

S0300-BV-CAT-020

0910-LP-722-6800

VOLUME 2

**U.S. NAVY
EMERGENCY SHIP SALVAGE
MATERIAL CATALOG**

POLLUTION EQUIPMENT



DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

PUBLISHED BY DIRECTION OF COMMANDER, NAVAL SEA SYSTEMS COMMAND.

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Change No.	Date	Title and/or Brief Description	Signature of Validating Officer
A	27 May 04	<p>Updated and reformatted TOC and Index</p> <p>Updated and reformatted Foreword</p> <p>Updated and reformatted Chapter 1</p> <p>Updated and reformatted Chapter 2</p> <p>Updated and reformatted Chapter 3</p> <p>Updated and reformatted Chapter 5</p> <p>Updated and reformatted Chapter 6</p> <p>Updated and reformatted Chapter 7</p> <p>Updated and reformatted System Number P02100 – Boarding Kit</p> <p>Updated and reformatted System Number P03100 – Boom Handling Boat</p> <p>Updated and reformatted System Number P03200 – Boom Tending Boat (Rigid)</p> <p>Updated and reformatted System Number P04100 – Boom Mooring System</p> <p>Updated and reformatted System Number P04200 – Boom Mooring System Deep Water Extension</p> <p>Updated and reformatted System Number P05200 – Communications System (Shipboard)</p> <p>Updated and reformatted System Number P06100 – Low Pressure Fender System</p> <p>Updated and reformatted System Number P06200 – Fenders (LP Pneumatic 10' x 50' 4/Sys)</p> <p>Updated and reformatted System Number P06400 – Modular Barge System</p> <p>Updated and reformatted System Number P07100 – Portable Firefighting System</p> <p>Updated and reformatted System Number P08100 – Floating Hose System</p> <p>Updated and reformatted of System Number P12200 – Steam Generators</p> <p>Updated and reformatted System Number P14100 – Oil Storage Bladder, 136k-Gallon</p>	

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Change No.	Date	Title and/or Brief Description	Signature of Validating Officer
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B	1 Sept 2004	<p>Updated and reformatted TOC and Index</p> <p>Repaginated Foreword</p> <p>Updated LOEP</p> <p>Updated and reformatted System Number P03300 – Boom Tending Boat (Inflatable)</p> <p>Updated and reformatted System Number P19100 – Oil Containment Boom System</p> <p>Updated and reformatted System Number P20300 – Oil Bladder Transfer System</p>	LLS
C	31 Jan 2006	<p>Updated and reformatted TOC and Index</p> <p>Repaginated Foreword</p> <p>Updated and reformatted System Number P01100 – Beach Transfer System</p> <p>Updated and reformatted System Number P03100 – Boom Handling Boat</p> <p>Updated and reformatted System Number P03300 – Boom Tending Boat (Inflatable)</p> <p>Updated and reformatted System Number P05200 – Communications System (Shipboard)</p>	LLS

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Change No.	Date	Title and/or Brief Description	Signature of Validating Officer
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Change No.	Date	Title and/or Brief Description	Signature of Validating Officer
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Updated Chapter 6

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This is to certify that responsible NAVSEA activities have reviewed the basic technical manual (), revision (), or change (X) for acquisition compliance, technical coverage, and printing quality. This form is for internal NAVSEA management use only, and does not imply contractual approval or acceptance of the technical manual by the Government. nor relieve the contractor of any responsibility for delivering the technical manual in accordance with the contract requirements.

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FOREWORD

The Emergency Ship Salvage Material (ESSM) Pollution Catalog is the basic reference for all major items of ESSM pollution response equipment. The system description page gives a brief description of what each system is used for, what each system does, and what equipment constitutes each system. The item data sheets include descriptions, photographs, physical characteristics as well as information on ancillary equipment and reference data for each major ESSM-numbered piece of equipment. This information is for fleet and shoreside Navy On-Scene-Coordinators (NOSCs), and should be of interest to federal OSCs, state, and local planning officials for major pollution operations that present problems beyond the experience of most pre-designated NOSCs and their staff. SUPSALV can provide much of the needed experience and support for this type of operation and can recommend other sources of expertise.

The ESSM catalog lists and describes ESSM system facilities and functional responsibilities at all levels. This new edition incorporates hardware improvements and recommended changes from the Navy pollution community. Suggestions for future improvements to the technical content are encouraged. SUPSALV is continually working to upgrade the Navy's pollution related response capability. NOSCs and other federal agencies are encouraged to contact SUPSALV to recommend improvements or additions to our response system, or comment on this document at the following address:

Naval Sea Systems Command
1333 Isaac Hull Ave. SE
Washington Navy Yard, DC 20376

Telephone: (202) 781-1070
Fax: (202) 781-4855

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CHAPTER 1

EMERGENCY SHIP SALVAGE MATERIAL

SECTION 1.1

SYSTEM DESCRIPTION

1.1.1 PURPOSE AND FUNCTION

The Emergency Ship Salvage Material (ESSM) System is a combination of bases and complexes, which provide ship salvage, pollution control, and ocean engineering equipment on an emergency basis. Bases are located within the Continental United States and provide a complete inventory of ESSM equipment; complexes are located outside CONUS and carry limited amounts of ship salvage and pollution control material.

1.1.2 BASES

There are two ESSM bases located within the Continental United States. Both bases carry essentially the same allowance of material, which includes a complete inventory of ship salvage, pollution control, and ocean engineering equipment. All material is stored and maintained in ready-for-issue condition by a commercially contracted manager and support personnel. The Supervisor of Salvage (00C) controls all issues of ESSM base material. CONUS base locations are:

Virginia

ESSM Base
Cheatham Annex, Warehouse 12
Williamsburg, VA 23185
Telephone: (757) 637-9000
Fax: (757) 637-9089
DSN: 953-9000

California

ESSM Base
NBVC, Patterson Road, Bldg. 1163
Port Hueneme, CA 93043
Telephone: (805) 982-4463/2165/2232/2164
Fax: (805) 982-4459
DSN: 551-4463

1.1.3 COMPLEXES

Presently, there are six ESSM Complexes located outside the Continental United States:

Alaska

ESSM Base SUPSALV
Bldg. 800, 1st and Warehouse
Fort Richardson, AK 99505
Telephone: (907) 384-2963
(907) 384-2968
Fax: (907) 384-2969

Hawaii

ESSM Base
Bldg. 54, Bishop Point
Pearl Harbor, HI 96860
Telephone: (808) 423-7100
(808) 423-7055
Fax: (808) 423-6535

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1.1.3 COMPLEXES (Continued)

Italy

ESSM Complex
 M/F Commanding Officer
 UIC WSCM99, Depot Warehouse 3
 Via Aurelia, Leghorne Army Depot
 Livorno, Italy 56018
 Telephone: 011-39-50-547233/547893
 Fax: 011-39-50-547868
 DSN: 663-7233

Singapore

ESSM Complex
 PSA Sembawang Terminal, Bldg. 7-A
 Singapore 759657
 Telephone: 011-65-6750-2626
 Fax: 011-65-6750-2450

Bahrain

ESSM Complex
 Attn: SRU Bahrain
 Banz Warehouse, #1 Juffair Ave.
 Manama, Bahrain
 Telephone: 011-973-724441
 011-973-724442
 011-973-724443
 011-973-724445
 Fax: 011-973-724447
 DSN: 318-439-724442

Japan

ESSM Complex
 Attn: U.S. Naval Repair Facility
 Tategami-Cho Bldg 141
 Sasebo Naval Base
 Sasebo, Japan
 Telephone: 011-81-956-24-6111
 ext. 3265/3212
 Fax: 011-81-956-24-7723

These complexes are established to provide an ESSM presence in overseas areas. Their inventories include limited quantities of ship salvage material and pollution control equipment, intended for short-term emergency use. This material is stored in ready-for-issue condition and in a low level of preservation. Equipment is not afforded the caretaker status associated with ESSM bases in CONUS. The Supervisor of Salvage (00C) controls all issuance of ESSM complex material.

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SECTION 1.2

SYSTEM ADMINISTRATION

1.2.1 SCOPE

This section describes responsibilities for the administration of the total ESSM System.

1.2.2 SYSTEM ADMINISTRATION

The focal point for all matters pertaining to the ESSM System is the office of the Supervisor of Salvage (00C) within the Naval Sea Systems Command (NAVSEA).

Department of the Navy
Naval Sea Systems Command (SEA-00C)
1333 Isaac Hull Ave.
Washington Navy Yard, DC 20376-1070
Telephone: (202) 781-1070
Fax: (202) 781-4855
DSN: 326-1070
NAVSEA Duty Officer: (202) 781-3889

SUPSALV's limited quantities of ship salvage material and pollution control equipment are intended for short-term emergency use only. This material is stored in ready-for-issue condition and in a low level of preservation. Equipment is not afforded the caretaker status associated with ESSM bases in CONUS. The Supervisor of Salvage (00C) controls all issuance of ESSM complex material. Operations Branch serves as a clearing point for all ESSM inquiries and requests. Determination of what assistance is required rests with their evaluation of a given situation. Assistance may be provided through recommendations or the actual provision of specific ESSM items, based on cumulative case experience. Final determination and issuing authority for ESSM requests remains with the Supervisor of Salvage or his designated deputy.

1.2.2.1 ESSM MANAGER

A commercially contracted ESSM Warehousing Manager is directly responsible to the Supervisor of Salvage for provision of the following ESSM support services:

- a. Full-time manning and management of ESSM bases.
- b. Periodic maintenance and inventory of equipment stored at ESSM complexes.
- c. Maintaining all ESSM System equipment for immediate deployment and operation.
- d. Providing operators for pollution control equipment when it is deployed.

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SECTION 1.3

SYSTEM OPERATION

1.3.1 SCOPE

This section describes specific procedures, responsibilities, and fiscal requirements for activities desiring to utilize the ESSM System.

1.3.2 SYSTEM OPERATION

1.3.3 GENERAL

Materials in ESSM bases and ESSM complexes are contingent items for emergency use only, as required by the requesting activity. The materials are not intended for stock replenishment of salvage ships and stations for their routine operations. Similarly, individual subcomponents cannot be drawn from bases or complexes. Only total units with all necessary accessories will be authorized for issue. Prerequisites for obtaining ESSM equipment differ with equipment categories and requesting activities. Equipment categories are:

- * Ship Salvage Material
- * Pollution Control Material
- * Underwater Ship Husbandry Material (UWSH)

Technical representatives are available to accompany ship salvage and underwater ship husbandry materials; contractor operators are provided with pollution control equipment. The following paragraphs of this section identify the variable requesting and funding criteria for ESSM.

1.3.4 REQUESTING ACTIVITY CATEGORIES

As stated earlier, ESSM procurement criteria differ for various requesting agencies and, in some cases, with the material requested. Procedure associated with principal requesting activities is summarized below.

1.3.4.1 U.S. NAVY

When additional or specialized equipment is required fleet commanders request ESSM augmentation directly from the Supervisor of Salvage (Operations Branch) for all categories of material.

1.3.4.2 U.S COAST GUARD/FEDERAL AGENCIES

Because of common national responsibilities the Supervisor of Salvage routinely responds to requests for pollution control equipment from the U.S. Coast Guard and also provides material to other military departments and federal agencies. These requests for ESSM equipment are routed via the Chief of Naval Operations (CNO OP64I).

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1.3.4.3 FOREIGN GOVERNMENTS

All assistance to foreign governments, including ESSM requests, are authorized via the U.S. State Department and CNO OPG4.

1.3.4.4 COMMERCIAL

Pollution control assistance to commercial interests in U.S. waters is provided through, and in support of, the U.S. Coast Guard and other federal agencies. The provision of Navy salvage assistance to commercial ships is determined by the Secretary of the Navy. However, ship salvage and ocean engineering materials are made available to commercial contractors through direct leasing agreements with the Supervisor of Salvage. These agreements must be preceded by certification that no similar commercial assets are available.

1.3.5 REQUESTING PROCEDURES/FUNDING REQUIREMENTS

The Supervisor of Salvage provides specific funding information and instruction to all requesting activities.* There are current rental rates for ESSM which will be identified upon request. Also, funding is required to cover equipment mobilization, shipping, and refurbishment costs. Generally, funding for salvage related material is received directly by SUPSALV, while that for pollution related equipment is routed to miscellaneous receipts of the U.S. Treasury. Specific funding documentation required of requesting government activities follows.

*Requests should include ESSM numbers for ease of identification.

1.3.5.1 U.S. NAVY

Naval activities requesting services should provide NAVSEA 00C with a NavCompt Form 2276, Request for Contractual Procurement, in accordance with NAVSEAINST 7300.4 and Navy Comptroller Manual paragraphs 035450-035452.

1.3.5.2 U.S. COAST GUARD/FEDERAL AGENCIES

The U.S. Coast Guard may submit a DD 1149, Requisition and Invoice/Shipping Document, for requested services. Other military departments should provide NAVSEA 00C with a DD Form 448, Military Interdepartmental Purchase Request (MIPR), in accordance with Defense Acquisition Regulation (DAR), article 5-1118. NASA will use NASA Form No. 523, NASA Defense Purchase Request, in accordance with Defense Acquisition Regulation (DAR), article 5-1002. NASA Form 523 will be accepted on a reimbursable basis. Other government agencies outside the Department of Defense requiring services should submit a Letter of Authorization. The letter should include a funding limitation, accounting data, and the intended purpose. Acceptance will be on a reimbursable basis in accordance with NASEAINST 7300.4 and Navy Comptroller Manual paragraphs 035450-035452.

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1.3.5.3 FOREIGN GOVERNMENTS

Foreign countries requesting services will be provided a DD Form 1513, Offer and Acceptance, by the cognizant OPNAV code. The applicable country will accept this DD Form 1513 and forward it to OPNAV in accordance with OPNAVINST 4920.7B. Funds will be forwarded to NAVSEA from the Navy International Logistics Control Office (NAVILCO).

1.3.5.4 PERSONNEL ORDERS

Persons arranging for orders to be submitted to NAVSEA00C should ensure that the orders for travel, per diem, and overtime are submitted separately from orders for services, per NAVSEAINST 7300.4. If a NavCompt Form 2276 is submitted for services, a NavCompt Form 2275 should also be submitted for applicable travel, per diem, and overtime. If any other type of document is provided for services, the same type of document should be separately prepared for travel, per diem, and overtime, i.e., when a MIPR is utilized for services, a separate MIPR should be utilized for travel or when a DD 1149 is utilized for services. A separate DD 1149 should be utilized for travel.

1.3.6 THE ESSM CATALOG

This catalog has been compiled to offer a quick and detailed reference on all major items of Emergency Ship Salvage Material. The catalog is divided into separate sections representing each major equipment category: Pollution Control Material and individual item data sheets, which include photographs, physical characteristics, specifications, and information regarding ancillary equipment. The data presented herein does not supersede the data contained in appropriate U.S. Navy and/or manufacturers' operation, maintenance, or technical manuals.

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CHAPTER 2

SUPSALV RESPONSIBILITIES

SECTION 2.1

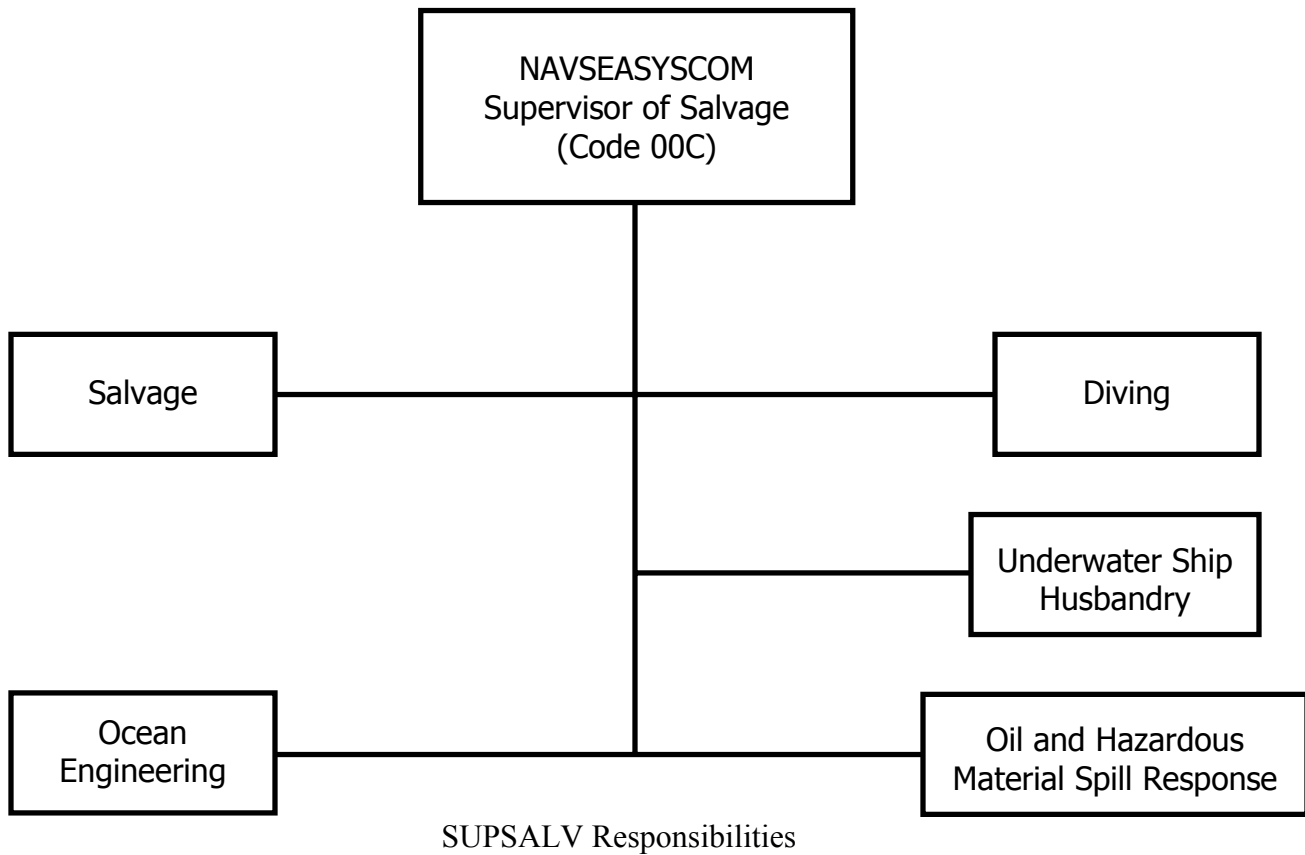
SUPERVISOR OF SALVAGE

2.1.1 The Supervisor of Salvage (SUPSALV) supports Fleet and shoreside commands from his position on the staff of Naval Sea System Command (NAVSEA) in Washington, DC. As shown in figure 1-1, SUPSALV has several distinct responsibilities. SUPSALV provides technical support in the areas of Diving, Salvage, Ocean Engineering, Underwater Ship Husbandry, and Oil and Hazardous Materials Spill Response. This technical support includes the development, testing, and procurement of new equipment and systems; diving system inspection and certification; oil spill contingency planning; and related functions.

In addition to technical support, SUPSALV has operational responsibilities, maintains the capability to augment fleet diving and salvage units, and assists the Naval on Scene Commands/Naval on Scene Commanders (NOSCs/NOSCDRs) in spill response operations. SUPSALV maintains contracts with commercial salvors worldwide to provide emergency salvage services to Navy commands and to other Government agencies, to foreign governments through the U.S. State Department, and, under certain conditions, to the private sector. SUPSALV maintains commercial contracts for the following services on a worldwide basis:

- Marine salvage
- Diving
- Underwater search and recovery
- Underwater ship husbandry (including in-water hull cleaning and repair by divers)
- ROV husbandry and operations
- Emergency Ship Salvage Material (ESSM) base husbandry
- Pollution response operations

These contracted services are available through SUPSALV on a cost reimbursement basis. Requesting procedures and accounting information are provided in Chapter 4.

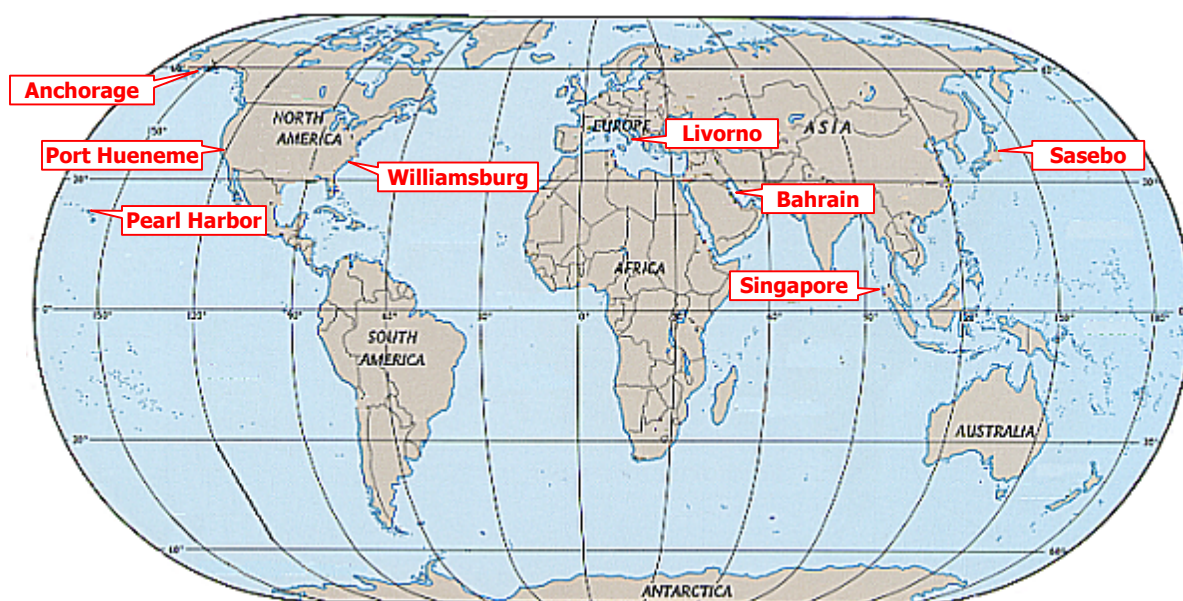
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SECTION 2.2

EMERGENCY SHIP SALVAGE MATERIAL (ESSM)

- 2.2.1 SUPSALV operates the ESSM System, through which salvage equipment can be shipped to salvage sites worldwide in support of Fleet or contractor operations. The ESSM bases are located near major Fleet operating areas at the following sites (see Figure 1-2): Williamsburg, Virginia; Port Hueneme, California; Pearl Harbor, Hawaii; Anchorage, Alaska; Livorno, Italy; Sasebo, Japan; Bahrain; and Singapore. An inventory of pumps, compressors, generators, beach gear, and other standard and specialty salvage equipment items is maintained in constant readiness for immediate air or surface shipment to operations sites. Oil spill response equipment is maintained as part of this inventory in all U.S. bases.

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Emergency Ship Salvage Material (ESSM) Bases

SECTION 2.3

SUPSALV OFFSHORE SPILL RESPONSE PROGRAM

2.3.1 Because Navy offshore and salvage-related spills occur infrequently but can be very large in volume when they do occur, it is not practical to distribute adequate allowances of SUPSALV offshore spill response equipment to Navy activities worldwide. Instead, SUPSALV retains custody of this equipment and provides the capability to respond rapidly and effectively to any site. Spill response equipment is contractor-maintained at all U.S. ESSM bases as noted above. An equipment inventory is provided in Chapter 5 with detailed descriptions of each system in Chapter 6.

When a large spill occurs, the responsible NOSC/FOSC can request SUPSALV to provide, on a cost reimbursable basis, spill response equipment and operators. The equipment is mobilized from one or more of the ESSM bases for rapid delivery to the spill site, shipped by the most expedient government or commercial mode. A SUPSALV pollution control operations specialist will work with the NOSC or FOSC to coordinate deployment and operation of the SUPSALV equipment. SUPSALV response team personnel proceed to the spill site to operate and maintain the equipment under the direction of the SUPSALV representative. This representative will integrate SUPSALV directly into the on-scene Unified Command System. All response personnel meet Occupational Safety and Health Administration (OSHA) Training Standards as prescribed in Manual for Workplace Standards, 29CFR 1910.120.

Offshore spill response operations are very demanding on both the operators and equipment. To meet these demands, SUPSALV has tried to provide rugged equipment and experienced operators. Exercises are conducted periodically to train SUPSALV and contractor personnel in the most effective operation of the equipment and to test the equipment. These exercises have helped SUPSALV develop and maintain a significant reliable spill response capability.

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CHAPTER 3

ACCESS TO SUPSALV

SECTION 3.1

EMERGENCY SUPSALV SUPPORT REQUESTS

3.1.1 The SUPSALV pollution control equipment described in this document is immediately available to NOSC's or FOSC's. All equipment is supplied with required operating and maintenance support, on a cost reimburse through the Chief of Naval Operations, Navy Command Center (N312), in Washington, DC. However, an initial call directly to SUPSALV will ensure a more rapid and accurate response.

To request SUPSALV support for emergency response, on-scene technical expertise, or simply advice over the telephone, contact SUPSALV at the commercial or AUTOVON numbers below:

 SUPSALV ASSISTANCE

FOR INFORMAL LIAISON AND "HEADS UP" NOTIFICATION:

Working Hours	(202) 607-2758 DSN 326-1070
---------------	--------------------------------

Non-Working Hours: (NAVSEA Duty Officer)	(202) 781-3889 DSN 326-3889
---	--------------------------------

(The Duty Officer will relay the caller's message to appropriate SUPSALV personnel for a return call.)

FOR OFFICIAL REQUESTS FOR SUPSALV RESPONSE:

24 Hours: (CNO Duty Captain)	(202) 781-3889 DSN 326-3889
---------------------------------	--------------------------------

NOTE: Early alert, "heads up" calls to SUPSALV are encouraged, appreciated, and invaluable to the caller even if the extent of the response has not yet been determined.

Non-DOD requests for emergency assistance should be directed through the FOSC. Coast Guard requests can be initiated in accordance with the Navy/Coast Guard interagency agreement, generally through the FOSC. Foreign government requests should be forwarded through the appropriate embassy Defense Liaison Officer (DLO) or Defense Attaché (DA) to the State Department and then to the CNO (N3/5).

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CHAPTER 4

FUNDING AND COST ACCOUNTING

SECTION 4.1

FUNDING AND COST ACCOUNTING

4.1.1 DOD SPILL

The Navy's inventory of offshore spill response equipment, procured by SUPSALV, is maintained and operated by SUPSALV personnel and contractor personnel within the system. SUPSALV is centrally funded for all equipment storage and maintenance requirements within the ESSM bases. All operational costs for response to Navy spills (including SUPSALV/response team costs) must be funded by the Fleet facility spills. These funding requirements are established in OPNAVINST 5090.1B, Chapters 1-4.

When the NOSC requests SUPSALV assistance in response to a pollution incident (through CNO), he must state that he will reimburse NAVSEA for all SUPSALV operational costs incurred in the incident response. Shortly after SUPSALV mobilization, SUPSALV fiscal representatives will contact the NOSC's fiscal agent to explain and discuss appropriate reimbursement procedures.

4.1.2 NON-DOD SPILL

Funding for a non-government spill response is provided by the National Pollution Fund Center (NPFC). SUPSALV and NPFC have prearranged procedures for the transfer of these funds. When an FOSC requests SUPSALV assistance, a Federal Project Number (FPN) and case officer name for the NPFC should be provided to expedite the transfer procedure.

In addition, a non-DOD response (private RP) will incur equipment rental rate charges as detailed in the Federal Registry. These rates are shown in Chapter 4 but do not apply to DOD response operations.

SUPSALV operational costs include SUPSALV personnel salary, travel, per diem, and overtime; and all response team costs for equipment mobilization, on-scene operation and maintenance, demobilization, and equipment refurbishment. This includes replacement of consumable and repair or replacement of equipment damaged or destroyed while under the operational control of the NOSC/FOSC. Prior to an official NOSC request for SUPSALV assistance, SUPSALV representatives can be reached by telephone to provide a daily cost estimate for response based on the agreed upon level of response (e.g., number of skimmer systems, quantity of boom, personnel requirements, etc.). A sample of these costs are included Chapter 5.

The on-scene SUPSALV representative will present to the NOSC or FOSC daily cost summaries of all expenses incurred as the operation progresses. The daily cost summaries provide the NOSC with information about deployed SUPSALV assets, an accurate estimate of SUPSALV costs incurred to date, and an opportunity to resolve any SUPSALV cost questions in a timely manner.

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CHAPTER 5

COST ESTIMATES, TRANSPORTATION REQUIREMENTS, AND RENTAL RATES

SECTION 5.1

COST ESTIMATES AND TRANSPORTATION REQUIREMENTS

5.1.1 The following tables show response cost and transportation requirements of operations based on the primary response package, which consists of the minimum equipment required for first response. It should be understood that these are only estimates; rental rates and labor costs are subject to change, and any particular response operation is a unique event, which will require adjustment and refinement of these estimates.

5.1.2 SUPSALV OIL RECOVERY RESPONSE PACKAGES ESTIMATED TRANSPORT REQUIREMENTS AND LABOR COSTS (Personnel travel & per diem costs not included.)

1 SYSTEM (Labor costs are estimated Contractor plus SUPSALV.)

Equipment	Page Number	Qty	Transportation				12-Hour Shift		Rental Per Day
			Truck	Aircraft			Crew	Labor	
				C130	C141	C-5			
Vessel Skimmer 36' w/Rack	7-149	1	2				3		\$5990
Boom Handling Boat	7-69	2	1				4		2464
Boom Tend. Boat 19' Inf	7-105	1	1				2		744
Command Van 20'	7-345	1					4		469
Shop Van	7-385	1	1				2		480
Rigging Van	7-365	1							520
Cleaning Van	7-461	1	1						779
Total System Requirement:			6	8	3	1	15	\$10,000	\$11,446

2 SYSTEMS (Labor costs are estimated Contractor plus SUPSALV.)

Equipment	Page Number	Qty	Transportation				12-Hour Shift		Rental Per Day
			Truck	Aircraft			Crew	Labor	
				C130	C141	C-5			
Vessel Skimmer 36' w/Rack	7-149	2	4				6		\$11,980
Boom Handling Boat	7-69	4	2				8		4928
Boom Tend. Boat 19' Inf	7-105	1	1				2		744
Command Van 20'	7-345	1					4		469
Shop Van	7-569	1	1				2		480
Rigging Van	7-551	1							520
Cleaning Van	7-505	1	1						779
Total System Requirement:			9	12	4	2	22	\$14,000	\$19,900

S0300-BV-CAT-020**3 SYSTEMS (Labor costs are estimated Contractor plus SUPSALV.)**

Equipment	Page Number	Qty	Transportation			12-Hour Shift		Rental Per Day	
			Truck	Aircraft		Crew	Labor		
				C130	C141				C-5
Vessel Skimmer 36' w/Rack	7-149	3	6			9		\$17,910	
Boom Handling Boat	7-69	6	3			12		7392	
Boom Tend. Boat 19' Inf	7-105	1	1			2		744	
Command Van 20'	7-345	1				4		469	
Shop Van	7-385	1	1			2		480	
Rigging Van	7-365	1						520	
Cleaning Van	7-461	1	1					799	
Total System Requirement:			12	16	5	3	29	\$18,000	\$28,354

4 SYSTEMS (Labor costs are estimated Contractor plus SUPSALV.)

Equipment	Page Number	Qty	Transportation			12-Hour Shift		Rental Per Day	
			Truck	Aircraft		Crew	Labor		
				C130	C141				C-5
Vessel Skimmer 36' w/Rack	7-149	4	8			12		\$23,960	
Boom Handling Boat	7-69	8	4			16		9856	
Boom Tend. Boat 19' Inf	7-105	1	1			2		744	
Command Van 20'	7-345	1				4		469	
Shop Van	7-385	1	1			2		480	
Rigging Van	7-365	1						520	
Cleaning Van	7-461	1	1					779	
Total System Requirement:			15	20	7	3	36	\$22,000	\$36,808

5 SYSTEMS (Labor costs are estimated Contractor plus SUPSALV)

Equipment	Page Number	Qty	Transportation			12-Hour Shift		Rental Per Day	
			Truck	Aircraft		Crew	Labor		
				C130	C141				C-5
Vessel Skimmer 36' w/Rack	7-149	5	10			15		\$29,950	
Boom Handling Boat	7-69	10	5			20		12,320	
Boom Tend. Boat 19' Inf	7-105	2	1			4		1488	
Command Trailer 40'	7-339	1	1	N/A	N/A	4		730	
Command Van 20'	7-345	1				2		469	
Shop Van	7-385	1	1			4		480	
Rigging Van	7-365	1						520	
Cleaning Van	7-461	1	1					779	
Total System Requirement:			19	24	8	3	49	\$29,000	\$46,736

S0300-BV-CAT-020**6 SYSTEMS (Labor costs are estimated Contractor plus SUPSALV)**

Equipment	Page Number	Qty	Transportation			12-Hour Shift		Rental Per Day	
			Truck	Aircraft		Crew	Labor		
				C130	C141				C-5
Vessel Skimmer 36' w/Rack	7-149	6	12				18		\$35,940
Boom Handling Boat	7-69	12	6				24		14,784
Boom Tend. Boat 19' Inf	7-105	2	1				4		1488
Command Trailer 40'	7-339	1	1	N/A	N/A		4		730
Command Van 20'	7-345	1					2		469
Shop Van	7-385	1	1				4		480
Rigging Van	7-365	1							520
Cleaning Van	7-461	1	1						779
Total System Requirement:			22	28	10	4	56	\$33,000	\$55,190

NOTE 1: Personnel numbers are based on one 12-hour shift per day.

NOTE 2: For more than 12 systems, contact SUPSALV for cost/manpower/transportation requirements.

NOTE 3: The preceding estimates assume both towboats are supplied by SUPSALV. In some cases, one commercial boat/system can be leased on scene.

NOTE 4: Rental rates are used in non-DOD responses only. Rates used are published in the Federal Register, Volume 7, No. 145 and may change without notice when the Federal Register is updated.

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SECTION 5.2

SUPSALV OIL SPILL RESPONSE EQUIPMENT RENTAL RATES

5.2.1 Listed below are the rental rates charged private or commercial spillers when SUPSALV assets are employed during a federal oil spill response, or when called upon by the State Department. These rates apply to a day, or any fraction of a day, in which the equipment is in transit, operated, or is in standby status.

<u>EQUIPMENT (NOTE 1)</u>	<u>DAILY RATES</u>
Vans	
Command Van	\$ 469
Command Trailer	\$ 730
Shop Van	\$ 480
Berthing Van	\$ 142
Rigging Van	\$ 520
Hot Tap Van	\$ 1596
Cleaning Van	\$ 779
Steam Generator System	\$ 357
Skimmers	
Vessel Skimmer	\$ 3491
Vessel Skimmer w/Mod Pack (NOTE 2)	\$ 5990
Sorbent Belt VOSS Skimmer (NOTE 3)	\$ 4471
Auger Pump VOSS Skimmer	\$ 1366
Sorbent Rope Skimmer	\$ 489
Boats	
Boom Handling Boat, 24'	\$ 1232
Workboat 18' w/outboard motor on trailer	\$ 776
Inflatable Boat 23' with outboard motors	\$ 950
Inflatable Boat 19' with outboard motors	\$ 744
Inflatable Boat 17'	\$ 200
Inflatable Boat 15'	\$ 74
Pumps	
Hydraulic Submersible Pump System (6")	\$ 622
Hydraulic Submersible Pump (4")	\$ 60
Jetting Pump	\$ 71
Auger Pump (DESMI) DOP 250	\$ 185
Auger Pump (DESMI) 150	\$ 185
Hydraulic Power Units	
Power Unit, Mod 2, Hydraulic Diesel	\$ 118
Power Unit, Mod 6, Hydraulic Diesel	\$ 900
Power Unit, Mod 7, Hydraulic Diesel	\$ 24
Containment Boom, 55' Section (NOTE 4)	\$ 129
Communications System Shipboard (SATCOM)	\$ 1303
Communications System Landbased (SATCOM)	\$ 489

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Miscellaneous

Boom Mooring System	\$ 47
Boom Roller	\$ 60
Portable Crane, 8-ton	\$ 617
Bladder, 136k-gallon	\$ 1589
Bladder, 26k-gallon	\$ 910
Lighting Kit	\$ 93
Light Tower	\$ 61
Generator, 30-kW	\$ 159
Hot Tap Kit	\$ 290
Portable A-frame	\$ 91
Air Compressor	\$ 96
Firefighting Kit	\$ 88
Ship Fender (8' x 12')	\$ 91
Ship Fender, Inflatable (14' x 60')	\$ 1090
Ship Fender, Inflatable (10' x 50')	\$ 847
Ship Fender, Inflatable (10' X 40')	\$ 632
Boarding Kit (for use with POL Pump System)	\$ 265
Portable Capatan	\$ 295
Cleaning Pool	\$ 481
Outboard Motor, 50-hp	\$ 46
Outboard Motor, 35-hp	\$ 30
Outboard Motor, 15-hp	\$ 25

NOTE 1: See chapter 7 of catalog for equipment descriptions

NOTE 2: Package includes sponson rack containing 660' of collection boom, a 26k-gallon oil storage bladder, tools, spare parts, rigging supplies, etc.

NOTE 3: VOSS, Vessel of Opportunity Skimmer System

NOTE 4: Boom is shipped in a Boom Van that contains thirty-six 55' sections of boom

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SECTION 5.3

EQUIPMENT TRANSPORTATION TIMES AND COSTS

5.3.1 Transportation

The SUPSALV ESSM equipment will be deployed to the spill area from the ESSM base by the most expeditious transportation method. These methods include truck, air cargo, and ship/barge transportation. The most expeditious transportation mode will be determined by SUPSALV on the basis of distance, the time available, and the equipment needed.

The requesting activity must provide a contact for all transportation coordination with a 24-hour phone number. A complete shipping address for the delivery site/staging area must be provided to SUPSALV before shipment of the equipment from the ESSM warehouses.

5.3.2 Response Time Zones and Estimated Rates

The maps on the following pages give approximate response times from the Naval Supply Center, Cheatham Annex, Williamsburg, Virginia, on the East Coast and the Naval Station, Port Hueneme, California, on the West Coast of the United States. Accompanying these maps are charts estimating the approximate travel time and cost from their respective coast. All costs are subject to change without notice.

5.3.3 Aircraft Response Times

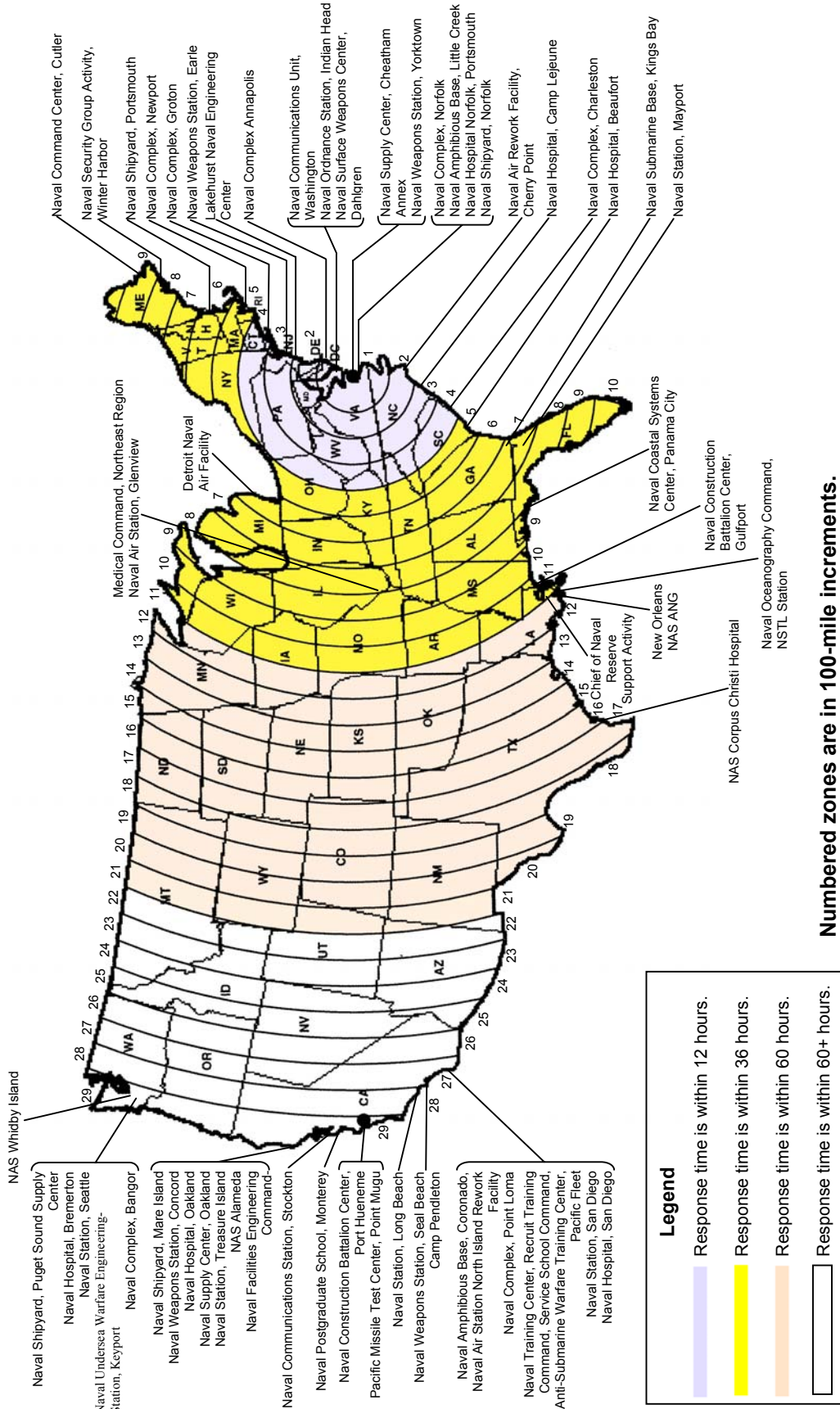
To determine response times for an aircraft-based response, use the following formula:

$$\text{RESPONSE TIME} = 6 \text{ Hours} + \text{Flight Time} + \text{Transit Time to Spill Site from an Airstrip}$$

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RESPONSE TIME ZONES FROM CHEATHAM ANNEX

TRUCK



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APPROXIMATE TRAVEL TIMES AND TRUCKING COSTS FROM CHEATHAM ANNEX, VA				
Destination	Miles (Note 1)	Hours (Note 2)	Average Cost Per Mile	Cost (Note 3)
Zone 1	1 – 100	3	(See Note 4)	
Zone 2	101 – 200	6	\$2.49	\$498.00 (See Note 5)
Zone 3	201 – 300	8.6	\$2.49	\$747.00 (See Note 5)
Zone 4	301 – 400	11.5	\$2.49	\$996.00
Zone 5	401 – 500	14.5	\$2.49	\$1,245.00
Zone 6	501 – 600	17	\$2.49	\$1,494.00
Zone 7	601 – 700	20	\$2.49	\$1,743.00
Zone 8	701 – 800	23	\$2.49	\$1,992.00
Zone 9	801 – 900	26	\$2.06	(See Note 6)
Zone10	901 – 1,000	28.5	\$2.06	\$1,957.00 to middle of zone
Zone 11	1,001 – 1,100	31.5	\$2.06	\$2,266.00
Zone 12	1,101 – 1,200	34.5	\$2.06	\$2,369.00 to middle of zone
Zone 13	1,201 – 1,300	37	\$2.06	\$2,575.00 to middle of zone
Zone 14	1,301 – 1,400	40	\$2.06	\$2,781.00 to middle of zone
Zone 15	1,401 – 1,500	43	\$2.06	\$2,987.00 to middle of zone
Zone 16	1,501 – 1,600	46	\$2.06	\$3,193.00 to middle of zone
Zone 17	1,601 – 1,700	48.5	\$2.06	\$3,502.00
Zone 18	1,701 – 1,800	51.5	\$1.85	\$3,237.50 to middle of zone
Zone 19	1,801 – 1,900	54.5	\$1.85	\$3,422.50 to middle of zone
Zone 20	1,901 – 2,000	57	\$1.85	\$3,607.50 to middle of zone
Zone 21	2,001 – 2,100	60	\$1.85	\$3,792.50 to middle of zone
Zone 22	2,101 – 2,200	63	\$1.85	\$3,977.50 to middle of zone

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APPROXIMATE TRAVEL TIMES AND TRUCKING COSTS FROM CHEATHAM ANNEX, VA				
Destination	Miles (Note 1)	Hours (Note 2)	Average Cost Per Mile	Cost (Note 3)
Zone 23	2,201 – 2,300	66	\$1.85	\$4,162.50 to middle of zone
Zone 24	2,301 – 2,400	69	\$1.85	\$4,347.50 to middle of zone
Zone 25	2,401 – 2,500	71.5	\$1.85	\$4,532.50 to middle of zone
Zone 26	2,501 – 2,600	74.5	\$1.85	\$4,717.50 to middle of zone

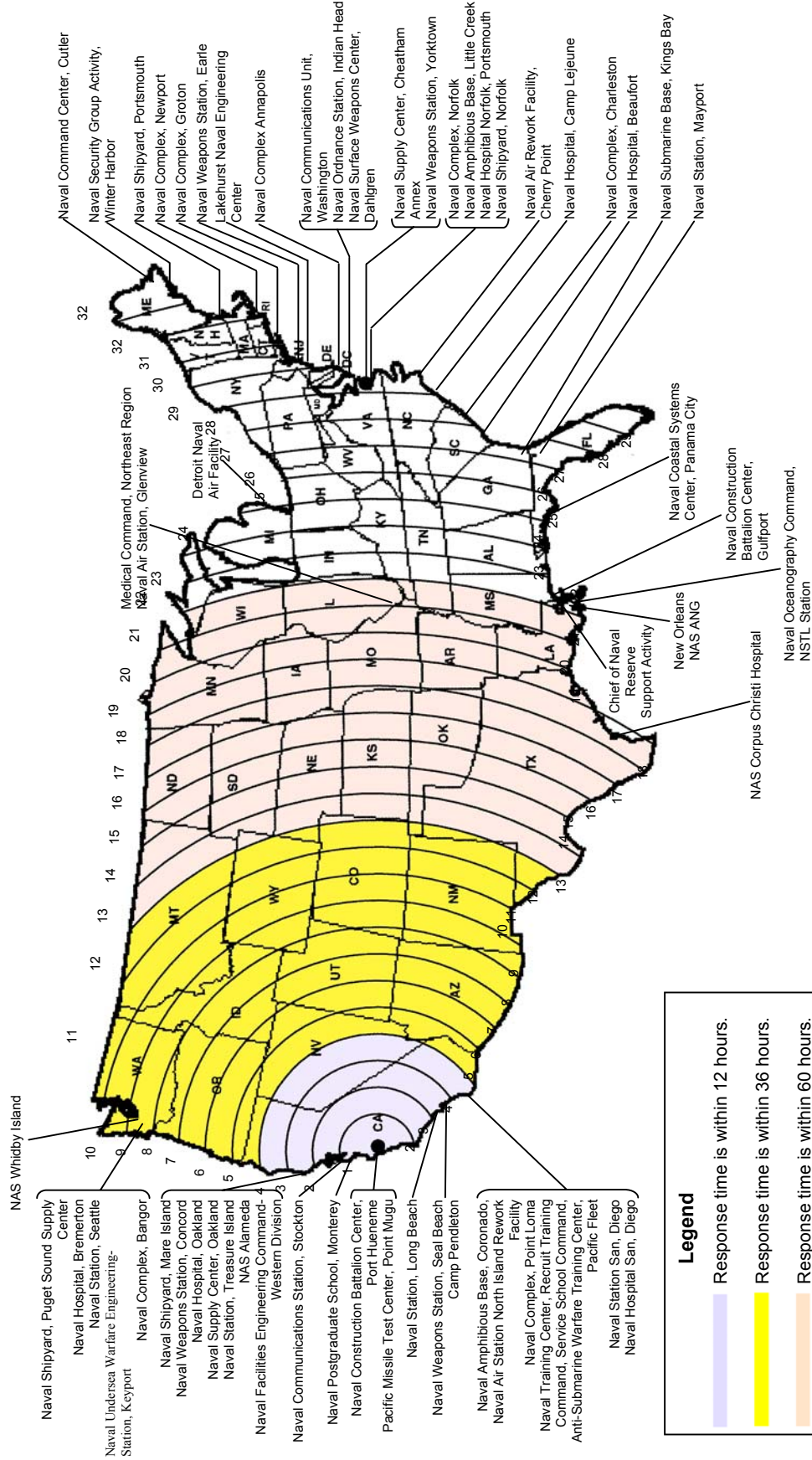
NOTES

1. All mileages, times, and costs are from Cheatham Annex, zone 1.
2. Average rate of travel is 35 miles per hour per USCG guidance.
3. Cost within each zone will vary depending on actual mileage.
4. Minimum cost to Yorktown, Norfolk, Little Creek, or Portsmouth is \$375.00. Minimum cost to Annapolis, Washington, Indian Head, or Dahlgren is \$625.00.
5. Minimum cost to Cherry Point and Camp Lejeune is \$550.00.
6. Cost to Cutler is \$2,241.00. Cost to Panama City is \$1,854.00.

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RESPONSE TIME ZONES FROM PORT HUENEME, CA

TRUCK



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APPROXIMATE TRAVEL TIMES AND TRUCKING COSTS FROM PORT HUENEME, CA				
Destination	Miles (Note 1)	Hours (Note 2)	Average Cost Per Mile	Cost (Note 3)
Zone 1	1 – 100	3	\$4.50	\$450.00
Zone 2	101 – 200	10	\$2.49	\$498.00
Zone 3	201 – 300	7-8	\$2.49	\$747.00
Zone 4	301 – 400	8	\$2.49	(See Note 4)
Zone 5	401 – 500	10	\$2.49	(See Note 5)
Zone 6	501 – 600	20	\$2.49	\$1,494.00
Zone 7	601 – 700	20	\$2.49	\$1,743.00
Zone 8	701 – 800	20	\$2.49	\$1,992.00
Zone 9	801 – 900	20	\$1.80	(See Note 6)
Zone10	901 – 1,000	30	\$1.80	\$1,800.00
Zone 11	1,001 – 1,100	30	\$1.80	\$1,980.00
Zone 12	1,101 – 1,200	30	\$1.80	\$2,160.00
Zone 13	1,201 – 1,300	30	\$1.80	\$2,340.00
Zone 14	1,301 – 1,400	30	\$1.80	\$2,520.00
Zone 15	1,401 – 1,500	30	\$1.80	\$2,700.00
Zone 16	1,501 – 1,600	40	\$1.80	\$2,880.00
Zone 17	1,601 – 1,700	50	\$1.80	\$3,060.00
Zone 18	1,701 – 1,800	50	\$1.60	\$2,880.00
Zone 19	1,801 – 1,900	40	\$1.60	\$3,040.00
Zone 20	1,901 – 2,000	50	\$1.60	\$3,200.00
Zone 21	2,001 – 2,100	50	\$1.60	\$3,360.00

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APPROXIMATE TRAVEL TIMES AND TRUCKING COSTS FROM PORT HUENEME, CA				
Destination	Miles (Note 1)	Hours (Note 2)	Average Cost Per Mile	Cost (Note 3)
Zone 22	2,101 – 2,200	40	\$1.60	\$3,520.00
Zone 23	2,201 – 2,300	50	\$1.60	\$3,680.00
Zone 24	2,301 – 2,400	50	\$1.60	\$3,840.00
Zone 25	2,401 – 2,500	50	\$1.18	\$2,950.00
Zone 26	2,501 – 2,600	60	\$1.18	\$3,068.00
Zone 27	2,601 – 2,700	60	\$1.14	\$3,078.00
Zone 28	2,701 – 2,800	60	\$1.14	(See Note 7)
Zone 29	2,801 – 2,900	60	\$1.14	(See Note 8)

NOTES

1. All mileages, times, and costs are from Port Hueneme, CA, zone 1.
2. Average rate of travel is 35 miles per hour per USCG guidance.
3. Cost within each zone will vary depending on actual mileage.
4. Cost to Seal Beach, CA is \$920.00. Cost to Long Beach, CA is \$900.00.
5. Cost to San Diego, CA is \$1,020.00. Cost to Camp Pendleton, CA is \$1,020.00. Cost to Coronado, CA is \$1,150.00.
6. Cost to Seattle, WA is \$978.44. Cost to Keyport, WA is \$979.66. Cost to Bremerton, WA is \$978.44.
7. Cost to Yorktown, VA is \$3,317.75. Cost to Indian Head, MD is \$3,315.45. Cost to Annapolis, MD is \$3,184.50. Cost to Washington, D.C. is \$3,162.50.
8. Cost to Camp Lejeune, NC is \$3,290.15. Cost to Norfolk, VA is \$3,315.45. Cost to Cherry Point, NC is \$3,332.70. Cost to Little Creek, VA is \$3,329.25.

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CHAPTER 6

POLLUTION RESPONSE EQUIPMENT

SECTION 6.1

EQUIPMENT INVENTORY

6.1.1 SUPSALV inventories and maintains six types of pollution response equipment. All equipment is ready for immediate deployment with operating personnel. The following types of equipment are available:

- Containment Systems
- Primary Skimmer Systems
- POL Offloading Systems
- Field Support Equipment
- Logistic Support System
- Forward Response Systems

An inventory of SUPSALV pollution control equipment follows. Any logistics support requirements such as large support vessels, aircraft, staging areas, and related items must be locally provided and should be addressed in local contingency plans.

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POLLUTION RESPONSE SYSTEMS INVENTORY

EQUIPMENT DESCRIPTION	Williamsburg, Pt. Hueneme, Anchorage, Pearl Harbor, Singapore Japan Italy Bahrain							
	VA	CA	AK	HI				
CONTAINMENT SYSTEMS								
Boom Van (42" x 1980' Boom)	20	8	2	5	0	0	0	0
Boom, Oil Containment, 60" X 600' Foam Flotation	1	1	1	0	0	0	0	1
Boom Mooring System	29	30	12	12	0	0	0	0
Boom Mooring Sys (Deep Water Extension)	10	21	10	10	0	0	0	0
Boom Handling Boat 24'	10	8	2	4	0	0	0	0
Boom Tending Boats (18' rigid hull)	4	5	3	1	0	0	0	0
Boom Tending Boats (Inflatable)	6	2	2	2	0	0	0	0
Fire Boom System	1	0	0	0	0	0	0	0
PRIMARY SKIMMER SYSTEMS								
Vessel Skimmer System	6	4	1	1	0	0	0	0
Rapid Deployment Skimmer System	4	4	2	2	0	0	0	0
Vessel of Opportunity Skimmer System	2	0	1	0	0	0	0	0
Arctic Oil Recovery Stsyem	0	0	0	0	0	0	0	0
Rope Mop Skimmer System	1	0	2	0	0	0	0	0
POL OFFLOADING SYSTEMS								
Pump System, POL 6" Submersible	4	3	2	4	2	2	2	2
Viscous Oil Transfer System	5	3	2	1	0	0	0	0
Boarding Kit	3	1	0	1	0	0	0	0
Firefighting System, Off-Ship (OSFS)	6	1	1	1	0	0	0	0
Hot Tap System	3	2	0	1	0	0	0	0
Fender System (10' x 50' LP Air)	1	2	1	0	0	0	0	0
Fender System (14' x 60' LP Air)	1	1	0	0	0	0	0	0
Modular Barge System	1	0	0	0	0	0	0	0
ROV Lightering System	0	0	0	0	0	0	0	0
Submersible, 2" to 6" Hydraulic Pump System	2	0	0	0	0	0	0	0
FIELD SUPPORT EQUIPMENT								
Command Trailer (40')	3	2	0	0	0	0	0	0
Command Van (20')	2	3	1	1	0	0	0	0
Rigging Vans	5	2	1	1	0	0	0	0
Shop Vans	3	3	1	1	0	0	0	0
Personnel Bunk Vans	3	1	0	0	0	0	0	1
Communications Sys (Satellite Phone, Land)	6	0	0	0	0	0	0	0
Communications Sys (Satellite Phone, Ship)	4	0	0	0	0	0	0	0
Communications System (Range Enhancing)	1	0	0	0	0	0	0	0
Beach Transfer System	3	1	1	1	0	0	0	0
Cleaning System	4	1	1	1	0	0	0	0
Supply Van	1	0	0	0	0	0	0	0
Personnel Transfer Boats	6	0	0	2	0	0	0	0
GPS Response Asset Tracking System	2	0	0	0	0	0	0	0
Hose Van Supply & Support	1	0	0	0	0	0	0	0
Rapid Personnel / Equipment Transfer System	1	0	0	0	0	0	0	0
LOGISTIC SUPPORT SYSTEMS								
Floating Hose System (6" x 5800')	1	1	0	0	0	0	0	0
136K Oil Storage Bladder	4	5	1	1	0	0	0	0
290K Oil Storage Bladders	0	0	1	1	0	0	0	0
Material Transfer System	1	1	0	0	0	0	0	0
Oil Bladder Transfer System	1	0	0	0	0	0	0	0
Debris Handling System	3	0	0	0	0	0	0	0
Vacuum Pump/Skimmer System	2	0	0	0	0	0	0	0
Oil/Water Separator (Parallel Plate 100 gpm)	1	1	1	0	0	0	0	0
Steam Generator System	1	3	0	0	0	0	0	0
Spill Recovery Bladder (26-50K)	6	6	2	2	0	0	0	0
FORWARD RESPONSE SYSTEMS								
Salvage Support Skimmer System	4	0	0	1	0	0	0	0
Tier 1 Tanker Skimmer System	0	0	0	0	0	0	0	0
Inland Support Skimmer System	0	0	2	0	0	0	0	0

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SECTION 6.2

DAILY EQUIPMENT RECOVERY RATES

SUPSALV Oil Spill Equipment Recovery Rates

SKIMMER	EFFECTIVE DAILY RECOVERY RATE (24-Hr Period)
1. Class V Skimmer with Moyno Progressive Cavity Pump	1234 bbls
2. Class V Skimmer with DS 210	1371 bbls
3. Class XI with DS 210 pump	1371 bbls
4. Destroil with DS 150 pump	Est 603 bbls
5. Destroil Skimmer w/DS 210 pump	1371 bbls
6. Desmi Mini-Max 24" Diameter Weir	1509 bbls
7. Desmi Termite 28" Diameter Weir	1509 bbls
8. Desmi Terminator	3017 bbs
9. Lamor LWS-50 Weir	1509 bbls
10. Douglas Weir Skim Pacs w/peristaltic pump	754 bbls
11. Lamor Minimax 12 Skimmer	362 bbls

EDRR Method = OEM Nameplate Rating bbls/hr x (0.2) x 24*

* Effective daily recovery rates are supplied by equipment manufacturer taken under controlled conditions. Actual daily recovery rates may be substantially lower in an uncontrolled condition.

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CHAPTER 7

POLLUTION CONTROL EQUIPMENT

SECTION 7.1

INTRODUCTION

7.1.1 This section provides specifications, characteristics, ancillary equipment, and reference data for pertinent pollution items usually activated in quick response to assistance request. Material in the ESSM system are contingent for use in emergency ship salvage pollution operations only.

SECTION 7.2

INVENTORY OBJECTIVE LIST OF POLLUTION EQUIPMENT

Inventory Objective List	System Number	Page Number
1. Containment Systems		
1.1 Oil Containment Boom System.....	P19100	7-5
1.2 Boom Mooring System	P04100	7-35
1.3 BMS Deep Water Extension	P04200	7-45
1.4 Boom Handling Boat.....	P03100	7-53
1.5 Boom Tending Boat (RDG)	P03200	7-71
1.6 Boom Tending Boat (INF)	P03300	7-85
1.7 Fire Boom System	P20600	7-109
2. Primary Skimmer Systems		
2.1 Vessel Skimmer System.....	P16400	7-135
2.2 Rapid Deployment Skimmer System	P16100	7-147
2.3 Vessel of Opportunity Skimmer Sys	P16300	7-173
2.4 Arctic Oil Recovery System.....	P16500	7-205
2.5 Rope Mop Skimmer System	P16600	7-207
3. Pollution Offloading Systems		
3.1 Submersible 6" Hyd Pump	P17100	7-219
3.2 2" to 6" Subm Hyd Pumping Sys	P17200	7-244G
3.3 Viscous Oil Transfer System	P13200	7-245
3.3 Boarding Kit	P02100	7-251
3.4 Fire Fighting System	P07100	7-259
3.5 Hot Tap System	P10100	7-287

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SECTION 7.2 INVENTORY OBJECTIVE LIST OF POLLUTION EQUIPMENT, Cont.

Inventory Objective List	System Number	Page Number
3.6 Fenders, LP Pneumatic, 4 Sys		
10' x 50'	P06100	7-303
14' x 60'	P06200	7-311
3.7 Modular Barge System	P06400	7-317
3.8 ROV Lightering System	P10200	7-319
 4. Field Support Equipment		
4.1 Command Trailer	P19400	7-321
4.2 Command Van	P19300	7-345
4.3 Rigging Van	P19600	7-357
4.4 Shop Van	P19700	7-369
4.5 Personnel Bunk Van	P19500	7-387
4.6 Communications System		
Land Based	P05100	7-393
Shipboard	P05200	7-411
Range Enhancing	P05300	7-421
4.7 Beach Transfer System	P01100	7-423
4.8 Cleaning System Van	P19200	7-437
4.9 Supply Van	P19800	7-465
4.10 Personnel Transfer Boats	P19900	7-471
4.11 GPS Response Asset Tracking System	P20100	7-503
4.12 Hose Van	P20200	7-517
4.13 Rapid Personnel/Equip Trans Sys	P20000	7-519
 5. Logistic Support System		
5.1 Floating Hose System	P08100	7-525
5.2 Oil Storage Bldr 136K	P14100	7-549
5.3 Oil Storage Bldr 290K	P14200	7-555
5.4 Material Transfer System	P11100	7-561
5.5 Oil Bldr Transfer System	P20300	7-563
5.6 Debris Handling System	P20400	7-565
5.7 Vacuum Pump/Skimmer System	P18100	7-567
5.8 Incinerator System	P20500	7-591
5.9 Oil/Water Separation System	P12100	7-593
5.10 Steam Generators	P12200	7-601
5.11 Spill Recovery Bladders 26-50K	P14300	7-611

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SECTION 7.2 INVENTORY OBJECTIVE LIST OF POLLUTION EQUIPMENT, Cont.

Inventory Objective List	System Number	Page Number
6. Forward Response Systems		
6.1 Salvage Supt Skim Sys.....	P16200	7-619
6.2 Tier 1 Tanker Skim Sys.....	P16800	7-653
6.3 Inland Support Skimmer System.....	P16700	7-675

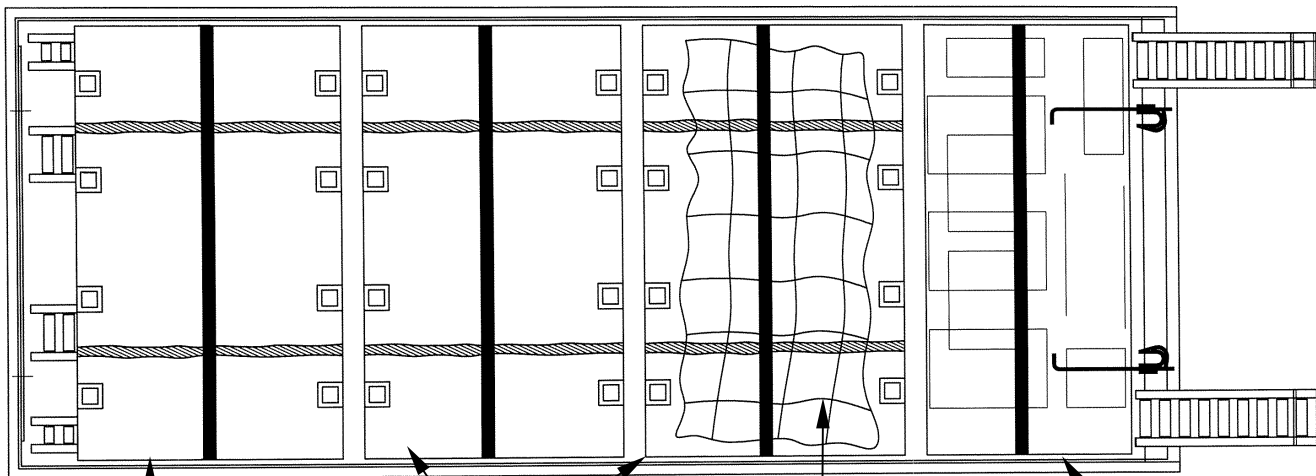
SECTION 7.3

POLLUTION SYSTEMS

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OIL CONTAINMENT BOOM SYSTEM P19100

S0300-BV-CAT-020



Containment Boom Pallet
Two 330-Ft Legs of
Containment Boom

Containment Boom Pallet
Two 330-Ft Legs of
Containment Boom

Shore Boom
In Cargo Net on Top of
Containment Boom

Equipment Basket
Absorbent Boom and
Absorbent Pads Stored on
Top of Equipment Basket

BOOM VAN PACKING

Oil Containment Boom System Overview

S0300-BV-CAT-020**OIL CONTAINMENT BOOM SYSTEM****SYSTEM NUMBER P19100****SYSTEM DESCRIPTION**

The Oil Containment Boom System P19100 is the primary containment equipment at an oil spill site, and consists of vans, boom, air compressors, and necessary ancillary equipment to support the various types of containment boom. The Oil Containment Boom System is portable and maintained in a state of readiness for rapid deployment to a spill site.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM NUMBER</u>	<u>Qty</u>
1. Van, Oil Containment Boom		1
a. USS-42HB Boom Van:	VA0737	
Oil Containment Boom		
Model USS-42HB, 42" x 55'	BM0737	36
Model USS-42SB, 42" x 25'	BM0736	4
Pallet, Storage, USS-42/USS-42HB Boom	BM0876	3
Equipment Basket, USS-42/USS-42HB Boom:	BM0881	1
Air Compressor		1
19 Cfm @ 125 Psi, Diesel	AC0501	
14 Cfm @ 100 Psi, Diesel	AC0500 (Altn)	
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Pump, Diaphragm, 1" Pneumatic	PU2103	1
Carpenter Stopper, 5/8"	ST0010	2
Bridle, Wire Rope, 5/8" Carpenter Stopper	ST0012	2
Roundsling, Polyester, 14' 6"	SL0011(Altn not shown)	4
Roundsling, Polyester, 16'	SL0012	4
b. USS-42 Boom Van:	VA0738 (1st Altn)	
Oil Containment Boom:		
Model USS-42, 42" x 55'	BM0738	36
Model USS-42SB, 42" x 25'	BM0736	4
Pallet, Storage, USS-42/USS-42HB Boom	BM0876	3
Equipment Basket, USS-42/USS-42HB Boom:	BM0881	1
Air Compressor		1
22 Cfm @ 125 Psi, Diesel	AC0501	
14 Cfm @ 100 Psi, Diesel	AC0500 (Altn)	
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Pump, Diaphragm, 1" Pneumatic	PU2103	1
Carpenter Stopper, 5/8"	ST0010	2
Bridle, Wire Rope, 5/8" Carpenter Stopper	ST0012	2
Roundsling, Polyester, 16'	SL0012	4

S0300-BV-CAT-020**OIL CONTAINMENT BOOM SYSTEM****SYSTEM NUMBER P19100**

c. FUG Boom Van:	VA0720 (2nd Altn)	
Oil Containment Boom Model FUG, 42" x 55'	BM0735	36
Pallet, Storage, FUG Boom	BM0877	3
Equipment Basket, FUG Boom:	BM0880	1
Air Compressor		1
19 Cfm @ 125 Psi, Diesel	AC0501	
14 Cfm @ 100 Psi, Diesel	AC0500 (Altn)	
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Roundsling, Polyester, 16'	SL0012	4

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Oil Containment Boom Van (USS-42HB Boom) VA0737

S0300-BV-CAT-020**VAN, OIL CONTAINMENT BOOM (USS-42HB BOOM)****ESSM NUMBER VA0737****DESCRIPTION**

The Oil Containment Boom Van VA0737 is a storage and shipping container for 2000 feet of Oil Containment Boom, a diesel driven air compressor, tools, a repair kit, tow lines, related rigging materials, and other support equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	27,500 lb

REFERENCES

None

S0300-BV-CAT-020



Oil Containment Boom Van (USS-42 Boom) VA0738

S0300-BV-CAT-020**VAN, OIL CONTAINMENT BOOM (USS-42 BOOM)****ESSM NUMBER VA0738****DESCRIPTION**

The Oil Containment Boom Van VA0738 is a storage and shipping container for 2000 feet of Oil Containment Boom, a diesel driven air compressor, tools, a repair kit, tow lines, related rigging materials, and other support equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	27,500 lb

REFERENCES

None

S0300-BV-CAT-020



Oil Containment Boom Van (FUG Boom) VA0720

S0300-BV-CAT-020**VAN, OIL CONTAINMENT BOOM (FUG BOOM)****ESSM NUMBER VA0720****DESCRIPTION**

The Oil Containment Boom Van VA0720 is a storage and shipping container for 2000 feet of Oil Containment Boom, a diesel driven air compressor, tools, a repair kit, tow lines, related rigging materials, and other support equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	26,300 lb

REFERENCES

None

S0300-BV-CAT-020



42" x 55' Oil Containment Boom, Model USS-42HB BM0737

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL USS-42HB,
42" X 55'****ESSM NUMBER BM0737****DESCRIPTION**

The Oil Containment Boom, Model USS-42HB, BM0737 is constructed of nitrile/vinyl rubber-impregnated, high strength nylon cloth that resists abrasions, gouging, oil, and salt water. The standard 55-ft section has five 10-ft long, 18-inch diameter inflation chambers with inflation/deflation valves. There is a 10-inch piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized, with no stitched seams that can pull apart.

The boom has a skirt that extends 24 inches below the inflation chambers for containing the oil. A 1/2-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible orange strips are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne. The boom is high in buoyancy and will float higher in the water than standard boom.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-42HB
Inflation pressure	2 - 3 psig
Test pressure	6 psig
Draft	30 in.
Freeboard	20 in.
Overall height inflated	50 in.
Overall height deflated	55 1/2 in.
Section length	55 ft
Weight per foot	7.5 lb
Flotation chamber	
Diameter	18 in.
Length	10 ft
Air valves per chamber	2
Chamber buoyancy	1600 lb
Handle spacing	4 ft

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42HB, 42" X 55'****ESSM NUMBER BM0737**

SPECIFICATIONS (Cont'd)

Materials

Coated fabric	Nitrile/vinyl rubber impregnated high strength nylon cloth
Color	Black with high visibility orange strips
Ballast	1/2-in. galvanized steel chain, 45,000-lb tensile strength
End connections	Anodized 6061-T6 aluminum alloy extrusion
Connector plate	Stainless steel
Clevis, shackles, & oblong clevis pins	Galvanized steel
Inflation/deflation valves	Plastic with stainless steel hardware
Tow bar	Stainless steel

PHYSICAL CHARACTERISTICS

	<u>Operating*</u>
Length	55 ft, 0 in.
Height (overall)	3 ft, 6 in.
Diameter (bladder inflated)	1 ft, 8 in.
Cube	324 cu ft
Weight	396 lb

*Operating characteristics are for one 55' section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



42" x 55' Oil Containment Boom, Model USS-42 BM0738

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738****DESCRIPTION**

The Oil Containment Boom, Model USS-42 BM0738 is constructed of nitrile/vinyl rubber-impregnated, high strength nylon cloth that resists abrasions, gouging, oil, and salt water. The standard 55-ft section has five 10-ft long, 14-inch diameter inflation chambers with inflation/deflation valves. There is a 10-inch piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized, with no stitched seams that can pull apart.

The boom has a skirt that extends 24 inches below the inflation chambers for containing the oil. A 1/2-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible orange strips are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-42
Inflation pressure	2 - 3 psig
Test pressure	6 psig
Draft	22 in.
Freeboard	16 in.
Overall height inflated	42 in.
Overall height deflated	52 1/2 in.
Section length	55 ft
Weight per foot	6.7 lb
Flotation chamber	
Diameter	14 in.
Length	10 ft
Air valves per chamber	2
Chamber buoyancy	950 lb
Handle spacing	4 ft
Materials	
Coated fabric	Nitrile/vinyl rubber-impregnated high strength nylon cloth
Color	Black with high visibility orange strips
Ballast	1/2-in. galvanized steel chain, 45,000-lb tensile strength

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738**

SPECIFICATIONS (Cont'd)

End connections	Anodized 6061-T6 aluminum alloy extrusion
Connector plate	Stainless steel
Clevis, shackles, & oblong clevis pins	Galvanized steel
Inflation/deflation valves	Plastic with stainless steel hardware
Tow bar	Stainless steel

PHYSICAL CHARACTERISTICS

	<u>Operating*</u>
Length	55 ft, 0 in.
Height (overall)	3 ft, 6 in.
Diameter (bladder inflated)	1 ft, 3in.
Cube	240 cu ft
Weight	420 lb

*Operating characteristics are for one 55' section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



42" x 55' Oil Containment Boom, Model FUG BM0735

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL FUG
42" X 55'****ESSM NUMBER BM0735****DESCRIPTION**

The Oil Containment Boom, Model FUG, BM0735 is an inflatable, rubberized, all-nylon boom that resists abrasions, gouging, oil, and salt water. The standard 55-foot section has five 10-ft long, 14-inch diameter inflation chambers with inflation/deflation valves. There is a 12-inch piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized, with no stitched seams that can pull apart.

The boom has a skirt that extends 24 inches below the inflation chambers for containing the oil. A 1/2-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. The boom also has two rubber-coated, 5/8-inch Kevlar lines through reinforced loops on each side of the skirt below the inflation chamber. The chain and Kevlar line serve as tension carrying members of the boom.

There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible orange strips are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne.

SPECIFICATIONS

Manufacturer	Goodyear
Model	FUG
Inflation pressure	2 - 3 psig
Test pressure	6 psig
Weight per ft	11.6 ±0.5 lb
Freeboard	12 1/2 in.
Boom tensile strength:	
Working	23,000 lb
Proof	45,000 lb
Ultimate	65,000 lb
Chamber buoyancy	630 lb
Lifting points	4 per boom section

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL FUG,
42" X 55'****ESSM NUMBER BM0735**

PHYSICAL CHARACTERISTICS

Operating*

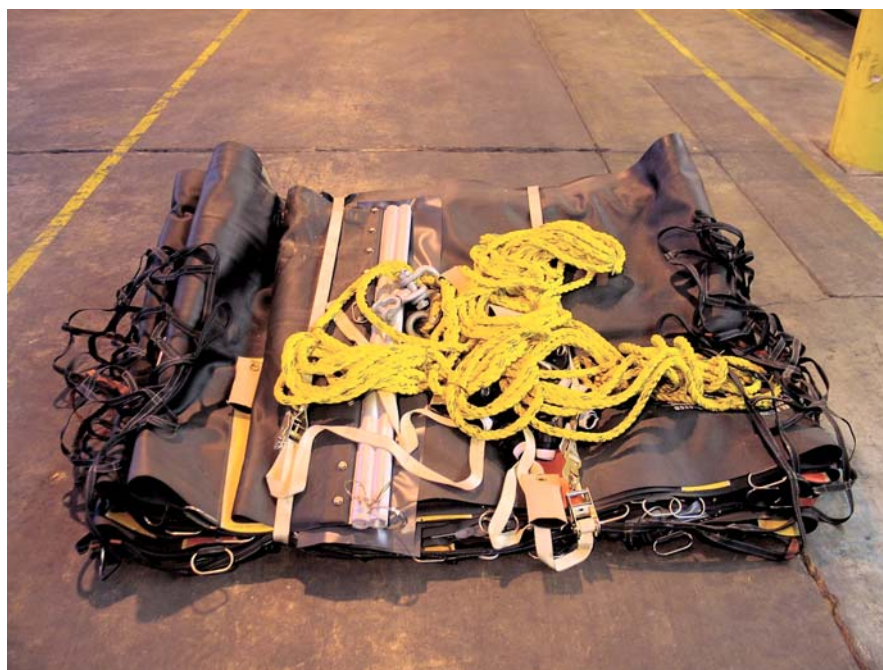
Length	55 ft, 0 in.
Height (overall)	3 ft 6 in.
Diameter (bladder inflated)	1 ft, 2 in.
Cube	224 cu ft
Weight	644 lb

*Operating characteristics are for one 55' section of boom.

REFERENCES

1. NAVSEA Operations and Maintenance Manual, S-5400-AA-OHB-00-0.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



Shore Boom, Model USS-42SB, BM0736

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL USS-42SB,
42" X 25'****ESSM NUMBER BM0736**

DESCRIPTION

The USS-42SB Oil Containment Boom BM0736 is used to contain and control spilled oil in support of U. S. Navy oil pollution operations. Each boom segment is fitted with an air buoyancy chamber for flotation and two water chambers at the bottom to secure the boom to the shoreline and prevent oil from passing under it.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-42SB
Inflation pressure	2 - 3 psi
Test pressure	6 psi
Overall height deflated	36 in.
Section length	25 ft

P08100-0003

PHYSICAL CHARACTERISTICS

P08100-0003

Operating*

Length	25 ft, 0 in.
Height (overall)	3 ft, 6 in.
Diameter	1 ft, 11 in.
Cube	168 cu ft
Weight	322 lb

*Operating characteristics are for one 25' section of boom.

REFERENCES

1. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



USS-42/US-42HB Boom Storage Pallet BM0876
(Without Boom and Stanchions)



USS-42/US-42HB Boom Storage Pallet BM0876
(With Eight 65 1/2" Stanchions and Boom)

S0300-BV-CAT-020**PALLET, STORAGE, BOOM,
USS-42/USS-42HB****ESSM NUMBER BM0876**

DESCRIPTION

The 84-inch x 60-inch x 7-inch USS-42/USS-42HB Boom Storage Pallet BM0876 is a storage/shipping container for either the USS-42 or the USS-42HB boom. The pallet has two configurations. One configuration is with stanchions that are 65 1/2 inches in height. This configuration is used in the Oil Containment Boom Vans and is designed to hold 12 sections of USS-42 or USS-42HB. The second configuration is with stanchions that are 31 3/4 inches in height, due to storage restriction in the Sponson Rack SK0712 used in the Modular Skimmer System. This configuration is used with the Modular Skimmer System only and is designed to hold 6 sections of USS-42 or USS-42HB as applicable. The pallet is constructed of 2 and 2 1/2-inch square tubing with a 3/4-inch x #9 expanded metal deck to support the boom.

SPECIFICATIONS

Manufacturer ESSM Facility
Drawing number 6777293

PHYSICAL CHARACTERISTICS

	<u>Shipping (with boom)</u>	<u>Shipping (w/o boom)</u>
<u>Pallet with 65 1/2" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	5 ft, 5 1/2 in.	7 in.
Weight (with USS-42HB)	5626 lb	700 lb
Weight (with USS-42)	5962 lb	
Cube	191 cu ft	20 cu ft
<u>Pallet with 31 3/4" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	2 ft, 7 3/4 in.	7 in.
Weight (with USS-42HB)	3250 lb	636 lb
Weight (USS-42)	3442 lb	
Cube	93 cu ft	20 cu ft

REFERENCES

1. USS-42 & USS-42HB Equipment Container & Pallets, NAVSEA Dwg. 6777293.

S0300-BV-CAT-020



85" x 54" x 7" FUG Boom Storage Pallet BM0877

S0300-BV-CAT-020**PALLET, STORAGE, BOOM, FUG****ESSM NUMBER BM0877****DESCRIPTION**

The 84-inch x 54-inch x 7-inch FUG Boom Storage Pallet BM0877 is a storage/shipping container designed to hold 12 sections of FUG Boom. The pallet is constructed of 2 and 2 1/2-inch square tubing with a 3/4-inch x #9 expanded metal deck to support the boom.

SPECIFICATIONS

Manufacturer ESSM Facility
Drawing number 6777292

PHYSICAL CHARACTERISTICS

	<u>Shipping (with boom)</u>	<u>Shipping (w/o boom)</u>
Length	7 ft, 0 in.	7 ft, 0 in
Width	4 ft, 6 in.	4 ft, 6 in.
Height	5 ft, 5 1/2 in.	7 in.
Weight	7773 lb	435 lb
Cube	171 cu ft	18 cu ft

REFERENCES

1. FUG Boom Equipment Container & Pallets, NAVSEA Dwg. 6777292.

S0300-BV-CAT-020



USS-42 & USS-42HB Boom Equipment Basket BM0881

S0300-BV-CAT-020**EQUIPMENT BASKET, USS-42 & USS-42HB BOOM****ESSM NUMBER BM0881****DESCRIPTION**

The USS-42 and USS-42HB Boom Equipment Basket BM0881 is a metal, wire mesh container used to store and transport the ancillary equipment for the USS-42 and USS-42HB Boom. The equipment basket measures 84 inches x 48 inches x 46.5 inches and contains a 14- or 19-cfm air compressor, a machinery containment pool, a 1-inch diaphragm pump, and two 5/8-inch carpenter stoppers and bridles.

The rigging basket also contains a boom patching kit, basic hand tools, two helix anchors, two bridle assemblies for anchoring boom, a turning bar for screwing anchors into the ground, an adapter plate (FUG boom to USS-42HB), air and suction hoses, shackles, boom connector plates, light assemblies, various adaptors and connectors, a tow plate, sorbent pads, and other ancillary equipment.

SPECIFICATIONS

Manufacturer	ESSM Facility
Drawing number	6777293

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	7 ft, 0 in.
Width	4 ft, 0 in.
Height	3 ft, 10 1/2 in.
Cube	113 cu ft
Weight	2016 lb

REFERENCES

1. USS-42 & USS-42HB Equipment Container & Pallets, NAVSEA Dwg. 6777293.

S0300-BV-CAT-020



FUG Boom Equipment Basket BM0880

S0300-BV-CAT-020**EQUIPMENT BASKET, FUG BOOM****ESSM NUMBER BM0880****DESCRIPTION**

The FUG Boom Equipment Basket BM0880 is a metal, wire mesh container used to store and transport the ancillary equipment for the FUG Boom.

The equipment basket contains a 14- or 19-cfm air compressor, and a machinery containment pool. It also contains a patching kit, basic hand tools, boom end plates, four 3/8-inch x 50-foot air hoses, two toelines, shackles, a tow plate assembly, two red and eighteen amber light assemblies, a tow plate, sorbent pads, and various other ancillary items.

SPECIFICATIONS

Manufacturer	ESSM Facility
Drawing number	6777292

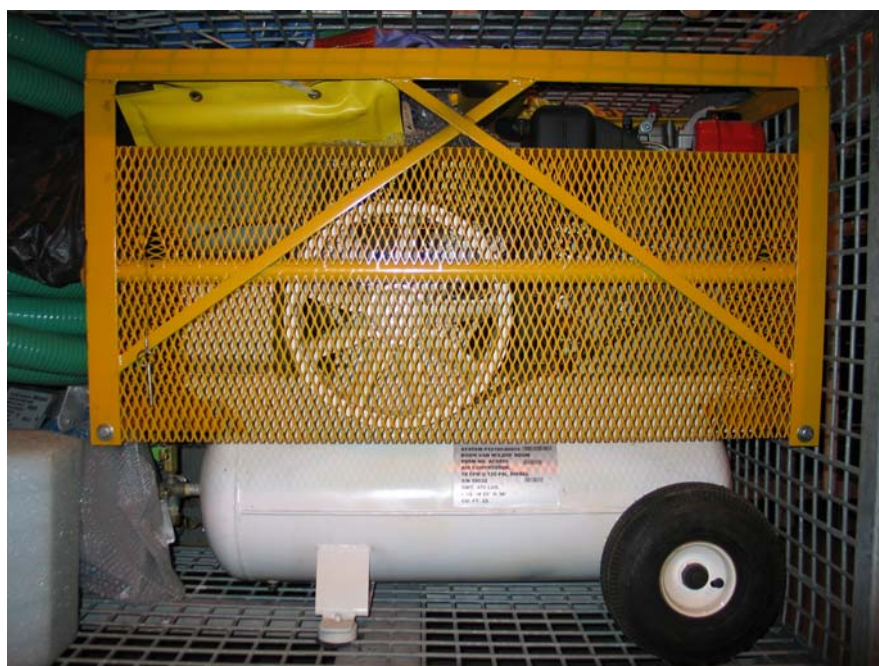
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	7 ft, 0 in.
Width	4 ft, 0 in.
Height	3 ft, 10 1/2 in.
Cube	113 cu ft
Weight	2146 lb

REFERENCES

1. FUG Oil Boom Equipment Container & Pallets, NAVSEA Dwg. 6777292.

S0300-BV-CAT-020



19-Cfm Air Compressor AC0501

S0300-BV-CAT-020**AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL****ESSM NUMBER AC0501****DESCRIPTION**

The Air Compressor AC0501 is a two-stage, high volume air compressor that provides 19 cfm at 125 psig. The air compressor is powered by a 1-cylinder, 6.2-hp diesel engine, which has its own fuel supply tank. The engine is designed to operate at a continuous speed of 3600 rpm for long periods of time. The engine and compressor are enclosed in a protective frame that is mounted on top of a 30-gallon air storage tank with wheels, which allows for easy maneuverability.

SPECIFICATIONSAir Compressor Assembly

Manufacturer	Emglo Products
Model	GC8YDA-17F

Air Compressor

Manufacturer	Emglo Products
Model	JU
Capacity	19 cfm
Rated operating pressure	125 psi
Operating pressure range	100 to 120 psig
Stages	2
Rpm	875
Storage tank	30 gallons
Cylinders	2

Engine

Manufacturer	Yanmar
Model	L60
Cylinders	1
Bore	2.95 in.
Stroke	2.44 in.
Displacement	16.7 cu in.
Rpm (continuous)	3600
Compression ratio	20 : 1
Starting	Elec./recoil
Battery	12 V dc
Fuel	Diesel
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	22 cu ft
Weight	398 lb

S0300-BV-CAT-020

AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL

ESSM NUMBER AC0501

REFERENCES

1. Yanmar Diesel Engine Operation Manual for L-Series Engine.
2. Emglo Parts Price List J, 288.

S0300-BV-CAT-020



14-Cfm Air Compressor AC0500

S0300-BV-CAT-020**AIR COMPRESSOR, 14 CFM @ 100 PSI, DIESEL****ESSM NUMBER AC0500**

DESCRIPTION

The Air Compressor AC0500 is a diesel-powered, 14-cfm, air-cooled, single-stage, 4-cycle air compressor. The air compressor is used for boom inflation, operation of pneumatic-powered tools, and other needs that require low pressure, low volume air.

SPECIFICATIONS

Air Compressor Assembly

Manufacturer	Emglo Products
Model	22C125P17E

Air Compressor

Manufacturer	Emglo Products
Model	LCU
Cylinders	4
Stage	Single
Bore/stroke	2 1/2 in./2 in.
Displacement	13.6 cu in.
Pressure	100 psig
Rpm	1725
Cooling	Air

Engine

Manufacturer	Teledyne Wisconsin Motor
Model	WD1-436
Cylinders	1
Cooled	Air
Cycle	4
Starter	Electric generator/hand crank
Battery	12 V dc
Fuel	Diesel
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	20 cu ft
Weight	530 lb

REFERENCES

1. Wisconsin Diesel Engine Parts Catalog, MM-367.
2. Emglo Products Corp. Parts List, L-983.

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	1 ft, 8 in.	5 ft, 0 in.
Width	1 ft, 8 in.	5 ft, 0 in.
Height	6 in.	1 ft, 0 in.
Cube	1.5 cu ft	25 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



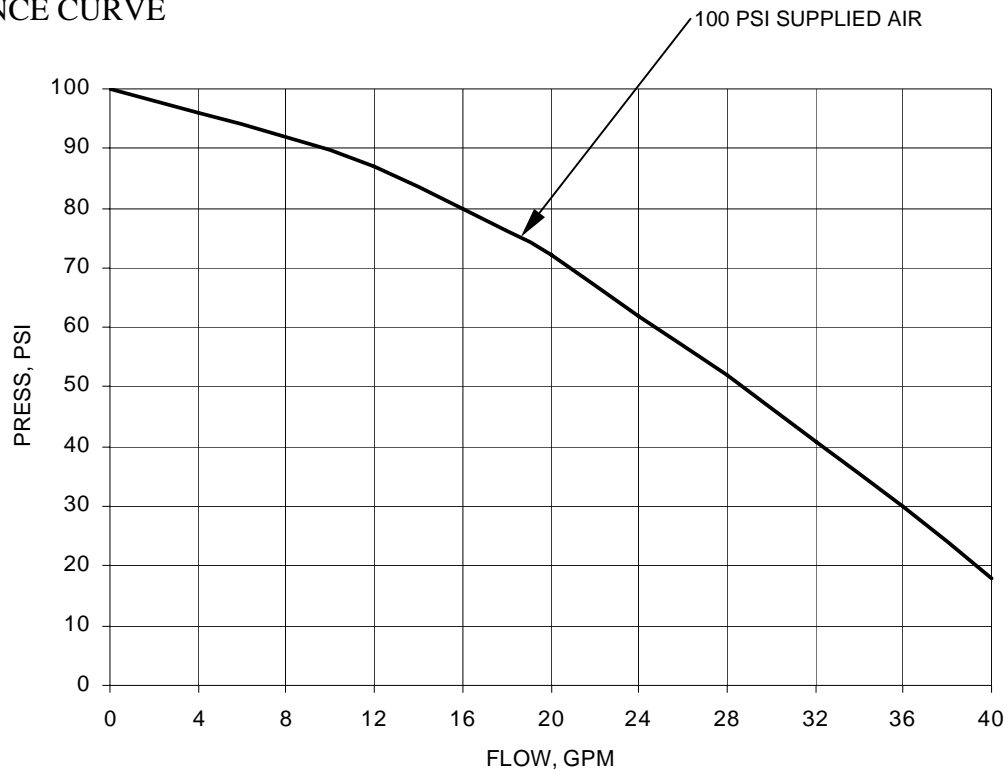
Pneumatic 1-Inch Diaphragm Pump PU2103

S0300-BV-CAT-020**PUMP, DIAPHRAGM, 1-INCH, PNEUMATIC****ESSM NUMBER PU2103****DESCRIPTION**

The Pneumatic 1-Inch Diaphragm Pump PU2103 is made of aluminum and is typically used to move abrasive, heavy, viscous, corrosive and aggressive materials. The pump is used in applications where electricity is not available or cannot be used due to safety conditions. The diaphragm pump provides pollution-free and energy-efficient operation, with fewer moving parts than conventional motor-driven pumps.

SPECIFICATIONSPump Assembly

Manufacturer	Warren Rupp
Model	SA1-DB4A
Suction	1 in.
Discharge	1 in.
Max. air supply pressure	125 psi
Max. discharge rate	42 gpm

PERFORMANCE CURVE

S0300-BV-CAT-020

PUMP, DIAPHRAGM, 1-INCH, PNEUMATIC

ESSM NUMBER PU2103

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 2 in.
Width	1 ft, 0 in.
Height	1 ft, 0 in.
Cube	1.5 cu ft
Weight	36 lb

REFERENCES

1. Manufacturer's Pamphlet for Models SA1-a and SA25A.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1" screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

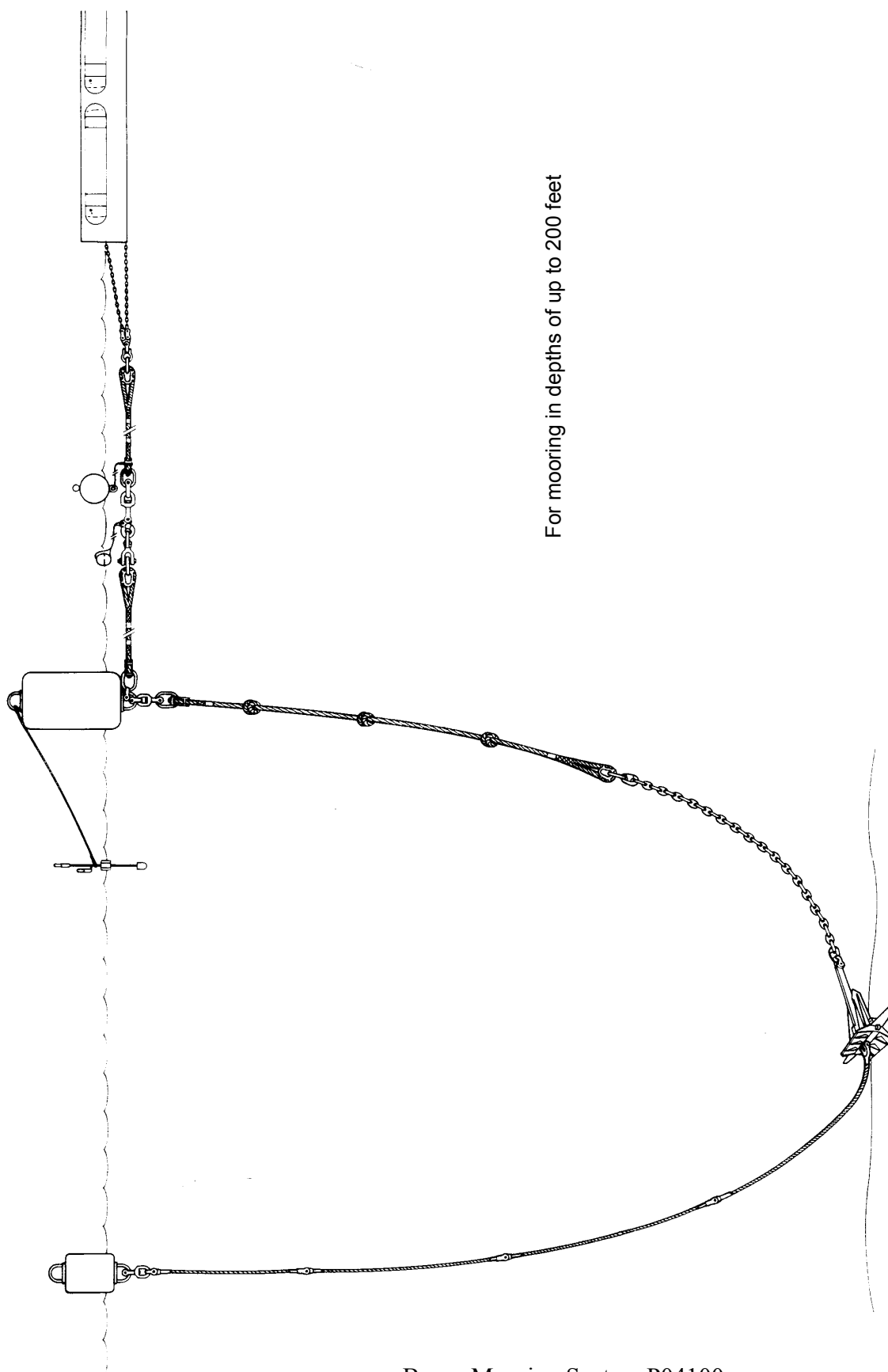
REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020

BOOM MOORING SYSTEM P04100

S0300-BV-CAT-020



For mooring in depths of up to 200 feet

Boom Mooring System P04100

S0300-BV-CAT-020**BOOM MOORING SYSTEM****SYSTEM NUMBER P04100****SYSTEM DESCRIPTION**

The Boom Mooring System P04100 is comprised of a 500- or 1000-pound anchor, a mooring buoy, a crown buoy, chain, wire rope, and polypropylene line. The system is designed to hold the SUPSALV Oil Containment Boom in position around a casualty vessel or elsewhere in water depths up to 200 feet, against a 3-knot current.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Mooring System		1
a. Mooring System, Boom, w/500-Lb Anchor	MS0009	
Anchor, Stato, 500-Lb, Folding Stabilizer, Short Mud Palm	AN0152	1
Buoy, Mooring, 5000-Lb Buoyancy	BU0140	1
Buoy, Crown, 24" x 36", 350-Lb Buoyancy	BU0320	1
Chain, Stud Link, 2 1/4" x 90'	CH1093	1
b. Mooring System, Boom, w/1000-Lb Anchor	MS0011	
Anchor, Stato, 1000-Lb, Folding Lightweight Stabilizer	AN0153	1
Buoy, Mooring, 5000-Lb Buoyancy	BU0140	1
Buoy, Crown, 24" x 36", 350-Lb buoyancy	BU0320	1
Chain, Stud Link, 2 1/4" x 90'	CH1093	1

S0300-BV-CAT-020



Boom Mooring System MS0009

S0300-BV-CAT-020**MOORING SYSTEM, BOOM W/500-LB ANCHOR****ESSM NUMBER MS0009****DESCRIPTION**

The Boom Mooring System MS0009 consists of various components that include a mooring buoy, a crown buoy, a 500-lb anchor, chain, wire rope, and polypropylene line. The Boom Mooring System is designed to hold boom in position around a casualty vessel or in any area where water depths do not exceed 200 feet and currents do not exceed three knots. Three Boom Mooring Systems are required to hold 1000 feet of boom in position.

SPECIFICATIONS

Operating depth	Up to 200 ft
Mooring buoy	
Weight	700 lb
Buoyancy	5000 lb
Rated pull-through	10,000 lb
Dimensions	4 ft diameter x 7 ft, 4 in. long
Crown buoy	
Weight	110 lb
Buoyancy	350 lb
Rated pull-through	10,000 lb
Dimensions	2 ft diameter x 3 ft long
Mooring cube	
Weight	3 1/2 lb
Buoyancy	49 lb
Dimensions	9 ft x 9 ft x 1 ft, 6 in.
Anchor (500-lb)	
Type	Stato w/folding stabilizers
Shaft length	4 ft, 2 1/2 in.
Fluke length	2 ft, 4 in.
Stabilizer length	1 ft, 6 in.
Fluke angle	34° w/ wedges; 50° w/out wedges
Holding power (calculated)	8800 lb in mud; 12,500 lb in sand; questionable in rocks or coral
Chain	
Type	Stud link, anchor, low alloy steel, flash butt-welded (MIL-C-24633)
Size	2 1/4 in. or 2 5/16 in. diameter links, 90 ft long
Weight	4250 lb

S0300-BV-CAT-020**MOORING SYSTEM, BOOM W/500-LB ANCHOR (CONTD)****ESSM NUMBER MS0009**

SPECIFICATIONS (Cont'd)

Wire rope

Size	5/8 in. diameter
Working load	5680 lb

Polypropylene rope

Size	6 in. crcmf
Working load	7333 lb

Polypropylene rope

Size	1 1/2 in. crcmf
Working load	633 lb

PHYSICAL CHARACTERISTICS

Shipping

Length	8 ft, 4 in.
Width	4 ft, 0 in.
Height	8 ft, 4 in.
Cube	278 cu ft
Weight	8100 lb

REFERENCES

1. Operations and Maintenance Manual, Oil Containment Boom and Boom Mooring System, S9597-AC-MMO-010.

S0300-BV-CAT-020



Boom Mooring System MS0011

S0300-BV-CAT-020**MOORING SYSTEM, BOOM W/1000-LB ANCHOR****ESSM NUMBER MS0011****DESCRIPTION**

The Boom Mooring System MS0011 consists of various components that include a mooring buoy, a crown buoy, a 1000-lb anchor, chain, wire rope, and polypropylene line. The Boom Mooring System is designed to hold boom in position around a casualty vessel or in any area where water depths range from 200 to 600 feet and currents do not exceed three knots. The Boom Mooring System with the 1000-lb anchor is designed to be used with the Boom Mooring System Deep Water Extension. Three Boom Mooring Systems are required to hold 1000 feet of boom in position.

SPECIFICATIONS

Operating depth	200 ft to 600 ft
Mooring buoy	
Weight	700 lb
Buoyancy	5000 lb
Rated pull-through	10,000 lb
Dimensions	4 ft diameter by 7 ft, 4 in. long
Crown buoy	
Weight	110 lb
Buoyancy	350 lb
Rated pull-through	10,000 lb
Dimensions	2 ft diameter x 3 ft long
Mooring cube	
Weight	3 1/2 lb
Buoyancy	49 lb
Dimensions	9 ft x 9 ft x 1 ft, 6 in.
Anchor (1000-lb)	
Type	Stato w/folding stabilizers
Shank length	7 ft, 4 in.
Fluke length	4 ft, 3 in.
Stabilizer length	1 ft, 11 1/2 in.
Fluke angle	34° w/ wedges; 50° w/out wedges
Holding power	17,600 lb in mud; 25,500 lb in sand; questionable in rocks or coral
Chain	
Type	Stud link, anchor, low alloy steel, flash butt-welded (MIL-C-24633)
Size	2 1/4 in. or 2 5/16 in. diameter links, 90 ft long
Weight	4250 lb

S0300-BV-CAT-020**MOORING SYSTEM, BOOM W/1000-LB ANCHOR (CONTD)****ESSM NUMBER MS0011**

SPECIFICATIONS (Cont'd)

Wire rope	
Size	5/8 in. diameter
Working load	5680 lb
Polypropylene rope	
Size	6 in. crcmf
Working load	7333 lb
Polypropylene rope	
Size	1 1/2 in. crcmf
Working load	633 lb

PHYSICAL CHARACTERISTICS

Shipping

Length	8 ft, 4 in.
Width	4 ft, 0 in.
Height	8 ft, 4 in.
Cube	278 cu ft
Weight	8600 lb

REFERENCES

1. Operations and Maintenance Manual, Oil Containment Boom and Boom Mooring System, S9597 AC-MMO-010.

S0300-BV-CAT-020



500-Lb Stato Anchor with Short Mud Palm and Folding Stabilizers AN0152

S0300-BV-CAT-020**ANCHOR, STATO, 500-LB, FOLDING STABLIZER,
SHORT MUD PALM****ESSM NUMBER AN0152**

DESCRIPTION

The 500-Lb Stato Anchor with Short Mud Palm and Folding Stabilizers AN0152 was developed for use in both sand and mud bottoms. The anchor incorporates design characteristics that enhance burial and increase holding power.

SPECIFICATIONS

Manufacturer	Various, U.S. Navy Design
Type	500 lb Stato

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	4 ft, 8 in.
Width	2 ft, 8 in.
Height	1 ft, 9 in.
Cube	24 cu ft
Weight	500 lb

REFERENCES

None

S0300-BV-CAT-020



1000-Lb Stato Anchor with Folding Lightweight Stabilizers AN0153

S0300-BV-CAT-020**ANCHOR, STATO, 1000-LB,
FOLDING LIGHTWEIGHT STABLIZER****ESSM NUMBER AN0153**

DESCRIPTION

The 1000-lb Stato Anchor with Folding Lightweight Stabilizers AN0153 was developed for use in both sand and mud bottoms. The anchor incorporates design characteristics that enhance burial and increase holding power.

SPECIFICATIONS

Manufacturer	Various, U.S. Navy Design
Type	1000 lb Stato

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	8 ft, 4 in.
Width	6 ft, 5 in.
Height	2 ft, 3 in.
Cube	120 cu ft
Weight	1000 lb

REFERENCES

None

S0300-BV-CAT-020



Mooring Buoy BU0140

S0300-BV-CAT-020**BUOY, MOORING, 5000-LB BUOYANCY****ESSM NUMBER BU0140**

DESCRIPTION

The Mooring Buoy BU0140 is designed to provide buoyancy to the anchor line so that boom or boats can be fastened to the Boom Mooring System.

SPECIFICATIONS

Manufacturer	Seaward International
Material	Polyethylene foam/urethane cover
Buoyancy	5000 lb
Rated pull-through	10,000 lb
Operating depth	200 feet

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 ft, 1 in
Diameter	3 ft, 10 in.
Cube	134 cu ft
Weight	748 lb

REFERENCES

None

S0300-BV-CAT-020



Crown Buoy BU0320

S0300-BV-CAT-020**BUOY, CROWN, 350-LB BUOYANCY, 24" X 36"****ESSM NUMBER BU0320**

DESCRIPTION

The Crown Buoy BU0320 marks the location of the anchor and supports the wire rope attached to the crown of the anchor. The anchor crown wire rope is used to break out the anchor for retrieval.

SPECIFICATIONS

Manufacturer	Seaward International
Material	Polyethylene foam/urethane cover
Buoyancy	350 lb
Rated pull-through	10,000 lb
Operating depth	200 feet

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 0 in.
Diameter	2 ft, 0 in.
Cube	16 cu ft
Weight	228 lb

REFERENCES

None

S0300-BV-CAT-020



2 1/4" x 90' Stud Link Chain CH1093

S0300-BV-CAT-020**CHAIN, STUD LINK, 2 1/4" x 90'****ESSM NUMBER CH1093**

The 2 1/4" x 90' Stud Link Chain CH1093 is connected to the anchor shank with a safety shackle and a pear-shaped detachable link. The other end of the anchor chain is attached to a polypropylene anchor line (6" circumference) by another pear-shaped detachable link. The anchor line is then attached to the mooring buoy.

SPECIFICATIONS

Link size	2 1/4 in.
Length	90 ft
Proof test load	396,000 lb
Break test load	570,000 lb

PHYSICAL CHARACTERISTICSShipping

Length	5 ft, 2 in.
Width	3 ft, 0 in.
Height	3 ft, 6 in.
Cube	54.25 cu ft
Weight	4940 lb

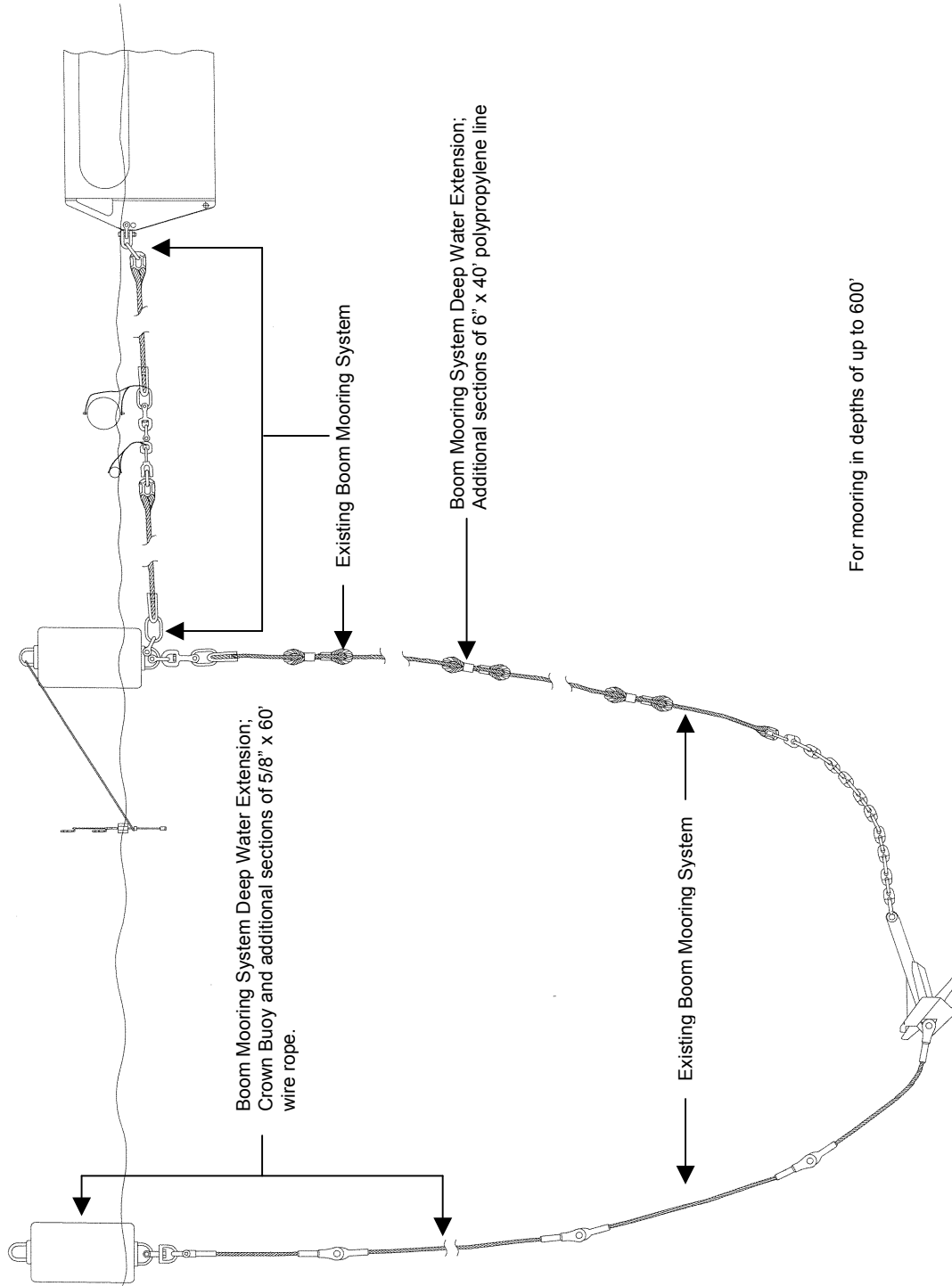
REFERENCES

1. Baldt Catalog #30 for Anchors and Chains.

S0300-BV-CAT-020

BOOM MOORING SYSTEM DEEP WATER EXTENSION P04200

S0300-BV-CAT-020



Boom Mooring System Deep Water Extension P04200

S0300-BV-CAT-020**BOOM MOORING SYSTEM
DEEP WATER EXTENSION****SYSTEM NUMBER P04200**

SYSTEM DESCRIPTION

The Boom Mooring System Deep Water Extension P04200 consists of a Mooring Buoy BU0140 used as a crown buoy, eight 5/8" x 50' sections of wire rope, fifteen 6" x 40' sections of polypropylene line, and the necessary hardware needed to extend the working depths of a mooring system from the depth of 200 feet up to a depth of 600 feet.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Buoy, Mooring, 5000-Lb Buoyancy	BU0140	1
2. Deep Water Extension, Boom Mooring System	MS0020	1

S0300-BV-CAT-020



Mooring Buoy BU0140

S0300-BV-CAT-020**BUOY, MOORING, 5000# BUOYANCY****ESSM NUMBER BU0140**

DESCRIPTION

The Mooring Buoy BU0140 is designed to moor boom, boats, or other objects that are to be held in a designated area where the water depth is 200 feet or less. Its use in the Boom Mooring System Deep Water Extension is as a crown buoy to support the additional weight of the eight 5/8" x 50' sections of wire rope needed to extend the working depth of the mooring system to 600'.

SPECIFICATIONS

Manufacturer	Seaward International, Inc.
Material	Polyethylene foam/urethane cover
Buoyancy	5000 lb
Rated pull-through	10,000 lb
Operating depth	200 feet

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	9 ft, 1 in.
Diameter	3 ft, 10 in.
Cube	134 cu ft
Weight	748 lb

REFERENCES

None

S0300-BV-CAT-020



Boom Mooring System Deep Water Extension MS0020

S0300-BV-CAT-020**DEEP WATER EXTENSION,
MOORING SYSTEM, BOOM****ESSM NUMBER MS0020**

DESCRIPTION

The Boom Mooring System Deep Water Extension MS0020 is used to extend the working depth of the boom mooring leg to a depth of 600 feet. The system is designed to be used in conjunction with a Boom Mooring System when the depth of water exceeds 200 feet but is not greater than 600 feet.

SPECIFICATIONS

Operating depth	Up to 600 ft
Mooring buoy	
Weight	834 lb
Buoyancy	5000 lb
Rated pull-through	10,000 lb
Dimensions	3 ft, 10 in. diameter x 9 feet, 1 in.

PHYSICAL CHARACTERISTICS

Shipping

Length	9 ft, 1 in.
Width	4 ft, 0 in.
Height	7 ft, 1 in.
Cube	258 cu ft
Weight	2260 lb

REFERENCES

1. Operations and Maintenance Manual, Oil Containment Boom and Boom Mooring System, 9507-AC-MM0-010.

S0300-BV-CAT-020

BOOM HANDLING BOAT P03100

S0300-BV-CAT-020



Boom Handling Boat WB0722

S0300-BV-CAT-020**BOOM HANDLING BOAT****SYSTEM NUMBER P03100****SYSTEM DESCRIPTION**

The Boom Handling Boat (BHB) System P03100 consists of a 24-foot boom handling boat, a VHF marine mobile radio, a CB marine radio, a radar unit, a 4-leg roundsling bridle for lifting the boat, and a tool box with appropriate tools for maintaining the boom handling boat system. The system also provides a boat cradle or a trailer for storage and shipping of the 24' Boom Handling Boat WB0722.

The 24' Boom Handling Boat is an all welded aluminum, single-screw craft that has been designed with removable bow sections. The boat can be shipped with the two bow sections removed and stowed on the after deck and the boat placed in the shipping cradle. Or it can be shipped with the bow sections in place and the boat placed on the boat trailer. There are presently only two boat trailers in the system and they are located at the ESSM facility in Hawaii.

The BHB is equipped with a four-point lift system. It has a 3000-pound bollard pull capacity, and can run at speeds up to 16.5 knots. The Boom Handling Boat System P03100 provides a powerful all-weather towboat for handling the containment boom and skimmer systems.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Cradle, 24' Boom Handling Boat	BC0722	1
2. Trailer, 24' BHB WB0722	TR0944 (Optional)	1
3. Boat		
a. 24' Boom Handling	WB0722A	1
b. 24' Boom Handling	WB0722B (Altn)	1*
c. 24' Boom Handling	WB0722C (Altn)	1*
d. 24' Boom Handling	WB0722D (Altn)	1*
e. 24' Boom Handling	WB0722E (Altn)	1*
Radio, CB, Marine Mobile	RA1709	1
Radio:		1
VHF, Marine Mobile, Voyager (78-Channel)	RA1830 (Altn)	
VHF, Marine Mobile, Icom (58-Channel)	RA1831	
Radar, Model 1730/1731	RD0001	1
Roundsling Bridle, Polyester, 4-Leg, 11' 6"	SL0350	1
Tool Box, 24' BHB	TL0030	1

*Alternate ESSM configurations for the 24' Boom Handling Boats are functionally equivalent to WB0722A and are not shown in the catalog.

S0300-BV-CAT-020



24' Boom Handling Boat Cradle BC0722 With 24' Boom Handling Boat

S0300-BV-CAT-020**CRADLE, 24' BOOM HANDLING BOAT****ESSM NUMBER BC0722****DESCRIPTION**

The 24' Boom Handling Boat Cradle (BC0722) is constructed from 3 1/2" steel channel and is made to fit the contour of the hull of the Boom Handling Boat. To prevent damage to the bottom of the boat the cradle supports are fitted with 4" x 4" oak timbers covered with indoor-outdoor carpet and are bolted to the three sets of cradle supports.

The 24' Boom Handling Boat Cradle (BC0722) is used as a storage and shipping cradle for transportation on military air cargo planes or on over-the-road flatbed trailers.

SPECIFICATIONS

Manufacturer Monark

PHYSICAL CHARACTERISTICSShipping

Length	18 ft, 0 in.
Width	7 ft, 1 in.
Height	2 ft, 4 in.
Cube	298 cu ft
Weight	1500 lb

REFERENCES

1. 24' Boom Handling Boat Cradle, NAVSEA Dwg. 6147160.

S0300-BV-CAT-020



Boom Handling Boat Trailer TR0944

S0300-BV-CAT-020**TRAILER FOR WB0722, 24' BHB****ESSM NUMBER TR0944****DESCRIPTION**

The Boom Handling Boat (BHB) Trailer TR0944 is a 10,000-pound capacity trailer used to transport, launch, and recover the 24-foot BHB. It is also used as a storage platform when the boat is not in use. The trailer is equipped with an electrically operated winch, surge-type brakes, and an adjustable suspension.

SPECIFICATIONS

Manufacturer	Monark
Part number	009102
Capacity	10,000 lb
Construction	Welded steel (galvanized)
Hitch type	Dico Model 20 Surge Brake w/ball hitch 2 5/16"
Wheel bearing	Roller with greaseable hubs
Tire size	7.50 x 16 ST
Air pressure	95 psi
Quantity	5 (includes spare)
Brakes	Bendix (2" x 12") shoes
Winch manufacturer	Powerwinch Co.
Model	912-C
Capacity	6000 lb; double line

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (trailer only)	30 ft, 0 in.
Width	8 ft, 0 in.
Height (trailer only)	5 ft, 0 in.
Cube (trailer only)	1200 cu ft
Weight (trailer only)	4000 lb

REFERENCES

None

S0300-BV-CAT-020



Boom Handling Boat WB0722A, Cradle Shipping Configuration (Bow Removed)



Boom Handling Boat WB0722A, Trailer Shipping Configuration

S0300-BV-CAT-020**BOAT, 24', BOOM HANDLING****ESSM NUMBER WB0722A****DESCRIPTION**

Boom Handling Boat (BHB) WB0722A is a powerful all-weather towboat used for handling containment boom, towing V-boom skimming systems, and transporting personnel and equipment to either inshore or offshore spill sites. There are 5 different series of boats made by various manufacturers.

SPECIFICATIONSBoat

Manufacturer	
0 Series	Monark
20 Series	Peterson
30 Series	Miller Marine
40 Series	Monark
90 Series	SeaArk Marine
Model	24 foot
Sections	3
Design draft	3 ft, 2 in.
Freeboard fwd	2 ft, 8 in.
Freeboard aft	2 ft, 6 in.
Max load capacity	2050 lb
Passengers	4 plus operator
Bollard pull	3000 lb

Engine

Manufacturer	Detroit Diesel
Model	5062-7300
Type	6V-53TI
Cylinders	6
Bore	3.875 in.
Stroke	4.5 in.
Displacement	318 cu in.
Compression ratio	17 : 1
Shaft horsepower	260 @ 2800 rpm
Main bearings	4
Starter	Electric
Battery	12 V dc
Alternator	60 A
Fuel	Diesel
Fuel source	Integral 16.5-gal. tank (2)
Fuel consumption	12.5 gph

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	24 ft, 9 in.	20 ft, 8 in.
Beam	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 8 in.	8 ft, 3 in.
Cube	1716 cu ft	1364 cu ft
Weight	9700 lb	9700 lb
Weight (cradle)	NA	795 lb
Weight (boat & cradle)	NA	10,495 lb

S0300-BV-CAT-020

BOAT, 24', BOOM HANDLING (CONTD)

ESSM NUMBER WB0722A

REFERENCES

1. Monark Aluminum Work Boat Owner's Manual.
2. Twin Disc Service Manual MG-506.
3. Twin Disc Service Manual MG-507.
4. Detroit Diesel Operator's Manual 53 Series.
5. Detroit Diesel Service Manual 53 Series.
6. Detroit Diesel Field Service Data.
7. Detroit Diesel Parts Manual 53 Series.
8. NAVSEA Boat Information Book for 24' Boom Handling Boat, S9077-BX-BIM-010.

S0300-BV-CAT-020



CB Marine Mobile Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709****DESCRIPTION**

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Manufacturer	Commercial
Frequency range	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only)	
RF output	4 W maximum
Receiver (CB)	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kV	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owners Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



VHF Marine Mobile Radio (Voyager, 76-Channel) RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE, VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830****DESCRIPTION**

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a single moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high; 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC-M402S are currently in use in the ESSMIS system with appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model(s)	IC-M56 IC-M58 IC-M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Sensitivity	.3μV for 12 dB SINAD
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high; 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

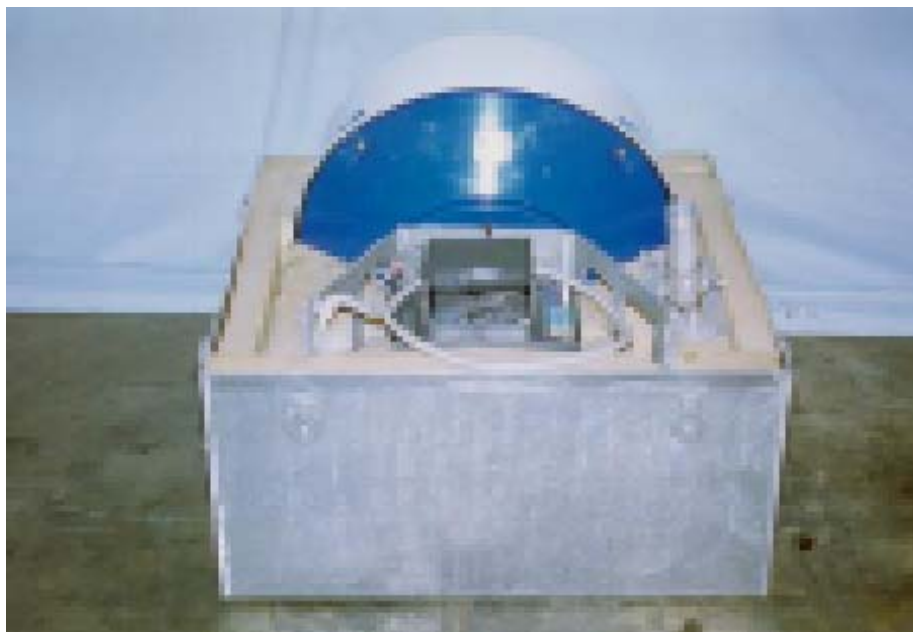
Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



Radar Model 1730 RD0001



Shipping Container for Radar RD0001

S0300-BV-CAT-020**RADAR, MODEL 1730/1731****ESSM NUMBER RD0001****DESCRIPTION**

The Furuno Model 1730/1731 Radar RD0001 is a standard radar (radio detection and ranging) unit used to indicate a target object's range and bearing location. The radar unit determines the distance to a target by calculating the time difference between the transmission of a radar signal and reception of the reflected echo

The range and bearing of a target is displayed on a visual indicating screen.. This display shows the transmitting ship's position at the center. Target image echoes are received and displayed as a sight signal on the visual display screen and show the distance and relative bearing from the transmitting vessel. The motion of the transmitting ship is also displayed along with the target images.

SPECIFICATIONS

Manufacturer	Furuno								
Scanner unit									
Peak output power	3 kW nominal								
Display unit									
Indication system	Raster scan, daylight display								
Picture tube	7 in. diagonal, green phosphor CRT								
Range (nm)	0.25	0.5	1	2	4	8	1	24	
Range ring interval (nm)	0.125	0.25	0.5	1	2	4	4	4	
Number of rings	2	4	4	4	4	4	4	4	
Interference rejecter	Built-in								
Display Unit									
Ambient temperature	Scanner unit: -25°C to +70°C Display unit: -15°C to +55°C								
Humidity	Relative humidity 95% or less at +40°C								
Power supply & consumption	10.2 V dc - 40.0 V dc, 47 W approx. (25 W approx. in economy mode) 100/110/220/230 V ac, 50/60 Hz, 1 rectifier required								

S0300-BV-CAT-020

RADAR, MODEL 1730/1731 (CONTD)

ESSM NUMBER RD0001

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 9 in.
Width	2 ft, 9 in.
Height	2 ft, 9 in.
Weight	170 lb
Cube	21 cu ft

REFERENCES

1. Operator's Manual, Marine Radar Furuno Model 1730, OM-E3330-OA.
2. Service Manual, Marine Radar Furuno Model 1730, SM-E3330-OA.

S0300-BV-CAT-020



11' 6", 4-Leg, Roundslings Bridle SL0350

S0300-BV-CAT-020**ROUNDSLING BRIDLE, POLYESTER,
4-LEG, 11-FOOT, 6-INCH****ESSM NUMBER SL0350**

DESCRIPTION

The 11' 6" 4-Leg Polyester Roundsling Bridle SL0350 is designed specifically for handling the 24' Boom Handling Boat WB0722 in an under-the-hook configuration using a crane. It is equipped with four screw pin shackles and is shipped in the bow compartment of the boom handling boat.

SPECIFICATIONS

	<u>Roundsling Bridle</u>	<u>Shackle (4 each)</u>
Manufacturer	Lift-All	Crosby
Model	EN150	G-209
Safe working load	13,200 lb	6 1/2 ton
Size	11' 6"	7/8" screw pin

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	11 ft, 6 in. (Continuous loop)
Cube (coiled for shipping)	4 cu ft
Weight	14 lb

REFERENCES

1. Lift-All Catalog, 1998.

S0300-BV-CAT-020



24' BHB Tool Box TL0030

S0300-BV-CAT-020**TOOL BOX, 24' BHB****ESSM NUMBER TL0030**

DESCRIPTION

The 24' BHB Tool Box TL0030 is a basic mechanic's tool set that contains 1/2" drive sockets and accessories, combination, open end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 24' Boom Handling Boat WB0722.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 2 in.
Width	10 in.
Height	11 in.
Cube	2 cu ft
Weight	48 lb

REFERENCES

None

S0300-BV-CAT-020

BOOM TENDING BOAT (RIGID) P03200

S0300-BV-CAT-020



18' Boom Tending Boat WB0942

S0300-BV-CAT-020**BOOM TENDING BOAT (RIGID)****SYSTEM NUMBER P03200**

SYSTEM DESCRIPTION

The Boom Tending Boat System P03200 consists of an 18-foot rigid-hulled utility boat, an outboard motor, a tool box, and a boat trailer.

The 18' boat is equipped and shipped with the following ancillary equipment onboard: life preservers, anchor and anchor line, mooring lines, tow line, boat hook, boat plug, horn, compass, fire extinguisher, first aid kit, flare kit, boat paddle, radar reflector, and tool box.

The Boom Tending Boat System is used for inspecting, repairing, or reinflating moored containment boom systems, and other miscellaneous tasks in protected, shallow water areas.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Boat, 18' Boom Tending	WB0942	1
Motor, Outboard		1
115-Hp	MT0943	
120-Hp	MT0946 (Altn)	
90-Hp	MT0948 (Altn)	
90-Hp, 4-Stroke	MT0050 (Altn)	
Trailer, for WB0942 BTB	TR0936	1
Tool Box, 18' Boom Tending Boat	TL0050	1

S0300-BV-CAT-020



18' Boom Tending Boat WB0942

S0300-BV-CAT-020**BOAT, 18' BOOM TENDING****ESSM NUMBER WB0942****DESCRIPTION**

The 18' Boom Tending Boat (BTB) WB0942 is a rigid-hulled, fiberglass boat used for tending, inspecting, and repairing containment boom systems and for transporting material and personnel in protected shallow water areas. The boat is powered by a 115-, 120-, or 90-horsepower outboard motor, and can be launched and retrieved from a trailer or by a crane with slings. The boat is operated by one crewman and has a total capacity for up to three additional passengers/crew. It has navigational lights for night operations and a center console with steering and throttle controls.

SPECIFICATIONS

Manufacturer	Uniflite Boston Whaler
Model	18UB 18BT
Material	Fiberglass
Max. load capacity	5000 lb
Draft (full load)	10 3/4 in.
Displacement (full load)	2600 lb
Propulsion	Outboard motor
Fuel	Gasoline
Fuel capacity	36 gallons (2 tanks)
Crew/passengers	1/3
Electrical system	12 V dc
Turning radius (full power)	40 yards

PHYSICAL CHARACTERISTICS

	<u>Boat</u>	<u>Trailer w/boat (shipping)</u>
Length	17 ft, 6 in.	21 ft, 0 in.
Width	7 ft, 0 in.	8 ft, 0 in.
Height	4 ft, 3 in.	6 ft, 1 in.
Cube	521 cu ft	1022 cu ft
Weight	2270 lb	2820 lb

REFERENCES

1. NAVSEA Boat Information Book, 18' Utility, S9007-BW-BIM-010.

S0300-BV-CAT-020



115-Hp Outboard Motor MT0943

S0300-BV-CAT-020**MOTOR, OUTBOARD, 115-HP****ESSM NUMBER MT0943**

DESCRIPTION

The 115-Hp Outboard Motor MT0943 is used to power the Boom Tending Boat WB0942. The 2-cycle gasoline motor has a V-4 cylinder arrangement with power trim and tilt positioning and a variable ratio oiling (VRO) system that mixes oil with the gasoline as it enters the carburetor. Some of the outboard motors are not equipped with a VRO system and require a 50-to-1 oil mixture added to the gasoline tank.

SPECIFICATIONS

Manufacturer	Johnson
Number of cylinders	4
Full throttle operating range	5000 to 6000 rpm
RPM at idle, in gear, w/propeller	650 rpm
Bore/Stroke	3.500"/2.860"
Piston displacement	110 cu. in.
Starter	Electric, 12 V dc
Propeller	14 1/2" diameter x 19" pitch
Horsepower	115

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 0 in.
Width	2 ft, 0 in.
Height	5 ft, 0 in.
Cube	30 cu ft
Weight	365 lb

REFERENCES

1. OMC Outboard Service Manual, Models 2 through V-6; 507508, 1 through 12.

S0300-BV-CAT-020



120-Hp Outboard Motor MT0946

S0300-BV-CAT-020**MOTOR, OUTBOARD, 120-HP****ESSM NUMBER MT0946**

DESCRIPTION

The 120-Hp Outboard Motor MT0946 is used to power the Boom Tending Boat WB0942. The 2-cycle gasoline motor has a V-4 cylinder arrangement with power trim and tilt positioning and a variable ratio oiling (VRO) system that mixes oil with the gasoline as it enters the carburetor. Some of the outboard motors are not equipped with a VRO system and require a 50-to-1 oil mixture added to the gasoline tank.

SPECIFICATIONS

Manufacturer	Johnson
Number of cylinders	4
Full throttle operating range	5000 to 6000 rpm
RPM at idle, in gear, w/propeller	650 rpm
Bore/stroke	3.500"/2.860"
Piston displacement	110 cu. in.
Starter	Electric, 12 V dc
Propeller	14 1/2" diameter x 19" pitch
Horsepower	120

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 0 in.
Width	2 ft, 0 in.
Height	5 ft, 0 in.
Cube	30 cu ft
Weight	365 lb

REFERENCES

1. OMC Outboard Service Manual, Models 2 through V-6; 507508, 1 through 12.

S0300-BV-CAT-020



90-Hp Outboard Motor MT0948

S0300-BV-CAT-020**MOTOR, OUTBOARD, 90-HP****ESSM NUMBER MT0948**

DESCRIPTION

The 90-Hp Outboard Motor MT0948 is a 2-cycle gasoline motor used to power the Boom Tending Boat WB0942.

SPECIFICATIONS

Manufacturer	Johnson
Model	J90SLEDR
Max. operating rpm	4500 - 5500 rpm
Idle (in gear)	600 - 700 rpm
Cylinders	4
Bore/stroke	3.600"/2.588"
Piston displacement	105.4 cu in.
Horsepower	90
Starting	Electric, 12 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	2 ft, 10 in.	3 ft, 6 in.
Width	1 ft, 6 in.	2 ft, 2 in.
Height	4 ft, 8 in.	5 ft, 4 in.
Cube	20 cu ft	40 cu ft
Weight	319 lb	484 lb

REFERENCES

1. OMC Service Manual, P/N 507127.

S0300-BV-CAT-020



90-Hp, 4-Stroke Outboard Motor MT0050

S0300-BV-CAT-020**MOTOR, OUTBOARD, 90-HP, 4-STROKE****ESSM NUMBER MT0050**

DESCRIPTION

The 90-Hp, 4-Stroke Outboard Motor MT0050 is used to power the Boom Tending Boat WB0942. It is a 3 cylinder, in-line motor with power trim and tilt positioning. It is lubricated by a single point variable ratio oil injection system that mixes oil with the gasoline as it enters the carburetor.

SPECIFICATIONS

Manufacturer	Mercury
Number of cylinders	3
Full throttle operating range	5000 to 5500 rpm
Bore/stroke	3.500"/2.930"
Piston displacement	84.6 cu. in.
Starter	Electric, 12 V dc
Shaft length	20"
Propeller	14" diameter x 13 3/8" pitch
Horsepower	90

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 7 in.
Width	1 ft, 6 in.
Height	5 ft, 6 in.
Cube	30 cu ft
Weight	348 lb

REFERENCES

1. Manual, Outboard Motor, 75/90-Hp, 4-Stroke, Mercury Marine, 90-10215010.

S0300-BV-CAT-020



Trailer for 18' BTB TR0936

S0300-BV-CAT-020**TRAILER FOR WB0942 18' BTB BOAT****ESSM NUMBER TR0936****DESCRIPTION**

The 18' Boom Tending Boat (BTB) Trailer TR0936 is constructed of welded steel and is primarily used to transport one 18' BTB WB0942 over land, and for launching and recovering the boat into and out of water without the use of a crane. The trailer is equipped with a winch, lights for towing, a hydraulic surge brake system, and a utility box for storing the jack, lug wrench, and other equipment.

SPECIFICATIONS

Manufacturer	EZ Loader Boat Trailer Inc.
Model	EZL96 15-18'
Load capacity	3100 lb
Ball size	2"
Wheels (including spare)	3
Jack for tongue	1
Utility box for storage	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	19 ft, 7 in.
Width	8 ft, 0 in.
Height	4 ft, 0 in.
Cube	627 cu ft
Weight	550 lb

REFERENCES

None

S0300-BV-CAT-020



18' Boom Tending Boat Tool Box TL0050

S0300-BV-CAT-020**TOOL BOX, 18' BOOM TENDING BOAT****ESSM NUMBER TL0050**

DESCRIPTION

The 18' Boom Tending Boat Tool Box TL0050 is a basic tool set consisting of a flushing attachment, a fuel line, light bulbs, motor oil, a 3/8" ratchet and spark plug socket, adjustable wrenches, a 3/8" x 7/8" open end wrench, a #2 Phillips screwdriver and a 1/4" standard screwdriver.

SPECIFICATIONS

Manufacturer of tool box	Contico
Manufacturer of tools	Commercial

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 7 in.
Width	11 in.
Height	11 in.
Cube	1 cu ft
Weight	20 lb

REFERENCES

None

S0300-BV-CAT-020

BOOM TENDING BOAT (INFLATABLE) P03300

S0300-BV-CAT-020



Shipping Container VA2260



Shipping Container VA2264



Shipping Container VA2265



19' Inflatable Boat WB0730



23' Inflatable Boat WB0732



50-Hp, 4-Stroke Outboard MT0938



50-Hp, 2-Stroke Outboard MT0939



70-Hp, 4-Stroke Outboard MT0045



70-Hp, 2-Stroke Outboard MT0942



VHF Marine Mobile Radio RA1830



VHF Marine Mobile Radio RA1831



Tool Box TL0055/TL0060

P03300 System Equipment Overview

S0300-BV-CAT-020**BOOM TENDING BOAT (INFLATABLE)****SYSTEM NUMBER P03300****SYSTEM DESCRIPTION**

The Inflatable Boom Tending Boat System P03300 consists of a choice of either a 19- or 23-foot inflatable multipurpose boat with twin outboard motors. The system also contains a 58-channel VHF marine radio, aluminum floorboards, paddles, running lights, stern light, boat hook, windshield and console assembly, and all necessary ancillary equipment to operate and maintain the inflatable boats. The system is used to transport personnel, equipment, and supplies. The inflatable boats are particularly suitable for work in rough weather alongside large support vessels.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Shipping Container:		1
a. 19' Inflatable Boat:	VA2260	
Boat, 19', Inflatable, MK V HD, w/Twin 50-Hp Motors	WB0730	1
Motor, Outboard, 50-Hp, 4-Stroke	MT0938	2
Motor, Outboard, 50-Hp, 2-Stroke	MT0939 (Altn)	2
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830 (Altn)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Tool Box, 19' Inflatable Boat	TL0055	1
b. 23' Inflatable Boat (10'):	VA2264	
23' Inflatable Boat (8'):	VA2265 (Altn)	
Boat, 23', Inflatable, MK VI HD, w/Twin 70-Hp Motors	WB0732	1
Motor, Outboard, 70-Hp, 4-Stroke	MT0045	2
Motor, Outboard, 70-Hp, 2-Stroke	MT0942 (Altn)	2
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830 (Altn)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Tool Box, 23' Inflatable Boat	TL0060	1

S0300-BV-CAT-020



19' Inflatable Boat Shipping Container VA2260

S0300-BV-CAT-020**VAN, SHIPPING CONTAINER, 19' INFLATABLE BOAT****ESSM NUMBER VA2260****DESCRIPTION**

The Shipping Container VA2260 is used to store and ship the inflatable 19-foot Zodiac workboat. The van contains a 19-foot inflatable boat, two 50-hp outboard motors, fuel tanks, spare parts, toolbox, anchor, and necessary ancillary equipment to operate and maintain the 19-foot boat while in the field.

SPECIFICATIONS

Manufacturer	ESSM Facility
Construction material	Aluminum 6061/6063

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	7 ft, 2 in.
Width	7 ft, 8 in.
Height	7 ft, 2 in.
Cube	430 cu ft
Weight	2810 lb

REFERENCES

None

S0300-BV-CAT-020



19' Inflatable Boat WB0730

S0300-BV-CAT-020**BOAT, 19' INFLATABLE, MK V HD,
W/TWIN 50-HP MOTORS****ESSM NUMBER WB0730****DESCRIPTION**

The 19' Inflatable Boat WB0730 is a lightweight, multipurpose craft. The boat is used primarily for transporting personnel, equipment, and supplies. The hull is a U-shaped chamber with conical airtight bulkheads that ensure complete safety and balance of pressure in the different compartments. The keel, when inflated, causes the bottom to assume a V-shape configuration.

The boat is equipped with aluminum floorboards, paddles, running lights, boat hook, windshield and console assembly, and all the necessary ancillary gear to operate, maintain, and repair the boat. The boat is also equipped with two 50-hp outboard motors and ancillary equipment for each motor. The boat, motors, and ancillary equipment are stored in a metal shipping container.

SPECIFICATIONS

Manufacturer	Zodiac
Model	MK V HD
Type	5653
Max. persons on board	15
Load capacity	4631 lb
Max. horsepower	115

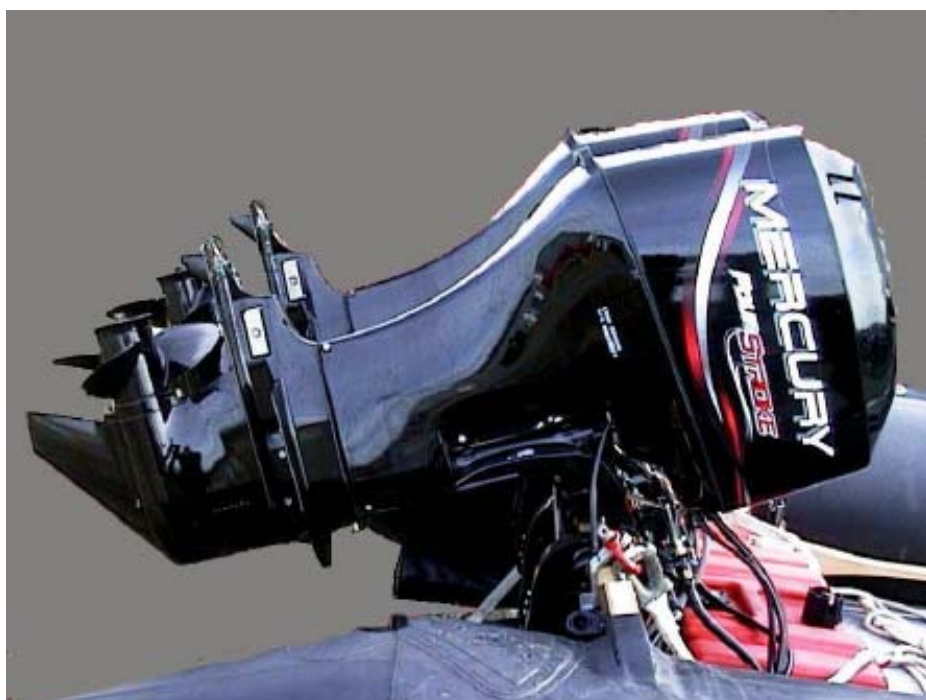
PHYSICAL CHARACTERISTICSOperating (boat only)

Length	19 ft, 6 in.
Width	8 ft, 2 in.
Height	3 ft, 0 in.
Cube	450 cu ft
Weight	550 lb

REFERENCES

1. Maintenance and Assembly Manual for Zodiac Models Mark IV HD, V HD, and VI HD.

S0300-BV-CAT-020



50-hp Outboard Motors MT0938

S0300-BV-CAT-020**MOTOR, OUTBOARD, 50-HP, 4-STROKE****ESSM NUMBER MT0938****DESCRIPTION**

The 50-hp Outboard Motor MT0938 is a 4-stroke gasoline outboard motor used to power boats that are used for transferring personnel, cargo and equipment, tending boom, and various other duties.

SPECIFICATIONS

Manufacturer	Mercury
Model	50ELPT Bigfoot
Max. operating rpm	5500 - 6000
Idle (rpm)	750 \pm 25
Cylinders	4
Bore	2.48 in.
Stroke	2.953 in.
Displacement	57 cu in.
Gear ratio:	
3 1/4" diameter gear case	1.83 : 1
4 1/4 " diameter gear case	2.3 : 1
Horsepower	50
Engine oil capacity	3 qts.
Starting	Electric/manual
Battery	12 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1ft, 6 in.
Width	2 ft, 6 in.
Height	5 ft, 0 in.
Cube	19 cu ft
Weight	320 lb

REFERENCES

1. Operation and Maintenance Manual for Mercury 45/50-hp (4-stroke) Outboard Motors.

S0300-BV-CAT-020



50-hp Outboard Motors MT0939

S0300-BV-CAT-020**MOTOR, OUTBOARD, 50-HP, 2-STROKE****ESSM NUMBER MT0939****DESCRIPTION**

The 50-hp Outboard Motor MT0939 is a 2-cycle gasoline outboard motor used to power boats that are used for transferring personnel, cargo and equipment, tending boom, and various other duties.

SPECIFICATIONS

Manufacturer	Outboard Marine Corporation (OMC), Johnson
Model	J50BELCIC
Max. operating rpm	5500
Idle (rpm)	750
Cylinders	2
Bore	3.1875 in.
Stroke	2.820 in.
Displacement	45 cu in.
Horsepower	50
Starting	Electric/manual
Battery	12 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	4 ft, 2 in.	4 ft, 0 in.
Width	1 ft, 2 in.	3 ft, 4 in.
Height	2 ft, 4 in.	2 ft, 9 in.
Cube	12 cu ft	37 cu ft
Weight	202 lb	252 lb

REFERENCES

1. Outboard Marine Corporation Service Manual, Models 2 through V6, Part No. 507508 1 through 2.
2. Outboard Marine Corporation Special Tool Guide, Part No. 395402.
3. Outboard Marine Corporation Parts Catalog for 50-hp Models.

S0300-BV-CAT-020



VHF Marine Mobile Radio, Voyager (76-Channel) RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC-M402S are currently in use in the ESSM System with appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model(s)	IC-M56 IC-M58 IC-M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Sensitivity	.3μV for 12 dB SINAD
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high; 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



19' Inflatable Boat Tool Box TL0055

S0300-BV-CAT-020**TOOL BOX, 19' INFLATABLE BOAT****ESSM NUMBER TL0055****DESCRIPTION**

The 19' Inflatable Boat Tool Box TL0055 is a tool set that contains spark plugs, fuses, 3/8" drive ratchet set, screwdrivers, pliers, oil filters, timing belts, adjustable wrenches, and a boat patching kit. It contains the necessary tools to set up, operate, and maintain the 19' Inflatable Boat

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1ft, 4 in.
Width	9 in.
Height	13 in.
Cube	1 cu ft
Weight	18 lb

REFERENCES

None

S0300-BV-CAT-020



23' Inflatable Boat Shipping Container (10') VA2264

S0300-BV-CAT-020**VAN, SHIPPING CONTAINER (10'),
23' INFLATABLE BOAT****ESSM NUMBER VA2264**

DESCRIPTION

The 23' Inflatable Boat Shipping Container (10') VA2264 is used to store and ship the 23' Inflatable Boat WB0730. The van contains a 23-foot inflatable boat, two 70-hp outboard motors, fuel tanks, spare parts, tool box, anchor, and necessary ancillary equipment to operate and maintain the boat while in the field.

SPECIFICATIONS

Manufacturer	ESSM Facility
Model	9202M
Drawing number	DCSF-SER301 (PCCI)
Construction material	Steel
Bottom side rail	ASTM AS69/A570 Steel
Geometry	Cold formed channel sections
Thickness	7 gauge
Maximum gross weight	14,800 lb
Maximum payload	12,100 lb
Tare weight	2700 lb

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	10 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	640 cu ft
Weight	6180 lb

REFERENCES

None

S0300-BV-CAT-020



23' Inflatable Boat Shipping Container (8') VA2265

S0300-BV-CAT-020**VAN, SHIPPING CONTAINER (8'),
23' INFLATABLE BOAT****ESSM NUMBER VA2265**

DESCRIPTION

The 23' Inflatable Boat Shipping Container (8') VA2265 is used to store and ship the 23' Inflatable Boat WB0730. The van contains a 23-foot inflatable boat, two 70-hp outboard motors, fuel tanks, spare parts, tool box, anchor, and necessary ancillary equipment to operate and maintain the boat while in the field.

SPECIFICATIONS

Manufacturer	ESSM Facility
Construction material	Aluminum 6061/6063

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 ft, 2 in.
Width	7 ft, 8 in.
Height	7 ft, 5 in.
Cube	485 cu ft
Weight	3095 lb

REFERENCES

None

S0300-BV-CAT-020



23' Inflatable Boat WB0732

S0300-BV-CAT-020**BOAT, 23' INFLATABLE, MK VI HD,
W/TWIN 70-HP MOTORS****ESSM NUMBER WB0732****DESCRIPTION**

The 23' Inflatable Boat WB0732 is a lightweight, multipurpose craft. The boat is used primarily for transporting personnel, equipment, and supplies. The hull is a U-shaped chamber with conical airtight bulkheads that ensure complete safety and balance of pressure in the different compartments. The keel, when inflated, causes the bottom of the boat to assume a V-shaped configuration.

The boat is equipped with aluminum floorboards, paddles, running lights, a boat hook, a windshield and console assembly, and all necessary gear to operate, maintain, and repair the boat. The boat is also equipped with two 70-hp outboard motors and ancillary equipment for each. The boat, motors, and all ancillary equipment are stored in a metal shipping container.

SPECIFICATIONS

Manufacturer	Zodiac
Model	MK VI HD
Type	6662
Capacities:	
Persons	20
Useful payload	6615 lb
Max. horsepower	175

PHYSICAL CHARACTERISTICSOperating (boat only)

Length	23 ft, 0 in.
Width	9 ft, 5 in.
Height	3 ft, 5 in.
Cube	740 cu ft
Weight	705 lb

REFERENCES

1. Maintenance and Assembly Manual for Zodiac Models, MARK IV HD, V HD, VI HD.

S0300-BV-CAT-020



70-hp Outboard Motors MT0045

S0300-BV-CAT-020**MOTOR, OUTBOARD, 70-HP, 4-STROKE****ESSM NUMBER MT0045****DESCRIPTION**

The 70-hp Outboard Motor MT0045 is a 4-stroke gasoline outboard motor used to power boats that are used for transferring personnel, cargo and equipment, tending boom, and other various duties.

SPECIFICATIONS

Manufacturer	Outboard Marine Corporation (OMC), Evinrude
Model	E70 PL4SS
Max. operating rpm	5200 - 5800
Idle (rpm)	750 ±25
Cylinders	4
Bore	2.91 in.
Stroke	2.97 in.
Displacement	79.2 cu in.
Gear ratio	2.42 : 1
Horsepower	70
Starting	Electric/manual
Battery	12 V dc

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft, 6 in.
Width	1 ft, 5 in.
Height	5 ft, 0 in.
Cube	18 cu ft
Weight	340 lb

REFERENCES

1. Operation and Maintenance Manual for the Evinrude 70-hp (4-stroke) Outboard Motors.

S0300-BV-CAT-020



70-hp Outboard Motors MT0942

S0300-BV-CAT-020**MOTOR, OUTBOARD, 70-HP****ESSM NUMBER MT0942****DESCRIPTION**

The 70-hp Outboard Motor MT0942 is a 2-cycle gasoline outboard motor used to power boats that are used for transferring personnel, cargo and equipment, for tending boom, and other various duties.

SPECIFICATIONS

Manufacturer	Outboard Marine Corporation (OMC), Johnson
Model	J70ELCRD or J70ELEOR
Max. operating rpm	5500
Idle (rpm)	750
Cylinders	3
Bore	3.000 in.
Stroke	2.3437 in.
Displacement	49.7 cu in.
Horsepower	70
Starting	Electric/manual
Battery	12 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	4 ft, 7 in.	4 ft, 0 in.
Width	1 ft, 2 in.	3 ft, 4 in.
Height	2 ft, 4 in.	2 ft, 9 in.
Cube	12.5 cu ft	37 cu ft
Weight	250 lb	300 lb

REFERENCES

1. Outboard Marine Corporation Service Manual, Models 2 through V6, Part No. 507508, 1 through 12.
2. Outboard Marine Corporation Special Tool Guide, Part No. 395402.
3. Outboard Marine Corporation Parts Catalog for 70-hp Models.

S0300-BV-CAT-020



VHF Marine Mobile Radio, Voyager (76-Channel) RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.
- +

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8 V dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The Icom radio model IC-M56 is currently being replaced with the IC-M58 model. The system may contain either model and instruction manual. Both models have similar features, except that the IC-M58 model contains an emergency Channel 9.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56/IC-M58
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit/receive	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Sensitivity	.3µV for 12 dB SINAD
Audio output power	4 W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz, 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE ICOM
(58-CHANNEL)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56/Icom IC-M58.

S0300-BV-CAT-020



23' Inflatable Boat Tool Box TL0060

S0300-BV-CAT-020**TOOL BOX, 23' INFLATABLE BOAT****ESSM NUMBER TL0060****DESCRIPTION**

The 23' Inflatable Boat Tool Box TL0060 is a tool set that contains spark plugs, fuses, 3/8" drive ratchet set, screwdrivers, pliers, oil filters, timing belts, adjustable wrenches, and a boat patching kit. It contains the necessary tools to set up, operate, and maintain the 23' Inflatable Boat.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1ft, 4 in.
Width	9 in.
Height	13 in.
Cube	1 cu ft
Weight	18 lb

REFERENCES

None

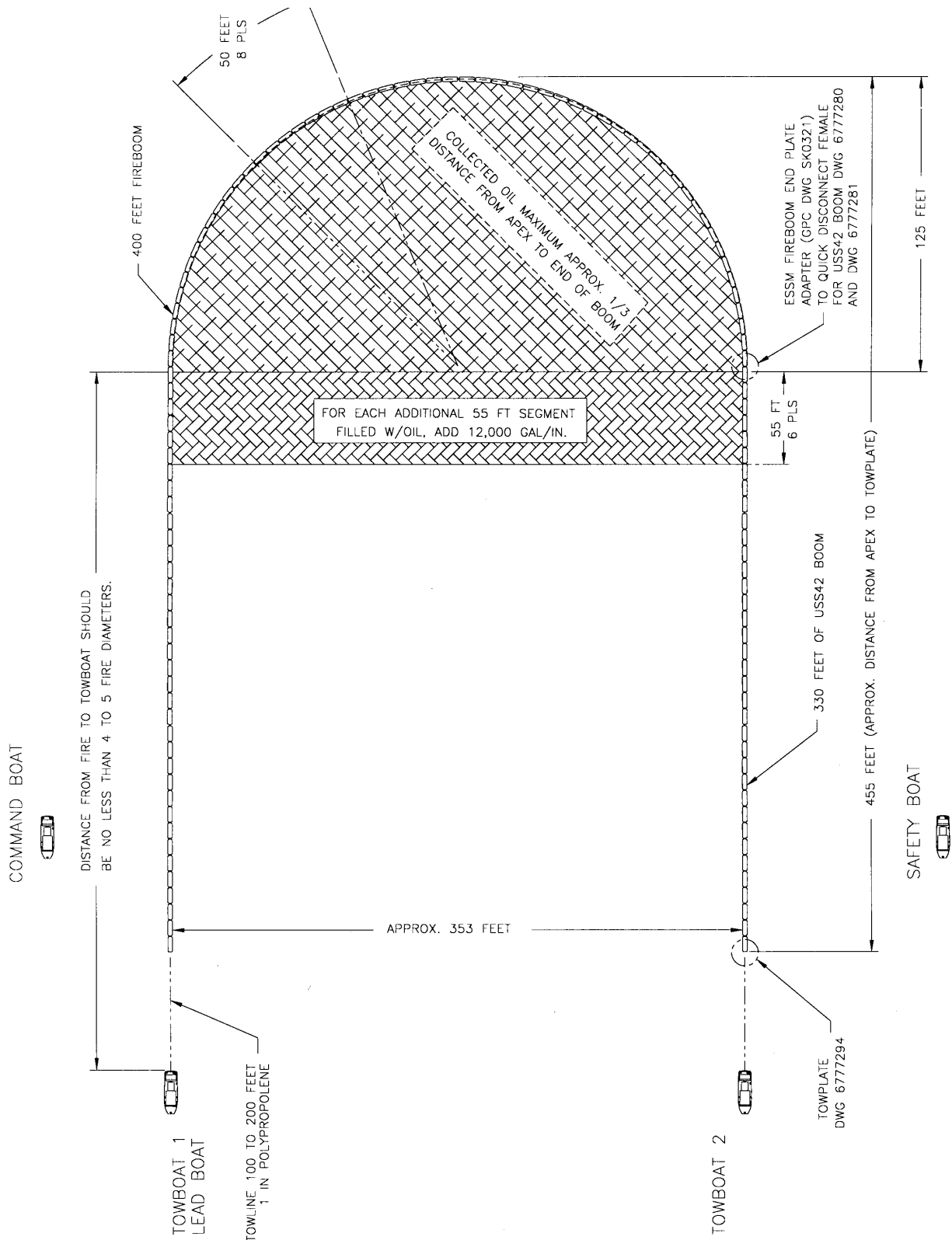
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FIRE BOOM SYSTEM P20600

SYSTEM INACTIVE



S0300-BV-CAT-020



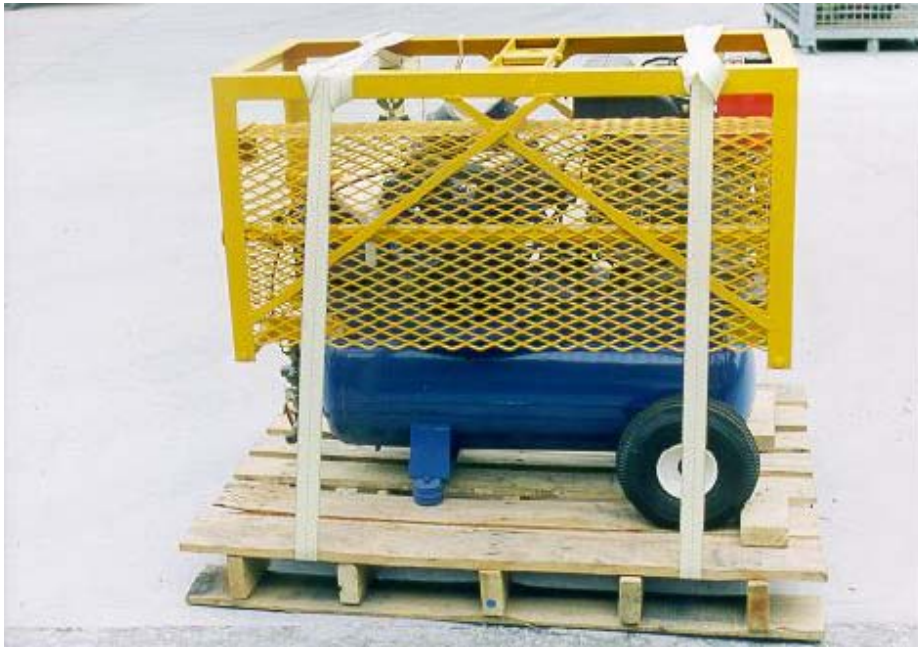
Fire Boom System Configuration

S0300-BV-CAT-020**FIRE BOOM SYSTEM****SYSTEM NUMBER P20600****DESCRIPTION**

The Fire Boom System P20600 consists of sections of fire boom, containment boom burn blankets, a rigging set, ancillary equipment, fire pumps with hoses and nozzles, and a set of igniters. The fire boom system is used in conjunction with the containment boom to confine and burn large quantities of recovered oil thereby reducing the storage requirements for the recovered oil. The fire boom system must be deployed early with appropriate operation in spill responses. This system allows oil to be confined and burned in place versus recovered and stored. This can only occur early in a response as weathered and emulsed oil more than seven (7) days old will not burn.

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Air compressor, 19 cfm @ 125 psi, diesel	AC0505	1
2. Boom, fire, 42" X 50' sections	BM0730	8
3. Boom deployment tray for BM0730	BM0731	4
4. Boom, oil containment, model USS-42, 42" x 55'	BM0738	12
5. Fire monitor, Apollo, portable w/folding legs	FM0010	3
6. Ignitor, flare type	IG0010	5
7. Pump, fire, 2 1/2", diesel	PU2130	3
8. Ancillary Safety Kit for PU2130	PU2131	1

S0300-BV-CAT-020



19-cfm Diesel Air Compressor AC0505

S0300-BV-CAT-020**AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL****ESSM NUMBER AC0505**

DESCRIPTION

The 19 cfm @ 125 psig, Diesel-driven, Air Compressor AC0505 is a single-stage, four-cylinder air compressor capable of delivering 19 cfm @ 125 psig. The air compressor is used for boom inflation, operation of pneumatic-powered hand tools, and other needs that require low pressure, low volume air.

SPECIFICATIONS

<u>Engine</u>		<u>Air Compressor</u>	
Manufacturer	Yanmar	Manufacturer	Emglo Prod.
Model	L60	Model	CGU
Cylinders	1	Capacity	19 cfm
Fuel*	Diesel	Rated operating pressure	125 psig
Bore	2.95 in.	Cylinders	4
Stroke	2.44 in.	Stages	1
Displacement	16.7 cu in.	RPM	710
RPM (continuous)	3600	Storage tank	30 gallon
Compression ratio	20 : 1	Operating pressure range	100/120 psig
Starting	Recoil/Electric		
Battery	12 V dc		
Fuel consumption	0.5 gph		

* Fuel is supplied from a 0.92-gallon integral fuel tank.

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 2 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	20 cu ft
Weight	530 lb

REFERENCES

1. Operation Manual for Yanmar (Air-cooled) Diesel Engine L-A series
2. Yanmar Diesel Engine Parts Catalog Pub. No. 000Y00R3981
3. Parts list G592 for Model G & GC Air Compressors

S0300-BV-CAT-020



42" Fire Boom BM0730

S0300-BV-CAT-020**BOOM, FIRE, 42" X 50' SECTIONS****ESSM NUMBER BM0730****DESCRIPTION**

The 42" x 50' Sections of Fire Boom BM0730 are used in conjunction with standard oil containment boom sections to make a long section of boom to collect and contain the spilled oil. The boom, which is attached to two towboats by lines, is pulled by the towboats to form a U-shape. The open end of the U is maneuvered through the oil slick to collect oil within the "U". The oil is then herded to the apex of the U-shape. The boom is towed away from the main oil slick and ignited. Once ignited the collected oil is allowed to burn until it burns itself out (burns up its fuel). The recommended configuration of fire boom and oil containment boom is 400-feet of fireboom with 330-feet of oil containment boom attached to each end.

During the burning, the boom is towed to maintain a slow advance through the water to ensure that the oil is concentrated at the boom apex to maintain maximum thickness. Once the burn is complete, the boom may be towed with, against, or across currents as long as the maximum speed over the water does not exceed 0.75 to 1 knot tow speed. When burning the towboats must maintain a heading within 45° of the true wind direction to keep any plume from overcoming boat personnel.

SPECIFICATIONS

Manufacturer	3M Corporation
Float diameter	18 in.
Freeboard	14 1/2 in.
Draft	27 1/2 in.
Skirt length	24 in.
Reserve buoyancy (RB)	72.6 lb/ft
RB to weight ratio	4.5
Float length	72 in. (6 ft)
Segment length	7.2 ft
Number of segment per section	7
Section length	50 ft
Weight	16 lb/per foot
End connector (3M fireboom to USS-42 boom adaptor)	3M standard clasp to SUPSALV adaptor SK0321
Connector strength (lb ft)	13700
Skirt mat	PVC
Floataction	CS-S ceramic log
Vertical CG	14.5 in.
Waterline beam	14.7 in.
Ballast	3/8-in. galvanized chain at 1.9 lb/ft
Ballast chain strength	10,600 lb

S0300-BV-CAT-020**BOOM, FIRE, 42" X 50' SECTIONS****ESSM NUMBER BM0730**

SPECIFICATIONS (Cont'd)

Fabric strength	5200 lb
Tear strength	150 lb
Storage volume	3.2 cu ft
Operating sea state 2 limits	
Towing in straight line	6 knots
"U" configuration	1 knot

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	50 ft, 0 in.
Width	1 ft, 6 in.
Height	3 ft, 6 in.
Cube	263 cu ft
Weight	800 lb

REFERENCES

1. U.S.N. SUPSALV ESSM System In-situ Burn Operations Manual

S0300-BV-CAT-020



Boom Trays BM0731 with Boom

S0300-BV-CAT-020**BOOM DEPLOYMENT TRAY FOR BM0730****ESSM NUMBER BM0731**

DESCRIPTION

The Boom Deployment Tray BM0731 is designed to store boom in the warehouse, transport boom overland and via military cargo aircraft, deploy boom, and retrieve the fireboom. The boom trays are designed to accommodate 2 sections of boom faked transversely back and forth across the width of the tray.

SPECIFICATIONS

None

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	23 ft, 0 in.
Width	8 ft, 0 in.
Height	2 ft, 0 in.
Cube	368 cu ft
Weight	2800 lb w/boom

REFERENCES

None

S0300-BV-CAT-020



USS-42 Oil Containment Boom BM0738

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738**

DESCRIPTION

The Oil Containment Boom BM0738 is an inflatable, rubberized, nitrile/vinyl rubber impregnated high strength nylon cloth that resists abrasions, gouging, oil, and saltwater. The standard 55 1/2-foot section has five, 10-foot long, 14-inch diameter inflation chambers with an inflation/deflation valve. There is a 10" piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized with no stitched seams that can pull apart. The boom has a skirt that extends 24-in. below the inflation chambers for containing the oil. A 1/2-in. galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible yellow warning stripes are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne. The boom is high in buoyancy and will float higher in the water than standard boom.

SPECIFICATIONS

Boom

Manufacturer	Engineering Fabrics Corporation
Inflation pressure	2-3 psig
Test pressure	6 psig
Draft	28 in.
Freeboard	15 in.
Overall height inflated	42 in.
Overall height deflated	52 1/2 in.
Section length	55 ft
Weight per foot	6.7 lb
Flotation Chamber	
Diameter	14 in.
Length	10 ft
Air valves per chamber	2
Chamber buoyancy	950 lb
Handle spacing	4 ft
Materials:	
Coated Fabric	Nitrile/vinyl rubber impregnated high strength nylon cloth
Color	Black with high visibility orange strips
Ballast	1/2-in. galvanized steel chain, 45,000 lb tensile

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738**

SPECIFICATIONS (Cont'd)

End connections	Anodized 6061-T6 aluminum alloy extrusion
Connector plate	Stainless steel
Clevis, Shackles, & oblong clevis pins	Galvanized steel
Inflation/deflation valves	Plastic with stainless steel hardware
Tow bar	Stainless steel

PHYSICAL CHARACTERISTICS

Shipping

Length	3 ft, 6 in.
Width	3 ft, 4 in.
Height	2 ft, 6 in.
Cube	30 cu ft
Weight	875 lb

Operating

Length	55 ft, 0 in.
Diameter	3 ft, 6 in.
Cube	674 cu ft
Weight	875 lb

REFERENCES

1. Operations and Maintenance Instructions with Illustrated Parts Breakdown.

S0300-BV-CAT-020



Portable Fire Monitor w/Folding legs FM0010

S0300-BV-CAT-020**FIRE MONITOR, APOLLO,
PORTABLE W/ FOLDING LEGS****ESSM NUMBER FM0010**

DESCRIPTION

The Portable Fire Monitor FM0010 is used in conjunction with the fire pump and the 95 gpm, 1 1/2-in. NPSH nozzle for the protection of the crews aboard the tow, command, and safety vessel during an in-situ burn. If a tow vessel becomes disabled, it must drop its towline immediately and turn its fire monitor on to a fog or straight stream, as required to protect itself. All personnel should have full protective clothing on.

SPECIFICATIONS

Manufacturer	Akron Brass
Model	Apollo Plus
Style	3421
Inlet	2 1/2 in. Y-gate
Discharge	2 1/2 in.
Maximum discharge pressure with straight tip:	
1 3/8"	100 psig
1 1/2"	100 psig
1 3/4"	70 psig
2"	50 psig
Maximum flow with fog nozzle	800 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	2 ft, 0 in.
Height	1 ft, 6 in.
Cube	6 cu ft
Weight	

REFERENCES

1. USN SUPSALV ESSM System In-situ Burn Operations Manual

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Flare Type Ignitor IG0010

S0300-BV-CAT-020**IGNITOR, FLARE TYPE****ESSM NUMBER IG0010****DESCRIPTION**

The Flare Type Ignitor IG0010 consists of a flare-type pyrotechnic device. The pyrotechnic device is made up of a mixture of metals, chemicals, and organic binders that ignite by a small amount of energetic compound. An electrical filament connected to the internal of the flare ignites this energetic compound, or "squib." The squib, in turn, lights the metal/binder mixture, which (when lit) produces a very hot flame (in excess of 2400°F) that sparks the burn at the oil/water interface. The cylinder-type Ignitor is a free floating version that needs only to have its safety jumper engaged and its power switch turned on to be deployed. When the switch is turned on, it activates a 2.5 to 5.0 minute timer, which must time out before the squib is energized and ignited. The intense heat at the oil/water interface causes the oil to heat up and flash (emit volatile vapors). The vapors ignite, creating more heat, which in turn radiates back to the surface oil and propagates the fire. The igniter flare is always used in conjunction with sorbent 3M pads, which are wrapped and taped around the flare prior to deployment in order to trap oil and enhance oil ignitability.

SPECIFICATIONS

None

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 4 in.
Diameter	0 ft, 4 in.
Cube	1 cu ft
Weight	4 lb

REFERENCES

1. USN SUPSALV ESSM System In-situ Burn Operations Manual

S0300-BV-CAT-020



2 1/2" Fire pump PU2130

S0300-BV-CAT-020**PUMP, FIRE, 2-1/2", DIESEL****ESSM NUMBER PU2130****DESCRIPTION**

The 2 1/2" Inch Diesel Fire Pump PU2130 is a commercial, diesel driven, portable pump designed for firefighting, dewatering, and other utility type functions. The pump unit consists of the engine, a centrifugal pump, an exhaust primer, a discharge valve, a recoil starter, a 1.45-gallon fuel tank, and a compound pressure gauge. The pump is designed to provide 100 gpm @ 83 psig at a lift of 20 feet. The pump will deliver 71 gpm @ 62 psig at a high lift condition of 44 feet.

SPECIFICATIONS

<u>Engine</u>		<u>Pump</u>	
Manufacturer	Yanmar Engines	Manufacturer	Darley & Co.
Model	L100AE	Model	2BE
Type	Air-cooled, 4-cycle	Type	Centrifugal
Cylinders	1	Suction port	3 in.
Bore	2.756 in.	Discharge port	2 in.
Stroke	3.386 in.	Rated output:	
Displacement psig	24.78 cu in.	20 foot head	100 gpm/83
Compression ratio psig	19.3 : 1	44 foot head	71 gpm/62
Horsepower	10 hp		
Starting	Recoil pull-starting		
Fuel*	Diesel		
Fuel consumption	.52 gph		

* Fuel source is an integral 1.45-gallon fuel tank.

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	2 ft, 3 in.
Height	2 ft, 0 in.
Cube	9 cu ft
Weight	166 lb

S0300-BV-CAT-020

PUMP, FIRE, 2 1/2", DIESEL

ESSM NUMBER PU2130

REFERENCES

1. Champion Fire Pump Operators Manual for Model 2BE 10YDN, S6226-NM-MMC-010/15852
(Shipped with unit)

S0300-BV-CAT-020



Ancillary Safety Kit PU2131

S0300-BV-CAT-020**ANCILLARY SAFETY KIT FOR PU2130****ESSM NUMBER PU2131**

DESCRIPTION

The Ancillary Safety Kit PU2131 for pump PU2130 is a three-basket set consisting of the necessary hoses, monitors, protective wear, fire pump, and fittings to support the PU2130 fire pump in the field. See Specifications section for listing of ancillary items.

SPECIFICATIONS

<u>Item</u>	<u>Qty</u>
Basket #1, 62" x 36" x 41"	1
Hose, fire, 1 1/2" x 20'	2
Hose, fire, 2 1/2" x 6'	2
Hose, suction, 3" w/foot valve	2
Inventory, laminated	1
Manual, fire pump	2
Monitor, with piping	2
Nozzle, 95 gpm, 1 1/2" NPSH	2
Pump, fire (2BE 10YDN)	2
Strap, cargo, tie-down	4
Swivel, 2 1/2" female by female	3
Basket #2, 62" x 36" x 41"	1
Carrier, Jerry Can	2
Hose, fire, 1 1/2" x 20'	1
Hose, fire, 2 1/2" x 6'	1
Hose, suction, 3" w/foot valve	1
Igniter	5
Jerry can, 5 gallon	2
Strap, cargo, tie-down	5
Basket #3, 62" x 36" x 41"	1
Face piece, 6000 series, 3M, small 6100	2
Filter, high efficiency, model 3M	20
Glove, oil/fire retardant	20
Inventory, laminated	1
Nomex, head hood sock	20
Shield, face	17
Shields, mesh	17
Fire retardant suit	20
Case, Thermodyne	1
Flotation vest, fire retardant	17

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ANCILLARY SAFETY KIT FOR PU2130

ESSM NUMBER PU2131

PHYSICAL CHARACTERISTICS

	<u>Basket #1</u>	<u>Basket #2</u>	<u>Basket #3</u>
Length	5 ft, 1 in.	5 ft, 1 in.	5 ft, 1 in.
Width	8 ft, 0 in.	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 0 in.	8 ft, 0 in.	8 ft, 0 in.
Cube	53 cu ft	53 cu ft	53 cu ft
Weight	1094 lb	744 lb	556 lb

REFERENCES

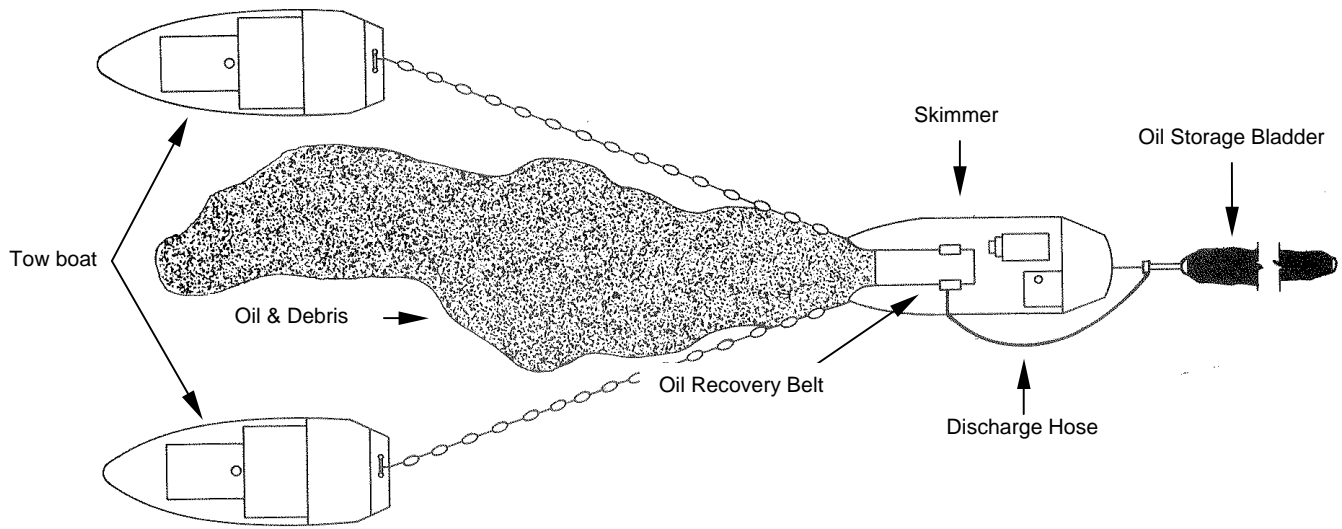
None

S0300-BV-CAT-020

VESSEL SKIMMER SYSTEM P16400

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S0300-BV-CAT-020



Vessel Skimmer System P16400
(Towboats not part of this system.)

S0300-BV-CAT-020**VESSEL SKIMMER SYSTEM****SYSTEM NUMBER P16400****SYSTEM DESCRIPTION**

The Vessel Skimmer System P16400 is designed to pick up oil spills from the water surface. To accomplish this mission, the skimmer is outfitted with the machinery necessary to draw and separate spilled oil from the water, store the recovered oil, and transfer it to an off-vessel storage facility. The Vessel Skimmer System normally recovers the oil while being towed by two support vessels; however, the skimmer is self-propelled and may be used to conduct oil skimming operations while under its own power. To eliminate transit time required to offload the recovered oil from the skimmer, an oil storage bladder may be towed by the skimmer for transfer of the recovered oil. The oil storage bladder must be ordered separately from the ESSM facility.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Skimmer, Oil, Sorbent Belt, 36' Vessel (Class V)	SK0721	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF		1
Marine Mobile, Voyager (76-Channel)	RA1830	
Marine Mobile, Icom (58-Channel)	RA1831 (Altn)	
Roller, Oil Boom	RO0501	1
Belt, Skimmer, Light Oil	SK0722 (not shown)	1
Belt, Bunker, Class V Skimmer	SK0725 (not shown)	1
Belt, Medium Oil, Class V Skimmer	SK0726 (not shown)	1
Tool Box, 36' Skimmer SK0721	TL0025	1
Washer, Pressure, Hydraulic, Kew, Model-4403K0S	WA0700	1
2. Boom, Oil Containment, Model USS-42, 42" x 55'	BM0738	12
3. Pallet, Storage, 84" x 60" x 7", USS-42 and USS-42HB Boom	BM0876	1

S0300-BV-CAT-020



Class V 36-Foot Sorbent Belt Oil Skimmer Pilot House



Class V 36-Foot Sorbent Belt Oil Skimmer SK0721

S0300-BV-CAT-020**SKIMMER, OIL, SORBENT BELT,
36-FOOT VESSEL (CLASS V)****ESSM NUMBER SK0721****DESCRIPTION**

The Class V 36-Foot Sorbent Belt Oil Skimmer SK0721 is a 36-foot aluminum vessel that has a modular pilot house and is fitted with a rotating sorbent belt for oil recovery. The skimmer is self-propelled and can function in stationary, free skimming, or towed V-boom configurations. When used offshore or in open water, the skimmer is towed in a V-boom configuration by two SUPSALV boom handling boats or alternative towboats.

Primary vessel power is provided by a 4-cylinder diesel engine. This engine drives a series of hydraulic pumps that drive various hydraulic motors and cylinders. Most vessel functions are hydraulically activated, including vessel propulsion, steering, bilge pump operation, filter belt operation, and induction and offloading pump operation from the installed modular pilot house. The engine also drives an air compressor to pressurize the filter belt squeeze cylinders.

To eliminate transit time required to offload oil from the skimmer, an oil storage bladder may be towed by the recovery vessel for the transfer of recovered oil.

SPECIFICATIONSHull

Manufacturer	Marine Construction & Design Co. (MARCO)
Draft (empty)	3 ft, 2 in.
Draft (loaded)	4 ft, 0 in.
Displacement (full load)	32,000 lb
Hoisting weight	17,300 lb
Construction	Welded aluminum
Capacities:	
Fuel tank	75 gal.
Hydraulic oil reservoir	75 gal.
Cooling system	5 gal.
Air tank	830 cu in.
Sump tank	43 bbl

Engine

Manufacturer	Detroit Diesel
Model	5043-7201
Cylinders	4
Bore/stroke	3.875 in./4.5 in.
Displacement	212 cu in.
Compression ratio	21 : 1
Rpm (idle)	650
Rpm (max.)	2400
Horsepower	128 shp @ 2800 rpm
Starting	Electric
Battery	12 V dc (2 in parallel)
Fuel	Diesel
Fuel tank	75 gallons
Fuel consumption	6 gph

S0300-BV-CAT-020**SKIMMER, OIL, SORBENT BELT,
36-FOOT VESSEL (CLASS V)****ESSM NUMBER SK0721**

PHYSICAL CHARACTERISTICS

WARNING: Exceeds legal load size of 102" in width. Requires wide load permit.

	<u>Skimmer</u> <u>Shipping</u>	<u>Pilot House</u> <u>Shipping</u>
Length	36 ft, 0 in.	5 ft, 9 in.
Width	12 ft, 0 in.	4 ft, 6 in.
Height	8 ft, 10 in.	8 ft, 6 in.
Cube	3816 cu ft	220 cu ft
Weight	20,200 lb	715 lb

REFERENCES

1. Boat Information Book for Class V Oil Recovery System, Ch-1, NAVSEA 0994-LP-015-7010.
2. Series 53 Operator's Manual, Detroit Diesel-Allison.

S0300-BV-CAT-020



CB Marine Mobile Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709****DESCRIPTION**

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Manufacturer	Commercial
Frequency range	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only)	
RF output	4 W maximum
Receiver (CB)	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kHz	45 dB

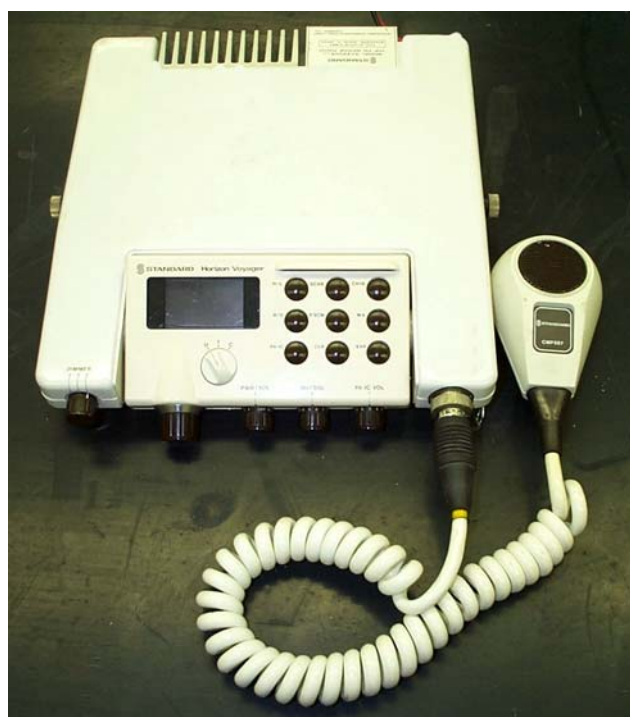
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



76-Channel Voyager Marine Mobile VHF Radio RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The 76-Channel Voyager Marine Mobile VHF Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a single moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC- M402S are currently in use in the ESSM System with their appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC- M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



Oil Boom Roller RO0501

S0300-BV-CAT-020**ROLLER, OIL BOOM****ESSM NUMBER RO0501**

DESCRIPTION

The Oil Boom Roller RO0501 is designed to prevent damage to the oil containment boom during deployment or recovery. It can be placed at the edge of a pier or dock and the boom deployed over it. The boom roller has a manual brake assembly that is used to control the rate of feed over the roller as the boom is deployed.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 3 in.
Width	3 ft, 4 in.
Height	3 ft, 11 in.
Cube	82 cu ft
Weight	464 lb

REFERENCES

1. Boom Roller Assembly and Details, NAVSEA Dwg. # 6579538.

S0300-BV-CAT-020



36' Skimmer SK0721 Tool Box TL0025

S0300-BV-CAT-020**TOOL BOX, 36' SKIMMER SK0721****ESSM NUMBER TL0025****DESCRIPTION**

The 36' Skimmer SK0721 Tool Box TL0025 is a basic mechanic's tool set that contains 1/2-inch and 3/8-inch-drive sockets and accessories, combination, open end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 36' Skimmer SK0721

SPECIFICATIONS

Manufacturer ESSM Facility

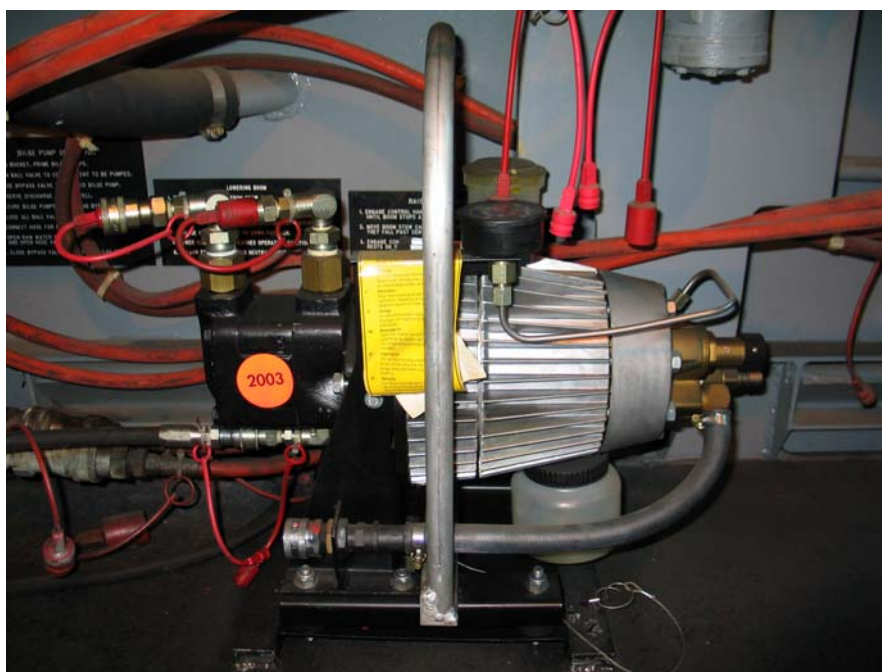
PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 10 in.
Width	9 in.
Height	10 in.
Cube	2 cu ft
Weight	62 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Pressure Washer WA0700

S0300-BV-CAT-020**WASHER, PRESSURE, HYDRAULIC
MODEL-4403K0****ESSM NUMBER WA0700**

DESCRIPTION

The Hydraulic Pressure Washer WA0700 is a high pressure, cold water cleaner that is used to clean oil and dirt from equipment by spraying high pressure water on the equipment. The pressure washer can use either fresh or salt water as a cleaning medium.

SPECIFICATIONS

Manufacturer	ALTO/KEW
Model	4403K0
Max. pump pressure	2610 psig
Water volume:	
Maximum	20.5 gal.
Minimum	5.42 gal.
Max. inlet water temp.	150°F
Self-priming max. lift	16 ft

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 2 in.
Width	1 ft, 1 in.
Height	1 ft, 10 in.
Cube	5 cu ft
Weight	84 lb

REFERENCES

1. Owner's Manual for Kew Hydraulic Pressure Washer, Model 4403K0.

S0300-BV-CAT-020



Oil Containment Boom, Model USS-42 BM0738

S0300-BV-CAT-020

**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'**

ESSM NUMBER BM0738

DESCRIPTION

The Oil Containment Boom, Model USS-42 BM0738 is constructed of nitrile/vinyl rubber-impregnated, high strength nylon cloth that resists abrasions, gouging, oil, and salt water. The standard 55-ft section has five, 10-ft long, 14-inch diameter inflation chambers with inflation/deflation valves. There is a 10-inch piece of rubberized fabric between adjoining chambers that provides flexibility for the boom. Each inflation section is completely vulcanized, with no stitched seams that can pull apart.

The boom has a skirt that extends 24 inches below the inflation chambers for containing the oil. A 1/2-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible orange strips are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-42
Inflation pressure	2 - 3 psig
Test pressure	6 psig
Draft	22 in.
Freeboard	16 in.
Overall height inflated	42 in.
Overall height deflated	52 1/2 in.
Section length	55 ft
Weight per foot	6.7 lb
Flotation chamber	
Diameter	14 in.
Length	10 ft
Air valves per chamber	2
Chamber buoyancy	950 lb
Handle spacing	4 ft
Materials	
Coated fabric	Nitrile/vinyl rubber-impregnated high strength nylon cloth
Color	Black with high visibility orange strips
Ballast	1/2-in. galvanized steel chain, 45,000-lb tensile strength

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738**

SPECIFICATIONS (Cont'd)

End connections	Anodized 6061-T6 aluminum alloy extrusion
Connector plate	Stainless steel
Clevis, shackles, & oblong clevis pins	Galvanized steel
Inflation/deflation valves	Plastic with stainless steel hardware
Tow bar	Stainless steel

PHYSICAL CHARACTERISTICS

	<u>Operating*</u>
Length	55 ft, 0 in.
Height (overall)	3 ft, 6 in.
Diameter (bladder inflated)	1 ft, 3 in.
Cube	240 cu ft
Weight	420 lb

*Operating characteristics are for one 55' section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



USS-42/US-42HB Boom Storage Pallet BM0876
(Without Boom and Stanchions)



USS-42/US-42HB Boom Storage Pallet BM0876
(With Eight 65 1/2" Stanchions and Boom)

S0300-BV-CAT-020**PALLET, STORAGE, BOOM,
USS-42/USS-42HB****ESSM NUMBER BM0876**

DESCRIPTION

The 84-inch x 60-inch x 7-inch USS-42/USS-42HB Boom Storage Pallet BM0876 is a storage/shipping container for either the USS-42 or the USS-42HB boom. The pallet has two configurations. One configuration is with stanchions that are 65 1/2 inches in height. This configuration is used in the Oil Containment Boom Vans and is designed to hold 12 sections of USS-42 or USS-42HB. The second configuration is with stanchions that are 31 3/4 inches in height, due to storage restriction in the Sponson Rack SK0712 used in the Modular Skimmer System. This configuration is used with the Modular Skimmer System only and is designed to hold 6 sections of USS-42 or USS-42HB, as applicable. The pallet is constructed of 2 and 2 1/2-inch square tubing with a 3/4-inch x #9 expanded metal deck to support the boom.

SPECIFICATIONS

Manufacturer ESSM Facility
Drawing number 6777293

PHYSICAL CHARACTERISTICS

	<u>Shipping (with boom)</u>	<u>Shipping (w/o boom)</u>
<u>Pallet with 65 1/2" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	5 ft, 5 1/2 in.	7 in.
Weight (with USS-42HB)	5626 lb	700 lb
Weight (with USS-42)	5962 lb	700 lb
Cube	191 cu ft	20 cu ft
<u>Pallet with 31 3/4" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	2 ft, 7 3/4 in.	7 in.
Weight (with USS-42HB)	3250 lb	636 lb
Weight (USS-42)	3442 lb	636 lb
Cube	93 cu ft	20 cu ft

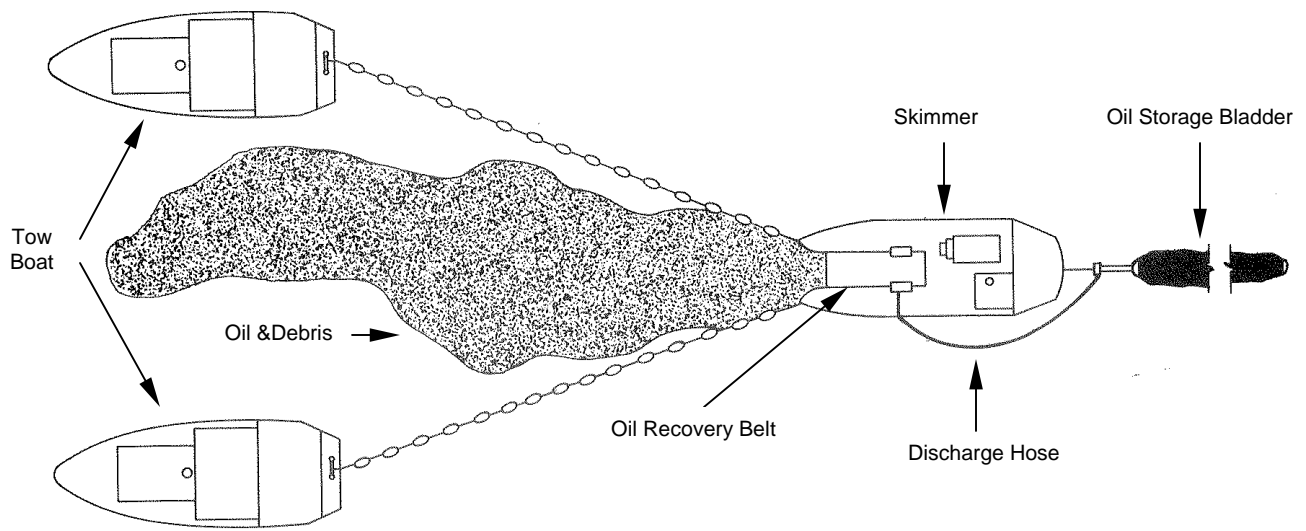
REFERENCES

1. USS-42 & USS-42HB Equipment Container & Pallets, NAVSEA Dwg. 6777293.

S0300-BV-CAT-020

RAPID DEPLOYMENT SKIMMER SYSTEM P16100

S0300-BV-CAT-020



Operating Configuration



Rapid Deployment Skimmer System
(Tow Boats Not Part of This System)

S0300-BV-CAT-020**RAPID DEPLOYMENT SKIMMER SYSTEM****SYSTEM NUMBER P16100****SYSTEM DESCRIPTION**

The Rapid Deployment Skimmer System P16100 is a modular 36-foot aluminum skimming vessel fitted with a rotating sorbent belt for oil recovery. The system is packaged in three modules: two separate 8' x 36' modules plus a cabin top on a separate pallet. The first large module contains the skimmer body. The second large module contains a separate sponson rack unit. The sponson rack unit contains the skimmer sides, boom, spill recovery bladder, spare parts, tools, rigging, and the ancillary equipment necessary to complete the system. The design of the system permits rapid field assembly with minimal support. The skimmer is self-propelled and can function in a stationary, free-skimming mode, or towed in the normal operational V-boom configuration.

Primary vessel power is supplied by 4-cylinder diesel engine. The diesel engine drives a series of hydraulic pumps, which drive various hydraulic motors and cylinders. Most vessel functions are hydraulically activated and include: vessel propulsion, steering, bilge pump operation, filter belt operation, induction pump operation, and offloading pump operation. The engine also drives an air compressor to pressurize the filter belt squeeze cylinders.

During normal oil recovery operations, the vessel is towed by two towboats. To eliminate the transit time required to offload oil from the skimmer, a spill recovery bladder may be towed.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Skimmer, Oil, Sorbent Belt, Model 36' Vessel (Class V):	SK0711	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831 (Altn)	1
Roller, Oil Boom	RO0501	1
Belt, Skimmer, Light Oil	SK0722 (not shown)	1
Belt, Bunker, Class V Skimmer	SK0725 (not shown)	1
Belt, Medium Oil, Class V Skimmer	SK0726 (not shown)	1
Tool Box, 36' Modified Skimmer SK0711	TL0020	1
Washer, Pressure, Hydraulic, Kew, Model-4403K0S	WA0700	1
2. Rack System for SK0711:	SK0712	1
Air Compressor, 19 scfm @ 125 psi, Diesel	AC0501	1
Blower, Electric, Portable	BL0403	1
Boom, Oil Containment, Model USS-42, 42" x 55'	BM0738	12
Pallet, Storage, 84" x 60" x 7", USS-42 & USS-42HB Boom	BM0876	2
Buoy, Marker, Dracone	BU0023	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Motor, Outboard, 15-Hp	MT0940	1

S0300-BV-CAT-020**RAPID DEPLOYMENT SKIMMER SYSTEM (CONTD)****SYSTEM NUMBER P16100**

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Repair Kit, Bladder	OB0801	1
Bladder, Spill Recovery, 26K-Gallon, Type E, Rubber	OB0809	1
Roundsling, Polyester, 16'	SL0012	4
Boat, 15' Inflatable	WB0717	1

S0300-BV-CAT-020



Pilot House for SK0711



Modified Oil Skimmer SK0711 Without Side Hull

S0300-BV-CAT-020**SKIMMER, OIL, SORBENT BELT,
MODEL 36' VESSEL (CLASS V)****ESSM NUMBER SK0711****DESCRIPTION**

The Oil Skimmer SK0711 is a 36' aluminum vessel fitted with a rotating sorbent belt for oil recovery. The skimmer is self-propelled and can function in stationary, free-skimming, and towed V-boom configurations. When used offshore or in open water, the skimmer is towed in a V-boom configuration by a pair of SUPSALV boom handling boats or alternative towboats.

Primary vessel power is provided by a 4-cylinder diesel engine. This engine drives a series of hydraulic pumps, which drive various hydraulic motors and cylinders. Most vessel functions are hydraulically activated. This includes vessel propulsion, steering, and the operation of the bilge pumps, filter belt module, induction pump, and offloading pump. The engine also drives an air compressor to pressurize the filter belt squeeze cylinders.

During oil recovery operations, the vessel is normally towed by two towboats. To eliminate the transit time required to offload oil from the skimmer, an oil storage bladder may be towed.

SPECIFICATIONSBoat

Manufacturer	Marine Construction & Design Co. (MARCO)
Draft (empty)	3 ft, 2 in.
Draft (loaded)	4 ft
Displacement (loaded)	32,000 lb
Body weight	15,500 lb
Side hull	2000 lb
Pilot house	500 lb
Speed	5 kts
Capacities:	
Recovery sump	32 bbls
Fuel tank, integral	75 gal.
Hydraulic oil reservoir	75 gal.
Fuel consumption	6 gph
Air tank	830 cu in.

Engine

Manufacturer	Detroit Diesel
Model	5043-7201
Cylinders	4
Bore	3.875 in.
Stroke	4.5 in.
Displacement	212 cu in.
Compression ratio	21 : 1
Idle rpm	650
Maximum rpm	2400
Horsepower	128 shp @ 2800 rpm
Starting	Electric
Battery	12 V dc

S0300-BV-CAT-020**SKIMMER, OIL, SORBENT BELT,
MODEL 36' VESSEL (CLASS V) (CONTD)****ESSM NUMBER SK0711**

SPECIFICATIONS (Cont'd)

Propulsion Unit

Manufacturer	MARCO
Model	40
Propeller size	16-in. diameter x 13-in. pitch

NOTE: Temporary storage of Class V Systems is limited to 565.3 bbls (oil storage bladder & skimmer holding capacity).

PHYSICAL CHARACTERISTICS

<u>Hull (module)</u>	<u>Shipping</u>	<u>Operational</u>
Length	36 ft, 0 in.	36 ft, 0 in.
Width	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 10 in.	16 ft 6 in.
Cube	2544 cu ft	4752 cu ft
Weight	16,000 lb	21,000 lb

<u>Pilot House</u>	<u>Shipping</u>
Length	5 ft, 9 in.
Width	4 ft, 6 in.
Height	8 ft, 6 in.
Cube	220 cu ft
Weight	715 lb

Side Hulls (2): Shipped as part of SK0712. See SK0712 for shipping configurations.

REFERENCES

1. Class V and VB Oil Recovery Systems Manual, NAVSEA S9593-BT-OMP-010/09608.
2. Series 53 Operator's Manual, Detroit Diesel-Allison.

S0300-BV-CAT-020



Marine Mobile Citizens Band (CB) Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709****DESCRIPTION**

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Manufacturer	Commercial
Frequency range	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only)	
RF output	4 W maximum
Receiver (CB)	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kHz	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



76-Channel Voyager Marine Mobile VHF Radio RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The 76-Channel Voyager Marine Mobile VHF Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a single moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC- M402S are currently in use in the ESSMMIS System with their appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC- M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	48
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



Oil Boom Roller RO0501

S0300-BV-CAT-020**ROLLER, OIL BOOM****ESSM NUMBER RO0501**

DESCRIPTION

The Oil Boom Roller RO0501 is designed to prevent damage to the oil containment boom during deployment or recovery. It can be placed at the edge of a pier or dock and the boom deployed over it. The boom roller has a manual brake assembly that is used to control the rate of feed over the roller as the boom is deployed.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	6 ft, 3 in.
Width	3 ft, 4 in.
Height	3 ft, 11 in.
Cube	82 cu ft
Weight	464 lb

REFERENCES

1. Boom Roller Assembly and Details, NAVSEA Dwg. # 6579538.

S0300-BV-CAT-020



36' Modified Skimmer SK0711 Tool Box TL0020

S0300-BV-CAT-020**TOOL BOX, 36' MODIFIED SKIMMER SK0711****ESSM NUMBER TL0020**

DESCRIPTION

The 36' Modified Skimmer SK0711 Tool Box TL0020 is a basic mechanic's tool set that contains 1/2-inch and 3/8-inch-drive sockets and accessories, combination, open end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 36' Modified Skimmer SK0711.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 10 in.
Width	9 in.
Height	10 in.
Cube	2 cu ft
Weight	62 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Pressure Washer WA0700

S0300-BV-CAT-020**WASHER, PRESSURE, HYDRAULIC
MODEL-4403K0****ESSM NUMBER WA0700**

DESCRIPTION

The Hydraulic Pressure Washer WA0700 is a high pressure, cold water cleaner that is used to remove oil and dirt from equipment by spraying high pressure water on the equipment. The pressure washer can use either fresh or salt water as a cleaning medium.

SPECIFICATIONS

Manufacturer	ALTO Denmark
Model	4403K0
Maximum pump pressure	2610 psig
Water volume:	
Maximum	20.5 gal.
Minimum	5.42 gal.
Maximum inlet water temp.	150°F
Self-priming maximum lift	16 ft

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 2 in.
Width	1 ft, 1 in.
Height	1 ft, 10 in.
Cube	5 cu ft
Weight	84 lb

REFERENCES

1. Owner's Manual for Kew Hydraulic Pressure Washer Model 4403K0.

S0300-BV-CAT-020



Rack System SK0712 for SK0711

S0300-BV-CAT-020**RACK SYSTEM FOR SK0711****ESSM NUMBER SK0712**

DESCRIPTION

The Rack System SK0712 is designed to carry the skimmer sides, boom, oil bladder, spare parts, tools, rigging, and all ancillary equipment to complete the Rapid Deployment Skimmer System P16100.

SPECIFICATIONS

Manufacturer ESSM Facility

Rack System SK0712 consists of:

- | | |
|------------------------------------|---|
| 1. Side hulls (2) | 8. Oil Storage Bladder (OB0809) |
| 2. Absorbent materials | 9. Twelve, 660-foot sections of boom (BM0738) |
| 3. Storage bladder blower (BL0403) | 10. Boom Storage Pallet (BM0876) |
| 4. Storage bladder buoy (BU0023) | 11. Lifting slings (SL0012) |
| 5. Cargo net | 12. Outboard Motor, 15-Hp (MT0940) |
| 6. Workboat (WB0717) | 13. Ancillary equipment |
| 7. Air Compressor (AC0501) | |

PHYSICAL CHARACTERISTICS

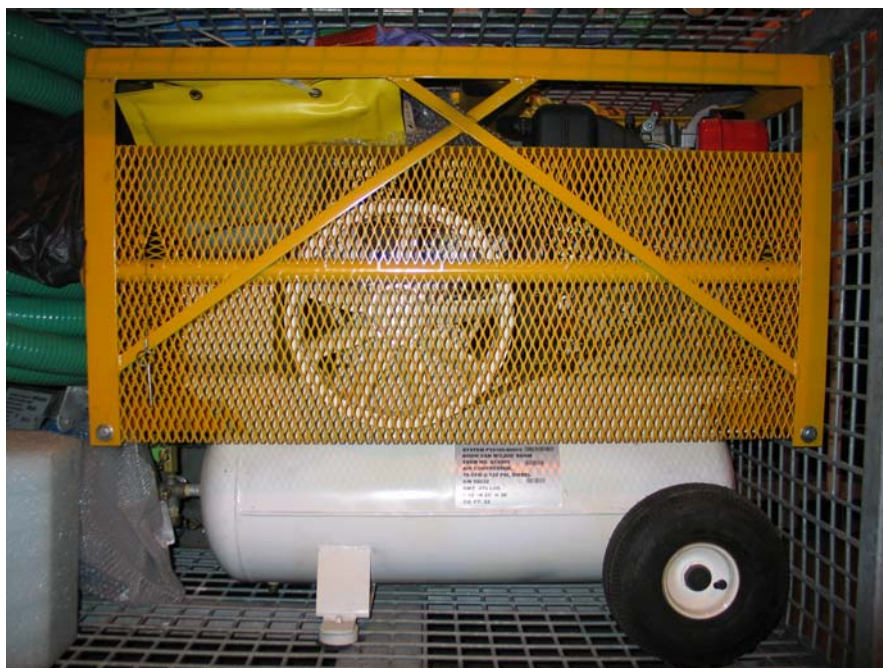
Shipping

Length	32 ft, 6 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	2080 cu ft
Weight	21,180 lb

REFERENCES

None

S0300-BV-CAT-020



Air Compressor AC0501

S0300-BV-CAT-020**AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL****ESSM NUMBER AC0501****DESCRIPTION**

The Air Compressor AC0501 is a two-stage, high volume air compressor that provides 19 cfm at 125 psig. The air compressor is powered by a 1-cylinder, 6.2-hp diesel engine which has its own fuel supply tank. The engine is designed to operate at a continuous speed of 3600 rpm for long periods of time. The engine and compressor are enclosed in a protective frame that is mounted on top of a 30-gallon air storage tank with wheels, which allows for easy maneuverability.

SPECIFICATIONSAir Compressor Assembly

Manufacturer	Emglo Products
Model	GC8YDA-17F

Air Compressor

Manufacturer	Emglo Products
Model	JU
Capacity	19 cfm
Rated operating pressure	125 psi
Operating pressure range	100 to 120 psig
Stages	2
Rpm	875
Storage tank	30 gallons
Cylinders	2

Engine

Manufacturer	Yanmar
Model	L60
Cylinders	1
Bore	2.95 in.
Stroke	2.44 in.
Displacement	16.7 cu in.
Rpm (continuous)	3600
Compression ratio	20 : 1
Starting	Elec./recoil
Battery	12 V dc
Fuel	Diesel
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	22 cu ft
Weight	398 lb

S0300-BV-CAT-020

AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL (CONTD)

ESSM NUMBER AC0501

REFERENCES

1. Yanmar Diesel Engine Operation Manual for L-Series Engine.
2. Emglo Parts Price List J 288.

S0300-BV-CAT-020



Portable Electric Blower BL0403

S0300-BV-CAT-020**BLOWER, ELECTRIC, PORTABLE****ESSM NUMBER BL0403****DESCRIPTION**

The Portable Electric Blower BL0403 consists of a 120-volt, 60-cycle motor and squirrel cage type blower. The blower is used to inflate the empty Dracone to permit entry during inspection and repair. This blower will inflate an "L" type Dracone in approximately 60 minutes. A collapsible polyester duct or spiral tube duct can be attached to the blower outlet for normal pressure operations.

SPECIFICATIONS

Manufacturer	Homelite
Model	200 EB-1
Voltage	120/240
Cycles	60
Phase	Single

PHYSICAL CHARACTERISTICS

Length	2 ft, 0 in.
Width	1 ft, 4 in.
Height	1 ft, 5 in.
Cube	4 cu ft
Weight	66 lb

REFERENCES

None

S0300-BV-CAT-020



Model USS-42 Oil Containment Boom BM0738

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55'****ESSM NUMBER BM0738****DESCRIPTION**

The Oil Containment Boom, Model USS-42 BM0738, is constructed of nitrile/vinyl rubber-impregnated, high strength nylon cloth that resists abrasions, gouging, oil, and salt water. The standard 55-ft section has five 10-ft long, 14-inch diameter inflation chambers with inflation/deflation valves. There is a 10-inch piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized, with no stitched seams that can pull apart.

The boom has a skirt that extends 24 inches below the inflation chambers for containing the oil. A 1/2-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are six metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. In addition, there are two large lifting eyes vulcanized to the end chamber sections for lifting the boom sections into and out of the water. Highly visible orange strips are located at the first and third handle positions of each inflation chamber for improved visibility of the boom when it is waterborne.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-42
Inflation pressure	2 - 3 psig
Test pressure	6 psig
Draft	22 in.
Freeboard	16 in.
Overall height inflated	42 in.
Overall height deflated	52 1/2 in.
Section length	55 ft
Weight per foot	6.7 lb
Flotation chamber:	
Diameter	14 in.
Length	10 ft
Air valves per chamber	2
Chamber buoyancy	950 lb
Handle spacing	4 ft
Materials:	
Coated fabric	Nitrile/vinyl rubber-impregnated high strength nylon cloth
Color	Black with high visibility orange strips
Ballast	1/2-in. galvanized steel chain, 45,000-lb tensile strength

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT,
MODEL USS-42, 42" X 55' (CONTD)****ESSM NUMBER BM0738**

SPECIFICATIONS (Cont'd)

End connections	Anodized 6061-T6 aluminum alloy extrusion
Connector plate	Stainless steel
Clevis, shackles, & oblong clevis pins	Galvanized steel
Inflation/deflation valves	Plastic with stainless steel hardware

PHYSICAL CHARACTERISTICS

	Operating*
Length	55 ft, 0 in.
Height (overall)	3 ft, 6 in.
Diameter (bladder inflated)	1 ft, 3in.
Cube	240 cu ft
Weight	420 lb

*Operating characteristics are for one 55' section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.

S0300-BV-CAT-020



USS-42/USS-42HB Boom Storage Pallet BM0876
(Without Boom and Stanchions)



USS-42/USS-42HB Boom Storage Pallet BM0876
(With Eight 65 1/2" Stanchions and Boom)

S0300-BV-CAT-020**PALLET, STORAGE, BOOM,
USS-42/USS-42HB****ESSM NUMBER BM0876**

DESCRIPTION

The 84-inch x 60-inch x 7-inch USS-42/USS-42HB Boom Storage Pallet BM0876 is a storage/shipping container for either the USS-42 or the USS-42HB boom. The pallet has two configurations. One configuration is with stanchions that are 65 1/2 inches in height. This configuration is used in the Oil Containment Boom Vans and is designed to hold 12 sections of USS-42 or USS-42HB. The second configuration is with stanchions that are 31 3/4 inches in height, due to storage restriction in the Sponson Rack SK0712 used in the Modular Skimmer System. This configuration is used with the Modular Skimmer System only and is designed to hold 6 sections of USS-42 or USS-42HB as applicable. The pallet is constructed of 2 and 2 1/2-inch square tubing with a 3/4-inch x #9 expanded metal deck to support the boom.

SPECIFICATIONS

Manufacturer ESSM Facility
Drawing number 6777293

PHYSICAL CHARACTERISTICS

	<u>Shipping (with boom)</u>	<u>Shipping (w/o boom)</u>
<u>Pallet with 65 1/2" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	5 ft, 5 1/2 in.	7 in.
Weight (with USS-42HB)	5626 lb	NA
Weight (with USS-42)	5962 lb	NA
Weight (without boom)	NA	700 lb
Cube	191 cu ft	20 cu ft
<u>Pallet with 31 3/4" stanchions</u>		
Length	7 ft, 0 in.	7 ft, 0 in.
Width	5 ft, 0 in.	5 ft, 0 in.
Height	2 ft, 7 3/4 in.	7 in.
Weight (with USS-42HB)	3250 lb	NA
Weight (USS-42)	3442 lb	NA
Weight (without boom)	NA	636 lb
Cube	93 cu ft	20 cu ft

REFERENCES

1. USS-42 & USS-42HB Equipment Container & Pallets, NAVSEA Dwg. 6777293.

S0300-BV-CAT-020



Dracone Marker Buoy BU0023

S0300-BV-CAT-020**BUOY, MARKER, DRACONE****ESSM NUMBER BU0023****DESCRIPTION**

The Dracone Marker Buoy BU0023 consists of a 40" diameter styrofoam base for flotation. Extending 22" above the base is a 12" diameter column, which houses a 6-volt battery and a steady-burn white light with lens. The light's on/off function is controlled automatically by a photocell. The Marker Buoy is to be exhibited at or near the aftermost part of the Dracone being towed or moored.

SPECIFICATIONS

Manufacturer Curd Enterprises

PHYSICAL CHARACTERISTICS

Height	4 ft, 2 in.
Diameter	3 ft, 4 in.
Cube	47.5 cu ft
Weight	92 lb

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12''****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12'' urethane berm. Its is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



15-Hp Outboard Motor MT0940

S0300-BV-CAT-020**MOTOR, OUTBOARD, 15-HP****ESSM NUMBER MT0940****DESCRIPTION**

The Outboard Motor MT0940 is a 2-cycle, 15-hp outboard motor with a long shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	OMC, Johnson Division
Power at propeller shaft	15 hp
Max. operating rpm	7000 rpm
Fuel	Gasoline (mixed w/50:1 outboard motor oil)
Fuel tank capacity	6 gallons, external
Propeller	9 ½" diameter x 10" pitch
Starting	Recoil (pull start)

PHYSICAL CHARACTERISTICSShipping

Length	1 ft, 8 in.
Width	1 ft, 0 in.
Height	3 ft, 6 in.
Cube	6 cu ft
Weight	77 lb

REFERENCES

1. Manual for Johnson Outboards, Model 9-15, No. 433276C.
2. Evinrude-Johnson Service Manual, Models 2 through V6, PN 507508.
3. Outboard Marine Corporation Special Tool Guide, PN 395402.
4. Outboard Marine Corporation Parts Catalog for 15-Hp Motors.

S0300-BV-CAT-020



Bladder Repair Kit OB0801

S0300-BV-CAT-020**REPAIR KIT, BLADDER****ESSM NUMBER OB0801****DESCRIPTION**

The Bladder Repair Kit OB0801 consist of various tools, a patching kit with patching procedures, a white marker light, two 6-volt batteries and bulbs, MSDS sheets, and a laminated inventory. The Repair Kit is designed to maintain the oil storage bladder during an operational deployment.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 8 in.
Width	10 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	34 lb

REFERENCES

None

S0300-BV-CAT-020



Spill Recovery Bladder OB0809

S0300-BV-CAT-020**BLADDER, SPILL RECOVERY, 26K-GALLON,
TYPE E, RUBBER****ESSM NUMBER OB0809**

DESCRIPTION

The Spill Recovery Bladder OB0809 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The spill recovery bladder's skin is made up of nylon cord, a woven nylon fabric that has been weatherproofed, and abrasion-resistant synthetic rubber.

The spill recovery bladder is towed behind the skimming vessel using a 6-inch towline. A 6-inch loading and discharge hose is attached to the towline for filling and discharging the skimmed oil to and from the bladder.

SPECIFICATIONS

Manufacturer	Dunlop
Model	Type E, Dracone Barge
Capacity:	
100% full	26,400 gallons/628 bbls
85% full	22,400 gallons/534 bbls
Outer proofing	Neoprene rubber
Inner proofing	Nitrile rubber

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping (w/ancillary equipment)</u>
Length	126 ft, 0 in.	10 ft, 10 in.
Width	NA	5 ft, 11 in.
Height	NA	5 ft, 9 in.
Diameter	6 ft, 2 in.	NA
Weight	5324 lb	2630 lb
Cube	3763 cu ft	369 cu ft

REFERENCES

1. The Dracone Barge Operating Manual, Issue 3.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1" screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Inflatable 15 'Boat WB0717

S0300-BV-CAT-020**BOAT, 15' INFLATABLE****ESSM NUMBER WB0717****DESCRIPTION**

The 15' Inflatable Boat WB0717 is a lightweight, multi-purpose boat. The boat is used to transport people, equipment, and supplies, and for numerous other jobs.

The hull is a U-shaped chamber with conical airtight bulkheads that ensure safety and balance of pressure in the different compartments. An additional airtight compartment is the inflatable keel, which gives the bottom a V-shaped configuration.

The boat is equipped with aluminum floorboards, paddles, running lights, an anchor light, a stern light, a boat hook, and the necessary ancillary gear to operate and maintain it.

SPECIFICATIONS

Manufacturer	Zodiac
Model	Mark III GR
Type	3470
Max. persons on board	8
Load capacity	2205 lb
Max. horsepower	65

PHYSICAL CHARACTERISTICSShipping

Length	4 ft, 11 in.
Width	2 ft, 6 in.
Height	1 ft, 2 in.
Cube	14 cu ft
Weight	144 lb

REFERENCES

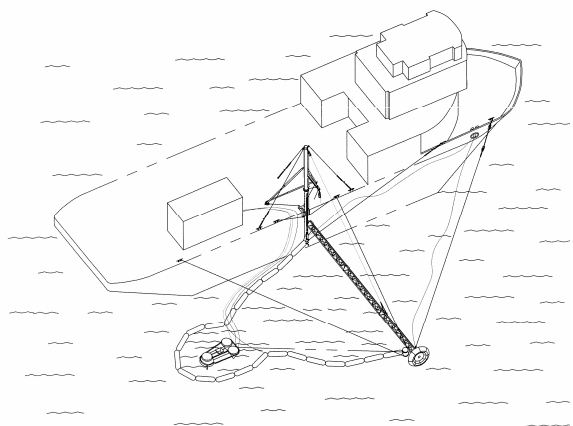
Maintenance and Assembly Manual for Zodiac Models Mark I, II, III.

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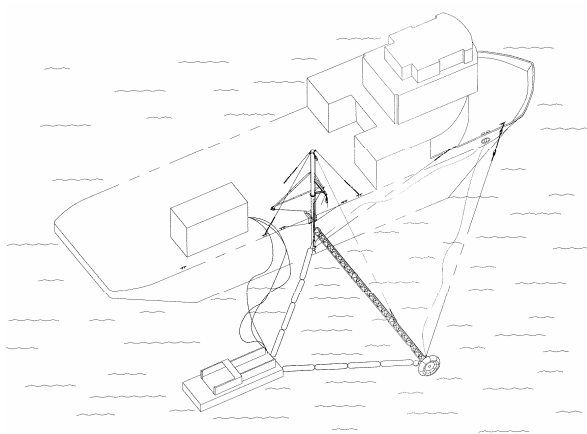
VESSEL OF OPPORTUNITY SKIMMER SYSTEM P16300



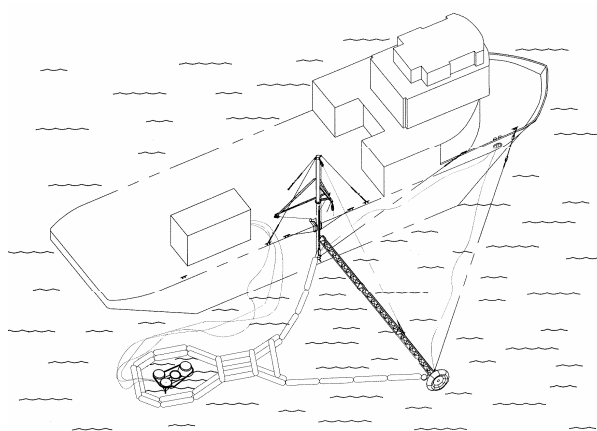
S300-BV-CAT-020



Destroyil VOSS



Class XI VOSS



High Speed Current Buster VOSS

Configurations for the Vessel of Opportunity Skimmer System P16300

S300-BV-CAT-020**VESSEL OF OPPORTUNITY SKIMMER SYSTEM****SYSTEM NUMBER P16300****SYSTEM DESCRIPTION**

The Vessel of Opportunity Skimming System (VOSS) P16300 is a modular oil recovery skimmer system, which can be secured to and operated from a large vessel of opportunity at a spill site. Through this system, a vessel such as an offshore towboat, supply boat, or fishing vessel can be transformed into an oil recovery vessel. The VOSS allows for continuous skimming operations, limited only by adverse weather conditions and darkness. It consists of an in-water oil recovery unit, oil collection (V-) boom, a portable outrigger system to support the leading end of the outboard V-boom leg, and the ancillary equipment necessary to set up, maintain, and operate the VOSS.

There are three alternate configurations of the Vessel of Opportunity Skimming System: the Destroyil Type Skimmer System, the Class XI Skimmer System, and the High Speed Current Buster Skimmer System. The alternate configurations are functionally the same; however, the performance characteristics may vary slightly from one another.

The Destroyil Type VOSS consists of the following: an 8' x 8' x 20' van used to store and ship the system components and ancillaries; four lifting slings; 110' of fence-type boom with foam flotation used to contain and control spilled oil; a portable outrigger system to support the leading end of an outboard boom leg; an in-water oil recovery unit; a hydraulic power unit to power the hydraulic components of the system; a machinery containment pool used to catch and contain any oil, fuel, or contaminants leaking or spilled from the HPU; a hose reel to store the discharge, air, and hydraulic hoses; a pressure washer for cleaning system equipment; and a tool box with tools for assembly and maintenance of the system.

The Class XI VOSS consists of the following: two 8' x 8' x 20' vans used to store and ship the system components and ancillaries; four lifting slings per van; an in-water oil recovery unit with two 55' sections of boom to contain and control spilled oil; a hydraulic power unit to power the hydraulic components of the system; two machinery containment pools to catch and contain any oil, fuel, or contaminants leaking or spilled from the equipment; a pressure washer for cleaning system equipment; tool boxes with tools for assembly and maintenance of the system; an 8-ton knuckle crane used to lift and maneuver system components; and an ancillary kit with rigging components necessary for crane operation.

The High Speed Current Buster VOSS consists of the following: an 8' x 8' x 20' van used to store and ship the system components and ancillaries; four lifting slings; two 26" x 55' sections of USS-26 Oil Containment Boom to lengthen the guide boom of the High Speed Current Buster Skimmer; a High Speed Current Buster Skimmer for collecting and separating the spilled oil; a storage reel used as a storage/shipping platform for the High Speed Current Buster Skimmer; a portable outrigger system to support the leading end of an outboard boom leg of the High Speed Current Buster Skimmer; three in-water oil recovery units, (a weir-type skimmer, a brush-type skimmer, and a 2" Skim- Pak Skimmer);

S300-BV-CAT-020**VESSEL OF OPPORTUNITY SKIMMER SYSTEM
(CONTD)****SYSTEM NUMBER P16300**

a hydraulic power unit which powers the weir-type skimmer and the skimmer storage reel; a hydraulic power pack which powers the Minimax 12 Skimmer; a 2" Peristaltic Diesel Pump for operating the 2" Skim-Pak and inflating the USS-26 boom; two 2-cycle, gas-powered portable blowers to inflate the High Speed Current Buster Skimmer; two machinery containment pools; a pressure washer for cleaning system equipment; and a tool box with tools for assembly and maintenance of the system.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Vessel of Opportunity Skimmer System	P16300	1
a. Destroil VOSS (Altn)		
Van, Destroil Oil Skimmer System	VA0930	1
Boom, Oil Containment, 60" x 110', Urethane	BM0819	1
Containment Pool, Machinery, 10' x 6' x 12", Cooley Urethane	CP3010	1
Outrigger Assembly, VOSS	OA0010	1
Pump, Submersible, 6", Hyd, Auger (Type 210)	PU0802 (not shown)	
Hose Reel Assembly for SK0800	PU0804	1
Skimmer, Oil, Destroil, Weir-Type	SK0800	1
Power Unit, Hyd, Diesel, for SK0800	SK0801	1
Roundslings, Polyester, 16'	SL0012	4
Tool Box, Destroil Skimmer System	TL0019	1
Washer, Pressure, Hydraulic, Kew Model-4403K0S	WA0700 (Altn)	1
Washer, HP, Water w/Destroil	WA0808	1
b. Class XI VOSS (Altn)		
Van, Class XI Skimmer System (Van 1 of 2)	VA0924	1
Skimmer, Oil, Sorb Belt, Class XI System	SK0924	1
Belt, Light Oil, Class XI Skimmer	SK0728 (not shown)	1
Roundslings, Polyester, 16'	SL0012	4
Van, Class XI Skimmer System (Van 2 of 2)	VA0925	1
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
Outrigger Assembly, VOSS	OA0010	1
Power Unit, Hyd, Dsl, Class XI	PW0924	1
Tool Box, Class XI Skimmer System	TL0018	1
Crane, 8-Ton, Portable, Hyd, 40' Knuckle Boom	CR0040	1
Rigging Box For CR0040	CR0041	1
Block, Head, 1/2" Wire Rope	BK0036 (not shown)	1
Block, Snatch, 1/2" Wire Rope, 8-Ton	BK0037 (not shown)	1
Hook, Safety, 1 3/4", 4.5-Ton	HK0004 (not shown)	1
Hook, Safety, 2", 5-Ton	HK0005 (not shown)	1

S300-BV-CAT-020**VESSEL OF OPPORTUNITY SKIMMER SYSTEM
(CONTD)****SYSTEM NUMBER P16300**

Hook, Safety, 2 1/2", 9-Ton	HK0007 (not shown)	1
Hook, Safety, 3", 12-Ton	HK0009 (not shown)	1
Tension Meter, Digital, 20k-Pound Capacity	SE2108	1
Tool Box for CR0040	TL0021	1
c. High Speed Current Buster VOSS (Altn)		
Van, Skimmer, High Speed Current Buster	VA0935	1
Blower, Portable, Gas-Powered, 2-Cycle	BL0025	2
Containment Pool, Machinery, 5' x 5' x 12", Cooley Urethane	CP3000	2
Containment Pool, Machinery, 10' x 6' x 12", Cooley Urethane	CP3010	1
Outrigger Assembly, VOSS	OA0010	1
Pump, Peristaltic, 2" Diesel	PU0300	1
Power Unit, Hyd, Model HT50DQV, 25 gpm @ 3000 psi	PW0050	1
Power Pack, Model LPP 6HA/C75	PW0055	1
Reel, Skimmer, High Speed Current Buster	RL0051	1
Boom, Oil Containment, Model USS-26, 26" x 55'	BM0760	2
Skimmer, High Speed Current Buster	SK0050	1
Skimmer, Minimax 12	SK0055	1
Skimmer, Weir, LWS-50	SK0056	1
Skim-Pak, 2", 4000-Gph	SK0620	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, High Speed Current Buster Skimmer	TL0026	1
Washer, Pressure, Hydraulic, Kew Model-4403K0S	WA0700	1

S300-BV-CAT-020



Destroil Oil Skimmer System Van VA0930 (Interior)



Destroil Oil Skimmer System Van VA0930

S300-BV-CAT-020**VAN, DESTROIL OIL SKIMMER****ESSM NUMBER VA0930**

The Destroil Oil Skimmer Van VA0930 is a storage/shipping container for the following components of the Destroil skimming system: four lifting slings for lifting the van; 110' of fence-type boom with foam flotation used to contain and control spilled oil; a portable outrigger system to support the leading end of an outboard boom leg; an in-water oil recovery unit to recover the oil; a hydraulic power unit which powers the hydraulic components of the system; a machinery containment pool used to catch and contain any oil, fuel, or contaminants leaking or spilled from the HPU; a hose reel to store the discharge, air, and hydraulic hoses; a pressure washer for cleaning system equipment; a tool box with tools for assembly and maintenance of the system; and the necessary ancillary equipment to operate and maintain the skimmer system in the field.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	14,830 lb

REFERENCES

None

S300-BV-CAT-020



Oil Containment Boom BM0819

S300-BV-CAT-020**BOOM, OIL CONTAINMENT, 60" X 110', URETHANE****ESSM NUMBER BM0819****DESCRIPTION**

The 60" x 110' Oil Containment Boom BM0819 is a simple fence-type boom with foam flotation, fiberglass vertical stiffeners (battens), integral top rope tension member, and chain ballast. Each section of boom is fitted with special sewn webbing quick connects, which are bolted to the top and bottom edges of the boom through the battens. The quick connects provide simple and strong attachment points for boom support bridles which transfer towing forces to the aft guide line.

SPECIFICATIONS

Manufacturer	Hyde Products
Fabric	Polyvinyl-chloride (PVC)

PHYSICL CHARACTERISTICS

	<u>Shipping</u>
Length	5 ft, 7 in.
Width	5 ft, 7 in.
Height	6 ft, 9 in.
Cube	200 cu ft
Weight	1360 lb

REFERENCES

None

S300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12"****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the hydraulic power unit or other equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft.
Weight	56 lb	34 lb

REFERENCES

None

S300-BV-CAT-020



VOSS Outrigger Assembly OA0010



VOSS Outrigger Assembly OA0010 (Deployed)

S300-BV-CAT-020**OUTRIGGER ASSEMBLY, VOSS****ESSM NUMBER OA0010****DESCRIPTION**

The VOSS Outrigger Assembly OA0010 is designed to meet the rigorous requirements for a boom that is light in weight, high in strength, and easily deployed. The outrigger arm assembly consists of three truss sections with flanged ends, an outboard float with mounting flange, a universal assembly with mounting bolt flange, and a pad eye plate for attachment of rigging to the outboard end of the arm with the mounting bolt pattern. Each truss section has welded end plates with a symmetrical bolt pattern for a strong connection and easy alignment. The outrigger sections are completely interchangeable and can be assembled from two sections to form a 28-foot wide sweep or from three sections to form a 42-foot sweep. The outrigger arm length must be determined based on limitations of the available vessel and expected skimming conditions. The design working compressive strength of the 42-foot outrigger arm is 8000 lb and is substantially higher for the 28-foot arm.

SPECIFICATIONS

Each outrigger assembly is shipped in six pieces:

- 3 truss sections with flanged end connections (60 lb)
- Outboard float with mounting flange (8 lb)
- Universal joint (U-joint) assembly with mounting flange (15 lb)
- Pad eye plate (for attachment of rigging to the outboard end of the arm) with mounting bolt pattern (3 lb)

PHYSICAL CHARACTERISTICS

	Per truss section
Length	14 ft, 6 in.
Width	14 in.
Height	14 in.
Cube	20 cu ft
Weight	60 lb

REFERENCES

1. NAVSEA Drawing Class XI Outrigger Arm (VOSS), Dwg # 6777303.

S300-BV-CAT-020



Hose Reel Assembly for SK0800

S300-BV-CAT-020**HOSE REEL ASSEMBLY FOR SK0800****ESSM NUMBER PU0804****DESCRIPTION**

The Hose Reel Assembly PU0804 is skid-mounted and manually operated. The hose reel is used to reel up and store the two sections of 3/4" x 50' and the two sections of 3/8" x 50' hydraulic hoses, one section of 3/8" x 100' of air hose, and the one section of 6" x 100' discharge hose that is used with the Destroil VOSS.

SPECIFICATIONS

Manufacturer Desmi

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	6 ft, 5 in.
Width	3 ft, 3 in.
Height	5 ft, 9 in.
Cube	112 cu ft
Weight	1602 lb

REFERENCES

None

S300-BV-CAT-020



Weir-Type Destroy Oil Skimmer SK0800



Shipping Configuration for Weir-Type Destroy Oil Skimmer SK0800

S300-BV-CAT-020**SKIMMER, OIL, DESTROIL, WEIR-TYPE****ESSM NUMBER SK0800****DESCRIPTION**

The Destroil Weir-Type Oil Skimmer SK0800 is fitted with a modified positive displacement Archimedean screw pump. The screw pump is able to efficiently recover light oil as well as very heavy oil, even when mixed with debris normally found in connection with oil spills. A special cutting zone is incorporated in the design, which allows debris such as seaweed, ice, wood, garbage, dead sea birds, and small animals not to affect the skimmer oil recovery capability. If the pump does become jammed, the rotation of the pump can be reversed to free the jam.

The skimmer is fitted with 3 floats to provide the necessary buoyancy for the unit. One of the floats is air-controlled from the hydraulic power unit to ensure optimal positioning of the inlet weir relative to the oil surface. Hydraulic hoses of approximately 130 feet in length connect the hydraulic power unit to the skimmer, and quick disconnect couplings are used throughout. An additional 130-foot length of discharge hose is used to pump the recovered oil from the skimmer to a storage container. The hoses will not affect the buoyancy of the skimmer as they are fitted with floats to keep them afloat.

SPECIFICATIONS

Manufacturer	DESMI, Denmark
Model	DS-210
Max. hydraulic working pressure	3000 psig
Max. screw speed	400 rpm
Hydraulic oil specifications	Exxon transmission fluid, viscosity 35 cSt at 103°F Dexron, BP Autran GM-MP
Discharge hose	125 mm = 5 in.
Power source	Destroil power pack
Capacity	875 cu ft/hr
Effective daily recovery rate:	1371 bbls (24-hour day)

S300-BV-CAT-020

SKIMMER, OIL, DESTROIL, WEIR-TYPE (CONTD)

ESSM NUMBER SK0800

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 ft, 3 in.
Width	5 ft, 7 in.
Height	3 ft, 0 in.
Cube	146 cu ft
Weight	790 lb

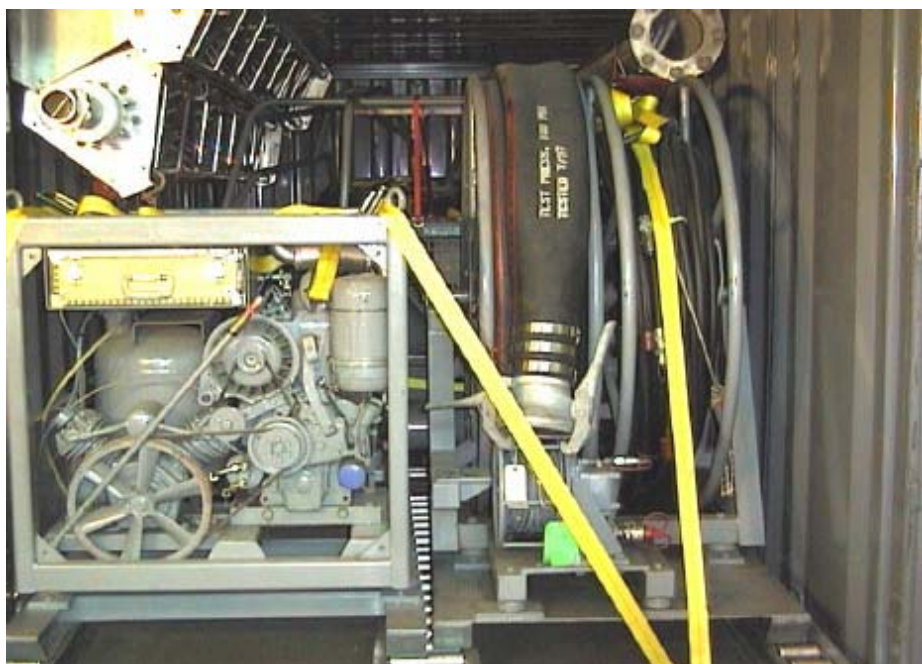
REFERENCES

1. Operation and Maintenance Manual for Destroil Skimmer System, Skimmer Type DS210/MK2, Power Pack Type DSPP/MK2.

S300-BV-CAT-020



Hydraulic Power Unit SK0801



Shipping Configuration for Hydraulic Power Unit SK0801

S300-BV-CAT-020**POWER UNIT, HYDRAULIC, DIESEL
FOR SK0800****ESSM NUMBER SK0801**

DESCRIPTION

The Diesel Power Hydraulic Unit SK0801 is comprised of a diesel driven hydraulic pump, an air compressor, oil and fuel tanks, and a silencer with spark arrestor. The hydraulic power unit is used to operate the skimmer unit SK0800 and hydraulically controlled ancillary equipment. The unit is protected by an aluminum-enclosed frame and all controls and instruments are concentrated in one panel.

SPECIFICATIONS

Engine

Manufacturer	Deutz
Model	F2L511
Type	Air-cooled
Displacement	105.6 cu in.
Cylinders	2
Starter	Hydraulic
Power	9.5 kW @ 2500 rpm
Air filter	Oil bath
Lube oil	HD or HDC
Fuel	Diesel
Fuel source	21-gallon integral fuel tank

Hydraulic Pump

Manufacturer	Hamworthy Hydreco
Model	AP4B3C1C2-R20
Type	Pressure flow axial piston pump
Working pressure	725 psig
Max. continuous pressure	2900 psig
Max. working pressure	1000 psig
Flow rate	0 - 21 gallons
Hydraulic oil tank	21 gallons
Hydraulic hose connection	Quick disconnect

Air Compressor

Manufacturer	Sigurd Stenhoj
Type	K66A
Max. pressure	140 psi
Flow rate	.5 cfm
Lube oil capacity	0.3 gallon

S300-BV-CAT-020

**POWER UNIT, HYDRAULIC, DIESEL
FOR SK0800 (CONTD)**

ESSM NUMBER SK0801

PHYSICAL CHARACTERISTICS

Shipping/Operating

Length	5 ft, 4 in.
Width	3 ft, 7 in.
Height	4 ft, 4 in.
Cube	83 cu ft
Weight	2114 lb

REFERENCES

1. Operation and Maintenance Manual for Destroy Skimmer System, Skimmer type DS210/MK2 Power Pack Type/MK2.

S300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300-BV-CAT-020



Destroil Skimmer System Tool Box TL0019

S300-BV-CAT-020**TOOL BOX, DESTROIL SKIMMER SYSTEM****ESSM NUMBER TL0019**

DESCRIPTION

The Destroil Skimmer System Tool Box TL0019 is a basic mechanic's tool set that contains 3/8" drive standard sockets and accessories, metric and standard combination wrench sets, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Destroil Oil Skimmer.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 11 in.
Width	10 in.
Height	10 in.
Cube	2 cu ft
Weight	52 lb

REFERENCES

None

S300-BV-CAT-020



Hydraulic Pressure Washer WA0700

S300-BV-CAT-020**WASHER, PRESSURE, HYDRAULIC,
MODEL-4403K0****ESSM NUMBER WA0700**

DESCRIPTION

The Hydraulic Pressure Washer WA0700 is a high pressure, cold water cleaner that is used to clean oil and dirt from equipment by spraying high pressure water on it. The pressure washer can use either fresh or salt water as a cleaning medium.

SPECIFICATIONS

Manufacturer	Alto/Kew
Model	4403K0
Max. pump pressure	2610 psig
Water volume:	
Maximum	20.5 gal.
Minimum	5.42 gal.
Max. inlet water temp.	150°F
Self-priming max. lift	16 ft

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 2 in.
Width	1 ft, 1 in.
Height	1 ft, 10 in.
Cube	5 cu ft
Weight	84 lb

REFERENCES

1. Owner's Manual for Kew Hydraulic Pressure Washer, Model 4403K0.

S300-BV-CAT-020



Destroil Hydraulic Pressure Washer WA0808

S300-BV-CAT-020**WASHER, HP, WATER W/DESTROIL****ESSM NUMBER WA0808****DESCRIPTION**

The Destroil Hydraulic Pressure Washer WA0808 is a high pressure, cold water cleaner that is used to clean oil and dirt from equipment by spraying high pressure water on it. The pressure washer uses fresh water as a cleaning medium.

SPECIFICATIONS

Manufacturer	Alto/Kew
Model	1500
Max. pump pressure	1500 psig

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 9 in.
Width	1 ft, 0 in.
Height	23 in.
Cube	11 cu ft
Weight	178 lb

REFERENCES

None

S300-BV-CAT-020



Class XI Skimmer System Van VA0924 (Van 1 of 2) Interior



Class XI Skimmer System Van VA0924 (Van 1 of 2)

S300-BV-CAT-020**VAN, CLASS XI SKIMMER SYSTEM (VAN 1 OF 2)****ESSM NUMBER VA0924**

The Class XI Skimmer System Van VA0924 is a storage/shipping container for the following components of the Class XI Skimmer System: Class XI sorbent belt oil skimmer, two 1 1/4" x 50', four 1" x 50', and four 3/4" x 50' hydraulic hose assemblies, two 6" x 50' layflat hose assemblies, absorbent pads, lifting slings and shackles.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	12,800 lb

REFERENCES

1. NAVSEA Class XI-A and XI-B Oil Recovery System, T9593-AR-OMP- 010/09608.

S300-BV-CAT-020



Class XI Sorbent Belt Oil Skimmer SK0924

S300-BV-CAT-020**SKIMMER, OIL, SORBENT BELT,
CLASS XI SYSTEM****ESSM NUMBER SK0924**

DESCRIPTION

The Class XI System Sorbent Belt Oil Skimmer SK0924 consists of a filterbelt module, an induction pump, a squeeze roller assembly, and an offloading pump. The skimmer assembly is designed to be towed through spilled oil and pick up the water and oil emulsion. As the mixture flows up the filterbelt, the oil and water separate. The water passes through the belt while the oil and debris continues on. A scraper located at the top of the belt scrapes off solid debris and heavy oil, while the oil entrained in the belt is forced out by a squeeze roller. The oil then drips into a hopper, where it is eventually pumped to a support ship or other vessel by the offloading pump.

SPECIFICATIONS

Manufacturer	Marine Construction and Design Co.
Model	Class XI
Induction pump	Two hydraulically driven propeller-type
Offload pump	Destroil Model DS210 (rated at 20 tons/hr)

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	19 ft, 4in.
Width	7 ft, 4 in.
Height	6 ft, 9 in.
Cube	157 cu ft
Weight	4300 lb

REFERENCES

NAVSEA Class XI-A and Class XI-B Oil Recovery System, T9593-AR-OMP-010/09608.

S300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300-BV-CAT-020



Class XI Skimmer System Van VA0925 (Van 2 of 2) Interior



Class XI Skimmer System Van VA0925 (Van 2 of 2)

S300-BV-CAT-020**VAN, CLASS XI SKIMMER SYSTEM (VAN 2 OF 2)****ESSM NUMBER VA0925**

The Class XI Skimmer System Van VA0925 is a storage/shipping container for the following components of the Class XI Skimmer System; a hydraulic power unit, an outrigger assembly, a machinery containment pool for the HPU, a mechanic's tool box, and the necessary ancillary gear to set up, operate and maintain the Class XI Skimmer System.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	19,100 lb

REFERENCES

1. NAVSEA Class XI-A and XI-B Oil Recovery System, T9593-AR-OMP- 010/09608.

S300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12"****ESSM NUMBER CP3010****DESCRIPTION**

The Machinery Containment Pool CP3010 is a 10' x 6' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the hydraulic power unit or other equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	34 lb

REFERENCES

None

S300-BV-CAT-020



VOSS Outrigger Assembly OA0010



VOSS Outrigger Assembly OA0010 (Deployed)

S300-BV-CAT-020**OUTRIGGER ASSEMBLY, VOSS****ESSM NUMBER OA0010****DESCRIPTION**

The VOSS Outrigger Assembly OA0010 is designed to meet the rigorous requirements for a boom that is light in weight, high in strength, and easily deployed. The outrigger arm assembly consists of three truss sections with flanged ends, an outboard float with mounting flange, a universal assembly with mounting bolt flange, and a pad eye plate for attachment of rigging to the outboard end of the arm with mounting bolt pattern. Each truss section has welded end plates with a symmetrical bolt pattern for a strong connection and easy alignment. The outrigger sections are completely interchangeable. The outrigger assembly can be assembled from two sections to form a 28-foot wide sweep or from three sections to form a 42-foot sweep. The outrigger arm length must be determined based on limitations of the available vessel and expected skimming conditions. The design working compressive strength of the 42-foot outrigger arm is 8000-lbs and is substantially higher for the 28-foot arm.

SPECIFICATIONS

Each outrigger assembly is shipped in six pieces:

- 3 truss sections with flanged end connections (60 lb)
- Outboard float with mounting flange (8 lb)
- Universal joint (U-joint) assembly with mounting flange (15 lb)
- Pad eye plate (for attachment of rigging to the outboard end of the arm) with mounting bolt pattern (3 lb)

PHYSICAL CHARACTERISTICS

	Per section
Length	14 ft, 6 in.
Width	14 in.
Height	14 in.
Cube	20 cu ft
Weight	60 lb

REFERENCE

1. NAVSEA Drawing Class XI Outrigger Arm (VOSS), Dwg # 6777303.

S300-BV-CAT-020



Hydraulic Power Unit PW0924

S300-BV-CAT-020**POWER UNIT, DSL/HYD,
CLASS XI****ESSM NUMBER PW0924****DESCRIPTION**

The Hydraulic Power Unit PW0924 is a portable control and power package that operates the skimmer assembly. The power unit consists of a diesel engine that drives a triple hydraulic pump, a hydraulic reservoir, and a fuel tank. The unit is furnished with a sound dampening housing. A hydraulic starting system is employed so that the unit can be operated without an outside power source. An engine-driven air compressor and storage tank are provided to inflate the flotation cells on the skimmer assembly. The hydraulic control console on the hydraulic power unit contains controls and indicators necessary to operate the engine and remote skimmer assembly systems. Selector valves and auxiliary hydraulic supply and return ports are furnished so that auxiliary equipment can be powered by the hydraulic power unit.

SPECIFICATIONS

Manufacturer	Marine Construction and Design Co.
Model	Class XI
Filter belt	36 in. wide
Induction pump	(2) hydraulically driven propeller-type
Offload pump	Destroil Model DS210 (rated at 20 tons/hr)

Power unit (engine)

Manufacturer	Detroit Diesel
Mode	4-53
Horsepower	85 hp
Starter	Hydraulic
Air compressor	12 scfm
Hydraulic oil tank	100-gal. capacity
Boom, Goodyear 12-24	55 ft long
Fuel	Diesel
Fuel oil tank	31-gal. capacity
Fuel consumption	3 gph

S300-BV-CAT-020

**POWER UNIT, DSL/HYD,
CLASS XI (CONTD)**

ESSM NUMBER PW0924

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	12 ft, 3 in.	12 ft, 3 in.
Width	4 ft, 9 in.	4 ft, 9 in.
Height	5 ft, 0 in.	7 ft, 3 in.
Cube	291 cu ft	422 cu ft
Weight	6160 lb	6160 lb

REFERENCES

1. NAVSEA Class XI-A and Class XI-B Oil Recovery Systems, T9593-AR-OMP-010/09608.

S300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300-BV-CAT-020



Class XI Skimmer System Tool Box TL0018

S300-BV-CAT-020**TOOL BOX, CLASS XI SKIMMER SYSTEM****ESSM NUMBER TL0018****DESCRIPTION**

The Class XI Skimmer System Tool Box TL0018 is a basic mechanic's tool set that contains 3/8" and 1/2" drive standard sockets and accessories, a standard combination wrench set, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, a hex key set, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Class XI Skimmer System.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 10 in.
Width	11 in.
Height	10 in.
Cube	2 cu ft
Weight	76 lb

REFERENCES

None

S300-BV-CAT-020



40' Knuckle Boom Portable Hydraulic Crane CR0040

S300-BV-CAT-020**CRANE, 8-TON PORTABLE, HYDRAULIC,
40' KNUCKLE BOOM****ESSM NUMBER CR0040**

DESCRIPTION

The 8-ton, 40-foot Portable Knuckle Boom Crane CR0040 is a crane that can be extended manually and hydraulically from a minimum of 13 feet, 5 inches up to 40 feet. The crane is hydraulically operated by a separate hydraulic power unit and is controlled by a five-section hydraulic control valve. The crane consists of a base, a mast, an inner boom, an outer boom, an extension boom, a winch, and the controls and hydraulic components necessary for operation.

SPECIFICATIONS

Manufacturer	Iowa Mold Tooling Co. Inc.
Maximum lift	16,500 lb
Model	18040
Crane boom length	13 ft, 5 in. up to 40 ft
Rotating mechanism	360°
Outer boom swing	126° arc

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 ft, 6 in.
Width	5 ft, 8 in.
Height	8 ft, 7 in.
Cube	413 cu ft
Weight	10,830 lb

REFERENCES

1. NAVSEA Hydraulic Crane, Model 18040, S9597-AD-OMP-010/54209.

S300-BV-CAT-020



Rigging Box for CR0040 Crane, CR0041

S300-BV-CAT-020**RIGGING BOX FOR CR0040****ESSM NUMBER CR0041**

DESCRIPTION

The Rigging Box for CR0040 contains the equipment necessary to set up, operate, and maintain the 8-Ton Portable Hydraulic Crane CR0040.

SPECIFICATIONS

Manufacturer ESSM Facility

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Rigging Box for CR0040, 62" x 34" x 39":	CR0041	1
Block, Head, 1/2" Wire Rope	BK0036	1
Block, Snatch, 1/2" Wire Rope, 8-Ton	BK0037	1
Hook, Safety, 1 3/4", 4.5-Ton	HK0004	1
Hook, Safety, 2", 5-Ton	HK0005	1
Hook, Safety, 2 1/2", 9-Ton	HK0007	1
Hook, Safety, 3" 12-Ton	HK0009	1
Tension Meter, Digital, 20k-lb Capacity	SE2108	1
Tool Box for CR0040	TL0021	1
Ammo box #1, 12" x 7" x 8"		1
Ammo box #2, 12" x 7" x 8"		1
Ammo box #3, 12" x 5" x 7"		1"
Bolt, 1 1/4" x 4", w/spacer		8
Bolt, 1 1/4" x 6"		4
Box, storage, 12 1/2" x 7 1/2" x 11" (gray)		1
Box, wood, 14" x 14" x 10"		1
Calculator, solar		1
Case, 12" x 10" x 5" (black)		1
Case, storage, 16" x 9" x 3" (orange)		1
Clamp, wire rope combination, 1/2"		4
Crows foot, w/wedge, 46"		1
Extension, 16", 3/4" squared drive		1
Grease gun		1
Grease, multipurpose		1
Hose, hydraulic, -16, 1" x 10'		2
Inventory, laminated		1
Manual, Tech, Hydraulic Crane, Model 18040, NAVSEA S9597.AD-OMP-010		1
Nut, 1 1/4"		4

S300-BV-CAT-020**RIGGING BOX FOR CR0040 (CONTD)****ESSM NUMBER CR0041**Rigging Box for CR0040 Contents (Contd):

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Plate, steel (dogs)		40
Pry bar, 36"		1
Seal kit, 9C282835		1
Sling, 12', green		2
Sling, 12', red		2
Sling, 12', white		2
Sling, 12', yellow		2
Sling, 6', green		2
Sling, 6', red		2
Sling, 6', yellow		2
Socket, 12-pt, 1 11/16", 3/4" dr		1
Socket, 12-pt, 1 13/16", 3/4" dr		1
Socket, 12-pt, 1 3/4", 3/4" dr		1
Socket, 12-pt, 1 7/8", 3/4"dr		1
Socket, 12-pt, 2", 3/4" dr		1
Socket, 6-pt, 1 1/16, 3/4" dr		2
Socket, 6-pt, 1 1/8", 3/4" dr		2
Tape, duct, 2"		1
Tape, measuring, steel, 100'		1
Tape, measuring, steel, 12'		1
Wedge socket assembly, 1/2"-5/8"		2
Wedges, steel		40
Wrench, pneumatic, 3/4", square dr		1
Wrench, pneumatic, w/socket set, 1/2" dr		1
Wrench, torque, 3/4", sq dr, 0-600-ft lb		1

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	5 ft, 2 in.
Width	2 ft, 10 in.
Height	3 ft, 3 in.
Cube	47 cu ft
Weight	1110 lb

REFERENCES

None

7-204X Change E

S300-BV-CAT-020



Digital Tension Meter SE2108



Digital Tension Meter SE2108

S300-BV-CAT-020**TENSION METER, DIGITAL, 20K-POUND CAPACITY****ESSM NUMBER SE2108****DESCRIPTION**

The 20k-Pound Digital Tension Meter SE2108 is a high quality dynamometer with dual range capacity of 2000 pounds and 20,000 pounds. Dual range capacity permits flexibility to use one instrument for multiple tasks in measuring light and heavy loads. The tension meter is equipped with a 1 1/2-in. x 3 1/2-in. liquid crystal display.

SPECIFICATIONS

Manufacturer	Emery Winslow Scale Company
Model	Dynabar 1010
Accuracy	0.2% F.S. @ 2000 lb 0.2% F.S. @ 20,000 lb
Display	Liquid crystal
Battery	Rechargeable, 4-hour charge for 40 hours

PHYSICAL CHARACTERISTICS

Length	1 ft, 4 in.
Width	1 ft, 2 in.
Height	7 in.
Cube	1 cu ft
Weight	22 lb

REFERENCES

None

S300-BV-CAT-020



Tool Box for CR0040 Crane, TL0021

S300-BV-CAT-020**TOOL BOX FOR CR0040****ESSM NUMBER TL0021****DESCRIPTION**

The Tool Box for CR0040 Crane, TL0021 is a basic mechanic's tool set that contains 1/2" drive standard sockets and accessories, a standard combination wrench set, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, a hex key set, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 8-ton, 40-foot Portable Knuckle Boom Crane CR0040.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	9 in.
Height	7 in.
Cube	1 cu ft
Weight	46 lb

REFERENCES

None

S300-BV-CAT-020



High Speed Current Buster Skimmer System Van VA0935 (Interior)



High Speed Current Buster Skimmer System Van VA0935

S300-BV-CAT-020**VAN, SKIMMER, HIGH SPEED CURRENT BUSTER****ESSM NUMBER VA0935**

The High Speed Current Buster Skimmer System Van VA0935 is a storage/shipping container for the following components of the High Speed Current Buster Skimming System: four lifting slings; two sections of USS-26 oil containment boom for containing and controlling spilled oil; a two-cycle gas-powered blower for inflating the USS-26 boom, a portable outrigger system to support the leading end of an outboard boom leg; three types of in-water oil recovery units; two hydraulic power units to power the oil recovery units; a 2" peristaltic pump used to operate the 2" skim-pak; two machinery containment pools; a hydraulic hose storage reel that is used to store the boom and the high speed current buster; a pressure washer for cleaning system equipment; a tool box with tools for assembly and maintenance of the system; and the ancillary equipment necessary to operate and maintain the skimmer system in the field.

SPECIFICATIONS

Manufacturer ESSM Facility

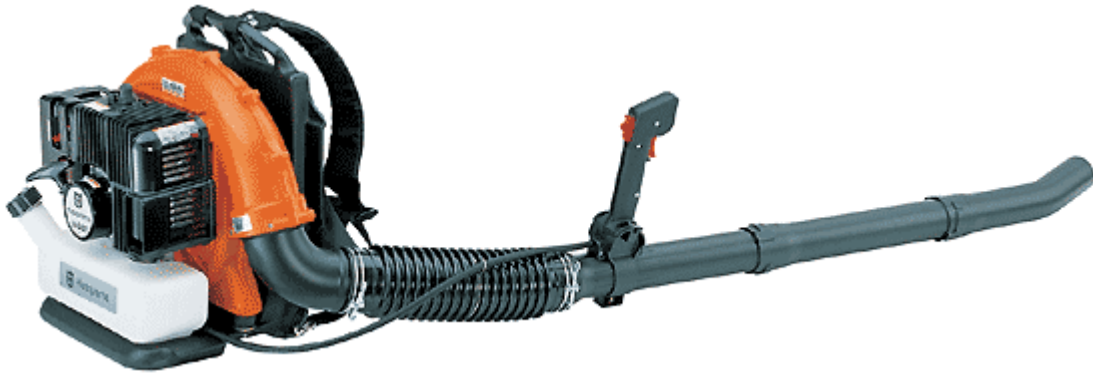
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	19,800 lb

REFERENCES

None

S300-BV-CAT-020



Two-Cycle Gas-Powered Portable Blower BL0025

S300-BV-CAT-020**BLOWER, PORTABLE, GAS POWERED, 2-CYCLED****ESSM NUMBER BL0025****DESCRIPTION**

The Two-Cycle Gas-Powered Portable Blower BL0025 is a quiet, lightweight blower with a 59cc (3.6 cu m.) engine. It has a maximum airspeed of 190 mph, and a maximum air volume at tube of 530 cfm. The blower includes a durable padded harness. It is used for the inflation of the USS-26 oil containment boom.

SPECIFICATIONS

Manufacturer	Husqvarna
Model	165BT
Cylinder displacement	3.6 cu in.
Horsepower	3.2
Maximum power rpm	7800
Maximum engine rpm	7800
Fuel tank volume	4.6 US pints
Air volume @ housing	680 cfm
Air volume @ tube	530 cfm
Maximum air velocity	190 mph

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft
Width	18 in.
Height	22 in.
Cube	5.5cu ft
Weight	32 lb

REFERENCES

1. Husqvarna Blower Manual.

S300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000**

DESCRIPTION

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the HPU, pump, or other equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	1 ft, 8 in.	5 ft, 0 in.
Width	1 ft, 8 in.	5 ft, 0 in.
Height	6 in.	1 ft, 0 in.
Cube	1.5 cu ft	25 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12''****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12'' urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft.
Weight	56 lb	34 lb

REFERENCES

None

S300-BV-CAT-020



VOSS Outrigger Assembly OA0010



VOSS Outrigger Assembly OA0010 (Deployed)

S300-BV-CAT-020**OUTRIGGER ASSEMBLY, VOSS****ESSM NUMBER OA0010****DESCRIPTION**

The VOSS Outrigger Assembly OA0010 is designed to meet the rigorous requirements for a boom that is light in weight, high in strength, and easily deployed. The outrigger arm assembly consists of three truss sections with flanged ends, an outboard float with mounting flange, a universal assembly with mounting bolt flange, and a pad eye plate for attachment of rigging to the outboard end of the arm. Each truss section has welded end plates with a symmetrical bolt pattern for a strong connection and easy alignment. The outrigger sections are completely interchangeable. The outrigger assembly can be assembled from two sections to form a 28-foot wide sweep or from three sections to form a 42-foot sweep. The outrigger arm length must be determined based on the limitations of the available vessel and expected skimming conditions. The design working compressive strength of the 42-foot outrigger arm is 8000 lb and is substantially higher for the 28-foot arm.

SPECIFICATIONS

Each outrigger assembly is shipped in six pieces:

- 3 truss sections with flanged end connections (60 lb)
- Outboard float with mounting flange (8 lb)
- Universal joint (U-joint) assembly with mounting flange (15 lb)
- Pad eye plate (for attachment of rigging to the outboard end of the arm) with mounting bolt pattern (3 lb)

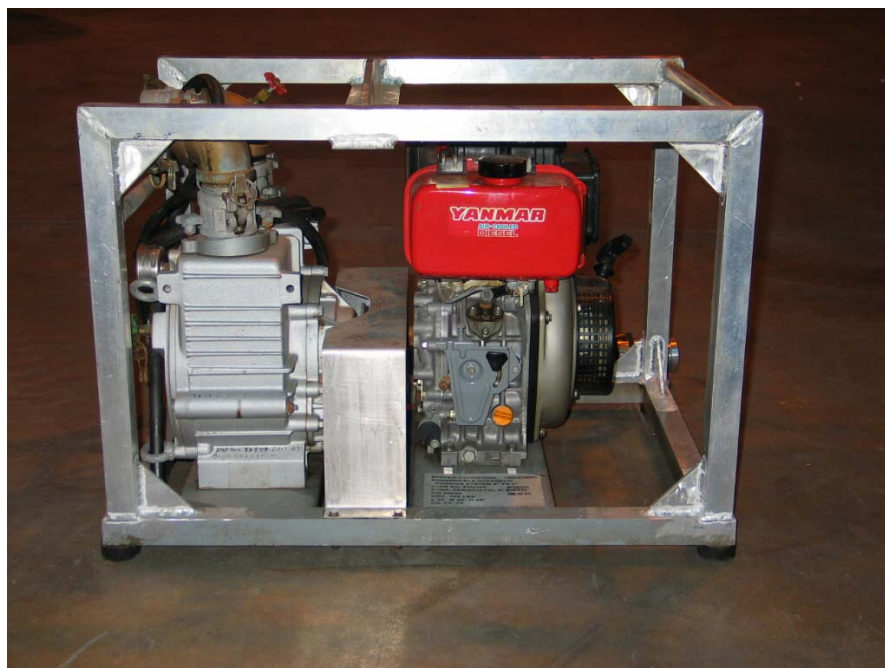
PHYSICAL CHARACTERISTICS

	Per section
Length	14 ft, 6 in.
Width	14 in.
Height	14 in.
Cube	20 cu ft
Weight	60 lb

REFERENCES

1. NAVSEA Drawing Class XI Outrigger Arm (VOSS), Dwg # 6777303.

S300-BV-CAT-020



2-Inch Peristaltic Pump PU0300

S300-BV-CAT-020**PUMP, PERISTALTIC, 2", DIESEL****ESSM NUMBER PU0300**

DESCRIPTION

The 2-Inch Peristaltic Pump PU0300 is a self-priming, diesel driven, hose-type pump designed to pump a wide variety of viscous materials. The 2-inch pump will pump at a rate of 110 gpm with an open discharge. Maximum practical suction lift is 29 feet above the material surface.

The 2-inch pump is powered by a 1-cylinder, 5.5 hp, air-cooled, 4-cycle engine. The engine has a recoil starter and direct fuel injection with a variable speed control and is designed to operate from its own integral fuel system.

SPECIFICATIONS

Pump Assembly

Manufacturer	Master Pump Engine Co.
Model	MD-5
Type	Series M, hose-type
Capacity	110 gpm/open discharge
Effective daily recovery rate (24-hr)	Mod 2400 - 226 bbls Mod 4200 - 459 bbls

Engine

Manufacturer	Yanmar Diesel
Model	L60AE-D
Bore/stroke	75mm/62mm
Displacement	273 cc
Rpm	3600
Horsepower	5.5
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 9 in.
Width	2 ft, 1 in.
Height	2 ft, 1 in.
Cube	12 cu ft
Weight	192 lb

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual for L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.
4. Pamphlet for Series M Peristaltic Pumps.

S300-BV-CAT-020



Hydraulic Power Unit PW0050

S300-BV-CAT-020

**POWER UNIT, HYDRAULIC,
MODEL HT50DQV, 25 GPM @ 3000 PSI**

ESSM NUMBER PW0050

DESCRIPTION

The Hydraulic Power Unit PW0050 is a sound-attenuated unit designed to be used in areas where low sound levels are required. The HPU is a portable, diesel driven unit that provides hydraulic flow through a hydraulic circuit controlled by a manually operated hydraulic pressure switch. The total hydraulic output is 25 gpm at a pressure of 3000 psi.

The HPU is skid-mounted with forklift slots and enclosed in a protective frame with two lifting points. Hydraulic connections utilize 1-inch Aeroquip 5600 series quick disconnect fittings (one male for supply and one female for return).

SPECIFICATIONS

Hydraulic Power Unit

Manufacturer Hydra-Tech Pumps
Model HT50DQV

Engine

Manufacturer John Deere
Model 3024T
Type 4-cycle
No. of cylinders In-line 4 cylinders
Horsepower 60 @ 2800 rpm
Starting Electric
Fuel Diesel
Fuel source 75-gal internal tank
Fuel consumption 2.5 gal./hr

Pump

Manufacturer Rex Roth
Model Pressure compensated
Maximum output 25 gpm @ 3000 psi
Hydraulic fluid Rando 46
Hydraulic reservoir capacity 30 gallons
Hose port size:
Supply 1" NPT
Return 1" NPT
Case drain 1/2" NPT

S300-BV-CAT-020

**POWER UNIT, HYDRAULIC,
MODEL HT50DQV, 25 GPM @ 3000 PSI (CONTD)**

ESSM NUMBER PW0050

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 6 in.
Width	3 ft, 1 in.
Height	5 ft, 7 in.
Cube	112 cu ft
Weight	2690 lb

REFERENCES

1. Hydra-Tech Pumps Maintenance and Parts List for Power Unit Model HT50DQV.

S300-BV-CAT-020



Power Pack PW0055

S300-BV-CAT-020**POWER PACK, MODEL LPP 6HA/C75****ESSM NUMBER PW0055****DESCRIPTION**

The Power Pack PW0055 is a compact multipurpose hydraulic power unit, coupled to a powerful transfer pump. Power is provided by a single cylinder air-cooled diesel engine generating 5kW. The Power Pack is equipped with electric start as standard, with manual start as backup. The Power Pack consists of one hydraulic circuit capable of pumping 1 gpm @ 2175 psi; hydraulic flow is controlled by a valve located on the hydraulic pump body. The standard hydraulic connections used are TEMA quick release couplings. The integral pump is a self-priming double diaphragm pump with a maximum capacity of 30m³/hr through a 3-inch inlet and discharge camlock couplings. The pump is protected by a suction strainer and can handle solids up to 6mm in size. All seals are constructed from synthetic rubber for protection against all oils encountered. The LPP 6HA/C75 is mounted on a tough and portable, steel 2- wheeled site chassis with collapsible handle allowing for easy deployment. In addition to powering the smaller capacity skimmers, the power pack is used to power the Minimax12 Skimmer for the recovery of oil of varying viscosities.

SPECIFICATIONS

Manufacturer	Lamor
Model	LPP 6HA/C75

Engine

Manufacturer	Hatz
Model	1B30
Type	4-cycle
No. of cylinders	1
Horsepower	8 @ 3600 rpm
Starting	Electric
Fuel	Diesel
Fuel source	1.5-gal. internal tank
Fuel consumption	.5 gal./hr

Pump

Manufacturer	Sparte
Model	75C
Capacity	7000 gal./hr
Self-priming lift	29 ft H ₂ O
Hose connections	3" camlock

S300-BV-CAT-020

POWER PACK, MODEL LPP 6HA/C75 (CONTD)

ESSM NUMBER PW0055

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	3 ft, 7 in.
Width	3 ft, 4 in.
Height	2 ft, 8 in.
Cube	32 cu ft
Weight	62 lb

REFERENCES

1. Lamor Owner's Manual for Power Pack LPP 6.

S300-BV-CAT-020



High Speed Current Buster Reel RL0051



High Speed Current Buster Reel RL0051
(With NOFI Skimmer and USS-26 Boom)

S300-BV-CAT-020**REEL, SKIMMER, HIGH SPEED
CURRENT BUSTER****ESSM NUMBER RL0051**

DESCRIPTION

The High Speed Current Buster Skimmer Reel RL0051 is skid-mounted and hydraulically powered. The reel can store up to ten 6" x 100' sections of floating hose, and is powered by a Mod 8 Hydraulic Power Unit (PU0200B), which is not a part of this system and must be obtained from a separate source.

SPECIFICATIONS

Manufacturer	Cavotec
Model	HC3

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	7 ft, 5 in.
Width	6 ft, 4 in.
Height	6 ft, 7 in.
Cube	309 cu ft
Weight	4800 lb (with NOFI Skimmer)

REFERENCES

None

S300-BV-CAT-020



Oil Containment Boom BM0760

S300-BV-CAT-020**BOOM, OIL CONTAINMENT
MODEL USS-26, 26' x 55'****ESSM NUMBER BM0760**

DESCRIPTION

The Oil Containment Boom BM0760 is an inflatable, rubberized, all-nylon construction boom that resists abrasions, gouging, oil, and salt water. The standard section has inflation chambers with an inflation/deflation valve. There is a piece of rubberized fabric that separates adjoining chambers and provides flexibility for the boom. Each inflation section is completely vulcanized with no stitched seams that can pull apart.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-26
Inflation pressure	2 psig
Test pressure	4 psig
Weight per foot	4 1/2 lb

PHYSICAL CHARACTERISTICS

Shipping

Length	3 ft, 0 in.
Width	3 ft, 0 in.
Height	1 ft, 9 in.
Cube	15 cu ft
Weight	248 lb

REFERENCES

None

S300-BV-CAT-020



High Speed Current Buster Skimmer SK0050

S300-BV-CAT-020**SKIMMER, HIGH SPEED CURRENT BUSTER****ESSM NUMBER SK0050****DESCRIPTION**

The High Speed Current Buster Skimmer SK0050 is capable of containing and collecting oil at towing speeds (or currents) up to 4 knots. It is capable of recovering oil with dramatically increased skimming efficiency due to low oil layer turbulence in the separator at the end of the system. The High Speed Current Buster Skimmer, in addition to containing oil at high towing speeds or currents, also separates the oil from the water and positively “controls” the oil for uncomplicated and highly efficient oil recovery. This skimmer is well suited for fast running rivers and in narrow, high current straits.

The High Speed Current Buster Skimmer consists of a front sweep (standard opening 65 ft.) for guiding oil product into the combined collector/skimming device and then into the separator tank (holding capacity approx. 7,925 gallons), where the oil is recovered by a simple pump or a skimmer.

SPECIFICATIONS

Manufacturer	NOFI
Model	Current Buster 600
Inflation pressure	2 psig
Draft	18”
Freeboard	24”
Overall height inflated	42
Mooring/lifting points	19
Flotation chambers	18
Air inflated stiffeners	4
Air valves per chamber	1
Materials:	
Buoyancy chambers	PU/PVC-coated polyester
Transverse bladders	PU/PVC-coated polyester
Storage/operating temperatures	-13° to 150° F

S300-BV-CAT-020

**SKIMMER, HIGH SPEED CURRENT BUSTER
(CONTD)**

ESSM NUMBER SK0050

PHYSICAL CHARACTERISTICS

Shipping (on Storage Reel RL0051)*

Length	7 ft, 5 in.
Width	6 ft, 4 in.
Height	6 ft, 7 in.
Cube	309
Weight	3000 lb
Weight (Skimmer only)	750 lb

*The High Speed Current Buster is shipped on the High Speed Current Buster Storage Reel RL0051.
Dimensions given are for combined shipping configuration.

REFERENCES

1. User Documentation for NOFI Current Buster 600.

S300-BV-CAT-020



Minimax 12 Skimmer SK0055

S300-BV-CAT-020**SKIMMER, MINIMAX 12****ESSM NUMBER SK0055****DESCRIPTION**

The Minimax 12 Skimmer SK0055 is an efficient, free-floating brush wheel-type skimmer. It is lightweight, portable, and is designed to recover oil of all types from shorelines, harbors, estuaries, rivers and lakes. The Minimax 12 Skimmer is hydraulically operated and offloaded by suction pump. The small and lightweight Minimax 12 can be easily carried and deployed by one person and can recover any floating oils that remain fluid.

The Minimax 12 Skimmer consists of a floating skimmer head incorporating two brush wheel units side by side with a diameter of only 9.8 inches. The brush wheels rotate “with the flow,” forcing the oil under the water. As oil tends to rise to the surface, it sticks to the oleophilic brushes. The brush wheels consist of hundreds of thousands of bristles, giving a large surface area for the oil to stick to. As the brush wheels rotate, water flows off the brushes through a channel and out of the skimmer head. Collected oil is scraped off into the oil collection hopper and pumped to a recovery tank.

SPECIFICATIONSSkimmer

Manufacturer	Lamor
Model	Minimax 12
Brush disc:	
Quantity	6
Diameter	9.8 in.
Capacity per 24hr/day	362 bbls

Hydraulic Motor

Manufacturer	Danfoss
Model	OMM 32
Maximum hydraulic flow	.47 gallon
Hydraulic pressure	1450 psi

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 7 in.
Width	3 ft, 4 in.
Height	2 ft, 8 in.
Cube	32 cu ft
Weight	62 lb

REFERENCES

1. Lamor Minimax 12 Owner's Manual.

S300-BV-CAT-020



LWS-50 Weir Skimmer SK0056



LWS-50 Weir Skimmer SK0056 (Operating)

S300-BV-CAT-020**SKIMMER, WEIR, LWS-50****ESSM NUMBER SK0056****DESCRIPTION**

The LWS-50 Weir Skimmer SK0056 is a free-floating weir with high buoyancy-to-weight ratio and low inertial mass. This gives it excellent sea-keeping characteristics and the ability to follow choppy waves. The self-adjusting Weir Skimmer gives the operator precise control of the skimming process in all operating conditions. The unit is also simple to operate, and require little operator training.

The hopper and float arms are manufactured using seawater-resistant aluminum. Floats and weir lip are constructed of polyethylene, and the flexible bellows are made of neoprene rubber. The transfer pump is accessible for easy inspection and maintenance without removal from the skimmer. Debris is handled by cutting knives at the pump inlet. The pump can quickly be detached from the weir skimmer for use in any oil transfer operation. The skimmer has a center lifting yoke as well as a lifting eye on each pontoon leg.

SPECIFICATIONS

Manufacturer	Lamor
Model	LWS-50

Weir

Manufacturer	Lamor
Model	LWS-50
Entrance diameter	Approximately 25"
Draft	16"

Pump

Manufacturer	Lamor
Model	GT A 50
Discharge coupling	3" camlock
Capacity per 24 hr/day	1509 bbls

Motor

Manufacturer	Danfoss
Model	OMTS 160
Max. hydraulic flow	35 gpm @ 3500 psi
Max return pressure	290 psi
Hydraulic couplings:	
Pressure	Tema 3/4" female
Return	Tema 3/4" male

S300-BV-CAT-020

SKIMMER, WEIR, LWS-50 (CONTD)

ESSM NUMBER SK0056

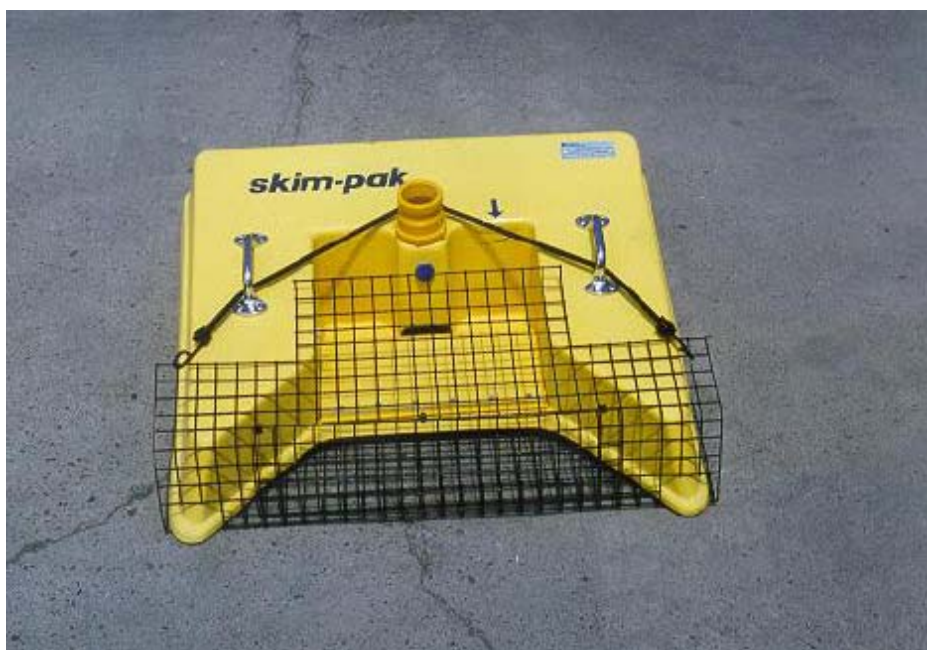
PHYSICAL CHARACTERISTICS

Length	3 ft, 6 in.
Width	3 ft, 1 in.
Height	1 ft, 6 in.
Cube	16 cu ft
Weight	190 lb

REFERENCES

1. Lamor Weir Skimmer Owner's Manual.

S300-BV-CAT-020



2" Skim-Pak SK0620

S300-BV-CAT-020**SKIM-PAK, 2", 466 BBLs/24 HR DAY****ESSM NUMBER SK0620****DESCRIPTION**

The 466 Bbls/24 hr Day, 2" Skim-Pak SK0620 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. The Skim-Pak unit is designed to be used as a general purpose skimmer for oil recovery on lakes, harbors, rivers, streams, and calm water applications.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	4000
Model	4200
Flow	5 to 68 gpm
Max. recovery rate	466 bbls/24 hr day
Size	2 in.
Draft	5 in.
Weir width	1 ft
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 3 in.
Width	2 ft, 1 in.
Height	11 in.
Cube	5 cu ft
Weight	18 lb

REFERENCES

1. Brochure: "The Skimmer That Really Works".

S300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300-BV-CAT-020



High Speed Current Buster Skimmer Tool Box TL0026

S300-BV-CAT-020**TOOL BOX, HIGH SPEED CURRENT BUSTER SKIMMER****ESSM NUMBER TL0026**

DESCRIPTION

The High Speed Current Buster Skimmer Tool Box TL0026 is a basic mechanic's tool set that contains 3/8" and 1/2" drive standard sockets and accessories, a standard combination wrench set, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, a hex key set, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the High Speed Current Buster Skimmer.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 10 in.
Width	11 in.
Height	10 in.
Cube	2 cu ft
Weight	76 lb

REFERENCES

None

S300-BV-CAT-020



Hydraulic Pressure Washer WA0700

S300-BV-CAT-020**WASHER, PRESSURE, HYDRAULIC
MODEL 4403K0****ESSM NUMBER WA0700**

DESCRIPTION

The Hydraulic Pressure Washer WA0700 is a high pressure, cold water cleaner that is used to remove oil and dirt from equipment by spraying high pressure water on it. The pressure washer can use either fresh or salt water as a cleaning medium.

SPECIFICATIONS

Manufacturer	Alto/Kew
Model	4403K0
Max. pump pressure	2610 psig
Water volume:	
Maximum	20.5 gal.
Minimum	5.42 gal.
Max. inlet water temp.	150°F
Self-priming max. lift	16 ft

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 2 in.
Width	1 ft, 1 in.
Height	1 ft, 10 in.
Cube	5 cu ft
Weight	84 lb

REFERENCES

1. Owner's Manual for Kew Hydraulic Pressure Washer, Model 4403K0.

S0300-BV-CAT-020

ARCTIC OIL RECOVERY SYSTEM P16500

S0300-BV-CAT-020



Arctic Oil Recovery System Van VA1650 (Van 1 of 2)



Bobcat Loader VE0040



80" Bucket VE0042



12" Bit VE0043



Drive Unit VE0044



Backhoe VE0045



Breaker VE0046



Pallet Forks VE0047



Planer VE0048



Trencher VE0049



Track Package VE0050



Slings SL0012



Tool Box TL0016

System Overview of Arctic Oil Recovery System Van VA1650 (1 of 2)

S0300-BV-CAT-020



Arctic Oil Recovery System Van VA1651 (2 of 2)



Containment Pool C03000



Containment Pool C03010



Portable Crane CR0015



Chain Saw CS0010



Hyd Power Unit PW0051



Power Pack PW0056



Lori Mini Skimmer SK0020



Belt Skimmer SK0030



DOP-160 Pump PU0840

Photo Not Available



Ancillary Set SK0032



Spare Parts Kit SK0971

Seamop Skimmer SK0970



Ro-Vac Skimmer SK0980



16' Roundslings SL0012



Tool Box TL0027

System Overview of Arctic Oil Recovery System Van VA1651 (2 of 2)

S0300-BV-CAT-020**ARCTIC OIL RECOVERY SYSTEM****SYSTEM NUMBER P16500****SYSTEM DESCRIPTION**

The Arctic Oil Recovery System P16500 consists of two storage/shipping containers which provide a means of storage and shipping for the components of the Arctic Oil Recovery System. This system is designed to recover oil in an active environment where specific weather conditions render normal skimmer recovery methods useless.

The ancillary items for the Bobcat are shown on the system overview page, but are do not appear in the catalog. All the ancillary items are located and shipped in The Arctic Oil Recovery System Van (Van 1 of 2).

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Arctic Oil Recovery System (Van 1 of 2)	VA1650	1
Pipe, Heater	HE0501 (Not Shown)	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Arctic Oil Recovery System Van (VA1650)	TL0016	1
Vehicle, Loader, Model 863 Bobcat	VE0040	1
Vehicle, Loader, Model 843 Bobcat	VE0041 (Altn)	1
Bucket, 80", for Model 863 Bobcat	VE0042 (Not Shown)	1
Bit, 12", for Model 863 Bobcat	VE0043 (Not Shown)	1
Drive Unit, Auger, for Model 863 Bobcat	VE0044 (Not Shown)	1
Backhoe, 607, for Model 863 Bobcat	VE0045 (Not Shown)	1
Breaker, Hydraulic, for Model 863 Bobcat	VE0046 (Not Shown)	1
Pallet Forks, 48", for Model 863 Bobcat	VE0047 (Not Shown)	1
Planer, 18", for Model 863 Bobcat	VE0048 (Not Shown)	1
Trencher for Model 863 Bobcat	VE0049 (Not Shown)	1
Track Package for Model 863 Bobcat	VE0050 (Not Shown)	1
Pallet, VE0044 & VE0048 Shipping, 53" x 72" x 12"	VE0051 (Not Shown)	1
Pallet, VE0046 & VE0049 Shipping, 64" x 47" x 12"	VE0052 (Not Shown)	1

S0300-BV-CAT-020**ARCTIC OIL RECOVERY SYSTEM****SYSTEM NUMBER P16500**

SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
2. Van, Arctic Oil Recovery System (Van 2 of 2)	VA1651	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	2
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	2
Crane, Portable Marine, Model 705TM-3S	CR0015	1
Chain Saw, 36"	CS0010	1
Power Unit, Hydraulic, Model HT30DQV, 15 Gpm @ 3000 Psi	PW0051	1
Power Pack, Model LPP 7HA/75C PW0056	PW0056	1
Skimmer, Mini, Lori	SK0020	1
Skimmer, Moving Inclined Belt	SK0030	1
Pump, DOP-160	PU0840	1
Ancillary Kit for SK0030	SK0032	1
Skimmer, Seamop 3060	SK0970	1
Spare Parts Kit For Seamop 3060 Skimmer	SK0971	1
Skimmer, Ro-Vac MK II	SK0980	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Arctic Oil Recovery System Van (VA1651)	TL0027	1

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Arctic Oil Recovery System Van VA1650 (Van 1 of 2)

S0300-BV-CAT-020**VAN, ARCTIC OIL RECOVERY SYSTEM (1 OF 2)****ESSM NUMBER VA1650****DESCRIPTION**

The Arctic Oil Recovery System Van VA1650 (Van 1 of 2) is used as a storage/shipping container for the components of and ancillary items associated with the Bobcat Loader Vehicle. The following components are stored and shipped in the Arctic Oil Recovery System Van VA1650: a heater pipe, four 16' polyester roundslings, a tool box, and a Bobcat loader vehicle. The van also contains the following accessories for the Bobcat loader vehicle: an 80-inch front loader bucket, a 12-inch auger bit, an auger drive unit, a backhoe, a hydraulic breaker, a set of 48-inch pallet forks, an 18-inch planer, a trencher, and two pallets for shipping the Bobcat loader ancillaries.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSShipping

Length	20 ft
Width	8 ft
Height	8 ft
Cube	1280 cu ft
Weight	23,360 lb

REFERENCES

1. Arctic Oil Recovery System Van #1 Structural Modifications and Outfitting, NAVSEA Dwg. 7022801.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Arctic Oil Recovery System Van Tool Box TL0016

S0300-BV-CAT-020**TOOL BOX, ARCTIC OIL RECOVERY SYSTEM VAN****TL0016**

DESCRIPTION

The Arctic Oil Recovery System Van Tool Box TL0016 is a basic mechanic's tool set that contains 1/2-inch and 3/8-inch-drive deep well and standard socket sets, 1/2-inch and 3/8-inch-drive metric socket sets, combination and metric wrench sets, adjustable wrenches, pipe wrenches, pliers, hammers and other miscellaneous tools and accessories. It contains the necessary tools to set up and perform basic repairs on the Arctic Oil Recovery System.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 10 in.
Width	10 in.
Height	10 in.
Cube	2 cu ft
Weight	102 lb

REFERENCES

None

S0300-BV-CAT-020



Bobcat Loader Vehicle, Model 863 VE0040

S0300-BV-CAT-020**VEHICLE, LOADER, MODEL 863 BOBCAT****ESSM NUMBER VE0040****DESCRIPTION**

The Bobcat Loader Vehicle, Model 863 VE0040 is equipped to handle just about any terrain, whether clearing a path through thick underbrush or plowing through densely packed earth. It can perform multiple jobs, and operate in soft, wet, muddy, snowy or sandy environments. The Bobcat Loader Vehicle comes with a variety of attachments: an 80-inch Bucket VE0042, 12-inch Bit VE0043, Auger Drive Unit VE0044, Backhoe VE0045, Hydraulic Breaker VE0046, 48-inch Pallet Forks VE0047, 18-inch Planer VE0048, Trencher VE0049, and Track Package VE0050.

SPECIFICATIONSVehicle

Manufacturer	Melroe/Ingersoll-Rand
Model	863
Rated operating capacity	1900 lb
Tipping load (SAE rating)	3800 lb
Travel speed	0 – 7.2 mph
Fuel:	
Type	Diesel
Capacity	25 gallons
Tires:	
Size	12-16.5, 10-ply rating
Inflation pressure	Maximum pressure shown on sidewall

Engine

Manufacturer	Deutz
Model	BF4M1011 Turbo-Charged
Horsepower	73.5 hp
Maximum torque	164 ft-lbs
Maximum rpm	2600
Cylinders	4
Bore/stroke	3.58/4.13
Displacement	167 cu in.
Starter	12-volt, direct drive, 4 hp

Hydraulic System

Pump	Engine driven, gear-type
Flow rate	18 gpm @ 2750 rpm
Relief at QDs	3000 psi
Filters	Full flow replicable, 3-micron synthetic media
Hydraulic lines	SAE standard tubes, hoses, and fittings
Capacity	14 gallons
Hyd fluid type	10W-40 (temps above 0°) 5W-30 (temps below 0°)

S0300-BV-CAT-020

VEHICLE, LOADER, MODEL 863 BOBCAT

ESSM NUMBER VE0040

PHYSICAL CHARACTERISTICS

Operating/Shipping (vehicle only)

Length	8 ft, 11 in.
Width	6 ft, 1 in.
Height	6 ft, 10 in.
Cube	371 cu ft
Weight	7040 lb (vehicle only)

REFERENCES

1. Operation and Maintenance Manual, Bobcat Model 843.
2. Operation and Maintenance Manual, Bobcat Model 863.
3. Bobcat Operation and Maintenance Manual for LT 203 Trencher.
4. Bobcat Operation and Maintenance Manual for 18" Planer.
5. Bobcat Operation and Maintenance Manual for 2570 & 3570 Hydraulic Breaker.
6. Bobcat Operation and Maintenance Manual for 607 & 709 Backhoe.
7. Bobcat Operation and Maintenance Manual for Round Drive & Hex Drive Auger.
8. Loegering Owner Manual for Trail Blazers and D Series Tracks.
9. EMI Safety Manual for Users and Operators.

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Arctic Oil Recovery System Van (2 of 2)

S0300-BV-CAT-020**VAN, ARCTIC OIL RECOVERY SYSTEM (2 OF 2)****VA1651****DESCRIPTION**

The Arctic Oil Recovery System Van VA1651 (2 of 2) is used as a storage/shipping container for the ancillary items associated with the Arctic Oil Recovery System. The following components are stored and shipped in the Arctic Oil Recovery System Van VA1651: two 5' x 5' x 12" and 10' x 6' x 12" machinery containment pools, a model 705TM-3S portable marine crane, a 36-inch chain saw, a Lori mini skimmer, an inclined belt skimmer and ancillary kit, a Seamop skimmer and spare parts kit, a Ro-Vac MK II skimmer, four 16' polyester roundslings, and a tool box for Van 2.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	20 ft
Width	8 ft
Height	8 ft
Cube	1280 cu ft
Weight	TBD

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000**

DESCRIPTION

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12"****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the operating equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft.
Weight	56 lb	56 lb

REFERENCES

None

S0300-BV-CAT-020



Portable Marine Crane CR0015

S0300-BV-CAT-020**CRANE, PORTABLE MARINE,
MODEL 705TM-3S****ESSM NUMBER CR0015**

DESCRIPTION

The Portable Marine Crane CR0015 can be extended hydraulically from a minimum of 6 feet, 8 inches to a maximum of 21 feet, 4 inches. The crane is operated by a separate hydraulic power unit and is controlled by a four-function hydraulic control valve. The crane consists of a base, a mast, an inner boom, an outer boom, a winch, and hydraulic components necessary for operation.

SPECIFICATIONS

<u>Crane</u>		<u>Winch</u>	
Manufacturer	Morgan Marine	Manufacturer	Pullmaster Winch
Model	705TM-3S	Model	PL2
Boom length:		Cable drum size:	
Minimum	6 ft, 8 in.	Barrel diameter	6.13 in.
Maximum	21 ft, 4 in.	Barrel length	5.25 in.
Capacity with boom at:		Cable storage wire size:	
4 ft, 3 in.	4180 lb	1/16 in.	318 ft
7 ft, 6 in.	2530 lb	1/8 in.	745 ft
10 ft, 9 in.	1760 lb	5/16 in.	122 ft
13 ft, 11 in.	1210 lb	3/8 in.	84 ft
		Operating pressure:	
		Maximum	2200 psi
		Minimum	700 psi
		Operating volume:	
		Gpm	7.7
		Psi	2.5
		Line pull @ max. pressure:	
		Bare drum	2200 lb
		Full drum	1663 lb
		Line speed @ max. volume:	
		Bare drum	83 fpm
		Full drum	108 fpm
		Maximum pressure at:	
		Motor return port	65 psi
		Brake safety valve	100 psi

S0300-BV-CAT-020

**CRANE, PORTABLE MARINE,
CAPACITY 1210 LB @ 13', 11"**

ESSM NUMBER CR0010

PHYSICAL CHARACTERISTICS

Shipping

Length	6 ft, 7 in.
Width	2 ft, 4 in.
Height	5 ft, 0 in.
Cube	85 cu ft
Weight	952 lb

REFERENCES

1. Morgan Model 27 Marine Crane Manual.

S0300-BV-CAT-020



36" Chain Saw CS0010

S0300-BV-CAT-020**CHAIN SAW, 36"****ESSM NUMBER CS0010**

DESCRIPTION

The 36" Chain Saw CS0010 is designed for heavy duty cutting on rivers and lakes to remove frozen oil product from the ice. The 36" Chain Saw combines high power with low weight. A decompression valve makes starting easier and an IntelliCarb™ helps keep the saw running at full rpm. Additional features include fuel and oil caps with retainers, an Elastostart™ starter handle, an automatic oiler (adjustable), a side access chain tensioner, a carburetor preheat shutter for summer/winter operation, and a heavy duty air filter.

SPECIFICATIONS

Manufacturer	Stihl
Model	MS-660
Engine:	
Displacement	5.6 cu in.
Horsepower	7.0 bhp
Fuel capacity	27.9 oz
Chain oil capacity	12.2 oz
Chain guide bar	36"

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 8 in.
Width	1 ft, 0 in.
Height	1 ft, 0 in.
Cube	5 cu ft
Weight	23 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Power Unit PW0051

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC,
MODEL HT30DQV, 15 GPM @ 3000 PSI****ESSM NUMBER PW0051**

DESCRIPTION

The Hydraulic Power Unit PW0051 is a sound-attenuated unit designed to be used in areas where low sound levels are required. The HPU is a portable, diesel driven unit that provides hydraulic flow through a circuit controlled by a manually operated pressure switch. The total hydraulic output is 15 gpm at a pressure of 3000 psi.

The HPU is skid-mounted with forklift slots and enclosed in a protective frame with two lifting points. Hydraulic connections utilize 1-inch Aeroquip 5600 series quick disconnect fittings (one male for supply and one female for return).

SPECIFICATIONS

Hydraulic Power Unit

Manufacturer Hydra-Tech Pumps
Model HT30DQV

Engine

Manufacturer Yanmar
Model 3TNV88-D
Type 3-cycle
No. of cylinders 4 in-line
Horsepower 37.5 @ 3000 rpm
Starting Electric
Fuel Diesel
Fuel source 20-gal. internal tank
Fuel consumption 1.75 gal./hr

Pump

Manufacturer Rex Roth
Model Pressure compensated
Maximum output 15 gpm @ 3000 psi
Hydraulic fluid Rando 46
Hydraulic reservoir
capacity 30 gallons
Hose port size:
Supply 3/4" NPT
Return 3/4" NPT
Case drain 3/8" NPT

S0300-BV-CAT-020

**POWER UNIT, HYDRAULIC,
MODEL HT30DQV,15 GPM @ 3000 PSI (CONTD)**

ESSM NUMBER PW0051

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	5 ft, 9 in.
Width	2 ft, 8 in.
Height	4 ft, 2 in.
Cube	63 cu ft
Weight	2090 lb

REFERENCES

1. Yanmar Operational Manual for Model 3TNV88-D Engine.

S0300-BV-CAT-020



Power Pack Model LPP 7HA/75C PW0056

S0300-BV-CAT-020**POWER PACK MODEL LPP 7HA/75C****ESSM NUMBER PW0056**

DESCRIPTION

The Power Pack Model LPP 7HA/75C PW0056 consists of an air-cooled diesel engine, electric starter, a hydraulic pump, an oil transfer pump, battery, a hydraulic oil tank, and a fuel tank. The power pack is designed to be used as a power source for the mini skimmer, Seamop skimmer, and the inclined belt oil skimmer.

SPECIFICATIONS

Manufacturer	Lamor Corporation		
Model	LPP 7HA/75C		
<u>Engine</u>		<u>Oil Transfer Pump</u>	
Manufacturer	Hatz	Manufacturer	Selwood Spate
Model	1B40 air-cooled	Model	75 C
Cylinders	1	Capacity	7000 gal./hr.
Max. rpm	3600	Total head	130 ft
Power	7.3 kW	Delivery head	100 ft
Starter	Electric/hand	Self priming lift	29 ft H ₂ O
Battery	12 V, 30Ah	Suction lift	30 ft
Fuel	Diesel	Solids size	0.25 in.
Fuel source	1.32-gal. integral tank	Air handling	8 ft ³ /min.
<u>Hydraulic Pump</u>		Pump speed	1500 strokes/min.
		Port size	3"
Manufacturer	Oil System		
Max. flow	2.65 gpm		
Max. pressure	2175 psi		
Hydraulic connectors	-6 QD		

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 1 in.
Width	3 ft, 3 in.
Height	2 ft, 6 in.
Cube	1 cu ft
Weight	360 lb

S0300-BV-CAT-020

POWER PACK MODEL LPP 7HA/75C

PW0056

REFERENCES

1. Lamor Owner's Manual for Model LPP 7HA/75C Power Pack.

S0300-BV-CAT-020



Lori Mini Skimmer SK0020

S0300-BV-CAT-020**SKIMMER, MINI, LORI****ESSM NUMBER SK0020****DESCRIPTION**

The Lori Mini Skimmer (LMS) SK0020 is a self-contained, free floating, portable skimmer for recovering spilled oil. The LMS is easy to handle and is an ideal unit for most industrial, inshore, and offshore uses. It is easily transported and can be launched from a boat, dock, or shore. It can also be operated from a vessel of opportunity. A surface stream, generated by current and brush drum rotation, draws oil into the brushes. The brush is a drum made of oleophilic material to which the oil adheres very efficiently. The brush drum separates oil and debris from the water and delivers it to the specially made cleaner units where the oil is combed off the brushes. The recovered oil is then pumped off to a suitable storage device.

SPECIFICATIONS

Manufacturer	Lori Products
Model	LMS
Environmental conditions:	
Significant wave height	5 ft
Minimum air temperature	23° F
Minimum water temperature	32° F
Recovery speed (if towed)	1 – 2 knots
Sweeping width	493 ft
Recovered water	10%
Oil to be recovered	All types and ages
Recovery capacity	3019 bbls/day

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	2 ft, 11 in.
Width	2 ft, 11 in.
Height	1 ft, 9 in.
Cube	15 cu ft
Weight	66 lb

REFERENCES

1. Lori Mini Skimmer Information Pamphlet.

S0300-BV-CAT-020



Moving Inclined Belt Skimmer SK0030

S0300-BV-CAT-020**SKIMMER, MOVING INCLINED BELT****ESSM NUMBER SK0030****DESCRIPTION**

The Moving Inclined Belt Skimmer SK0030 is a lightweight, economical, and efficient transportable skimming system that consists of an inclined plane belt skimmer, flotation pontoons, hydraulic hoses, a cargo pump and discharge hoses, aluminum "V" sweeps, and a lifting frame.

The Moving Inclined Belt Skimmer is designed to be used in conjunction with small workboats or vessels of opportunity. Hydraulic power requirements are supplied by either the support vessel's hydraulic system or a separate portable power unit. The skimmer is attached to the vessel of opportunity with two mooring lines.

In the stationary mode, in a river or pond, oil containment boom can be attached to the ASTM "C" type slide connectors on the front of the skimmer, which will funnel oil flowing downstream into the skimmer for collection.

For ease of movement and deployment of the skimmer, the unit is outfitted with wheels and removable rear handles. The handles slide into brackets at the rear of the skimmer and are removed for skimming operations.

SPECIFICATIONS

Manufacturer	JBF Environmental Technology
Model	DIP 400
Oil collection assembly:	
Type	Dynamic Incline Plane (DIP)
Skimmer belt	12-inch-wide polypropylene
Belt drive	Hydraulic motor (Parker 110A-071-AS-S or equivalent)
Debris collection	Expanded mesh removable basket
Max. oil recovery rate	5400 bbls/24-hr day
	225 bbs/hr
	160 gpm
	36 m ³ /hr
Oil storage capacity	1320 gal.
Hull material	5052-H32 aluminum

S0300-BV-CAT-020

SKIMMER MOVING INCLINED BELT

SK0030

PHYSICAL CHARACTERISTICS

Shipping

Length	6 ft, 2 in.
Width	2 ft, 5 in.
Height	3 ft, 8 in.
Cube	55 cu ft
Weight	334 lb

REFERENCES

1. JBF Environmental Technology, Operation and Maintenance Manual.

S0300-BV-CAT-020

**PICTURE NOT AVAILABLE;
SHIPPING CONFIGURATION IS UNDER DEVELOPMENT.**

S0300-BV-CAT-020**ANCILLARY KIT FOR SK0030****ESSM NUMBER SK0032**

DESCRIPTION

The Ancillary Kit for SK0030 (SK0032) consists of the necessary equipment to set up and operate the Moving Inclined Belt Skimmer SK0030.

SPECIFICATIONS

Manufacturer ESSM Facility

<u>Item</u>	<u>Qty</u>
Container, Storage (TBD):	1
Bar, pontoon bracket	2
Basket, aluminum	1
Bearing, roller	1
Bearing, roller w/carrier	1
Belt pins	6
Belt section, polypro, 12" wide	1
Boom, 20" x 10'	2
Box, spare prts, plstc, 28" x 21" x 15"	1
Bracket, pontoon	4
Bridle, tow, inboard	1
Cable tie, 14" (bag)	1
Drive coupling, sleeve	1
Fitting, elbow, 90°, 3" camlock	2
Fitting, QD, female, -6	1
Fitting, QD, male, -6	1
Plate, gunnel	1
Hose w/m/f QDs, hyd, 2781-6 x 25'	5
Hose w/m/f QDs, hyd, 2781-10 x 25'	5
Hose w/m/f QDs, hyd, 2781-12 x 25'	4
Hose, layflat, 3" x 25'	3
Inventory, laminated	1
Line, dbl brd, nyl, 1/2" x 15' w/3/8" screw pin	3
Line, dbl brd, nyl, 1/2" x 25' w/3/8" screw pin	3
Manual, DOP-160	1
Manual, JBF (DIP 400)	1
Outrigger, 2-pc, w/snap hook, 2 1/2" x 8'	1
Pin, linch, 1/4"	1
Pin, push, 3/8" x 2 3/4"	2
Pipe stinger, 3" camlock x 4'	1

S0300-BV-CAT-020**ANCILLARY KIT FOR SK0030****ESSM NUMBER SK0032**

SPECIFICATIONS

<u>Item</u>	<u>Qty</u>
Container, Storage (TBD):	1
Plate adapter, outrigger float	1
Plug, poly belt, spare	2
Pontoon, inflatable, 13" x 6'	2
Pump, foot, air w/hose	1
Ratchet strap, 1"	2
Straps (pontoons)	5
Valve, pontoon inflation	1
Wiper strip (belt scraper)	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	TBD
Width	TBD
Height	TBD
Cube	TBD
Weight	TBD

REFERENCES

None

S0300-BV-CAT-020



DOP-160 Pump PU0840

S0300-BV-CAT-020**PUMP, DOP-160****ESSM NUMBER PU0840****DESCRIPTION**

The DOP-160 Pump PU0840 is a modified Archimedes' screw-type pump that has been specially developed for a wide range of emergency and ancillary pumping operations. It has been designed for handling liquids of an extremely high viscosity, like heavy crude. It is also capable of handling low viscosity fluids such as diesel fuel or water; and it will cope with debris normally found at oil spill sites.

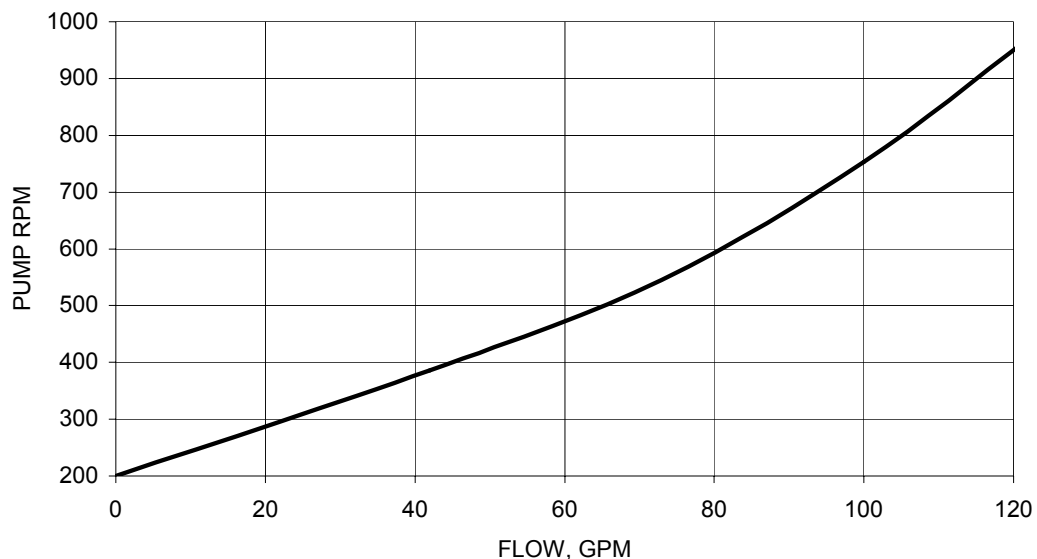
SPECIFICATIONSPump assembly

Manufacturer	Desmi
Model	DOP-160
Min. manhole diameter	0.4 m (15.7 in.)
Pump outlet	3" male camlock
Max. flow rate	42 gpm
Max. pressure	10 bar/150 psi
Max. capacity	27.5 m ³ /h/121 gpm

Hydraulic motor

Manufacturer	Rex Roth
Type	GMSS 80
Hydraulic connections:	
Supply	1/2" Aero-quip female QD
Return	1/2" Aero-quip male QD
Drain	3/8" Aero-quip female QD

The DOP-160 Pump PU0840 is a positive-displacement pump and the flow rate is dependent on rpm, as shown by the performance curve below.

PERFORMANCE CURVE

S0300-BV-CAT-020

PUMP, DOP-160

ESSM NUMBER PU0840

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 4 in.
Width	10 in.
Height	1 ft, 9 in.
Cube	2 cu ft
Weight	68 lb

REFERENCES

1. Operator's Manual for the Desmi DOP-160 Vertical Archimedes' Screw Off-loading Pump.

S0300-BV-CAT-020



Seamop 3060 Skimmer SK0970

S0300-BV-CAT-020**SKIMMER, SEAMOP 3060****ESSM NUMBER SK0970**

DESCRIPTION

The Seamop 3060 Skimmer SK0970 is a highly efficient mop skimmer that is ideal for choppy or open waters where a high collection efficiency is required. The continuous mop loops are circulated across the water surface and through the hanging wringer unit. The oil on the water sticks to the oleophilic mop surface and is removed within the Seamop. Recovered oil is drained or pumped into a suitable storage container.

SPECIFICATIONS

Manufacturer	Ro-Clean Desmi
Model	3060
Mop speed	130 ft/min.
Drain connection	3 in.
Recovery capacity	44 gpm
	1056 gal./24-hr day
Roller tension	Spring
Max. Hydraulic pressure	1450 psi
Hose connections	3/8"

PHYSICAL CHARACTERISTICS

Shipping

Length	2 ft, 5 in.
Width	2 ft, 3 in.
Height	2 ft, 8 in.
Cube	14.5 cu ft
Weight	296 lb

REFERENCES

1. Ro-Clean Desmi Operation and Maintenance Handbook.

S0300-BV-CAT-020



Spare Parts Kit for Seamop Skimmer, Model 3060 SK0971

S0300-BV-CAT-020**SPARE PARTS KIT FOR SEAMOP SKIMMER,
MODEL 3060****ESSM NUMBER SK0971**

DESCRIPTION

The Spare Parts Kit SK0971 consists of the necessary spare parts to operate and maintain the Seamop Skimmer, Model 3060 SK0970.

SPECIFICATIONS

Manufacturer ESSM Facility

<u>Item</u>	<u>Qty</u>
Ammo box, 15" x 14" x 6":	1
Assembly link, 1/2" duplex	5
Bearing with housing, BPFL	2
Bolt, 3/8"-16 x 1 1/2"	4
Connector, QD, -6 female	1
Connector, QD, -6 male	1
Gasket, flange, 4-bolt	1
Inventory, laminated	1
Manual, Operator's & Maintenance, Seamop 3060	1
Nut, hex, 3/8"	4
Roller chain, duplex, 1/2" x 1080 mm	1
Scaling ring, for 1/2" hydraulic hose	4
Sprocket wheel, 1/2" duplex, 17 teeth	2
Tool, bearing installer	1
Washer, flat, 3/8"	4
Washer, lock, 3/8"	4

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 2 in.
Width	6 in.
Height	1 ft, 2 in.
Cube	1 cu ft
Weight	19 lb

REFERENCES

None

S0300-BV-CAT-020



RO-VAC MK II Skimmer SK0980

S0300-BV-CAT-020**SKIMMER, RO-VAC MK II****ESSM NUMBER SK0980****DESCRIPTION**

The RO-VAC MKII Skimmer SK0980 is designed to suction off liquids and oils floating on water, on the ground, or on the beach. The whole system is designed to be very versatile. The vacuum pump can generate up to 95% vacuum and handle air flow up to 240 cubic feet per minute. It is driven by a hand and electric start diesel engine, mounted in a fully galvanized frame. The RO-VAC MKII is supplied with large-diameter removable wheels and retractable towbar for road and off-road towing, permitting access to many areas of operation.

The RO-VAC MKII incorporates a high pressure, cold water pump for washing of contaminated surfaces. It is activated by pull switch and electromagnetic clutch. A trigger-operated hand lance and chemical dosing eductor with pickup tube are included in the package.

The RO-VAC can generate a vacuum in either an open-top oil drum using a domed vacuum head or a wheeled tank – RO-TANKER. Oil is sucked up into the tank or drum without passing through the vacuum pump. Wheels can be removed for use onboard vessels.

SPECIFICATIONS

Manufacturer Ro-Clean Desmi
Model RO-VAC MKII

Engine

Manufacturer Hatz
Type 1D81C
Horsepower 13.4
Fuel Diesel
Fuel source 5 1/2 gal. integral tank

High Pressure Pump

Manufacturer Speck
Type P11/-150
Cylinders 3
Max. rpm 1420
Horsepower 6
Max. flow 3.8 gpm
Max. hyd pressure 2175

Vacuum Pump

Manufacturer Moro
Type M10
Starter 12 V
Battery 12 V, 30 Ah/20 hr @ 68° F
Alternator 12 V, 9A @ 3000 rpm

S0300-BV-CAT-020

SKIMMER, RO-VAC MK II

ESSM NUMBER SK0980

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	5 ft, 0 in.
Width	3 ft, 0 in.
Height	5 ft, 3 in.
Cube	79 cu ft
Weight	1492 lb

REFERENCES

1. Ro-Clean Desmi Ro-Vac MKII Portable Vacuum Skimmer Operator's Manual.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Arctic Oil Recovery System Van (VA1651) Tool Box TL0027

S0300-BV-CAT-020**TOOL BOX, ARCTIC OIL RECOVERY
SYSTEM VAN (VA1651)****ESSM NUMBER TL0027**

DESCRIPTION

The Skimmer System Tool Box TL0027 is a basic mechanic's tool set that contains 3/8" drive standard sockets and accessories, metric and standard combination wrench sets, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Arctic Oil Recovery System P16500..

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 4 in.
Width	1 ft, 1 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	70 lb

REFERENCES

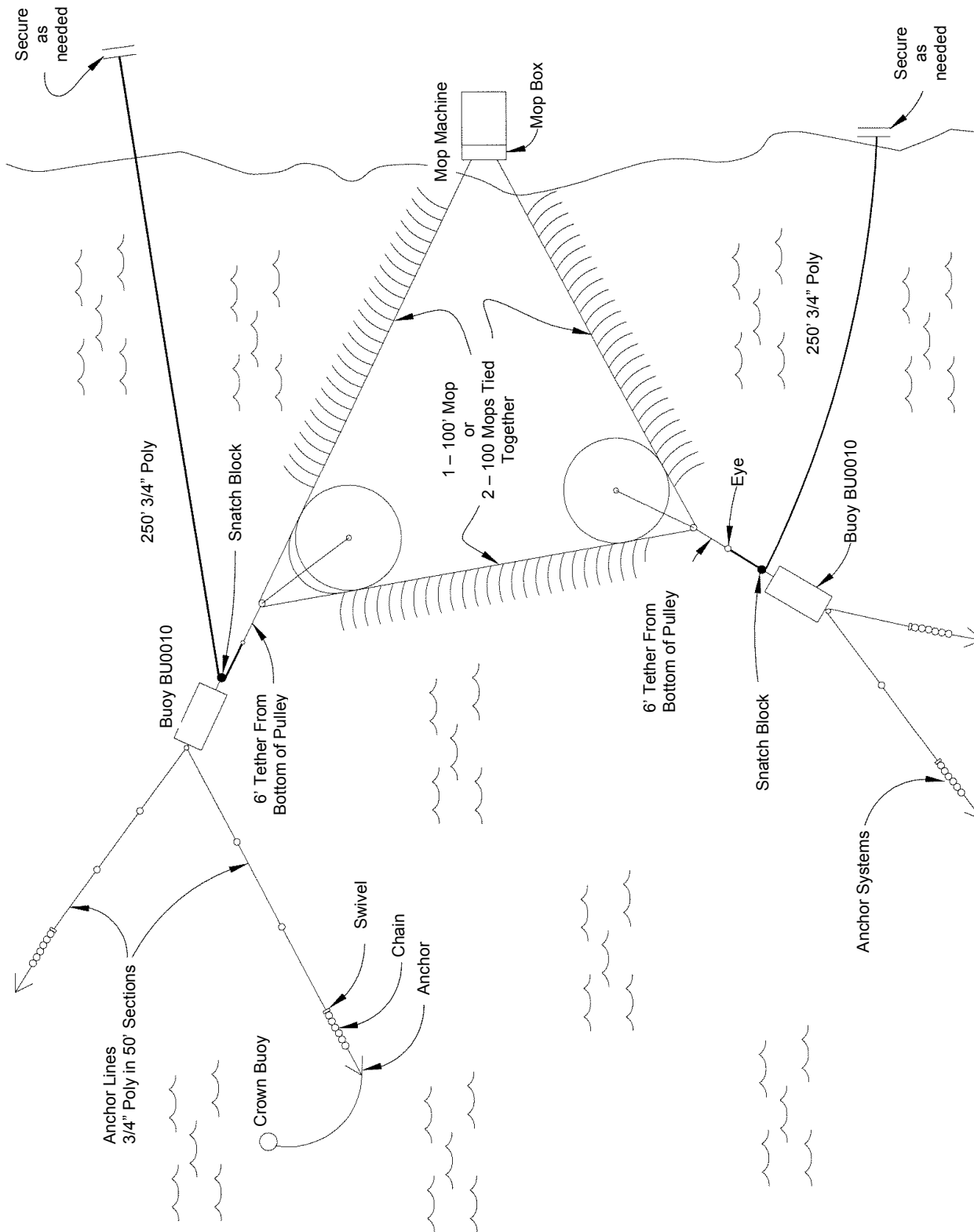
None

S0300-BV-CAT-020

ROPE MOP SKIMMER SYSTEM P16600



S0300-BV-CAT-020



Rope Mop Skimmer System P16600 Overview

S0300-BV-CAT-020**SKIMMER SYSTEM, ROPE MOP****SYSTEM NUMBER P16600****SYSTEM DESCRIPTION**

The Rope Mop Skimmer System P16600 is a stationary oil recovery system maintained by SUPSALV. The skimmer unit is diesel-driven and pulls either an 18-inch or 36-inch diameter by 200-foot long continuous loop absorbent rope mop. It is particularly effective in areas of shallow water and/or heavy floating debris.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Skimmer, Rope Mop, 36"	SK0723	1
Buoy, Mooring, 400# Buoyancy	BU0010	2
2. Ancillary Set for SK0723	SK0724	1

S0300-BV-CAT-020



36-Inch Rope Mop Skimmer SK0723

S0300-BV-CAT-020**SKIMMER, ROPE MOP, 36"****ESSM NUMBER SK0723**

DESCRIPTION

The Rope Mop Skimmer SK0723 is a diesel-driven, stationary oil recovery unit. The unit pulls a 200-foot long, continuous loop, absorbent rope mop with a diameter of either 18 or 36 inches. The rope mop skimmer is particularly effective in areas of shallow water and/or heavy floating debris. It is used mainly as a backup for primary skimmers and salvage skimmers. The ancillary equipment for the rope mop skimmer is shipped in three separate containers.

SPECIFICATIONS

Rope Mop Skimmer

Manufacturer	OMI
Model	Mark IV Series
Effective recovery rate/24-hour day:	
18" rope mop	960 bbls
36" rope mop	1920 bbls

Engine

Manufacturer	Detroit Diesel
Model	3-53 series
Type	2-cycle
Cylinders	3
Bore	3 7/8"
Stroke	4 1/2"
Displacement	159 cu in.
Rated brake horsepower	78 @ 2200 rpm
Continuous brake horsepower	64 @ 2200 rpm
Torque @ 100 rpm	200 ft-lb
Compression ratio	17:1
Power takeoff	Single plate 18" clutch
Starting	Hydraulic
Fuel	Diesel
Fuel source	Internal fuel tank
Fuel consumption	3 gph

Pump

Manufacturer	Gorman-Rupp
Model	14A2-B
Type	Centrifugal (self-priming)
Duty cycle	Continuous
Input port	4" NPT
Discharge port	4" NPT
Impeller	Bronze

S0300-BV-CAT-020

SKIMMER, ROPE MOP, 36"

ESSM NUMBER SK0723

PHYSICAL CHARACTERISTICS

Operating

Length	11 ft, 6 in.
Width	8 ft, 8 in.
Height	8 ft, 8 in.
Cube	847 cu ft
Weight	14,250 lb

REFERENCES

1. Detroit Diesel Engine Operator's Manual - Series 53.
2. Gorman-Rupp Operations and Service Manual for Self-Priming Centrifugal Pump, Model 14A2-B.
3. Oil Mop Inc., Operating Brochure, Mark IV Series, Belle Chasse, LA.

S0300-BV-CAT-020



Mooring Buoy BU0010

S0300-BV-CAT-020**BUOY, MOORING, 400# BUOYANCY****ESSM NUMBER BU0010****DESCRIPTION**

The Mooring Buoy BU0010 is positioned between the turning sheaves and the anchor line to help prevent the turning sheave from being pulled under the surface of the water by the rope mop during skimming operations. Two buoys are used with each rope mop skimming system.

SPECIFICATIONS

Manufacturer	Ocean Products
Size	24" x 36"

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 9 in.
Width	2 ft, 1 in.
Height	2 ft, 1 in.
Cube	16 cu ft
Weight	42 lb

REFERENCES

None

S0300-BV-CAT-020



Ancillary Set for SK0723

S0300-BV-CAT-020**ANCILLARY SET FOR SK0723****ESSM NUMBER SK0724**

DESCRIPTION

The Ancillary Set For SK0723 is stored and shipped in an aluminum container that is 97 inches x 49 inches x 33 inches. It consists of anchors, crown buoys, snatch blocks, a turning bar, two 36-inch x 100-foot rope mop trains for light oil, two 18-inch x 100-foot rope mop trains, various lengths of 1/2-inch and 3/4-inch polypropylene line, and aluminum drain trays. The Ancillary Set also contains two fairlead blocks for the rope mop trains. The fairlead blocks are stored and shipped separately from the aluminum shipping container.

SPECIFICATIONS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Container, aluminum, w/drain valve:		1
Anchor, 65 lb w/10' of 1/2" chain, 1/2" swivel		4
Anchor, helix, roundshaft, 5', 5" x 1" dia		2
Block, snatch, 3/4"		2
Buoy, crown w/10' of 1/2" polypro line, 1/2" swivel		4
Inventory, laminated		1
Line, 1/2" polypro, 10', w/hard eye, soft eye		4
Line, 1/2" polypro, 20', soft eye/soft eye (crown)		4
Line, 3/4" polypro, 50', hard eye/soft eye (anchor)		8
Line, 3/4" polypro, 50', soft eye/soft eye (anchor)		4
Line, 3/4" polypro, 250', hard eye bitter end		2
Rope mop train, 18" x 100'		2
Rope mop train, 36" x 100'		2
Strap, ratchet, small		2
Tarp, neoprene, 10' x 25' x .040" w/grommets		1
Trays, drain, aluminum		2
Turning bar, helix anchor, 3/4" x 5' pipe		1
Fairlead, for rope mop train		2

PHYSICAL CHARACTERISTICS

Length	8 ft, 1 in.
Width	4 ft, 1 in.
Height	2 ft, 9 in.
Cube	91 cu ft
Weight	1286 lb

REFERENCES

None

S0300-BV-CAT-010

6-INCH SUBMERSIBLE HYDRAULIC PUMP SYSTEM P17100

S0300-BV-CAT-010**SUBMERSIBLE 6" HYDRAULIC PUMP****SYSTEM NUMBER P17100****SYSTEM DESCRIPTION**

The Submersible 6-Inch Hydraulic Pump System P17100 consists of a Mod 6 hydraulic power unit with a machinery containment pool, two hydraulic hose reels, and an ancillary set that includes the 6" hydraulic submersible pump, a hydraulic control block, a winch, a tripod, and a machinery containment pool for the hydraulic flow control block.

The ancillary set is packaged in four containers for ease of shipment and handling. The components contained within the ancillary set are: a submersible 6-inch hydraulic pump, discharge hoses, a hydraulic flow control block, a hydraulic winch, a tripod, a tool box, a machinery containment pool for the flow control block, snatch blocks, clamps, a handtruck, and the necessary supporting ancillary equipment to operate and maintain the Submersible 6-Inch Hydraulic Pump System.

The pump with attached hoses can be lowered into tanks through 12 1/2-inch-diameter Butterworth or larger tank top access hatches, or can be hand-carried into confined spaces. The pump is hydraulically driven by a Mod 6 hydraulic power unit. The Submersible 6-Inch Hydraulic Pump System is designed for the offloading of petroleum products and is capable of withstanding prolonged immersion in petroleum products or sea water. Several pumping systems are required to support a major vessel casualty. For emergency offloading, up to four pumps may be in operation at any one time, discharging from individual tanks. Another two or three pumps may be needed to pump ballast water back into the tanks, or as standby pumps.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Ancillary Set for PU0280 Pump (made up of 4 containers):	PU0281	1
Container #1:		1
Hose, 6" x 50', Layflat w/Hydrasearch Fittings	HS0820 (not shown)	4
Hose, 6" x 50' w/Male and Female Camlock Fittings	HS0823 (not shown)	2
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Container #2:		1
Clamp, Beam, Universal, 3 1/2" to 12"	CL0200 (not shown)	1
Clamp, Hose, Shutoff, 6"	CL0201 (not shown)	2
Handtruck, Single-Cylinder, 500-Lb Capacity	HT0010 (not shown)	1
Hoist, Grip, 4-T, Model TU-32	HO0228 (not shown)	1
Pump, Submersible, 6", Hydraulic (POL)	PU0280	1

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SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Inner Basket For Container #2:		1
Block, Snatch, 1/2" - 5/8" Wire Rope, 8" Diameter Sheave	BK0035 (not shown)	2
Tool box	TL0017	1
Winch:		1
Hydraulic, 5000 Lb	WN0280 (Altn)	
Hydraulic, 6000 Lb, Series 1	WN0281 (Altn)	
Container #3:		1
Hydraulic Flow Control Block for PU0280 Pump	PU0282	1
Container #4:		1
Tripod (POL)	PU0284	1
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
Reel, Hydraulic Hose Assembly	PU0283	2
Power Unit, Hyd, Mod 6, Diesel, 52 gpm @ 2500 psi	PW0045	1
Spare Parts Kit, for Power Unit PW0045	PW0046	1

S0300-BV-CAT-020



Ancillary Set PU0281

S0300-BV-CAT-010**ANCILLARY SET FOR PU0280 PUMP****ESSM NUMBER PU0281**

DESCRIPTION

The Ancillary Set PU0281 is comprised of the equipment necessary to offload oil from a damaged vessel, and is shipped in three wire mesh containers and a wooden crate.

SPECIFICATIONS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Container #1, Wire Mesh Basket, 62" x 36" x 41":		1
C-clamp, ground w/1' pigtail & T120 lugs		1
Hose, 6" x 50', Layflat w/Hydrasearch Fittings	HS0820	4
Hose, 6" x 50' w/Male and Female Camlock Fittings	HS0823	2
Hose, hydraulic, 1" x 20'		4
Container #2, Wire Mesh Basket, 62" x 36" x 41":		1
Adapter x adapter, female split clamp x male camlock, 6"		1
Adapter x hose shank, male camlock x hose shank, 6"		1
Bracket, pump to Dracone		1
Butterworth ring		1
Cap, dust, camlock, 4"		3
Cap, dust, camlock, 6"		3
Clamp, Beam, Universal, 3 1/2" to 12"	CL0020	1
Clamp, hose		8
Clamp, Hose, Shutoff, 6"	CL0201	2
Clamp, split, 6"		2
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Coupler x adapter, 4" female camlock x 6" male camlock		1
Coupler x adapter, 6" female camlock x 4" male camlock		1
Coupler x adapter, female camlock x male split clamp, 6"		1
Coupler x hose shank, female camlock x hose shank, 6"		1
Crowbar, 3'		1
Elbow, 90°, female camlock x camlock adapter, 6"		1
Flange, pump inlet, 6"		1
Handtruck, Single-Cylinder, 500-Lb Capacity	HT0010	1
Hoist, grip, 4-T, model TU-32	HO0228	1
Plug, dust, camlock, 4"		3
Plug, dust, camlock, 6"		3
Pump, Submersible, 6" Hydraulic (POL)	PU0280	1

S0300-BV-CAT-020**ANCILLARY SET FOR PU0280 PUMP (CONTD)****ESSM NUMBER PU0281**

SPECIFICATIONS (Cont'd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Inner Basket For Container #2:		1
Ammo box 11" x 4" x 7"		1
Block, snatch, 1/2" to 5/8" Wire Rope, 8" Diameter Sheave	BK0035	2
Block, snatch, 1/4" to 3/8" x 4"		2
Cable, wire rope, 5/8" x 100'; w/hook (grip hoist)		1
Drawing, Submersible 6" Hydraulic Pump System (SK1094)		1
Eyebolt, 3/4"		1
Flange, international ship connection, 2 1/2' x 7"		1
Flange, international shore connection, 2 1/2' x 7"		1
Gasket, camlock, 4"		6
Gasket, camlock, 6"		6
Inventory, laminated		1
Manual, operation/maintenance, TU-32 grip hoist		1
Manual, POL or water offloading system		1
Manual, technical, CNN-150		1
Manual, technical, control block		1
Manual, hose reel		1
Roundslings, 8', yellow		2
Shackle, safety, 1/2"		1
Shackle, screw pin, 7/8"		1
Sling, wire rope, 4-legged, 3/8" x 57" (each leg)		1
Tool box	TL0017	1
Turnbuckle, jaw & jaw, 5/8"		1
Winch, Hydraulic, 5000-Lb (Altn)	WN0280	1
Winch, Hydraulic, 6000-Lb Series 6 (Altn)	WN0281	1
Container #3, Wire Mesh Basket, 62" x 36" x 41":		1
Bleeder, quick disconnect, -12		1
Bleeder, quick disconnect, -16		1
Block, hydraulic flow reducing		1
Boom, absorbent, 8'		1
Hose, hydraulic, 25', FC300-12		2
Hose hydraulic, 42", FC300-12		2
Hose, hydraulic, 50', FC300-6		2
Hydraulic Flow Control Block for PU0280	PU0282	1
Pad, absorbent, bundle		2
Reducer, QD, 16 female to 10 male		1
Reducer, QD, 16 male to 10 female		1

S0300-BV-CAT-010**ANCILLARY SET FOR PU0280 PUMP (CONTD)****ESSM NUMBER PU0281**

SPECIFICATIONS (Cont'd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Container #4, Wooden, 122" x 21" x 23":		1
Cable, wire rope, 1/4" x 50' (Altn)		1
Line, nylon, 5/8" x 50', 3-strand (Altn)		1
Tripod (POL)	PU0284	1

PHYSICAL CHARACTERISTICS

	<u>Container #1</u>	<u>Container #2</u>	<u>Container #3</u>
Length	5 ft, 2 in.	5 ft, 2 in.	5 ft, 2 in.
Width	3 ft, 4 in.	3 ft, 4 in.	3 ft, 4 in.
Height	3 ft, 0 in.	3 ft, 0 in.	3 ft, 0 in.
Cube	52 cu ft	52 cu ft	52 cu ft
Weight	1388 lb	1674 lb	970 lb
	<u>Container #4</u>		
Length	10 ft, 2 in.		
Width	1 ft, 9 in.		
Height	1 ft, 11 in.		
Cube	34 cu ft		
Weight	295 lb		

REFERENCES

1. Technical Manual for Petroleum, Oil, Lubricant, or Water Offloading Pump System, NAVSEA S9593-BX-OMP-010.
2. Technical Manual for Submersible Pump CCN-150, NAVSEA S9593-BZ-OMP-010/3P215.
3. Technical Manual for Flow Control Block, Model 15355, NAVSEA S9593-BY-OMP-010/32142.

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-010**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12''****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12'' urethane berm. Its is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



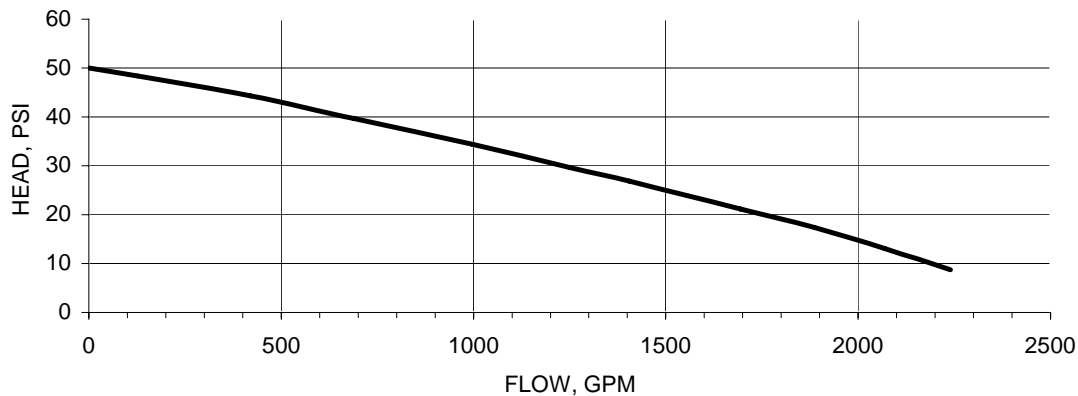
6" Hydraulic Submersible Pump PU0280

S0300-BV-CAT-010**PUMP, SUBMERSIBLE, 6", HYDRAULIC (POL)****ESSM NUMBER PU0280****DESCRIPTION**

The 6" Hydraulic Submersible Pump PU0280 is designed for the offloading of petroleum products and is capable of withstanding prolonged immersion in petroleum products or seawater. A sling is provided for lifting and lowering the pump when hoses are attached. The pump is used with combined components included in the 6-Inch Submersible Hydraulic Pump System P17100.

SPECIFICATIONSPump Assembly

Manufacturer	Thune-Eureka Marine Pollution Control, Inc.
Model	CCN-150
Type	Hydraulic, single stage, centrifugal
Hydraulic fluid	Rando 46 or equivalent
Hydraulic pressure	2345 - 2370 psig
Hydraulic fluid temp.	100 - 180°F
Back pressure	200 psig max.
Hydraulic flow	45 - 52 gpm
Connections:	
HP Supply	Aeroquip 5601-16 quick disconnect
LP Return	Aeroquip 5602-16 quick disconnect

PERFORMANCE CURVE

Performance Curve for PU0280

S0300-BV-CAT-020

PUMP, SUBMERSIBLE, 6", HYDRAULIC (POL) (CONTD)

ESSM NUMBER PU0280

PHYSICAL CHARACTERISTICS

Operating/Shipping

Height w/hoses	4 ft, 8 in.
Diameter	2 ft, 6 in.
Cube	7 cu ft
Weight	279 lb

REFERENCES

1. Technical Manual for Petroleum, Oil, Lubricant, or Water Offloading Pump System, NAVSEA S9593-BX-OMP-010.
2. Technical Manual for Submersible Pump CCN-150, NAVSEA S9593-BZ-OMP-010/3P215.
3. Technical Manual for Flow Control Block, Model 15355, NAVSEA S9593-BY-OMP-010/32142.

S0300-BV-CAT-020



POL Pump System Tool Box TL0017

S0300-BV-CAT-010**TOOL BOX, POL PUMP SYSTEM****ESSM NUMBER TL0017****DESCRIPTION**

The POL Pump System Tool Box TL0017 is a basic mechanic's tool set that contains 1/2" drive sockets and accessories, combination, open-end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 6-Inch Submersible Hydraulic Pump System P17100

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1ft, 7 in.
Width	8 in.
Height	9 in.
Cube	1 cu ft
Weight	32 lb

REFERENCES

None

S0300-BV-CAT-020



5000-Pound Hydraulic Power Winch WN0280

S0300-BV-CAT-010**WINCH, HYDRAULIC, 5000-POUND****ESSM NUMBER WN0280****DESCRIPTION**

The 5000-Pound Hydraulic Winch WN0280 is a portable, general purpose, single-drum unit used with the 6-Inch Submersible Hydraulic Pump System. The winch has a capacity of 5000 pounds. The winch is mounted to one leg of the Tripod PU0284.

SPECIFICATIONS

Manufacturer	Warn Industries Inc.
Model	Series 5 hydraulic
Rated working load	5000 lb
Winch breaking strength, first layer	11,000+ lb
Maximum wire rope diameter	5/16"
Drum dimensions	
Barrel diameter	2 1/2"
Flange diameter	5 1/2"
Distance between flanges	8 1/2"
Total gear reduction	26 : 1
Torque requirement	
Static input torque	410 lb-in. (start maximum load)
Dynamic input torque	360 lb-in. (operate maximum load)
Maximum input flow at rated load	12 gpm
Duty cycle rating	200'

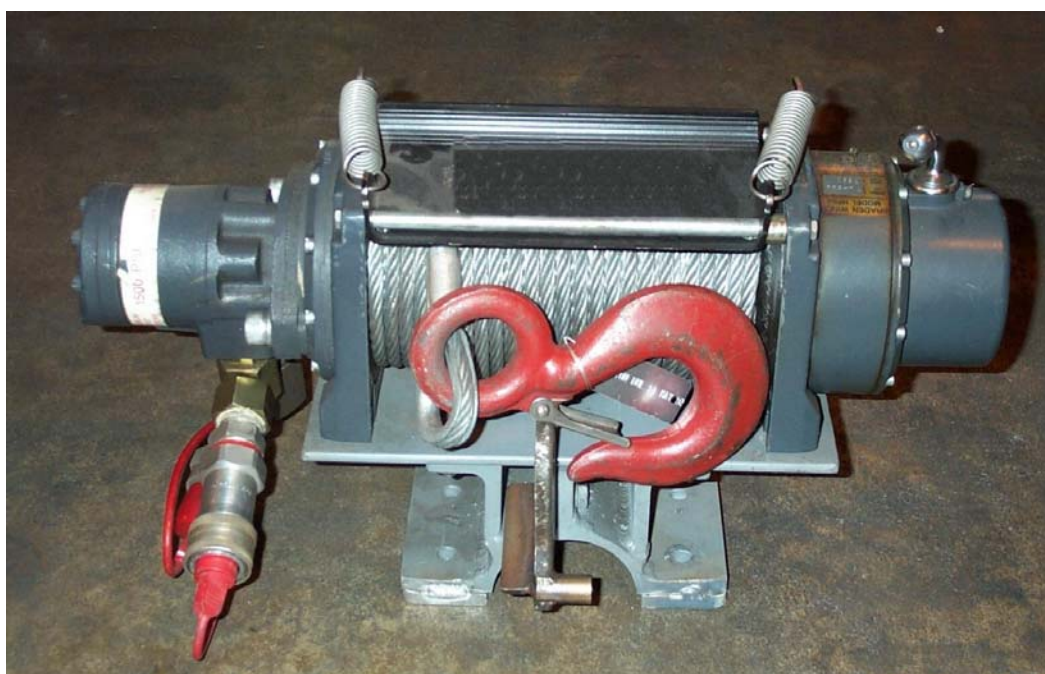
PHYSICAL CHARACTERISTICS

Length	1 ft, 9 in.
Width	9 in.
Height	11 in.
Cube	1.5 cu ft
Weight	62 lb w/cable

REFERENCES

1. Warn Operator's Manual for Series 5 Hydraulic & Electric Winch.

S0300-BV-CAT-020



6000-Pound, Series 6 Hydraulic Winch WN0281

S0300-BV-CAT-010**WINCH, HYDRAULIC, 6000-POUND,
SERIES 6****ESSM NUMBER WN0281****DESCRIPTION**

The 6000-Pound, Series 6 Hydraulic Winch WN0281 is a portable, general purpose, single-drum unit used with the Submersible 6" Hydraulic Pump System. The winch has a capacity of 6000 pounds and is mounted to one leg of the Tripod PU0284.

SPECIFICATIONS

Manufacturer	Warn Industries Inc.
Model	Series 6 hydraulic
Rated working load	6000 lb
Winch breaking strength, first layer	12,000+ lb
Maximum wire rope diameter	5/16"
Drum dimensions	
Barrel diameter	2 1/2"
Flange diameter	6"
Distance between flanges	9"
Total gear reduction	26 : 1
Torque requirement	
Static input torque	415 lb-in. (start maximum load)
Dynamic input torque	365 lb-in. (operate maximum load)
Maximum input flow at rated load	12 gpm
Duty cycle rating	258'

PHYSICAL CHARACTERISTICS

Length	1 ft, 3 in.
Width	1 ft, 9 in.
Height	14 in.
Cube	3 cu ft
Weight	84 lb w/ cable

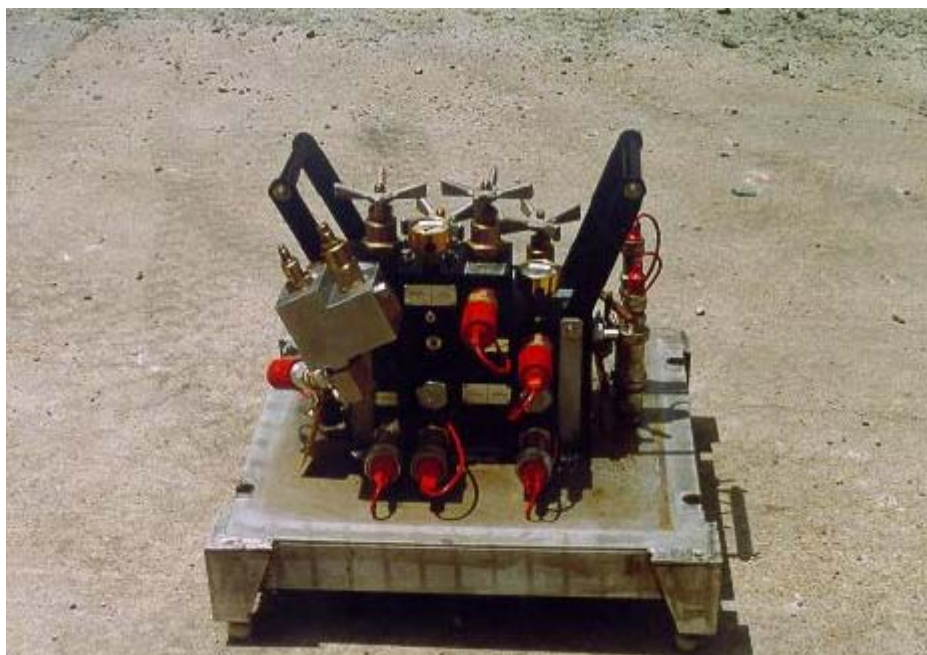
REFERENCES

1. Warn Operator's Manual for Series 6 Hydraulic Winch.

S0300-BV-CAT-020



Shipping Configuration for PU0282



Hydraulic Flow Control Block PU0282

S0300-BV-CAT-010**HYDRAULIC FLOW CONTROL BLOCK
FOR PU0280 PUMP****ESSM NUMBER PU0282**

DESCRIPTION

The Hydraulic Flow Control Block PU0282 is designed to control, limit, or combine hydraulic fluid from one or two hydraulic power units (HPUs) to a maximum of three hydraulic motors. The flow control block has a working hydraulic pressure of 2500 psig and a total flow of 52 gpm.

SPECIFICATIONS

Manufacturer	Hydrasearch Co., Inc.
Model	15355
Type	Aluminum, twin circuit
Hydraulic fluid required	Any petroleum based hydraulic fluid
Working pressure	2500 psig
Hydraulic flow:	
Per circuit	26 gpm
Total	52 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	2 ft, 8 in.
Width	2 ft, 5 in.
Height	2 ft, 4 in.
Cube	15 cu ft
Weight	240 lb

REFERENCES

1. Technical Manual for Flow Control Block, Model 15355, NAVSEA S9593-BY-OMP-010/32142.
2. Technical Manual for Petroleum, Oil, Lubricant, or Water Offloading Pump System, NAVSEA S9593-BX-OMP-010.
3. Technical Manual for Submersible Pump CNN-150, NAVSEA S9593-BZ-OMP-010/3P215.

S0300-BV-CAT-020



Tripod PU0284

S0300-BV-CAT-010**TRIPOD (POL)****ESSM NUMBER PU0284****DESCRIPTION**

The Tripod PU0284 is an adjustable three-legged stand that is set above the tank or compartment to be pumped. A snatch block is attached to the top of the tripod and a winch with cable is attached to one leg of the tripod. The cable from the winch is passed through the snatch block and attached to the lifting bracket for the offloading pump. The tripod is now able to raise and lower the offloading pump with hoses attached in and out of the tank or compartment that is to be pumped.

SPECIFICATIONS

Manufacturer	B. E. Wallace
Model	3-682

PHYSICAL CHARACTERISTICSShipping

Length	10 ft, 2 in.
Width	1 ft, 9 in.
Height	1 ft, 11 in.
Cube	34 cu ft
Weight	295 lb

REFERENCES

None

S0300-BV-CAT-020



Machinery Containment Pool CP3010 (Folded for Storage)

S0300-BV-CAT-010**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12''****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12'' urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants, leaking or spilled from the operating equipment it contains.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	56 lb

REFERENCES

None

S0300-BV-CAT-020



Hose Reel Assembly PU0283

S0300-BV-CAT-010**HOSE REEL ASSEMBLY (POL)****ESSM NUMBER PU0283****DESCRIPTION**

The Hydraulic Hose Reel Assembly PU0283 consists of two 100-foot sections of 1-inch supply and two 100-foot sections of 1-inch return hose with quick disconnect fittings reeled onto a flanged spool. The spool is mounted on a steel frame which has forklift slots for transporting. There is a single lift point for connecting a sling to lift the assembly. The hoses on the hose reel assembly transfer hydraulic power from the hydraulic power unit to the hydraulically driven POL pump.

SPECIFICATIONS

Hose	Aeroquip 2781-16, four sections, 100 feet long (each)
Quick-disconnect fittings	Aeroquip 5600-16-16S
Spool and frame	Single-drum, steel w/pillow-block bearings

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 10 in.
Width	2 ft, 11 in.
Height	4 ft, 2 in.
Cube	47 cu ft

REFERENCES

1. Technical Manual, Hose Reel, NAVSEA S9593-BI-OMP-010.
2. Technical Manual, Petroleum, Oil, Lubricant, or Water Offloading Pump System, NAVSEA S9593-B02X-OMP-010.

S0300-BV-CAT-020



Mod 6 Hydraulic Power Unit PW0045

S0300-BV-CAT-010**POWER UNIT, MOD 6, HYDRAULIC, DIESEL,
52 GPM @ 2500 PSI****ESSM NUMBER PW0045****DESCRIPTION**

The Mod 6 Hydraulic Power Unit (HPU) PW0045 is a portable, diesel driven unit that provides hydraulic flow through two independent circuits. Each circuit is controlled by an independent directional control valve. An adjustable pressure relief valve controls the output pressure delivered to the supply circuit. The total hydraulic output is 52 gpm at a pressure of 2500 psi.

The HPU is skid-mounted with forklift slots and enclosed in a protective frame with two lifting points. Hydraulic connections utilize 1-inch Aeroquip 5600 series quick disconnect fittings (two male for supply and two female for return).

SPECIFICATIONSHydraulic Power Unit Assembly

Manufacturer	Commercial, Navy Design
Drawing	NAVSEA 5191947

Diesel Engine

Manufacturer	Detroit Diesel-Allison
Series	4-53
Rpm	2200
Hp	87 @ 2200 rpm
Starting	Hydraulic
Fuel	Diesel
Fuel source	20-gal. internal tank
Fuel consumption	6 gph

Hydraulic Pump

Manufacturer	Commercial Shearing
Model	(2) P30's, tandem
Part number	P30B-442-B1-OJ15-25-C-OJ15-1
Type	Gear
Op. press. (max.)	2500 psi
Flow	26 gpm each @ 2200 rpm
Hyd. reservoir	50 gal.
Hydraulic fluid	Rando 46

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	8 ft, 0 in.
Width	2 ft, 10 in.
Height	4 ft, 10 in.
Cube	120 cu ft
Weight	4400 lb

S0300-BV-CAT-020

**POWER UNIT, MOD 6, HYDRAULIC, DIESEL,
52 GPM @ 2500 PSI (CONTD)**

ESSM NUMBER PW0045

REFERENCES

1. Operation and Maintenance Instructions for the Hydraulic Power Unit, Model 6, NAVSEA Manual S9597-AB-OMP-010.

S0300-BV-CAT-020



Spare Parts Kit PW0046

S0300-BV-CAT-010**SPARE PARTS KIT, FOR POWER UNIT PW0045****ESSM NUMBER PW0046**

DESCRIPTION

The Spare Parts Kit PW0046 contains the items necessary to support the operation and maintenance of one Hydraulic Power Unit PW0045.

SPECIFICATIONS

The Spare Parts Kit contains the following:

<u>Item</u>	<u>Qty</u>
Container, Spare Parts Kit, 21" x 16" x 12":	1
Filter, hydraulic	2
Filter, fuel (BF-593)	2
Filter, fuel (BF-592)	2
Filter, engine oil	2
Gasket, thermostat	1
Injector, fuel	2
Manual, Operation and Maintenance, Mod 6 HPU	1
O-ring, Buna rubber	12
O-ring, Teflon	12
Thermostat	1
V-belt	1
V-belt set	1
Inventory, laminated	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	1 ft, 4 in.
Height	1 ft, 0 in.
Cube	2.5 cu ft
Weight	28 lb

REFERENCES

None

S0300-BV-CAT-020

2-INCH TO 6-INCH SUBMERSIBLE HYDRAULIC PUMPING SYSTEM P17200

S0300-BV-CAT-010



2" to 6" Pump System Van VA0280



Tool Box TL0023



Hyd Power Unit PW0200B



Hyd Power Unit PW0020



120-Gal. Fuel Tank TK0045



2" Peristaltic Pump PU0300



6" Hyd Pump PU0310



Ancillary Pallet PU0832



2" Pump PU0830



2" Pump PU0835



Control Block PU0831



2" Diaph Pump PU0300



4" Pump PU0305



Pri Ctrl Bk PU0306



Sec Ctrl Bk PU0307



Heavy Oil Pump PU0851



Hyd Winch WN0281



Ctrl Bk PU0311



Tripod PU0284



Spare Parts Kit PW0206



Spare Parts Kit PW0206

2-Inch to 6-Inch Submersible Hydraulic Pumping System P17200 Overview

S0300-BV-CAT-020**SUBMERSIBLE HYDRAULIC PUMPING
SYSTEM, 2-INCH TO 6-INCH****SYSTEM NUMBER P17200****SYSTEM DESCRIPTION**

The 2-Inch to 6-Inch Submersible Hydraulic Pumping System P17200 is a versatile system designed to meet a wide range of on-scene pollution and salvage support requirements. The system is housed in the 2" to 6" Submersible Hydraulic Pump System Van, which contains: a Mod 8 diesel hydraulic power unit that is used to supply hydraulic power to the 4" hydraulic centrifugal screw submersible pumps, the 6" hydraulic submersible high capacity pollution pumps, the heavy oil DOP-250 transfer pumps, the DOP-160 pumps, and the 6000-pound hydraulic winches; and a Mod 9 diesel hydraulic power unit that supplies hydraulic power to the 2" hydraulic submersible pump, the 2" hydraulic trash and slurry pump, the 1/2" underwater hydraulic drill press, and the 1/2" hydraulic drills which are used to operate the heavy duty, lightweight hot taps.

Additional items stored in the van are a 2" to 6" hydraulic submersible pumps ancillary pallet which contains the Mod 9 hydraulic power unit, the 2" hydraulic submersible pumps, the control block for the PU0830 & PU0835 pumps, the 2" hydraulic trash and slurry pump, and the various adapters, couplers, drawing overviews, gaskets, hoses, and other additional items necessary to maintain and operate the system components. There are also four wire mesh containers located in the van that contain a machinery containment pool, the heavy duty lightweight hop tap kit containing the two heavy duty, lightweight hot taps and ancillaries, the two 1/2" hydraulic drills that are used to operate the heavy duty, lightweight hot taps; the underwater drill press kit containing the underwater drill press and ancillaries; the 2" peristaltic diesel pump, the four centrifugal screw 4" hydraulic submersible pumps and their primary and secondary control blocks, two DOP-250 and two DOP-160 pumps; two 2" pneumatic diaphragm pumps and all the necessary hoses, adapters, fittings and ancillaries to operate and maintain the 2" to 6" Submersible Hydraulic Pumping System P17200.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Submersible, 2" to 6" Hydraulic Pump System	VA0280	1
Block, Snatch, 1/2-5/8" Wire Rope, 8" Dia Sheave	BK0035 (not shown)	2
Clamp, Beam, Universal, 3 1/2" to 12"	CL0200 (not shown)	2
Clamp, Hose, Shut-off, 6"	CL0201 (not shown)	4
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
Drill, Hydraulic, 1/2"	DR0010	2
Hoist, Grip, 4T, MD TU-32	HO0228 (not shown)	2
Hose, 6" x 25', Layflat, Offshore	HS0818 (not shown)	2
Hose, 6" x 50', Layflat, Offshore	HS0819 (not shown)	2
Hose, 6" x 50', Layflat w/M&F Camlock Fittings	HS0820 (not shown)	5
Hot Tap Kit, Lightweight, Heavy Duty	HT0007	1
Hot Tap, Lightweight, Heavy Duty	HT0006	2
Handtruck, Single-Cylinder, 500-lb Capacity	HT0010 (not shown)	2
Kit, Drill Press, Hydraulic, Underwater	KT0050	1
Drill Press, Hydraulic, Underwater, 1/2"	DR0011	1

S0300-BV-CAT-010**SUBMERSIBLE HYDRAULIC PUMPING
SYSTEM, 2-INCH TO 6-INCH****SYSTEM NUMBER P17200**

SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Tripod (POL)	PU0284	2
Pump, Peristaltic, 2" Diesel	PU0300	1
Pump, Submersible, 4" Hydraulic, Centrifugal Screw	PU0305	4
Control Block for 4" Hydraulic Pump PU0305, Primary	PU0306	1
Control Block for 4" Hydraulic Pump PU0305, Secondary	PU0307	1
Pump, Submersible, 6", Hydraulic, Pollution (High Capacity)	PU0310	2
Control Block for 6" Hydraulic Pump PU0310	PU0311	2
Ancillary Pallet, 2" to 6" Hydraulic Submersible Pumps	PU0832	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	3
Pump, Submersible, 2" Hydraulic	PU0830	1
Control Block for 2" Hydraulic Pumps PU0830 & PU0835	PU0831	1
Pump, Trash and Slurry, 2" Hydraulic	PU0835	1
Power Unit, Hydraulic, Mod 9, Diesel, 10 gpm @ 2000 psi	PW0020	1
Pump, DOP-160	PU0840	2
Pump, Heavy Oil Transfer (DOP-250)	PU0851	2
Pump, Diaphragm, 2", Pneumatic	PU2105	2
Spare Parts Kit, For Power Unit PW0020	PW0021	1
Power Unit, Hydraulic, Mod 8, Diesel, 71gpm @ 4000 psi (Poll)	PW0200B	1
Spare Parts Kit For Mod 8 HPU, PW0200	PW0206	1
Roundsling, Polyester, 16'	SL0012	4
Tank, Diesel Fuel, 120-Gallon	TK0045	1
Tool Box, 2" To 6" Submersible Hydraulic Pump System	TL0023	1
Winch, Hydraulic, 6000-Pound, Series 6	WN0281	2

S0300-BV-CAT-010



2" to 6" Submersible Hydraulic Pump System Van VA0280

S0300-BV-CAT-020**VAN, 2" TO 6" SUBMERSIBLE
HYDRAULIC PUMP SYSTEM****ESSM NUMBER VA0280****DESCRIPTION**

The 2" to 6" Submersible Hydraulic Pump System Van (VA0280) contains: a Mod 8 diesel hydraulic power unit that is used to supply hydraulic power to the 4" hydraulic centrifugal screw submersible pumps, the 6" hydraulic submersible high capacity pollution pumps, the heavy oil DOP-250 transfer pumps, the DOP-160 pumps, and the 6000-pound hydraulic winches; a Mod 9 diesel hydraulic power unit that supplies hydraulic power to the 2" hydraulic submersible pump, the 2" hydraulic trash and slurry pump, the 1/2" underwater hydraulic drill press, and the 1/2" hydraulic drills which are used to operate the lightweight heavy duty hot taps.

Additional items stored in the van are a 2" to 6" hydraulic submersible pumps ancillary pallet which contains the Mod 9 hydraulic power unit, the 2" hydraulic submersible pumps, the control block for the PU0830 & PU0835 pumps, the 2" hydraulic trash and slurry pump and the various adapters, couplers, drawing overviews, gaskets, hoses for the above listed items; and all additional items necessary to maintain and operate the system components. There are also four wire mesh containers located in the van that contain a machinery containment pool, the heavy duty lightweight hop tap kit containing the two heavy duty, lightweight hot taps and ancillaries, the two 1/2" hydraulic drills that are used to operate the heavy duty, lightweight hot taps; the underwater drill press kit containing the underwater drill press and ancillaries; the 2" peristaltic diesel pump, the four centrifugal screw 4" hydraulic submersible pumps and their primary and secondary control blocks, two DOP-250 and two DOP-160 pumps; two 2" pneumatic diaphragm pumps and all the necessary hoses, adapters, fitting and ancillaries to operate and maintain the 2" to 6" Submersible Hydraulic Pumping System P17200.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	24,860 lb

REFERENCES

None

S0300-BV-CAT-010



Machinery Containment Pool CP3010 (Folded for Storage)

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12''****ESSM NUMBER CP3010****DESCRIPTION**

The Machinery Containment Pool CP3010 is a 10' x 6' x 12'' urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants, leaking or spilled from the operating equipment it contains.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	56 lb

REFERENCES

None

S0300-BV-CAT-010



1/2-Inch Hydraulic Drill DR0010

S0300-BV-CAT-020**DRILL, HYDRAULIC, 1/2-INCH****ESSM NUMBER DR0010****DESCRIPTION**

The 1/2-Inch Hydraulic Drill DR0010 is designed for underwater use and is equipped with a 1/2-inch smooth-jawed adjustable chuck capable of holding drill bits with a shaft size of 1/2 inch in diameter.

SPECIFICATIONS

Manufacturer	Stanley
Model	DL09
Drive size	1/2"
Hydraulic pressure range	1000 - 2000 psi
Flow range	4 - 12 gpm
Optimum flow	8 gpm
Porting	-8 SAE O-ring
Drill speed	1000 rpm @ 8 gpm
Rpm range	350 - 1500

PHYSICAL CHARACTERISTICSOperating

Length	9 in.
Width	3 1/2 in.
Height	6 in.
Cube	1 cu ft
Weight	6 lb

REFERENCES

1. Stanley Hydraulic Drill DL09 Safety, Operation, and Maintenance Manual.

S0300-BV-CAT-010



Heavy Duty, Lightweight Hot Tap Kit HT0007

S0300-BV-CAT-020**HOT TAP KIT, LIGHTWEIGHT, HEAVY DUTY****ESSM NUMBER HT0007****DESCRIPTION**

The Heavy Duty, Lightweight Hot Tap Kit HT0007 is designed for tapping into mild steel hull plating up to 1 inch thick. The tap machine is used to tap a 3 5/8-inch hole through a 4-inch full port ball valve as in the 2" to 6" Submersible Hydraulic Pumping System P17200. The flange/valve assembly, through which the tap is made, comes in two configurations, a flat surface plate and a contour-forming plate.

The Heavy Duty, Lightweight Hot Tap Kit HT0007 consists of the following:

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Adapter, 3/8" drive extension		5
Adapter, drill bit stop		5
Bit, drill, 5/16"		10
Bit, drill, 9/32"		10
Compound, duct seal, 1 lb		5
Epoxy stick		1
Gasket, special, 4" camlock, Teflon		5
Handle, spindle, hot tap		8
Hole saw, 3 1/2"		10
Key, drill chuck		2
Machine, hot tap, lightweight	HT0006	2
Nutsetter, magnetic, 7/16", 1/4" drive		5
Packing, 1/4", graphite		2
Screw, self-tapping 5/16 -18 x 1"		100
Screw, self-drilling, self-tapping 5/16 -18 x 1"		100
Sealant, pipe thread		1
Socket, deepwell, 6-pt, 1/2", 3/8" drive		5
Spray, preservative (LPS)		2
Tape, Teflon, 1/4" roll		2
Tape, Teflon, 3/4" roll		2
Thread locker		1
Valve, ball, 3/4 NPT x garden hose		2
Wrench, set, hex		2
Wrench, torque, 3/8" drive		1

S0300-BV-CAT-010

HOT TAP KIT, LIGHTWEIGHT, HEAVY DUTY

ESSM NUMBER HT0007

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Shipping

Length	1 ft, 2 in.
Width	2 ft, 11 in.
Height	1 ft, 4 in.
Cube	5 cu ft
Weight	100 lb

REFERENCES

None

S0300-BV-CAT-010



Heavy Duty, Lightweight Hot Tap HT0006

S0300-BV-CAT-020**HOT TAP, LIGHTWEIGHT, HEAVY DUTY****ESSM NUMBER HT0006****DESCRIPTION**

The Heavy Duty, Lightweight Hot Tap HT0006 is designed to and has the capability of tapping into mild steel hull plating up to 1 inch thick. The hot tap machine is used to tap a 3 5/8-inch hole through a 4-inch full port valve.

The flange/valve assembly through which the tap is accomplished is available in two configurations, a flat surface plate and a contour-forming plate. The flat surface plate is 12 inches in diameter with a 12-inch bolt hole pattern on a 10-inch bolt circle. This plate is used for flat shell or tank top applications. The contour forming plate has a 12-inch by 4-inch base with serrated tabs perpendicular to the base. These tabs can be formed to the contour of the hull.

SPECIFICATIONS

Manufacturer	Easy Tapper
Model	XTC 1.7S
Standard tapping range in kit	3 5/8"
Pressure rating	1470 psi @ 100° F
Method of applied forward pressure	Spindle
Type of machine-to- valve adapters	National Pipe Thread
Power pack for cutter rotation	Ready for electric, air, or hydraulic power package

PHYSICAL CHARACTERISTICSShipping

Length	2 ft, 6 in.
Width	11 in.
Height	6 in.
Cube	1 cu ft
Weight	29 lb

REFERENCES

None

S0300-BV-CAT-010



Underwater Hydraulic Drill Press Kit KT0050

S0300-BV-CAT-020**KIT, DRILL PRESS, HYDRAULIC, UNDERWATER****ESSM NUMBER KT0050**

DESCRIPTION

The Underwater Hydraulic Drill Press Kit KT0050 consist of a lightweight magnet with a holding power of 1200 pounds, a heavyweight magnet with a holding power of 2000 pounds, a foot-operated control valve, and an underwater, hydraulically operated drill press. The components of the kit are stored in a heavy duty plastic container that also serves as a shipping container.

SECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 7 in.
Width	3 ft, 0 in.
Height	1 ft, 8 in.
Cube	8 cu ft
Weight	142 lb

REFERENCES

NONE

S0300-BV-CAT-010



1/2-Inch Underwater Hydraulic Drill Press DR0011

S0300-BV-CAT-020**DRILL PRESS, HYDRAULIC,
UNDERWATER, 1/2-INCH****ESSM NUMBER DR0011****DESCRIPTION**

The 1/2-Inch Underwater Hydraulic Drill Press DR0011 is a hydraulically driven 1/2-inch drill press with a specially designed motor for underwater applications. The drill press is controlled by a foot-operated control valve. The drill press comes with two magnetic bases; one with an adhesion force of 1200 pounds, a second with an adhesion force of 2000 pounds.

SPECIFICATIONS

Manufacturer	Universal Drilling and Cutting
Model	HUW200
Magnetic force	1200 lb
Speed	50 - 500 rpm (dependent on flow)
Working pressure	2000 psi
Cutter capacity	2"
Stroke	6 1/3"

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	1 ft, 1 in.
Width	9 in.
Height	1 ft, 4 1/2 in.
Cube	2 cu ft
Weight	53 lb

REFERENCES

1. Universal Drilling and Cutting Equipment Operator's Instruction Manual and Spare Parts Listing for Magnetic Base Drilling Machine.

S0300-BV-CAT-010



Tripod PU0284

S0300-BV-CAT-020**TRIPOD (POL)****ESSM NUMBER PU0284****DESCRIPTION**

The Tripod PU0284 is an adjustable three-legged stand that is set above the tank or compartment to be pumped. A snatch block is attached to the top of the tripod and a winch with cable is attached to one leg of the tripod. The cable from the winch is passed through the snatch block and attached to the lifting bracket for the offloading pump. The tripod is now able to raise and lower the offloading pump with hoses attached in and out of the tank or compartment that is to be pumped.

SPECIFICATIONS

Manufacturer	B. E. Wallace
Model	3-682

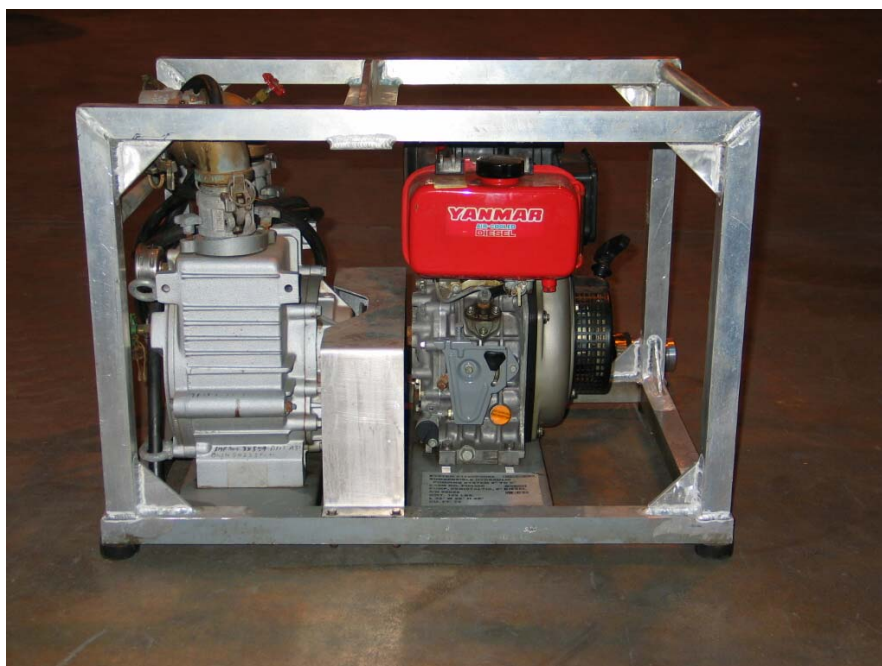
PHYSICAL CHARACTERISTICSShipping

Length	10 ft, 2 in.
Width	1 ft, 9 in.
Height	1 ft, 11 in.
Cube	34 cu ft
Weight	295 lb

REFERENCES

None

S0300-BV-CAT-010



2-Inch Peristaltic Pump PU0300

S0300-BV-CAT-020**PUMP, PERISTALTIC, 2", DIESEL****ESSM NUMBER PU0300**

DESCRIPTION

The 2-Inch Peristaltic Pump PU0300 is a self-priming, diesel driven, hose-type pump designed to pump a wide variety of viscous materials. The 2-inch pump will pump at a rate of 110 gpm with an open discharge. Maximum practical suction lift is 29 feet above the material surface.

The 2-inch pump is powered by a 1-cylinder, 5.5 hp, air-cooled, 4-cycle engine. The engine has a recoil starter and direct fuel injection with a variable speed control and is designed to operate off its own integral fuel system.

SPECIFICATIONS

Pump Assembly

Manufacturer	Master Pump Engine Co.
Model	MD-5
Type	Series M, hose-type
Capacity	110 gpm/open discharge
Effective daily recovery rate	Mod 2400 (24-hr day) - 226 bbls Mod 4200 (24-hr day) - 459 bbls

Engine

Manufacturer	Yanmar Diesel
Model	L60AE-D
Bore/stroke	75mm/62mm
Displacement	273 cc
Rpm	3600
Horsepower	5.5
Fuel	Diesel
Fuel source	Integral fuel tank.
Fuel consumption	.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 9 in.
Width	2 ft, 1 in.
Height	2 ft, 1 in.
Cube	12 cu ft
Weight	192 lb

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual for L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.
4. Yanmar Pamphlet for Series M Peristaltic Pumps.

S0300-BV-CAT-010



4-Inch Hydraulic Submersible Pump PU0305

S0300-BV-CAT-020**PUMP, SUBMERSIBLE, 4-INCH, HYDRAULIC,
CENTRIFUGAL SCREW****ESSM NUMBER PU0305**

DESCRIPTION

The 4-Inch Hydraulic Submersible Pump PU0305 is capable of pumping oils containing solids up to 2 inches in diameter. The pump is rated for continuous output of up to 1200 gpm at 25 psi discharge pressure. Quick disconnect fittings are utilized to allow for rapid hookup of the discharge hose and the supply and return hydraulic hoses. The 4-Inch Hydraulic Submersible Pump is ideal for moving moderate viscosity oils up to 10,000 cSt.

SPECIFICATIONS

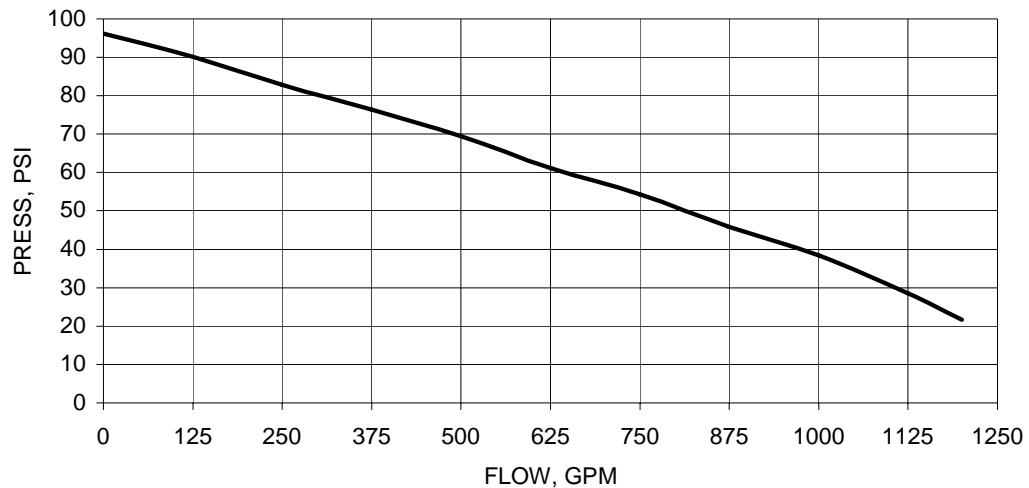
Pump Assembly

Manufacturer	Hydro-Tech
Model	S4SCR
Type	Submersible
Discharge	4"
Output (max.)	1200 gpm at 25 psi

Motor

Manufacturer	Rex Roth
Model	A2FM16
Operating pressure (max.)	2500 psi
Maximum flow rate	25 gpm

PERFORMANCE CURVE



S0300-BV-CAT-010

**PUMP, SUBMERSIBLE, 4-INCH, HYDRAULIC,
CENTRIFUGAL SCREW**

ESSM NUMBER PU0305

PHYSICAL CHARACTERISTICS

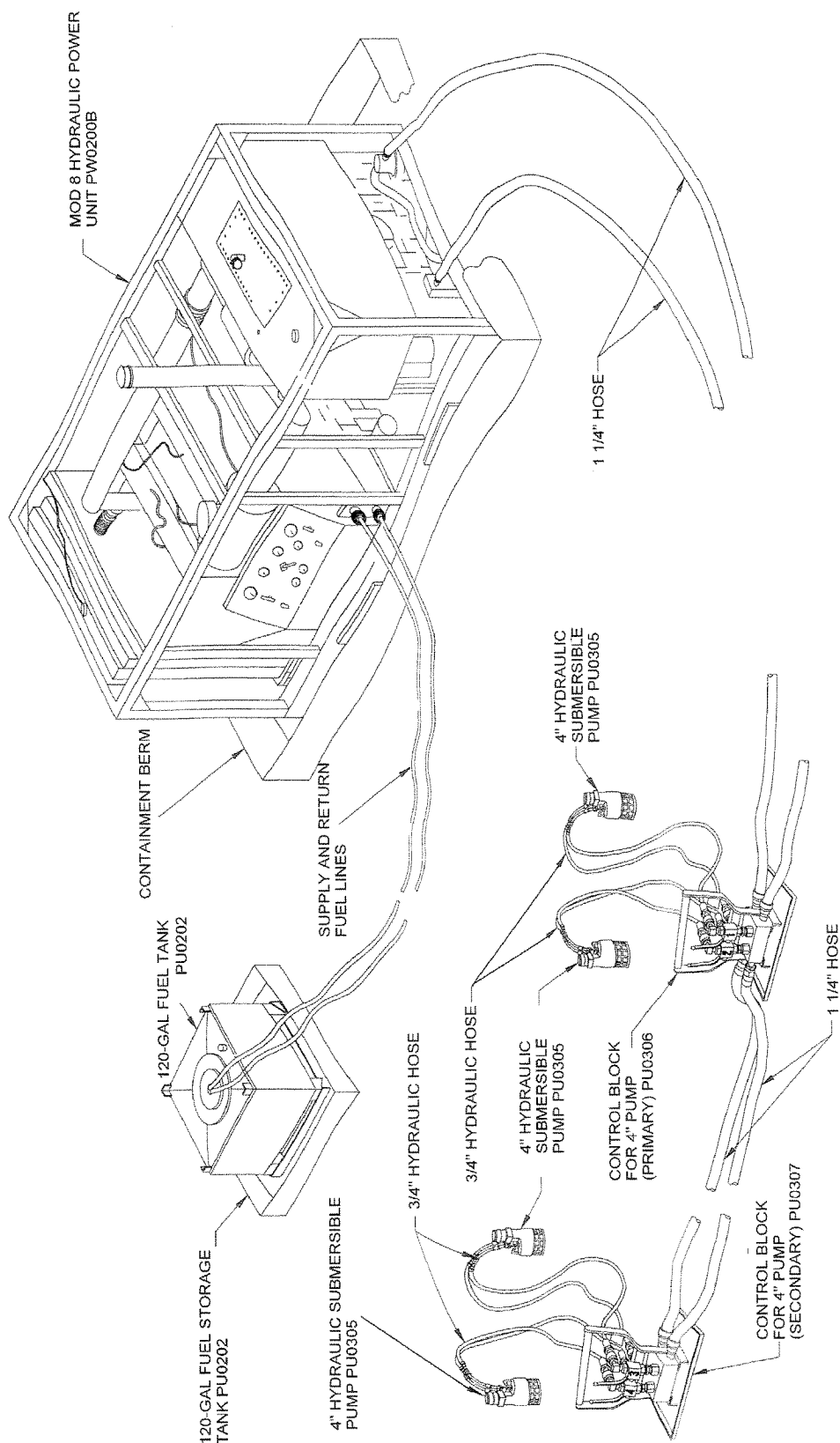
Operating/Shipping

Height	1 ft, 9 in.
Diameter	1 ft, 0 in.
Cube	2 cu ft
Weight	62 lb

REFERENCES

1. Hydro-Tech Operation and Maintenance Instructions, with Illustrated Parts Breakdown, S4SCR Submersible Pump.

S0300-BV-CAT-010



PU0305 Hydraulic Pump System Overview

S0300-BV-CAT-020**CONTROL BLOCK FOR 4" HYDRAULIC
PUMP PU0305, PRIMARY****ESSM NUMBER PU0306****DESCRIPTION**

The Primary Control Block for 4" Hydraulic Pump (PU0305) PU0306 is designed to control and limit hydraulic fluid from one hydraulic power unit to a maximum of two hydraulic motors. The control block is also designed with flow-through supply and return passages, which allows hydraulic fluid to be supplied to a secondary control block from the power unit. The flow control block has a working hydraulic pressure of 3500 psig and a total flow of 70 gpm, which is regulated to 15 gpm to each of the 4-inch submersible pumps.

SPECIFICATIONS

Manufacturer	ESSM Facility
Dwg. Number	7022753
Type	Aluminum, twin circuit
Hydraulic fluid required	Any petroleum-based hydraulic fluid
Working pressure	3500 psig
Hydraulic flow	15 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	1 ft, 3 in.
Width	1 ft
Height	1 ft, 3 in.
Cube	2 cu ft
Weight	32 lb

REFERENCES

1. 2" to 6" Hydraulic Pumping System Primary Flow Control Block for 2" Hydraulic Pump, NAVSEA Dwg. Number 7022753.

S0300-BV-CAT-010



Secondary Control Block for 4" Hydraulic Pump (PU0305) PU0307

S0300-BV-CAT-020**CONTROL BLOCK FOR 4" HYDRAULIC
PUMP PU0305, SECONDARY****ESSM NUMBER PU0307****DESCRIPTION**

The Secondary Control Block for the 4" Hydraulic Pump (PU0305) PU0307 is designed to control and limit hydraulic fluid from one hydraulic power source to a maximum of two hydraulic motors. The flow control block has a working hydraulic pressure of 3500 psig and a total flow of 70 gpm, which is regulated to 15 gpm to each of the 4-inch submersible pumps.

SPECIFICATIONS

Manufacturer	ESSM Facility
Dwg. Number	7022754
Type	Aluminum, twin circuit
Hydraulic fluid required	Any petroleum-based hydraulic fluid
Working pressure	3500 psig
Hydraulic flow	15 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	1 ft, 6 in.
Width	1 ft, 2 in.
Height	1 ft, 6 in.
Cube	3 cu ft
Weight	46 lb

REFERENCES

1. 2" to 6" Hydraulic Pumping System Secondary Flow Control Block for 2" Hydraulic Pump, NAVSEA Dwg. Number 7022754.

S0300-BV-CAT-010



6-Inch High Capacity Hydraulic Submersible Pump PU0310

S0300-BV-CAT-020**PUMP, SUBMERSIBLE, HYDRAULIC,
6-INCH (HIGH CAPACITY)****ESSM NUMBER PU0310**

DESCRIPTION

The 6-Inch High Capacity Hydraulic Submersible Pump PU0310 is a high-capacity, hydraulically driven, submersible, centrifugal pump with a shutoff head pressure of 125 psi and a maximum discharge flow of 2200 gpm. The pump, with hoses and fittings attached, is sized to fit through a standard 12 1/2-inch Butterworth-type opening. Carrying handles located at the top and bottom of the pump allow for positioning by personnel and serve as pad eyes for lifting slings. The pump can be transported manually by a specially modified handtruck. The pump is powered by the Hydraulic Power Unit PW0200.

SPECIFICATIONS

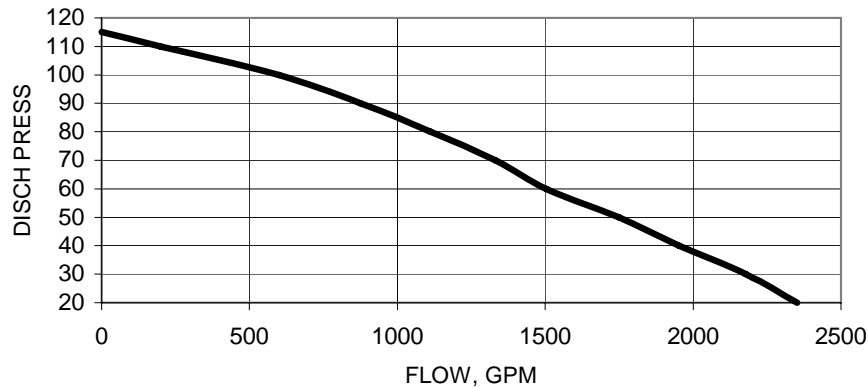
Pump

Manufacturer	Marine Pollution Control
Model	KMA 333
Type	Centrifugal
Suction dia.	6" male camlock
Discharge dia.	6" male camlock
Speed	Variable
Output	2200 gpm
Hyd. connections	Snap-tite, series 71
Supply	1" female
Return	1" male
Case drain	1/2" male

Hydraulic Motor

Manufacturer	Eaton
Type	46

PERFORMANCE CURVE



S0300-BV-CAT-010

**PUMP, SUBMERSIBLE, HYDRAULIC,
6-INCH (HIGH CAPACITY)**

ESSM NUMBER PU0310

PHYSICAL CHARACTERISTICS

Operating/Shipping

Height (with inlet screen)	3 ft, 0 in.
Diameter	1 ft, 0 in.
Cube	3 cu ft
Weight	210 lb

REFERENCES

1. Marine Pollution Control KMA 333 Hydraulic Submersible Pump Technical Specifications and Operations Manual.

S0300-BV-CAT-010



Control Block for the 6" Hydraulic Pump (PU0310) PU0311

S0300-BV-CAT-010**CONTROL BLOCK FOR 6" HYDRAULIC
PUMP PU0310****ESSM NUMBER PU0311**

DESCRIPTION

The Control Block for the 6" Hydraulic Pump (PU0310) PU0311 is designed to control and limit hydraulic fluid from one hydraulic power unit to a maximum of two hydraulic motors (one motor for the 6" submersible pump and one motor for the 6000-lb winch). The flow control block has a working hydraulic pressure of 4000 psig and a total flow of 71 gpm.

SPECIFICATIONS

Manufacturer	ESSM Facility
Type	Aluminum, twin circuit
Sketch	SK1378
Hydraulic fluid required	Any petroleum-based hydraulic fluid
Working pressure	4000 psig
Hydraulic flow	71 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	2 ft, 1 in.
Width	1 ft, 11 in.
Height	1 ft, 6 in.
Cube	10 cu ft
Weight	200 lb

REFERENCES

None

S0300-BV-CAT-010



Ancillary Pallet PU0832

S0300-BV-CAT-010**ANCILLARY PALLET, 2" TO 6" HYDRAULIC
SUBMERSIBLE PUMPS****ESSM NUMBER PU0832**

DESCRIPTION

The Ancillary Pallet PU0832 is used as a shipping/ storage pallet for three oil containment pools, one 2-inch hydraulic submersible pump, one 2-inch trash pump, one Mod 9 Hydraulic Power Unit, one hydraulic flow control block for the 2-inch pumps, and the various ancillary items to maintain and operate the 2-inch to 6-inch pumps. The items contained in the Ancillary Pallet PU0832 are listed below.

SPECIFICATIONS

Manufacturer ESSM Facility
Drawing Number 7539529

The Ancillary Pallet for the 2" Hydraulic Pumps PU0830 and PU0835 contains the following:

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
2" to 6" Hydraulic Submersible Pumps Ancillary Pallet	PU0832	1
Line, nylon, 1/4" x 500'		1
Adapter, hydraulic, -16 Aeroquip to -10 Snap-Tite		2
Adapter, hydraulic, -16 Aeroquip to -12 Aeroquip		2
Adapter, hydraulic, -16 Aeroquip to -16 Snap-Tite		1
Adapter, hydraulic, -20 Snap-Tite to -12 Aeroquip		1
Adapter, hydraulic, -20 Snap-Tite to -20 Aeroquip		1
Adapter, hydraulic, -6 Aeroquip to -6 Snap-Tite		2
Adapter x adapter, 3" male camlock x 4" male camlock		4
Adapter x adapter, male camlock x male camlock, 3"		4
Adapter x adapter, male camlock x male camlock, 4"		4
Bleeder, quick disconnect, -12		1
Bleeder, quick disconnect, -16		1
Bleeder, Snap-Tite, -20		2
Bolt, ss, 3/8"-16 x 3/4"		8
Box, metal, 19" x 13" x 13" (black)		1
Cable tie, 15"		8
Cable tie, 14"		4
Cable tie, blue		4
Cable tie, green		4
Cable tie, red		4
Cable tie, yellow		4

S0300-BV-CAT-010**ANCILLARY PALLET, 2" TO 6" HYDRAULIC
SUBMERSIBLE PUMPS****ESSM NUMBER PU0832**

2" to 6" Hydraulic Submersible Pumps Ancillary Pallet (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Cap, dust, camlock, 4"		8
Coupler x adapter, 3" female camlock x 4" male camlock		4
Coupler x adapter, 3" female camlock x 4" male camlock		4
Coupler x adapter, 4" female camlock x 3" male camlock		4
Coupler x adapter, 4" female camlock x 6" male camlock		4
Coupler x adapter, 6" female camlock x 4" male camlock		4
Coupler x adapter, f camlock x m camlock, 4"; w/3/4" ball valve		2
Coupler x coupler, 4" female camlock x 6" female camlock		4
Coupler x coupler, female camlock x female camlock, 3"		4
Coupler x coupler, female camlock x female camlock, 4"		4
Coupler x flange, female camlock x pump flange, 2"		2
Elbow, 45°, female camlock x male camlock, 4"		4
Elbow, 90°, female camlock x male camlock, 4"		4
Flowmeter, hydraulic; w/-20 Snap-Tite QDs @10-75gpm		1
Gasket, camlock, 3"		20
Gasket, camlock, 4"		20
Gasket, camlock, 6"		20
Gasket, flange, 2" (female camlock x pump flange)		4
Gate, aluminum, 32" x 1 1/2" x 14 1/2"		3
Hose, air, 3/4" x 50' w Chicago fittings		4
Hose, hydraulic, -12, 3/4" x 25' (4k psi)		4
Hose, hydraulic, -12, 3/4" x 50' (4k psi)		4
Hose, layflat, 2" x 50'; w/ male & female camlock		2
Hose, layflat, 4" x 50'; w/ male & female camlock		2
Hose, suction, 2" x 25'		8
Hose, suction, 2" x 50'		4
Hose, suction, 4" x 25'		2
Hose, suction, 4" x 50'		2
Lockwire, ss, .032 diameter		4
Plug, dust, camlock, 4"		8
Ramp, aluminum, 28" x 5"		2
Stinger, 2" x 4'		2
Strap, ratchet, 1"		7
Adapter x adapter, 2" male camlock x 3" male camlock		4
Adapter x adapter, male camlock x male camlock, 2"		4
Cap, dust, camlock, 2"		6

S0300-BV-CAT-010**ANCILLARY PALLET, 2" TO 6" HYDRAULIC
SUBMERSIBLE PUMPS****ESSM NUMBER PU0832**

2" to 6" Hydraulic Submersible Pumps Ancillary Pallet (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Coupler x adapter, 2" female camlock x 3" male camlock		4
Coupler x adapter, 4" female camlock x 2" male camlock		4
Coupler x adapter, female camlock x male camlock, 2"; w/3/4" ball valve		2
Coupler x coupler, female camlock x female camlock, 2"		4
Gasket, camlock, 2"		20
Plug, dust, camlock, 2"		6
Inventory, laminated		1
Containment pool, machinery, 5' x 5' x 12"	CP3000	3
Pump, submersible, 2" hydraulic	PU0830	1
Control block for 2" hyd pumps PU0830/PU0835	PU0831	1
Pump, trash and slurry, 2" hydraulic	PU0835	1
Power unit, hyd, Mod 9, dsl, 10 gpm @ 2000 psi	PW0020	1

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	7 ft, 4 in.
Width	4 ft, 7 in.
Height	6 ft, 4 in.
Cube	213 cu ft
Weight	3574 lb

REFERENCES

1. 2-Inch to 6-Inch Submersible Hydraulic Pumping System Ancillary Pallet, NAVSEA Dwg. 7539529.

S0300-BV-CAT-010



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-010**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12''****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12'' urethane berm. Its is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

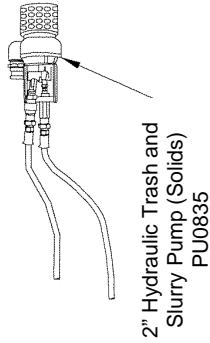
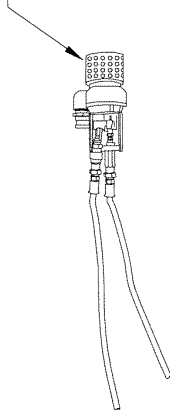
None

S0300-BV-CAT-010



2" Hydraulic Submersible Pump PU0830

2" Hydraulic Submersible Pump (Liquids) PU0830

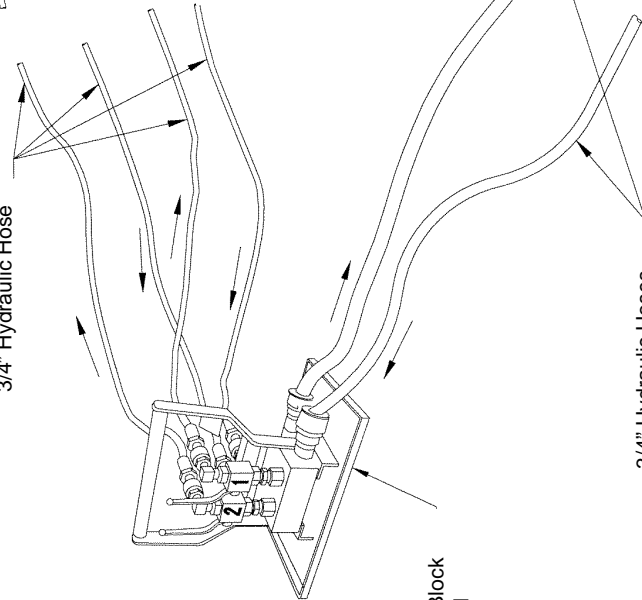


2" Hydraulic Trash and Slurry Pump (Solids) PU0835



2" Hydraulic Trash and Slurry Pump PU0835

3/4" Hydraulic Hose



2" Control Block PU0831

3/4" Hydraulic Hoses

Hydraulic Power Unit: Mod 9 PW0020

10 gpm @ 2000psi

Machinery Containment Pool

2" Hydraulic Submersible Pump Overview PU0830 & PU0835

S0300-BV-CAT-010**PUMP, SUBMERSIBLE, 2" HYDRAULIC****ESSM NUMBER PU0830****DESCRIPTION**

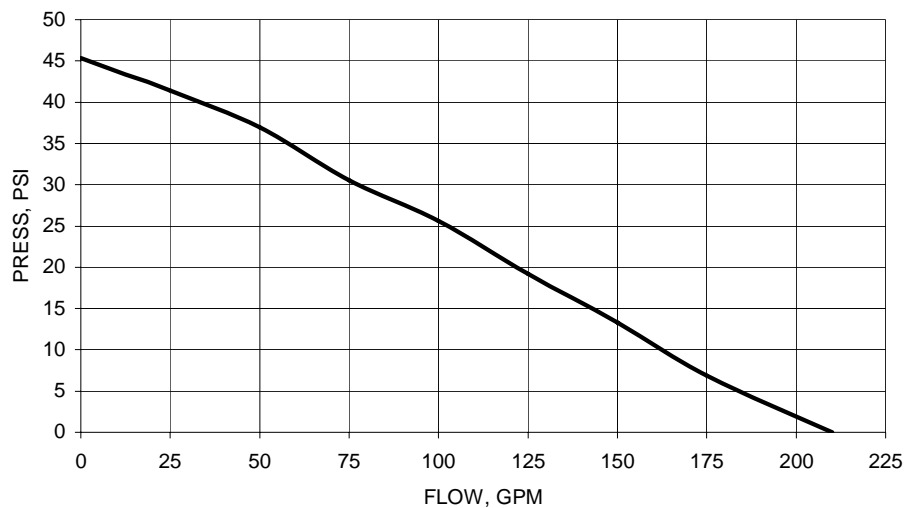
The 2-Inch Hydraulic Submersible Pump PU0835 is capable of pumping water containing some solids up to 1 inch in diameter. The pump is rated for continuous output of up to 210 gpm at 0 psi discharge pressure. Quick disconnect fittings are utilized to allow for rapid hookup of the discharge hose and the supply and return hydraulic hoses. The 2-Inch Hydraulic Submersible Pump is a very portable and versatile all-purpose pump that can be used for bilge pumping, wastewater transfer, and for pumping oil.

SPECIFICATIONSPump Assembly

Manufacturer	Hydro-Tech
Model	S2TCAL-2
Type	Submersible
Discharge	2"
Output (max.)	210 gpm at 0 psi

Motor

Manufacturer	Rex Roth
Operating pressure (max)	2500 psi
Flow rate (max.)	5 gpm

PERFORMANCE CURVE

S0300-BV-CAT-010

PUMP, SUBMERSIBLE, 2" HYDRAULIC

ESSM NUMBER PU0830

PHYSICAL CHARACTERISTICS

Operating/Shipping

Height	1 ft, 1 in.
Diameter	9 3/8 in.
Cube	1 cu ft
Weight	16 lb

REFERENCES

1. Hydro-Tech Operation and Maintenance Instructions, with Illustrated Parts Breakdown, S2T-2 Submersible Pump.

S0300-BV-CAT-010**PUMP, TRASH AND SLURRY, 2" HYDRAULIC****ESSM NUMBER PU0835****DESCRIPTION**

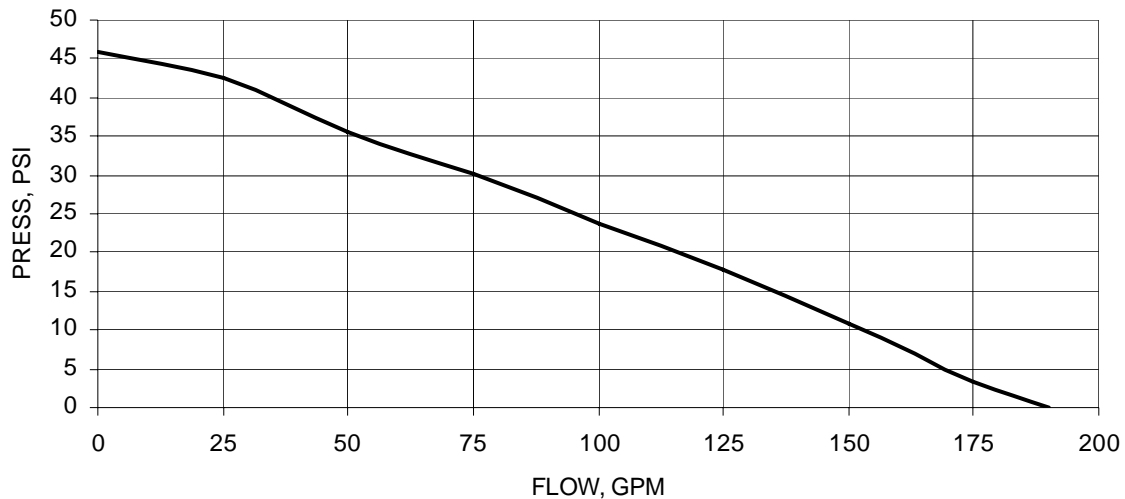
The 2-Inch Hydraulic Trash and Slurry Pump PU0835 is capable of pumping water containing solids up to 2 inches in diameter. The pump is rated for continuous output of up to 185 gpm at 0 psi discharge pressure. Quick disconnect fittings are utilized to allow for rapid hookup of the discharge hose and the supply and return hydraulic hoses. The 2-Inch Hydraulic Trash and Slurry Pump is ideal for bilge pumping, wastewater transfer, and for pumping oil.

SPECIFICATIONSPump Assembly

Manufacturer	Hydro-Tech
Model	S2TAL-2
Type	Submersible
Discharge	2"
Output (max.)	185 gpm at 0 psi

Motor

Manufacturer	Rex Roth
Operating pressure (max.)	2500 psi
Flow rate (max.)	5 gpm

PERFORMANCE CURVE

S0300-BV-CAT-010

PUMP, TRASH AND SLURRY, 2" HYDRAULIC

ESSM NUMBER PU0835

PHYSICAL CHARACTERISTICS

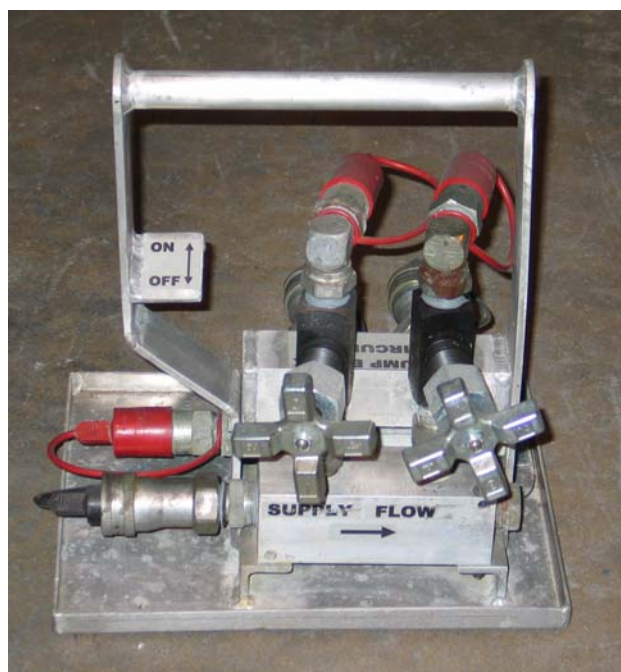
Operating/Shipping

Height	1 ft, 1 1/2 in.
Diameter	9 3/8 in.
Cube	1 cu ft
Weight	18 lb

REFERENCES

1. Hydro-Tech Operation and Maintenance Instructions, with Illustrated Parts Breakdown, S2T-2 Submersible Pump.

S0300-BV-CAT-010



Control Block for 2" Hydraulic Pumps (PU0830 & PU0835) PU0831

S0300-BV-CAT-020**CONTROL BLOCK FOR 2" HYDRAULIC
PUMPS PU0830 AND PU0835****ESSM NUMBER PU0831****DESCRIPTION**

The Control Block for 2" Hydraulic Pumps (PU0830 and PU0835) PU0831 is designed to control and distribute hydraulic fluid from one hydraulic power unit to a maximum of two hydraulic motors. The flow control block has a working hydraulic pressure of 2500 psig and a total flow of 10 gpm.

SPECIFICATIONS

Manufacturer	ESSM Facility
Dwg. Number	7022752
Type	Aluminum, twin circuit
Hydraulic fluid required	Any petroleum-based hydraulic fluid
Working pressure	2500 psig
Hydraulic flow:	25 gpm

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	1 ft, 3 in.
Width	1 ft
Height	1 ft, 3 in.
Cube	2 cu ft
Weight	32 lb

REFERENCES

1. 2" to 6" Hydraulic Pumping System Primary Flow Control Block for 2" Hydraulic Pump, NAVSEA Dwg. Number 7022752.

S0300-BV-CAT-010



Mod 9 HPU Front View



Mod 9 HPU Right Side View

Mod 9 Hydraulic Power Unit PW0020

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 9, DIESEL,
10 GPM @ 2000 PSI****ESSM NUMBER PW0020****DESCRIPTION**

The Mod 9 Hydraulic Power Unit (HPU) PW0020 is a portable, diesel driven unit that provides hydraulic fluid up to 10 gpm @ 2000 psi. An adjustable pressure relief valve controls the output pressure delivered to the supply circuit. The HPU is mounted on a wheeled frame and is enclosed in a protective steel housing with four sling points on the external steel tubing frame. Hydraulic connections are made via Aeroquip 5600, -12 series male and female quick disconnect fittings for the hydraulic supply and return, with a 3/8-inch case drain fitting. The unit is shipped with the exhaust muffler attached to the side of the HPU housing, and the muffler is installed prior to operation of the unit.

SPECIFICATIONSHydraulic Power Unit Assembly

Manufacturer	PortaCo Hydraulic Power
Model	D-17S10-15-W

Diesel Engine

Manufacturer	Deutz Ruggerini
Series	MD 191
Rpm	2200
Horsepower	19 @ 3600 rpm
Starting	Electric, 12-volt
Fuel	Diesel
Fuel source	Internal fuel tank, 4-gal., or external tank using installed fuel pickup
Fuel consumption	1 gph

Hydraulic Pump

Manufacturer	Sauer-Sundstrand
Model	SNP 2/11
Type	Gear
Flow	10 gpm @ 2000 psi
Hyd. reservoir	5 gal.
Fluid type	Rando 46

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 5 in.
Width	2 ft, 7 in.
Height	2 ft, 7 in.
Cube	24 cu ft
Weight (dry)	472 lb

S0300-BV-CAT-010

**POWER UNIT, HYDRAULIC, MOD 9, DIESEL,
10 GPM @ 2000 PSI**

ESSM NUMBER PW0020

REFERENCES

1. Operation, Maintenance, and Repair Manual for PortaCo Hydraulic Power Unit, Model D-17S10-15-W.
2. Deutz Ruggerini Use and Maintenance Manual, Engine Type MD150-151 and MD190-191.

S0300-BV-CAT-010



DOP-160 Pump PU0840

S0300-BV-CAT-020**PUMP, DOP-160****ESSM NUMBER PU0840****DESCRIPTION**

The DOP-160 Pump PU0840 is a modified Archimedes' screw-type pump that has been specially developed for a wide range of emergency and ancillary pumping operations. It has been designed for handling liquids of an extremely high viscosity, like heavy crude. It is also capable of handling low viscosity fluids such as diesel fuel or water; and it will cope with debris normally found at oil spill sites.

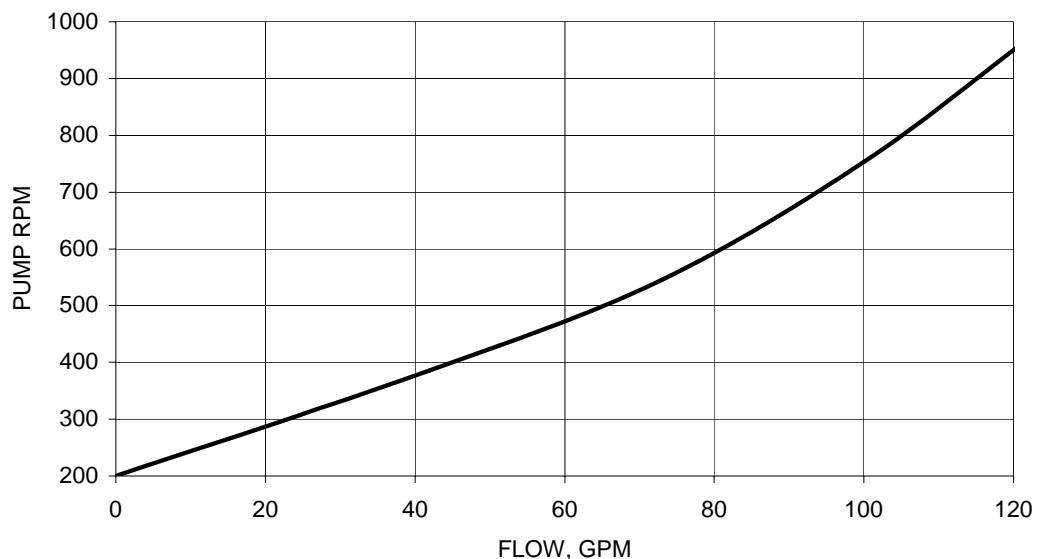
SPECIFICATIONSPump Assembly

Manufacturer	Desmi
Model	DOP-160
Min. manhole diameter	0.4 m (15.7 in.)
Pump outlet	3" male camlock
Max. flow rate	42 gpm
Max. pressure	10 bar/150 psi
Max. capacity	27.5 m ³ /h/121 gpm

Hydraulic Motor

Manufacturer	Rex Roth
Type	GMSS 80
Hydraulic connections:	
Supply	1/2" Aero-quip female QD
Return	1/2" Aero-quip male QD
Drain	3/8" Aero-quip female QD

The DOP-160 Pump PU0840 is a positive-displacement pump and the flow rate is dependent on rpm, as shown by the performance curve below.

PERFORMANCE CURVE

S0300-BV-CAT-010

PUMP, DOP-160

ESSM NUMBER PU0840

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 4 in.
Width	10 in.
Height	1 ft, 9 in.
Cube	2 cu ft
Weight	68 lb

REFERENCES

1. Operator's Manual for the DESMI DOP-160 Vertical Archimedes' Screw Off-loading Pump.

S0300-BV-CAT-010



Heavy Oil Transfer Pump PU0851

S0300-BV-CAT-020**PUMP, HEAVY OIL TRANSFER (DOP-250)****ESSM NUMBER PU0851****DESCRIPTION**

The Heavy Oil Transfer Pump PU0851 is a modified Archimedes' screw-type pump that is capable of moving highly viscous products at high discharge pressures. The heavy oil transfer pump is designed to work well at slow operating speeds and can gently handle any medium without mixing or emulsifying the medium. The pump is driven by a hydraulic power unit with the necessary ancillary equipment.

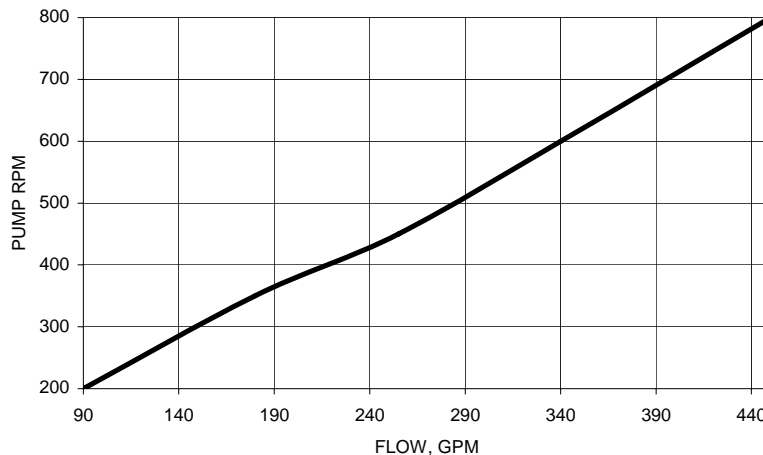
SPECIFICATIONSPump Assembly

Manufacturer	Desmi
Model	DOP-250
Min. manhole diameter	0.6 m (24 in.)
Pump outlet	6" male camlock
Max. flow rate	42 gpm
Max. pressure	10 bar/150 psig
Max. capacity	100 m ³ /h/440 gpm

Hydraulic Motor

Manufacturer	Danfoss
Type	OMTS-200
Hyd. connections:	
Supply	1" Aero-quip female QD
Return	1" Aero-quip male QD
Drain	3/8" Aero-quip female QD

The Heavy Oil Transfer Pump PU0851 is a positive displacement and the flow rate is dependant on the rpm of the pump as shown by the performance curve below .

PERFORMANCE CURVE

S0300-BV-CAT-010

PUMP, HEAVY OIL, TRANSFER (DOP-250)

ESSM NUMBER PU0851

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 10 in.
Width	1 ft, 2 in.
Height	1 ft, 9 in.
Cube	4 cu ft
Weight	154 lb

REFERENCES

1. Operator's Manual for DESMI DOP-250.

S0300-BV-CAT-010



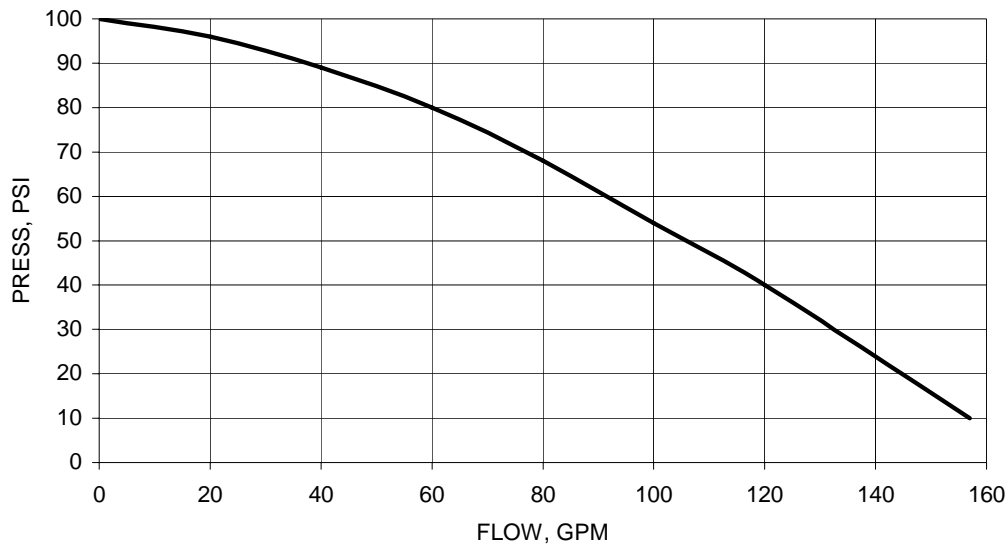
Pneumatic 2-Inch Diaphragm Pump PU2105

S0300-BV-CAT-020**PUMP, DIAPHRAGM, 2-INCH, PNEUMATIC****ESSM NUMBER PU2105****DESCRIPTION**

The Pneumatic 2-Inch Diaphragm Pump PU2105 is made of aluminum and is typically used to move abrasive, heavy, viscous, corrosive and aggressive materials. The pump is used in applications where electricity is not available or cannot be used due to safety conditions. The diaphragm pump provides pollution-free and energy-efficient operation, with fewer moving parts than conventional motor-driven pumps. The 2-Inch Diaphragm Pump is completely self-priming from a dry startup to suction lifts of 20 feet. For priming of suction lifts in excess of 20 feet, fill the chambers of the pump with water. An air supply less than 125 psi is required to operate the pump.

SPECIFICATIONS

Manufacturer	Warren Rupp
Model	SA2-A
Displacement per stroke	.43 gal.
Max. flow per minute	140 gpm @ 100 psi supply air pressure
Max. solid handling	2"
Suction	2"
Discharge	2"
Max. air supply pressure	125 psi

PERFORMANCE CURVE

S0300-BV-CAT-010

PUMP, DIAPHRAGM, 2-INCH, PNEUMATIC

ESSM NUMBER PU2105

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 11 in.
Width	1 ft, 5 in.
Height	1 ft, 9 in.
Cube	5 cu ft
Weight	80 lb

REFERENCES

1. Sandpiper Operating Instructions, Service Manual and Parts List for the Warren Rupp Model SA2-A Type 3 Pump.

S0300-BV-CAT-020



Spare Parts Kit PW0021

S0300-BV-CAT-020**SPARE PARTS KIT, FOR POWER UNIT PW0020****ESSM NUMBER PW0021**

DESCRIPTION

The Spare Parts Kit PW0021 contains items necessary to support the operation and maintenance of one Hydraulic Power Unit PW0020.

SPECIFICATIONS

The spare parts kit contains the following:

<u>Item</u>	<u>Qty</u>
Container, spare parts, 18" x 11" x 10":	1
Filter, engine air	1
Filter, engine oil	1
Filter, engine fuel	1
Filter, hydraulic	1
Inventory, laminated	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 7 in.
Width	11 in.
Height	10 in.
Cube	1 cu ft
Weight	6 lb

REFERENCES

None

S0300-BV-CAT-020



Mod 8 Hydraulic Power Unit PW0200B

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 8, DIESEL,
71 GPM @ 4000 PSI****ESSM NUMBER PW0200B****DESCRIPTION**

The Mod 8 Diesel Hydraulic Power Unit PW0200B is a skid-mounted assembly that provides hydraulic fluid flow of up to 71 gpm at 4000 psi from a variable displacement, pressure compensated pump. The flow rate can be mechanically varied at the control panel. Maximum system pressure is adjustable at the pump.

SPECIFICATIONSHydraulic Power Unit

Manufacturer Highstar Industries
Model 82647

Engine

Manufacturer Detroit Diesel
Model Series 40, 8.7 LT
Type In-line
No. of cylinders 6, in-line config.
Combustion 4-cycle
Starting Hydraulic
Horsepower 225 @ 2100 rpm
Fuel Diesel
Fuel source 120-gal. ext. tank
w/ pickup tube & hoses
Fuel consumption 11.8 gph

Pump

Manufacturer Sauer-Sundstrand
Model Series 90
Type Variable
Max. displacement 6.10 cu. in./rev
Hydraulic fluid Rando 46
Hydraulic reservoir capacity 70 gallons
Hydraulic fluid output 71 gpm @ 4000 psi

PHYSICAL CHARACTERISTICSOperating/Shipping

Length 7 ft, 7 in.
Width 3 ft, 11 in.
Height 4 ft, 0 in.
Cube 122 cu ft
Weight 3850 lb

REFERENCES

1. Commercial Off-the-Shelf (COTS) Manual, Hydraulic Power Unit (HPU) Model 82647, PW0200.

S0300-BV-CAT-020



Spare Parts Kit PW0206

S0300-BV-CAT-020**SPARE PARTS KIT FOR HYDRAULIC POWER UNIT
PW0200****ESSM NUMBER PW0206**

DESCRIPTION

The Spare Parts Kit PW0206 contains the items necessary to support the operation and maintenance of one Hydraulic Power Unit PW0200.

SPECIFICATIONS

The Spare Parts Kit contains the following:

<u>Item</u>	<u>Qty</u>
Container, spare parts kit, 24-gallon:	1
Filter, air	1
Filter, engine coolant	1
Filter, engine oil	1
Filter, fuel	1
Filter, engine fuel prefilter	1
Filter, hydraulic, high pressure	1
Filter, hydraulic, medium pressure	2
Filter, hydraulic, system return	2
Plug, bleeder	1
Repair kit, quick disconnect (71-3C16-SPK)	2
Repair kit, quick disconnect (71-3N16-SPK)	2
V-belt, engine auxiliaries	1
V-belt, engine starting system	1
Inventory, laminated	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	1 ft, 4 in.
Height	1 ft, 0 in.
Cube	2.5 cu ft
Weight	28 lb

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.



120-Gallon Diesel Fuel Tank TK0045

S0300-BV-CAT-020**TANK, DIESEL FUEL, 120-GALLON****ESSM NUMBER TK0045****DESCRIPTION**

The 120-Gallon Diesel Fuel TK0045 is a portable, stainless steel container used to provide No.2 diesel fuel to the PW0200 diesel HPU. Four pad eyes are located at the top of the tank for attachment of lifting slings, and there is sufficient clearance at the bottom for lifting forks. A tank opening with cap is provided for filling and for the insertion of a pickup/return fuel hose assembly. The fuel pickup tube and hoses are stored on the HPU. A manhole is provided for cleaning and inspecting the tank interior. A ball-type valve, located on one side of the tank bottom is used to drain fuel from the tank.

SPECIFICATIONS

Manufacturer	Hoover Group, Inc.
Design (pressure)	9.5 psi
Tank weight	300 lb
Gross weight	1255 lb
Volume capacity	120 gal.
Material	Stainless steel, ASTM A-240

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	4 ft, 2 in.
Width	3 ft, 8 in.
Height	2 ft, 3 in.
Cube	33 cu ft
Weight (empty)	300 lb
Weight (full)	1174 lb

REFERENCES

None

S0300-BV-CAT-020



2" To 6" Submersible Hydraulic Pump System Tool Box TL0023

S0300-BV-CAT-020**TOOL BOX, 2" TO 6" SUBMERSIBLE
HYDRAULIC PUMP SYSTEM****ESSM NUMBER TL0023**

DESCRIPTION

The 2" To 6" Submersible Hydraulic Pump System Tool Box TL0023 is a basic mechanic's tool set that contains 1/2" drive sockets and accessories, combination, open-end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up, operate, and maintain the 2" To 6" Submersible Hydraulic Pump System.

SPECIFICATIONS

Manufacturer ESSM Facility

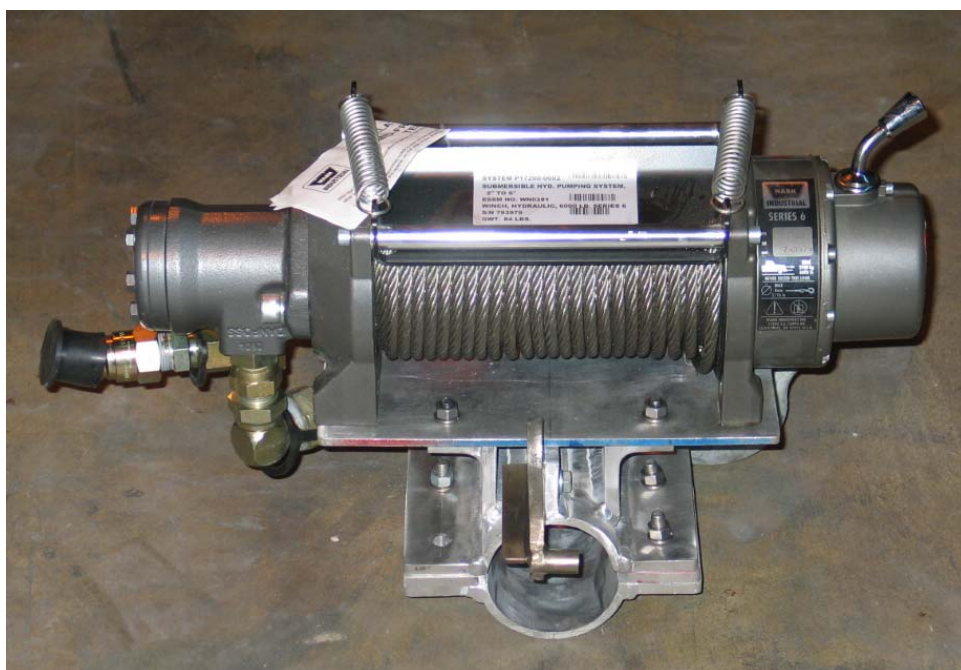
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 3 in.
Width	9 in.
Height	10 in.
Cube	1 cu ft
Weight	70 lb

REFERENCES

None

S0300-BV-CAT-020



6000-Pound, Series 6 Hydraulic Winch WN0281

S0300-BV-CAT-020**WINCH, HYDRAULIC, 6000-POUND,
SERIES 6****ESSM NUMBER WN0281**

DESCRIPTION

The 6000-Pound, Series 6 Hydraulic Winch WN0281 is a portable, general purpose, single-drum unit used with the Submersible 6" Hydraulic Pump System. The winch has a capacity of 6000 pounds and is mounted to one leg of the Tripod PU0284.

SPECIFICATIONS

Manufacturer	Warn Industries Inc.
Model	Series 6 hydraulic
Rated working load	6000 lb
Winch breaking strength, first layer	12,000+ lb
Maximum wire rope diameter	5/16"
Drum dimensions:	
Barrel diameter	2 1/2"
Flange diameter	6"
Distance between flanges	9"
Total gear reduction	26 : 1
Torque requirement:	
Static input torque	415 lb-in. (start maximum load)
Dynamic input torque	365 lb-in. (operate maximum load)
Maximum input flow at rated load	12 gpm
Duty cycle rating	258'

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 3 in.
Width	1 ft, 9 in.
Height	1 ft, 4 in.
Cube	3 cu ft
Weight	84 lb w/cable

REFERENCES

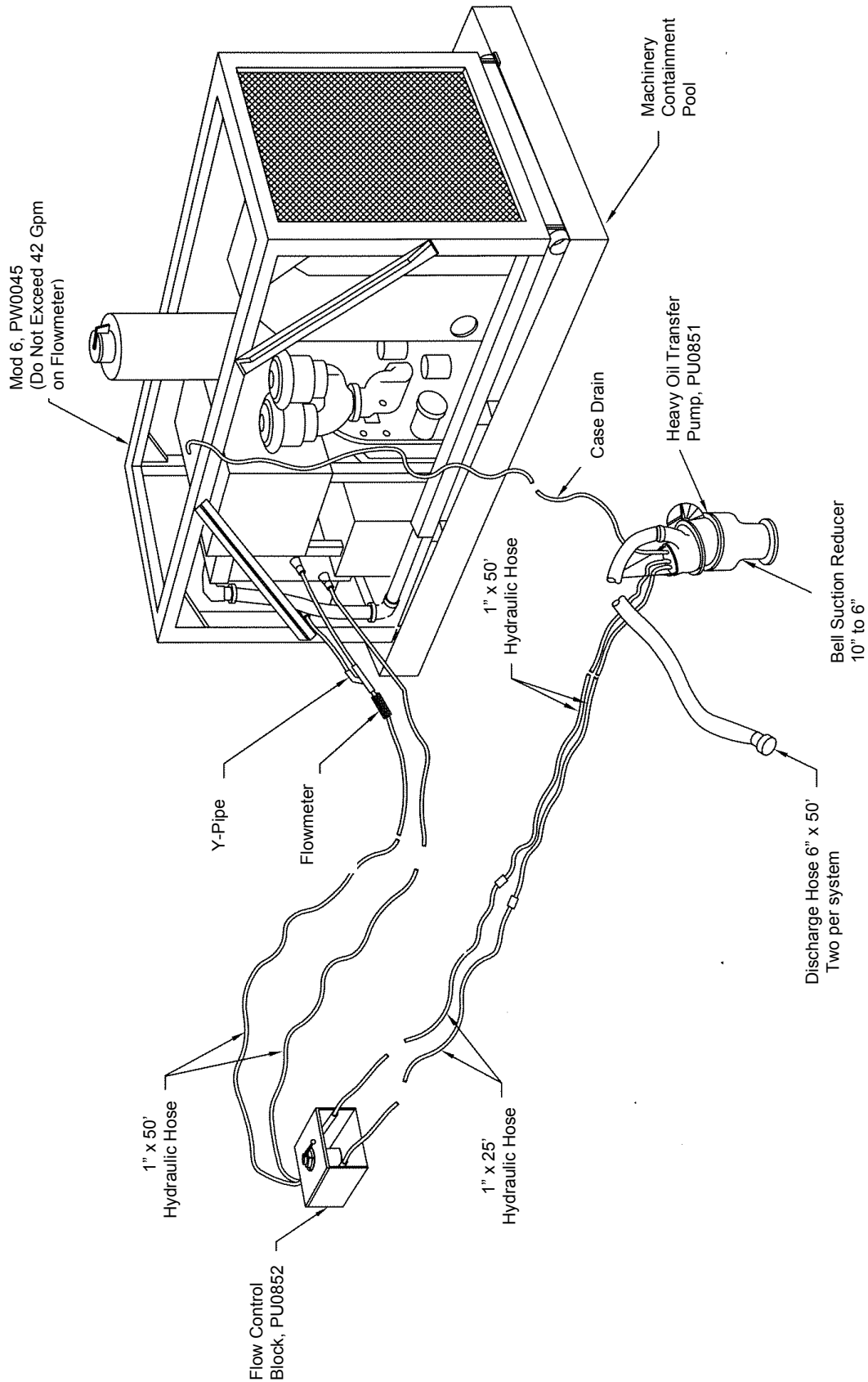
1. Warn Operators Manual for Series 6 Hydraulic Winch.

S0300-BV-CAT-020

VISCOUS OIL TRANSFER SYSTEM P13200



S0300-BV-CAT-020



Viscous Oil Transfer System P13200

S0300-BV-CAT-020**VISCOUS OIL TRANSFER SYSTEM****SYSTEM NUMBER P13200****SYSTEM DESCRIPTION**

The Viscous Oil Transfer System P13200 consists of a modified Archimedes' screw-type pump and the necessary ancillary equipment for proper system operation. The system is designed to move highly viscous products at high discharge pressures from casualty vessels. It also aids in moving ballast water, offloading skimmer sumps, and in the recovery of viscous products that have escaped stricken vessels. The system is packaged in one wire basket that serves as a storage/shipping container.

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Ancillary Set for PU0851:	PU0854	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
Pump, Heavy Oil Transfer, DOP-250	PU0851	1
Hydraulic Flow Control Block for PU0851	PU0852	1
Hydraulic Flowmeter for PU0851	PU0853	1
2. Power Unit, Hyd, Mod 6, Diesel, 52 Gpm @ 2500 Psi	PW0045*	1
3. Spare Parts Kit, For Power Unit PW0045	PW0046*	1

* The Mod 6 Hydraulic Power Unit PW0045 and the Spare Parts Kit PW0046 are required for operation of the Vicious Oil Transfer System P13200. The Mod 6 and Spare Parts Kit are not assigned as part of the Vicious Oil Transfer System P13200. When the Vicious Oil Transfer System is shipped these items will be pulled from ESSM inventory and shipped along with the system.

S0300-BV-CAT-020



Ancillary Set PU0854

S0300-BV-CAT-020**ANCILLARY SET FOR PU0851****PU0854**

DESCRIPTION

The Ancillary Set PU0854 (for PU0851) is a wire mesh container that is used for storage and shipping of the Viscous Oil Transfer System components. The ancillary set contains the items listed below.

SPECIFICATIONS

Manufacturer ESSM Facility

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Adapter, 6" female camlock to Hydrasearch fitting		1
Adapter, camlock, 6" male to 6" male		1
Adapter, pump base to 6" female camlock		1
Adapter, QD, male to female, -12 to -16		1
Adapter, QD, male to female, -16 to -12		1
Adapter, QD, male to female, -4 to -6		1
Adapter, QD, male to female, -6 to -4		1
Bleeder set, male & female		1
Bolt, stainless steel, 5/16"-18 x 1 1/2"		1
Cap, 6", camlock		3
Container, wire mesh, 72" x 29" x 42"		1
Container, wire mesh, upper basket, 65" x 24" x 19"		1
Containment Pool, 5' x 5' x 12"	CP3000	1
Containment Pool, 10' x 6' x 12"	CP3010	1
Y-connector, hydraulic, w/5600-16-16s couplings		1
Coupling, camlock, 6" female to 6" female		1
Coupling, QD, female half -4		1
Coupling, QD, female half -6		1
Coupling, QD, female half -12		1
Coupling, QD, female half -16		1
Coupling, QD, male half -4		1
Coupling, QD, male half -6		1
Coupling, QD, male half -12		1
Coupling, QD, male half -16		1
Elbow, 45°, camlock, 6"		1
Elbow, 90°, camlock, 6"		1
Gasket, camlock rubber, 6"		6
Gasket, rubber, 1/8" - optional (old pumps)		2
Hose assembly, hydraulic, 1" x 50' w/male & female QDs		4

S0300-BV-CAT-020**ANCILLARY SET FOR PU0851****PU0854**

SPECIFICATIONS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Hose assy, hydraulic, 3' w/male QD attached to pump		1
Hose assy, hydraulic, w/female QD attached to pump		1
Hose hydraulic, case drain, 1/4" x 50' w/male & female QDs		3
Hose hydraulic, case drain, 3/8" x 50' w/male & female QDs		3
Hose, 6" x 50' w/male & female camlock fittings (optional)		2
Hose, layflat, 6" x 50' w/camlock (optional)		2
Hose assembly, hydraulic, 1" x 20' w/male & female QDs		2
Hydraulic Flow Control Block, For PU0851	PU0852	1
Hydraulic Flowmeter, For PU0851	PU0853	1
Inventory, laminated		1
Manual & Parts List for DOP-250		1
Nut, stainless steel, 5/16" -18		18
Pad, sorbent		1
Pig, tapered, 6"		2
Pliers, combination		1
Pliers, diagonal cutting		1
Plug, 6", camlock		1
Pump, Heavy Oil Transfer, DOP-250	PU0851	1
Quick disconnect repair kit -4		2
Quick disconnect repair kit -6		2
Quick disconnect repair kit -12		2
Quick disconnect repair kit -16		2
Ratchet strap, 1"		2
Schematic, system setup, Mod 6, laminated		1
Screen, pump suction		1
Sling, 2-point pickup, 3/8" x 3', 6 x 25 IWRC		1
Sling, 4-point w/safety hooks, 3/8" x 5'		1
Spare parts box		1
Stinger, 6" diameter x 4', w/male and female camlock fittings		1
Washers, flat, 5/16", SS		18
Washers, lock, 5/16", SS		18
Wire, seizing, SS, Type, 302L/304		1

S0300-BV-CAT-020

ANCILLARY SET FOR PU0851

PU0854

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 0 in.
Width	2 ft, 5 in.
Height	4 ft, 5 in.
Cube	64 cu ft
Weight	1590 lb

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000**

DESCRIPTION

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	1 ft, 8 in.	5 ft, 0 in.
Width	1 ft, 8 in.	5 ft, 0 in.
Height	6 in.	1 ft, 0 in.
Cube	1.5 cu ft	25 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY,
10 'X 6' X 12", COOLEY URETHANE****CP3010**

DESCRIPTION

The 10' x 6' x 12" Machinery Containment Pool CP3010 is a urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the equipment placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	0 ft, 6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



Heavy Oil Transfer Pump PU0851

S0300-BV-CAT-020**PUMP, HEAVY OIL TRANSFER (DOP-250)****ESSM NUMBER PU0851****DESCRIPTION**

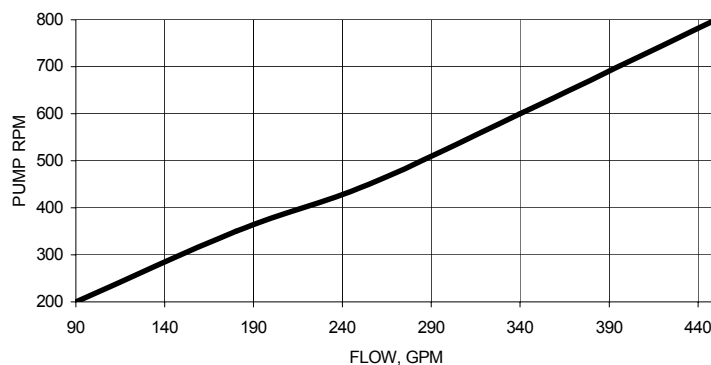
The Heavy Oil Transfer Pump PU0851 is a modified Archimedes' screw-type pump that is capable of moving highly viscous products at high discharge pressures. The heavy oil transfer pump is designed to work well at slow operating speeds and can gently handle any medium without mixing or emulsifying the medium.

SPECIFICATIONS

Manufacturer	Desmi
Model	DOP-250
Min. manhole diameter	24"
Pump outlet	6" male camlock
Maximum flow rate	42 gpm
Maximum pressure	150 psig
Maximum capacity	440 gpm
Hydraulic motor	Danfoss, Type OMTS-200
Hydraulic connections:	
Pressure line	1" Aeroquip coupling, male, 5602-16-16S
Return line	1" Aeroquip coupling, female, 5601-16-16S
Drain line	3/8" Aeroquip coupling, female, 5601-6-6S

PERFORMANCE CURVE

Output depends on pump operating rpm and viscosity of liquid being pumped. This curve applies to heavy fuel oil/water emulsion with 41% water content.



Performance Curve for Heavy Oil Transfer Pump PU0851

S0300-BV-CAT-020

PUMP, HEAVY OIL TRANSFER (DOP-250)

ESSM NUMBER PU0851

PHYSICAL CHARACTERISTICS

Length	1 ft, 10 in.
Width	1 ft, 2 in.
Height	1 ft, 7 in.
Cube	3.5 cu ft
Weight	172 lb

REFERENCES

1. Operators Manual for Desmi DOP-250.

S0300-BV-CAT-020



Hydraulic Flow Control Block PU0852

S0300-BV-CAT-020**HYDRAULIC FLOW CONTROL BLOCK FOR PU0851****PU0852****DESCRIPTION**

The Hydraulic Flow Control Block PU0852 is designed to control the direction of flow of the hydraulic fluid from the hydraulic power unit (HPU) to the Heavy Oil Transfer Pump PU0851. The Hydraulic Flow Control Block controls neutral, forward, and reverse direction of the pump. The flow control block should not exceed a maximum flow rate of 42 gpm to the Heavy Oil Transfer Pump and is controlled by the speed of the HPU.

SPECIFICATIONS

Manufacturer	ESSM Facility
Type	Aluminum, single circuit
Hydraulic fluid required	Any petroleum based hydraulic fluid
Working pressure	2500 psig
Maximum flow rate	42 gpm

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 3 in.
Width	1 ft, 5 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	31 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Flow Control Meter PU0853

S0300-BV-CAT-020**HYDRAULIC FLOWMETER FOR PU0851****PU0853****DESCRIPTION**

The Hydraulic Flow Control Meter PU0853 is an instrument designed for monitoring and measuring the rate of flow of the hydraulic fluid that is being pumped from an HPU to the hydraulic motor, pump, or other operating equipment.

SPECIFICATIONS

Manufacturer	Commercial
Model	0 to 75 gpm
Type	In-line
Connections	Series -16 male and female quick disconnects

PHYSICAL CHARACTERISTICS

Length	2 ft, 0 in.
Diameter	4 in.
Cube	1 cu ft
Weight	10 lb

REFERENCES

None

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 6, DIESEL,
52 GPM @ 2500 PSI****ESSM NUMBER PW0045**

DESCRIPTION

The Mod 6 Hydraulic Power Unit (HPU) PW0045 is a portable, diesel driven unit that provides hydraulic flow through two independent circuits. Each circuit is controlled by an independent directional control valve. An adjustable pressure relief valve controls the output pressure delivered to each supply circuit. The total hydraulic output is 52 gpm at a pressure of 2500 psi.

Hydraulic connections utilize 1-inch Aeroquip 5600 series quick disconnect fittings (two male for supply and two female for return).

The HPU is skid-mounted with forklift slots and enclosed in a protective frame with two lifting points.

SPECIFICATIONS

Hydraulic Power Unit Assembly

Manufacturer Commercial, Navy Design
Drawing number NAVSEA 5191947

Diesel Engine

Manufacturer Detroit Diesel-Allison
Series 4-53
Rpm 2200
Hp 87 @ 2200 rpm
Starting Hydraulic
Fuel Diesel
Fuel source 20-gal. internal tank,
with pickup tube
Fuel consumption 6 gph

Hydraulic Pump

Manufacturer Commercial Shearing
Model Two P30's, tandem
Part number P30B-442-B1-OJ15-25-C-
OJ15-1
Type Gear
Oper. press. (max.) 2500 psi
Flow 26 gpm each @ 2200 rpm
Hyd. reservoir 50 gallons
Hydraulic fluid Rando 46

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length 8 ft, 0 in.
Width 2 ft, 10 in.
Height 4 ft, 10 in.
Cube 120 cu ft
Weight 4400 lb

S0300-BV-CAT-020

**POWER UNIT, HYDRAULIC, MOD 6, DIESEL,
52 GPM @ 2500 PSI**

ESSM NUMBER PW0045

REFERENCES

1. Operation and Maintenance Instructions for the Hydraulic Power Unit, Model 6, NAVSEA Manual S9597-AB-OMP-010.

S0300-BV-CAT-020



Spare Parts Kit PW0046

S0300-BV-CAT-020**SPARE PARTS KIT, FOR POWER UNIT PW0045****ESSM NUMBER PW0046**

DESCRIPTION

The Spare Parts Kit PW0046 contains the items necessary to support the operation and maintenance of one Hydraulic Power Unit PW0045.

SPECIFICATIONS

The Spare Parts Kit contains the following:

<u>Item</u>	<u>Qty</u>
Container, Spare Parts Kit, 21" x 16" x 12":	1
Filter, hydraulic	2
Filter, fuel (BF-593)	2
Filter, fuel (BF-592)	2
Filter, engine oil	2
Gasket, thermostat	1
Injector, fuel	2
Manual, Operation and Maintenance, Mod 6 HPU	1
O-ring, Buna rubber	12
O-ring, Teflon	12
Thermostat	1
V-belt	1
V-belt set	1
Inventory, laminated	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	1 ft, 4 in.
Height	1 ft, 0 in.
Cube	2.5 cu ft
Weight	28 lb

REFERENCES

None

S0300-BV-CAT-020

BOARDING KIT P02100

S0300-BV-CAT-020



Boarding Kit System P02100

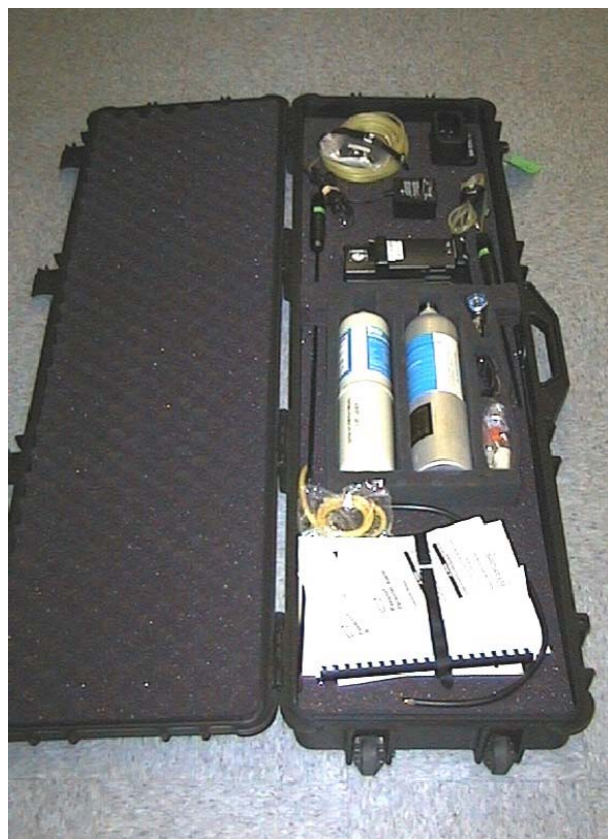
S0300-BV-CAT-020**BOARDING KIT****SYSTEM NUMBER P02100****SYSTEM DESCRIPTION**

The Boarding Kit System P02100 is a containerized package of equipment that is intended to allow offloading personnel to safely board a casualty vessel, inspect the ship, and prepare for petroleum, oil, lubricant (POL) offloading or other salvage operations. The system consists of emergency breathing equipment, a gas monitoring meter with calibration kit, tank sounding gear, personnel protective clothing, radios with headsets, drinking water and rations, a four-man nine-foot inflatable boat, non-sparking tools and tool box, a Jacob's ladder, a block and tackle for entering tanks, and a shipping container that doubles as a small personnel shelter/office on the deck of a casualty vessel. Safety equipment is also provided for survival use in case of an emergency.

SYSTEM COMPONENTS

Item	ESSM Number	Qty
1. Alarm, Personal, Passport	AL0200	1
2. Breathing Apparatus, Air Pack, w/Tank, 30-Minute	BA0021	4
3. Boarding Kit, Oil Tanker	BO0543	1
4. Radio, VHF, Walkie-Talkie, Intrinsically Safe, Icom (96-Channel)	RA1731	4
5. Headset, Noise Reduction, Series 7000	RA1732	4
6. Roundslings, Polyester, 16'	SL0012	4
7. Tape, Gauging, Portable, Electronic, Petroleum & Chemical	TA0010	1
8. Tool Box, Boarding Kit	TL0080	1
9. Boat, 9', Inflatable	WB0010	1

S0300-BV-CAT-020



Passport Personal Alarm AL0200

S0300-BV-CAT-020**ALARM, PERSONAL, PASSPORT****ESSM NUMBER AL0200**

DESCRIPTION

The Passport Personal Alarm AL0200 when properly used alerts the user to the presence of combustible gases and vapors and to atmospheres that are rich or deficient in oxygen. It also alerts the user to the presence of specific toxic gases when it is equipped with sensors for those gases. These conditions are displayed clearly and simultaneously on the face of the instrument, and the instrument must be used to detect only those specific gases. Other toxic hazards may be present; the Passport Personal Alarm is not intended to detect these other toxic hazards. The personal alarm measures combustible gases and vapors and cannot measure the presence of combustible airborne mist such as lubricating oils.

SPECIFICATIONS

Manufacturer	MSA
Model	FiveStar
Sensors	Oxygen Carbon Monoxide Hydrogen Sulfide Combination (Nitrogen and Methane)

PHYSICAL CHARACTERISTICS

Shipping

Length	4 ft, 5 in.
Width	6 in.
Height	1 ft, 6 in.
Cube	3.5 cu ft
Weight	34 lb

REFERENCES

1. MSA Passport FiveStar Personal Alarm Technical Manual #710440.
2. MSA Passport FiveStar Personal Alarm Instruction Manual #710436.
3. Calibration Test System Instruction Manual.

S0300-BV-CAT-020



Breathing Apparatus BA0021

S0300-BV-CAT-020**BREATHING APPARATUS, AIR PACK
W/TANK, 30-MINUTE****ESSM NUMBER BA0021****DESCRIPTION**

The 30-Minute Air Pack Breathing Apparatus with Tank BA0021 is a 30-minute rated, pressure-demand, self-contained breathing apparatus (SCBA). All components are contained in a bag, which unzips and reverses to become a vest holding the SCBA components.

The SCBA has an airline connection, which allows it to be used as a combination self-contained breathing apparatus/supplied air respirator (SCBA/SAR) thus providing extended operation in hazardous environments.

The air cylinder must be charged with Grade D quality or better breathing air. In Canada refer to CSA Standard Z180.1 (table for the quality of compressed breathing air). The air is supplied to the facepiece from the air cylinder carried in a pouch on the wearer's back by way of a first stage regulator and a pressure-demand valve.

The facepiece attaches to the head by a series of six straps that are pulled sufficiently to seal the facepiece around the face and prevent air leakage. Under normal conditions, a good facial seal will help keep the pressure inside the facepiece higher than the pressure of the external air, thus preventing the external air from entering the facepiece.

SPECIFICATIONS

Manufacturer	3M
Model	BA-4630
Facepiece color	Black with yellow exhalation valve cover grill
Facepiece material	Silicone rubber
Facepiece lens material	Hard-coated polycarbonate
Bag/vest material	Cordura Nylon or Advance Kevlar Nomex
Working pressure	4500 psi
Cylinder capacity	45 cu ft
Approved working temperature range	-25° to 160° F (-32° to 71° C)
Duration @ 40 lpm	30 minutes
Burst disk pressure	7500 psig (51.6 x 10 ³ kPa)
Low-pressure audible alarm activation range	1035 - 1215 psig
NIOSH approval number	TC-13F-454
SCBA system air flow	40 lpm
Static pressure range	0.0 - 1.5 iwg (0.0 - 2.8 mm Hg)
Positive pressure range	0.0 - 3.5 iwg (0.0 - 6.5 mm Hg)

S0300-BV-CAT-020**BREATHING APPARATUS, AIR PACK,
W/TANK, 30-MINUTE (CONTD)****ESSM NUMBER BA0021**

SPECIFICATIONS (Continued)

Constant flow emergency bypass	135 lpm @ 2216 psig (4.77 cfm @ 15.3×10^3 kPa) 85 lpm @ 500 psig (3.00 cfm @ 3440 kPa)
Minimum low-pressure whistle sound level	80 dB(A)

PHYSICAL CHARACTERISTICS

Shipping

Length	2 ft, 2 in.
Width	9 in.
Height	1 ft, 3 in.
Cube	2.5, cu ft
Weight	26 lb

REFERENCES

1. User Instructions for BA-4430, BA-4530, BA-4630, BA-4730.

S0300-BV-CAT-020



Boarding Kit BO0543 Interior



Boarding Kit BO0543

S0300-BV-CAT-020**BOARDING KIT, OIL TANKER****ESSM NUMBER BO0543****DESCRIPTION**

The Oil Tanker Boarding Kit BO0543 is a containerized package of equipment that will allow personnel to safely board a casualty vessel to inspect and prepare for petroleum, oil, lubricant (POL) pump offloading and other salvage operations. The equipment is shipped and stored in a boarding kit container van. The contents of the container include emergency breathing equipment, gas monitoring meter with calibration kit, tank sounding gear, personnel protective clothing, radios, water/rations, a four-man nine-foot inflatable boat, non-sparking tools, a Jacob's ladder, and block and tackle for entering tanks. Safety equipment is also provided for survival use in case of an emergency.

SPECIFICATIONS

None

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 2 in.
Cube	512 cu ft
Weight	2732 lb

REFERENCES

1. Fire Suit Donning Instruction Manual.

S0300-BV-CAT-020



Intrinsically Safe Walkie-Talkie Radio RA1731

S0300-BV-CAT-020

**RADIO, VHF, WALKIE-TALKIE,
INTRINSICALLY SAFE, ICOM (96-CHANNEL)**

ESSM NUMBER RA1731

DESCRIPTION

The Icom 96-Channel, Intrinsically Safe, Walkie-Talkie Radio RA1731 is an all solid-state, VHF-FM hand-held transceiver designed for use in the frequency range of 156.025 MHz to 157.425 MHz. The radio requires an input power of 7.2 V dc for operation, which is supplied by a rechargeable battery pack. RF power is switchable between 5 watts and 1 watt. Features include: on-off/volume control, squelch control, channel selector, high-low power switch, push-to-talk switch, antenna, external speaker-microphone, a transmit indicator and battery charger.

SPECIFICATIONS

Manufacturer	Standard
Model	IC-F30LT
Frequency range:	
Marine:	
Transmit	156.025 MHz to 157.425 MHz
Receive	156.050 MHz to 157.425 MHz
LMR Tx/Rx	1246-147 MHz
Number of channels	96
Input voltage	7.2 V dc
RF output power	5-watts high, 1-watt low

PHYSICAL CHARACTERISTICS

Operating (with antenna installed)

Length	1 ft, 0 in.
Width	2 1/2 in.
Height	2 in.
Cube	1 cu ft
Weight	2 lb

REFERENCES

1. Owner Operator's Manual for the Icom IC-F30LT Radio.

S0300-BV-CAT-020



Series 7000 Noise Reduction Headset RA1732

S0300-BV-CAT-020**HEADSET, NOISE REDUCTION, SERIES 7000****ESSM NUMBER RA1732**

DESCRIPTION

The Series 7000 Noise Reduction Headset RA1732 consists of a noise reducing headset and a voice-activated VOX box and the necessary cables to connect the components. The Series 7000 Noise Reduction Headset is designed to lower the noise level 23 decibels below the ambient noise level when worn properly over the ear. When used in conjunction with the VOX box and a portable transceiver, hands-free, voice -activated radio transmission is possible.

SPECIFICATIONS

Headset

Manufacturer David Clark
 Model H7040
 Noise reduction rating 23dB

VOX Box

Manufacturer David Clark
 Model V7000
 Attack time 10 milliseconds
 Hold time 0.3 to 1.5 seconds
 Microphone input level 0.14 mV min
 S/N ratio for VOX activation 6 dB
 Mic audio to radio transmitter 0 to 12 mV minimum
 At minimum mic input level
 PTT switching, lever type 150 mA maximum
 (close from positive to ground)
 Audio distortion 4% maximum
 RFI protection 25-900 MHz
 Operating temperature -30° C to +60° C

PHYSICAL CHARACTERISTICS

Shipping

Length 11 in.
 Width 10 in.
 Height 5 in.
 Cube 1 cu ft
 Weight 1 lb

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned, in this case the Oil Tanker Boarding Kit BO0543.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Petroleum & Chemical Electronic Gauging Tape TA0010

S0300-BV-CAT-020**TAPE, GAUGING, PORTABLE, ELECTRONIC,
PETROLEUM & CHEMICAL****ESSM NUMBER TA0010**

DESCRIPTION

The Petroleum & Chemical Electronic Gauging Tape TA0010 consists of an electronic gauging tape on a steel reel, storage case, batteries, and operating and maintenance instructions. The tri-mode portable ullage, temperature, and interface gauging tape incorporates extremely accurate instrumentation to provide petroleum and other liquid tank measurements. The gauging tape provides measurement of surface ullage level of oil and other fluids to an accuracy repeatability of $\pm 1/8$ inch. It determines the exact location of ullage level of the interface layer that exists when an oil-water mixture is contained within the same vessel. The tape also provides measurement in degrees Fahrenheit or degrees Centigrade of the temperature of the fluid within a vessel, at any or several desired ullage levels, in rapid succession. Measurement is given to the nearest 0.1° and is accurate to $\pm 0.5^\circ\text{F}$ over the calibrated temperature range.

SPECIFICATIONS

Manufacturer	MMC International
Model	D-2401-2
Display readable temperature range	-40°F to 199.9°F
Tape length	100 ft (30 meters)
Guaranteed temperature calibration range	32°F to 190°F (0°C to 88°)
Accuracy over calibration range	$\pm 0.5\text{F}$ ($\pm 0.3^\circ\text{C}$)
Accuracy linear measurements	$1/8''$ ($\pm 0.3\text{mm}$) plus $\pm 0.1\%$ of total tape length
Minimum detectable tank bottom liquid level	$3''$ (10mm)
Minimum detectable floating product level	$1/8''$ (3 mm)
Display	3 1/2-digit liquid crystal display, 1/2" character height
Operating temperature limit of LCD	-40°F to 85°C (ambient)

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	2 ft, 5 in.
Width	8 in.
Height	1 ft, 5 in.
Cube	2.5 cu ft
Weight	18 lb

REFERENCES

1. MMC Operating and Maintenance Instructions.

S0300-BV-CAT-020



Oil Tanker Tool Box TL0080

S0300-BV-CAT-020**TOOL BOX, OIL TANKER****ESSM NUMBER TL0080**

DESCRIPTION

The Oil Tanker Tool Box TL0080 is a basic mechanic's tool set consisting of a non-sparking tool box and non-sparking ratchets, sockets and accessories, wrenches, pliers, hammers and other miscellaneous tools.

SPECIFICATIONS

Manufacturer of tool box	Kennedy
Manufacturer of tools	Ampco

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 1 in.
Width	10 in.
Height	10 in.
Cube	1.5 cu ft
Weight	72 lb

REFERENCES

None

S0300-BV-CAT-020



9' Inflatable Boat WB0010

S0300-BV-CAT-020**BOAT, 9' INFLATABLE****ESSM NUMBER WB0010**

DESCRIPTION

The 9' Inflatable Boat WB0010 is a lightweight, multi-purpose boat. The WB0010 Inflatable Boat is used to transport people, equipment, and supplies. The maximum payload is 700 pounds. The inflatable boat is also used to support various operations where a small lightweight boat is required.

SPECIFICATIONS

Manufacturer	Avon
Model	AV Redcrest
Type	290579
Max. no. persons	4
Max. load capacity	700 lb
Max. horsepower	4
Number of air chambers	2
Hull material	Hypalon/nylon

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	9 ft, 0 in.	3 ft, 3 in.
Width	4 ft, 10 in.	1 ft, 6 in.
Height	15 in.	1 ft, 1 in.
Cube	45 cu ft	6 cu ft
Weight	40 lb	58 lb

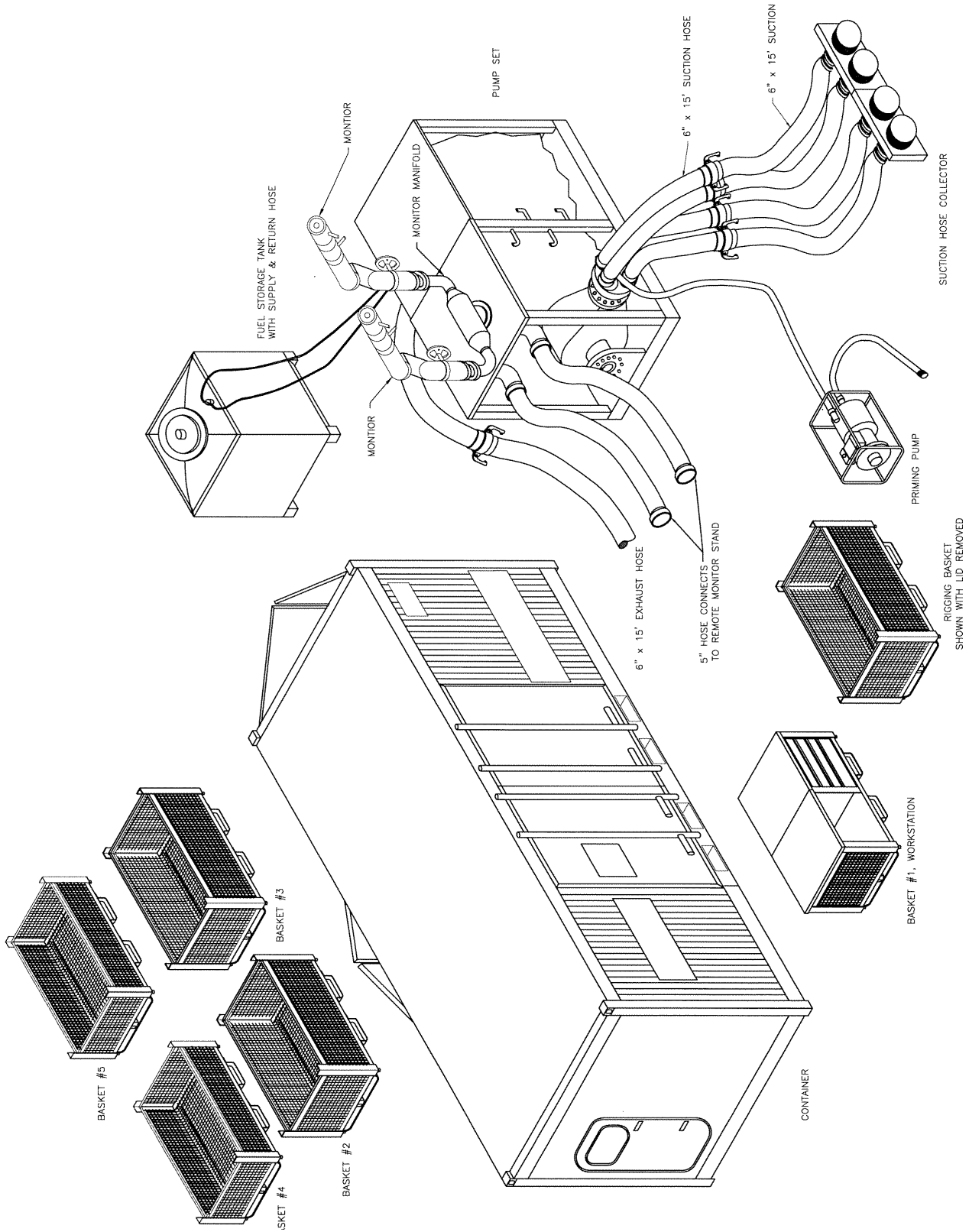
REFERENCE

1. Avon Instruction Manual.

S0300-BV-CAT-020

PORTABLE FIREFIGHTING SYSTEM P07100

S0300-BV-CAT-020



OSFS Overview

S0300-BV-CAT-020**FIREFIGHTING SYSTEM (PORTABLE)****SYSTEM NUMBER P07100****SYSTEM DESCRIPTION**

The Portable Off-Ship Firefighting System P07100 (OSFS) is a portable firefighting system that has two configurations: a prototype system and a second-generation system.

Both configurations contain a portable, self-contained, diesel driven centrifugal firefighting pump set that is skid-mounted and is capable of delivering 3000 gpm of water at a pressure of 175 psi. The pump sets for both configurations have hydraulic starting systems and a control panel that allows the operator to monitor the operation of the unit. The prototype system has a 350-gallon internal fuel tank for the pump set, while the second-generation system is configured with an external 350-gallon portable stainless steel fuel tank (TK0040) with fittings that will accommodate the fuel pickup tubes for that pump set.

Both systems are supplied with monitors, hoses (suction, discharge, and firefighting), nozzles (1250-gpm and 125-gpm hand-held), proportioners, pickup tubes, and the ancillary equipment needed to successfully fight a fire.

The ancillary equipment for each system is stored inside five ancillary baskets, which are stored in the system van VA0520. The van also provides storage for the pump set, various hoses, lifting slings, and personnel equipment bags.

Both systems also have a rigging basket (FF0501) with various tie-down components, such as turnbuckles, chains, and eyebolts.

The OSFS is designed to supplement a salvage ship's installed firefighting system by providing an additional supply of firefighting water. The system also provides firefighting capabilities for vessels that are otherwise incapable of performing firefighting operations. In addition, the system has Aqueous Film Forming Foam (AFFF) proportioning capabilities. However, the AFFF is not a part of the OSFS system and will have to be provided by the user.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Firefighting System (Portable)	VA0520	1
Dehumidifier, Model SSP-6A	DE0010 (not shown)	1
Pump Set, Centrifugal, Diesel, 3000 gpm @ 175 psi	FF0500	1
Pump, Centrifugal, 2", Diesel	PU2110	1
Roundslings, Polyester, 14' 6"	SL0011 (Altn; not shown)	4
Roundslings, Polyester, 16'	SL0012	4
2. Rigging Basket, OSFS	FF0501	1
3. Tank, Diesel Fuel, 350-Gallon	TK0040	1

S0300-BV-CAT-020



Container Van VA0520



Container Van VA0520 Interior

S0300-BV-CAT-020**VAN, FIREFIGHTING SYSTEM (PORTABLE)****ESSM NUMBER VA0520****DESCRIPTION**

The Portable Firefighting System Van VA0520 is used to store the skid-mounted firefighting pump set and ancillary equipment baskets for the OSFS as listed below. Also stored in the van are water suction and engine exhaust hoses, lifting slings, and personnel equipment bags.

NOTE: Reference ancillary inventory for VA0520 for detailed contents of the equipment baskets.

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Pump Set, Centrifugal, Diesel, 3,000 gpm @175 psi	FF0500	1
2. Basket #1, Work station with mechanic's standard and metric tool sets		1
3. Basket #2, Adapters, flanges, collection device, and related hardware		1
4. Basket #3, Adapters, discharge manifold		1
5. Basket #4, Monitors, foam nozzles, 2 1/2-in. adapters, monitor gauges		1
6. Basket #5, 1 1/2-in., 2-in., 5-in. firehose and fuel pickup tubes		1
7. Bag, personnel equipment		7

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Prototype</u> <u>Operating/Shipping</u>	<u>Second-Generation</u> <u>Operating/Shipping</u>
Length	20 ft, 0 in.	20 ft, 0 in.
Width	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 6 in.	8 ft, 0 in.
Cube	1360 cu ft	1280 cu ft
Weight	22,880 lb	20,720 lb

REFERENCES

1. Operations Manual for Off-Ship Firefighting System.

S0300-BV-CAT-020



3000-Gpm Centrifugal Pump FF0500

S0300-BV-CAT-020**PUMP SET, CENTRIFUGAL, DIESEL,
3000 GPM @ 175 PSI****ESSM NUMBER FF0500****DESCRIPTION**

The Pump Set FF0500 is a portable, self-contained, skid-mounted firefighting unit. It is used aboard salvage ships or other vessels of opportunity and supplements the ship's installed firefighting system by providing additional flow of water and foam proportioning capabilities. The pump set also provides firefighting capabilities for vessels that are otherwise incapable of performing firefighting operations.

The pump set consists of a centrifugal pump, a diesel engine, and skid assembly. The pump is capable of delivering 3000 gpm of water at a pressure of 175 psi. The ancillary equipment for the pump set includes a davit, slings, a 2-inch centrifugal priming pump, and various other components that are contained inside five equipment baskets.

SPECIFICATIONSFire Pump Assembly

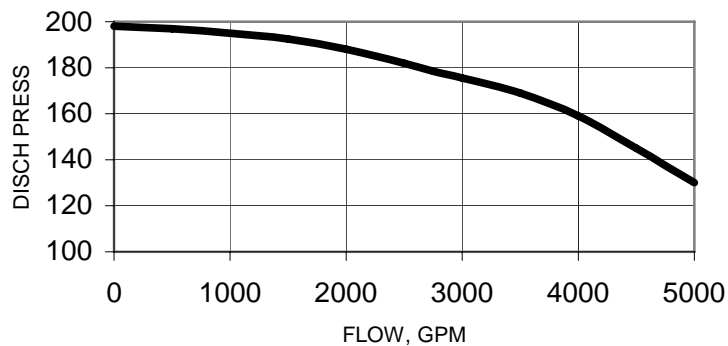
Manufacturer Fischcon Trading & Engineering
Model Hellbeater

Pump

Manufacturer Nijhuis
Model HGTFD-1-250-500-H
Type Centrifugal
Capacity 3000 gpm @ 175 psi
w/20' suction lift

Engine

Manufacturer Volvo-Penta
Model TAMD 122D
Number of cylinders 6
Fuel #2 Diesel
Fuel source:
Prototype 350-gal. int.
Second-Gen. 350-gal. ext.

DESIGN PERFORMANCE CURVE

S0300-BV-CAT-020**PUMP SET, CENTRIFUGAL, DIESEL,
3000 GPM @ 175 PSI****ESSM NUMBER FF0500**

	<u>Operating/Shipping Prototype</u>	<u>Operating/Shipping Second-Generation</u>
Length	8 ft, 0 in.	8 ft, 0 in.
Width	4 ft, 0 in.	4 ft, 1 in.
Height	5 ft, 4 in.	5 ft, 8 in.
Cube	170 cu ft	188 cu ft
Weight (dry)	7000 lb	6070 lb

REFERENCES

1. Operations Manual for Off-Ship Firefighting System.
2. Volvo-Penta Workshop Manual, Pub. No. 5333.
3. Volvo-Penta Instruction Book, Pub. No. 7732879-7.

S0300-BV-CAT-020



2" Centrifugal Pump PU2110

S0300-BV-CAT-020**PUMP, CENTRIFUGAL, 2", DIESEL****ESSM NUMBER PU2110****DESCRIPTION**

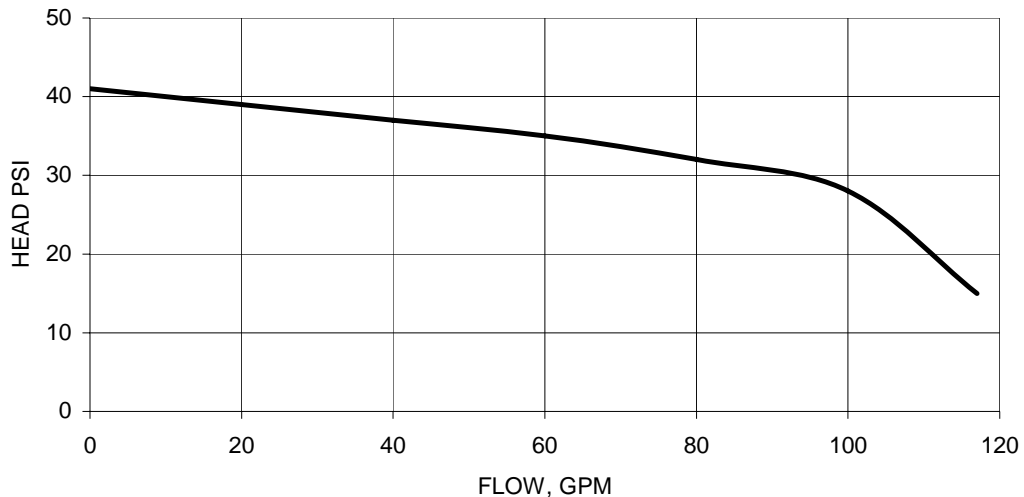
The 2" Centrifugal Pump PU2110 is a diesel driven, centrifugal pump, which is lightweight, rugged, and portable. The pump is used to prime the OSFS and designed to pump water at a rate of 90 gpm with a discharge pressure of 28 psi at a 15-foot lift. Maximum practical suction lift is 26 feet above the water surface. The pump is driven by a 1-cylinder, 4.2-horsepower (at 3600 rpm), air-cooled, 4-cycle, diesel engine. The engine has a recoil starter, direct fuel injection with a variable speed control, and its own integral fuel system.

SPECIFICATIONSPump Assembly

Manufacturer	Peabody Barnes
Model	4280-C
Type	Centrifugal
Capacity	115 gpm @ 28 psi, w/15' suction lift

Engine

Manufacturer	Yanmar Diesel
Model	L40AE-DP
Bore	68 mm
Stroke	55 mm
Displacement	199 cc
Compression ratio	20 : 1
Rpm	3600
Horsepower	4.2
Fuel	Diesel
Fuel capacity	0.66-gal. int. tank
Fuel consumption	0.5 gph

PERFORMANCE CURVE

S0300-BV-CAT-020

PUMP, CENTRIFUGAL, 2", DIESEL

ESSM NUMBER PU2110

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 0 in.
Width	1 ft, 6 in.
Height	1 ft, 8 in.
Cube	5 cu ft
Weight	108 lb

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual for Model L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, 51 Pub. No. 000Y00R3981.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



OSFS Rigging Basket FF0501

S0300-BV-CAT-020**RIGGING BASKET, OSFS****ESSM NUMBER FF0501****DESCRIPTION**

The OSFS Rigging Basket FF0501 is a metal, wire mesh container used to store and transport the rigging gear for the P07100 Firefighting System. The rigging basket contains turnbuckles, chains, eyebolts, and a 5-gallon plastic bucket used for stowage of eyebolts.

SPECIFICATIONS

Manufacturer Commercial
 Drawing Number 721460-303-01

The OSFS Rigging Basket contains the following:

	<u>ESSM Number</u>	<u>Qty</u>
Container, Wire Mesh, 62" x 36" x 41"	FF0501	1
Bracket, hanging, steel		2
Bucket, plastic, 5-gallon		1
Chain, 3/8" x 12', grade 4, w/grab & slip hooks		36
Chain, 3/8" x 6', grade 4, w/grab & slip hooks		20
Cover, plywood, marine grade, 3/4" x 36" x 64"		1
Eyebolt, galv, 1 7/8" x 3 5/8" x 1 3/4" x 1"		56
Inventory, laminated		1
Turnbuckle, 1/2" x 9", hook & eye ends		20
Turnbuckle, 3/4" x 12", hook & eye ends		36

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	5 ft, 2 in.
Width	3 ft, 0 in.
Height	3 ft, 5 in.
Cube	53 cu ft
Weight	1956 lb

REFERENCES

None

S0300-BV-CAT-020



350-Gallon Diesel Fuel Tank TK0040

S0300-BV-CAT-020**TANK, DIESEL FUEL, 350-GALLON****ESSM NUMBER TK0040****DESCRIPTION**

The 350-Gallon Diesel Fuel Tank TK0040 is a portable, stainless steel container used to provide No. 2 diesel fuel to high flow components such as air compressors and fire fighting systems. The tank is equipped with four lifting pad eyes at the top and forklift slots at the base to facilitate handling. A tank opening with a cap is provided for filling and for attachment of a fuel pickup and return assembly. A ball valve, located on the bottom of the tank, is used to drain fuel from the tank.

SPECIFICATIONS

Manufacturer	Hoover Materials Handling Group
Design pressure	9.5 psi
Material	Stainless steel
Capacity	350 gallons

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 2 in.
Width	3 ft, 6 in.
Height	4 ft, 6 in.
Cube	69 cu ft
Weight (empty)	473 lb
Weight (full)	3033 lb

REFERENCES

None

S0300-BV-CAT-010

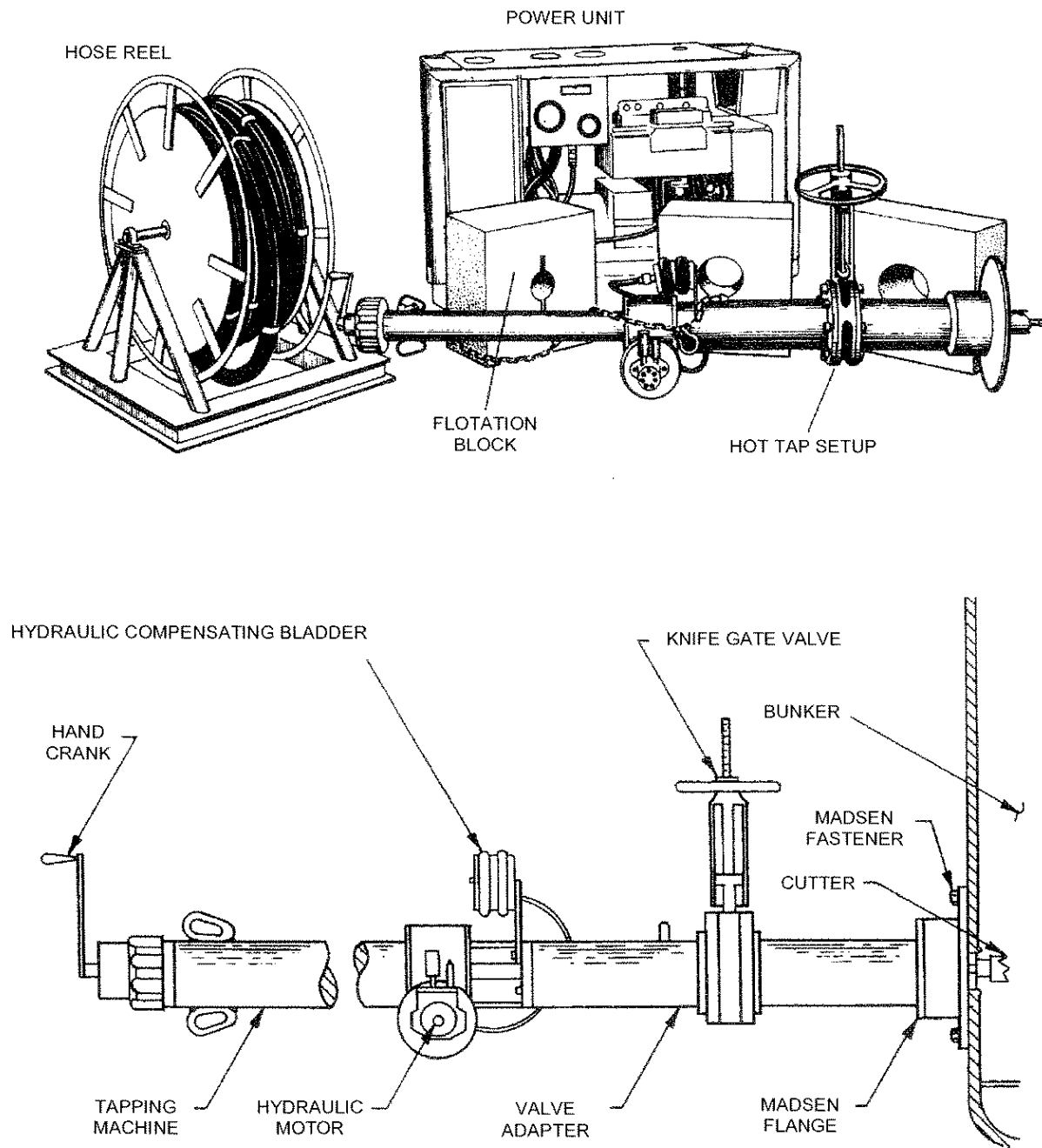
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S0300-BV-CAT-020

HOT TAP SYSTEM P10100

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S0300-BV-CAT-020



Hot Tap System Overview P10100

S0300-BV-CAT-020**HOT TAP SYSTEM****SYSTEM NUMBER P10100****SYSTEM DESCRIPTION**

The Hot Tap System P10100 consists of two hot tap machines, two heavy duty lightweight hot tap machines, two Mod 2 hydraulic power units, two hydraulic hose reel assemblies, two stud guns, a hydraulic grinder, a hydraulic impact wrench, two 1/2-inch hydraulic drills, a Fluke 87 multimeter, two machinery containment pools, four 16' roundsling bridles, and one container van used for storing and shipping. The Hot Tap System is used underwater by divers to allow oil to be removed from sunken or distressed ships by installing a flange and valve on the side of the ship's hull or tank through which oil can be discharged. This can be accomplished without spilling the oil or admitting water into the tank. When the equipment is in an operating configuration, the storage/shipping container serves as a maintenance shop and personnel shelter.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Hot Tap	VA0736A	1
HVAC Unit w/Sleeve	AC2001	1
Containment Pool, Machinery, 10 'x 6' x 12", Cooley Urethane	CP3010	2
Drill, Hydraulic, 1/2"	DR0010	2
Gun, Stud, Hot Tap Systems	GU0120	2
Hose Reel Assembly, Hydraulic, w/ 3/4" Synflex Hose	HS0137	2
Hot Tap, Lightweight, Heavy Duty	HT0006	2
Machine, Hot Tap	MC0110	2
Power Unit, Hydraulic, Mod 2, Diesel, 15 gpm @ 2000 psi	PW0108	2
Multimeter, RMS True, Fluke 87	SE0853	1
Roundsling, Polyester, 16'	SL0012	4
Grinder, Hydraulic	TL1000	1
Wrench, Impact, Hydraulic	TL1010	1
2. Van, Hot Tap	VA0736B	1*
HVAC Unit w/Sleeve	AC2001	1
Containment Pool, Machinery, 10 'x 6' x 12", Cooley Urethane	CP3010	2
Drill, Hydraulic, 1/2"	DR0010	2
Gun, Stud, Hot Tap Systems	GU0120	2
Hose Reel Assembly, Hydraulic, w/ 3/4" Synflex Hose	HS0137	2
Hot Tap, Lightweight, Heavy Duty	HT0006	2
Machine, Hot Tap	MC0110	2
Power Unit, Hydraulic, Mod 2, Diesel, 15 gpm @ 2000 psi	PW0108	2
Multimeter, RMS True, Fluke 87	SE0853	1

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SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Roundsling, Polyester, 16'	SL0012	4
Grinder, Hydraulic	TL1000	1
Wrench, Impact, Hydraulic	TL1010	1

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Hot Tap Van VA0736A



Hot Tap Van VA0736A (Interior)

S0300-BV-CAT-020**VAN, HOT TAP****ESSM NUMBER VA0736A****DESCRIPTION**

The Hot Tap Van VA0736 is used as a storage/shipping container for the components of the Hot Tap System, which include two Hydraulic Power Units PW0108, two Hot Tap Machines MC0110, two Stud Guns GU0120, various hydraulic hose assemblies, and the necessary equipment to maintain and operate the Hot Tap System. When the equipment is in an operating configuration, the shipping container serves as a maintenance shop and personnel shelter. The van has a heat pump for climate control, a workbench, and the necessary tools for maintaining the equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSShipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	17,712 lb

REFERENCES

None

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/ SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump. It is designed to maintain a comfortable ambient atmosphere in the van.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020

ESSM Number CD0010 Deleted.

S0300-BV-CAT-020



10 'x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY,
10 'X 6' X 12", COOLEY URETHANE****ESSM NUMBER CP3010**

DESCRIPTION

The 10 'x 6' x 12" Machinery Containment Pool CP3010 is a urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the diesel hydraulic power unit or other equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



1/2" Hydraulic Drill DR0010

S0300-BV-CAT-020**DRILL, HYDRAULIC, 1/2-INCH****ESSM NUMBER DR0010****DESCRIPTION**

The 1/2-Inch Hydraulic Drill DR0010 is designed for underwater use and is equipped with a 1/2-inch smooth jawed adjustable chuck capable of holding drill bits with a shaft size of 1/2-inch in diameter.

SPECIFICATIONS

Manufacturer	Stanley
Model	DL09
Drive size	1/2"
Hydraulic pressure range	1000 - 2000 psi
Flow range	4 - 12 gpm
Optimum flow	8 gpm
Porting	-8 SAE O-ring
Drill speed	1000 rpm @ 8 gpm
Rpm range	350 - 1500

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	9 in.
Width	3 1/2 in.
Height	6 in.
Cube	1 cu ft
Weight	6 lb

REFERENCES

1. Hydraulic Drill DL09 Safety, Operation, and Maintenance Manual.

S0300-BV-CAT-020



Stud Gun GU0120

S0300-BV-CAT-020**GUN, STUD, HOT TAP SYSTEM****ESSM NUMBER GU0120****DESCRIPTION**

The Hot Tap System Stud Gun GU0120 is a direct-acting, high-velocity, underwater marine, powder-actuated tool that can be used by divers in water depths to 300 feet. The gun utilizes energy from a special expendable barrel to drive a fastener into steel or concrete. Fasteners are loaded into the expendable barrels prior to entering the water. Once the diver is in the water, the barrel is inserted in the gun and fired. The fastener is driven at a high velocity down the barrel by the expanding gases of the fired load into the work surface. The used barrel is removed and a new barrel is inserted for the next fastening. The stud gun is designed to allow up to four fastenings a minute.

SPECIFICATIONS

Manufacturer	I.T.W. Ramset
Model	200 HD
Caliber	.38
Max. depth to use gun	300 ft
Velocity of fasteners	492 feet per second

PHYSICAL CHARACTERISTICSShipping

Length	1 ft, 7 in.
Width	9 in.
Height	11 in.
Cube	1 cu ft
Weight	25 lb

REFERENCES

1. Ramset 200 HD Tool Operator's Instructions and Training Manual, TM-21, 5/88.

S0300-BV-CAT-020



Hose Reel HS0137

S0300-BV-CAT-020**HOSE REEL ASSEMBLY, HYDRAULIC,
W/ 3/4" SYNFFLEX HOSE****ESSM NUMBER HS0137**

DESCRIPTION

The Hydraulic Hose Reel Assembly HS0137 consists of a 3/4-inch diameter braided lined Synflex hose, which is reeled onto a mechanical hose reel in two, 100-foot continuous sections. The hose is equipped with quick disconnect fittings compatible with the Hydraulic Power Unit PW0108. A separate set of 15-foot hose assemblies are used to couple the hoses and the power source to each other.

SPECIFICATIONS

Manufacturer	Commercial
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Hose

Manufacturer	Furon Synflex
Type	3R80-12
Inner diameter	3/4 in.
Max. outer diameter	1.138 in.
Min. bend radius	6.5 in.
Working pressure	2250 psi
Min. burst pressure	9000 psi
Weight per 100 feet	25.6 lb
Hose couplings	390 H-12

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	3 ft, 10 in.
Width	2 ft, 9 in.
Height	3 ft, 11 in.
Cube	41 cu ft
Weight	630 lb

REFERENCES

1. Synflex Hydraulic Hose, Specialty Hose, Tubing, and Accessories; Furon Synflex.
2. Reel, 3/4" Hose, Hydraulic NAVSEA Dwg. 5366582.

S0300-BV-CAT-020



Heavy Duty, Lightweight Hot Tap HT0006

S0300-BV-CAT-020**HOT TAP, LIGHTWEIGHT, HEAVY DUTY****ESSM NUMBER HT0006****DESCRIPTION**

The Heavy Duty, Lightweight Hot Tap HT0006 has the capability of tapping into mild steel hull plating up to 1 inch thick. The hot tap machine is used to tap a 3 1/2 or a 5 1/2-inch hole through a 6-inch knife valve.

The flange/valve assembly through which the tap is accomplished is available in two configurations, a flat surface plate and a contour-forming plate. The flat surface plate is 12 inches in diameter with a 12-inch bolt hole pattern on a 10-inch bolt circle. This plate is used for flat shell or tank top applications. The contour forming plate has a 12-inch by 4-inch base with serrated tabs perpendicular to the base. These tabs can be formed to the contour of the hull.

SPECIFICATIONS

Manufacturer	Easy Tapper
Model	XTC 1.7S
Standard tapping range in kit	3 1/2" or 5 1/2"
Pressure rating	1470 psi @ 100° F
Method of applied forward pressure	Spindle
Type of machine-to- valve adapters	National Pipe Thread
Power pack for cutter rotation	Ready for electric, air, or hydraulic power package

PHYSICAL CHARACTERISTICSShipping

Length	2 ft, 6 in.
Width	11 in.
Height	6 in.
Weight	29 lb
Cube	1 cu ft

REFERENCES

None

S0300-BV-CAT-020



Hot Tap Machine MC0110

S0300-BV-CAT-020**MACHINE, HOT TAP****ESSM NUMBER MC0110****DESCRIPTION**

The Hot Tap Machine MC0110 is capable of cutting 5 1/2-inch diameter hole in up to 1-inch thick mild steel plate. The machine is lightweight (with the bulk of its weight concentrated toward the cutter head) and has an adjustable automatic feed rate. These features promote relative ease of handling and operation by divers. The hardware in the kit can restrict the cutting capability to 1-inch plate and 6-inch nominal diameters. The drive motor for the hot tap machine is a hydraulic motor.

SPECIFICATIONS

Manufacturer	T.D. Williams, Inc.
Model	T-203
Max. operating pressure	1500 psi
Working pressure	600 - 800 psi
Flow rate	15 gpm
Max. boring bar travel	36"
Rate of travel	Adjustable: 0 to 1/8" per revolution
Nominal cutter size	5 1/2"
Pilot size	3/4" diameter

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	5 ft, 3 in.
Width	2 ft, 2 in.
Height	1 ft, 6 in.
Cube	15 cu ft
Weight	258 lb

REFERENCES

1. T.D. Williams, Inc. Maintenance and Operation Manual, Salvage Hot Tap Kit, NAVCOSSYSCUT, Panama City, FL, May 1978.

S0300-BV-CAT-020



Mod 2 Hydraulic Power Unit PW0108

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 2, DIESEL,
15 GPM @ 2000 PSI****ESSM NUMBER PW0108****DESCRIPTION**

The Mod 2 Hydraulic Power Unit PW0108 is a portable, diesel driven unit that provides hydraulic fluid up to 15 gpm @ 2000 psi. An adjustable pressure relief valve controls the output pressure delivered to the supply circuit. The HPU is mounted on a steel frame equipped with forklift slots and lifting points for handling during shipment and operation. Hydraulic connections are made via Aeroquip 5600, -12 series male and female quick disconnect fittings for the hydraulic supply and return, with a 3/8-inch case drain fitting. The unit is shipped with the exhaust muffler attached to the side of the HPU housing, and the muffler is installed prior to operation of the unit.

SPECIFICATIONSHydraulic Power Unit Assembly

Manufacturer	Commercial, Navy Design
Model	NAVSEA Model 2

Diesel Engine

Manufacturer	Onan
Series	DJC-MS/2450
Rpm	2400
Horsepower	23.8 @ 2400 rpm
Starting	Electric, 12-volt
Fuel	Diesel
Fuel source	Internal tank, 20-gal.
Fuel consumption	1.5 gph @ 2000 rpm

Hydraulic Pump

Manufacturer	Vickers Inc.
Model	30-H-10
Type	Axial piston
Flow (maximum)	15 gpm @ 2000 psi
Hyd. reservoir	55 gal.
Hydraulic fluid	Rando 46

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	5 ft, 8 in.
Width	2 ft, 0 in.
Height	3 ft, 8 in.
Cube	42 cu ft
Weight (dry)	1762 lb

S0300-BV-CAT-020

**POWER UNIT, HYDRAULIC, MOD 2, DIESEL,
15 GPM @ 2000 PSI**

ESSM NUMBER PW0108

REFERENCES

1. Operation and Maintenance Instructions, Diesel Hydraulic Power Unit, NAVSEA Model 2, S9233-A-3-MM0-01B-0910-LP-000-4092.

S0300-BV-CAT-020



Fluke 87 Multimeter SE0853

S0300-BV-CAT-020**MULTIMETER, TRUE-RMS, FLUKE 87****ESSM NUMBER SE0853****DESCRIPTIONS**

The Fluke 87 Multimeter SE0853 is an electronic instrument used to make various electrical measurements, such as ac and dc voltage, ac and dc current, and resistance. It is called a *multimeter* because it combines the functions of a voltmeter, ammeter, and ohmmeter. The multimeter has other functions, such as diode and continuity testing capabilities.

SPECIFICATIONS

Manufacturer	Fluke
Model	87
Display	Digital
Maximum voltage:	
DC V	1000 V
AC V	1000 V
Maximum Amps:	
DC current	10 A
AC current	10 A
Maximum resistance	40 M Ω
Temperature:	
Operating	-4°F to 131°F
Storage	-40°F to 140°F
Battery	9 V, zinc
Battery life	400 hrs typical

PHYSICAL CHARACTERISTICSOperating w/flex stand

Length	7 1/2 in.
Width	3 1/2 in.
Height	1 1/4 in.
Cube	.5 cu ft
Weight	12.5 oz

REFERENCE

1. Fluke 80 Series Multimeter User's Manual.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Hydraulic Grinder TL1000

S0300-BV-CAT-020**GRINDER, HYDRAULIC****ESSM NUMBER TL1000****DESCRIPTION**

The Hydraulic Grinder TL1000 is a hydraulically driven rotary device that uses a wheel made of an abrasive material to clean, grind, polish, and shape metallic materials. It is designed for underwater use.

SPECIFICATIONS

Manufacturer	Stanley Hydraulic Tools
Model	GR24
Pressure range	1000-2000 psi
Flow range	7-9 gpm
Optimum flow	9 gpm
Porting	3/8" pipe

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	17 in.
Width	9 in.
Height	9 in.
Cube	1 cu ft
Weight	11 lb

REFERENCE

1. Stanley Model GR24 Hydraulic Grinder Parts Manual.

S0300-BV-CAT-020



Hydraulic Impact Wrench TL1010

S0300-BV-CAT-020**WRENCH, IMPACT, HYDRAULIC****ESSM NUMBER TL1010****DESCRIPTION**

The Hydraulic Impact Wrench TL1010 is a rotary hammer that impacts the head of a nut or bolt to either loosen or tighten it and is designed for use underwater.

SPECIFICATIONS

Manufacturer	Stanley Hydraulic Tools
Model	IW12
Pressure range	1000-2000 psi
Flow range	4 1/2 gpm
Output speed (free spin)	2000 rpm @ 5 gpm
Impact speed	1200 impacts per minute
Porting	1/2" SAE
Output drive	3/4" square drive

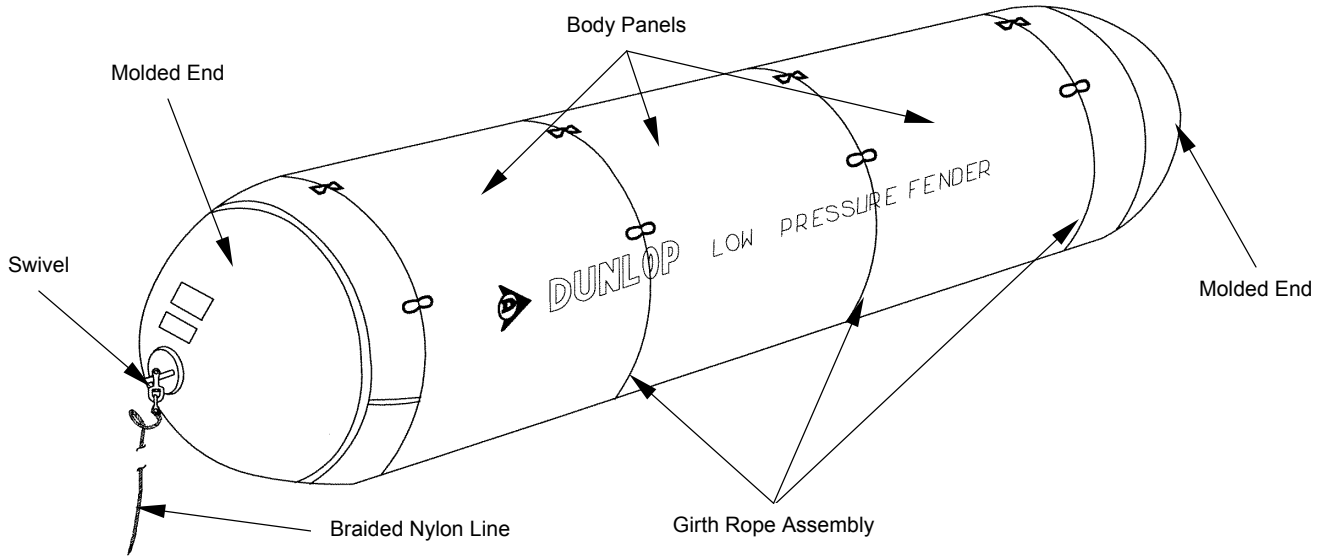
REFERENCE

1. Stanley Model IW12 Hydraulic Impact Wrench Parts Manual.

S0300-BV-CAT-020

10' X 50' LOW PRESSURE FENDER SYSTEM P06100

S0300-BV-CAT-020



Molded End Low Pressure Fender



10' x 50' Low Pressure Fender System P06100

S0300-BV-CAT-020**FENDER SYSTEM, LOW PRESSURE, 10' X 50'****SYSTEM NUMBER P06100**

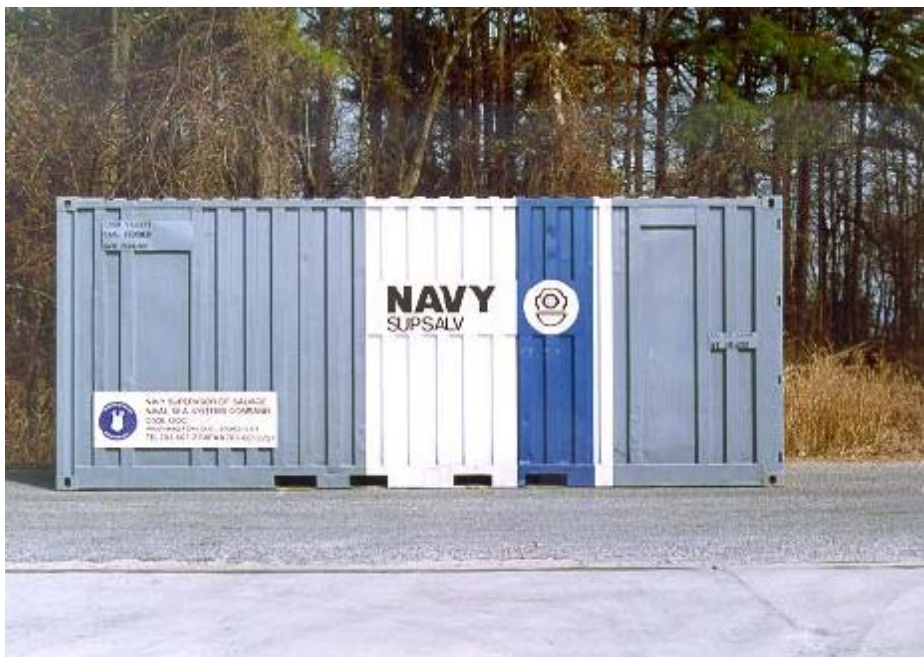
SYSTEM DESCRIPTION

The 10' x 50' Low Pressure Fender System P06100 consists of a 20-foot van, which stores four 10' x 50', low pressure ship fenders. The fenders are designed to allow supporting vessels or receiving tankers to moor alongside casualty vessels for offloading operations in moderate seas without risking hull damage.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Low Pressure Fender System	VA2221	1
Fender, Low Pressure, 10' x 50'	FN2071	4
Roundsling Bridle, Polyester, 16'	SL0012	4

S0300-BV-CAT-020



Low Pressure Fender System Van VA2221



Interior of Low Pressure Fender System Van VA2221

S0300-BV-CAT-020**VAN, LOW PRESSURE FENDER SYSTEM****ESSM NUMBER VA2221****DESCRIPTION**

The Low Pressure Fender System Van VA2221 is used to store and ship the four deflated pneumatic ship fenders used in the Low Pressure Fender System P06100. The fenders are secured to individual pallets, which are in turn secured inside of the van, along with all the necessary ancillary equipment. The ancillary equipment consists of a repair kit, an inflation connector, a pressure gauge, towing and mooring lines, and assembly parts.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	19,432 lb

REFERENCES

None

S0300-BV-CAT-020



10' x 50' Low Pressure Fender FN2071

S0300-BV-CAT-020**FENDER, LOW PRESSURE, 10' x 50'****ESSM NUMBER FN2071**

DESCRIPTION

The 10' x 50' Low Pressure Fender FN2071 is a low pressure pneumatic fender designed to be placed alongside a casualty vessel to allow support vessels or receiving tankers to moor alongside in moderate seas without the risk of hull damage occurring during offloading operations.

SPECIFICATIONS

Manufacturer	Dunlop
Model	C3515
Length - inflated	50 feet
Diameter - inflated	10 feet
Weight (w/specified ancillaries)	2370 lb
Reaction load (max. at 50% compression)	200 tons (long)
Energy absorption (max. at 50% compression)	236 ft-tons (long)

PHYSICAL CHARACTERISTICS

<u>Fender</u>	<u>Operating</u>	<u>Pallet & Fender</u>	<u>Shipping</u>
Length	50 ft 0 in.	Length	9 ft, 0 in.
Diameter	10 ft, 0 in.	Width	8 ft, 2 in.
Cube	5000 cu ft	Height	3 ft, 5 in.
Weight	2370 lb (Empty)	Cube	253 cu ft
		Weight	3720 lb

REFERENCES

1. Fenders, Low Pressure, Marine Pneumatic, 10' x 50' and 14' x 60', Model Nos. C3515 and C3516.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

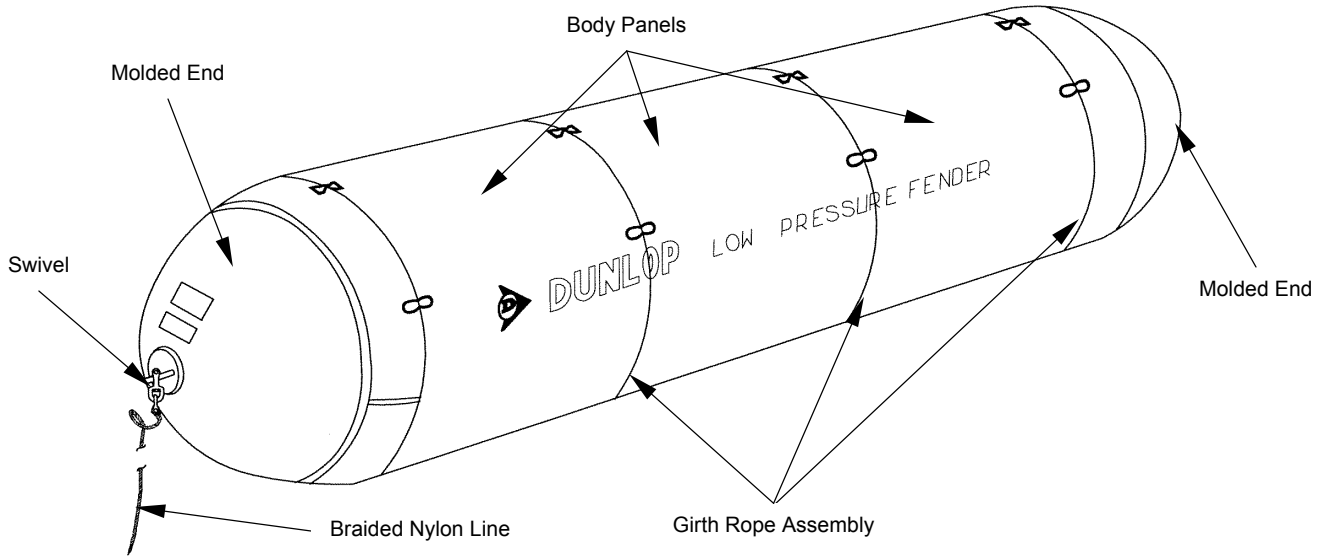
REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020

14' x 60' LOW PRESSURE FENDER SYSTEM P06200

S0300-BV-CAT-020



Molded End Low Pressure Fender



14' x 60' Low Pressure Fender System P06200

S0300-BV-CAT-020**FENDER SYSTEM, LOW PRESSURE, 14' X 60'****SYSTEM NUMBER P06200****SYSTEM DESCRIPTION**

The 14' X 60' Low Pressure Fender System P06200 consists of four 14' x 60' pneumatic fenders that are arranged on shipping pallets. The fenders allow support vessels or receiving tankers to moor alongside a casualty vessel in moderate seas without the risk of hull damage.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Fender System, Low Pressure, 14' x 60'	FN2072	4

S0300-BV-CAT-020



14' x 60' Low Pressure Fender FN2072

S0300-BV-CAT-020**FENDER, LOW PRESSURE, 14' X 60'****ESSM NUMBER FN2072**

DESCRIPTION

The 14' X 60' Low Pressure Fender FN2072 is a low pressure, pneumatic fender designed to allow support vessels or receiving tankers to moor alongside casualty vessels in moderate seas without the risk of hull damage occurring during offloading.

SPECIFICATIONS

Manufacturer	Dunlop
Model	C3516
Reaction load (max. at 50% compression)	290 tons (long)
Energy absorption (max. at 50% compression)	517 ft-tons (long)

PHYSICAL CHARACTERISTICS

	<u>Operating</u>		<u>Shipping</u>
Length inflated	60 ft, 0 in.	Length	11 ft, 0 in.
Diameter inflated	14 ft, 0 in.	Width	8 ft, 0 in.
Cube	8518 cu ft	Height	4 ft, 0 in.
Weight	3124 lb	Cube	352 cu ft
		Weight w/pallet	5130 lb

REFERENCES

1. Fenders, Marine Pneumatic, Low Pressure, 10' x 50' and 14' x 60', Model Nos. C3515 and C3516.

S0300-BV-CAT-020

MODULAR BARGE SYSTEM P06400

S0300-BV-CAT-020



Barge Modules for BA0005



Supersectional Barge Assembly (two single sectional assemblies)

S0300-BV-CAT-020**MODULAR BARGE SYSTEM****SYSTEM NUMBER P06400****SYSTEM DESCRIPTION**

The Modular Barge System P06400 consists of a 24' x 16' x 4' Modular Barge BA0005 and a complete set of ancillary gear, tools, and rigging equipment.

The Modular Barge System is designed to allow for two configurations that meet various operational conditions; a single sectional barge assembly and a supersectional barge assembly. The single sectional barge assembly consists of a Modular Barge BA0005, which is composed of two 24' x 8' x 4' modules fastened together. The operational supersectional barge assembly consists of two BA0005 Modular Barges that are assembled stern-to-stern.

The Modular Barge System is designed to be used in remote locations that do not provide sufficient equipment or accessibility to properly conduct an oil spill response operation. The barge decks accommodate the storage and assembly of oil response equipment. The Modular Barge System P06400 may be used in conjunction with the Oil Bladder Transfer System P20300.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Barge, Modular, 24' x 16' x 4'	BA0005	1

S0300-BV-CAT-020



Barge Modules for BA0005

S0300-BV-CAT-020**BARGE, MODULAR, 24' X 16' X 4'****ESSM NUMBER BA0005**

DESCRIPTION

The Modular Barge BA0005 is a 24' x 16' x 4' work platform that is used in remote locations that do not provide sufficient equipment or accessibility for properly conducting an oil spill response operation. The barge consists of two 24' x 8' x 4' barge modules mated side by side. The barge decks accommodate the storage and assembly of oil response equipment.

SPECIFICATIONS

Manufacturer	Kvichak
Hull material	5000 series aluminum
Draft	1' 4"
Freeboard	2' 3"
Watertight compartments	4 (per module)
Deck drains	5 (per module)

PHYSICAL CHARACTERISTICS

	<u>Shipping (single module)</u>	<u>Operating (two modules)</u>
Length	24 ft, 0 in.	24 ft, 0 in.
Width	8 ft, 0 in.	16 ft, 0 in.
Height	4 ft, 0 in.	4 ft, 0 in.
Cube	768 cu ft.	1536 cu ft.
Weight	4600 lb	9200 lb

REFERENCES

None

S300-BV-CAT-020

ROV LIGHTERING SYSTEM

SYSTEM NUMBER P10200

DESCRIPTION

The Remote Operated Vehicle (ROV) Lightering System P10200 consists of an ROV delivery unit, a hydraulically driven hot tap machine, a set of attachment flanges, a set of attachment tools, a set of valves and fittings, a hydraulic power unit and a 8' x 8' x 20' shipping container. The system is designed to allow penetration into tanks below the waterline and to be deployed by an ROV. During some operational scenarios it is necessary to gain access to tanks in deep water. Access through tank sides necessitates the use of a drilling mechanism called a hot tap machine delivered by an ROV. The ROV Lightering System is used to install a flange and valve on the side of a ship's hull or tank through which oil can be discharged. The hot tap is used in deep water operations to allow oil to be removed from sunken ships. This is accomplished without spillage of oil or ingress of water into the tank. On scene, with the equipment in the operating configuration, the shipping container serves as a maintenance shop, personnel shelter and ROV control center.

SYSTEM UNDER DEVELOPMENT

S0300-BV-CAT-020

COMMAND TRAILER P19400



S0300-BV-CAT-020



Command Trailer System P1940

S0300-BV-CAT-020**COMMAND TRAILER****SYSTEM NUMBER P19400****SYSTEM DESCRIPTION**

The Command Trailer System P19400 is an over-the-road command and communications office for field operations. These 40-foot trailers are equipped to provide on-site telephone and radio communications, office space and equipment, a small conference area, a galley, a generator, and head facilities, as well as heated/air conditioned shelter from the environment. The trailer provides a portable, fully equipped command post from which to direct extended field response operations where road transport is available.

A major offshore spill may impact hundreds of miles of shoreline. When this occurs, several command posts must be established to coordinate response in the many sub-areas where response work is being accomplished. Two command trailers on each U.S. coast and one in Alaska are required to support large or concurrent operations. The requirement for additional sub-area command posts on major spill response operations is met by deployment of the command vans or locally leased trailers if necessary.

Several slightly different configurations of the Command Trailer are available in the ESSM System. The primary Command Trailer System is the one containing VA0719. The alternate configurations (VA0717 and VA0718) differ slightly in their components, performance characteristics, and ancillary equipment, but are functionally equivalent.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Command Trailer		1
a. Van, Command Trailer, 45'	VA0717	1
Printer, Multifunction	CO1306	1
Containment Pool, Mchry, 10 'x 6' x 12"	CP3010	1
Generator, 25-kW, Dsl, Model CI4J-25	GE0440	1
Refrigerator, 6.0 Cubic Foot	OE0001	1
Marker Board w/Sliding Board	OE0111	1
TV/VCR Combo	OE2099	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Tool Box, Command Trailer VA0717	TL0041	1

S0300-BV-CAT-020**COMMAND TRAILER****SYSTEM NUMBER P19400**

SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
b. Van, Command Trailer, 40', Modified	VA0718	1
Printer, Multifunction	CO1306	1
Containment Pool, Mchry, 10 'x 6' x 12"	CP3010	1
Generator, 25-kW, Dsl, Model CI4J-25	GE0440	1
Kitchenette, Sink/Range/Refrigerator/Cabinet Unit	KI0011	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine, Motorola, Mdl D43KXA7JA5BK	RA1870	1
Tool Box, Command Trailer VA0718/VA0719	TL0040	1
c. Van, Command Trailer, 40'	VA0719	1
Containment Pool, Mchry, 5 'x 5' x 12"	CP3000	1
TV/VCR Combo	OE2099 (not shown)	1
Generator, 12-kW, Diesel, in VA0719	GE0406	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830	1
Tool Box, Command Trailer VA0718/VA0719	TL0040	1

S0300-BV-CAT-020



40' Command Trailer Van VA0719

S0300-BV-CAT-020**VAN, COMMAND TRAILER, 40'****ESSM NUMBER VA0719****DESCRIPTION**

The 40-foot Command Trailer Van VA0719 is an eight-wheeled trailer used as a command and communications office for field operations. It is equipped to provide on-site telephone and radio communications, office space facilities, and heated/air conditioned shelter from the environment. The trailer provides a portable, fully equipped command post from which to direct extended field operations where road transport is available.

SPECIFICATIONS

Power systems	240 V ac single phase, 60 A max 12-volt emergency lighting system
Communications power	AC converter = 12 V dc
Communication systems:	58-Channel marine VHF radio 40-Channel CB radio plus 4 channels for weather
Telephone lines:	6-line capability: 4 lines for telephone communications 1 line for fax communications 1 line for modem communications
Heat	Propane heater
Cooling	Air conditioner - 240 V ac
Berthing	1
Shower	1
Commode	1
Sewage holding tank	250 gallons
Gray water	250 gallons
Fresh water	500 gallons
Galley facilities	Butane range, microwave oven, refrigerator

PHYSICAL CHARACTERISTICSOperating/Shipping

Height	13 ft, 4 in.
Width	8 ft, 0 in.
Length	42 ft, 0 in.
Cube	4480 cu ft
Weight	24,130 lb

S0300-BV-CAT-020

VAN, COMMAND TRAILER, 40'

ESSM NUMBER VA0719

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000**

DESCRIPTION

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

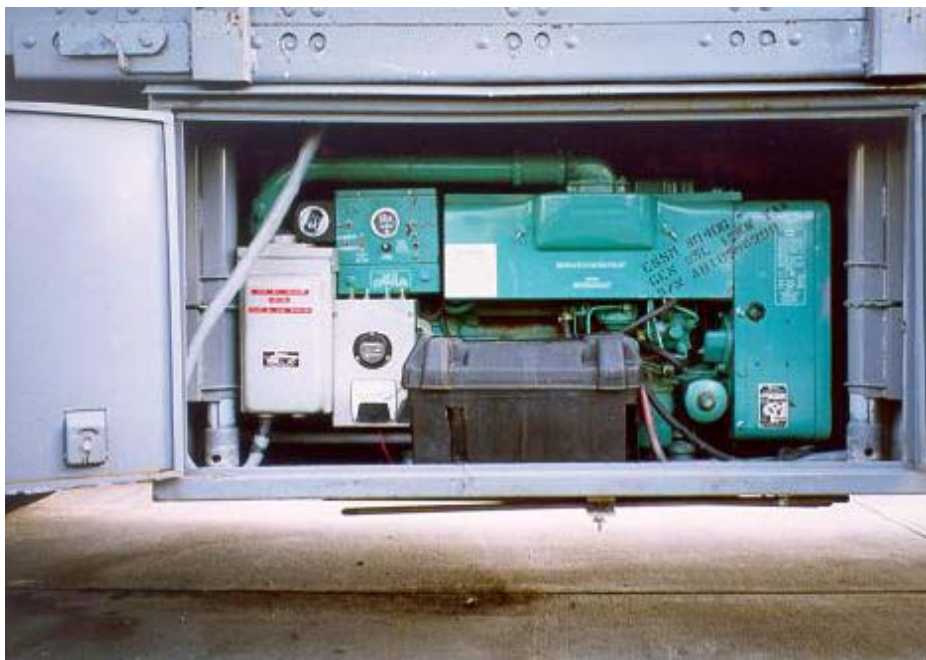
PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



12-kW Generator GE0406

S0300-BV-CAT-020**GENERATOR, 12-kW, DSL, IN VA0719****ESSM NUMBER GE0406**

DESCRIPTION

The 12-kW Diesel Generator GE0406 is a 60-hertz, 120/240-volt, single phase, revolving field alternator powered by an air-cooled, diesel engine. The generator is mounted under the Command Trailer Van VA0719 and can be operated either in place or at a remote location within the length of the power supply cable.

SPECIFICATIONS

<u>Generator</u>		<u>Engine</u>	
Manufacturer	Onan	Manufacturer	Onan
Model	LR 3927	Model	DJC
Phase	Single	Battery	12 V dc
Volts	120/240 V ac	Cycle	4-stroke
Hertz	60	No. of cylinders	4
Capacity	12 kW	Compression ratio	19 : 1
		Horsepower @ 1800 rpm	20
		Starter	Electric

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 7 in.
Width	4 ft, 0 in.
Height	2 ft, 8 in.
Cube	49 cu ft
Weight	1656 lb

REFERENCES

1. Onan Technical Manual for DJC Engine.

S0300-BV-CAT-020



Marine Mobile CB Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709**

DESCRIPTION

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Frequency range	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total	44
Citizens	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only) RF output	4 W maximum
Receiver (CB):	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kV	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



Marine Mobile VHF Radio RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE, VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830****DESCRIPTION**

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a single moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



VA0718/VA0719 Command Trailer Tool Box TL0040

S0300-BV-CAT-020**TOOL BOX, COMMAND TRAILER VA0718/VA0719****ESSM NUMBER TL0040**

DESCRIPTION

The VA0718/VA0719 Command Trailer Tool Box TL0040 is a basic mechanic's tool set that contains 1/2" drive sockets and accessories, combination, open-end and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up, operate, and maintain the Command Trailer VA0718/VA0819.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 6 in.
Width	10 in.
Height	1 ft, 2 in.
Cube	1 cu ft
Weight	36 lb

REFERENCES

None

S0300-BV-CAT-020

COMMAND VAN P19300

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S0300-BV-CAT-020



Command Van System P19300
VA0727A Top, VA0727B Bottom



Command Van VA0727B, Interior

S0300-BV-CAT-020**COMMAND VAN****SYSTEM NUMBER P19300****SYSTEM DESCRIPTION**

The Command Van System P19300 provides the same type of services as the 40-foot command trailer. The 20-foot long vans are more compact, and they do not provide head facilities. Their compact size is an advantage for air shipment, and for positioning on barges or other support platforms. The command vans augment the capabilities provided by the 40-foot command trailers and replace that capability overseas. The command van system is equipped with onsite telephone and radio communications, an office space, a small conference area, and a galley. The van also provides a heated/air-conditioned shelter against the environment. The command van is a fully equipped command post from which to direct extended field response operations.

In conjunction with the Command Van (VA0727A and VA0727B) an Expandable Command Conference Center Van VA0715 may be used if the need arises. When fully expanded, the Command Conference Center and Command Van combine to create an all-in-one multipurpose command center and conference room. The VA0715 is a stand-alone item and must be ordered separately from the ESSM facility in Williamsburg, VA.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Command Van		1
a. Van, Command, 20'	VA0727A	
HVAC Unit, w/Sleeve	AC2001	1
Kitchenette, Sink, 2-Burner Stove, Refrigerator	KI0010 (not shown)	1
Mast Assembly, Antenna	MA0010 (not shown)	1
Telephone, Digital, Manual System w/4 Phones	OE2109 (not shown)	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830 (Altn)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundsling, Polyester, 16'	SL0012	1
Tool Box, 20' Command Van	TL0045	1

S0300-BV-CAT-020

COMMAND VAN

SYSTEM NUMBER P19300

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
b. Van, Command, 20'	VA0727B	
Printer, Laser	CO1300 (not shown)	1
HVAC Unit, w/Sleeve	AC2001	1
Mast Assembly, Antenna	MA0010 (not shown)	1
Refrigerator, 6.0 Cubic Foot	OE0001 (not shown)	1
Marker Board w/Sliding Board	OE0111 (not shown)	1
Television/VCR Combination, 13"	OE2095 (not shown)	1
Telephone, Digital, Manual System w/4 Phones	OE2109 (not shown)	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830 (Altn)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundslings, Polyester, 16'	SL0012	1
Tool Box, 20' Command Van	TL0045	1

S0300-BV-CAT-020



Command Van System P19300
VA0727A Top, VA0727B Bottom



Command Van VA0727B, Interior

S0300-BV-CAT-020**VAN, COMMAND, 20'****ESSM NUMBER VA0727A/B****DESCRIPTION**

The Command Van VA0727A/B is a modified shipping container serving as a command and communications office for field operations. The van is equipped with onsite telephone and radio communications, an office space, a small conference area with a copy machine, a fax machine, a printer, 4 telephone lines for telephone communications, 1 telephone line for fax communications, 1 telephone line for modem communications, galley facilities, as well as heated/air-conditioned shelter from the environment. It also provides a portable, fully equipped command post from which to direct extended field response operations. The Command Van VA0727A/B augments the capability provided by the Command Trailer VA0718/VA0719 in CONUS and replaces that capability overseas. The command van's compact size is an advantage for air shipment and for positioning on barges or other support platforms.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

	<u>VA0727A</u>	<u>VA0727B</u>
Length	20 ft, 0 in.	20 ft, 0 in.
Width	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 6 in.	8 ft, 0 in.
Cube	1360 cu ft	1280 cu ft
Weight	6420 lb	9060 lb

REFERENCES

None

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-Btu through-the-wall air conditioner and heat pump unit. It is designed to maintain a comfortable ambient atmosphere in the space being conditioned.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
Btu's	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



Marine Mobile CB Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709**

DESCRIPTION

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Frequency range:	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only)	
RF output	4 W maximum
Receiver (CB):	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kV	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



Marine Mobile VHF Radio, Voyager (76-Channel) RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



Marine Mobile VHF Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom Marine Mobile VHF Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8 V dc negative ground and operates in the frequency range of 156 to 163 MHz. The radio has 58 programmed marine transmit/receive channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio model IC-M56 is currently being replaced with the IC-M58 model. The system may contain either model and instruction manual. Both models have similar features, except that the IC-M58 model contains an emergency Channel 9.

SPECIFICATIONS

Usable temperature range	-20 to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Sensitivity	0.3 micro-volts for 12 dB SINAD
Audio output power	4 W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual ICOM IC-M56/Instruction Manual ICOM IC-M58.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



20' Command Van Tool Box TL0030

S0300-BV-CAT-020**TOOL BOX, 20' COMMAND VAN****ESSM NUMBER TL0045****DESCRIPTION**

The 20' Command Van Tool Box TL0030 is a basic mechanic's tool set that contains a set of open end wrenches, adjustable wrenches, pliers, a nut driver set, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 20' Command Van.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 8 in.
Width	9 in.
Height	11 in.
Cube	2 cu ft
Weight	16 lb

REFERENCES

None

S0300-BV-CAT-020

RIGGING VAN P19600

S0300-BV-CAT-020



Rigging Van VA0010A



VA0010B

Rigging Van System P19600

S0300-BV-CAT-020**RIGGING VAN****SYSTEM NUMBER P19600****SYSTEM DESCRIPTION**

The Rigging Van System P19600 is a self-contained rigger's storeroom and shop. It is used to provide rigging support in the field for operations involving containment boom, moorings, small boats, skimmers, and general lifting and equipment handling. The Rigging Van contains personal protection equipment, personal flotation devices, general cleaning equipment, paint, rigging gear, patching material for boom, rain gear, general support equipment for response operations, and the ESSM-numbered items listed below. For a detailed inventory list of components, check the ancillary listing contained in the ESSM facilities database.

A rigging van is required during spill response operations at each location where the functions identified above are being performed. A command trailer or van, a rigging van, and a shop van will generally be placed at one or more equipment staging areas supporting the response operation. Several staging areas may be required for major offshore spills. The appropriate number of rigging vans will be deployed from one or both of the CONUS bases or the Alaska and Hawaii complexes.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Rigging	VA0010A	1
HVAC Unit w/Sleeve	AC2001	1
Block, Snatch, 6", Wire Rope, Self-Locking	BK2015	2
Block, Snatch, 6", Wire Rope, w/ Swivel Shackle	BK2016	2
Fender, Ship, 24" x 36", Foam, Navy Type	FN2028	2
Hook, Quick-Release	HK2000	1
Hook, Release-A-Matic	HK2001	1
Motor, Outboard, 15-Hp	MT0940	1
Motor, Outboard, 35-Hp	MT0944	1
Roundslings, Polyester, 16'	SL0012	4
Roundslings Bridle, Polyester, 4-Leg, 8' 6"	SL0382	1
Stopper, Carpenter, 5/8"	ST0010	1
Bridle, WR, 5/8" Carpenter Stopper	ST0012	1
Boat,		1
16' Inflatable	WB0716 (Altn)	
15' Inflatable	WB0717 (Altn)	

S0300-BV-CAT-020**RIGGING VAN****SYSTEM NUMBER P19600**

SYSTEM COMPONENTS (Continued)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
2. Van, Rigging	VA0010B (Altn not shown)*	
HVAC Unit w/Sleeve	AC2001	1
Block, Snatch, 6", Wire Rope, Self-Locking	BK2015	2
Block, Snatch, 6", Wire Rope, w/ Swivel Shackle	BK2016	2
Fender, Ship, 24" x 36", Foam, Navy Type	FN2028	2
Hook, Quick-Release	HK2000	1
Hook, Release-A-Matic	HK2001	1
Motor, Outboard, 15-Hp, 4-Stroke, Long Shaft	MT0016	1
Motor, Outboard, 40-Hp, 4-Stroke	MT0040	1
Roundsling, Polyester, 16'	SL0012	4
Roundsling Bridle, Polyester, 4-Leg, 8' 6"	SL0382	1
Stopper, Carpenter, 5/8"	ST0010	1
Bridle, WR, 5/8" Carpenter Stopper	ST0012	1
Boat, 16' Inflatable	WB0716	1

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Rigging Van VA0010A/VA0010B

S0300-BV-CAT-020**VAN, RIGGING****ESSM NUMBER VA0010A/VA0010B****DESCRIPTION**

The Rigging Van VA0010A/VA0010B is a self-contained rigger's storeroom and workshop. It is equipped with lighting, heating, ventilation, bins, racks, line, wire rope, rigging supplies, spare parts, and other items needed to support the rigging and operation of the response equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping (VA0010A)</u>	<u>Operating/Shipping (VA0010B)</u>
Length	20 ft, 0 in.	20 ft, 0 in.
Width	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 0 in.	8 ft, 0 in.
Cube	1280 cu ft	1280 cu ft
Weight	16,580 lb	13,740 lb

REFERENCES

None

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/ SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump. It is designed to maintain a comfortable ambient atmosphere in the van.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



6" Self-Locking Wire Rope Snatch Block BK2015

S0300-BV-CAT-020**BLOCK, SNATCH, 6", WIRE ROPE, SELF-LOCKING****ESSM NUMBER BK2015****DESCRIPTION**

The Self-Locking, 6" Wire Rope Snatch Block BK2015 is designed with a self-locking opening in its shell to permit the placing of a wire rope over its sheave without reeving. The wire rope is used as a temporary lead and may be taken to a winch or capstan to aid in the moving of heavy objects.

The snatch block is constructed with a self-lubricating bronze bushing and has an extra large center pin with steel sleeves around it, thus increasing the diameter of the bearing surface. The sleeves also act as separators for the sides of the shell, and when the nuts on the lubricated center pin are pulled tightly, the rigidity and strength of the block are greatly increased.

SPECIFICATIONS

Manufacturer	Crosby
Model	T-961
Block size	6 in.
Sheeve size:	
Outside diameter	6 in.
Rim Thickness	1.50 in.
Bearing diameter	1.63 in.
Wire rope size	5/8 in.
Working load limit	10 tons
Ultimate load	4 times working load

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 7 in.
Width	7 in.
Height	4 1/2 in.
Cube	1 cu ft
Weight	28 lb

REFERENCES

1. Crosby General Catalog, August 1998.

S0300-BV-CAT-020



6" Wire Rope Snatch Block, w/Swivel BK2016

S0300-BV-CAT-020**BLOCK, SNATCH, 6", WIRE ROPE,
w/SWIVEL SHACKLE****ESSM NUMBER BK2016****DESCRIPTION**

The 6" Wire Rope Snatch Block with Swivel BK2016 is designed with a drop-link opening in its shell to permit the placing of a wire rope over its sheave without reeving. The wire rope is used as a temporary lead and may be taken to a winch or capstan to aid in the moving of heavy objects.

The snatch block is constructed with a self-lubricating bronze bushing and has an extra large center pin with steel sleeves around it, thus increasing the diameter of the bearing surface. The sleeves also act as separators for the sides of the shell, and when the nuts on the lubricated center pin are pulled tightly, the rigidity and strength of the block are greatly increased.

SPECIFICATIONS

Manufacturer	Crosby
Model	G-941
Block size	6 in.
Sheave size:	
Outside diameter	6 in.
Rim thickness	1 in.
Wire rope size	1/2 in.
Working load limit	2 tons
Ultimate load	4 times working load

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 4 in.
Width	7 in.
Height	2 1/2 in.
Cube	1 cu ft
Weight	16 lb

REFERENCES

1. Crosby General Catalog.

S0300-BV-CAT-020

ESSM Number CD0010 Deleted.

S0300-BV-CAT-020



24" x 36" Navy-Type Ship Fender FN2028

S0300-BV-CAT-020**FENDER, SHIP, 24" X 36", FOAM, NAVY-TYPE****ESSM NUMBER FN2028****DESCRIPTION**

The 24" x 36" Navy-Type Foam Ship Fender FN2028 is designed to be placed between two boats or a boat and a mooring vessel to allow the boat to moor alongside it in moderate seas without the risk of hull damage occurring during operations. The fender is foam filled and will effectively reduce wear and tear on vessels and wharves, reducing downtime required for maintenance and repairs.

SPECIFICATIONS

Manufacturer	Seaward
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PHYSICAL CHARACTERISTICS

Length	3 ft, 6 in.
Width	2 ft, 0 in.
Height	2 ft, 0 in.
Cube	14 cu ft
Weight	60 lb

REFERENCES

None

S0300-BV-CAT-020



Quick-Release Hook HK2000

S0300-BV-CAT-020**HOOK, QUICK-RELEASE****ESSM NUMBER HK2000****DESCRIPTION**

The Quick-Release Hook HK2000 is designed for material handling overhead and aids in the placement of loads where access is restricted. The advantage of the quick-release hook is that it can be opened remotely and released while under load. The hook assembly is constructed of three separate parts; the sling, the swivel hook, and a lanyard.

SPECIFICATIONS

Manufacturer	Aeroquip
Safe working load	15,000 lb
Swivel hook inside diameter	3"

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	5 ft, 3 in.
Width	1 ft, 0 in.
Height	5 in.
Cube	2 cu ft
Weight	52 lb

REFERENCES

1. Technical Manual for Mission Essential Equipment and Systems for Helicopter External Cargo Handling, AG-230SL-MME-000.

S0300-BV-CAT-020



Release-A-Matic Hook HK2001

S0300-BV-CAT-020**HOOK, RELEASE-A-MATIC****ESSM NUMBER HK2001****DESCRIPTION**

The Release-A-Matic Hook HK2001 is a rigging device for remotely releasing loads under tension. It is designed to aid in the placement of loads where access is restricted. It can be opened remotely, and can be released from a wide range of angles. The Release-A-Matic hook is not designed for overhead lifting or for personal safety use.

SPECIFICATIONS

Manufacturer	Peck & Hale
Model	H 44
Safe working load	18,000 lb
Minimum break strength	71,700 lb

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 1/2 in.
Width	5 1/2in.
Height	2 in.
Cube	1 cu ft
Weight	12 lb

REFERENCES

None

S0300-BV-CAT-020



15-Hp 4-Stroke Outboard Motor MT0016

S0300-BV-CAT-020**MOTOR, OUTBOARD, 15-HP,
4-STROKE, LONG SHAFT****ESSM NUMBER MT0016**

DESCRIPTION

The Outboard Motor MT0016 is a 4-stroke, 15-hp outboard motor with a long shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	Mercury Marine
Engine type	4-stroke
Power at propeller shaft	15 hp
Max. operating rpm	4500-5500
Fuel	Gasoline with a minimum octane rating of 87. Leaded gasoline is not recommended
Fuel tank capacity	6 gallons, external
Propeller	9 1/2" diameter x 10" pitch
Starting	Recoil (pull start)

PHYSICAL CHARACTERISTICS

Operation/Shipping

Length	2 ft, 3 in.
Width	1 ft, 3 in.
Height	4 ft, 2 in.
Cube	12 cu ft
Weight	128 lb

REFERENCES

1. Mercury Outboard Operation, Maintenance, and Warranty Manual 90-10185040 203.

S0300-BV-CAT-020



40-Hp 4-Stroke Outboard Motor MT0040

S0300-BV-CAT-020**MOTOR, OUTBOARD, 40-HP, 4-STROKE****ESSM NUMBER MT0040**

DESCRIPTION

The Outboard Motor MT0040 is a 4-stroke, 40-hp outboard motor with a long shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	Mercury Marine
Engine type	4-stroke
Power at propeller shaft	40 hp
Max. operating rpm	5500-6000
Fuel	Gasoline with a minimum octane rating of 87. Leaded gasoline is not recommended
Fuel tank capacity	6 gallons, external
Propeller	10 1/2" diameter x 11" pitch
Starting	Recoil (pull start)

PHYSICAL CHARACTERISTICS

	<u>Operation/Shipping</u>
Length	2 ft, 10 in.
Width	1 ft, 3 in.
Height	5 ft
Cube	18 cu ft
Weight	235 lb

REFERENCES

1. Mercury Outboard Operation, Maintenance, and Warranty Manual 90-10212040 203.

S0300-BV-CAT-020



15-Hp Outboard Motor MT0940
35-Hp Outboard Motor MT0944 also Pictured

S0300-BV-CAT-020**MOTOR, OUTBOARD, 15-HP****ESSM NUMBER MT0940****DESCRIPTION**

The Outboard Motor MT0940 is a 2-cycle, 15-hp outboard motor with a long shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	OMC, Johnson Division
Power at propeller shaft	15 hp
Max. operating rpm	7000
Fuel	Gasoline (mixed w/50:1 outboard motor oil)
Fuel tank capacity	6 gallons, external
Propeller	9 1/2" diameter x 10" pitch
Starting	Recoil (pull start)

PHYSICAL CHARACTERISTICS

Shipping (mounted on rigging van door)

Length	1 ft, 8 in.
Width	1 ft, 0 in.
Height	3 ft, 6 in.
Cube	6 cu ft
Weight	77 lb

REFERENCES

1. Manual for Johnson Outboards, Model 9-15, No. 433276C.
2. Evinrude-Johnson Service Manual, Models 2 through V6, PN 507508.
3. Outboard Marine Corporation Special Tool Guide, PN 395402.
4. Outboard Marine Corporation Parts Catalog for 15-Hp Motors.

S0300-BV-CAT-020



35-Hp Outboard Motor MT0944
15-Hp Outboard Motor MT0940 also Pictured

S0300-BV-CAT-020**MOTOR, OUTBOARD, 35-HP****ESSM NUMBER MT0944****DESCRIPTION**

The Outboard Motor MT0944 is a two-cycle, gasoline, 35-hp outboard motor with a long shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	OMC, Johnson Division
Power at propeller shaft	35 hp
Max. operating rpm	5500
Fuel	Gasoline (mixed w/50:1 outboard motor oil)
Fuel tank capacity	6 gallons, external
Propeller	10 1/2" diameter x 11" pitch
Starting	Recoil

PHYSICAL CHARACTERISTICS

Shipping (mounted on rigging van door)

Length	4 ft, 6 in.
Width	1 ft, 3 in.
Height	2 ft, 2 in.
Cube	1125 cu ft
Weight	114 lb

REFERENCE

1. Evinrude-Johnson Service Manual, Models 2 through V6, PN 507508.
2. Outboard Marine Corporation Special Tool Guide, PN 395402.
3. Outboard Marine Corporation Parts Catalog for 35-Hp Motors.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn and covered by a double-wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned, and each sling is fitted with a screw pin shackle.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

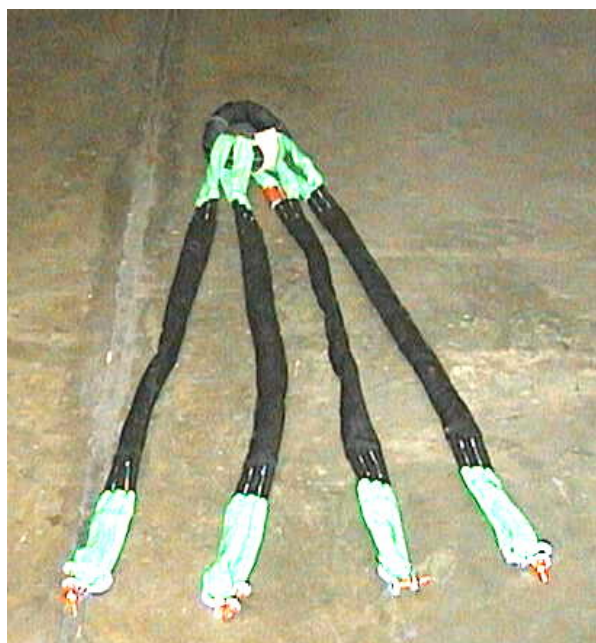
PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



4-Leg Polyester Roundsling Bridle SL0382

S0300-BV-CAT-020**ROUNDSLING BRIDLE, 4-LEG, POLYESTER,
QOS EN30****ESSM NUMBER SL0382**

DESCRIPTION

The 4-Leg, Polyester Roundsling Bridle SL0382 is an assembly consisting of four endless synthetic slings made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. The four slings are connected at one end with a cloth-type D-ring; the opposite end of each leg has a safety shackle.

The 4-Leg, Polyester Roundsling Bridle SL0382 is used to lift and position the 16' Inflatable Workboat WB0716.

SPECIFICATIONS

Roundsling Bridle

Manufacturer	Lift-All
Model	QOS EN30
Capacity	4,500 lb @ 60°
Length	8 ft, 6 in.

Shackle (4 each)

Manufacturer	Columbus McKinnon
Part Number	M649G
Size	7/16"
Working load	4,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 ft, 6 in.
Width	6 in.
Height	6 in.
Cube	2 cu ft
Weight	14 lb

REFERENCES

1. Lift-All Catalog.

S0300-BV-CAT-020



5/8" Carpenter Stopper ST0010

S0300-BV-CAT-020**STOPPER, CARPENTER, 5/8-INCH****ESSM NUMBER ST0010****DESCRIPTION**

The 5/8-inch Carpenter Stopper ST0010 is the principal means of gripping and holding a wire rope that is under a load. The carpenter stopper is capable of gripping a wire rope to the breaking strength of that wire rope without causing damage to itself. Under normal operating conditions, the carpenter stopper is repeatedly engaged and loaded up to 60 percent of the wire rope's breaking strength without causing damage to that wire rope. Although the construction and operating principles of the carpenter stopper are relatively simple, specific maintenance and operating techniques are mandatory to ensure a long and dependable service life.

SPECIFICATIONS

Manufacturer	Commercial to Navy specifications
Size	5/8"
Proof load	21,240 lb
Trip test load	6,372 lb

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	6 in.
Height	4 in.
Cube	1 cu ft
Weight	12 lb

REFERENCES

1. Operation and Maintenance Instruction, Carpenter Stopper, NAVSHIP 0994-LP-004-8010.
2. U.S. Navy Ship Salvage Manual, Volume 1, Theory of Strandings and the Use of Beach Gear, NAVSHIPS 0994-000-3010.
3. Carpenter Stopper for 5/8" Diameter Wire Rope, Assembly & Detail, NAVSEA Dwg. 6539368.

S0300-BV-CAT-020



5/8" Carpenter Stopper Bridle ST0012

S0300-BV-CAT-020**BRIDLE, WIRE ROPE, 5/8-INCH
CARPENTER STOPPER****ESSM NUMBER ST0012****DESCRIPTION**

The Wire Rope Bridle, for 5/8-inch Carpenter Stopper ST0012, is comprised of 3 high-in-strength, steel alloy forgings that are permanently assembled onto a length of wire rope. The three parts of the bridle consist of the equalizing thimble and two sockets. The sockets of the bridle are attached to two ears located on the body of the carpenter stopper and the equalizing thimble can be secured to either a cable puller or a secured deck fitting. The purpose of the bridle is to restrain the carpenter stopper.

SPECIFICATIONS

Manufacturer	Commercial to Navy specifications
Maximum operating load	29,400 lb
Maximum safe overload	40,750 lb
Breaking strength	45,200 lb

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 4 in.
Width	5 in.
Height	4 in.
Cube	1 cu ft
Weight	14 lb

REFERENCES

1. Operation and Maintenance Instruction, Carpenter Stopper, NAVSHIPS 0994-LP-004-8010.
2. U.S. Navy Ship Salvage Manual, Volume 1, Theory of Strandings and the Use of Beach Gear, NAVSHIPS 0994-000-3010.
3. Wire Rope Bridle for 5/8" Carpenter Stopper Assembly & Detail, NAVSEA Dwg. 6539369.

S0300-BV-CAT-020



16' Inflatable Boat WB0716

S0300-BV-CAT-020**BOAT, 16' INFLATABLE****ESSM NUMBER WB0716****DESCRIPTION**

The 16' Inflatable Boat WB0716 is a medium weight, trailerable boat that can be used in many applications where maneuverability, stability, and durability are important. The boat is used to transport people, equipment, and supplies, and for numerous other jobs.

The boat features a rigid one-piece aluminum deck with tie-down bars for securing equipment. The boat's rugged vulcanized neoprene tubes and internal keel tube enhance its self-bailing capabilities. The boat is designed to handle up to a 60-hp outboard motor that mounts on a neoprene-encased marine plywood transom.

The boat is equipped with a solid aluminum floor, paddles, running lights, a stern light, an anchor light, a boat hook, and the necessary ancillary gear to operate, maintain, and repair it.

SPECIFICATIONS

Manufacturer	Demaree
Model	16' GPC
Main tube diameter	20"
Inflatable chambers:	
Main tube	4
Keel tube	1
Load capacity	2000 lb
Max. horsepower rating	60

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	16 ft, 2 in.	5 ft, 2 in.
Width	6 ft, 5 in.	2 ft, 8 in.
Height	1 ft, 8 in.	1 ft, 10 in.
Cube	173 cu ft	25 cu ft
Weight	395 lb (with floor)	395 lb (with floor)

REFERENCES

None

S0300-BV-CAT-020



15' Inflatable Boat WB0717

S0300-BV-CAT-020**BOAT, 15' INFLATABLE****ESSM NUMBER WB0717****DESCRIPTION**

The 15' Inflatable Boat WB0717 is a lightweight, multi-purpose boat. The boat is used to transport people, equipment, and supplies, and for numerous other jobs.

The hull is a U-shaped chamber with conical airtight bulkheads that ensure safety and balance of pressure in the different compartments. An additional airtight compartment is the inflatable keel, which gives the bottom a V-shaped configuration.

The boat is equipped with aluminum floorboards, paddles, running lights, an anchor light, a stern light, a boat hook, and the necessary ancillary gear to operate and maintain it.

SPECIFICATIONS

Manufacturer	Zodiac
Model	Mark III GR
Type	3470
Max. persons on board	8
Load capacity	2205 lb
Max. horsepower	65

PHYSICAL CHARACTERISTICSShipping

Length	4 ft, 11 in.
Width	2 ft, 6 in.
Height	1 ft, 2 in.
Cube	14 cu ft
Weight	144 lb

REFERENCES

1. Maintenance and Assembly Manual for Zodiac Models Mark I, II, III.

S0300-BV-CAT-020

SHOP VAN P19700

I

S0300-BV-CAT-020



Shop Van System P19700

S0300-BV-CAT-020**SHOP VAN****SYSTEM NUMBER P19700****SYSTEM DESCRIPTION**

The Shop Van is a self-contained workshop outfitted to provide full maintenance and repair support for all SUPSALV spill response equipment. The Shop Van System includes the workshop van with spare parts and tools, a 175-Cfm Air Compressor (AC0330), a 40-kW generator (GE0550), and the necessary ancillary equipment to maintain response equipment at a spill site. The heated and air conditioned work area with a large workbench allows maintenance personnel to work comfortably and efficiently in the full range of environmental conditions at the spill site.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Workshop:	VA0508	1
Air Compressor, 175 cfm @ 100 psi, Diesel	AC0330	1
HVAC Unit w/Sleeve	AC2001	1
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	2
Electrical Distribution Panel	GE0001	1
Generator, 40-kW, Diesel, Model CJ4D-40SQ	GE0550	1
Roundsling, Polyester, 16'	SL0012	4

S0300-BV-CAT-020



Workshop Van VA0508

S0300-BV-CAT-020**VAN, WORKSHOP****ESSM NUMBER VA0508**

DESCRIPTION

The Workshop Van VA0508 is a complete, self-contained workshop. It is equipped with a 40-kW diesel-powered generator, a power cord, an external distribution power panel, a 175-cfm, 100-psi diesel-powered air compressor, lighting, heating, ventilation, power tools, spare parts, cabinets for storage, and other items needed to maintain the response equipment.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	21,400 lb

REFERENCES

None

S0300-BV-CAT-020



175-Cfm Air Compressor AC0330

S0300-BV-CAT-020**AIR COMPRESSOR, 175 CFM, @ 100 PSI, DIESEL****ESSM NUMBER AC0330**

DESCRIPTION

The 175-Cfm Air Compressor AC0330 is a rotary screw-type air compressor driven by a three- cylinder diesel engine. The air compressor is rated at 175 cfm @ 100 psi discharge pressure. The engine and compressor assembly is enclosed in a skid-mounted, sound-insulated, steel enclosure surrounded by a steel frame. The base plate for the air compressor contains forklift pockets to facilitate handling. The fuel source for the compressor is an internally mounted 25-gallon tank.

SPECIFICATIONS

Air Compressor Assembly

Manufacturer	Ingersoll-Rand
Model	P-175-W-JD-U-GPC

Air Compressor

Manufacturer	Ingersoll-Rand
Model	36005890
Type	Rotary screw
No. rotors	2
Capacity	175 cfm
Rated pressure	100 psi
Operating range	70 to 115 psi
Safety valve setpoint	150 psi
Disch. temp. range	180° to 200° F

Engine

Manufacturer	John Deere
Model	3179D
Starting system	12-volt
Speed:	
Full load	2500 rpm
No load	1400 rpm
Unloader range	110 to 115 psi
Fuel	Diesel
Fuel source	Internal 25-gal. tank
Fuel consumption	2 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	7 ft, 4 in.
Width	3 ft, 9 in.
Height	4 ft, 8 in.
Cube	129 cu ft
Weight	2632 lb

S0300-BV-CAT-020

AIR COMPRESSOR, 175 CFM, @ 100 PSI, DIESEL

ESSM NUMBER AC0330

REFERENCES

1. Technical Manual for Low-Pressure Air Compressor, Ingersoll-Rand Model P-175-W-JD-U- GPC.
2. Operating, Maintenance, and Parts Manual, Ingersoll-Rand, P/N 35380302.
3. Noise Emission Control Maintenance Manual, Ingersoll-Rand Form PCD 685.
4. Operator's Manual 3164, 3179, 4219, 4239, 4276, 6329, and 6414 OEM Engines, John Deere Catalog No. OM-RG16407, Issue E-1.
5. Parts Catalog 3176, OEM Engine & Accessories (Saran), John Deere, PC3178.
6. Component Technical Manual, John Deere, CTM 4 (24 Jan 90).

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump-type unit. The unit maintains a comfortable ambient atmosphere in the workshop van.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Voltage	230 V ac

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020

ESSM Number CD0010 Deleted.

S0300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12"****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the operating equipment.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft.
Weight	56 lb	56 lb

REFERENCES

None

S0300-BV-CAT-020



Electrical Distribution Panel GE0001

S0300-BV-CAT-020**ELECTRICAL DISTRIBUTION PANEL****ESSM NUMBER GE0001****DESCRIPTION**

The Electrical Distribution Panel GE0001 is designed to distribute 240-volt, single phase electric power. The distribution panel has a single 100-amp, 240-volt, three-phase receptacle to receive the 240-volt, three-phase ac power from the 40-kW Diesel Generator GE0550. There are four 50-amp, 125/250-volt, single phase receptacles that distribute 240-volt, single phase ac power to up to four separate vans (example: shop van, bunk van, rigging van, hot tap van, etc.). Any van that is to be connected to the distribution panel must be wired for 240-V ac, single phase power.

SPECIFICATIONS

Manufacturer	ESSM Facility
Receptacles:	
Input	One, 100-amp, 240-volt ac, three-phase
Output	Four, 50-amp, 240-volt ac, single phase

PHYSICAL CHARACTERISTICS

Length	2 ft, 6 in.
Width	9 in.
Height	3 ft, 9 in.
Cube	6.5 cu ft
Weight	128 lb

REFERENCE

1. Electrical Panel Container, ESSM Shop Van, NAVSEA Sketch SK0660.

S0300-BV-CAT-020



40-kW Diesel Generator GE0550

S0300-BV-CAT-020**GENERATOR, DIESEL, 40-kW, MODEL CJ4D-40SQ****ESSM NUMBER GE0550****DESCRIPTION**

The 40-kW Diesel Generator GE0550 is a self-contained unit, mounted on a rugged steel base with an integral fuel tank and enclosed in a weather-resistant, sound-attenuated steel enclosure. All generator engine controls and instrumentation are mounted on tilt-out, hinged panels, which are visible through a safety glass window during operation of the generator. Access to the generator and engine is provided through hinged doors. Forklift slots penetrate the width of the base for ease of transportation and handling. Four base tie-down points are installed for securing the unit during transportation, and a center-point lifting point is provided for overhead lifting.

The generator supplies 480/220-volt, three-phase or single phase power to the power distribution system. Power is distributed via four main 220-volt, three-phase distribution terminals; a 240-volt, three-phase temporary power receptacle; two 120/240-volt, single phase, marine twist-lock temporary power receptacles; and two 120-volt, single phase ground fault interrupter (GFI) receptacles.

SPECIFICATIONS40-Kw Generator Assembly

Manufacturer	Coleman Engineering
Model	CJ4D-40SQ
<u>Generator</u>	
Manufacturer	Newage International
Model	UCI224C
Frequency	60 Hz @ 1800 rpm
Voltage ranges:	240/120 volts, single phase 480/240/208 volts, three-phase

Engine

Manufacturer	John Deere
Model	4045DF150
No. of cylinders	4
Bore	4.19 in.
Stroke	5.0 in.
Displacement	276 cu in.
Compression ratio	17.6 : 1
Horsepower	54 bhp @1800 rpm
Starting	Electric, 12 V dc
Rpm (full load)	1800
Rpm (idle)	850
Fuel	Diesel
Fuel consumption	3.88 gph full load
Fuel tank capacity	80 U. S. gallons

S0300-BV-CAT-020

GENERATOR, DIESEL, 40-kW, MODEL CJ4D-40SQ (CONTD)

ESSM NUMBER GE0550

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	7 ft, 4 in.
Width	3 ft, 6 in.
Height	5 ft, 11 in.
Cube	152 cu ft
Weight	4100 lb (dry weight)

REFERENCES

1. Coleman Operation and Maintenance Manual, OMRG25204 (20 May 1996).
2. Coleman Parts Catalog, PC2521.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting each van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300-BV-CAT-020

PERSONNEL BUNK VAN P19500

S300-BV-CAT-020



Personnel Bunk Van P1950

S300-BV-CAT-020**PERSONNEL BUNK VAN****SYSTEM NUMBER P19500****SYSTEM DESCRIPTION**

The Personnel Bunk Van P19500 provides interim, supplemental accommodations, and a first response capability in remote areas while more adequate facilities (generally a large support vessel) are being mobilized. The bunk van is outfitted with a kitchenette (consisting of a two-burner stove, a sink, and a 6.0 cubic foot refrigerator) or a microwave, all necessary berthing items (mattress, blankets, sheets, and pillow cases), fire extinguishers, smoke alarms, basic toiletries (soap and towels), and other ancillaries. More adequate accommodations would include full head facilities with showers, a galley, and lounge area. When such adequate facilities are available, the bunk van may still be necessary to provide bunks for additional personnel. Power can be supplied from an external source (either by the 30-kW generator in the shop van, by a separate ESSM 5-kW generator, or by commercial power), supplying 240-volt, single phase power. It is impractical to provide personnel berthing for a worst-case remote area spill scenario entirely from in-house assets. Commercially available portable berthing trailers or vans can be leased in some areas. Such commercial facilities would be used to augment the first response SUPSALV bunk vans where required.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. PERSONNEL BUNK VAN		1
a. Van, Berthing	VA0734A (Altn)*	
HVAC Unit w/Sleeve	AC2001	1
Roundslings, Polyester, 16'	SL0012	4
b. Van, Berthing	VA0734B	
HVAC Unit w/Sleeve	AC2001	1
Roundslings, Polyester, 16'	SL0012	4

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S300-BV-CAT-020



Personnel Bunk Van VA0734B (Interior)



Personnel Bunk Van VA0734B

S300-BV-CAT-020**VAN, BERTHING****ESSM NUMBER VA0734**

DESCRIPTION

The Berthing Van VA0734 provides interim or supplemental berthing accommodations for first response capability in remote areas. The van can accommodate berthing for 7 people, provide emergency galley accommodations, and provide shelter from the environment. The van is equipped with bunks, lockers, lights, a kitchenette or microwave, a portable water tank, a refrigerator, a coffee maker, a heater, and an air conditioner. Electrical power is supplied by external sources, an ESSM generator, a ship's generator, or commercial power if available. A 60-hertz, 240-volt, single phase power source is required for the van.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	6500 lb

REFERENCE

None

S300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump-type unit. The unit maintains a comfortable temperature in the Berthing Van.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Voltage	230 V ac

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft 0 in.
Width	1 ft 7 in.
Height	1 ft 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S300-BV-CAT-020

ESSM Number CD0010 Deleted.

S300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020

SOLAS SHIPBOARD PERSONNEL BUNK VAN P19550

S0300-BV-CAT-020



SOLAS Shipboard Personnel Bunk Van P19550

S0300-BV-CAT-020**PERSONNEL BUNK VAN,
SHIPBOARD, SOLAS****SYSTEM NUMBER P19550****SYSTEM DESCRIPTION**

The SOLAS Shipboard Personnel Bunk Van P19550 provides interim, supplemental accommodations, and a first response capability in remote areas while more adequate facilities (generally a large support vessel) are being mobilized. The bunk van is outfitted with four bunks and all the necessary berthing items (mattresses, blankets, sheets, and pillow cases), fire extinguishers, smoke alarms, basic toiletries (soap and towels), and accommodations that also include a full downsized head with a shower. When adequate facilities are available, the bunk van may still be necessary to provide bunks for additional personnel. Power can be supplied from an external source (either by the 30-kW generator in the shop van, a separate ESSM 5-kW generator, or by commercial power), supplying 208-volt, single phase, ac power.

The SOLAS Shipboard Personnel Bunk Van has been certified for use aboard ships certified under 46 CFR, Subchapters 1, 1-A, L, and SOLAS.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Berthing, Shipboard	VA0735	1
Roundslings, Polyester, 16'	SL0012	4

S0300-BV-CAT-020



SOLAS Shipboard Personnel Bunk Van VA0735

S0300-BV-CAT-020**VAN, BERTHING, SHIPBOARD****ESSM NUMBER VA0735****DESCRIPTION**

The Shipboard Berthing Van VA0735 provides interim or supplemental berthing accommodations for first response capability in remote areas. the bunk van is outfitted with four bunks and all the necessary berthing items (mattress, blankets, sheets, and pillow cases), fire extinguishers, smoke alarms, basic toiletries (soap and towels), and accommodations that also include a full downsized head with a shower. When adequate facilities are available, the bunk van may still be necessary to provide bunks for additional personnel. Power can be supplied from an external source (either by the 30-kW generator in the shop van, a separate ESSM 5-kW generator, or by commercial power), supplying 208-volt, single phase, 60-Hz, , ac power via a 50-foot, four wire pig tail type power cord.

The Shipboard Berthing Van is designed with an entrance door at each end and two 8' x 7' berthing areas. Each berthing area has two shipboard style bunks, a drop down table, a chair, two lockers and a sink. Separating the two berthing areas is a 2' x 3' head area containing a shower, hot water heater, storage area and a toilet. The head has two lockable privacy doors, one for each berthing area.

The SOLAS Shipboard Personnel Bunk Van has been certified for use aboard vessels certified under 46 CFR, Subchapters 1, 1-A, L, and SOLAS.

SPECIFICATIONS

Manufacturer	Sonic Enclosures Ltd
Model	20' Temporary Accommodation Module
Exterior connections:	
Input power	Pin & sleeve, 208 volts, single phase, 60 Hz
Ground studs	2
Deck drains	Two 1 1/2" male camlock fittings
Fresh water	3/4" male camlock fitting
Gray water drain	1 1/4" male camlock fitting
Black water drain	1 1/2" male camlock fitting
Communications	Shipboard interface box for hookup to ships' communications data and alarm systems
Emergency fire dampers	3 T-handle manual pull-type shutoffs

S0300-BV-CAT-020

VAN, BERTHING, SHIPBOARD

ESSM NUMBER VA0735

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	22,000 lb

REFERENCES

1. USCG As-Built Dossier For Tempory Accommodations Modules.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1-inch screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

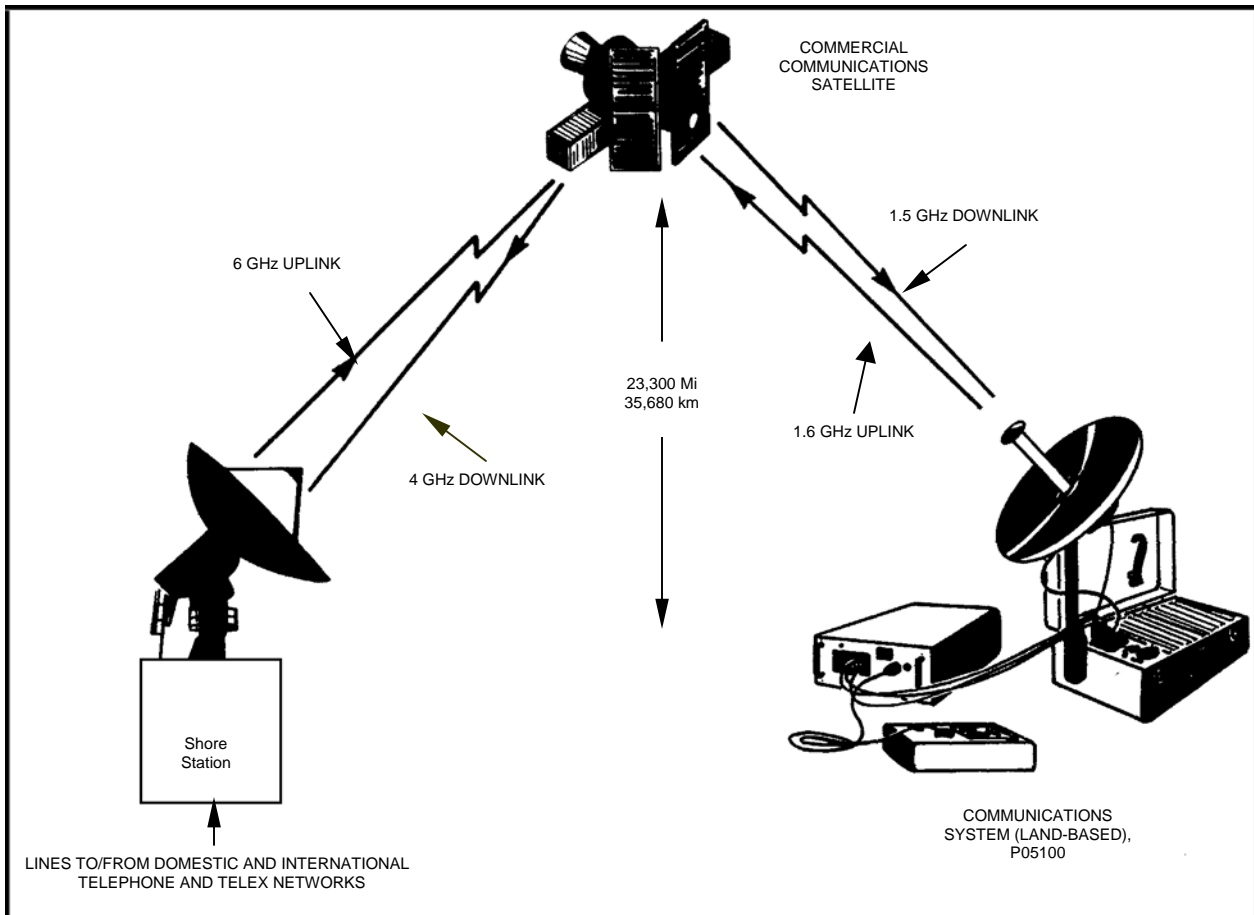
1. Lift-All 1998 Catalog.

S0300-BV-CAT-020

COMMUNICATIONS SYSTEM (LAND-BASED) P05100



S0300-BV-CAT-020



Communications System (Land-Based) P05100

S0300-BV-CAT-020**COMMUNICATIONS SYSTEM (LAND-BASED)****SYSTEM NUMBER P05100****SYSTEM DESCRIPTION**

The Land-Based Communications System P05100 is a complete high-quality terminal used for voice, data, or Telex communications. There are five separate configurations of the communications system available for the end user, depending on the space available and power requirements. The system uses a geostationary International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. The shore stations connect the land-based communications system into the domestic and international telephone and Telex circuits. This operation makes available a worldwide communications network via satellite.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Phone, Portable SATCOM System, Model TCS-9200	PH0923 (Altn)	1
2. Phone, Portable SATCOM System, Model TCS-9700	PH0924 (Altn)	1
3. Phone, Portable SATCOM System Planet 1 #1001	PH0930 (Altn)	1
4. Phone, Solsat 1, Ruggedized Communication System	PH0935 (Altn)	1
5. Phone, Satellite, Iridium	PH1730 (Altn)	1
6. Accessory Kit, For Sat PhonePH1731	PH1732 (Altn)	1
Phone, Satellite, Iridium	PH1730 (Altn)	1

S0300-BV-CAT-020

ESSM Number PH0921 Deleted.

S0300-BV-CAT-020



Portable SATCOM Unit PH0923



Portable SATCOM System PH0923

S0300-BV-CAT-020**PHONE, PORTABLE SATCOM SYSTEM,
MODEL TCS-9200****ESSM NUMBER PH0923**

DESCRIPTION

The Portable SATCOM System Phone PH0923 is a complete, high-quality terminal used for voice, data, or Telex communication. The system uses a geostationary International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. The shore stations connect the PH0923 into the domestic and international telephone and Telex circuits. This operation makes a worldwide communications network available via satellite.

As part of the portable SATCOM system phone, a high-gain, directive antenna is aimed at the satellite to be used. Once the satellite is acquired, duplex voice/data or Telex communication channels may be established in a manner similar to ordinary telephone or Telex machine usage.

SPECIFICATIONS

Manufacturer	Telesystems Inc.
Model	TCS-9200
Power requirements	290 W, 110 V ac $\pm 10\%$, single phase, 47-64 Hz, 0.29 kVA (Recommended: 0.5 kVA transformer, if required)
Environmental	
Ambient temperature	-35° to +55°C
Relative humidity	95% max. at 40°C
Precipitation	10 cm/hour max.
General	
Transmit frequency range	1636.5 to 1646.0 MHz
Receive frequency range	1535.0 to 1543.5 MHz
Gain-to-noise temp ratio (G/T)	Better than -4 dBK

PHYSICAL CHARACTERISTICS

<u>TSC-9200</u>	<u>Shipping</u>	<u>Antenna</u>	<u>Shipping</u>
Length	2 ft, 5 in.	Height	2 ft, 5 in.
Width	1 ft, 9 in.	Diameter	8 in.
Height	10 in.	Cube	1 cu ft
Cube	4 cu ft	Weight	5 lb
Weight	78 lb		

S0300-BV-CAT-020

**PHONE, PORTABLE SATCOM SYSTEM,
MODEL TCS-9200**

ESSM NUMBER PH0923

REFERENCES

1. TCS-9200, Operations and Instruction Manual.
2. TCS-9200, Maintenance Manual.
3. TCS-9200, Schematics Manual.

S0300-BV-CAT-020



Portable SATCOM System PH0924



Portable SATCOM System PH0924

S0300-BV-CAT-020

**PHONE, PORTABLE SATCOM SYSTEM,
MODEL TCS-9700**

ESSM NUMBER PH0924

DESCRIPTION

The Portable SATCOM System Phone PH0924 is a complete, self-contained, high-quality terminal used for voice, data, or Telex communication. The system uses an International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. All that is required is a power source to power up the TCS-9700 ultralite phone system. The TCS-9700 can operate on almost any power source. The system can operate either on direct current (150-375 V dc) or alternating current (85-264 V ac @ 47-440 Hz). The TCS-9700 automatically adapts itself to either power source. A portable generator or battery/inverter setup provides the ultimate in portable independence. The TCS-9700 is highly efficient, with a power consumption of 75 watts idle and 180 watts when transmitting.

SPECIFICATIONS

Manufacturer	Mobile Telesystems Inc.
Model	TCS-9700
Power requirements	
Idle	75 W
Transmitting	180 W
Environmental conditions	
Ambient temperature	-35° to 55°C
Relative humidity	95% max. at 40°C
Precipitation	10 cm/hour max.
General	
Transmit frequency range	1636.5 to 1645.0 MHz
Receive frequency range	1535.0 to 1543.5 MHz

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	2 ft, 3 in.
Width	1 ft, 2 in.
Height	1 ft, 8 in.
Cube	5 cu ft
Weight	66 lb

S0300-BV-CAT-020

**PHONE, PORTABLE SATCOM SYSTEM,
MODEL TCS-9700**

ESSM NUMBER PH0924

REFERENCES

1. Operator's Manual for the Panasonic Cordless Phone, Model KX-T9006TW.
2. Operator's Manual for the Transportable Communications System, Model TCS-9800.

S0300-BV-CAT-020



Shipping Configuration for PH0930



Portable SATCOM System PH0930

S0300-BV-CAT-020**PHONE, PORTABLE SATCOM SYSTEM PLANET 1 #1001****ESSM NUMBER PH0930****DESCRIPTION**

The Planet 1 Portable SATCOM Phone System PH0930 consists of a base unit including electronics, antenna, rechargeable LI-Ion battery, and smart card reader, a handset with full featured keypad and clear display, a handset cradle with ports for peripheral equipment such as fax machine, personal computer, or an external phone.

The basic functions of the Planet 1 satellite phone include 4.8-Kbps voice operation, 2.4-Kbps fax communications, and 2.4-Kbps data communications. The Planet 1 phone also supports transmission of dial tones (DTMF) for accessing user-driven telephone information services.

The Planet 1 phone operates from a battery, ac charger, or optional dc converter/charger utilizing a vehicle battery. The battery will operate the phone for approximately 1.2 hours (minimum) of continuous transmission and receiving. When connected to the satellite but not transmitting or receiving, the Planet 1 phone goes into a power saver mode, which increases the operational life of the battery to approximately 4.5 hours.

SPECIFICATIONS

Manufacturer	COMSAT Corp.
Model	Planet 1 #1001
Satellite:	
Configuration	Four INMARSAT-3 satellites in geosynchronous orbit for total global coverage
Beams	Spot beams for voice, fax, and data communications channels
Frequency range	1626.5 to 1660.5 MHz (transmitting); 1525.0 to 1559.0 MHz (receiving)
Phone:	
Antenna type	Flat type patch antenna
Communication functions:	
Voice	4.8 Kbps Advanced Multi-Band Excitation (AMBE) encoding
Fax	2.4 Kbps, Group 3
Asynchronous data	2.4 Kbps
Interfaces:	
Telephone	RJ-11 2-wire modular jack
Fax	RJ-11 2-wire modular jack
Data	Special 14-pin connector adapter cable (option) converts to 9-pin D-subminiature (female)
Data rate	2400 bps

S0300-BV-CAT-020

PHONE, PORTABLE SATCOM SYSTEM PLANET 1 #1001

ESSM NUMBER PH0930

PHYSICAL CHARACTERISTICS

Length	1 ft, 0 in.
Width	8 1/4 in.
Height	1 5/8 in.
Cube	1 cu ft
Weight	6 lb

REFERENCES

1. Planet 1 STU-III Instruction Book, June 1997.

S0300-BV-CAT-020



Solsat 1 Ruggedized Communication Phone System PH0935

S0300-BV-CAT-020**PHONE, SOLSAT 1, RUGGEDIZED
COMMUNICATION SYSTEM****ESSM NUMBER PH0935****DESCRIPTION**

The Solsat 1 Ruggedized Communication Phone System PH0935 consists of a base unit including electronics; an antenna; a rechargeable NiCd battery pack with a fast charge power supply; an operator handset with full featured keypad and clear display; a handset cradle with ports for peripheral equipment such as fax machines, personal computer, or an external phone; and various cables and adapters to set up and operate the unit.

The basic communication functions of the Solsat 1 phone include 4.8-Kbps voice operation, 2.4-Kbps fax communications, and 2.4-Kbps data communications. The Planet 1 phone also supports transmission of dial tones (DTMF) for accessing user-driven telephone information services.

The Solsat 1 phone can be powered from several different sources: an external AC aDpaptor, a DC source, a solar panel, or the internal NiCd battery pack this provides a high degree of portability and independence of specific power sources

SPECIFICATIONS

Manufacturer	Thrane & Thrane
Model	Solsat 1
Satellite	Four INMARSAT-3 satellites in geosynchronous orbit for total global coverage
Power supply	10.5-18.5 V dc
Frequency range:	
Transmitting	1626.5 to 1660.5 MHz
Receiving	1525.0 to 1559.0 MHz
Antenna	Directional patch array antenna

PHYSICAL CHARACTERISTICS

Length	1 ft, 5 in.
Width	1 ft, 1 in.
Height	.7 in.
Cube	1 cu ft
Weight	18 lb

REFERENCES

1. TT-3060A Capsat® Mobile Telephone User's Manual.

S0300-BV-CAT-020



Iridium Satellite Phone PH1730

S0300-BV-CAT-020**PHONE, SATELLITE, IRIDIUM****ESSM NUMBER PH1730****DESCRIPTION**

The Iridium Satellite Phone PH1730 consists of an operator handset with a full featured keypad and clear display, handheld satellite phone, two rechargeable Lithium-Ion battery packs, an ac- and dc-powered battery charger, and various cables and adapters to set up and operate the unit.

The Iridium Satellite LLC provides global mobile satellite voice and data service with complete coverage of the earth (including oceans, airways and polar regions). Through a constellation of 66 low-earth orbiting (LEO) satellites operated by The Boeing Company, Iridium delivers essential communications services to and from remote areas where no other form of communication is available. The service is ideally suited for industrial applications, such as defense/military, emergency services, maritime, mining, forestry, and oil recovery operations.

SPECIFICATIONS

Manufacturer	Motorola
Model	9500 series
Satellite	66 low orbiting satellites
Power supply	110 V ac and 12 V dc
Volume	Under 489 cc (30 cubic inches)
Continuous talk time	Up to 2.0 hrs w/standard battery 3.2 hrs w/ high capacity battery 6.5 hrs w/ ultra high capacity battery
Standby time	Up to 20 hrs w/standard battery 30 hrs w/ high capacity battery 65 hrs w/ ultra high capacity battery

PHYSICAL CHARACTERISTICSShipping

Length	1 ft, 6.5 in.
Width	1 ft, 2 in.
Height	5 in.
Cube	1 cu ft
Weight	12 lb

REFERENCES

1. 9500 Portable Telephone User's Guide, 68P09420A79-0.
2. 9501 Pager User's Manual, 6881031B15-O.
3. Iridium Services User Manual, INAUG1098.

S0300-BV-CAT-020



Accessory Kit, For Satellite Phone PH1731 (PH1732)

S0300-BV-CAT-020**ACCESSORY KIT, FOR SAT PHONE PH1731****ESSM NUMBER PH1732**

The Accessory Kit, For Sat Phone PH1731 (PH1732) is comprised of the necessary ancillary equipment to set up and operate the Satellite Phone PH1731 and is shipped in a hard side plastic case.

SPECIFICATIONS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Accessory case, Model M9505A		1
Adapter, remote, antenna		1
Antenna cable, 60'		1
Antenna, shipboard mount		1
Cable, computer to data adapter		1
Charger, ac, adapter for solar panel		1
Data adapter		1
Inventory, laminated		1
Iridium data services CD		1
Iridium M9505A User's Guide		1
Iridium phone stand (3-leg)		1
Magnetic mount, antenna, large (17")		1
Magnetic mount, antenna,, small (5')		1
Manual, Direct Internet Data User's Guide		1
Manual, Using Commercial E-mail Account		1
Phone, Satellite, Model M9505A	PH1731	1
Solar panel, w/internal battery		1

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	1 ft, 11 in.
Width	1 ft, 6 in.
Height	9 in.
Cube	2 cu ft
Weight	23 lb

REFERENCES

None

S0300-BV-CAT-020



Iridium Satellite Phone PH1731

S0300-BV-CAT-020**PHONE, SATELLITE, IRIIDIUM****ESSM NUMBER PH1731**

DESCRIPTION

The Iridium Satellite Phone PH1731 consists of an operator handset with a full featured keypad and clear display, handheld satellite phone, two rechargeable Lithium-Ion battery packs, an ac- and dc-powered battery charger, and various cables and adapters to set up and operate the unit.

The Iridium Satellite LLC provides global mobile satellite voice and data service with complete coverage of the earth (including oceans, airways and polar regions). Through a constellation of 66 low-earth orbiting (LEO) satellites operated by The Boeing Company, Iridium delivers essential communications services to and from remote areas where no other form of communication is available. The service is ideally suited for industrial applications, such as defense/military, emergency services, maritime, mining, forestry, and oil recovery operations.

SPECIFICATIONS

Manufacturer	Motorola
Model	9505A series
Satellite	66 low orbiting satellites
Power supply	110 V ac and 12 V dc
Volume	Under 489 cc (30 cubic inches)
Continuous talk time	Up to 2.0 hrs w/standard battery 3.2 hrs w/ high capacity battery 6.5 hrs w/ ultra high capacity battery
Standby time	Up to 20 hrs w/standard battery 30 hrs w/ high capacity battery 65 hrs w/ ultra high capacity battery

PHYSICAL CHARACTERISTICS

Shipping

Length	11 in.
Width	8 in.
Height	7 in.
Cube	1 cu ft
Weight	4 lb

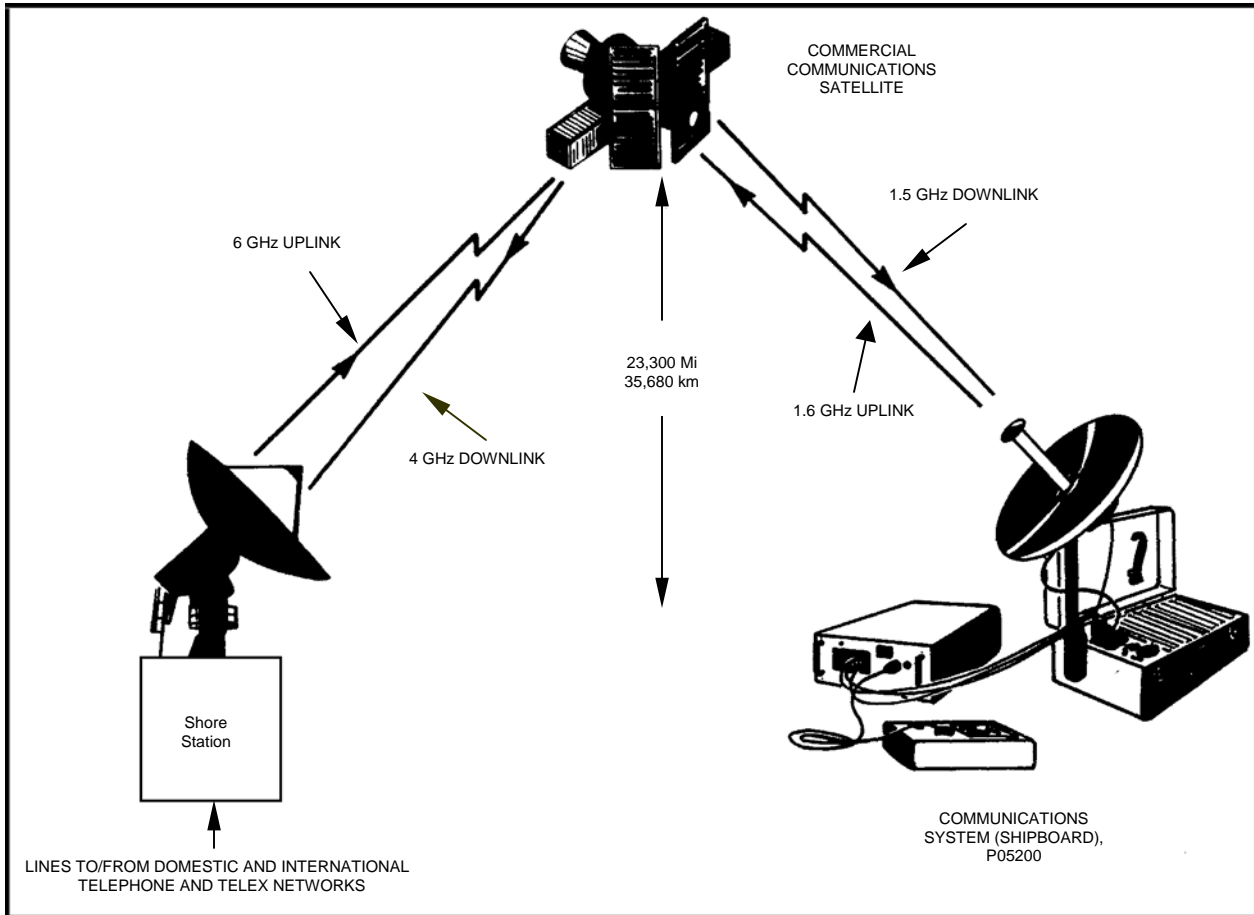
REFERENCES

1. 9505A Portable Telephone User's Guide, 68P09420A79-0.

S0300-BV-CAT-020

COMMUNICATIONS SYSTEM (SHIPBOARD) P05200

S0300-BV-CAT-020



Communications System (Shipboard) P05200

S0300-BV-CAT-020**COMMUNICATIONS SYSTEM (SHIPBOARD)****SYSTEM NUMBER P05200****SYSTEM DESCRIPTION**

The Shipboard Communications System P05200 is a complete, high-quality terminal used for voice or data communications. There are three separate configurations of the communications system available for the end user, depending on the space available and power requirements. All three systems use a geostationary International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. The shore stations connect the shipboard communications system into the domestic and international telephone and Telex circuits. This operation makes a worldwide communications network via satellite available to vessels at sea.

The PH0920 and PH0922 are containerized systems that, once set up, allow the container to be used as an environmentally friendly workspace and communications room. The container provides shelter from the elements and is air conditioned and heated.

The PH0940 Ruggedized Communications System Phone is a briefcase-size unit that provides ease in portability due to its size. While providing excellent voice communication, data capability is reduced in comparison to the PH0920 and PH0922, and the end user will sacrifice climate controlled workspace and communications room for portability.

All three systems, while primarily designed for shipboard applications, may be used in a landside application.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Communications System (Shipboard)		1
a. Phone, Shipboard SATCOM System, MCS 9120, 8' x 10' container	PH0920 (Altn)	
HVAC Unit, w/Sleeve	AC2001	1
Faxphone	OE2068 (not shown)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundsling, Polyester, 16'	SL0012	4
b. Phone, Shipboard SATCOM System, MCS 9100, 8' x 8' container	PH0922 (Altn)	
HVAC Unit, w/Sleeve	AC2001	1
Faxphone	OE2068 (not shown)	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundsling, Polyester, 16'	SL0012	4
c. Phone, Sea Pak-M, Maritime Mini, w/Stabilized Antenna	PH0940 (Altn)	

S0300-BV-CAT-020



SATCOM Van PH0920



SATCOM Van PH0920 Interior

S0300-BV-CAT-020**PHONE, SHIPBOARD SATCOM SYSTEM,
MCS 9120, 8' X 10' CONTAINER****ESSM NUMBER PH0920****DESCRIPTION**

The Shipboard SATCOM Phone System PH0920 is a containerized, high-quality terminal used for voice and data communications. The system uses a geostationary International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. The shore stations connect the PH0920 phone system into a domestic and international telephone network. The result of this operation is to make a worldwide communications network via satellite available to vessels at sea.

On board the ship, as a part of the PH0920 system, is a high-gain, highly directional antenna aimed at the satellite to be used. Once aimed at the satellite, the terminal will receive a continuously transmitted signal that, along with the ship's gyro, will keep the antenna aimed at the satellite as the ship changes geographical locations and headings. Once the satellite is acquired, duplex voice and data communication channels may be established in a manner similar to using the telephone.

SPECIFICATIONS

Manufacturer	Telesystems Inc.
Model	MCS 9120
General	
Transmit frequency range	1636.5 to 1645.0 MHz
Receive frequency range	1535.0 to 1543.5 MHz
Gain-to-noise temp. ratio (G/T)	Better than -4 dB
Environmental	
Ambient temperature	-35° to +55°C (above deck); 0 to +45°C (below deck)
Relative humidity	95% max @ 40°C
Power	110/220 V ac ±10%, single phase, 47-64 Hz, 0.5 kVA

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	9 ft, 10 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	630 cu ft
Weight	6880 lb

S0300-BV-CAT-020

**PHONE, SHIPBOARD SATCOM SYSTEM,
MCS 9120, 8' X 10' CONTAINER (CONTD)**

ESSM NUMBER PH0920

REFERENCES

1. MCS 9120, Operations and Installation Manual.
2. MCS 9120, Maintenance Manual.
3. MCS 9120, Schematic Manual.

S0300-BV-CAT-020



SATCOM Van PH0922



SATCOM Van Interior PH0922

S0300-BV-CAT-020**PHONE, SHIPBOARD SATCOM SYSTEM,
MCS 9100, 8' X 8' CONTAINER****ESSM NUMBER PH0922****DESCRIPTION**

The Shipboard SATCOM Phone System PH0922 is a containerized, high-quality terminal used for voice and data communications. The system uses a geostationary International Maritime Satellite Organization (INMARSAT) satellite as a repeater to one or more shore stations. The shore stations connect the PH0922 phone into the domestic and international telephone circuits. The end result of this operation is to make a worldwide communications network via satellite available to vessels at sea.

On board the ship, as part of the PH0922 system, is a high-gain, highly directive, vertically-referenced antenna that is aimed at the satellite being used. After the antenna is aimed at the satellite, the terminal will receive a continuously transmitted signal that, along with the ship's gyro, will keep the antenna aimed at the satellite as the ship changes geographical locations and headings. Once the satellite link is acquired, duplex voice and data communication channels may be established in a manner similar to using the telephone.

SPECIFICATIONS

Manufacturer	Telesystem Inc.
Model	MCS 9100
Transmit frequency range	1636.5 to 1645.0 MHz
Receive frequency range	1535.0 to 1543.5 MHz
Gain-to-noise temp. ratio (G/T)	Better than -4 dB
Ambient temperature	-35° to +55°C (above deck); 0 to +45°C (below deck)
Relative humidity	95% max at 40°C
Power	110/220 V ac \pm 10%, single phase, 47-64 Hz, 0.5 kVA

PHYSICAL CHARACTERISTICSShipping

Length	8 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	512 cu ft
Weight	4194 lb

S0300-BV-CAT-020

**PHONE, SHIPBOARD SATCOM SYSTEM,
MCS 9100, 8' X 8' CONTAINER (CONTD)**

ESSM NUMBER PH0922

REFERENCES

1. MCS9100 Operations and Installation Manual.
2. MCS9100 Maintenance Manual.
3. MCS9100 Schematics Manual.

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump unit. It is designed to maintain a comfortable ambient atmosphere in the space being conditioned.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58 CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC-M402S are currently in use in the ESSM System with appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model(s)	IC-M56 IC-M58 IC-M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Sensitivity	.3μV for 12 dB SINAD
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high; 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Mini Maritime Sea Pak-M Phone PH0940

S0300-BV-CAT-020**PHONE, SEA PAK-M, MARITIME MINI,
W/STABILIZED ANTENNA****ESSM NUMBER PH0940****DESCRIPTION**

The Maritime Mini Sea Pak-M Phone PH0940 provides telephone satellite services between fixed land users and mobile stations. The Maritime Mini Sea Pak-M Phone also offers CCITT Group III facsimile at 9600 baud and full duplex data services up to 9600 baud. The Maritime Mini Sea Pak-M Phone can be powered from several different sources: an external ac adaptor, a dc power source, a solar panel, or the internal NiCd battery pack. The ability to use multiple power sources provides a high degree of portability and independence of specific power sources.

The Maritime Mini Sea Pak-M Phone consists of the following components: an electronics unit, a stabilized antenna, an operator handset, a NiCd battery pack, a compass, manuals, antenna cables, and a lightweight power supply.

SPECIFICATIONS

Manufacturer	Thrane & Thrane
Model	TT-3064A
Transmit frequency range	1626.5 MHz to 1660.5 MHz
Receive frequency range	1525.0 MHz to 1559.0 MHz
Ambient temperature	-25°C to +55°C operating; -40°C to +80°C storage
Relative humidity	95% non-condensing at +40°C
Power	10.5 - 32.0 V dc floating, $\pm 0.3\%$, min. 5W to max. 10W, 120-V ac power supply

PHYSICAL CHARACTERISTICSShipping

Length	1 ft, 9 in.
Width	10 in.
Height	1 ft, 3 in.
Cube	2 cu ft
Weight	32 lb

S0300-BV-CAT-020

**PHONE, SEA PAK-M, MARITIME MINI,
W/STABLIZED ANTENNA (CONTD)**

ESSM NUMBER PH0940

REFERENCE

1. TT3060A Capsat[®] Mobile Telephone User Manual.
2. Sea Pak-M Quick Start User's Guide, LSS-99434.
3. Solsat Phone Communication System Equipment Handbook, LSS94429.
4. Fax/Phone Switch for Mini-M User's Manual

S0300-BV-CAT-020

COMMUNICATIONS SYSTEM (RANGE ENHANCING) P05300

S0300-BV-CAT-020



Range Enhancing Communications System P05300

S0300-BV-CAT-020**COMMUNICATIONS SYSTEM (RANGE ENHANCING)****SYSTEM NUMBER P05300****DESCRIPTION**

The Range Enhancing Communications System P05300 consist of a base station radio/repeater, with encryption software, a 110-volt ac and a 12-volt dc power cable, an antenna, a 12-volt gel cell battery used for a backup power source, and an instruction manual.

The unit can function either as a stand-alone radio or as a repeater for other radios. There may be situations in which some or all of the remote sites cannot communicate directly with the base radio, as, for example, with oil recovery equipment or with base stations that are out of range. In these cases a “repeater” radio can be used to extend the effective range between units by placing it between the base station and the remote(s). The repeater must have line-of-sight transmission and be within range of both the base and the intended remote radios. The electrical power for the base station operation is independent of the radio unit(s). It is recommended to run the repeater radio with ac power or other continuous power source, so that the radio can be left on 24 hours a day. At very least it must be on whenever any of the remote radios in its area of coverage are scheduled for operation.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Radio/Repeater, Marine, VHF, Portable	RA0905	1

S0300-BV-CAT-020



Portable VHF Marine Radio/Repeater RA0905

S0300-BV-CAT-020**RADIO/REPEATER, MARINE, VHF, PORTABLE****ESSM NUMBER RA0905****DESCRIPTION**

The Portable VHF Marine Radio/Repeater RA0905 is a self-contained, portable base station/repeater capable of normal or encrypted transmissions. Its features include programmable frequencies, a palm microphone, a 5-watt speaker, and removable printed circuit cards for easy servicing and future upgrading. An internal battery allows a change to low RF power for 30 minutes of operation during an ac power failure. The unit has a 110/220-volt ac or 12-volt dc (selectable) power supply.

SPECIFICATIONS

Manufacturer	Motorola
Model	P1820AX
Modes	128
AC voltage range	90-132 V ac 180-264 V ac
AC frequency input	47-63 Hz
External dc power input	11-16 V dc
Emergency battery capacity	30 minutes

PHYSICAL CHARACTERISTICSShipping

Length	1 ft, 8 in.
Width	8 in.
Height	1 ft, 3 in.
Cube	1.5 cu ft
Weight	38 lb

REFERENCE

1. Motorola Portable Repeater II P1820AX and P1821AX Instruction Manual 68P81074C85-A.

S0300-BV-CAT-020

BEACH TRANSFER SYSTEM P01100

S0300-BV-CAT-020



Beach Transfer System Van



Roundsling SL0012



Beach Transfer System Tool Box TL0090



Beach Transfer Trailer TR2114



Farm-Type Tractor Model 2120 TT2009



All-Terrain Vehicle (ATV) VE2110

Beach Transfer System P01100 Overview

S0300-BV-CAT-020**BEACH TRANSFER SYSTEM****SYSTEM NUMBER P01100****SYSTEM DESCRIPTION**

The Beach Transfer System P01100 has four equivalent configurations with each consisting of a storage/shipping container, four polyester roundslings, two beach transfer trailers, a 4-wheel drive tractor with front-end loader, and two one-man, 4-wheel drive all-terrain vehicles. Each of the four configurations has equipment that is functionally the same. The performance characteristics of the individual equipment in the systems may vary slightly from one another. The system is used to provide access to the beach and water areas for shoreside operations, which include beach surveys, cleanup operations, and transportation of equipment and materials.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Beach Transfer System	VA2113A (Altn)*	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Beach Transfer System	TL0090	1
Trailer, Beach Transfer	TR2114	2
Tractor, Farm-Type, Model 1160	TT2010	1
Vehicle, ATV, Fourtrax 4 x 4, TRX 300	VE2100	2
2. Van, Beach Transfer System	VA2113B (Altn)*	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Beach Transfer System	TL0090	1
Trailer, Beach Transfer	TR2114	2
Tractor, Farm-Type, Model 2110	TT2008	1
Vehicle, ATV, Fourtrax 4 x 4, TRX 350D	VE2105	2
3. Van, Beach Transfer System	VA2113C (Pri)	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Beach Transfer System	TL0090	1
Trailer, Beach Transfer	TR2114	2
Tractor, Farm-Type, Model 2120	TT2009	1
Vehicle, ATV, Foreman 400	VE2110	2
4. Van, Beach Transfer System	VA2113D (Altn)*	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Beach Transfer System	TL0090	1
Trailer, Beach Transfer	TR2114	2
Tractor, Farm-Type, Model 2120	TT2009	1
Vehicle, ATV, Fourtrax 4 x 4, Foreman 450	VE2115	2

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Beach Transfer System Van VA2113

S0300-BV-CAT-020**VAN, BEACH TRANSFER SYSTEM****ESSM NUMBER VA2113****DESCRIPTION**

The Beach Transfer System Van VA2113 stores the components of the Beach Transfer System, which consists of a 4-wheel drive farm-type tractor, two all-terrain vehicles, two 4-wheel utility trailers, four 16' Polyester Roundslings for lifting the van, personnel safety equipment stored in the forward storage cabinets of the van, and the necessary spare parts and ancillary equipment to maintain and operate the Beach Transfer System.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	13,690 lb

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1" screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Beach Transfer System Tool Box TL0090



Contents of the Beach Transfer System Tool Box TL0090

S0300-BV-CAT-020**TOOL BOX, BEACH TRANSFER SYSTEM****ESSM NUMBER TL0090****DESCRIPTION**

The Beach Transfer System Tool Box TL0090 is a basic mechanic's tool set consisting an 18-piece metric wrench set, adjustable wrenches, Phillips and slotted screwdrivers, a 12-volt air compressor, pliers, hammers, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Beach Transfer System P01100.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 6 in.
Width	8 in.
Height	9 in.
Cube	1 cu ft
Weight	34 lb

REFERENCES

None

S0300-BV-CAT-020



Beach Transfer Trailer TR2114 (Operational Configuration)



Beach Transfer Trailer TR2114 (Shipping Configuration)

S0300-BV-CAT-020**TRAILER, BEACH TRANSFER****ESSM NUMBER TR2114****DESCRIPTION**

The Beach Transfer Trailer TR2114 is a lightweight, all-terrain utility trailer used for transporting personnel and equipment to and from oil spill sites over soft sand beaches. The trailer is equipped with removable sides that make it very versatile.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating (sides up)</u>	<u>Shipping (sides down)</u>
Length	8 ft, 7 in.	8 ft, 7 in.
Width	3 ft, 7 in.	3 ft, 7 in.
Height	3 ft, 6 in.	2 ft, 5 in.
Cube	135 cu ft	75 cu ft
Weight	420 lb	420 lb

REFERENCES

1. Beach Transfer Trailer, NAVSEA Dwg. 7022701.

S0300-BV-CAT-020



Farm-Type Tractor, Model 2120 TT2009

S0300-BV-CAT-020**TRACTOR, FARM-TYPE, MODEL 2120****ESSM NUMBER TT2009****DESCRIPTION**

The Farm-Type Tractor, Model 2120 TT2009 with front-end loader is used to transport oil-absorbent materials from soft sand beaches of remote oil spill sites to designated oil disposal areas. The front-end loader can be used to scoop up oil-soaked sand and debris into trucks or trailers for transportation to the disposal site.

SPECIFICATIONS

Manufacturer	Ford
Model	2120
Cylinders	4
Displacement	179 cu in.
Idle speed	700 - 800 rpm
Max. no-load rpm	2650 - 2700
Rated engine speed	2500 rpm
Gross horsepower	42
Transmission	12 x 4 Synchro
Starter	Electric
Battery	12 V dc
Fuel	Diesel
Fuel capacity	11 gal.

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	12 ft, 10 in.
Width	6 ft, 3 in.
Height	7 ft, 1 in.
Cube	568 cu ft
Weight	4620 lb

REFERENCES

1. Ford Operator's Manual for Model 2120 Tractor, 42202010.
2. Ford Parts Manual for Model 2120 Tractor, 86615740.
3. Ford Service Manual for Model 2120 Tractor, 40192020.
4. Ford Operator's Manual for Great Bend Series GR260 Bucket.

S0300-BV-CAT-020



All-Terrain Vehicle (ATV) VE2110

S0300-BV-CAT-020**VEHICLE, ATV, FOREMAN 400****ESSM NUMBER VE2110****DESCRIPTION**

The Beach Transfer All-Terrain Vehicle (ATV) VE2110 is a 4-wheel drive (4WD) vehicle used at remote oil spill sites on soft sand beaches. There are two vehicles per beach transfer system. The ATV can be connected to a utility trailer for the transportation of equipment, materials, and personnel to beach cleanup sites.

SPECIFICATIONS

Manufacturer	Honda
Model	Fourtrax Foreman 400 4 x 4
Type	Gasoline, air-cooled, 4-stroke
Cylinders	1
Bore	3.39 in. x 2.68 in.
Max. horsepower	24.5 hp/6000 rpm
Displacement	24.09 cu in.
Oil capacity	2.9 qts
Compression ratio	8.2 : 1
Transmission	5-speed constant mesh w/reverse
Starter	Electric
Battery	12 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	6 ft, 5 in.
Width	3 ft, 10 in.
Height	3 ft, 7 in.
Cube	88 cu ft
Weight	568 lb

REFERENCES

1. Honda Service Manual for the Fourtrax Foreman 400 (ATV).

S0300-BV-CAT-020

CLEANING SYSTEM VAN P19200

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S0300-BV-CAT-020



Cleaning System Van P19200



Cleaning System Van P19200 (Interior)

S0300-BV-CAT-020**CLEANING SYSTEM VAN****SYSTEM NUMBER P19200****SYSTEM DESCRIPTION**

The Cleaning System Van P19200 contains the necessary components to clean the response equipment at an oil spill site. The cleaning system van contains a cleaning pool, a steam cleaner or saltwater pressure washer, a storage/shipping container, and the ancillary equipment to support the system while operating in the field. Oil spill response equipment requires extensive cleaning prior to demobilization and return to the warehouses. Without proper cleaning equipment, this task is difficult, time consuming, and costly. The cleaning system van provides the full array of cleanup tools and materials necessary for efficient cleaning and demobilization of equipment. A major spill response operation may require several cleaning vans to expedite the time-consuming and costly cleaning process.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Cleaning		1
a. Van	VA2119A	
Cleaner, Steam	CS0507	1
Kit, Hose Cleaning	KT0940 (not shown)	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Containment Pool, 14' x 14' x 18"	CP3025	1
Pallet, Hose Cleaning Manifold, 43" x 42" x 22"	HC0001	1
Pallet, Hose Cleaning Pig Launcher, 32" x 32" x 26"	HC0002	1
Pig Catcher	HC0004	1
Pool, Cleaning, 20' x 60'	PC0814	1
Pool, Cleaning, 10' X 10' X 12"	PC0815	2
Pump, Diaphragm, 3", Diesel	PU2108	1
Roundsling, Polyester, 16'	SL0012	1
b. Van	VA2119B	
Kit, Hose Cleaning	KT0940 (not shown)	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Containment Pool, 14' x 14' x 18"	CP3025	1
Pallet, Hose Cleaning Manifold, 43" x 42" x 22"	HC0001	1
Pallet, Hose Cleaning Pig Launcher, 32" x 32" x 26"	HC0002	1
Pig Catcher	HC0004	1

S0300-BV-CAT-020**CLEANING SYSTEM VAN (CONTD)****SYSTEM NUMBER P19200**

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Pool, Cleaning, 20' x 60'	PC0814	1
Pool, Cleaning, 10' x 10' x 12"	PC0815	1
Pool, Cleaning, 30' x 70' (Optional)	PC0830	1
Pool, Cleaning, 30' x 70'	PC0831	1
Roundsling, Polyester, 16'	SL0012	1
Pump, Diaphragm, 3", Diesel	PU2108	1
Tank, Fast Erect, 2500-Gal, 12' x 12' x 28"	TK0020	1
Washer, Pressure, Salt Water, Diesel	WA0820	1

S0300-BV-CAT-020



Cleaning Van VA2119A/B

S0300-BV-CAT-020**VAN, CLEANING****ESSM NUMBER VA2119A/B****DESCRIPTION**

The Cleaning Van VA2119A/B is a modified 8' x 8' x 20' shipping container used to store and ship the oil spill response equipment cleaning system. The main components of the cleaning system are a high-pressure steam cleaner or salt water pressure washer, cleaning solvents, sorbents, brushes, hand tools, and cleaning pools.

There are two configurations of the Cleaning Van; the two configurations are functionally the same. The characteristics and inventories of each may vary slightly from one another.

SPECIFICATIONS

Manufacturer ESSM Facility

Van VA2219AVan VA2219B

Serial numbers

264601
800001
800003

Serial numbers

008680
105707
106716
106716

PHYSICAL CHARACTERISTICSOperating/Shipping

	<u>VA2219A</u>	<u>VA2119B</u>
Length	20 ft, 0 in.	20 ft, 0 in.
Width	8 ft, 0 in.	8 ft, 0 in.
Height	8 ft, 0 in.	8 ft, 0 in.
Cube	1280 cu ft	1280 cu ft
Weight	11,176 lb	13,175 lb

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



Containment Pool CP3025

S0300-BV-CAT-020**CONTAINMENT POOL, 14' x 14' x 18''****ESSM NUMBER CP3025****DESCRIPTION**

The Containment Pool CP3025 is a 14' x 14' x 18'' urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaked, spilled or cleaned from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	14 ft, 0 in.	2 ft, 6 in.
Width	14 ft, 0 in.	2 ft, 6 in.
Height	1 ft, 6 in.	1 ft, 0 in.
Cube	294 cu ft	6 cu ft
Weight	214 lb	214 lb

REFERENCES

None

S0300-BV-CAT-020



Steam Cleaner CS0507

S0300-BV-CAT-020**CLEANER, STEAM****ESSM NUMBER CS0507****DESCRIPTION**

The Steam Cleaner CS0507 is a high pressure, hot water unit used to clean off oil, salt spray, and dirt by spraying a chemical cleaner on the equipment. The main components of the steam cleaner are a high pressure pump, diesel engine, oil fluid burner, heating coils, and a 60-cycle, 115-volt generator.

SPECIFICATIONS

Manufacturer Landa
Model SDHW5-3000

Pump

Manufacturer General Pump
Model TS2021
Type Tri-plunger oil bath
Discharge capacity 4.4 gpm
Operating pressure 3000 psig
Operating temperature 200° F
BTU/hour 380,000
Burner Oil-fired auto light
Fuel type Kerosene/diesel

Diesel Engine

Manufacturer Kubota
Cooled Water
Cycle 4
Cylinders 1
Starter Electric
Horsepower 13.5
Rpm 2200

Burner Motor

Horsepower 1/8
Volts 115 V ac
Hertz 60
Phase 1
Ignition Transformer
Coil 105' of 1/2" schedule 80 pipe
High pressure hose 3/8" ID x 50' wire braid
Gun Insulated shutoff
Nozzle (4 ea) 0°, 15°, 25°, 40°
Pressure control Variable pressure wand
Chemical control Needle meter value

Generator

Volts 115 V ac
Hertz 60
Amps 17.4

S0300-BV-CAT-020

CLEANER, STEAM (CONTD)

ESSM NUMBER CS0507

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	4 ft, 11 in.
Width	3 ft, 4 in.
Height	3 ft, 10 in.
Cube	63 cu ft
Weight	1236 lb

REFERENCE DATA

1. Kubota Instruction Manual.
2. Kubota Parts List Manual.
3. Landa Operator's Manual SDHW5-3000.

S0300-BV-CAT-020



Hose Cleaning Manifold Pallet HC0001 with 4" Cleaning Adapter



Hose Cleaning Manifold Pallet HC0001 with 6" Cleaning Adapter

S0300-BV-CAT-020**HOSE CLEANING MANIFOLD PALLET
43" X 42" X 22"****ESSM NUMBER HC0001****DESCRIPTION**

The Hose Cleaning Manifold Pallet HC0001 is connected in-line with oil contaminated hoses, a cleaning tank (TK0020) filled with approved cleaning solvent, and a pump (used to circulate cleaning fluid). The manifold comes with a 4-inch and a 6-inch adapter manifold for the cleaning of either 4- or 6-inch hoses. Either of these adapter manifolds can be fitted with other adapters of different sizes to clean other hoses of different sizes. Once connected, the circulation pump is started and circulates the cleaning fluids through the hose until the hoses are clean. Diesel fuel is circulated through the hose first to break down the crude oil. After the hoses are flushed with diesel fuel they are then flushed with an approved cleaning solvent such as Citrikleen until the desired state of cleanliness is achieved.

SPECIFICATIONS

Manufacturer ESSM Facility

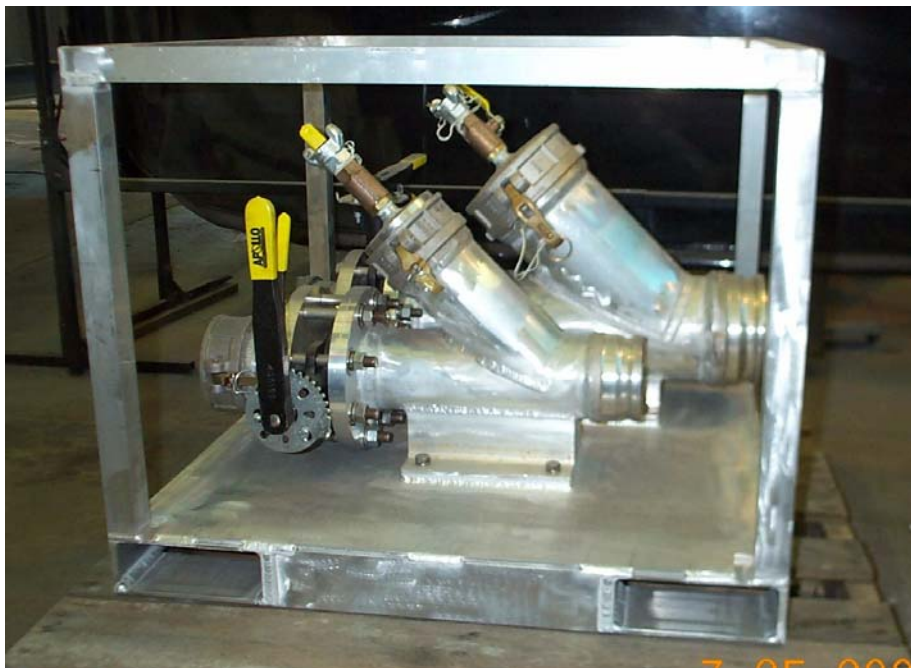
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 7 in.
Width	3 ft, 6 in.
Height	1 ft, 10 in.
Cube	23 cu ft
Weight	260 lb

REFERENCES

None

S0300-BV-CAT-020



Hose Cleaning Pig Launcher Pallet HC0002

S0300-BV-CAT-020**HOSE CLEANING PIG LAUNCHER PALLET
32" X 32" X BY 26"****ESSM NUMBER HC0002**

DESCRIPTION

The Hose Cleaning Pig Launcher Pallet HC0002 contains a 4-inch and a 6-inch manifold assembly that, when connected to the proper sized hose, launches either a 4- or 6-inch cleaning pig. The pig launcher can be used to clear the hose of crude oil after a transfer or to clear the hose after cleaning.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 8 in.
Width	2 ft, 8 in.
Height	2 ft, 2 in.
Cube	15 cu ft
Weight	190 lb

REFERENCES

None

S0300-BV-CAT-020



Pig Catcher HC0004

S0300-BV-CAT-020**PIG CATCHER****ESSM NUMBER HC0004****DESCRIPTION**

The Hose Cleaning Pig Catcher HC0004 contains a 4-inch and 6-inch manifold assembly that when connected to the proper sized hose catches either a 4- or 6-inch cleaning pig. The pig catcher can be used to clear the hose of crude oil after a transfer or to clear the hose after cleaning.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 0 in.
Width	3 ft, 0 in.
Height	3 ft, 5 in.
Cube	31 cu ft
Weight	204 lb

REFERENCES

None

S0300-BV-CAT-020



Cleaning Pool PC0814

S0300-BV-CAT-020**POOL, CLEANING, 20' X 60'****ESSM NUMBER PC0814****DESCRIPTION**

The Cleaning Pool PC0814 is a Goodyear rubber berm in which pollution equipment can be cleaned after use on oil spills. The pool is large enough to hold two skimmers for cleaning. The pool contains the oil and chemicals from the equipment until it can be pumped out and transported to a disposal site.

SPECIFICATIONS

Manufacturer	Engineered Fabrics, Rockmart, GA
Material	Goodyear rubber
Sides	Inflatable pockets

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	60 ft, 0 in.	10 ft, 3 in.
Width	20 ft, 0 in.	5 ft, 1 in.
Height	18 in.	3 ft, 7 in.
Cube	1800 cu ft	187 cu ft
Weight	1200 lb	1200 lb

REFERENCES

None

S0300-BV-CAT-020



Cleaning Pool PC0815

S0300-BV-CAT-020**CLEANING POOL, 10' x 10' x 12"****ESSM NUMBER PC0815****DESCRIPTION**

The Cleaning Pool PC0815 is a 10' x 10' x 12" urethane berm. Its is used to catch and contain any oil, fuel, or contaminants leaked, spilled or cleaned from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	2 ft, 4 in.
Width	10 ft, 0 in.	1 ft, 9 in.
Height	1 ft, 0 in.	1 ft, 3 in.
Cube	100 cu ft	5 cu ft
Weight	68 lb	68 lb

REFERENCES

None

S0300-BV-CAT-020



Cleaning Pool PC0830

S0300-BV-CAT-020**POOL, CLEANING, 30' X 70'****ESSM NUMBER PC0830****DESCRIPTION**

The Cleaning Pool PC0830 is a rubber container in which pollution equipment can be cleaned after use on oil spills. The pool is large enough to hold two skimmers for cleaning. The pool contains the oil and chemicals from the equipment until it can be pumped out and transported to a disposal site.

SPECIFICATIONS

Manufacturer	GPC Fabricated
Material	Goodyear rubber
Sides	Inflatable boom pockets

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	70 ft, 0 in.	6 ft, 6 in.
Width	30 ft, 0 in.	4 ft, 6 in.
Height	18 in.	4 ft, 6 in.
Cube	3150 cu ft	191 cu ft
Weight	1200 lb	1200 lb

REFERENCES

None

S0300-BV-CAT-020



Cleaning Pool PC0831

S0300-BV-CAT-020**POOL, CLEANING, 30' X 70'****ESSM NUMBER PC0831****DESCRIPTION**

The Cleaning Pool PC0831 is a rubber container in which pollution equipment can be cleaned after use on oil spills. The pool is large enough to hold two skimmers for cleaning. The pool contains the oil and chemicals from the equipment until it can be pumped out and transported to a disposal site.

SPECIFICATIONS

Manufacturer	Basic Concepts
Material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	70 ft, 0 in.	5 ft, 6 in.
Width	30 ft, 0 in.	4 ft, 8 in.
Height	18 in.	3 ft, 4 in.
Cube	3150 cu ft	76 cu ft
Weight	1900 lb	1900 lb

REFERENCES

None

S0300-BV-CAT-020



3" Diaphragm Pump PU2108

S0300-BV-CAT-020**PUMP, DIAPHRAGM, 3", DIESEL****ESSM NUMBER PU2108****DESCRIPTION**

The 3" Pump PU2108 is a self-priming, diesel driven, diaphragm pump that is designed to pump water and transfer viscous materials. It will pump water at a maximum rate of 100 gpm with a maximum discharge pressure of 10 psig. Maximum practical suction lift is 26 feet above the water surface. The pump is skid-mounted with two carrying handles that double as a protective roll cage.

The pump is powered by a 1-cylinder, 4.2-hp, air-cooled, 4-cycle, diesel engine. The engine has a recoil starter and direct fuel injection with a variable speed control and is designed to operate off its own integral fuel system.

SPECIFICATIONS

<u>Pump</u>		<u>Engine</u>	
Manufacturer	CH&E Mfg Co.	Manufacturer	Yanmar Diesel
Model	5500	Model	L40AE
Type	Diaphragm	Cylinders	1
Max. capacity	100 gpm @ 10 psig	Bore/stroke	68 mm/55 mm
		Displacement	199 cm ³
		Compression ratio	20 : 1
		Rpm	3600
		Horsepower	4.2
		Fuel	Diesel
		Fuel source	Int. fuel tank
		Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 5 in.
Width	2 ft, 6 in.
Height	2 ft, 2 in.
Cube	19 cu ft
Weight	158 lb

S0300-BV-CAT-020

DIAPHRAGM, 3", DIESEL (CONTD)

ESSM NUMBER PU2108

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual, Model L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



2500-Gallon Fast Erect Tank TK0020

S0300-BV-CAT-020**TANK, FAST ERECT, 2500-GALLON,
12' X 12' X 28"****ESSM NUMBER TK0020****DESCRIPTION**

The 2500-Gallon Fast Erect Tank TK0020 is designed for the primary containment of fuel. The tank is used for holding cleaning agent during the hose cleaning process. The unit consists of an aluminum frame and a 12' x 12' x 28" tank made of a nylon base fabric coated with urethane.

SPECIFICATIONS

Manufacturer	Cooley Incorporated
Style	L3284NESU
Construction	Style 84
Base fabric:	
Weight	13 oz. per square yard (psy)
Fiber	Nylon
Fabric count	Fill
Coated fabric:	
Total weight	32 oz psy
Type of coating	Urethane
Coating distribution	Face,50; Back, 50
Color	Tan
Tensile strength	1000 lb grab 600 1-inch strip pounds
Tear strength weight	40 lb
Puncture resistance	175 psig
Hydrostatic pressure	600 psig
Temperature:	
Low	-50°F
High continuous	160°F
Intermittent	180°F
Drain	4-in. female pipe flange

S0300-BV-CAT-020

**TANK, FAST ERECT, 2500-GALLON,
12' X 12' X 28" (CONTD)**

ESSM NUMBER TK0020

PHYSICAL CHARACTERISTICS

Operating

Length	12 ft, 0 in.
Width	12 ft, 0 in.
Height	2 ft, 4 in.
Cube	336 cu ft
Weight	125 lb

REFERENCES

None

S0300-BV-CAT-020



Salt Water Pressure Washer WA0820

S0300-BV-CAT-020**WASHER, PRESSURE, SALT WATER, DIESEL****ESSM NUMBER WA0820**

DESCRIPTION

The Diesel-Driven, Salt Water Pressure Washer WA0820 is a high pressure, hot water unit used to remove oil and dirt by spraying water and cleaner on the equipment at a high pressure and temperature. The pressure washer can use either fresh or salt water as a cleaning medium. The main components of the pressure washer are a high pressure pump, diesel engine, oil fired-burner, and heating coils.

SPECIFICATIONS

Engine

Manufacturer	Ruggerini
Cooling	Air
Cylinders	2
Bore/stroke	80mm/65mm
Displacement	654 cm ³
Horsepower	13
Operating rpm	3600
Compression ratio	19 : 1
Starting	Electric
Battery	12 V/60Ah/300 A
Fuel	Diesel
Fuel source:	
Engine	4-gal. int. tank
Burner	5-gal. jerry can
Fuel consumption:	
Engine	.79 gph
Burner @140°F	1.98 gph

Pressure Washer

Manufacturer	KEW Industries
Model	KEW Contractor Diesel
Max. pump pressure	2610 psig
Water volume	
@ min./max. pressure	5.42/20.5 gal.
Max. inlet water temp	95°F/35°C
Temperature range	86-302°F/30-150°C
Self priming max. lift	16.5 ft

PHYSICAL CHARACTERISTICS

Operating

Length	2 ft, 11 in.
Width	3 ft, 10 in.
Height	4 ft, 0 in.
Cube	45 cu ft
Weight	435 lb

S0300-BV-CAT-020

WASHER, PRESSURE, SALT WATER, DIESEL (CONTD)

ESSM NUMBER WA0820

REFERENCES

1. Owner's Manual for KEW Contractor Diesel.
2. User and Maintenance Manual for Ruggerini MD/1 - MD/2 Engine.

S0300-BV-CAT-020

SUPPLY VAN SYSTEM P19800

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S0300-BV-CAT-020



Supply Van System P19800

S0300-BV-CAT-020**SUPPLY VAN****SYSTEM NUMBER P19800****SYSTEM DESCRIPTION**

The Supply Van System P19800 provides spill response operations with required spare parts for the equipment at a spill site. All equipment comes with onboard spares such as filters, belts, and other easily replaced, frequently required parts. A second level supply of spares for smaller spill response jobs (up to 4 skimmers) is provided by a shop van. The Supply Van, however, provides the “depot level” of support required for larger jobs (8 or more skimmers). The Supply Van contains more specialized parts, such as spare engines, pumps, rebuild kits, belt modules, specialized tools, and one-of-a-kind spares necessary to maintain the wide variety of individual items that must be maintained at a major spill site in the field.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Supply, 8' x 8' x 20'	VA0740	1
Dehumidifier, Model SSP-6A	DE0010 (not shown)	1
Engine, Diesel, GM 4-53 (Class V Skimmer Spare)	EN0015	1
Roundsling, Polyester, 16'	SL0012	4

S0300-BV-CAT-020



Supply Van VA0740



Supply Van VA0740 Interior

S0300-BV-CAT-020**VAN, SUPPLY, 8' X 8' X 20'****ESSM NUMBER VA0740****DESCRIPTION**

The Supply Van System P19800 provides spill response operations with required spare parts for the equipment at a spill site. All equipment comes with onboard spares such as filters, belts, and other easily replaced, frequently required parts. A second level supply of spares for smaller spill response jobs (up to 4 skimmers) is provided by a shop van. The Supply Van, however, provides the “depot level” of support required for larger jobs (8 or more skimmers). The Supply Van contains more specialized parts, such as spare engines, pumps, rebuild kits, belt modules, specialized tools, and one-of-a-kind spares necessary to maintain the wide variety of individual items that must be maintained at a major spill site in the field.

SPECIFICATIONS

None

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	16,040 lb

REFERENCES

None

S0300-BV-CAT-020



GM 4-53 Diesel Engine EN0015

S0300-BV-CAT-020**ENGINE, GM 4-53,
(CLASS V SKIMMER SPARE)****ESSM NUMBER EN0015**

DESCRIPTION

The GM 4-53 Diesel Engine EN0015 is a Class V Skimmer spare engine. The spare engine is for use as a direct replacement for a Class V Skimmer engine in the event of a major engine failure.

SPECIFICATIONS

Engine

Manufacturer	Detroit Diesel
Model	5043-7201
Cylinders	4
Bore/stroke	3.875 in./4.5 in.
Displacement	212 cu in.
Compression ratio	21 : 1
Rpm (idle)	650
Rpm (max.)	2400
Horsepower	128 shp @ 2800 rpm
Starting	Electric
Battery	12 V dc (2 in parallel)
Fuel	Diesel
Fuel consumption	6 gph

PHYSICAL CHARACTERISTICS

Length	4 ft, 0 in.
Width	2 ft, 5 in.
Height	3 ft, 0 in.
Cube	29 cu ft
Weight	1665 lb

REFERENCES

1. Detroit Diesel-Allison Series 53 Operator's Manual.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double wall tubular jacket. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020

PERSONNEL TRANSFER BOATS P19900

S0300-BV-CAT-020



24' Rigid Hull Inflatable Boat WB0736



22.5' Rigid Hull Inflatable Boat WB0740



22' Command Boat WB0941

Personnel Transfer Boats

S0300-BV-CAT-020**PERSONNEL TRANSFER BOATS****SYSTEM NUMBER P19900****SYSTEM DESCRIPTION**

The Personnel Transfer System P19900 consists of a choice of either a 24' Rigid Hull Inflatable Boat, a 22.5' Rigid Hull Inflatable, or a 22' Command Boat. The rigid hull inflatables offer the safety of an inflatable with the speed and ride characteristics of a V-hull boat. During large spill operations, skimmers and maintenance vessels can be scattered over very large distances. Supplying crews with meals, parts, water and other necessary items, tending to emergencies, and changing out relief crews become very demanding problems on large jobs. These boats augment the inflatable boom tending boats, which are smaller, slower, and already busy with their boom tending and heavy load missions and are not generally available.

The 24' Rigid Hull Inflatable Boat WB0736 is equipped with a VHF marine mobile radio, a marine mobile CB radio, a radar, a GPS system, a tool box, a first aid kit, a flare kit, mooring lines, tow line, anchor line, anchor, life preservers, and all necessary ancillary equipment to operate and maintain the boat. The system also provides a boat cradle for storage and shipping of the 24' Rigid Hull Inflatable Boat.

The 22.5' Rigid Hull Inflatable Boat WB0740 is equipped with a VHF marine mobile radio, a marine mobile CB radio, a radar, a GPS system, a tool box, a first aid kit, a flare kit, mooring lines, tow line, anchor line, anchor, life preservers, and all necessary ancillary equipment to operate and maintain the boat. The system also provides a boat cradle for storage and shipping of the 22.5' Rigid Hull Inflatable Boat. There is an optional trailer for the 22.5' Rigid Hull Inflatable Boat which is presently located at the ESSM facility in Hawaii.

The 22' Command Boat WB0941 is equipped with a VHF marine mobile radio, a tool box, a first aid kit, a flare kit, mooring lines, tow line, anchor line, anchor, life preservers, and all necessary ancillary equipment to operate and maintain the boat. The system also provides a boat trailer for the storage and shipping of the 22' Command Boat.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Boat		1
a. 24' Rigid Hull Inflatable (Altn):	WB0736	
Cradle, 24' Rigid Hull Inflatable Boat	BC0736	1
GPS, Furuno GP-30	GP0130	1
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Voyager (76-Channel)	RA1830	1
Radar, LCD MK II	RD0010	1
Tool Box, 24' Rigid Hull Inflatable Boat	TL0065	1

S0300-BV-CAT-020**PERSONNEL TRANSFER BOATS****SYSTEM NUMBER P19900**

SYSTEM COMPONENTS (Cont'd)

b. 22.5' Rigid Hull Inflatable w/Engine (Altn):	WB0740	
Cradle, 22.5' Rigid Hull Inflatable Boat:	BC0740	1
Roundsling Bridle, Polyester, 4-Leg (2- 20', 2-20' 3")	SL0386	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundsling Bridle, Polyester, 4-Leg (2-7' 8", 2-8' 4")	SL0384	1
Tool Box, 22.5' Rigid Hull Inflatable Boat	TL0075	1
Trailer, 22.5' Rigid Hull Inflatable Boat (Optl)	TR0955 (not shown)	1
c. 22' Command Boat (Altn):	WB0941	
Radio VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Tool Box, 22' Command Boat	TL0070	1
Trailer, 22' Command Boat	TR0951	1

S0300-BV-CAT-020



24' Rigid Hull Inflatable Boat WB0736

S0300-BV-CAT-020**BOAT, 24' RIGID HULL INFLATABLE****ESSM NUMBER WB0736****DESCRIPTION**

The 24' Rigid Hull Inflatable Boat WB0736 consists of an inflatable collar attached to a rigid hull by means of reusable fasteners. The boat is powered by a 200-hp turbocharged Volvo AQAD 41 diesel engine. The engine is attached to a Volvo-290 outdrive by a Cardan drive shaft. A combined engine cover and control console is located in the center of the boat. Equipment stowage is provided for in an aft stowage locker/seat and forward in a below deck locker accessed through a deck hatch. A solid lifting frame, located in the front console, allows the vessel to be launched and recovered by a Miranda-type davit. A four-point lifting sling is furnished to launch and recover the boat from a single arm davit. The 24' Rigid Hull Inflatable Boat is used to supply crews with meals, parts, water and other necessary items, to tend to emergencies, and to change out relief crews.

SPECIFICATIONSBoat

Manufacturer	Zodiac
Model	22.5 (RIB-S)
Capacity	
People	9
Net weight	4375 lb
Gross weight (SOLAS)	6300 lb
Fuel	40 gallons
Tube diameter	22 in.
Number of chambers	7

Engine

Manufacturer	Volvo Penta
Model	AD41B
Cylinders	6
Bore	3.62264 in.
Stroke	3.54331 in.
Compression ratio	17.7 : 1
Oil pressure (hot)	61-73 psig
Cooling system	
Type	Positive press.
Capacity	3.7 gal.
Fill cap pressure	10.8 psig
Starter motor	12 V dc

Outdrive

Manufacturer	Volvo Penta
Model	DP-P
Max prop diameter	16 in.
Gear ratio	2.30 : 1
Weight	128 lb
Oil capacity	2.8 gal.
Oil viscosity	SAE 90 or 80W90

S0300-BV-CAT-020**BOAT, 24' RIGID HULL INFLATABLE (CONTD)****ESSM NUMBER WB0736**

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	25 ft, 0 in.	25 ft, 0 in.
Width	10 ft, 0 in.	10 ft, 0 in.
Height	14 ft 6 in.	11 ft, 0 in.
Cube	3625 cu ft	2750 cu ft
Weight	4980 lb	6780 lb

REFERENCES

1. Volvo Technical Manual for 24-Foot Rigid Inflatable Boat (RIB-S).
2. Volvo Engine Workshop Manual Publication Number 7735288-8.
3. Volvo Outdrive Workshop Manual Publication Number 7731624-8.

S0300-BV-CAT-020



24' Rigid Hull Inflatable Boat Cradle BC0736
with 24' Rigid Hull Inflatable Boat WB0736

S0300-BV-CAT-020**CRADLE, 24' RIGID HULL INFLATABLE BOAT****ESSM NUMBER BC0736****DESCRIPTION**

The 24' Rigid Hull Inflatable Boat Cradle BC0736 is constructed from aluminum I-beam and channel. It is made to fit the contour of the hull of the 24' Rigid Hull Inflatable Boat. To prevent damage to the bottom of the boat, the cradle supports are fitted with pressure-treated pine timbers covered with indoor-outdoor carpet and are bolted to the three sets of cradle supports. To support the keel of the boat there is a pressure-treated timber running the length of the cradle.

The 24' Rigid Hull Inflatable Boat Cradle BC0736 is used as a storage and shipping cradle for transportation on military air cargo planes or on over-the-road flatbed trailers.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u> (with boat)	<u>Shipping</u> (without boat)
Length	25 ft, 0 in.	15 ft, 3 in.
Width	10 ft, 0 in.	8 ft, 1 in.
Height	11 ft, 0 in.	3 ft, 10 in.
Cube	2750 cu ft	298 cu ft
Weight	6780 lb	1280 lb

REFERENCES

1. 24' Rigid Hull Inflatable Boat Cradle, NAVSEA Dwg. 5104727.

S0300-BV-CAT-020



Furuno GP-30/32/37 GPS GP0130

S0300-BV-CAT-020**GPS, FURUNO, GP-30****ESSM NUMBER GP0130****DESCRIPTION**

The GP-30/32/37 Furuno GPS (GP0130) is a totally integrated GPS receiver and video plotter, and consists of a display unit and an antenna unit. The high sensitivity receiver tracks up to 8 satellites simultaneously. An 8-state Kalman filter ensures optimum accuracy in determining vessel position, course, and speed. In most cases the operator only needs to turn on the power to find the vessel's position.

SPECIFICATIONS

Manufacturer	Furuno
Models	GP-30, GP-32, GP-37
Receiving frequency	1575.42 MHz
Power supply:	
GP-30	10.2 to 31.2 V dc
GP-32	10.2 to 31.2 V dc
GP-37	12 to 24 V dc

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	9 in.
Width	4 in.
Height	5 in.
Cube	1 cu ft
Weight	2 lb

REFERENCE

1. Furuno Operator's Manual for Model GP-30.
2. Furuno Operator's Manual for Model GP-32/GP-37.

S0300-BV-CAT-020



CB Marine Mobile Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709****DESCRIPTION**

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Manufacturer	Commercial
Frequency range:	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only):	
RF output	4 W maximum
Receiver (CB):	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kHz	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



VHF Marine Mobile Radio, Voyager (76-Channel) RA1830

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
VOYAGER (76-CHANNEL)****ESSM NUMBER RA1830**

DESCRIPTION

The Horizon Voyager GX2200S Marine Mobile Radio RA1830 is a marine VHF/FM transceiver with public address system and intercom features in a single moisture-resistant console. The Horizon Voyager requires 13.8 V dc for operation, can develop a switchable RF output power of 1 watt or 25 watts, and operates in the frequency range of 156.050 to 163.275 MHz.

The Horizon Voyager has a capacity of 76 channels: 55 programmed marine transmit/receive channels, 6 weather channels, and 15 transmit/receive expansion channels. The 55 marine channels are switchable for use with USA, international, or Canadian regulations. Should the FCC increase the number of marine channels, the Voyager may be programmed by qualified dealers for 15 new transmit and receive frequencies. The one-touch Channel 16 access allows immediate selection of emergency Channel 16.

SPECIFICATIONS

Manufacturer	Standard
Model	Horizon Voyager GX2200S
Channels	76 total: 55 marine 6 weather 15 expansion
Input voltage	13.8 V dc \pm 20%
Frequency range	156.050 to 163.275 MHz
Transmitter RF output	25 W high, 1 W low

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Horizon Voyager GX2200S Owner's Manual.

S0300-BV-CAT-020



MK II LCD Radar RD0010

S0300-BV-CAT-020**RADAR, LCD, MK II****ESSM NUMBER RD0010****DESCRIPTION**

The MK II LCD Radar RD0010 is a standard radar (radio detection and ranging) unit used to indicate a target object's range and bearing location. The radar unit determines the distance to a target by calculating the time difference between the transmission of a radar signal and reception of the reflected echo.

The range and bearing of a target is displayed on a visual indicating screen. This display shows the transmitting ship's position at the center. Target image echoes are received and displayed as a sight signal on the visual display screen and show the distance and relative bearing from the transmitting vessel. The motion of the transmitting ship is also displayed along with the target images.

SPECIFICATIONS

Manufacturer	Furuno
Model	821
Display unit:	
Indication system	PPI raster scan
Picture tube	8 in. diagonal, LCD, STN semi-transparent, yellow mode
Range ring interval (nm)	0.125 0.25 0.5 1 2 4 4 4
Ambient temperature	Scanner unit: -20°C to +70°C
	Display unit: 0°C to +55°C
Humidity	Relative humidity 95% or less at +40°C
Power supply & consumption	10.2 to 31.2 V dc, 40 - 47 W

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	12 in.
Width	6 in.
Height	9 in.
Cube	1 cu ft
Weight	5 lb

REFERENCES

1. Operator's Manual, Marine Radar Furuno Model 821.

S0300-BV-CAT-020**TOOL BOX, 24' RIGID HULL INFLATABLE BOAT****ESSM NUMBER TL0065**

DESCRIPTION

The 24' Rigid Hull Inflatable Boat Tool Box TL0065 is a basic mechanic's tool set that contains 3/8" drive sockets and accessories, combination, open-end, pipe, and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 24' Rigid Hull Inflatable Boat WB0736.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

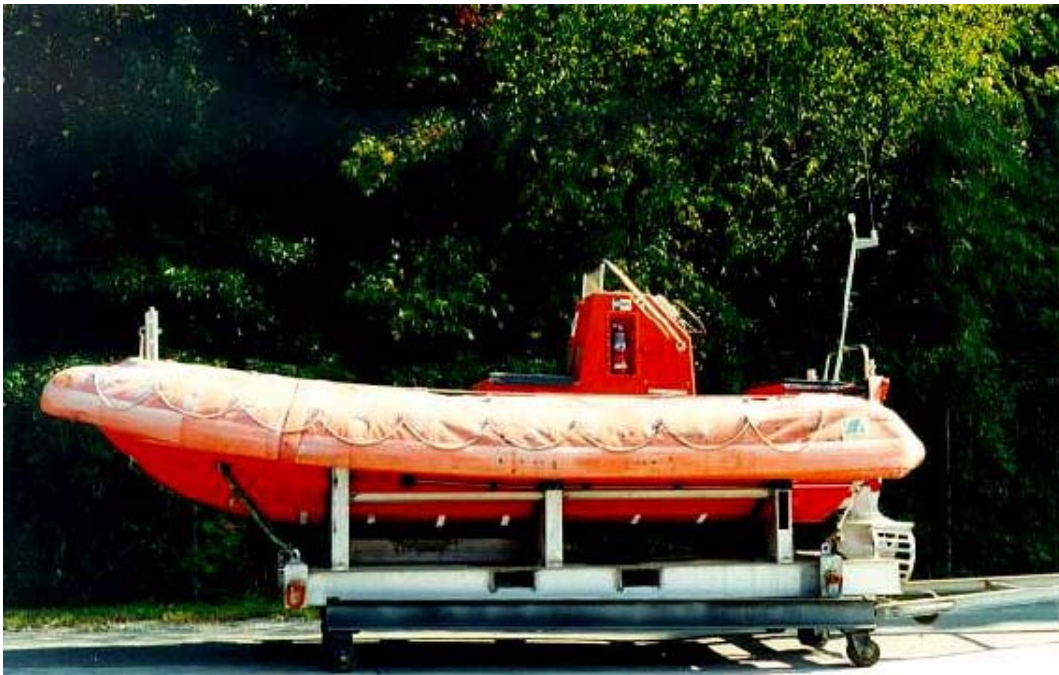
Operating/Shipping

Length	1 ft, 8 in.
Width	9 in.
Height	9 in.
Cube	1 cu ft
Weight	25 lb

REFERENCES

None

S0300-BV-CAT-020



22.5' Rigid Hull Inflatable Boat WB0740

S0300-BV-CAT-020**BOAT, 22.5' RIGID HULL
INFLATABLE W/ENGINE****ESSM NUMBER WB0740****DESCRIPTION**

The 22.5' Rigid Hull Inflatable Boat WB0740 consists of an inflatable collar attached to a rigid hull by means of reusable fasteners. The boat is powered by a 200-hp turbocharged Volvo AQAD 41 diesel engine. The engine is attached to a Volvo-290 outdrive by a Cardan drive shaft. A combined engine cover and control console is located in the center of the boat. Equipment stowage is provided for in an aft stowage locker/seat and forward in a below deck locker accessed through a deck hatch. A solid lifting frame, located in the front console, allows the vessel to be launched and recovered by a Miranda-type davit. A four-point lifting sling is furnished to launch and recover the boat from a single arm davit. The 22.5' Rigid Hull Inflatable Boat is used to supply crews with meals, parts, water and other necessary items, to tend to emergencies, and to change out relief crews.

SPECIFICATIONSBoat

Manufacturer	Zodiac
Model	22.5 (RIB-S)
Capacity	
People	9
Net weight	4375 lb
Gross weight (SOLAS)	6300 lb
Fuel	40 gallons
Tube diameter	22 in.
Number of chambers	7

Engine

Manufacturer	Volvo Penta
Model	AQAD41B
Cylinders	6
Bore	3.62264 in.
Stroke	3.54331 in.
Compression ratio	17.7 : 1
Oil pressure (hot)	61-73 psig
Cooling system	
Type	Positive pressure
Capacity	3.7 gal
Fill cap pressure	10.8 psig
Starter motor	12 V dc

Outdrive

Manufacturer	Volvo Penta
Model	SP-A
Max prop dia	16 in.
Gear ratio	2.30 : 1
Weight	128 lb
Oil capacity	2.8 gal.
Viscosity	SAE 90 or 80W90

S0300-BV-CAT-020**BOAT, 22.5' RIGID HULL
INFLATABLE W/ENGINE (CONTD)****ESSM NUMBER WB0740**

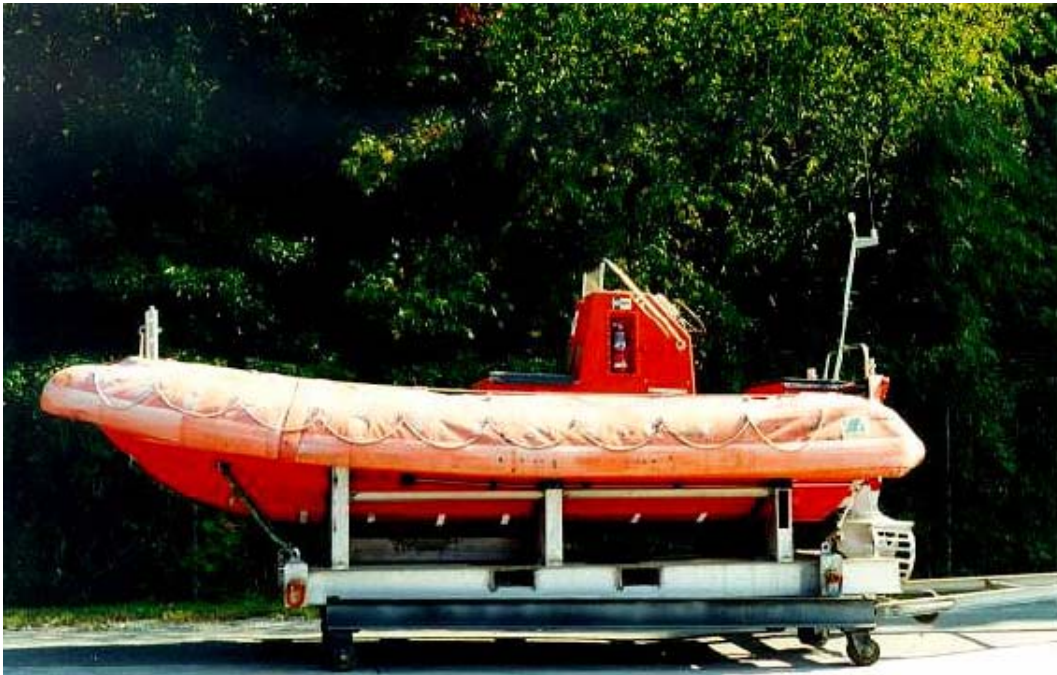
PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	23 ft, 10 in.	23 ft, 10 in.
Width	9 ft, 2 in	9 ft, 2 in.
Height	10 ft, 0 in.	10 ft, 0 in.
Cube	2185 cu in.	2185 cu ft
Weight	4465 lb	6000 lb

REFERENCES

1. Technical Manual for 22.5-Foot Rigid Inflatable Boat (RIB-S).

S0300-BV-CAT-020



22.5' Rigid Hull Inflatable Boat Cradle BC0740
with 22.5' Rigid Hull Inflatable Boat WB0740

S0300-BV-CAT-020**CRADLE, 22.5' RIGID HULL INFLATABLE BOAT****ESSM NUMBER BC0740****DESCRIPTION**

The 22.5' Rigid Hull Inflatable Boat Cradle (BC0740) is constructed from aluminum I-beam and channel. It is made to fit the contour of the hull of the 24' Rigid Hull Inflatable Boat. To prevent damage to the bottom of the boat, the cradle supports are fitted with pressure-treated pine timbers covered with indoor-outdoor carpet and are bolted to the three sets of cradle supports. To support the keel of the boat there is a pressure-treated timber running the length of the cradle.

The 22.5' Rigid Hull Inflatable Boat Cradle (BC0740) is used as a storage and shipping cradle for transportation on military air cargo planes or on over-the-road flatbed trailers.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u> (with boat)	<u>Shipping</u> (without boat)
Length	23 ft, 10 in.	15 ft, 0 in.
Width	9 ft, 2 in.	8 ft, 1 in.
Height	10 ft, 0 in.	3 ft, 7 in.
Cube	2185 cu ft	434 cu ft
Weight	6000 lb	1535 lb

REFERENCES

None

S0300-BV-CAT-020



4-Leg Roundsling Bridle SL0386

S0300-BV-CAT-020**ROUNDSLING BRIDLE, POLYESTER,
4-LEG (2- 20', 2- 20' 3")****ESSM NUMBER SL0386**

DESCRIPTION

The 4-Leg Polyester Roundsling Bridle SL0386 is an assembly consisting of 4 synthetic slings. Each sling is made from polyester yarn covered by a double-wall tubular jacket. The slings are attached to a D-ring at one end and each is fitted with a screw pin shackle at the other.

The 4-Leg Polyester Roundsling Bridle is used for lifting the 22.5' Rigid Hull Inflatable Boat Cradle and boat.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	QOS-EN60
Vertical SWL	5300 lb
Choker SWL	4200 lb
Basket SWL	10,600 lb
Overall length	20 ft, 5 in.

Shackle

Manufacturer	Crosby
Part number	G-209
Size	5/8 in.
Working load limit	6500 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	20 ft, 5 in.
Cube (coiled for shipping)	4 cu ft
Weight	36 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC- M402S are currently in use in the ESSM System with their appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC- M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
1. Instruction Manual, Icom IC-M58.
2. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



4-Leg Roundsling Bridle SL0384

**ROUNDSLING BRIDLE, POLYESTER,
4-LEG (2- 7' 8", 2- 8'4")**

ESSM NUMBER SL0384

DESCRIPTION

The 4-Leg Polyester Roundsling Bridle SL0384 is an assembly consisting of 4 synthetic slings. Each sling is made from polyester yarn covered by a double-wall tubular jacket. The slings are attached to a D-ring at one end and each is fitted with a screw pin shackle at the other.

The 4-Leg Polyester Roundsling Bridle is used for lifting the 22.5' Rigid Hull Inflatable Boat.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	QO-EN60
Vertical SWL	5300 lb
Choker SWL	4200 lb
Basket SWL	10,600 lb
Overall length	9 ft, 4 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1/2 in.
Working load limit	4000 lb

PHYSICAL CHARACTERISTICS

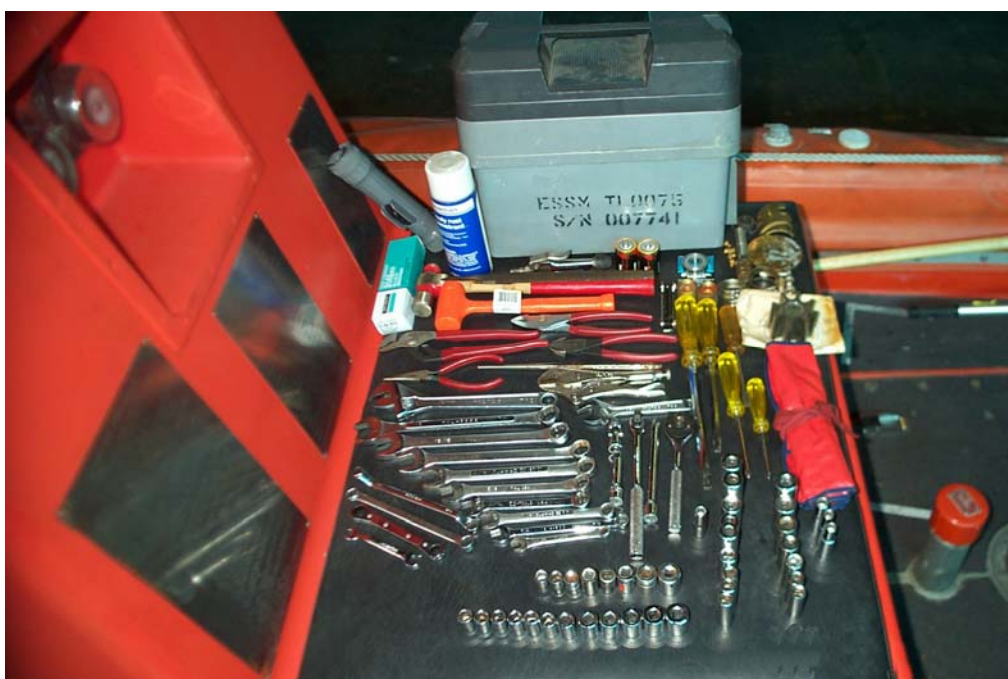
Operating/Shipping

Length (operating)	9 ft, 4 in.
Cube (coiled for shipping)	4 cu ft
Weight	16 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



22.5' Rigid Hull Inflatable Boat Tool Box TL0075

**TOOL BOX, 22.5' RIGID HULL
INFLATABLE BOAT****ESSM NUMBER TL0075****DESCRIPTION**

The 22.5' Rigid Hull Inflatable Boat Tool Box TL0075 is a basic mechanic's tool set that contains 3/8" drive standard and deepwell sockets and accessories, combination, metric, open-end, pipe, and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 22.5' Rigid Hull Inflatable Boat WB0740.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 4 in.
Width	9 in.
Height	1 ft, 1 in.
Cube	1 cu ft
Weight	30 lb

REFERENCES

None

S0300-BV-CAT-020



22' Command Boat WB0941

BOAT, 22' COMMAND**ESSM NUMBER WB0941****DESCRIPTION**

The 22' Command Boat WB0941 is a deep V-hull craft designed for fast speeds and rough weather. The command boat is used to transport the On-Scene-Commander, personnel, and equipment to the various locations of operating equipment associated with an oil spill.

SPECIFICATIONSBoat

Manufacturer Privateer
Model 22 ft deep-V

Transmission

Manufacturer Hurth
Model 630A, 8 (down angle)
Transmission fluid Dexron II-D
Shifting pressure 312-377 psig
Operating temp. 130°
Gear ratio 1.5, 2.0, 2.5

Outdrive

Manufacturer Mercruiser

Engine

Manufacturer Mercruiser
Model 5.7L
Cylinders V-8
Bore 4.00 in.
Stroke 3.48 in.
Displacement 350 cu in.
Compression ratio 9.3 : 1
Compression pressure 150-160 psig
Shaft horsepower 235 hp
Idle (fwd gear) 650-700 rpm
Max rpm 4200-4600
Maximum oil @ 2000 rpm 30-70 psig
Minimum oil at idle 4 psig
Fuel pressure at 1800 rpm 3-7 psig
Electrical system 12 V dc
Minimum cold cranking amps 350

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	24 ft, 2 in.	29 ft, 6 in.
Width (Beam)	8 ft, 6 in.	8 ft, 6 in.
Height	7 ft, 3 in.	7 ft, 6 in.
Cube	1490 cu ft	1880 cu ft
Weight	4360 lb	5392 lb

REFERENCES

1. Mercruiser Service Manual Number 17.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

**RADIO, VHF, MARINE MOBILE,
ICOM (58 CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC-M402S are currently in use in the ESSM system with its appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC-M402S
General	
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels	
Transmit	58
Weather	10
Receiver	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE
ICOM (58 CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



22' Command Boat Tool Box TL0070

S0300-BV-CAT-020**TOOL BOX, 22' COMMAND BOAT****ESSM NUMBER TL0070**

DESCRIPTION

The 22' Command Boat Tool Box TL0070 is a basic mechanic's tool set that contains 3/8" drive sockets and accessories, combination, open-end, pipe, and adjustable wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 22' Command Boat WB0941.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 7 in.
Width	10 in.
Height	9 in.
Cube	1 cu ft
Weight	26 lb

REFERENCES

None

S0300-BV-CAT-020



22' Command Boat Trailer TR0951
with 22' Command Boat WB0941

S0300-BV-CAT-020**TRAILER, 22' COMMAND BOAT WB0941****ESSM NUMBER TR0951****DESCRIPTION**

The Command Boat Trailer TR0951 is used to transport, launch, and recover the 22-foot Command Boat. The trailer is also used as a storage platform when the Command Boat is not in use. The trailer is equipped with an electrically operated winch, surge-type brakes, and adjustable suspension.

SPECIFICATIONS

Manufacturer Calkins

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u> (with boat)	<u>Shipping</u> (without boat)
Length	26 ft, 5 in.	29 ft, 6 in
Width	8 ft, 6 in.	8 ft, 1 in.
Height	4 ft, 10 in.	7 ft, 6 in.
Cube	1880 cu ft	1032 cu ft
Weight	5392 lb	1980 lb

REFERENCES

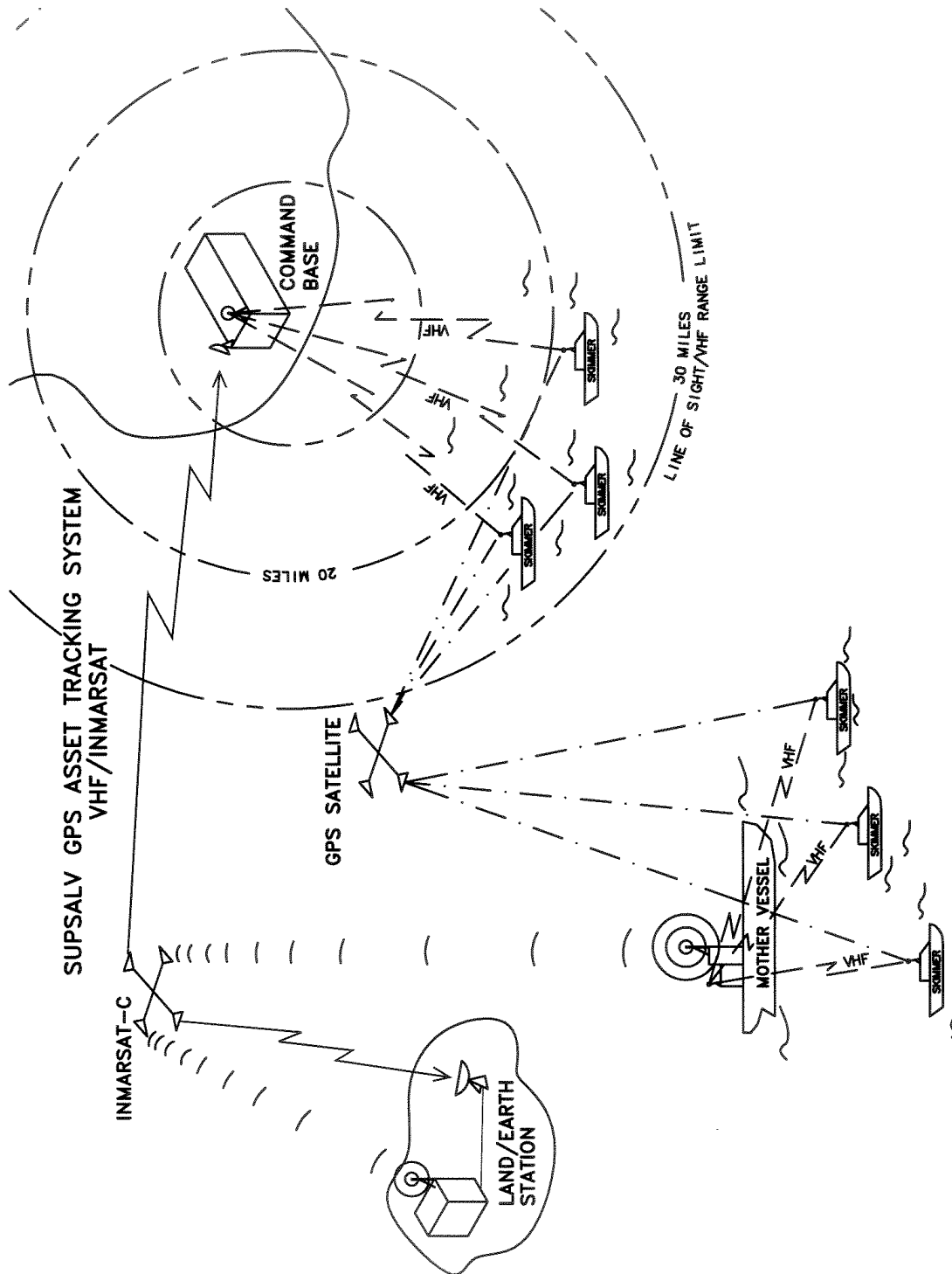
None

S0300-BV-CAT-020

GPS RESPONSE ASSET TRACKING SYSTEM P20100



S0300-BV-CAT-020



GPS Response Asset Tracking System P20100

S0300-BV-CAT-020**GPS RESPONSE ASSET TRACKING SYSTEM****SYSTEM NUMBER P20100****SYSTEM DESCRIPTION**

The GPS Response Asset Tracking System (RATS) P20100 is comprised of completely mobile “plug and play” technology. The global positioning receivers (GPS) base location systems are placed aboard skimmers and other equipment that automatically report in near real time through VHF transmission links to a host command vessel or command post. The command post/vessel compiles these position reports and displays them on a laptop computer overlaid on the selected digitized nautical chart or land mapping system. Acting as a forward command post/vessel, the command station is able to watch, direct, and fully coordinate the containment and recovery efforts of the skimming systems under its control. In addition to providing command and control at the local level, the forward command post/vessel automatically sends the position reports to the SUPSALV command post via INMARSAT-C. This communications link, with a typical five- to ten-minute delay from real time, again overlays the position reports on selected chart/map bases and provides SUPSALV a worldwide linkage to operational elements responding to a pollution incident.

A large, open water oil spill generally spreads over vast amounts of ocean and ranges far along coastlines. This creates logistical and communications problems, especially when weather is unfavorable. Skimmers equipped with GPS systems allow for central control of their locations. This, along with oil tracking buoys, permits command and control to follow spills at night or in conditions unfavorable to aircraft deployment such as fog, and to effectively reposition equipment when recovery operations resume.

There are two configurations of the GPS Response Asset Tracking System (RATS) P20100. Both systems are the same except that the second configuration contains an Over-the-Air Video Kit GP0111.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. GPS Response Asset Tracking System		1
GPS Tracking Base Station	GP0100	2
Palmtop Computer	CO1100 (not shown)	1
Laptop Computer (Older Technology)	CO1110 (not shown)	1
Case, Support, GPS Base Station	GP0105	2
GPS Mobile Tracking Station	GP0110	6
GPS Mobile Tracking Station, Helo	GP0115	1

S0300-BV-CAT-020**GPS RESPONSE ASSET TRACKING SYSTEM****SYSTEM NUMBER P20100**

SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
2. GPS Response Asset Tracking System		1
GPS Tracking Base Station	GP0100	2
Palmtop Computer	CO1100 (not shown)	1
Laptop Computer (Older Technology)	CO1110 (not shown)	1
Case, Support, GPS Base Station	GP0105	2
GPS Mobile Tracking Station	GP0110	6
Video Kit, Over-the-Air	GP0111	1
Camera, Video, Digital 8MM, CCD-TR87	CM0941	1
GPS Mobile Tracking Station, Helo	GP0115	1

S0300-BV-CAT-020



GPS Tracking Base Station GP0100 Shipping Configuration



GPS Tracking Base Station GP0100

S0300-BV-CAT-020**GPS TRACKING BASE STATION****ESSM NUMBER GP0100****DESCRIPTION**

The GPS Tracking Base Station GP0100 provides the nucleus of the contingency planning function and of field operations with a visual display of deployed assets on the appropriate nautical chart or land map. Information is displayed on the integral supporting Pentium laptop and in some cases enlarged to a 17-inch SVGA monitor. The 486 data/logger maintains a complete replayable history of the tracked assets, which may be used as a post-exercise training tool. The computer has the ability to select a wide variety of chart or map databases to both plan and conduct operations. The RATS system is able to select from nautical chart bases that include NOAA Environmental Sensitivities Indices (ESI) and may be used as an operational baseline for both tracking and planning. Operations on land, river, and streams are accomplished by using Tiger Line file map databases. The preferred method for entering chart data is through a CD-ROM provided by the chart originator, for example the NOAA nautical charts on CD from BSB, which are packaged with the baseline operational capability. Additionally, hard copy charts can be digitized on an as-needed basis and stored on the hard drive.

The base station's software, normally located on the command vessel and at the command post, has the simultaneous capability to plan and execute all containment, recovery, and logistics support operations on the Pentium laptop. The operations element can free draw on the supporting chart or map base. Plans for booming operations are overdrawn and automatically calculate the latitude of the start and finish points, heading, and distance expressed in either feet, nautical, or statute miles. Once operationally placed, these boom operations are saved within the program after being tagged with appropriate symbol, type, owner, and descriptive annotations. Automatic summary inventories are created by type of equipment deployed, allowing the user to readily find not only individual equipment but the total units of that equipment in use. After a time of entry into the program, operational actions such as placement of boom are automatically time-clicked and placed into the operational log.

Reporting vessels and equipment automatically provide position, speed, and heading. History trails are available on call so that the operations center can observe the vessel's operational history over a selected period of time. An additional 12 data ports within the system allow for the recording and transmission of weather, engine, and other remote sensors located onboard. Imbedded safety features include an automated "not-heard-from" function and a crew-operated panic button. By activating an onboard switch, the crew is able to automatically send a distress signal with position and tracking immediately highlighted with both visual and audio signal in the command post.

The command post maintains their operational logs within the system. All equipment entries are automatically placed into the log and narrative entries are typed by the operator. All transactions are time-relative to the vessel tracking system and can be recalled for an operational snapshot or entire operational replay. Direct print capability and direct fax capability allow the operator to produce hard copy charts with all overlays, equipment, and logs at any point in time. These products can be faxed directly to designated activities.

S0300-BV-CAT-020**GPS TRACKING BASE STATION****ESSM NUMBER GP0100****SPECIFICATIONS**

The base station controller unit consists of the following:

<u>Item</u>	<u>Qty</u>
Base Station Controller Unit Case:	1
Laptop PC, display	1
Laptop PC, maintenance	1
Radio, communications	1
Base VDML unit, Autofind	1
Transceiver, INMARSAT C	1
PC and keyboard, 486 data logger	1
Power supplies:	
Radio	1
Laptop	1
INMARSAT	1
External mouse	1
Video monitor, external (VGA/SVGA)	1

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	3 ft, 6 in.
Width	2 ft, 6 in.
Height	2 ft, 0 in.
Cube	17 cu ft
Weight	166 lb

REFERENCES

1. Operator's Manual for Autofind Tracking System.

S0300-BV-CAT-020



GPS Tracking Support Case GP0105



GPS Tracking Support Case GP0105

S0300-BV-CAT-020**CASE, SUPPORT, GPS BASE TRACKING****ESSM NUMBER GP0105****DESCRIPTION**

The GPS Base Tracking Support Case GP0105 contains the necessary ancillary items to set up and operate the GPS tracking system in the field.

SPECIFICATIONS

The Base Tracking Support Case consists of the following:

<u>Item</u>	<u>Qty</u>
Pelican-style carrying case (32" x 21" x 12"):	1
Power strip, ac	1
Antenna, INMARSAT-C	1
Antenna, VHF clip-on	2
Base antenna, magnetic	1
Cable, INMARSAT, antenna, 50'	1
Cable, INMARSAT, antenna, 25'	1
Cable, RG58U, 15'	2
Cable, RG58U, 25'	2
Cable, RG58U, 50'	1
Chart, nautical, CD, regions 2,3,4,6,7,8,10, 12,13,14,15,17,22,24,26,40	1 set
Clamp, hose, 5" diameter	3
Clamp, mast	2
Cord, power	1
P-Map on CD	1
Power cord, mobile	1
U-Bolt, 1 1/2"	2
Wire connectors for antenna	1 bag
Wire ties	1 bag
Inventory, laminated	1

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CASE, SUPPORT, GPS BASE TRACKING

ESSM NUMBER GP0105

PHYSICAL CHARACTERISTICS

Shipping

Length	2 ft, 8 in.
Width	1 ft, 9 in.
Height	1 ft, 0 in.
Weight	45 lb

REFERENCES

1. Operator's Manual for Autofind Tracking System.

S0300-BV-CAT-020



GPS Mobile Tracking Station GP0110



GPS Mobile Tracking Station GP0110

S0300-BV-CAT-020**GPS MOBILE TRACKING STATION****ESSM NUMBER GP0110****DESCRIPTION**

The GPS Mobile Tracking Station GP0110 is placed aboard a vehicle or vessel and will transmit its location to the base station on the same frequency. The same frequency is shared using a time-sharing algorithm. That is, each mobile unit is assigned a time slot in which it will transmit. In this way, multiple mobile units can share a single frequency without mutual interference. The GPS tracking system can operate independently of the type of communication link used for carrying the transmitted position reports from the mobile units to the base. The link can be any VHF radio, UHF radio, trunked line, satellite communications, cellular phone, or other links.

SPECIFICATIONS

The mobile unit consists of the following:

<u>Item</u>	<u>Qty</u>
Pelican-style carrying case (13" x 13" x 6")	1
Radio, communications	1
VDML unit, mobile	1
Antenna, GPS	1
Cable, power	1
Amplifier w/bracket	1
Antenna base w/10' cable	1

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	1 ft, 1 in.
Width	1 ft, 0 in.
Height	6 in.
Cube	1 cu ft
Weight	5 lb

REFERENCES

1. Operator's Manual for Autofind Tracking System.

S0300-BV-CAT-020



Over-the-Air Video Kit GP0111



Over-the-Air Video Kit GP0111

S0300-BV-CAT-020**VIDEO KIT, OVER-THE-AIR****ESSM NUMBER GP0111****DESCRIPTION**

The Over-the-Air Video Kit GP0111 is an interactive, imaging system designed to remotely monitor areas of interest via either overt or covert means. The information collected is sent over radio frequency (RF) data links to a control display unit (CDU) which displays the images. A CDU operator has the flexibility to control camera selection, adjust framing rates for the cameras, enhance image quality, activate camera triggering programs using intelligent sensors, archive imagery to computer disk, display real-time images or play back stored images, and activate a relay at any of the remote locations. All images collected can also be distributed to additional users via standard phone lines, local area networks, or over the Internet from the CDU. There are two models, a fixed and a portable model. The fixed model is for permanent installations where ac power is available for all or part of the system. The portable system is for temporary installations and is dc-powered. This manual describes the portable system.

An Over-the-Air Video Kit remote site consists of a maximum of four cameras and a remote processor unit (RPU). The cameras can be configured in any combination of color and black and white (b/w), with a mixture of interchangeable lenses. This allows one to establish panoramic (360°) or strategic coverage of critical and high traffic areas. By using a wavelet compression algorithm the video image is converted into a digital file which can be transmitted to the CDU for decompression and viewing. As part of the optional equipment offered, the cameras can be either black and white or color and an IR illuminator can be purchased for low light applications.

The Over-the-Air Video System uses two types of communications between the remote processing unit (RPU) and the RF communications interface unit (RFCIU). The primary command link is VHF line of sight that the systems uses for various control functions. The second communications link is the actual transmission of the digital video communications path. It is very important that both these communications paths be established, or the system will not function properly. For those applications where line of sight communications is difficult to obtain, an optional remote relay unit can be purchased which can be placed to maintain the line of sight communication path and extend the distance between the target and the monitoring position where the CDU is located.

S0300-BV-CAT-020**VIDEO KIT, OVER-THE-AIR****ESSM NUMBER GP0111**

SPECIFICATIONS

Manufacturer Corp Ten

The Over-the-Air Video Kit consists of the following:

<u>Item</u>	<u>Qty</u>
Antenna control case (57" x 10" x 10 1/2")	1
Antenna, command control	2
Video kit case 1(23 1/2" x 20" x 9")	1
Power adapter, ac	1
Amplifier w/bracket	1
Antenna base w/10' cable	1
Antenna, video	1
Battery pack (6 AA batteries)	1
AA battery	1
Bracket, antenna	2
Bracket, base video antenna	1
Cable, antenna, 50'	1
Cable, RFCIU to computer	2
Cable, pigtail (black & red)	1
Cable, video out to camera	1
Cable, video, 50-ohm, flexible, 2'	1
RG58CU video cable	1
Cable, AV video	1
Camera, digital video, 8mm, CM0941	1
Power cord, adapter to outlet	1
Power cord, outlet to RFCIU box	1
Inventory, laminated	1
Digital Video System Operator's Manual	1
Power injector, dc	1
Power supply box, ac	1
Power supply box, ac to dc	1
Remote control, video camera	1
Connection box, RFCIU single	1
Video tape, 8mm	1
Video kit case 2(18 1/2" x 15" x 5")	1

S0300-BV-CAT-020**VIDEO KIT, OVER-THE-AIR****ESSM NUMBER GP0111**

SPECIFICATIONS (Contd)

<u>Item</u>	<u>Qty</u>
Antenna control, flexible	1
Antenna control, telescopic	1
Antenna, video, 4 1/2" stub	1
Antenna, video, 5 1/2" stub	1
Battery, lithium	2
Connection box, RFCIU single	1
Carrying strap	1

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 8 in.
Height	9 in.
Cube	2.5 cu ft
Weight	31 lb

REFERENCES

1. Operator's Manual for Autofind Tracking System.

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Helo GPS Mobile Tracking Station GP0115 Shipping Configuration



Helo GPS Mobile Tracking Station GP0115

S0300-BV-CAT-020**GPS MOBILE TRACKING STATION, HELO****ESSM NUMBER GP0115**

DESCRIPTION

The Helo GPS Mobile Tracking Station GP0115 is placed aboard a helicopter and will transmit its location along with the type of oil spotted to the base station operating on the same frequency via a spotter control unit (SPU). There are four settings on the SPU for the type of oil spill spotted; sheen, mousse, black oil, and streamers. The operator sets the SPU to the appropriate type of oil spill spotted and then presses the Push To Send button, at which time the data is transmitted to the base station and the location is plotted. The GPS tracking system can operate independently of the type of communication link used for carrying the transmitted position reports from the mobile units to the base. The link can be any VHF radio, UHF radio, trunked line, satellite communications, cellular phone, or other links.

SPECIFICATIONS

The mobile unit consists of the following:

<u>Item</u>	<u>Qty</u>
Storage case (13" x 13" x 6"):	1
Antenna, GPS	1
Cable, parallel computer	1
Cable, Interface (black & red)	1
Helo Mobile Tracking Station	1
Interface, GPS	1
Inventory, laminated	1
Radio, GPS VHF	1

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>
Length	1 ft, 1 in.
Width	1 ft, 0 in.
Height	6 in.
Cube	1 cu ft
Weight	5 lb

REFERENCES

1. Operator's Manual for Autofind Tracking System.

S0300-BV-CAT-020

HOSE VAN P20200

S0300-BV-CAT-020



Hose Van P20200

S0300-BV-CAT-020**HOSE VAN****SYSTEM NUMBER P20200****SYSTEM DESCRIPTION**

Almost all pollution response systems involve hoses of some type. The Hose Van P20200 contains 2-inch, 3-inch, 4-inch, and 6-inch diameter hoses in sufficient quantities to meet the suction and discharge needs of a large scale oil spill operation. The quantities packaged in the primary response systems are normally adequate for first response; however, on large operations, additional hose or replacement hose is always required. Having these additional hoses readily available allows operations to continue if problems arise. See SPECIFICATIONS section of the Hose Supply and Support Van VA0120 for type and quantity of hose supplied with the system.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Hose Supply and Support	VA0120	1

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Hose Supply and Support Van VA0120

S0300-BV-CAT-020**VAN, HOSE SUPPLY AND SUPPORT****ESSM NUBER VA0120**

The Hose Supply and Support Van VA0120 contains 2-inch, 3-inch, 4-inch, and 6-inch diameter suction and discharge hoses in sufficient quantities to meet the suction and discharge needs of a large scale oil spill operation. The need in the field to repair and replace hose is a constant problem, so additional hose or replacement hose is usually required. Having these additional hoses readily available allows recovery operations to continue if problems arise. See SPECIFICATIONS section for type and quantity of hose supplied with the Hose Supply and Support Van VA0120.

SPECIFICATIONS

Manufacturer ESSM Facility

<u>Hose</u>	<u>Total</u>
2" X 50' Artic Flexing hose w/m/f camlock fittings	600 ft
3" X 50' Artic Flexing hose w/m/f camlock fittings	600 ft
3" X 50' Titan layflat hose w/ m/f camlock fittings	450 ft
4" X 50' Artic Flexing hose w/m/f camlock fittings	600 ft
4" X 50' Titan layflat hose w/ m/f camlock fittings	350 ft
6" x 20', Goodyear layflat hose w/m/f camlock fittings	120 ft
6" X 25', Angus Chemicoil layflat hose w/m/f/ camlock fittings	50 ft
6" X 50' Titan layflat hose w/ m/f camlock fittings	300 ft
6" X 50', Angus Chemicoil layflat hose w/m/f/ camlock fittings	200 ft
6" X 50', Titan layflat hose w/m/f Hydasearch fittings	300 ft

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	17,620 lb

REFERENCES

None

S0300-BV-CAT-020

RAPID PERSONNEL/EQUIPMENT TRANSFER SYSTEM P20000

S0300-BV-CAT-020



Rapid Personnel/Equipment Transfer System P20000

S0300-BV-CAT-020**RAPID PERSONNEL/EQUIPMENT TRANSFER SYSTEM****SYSTEM NUMBER P20000****SYSTEM DESCRIPTION**

The Rapid Personnel/Equipment Transfer System P20000 consists of a 36-foot, diesel-powered, hovercraft-type workboat equipped with a VHF marine mobile radio, a radar, a 50-foot shore power cable, and a tool box.

The following ancillary items are onboard: a compass, anchor and anchor line, headsets for communicating inside the vessel, life preservers, a first aid kit, a flare kit, spare skirt segments, spare skirt cable, skirt repair kit, spare parts, oil, fuel, and air filters, oil, electrical fuses, light bulbs, a hover beacon, a flashlight, and all the necessary manuals for operating, maintaining, and servicing the 36' Hovercraft WB0975.

The P20000 system is designed to support the inflatable boom tending boats, which are generally smaller, slower, and usually busy with their task of tending boom. During large spill operations, skimmers and maintenance vessels can be scattered over very large distances; 100 miles is not uncommon. The Rapid Personnel/Equipment Transfer System makes it possible to supply crews with meals, parts, water, and other necessary items, as well as tend to emergencies and change out relief crews.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Workboat, 36' Hovercraft, Diesel	WB0975	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Radar, Model 1730/1731	RD0001	1
Tool Box, 36' Hovercraft WB0975	TL0035	1

S0300-BV-CAT-020



36-Foot Hovercraft WB0975



36-Foot Hovercraft WB0975 on 40-Foot Flatbed Trailer

S0300-BV-CAT-020**WORKBOAT, 36' HOVERCRAFT, DIESEL****ESSM NUMBER WB0975****DESCRIPTION**

The 36' Hovercraft WB0975 is a fully amphibious hovercraft capable of carrying a crew of four and as many as nine passengers. The craft operates on a cushion of low pressure air, contained under the craft by a flexible, segmented rubber skirt. The skirt allows the craft to lift approximately 23 inches above the operating surface, and obstacles not exceeding this height will pass under and through the flexible skirt with a minimum of drag. Air for the cushion is supplied by a centrifugal-type fan situated forward of the engine. Air is drawn through a louver into the air intake bay and then into the central eye of the fan. Air is directed into the skirt through ducts on each side of the craft.

Power to the lift fan and the propeller is supplied by a Cummins 6CTA 8.3M-1 water-cooled engine. The engine is protected by a knit mesh filter system through which cooling and combustion air is drawn. The knit mesh filters are removable for cleaning and for access to the service bay. Two doors provide access to the engine for routine servicing; for major overhauls the access doors can be removed.

SPECIFICATIONSHovercraft

Manufacturer	Singsby Aviation Ltd
Model	SAH 2200
Max. load (including fuel)	3300 lb
Crew	4
Passengers	9
Lift fan	12-blade
	Air vehicle type
	1m diameter
Propeller	3-blade
	Variable pitch
	Reversible
	1.5m diameter
Maximum speed:	
Over water	40 knots
Over land	20 knots
Off cushion	4 knots
Worst intended conditions:	
Max. wave height	2 ft, 6 in.
Max. wind speed	20 knots

Engine

Manufacturer	Cummins
Model	6 CTA 8.3M-1
Control parts list number	1221
Cylinders	6
Displacement	505 cu in.
Horsepower @ 2500 rpm	300
Maximum rpm	2500
Fuel consumption	18.6 gph
Cruising rpm	2200
Fuel consumption	13.0 gph
Starter	Electric
Battery	Two 12 V dc
Fuel	Diesel
Fuel capacity	
Fwd tank	66 gallons
Aft tank	69 gallons

S0300-BV-CAT-020

WORKBOAT, 36' HOVERCRAFT, DIESEL (CONTD)

ESSM NUMBER WB0975

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	36 ft, 0 in.	36 ft, 0 in.
Width	14 ft, 0 in.	8 ft, 0 in.
Height	13 ft, 0 in.	9 ft, 2 in.
Cube	6552 cu ft	2464 cu ft
Weight	9440 lb	9440 lb

REFERENCES

1. SAH 2200 Hovercraft Operating Manual for Cummins Water-Cooled Engine Craft.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC-M402S are currently in use in the ESSM System with their appropriate instruction manuals. All models are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC-M402S
General	
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58 CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

1. Instruction Manual, Icom IC-M56.
2. Instruction Manual, Icom IC-M58.
3. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



Radar Model 1730 RD0001

S0300-BV-CAT-020**RADAR, MODEL 1730/1731****ESSM NUMBER RD0001****DESCRIPTION**

The Furuno Model 1700/1730 Radar RD0001 is a standard radar (radio detection and ranging) unit used to indicate a target object's range and bearing location. The radar unit determines the distance to a target by calculating the time difference between the transmission of a radar signal and reception of the reflected echo

The range and bearing of a target is displayed on a visual indicating screen. This display shows the transmitting ship's position at the center. Target image echoes are received and displayed as a sight signal on the visual display screen and show the distance and relative bearing from the transmitting vessel. The motion of the transmitting ship is also displayed along with the target images.

SPECIFICATIONS

Manufacturer	Furuno								
Scanner unit:									
Peak output power	3 kW nominal								
Display unit:									
Indication system	Raster scan, daylight display								
Picture tube	7 in. diagonal, green phosphor CRT								
Range (nm)	0.25	0.5	1	2	4	8	1	24	
Range ring interval (nm)	0.125	0.25	0.5	1	2	4	4	4	
Number of rings	2	4	4	4	4	4	4	4	
Interference rejecter	Built-in								
Ambient temperature	Scanner unit: -25°C to +70°C; Display unit: -15°C to +55°C								
Relative Humidity	95% or less at +40°C								
Power supply & consumption	10.2 V dc - 40.0 V dc, 47 W approx. (25 W approx. in economy mode); 100/110/220/230 V ac, 50/60 Hz, 1 rectifier required								

S0300-BV-CAT-020

RADAR, MODEL 1730/1731 (CONTD)

ESSM NUMBER RD0001

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 9 in.
Width	2 ft, 9 in.
Height	2 ft, 9 in.
Weight	170 lb
Cube	21 cu ft

REFERENCES

1. Operator's Manual, Marine Radar Furuno Model 1730, OM-E3330-OA.
2. Service Manual, Marine Radar Furuno Model 1730, SM-E3330-OA.

S0300-BV-CAT-020



36' Hovercraft Tool Box TL0035

S0300-BV-CAT-020**TOOL BOX, 36' HOVERCRAFT WB0975****ESSM NUMBER TL0035****DESCRIPTION**

The 36' Hovercraft Tool Box TL0035 is a basic mechanic's tool set that contains 3/8" drive metric sockets and accessories, metric combination wrench set, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the 36' Hovercraft WB0975.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 7 in.
Width	8 in.
Height	8 in.
Cube	1 cu ft
Weight	32 lb

REFERENCES

None

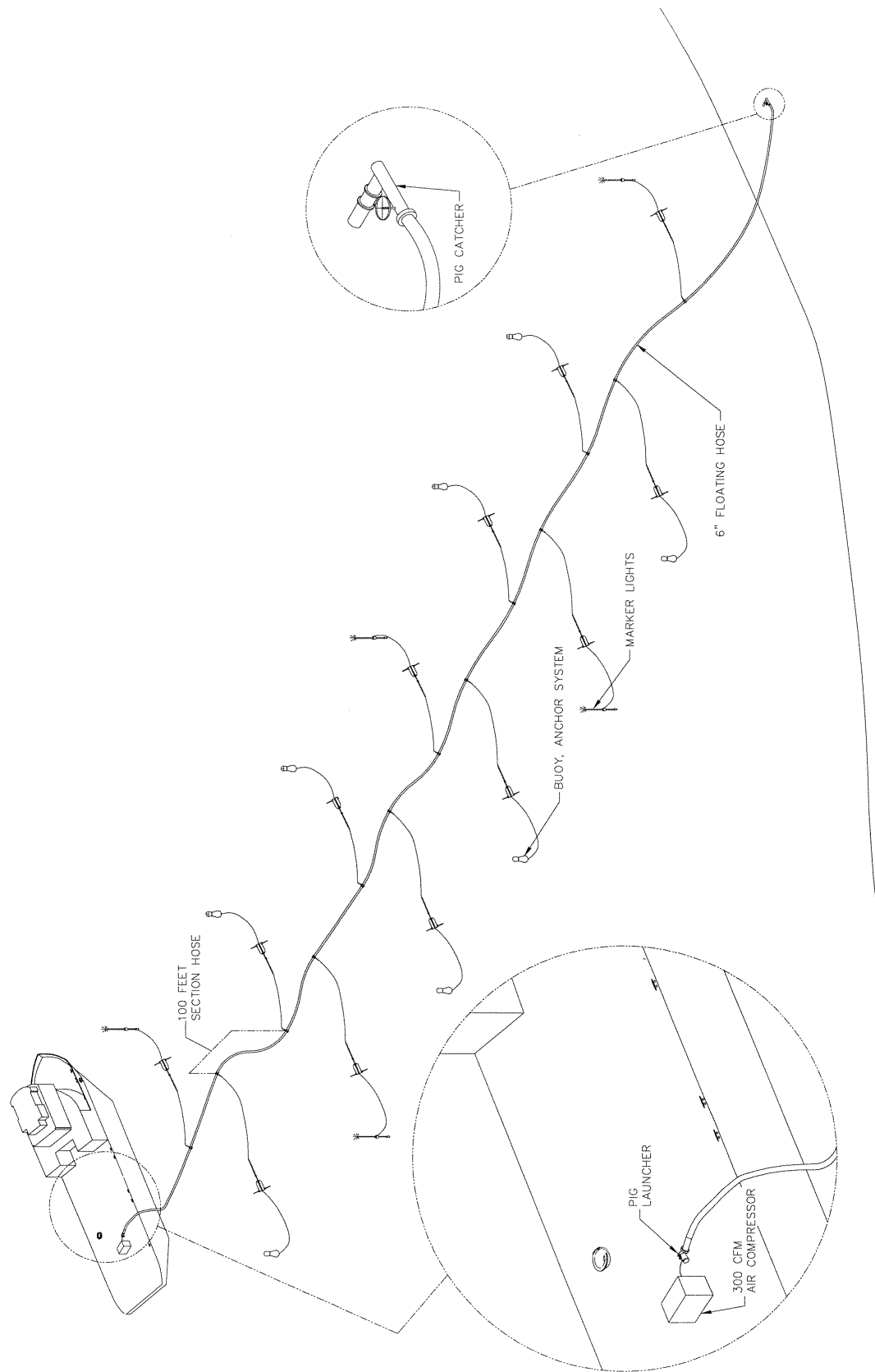
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S0300-BV-CAT-020

FLOATING HOSE SYSTEM P08100

S0300-BV-CAT-020



P08100 System Overview

S0300-BV-CAT-020**FLOATING HOSE SYSTEM****SYSTEM NUMBER P08100****SYSTEM DESCRIPTION**

The Floating Hose System P08100 consists of four, 20-foot storage/shipping vans; 5000 feet of 6" x 100' Layflat Floating Hose HS0822; a 22-Cfm Diesel Air Compressor AC0501; a 300-Cfm Hydraulic Air Compressor AC0700; a 1-Phase, 240-V ac, 9-kW Diesel Generator GE0470; a Mod 9 Diesel Hydraulic Power Unit PW0020; five Floating Hose Reels RL0031; a Pig Launcher HC0005; a Pig Catcher HC0006; four 16' Polyester Roundslings SL0012; and the necessary ancillary equipment to deploy and maintain the system. The ancillary equipment is stored in wire baskets, which are stored in the storage/shipping vans.

The floating hose system is used to discharge oil from a vessel casualty and transfer it to receiving tankers or barges when it is not possible to bring lightering vessels alongside.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Floating Hose System (Van 1 of 4):	VA2150	1
Air Compressor, 22 cfm@125 psi, Diesel	AC0501	1
HVAC Unit w/Sleeve	AC2001	1
Containment Pool, Machinery, 5' x 5'x12"	CP3000	3
Generator, 9-kW, Dsl, 240-V ac, 1-Phase	GE0470	1
Pig Launcher for Floating Hose System P08100	HC0005	1
Pig Catcher for Floating Hose System P08100	HC0006	1
Pool, Cleaning, 12' x 12'	PC0816	1
Power Unit, Hydraulic, Mod 9, Dsl, 10 gpm @ 2000 psi	PW0020	1
Roundslings, Polyester, 16'	SL0012	4
2. Van, Floating Hose System (Van 2 of 4):	VA2151	1
3. Van, Floating Hose System (Van 3 of 4):	VA2152	1
Reel, Floating Hose	RL0031	3
Hose, 6" x 100', Floating, Layflat, Nitrol SP	HS0822	30
4. Van, Floating Hose System (Van 4of 4):	VA2153	1
Air Compressor, Hydraulic Driven, 300 cfm @200 psi	AC0700	1
Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
Reel, Floating Hose	RL0031	2
Hose, 6" x 100', Floating, Layflat, Nitrol SP	HS0822	20

S0300-BV-CAT-020



Floating Hose System Van VA2150 (Van 1 of 4)

S0300-BV-CAT-020**VAN, FLOATING HOSE SYSTEM (VAN 1 of 4)****ESSM NUMBER VA2150****DESCRIPTION**

The Floating Hose System Van VA2150 is a 20-foot van used for the storage and shipping of the major components and ancillary equipment of the Floating Hose System. Van #1 contains a 22-Cfm Diesel Air Compressor AC0501, a Single Phase, 240-V ac, 9-kW Diesel Generator GE0470, a Mod 9 Diesel Hydraulic Power Unit PW0020, a Pig Launcher HC0005, a Pig Catcher HC0006, four 16' Polyester Roundslings SL0012, and adapters, fittings, protective clothing, spare parts, and tools to maintain the Floating Hose System.

SPECIFICATIONS

Manufacturer Commercial

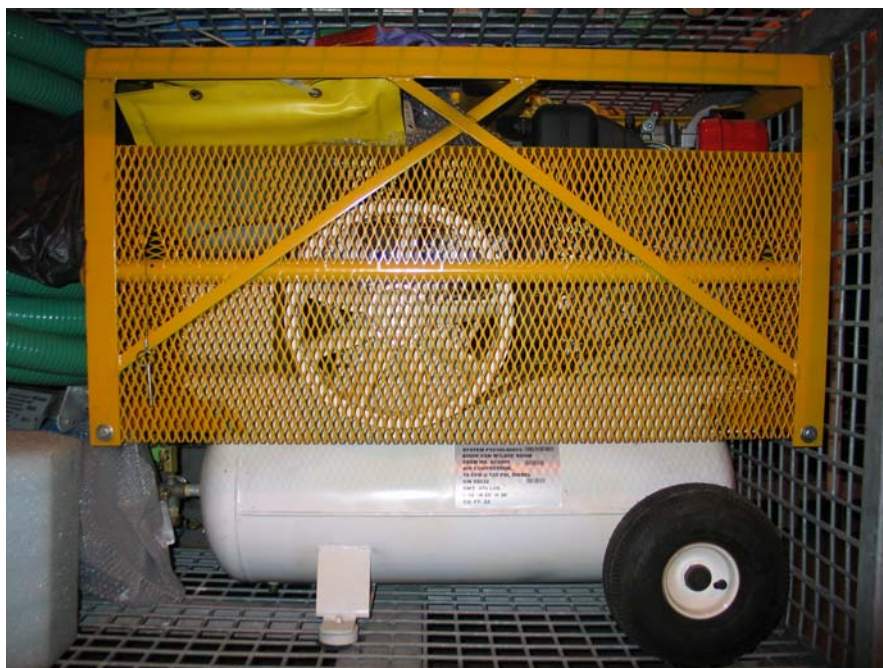
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	280 cu ft
Weight	13,360 lb

REFERENCES

None

S0300-BV-CAT-020



Air Compressor AC0501

S0300-BV-CAT-020**AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL****ESSM NUMBER AC0501****DESCRIPTION**

The Air Compressor AC0501 is a two-stage, high volume unit that provides 19 cfm of compressed air at 125 psig. The air compressor is powered by a 1-cylinder, 6.2-hp diesel engine, which has its own fuel supply tank. The engine is designed to operate at a continuous speed of 3600 rpm for long periods of time. The engine and compressor are enclosed in a protective frame that is mounted on top of a 30-gallon air storage tank with wheels, which allows for easy maneuverability.

SPECIFICATIONSAir Compressor Assembly

Manufacturer	Emglo Products
Model	GC8YDA-17F

Air Compressor

Manufacturer	Emglo Products
Model	JU
Capacity	19 cfm
Rated operating pressure	125 psi
Cylinders	2
Stages	2
Rpm	875
Storage tank	30 gallons
Operating pressure range	100 to 120 psig

Engine

Manufacturer	Yanmar
Model	L60
Cylinders	1
Bore	2.95 in.
Stroke	2.44 in.
Displacement	16.7 cu in.
Rpm (continuous)	3600
Compression ratio	20 : 1
Starting	Elec./recoil
Battery	12 V dc
Fuel	Diesel
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	22 cu ft
Weight	398 lb

S0300-BV-CAT-020

AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL

ESSM NUMBER AC0501

REFERENCES

1. Yanmar Diesel Engine Operation Manual for L-Series Engine.
2. Emglo Parts Price List J 288.

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/ SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump. It is designed to maintain a comfortable ambient atmosphere in the van.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12''****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12'' urethane berm. Its is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

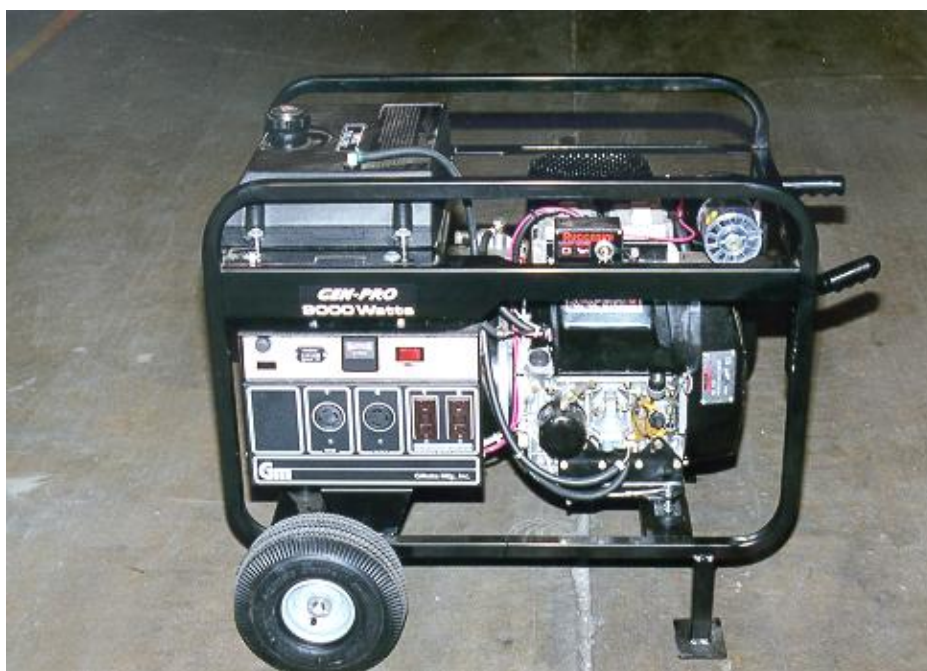
PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



9-kW Diesel Generator GE0470

S0300-BV-CAT-020**GENERATOR, 9-kW, DIESEL, 120/240-V AC,
1-PHASE****ESSM NUMBER GE0470****DESCRIPTION**

The 9-kW Diesel Generator GE0470 is a self-contained unit surrounded by a protective steel frame. Mounted on the frame are wheels and handles that allow for easy maneuverability. The unit is driven by an air-cooled, four-cycle, two-cylinder diesel engine. The generator can supply up to 9-kW single phase ac power at 120 or 240 volts. The 120- and 240-volt, single phase electrical power is distributed via one 4-prong, 120/240-volt twist-lock outlet; one 3-prong, 120-volt, twist-lock outlet; and two 120-volt, duplex ground fault interrupter (GFI) outlets located on the front panel of the generator. The outlets are protected by two 35-ampere breakers, located above the outlet panel.

SPECIFICATIONSGenerator Assembly

Manufacturer	Gillette Manufacturing
Model	GPD-90E
Type	AC
Capacity	9 kW
Frequency	60 Hz @ 3600 rpm
Voltage:	120 V ac, single phase 240 V ac, single phase
Amperage:	71 amps @ 120 volts 35.5 amps @ 240 volts

Engine

Manufacturer	Deutz-Ruggerini
Model	MD-151
No. cylinders	2
Horsepower	6.6
Rpm	3600
Starting system	12 volts
Fuel	Diesel
Fuel consumption	1.2 gph
Fuel source	5-gal. internal tank

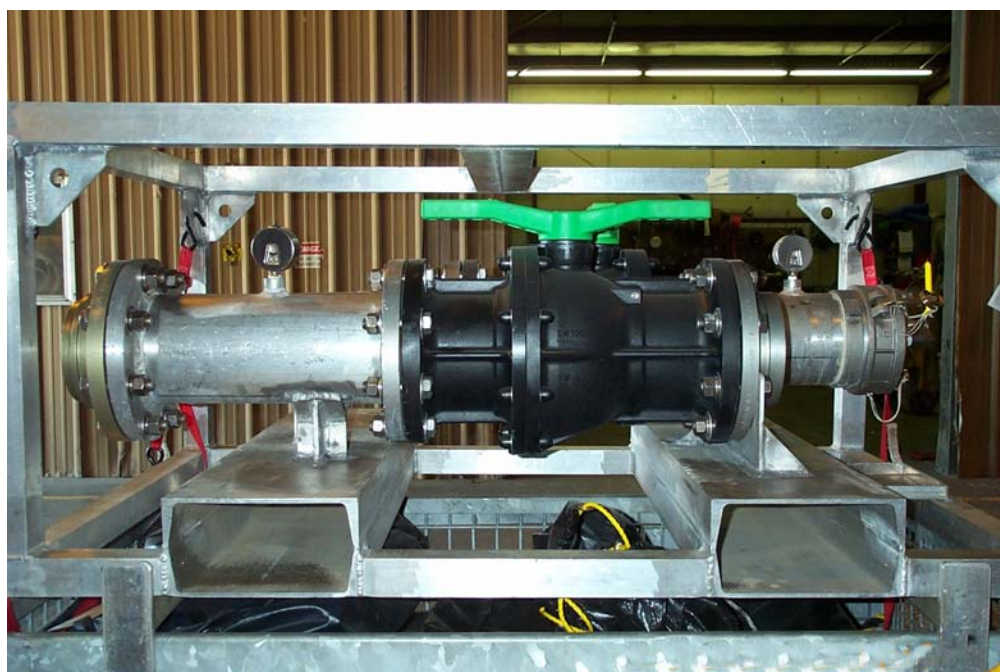
PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 3 in.
Height	3 ft, 1 in.
Volume	21 cu ft
Weight	444 lb

REFERENCES

1. Gillette Manufacturing Owner's Manual for Brushless Generators.

S0300-BV-CAT-020



Pig Launcher HC0005

S0300-BV-CAT-020**PIG LAUNCHER FOR FLOATING
HOSE SYSTEM P08100****ESSM NUMBER HC0005**

DESCRIPTION

The Pig Launcher HC0005 consists of a 6-inch manifold assembly that, when connected to the floating hose, will launch a 6-inch cleaning pig into the floating hose. The pig will then clear the floating hose of product. The pig launcher is used in conjunction with the 300-Cfm Hydraulic Air Compressor AC0700, which is used to provide sufficient air pressure to force the pig through the entire length of the floating hose.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 8 in.
Width	3 ft, 0 in.
Height	2 ft, 1 in.
Cube	29 cu ft
Weight	218 lb

REFERENCES

1. Floating Hose System Pig Launcher, GPC Sketch SK0388.

S0300-BV-CAT-020



Pig Catcher HC0006

S0300-BV-CAT-020**PIG CATCHER FOR FLOATING
HOSE SYSTEM P08100****ESSM NUMBER HC0006**

DESCRIPTION

The Pig Catcher HC0006 has a 6-inch manifold assembly that, when connected to the floating hose, will recover the 6-inch cleaning pig after the pig has cleared the floating hose of product.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 7 in.
Width	3 ft, 7 in.
Height	2 ft, 1 in.
Cube	49 cu ft
Weight	368 lb

REFERENCES

1. Floating Hose System Pig Catcher, GPC Sketch SK0406.
2. 6" Pig Catcher Prototype, GPC Sketch SK1579.

S0300-BV-CAT-020



Cleaning Pool PC0816

S0300-BV-CAT-020**POOL, CLEANING, 12' X 12'****ESSM NUMBER PC0816****DESCRIPTION**

The 12' x 12' Cleaning Pool PC0816 is a rubber pool/berm that provides a means of catching and containing any oil, fuel, or contaminants cleaned from the equipment used during an oil spill cleanup. The pool/berm is able to contain the oil and chemicals from the equipment until it can be pumped out and transported to a disposal site.

SPECIFICATIONS

Manufacturer	Carolina Boom
Material	32 oz. Cooley Urethane

PHYSICAL CHARACTERISTICSShipping

Length	2 ft, 10 in.
Width	1 ft, 5 in.
Height	11 in.
Cube	4 cu ft
Weight	50 lb

REFERENCES

None

S0300-BV-CAT-020



Mod 9 HPU Front View



Mod 9 HPU Right Side View

Mod 9 Hydraulic Power Unit PW0020

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 9, DIESEL,
10 GPM @ 2000 PSI****ESSM NUMBER PW0020****DESCRIPTION**

The Mod 9 Hydraulic Power Unit (HPU) PW0020 is a portable, diesel driven unit that provides hydraulic fluid up to 10 gpm @ 2000 psi. An adjustable pressure relief valve controls the output pressure delivered to the supply circuit. The HPU is mounted on a wheeled frame and is enclosed in a protective steel housing with four sling points on the external steel tubing frame. Hydraulic connections are made via Aeroquip 5600, -12 series male and female quick disconnect fittings for the hydraulic supply and return, with a 3/8-inch case drain fitting. The unit is shipped with the exhaust muffler attached to the side of the HPU housing, and the muffler is installed prior to operation of the unit.

SPECIFICATIONSHydraulic Power Unit Assembly

Manufacturer	PortaCo Hydraulic Power
Model	D-17S10-15-W

Diesel Engine

Manufacturer	Deutz-Ruggerini
Series	MD 191
Rpm	2200
Horsepower	19 @ 3600 rpm
Starting	Electric, 12-volt
Fuel	Diesel
Fuel consumption	1 gph
Fuel source	Internal 4-gal. fuel tank or external tank using installed fuel pickup

Hydraulic Pump

Manufacturer	Sauer-Sundstrand
Model	SNP 2/11
Type	Gear
Flow	10 gpm @ 2000 psi
Hyd. reservoir	5 gal.
Fluid type	Rando 46

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 5 in.
Width	2 ft, 7 in.
Height	2 ft, 7 in.
Cube	24 cu ft
Weight (dry)	472 lb

S0300-BV-CAT-020

**POWER UNIT, HYDRAULIC, MOD 9, DIESEL,
10 GPM @ 2000 PSI**

ESSM NUMBER PW0020

REFERENCES

1. Operation, Maintenance, and Repair Manual for PortaCo Hydraulic Power Unit, Model D-17S10-15-W.
2. Deutz-Ruggerini Use and Maintenance Manual, Engine Type MD150-151 and MD190-191.

S0300-BV-CAT-020

ESSM Number PW0021 Deleted.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1" screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

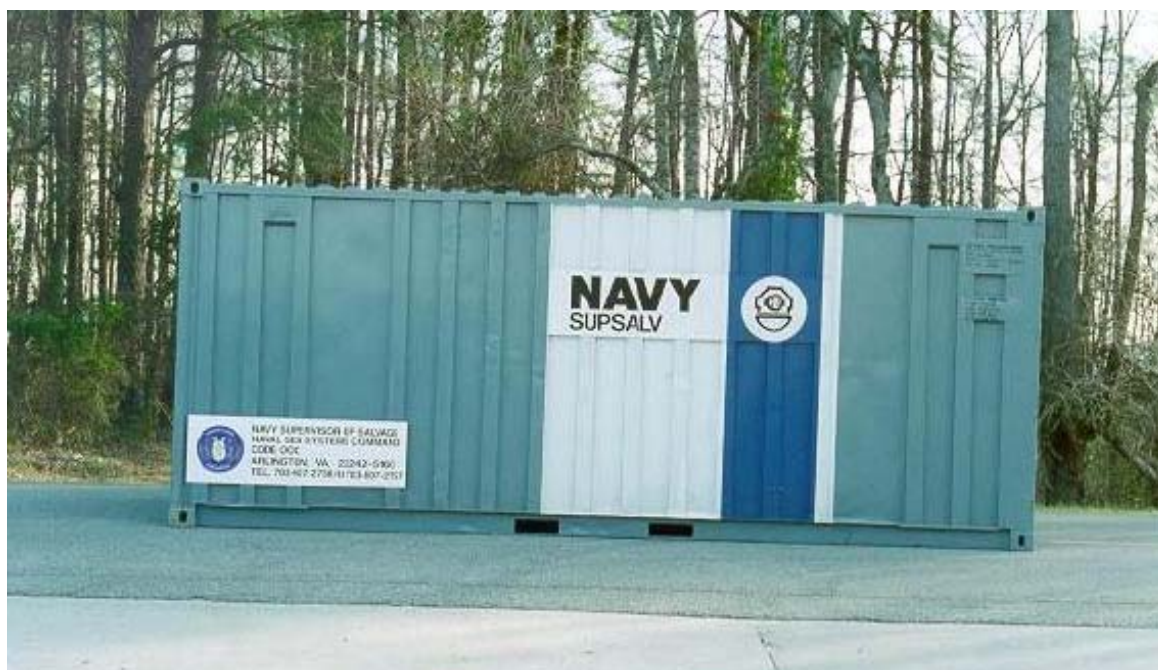
Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Floating Hose System Van VA2151 (Van 2 of 4)

S0300-BV-CAT-020**VAN, FLOATING HOSE SYSTEM (VAN 2 of 4)****ESSM NUMBER VA2151****DESCRIPTION**

The Floating Hose System Van VA2151 is a 20-foot van used for the storage and shipping of the Floating Hose System mooring components. Van #2 contains eight 62" x 36" x 41" wire mesh storage baskets that contain anchors, anchor lines, anchor chains, anchor marker buoys and anchor marker lights.

SPECIFICATIONS

Manufacturer Commercial

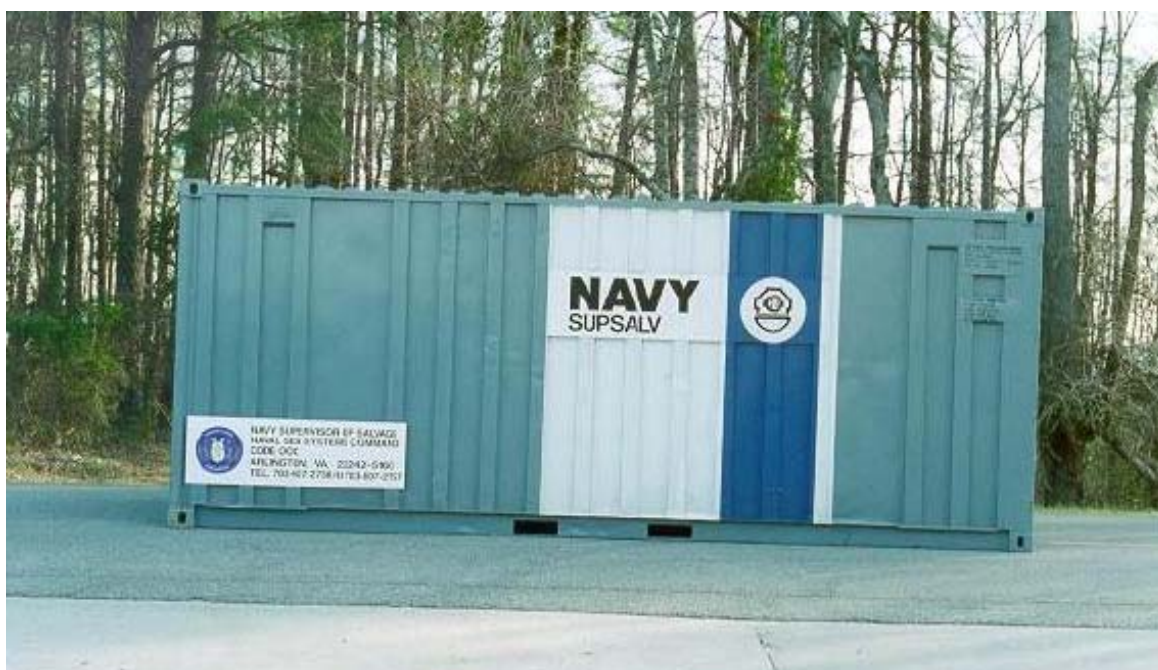
PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	280 cu ft
Weight	14,620 lb

REFERENCES

None

S0300-BV-CAT-020



Floating Hose System Van VA2152 (Van 3 of 4)

S0300-BV-CAT-020**VAN, FLOATING HOSE SYSTEM (VAN 3 of 4)****ESSM NUMBER VA2152****DESCRIPTION**

The Floating Hose System Van VA2152 is a 20-foot van used for the storage and shipping of the Floating Hose System and ancillary equipment. Van #3 contains three Floating Hose Reels RL0031 with ten sections of 6" x 100' Layflat Floating Hose HS0822 per reel, and eight wire storage baskets that contain anchors, anchor line, anchor chains, anchor marker buoys, and anchor marker lights.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	280 cu ft
Weight	25,400 lb

REFERENCES

None

S0300-BV-CAT-020



Floating Hose Reel RL0031
(with hose)

S0300-BV-CAT-020**REEL, FLOATING HOSE****ESSM NUMBER RL0031****DESCRIPTION**

The Floating Hose Reel RL0031 is skid-mounted and hydraulically powered. The Floating Hose Reel is used to reel up floating hose and can store up to ten 6" x 100' sections of floating hose. The floating hose reel is powered by a Mod 8 Hydraulic Power Unit (PU0200B), which is not a part of this system and must be obtained from a separate source.

SPECIFICATIONS

Manufacturer	Cavotec
Model	HC3

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	7 ft, 5 in.
Width	6 ft, 4 in.
Height	6 ft, 7 in.
Cube	309 cu ft
Weight	6410 lb (with 10 sections of floating hose)

REFERENCES

None

S0300-BV-CAT-020



Nitrol Layflat Hose HS0822

S0300-BV-CAT-020**HOSE, 6" x 100', FLOATING,
LAYFLAT, NITROL SP****ESSM NUMBER HS0822**

DESCRIPTION

The Nitrol SP Floating Hose HS0822 is a petroleum-compatible hose used to transfer oil from a casualty vessel to receiving tankers or barges when it is not possible to moor lightering vessels alongside.

SPECIFICATIONS

Manufacturer	Hydrasearch
Hose	MIL-H-22240 F
Part number	HOS-22240-6B-XXXL
Type	B
Dimensions:	
Inside diameter	6.00"
Outside diameter	7.01"
Proof pressure	300 psi
Min. burst pressure	600 psi
Min. tensile strength	16,000 lb
Weight per foot	4.40 lb
Size	6"
Rubber	Nitrile
Couplings, aluminum	MIL-C-24356

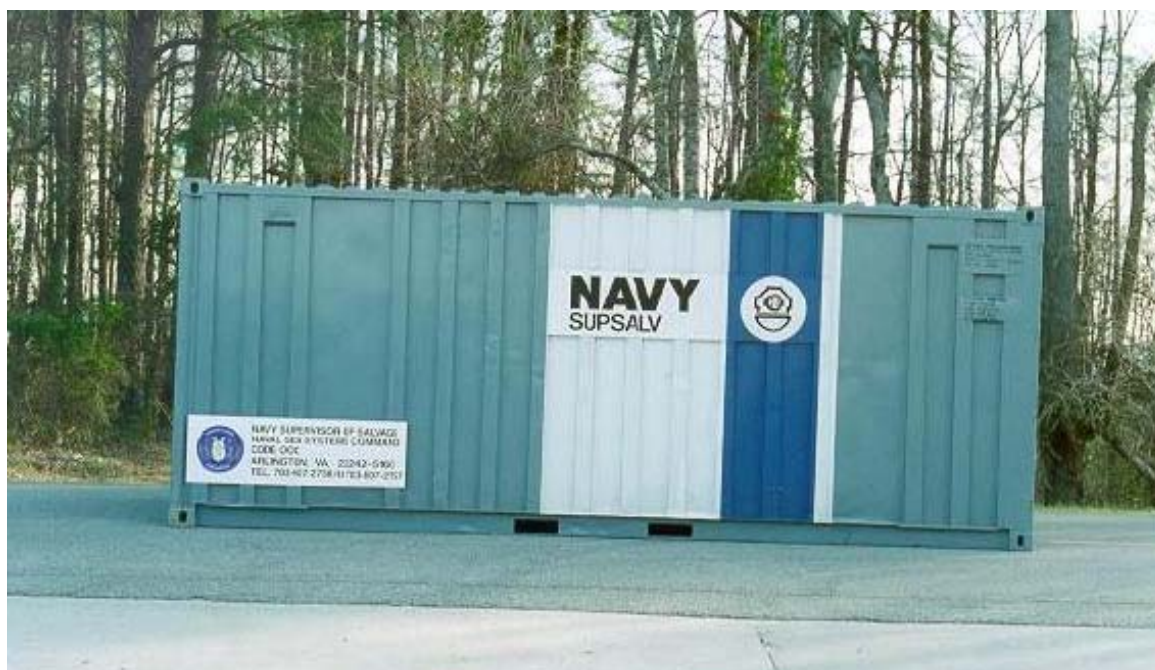
PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	100 ft, 0 in.
Diameter	7.01 in.
Weight	440 lb
Cube	35 cu ft

REFERENCES

None

S0300-BV-CAT-020



Floating Hose System Van VA2153 (Van 4 of 4)

S0300-BV-CAT-020**VAN, FLOATING HOSE SYSTEM (VAN 4 of 4)****ESSM NUMBER VA2153****DESCRIPTION**

The Floating Hose System Van VA2153 is a 20-foot van used for the storage and shipping of the Floating Hose System and ancillary equipment. Van #4 contains a 300-Cfm Hydraulic Air Compressor AC0700, two Floating Hose Reels RL0031, with ten sections of 6" x 100' Layflat Floating Hose HS0822 per reel, and a tool box.

SPECIFICATIONS

Manufacturer Commercial

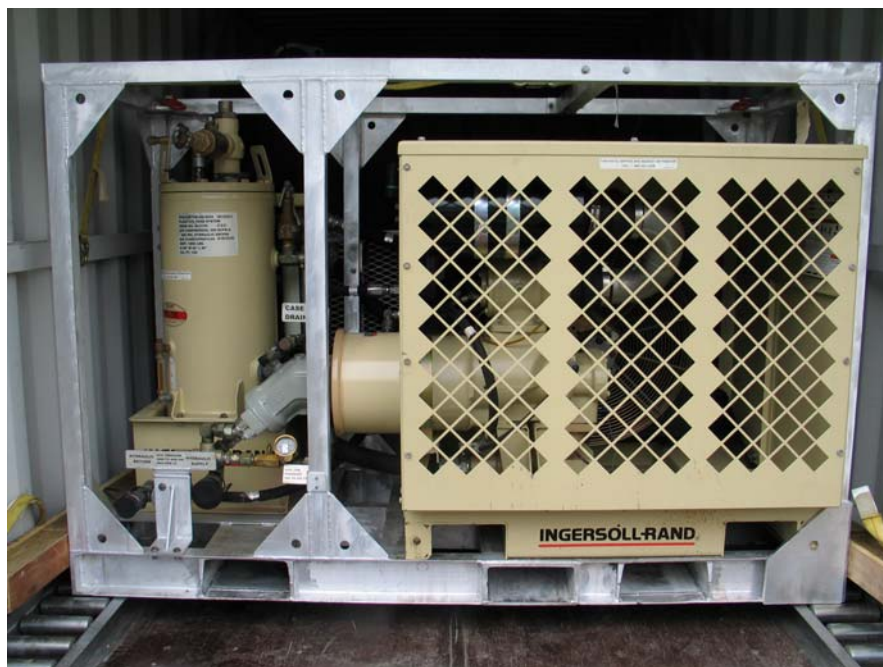
PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	280 cu ft
Weight	20,900 lb

REFERENCES

None

S0300-BV-CAT-020



300-Cfm Hydraulic Air Compressor AC0700

S0300-BV-CAT-020**AIR COMPRESSOR, 300 CFM, @ 200 PSI, HYDRAULIC****ESSM NUMBER AC0700****DESCRIPTION**

The 300-Cfm Hydraulic Air Compressor AC0700 is a rotary screw-type air compressor driven by a hydraulic motor. The air compressor is rated at 300 cfm @ 200 psi discharge pressure. The hydraulic motor and compressor assembly is skid-mounted and surrounded by a steel frame. The base plate for the air compressor contains forklift pockets to facilitate handling.

300-Cfm Hydraulic Air Compressor AC0700 is designed to be operated with a Mod 8 Hydraulic Power Unit PW0200B, which must be obtained from a separate source.

SPECIFICATIONSAir Compressor Assembly

Manufacturer	Ingersoll-Rand
Model	VHP300CM
Type	Rotary screw
No. of rotors	2
Rated delivery	300 cfm
Rated pressure	200 psi
Operating pressure range	77 to 200 psig
Discharge air temperature	185° to 248° F

Hydraulic Motor

Manufacturer	Mannesmann Rexroth
Model	AA2FM
Horsepower (min.)	108
Speed (rpm)	2750

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	4 ft, 8 in.
Width	3 ft, 10 in.
Height	6 ft, 10 in.
Cube	122 cu ft
Weight	1850 lb

REFERENCES

1. Operating, Maintenance, and Parts Manual, Ingersoll-Rand, Model VHP300CM.

S0300-BV-CAT-020



10 'x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY,
10' X 6' X 12", COOLEY URETHANE****ESSM NUMBER CP3010**

DESCRIPTION

The 10 ' x 6' x 12" Machinery Containment Pool CP3010 is a urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	60 cu ft	1.5 cu ft
Weight	56 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



Floating Hose Reel RL0031
(with hose)

S0300-BV-CAT-020**REEL, FLOATING HOSE****ESSM NUMBER RL0031****DESCRIPTION**

The Floating Hose Reel RL0031 is skid-mounted and hydraulically powered. It is used to reel up floating hose and can store up to ten 6" x 100' sections. The floating hose reel is powered by a Mod 8 Hydraulic Power Unit PU0200B, which is not a part of this system and must be obtained from a separate source.

SPECIFICATIONS

Manufacturer	Cavotec
Model	HC3

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	7 ft, 5 in.
Width	6 ft, 4 in.
Height	6 ft, 7 in.
Cube	309 cu ft
Weight	6410 lb (with 10 sections of floating hose)

REFERENCES

None

S0300-BV-CAT-020



Nitrol Layflat Hose HS0822

S0300-BV-CAT-020**HOSE, 6" x 100', FLOATING,
LAYFLAT, NITROL SP****ESSM NUMBER HS0822****DESCRIPTION**

The Nitrol SP Floating Hose HS0822 is a petroleum-compatible hose used to transfer oil from a casualty vessel to receiving tankers or barges when it is not possible to moor lightering vessels alongside.

SPECIFICATIONS

Manufacturer	Hydrasearch
Hose	MIL-H-22240 F
Part number	HOS-22240-6B-XXXL
Type	B
Dimensions:	
Inside diameter	6.00"
Outside diameter	7.01"
Proof pressure	300 psi
Min. burst pressure	600 psi
Min. tensile strength	16,000 lb
Weight per foot	4.40 lb
Size	6"
Rubber	Nitrile
Couplings, aluminum	MIL-C-24356

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	100 ft, 0 in.
Diameter	7.01 in.
Weight	440 lb
Cube	35 cu ft

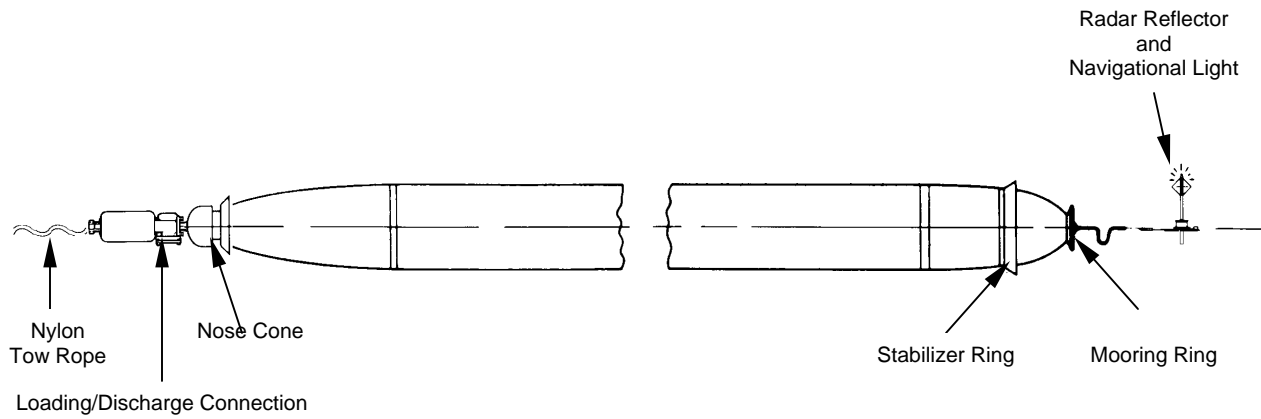
REFERENCES

None

S0300-BV-CAT-020

136K-GALLON OIL STORAGE BLADDER P14100

S0300-BV-CAT-020



136K-Gallon Oil Storage Bladder P14100

S0300-BV-CAT-020**OIL STORAGE BLADDER, 136K-GALLON****SYSTEM NUMBER P14100****SYSTEM DESCRIPTION**

The Oil Storage Bladder System P14100 consists of a 136,000-gallon capacity towable rubber storage bladder, a bladder repair kit, an electric blower, a marker buoy, and ancillaries to connect and operate the system. The bladder is designed to carry petroleum products and other liquids that are lighter in weight than water. At the spill site, the bladder can be used to hold oil discharged directly from the smaller 26,000-gallon and 50,000-gallon oil recovery bladders used with the Rapid Deployment Skimmer System (RDSS).

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Blower, Electric, Portable	BL0403	1
2. Buoy, Marker, Dracone	BU0023	1
3. Bladder, Oil Storage, 136k-gallon, type L, rubber	OB0800	1
4. Repair Kit, Bladder	OB0801	1

S0300-BV-CAT-020



Portable Electric Blower BL0403

S0300-BV-CAT-020**BLOWER, ELECTRIC, PORTABLE****ESSM NUMBER BL0403****DESCRIPTION**

The Portable Electric Blower BL0403 consists of a 120-volt, 60-cycle motor and squirrel cage type blower. The blower is used to inflate the empty Dracone for entry during inspection and repair. This blower will inflate an "L" type barge in approximately 60 minutes. A collapsible polyester duct or spiral tube duct can be attached to the blower outlet for normal pressure operations.

SPECIFICATIONS

Manufacturer	Homelite
Model	200 EB-1
Voltage	120/240
Cycles	60
Phase	Single

PHYSICAL CHARACTERISTICS

Length	2 ft, 0 in.
Width	1 ft, 4 in.
Height	1 ft, 5 in.
Cube	4 cu ft
Weight	66 lb

REFERENCES

None

S0300-BV-CAT-020



Dracone Marker Buoy BU0023

S0300-BV-CAT-020**BUOY, MARKER, DRACONE****ESSM NUMBER BU0023****DESCRIPTION**

The Dracone Marker Buoy BU0023 consists of a 40" diameter styrofoam base for flotation. Extending 22" above the base is a 12" diameter column, which houses a 6-volt battery and a steady-burn white light with lens. The light's on/off function is controlled automatically by a photocell. The Marker Buoy is to be exhibited at or near the aftermost part of the Dracone being towed or moored.

SPECIFICATIONS

Manufacturer Curd Enterprises

PHYSICAL CHARACTERISTICS

Height	4 ft, 2 in.
Diameter	3 ft, 4 in.
Cube	47.5 cu ft
Weight	92 lb

REFERENCES

None

S0300-BV-CAT-020



Oil Storage Bladder OB0800

S0300-BV-CAT-020**BLADDER, OIL STORAGE,
136K-GALLON, TYPE L****ESSM NUMBER OB0800**

DESCRIPTION

The Oil Storage Bladder OB0800 is a flexible tube designed to carry petroleum products and other liquids that are lighter in weight than water. The storage bladder skin is made of nylon cord and a woven nylon fabric with weatherproof and abrasive-resistant synthetic rubber. The bladder is towed behind a skimming vessel using a 6-inch tow line. A 4-inch or 6-inch loading and discharge hose is attached to the tow line for filling and discharging skimmed oil to and from the bladder. The bladder is shipped on a pallet that includes a storage area for the accompanying tool set and ancillary equipment.

SPECIFICATIONS

Manufacturer	Dunlop General Rubber
Model	Dracone barge, Type L
Shell material:	
Outer proofing	Neoprene
Skin	Nylon cord and woven nylon fabric
Inner proofing	Nitrile rubber for petroleum products
Buoyancy system	Two internal inflatable tubes
Towing hose bore	4 in. and 6 in.
Horsepower absorbed by barge at various speeds	4 knots - 32 (80) 6 knots - 106 (265) 8 knots - 254 (635) (Figures in parentheses above are recommended reserve horsepower required in towing vessel, assuming a 40% efficiency.)
Drag (in pounds) fully loaded in sea water	4 knots - 2620 6 knots - 5750 8 knots - 10,340
Nose strength	30 tons
Formula for equivalent drag hp	(Drag lbs x speed fps)/550
Oil capacity	
In-shore towing	100% - 136,000 gal (3238 bbl)
Open-sea towing	85% - 116,450 gal (2773 bbl)

S0300-BV-CAT-020**BLADDER, OIL STORAGE,
136K-GALLON, TYPE L (CONTD)****ESSM NUMBER OB0800**

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>	
Length	20 ft, 0 in.	Length	221 ft, 0 in.
Width	8 ft, 0 in.	Diameter	10 ft, 9 in.
Height	8 ft, 0 in.	Empty weight	8930 lb
Cube	1280 cu ft		
Weight (shipping rack w/ancillary)	16,330 lb		

REFERENCES

1. The Dracone Barge Handling, Operating, and Maintenance Manual; William Wood and Associates, New Orleans, LA.

S0300-BV-CAT-020



Bladder Repair Kit OB0801

S0300-BV-CAT-020**REPAIR KIT, BLADDER****ESSM NUMBER OB0801****DESCRIPTION**

The Repair Kit OB0801 consists of various tools, a patching kit with patching procedures, a white marker light, two 6-volt batteries and bulbs, MSDS sheets, and a laminated inventory. The Repair Kit is designed to maintain the oil storage bladder during an operational deployment.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

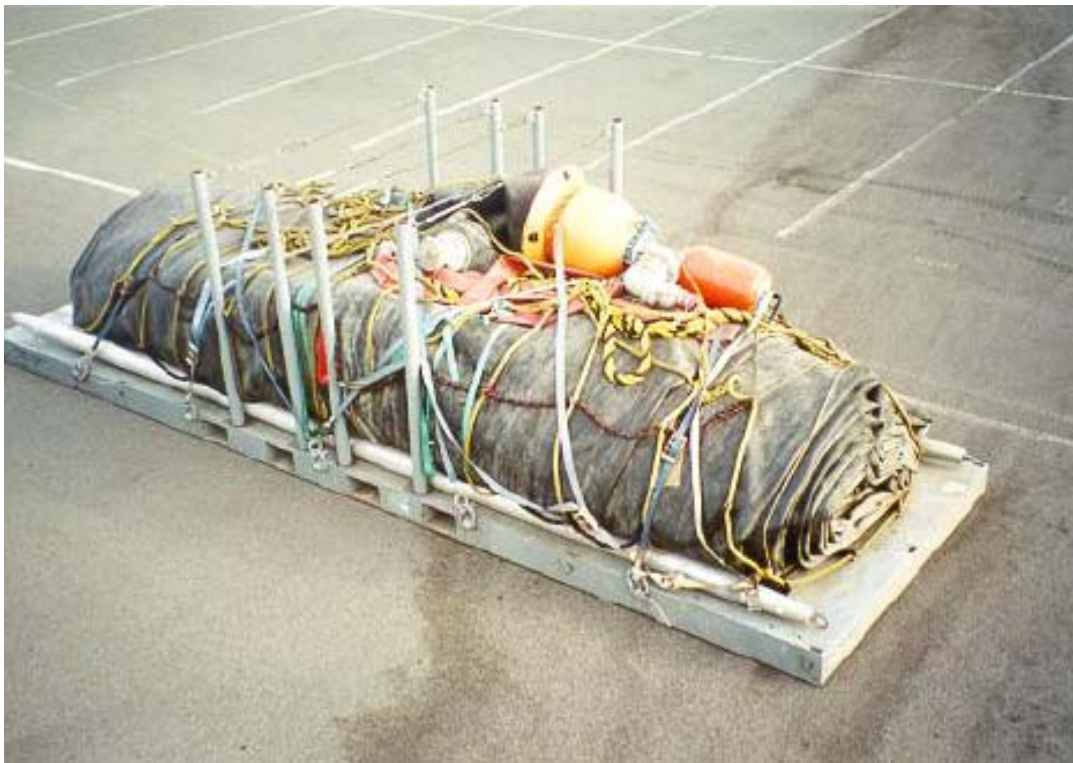
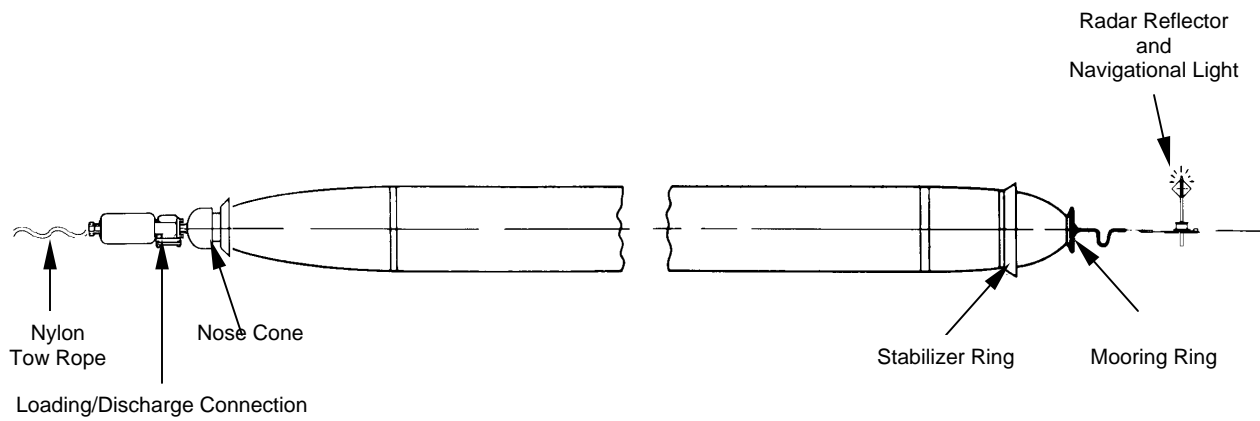
Length	1 ft, 8 in.
Width	10 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	34 lb

REFERENCES

None

S0300-BV-CAT-020

290K-GALLON OIL STORAGE BLADDER P14200



290k-Gallon Oil Storage Bladder P14200

S0300-BV-CAT-020**OIL STORAGE BLADDER, 290K-GALLON****SYSTEM NUMBER P14200****SYSTEM DESCRIPTION**

The Oil Storage Bladder System P14200 consists of a 290,000-gallon capacity towable rubber storage bladder, a bladder repair kit, an electric blower, a marker buoy, and ancillaries to connect and operate the system. The bladder is designed to carry petroleum products and other liquids that are lighter in weight than water. At the spill site, the bladder can be used to hold oil discharged directly from the smaller 26,000- and 50,000-gallon oil recovery bladders used with the Rapid Deployment Skimmer System (RDSS).

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Blower, Electric, Portable	BL0403	1
2. Buoy, Marker, Dracone	BU0023	1
3. Repair Kit, Bladder	OB0801	1
4. Bladder, Oil Storage, 290k-Gallon, Type "O", Rubber	OB0830	1



Portable Electric Blower BL0403

S0300-BV-CAT-020**BLOWER, ELECTRIC, PORTABLE****ESSM NUMBER BL0403****DESCRIPTION**

The Portable Electric Blower BL0403 consists of a 120-volt, 60-cycle motor and squirrel cage-type blower. The blower is used to inflate the empty Dracone to permit entry during inspection and repair. This blower will inflate an "L" type barge in approximately 60 minutes. A collapsible polyester duct or spiral tube duct can be attached to the blower outlet for normal pressure operations.

SPECIFICATIONS

Manufacturer	Homelite
Model	200 EB-1
Voltage	120/240
Cycles	60
Phase	Single

PHYSICAL CHARACTERISTICS

Length	2 ft, 0 in.
Width	1 ft, 4 in.
Height	1 ft, 5 in.
Cube	4 cu ft
Weight	66 lb

REFERENCES

None



Dracone Marker Buoy BU0023

S0300-BV-CAT-020**BUOY, MARKER, DRACONE****ESSM NUMBER BU0023****DESCRIPTION**

The Dracone Marker Buoy BU0023 consists of a 40-inch diameter styrofoam base for flotation. Extending 22 inches above the base is a 12-inch diameter column, which houses a 6-volt battery and a steady-burn white light with lens. The light's on/off function is controlled automatically by a photocell. The Marker Buoy is to be exhibited at or near the aftermost part of the Dracone being towed or moored.

SPECIFICATIONS

Manufacturer Curd Enterprises

PHYSICAL CHARACTERISTICS

Height	4 ft, 2 in.
Diameter	3 ft, 4 in.
Cube	47.5 cu ft
Weight	92 lb

REFERENCES

None

S0300-BV-CAT-020



Bladder Repair Kit OB0801

S0300-BV-CAT-020**REPAIR KIT, BLADDER****ESSM NUMBER OB0801****DESCRIPTION**

The Bladder Repair Kit OB0801 consists of various tools, a patching kit with patching procedures, a white marker light, two 6-volt batteries and bulbs, MSDSs, and a laminated inventory. The Repair Kit is designed to maintain the oil storage bladder during an operational deployment.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Length	1 ft, 8 in.
Width	10 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	34 lb

REFERENCES

None



Oil Storage Bladder OB0830

S0300-BV-CAT-020**BLADDER, OIL STORAGE, 290K-GALLON, TYPE O****ESSM NUMBER OB0830****DESCRIPTION**

The Oil Storage Bladder OB0830 is a flexible tube designed to carry petroleum products and other liquids that are lighter in weight than water. The storage bladder skin is made of nylon cord and a woven nylon fabric with weatherproof and abrasive-resistant synthetic rubber. The bladder is towed behind a skimming vessel by a 6-inch towline. A 4-inch or 6-inch loading and discharge hose is attached to the towline for filling and discharging skimmed oil to and from the bladder. The bladder is shipped on an aluminum shipping pallet.

SPECIFICATIONS

Manufacturer	Dunlop General
Model	Dracone barge, Type O
Shell material	
Outer proofing	Neoprene
Skin	Nylon cord and woven nylon fabric
Inner proofing	Nitrile rubber for petroleum products
Buoyancy system	Two internal inflatable tubes
Towing hose bore	4 in. and 6 in.
Max towing speed	6 knots
Horsepower absorbed by barge at various speeds:	52 hp @ 4 knots 168 hp @ 6 knots
Nose strength	30-ton pull
Formula for equivalent drag horsepower	(Drag lb x speed fps)/550

PHYSICAL CHARACTERISTICS

<u>Shipping</u>		<u>Operating</u>	
Length	24 ft, 8 in.	Length	300 ft, 0 in.
Width	8 ft, 0 in.	Diameter	13 ft, 10 in.
Height	7 ft, 3 in.	Volume	45,352 cu ft
Cube	1402 cu ft	Weight (empty)	14,300 lb
Weight	23,650 lb		

BLADDER, OIL STORAGE, 290K-GALLON, TYPE O (CONTD)

ESSM NUMBER OB0830

REFERENCES

1. The Dracone Barge Operating Manual, Issue 3.

S0300-BV-CAT-020

MATERIAL TRANSFER SYSTEM

SYSTEM NUMBER P11100

SYSTEM DESCRIPTION

The Material Transfer System P11100 is comprised of equipment required to facilitate transfer of the POL offloading system and other salvage/spill response equipment onto a casualty vessel. The exact components of the system have not been determined, but will consist of motion compensating equipment, a small winch, a portable A-frame, transfer crafts, storage/shipping containers, and the necessary ancillary equipment to support the system while operating in the field.

SYSTEM UNDER DEVELOPMENT

S0300-BV-CAT-020

OIL BLADDER TRANSFER SYSTEM P20300

S0300-BV-CAT-020



Oil Bladder Transfer System Van VA2290



Hydraulic Power Unit PW0200B



Portable Marine Crane CR0010



Vertical Axis Hydraulic Capstan CP0011



6.2-kW Diesel Generator GE0430



19-Cfm Air Compressor AC0501



Heavy Oil Transfer Pump PU0851



4-Inch Submersible Pump PU0305



Hydraulic Pressure Washer WA0700



Oil Bladder Sys Tool Box TL0035



Spare Parts Kit (for PW0206) PW0200



16' Polyester Roundsling SL0012

P20300 System Overview

S0300-BV-CAT-020**OIL BLADDER TRANSFER SYSTEM****SYSTEM NUMBER P20300****SYSTEM DESCRIPTION**

Transfer of fluids between oil bladders on large operations is necessary to keep systems operating by allowing the smaller 23.1k-, 26k- and 50k-gallon bladders to be offloaded into larger bladders. Ideally, fluid would be discharged into barges. However, these are not always readily available, so transfer to other larger bladders must be operationally available. The Oil Bladder Transfer System provides this capability. Specialized equipment allows for in-water connection of bladders and fluid transfer.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Oil Bladder Transfer System	VA2290	1
Air Compressor, 19 cfm @ 125 psi, Diesel	AC0501	1
Capstan, Hydraulic, Vertical Axis	CP0011	1
Crane, Portable Marine, Cap. 1210 lb @ 13', 11"	CR0010	1
Generator, 6.2-Kw, Diesel	GE0430	1
Pump, Submersible, 4" Hydraulic, Centrifugal Screw	PU0305	1
Pump, Heavy Oil Transfer, DOP-250	PU0851	1
Power Unit, Hyd, Mod 8, Diesel, 71 gpm @ 4000 psi	PW0200B	1
Spare Parts Kit for Mod 8 HPU, PW0200	PW0206	1
Roundsling, Polyester, 16'	SL0012	4
Tool Box, Oil Bladder Transfer System	TL0024	1
Washer, Pressure, Hydraulic, Kew, Model-4403k0	WA0700	1

S0300-BV-CAT-020



Oil Bladder Transfer System Van VA2290

S0300-BV-CAT-020**VAN, OIL BLADDER TRANSFER SYSTEM****ESSM NUMBER VA2290**

DESCRIPTION

The Oil Bladder Transfer System Van VA2290 is used as a storage and shipping container for the components of the Oil Bladder Transfer System. The system includes a Mod 8 Hydraulic Power Unit, a Portable Marine Crane, a Hydraulic Capstan, a 6.2-kW Diesel Generator, a 19-Scfm Air Compressor, a DOP-250 Heavy Oil Transfer Pump, a 4" Hydraulic Submersible Pump, a Hydraulic Pressure Washer, a Tool Box, four 16' Polyester Roundslings, and the necessary ancillary equipment to maintain and operate the P20300 Oil Bladder Transfer System.

SPECIFICATIONS

Manufacturer ESSM Facility

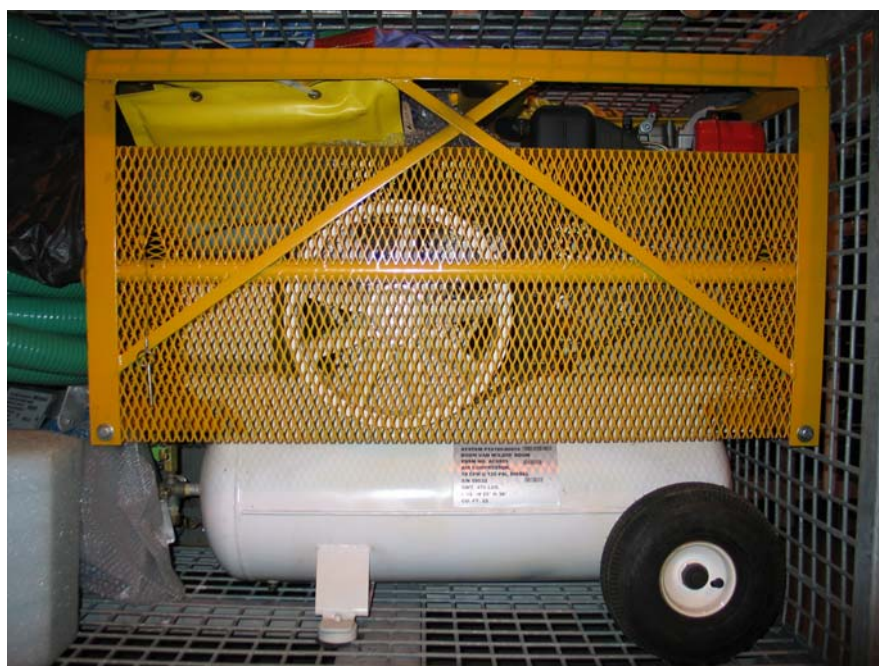
PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	18,720 lb

REFERENCES

None

S0300-BV-CAT-020



19-Cfm Air Compressor AC0501

S0300-BV-CAT-020**AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL****ESSM NUMBER AC0501****DESCRIPTION**

The 19-Cfm Air Compressor AC0501 is a two-stage, high-volume unit that provides 19 cfm at 125 psig. The air compressor is powered by a 1-cylinder, 6.2-hp diesel engine which has its own fuel supply tank. The engine is designed to operate at a continuous speed of 3600 rpm for long periods of time. The engine and compressor are enclosed in a protective frame that is mounted on top of a 30-gallon air storage tank with wheels, which allows for easy maneuverability.

SPECIFICATIONSAir Compressor Assembly

Manufacturer	Emglo Products
Model	GC8YDA-17F

Air Compressor

Manufacturer	Emglo Products
Model	JU
Capacity	19 cfm
Rated operating pressure	125 psi
Cylinders	2
Stages	2
Rpm	875
Storage tank	30 gallons
Operating pressure range	100 to 120 psig

Engine

Manufacturer	Yanmar
Model	L60
Cylinders	1
Bore	2.95 in.
Stroke	2.44 in.
Displacement	16.7 cu in.
Rpm (continuous)	3600
Compression ratio	20 : 1
Starting	Elec./recoil
Battery	12 V dc
Fuel	Diesel
Fuel source	Integral tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 6 in.
Width	2 ft, 1 in.
Height	3 ft, 0 in.
Cube	22 cu ft
Weight	398 lb

S0300-BV-CAT-020

AIR COMPRESSOR, 19 CFM @ 125 PSI, DIESEL

ESSM NUMBER AC0501

REFERENCES

1. Yanmar Diesel Engine Operation Manual for L-Series Engine.
2. Emglo Parts Price List J, 288.

S0300-BV-CAT-020



Vertical Axis Hydraulic Capstan CP0011

S0300-BV-CAT-020**CAPSTAN, HYDRAULIC, VERTICAL AXIS****ESSM NUMBER CP0011****DESCRIPTION**

The Vertical Axis Hydraulic Capstan CP0011 is a portable unit that can be easily handled, installed, relocated, and connected to an appropriate hydraulic power source to meet various operational requirements. The capstan comes with two 4-foot hoses and a pedal-operated, 4-way, 3-position control valve.

SPECIFICATIONS

Manufacturer	Down East Machine and Engineering (DEME)
Model	DEME PVC-10
Hydraulic flow	15 gpm @ 2500 psi
Line capacity	37 fpm @ 1200 pounds line pull
Capstan:	
Type	Vertical axis
Diameter	12"
Height	9 3/16"

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 2 in.
Width	1 ft, 2 in.
Height	2 ft, 0 in.
Cube	3 cu ft
Weight	120 lb

REFERENCES

1. DEME PVC-10 Portable Vertical Capstan Technical Manual.

S0300-BV-CAT-020



Portable Marine Crane CR0010

S0300-BV-CAT-020**CRANE, PORTABLE MARINE,
CAPACITY 1210 LB @ 13', 11"****ESSM NUMBER CR0010**

DESCRIPTION

The Portable Marine Crane CR0010 can be extended hydraulically from a minimum of 4 feet, 3 inches to a maximum of 13 feet, 11 inches. The crane is operated by a separate hydraulic power unit and is controlled by a four-section hydraulic control valve. The crane consists of a base, a mast, an inner boom, an outer boom, a winch, and hydraulic components necessary for operation.

SPECIFICATIONS

<u>Crane</u>		<u>Winch</u>	
Manufacturer	Morgan Marine	Manufacturer	Pullmaster Winch
Model	27.3	Model	PL2
Boom length:		Cable drum size:	
Minimum	4 ft, 3 in.	Barrel diameter	6.13 in.
Maximum	13 ft, 11 in.	Barrel length	5.25 in.
Capacity with boom at:		Cable storage wire size:	
4 ft, 3 in.	4180 lb	1/16 in.	318 ft
7 ft, 6 in.	2530 lb	1/8 in.	745 ft
10 ft, 9 in.	1760 lb	5/16 in.	122 ft
13 ft, 11 in.	1210 lb	3/8 in.	84 ft
		Operating pressure:	
		Maximum	2200 psi
		Minimum	700 psi
		Operating volume:	
		Gpm	7.7
		Psi	2.5
		Line pull @ max. pressure:	
		Bare drum	2200 lb
		Full drum	1663 lb
		Line speed @ max. volume:	
		Bare drum	83 fpm
		Full drum	108 fpm
		Maximum pressure at:	
		Motor return port	65 psi
		Brake safety valve	100 psi

S0300-BV-CAT-020

**CRANE, PORTABLE MARINE,
CAPACITY 1210 LB @ 13', 11"**

ESSM NUMBER CR0010

PHYSICAL CHARACTERISTICS

Length	6 ft, 7 in.
Width	2 ft, 4 in.
Height	5 ft, 0 in.
Cube	85 cu ft
Weight	952 lb

REFERENCES

1. Morgan Model 27 Marine Crane Manual.

S0300-BV-CAT-020



6.2-kW Diesel Generator GE0430

S0300-BV-CAT-020**GENERATOR, 6.2-KW, DIESEL****ESSM NUMBER GE0430****DESCRIPTION**

The 6.2-kW, 120/240-V ac, 1-phase, Diesel Generator GE0430 is a self-contained unit with generator and engine enclosed in a rugged steel box. The 120/240-volt, single phase, ac generator is driven by a single cylinder, 10-hp, four-cycle, air-cooled diesel engine. The generator is protected by two 120-volt thermomagnetic resettable circuit breakers. The control panel is equipped with four 120-volt, 20-amp ground-fault interrupter (GFI) receptacles, one 120-volt, 30-amp twist-lock receptacle, and one 120/240-volt, 30-amp twist-lock receptacle.

SPECIFICATIONS

Manufacturer NorthStar
Model 6500 DGP

Generator

Manufacturer Generac
Model 165930G
Maximum output 6500 watts
Continuous output 6120 watts
Voltage 120/240 V ac
Frequency 60 Hz @ 3600 rpm
Phase 1

Engine

Manufacturer Yanmar
Model L100AE-DEG
No. of cylinders 1
Bore 3.39 in.
Stroke 2.76 in.
Displacement 24.8 cu in.
Horsepower 10 @ 3600 rpm
Starting Electric/recoil
Fuel Diesel
Fuel source 6.5-gallon integral tank
Fuel consumption 0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length 3 ft, 0 in.
Width 4 ft, 0 in.
Height 2 ft, 5 in.
Cube 20 cu ft
Weight 456 lb

S0300-BV-CAT-020

GENERATOR, 6.2-KW, DIESEL,

ESSM NUMBER GE0430

REFERENCES

1. Operation Manual for Diesel Engine L - A.
2. Yanmar Service Manual for Models L - A.
3. Yanmar Warranty Handbook.
4. NorthStar 6500 DPG Owner's Manual.

S0300-BV-CAT-020



Centrifugal Screw 4" Hydraulic Submersible Pump PU0305

S0300-BV-CAT-020**PUMP, SUBMERSIBLE, 4-INCH HYDRAULIC,
CENTRIFUGAL SCREW****ESSM NUMBER PU0305****DESCRIPTION**

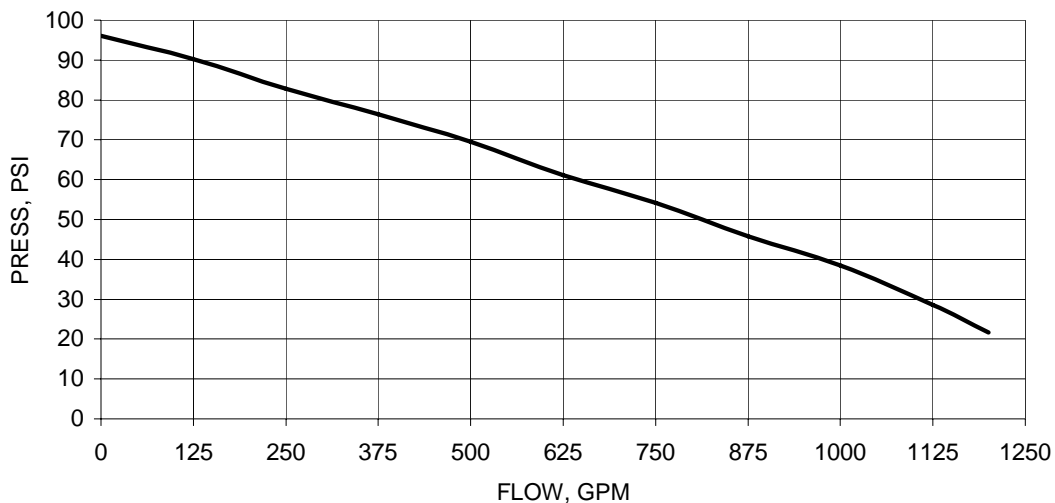
The 4-Inch Hydraulic Submersible Pump PU0305 is capable of pumping light oils containing solids up to 2 inches in diameter. The pump is rated for continuous output of up to 1200 gpm at 25 psi discharge pressure. Quick disconnect fittings are utilized to allow for rapid hookup of the discharge hose and the supply and return hydraulic hoses. The 4-Inch Hydraulic Submersible Pump is ideal for moving moderate viscosity oils up to 10,000 cSt.

SPECIFICATIONSPump Assembly

Manufacturer	Hydra-Tech
Model	S4SCR
Type	Submersible
Discharge	4"
Output (maximum)	1200 gpm @ 25 psi

Motor

Manufacturer	Rex Roth
Model	A2FM16
Operating pressure (max.)	2500 psi
Flow rate (max.)	25 gpm

PERFORMANCE CURVE

S0300-BV-CAT-020

**PUMP, SUBMERSIBLE, 4-INCH, HYDRAULIC,
CENTRIFUGAL SCREW**

ESSM NUMBER PU0305

PHYSICAL CHARACTERISTICS

Operating/Shipping

Height	1 ft, 9 in.
Diameter	1 ft, 0 in.
Cube	2 cu ft
Weight	62 lb

REFERENCES

1. Operation and Maintenance Instructions, with Illustrated Parts Breakdown, Hydra-Tech S4SCR Submersible Pump.

S0300-BV-CAT-020



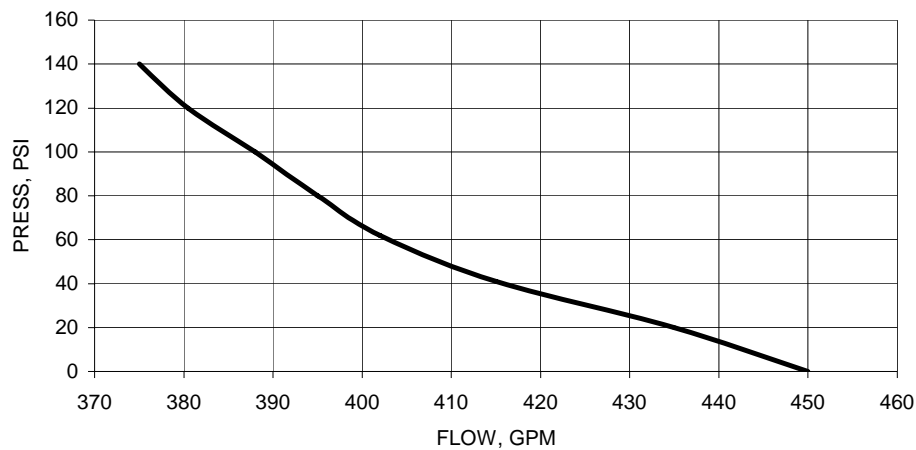
Heavy Oil Transfer Pump PU0851

S0300-BV-CAT-020**PUMP, HEAVY OIL, TRANSFER (DOP-250)****ESSM NUMBER PU0851****DESCRIPTION**

The Heavy Oil Transfer Pump PU0851 is a modified Archimedes' screw-type pump that is capable of moving highly viscous products at high discharge pressures. The heavy oil transfer pump is designed to work well at slow operating speeds and can gently handle any medium without mixing or emulsifying the medium. The pump is driven by a hydraulic power unit with the necessary ancillary equipment.

SPECIFICATIONS

Manufacturer	Desmi
Model	DOP-250
Min. manhole diameter	0.6 m (24")
Pump outlet	6" male camlock
Max. flow rate	42 gpm
Max. pressure	10 bar/150 psig
Max. capacity	100 m (cubed)/h/440 gpm
Hydraulic system pump motor	Danfoss hydraulic motor, type OMTS-200
Hydraulic connections:	
Pressure line	1" Aeroquip coupling, male, 5602-16-16S
Return line	1" Aeroquip coupling, female, 5601-16-16S
Drain line	3/8" Aeroquip coupling, female, 5601-6-6S

PERFORMANCE CURVE

S0300-BV-CAT-020

PUMP, HEAVY OIL, TRANSFER (DOP-250)

ESSM NUMBER PU0851

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	1 ft, 10 in.
Width	1 ft, 2 in.
Height	1 ft, 7 in.
Cube	4 cu ft
Weight	172 lb

REFERENCES

1. Operator's Manual for Desmi DOP-250.

S0300-BV-CAT-020



Mod 8 Hydraulic Power Unit PW0200B

S0300-BV-CAT-020**POWER UNIT, HYDRAULIC, MOD 8 DIESEL,
71 GPM @ 4000 PSI****ESSM NUMBER PW0200B**

DESCRIPTION

The Mod 8 Diesel Hydraulic Power Unit PW0200B is a skid-mounted assembly that provides hydraulic fluid flow of up to 71 gpm at 4000 psi from a variable displacement, pressure compensated pump. The flow rate can be mechanically varied at the control panel. Maximum system pressure is adjustable at the pump.

SPECIFICATIONS

Hydraulic Power Unit

Manufacturer Highstar
Model 82647

Engine

Manufacturer Detroit Diesel
Model Series 40, 8.7 LT
Type In-line
No. of cylinders 6, in-line configuration
Combustion 4-cycle
Starting Hydraulic
Horsepower 225 @ 2100 rpm
Fuel Diesel
Fuel source 120-gal. external tank
w/ pickup tube & hoses
Fuel consumption 11.8 gph

Pump

Manufacturer Sundstrand
Model Series 90
Type Axial piston
Max. displacement 6.10 cu. in./rev
Hydraulic fluid Rando 46
Hydraulic reservoir capacity 70 gallons
Hydraulic fluid output 71 gpm @ 4000 psi

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length 7 ft, 7 in.
Width 3 ft, 11 in.
Height 4 ft, 0 in.
Cube 122 cu ft
Weight 3850 lb

REFERENCES

1. Commercial Off-the-Shelf (COTS) Manual, Hydraulic Power Unit (HPU) Model 82647, PW0200.

S0300-BV-CAT-020



Spare Parts Kit PW0206

S0300-BV-CAT-020**SPARE PARTS KIT FOR HYDRAULIC POWER UNIT
PW0200****ESSM NUMBER PW0206****DESCRIPTION**

The Spare Parts Kit PW0206 contains the items necessary to support the operation and maintenance of one PW0200 Hydraulic Power Unit.

SPECIFICATIONS

The Spare Parts Kit contains the following:

<u>Item</u>	<u>Qty</u>
Container, spare parts kit, 24-gallon:	1
Filter, air	1
Filter, engine coolant	1
Filter, engine oil	1
Filter, fuel	1
Filter, engine fuel prefilter	1
Filter, hydraulic, high pressure	1
Filter, hydraulic, medium pressure	2
Filter, hydraulic, system return	2
Plug, bleeder	1
Repair kit, quick disconnect (71-3C16-SPK)	2
Repair kit, quick disconnect (71-3N16-SPK)	2
V-belt, engine auxiliaries	1
V-belt, engine starting system	1
Inventory, laminated	1

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	1 ft, 4 in.
Height	1 ft, 0 in.
Cube	2.5 cu ft
Weight	28 lb

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Oil Bladder Transfer System Tool Box TL0024

S0300-BV-CAT-020**TOOL BOX, OIL BLADDER TRANSFER SYSTEM****ESSM NUMBER TL0024****DESCRIPTION**

The Oil Bladder Transfer System Tool Box TL0035 is a basic mechanic's tool set that contains both 3/8" drive metric and standard sockets and accessories, metric and standard combination wrench sets, both metric and standard hex bits, adjustable wrenches, pliers, hammers, Phillips and standard screwdrivers, and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Oil Bladder Transfer system.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 2 in.
Width	1 ft, 2 in.
Height	2 ft, 0 in.
Cube	3 cu ft
Weight	70 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Pressure Washer WA0700

S0300-BV-CAT-020**WASHER, PRESSURE, HYDRAULIC
MODEL-4403K0****ESSM NUMBER WA0700**

DESCRIPTION

The Hydraulic Pressure Washer WA0700 is a high-pressure, cold water cleaner that is used to clean oil and dirt from equipment by spraying high-pressure water on it. The pressure washer can use either fresh or salt water as a cleaning medium.

SPECIFICATIONS

Manufacturer	ALTO/Kew
Model	4403K0
Max. pump pressure	2610 psig
Water volume:	
Maximum	20.5 gal.
Minimum	5.42 gal.
Max. inlet water temp.	150°F
Self-priming max. lift	16 ft

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 2 in.
Width	1 ft, 1 in.
Height	1 ft, 10 in.
Cube	5 cu ft
Weight	84 lb

REFERENCES

1. Owner's Manual for Kew Hydraulic Pressure Washer Model 4403K0.

S0300-BV-CAT-020

DEBRIS HANDLING SYSTEM P20400

S0300-BV-CAT-020



Debris Handling System P20400

S0300-BV-CAT-020**DEBRIS HANDLING SYSTEM****SYSTEM NUMBER P20400****SYSTEM DESCRIPTION**

The Debris Handling System P20400 consists of the Debris Handling System Van, a 3-piece modular 32' Rigid Hull Inflatable Boat (2 hull sections and a pilothouse), a marine mobile VHF radio, a marine mobile CB radio, a 2.5-kW gas generator, slings for lifting the boat and the van, and the necessary ancillary equipment to maintain and operate the Debris Handling System.

Debris handling is critical to continuous operation during major spill responses. The likelihood of encountering large amounts of debris is a function of location and type of casualty. It is normal to encounter debris in every case, and a ready supply of equipment designed to handle this problem is mandatory. The Debris Handling System with the 32' Rigid Hull Inflatable Boat is designed to pick up and store the debris onboard, and then transport it to a suitable location for proper disposal. Large amounts and pieces of debris must be removed so as to allow the skimming systems to properly do their job of collecting the spilled oil and disposing of it properly.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Debris Handling System	VA2400	1
Generator, 2.5-kW, Gas	GE0425	1
Inverter, 1750 Watts, w/Remote Switch	IN0001	1
Motor, Outboard, 4-Stroke, 130-Hp	MT0130	2
Radio, CB, Marine Mobile	RA1709	1
Radio, VHF, Marine Mobile, Icom (58-Channel)	RA1831	1
Roundslings, Polyester, 14', 6"	SL0011 (Altn)	4*
Roundslings, Polyester, 16'	SL0012	4
Roundslings Bridle, Polyester, 4-Leg, 18', w/Lifting Hook	SL0399	1
Boat, 32' Rigid Hull Inflatable	WB0750	1

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Debris Handling System Van VA2400

S0300-BV-CAT-020**VAN, DEBRIS HANDLING SYSTEM****ESSM NUMBER VA2400****DESCRIPTION**

The Debris Handling System Van VA2400 is used as a storage and shipping container for the components of the Debris Handling System, which include a 32' Rigid Hull Inflatable Boat WB0750, two 4-Stroke, 130-Hp Outboard Motors MT0130, a 1750-Watt Inverter w/Remote Switch IN0001, a Marine Mobile CB Radio RA1709, a Marine Mobile Icom (58-Channel) VHF Radio RA1831, a 4-Leg Polyester Roundsling Bridle (18') SL0399, a 2.5-kW Gas Generator GE0425, and four 16' Polyester Roundslings SL0012.

SPECIFICATIONS

Manufacturer Commercial

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	11,640 lb

REFERENCES

1. Debris Handling System Van, NAVSEA Dwg. 7022750.

S0300-BV-CAT-020



2.5-kW Gas Generator GE0425

S0300-BV-CAT-020**GENERATOR, 2.5-KW, GAS****ESSM NUMBER GE0425****DESCRIPTION**

The 2.5-kW Gas Generator GE0425 is a self-contained unit mounted on a base plate that is surrounded by a protective steel frame. The unit is driven by an air-cooled, four-cycle, single-cylinder gas engine. The generator can supply up to 2.5-kW single phase ac power at 120 volts. The 120-volt single phase electrical power is distributed via two 120-volt outlets, which are protected by a single overload breaker, located just below the two 120-volt receptacles.

SPECIFICATIONS2.5-kW Generator Assembly

Manufacturer	Honda
Model	EN2500
Type	Air-cooled
Capacity	2.5 kW
Frequency	60 Hz @ 3600 rpm
Voltage	120 V ac, single phase
Amperes	19.2 amps @ 120 volts
Rated output	2300 kVA
Max output	2500 kVA

Engine

Manufacturer	Honda
Model	GC160
No. cylinders	1
Rpm	3600
Starting system	Pull start
Fuel	Gas
Fuel source	2.91-gal. internal tank

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 9 in.
Width	1 ft, 5 in.
Height	1 ft, 5 in.
Volume	3.5 cu ft
Weight	72 lb

REFERENCES

1. Honda Owner's Manual for Generators EN2000/EN2500.

S0300-BV-CAT-020



1750-Watt Inverter w/Remote Switch IN0001

S0300-BV-CAT-020**INVERTER, 1750 WATTS, W/REMOTE SWITCH****ESSM NUMBER IN0001****DESCRIPTION**

The 1750-Watt Inverter IN0001 is designed to convert dc power to ac. It is ideal for running virtually any electrical item that does not consume over 1750 watts of power or several smaller applications simultaneously. Inverters are used in place of generators, and are light, durable, and easy to install. The Portawattz 1750 has stud-type connectors for secure connection to deep-cycle batteries. The unit has a display panel for monitoring battery status, current, and voltage, and has three ac outlets.

SPECIFICATIONS

Manufacturer	Xantrex
Model	Portawattz 1750
Input voltage	10 to 15 V dc
Output voltage	115 V ac \pm 5%
Output frequency	60 Hz
Maximum continuous power	1750 watts
Surge capability	3000 watts
Operating temperature	32° F to 104° F

PHYSICAL CHARACTERISTICS

Length	1 ft, 5 in.
Width	9 in.
Height	3 in.
Cube	1 cu ft
Weight	9 1/2 lb.

REFERENCES

1. Xantrex Owner's Guide for Portawattz 1750 Inverter.

S0300-BV-CAT-020



4-Stroke 130-Hp Outboard Motor MT0130

S0300-BV-CAT-020**MOTOR, OUTBOARD, 130-HP, 4-STROKE****ESSM NUMBER MT0130****DESCRIPTION**

The 4-Stroke, 130-Hp Outboard Motor MT0130 is used to power the 32' Debris Handling Boat WB0750. The 4-stroke gasoline motor has an inline 4-cylinder arrangement with power trim and tilt positioning.

SPECIFICATIONS

Manufacturer	Honda
Model	130A
Number of cylinders	4
Full throttle operating range	5000 to 6000 rpm
Bore/stroke	3.4"/3.8"
Piston displacement	135.5 cu. in.
Starter	Electric, 12 V dc
Propeller	13 1/2" diameter x 15" pitch
Horsepower	130

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft, 9 in.
Width	1 ft, 10 in.
Height	5 ft, 9 in.
Cube	29 cu ft
Weight	505 lb

REFERENCES

1. Honda Marine BF115A/130A Shop Manual.
2. Honda Marine BF115A/130A Owner's Manual.

S0300-BV-CAT-020



CB Marine Mobile Radio RA1709

S0300-BV-CAT-020**RADIO, CB, MARINE MOBILE****ESSM NUMBER RA1709**

DESCRIPTION

The Marine Mobile Citizens Band (CB) Radio RA1709 is designed for marine use. Features include the ability to receive four of the National Oceanic and Atmospheric Administration (NOAA) weather channels. The CB 40 + 4 radio has 44 channels; 40 CB and 4 weather channels. The 40 CB channels can be used for transmitting and receiving; whereas, the 4 weather channels are for receiving only.

SPECIFICATIONS

Manufacturer	Commercial
Frequency range:	
Citizens band	26.965 to 27.405 MHz
Weather band (receive only)	161.665 to 162.550 MHz
Channels total:	44
Citizens band	40
Weather band	4
Input voltage	13.8 V dc \pm 20%
Temperature range	-20°C to +50°C
Transmitter (citizens band only)	
RF output	4 W maximum
Receiver (CB):	
Audio output at 10% distortion	5 W
Audio response	300 Hz to 3 kHz, 3 dB
Channel spacing	10 kHz
Hum and noise at 100 kV	45 dB

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	9 in.
Width	6 in.
Height	2 in.
Weight	3 lb
Cube	1 cu ft

REFERENCES

1. Owner's Manual, CB 40 + 4 H-Watt Citizens Band Marine Transceiver.

S0300-BV-CAT-020



VHF Marine Mobile Radio RA1831

S0300-BV-CAT-020**RADIO, VHF, MARINE MOBILE,
ICOM (58-CHANNEL)****ESSM NUMBER RA1831****DESCRIPTION**

The Icom VHF Marine Mobile Radio RA1831 is a marine VHF/FM transceiver with intercom features and a public address system in a moisture-resistant console. The radio requires a supply voltage of 13.8-volt dc negative ground and operates in the frequency range of 156-163 MHz. The radio has 58 programmed marine transmit/receiver channels and 10 weather channels.

The radio has the following advanced features: voltage source deviation indicator; 25W of high transmission output power; dual watch and a variety of scans; 20 user-programmed memory channels; momentary high power on Channels 13 and 67; single-tone, double high-tone, and double low-tone beeps; high sensitivity and strong intermodulation rejection; and a built-in lithium battery to retain the information programmed into the memory channels. The life of the lithium battery is approximately 5 years. The Icom radio models IC-M56, IC-M58, and IC- M402S are currently in use in the ESSM System. All three models have similar features and are functionally equivalent.

SPECIFICATIONS

Manufacturer	Icom
Model	IC-M56 IC-M58 IC- M402S
Usable temperature range	-20° to +60°C (-4 to +140°F)
Power supply voltage	13.8 V dc negative ground
Channels:	
Transmit	58
Weather	10
Receiver:	
Frequency range	156 to 163 MHz
Audio output power	4W with a 4-ohm load
Intermediate frequency	1st: 21.8 MHz; 2nd: 455 kHz
Transmitter:	
Frequency range	156 to 157.5 MHz
Output power	25 W high, 1 W low

S0300-BV-CAT-020

**RADIO, VHF, MARINE MOBILE,
ICOM (58 CHANNEL) (CONTD)**

ESSM NUMBER RA1831

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	8 in.
Width	7 in.
Height	2 in.
Cube	1 cu ft
Weight	3 lb

REFERENCES

- 1.
2. Instruction Manual, Icom IC-M56.
3. Instruction Manual, Icom IC-M58.
4. Instruction Manual, Icom IC-M402S.

S0300-BV-CAT-020



16' Polyester Roundslings SL0012

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



18' 4-Leg Polyester Roundsling Bridle SL0399

S0300-BV-CAT-020**ROUNDSLING BRIDLE, POLYESTER,
4-LEG, 18', W/LIFTING HOOKS****ESSM NUMBER SL0399**

DESCRIPTION

The 18', 4-Leg, Polyester Roundsling Bridle SL0399 is an assembly consisting of four endless synthetic slings made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. The four slings are connected at one end with a cloth-type D-ring; the opposite end of each leg has a safety hook permanently attached.

The 18', 4-Leg, Polyester Roundsling Bridle SL0399 is used for lifting the Debris Handling Boat.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	QOS-EN60
Assembly SWL	10,000 lb
Length	18 ft, 0 in.

Hook

Manufacturer	Commercial
Type	Safety
Working load limit	4,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	18 ft, 0 in. (each leg)
Cube (coiled for shipping)	8 cu ft
Weight	30 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Debris Handling Boat WB0750



Debris Handling Boat WB0750 w/Wheelhouse

S0300-BV-CAT-020**BOAT, 32' RIGID HULL INFLATABLE****ESSM NUMBER WB0750****DESCRIPTION.**

The 32' Rigid Hull Inflatable Boat WB0750 is a rugged hard-deck, inflatable hull, self-bailing workboat currently used for oil spill cleanup support. The diamond plate aluminum alloy deck provides a solid and secure working platform with a sturdy transom for mounting single or twin outboard motors. The self-bailing feature ensures a buoyant platform regardless of water taken over the deck. The boat's rugged inflatable pontoons act as fenders and provide more stability in rough water than standard mono-hull designs. The pontoons are constructed from Nitrile rubber for added durability in oil spill environments. The 32' Rigid Hull Inflatable Boat also comes with a wheelhouse.

The boat is designed to be taken apart and palletized for quick, easy transport by air or sea cargo to remote locations around the world. The aluminum deck is comprised of two sections, which nest inside one another for more compact shipping and storage. To protect the boat while in transit, the pontoons can be deflated, rolled up, and strapped inside the frame. The 32' Rigid Hull Inflatable Boat fits into a 20' shipping container.

SPECIFICATIONS

Manufacturer	Demaree
Model	32' River Freighter (Modified)
Designed working load	11,000 lb
Max. buoyancy	26,000 lb
No. of air chambers	12
Max. power rating	Twin 200-hp outboard motors (400-hp)

PHYSICAL CHARACTERISTICS

	<u>Operating</u>
Length	32 ft, 0 in.
Width	7 ft, 4 in.
Height	6 ft, 6 in.
Cube	1525 cu ft
Weight	5368 lb

REFERENCES

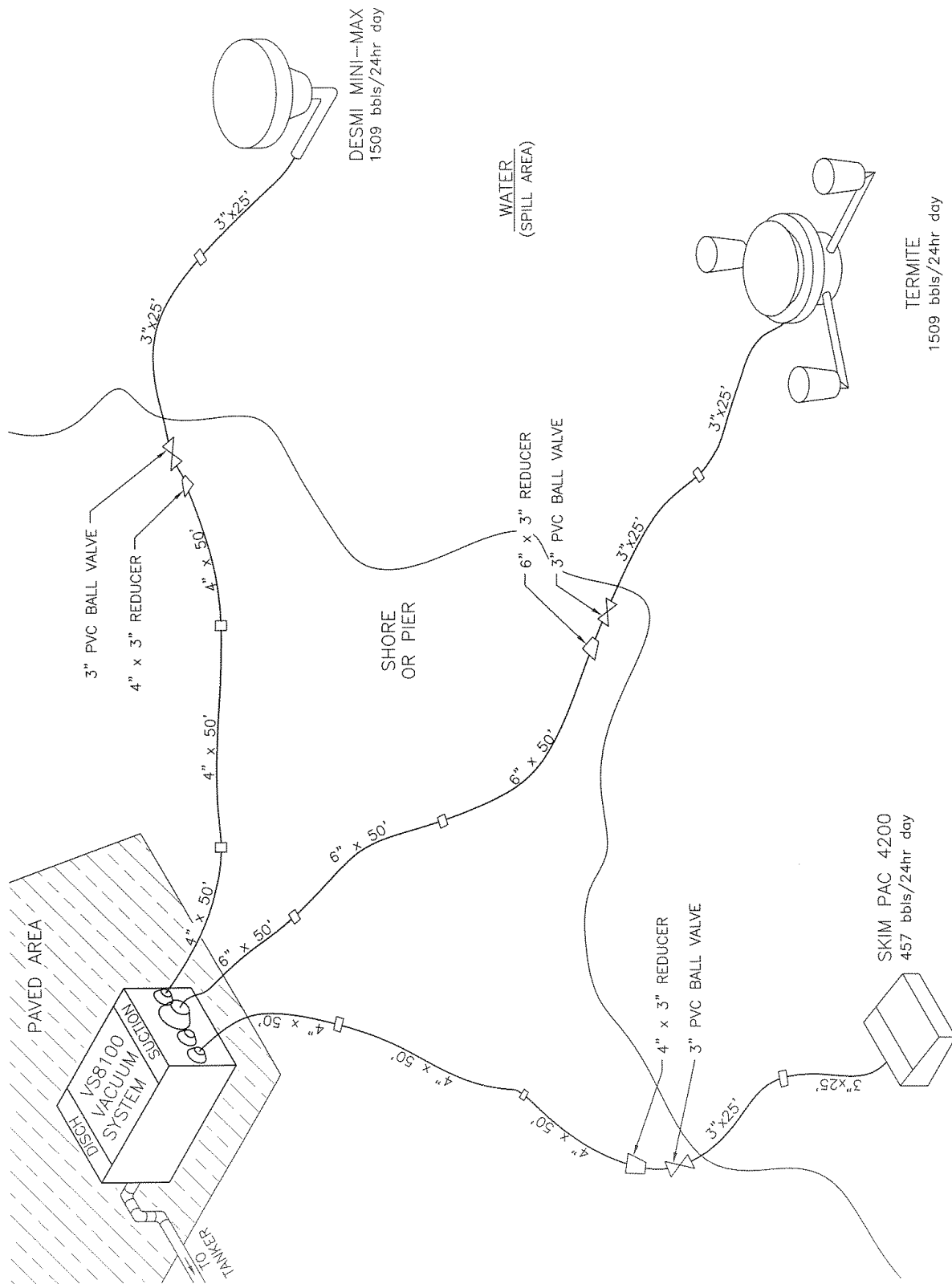
1. Demaree 32' Debris Handling Boat Owner's/Operator's Manual.
2. 32' Rigid Hull Inflatable Boat Modification, NAVSEA Dwg. 7022751.

S0300-BV-CAT-020

VACUUM PUMP/SKIMMER SYSTEM P18100

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S0300-BV-CAT-020



Vacuum Pump/Skimmer System P18100 Overview

S0300-BV-CAT-020**VACUUM PUMP/SKIMMER SYSTEM****SYSTEM NUMBER P18100****SYSTEM DESCRIPTION**

The Vacuum Pump/Skimmer System P18100 is a stationary vacuum pump specifically developed for oil spill countermeasures. The system uses a vacuum pump to provide a strong skimming capability, and a compressor pump to provide discharge and transfer capabilities to a temporary or permanent containment area. The unique two-tank or three-tank design (depending on individual unit) provides for a continuous, smooth operation. The unit is self-contained and may be operated in automatic or manual modes. The system is intended primarily for oil spill recovery, but may subsequently be used to transfer oil from temporary containment areas to permanent storage facilities. A major feature of the unit is the capability of operating in debris-laden oil conditions without interruption. The vacuum system may be deployed for ocean or coastal beach spill situations. The airflow capacity of the system enables suction techniques to be used for beach situations. Because the system readily tolerates debris, rapid spill recovery is possible. Once the spill is recovered the debris can be separated if desired. The unit operates via a diesel driven vacuum/tank system fitted with a variety of hoses and suction heads. The large vacuum pump skimmer system is supported by two harbor type skimmers and a 2-inch, Skim-Pak system. These smaller units support the larger vacuum systems in oil spill cleanup in and around confined spaces.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Vacuum system		1
a. Van, High Pressure Vacuum System (Van 1 of 2)	VA2250	1
HVAC Unit, W/Sleeve	AC2001	1
SL0011 Roundsling, Polyester, 14'6"	SL0011	4
Van, High Pressure Vacuum System (Van 2 of 2)	VA2251	1
Containment Pool, 10' x 20' x 12", Cooley Urethane	CP3040	1
Skim-Pak, 2", 457 bbls/24 Hr Day	SK0620	1
Skimmer, Harbor, Mini-Max	SK0900	1
Skimmer, Termite	SK0905	1
Vacuum System, High Pressure, Three-Tank	VS0010	1
b. Van, Vacuum Pump/Skimmer System	VA2255 (Altn)	1*
c. Vacuum Pump/Skimmer System	VS8100 (Altn)	1

* Contents of the Vacuum Pump/Skimmer System Van VA2255 have not been determined and van is not ready as part of the system.

S0300-BV-CAT-020



High Pressure Vacuum System Van (Van 1 of 2)

S0300-BV-CAT-020**VAN, HIGH PRESSURE VACUUM SYSTEM
(VAN 1 OF 2)****ESSM NUMBER VA2250**

DESCRIPTION

The High Pressure Vacuum System Van VA2250 (Van 1 of 2) is used to store and ship ancillary equipment for the vacuum pump/skimmer system. The van contains adapters, safety cables, flange couplings, various size hoses, spare parts kit for the two- and three-tank vacuum pump units, various fittings and other ancillary items necessary to set up, operate, and maintain the system.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in,
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	11,240 lb

REFERENCES

None

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-Btu through-the-wall air conditioner and heat pump unit. It is designed to maintain a comfortable ambient atmosphere in the space being conditioned.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
Btu	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



14' 6" Polyester Roundslings (4) SL0011

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 14' 6"****ESSM NUMBER SL0011****DESCRIPTION**

The 14' 6" Polyester Roundsling SL0011 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. The roundsling body can be compared to sling webbing with the tubular jacket face yarns woven without binder yarns; this allows the core yarns to move independently within the jacket.

Four 14' 6" Polyester Roundslings are used for lifting each van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	14 ft, 6"

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1"
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	14 ft, 6 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



High Pressure Vacuum System Van (Van 2 of 2)

S0300-BV-CAT-020**VAN, HIGH PRESSURE VACUUM SYSTEM
(VAN 2 OF 2)****ESSM NUMBER VA2251**

DESCRIPTION

The High Pressure Vacuum System Van VA2251 (Van 2 of 2) is used to store and ship ancillary equipment for the Vacuum Pump/Skimmer System P18100. The van contains a 4000-gph, 2" Skim-Pak; a Mini-Max Harbor Skimmer; a Termite Skimmer; a Three-Tank High Pressure Vacuum System; a 10' x 20' x 12" Machinery Containment Pool; various fittings; and other ancillary items necessary to set up, operate, and maintain the system.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in,
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	18,360 lb

REFERENCES

None

S0300-BV-CAT-020



Machinery Containment Pool CP3040



Machinery Containment Pool CP3040

S0300-BV-CAT-020**CONTAINMENT POOL, 10' X 20' X 12", COOLEY URETHANE****ESSM NUMBER CP3040****DESCRIPTION**

The Machinery Containment Pool CP3020 is a 10' x 20' x 12" urethane berm. It is used to catch and contain any oil, fuel, hydraulic fluid, or contaminants leaking or spilled from diesel powered or hydraulically driven components.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 0 in.
Width	20 ft, 0 in.	1 ft, 0 in.
Height	1 ft, 0 in.	1 ft, 0 in.
Cube	23 cu ft	1 cu ft
Weight	70 lb	70 lb

REFERENCES

None

S0300-BV-CAT-020



2" Skim-Pak SK0620

S0300-BV-CAT-020**SKIM-PAK, 2", 457 BBLs/24 HR DAY****ESSM NUMBER SK0620****DESCRIPTION**

The 457 bbls/24hr day, 2" Skim-Pak SK0620 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. The Skim-Pak unit is designed to be used as a general purpose skimmer for oil recovery on lakes, harbors, rivers, streams, and calm water applications.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	4000
Model	4200
Max. recovery rate	457 bbls/24 hrs
Flow	5 to 68 gpm
Size	2 in.
Draft	5 in.
Weir width	1 ft
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 3 in.
Width	2 ft, 1 in.
Height	11 in.
Cube	5 cu ft
Weight	18 lb

REFERENCES

1. Douglas Engineering Brochure; "The Skimmer That Really Works".

S0300-BV-CAT-020



Mini-Max Harbor Skimmer SK0900

S0300-BV-CAT-020**SKIMMER, HARBOR, MINI-MAX****ESSM NUMBER SK0900****DESCRIPTION**

The Mini-Max Harbor Skimmer SK0900 is a center float weir skimmer with 100% unobstructed flow into the collection hopper. The recovery rate is up to 220 bbl/h on light to medium viscosity oils. The center float design makes the skimmer the smallest floating weir skimmer on the market when comparing recovery rate with size and weight of the skimmer.

The skimmer incorporates Desmi's self-adjusting lip adapter. This adapter adjusts the weir lip automatically, allowing unattended operation, and it maintains correct weir position relative to the oil/water interface, even in choppy waves. By adjusting weir height to match oil layer thickness, water content is reduced and recovery efficiency increased. The skimmer head may be connected to a self-priming pump or vacuum truck.

SPECIFICATIOINS

Manufacturer	Desmi Environmental
Model	Mini-Max
Max recovery rate	1509 bbl/24 hr (dependent on available pump capacity)
Inlet weir	24-in. diameter
Outlet	Hinged bend with swivel joint and 3-in. camlocking-type coupling (male)
Materials:	
Center float, hopper, and floating collar	Polyethylene
Bellows	Oil resistant neoprene rubber
Discharge system	Stainless steel
Draft	12 in.
Suction hose	3-in. diameter corrugated suction hose with 3-in. camlock male/female couplings
Discharge hose	3-in. diameter layflat hose with 3-in. camlock female coupling at one end

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 1 in.
Width	2 ft, 11 in.
Height	1 ft, 3 in.
Cube	12 cu ft
Weight	48 lb

S0300-BV-CAT-020

SKIMMER, HARBOR, MINI-MAX (Cont'd)

ESSM NUMBER SK0900

REFERENCES

None

S0300-BV-CAT-020



Termite Skimmer SK0905

S0300-BV-CAT-020**SKIMMER, TERMITE****ESSM NUMBER SK0905****DESCRIPTION**

The Termite Skimmer SK0905 utilizes a large free-floating weir lip-type skimmer. The flexible, high buoyancy weir system allows for nearly 6 inches of vertical travel for excellent wave following, even in choppy seas. The weir height automatically adjusts to match the discharge rate of the pump, ensuring high recovery efficiency at all flow rates. The Termite's shallow draft allows for operation in very shallow water. The skimmer's high buoyancy-to-weight ratio and low inertial mass ensures excellent seakeeping characteristics in offshore conditions.

The Termite is uniquely versatile because it can be used in four modes of operation to fit the operating conditions:

1. Free-floating and offloaded by DOP-160 screw pump. This provides for a nameplate capacity of 189 bbl/hr (approx.).
2. Free-floating and offloaded through a separate 3-in. or 4-in. suction port by a diaphragm pump, peristaltic pump, or self-priming centrifugal pump. It is also ideal for offloading with the RO-VAC or vacuum truck. This provides a nameplate capacity of 315 bbl/hr (approximate).
3. Free-floating and offloaded simultaneously by DOP-160 and suction pump. This provides a nameplate capacity of 500 bbl/hr (approx.).
4. Suspended without floats from a crane. No nameplate capacity.

The Termite Skimmer uses a DOP-160 modified Archimedes' screw design, which provides many benefits over other types of pumps. The DOP-160 easily cuts and processes debris, does not emulsify oil and water when pumping, and has a low weight relative to its capacity and discharge pressure.

SPECIFICATIONSSkimmer

Manufacturer	RO-Clean Desmi
Model	Termite
Max recovery rate	1509 bbl/24 hr
Outlet	3 in. camlock

Pump

Manufacturer	Desmi
Model	DOP-160
Discharge pressure	150 psig
Hydraulic input:	
Flow	-3 to +17 gpm
Pressure	1500/3000 psig

S0300-BV-CAT-020

SKIMMER, TERMITE (Cont'd)

ESSM NUMBER SK0905

PHYSICAL CHARACTERISTICS

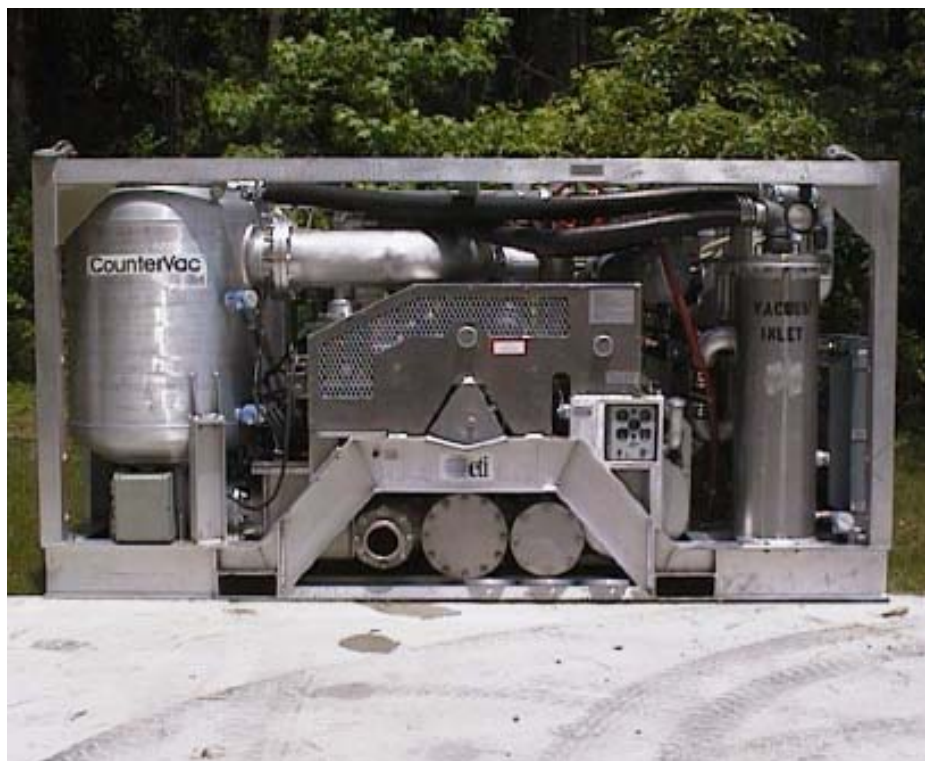
Operating/Shipping

Length	5 ft, 9 in.
Width	5 ft, 2 in.
Height	2 ft, 4 in.
Cube	70 cu ft
Weight	165 lb

REFERENCES

1. Hyde Instruction Manual for Desmi-Termite Skimmer.

S0300-BV-CAT-020



Three-Tank, High Pressure Vacuum System VS0010

S0300-BV-CAT-020**VACUUM SYSTEM, HIGH PRESSURE, THREE-TANK****ESSM NUMBER VS0010****DESCRIPTION**

The Three-Tank Vacuum System VS0010 is a skid-mounted, diesel-powered vacuum pump. The unit uses the positive and negative air pressures developed by a rotary screw vacuum pump and a rotary screw air compressor to draw in and discharge water, oil, emulsions, and debris in a spill response scenario. The vacuum system can skim oil from the water surface or it can be used as a rapid transfer pump for oil and debris. The system is effective in confined areas such as under piers, in shallow water, and in areas with heavy floating debris.

SPECIFICATIONSEngine

Manufacturer	Deutz Engines
Model	BF6L913
No. of cylinders	4
Rpm (full load)	2300
Starting	Electric
Battery	12 V dc
Horsepower	135 @ 2300 rpm
Fuel	Diesel
Fuel source	20-gal. int. fuel tank
Fuel consumption	5 gph

Air Compressor

Manufacturer	LeRoi Mfg. Co.
Model	G1231H
Rated capacity	300 scfm
Max. pressure	100 psig
Max. flow rate	300 scfm

Vacuum Pump

Manufacturer	LeRoi Manufacturing Co.
Model	40 SSV
Rated capacity	500 cfm
Max. vacuum	29.5 in. Hg
Max recovery rate	3771 bbl/24 hr

S0300-BV-CAT-020

VACUUM SYSTEM, HIGH PRESSURE, THREE TANK (Cont'd)

ESSM NUMBER VS0010

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	13 ft, 0 in.
Width	7 ft, 4 in.
Height	6 ft, 8 in.
Cube	638 cu ft
Weight	12,500 lb

REFERENCES

1. CounterVac Model 5335 Operating and Maintenance Manual.

S0300-BV-CAT-020



Vacuum Pump/Skimmer System Van VA2255

S0300-BV-CAT-020

VAN, VACUUM PUMP/SKIMMER SYSTEM

ESSM NUMBER VA2255

DESCRIPTION

The Vacuum Pump/Skimmer System Van VA2255 is **CURRENTLY UNDER DEVELOPMENT**.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in,
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	TBD

REFERENCES

None

S0300-BV-CAT-020



Vacuum Pump VS8100

S0300-BV-CAT-020

VACUUM SYSTEM

ESSM NUMBER VS8100

DESCRIPTION

The Vacuum System VS8100 is a skid-mounted, diesel-powered vacuum pump. The unit uses the positive and negative air pressures developed by two rotary vane type vacuum pumps to draw in and discharge water, oil, emulsions, and debris in a spill response scenario. The vacuum system can skim oil from the water surface or it can be used as a rapid transfer pump for oil and debris. The system is effective in confined areas such as under piers, in shallow water, and in areas with heavy floating debris.

SPECIFICATIONS

Engine

Manufacturer	Perkins Engines
Model	4.236
No. of cylinders	4
Bore	3.875 in.
Stroke	5 in.
Displacement	235.9 cu in.
Rpm (full load)	2,400
Starting	Electric
Battery	12 V dc
Horsepower	78.5 @ 2400 rpm
Fuel	Diesel
Fuel source	20-gal. int. fuel tank
Fuel consumption	5 gph

Pressure Pump

Manufacturer	Fruitland Tool & Mfg.
Model	RCF500
Rated capacity	320 scfm @ 15 psig
Maximum pressure	35 psig
Max. flow rate	380 scfm
Horsepower draw	27 hp @ rated capacity

Vacuum Pump

Manufacturer	Fruitland Tool & Mfg.
Model	RCF800
Rated capacity	476 cfm @ 18 in. Hg
Max. vacuum	28 in. Hg
Horsepower draw	27 hp @ rated capacity

S0300-BV-CAT-020

VACUUM SYSTEM (Cont'd)

ESSM NUMBER VS8100

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	10 ft, 6 in.
Width	7 ft, 4 in.
Height	7 ft, 8 in.
Cube	591 cu ft
Weight	7374 lb

REFERENCES

1. Vacuum System VS8100 Field Use Information Guide.
2. Perkins User's Handbook and Supplements.

S0300-BV-CAT-020

INCINERATOR SYSTEM

SYSTEM NUMBER P20500

SYSTEM DESCRIPTION

The Incinerator System P20500 is an In-situ burning system. In-situ burning is the intentional ignition and controlled combustion of a spill product at or in the vicinity of the spill site. In-situ burning of oil at an oil spill site can offer a logistically simple (as simple as other types of boom deployment) rapid, and relatively safe means for reducing the environmental impact of the oil spill. Because a large portion of the oil is converted to gaseous combustion products during burning, the need for collection, storage, transport, and disposal of recovered oil can be substantially reduced by using this system.

SYSTEM INACTIVE

S0300-BV-CAT-020

OIL/WATER SEPARATION SYSTEM P12100

S0300-BV-CAT-020



Oil/Water Separation System P12100

S0300-BV-CAT-020**OIL/WATER SEPARATION SYSTEM****SYSTEM NUMBER P12100****SYSTEM DESCRIPTION**

The Oil/Water Separation System P12100 is a passive separator system that is designed to separate oil and solids from waste water. The waste water flows into the separator and contacts the coalescing plates, which facilitates the separation of the oil and solids from the waste water. An external steam heat exchanger preheats the incoming waste water, facilitating the separation process. Two 480-volt ac internal electric heater exchangers further the separation process. The waste oil and water are then disposed of separately.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Separator, Oil/Water, Gravity Plate, 100-Gpm	SR0815	1
2. Heater, External, Oil/Water Separator	SR0820	1

S0300-BV-CAT-020



100-Gpm Gravity Plate Oil/Water Separator SR0815

S0300-BV-CAT-020**SEPARATOR, OIL/WATER, GRAVITY PLATE, 100 GPM****ESSM NUMBER SR0815****DESCRIPTION**

The 100-Gpm Gravity Plate Oil/Water Separator SR0815 is a passive system that is designed to separate oil and solids from waste water. It is a land-based unit that utilizes gravity with coalescing plates for the removal of oil and solids. The tank is made from mild steel and the coalescing plates inside the tank are made from polypropylene. The waste water flows into the separator and contacts the coalescing plates, which causes the oil to separate from the waste water and rise to the top, while any solids drop through special troughs. The oil then flows out through adjustable "skimming" devices into a proper receptacle. Solids can be removed through pipe connections on the side of the tank. The clean processed water is then discharged into waste water service lines.

SPECIFICATIONS

Manufacturer	Fram
Model	VPS-4
Maximum oil flow	100 gpm
Air temperature	40° - 125°F
Water temperature	40° - 140°F
Heat exchangers	
Quantity	2
Type	Electric
Power requirements	50-kW, 440-volt, 3-phase
Specific gravity of oils	0.8 - 9
Viscosity of oils	1 - 20,000 mg/1 max.
Detergents	100 ppm max.

PHYSICAL CHARACTERISTICSShipping

Length	16 ft, 3 in.
Width	5 ft, 5 in.
Height	7 ft, 7 in.
Cube	668 cu ft
Weight	8822 lb

REFERENCES

1. VPS Oil/Water Separator Operation and Maintenance Manual.
2. Test Report for Naval Surface Weapons Center, Dahlgren, Va.
3. Model VPS-4 Oil/Water Separator, Fram Industrial Dwg. 6050390.

S0300-BV-CAT-020



Oil/Water Separator External Heater SR0820

S0300-BV-CAT-020**HEATER, EXTERNAL, OIL/WATER SEPARATOR****ESSM NUMBER SR0820****DESCRIPTION**

The Oil/Water Separator External Heater SR0820 is a portable heating unit that uses steam heated coils to reduce the viscosity of the product being pumped. This facilitates transfer of the product and aids in the oil/water separation process.

SPECIFICATIONS

Manufacturer	Sims Co. Inc.
Type	Shell and tube

PHYSICAL CHARACTERISTICS

Length	14 ft, 0 in.
Width	3 ft, 4 in.
Height	2 ft, 8 in.
Cube	124 cu ft
Weight	1184 lb

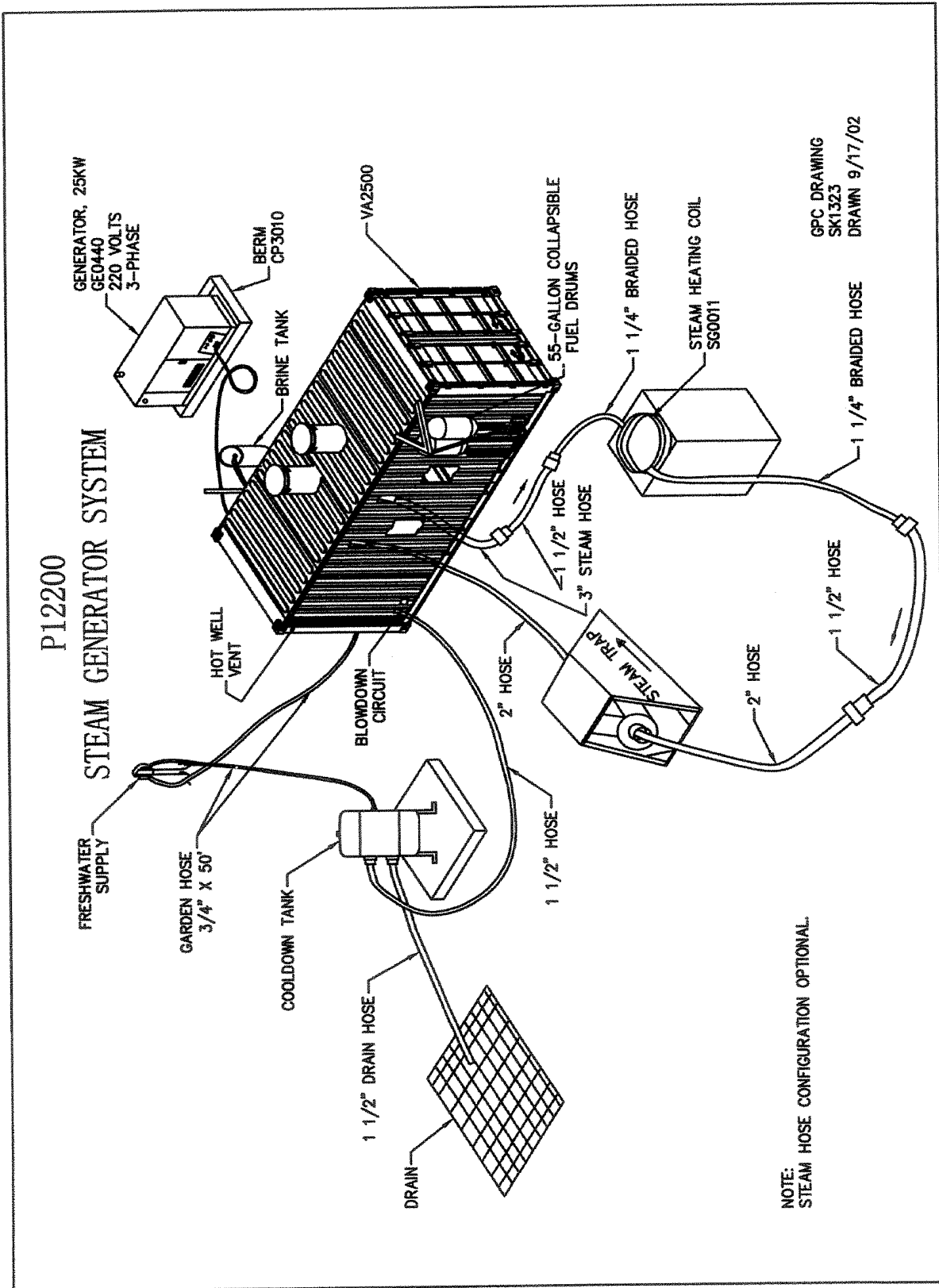
REFERENCES

None

S0300-BV-CAT-020

STEAM GENERATORS P12200

S0300-BV-CAT-020



Steam Generators P12200

S0300-BV-CAT-020**STEAM GENERATORS****SYSTEM NUMBER P12200****DESCRIPTION**

The Steam Generator System P12200 consists of two 60-hp steam generators, a 25-kW generator, a heating coil, an ancillary basket with all the necessary ancillary equipment, a water treatment skid package, a tool box, and a shipping container.

The two 60-hp steam generators can be operated independently or simultaneously. When operated simultaneously they produce 120-hp steam.

The steam generators and support equipment can all be removed from the shipping container and operated independently. Each component weighs less than 4000 pounds and is designed to be air lifted to a stricken vessel.

Recovery and pumping operations often require the heating of highly viscous product. The SUPSALV skimmers have offloading pumps that can remove recovered product from the skimmer storage tanks in most cases. However, if the product is very viscous it must be heated to remove it. The pumping of very viscous product during lightering operations may also require the heating of the product. The steam generator system provides the steam heat required in cold weather operations for oil-water separation, for lightering vessels, and for cleaning equipment used at a spill site.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Steam Generator System	VA2500	1
a. Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
b. Containment Pool, Machinery, 10' x 6' x 12"	CP3010	1
c. Generator, 25-kW, Diesel, Model C14J25SQ	GE0440	1
d. Generator, Steam, 60-Hp, Model E-10	SG0010	2
e. Heating Coil, Submersible	SG0011	1
f. Ancillary Basket for Steam Generator System P12200	SG0012	1
g. Water Treatment Skid Package, 120-Hp Capacity	SG0015	1
h. Roundsling, Polyester, 14' 6"	SL0011	1
i. Roundsling, Polyester, 16'	SL0012 (Altn)*	4
j. Tool Box, Steam Generator Van	TL0085	1

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Steam Generator System Van VA2500

S0300-BV-CAT-020**VAN, STEAM GENERATOR SYSTEM****ESSM NUMBER VA2500****DESCRIPTION**

The Steam Generator System Van VA2500 is used as a storage and shipping container for the components of the Steam Generator System, which include a 25-kW Generator GE0440, two steam Generators SG0010, a Submersible Heating Coil SG0011, an Ancillary Basket SG0012, a Water Treatment Skid SG0015, and a Tool Box TL0085.

SPECIFICATIONS

None

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	20,100 lb

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the diesel generator for the Steam Generator System.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	1 ft, 8 in.	5 ft, 0 in.
Width	1 ft, 8 in.	5 ft, 0 in.
Height	6 in.	1 ft, 0 in.
Cube	1.5 cu ft	25 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



10' x 6' x 12" Machinery Containment Pool CP3010

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 10' X 6' X 12"****ESSM NUMBER CP3010**

DESCRIPTION

The Machinery Containment Pool CP3010 is a 10' x 6' x 12" urethane berm. It is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the diesel generator for the Steam Generator System.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

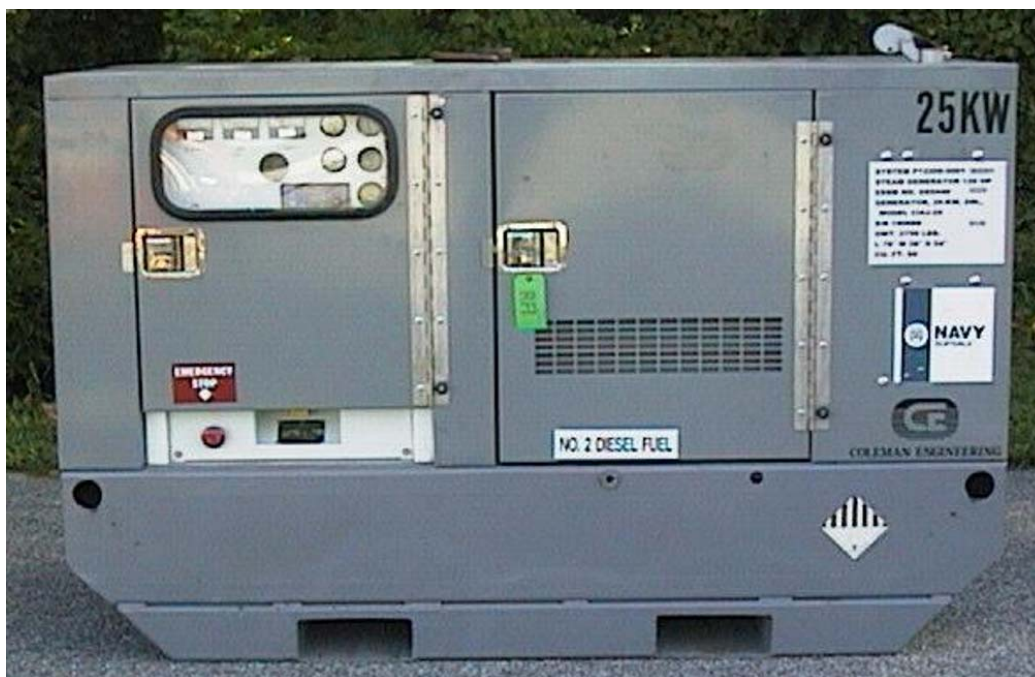
PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	10 ft, 0 in.	1 ft, 8 in.
Width	6 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	0 ft, 6 in.
Cube	60 cu ft	1.5 cu ft.
Weight	56 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



25-kW Diesel Generator GE0440

S0300-BV-CAT-020**GENERATOR, DIESEL, 25-kW, MODEL C14J25SQ****ESSM NUMBER GE0440****DESCRIPTION**

The 25-kW Diesel Generator GE0440 is a self-contained unit, mounted on a rugged steel base with an integral fuel tank and enclosed in a weather-resistant, sound-attenuated steel enclosure. All generator and engine controls and instrumentation are mounted on tilt-out, hinged panels, which are visible through a safety glass window during operation of the generator. Access to the generator and engine is provided through hinged doors. Forklift slots penetrate the width of the base for ease of transportation and handling. Four base tie-down points are installed for securing the unit during transportation, and a center-point lifting point is provided for overhead lifting.

The generator supplies 220-volt, three-phase or single phase power to the power distribution system. Power is distributed via four main 220-volt, three-phase distribution terminals; a 240-volt, three-phase temporary power receptacle; two 120/240-volt, single phase, marine, twist-lock, temporary power receptacles; and two 120-volt, single phase ground fault interrupter (GFI) receptacles.

SPECIFICATIONS25-kW Generator Assembly

Manufacturer	Coleman Engineering
Model	C14J25SQ
 <u>Generator</u>	
Manufacturer	Newage International
Model	BCL
Type	Alternating
Frequency	60 Hz @ 1800 rpm
Voltage ranges:	120/240 volt, single phase 208/240 volt, three-phase 416/480 volt, three-phase

Engine

Manufacturer	Isuzu
Model	4JB1
No. of cylinders	4
Bore	77.4 mm
Stroke	92 mm
Displacement	1.731 l
Compression ratio	22 : 1
Horsepower/kW	41/30.6@ 3000 rpm
Starting	Elect, 12 V dc
Fuel	Diesel
Rpm (full load)	1800
Rpm (idle)	850
Fuel capacity	56 gal.

S0300-BV-CAT-020

GENERATOR, DIESEL, 25-kW, MODEL C14J25SQ (CONTD)

ESSM NUMBER GE0440

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 7 in.
Width	3 ft, 2 in.
Height	4 ft, 6 in.
Cube	94 cu ft
Weight	2750 lb (dry weight)

REFERENCES

1. Isuzu Diesel Engine 4LB1, 4LC1, 4LE Instruction Manual.
2. Coleman Engineering 23-kW Super Quiet PAC Operation Manual.

S0300-BV-CAT-020



Steam Generator SG0010

S0300-BV-CAT-020**STEAM GENERATOR, MODEL E-60****ESSM NUMBER SG0010****DESCRIPTION**

The Steam Generator SG0010 is a water-in-tube boiler and will deliver its rated output of 99% quality steam (containing less than 1% moisture) per hour from 60°F feedwater. The generator will develop its full rated pressure within five minutes from a cold start. The generator features a continuous circulating water feed system with a constant capacity pump which ensures a wet tube in the generator unit at all times. Automatic controls regulate the feedwater rate and modulate or stop the burner in accordance with steam demand. Standard equipment includes safety devices for protection against water failure, excessive pressure, and electrical overload. The steam generator is used during oil spill recovery operations. Pumping of viscous product is common during recovery operations. If the product is very viscous it must be heated to remove it from skimmer storage tanks. Heating of product is also required during lightering operations. Steam heat is also required for the Oil/Water Separation System P12100 to operate properly in cold weather and for cleaning operations.

SPECIFICATIONS

Manufacturer	Clayton Manufacturing
Model	E-60
Steam output	2070 lb/hr
Steam design pressure	15 to 500 psi
Steam operating pressure	12 to 450 psi
Full load amperage	7.5 amps @ 460 volts
Fuel oil consumption	17.8 gph
Water supply	318 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	5 ft, 3 in.
Width	3 ft, 10 in.
Height	7 ft, 3 in.
Cube	146 cu ft
Weight	2268 lb

S0300-BV-CAT-020

STEAM GENERATOR, MODEL E-60 (CONTD)

ESSM NUMBER SG0010

REFERENCES

1. Clayton Steam Generator and Fluid Heater Installation Manual.
2. Clayton Steam Generator 60-kW Boiler System.
3. Clayton Instruction Manual for Steam Generator E-60.
4. Feedwater Treatment Reference Manual for Clayton Steam Generators/Fluid Heaters.
5. Clayton Operation and Programming Guide V.I.P.
6. Clayton Hotwell Instructions for 65 - 225 MP & HP Units.
7. Clayton Softener & Filter Installation & Operation Manual.

S0300-BV-CAT-020



Submersible Heating Coil SG0011

S0300-BV-CAT-020**SUBMERSIBLE HEATING COIL****ESSM NUMBER SG0011****DESCRIPTION**

The Submersible Heating Coil SG0011 is a tubular coil that connects in-line with the steam hose. The coil can then be lowered into a compartment containing highly viscous product to act as a heat exchanger. The heating of the viscous product lowers the product's viscosity, allowing it to be pumped from the compartment of a vessel.

SPECIFICATIONS

Manufacturer	Commercial
Materials	Copper tube with stainless steel strapping
Connections	1 1/4 IPS
Capacity (at 100 psi steam)	1700 lb/hr
Heating surface	81 sq ft
Maximum operating pressure	200 psi

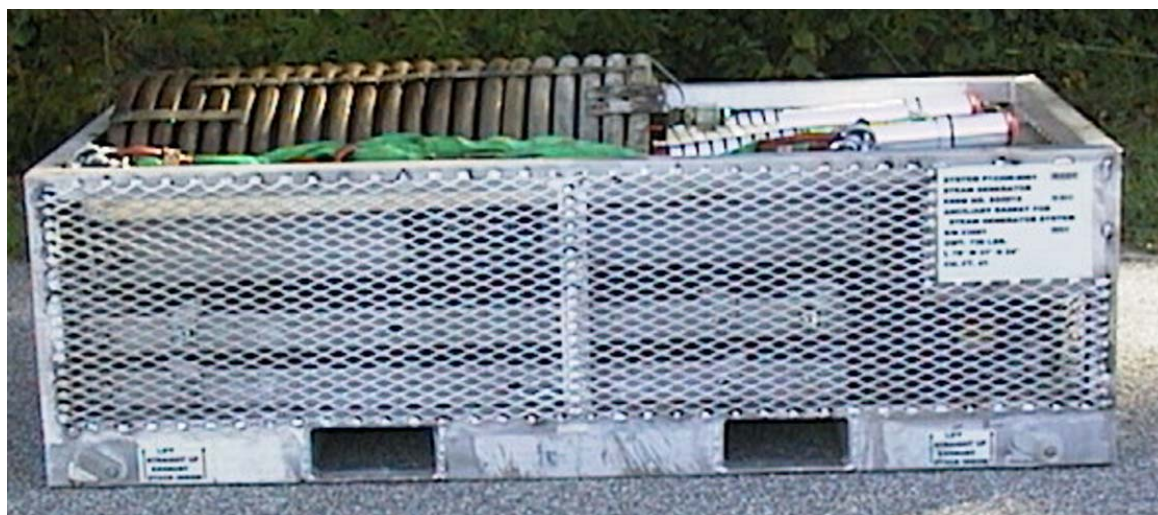
PHYSICAL CHARACTERISTICSOperating/Shipping

Inside diameter	1 ft, 4 1/2 in.
Outside diameter	1 ft, 11 in.
Height	3 ft, 10 in.
Cube	14 cu ft
Weight	260 lb

REFERENCES

None

S0300-BV-CAT-020



Ancillary Basket for Steam Generator System SG0012

S0300-BV-CAT-020**ANCILLARY BASKET FOR
STEAM GENERATOR SYSTEM****ESSM NUMBER SG0012**

DESCRIPTION

The Ancillary Basket SG0012 for the Steam Generator System is comprised of the equipment necessary to set up and maintain the Steam Generator System. The ancillary set consists of one shipping container. The contents of the ancillary set are listed below.

SPECIFICATIONS

<u>Item</u>	<u>Qty</u>
Cable, grounding, #8, 3/8" lug, 1/4" x 50'; w/plate	1
Cable, main power, 4/4SO x 50'; w/10-amp plug	2
Cable, pigtail, 4/4SO x 10'; w/100-amp plug	2
Cable, 18/2SO x 50'; w/Amphenol plug and emergency shutdown	1
Cable, interconnecting power, 10/4 x 50'; w/30-amp, 220-volt plug	3
Cable, interconnecting, 18/2SO x 50'; w/Amphenol plug	4
Gloves, welder's	4
Hard hats	4
Heating Coil, Submersible	1
Hose, garden, 3/4" x 50'	2
Inventory, laminated	1
Lance, steam, 3-piece	1
Power panel, remote	1
Spreader bar (heating coil and generator lifting)	1
Ancillary basket for Steam Generator System	1
Roundsling bridle, polyester, 2-leg (1 @ 60" and 1 @ 93")	1
Roundsling bridle, polyester, 2-leg (2 @ 93")	1
Shackle, safety, alloy, 1/2"	8
Shackle, screw pin, alloy, 3/4"	4

S0300-BV-CAT-020

**ANCILLARY BASKET FOR
STEAM GENERATOR SYSTEM (CONTD)**

ESSM NUMBER SG0012

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	6 ft, 7 in.
Width	3 ft, 1 in.
Height	2 ft, 0 in.
Cube	41 cu ft
Weight	736 lb

REFERENCES

None

S0300-BV-CAT-020



120-Hp Water Treatment Skid Package SG0015

**WATER TREATMENT SKID PACKAGE,
120-HP CAPACITY****ESSM NUMBER SG0015****DESCRIPTION**

The 120-Hp Capacity Water Treatment Skid Package SG0015 contains on one skid all the components necessary to chemically treat the steam generators' feedwater. The skid contains the receiver, softeners, chemical pumps, blowdown tank, control box, and booster pump(s).

Water system control and monitoring are required on any boiler or steam generator to protect it against corrosion and scaling. Due to the compact nature of the Clayton Steam Generator, the water must be continually treated and regularly monitored. Daily testing is recommended to assure normal functioning of all components. The automatic operation of the SG0015 Water Treatment Skid Package makes operational and maintenance efforts minimal.

SPECIFICATIONS

Manufacturer	Clayton Industries
Model	120-hp capacity

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	6 ft, 0 in.
Width	4 ft, 0 in.
Height	6 ft, 6 in.
Cube	156 cu ft
Weight	2400 lb

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

ROUNDSLING, POLYESTER, 16'**ESSM NUMBER SL0012****DESCRIPTION**

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is supplied with a 1" screw pin-type shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Steam Generator System Tool Box TL0085

TOOL BOX, STEAM GENERATOR SYSTEM**ESSM NUMBER TL0085****DESCRIPTION**

The Steam Generator System Tool Box TL0085 is a basic mechanic's tool set containing both 3/8" and 1/2" sockets and accessories, wrenches, pliers, hammers and other miscellaneous tools. It contains the necessary tools to set up and perform basic repairs on the Steam Generator System P12200.

SPECIFICATIONS

Manufacturer	Proto
Tool set number	99401

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 1 in.
Width	10 in.
Height	10 in.
Cube	1.5 cu ft
Weight	72 lb

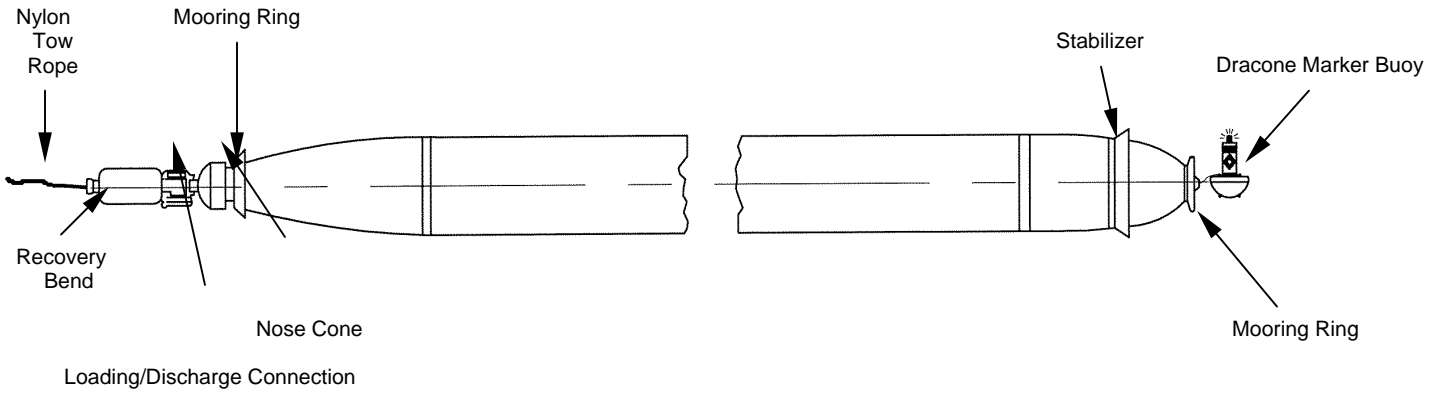
REFERENCES

None

S0300-BV-CAT-020

23.1/26/50K-GALLON SPILL RECOVERY BLADDER SYSTEM P14300

S0300-BV-CAT-020



Spill Recovery Bladder OB0809



Spill Recovery Bladder OB0810



Spill Recovery Bladder OB0820

S0300-BV-CAT-020**SPILL RECOVERY BLADDERS, 23.1/26/50K-GALLON****SYSTEM NUMBER P14300****DESCRIPTION**

The Spill Recovery Bladder System P14300 consists of either a 23,100-gallon, 26,000-gallon or 50,000-gallon spill recovery bladder, a Bladder Repair Kit, and a Marker Buoy. The spill recovery bladders are used for the temporary storage of recovered oil or other fluids recovered by the skimming of oil or the lightering of a vessel. The spill recovery bladders are small (23,100-, 26,000-, and 50,000-gallon capacity) towable floating rubber tanks. At the spill site the bladders can be used to hold oil discharged directly from a skimming system or other oil recovery source.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Buoy, Marker, Dracone	BU0023	1*
2. Repair Kit, Bladder	OB0801	1*
3. Bladder, Spill Recovery		1
a. 26,000-Gallon, Type E, Rubber (Altn)	OB0809	
b. 23,100-Gallon, Type E, Rubber (Altn)	OB0810	
c. 50,000-Gallon, Type F, Rubber (Altn)	OB0820	

*A Bladder Repair Kit OB0801 and a Dracone Marker Buoy BU0023 are included and shipped with each individual bladder.

S0300-BV-CAT-020



Dracone Marker Buoy BU0023

S0300-BV-CAT-020**BUOY, MARKER, DRACONE****ESSM NUMBER BU0023****DESCRIPTION**

The Dracone Marker Buoy BU0023 consists of a 40-inch diameter styrofoam base for flotation. Extending 22 inches above the base is a 12-inch diameter column, which houses a 6-volt battery and a steady-burn white light with lens. The light's on/off function is controlled automatically by a photocell. The Marker Buoy is to be exhibited at or near the aftermost part of the Dracone being towed or moored.

SPECIFICATIONS

Manufacturer Curd Enterprises

PHYSICAL CHARACTERISTICS

Height	4 ft, 2 in.
Diameter	3 ft, 4 in.
Cube	47.5 cu ft
Weight	92 lb

REFERENCES

None

S0300-BV-CAT-020



Bladder Repair Kit OB0801

S0300-BV-CAT-020**REPAIR KIT, BLADDER****ESSM NUMBER OB0801****DESCRIPTION**

The Bladder Repair Kit OB0801 consists of various tools, a patching kit with patching procedures, a white marker light, two 6-volt batteries and bulbs, MSDSs, and a laminated inventory. The Repair Kit is designed to maintain the oil storage bladder during an operational deployment.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	1 ft, 8 in.
Width	10 in.
Height	1 ft, 1 in.
Cube	2 cu ft
Weight	34 lb

REFERENCES

None

S0300-BV-CAT-020



Spill Recovery Bladder OB0809

S0300-BV-CAT-020**BLADDER, SPILL RECOVERY, 26K-GALLON,
TYPE E, RUBBER****ESSM NUMBER OB0809**

DESCRIPTION

The Spill Recovery Bladder OB0809 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The spill recovery bladder's skin is made up of nylon cord, a woven nylon fabric that has been weatherproofed, and abrasion-resistant synthetic rubber.

The spill recovery bladder is towed behind the skimming vessel using a 6-inch towline. A 6-inch loading and discharge hose is attached to the towline for filling and discharging the skimmed oil into and from the bladder.

SPECIFICATIONS

Manufacturer	Dunlop
Model	Type E, Dracone Barge
Capacity:	
100% full	26,400 gallons/628 bbls
85% full	22,400 gallons/534 bbls
Outer proofing	Neoprene rubber
Inner proofing	Nitrile rubber

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping (w/ancillary equipment)</u>
Length	126 ft, 0 in.	10 ft, 10 in.
Width	NA	5 ft, 11 in.
Height	NA	5 ft, 9 in.
Diameter	6 ft, 2 in.	NA
Weight	5324 lb	2630 lb
Cube	400 cu ft	369 cu ft

REFERENCES

1. The Dracone Barge Operating Manual, Issue 3.

S0300-BV-CAT-020



Spill Recovery Bladder OB0810

S0300-BV-CAT-020**BLADDER, SPILL RECOVERY, 23.1K-GALLON,
TYPE E, RUBBER****ESSM NUMBER OB0810**

DESCRIPTION

The Spill Recovery Bladder OB0810 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The spill recovery bladder's skin is made up of nylon cord, a woven nylon fabric that has been weatherproofed, and abrasion-resistant synthetic rubber.

The spill recovery bladder is towed behind the skimming vessel using a 6-inch towline. A 6-inch loading and discharge hose is attached to the towline for filling and discharging the skimmed oil into and from the bladder.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	Type E, Dracone Barge
Capacity:	
100% full	23,100 gallons/550 bbls
85% full	19, 635 gallons/468 bbls
Outer proofing	Neoprene rubber
Inner proofing	Nitrile rubber

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping (w/ancillary equipment)</u>
Length	64 ft, 0 in.	8 ft, 0 in.
Width	NA	7 ft, 0 in.
Height	NA	4 ft, 0 in.
Diameter	9 ft, 0 in.	
Weight	2000 lb	2650 lb
Cube	5184 cu ft	224 cu ft

REFERENCES

None

S0300-BV-CAT-020



Spill Recovery Bladder OB0820



Spill Recovery Bladder OB0820

S0300-BV-CAT-020**BLADDER, SPILL RECOVERY, 50K-GALLON,
TYPE F, RUBBER****ESSM NUMBER OB0820**

DESCRIPTION

Spill Recovery Bladder OB0820 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The spill recovery bladder's skin is made up of nylon cord, a woven nylon fabric that has been weatherproofed, has abrasion-resistant synthetic rubber.

The spill recovery bladder is towed behind the skimming vessel using a 6-inch towline. A 4-inch loading and discharge hose is attached to the towline for filling and discharging the skimmed oil into and from the bladder.

SPECIFICATIONS

Manufacturer	Dunlop
Model	Type F, Dracone Barge
Capacity:	
100% full	50,000 gallons/1190 bbls
85% full	42,500 gallons/1012 bbls
Outer proofing	Neoprene nylon cord and woven nylon fabric
Inner proofing	Nitrile rubber for petroleum products

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping (w/ancillary equipment)</u>
Length	165 ft, 0 in.	14 ft, 6 in.
Width	NA	7 ft, 1 in.
Height	NA	4 ft, 10 in.
Diameter	7 ft, 8 in.	NA
Weight	5005 lb	6640 lb
Cube	9698 cu ft	496 cu ft

REFERENCES

1. The Dracone Barge Handling, Operating, and Maintenance Manual; William Wood and Associates, New Orleans, LA.

S0300-BV-CAT-020

SALVAGE SUPPORT SKIMMER SYSTEM P16200

I

S0300-BV-CAT-020



Salvage Skim Sys Van VA2220



Containment Pool CP3000



Containment Pool CP3030



Skim-Pak Sys Kit KT0600



2" Peristaltic Pump PU0300



1 1/2" Skim-Pak SK0600



2" Skim-Pak SK0620



26" Oil Boom Kit KT0601



Boom Storage Pallet BM0875



26" USS-26 Boom BM0760



26" Shore Boom BM0765



Oil Mop Kit KT0602



Oil Mop Skimmer SK0730



2" Dsl Diaph Pump PU2109



15' Inflatable Boat Kit KT0603



15' Inflatable Boat WB0717



Oil Storage Bladder Kit KT0604



Storage Bladder OB0805



Outboard Motor MT0015



Polyester Roundsling SL0011



Harbor Skimmer SK0900

Salvage Support Skimmer System P16200 Overview

S0300-BV-CAT-020**SALVAGE SUPPORT SKIMMER SYSTEM****SYSTEM NUMBER P16200****SYSTEM DESCRIPTION**

The Salvage Support Skimmer System P16200 is a stand-alone response package for recovering oil from small salvage-related spills inside ship spaces, or in and around sheltered waters. The Salvage Support Skimmer System consists of: a Salvage Skimmer System Van, which is a storage/shipping container for the components of the system; two Machinery Containment Pools that provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled by components; a Skim-Pak System containing a 1 1/2-Inch and a 2-Inch Skim-Pak for skimming oil; Oil Containment Boom Kit containing 18 sections of 26-inch oil containment boom and four sections of 26-inch shore boom for booming off areas in and around harbors; an Oil Mop Kit containing an Oil Mop Skimmer and a 2-Inch Diaphragm Pump for oil removal; two 15-foot Inflatable Boats for maintaining and moving equipment; two 500-Gallon Rubber Oil Storage Bladders; two 15-hp outboard motors for the two 15-foot inflatable boats; a Mini-Max Harbor Skimmer for oil removal; four Polyester Roundslings for lifting the Salvage Skimmer System Van; and the ancillary equipment necessary to maintain and operate the components of the Salvage Skimmer System.

The 16' Polyester Roundslings SL0012 is an alternate for the 14' 6" Polyester Roundslings SL0011, and the Oil Mop Skimmers SK0733 and SK0734 are alternates for Oil Mop Skimmer SK0730. The alternate configurations are functionally the same as the primary component; however, the performance characteristics may vary slightly from one another and from the primary component. The following component listing is a representative of the slightly different system configurations that are available.

SYSTEM COMPONENTS

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Van, Salvage Skimmer System:	VA2220	1
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	4
Containment Pool, Machinery, 16' x 6' x 18"	CP3030	2
Kit, Skim-Pak System:	KT0600	1
Pump, Peristaltic, 2" Diesel	PU0300	2
Skim-Pak, 1 1/2", 2000-Gph	SK0600	1
Skim-Pak, 2", 4000-Gph	SK0620	1
Kit, Oil Containment Boom, Model USS-26:	KT0601	1
Pallet, Storage, 84" x 41" x 7", USS-26 and USS-26SB Boom:	BM0875	1
Boom, Oil Containment, Model USS-26, 26" x 55'	BM0760	18
Boom, Oil Containment, Model USS-26 SB, 26" x 25'	BM0765	4

S0300-BV-CAT-020**SALVAGE SUPPORT SKIMMER SYSTEM****SYSTEM NUMBER P16200**

SYSTEM COMPONENTS (Contd)

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
Kit, Oil Mop:	KT0602	1
Skimmer, Oil Mop, Model C-14D	SK0730	1
Skimmer, Oil Mop, Mark I-4D	SK0733 (Altn)	1*
Skimmer, Oil Mop, Model PWS-4D	SK0734 (Altn)	1*
Pump, Diaphragm, 2", Diesel	PU2109	1
Kit, Boat, Inflatable, 15':	KT0603	1
Boat, 15' Inflatable	WB0717	2
Kit, Oil Storage Bladder, 500-Gallon:	KT0604	1
Bladder, Oil Storage, 500-Gallon, Rubber	OB0805	2
Motor, Outboard, 15-Hp, 4-Stroke, Short Shaft	MT0015	2
Skimmer, Harbor, Mini-Max	SK0900	1
Roundsling, Polyester, 14' 6"	SL0011	4
Roundsling, Polyester, 16'	SL0012 (Altn)	4*

*Alternate ESSM configurations are functionally equivalent and are not shown in the catalog.

S0300-BV-CAT-020



Salvage Support Skimmer System Van VA2220

S0300-BV-CAT-020**VAN, SALVAGE SUPPORT SKIMMER SYSTEM****ESSM NUMBER VA2220****DESCRIPTION**

The Salvage Support Skimmer System Van VA2220 is used for the storage and shipment of the Salvage Support Skimmer System P16200 equipment, which consists of: six Machinery Containment Pools for catching and containing any oil, fuel, or contaminants leaking or spilled by components; a Skim-Pak System containing a 1 1/2-Inch and a 2-Inch Skim-Pak for skimming oil; Oil Containment Boom Kit containing 18 sections of 26" oil containment boom and 4 sections of 26" shore boom for booming off areas in and around harbors; an Oil Mop Kit containing an Oil Mop Skimmer and a 2-Inch Diaphragm Pump for oil removal; two 15-foot inflatable boats for maintaining and moving equipment; two 500-Gallon Oil Storage Bladders; two 15-hp Outboard Motors for the two 15-foot Inflatable Boats; a Mini-Max Harbor Skimmer for oil removal; four Polyester Roundslings for lifting the Salvage Skimmer System Van; and the ancillary equipment necessary to maintain and operate the components of the Salvage Skimmer System.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	20,700 lb

REFERENCES

None

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12"****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	1 ft, 8 in.	5 ft, 0 in.
Width	1 ft, 8 in.	5 ft, 0 in.
Height	6 in.	1 ft, 0 in.
Cube	1.5 cu ft	25 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



16' x 6' x 18" Machinery Containment Pool CP3030

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 16' x 6' x 18"****ESSM NUMBER CP3030****DESCRIPTION**

The Machinery Containment Pool CP3030 is a 16' x 6' x 18" urethane berm. It is used to catch and contain any oil, fuel, or contaminants leaking or spilled from the component placed in the berm.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>	<u>Operating</u>
Length	2 ft, 2 in.	16 ft, 0 in.
Width	2 ft, 8 in.	6 ft, 0 in.
Height	8 in.	12 in.
Cube	3 cu ft	144 cu ft
Weight	60 lb	60 lb

REFERENCES

None

S0300-BV-CAT-020



Skim-Pak System Kit KT0600

S0300-BV-CAT-020**KIT, SKIM-PAK SYSTEM****ESSM NUMBER KT0600****DESCRIPTION**

The Skim-Pak System Kit KT0600 is used for small spills inside ship spaces, or in and around sheltered waterways and tributaries. The Skim-Pak System Kit consists of a 1 1/2-Inch Skim-Pak SK0600, a 2-Inch Skim-Pak SK0620, a 2-Inch Peristaltic Pump PU0300, a 2-Inch Diaphragm Pump PU2109, control wands, suction hoses, adapters, miscellaneous tools, and the necessary ancillary hardware to support the Skim-Pak System Kit while operating in the field.

SPECIFICATIONS

Manufacturer ESSM Facility

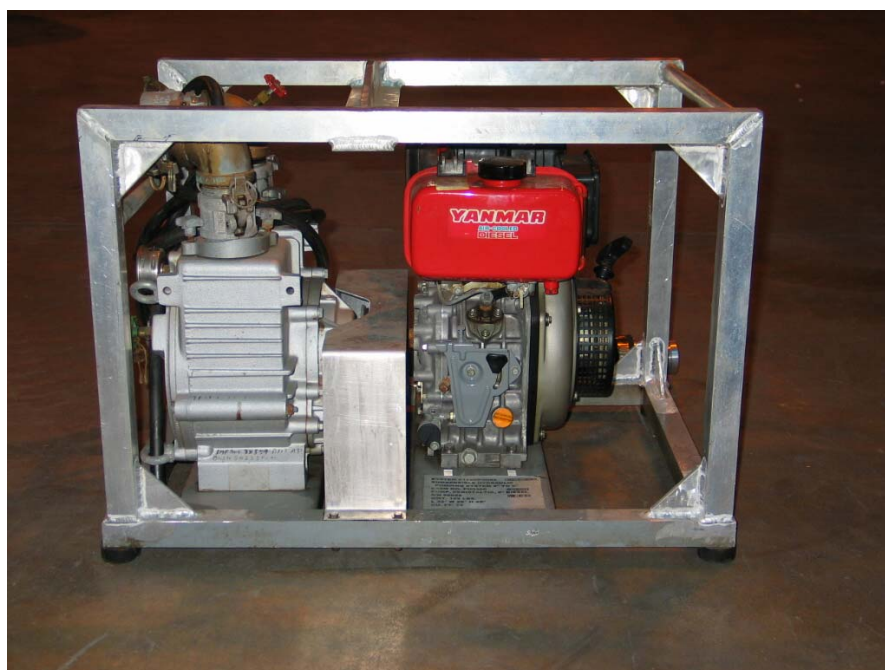
PHYSICAL CHARACTERISTICSShipping

Length	6 ft, 0 in.
Width	4 ft, 0 in.
Height	2 ft 10 in.
Cube	68 cu ft
Weight	1204 lb

REFERENCES

1. Yanmar L-A Series Operation Manual, 114250-0003E.
2. Yanmar L Series Operation Manual, 114250-0002E.
3. Master Pump Co. Peristaltic Pump Operators/Parts Catalog, Series M.
4. Yanmar Service Manual, 000A0C0378.

S0300-BV-CAT-020



2-Inch Peristaltic Pump PU0300

S0300-BV-CAT-020**PUMP, PERISTALTIC, 2", DIESEL****ESSM NUMBER PU0300**

DESCRIPTION

The 2-Inch Peristaltic Pump PU0300 is a self-priming, diesel driven, hose-type unit designed to pump a wide variety of viscous materials. The 2-inch pump will operate at a rate of 110 gpm with an open discharge. Maximum practical suction lift is 29 feet above the material surface.

The 2-inch pump is powered by a 1-cylinder, 5.5-hp, air-cooled, 4-cycle engine. The engine has a recoil starter and direct fuel injection with a variable speed control, and is designed to operate using its own integral fuel system.

SPECIFICATIONS

Pump Assembly

Manufacturer	Master Pump Engine Co.
Model	MD-5
Type	Series M, hose-type
Capacity	110 gpm/open discharge
Effective daily recovery rate (24-hour day)	Mod 2400 - 226 bbls Mod 4200 - 459 bbls

Engine

Manufacturer	Yanmar Diesel
Model	L60AE-D
Bore/Stroke	75mm/62mm
Displacement	273 cc
Rpm	3600
Horsepower	5.5
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	2 ft, 9 in.
Width	2 ft, 1 in.
Height	2 ft, 1 in.
Cube	12 cu ft
Weight	192 lb

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual for L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.
4. Master Pump Engine Co. Pamphlet for Series M Peristaltic Pumps.

S0300-BV-CAT-020



1 1/2" 261-Bbbls/24 Hr Day Skim-Pak SK0600

S0300-BV-CAT-020**SKIM-PAK, 1 1/2", 261-BBLS/24 HR DAY****ESSM NUMBER SK0600****DESCRIPTION**

The 1 1/2-Inch 261-Bbbs/24 Hr Day Skim-Pak SK0600 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. It is designed for recovery of oil on lakes, harbors, rivers, streams and calm water applications. The 1 1/2-Inch Skim-Pak is capable of fitting through 24-inch openings and is most productive in areas where access is limited and low volume recovery is planned.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	2000
Model	2200
Flow	5 to 38 gpm
Size	1 1/2"
Max. recovery rate	261 bbls/24 hr day
Draft	3"
Weir width	8"
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 6 in.
Width	1 ft, 9 in.
Height	11 in.
Cube	2 cu ft
Weight	10 lb

REFERENCES

1. Douglas Engineering Brochure; "The Skimmer That Really Works".

S0300-BV-CAT-020



2" 466-Bbls/24 Hr Day Skim-Pak SK0620

S0300-BV-CAT-020**SKIM-PAK, 2", 4000-GPH****ESSM NUMBER SK0620****DESCRIPTION**

The 2-Inch 261-Bbbls/24 Hr Day Skim-Pak SK0620 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. The Skim-Pak unit is designed as a general purpose skimmer for oil recovery on lakes, harbors, rivers, streams, and calm water applications.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	4000
Model	4200
Flow	5 to 68 gpm
Size	2"
Max. recovery rate	466 bbbls/24 hr day
Draft	5"
Weir width	12"
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 3 in.
Width	2 ft, 1 in.
Height	11 in.
Cube	5 cu ft
Weight	18 lb

REFERENCES

1. Douglas Engineering Brochure; "The Skimmer That Really Works".

S0300-BV-CAT-020



Oil Containment Boom Kit KT0601

S0300-BV-CAT-020**KIT, OIL CONTAINMENT BOOM, MODEL USS-26****ESSM NUMBER KT0601****DESCRIPTION**

The Oil Containment Boom Kit KT0601 is used for small oil spills around sheltered waters and tributaries. The components of the Oil Containment Boom Kit are used to direct, hold, and control spilled oil until it can be cleaned up. The Oil Containment Boom Kit consists of a boom storage pallet that stores 1000 feet of 26-inch oil containment boom and 100 feet of 26-inch shore boom, and a wire mesh storage container that stores the boom repair kit, anchors, line, marker buoys, and the ancillary equipment necessary to operate and maintain the Oil Containment Boom Kit KT0601.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSShipping

Length	7 ft, 0 in.
Width	4 ft, 0 in.
Height	2 ft, 9 in.
Cube	66 cu ft
Weight	6334 lb

REFERENCES

None

S0300-BV-CAT-020



USS-26 and USS-26SB Boom Storage Pallet BM0875
(Without Stanchions)



USS-26 and USS-26SB Boom Storage Pallet BM0875
(With Stanchions)

S0300-BV-CAT-020**PALLET, STORAGE, 84" X 41" X 7",
USS-26 AND USS-26SB BOOM****ESSM NUMBER BM0875****DESCRIPTION**

The 84-inch x 41-inch x 7-inch (without stanchions) USS-26/USS-26SB Boom Storage Pallet BM0875 is a storage/shipping container for either the USS-26 or the USS-26SB boom. The pallet is designed to hold 18 sections of USS-26 and four sections of USS-26SB. It is constructed of 2- and 2 1/2-inch-square tubing with a 3/4-inch x #9 expanded metal deck to support the boom. The pallet incorporates forklift slots for ease in handling and transporting.

SPECIFICATIONS

Manufacturer	ESSM Facility
Drawing number	6777302

PHYSICAL CHARACTERISTICS

	<u>Shipping (with boom and stanchions)</u>	<u>Shipping (w/o boom and stanchions)</u>
Length	7 ft, 0 in.	7 ft, 0 in.
Width	3 ft, 5 in.	3 ft, 5 in.
Height	7 ft, 0 in.	7 in.
Cube	167 cu ft	14 cu ft
Weight	6334 lb	700 lb

REFERENCES

1. USS-26 Boom Equipment Pallet, NAVSEA Dwg. 6777302.

S0300-BV-CAT-020



26" x 55' Model USS-26 Oil Containment Boom BM0760

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL USS-26, 26" X 55'****ESSM NUMBER BM0760****DESCRIPTION**

The 26-inch x 55-foot Model USS-26 Oil Containment Boom BM0760 is 26 inches high, air inflatable, and made of vinyl/nitrile rubber-impregnated nylon fabric that resists abrasions, gouging, oil and salt water. The boom is constructed in 55-foot sections. Each section has five, 10-foot-long inflation chambers with an inflation/deflation valve. The chambers are connected with the same material and vulcanized with no stitched seams. The boom is designed for use in oil spill situations to contain oil released from a casualty vessel, or to deflect or contain oil in harbors and bays.

The boom has a skirt that extends 14 inches below the inflation chambers for containing the oil. A 5/16-inch galvanized chain runs through a reinforced pocket on the bottom of the skirt. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are three metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. Highly visible green strips are located at the first and third handle positions of each inflation chamber for improved visibility when the boom is waterborne.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-26
Inflation pressure	2 - 3 psig
Draft	11 1/2"
Freeboard	14 5/8"
Overall height inflated	26"
Overall height deflated	37 1/2"
Section length	55'
Weight per foot	4.4 lb
Flotation chamber:	
Diameter	13 1/2"
Length	10', 6"
Air valves per chamber	1
Materials:	
Coated fabric	Nitrile/vinyl rubber-impregnated high strength nylon cloth
Color	Black with high visibility green strips
Ballast	5/16" galvanized steel chain, 45,000-lb tensile strength
End connections	Anodized 6061-T6 aluminum alloy extrusion

S0300-BV-CAT-020

BOOM, OIL CONTAINMENT, MODEL USS-26, 26' X 55'

ESSM NUMBER BM0760

PHYSICAL CHARACTERISTICS

Operating*

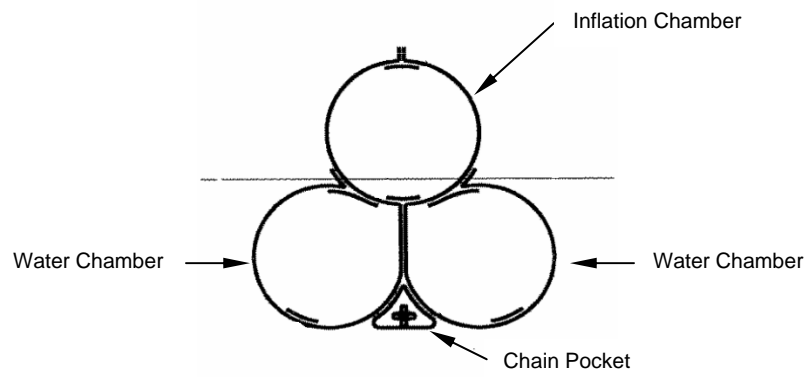
Length	55 ft, 0 in.
Height (overall)	2 ft, 2 in.
Diameter (bladder inflated)	1 ft, 1 1/2 in.
Cube	134 cu ft
Weight	242 lb

*Operating characteristics are for one 55-foot section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.
3. USS-26 Oil Boom Assembly, GPC Sketch SK1027.
4. USS-26 Oil Boom Section, GPC Sketch SK1030.

S0300-BV-CAT-020



Cross Sectional View of USS-26SB Boom



26" x 25' Model USS-26SB Oil Containment Boom BM0765

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, MODEL USS-26SB, 26" X 25'****ESSM NUMBER BM0765****DESCRIPTION**

This 26-Inch x 25-Foot Model USS-26SB Oil Containment Boom BM0765 is constructed from the same material as the 26-Inch Oil Containment Boom. It is constructed in 25-foot sections, each section having one top inflation chamber and two bottom water chambers. The end connector is the same as used on the 26-Inch Oil Containment and Open Ocean Boom. The boom is designed to be connected to the end(s) of the 26-Inch Oil Containment Boom to seal a beach or shoreline termination in either the deflection or containment mode. The boom's two bottom water chambers extend 15 1/2 inches below the inflation chambers to seal the boom to the beach or shoreline and not allow any trapped oil to flow underneath the boom. A 5/16-inch galvanized chain runs through a reinforced centered chain pocket located between the two water chambers. This chain acts as a ballast/tension member to keep the skirt in a vertical position. There are five metal lifting handles vulcanized to each inflation section for deployment and recovery of the boom. A highly visible green strip is located at the first and fifth handle position of the inflation chamber for improved visibility of the boom when it is waterborne. The second, third, and fourth handle positions are marked with high visibility orange strips.

SPECIFICATIONS

Manufacturer	Engineered Fabrics
Model	USS-26SB
Inflation pressure	2 - 3 psig
Draft	12 1/2"
Freeboard	15 1/2"
Overall height inflated	26"
Overall height deflated	28"
Section length	25'
Weight per foot	4.36 lb
Flotation chamber:	
Diameter	16 1/2"
Length	23', 5"
Air valves per chamber	2 (one on each side at opposite ends)
Water chamber:	
Diameter	12"
Length	23', 5"
Water fill valves per chamber	4 (two on each side at opposite ends)
Materials:	
Coated fabric	Nitrile/vinyl rubber-impregnated high strength nylon cloth
Color	Black with high visibility green and yellow strips
Ballast	5/16" galvanized steel chain, 45,000-lb tensile strength
End connections	Anodized 6061-T6 aluminum alloy extrusion

S0300-BV-CAT-020

BOOM, OIL CONTAINMENT, MODEL USS-26, 26' X 25'

ESSM NUMBER BM0765

PHYSICAL CHARACTERISTICS

Operating*

Length	25 ft, 0 in.
Height (overall)	3 ft, 1 1/2 in.
Diameter (bladder inflated)	2 ft, 0 in.
Cube	156 cu ft
Weight	240 lb

*Operating characteristics are for one 25-foot section of boom.

REFERENCES

1. Engineered Fabrics Operations and Maintenance Instructions with Illustrated Parts Breakdown.
2. Technical Manual for Oil Containment Boom and Boom Mooring Systems, S9597-AC-MMO-010.
3. USS-26SB Shoreline Boom Assembly, GPC Sketch SK1034.

S0300-BV-CAT-020



Oil Mop Kit KT0602

S0300-BV-CAT-020**KIT, OIL MOP****ESSM NUMBER KT0602****DESCRIPTION**

The Oil Mop Kit KT0602 is a small, portable, oil recovery system designed for small oil spills in protected waters and tributaries. The Oil Mop Kit consists of an Oil Mop Skimmer (SK0730 or alternate) with an oil recovery tank, a 2-Inch Diaphragm Pump PU2109, anchors, buoys, lines, pulleys, and other related hardware necessary to operate and maintain the Oil Mop Kit.

SPECIFICATIONS

Manufacturer ESSM Facility

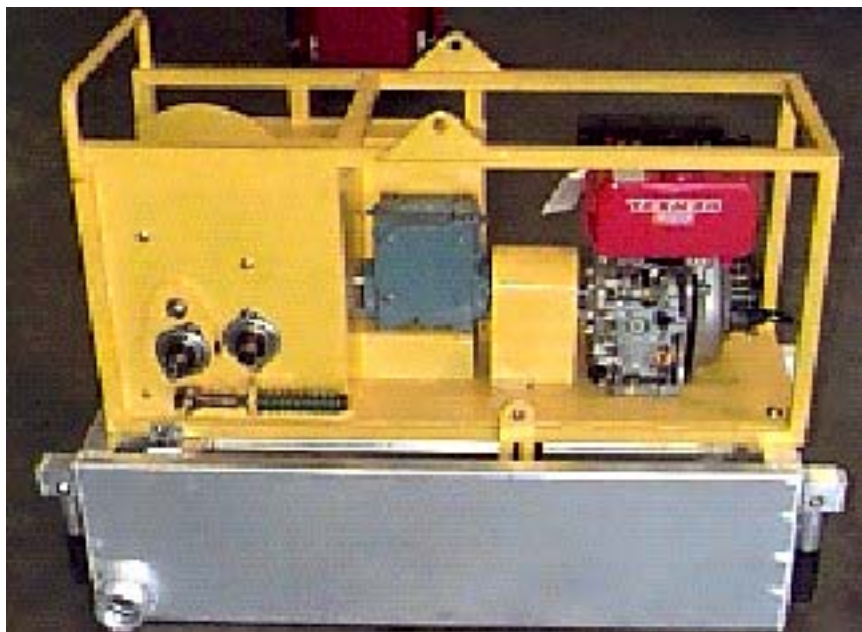
PHYSICAL CHARACTERISTICSShipping

Length	4 ft, 8 in.
Width	3 ft, 1 in.
Height	3 ft, 7 in.
Cube	52 cu ft
Weight	1445 lb

REFERENCES

1. Operations-Maintenance Manual for Crucial Oil Mop C-14D.
2. Operations Manual for Yanmar L-A Series Engines, 114250-0003E.
3. Yanmar Parts Catalog, 000YOOR3352.

S0300-BV-CAT-020



Oil Mop Skimmer SK0730

S0300-BV-CAT-020**SKIMMER, OIL MOP, MODEL PWS-4D****ESSM NUMBER SK0730**

DESCRIPTION

The Oil Mop Skimmer SK0730 is a portable oil spill recovery machine. It can be carried by two persons and placed on a 55-gallon drum or other suitable container. The unit uses a 4-inch-diameter rope mop, which is rung once during each pass through the unit by two 4-inch-diameter squeeze rollers. The skimmer is capable of recovering 5 to 10 barrels per hour and can be used on permanent installations, such as pits, holding ponds, and storage tanks. The Oil Mop Skimmer SK0730 is driven by a 1-cylinder, 5.5-horsepower, diesel engine with a variable speed control, and can run off its own integral fuel system.

SPECIFICATIONS

Skimmer

Manufacturer	Crucial
Model	C-14D
Recovery rate	5-10 barrels/hour

Engine

Manufacturer	Yanmar Diesel
Model	L60A
Cylinders	1
Bore/stroke	75mm/62mm
Displacement	273 cm ³
Rpm	3600
Horsepower	4
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	3 ft, 10 in.
Width	1 ft, 10 in.
Height	2 ft, 3in.
Cube	16 cu ft
Weight	250 lb

REFERENCES

- 1 Operations-Maintenance Manual for Crucial Oil Mop C-14D.
- 2 Operations Manual for Yanmar L-A Series Engines, 114250-0003E.
- 3 Yanmar Parts Catalog, 000YOOR3352.

S0300-BV-CAT-020



2-Inch Diaphragm Pump PU2109

S0300-BV-CAT-020**PUMP, DIAPHRAGM, 2-INCH, DIESEL****ESSM NUMBER PU2109****DESCRIPTION**

The 2-Inch Diaphragm Pump PU2109 is a self-priming, diesel driven, diaphragm pump that is designed to pump water and transfer viscous materials. The 2-inch pump will operate at a maximum rate of 50 gpm with a maximum discharge pressure of 10 psig. Maximum practical suction lift is 26 feet above the water surface. The pump is skid-mounted with two carrying handles that double as a protective roll cage.

The 2-inch pump is powered by a 1-cylinder, 4.2-horsepower, air-cooled, 4-cycle, diesel engine. The engine has a recoil starter and direct fuel injection with a variable speed control, and operates off its own integral fuel system.

SPECIFICATIONSPump

Manufacturer	CH & E Mfg. Co.
Model	5457S
Type	Diaphragm
Max. capacity	50 gpm @ 10 psig

Engine

Manufacturer	Yanmar
Model	L40AE
Cylinders	1
Displacement	199 cm ³
Compression ratio	20:1
Horsepower	4.2
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft, 6 in.
Width	2 ft, 5 in.
Height	2 ft, 3 in.
Cube	17 cu ft
Weight	150 lb

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual Model L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.

S0300-BV-CAT-020**KIT, BOAT, INFLATABLE, 15'****ESSM NUMBER KT0603****DESCRIPTION**

The 15' Inflatable Boat Kit KT0603 consists of a 72" x 48" x 33" wire mesh container that serves as a storage/shipping container for the two 15' Inflatable Workboats WB0717, along with all the related ancillary equipment that is required to assemble, operate, and maintain them.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	6 ft, 0 in.
Width	4 ft, 0 in.
Height	2 ft, 9 in.
Cube	66 cu ft
Weight	1000 lb

REFERENCE

None

S0300-BV-CAT-020



15' Inflatable Boat WB0717

S0300-BV-CAT-020**BOAT, 15' INFLATABLE****ESSM NUMBER WB0717****DESCRIPTION**

The 15' Inflatable Boat WB0717 is a lightweight, multipurpose boat. The boat is used to transport people, equipment, and supplies, and for numerous other jobs.

The hull is a U-shaped chamber with conical airtight bulkheads that ensure safety and balance of pressure in the different compartments. An additional airtight compartment is the inflatable keel, which gives the bottom a V-shaped configuration.

The boat is equipped with aluminum floorboards, paddles, running lights, an anchor light, a stern light, a boat hook, and the necessary ancillary gear to operate and maintain it.

SPECIFICATIONS

Manufacturer	Zodiac
Model	Mark III GR
Type	3470
Max. persons on board	8
Load capacity	2205 lb
Max. horsepower	65

PHYSICAL CHARACTERISTICSShipping

Length	4 ft, 11 in.
Width	2 ft, 6 in.
Height	1 ft, 2 in.
Cube	14 cu ft
Weight	144 lb

REFERENCES

1. Maintenance and Assembly Manual for Zodiac Models Mark I, II, III.

S0300-BV-CAT-020



500-Gallon Oil Storage Bladder Kit KT0604

S0300-BV-CAT-020**KIT, OIL STORAGE BLADDER, 500-GALLON****ESSM NUMBER KT0604**

The 500-Gallon Oil Storage Bladder Kit KT0604 consists of a 72" x 48" x 33" wire mesh container that serves as a storage/shipping container for the two 500-Gallon Oil Storage Bladders OB0805 along with all the related ancillary equipment required to assemble, operate, and maintain them.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	6 ft, 0 in.
Width	4 ft, 0 in.
Height	2 ft, 9 in.
Cube	66 cu ft
Weight	1688 lb

REFERENCE

None

S0300-BV-CAT-020



500-Gallon Oil Storage Bladder OB0805

S0300-BV-CAT-020**BLADDER, OIL STORAGE, 500-GALLON,
RUBBER****ESSM NUMBER OB0805**

DESCRIPTION

The Oil Storage Bladder OB0805 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The storage bladder's skin is made up of polyester fiber with a Shelterite XR-5 protective outer coating. The storage bladder has 1/4-inch cable bridle for purposes of securing and/or towing.

SPECIFICATIONS

Manufacturer	Crucial Inc.
Mode	TOB-500
Capacity:	
100%	500 gallons
85%	425 gallons
Bladder material	Polyester w/Shelterite XR-5 coating
Fill/drain	4" with 2" NPT threads
Pressure relief valve:	
Manufacturer	Survival Engineering Inc.
Model	PRV-4P-K
Relief setting	1.5 psig
Valve reset setting	1.0 psig

PHYSICAL CHARACTERISTICS

<u>Operating</u>		<u>Shipping (w/ancillary equipment)</u>	
Length	14 ft, 0 in.	Length	5 ft, 3 in.
Width	5 ft, 0 in.	Width	1 ft, 8 in.
Height	6 in. (empty)	Height	1 ft, 5 in.
Cube	35 cu ft (empty)	Cube	12 cu ft
Weight	78 lb (empty)	Weight	118 lb

REFERENCES

None

S0300-BV-CAT-020



4-Stroke, 15-Hp Outboard Motor MT0015

S0300-BV-CAT-020**MOTOR, OUTBOARD, 15-HP,
4-STROKE, SHORT SHAFT****ESSM NUMBER MT0015**

DESCRIPTION

The Outboard Motor MT0015 is a 4-stroke, 15-hp outboard motor with a short shaft. The motor has manual starting and uses a 6-gallon auxiliary fuel tank.

SPECIFICATIONS

Manufacturer	Mercury Marine
Engine type	4-stroke
Power at propeller shaft	15 hp
Max. operating rpm	4500-5500 rpm
Fuel	Gasoline with minimum octane rating of 87. Leaded gasoline not recommended.
Fuel tank capacity	6 gallons, external
Propeller	9 1/2" diameter x 10" pitch
Starting	Recoil (pull start)

PHYSICAL CHARACTERISTICS

Operation/Shipping

Length	2 ft, 3 in.
Width	1 ft, 5 in.
Height	3 ft, 10 in.
Cube	12 cu ft
Weight	114 lb

REFERENCES

1. Mercury Outboard Operation, Maintenance, and Warranty Manual.

S0300-BV-CAT-020



Mini-Max Harbor Skimmer SK0900

S0300-BV-CAT-020**SKIMMER, HARBOR, MINI-MAX****ESSM NUMBER SK0900**

DESCRIPTION

The Mini-Max Harbor Skimmer SK0900 is a center float weir skimmer with 100% unobstructed flow into the collection hopper. The recovery rate is up to 220 bbl/h with light to medium viscosity oils. The skimmer incorporates a self-adjusting lip adapter. This adapter adjusts the weir automatically, allowing unattended operation, and it maintains correct weir position relative to the oil-water interface, even in choppy waves. By adjusting weir height to match oil layer thickness, water content is reduced and recovery efficiency increased. The skimmer head may be connected to a self-priming pump or vacuum truck.

SPECIFICATIOINS

Manufacturer	Desmi Environmental
Model	Mini-Max
Recovery rate	220 bbl/h (dependent on available pump capacity)
Inlet weir	24" diameter
Outlet	Hinged bend with swivel joint and 3" camlocking-type coupling (male)
Materials:	
Center float, hopper, and floating collar	Polyethylene
Bellows	Oil resistant neoprene rubber
Discharge system	Stainless steel
Draught	12"
Suction hose	3" diameter corrugated suction hose with 3" camlock male/female couplings
Discharge hose	3" diameter layflat hose with 3" camlock female coupling at one end

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	3 ft, 1 in.
Width	2 ft, 11 in.
Height	1 ft, 3 in.
Cube	12 cu ft
Weight	48 lb

S0300-BV-CAT-020

SKIMMER, HARBOR, MINI-MAX

ESSM NUMBER SK0900

REFERENCES

None

S0300-BV-CAT-020



14' 6" Polyester Roundslings (4) SG0011

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 14' 6"****ESSM NUMBER SL0011****DESCRIPTION**

The 14' 6" Polyester Roundsling SL0011 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. The roundsling body can be compared to sling webbing with the tubular jacket face yarns woven without binder yarns; this allows the core yarns to move independently within the jacket.

Four 14' 6" Polyester Roundslings are used for lifting each van to which they are assigned.

SPECIFICATIONSSling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	14 ft, 6"

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1"
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICSOperating/Shipping

Length (operating)	14 ft, 6 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S300BV-CAT-020

DISPERSANT SPRAY UNIT SYSTEM P16800

S300BV-CAT-020



Dispersant Spray Unit System P16800

S300BV-CAT-020**DISPERSANT SPRAY UNIT SYSTEM****SYSTEM NUMBER P16800**

SYSTEM DESCRIPTION

The Dispersant Spray Unit System P16800 consists of a self-priming, positive displacement pump, prime mover, dispersant flowmeter, relief valve, and interconnecting pipe work, all mounted in an aluminum frame. The dispersant unit is suitable for below or above deck mounting for open sea or inshore duty. The Dispersant Spray Unit System is a portable, lightweight unit that can be quickly and easily mounted on tugs, offshore supply vessels and other pollution control craft responding to marine emergency oil spill situations.

<u>Item</u>	<u>ESSM Number</u>	<u>Qty</u>
1. Dispersant Spray Unit	DU0200	1

S300BV-CAT-020



Dispersant Spray Unit DU0200

S300BV-CAT-020**DISPERSANT SPRAY UNIT****ESSM NUMBER DU0200**

DESCRIPTION

The Dispersant Spray Unit DU0200 consists of a self-priming, positive displacement pump, prime mover, dispersant flowmeter, relief valve and interconnecting pipe work, all mounted in an aluminum frame. The dispersant unit is suitable for below or above deck mounting for open sea or inshore duty.

SPECIFICATIONS

Dispersant Unit

Manufacturer	Action Petroleum
Model	AP6M

Engine

Manufacturer	Yanmar
Model	L100EE-DE15A
Type	Diesel
Horsepower	9.5
Fuel Capacity	1.2 gal

Pump

Manufacturer	Multi-pump
Model	2P5
Max output	210 gpm @ 117 psi
Flow rate	75 psi

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	5 ft, 10 in.
Width	2 ft, 8 in.
Height	4 ft, 1 in.
Cube	64 cu ft
Weight	625 lb

REFERENCES

None

S300BV-CAT-020

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S0300-BV-CAT-020

INLAND SUPPORT SKIMMER SYSTEM P16700



S0300-BV-CAT-020



Electric Blower BL0010



Harbor Boom BM0739



Battery Charger CB1705



Machinery Pool CP3000



5-kw Generator GE0465



9-kw Generator GE0470



Diesel Heater HE0500



Storage Bladder OB0840



Cleaning Pool PC0820



Peristaltic Pump PU0300



Barrel Pump PU2050



3" Pump Diesel PU2108



2" Pump Diesel PU2109



Gas Fire Pump PU2120



VHF Radio RA1740



Storage Shelter SC0090



1 1/2" Skim-Pack SK0600



2" Skim-Pack SK0620



Oil Mop Skimmer SK0734



SK0825&SK0826



Skimmer SK0900



Van VA0800/VA0801



Pressure Washer WA0820



WB0010

Inland Support Skimmer System P16700

S0300-BV-CAT-020**INLAND SUPPORT SKIMMER SYSTEM****SYSTEM NUMBER P16700****SYSTEM DESCRIPTION**

The Inland Support Skimmer System P16700 is a stand-alone pollution response package for recovering oil from both onshore and inland environments. Such locations provide their own special recovery problems and require specialized equipment. This system includes the following equipment: an oil mop-type skimmer, a drum-type skimmer with a hydraulic power unit, a Desmi Mini-Max harbor skimmer, a portable fire pump, diaphragm pumps, a peristaltic pump, an electric fuel transfer pump, a 1 1/2" and a 2" skim-pak, harbor boom, a small oil bladder, a portable diesel heater, a saltwater pressure washer, 5-kW and 9-kW diesel generators, a storage shelter, a cleaning pool, an oil sampling kit, and protective clothing. These components are stored/shipped in two 20-foot vans.

SYSTEM COMPONENTS

Items	ESSM Number	Qty
1. Van, Inland Support Skimmer System	VA0800	1
HVAC Unit, w/Sleeve	AC2001	1
Blower, Oil Storage Bladder Inflation, Elec.	BL0010	1
Charger, Single Battery, Radio	CB1705	3
Containment Pool, Machinery, 5' x 5' x 12"	CP3000	1
Generator, 5-kW, Dsl, 240-V ac, 1-Phase	GE0465	1
Generator, 9-kW, Dsl, 240-V ac, 1-Phase	GE0470	1
Heater, Diesel	HE0500	1
Bladder, Oil Storage, 1500-Gallon, Rubber	OB0840	1
Pool, Cleaning, 22' x 22' x 15"	PC0820	1
Pump, Peristaltic, 2" Diesel	PU0300	1
Pump, Electric Barrel, 110-V Ac	PU2050	1
Pump, Diaphragm, 3" Diesel	PU2108	1
Pump, Diaphragm, 2" Diesel	PU2109	1
Pump, 1 1/2" Portable Fire, Gas	PU2120	1
Radio, VHF, Walk/Talk, Standard (55-Channel)	RA1740	3
Storage Shelter, Weatherport, 20' x 8' x 7'	SC0090	1
Skim-Pak, 1 1/2", 261 bbls/24 hr Day	SK0600	1
Skim-Pak, 2", 457 bbls/24 hr Day	SK0620	1
Skimmer, Oil Mop, Model C-14D	SK0733*	1
Skimmer, Oil Mop, Model PWS-4D	SK0734	1
Skimmer, Oil, Model-24	SK0825	1
Power Unit, Diesel, Hydraulic, For SK0825	SK0826	1

S0300-BV-CAT-020**INLAND SUPPORT SKIMMER SYSTEM****SYSTEM NUMBER P16700**

SYSTEM COMPONENTS (Contd)

Items	ESSM Number	Qty
Skimmer, Harbor, Mini-Max	SK0900	1
Roundsling, Polyester, 16'	SL0012	4
Washer, Pressure, Salt Water, Dsl	WA0820	1
Boat, 9' Inflatable	WB0010	1
2. Van, Oil Containment Boom, Harbor, Inland Skimmer System	VA0801	1
Boom, Oil Containment, 24" x 50', Harbor	BM0739	40
3. Van, Inland Support Skimmer System (Empty)	VA0802 (not shown)	1

*Alternate ESSM configurations are functionally equivalent and are not shown.

S0300-BV-CAT-020



Inland Support Skimmer System Van VA0800

S0300-BV-CAT-020**VAN, INLAND SUPPORT SKIMMER SYSTEM****ESSM NUMBER VA0800****DESCRIPTION**

The Inland Support Skimmer System Van VA0800 is used as a storage/shipping container for the components of the Inland Support Skimmer System, which consists of the following equipment: a diesel-fired heater, a 2" peristaltic pump, a 3" diaphragm pump, a 2" diaphragm pump, a 1 1/2" portable fire pump, a 110-volt electric barrel pump, a 2000-gph Skim-Pak, a 4000-gph Skim-Pak, two small skimming units, a hydraulic power pack, a Desmi Mini-Max skimmer, and a saltwater pressure washer.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	16,940 lb

REFERENCES

None

S0300-BV-CAT-020



HVAC Unit w/Sleeve AC2001

S0300-BV-CAT-020**HVAC UNIT W/SLEEVE****ESSM NUMBER AC2001****DESCRIPTION**

The HVAC Unit w/Sleeve AC2001 is a 12,000-BTU through-the-wall air conditioner and heat pump unit. It is designed to maintain a comfortable ambient atmosphere in the space being conditioned.

SPECIFICATIONS

Manufacturer	Frigidaire
Model	FAH12EJ2T
BTU	12,000
Volts	230 V ac

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 0 in.
Width	1 ft, 7 in.
Height	1 ft, 3 in.
Cube	4 cu ft
Weight	104 lb

REFERENCES

1. Frigidaire Installation Instruction 309000911.
2. Frigidaire Owner's Guide 309000823.

S0300-BV-CAT-020



Electric Oil Storage Bladder Inflation Blower BL0010

S0300-BV-CAT-020**BLOWER, OIL STORAGE BLADDER
INFLATION, ELECTRIC****ESSM NUMBER BL0010**

DESCRIPTION

The Electric Oil Storage Bladder Inflation Blower BL0010 consists of a 120-volt, 60-cycle motor and blower. The blower is used to inflate and empty the Rubber 1500-Gallon Oil Storage Bladder OB0840 for inspection and repair..

SPECIFICATIONS

Manufacturer	Circuiteer
Model	Blower-Dryer
Voltage	120/240
Cycles	60
Phase	Single

PHYSICAL CHARACTERISTICS

Length	1 ft, 8 in.
Width	9 in.
Height	11 in.
Cube	1.15 cu ft
Weight	22 lb

REFERENCES

None

S0300-BV-CAT-020



Radio Single Battery Charger CB1705

S0300-BV-CAT-020**CHARGER, SINGLE BATTERY, RADIO****ESSM NUMBER CB1705****DESCRIPTION**

The Radio Single Battery Charger CB1705 is designed to charge the radio battery pack. The charger allows for both rapid and trickle charge. The battery charger will operate on either 120 or 220/240 V ac. There are two models of this battery charger available: CSA20 and CSA56. Specifications for each model are given below.

SPECIFICATIONS

Manufacturer	Standard Communications	Standard Communications
Model	CSA20	CSA56
Input power	120/220/240	120/220/240
Rapid charge rate	750 mA/h	500 mA/h
Trickle charge rate	12 mA/h	25 mA/h
Operating temperature range	50° F to 104° F	50° F to 104° F

PHYSICAL CHARACTERISTICS

	Operating/Shipping
Length	6 in.
Width	3 in.
Height	3 in.
Cube	1 cu ft
Weight	2 lb

REFERENCES

1. Standard Communications CSA20 Charger Information Pamphlet.
2. Standard Communications Instructions for Desk-Top Charger CSA56.

S0300-BV-CAT-020



5' x 5' x 12" Machinery Containment Pool CP3000

S0300-BV-CAT-020**CONTAINMENT POOL, MACHINERY, 5' x 5' x 12''****ESSM NUMBER CP3000****DESCRIPTION**

The Machinery Containment Pool CP3000 is a 5' x 5' x 12'' urethane berm. Its is used to provide a means of catching and containing any oil, fuel, or contaminants leaking or spilled from the component that it is supporting.

SPECIFICATIONS

Manufacturer	Basic Concepts
Fabric material	Cooley Urethane

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	5 ft, 0 in.	1 ft, 8 in.
Width	5 ft, 0 in.	1 ft, 8 in.
Height	1 ft, 0 in.	6 in.
Cube	25 cu ft	1.5 cu ft
Weight	34 lb	34 lb

REFERENCES

None

S0300-BV-CAT-020



5-kW Diesel Generator GE0465

S0300-BV-CAT-020**GENERATOR, 5-kW, DIESEL,
240-V AC, 1-PHASE****ESSM NUMBER GE0465**

DESCRIPTION

The 1-phase, 240-V ac, 5-kW Diesel Generator GE0465 is a self-contained unit that is surrounded by a protective steel frame. The generator and engine are mounted on a rugged steel base that has wheels on one end and carrying handles on the other for maneuverability. The 240-volt, single phase, brushless-type ac generator is driven by a single cylinder, 6.6-hp, four-cycle, air-cooled diesel engine.

SPECIFICATIONS

<u>Generator</u>		<u>Engine</u>	
Manufacturer	Gillette Mfg. Inc.	Manufacturer	Yanmar
Type	AC/brushless	Model	L90AE-DEG
Capacity	5 kW	No. of cylinders	1
Frequency	60 Hz @ 3600 rpm	Bore	3.31 in.
Voltage	120/240 V ac	Stroke	2.76 in.
		Displacement	24.8 cu in.
		Horsepower	6.6
		Starting	Electric
		Fuel	Diesel
		Fuel source	1.45-gal. int. tank
		Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 9 in.
Width	2 ft, 6 in.
Height	2 ft, 3 in.
Cube	16 cu ft
Weight	280 lb

REFERENCES

1. Operation Manual for Yanmar Diesel Engine.
2. Owner's Manual for Yanmar Brushless Generators.

S0300-BV-CAT-020



9-kW Generator GE0470

S0300-BV-CAT-020**GENERATOR, 9-kW, DIESEL,
120/240-V AC, 1-PHASE****ESSM NUMBER GE0470**

DESCRIPTION

The 1-phase, 120/240-V ac, 9-kW Diesel Generator GE0470 is a self-contained unit that is surrounded by a protective steel frame. The generator and engine are mounted on a rugged steel base that has wheels on one end and carrying handles on the other for maneuverability. The 120- or 240-volt, alternating current, single phase, brushless-type generator is driven by a two-cylinder, 16.3-hp, four-cycle, air-cooled diesel engine.

SPECIFICATIONS

<u>Generator</u>		<u>Engine</u>	
Manufacturer	Gillette Mfg. Inc.	Manufacturer	Deutz
Model	GPD-90E	Model	MD-151
Capacity	9 kW	No. of cylinders	2
Frequency	60 Hz @ 3600 rpm	Horsepower	6.6 @ 3600 rpm
Kilowatts	12.8	Rpm	3600
Voltage	120/240 V ac	Starting	Electric
Amps	71/35.5	Fuel	Diesel
Watts	8500	Fuel source	5-gal. int. fuel tank
Phase	1	Fuel consumption	0.9 gph @ 3/4 load

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 11 in.
Width	2 ft, 8 in.
Height	2 ft, 8 in.
Cube	21 cu ft
Weight	360 lb

REFERENCES

1. Owner's Manual for Yanmar Brushless Generators

S0300-BV-CAT-020



Diesel Heater HE0500

S0300-BV-CAT-020**HEATER, DIESEL****ESSM NUMBER HE0500**

DESCRIPTION

The Diesel Heater HE0500 is a fully enclosed, self-contained, trailer-mounted, ground-portable unit that burns diesel or jet fuel to produce a forced stream of heated air. The heated air is delivered through flexible ducts to the area to be heated.

SPECIFICATIONS

Engine

Manufacturer	Lister Petter
Engine number	42 00462 AC10053
Horsepower	6.5 hp
Fuel	Diesel
Fuel source	35-gal. int. tank

Heater

Manufacturer	Aerotech Herman Nelson
Model	BT400-80
Heated air output:	
Maximum	400,000 BTUH @ -65°F
Minimum	100,000 BTUH @ 70°F
Heated air temp. range:	
Maximum	280°F (138°C)
Minimum	150°F (65.5°C)
Air delivery rate	1500 cfm @ 280°F

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	5 ft, 9 in.
Width	4 ft, 8 in.
Height	3 ft, 6 in.
Cube	94 cu ft
Weight	742 lb

REFERENCES

1. Technical Manual, Operations and Maintenance Instruction with Parts Breakdown for the BT400-80 Portable Diesel Heater.

S0300-BV-CAT-020



1500-Gallon Rubber Storage Bladder OB0840

S0300-BV-CAT-020**BLADDER, OIL STORAGE, 1500-GALLON,
RUBBER****ESSM NUMBER OB0840**

DESCRIPTION

The Rubber, 1500-Gallon, Oil Storage Bladder OB0840 is a flexible tube designed to carry petroleum products and other liquids lighter in weight than water. The towable storage bladder is intended for use as a storage and transportation bladder for recovered oil in oil spill cleanup operations. The bladder can be towed over waterways to a collection point or to a mooring point for later off-loading. The towable bladder is constructed of a rubberized fabric made from a nylon cloth that has been coated on both sides with a synthetic rubber. When not in use the bladder can be rolled or folded into a compact package for storage/shipping.

SPECIFICATIONS

Manufacturer	Engineered Fabrics Corp.
Model	5 cubic meter
Capacity:	
100% full	1300 gallons
85% full	1105 gallons
Bladder material	Nylon fabric, synthetic rubber-coated
Fill/drain	1 1/2" camlock fitting
Flotation bladder inflation pressure	.25 psig to 1.5 psig

PHYSICAL CHARACTERISTICS

	<u>Shipping</u>		<u>Operating</u>
Length	3 ft, 2 in.	Length	10 ft, 1 in.
Width	2 ft, 11 in.	Diameter	5 ft, 2 in.
Height	1 ft, 11 in.	Cube	270 cu ft
Cube	18 cu ft	Weight	230 lb (empty)
Weight	230 lb ft		

REFERENCES

1. Engineered Fabrics Corp. Maintenance and Operations Manual, Document No. 150-ED-287.

S0300-BV-CAT-020



Cleaning Pool PC0820

S0300-BV-CAT-020**\POOL, CLEANING (22' X 22' X 15')****ESSM NUMBER PC0820****DESCRIPTION**

The Cleaning Pool PC0820 is a polyester container that may be used as an inflatable catch pan, quick tank, or inflatable berm. The pool is designed for equipment cleanup and the decontamination of personnel and equipment involved with hazardous and toxic materials at an oil spill site.

SPECIFICATIONS

Manufacturer	Texas Boom Company, Inc.
Material	Seaman Corporations XR5-6130
Material type	Polyester
Tensile strength grab lb	475/425 lb
Tensile strength strip method	400/350 lb
Tear strength tongue method	125/125 lb
Puncture resistance	350 lb
Hydrostatic resistance	500 psig
Flame resistance	Not consumed in two minutes
Cold crack ASTM D-2136, 1/8" mandrel, 4 hr.	Pass @ -39°F

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	22 ft, 0 in.	3 ft, 6 in.
Width	22 ft, 0 in.	3 ft, 3 in.
Height	1 ft, 3 in.	2 ft, 3 in.
Cube	605 cu ft	26 cu ft
Weight	316 lb	316 lb

REFERENCES

1. Texas Boom Company, Inc. Product Specification Sheet.

S0300-BV-CAT-020



2" Peristaltic Diesel Pump PU0300

S0300-BV-CAT-020**PUMP, PERISTALTIC, 2" DIESEL****ESSM NUMBER PU0300****DESCRIPTION**

The 2" Peristaltic Pump PU0300 is a self-priming, diesel driven, hose-type pump designed to pump a wide variety of viscous materials. The 2" pump will pump at a rate of 110 gpm with an open discharge. Maximum practical suction lift is 29 feet above the material surface.

The 2" pump is powered by a 1-cylinder, 5.5-hp, air-cooled, 4-cycle engine. The engine has a recoil starter and direct fuel injection with a variable speed control and is designed to operate off its own integral fuel system.

SPECIFICATIONSPump

Manufacturer	National Master Pump Inc.
Model	MD-5
Type	Series M, hose-type
Capacity	110 gpm/open-discharge
Rpm	3600
Effective Daily Recovery Rate (24-hr day)	
Mod 2900	226 bbls
Mod 4200	459 bbls

Engine

Manufacturer	Yanmar Diesel
Model	L60AE-D
Cylinders	1
Bore/stroke	75mm/62mm
Displacement	273 cm ³
Horsepower	5.5
Fuel	Diesel
Fuel source	Int. fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	2 ft, 9 in.
Width	1 ft, 11 in.
Height	1 ft, 9 in.
Cube	10 cu ft
Weight	190 lb

S0300-BV-CAT-020

PUMP, PERISTALTIC, 2" DIESEL

ESSM NUMBER PU0300

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual for L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.
4. National Master Pump Inc. Pamphlet for Series M Peristaltic Pumps.

S0300-BV-CAT-020



110-V ac Electric Barrel Pump PU2050

PUMP, ELECTRIC BARREL, 110-V AC**ESSM NUMBER PU2050****DESCRIPTION**

The 110-V ac, Electric Barrel Pump PU2050 is a small, lightweight, portable diesel fuel transfer pump that is designed to transfer small amounts of diesel fuel oil for diesel-engine driven components of the Inland Water Skimming System P16700. The pump is designed “For Diesel Fuel Only” and is not to be used with gasoline or other combustible fluids.

SPECIFICATIONS

Manufacturer	North Star Inc.
Model	.389
Voltage	110 V ac
Hertz	60

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 0 in.
Width	1 ft, 8 in.
Height	1 ft, 2 in.
Cube	2 cu ft
Weight	35 lb

REFERENCES

None

S0300-BV-CAT-020



3" Diesel Diaphragm Pump PU2108

PUMP, DIAPHRAGM, 3" DIESEL**ESSM NUMBER PU2108****DESCRIPTION**

The 3" Pump PU2108 is a self-priming, diesel-driven, diaphragm pump that is designed to pump water and transfer viscous materials. The pump will pump water at a maximum rate of 100 gpm with a maximum discharge pressure of 10 psig. Maximum practical suction lift is 26 feet above the water surface. The pump is skid-mounted with two carrying handles that double as a protective roll cage.

The pump is powered by a 1-cylinder, 4.2 hp, air-cooled, 4-cycle, diesel engine. The engine has a recoil starter and direct fuel injection with a variable speed control and is designed to operate off of its own integral fuel system.

SPECIFICATIONSPump

Manufacturer	C H & E Mfg. Co.
Model	5500
Type	Diaphragm
Max. capacity	100 gpm @ 10 psig

Engine

Manufacturer	Yanmar Diesel Engine Co.
Model	L40AE
Cylinders	1
Bore/stroke	68 mm/55 mm
Displacement	199 cm ³
Compression ratio	20 : 1
Rpm	3600
Horsepower	4.2
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 0 in.
Width	2 ft, 5 in.
Height	2 ft, 3 in.
Cube	16.5 cu ft
Weight	150 lb

S0300-BV-CAT-020

PUMP, DIAPHRAGM, 3" DIESEL

ESSM NUMBER PU2108

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual, Model L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub. No. 00Y00R3981.

S0300-BV-CAT-020



2" Diesel Diaphragm Pump PU2109

S0300-BV-CAT-020**PUMP, DIAPHRAGM, 2" DIESEL****ESSM NUMBER PU2109****DESCRIPTION**

The 2" Diaphragm Pump PU2109 is a self-priming, diesel driven, diaphragm pump that is designed to pump water and transfer viscous materials. It will pump water at a maximum rate of 50 gpm with a maximum discharge pressure of 10 psig. Maximum practical suction lift is 26 feet above the water surface. The pump is skid-mounted with two carrying handles that double as a protective roll cage.

The 2" pump is powered by a 1-cylinder, 4.2-hp, air-cooled, 4-cycle, diesel engine. The engine has a recoil starter and direct fuel injection with a variable speed control and operates off its own integral fuel system.

SPECIFICATIONSPump

Manufacturer	C H & E Mfg. Co.
Model	5457S
Type	Diaphragm
Max. capacity	50 gpm @ 10 psig

Engine

Manufacturer	Yanmar Diesel Engine Co.
Cylinders	1
Bore/stroke	68 mm/55 mm
Displacement	199 cm ³
Compression ratio	20 : 1
Rpm	3600
Horsepower	4.2
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 0 in.
Width	2 ft, 5 in.
Height	2 ft, 3 in.
Cube	16.5 cu ft
Weight	150 lb

S0300-BV-CAT-020

PUMP, DIAPHRAGM, 2" DIESEL

ESSM NUMBER PU2109

REFERENCES

1. Yanmar Service Manual for Model L-A Series Engine.
2. Yanmar Operations Manual, Model L-A Series Engine.
3. Yanmar Diesel Engine Parts Catalog, Pub No. 00Y00R3981.

S0300-BV-CAT-020



1 1/2" Portable Pump PU2120

S0300-BV-CAT-020**PUMP, 1 1/2" PORTABLE FIRE, GAS****ESSM NUMBER PU2120****DESCRIPTION**

The 1 1/2" Portable Gas Fire Pump PU2120 is a floatable, self-priming unit. The unit consists of a single stage, centrifugal pump that is close-coupled to an air-cooled, 2-cycle, single-cylinder, gasoline engine. The unit is intended for use on ponds, streams lakes, or any source of water at least 4 inches deep. The pump is to be used as an emergency source of firefighting on inland water oil spill responses.

SPECIFICATIONS

<u>Engine</u>		<u>Pump</u>	
Manufacturer	U.S. Marine	Manufacturer	Hale Pumps
Model	82034	Model	20FP Centrifugal
Cylinders	1	Capacity	220 psig
Bore/stroke	2.53 in./1.62 in.	Discharge	1 1/2 in. NST (NH)
Horsepower	8		
Displacement	8.2 cu in.		
Fuel	Gas		
Fuel source	Int. 6-quart tank		
Fuel consumption	1 pint per hour		

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	11 in.
Width	9 in.
Height	1 ft, 0 in.
Cube	1 cu ft
Weight	20 lb

REFERENCES

1. Operating and Maintenance Manual for Hale Fire Pump.

S0300-BV-CAT-020



55-Channel Walk/Talk VHF Radio RA1740

S0300-BV-CAT-020**RADIO, VHF, WALK/TALK,
STANDARD (55-CHANNEL)****ESSM NUMBER RA1740**

DESCRIPTION

The Standard 55-Channel Walk/Talk Radio RA1740 is a VHF-FM hand-held transceiver designed for simplex/duplex marine use in the frequency range of 156.025 MHz to 163.275 MHz. The radio requires an input power of 10 V dc for operation, which is supplied by eight rechargeable nickel-cadmium batteries encased in the bottom of the radio. RF power is switchable between 6 watts and 1 watt. Features include: on-off/volume control, squelch control, channel selector, high-low power switch, push-to-talk switch, antenna, external speaker-microphone, a transmit indicator and a battery charger.

SPECIFICATIONS

Manufacturer	Standard
Model	HX220S
Frequency range	156.025 MHz to 163.275 MHz
Number of channels:	55 regular 10 weather 15 reserve
Input voltage	10 V dc
RF output power	6 watts high, 1 watt low

PHYSICAL CHARACTERISTICS

Operating (with antenna installed)

Length	1 ft, 0 in.
Width	2 in.
Height	1 in.
Cube	1 cu ft
Weight	2 lb

REFERENCES

1. HX220S Owner's Manual.

S0300-BV-CAT-020



Storage Shelter SC0090

S0300-BV-CAT-020**STORAGE SHELTER, WEATHERPORT,
20' X 8' X 7'****ESSM NUMBER SC0090**

DESCRIPTION

The 20' x 8' x 7' Weatherport Storage Shelter SC0090 is a lightweight, vinyl, general purpose storage shelter. The storage shelter is set up to provide protection from the elements for the components stored in the Inland Support Skimmer System Van /shipping container, VA0800. The van may then provide workshop space and/or personnel shelter for the cleanup crew at the spill site after all equipment has been removed and stored in the storage shelter.

SPECIFICATIONS

Manufacturer	Hansen Weatherport Corporation
Model	820 HW96-025
Material	Vinyl

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	20 ft, 0 in.	4 ft, 7 in.
Width	8 ft, 0 in.	2 ft, 4 in.
Height	7 ft, 0 in.	8 in.
Cube	1120 cu ft	8 cu ft
Weight	276 lb w/ancillaries	276 lb w/ancillaries

REFERENCES

None

S0300-BV-CAT-020



1 1/2" Skim-Pak SK0600

S0300-BV-CAT-020**SKIM-PAK, 1 1/2", 261 BBLs/24 HRS****ESSM NUMBER SK0600****DESCRIPTION**

The 261 bbls/24 Hr Day 1 1/2" Skim-Pak SK0600 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. The unit is designed for recovery of oil on lakes, harbors, rivers, streams and calm water applications. The unit is capable of fitting through 24-inch openings and is most productive in areas where access is limited and low volume recovery is planned.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	2000
Model	2200
Flow	5 to 38 gpm
Max. recovery rate	261 bbls/24 hrs
Size	1 1/2 in.
Draft	3 in.
Weir width	8 in.
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	1 ft, 9 in.
Width	1 ft, 6 in.
Height	0 ft, 7 in.
Cube	2 cu ft
Weight	11 lb

REFERENCES

1. Douglas Engineering Brochure; "The Skimmer That Really Works".

S0300-BV-CAT-020



2" Skim-Pak SK0620

S0300-BV-CAT-020**SKIM-PAK, 2", 466 BBLs/24 HR DAY****ESSM NUMBER SK0620****DESCRIPTION**

The 466 bbls/24 Hr Day, 2" Skim-Pak SK0620 is a complete emergency response system ready for rapid deployment. The unit includes a separator, hose, and control wand. The Skim-Pak unit is used as a general purpose skimmer for oil recovery on lakes, harbors, rivers streams, and calm water applications.

SPECIFICATIONS

Manufacturer	Douglas Engineering
Series	4000
Model	4200
Flow	5 to 68 gpm
Max. recovery rate	466 bbls/24 hr day
Size	2 in.
Draft	5 in.
Weir width	12 in.
Type	Flow control
Material	Fiberglass

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	2 ft, 3 in.
Width	2 ft, 1 in.
Height	11 in.
Cube	5 cu ft
Weight	18 lb

REFERENCES

1. Douglas Engineering Brochure; "The Skimmer That Really Works".

S0300-BV-CAT-020



Oil Mop Skimmer SK0734

S0300-BV-CAT-020**SKIMMER, OIL MOP, MODEL PWS-4D****ESSM NUMBER SK0734**

DESCRIPTION

The Oil Mop Skimmer SK0734 is a portable oil spill recovery machine. It can be carried by two persons and placed on a 55-gallon drum or other suitable container. The Skimmer SK0734 is capable of recovering 5 to 10 barrels per hour and can be used at a permanent installation, pits, ponds, rivers, lagoons, bays, and offshore. The Oil Mop Skimmer SK0734 is driven by a 1-cylinder, 5.5-horsepower diesel engine with a variable speed control, and can run off its own integral fuel system.

SPECIFICATIONS

Skimmer

Manufacturer	Petro Boom Environmental Inc.
Model	PWS-4D
Recovery rate	240 bbls/24 hr
Suitable rope mop	OCW3-4 (Oil Mop Co.)

Engine

Manufacturer	Yanmar Diesel Engine Co.
Model	L60A
Cylinders	1
Bore/stroke	75mm/62mm
Displacement	273 cm ³
Rpm	3600
Horsepower	5.5
Fuel	Diesel
Fuel source	Integral fuel tank
Fuel consumption	0.5 gph

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	3 ft, 10 in.
Width	1 ft, 10 in.
Height	2 ft, 3in.
Cube	16 cu ft
Weight	250 lbs

REFERENCES

None

S0300-BV-CAT-020



Drum-Type Oil Skimmer SK0825 Pictured
with Hydraulic Power Unit SK0826

S0300-BV-CAT-020**SKIMMER, OIL, MODEL-24****ESSM NUMBER SK0825**

DESCRIPTION

The Model-24 Oil Skimmer SK0825 is a portable drum-type oil spill recovery skimmer. The unit can be carried by two persons and placed in position at the spill site. The skimmer is capable of recovering oil at a rate of 70 gpm or 480 bbls per day. The unit is designed to work in any environment to pick up any petroleum product from any body of water. The product is recovered with less than 1% free water.

SPECIFICATIONS

Manufacturer	Action Petroleum Spill Recovery Inc.
Model	24
Drum diameter	24 in.
Drum length	26 in.
Recover rate:	
Gallons per minute	70
Barrels per 24 day	480

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
Length	4 ft, 3 in.
Width	4 ft, 10 in.
Height	2 ft, 2 in.
Cube	45 cu ft
Weight	190 lb

REFERENCES

None

S0300-BV-CAT-020



Hydraulic Power Unit SK0826 Pictured
with Drum-Type Oil Skimmer SK0825

S0300-BV-CAT-020**POWER UNIT, DIESEL/HYDRAULIC****ESSM NUMBER SK0826****DESCRIPTION**

The Diesel-Driven Hydraulic Power Unit SK0826 is designed to supply hydraulic fluid to the Skimmer SK0825 to operate the skimmer drum and transfer pump. The skimmer drum and transfer pump can be started, stopped, and speed controlled from the control panel of the Hydraulic Power Unit SK0826.

SPECIFICATIONSEngine

Manufacturer	Yanmar
Model	L60AE
Cylinders	1
Bore/stroke	75mm/62mm
Displacement	273 cm ³
Horsepower	5.5
Fuel	Diesel
Fuel source	.92-gal. int. fuel tank
Fuel consumption	.5 gph

Pump

Manufacturer	Cassappa
Stages	Two

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	4 ft, 2 in.
Width	2 ft, 9 in.
Height	3 ft, 3 in.
Cube	37 cu ft
Weight	256 lb

REFERENCES

1. Yanmar Diesel Engine, L-A series.

S0300-BV-CAT-020



Harbor Skimmer SK0900

S0300-BV-CAT-020**SKIMMER, HARBOR, MINI-MAX****ESSM NUMBER SK0900****DESCRIPTION**

The Mini-Max Harbor Skimmer SK0900 is a center float weir skimmer with 100% unobstructed flow into the collection hopper. The recovery rate is up to 220 bbl/h on light to medium viscosity oils. The center float design makes the skimmer the smallest floating weir skimmer on the market when comparing recovery rate with size and weight of the skimmer.

The skimmer incorporates Desmi's self-adjusting lip adapter. This adapter adjusts the weir lip automatically, allowing unattended operation, and it maintains correct weir position relative to the oil/water interface, even in choppy waves. By adjusting weir height to match oil layer thickness, water content is reduced and recovery efficiency increased. The skimmer head may be connected to a self-priming pump or vacuum truck.

SPECIFICATIONS

Manufacturer	Desmi Environmental
Model	Mini-Max
Recovery rate	220 bbl/h (dependent on available pump capacity)
Inlet weir	24-in. diameter
Outlet	Hinged bend with swivel joint and 3 in. camlock-type coupling (male)
Materials:	
Center float hopper and floating collar	Polyethylene
Bellows	Oil resistant neoprene rubber
Discharge system	Stainless steel
Draft	12 in.
Suction hose	3-in diameter corrugated suction hose
Discharge hose	3-in. diameter layflat hose

PHYSICAL CHARACTERISTICSOperating/Shipping

Length	3 ft, 1 in.
Width	2 ft, 11 in.
Height	1 ft, 3 in.
Cube	12 cu ft
Weight	48 lb

S0300-BV-CAT-020

SKIMMER, HARBOR, MINI-MAX

ESSM NUMBER SK0900

REFERENCES

None

S0300-BV-CAT-020



16' Polyester Roundslings SL0012
(4 per van)

S0300-BV-CAT-020**ROUNDSLING, POLYESTER, 16'****ESSM NUMBER SL0012**

DESCRIPTION

The 16' Polyester Roundsling SL0012 is an endless synthetic sling made from a skein (continuous loop or hank) of polyester yarn covered by a double-wall tubular jacket. Each sling is fitted with a screw pin shackle. Four 16' Polyester Roundslings are used for lifting the van to which they are assigned.

SPECIFICATIONS

Sling

Manufacturer	Lift-All
Model	EN240
Vertical SWL	21,200 lb
Choker SWL	17,000 lb
Basket SWL	42,400 lb
Overall length	16 ft, 0 in.

Shackle

Manufacturer	Crosby
Part number	G-209-A
Size	1 in.
Working load limit	25,000 lb

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length (operating)	16 ft, 0 in.
Cube (coiled for shipping)	4 cu ft
Weight	18 lb

REFERENCES

1. Lift-All 1998 Catalog.

S0300-BV-CAT-020



Salt Water Pressure Washer WA0820

S0300-BV-CAT-020**WASHER, PRESSURE, SALT WATER, DIESEL****ESSM NUMBER WA0820****DESCRIPTION**

The Diesel Driven, Salt Water Pressure Washer WA0820 is a high pressure, hot water cleaner that is used to clean oil and dirt from equipment by spraying water and cleaner on the equipment at a high pressure and temperature. The pressure washer can use either fresh or salt water as a cleaning medium. The main components of the pressure washer are a high pressure pump, diesel engine, oil-fired burner, and heating coils.

SPECIFICATIONSEngine

Manufacturer	Ruggerini
Cooling	Air
Cylinders	2
Bore/stroke	80mm/65mm
Displacement	654 cm ³
Horsepower	13
Operating rpm	3600
Compression ratio	19 : 1
Starting	Electric
Battery	12 V dc/60Ah/300 amp
Fuel	Diesel
Fuel source:	
Engine	4-gal. int. tank
Burner	5-gal. jerry can
Fuel consumption:	
Engine	.79 gph
Burner @ 140°F	1.98 gph

Pressure Washer

Manufacturer	KEW Industries
Model	KEW Contr Diesel
Maximum pump pressure	2610 psig
Water volume	
@ min./max. press.	5.42/20.5 gal.
Max. inlet water temp.	95°F/35°
Temp. range	86-302°F/30-150°C
Self-priming max. lift	16.5 ft

PHYSICAL CHARACTERISTICSOperating

Length	2 ft, 11 in.
Width	3 ft, 10 in.
Height	4 ft, 0 in.
Cube	45 cu ft
Weight	435 lb

S0300-BV-CAT-020

WASHER, PRESSURE, SALT WATER, DIESEL

ESSM NUMBER WA0820

REFERENCES

1. Owner Manual for KEW Contractor Diesel.
2. Use and Maintenance Manual for MD/1-MD/2 Engine.

S0300-BV-CAT-020



9' Inflatable Boat WB0010

S0300-BV-CAT-020**BOAT, 9' INFLATABLE****ESSM NUMBER WB0010****DESCRIPTION**

The 9' Inflatable Boat WB0010 is a lightweight, multipurpose boat. The WB0010 inflatable boat is used to transport people, equipment, and supplies. The maximum payload of people, equipment, and supplies combined must not exceed 700 pounds. The 9' Inflatable Boat is used to support skimming operations of the Inland Support Skimmer System.

SPECIFICATIONS

Manufacturer	Avon
Model	AV Redcrest
Type	290579
Max. persons on board	4
Max. load capacity	700 lb
Max. horsepower	4
Number of air chambers	2
Hull material	Hypalon/nylon

PHYSICAL CHARACTERISTICS

	<u>Operating</u>	<u>Shipping</u>
Length	9 ft, 0 in.	3 ft, 3 in.
Width	4 ft, 10 in.	1 ft, 6 in.
Height	15 in.	1 ft, 1 in.
Cube	45 cu ft	6 cu ft
Weight	40 lb (boat only)	58 lb

REFERENCES

1. Avon Instruction Manual.

S0300-BV-CAT-020



Inland Support Skimmer System Van VA0801

S0300-BV-CAT-020**VAN, OIL CNTNMNT BOOM, HARBOR,
INLAND SUPPORT SKIMMER SYSTEM****ESSM NUMBER VA0801**

DESCRIPTION

The Inland Support Skimmer System Harbor Oil Containment Boom Van VA0801 is used as a storage/shipping container for the 2000 feet of harbor boom required for the Inland Support Skimmer System. One VA0801 van will be used to support two inland skimmer vans VA0800.

SPECIFICATIONS

Manufacturer ESSM Facility

PHYSICAL CHARACTERISTICS

Operating/Shipping

Length	20 ft, 0 in.
Width	8 ft, 0 in.
Height	8 ft, 0 in.
Cube	1280 cu ft
Weight	9600 lb

REFERENCES

None

S0300-BV-CAT-020



24" x 50' Harbor Oil Containment Boom BM0739

S0300-BV-CAT-020**BOOM, OIL CONTAINMENT, 24" X 50', HARBOR****ESSM NUMBER BM0739****DESCRIPTION**

The 24" x 50' Harbor Oil Containment Boom BM0739 is designed to be used in protected waters such as lakes, ponds, small rivers, and harbors. The primary use of the harbor boom is for deflection and oil containment.

SPECIFICATIONS

Manufacturer	Slickbar
Model	MK-E-24
Fabric	PVC
Draft	16 in.
Freeboard	8 in.
Ballast chain	
Type	Galvanized
Size	5/16"
Tensile strength	8600 lb
Tow speed	
Straight line	10 kts
Sweep mode	1 kt
Operating environment	Protected

PHYSICAL CHARACTERISTICSShipping

Length	5 ft, 0 in.
Width	3 ft, 8 in.
Height	3 ft, 8 in.
Cube	200 cu ft
Weight	36 lb

REFERENCES

None

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