

## Section 9

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## **WARRANTY/PARTS INFORMATION**

### **WARRANTY AND SERVICE INFORMATION**

#### **Carver Warranty Policy**

Carver warrants every boat we manufacture as detailed in the Carver Limited Warranty Document. Your copy of the Carver Limited Warranty appears at the end of this section. Please review this document carefully.

The warranty on your new Carver is the joint responsibility of the Carver Boat Corporation, your Carver Dealer and yourself. All three parties have certain responsibilities to ensure that the warranty remains in force. Carver's responsibilities are outlined in the limited warranty document that is included within this Owner's Guide.

#### **Carver Dealer Responsibilities**

The Carver Dealer will review the terms of the warranty and make certain the warranty is registered with Carver. Your Carver Dealer will instruct you on how to obtain warranty service.

The Carver Dealer will prepare your boat for delivery in accordance with the procedures detailed on the Pre-Delivery Service Record. Your dealer will sign the Pre-Delivery Service Record and provide you with a copy. A representative from your Carver Dealership will conduct a review of how your boat and its systems operate.

#### **Owner's Responsibilities**

Make certain the boat's pre-delivery service record has been completed and mailed to Carver. The pre-delivery service record is contained in the preface of this manual. Read and follow all OEM supplied materials. Complete and mail all OEM warranty cards. Review the Pre-Delivery Service procedure with your dealer. Read the Pre-Delivery Service Record. Be certain you sign a copy of the Pre-Delivery Service Record and retain a copy for your records.

At time of delivery, make a complete inspection of the boat and its systems. Document any work that needs to be completed by the dealer in order to meet the terms of your agreement. Read, understand and follow the Carver Owner's Guide and all materials contained within the Captain's Kit. Contact your dealer if you have any questions. Perform all maintenance in accordance with the operator and service guides.

## WARRANTY/PARTS INFORMATION

Many of the complex components (engines, generators, stoves, etc.) within your boat are warranted by their respective manufacturer. These companies have programs designed to resolve problems with their products. Your Carver Dealer can implement these services as required.

### **Warranty Registration**

A Carver Pre-Delivery Service Record is included in the beginning of this Owner's Guide. Registration of your boat and its engines is also required by the Federal Safe Boating Act of 1971. Your Carver Dealer will complete and mail your engine warranty cards as part of the Pre-Delivery Service procedure.

Many of the other complex components installed on your boat must also be registered with their respective manufacturer. Warranty cards have been assembled and are contained in the OEM SUPPLIED MATERIALS packet that is part of your Captain's Kit.

**ALL WARRANTY CARDS MUST BE COMPLETED AND FORWARDED TO THE APPROPRIATE COMPANY WITHIN 5 DAYS AFTER TAKING DELIVERY OF YOUR CARVER.**

### **Obtaining Warranty Service**

The following requirements must be met before warranty work can be performed on your boat:

- 1) Your boat must be registered with the Carver Boat Corporation. Registration is accomplished by completing and submitting the Pre-Delivery Service Record to the Carver Boat Corporation, P.O. Box 1010, Pulaski, WI 54162-1010.
- 2) Pre-Delivery Service must be completed by your Carver Dealer. Information concerning Pre-Delivery Service can be found in the preface of this manual. The Pre-Delivery Service Record must be signed by both the dealer and the owner.

Your Carver Dealer is the **ONLY** person authorized to approve warranty work. If warranty service is needed you **MUST** contact your Carver Dealer first. There are no exceptions to this policy.

Your Carver Dealership is staffed with knowledgeable professionals who are familiar with your boat and are capable of providing the highest level of service. The Carver Dealership service personnel will communicate with The Carver Boat Corporation to ensure you fast and satisfactory solutions to any problem that may arise.

## WARRANTY/PARTS INFORMATION

### **Second Owner Registration**

A "Second Owner Registration Card" has been provided in the beginning of this guide. The purchaser of a "pre-owned" Carver should complete this card and submit it to the Carver Boat Corporation, P.O. Box 1010, Pulaski, WI 54162-1010.

Registration of a "pre-owned" Carver does not extend or in any way modify a boat's original limited warranty. However, purchasers of a pre-owned Carver can and should register ownership with Carver. Having this information on file will benefit you should Carver ever need to contact you.

### **Hull Identification Number (HIN)**

The United States Coast Guard has established a universal system of numerically identifying vessels by using a hull identification number or "HIN." This number identifies a boat's make, model, hull number, month, and year of manufacture.

The HIN is found on a boat's transom. Look for it on the starboard side, just below the rub rail or on the transom platform.

Provide your Carver Dealer with your boat's HIN when contacting them for parts or service.

The HIN consists of 12 alpha or numeric characters.

A typical HIN for a 1995, 500 Cockpit will read CDR-E3010E596.

**CDR** = Signifies that the boat was made by the Carver Boat Corporation. Every boat manufacturer in the United States has their own three letter designation.

**E3** = Shows that the boat is a Carver model 500 Cockpit. Every different model made by Carver has its own two digit identifier.

**010** = These three positions indicate the boat's hull number. 010 shows that his boat was the tenth boat of this model manufactured during this model year.

**E** = This letter denotes the month the hull was molded. "A" signifies January, "B" February and so on.

**6** = This is the CALENDAR YEAR the boat was made. This boat was made in 1996.

**96** = These numbers show the MODEL YEAR of the boat.

Looking at our HIN example of CDR-M2001G696, we see that this boat is a Carver 500 Cockpit, is a 1996 model, and that the hull was molded in July 1994. This boat was the first one made as a 1996 model.

## WARRANTY/PARTS INFORMATION

### **Original Equipment Manufacturer (OEM) Manuals**

Carver Boat Corporation has purchased and installed a variety of equipment which was manufactured by OEM suppliers. Engines, stoves, refrigerators and air conditioners are examples of this type of equipment. The majority of Carver's suppliers have created operators and maintenance manuals for their products. This information has been assembled and supplied to you.

Virtually all of your boat's components have their own limited warranty. Warranty registration cards have been provided for those products. These are your materials. Use a colored highlighter to mark sections of the text that are of special interest. Be sure to supplement your guide with information on wiring or installation of additional equipment that you add to the boat during your period of ownership.

The Carver Owner's Guide and all component manuals are a permanent part of your boat. These materials must remain on the vessel during its operation. These materials must also be transferred to the boat's subsequent owners.

**NOTE: Information presented in OEM suppliers literature and manuals takes precedence over information presented in the Carver Owner's Guide. If there is a discrepancy between the Owner's Guide and an OEM supplier's manual, FOLLOW THE INSTRUCTIONS IN THE SUPPLIER'S MANUAL.**

Information contained within this Owner's Guide is the most accurate information available at the time of publishing. Carver reserves the right to change without notice materials, part numbers, specifications or system designs.

### **ORIGINAL EQUIPMENT (OEM) SUPPLIERS**

Your Carver Dealer is the best "first source" for answers when you have questions about any of your boat's equipment. If however your dealer is unable to help you, a call to the original manufacturer of the equipment may be in order.

A listing of Carver's OEM suppliers follows. Use this list to contact the manufacturer of a particular component with regard to operation, service and replacement parts. Be prepared to provide the serial number of the component when requesting information. A serial number record sheet for your boat appears after this Section.

## WARRANTY/PARTS INFORMATION

### ENGINES

Mercury Marine  
3003 N. Perkins Road  
Stillwater, OK 74074  
(414) 929-5000

Thermo-Electron / Crusader  
Corp.  
7100 E. 15 Mile Road  
Sterling Heights, MI 48312  
(313) 264-1200

Volvo Penta of N. America  
Building G  
Rockleigh, NJ 07647  
(201) 768-7300

Cummins Engine Company  
Box 3005  
Columbus, IN 47202  
800-472-8283 (Wisconsin  
only)  
(414) 768-7400

Caterpillar Tractor Company  
100 N.E. Adams  
Peoria, IL 61629  
1-800-447-4986  
Illinois (309) 673-3252

### DRIVE SYSTEMS

Walters Machine Company  
84 - 98 Cambridge Ave.  
Jersey City, NJ 07307  
(201) 656-5654

Warner Gear  
Division of Borg-Warner Cor-  
poration  
P.O. Box 2688  
Muncie, IN 47302  
(317) 286-6100

### GENERATORS

Kohler Generators / Kohler  
Company  
Kohler, WI 53044  
(414) 565-3381

Onan Corporation  
1400 73rd Ave. N.E.  
Minneapolis, MN 55432  
(612) 574-5000

Westerbeke Corporation  
Avon Industrial Park  
Avon, MA 02322  
(617) 588-7700

### FUEL FILTERS

Racor Industries, Inc.  
P.O. Box 3208  
Modesto, CA 95353  
(209) 521-7860

### STEERING SYSTEMS

Hynautic Marine Systems  
1579 Barber Road  
Sarasota, FL 34240  
(813) 379-0500

Teleflex Steering Systems  
640 N. Lewis Road  
Limerick, PA 19468  
(215) 495-7011

### HEADS

SeaLand Technology Inc.  
P.O. 38, 201 Wayne Street  
Big Prairie, OH 44611  
(216) 496-3211

Raritan Engineering Corp.  
530 Orange Street  
P.O. Box 1157  
Millville, NJ 08332  
(609) 825-4900

### WATER HEATERS

Sea Ward Products  
P.O. Box 566  
LaPuente, CA 91747  
(818) 968-2117

### ENTERTAINMENT EQUIP- MENT

JVC Service & Engineering  
Company of America  
Division of JVC Corporation  
2250 Lively Blvd.  
Elk Grove Village, IL 60007  
(708) 364-0880  
1-800-537-5722

Sentrek Industries Ltd.  
751 Racquet Club Drive  
Addison, IL 60101  
(312) 628-6767

Pandor Corporation  
125 Cabot Court  
Hauppauge, NY 11783  
(516) 434-1200  
(Maxxima Stereo)

Kenwood U.S.A Corporation  
550 Clark Drive  
Mount Olive, NJ 07828  
(201) 691-5600

### BATTERY CHARGERS

Professional Mariner  
1565 Callens  
Ventura, CA 93003  
(805) 644-1886

Guest Corporation  
130 Shield Street  
West Hartford, CT 06110  
(203) 525-5318

## WARRANTY/PARTS INFORMATION

### REFRIGERATORS & ICE MAKERS

Norcold Inc.  
Division of Stolle Co.  
P.O. Box 180  
Sidney, OH 45365  
1-800-543-1219

Nova Kool Mfg. Inc.  
239 East 1st. Street  
North Vancouver, B.C.  
Canada, V7L1B4  
(604) 984-7764

U-Line Corporation  
8900 North 55th Street  
P.O. Box 23220  
Milwaukee, WI 53223  
(414) 354-0300

General Electric Company  
Consumer Affairs Dept.  
Appliance Park  
Louisville, KY 40225  
1-800-626-2000

### RANGES & MICROWAVES

SeaWard Products Inc.  
15600 Salt Lake Ave.  
City of Industry, CA 91745  
(818) 968-2117  
(Optimus Princes Stove)

Kenyon Marine  
Guilford, CT 06437  
(203) 453-4374

Origo U.S.A. Inc.  
1121 Lewis Avenue  
Sarasota, FL 34237  
(813) 365-3660

Riccar America Corporation  
Major Appliance Division  
3184 Pullman Street  
Costa Mesa, CA 92626  
(714) 669-1760

### AIR CONDITIONERS

Marine Air Systems  
2000 N. Andrews Ave.  
Pompano Beach, FL 33069  
(305) 973-4414

### TRIM TABS

Bennett Marine Inc.  
550 N.W. 12th Avenue  
Deerfield Beach, FL 33442  
(305) 427-1400

Boat Leveler Company  
7305 Natural Bridge  
St. Louis, MO 63121  
(314) 385-7470

### MISCELLANEOUS ACCES- SORIES

Teleflex Marine, Inc.  
1816 57th Street  
Sarasota, FL 33580  
(813) 355-7721  
(instruments & controls)

VDO Yazaki Corp.  
188 Brooke Road  
Winchester, VA 22603  
(703) 665-0100  
(gauges)

Guest Co. Inc.  
48 Elm Street  
Meriden, CT 06450  
(203) 238-0550

Morse Controls - INCOM  
21 Clinton Street  
Hudson, OH 44236  
(216) 653-9161  
(controls, throttle & shift  
cables)

Sparton Manufacturing Com-  
pany  
P.O. Box 399  
Flora, IL 62839  
(618) 662-2101

ITT Jabsco  
1485 Dale Way  
Costa Mesa, CA 92626  
(714) 545-8251  
(7" & 8" spotlights)

Datamarine International,  
Inc.  
53 Portside Drive  
P.O. Box 1030  
Pocasset, MA 02559  
(617) 563-7151

E.S. Ritche & Sons Inc.  
243 Oak Street  
P.O. Box 548  
Pembroke, MA 02359  
(617)826-5131

Alson Corporation  
42 Union Street  
Hillsdale, MI 49242  
517-439-1411  
(shower controls)



## WARRANTY/PARTS INFORMATION

### **Serial Number listings**

## WARRANTY/PARTS INFORMATION

### SPECIFICATIONS

#### Physical Measurements

**Length Overall (LOA) with swim platform:** 50' / 15,24 m

**Beam:** 15'4" / 4,67 m

**Bridge Clearance:** 15'11" / 4,85 m

**Draft:** 55" / 1,40 m

**Weight (with fuel and water):** 36,000 lbs. / 16329,60 kg

**Water:** 200 gal. / 757,08 liters

**Hot Water:** 20 gal. / 75,71 liters

**Waste:** 78 gal. / 295,26 liters

**Fuel:** 680 gal. / 2574,07 liters

A draft of 55" (1,40 m) has been calculated based upon the boat's 36,000 lb

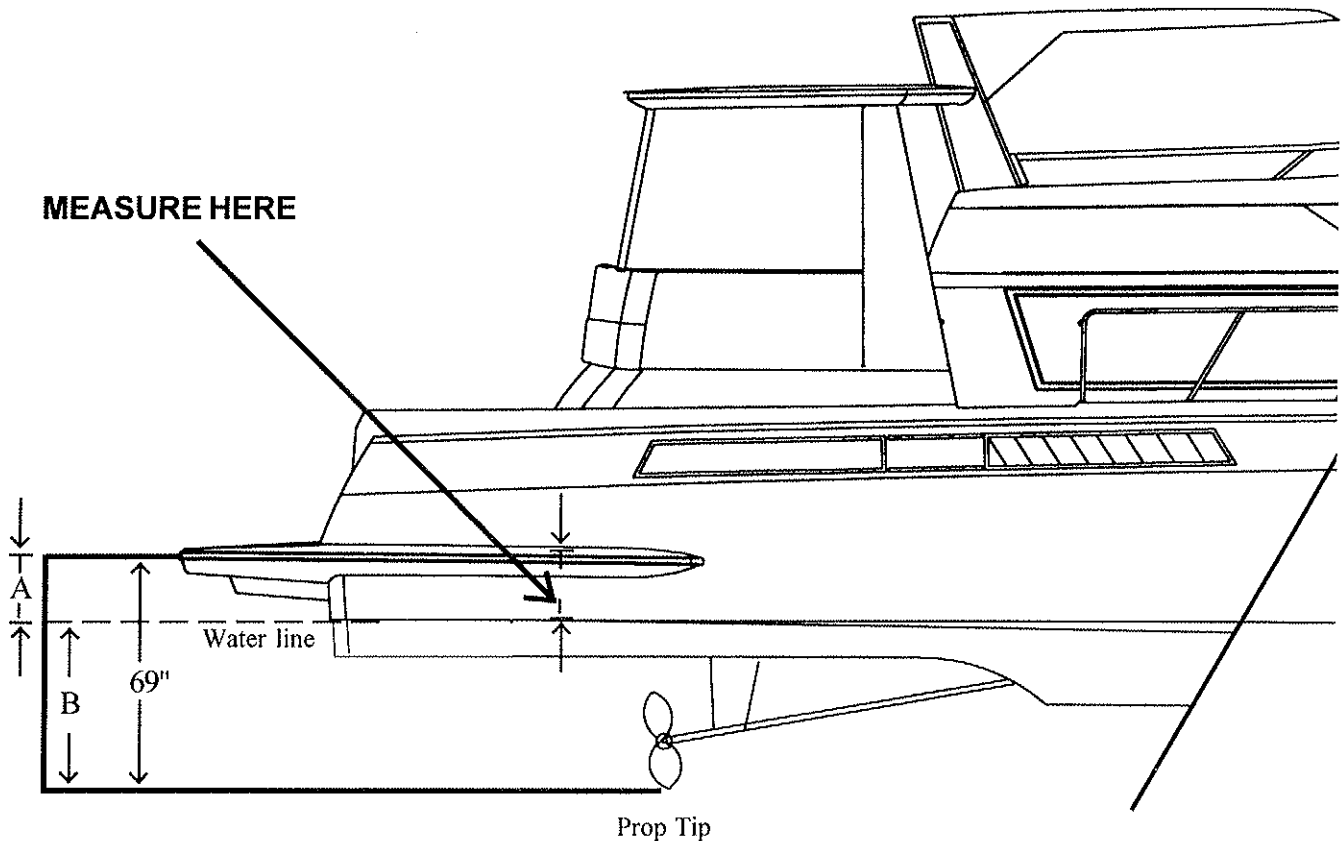
## WARRANTY/PARTS INFORMATION

### Determining Your Boat's Draft

1. Measure the distance from the bottom edge of the swim platform's rub rail to the water line. Refer to the drawing for the proper place along the hull to measure. Measure both the port and starboard sides.
- 2) Locate the smaller of the two measurements you have taken on column "A" on the chart below. Read the draft of your boat in column "B."

### DRAFT CONVERSION

"A"	"B"
10" (25,4 cm)	59" ( 149,86 cm)
12" (30,48 cm)	57" ( 144,78 cm)
14" (35,56 cm)	55" ( 139,7 cm)
16" (40,64 cm)	53" ( 134,62 cm)
18" (45,72 cm)	51" ( 129,54 cm)
20" (50,8 cm)	49" ( 124,46 cm)
22" (55,88 cm)	47" ( 119,38 cm)
24" (60,96 cm)	45" ( 114,3 cm)



## WARRANTY/PARTS INFORMATION

**Dry Weight:** 36,000 lbs / 16329,60 kg

Dry weight does not include fuel, water, optional equipment, food, beverages, safety gear or anything else a family is likely to have aboard their boat. The actual weight of your boat will be greater than the dry weight figure listed here.

The approximate weight of your boat can be estimated when the actual draft is known. It will require approximately 4,050 lbs (1837,08 kg) to increase a 500 AFT CABIN'S draft by 1" (2,54 cm). If a 500 COCKPIT draws 55" (139,70 cm) at its "dry" weight of 36,000 lbs (16329,60 kg), a boat that draws 57" (142,24 cm) will weigh approximately 44,100 lbs (20003,76 kg).

$57'' - 55'' = 2'' \times 4050 \text{ lbs} = 8100 \text{ lbs} + 36,000 \text{ lbs} = 44,100 \text{ lbs est. total weight}$

$(144,78 \text{ cm} - 139,70 \text{ cm} = 5,08 \text{ cm} \times 1837,08 \text{ kg} = 3674,16 \text{ kg} + 16329,60 \text{ kg} =$

$20003,76 \text{ kg est. total weight.})$

We can't over emphasize that this computation is for estimating purposes only. Use it to generate a rough approximation of your boat's total weight.

The 4050 lbs (1837,08 kg) figure used for this draft/weight computation is unique to the shape of the 500 COCKPIT'S hull. You can not use this figure on boats other than the 500 COCKPIT.

### **Tank Capacities**

#### **Fuel Capacity**

Standard Tanks = 680 U.S. Gallons / 2574,07 liters

#### **Water Capacity**

Fresh Water = 200 U.S. Gallons / 757,08 liters

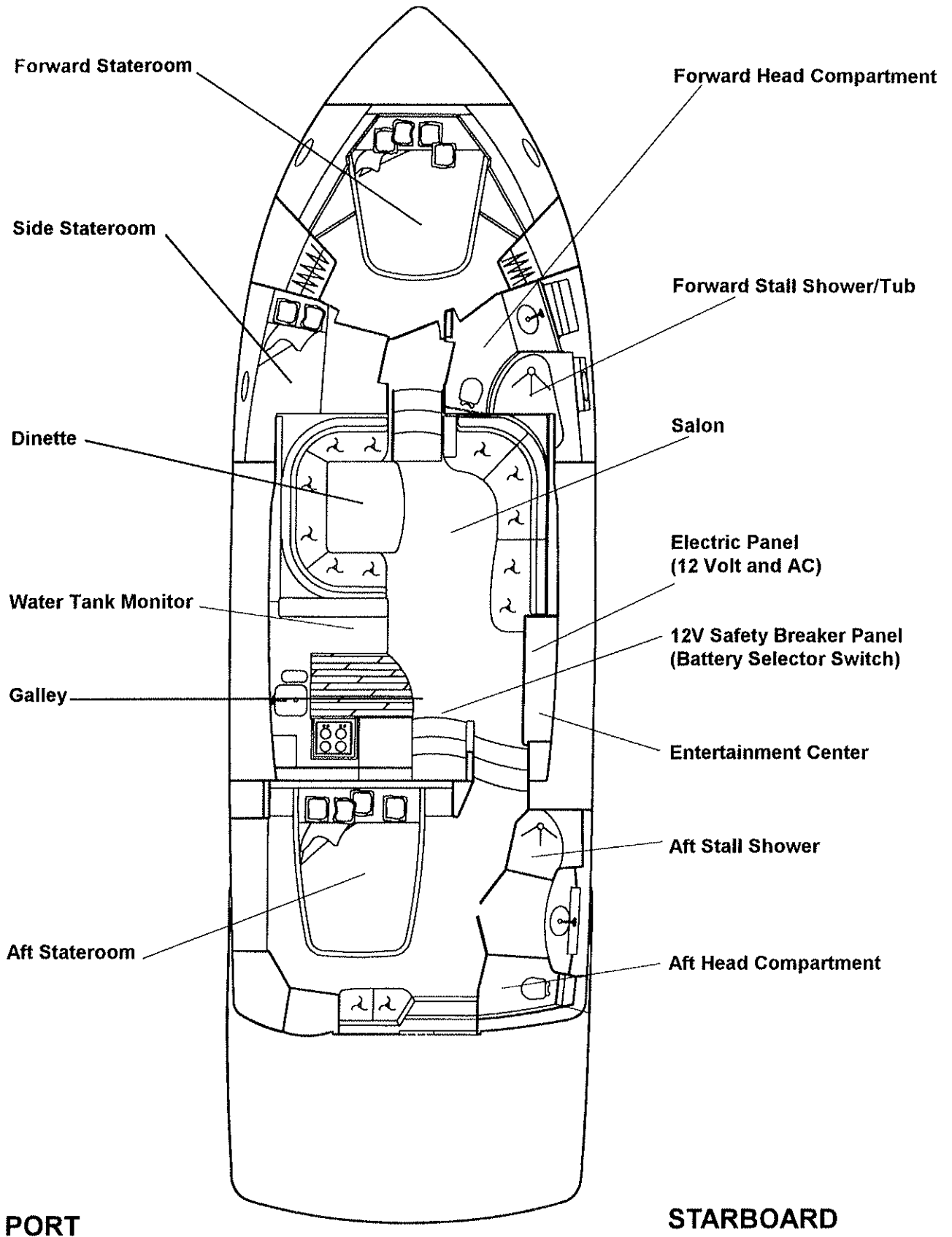
Hot Water = 20 U.S. Gallons / 75,70 liters

#### **Sanitation System**

Waste Holding Tank = 78 U.S. Gallons / 295,26 liters

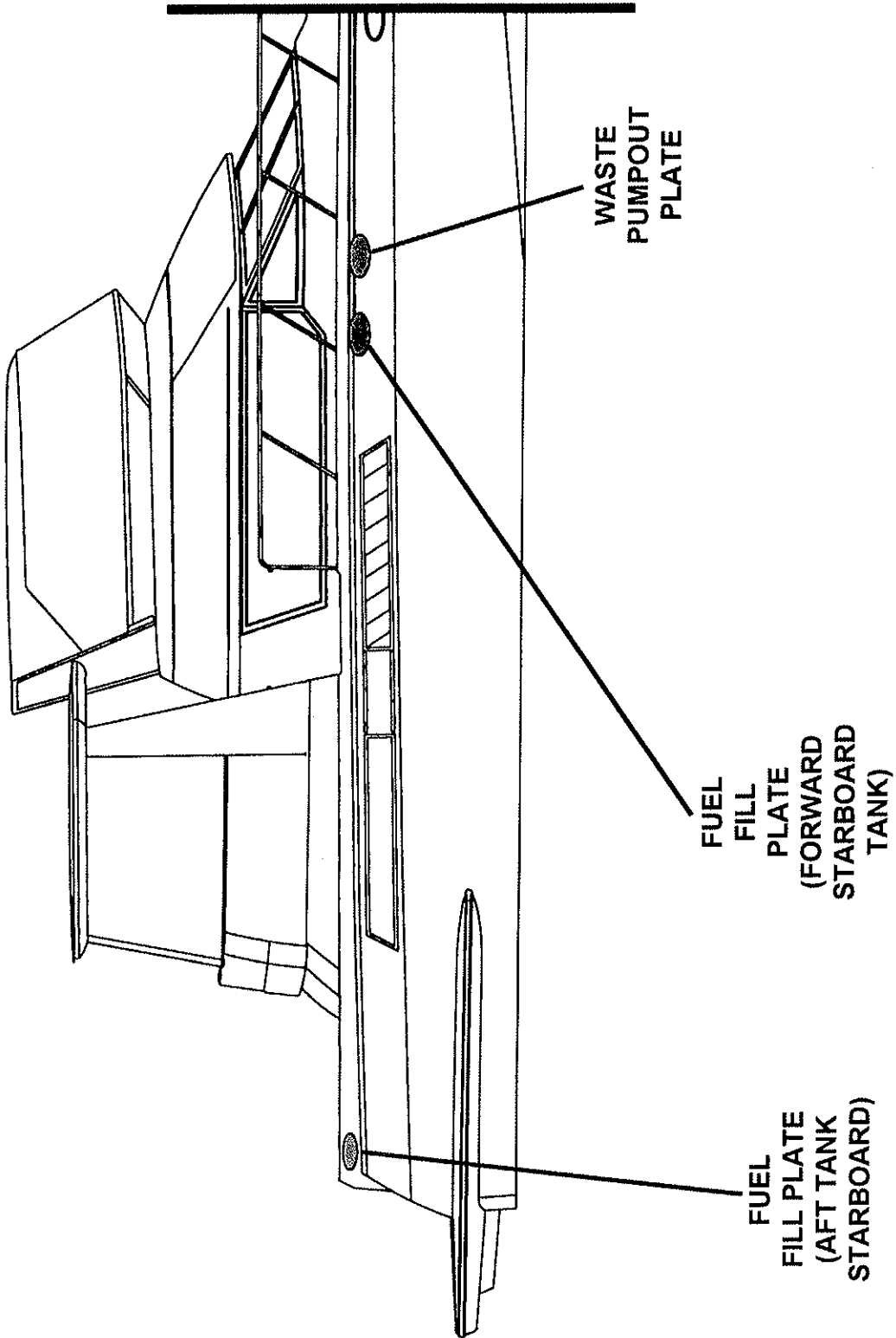
**WARRANTY/PARTS INFORMATION**

**Interior/Cabin Layout**



WARRANTY/PARTS INFORMATION

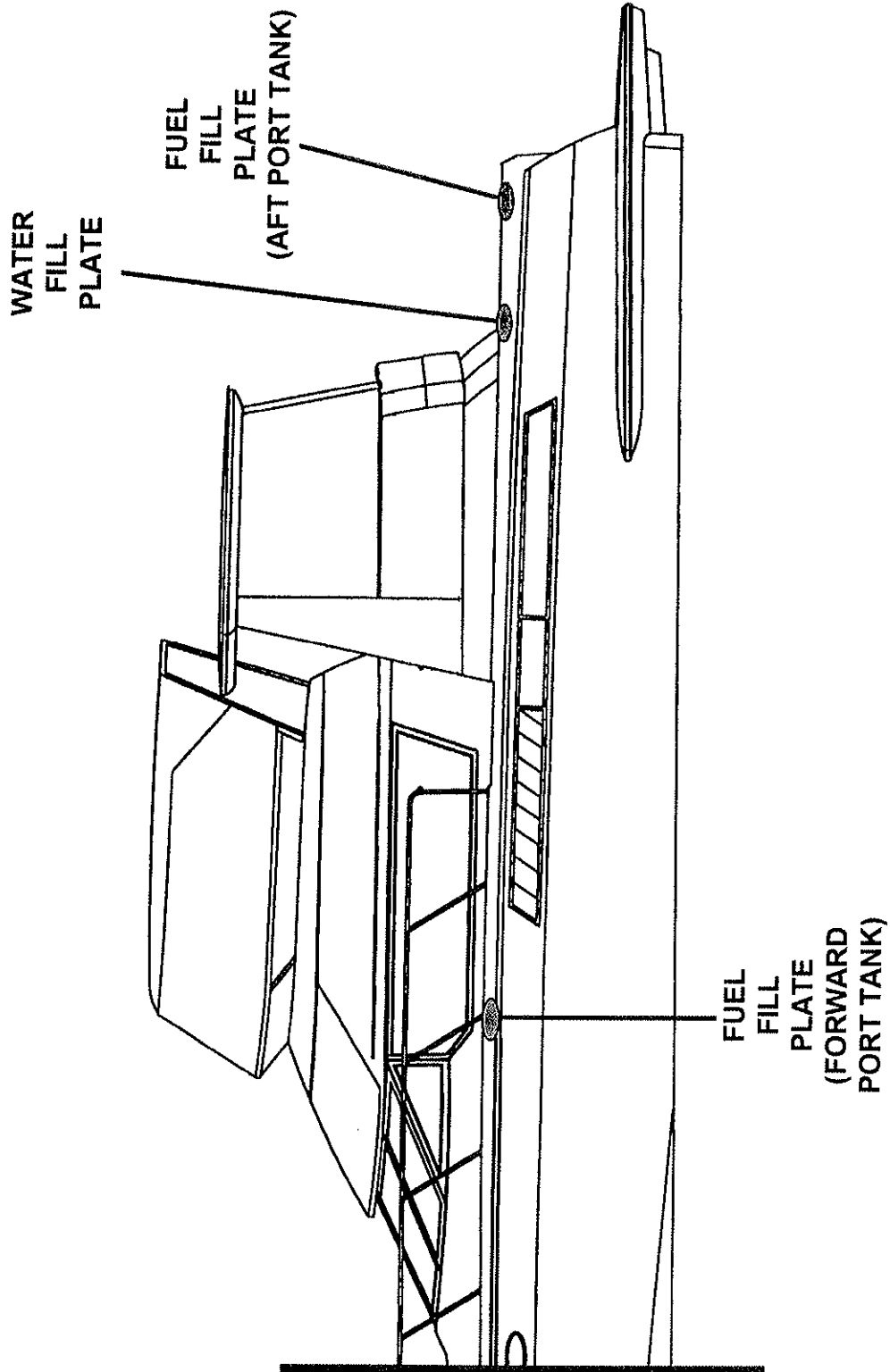
Fill Plate/Pumpout Locations (Starboard)



STARBOARD VIEW

**WARRANTY/PARTS INFORMATION**

**Fill Plate Locations (Portside)**

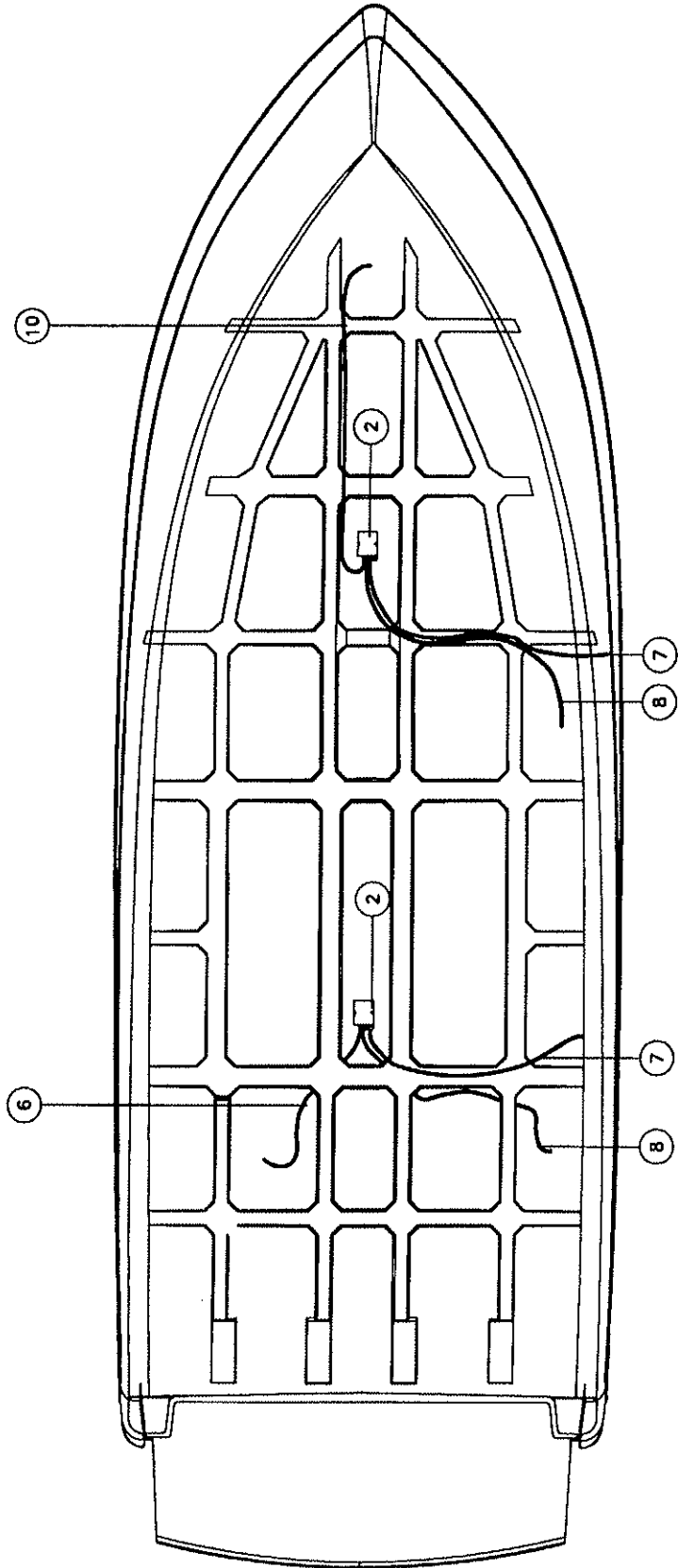


**PORTSIDE VIEW**

# WARRANTY/PARTS INFORMATION

## Shower Sump Layout

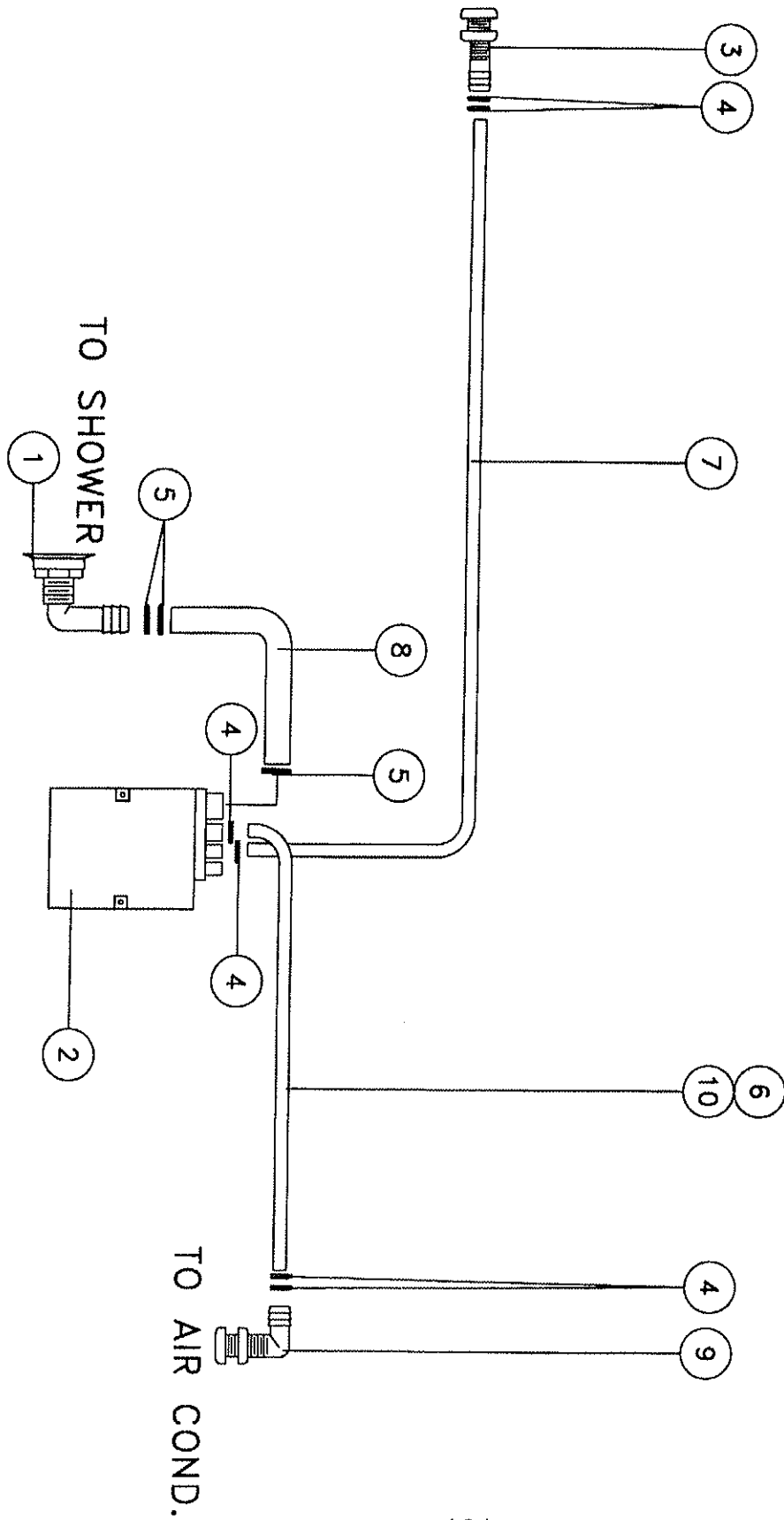
ITEM	QTY	DESCRIPTION	PART NO	OPTION
1	2	DRAIN: SHOWER 1 1/2" 100DG	6125900	STD
2	2	SUMP: SHOWER PUMP SYSTEM	6501400	STD
3	2	THRU HULL: 3/4" 90DEG WHITE	7408300	410=Y
4	12	CLAMP: HOSE #10	7500400	STD
5	6	CLAMP: HOSE #28	7500600	STD
6	1	HOSE: BILGE EX HD 3/4" x 8'	7509600	410=Y
7	2	HOSE: BILGE EX HD 3/4" x 14'	7509600	STD
8	2	HOSE: DRAIN HD 1 1/2" x 12'	7506600	STD
9	2	THRU HULL: 3/4" WHITE	7125200	STD
10	1	HOSE: BILGE EX HD 3/4" x 12'	7509600	410=Y





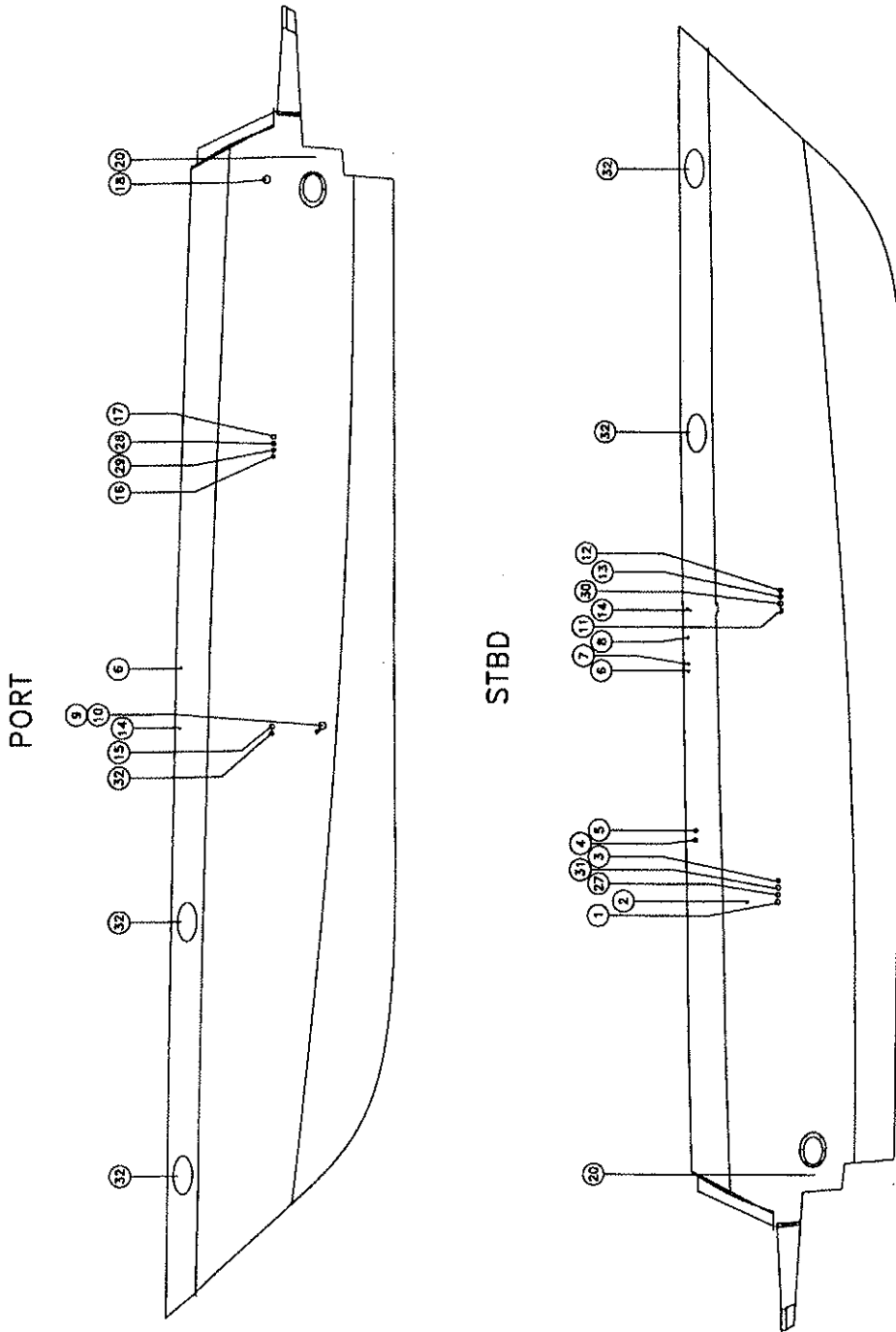
**WARRANTY/PARTS INFORMATION**

**Shower Sump Layout**



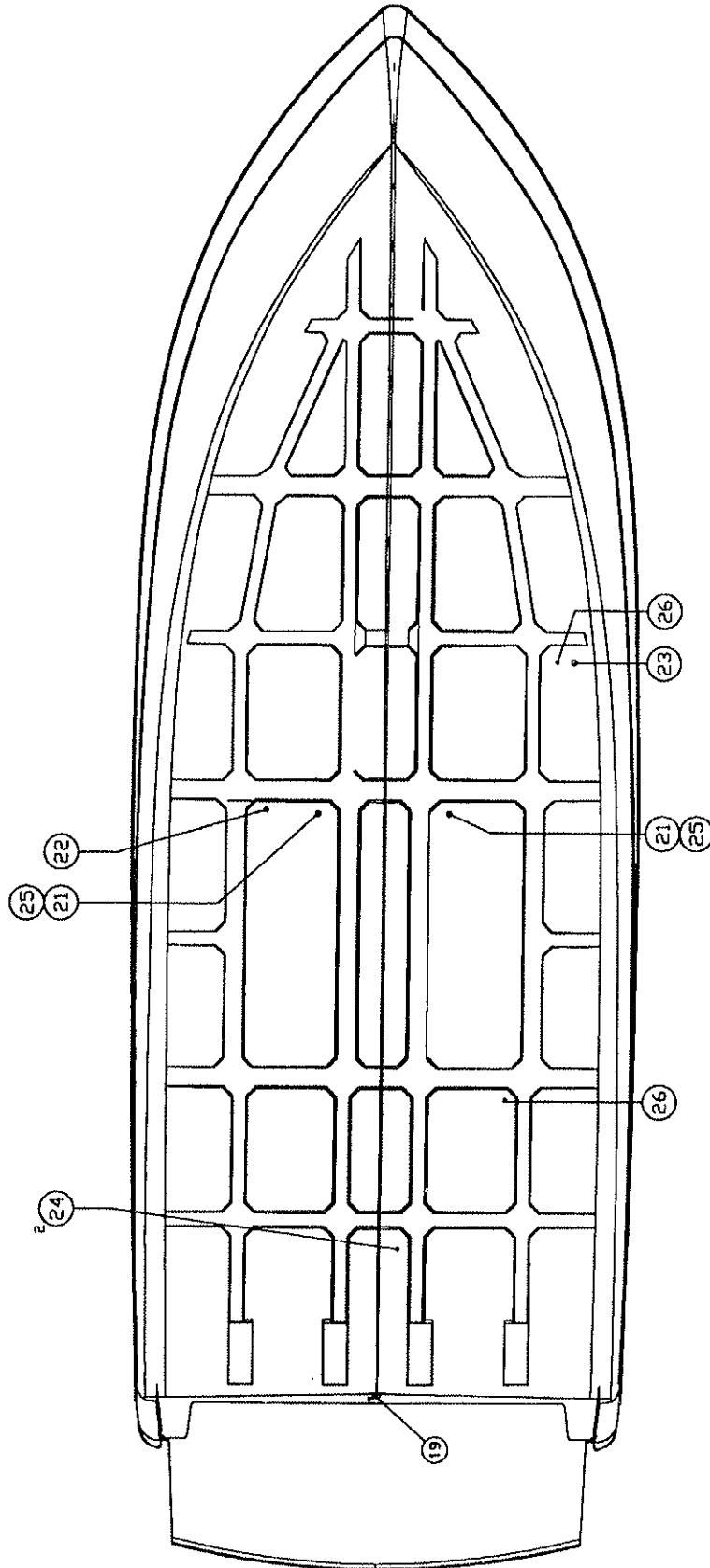
# WARRANTY/PARTS INFORMATION

## Above Waterline Thru-Hull Fittings



# WARRANTY/PARTS INFORMATION

## Below Waterline Thru-Hull Fittings



## WARRANTY/PARTS INFORMATION

### Thru-Hull Fittings

ITEM	QTY	DESCRIPTION	PART #	HOLE #	PART NO	OPTION
1	1	MID BILGE PUMP	1 1/8"	1 3/8"	7408400	STD
2	1	AFT HOLDING TANK VENT	5/8"	7/8"	7408200	160=N
3	1	AFT SHOWER SUMP	3/4"	1 1/8"	7408300	141=N
4	1	AFT HEAD EXHAUST VENT	3/4"	3 1/4"	6505500	STD
5	1	FWD HEAD EXHAUST VENT	3/4"	3 1/4"	6505500	STD
6	2	FUEL TANK VENT	5/8"	3/4"	6002400	STD
7	1	OVERBOARD DISCHARGE VENT	5/8"	7/8"	7408200	162,163=Y
8	1	FWD HOLDING TANK VENT	5/8"	7/8"	7408200	160=N
9	1	GENERATOR EXHAUST (GAS)	1 1/2"	1 7/8"	5108800	189=Y
10	1	GENERATOR EXHAUST (DIESEL)	2"	2 3/8"	5108900	212=Y
11	1	FWD BILGE PUMP	1 1/8"	1 3/8"	7408400	STD
12	1	FWD A/C DISCHARGE	3/4"	7/8"	7408200	410=Y
13	1	FWD SHOWER SUMP	3/4"	1 1/8"	7408300	141=N
14	2	WATER TANK VENT	5/8"	3/4"	6002800	STD
15	1	MID A/C DISCHARGE	5/8"	7/8"	7408200	410=Y
16	1	AFT A/C DISCHARGE	5/8"	7/8"	7408200	410=Y
17	1	GALLEY SINK DRAIN	1 1/2"	1 7/8"	7408500	141=N
18	1	AFT BILGE PUMP	1 1/8"	1 3/8"	7408400	STD
19	1	GARBOARD DRAIN	1 1/4"	1 1/8"	7146700	956=Y
20	1	ENGINE EXHAUST (DIESEL)	-----	JIG	5132000	955=Y
21	2	ENGINE PICKUPS (GAS)	1 1/4"	1 3/4"	5100800	956=Y
22	1	GENERATOR PICK-UP	3/4"	1 1/8"	7109400	212=Y
23	1	OVERBOARD DISCHARGE	1 1/2"	1 7/8"	7109500	160,162,163=Y
24	1	A/C PICKUP	3/4"	1 1/8"	5104900	410=Y
25	2	DSL ENGINE PICK-UP	2"	2 3/8"	5127100	955=Y
26	2	RAW WATER PICK-UP	3/4"	1 1/8"	7109400	284=Y
27	1	WASHER/DRYER	1 1/4"	1 3/8"	7103800	250=Y
28	1	WET BAR	3/4"	1 1/8"	7408300	141=N
29	1	FOOT WELL DRAIN	3/4"	1 1/8"	7408300	STD
30	1	HEAD SINK (FWD)	1 1/8"	1 3/8"	7408400	141=N
31	1	HEAD SINK (AFT)	1 1/8"	1 3/8"	7408400	141=N
32	4	PRTHL: OVAL S.S.	JIG	JIG	7326300	STD
33	1	MID A/C COND.	5/8"	7/8"	7408200	410=Y

## WARRANTY/PARTS INFORMATION

### UNDER WATER GEAR

#### Propellers

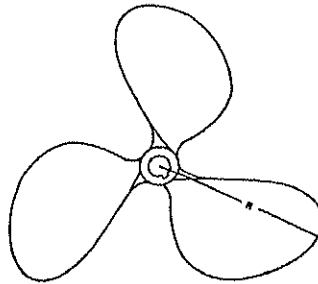
Your 500 COCKPIT is equipped with two propellers. These props are counter rotating to provide maximum maneuverability and efficiency. Each prop is designated for either right hand or left hand rotation.

Propellers come in a wide variety of shapes and sizes to meet the needs of different performance requirements. The actual size and type of propeller used on your boat has been listed on the Pre-Delivery Service Record and the Select Bills of Material that follows this section.

A basic knowledge of how a propeller works will allow you to better understand the terminology used to describe the aspects of propeller performance.

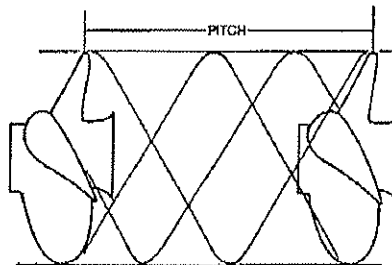
#### Diameter

Diameter is twice the distance from the center of the prop shaft to the extreme tips of the propeller blades. Increasing or decreasing the diameter of a prop will have a direct bearing on the RPM that the engines will be capable of developing. This is because changing the blade size changes the amount of blade surface that comes into contact with the water.



#### Pitch

Pitch is a measure of the helix angle (or angle of attack) of the rotating blade. Pitch can be better understood by imagining the propeller rotating through a semisolid such as butter. The distance (in inches) the propeller will travel in one revolution corresponds to the prop's pitch. Increasing or decreasing pitch will have a direct bearing on engine RPM. Increasing the prop's pitch will allow it to take a bigger "bite", increasing the load on the engine and lowering engine RPM.



## **WARRANTY/PARTS INFORMATION**

### **Prop Slip**

A propeller operating in a low viscosity fluid such as water is subject to a certain amount of slip. The difference between a prop's theoretical "bite" and its actual "bite" is referred to as prop slip.

Prop slip is expressed as a percent of the computed theoretical speed. Twenty-five to thirty-five percent slip is quite common for a large boat operating at normal cruising speed.

Changing either the diameter or pitch of a prop will have an effect on engine speed and prop slip. The propellers that Carver has selected and included with your boat will provide the best overall performance and efficiency under normal conditions and loads. This has been determined by data obtained through on-water testing.

Under normal conditions the engines should turn within the RPM range listed by the engine manufacturer. If the engines exceed this range a change in prop diameter or pitch may be required. Changes to your boat's propellers should only be made by a qualified individual. See your Carver Dealer before changing or making adjustments to your boat's propellers.

### **Rudder Assembly**

Rudders are used to control the direction of the boat while underway. Your boat uses two rudders. These two rudders are connected to your boat's steering system through the rudder shafts, tiller arm and tiller tie bar. Rudder movement is controlled through the boat's hydraulic steering system.

The rudder shaft enters the hull of the boat through a rudder port. This port uses a compressed teflon impregnated flax packing to seal the entry of the rudder shaft. It is normal for a drop or two of water to seep through the rudder port every couple of minutes. Tightening the hex nut on the top of the rudder port will reduce water seepage in cases where seepage increases beyond acceptable levels.

### **Propeller Shaft and Shaft Log Assembly**

#### **Propeller Shaft**

The propeller shaft connects the propeller to the engine output shaft. This shaft is made of a special stainless steel material to exact tolerances. A shaft that is not straight or in perfect balance will create vibrations that may damage certain propulsion system components. The propeller shaft **MUST** be properly aligned between the engine output flange, shaft log and struts in order for it to rotate smoothly. Your Carver Dealer aligned your boat's propeller shafts as part of the Pre-Delivery Service. We recommend that you have your Carver Dealer check the shaft alignment after your engines have been run for 25 hours. Alignment must also be checked on an annual basis and every time the boat is lifted and launched.

## WARRANTY/PARTS INFORMATION

Proper and precise shaft alignment is critical and should be left in the hands of an experienced marine technician. Once a shaft has been damaged, usually through an unintentional grounding, it is very difficult if not impossible to repair. Carver recommends replacing damaged shafts in lieu of attempted repairs.

### **Shaft Log**

The propeller shaft extends through the hull of the boat through a water tight fitting called a shaft log. This shaft log is packed with teflon impregnated flax packing material that is 1/2" in diameter. The packing minimizes the flow of water through the shaft log. It is normal for water to seep between the shaft and the flax packing especially while underway. A properly packed and adjusted shaft log will allow water to drip 3-4 times per minute while the shaft is turning.

Proper performance of the shaft log is directly dependent upon proper propeller shaft alignment. Repeated shaft log leakage, packing nuts becoming loose, packing failure, shaft log assembly damage and many other related problems are usually the result of a misaligned propeller shaft.

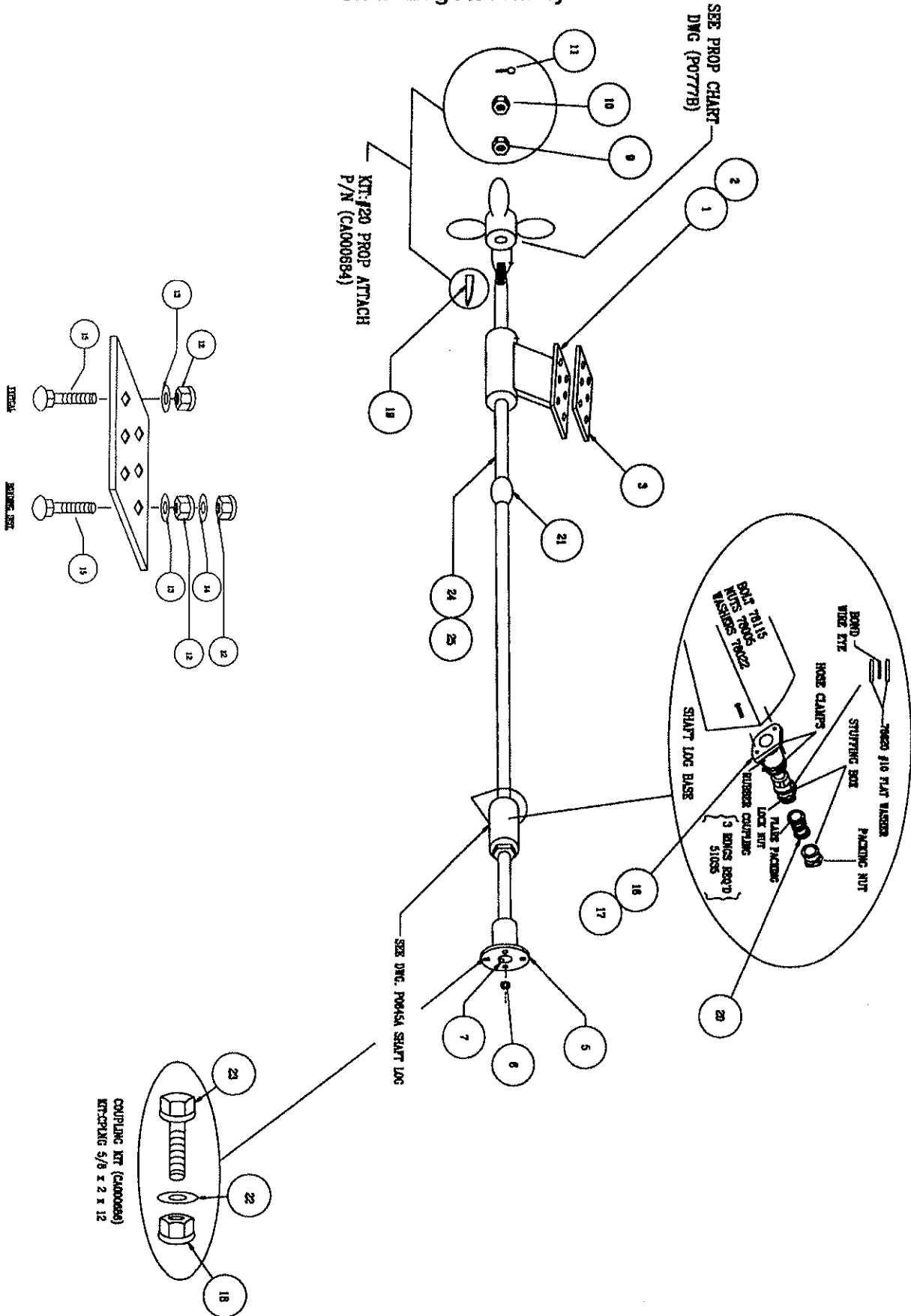
### **Strut Assembly**

Struts are fastened to the boat's hull and are used to support the propeller shaft. The 500 COCKPIT uses 90° struts. Using 90° struts allows a strut to be used on either the port or starboard side of the boat. This makes carrying a spare strut easier and more economical.

A rubber bearing within each strut provides a smooth surface for the propeller to rotate. Periodic lubrication of these bearings with an oil made for rubber will help keep the rubber surface from cracking.

# WARRANTY/PARTS INFORMATION

## Shaft Log Assembly





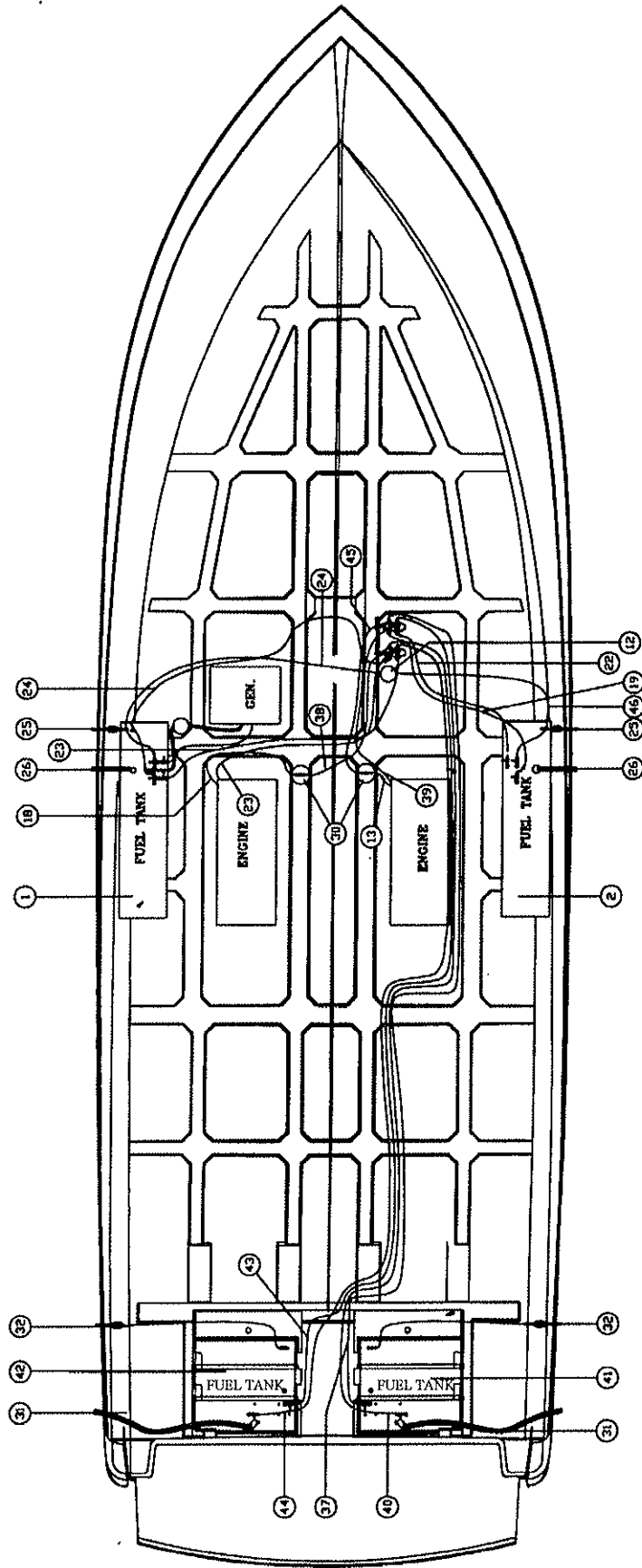
## WARRANTY/PARTS INFORMATION

### Shaft Log Assembly

ITEM	QTY	PART NO	DISCRPTION
1	2	5105804	STRUT:4007 2' MAIN
2	2	5105803	STRUT:4007 2-1/4" MAIN
3	2	5105808	PLT:BACKG STRUT 4007
4	2		INTERM 1 3/8",12 1/4" STRUT
5	2	5134200	CPLNG:TAPERED ZF 301 2'
6	2	5134202	NUT:NYLOCK F2-14 SHFT
7	2	5149700	KEY:1/2 x 3-1/2 COUPLING
8	2		
9	2	5149800	NUT:1-1/2"-6 HVY HEX BRAS
10	2	5149900	NUT:1-1/2"-6 HVY HEX JAM
11	2	5135400	PIN:3/16 x 2-1/2 SS COTTER
12	16		3/8-16 PIN HEX NUT SIL BRZ
13	16		3/8 BRASS FLT WASHER
14	12		BONDING WIRE EYE
15	16		3/8-16 X 3 SIL BRZ CARR BOLT
16	1	5110904	SHFTLG:PSS 2-1/4 x 4 HS
17	1	5110903	SHFTLG:PSS 2 x 3 HS
18	8	7812000	NUT:5/8-18 HEX GRD8 CORR
19	2	5150100	KEY:1/2 x 4 1/2SHAFT
20	2		1/4 TFE IMPREGNATED PKG
21	2	5106200	ZINC:2' ELECTRL COLLAR
22	8	7872100	WASHER:5/8 LOCK CORR RES
23	8	7872000	BOLT:5/8-18 x 2 HH GRD8 SPC
24	1	5105807	SHFT:2' x 120" DBL TAPER
25	1	5105802	SHFT:2-1/4" x 123" DBL TAPER

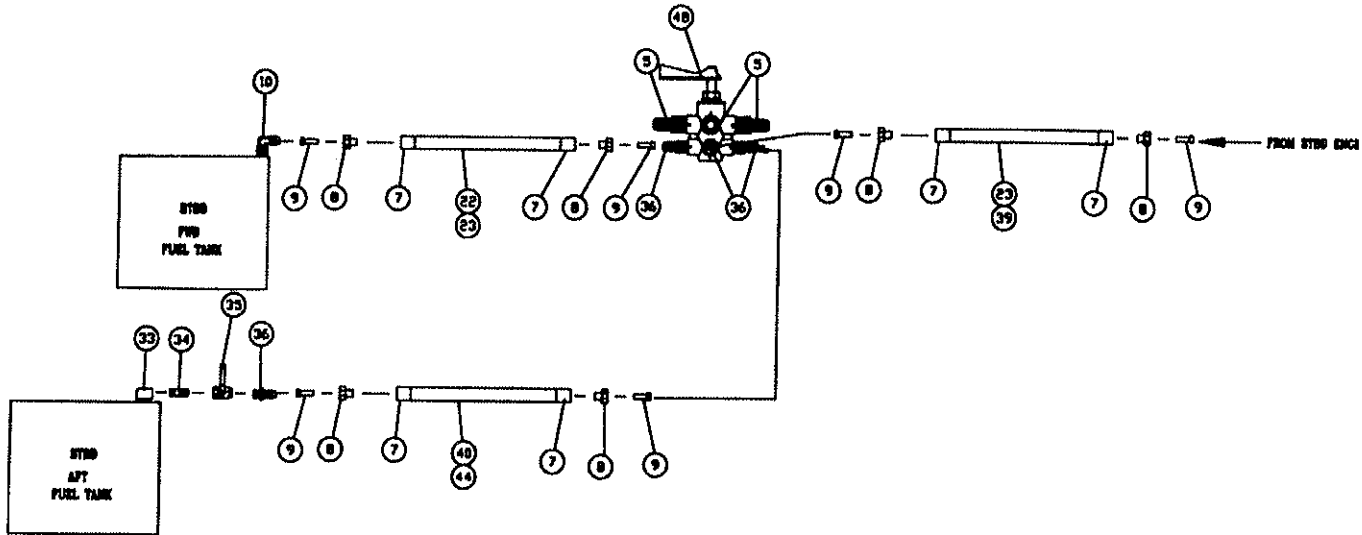
# WARRANTY/PARTS INFORMATION

## Fuel System (DIESEL)

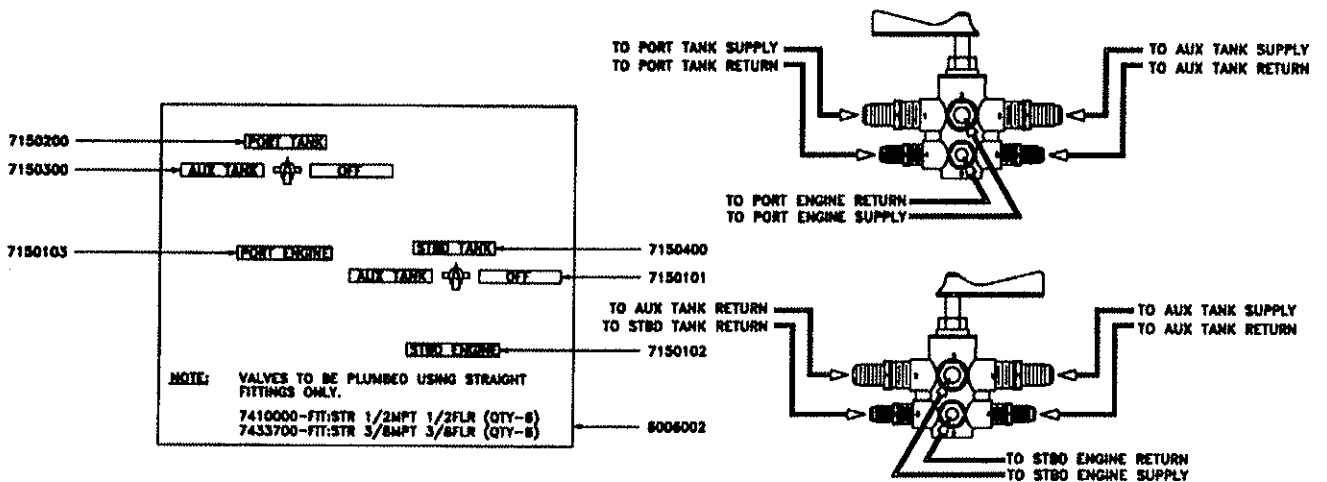


# WARRANTY/PARTS INFORMATION

## Fuel System (DIESEL)

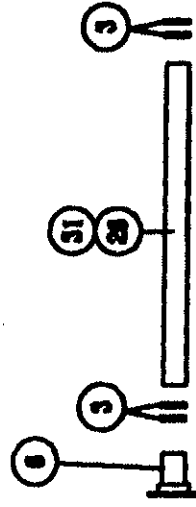
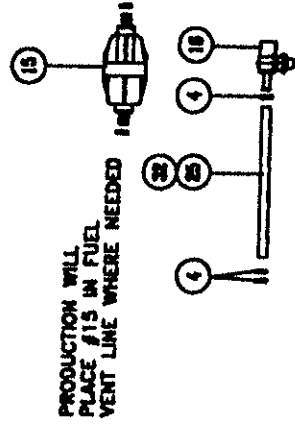
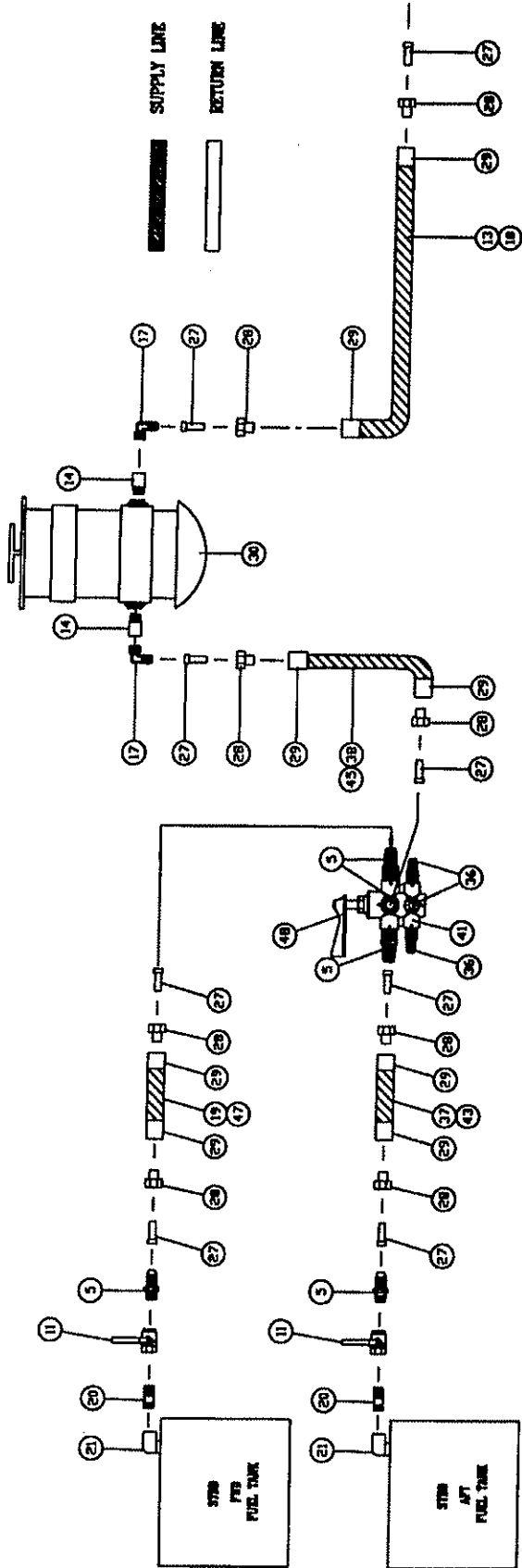


**TYPICAL RETURN FUEL LINE INSTALLATION**



# WARRANTY/PARTS INFORMATION

## Fuel System (DIESEL)

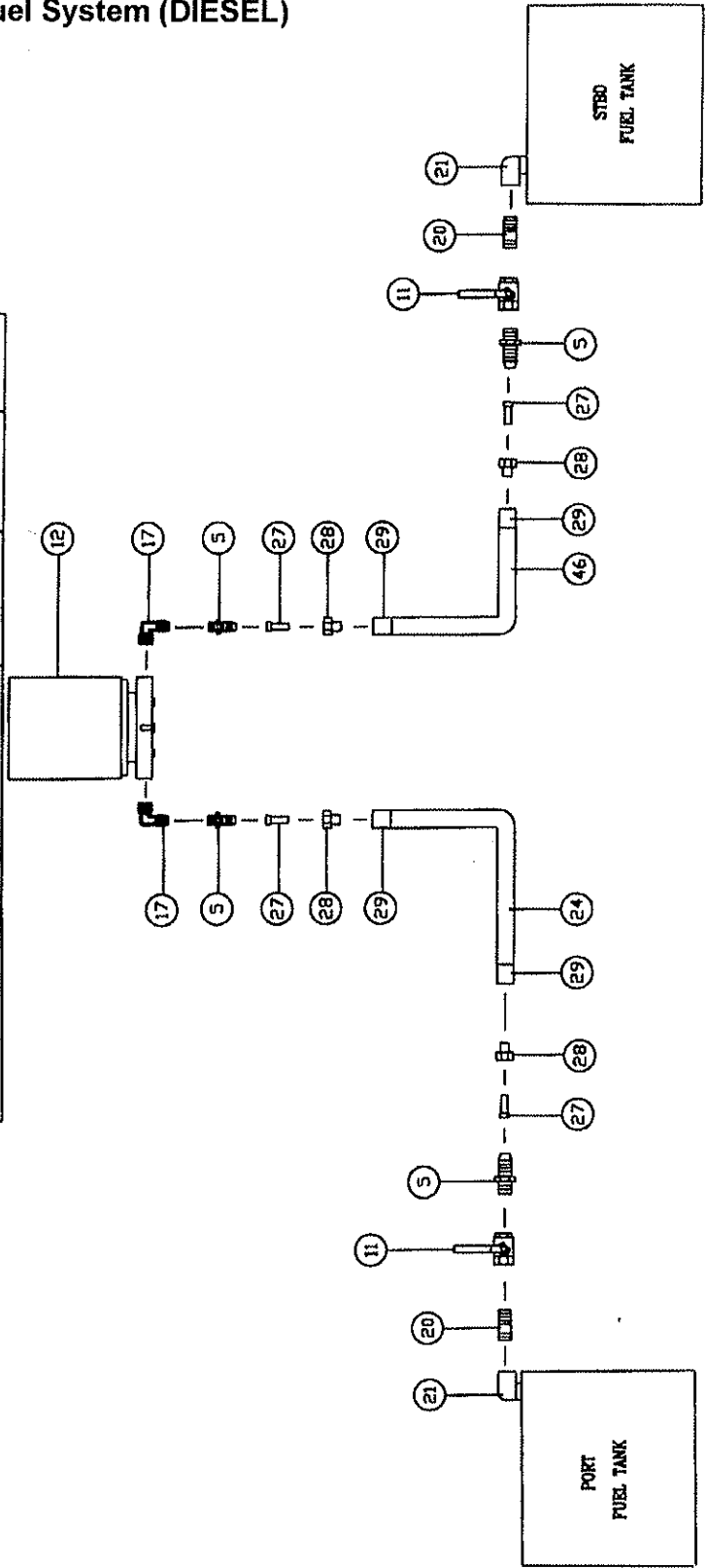


PRODUCTION WILL PLACE #15 IN FUEL VENT LINE WHERE NEEDED

# WARRANTY/PARTS INFORMATION

## Fuel System (DIESEL)

FUEL LINE LENGTHS				
TANK LOCATION	DIRECTION	LENGTH	P/N	ITEM
PORT AFT	SUPPLY TO VALVE	1/2" x 35'	A0018098	43
	RETURN TO VALVE	3/8" x 36'	A0018098	44
STBD AFT	SUPPLY TO VALVE	1/2" x 34'	A0018099	37
	RETURN TO VALVE	3/8" x 34'	A0018101	40
PORT FWD	SUPPLY TO VALVE	1/2" x 17'	A0015695	47
	RETURN TO VALVE	3/8" x 18'	A0013219	23
STBD FWD	SUPPLY TO VALVE	1/2" x 12'	A0000058	19
	RETURN TO VALVE	3/8" x 12'	A0000027	22
PORT	TO TRANSFER PUMP	1/2" x 20'	A0018025	24
	TO TRANSFER PUMP	1/2" x 9'	A0000060	46
STBD	VALVE TO STRAINER	1/2" x 13'	A0013753	38
	STRAINER TO ENGINE	1/2" x 8'	A0017355	18
PORT	VALVE TO ENG. RET.	3/8" x 18'	A0013219	23
	VALVE TO STRAINER	1/2" x 14'	A0014157	45
STBD	STRAINER TO ENGINE	1/2" x 5'	A0010062	13
	VALVE TO ENG. RET.	3/8" x 17'	A0016003	39



FUEL TRANSFER PUMP INSTALLATION

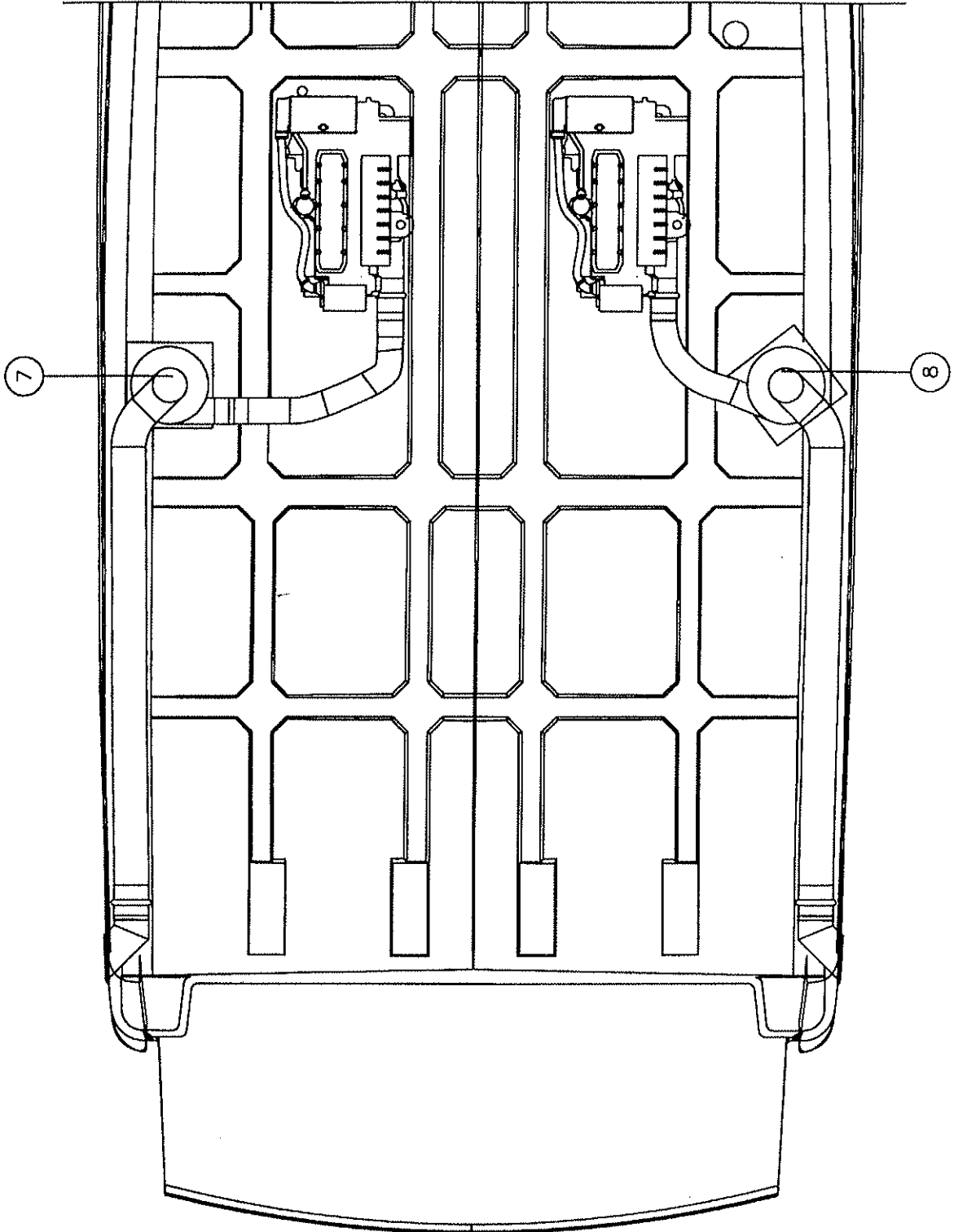
## WARRANTY/PARTS INFORMATION

### Fuel System (DIESEL)

BILL OF MATERIALS				
ITEM	QTY.	DESCRIPTION	PART NO.	OPTION
1	1	TANK: FUEL 261 GAL PORT	6114803	STD
2	1	TANK: FUEL 261 GAL STBD	6114804	STD
3	16	CLAMP: HOSE #28	7500600	STD
4	12	CLAMP: HOSE #10	7500400	*
5	12	FIT: 1/2MPT x 1/2FLR	7410000	*
6	4	PLT: DECK DSL 2'	6003200	*
7	12	FIT: FURREL 3/8'	7413400	*
8	12	FIT: NUT FOR 3/8' SWIVEL	7413701	*
9	12	FIT: SWIVEL 3/8'	7413700	*
10	2	FIT: EL 90 3/8MPT 3/8FLR	7402100	STD
11	6	VALVE: 1/2" BALL 48MY	7421700	*
12	1	PUMP: FUEL TRANSFER	6007400	*
13	1	HOSE: 1/2"x5' FUEL	A0000062	*
14	4	FIT: RACOR ADPTR 7/8x1/2FPT	7409900	*
15	4	SEPARATOR: FUEL/AIR LG100	6511200	*
16	4	VENT: 90DG W/SS TRIM	6002800	STD
17	6	FIT: EL 90DEG 1/2" MFLR x 1/2MP	7431700	*
18	1	HOSE: 1/2" x 8' FUEL	A0017355	*
19	2	HOSE: 1/2" x 12' FUEL	A0000058	*
20	6	NPPL: 1/2" x 1 1/8" RED BRA	7422100	*
21	6	FIT: ST EL 90DG 1/2 BR	7422000	*
22	1	HOSE: 3/8"x12' FUEL	A0000027	*
23	2	HOSE: 3/8"x18' FUEL	A0013219	*
24	2	HOSE: 1/2"x20' FUEL	A0018026	*
25	2	HOSE: 5/8"x33' FUEL VENT	A0013194	STD
26	2	HOSE: 2"x3' FUEL FILL	B0000513	STD
27	20	FIT: SWIVEL 1/2" FLARE	7414700	*
28	20	FIT: NUT FOR 1/2" SWIVEL	7414701	*
29	20	FIT: FURREL 1/2"	7414702	*
30	2	FLTR: FUEL RACOR 900MA	6003500	*
31	2	HOSE: 2"x8' FUEL FILL	A0017913	STD
32	2	HOSE: 5/8"x12' FUEL VENT	B0000704	STD
33	2	WTHDRWL: FUEL RIGID 20 5/8	6030702	*
34	2	FIT: NPPL 3/8PT x 1 1/8" LGBR	7422200	*
35	2	VALVE: 3/8" BALL	7421800	*
36	2	FIT: 3/8MTP x 3/8F BRS	7433700	*
37	2	HOSE: 1/2"x34' FUEL	A0018099	*
38	1	HOSE: 1/2"x13' FUEL	A0013753	*
39	1	HOSE: 3/8"x17' FUEL	A0016003	*
40	2	HOSE: 3/8"x34' FUEL	A0018101	*
41	2	TANK: FUEL 112 GAL STBD 4437	6112912	STD
42	2	TANK: FUEL 112 GAL PORT 4437	6112911	STD
43	2	HOSE: 1/2"x35' FUEL	A0018098	*
44	2	HOSE: 3/8"x36' FUEL	A0018100	*
45	2	HOSE: 1/2"x14' FUEL	A0014157	*
46	2	HOSE: 1/2"x9' FUEL	A0000060	*
47	2	HOSE: 1/2"x17' FUEL	A0015695	*
48	2	VALVE: FUEL SLCTR SIX PORT	7402800	*

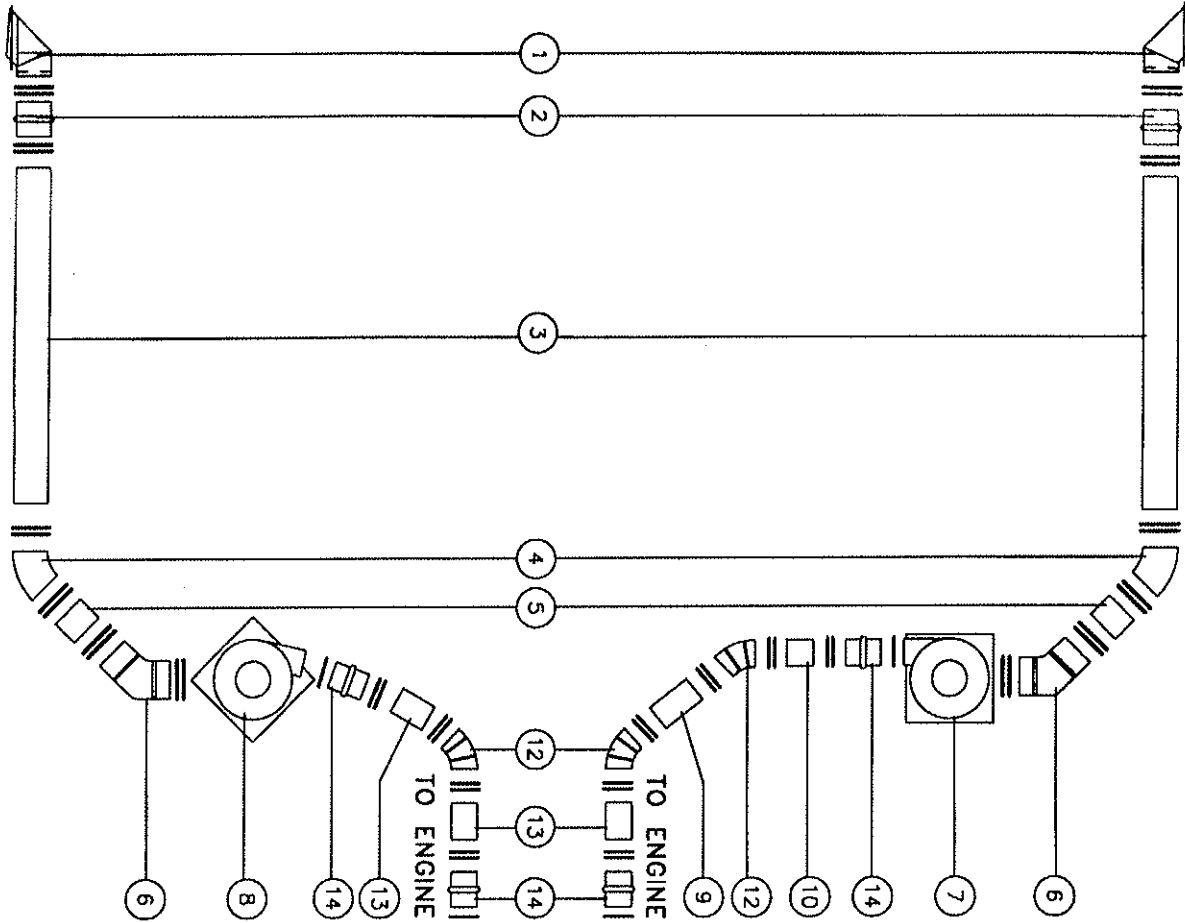
**WARRANTY/PARTS INFORMATION**

**Exhaust System (DIESEL)**



# WARRANTY/PARTS INFORMATION

## Exhaust System (DIESEL)





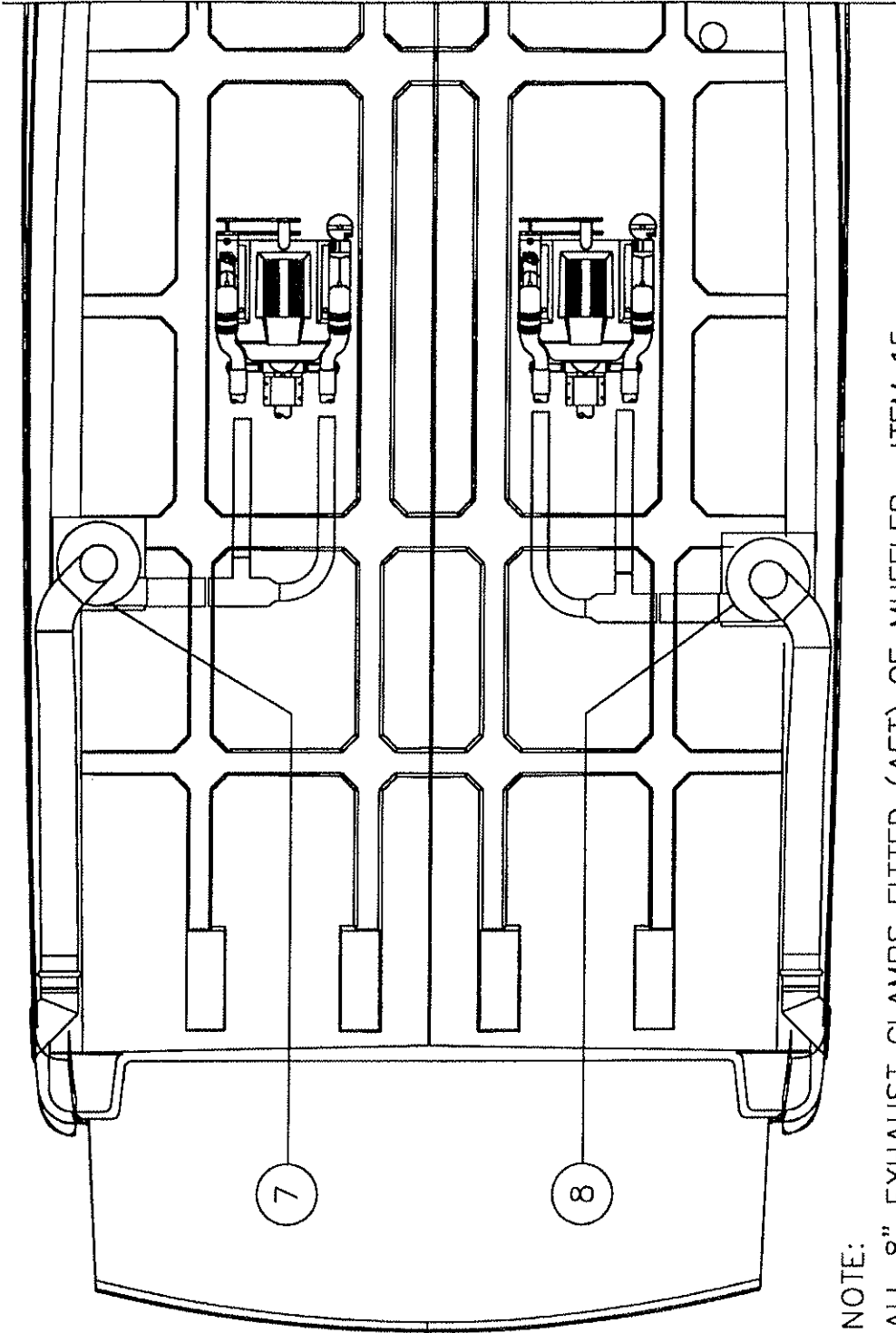
## WARRANTY/PARTS INFORMATION

### Exhaust System (DIESEL)

ITEM	QTY	DESCRIPTION	PART NO
1	2	EXHAUST PRI:8"OD SS 45°	5132000
2	2	CPLNG:EXHST 8" RUBBER	5162802
3	2	PIPE:FRP 8" x 9'	A0018015
4	2	ELB:EXHST RUBR 8" 45 DG	5162801
5	2	PIPE:FRP 8" x 6"	A0018016
6	2	ELB:EXHST RUBR 8" 90DG	5162800
7	1	MUFFLER:STBD 4007	5104501
8	1	MUFFLER:PORT 4007	5104500
9	1	PIPE:FRP 6" x 27"	5109300
10	1	PIPE:FRP 6" x 12"	A0018018
11	24	CLAMP:HOSE 6" RUBBER	7501700
12	3	ELB:EXHST RUBR 6" 45DG	5153002
13	3	PIPE:FRP 6" x 10"	A0018019
14	4	CPLNG:EXHST 6" RUBBER	5162600

**WARRANTY/PARTS INFORMATION**

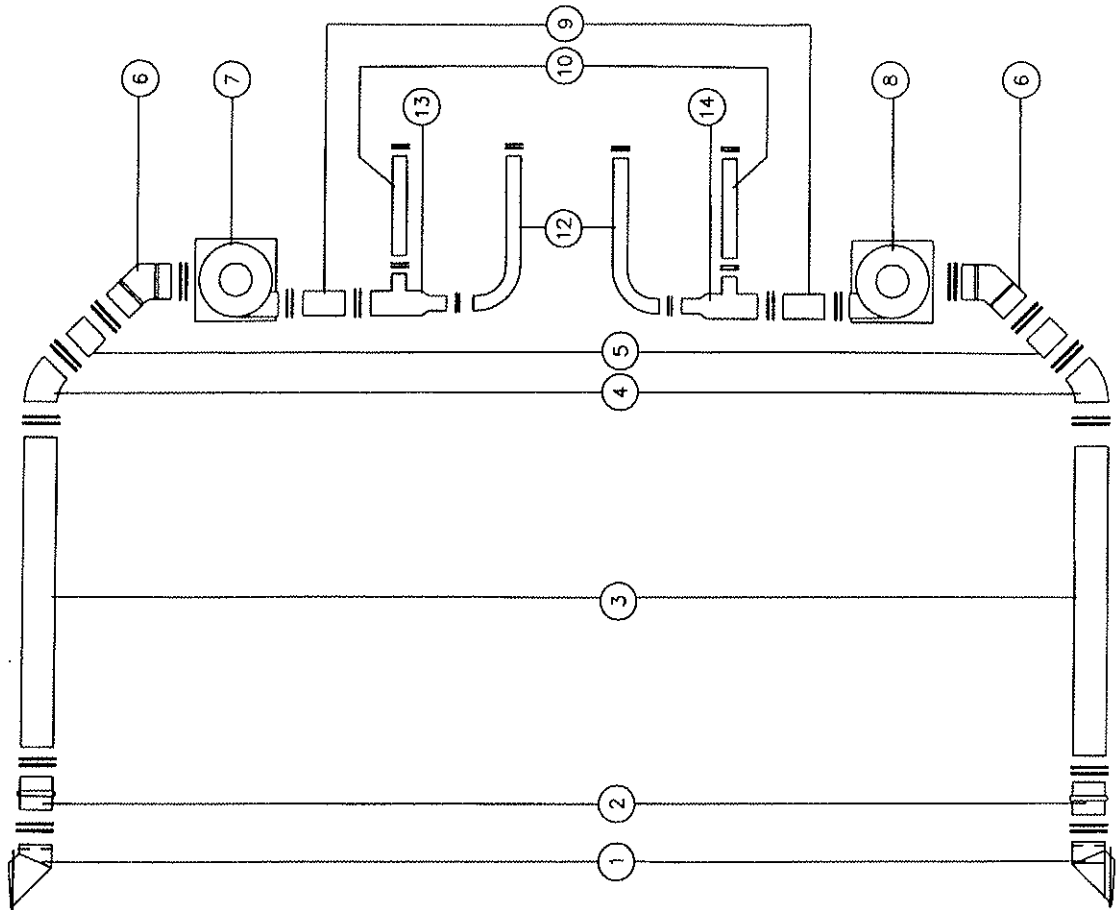
**Exhaust System (GASOLINE)**



NOTE:  
ALL 8" EXHAUST CLAMPS FITTED (AFT) OF MUFFLER— ITEM 15

## WARRANTY/PARTS INFORMATION

### Exhaust System (GASOLINE)



ITEM	QTY	DESCRIPTION	PART NO	OPTION
1	2	EXHAUST PRT: 8"OD SS 45°	5132000	STD
2	2	CPLNG: EXHST 8" RUBBER	5162802	STD
3	2	PIPE: FRP 8" x 100"	A0018015	STD
4	2	ELB: EXHST RUBR 8" 45 DG	5162801	STD
5	2	PIPE: FRP 8" x 7"	A0018016	STD
6	2	ELB: EXHST RUBR 8" 90DG	5162800	STD
7	1	MUFFLER: STBD 4007	5104501	STD
8	1	MUFFLER: PORT 4007	5104500	STD
9	2	HOSE: FLEX 6" x 10 1/2"	A0016772	976
10	2	HOSE: FLEX 4" x 48"	A0017836	976
11	16	CLAMP: HOSE 4" HD LONG	7501501	976
12	2	HOSE: FLEX 4" x 65"	A0017749	976
13	1	EXHST: TEE 4" x 4" x 6" DMPR-P	5103401	976
14	1	EXHST: TEE 4" x 4" x 6" DMPR-S	5103402	976
15	24	CLAMP: HOSE 8" RUBBER	7502100	STD
16	8	CLAMP: HOSE 6" HD LONG	7501601	976

## WARRANTY/PARTS INFORMATION

### PARTS GLOSSARY

ANY PARTS BEGINNING WITH A LETTER OR HAVE A CATEGORY PRIOR TO "50" ARE MANUFACTURED PARTS AND THEREFORE MAY NOT HAVE ALL PARTS LISTED WHICH MAKE UP THE ASSEMBLY INDICATED.

CATEGORY NO.	PART DESCRIPTION
50	ENGINES & V-DRIVES
51	INBOARD ENGINE EQUIPMENT
52	PROPELLERS
53	STEERING CABLES
54	STEERING HELMS & KITS
55	CONTROL CABLES
56	CONTROLS & KITS
57	INSTRUMENTS & INSTRUMENT ACCESSORIES
58	FRESH WATER COOLING
59	ENGINE EQUIPMENT; BATTERIES
60	FUEL SYSTEM & TANKS
61, 62	GALLEY, HEAD & SHOWER EQUIPMENT & TANKS
63	PRESSURE WATER SYSTEM
64	NAVIGATION & INTERIOR LIGHTING
65	BILGE PUMPS, BLOWERS & VENTILATORS
66	DECK HARDWARE; ARCH
67	RAILS, TAFFRAIL KITS & LADDERS
68	WIRE HARNESSSES, DOCKSIDE KITS & PANELS
69	ELECTRICAL EQUIPMENT, GENERATOR, WINDLASS
70	WINDOWS, DOORS, WINDSHIELD SETS, HATCHES & SCREENS
71	HARDWARE, LOGO
72	PILOT SEAT HARDWARE, TABLE LEGS & FOOTRESTS
73	ACCESSORIES; HATCH, HORN, SCREENS, STEREO, TV, VACUUM
74	FITTINGS; PIPE & TUBE
75	CLAMPS, HOSES & TUBING
77	WOOD SCREWS & SHEET METAL SCREWS
78	LAG & MACHINE SCREWS, BOLTS, NUTS & WASHERS
79	NAILS, STAPLES & RIVETS
80	BLINDS, CANVAS, CARPET, CURTAINS & UPHOLSTERY MATERIAL
81	FINISHING MATERIAL & ADHESIVES; LOGOS, PAINT, PLAQUES, STRIPE
82	FIBERGLASS MATERIALS, GEL & PUTTY
83	EXTRUSIONS
84	LUMBER, PLYWOOD, HARDBOARD & BALSA
85	PLASTICS, PLASTIC LAMINATES, DOORS, LIDS & COVERS
89	ELECTRICAL
90	AIR-CONDITIONING & ACCESSORIES
91	FOAM
94	WOODSET

**WARRANTY/PARTS INFORMATION**

**BILL OF MATERIALS**

**WARRANTY/PARTS INFORMATION**

**CARVER LIMITED WARRANTY DOCUMENT**