

S0300-BV-CAT-020

BOOM HANDLING BOAT P03100

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Boom Handling Boat WB0722

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 twelve boat trailers in the ESSM system; there are two (2) located at the ESSM facility in Pearl Harbor, Hawaii; two (2) located at the ESSM facility in Port Hueneme, California; and eight (8) located at the ESSM facility in Manama, Bahrain.

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		1*
a. 24' Boom Handling	WB0722A	
b. 24' Boom Handling	WB0722B (Altn)	
c. 24' Boom Handling	WB0722C (Altn)	
d. 24' Boom Handling	WB0722D (Altn)	
e. 24' Boom Handling	WB0722E (Altn)	
Radio, CB, Marine Mobile	RA1709	1
Radio:		1*
VHF, Marine Mobile, Voyager (78-Channel)	RA1830 (Altn)	
VHF, Marine Mobile, Icom (58-Channel)	RA1831	
Radar:		1*
Model 1730/1731	RD0001	
Model 1715, w/Radome	RD0002 (Altn)	
Roundsling Bridle, Polyester, 4-Leg, 11' 6"	SL0350	1
Tool Box, 24' BHB	TL0030	1

BOOM HANDLING BOAT (CONTD)

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* Alternate ESSM number configurations are functionally the same, however the performance characteristics of the alternates may vary slightly from one another and the primary. Alternate configurations are not shown in the catalog.

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24' Boom Handling Boat Cradle BC0722 with 24' Boom Handling Boat

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 CHARACTERISTICS

Shipping

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.

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Boom Handling Boat Trailer TR0944

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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 CHARACTERISTICS

	<u>Operating/Shipping</u>
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

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



Boom Handling Boat WB0722A, Trailer Shipping Configuration

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.

SPECIFICATIONS

<u>Boat</u>		<u>Engine</u>	
Manufacturer		Manufacturer	Detroit Diesel
0 Series	Monark	Model	5062-7300
20 Series	Peterson	Type	6V-53TI
30 Series	Miller Marine	Cylinders	6
40 Series	Monark	Bore	3.875 in.
90 Series	SeaArk Marine	Stroke	4.5 in.
Model	24 foot	Displacement	318 cu in.
Sections	3	Compression ratio	17 : 1
Design draft	3 ft, 2 in.	Shaft horsepower	260 @ 2800 rpm
Freeboard fwd	2 ft, 8 in.	Main bearings	4
Freeboard aft	2 ft, 6 in.	Starter	Electric
Max load capacity	2050 lb	Battery	12 V dc
Passengers	4 plus operator	Alternator	60 A
Bollard pull	3000 lb	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

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.

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CB Marine Mobile Radio RA1709

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.

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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 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

PHYSICAL CHARACTERISTICS

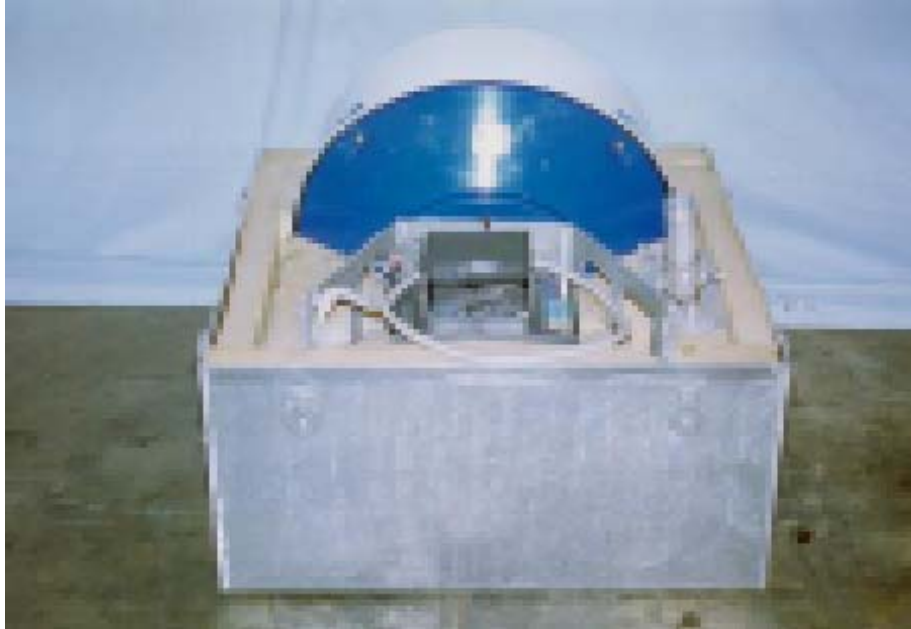
Operating/Shipping

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.

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Radar Model 1730 RD0001



Shipping Container for Radar RD0001

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								

PHYSICAL CHARACTERISTICS

	<u>Operating/Shipping</u>
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.

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

**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.

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24' BHB Tool Box TL0030

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

