

INSTRUCTIONS FOR PREPARATION FOR BOTTOM PAINTING

WARNING!

Do not use any sanding, sandblasting or other abrasive preparation of the bottom as this will void your hull blistering warranty. More information on the warranty is available in this owner's manual.

BOTTOM PAINTING

Choose a bottom paint system that suits the environment in your area.

Follow the procedure recommended by the manufacturer of the paint, while making sure not to void the Hunter Hull Blistering Warranty. The procedure for preparing for and painting the bottom varies between paint manufacturers, but should always include dewaxing, etching and sometimes priming of the surface.

EPOXY BARRIER COAT

Sanding of the gelcoat bottom surface will be permitted should a customer wish to have an epoxy barrier coat applied to the hull, (example Interlux Interprotect 1000, 2000, West System or VC Tar). This will not void the Five Year Blister Warranty.

Hunter Marine refers to epoxy barrier coatings as mentioned above, not epoxy primer paints.

If an epoxy barrier coat is applied to a Hunter vessel, it must be registered with the Warranty Department prior to application of the product. If the dealer applies bottom paint only, sanding will not be allowed and the no sanding system must be used.

TEAK CARE

Teak wood is a high quality, extremely durable wood with a high oil content. In order to help you protect the original beauty of your teak interior, we have sealed the beauty of your interior with a 3 to 4 coat finish system of high quality Seafin Teak Oil, manufactured by *Dalys* (wood finishing products). This material is a penetrating oil that dries to a low sheen to seal and protect the wood from moisture and weathering. It creates a durable, nonslip surface to repel water and resist wear. It won't chip, peel or blister. It reduces work and maintenance cost because it is easy to maintain and repair. With proper maintenance it will out live urethane varnish on interior and even exterior surfaces. (floor, bulkheads, trim wood & furniture).

MAINTENANCE

When oiled surfaces require renewing, simply wipe the surface area free of loose dirt, dust or other contaminants. Dampen a cloth with the Seafin Teak Oil and wipe on. Let stand for 5-15 minutes then polish dry.

REPAIRS

When wood work is damaged from scrapes or abrasions that go into or thru the finish, take the following steps:

1. Take 180 to 220 grit wet/dry sand paper to smooth out rough spots.
2. Wipe clean of dust and dirt with a clean rag. Note - before applying oil wood surface must be dry.
3. Wipe or brush on oil, allow to penetrate 5-15 minutes while surface is still wet.
4. Sand until smooth with a 400A wet/dry sandpaper.
5. Wipe dry with a clean rag. Allow 8-12 hours drying time.
6. Apply 2nd coat, and repeat above procedure.

This process may be repeated as many times as needed to bring damaged area back up to its original finish. If you have trouble with getting the same sheen, you may apply with a completely dampened/rung out cloth, a very light coat over this area and/or whole surface area to get an even sheen.

DALYS
3525 STONEWAY NORTH
SEATTLE, WA 98103
(206) 633-4200

MAINTENANCE

Engine, Transmission and Drivetrain

ENGINE

Follow the fuel and lubrication requirements in the Engine Manual. Check the engine oil level before and after operation and use quality motor oil (refer to Engine Manual). Be certain the proper amount of oil is in the crankcase at all times.

Engine alignment: The engine should be aligned by experienced marine service personnel. Final alignment should be done after launching, with all normal gear aboard. A description of the procedure follows:

The coupling flanges must come together evenly at all points, a feeler gauge is used to check the gap. If adjustment is necessary, the engine is tilted up or down and/or side to side until the flanges meet equally. Severe vibration will result from misalignment and can cause strut bearing and shaft damage. Alignment should be checked again after several weeks of use.

Any questions or problems concerning the engine, please contact our distributor, Mack Boring at (201) 964-0700.

TRANSMISSION

Follow the lubrication requirements of the Engine Manual. The oil level should be checked immediately after operation.

DRIVETRAIN

The shaft log (stuffing box) should be inspected periodically.

The stuffing box is held to the fiberglass shaft log by a rubber tube secured with hose clamps. The clamps should be tight and no water should leak from this location. While under weigh a slight drip from the stuffing box at the shaft exit is necessary (four drops a minute) and is normal.

To adjust, loosen the lock nut, tighten gland nut one-quarter turn, and retighten lock nut. If excessive water flow persists after adjustment, replace the packing with 5/16" square flax packing and then adjust as above.

Steering

Refer to the manufacturer's instructions for maintaining pedestal steering system. Cables should routinely be inspected for proper tension. Lightly oil all cables.

Electrical Systems

The electrical system is a 12-volt, negative ground installation. The owner should weekly inspect batteries, terminals and cables for signs of corrosion, cracks, and electrolyte leakage. Battery terminals are to be kept clean and greased. Refer to separate instructions on batteries, wiring diagram, and electronics

MAINTENANCE

Plumbing Systems

All pumps should be checked frequently to insure proper operation. **This is an especially important regular maintenance item since proper functioning of a pump could save your vessel from serious damage in the future.**

Inspect all hoses for chafing and deterioration. See that hose clamps are tight. Check that the pump impeller area is clean and free of obstructions.

Inspect electrical wiring for corrosion. Make sure float switches move freely and are making an electrical connection.

The owner should become familiar with the layout of the water and waste systems by walking through the boat with the diagrams provided in this manual. It is especially important that the owner knows all thru-hull valve locations and inspects for leaks frequently. Refer to plumbing diagrams in Specification and Technical section of this manual.

General Thru-hull List (*varies from boat to boat-see diagrams in Spec & Tech Info.*)

- 1) Engine cooling system
- 2) Galley sink
- 3) Head sink
- 4) Head toilet (water intake)
- 5) Holding tank discharge
- 6) Scupper drains

Fuel System

The owner should inspect the condition of fuel lines for cracks or leaks. A primary source of fuel-related problems is water in the system. The owner should use only well maintained fueling facilities and make sure fuel fill caps are tightly secured after filling. Check and maintain fuel filters periodically. Refer to your Engine Manual for additional information.

General Care

CLEANING FIBERGLASS SURFACES: Fiberglass surfaces should be cleaned regularly. Normal accumulations of surface dirt can be removed simply by occasional rinsings with water. If your boat is operated in salt water, more frequent rinsing will be required. To remove stubborn dirt, grease or oil, use a mild detergent and a soft brush. Rinse with clean fresh water. Avoid the plexiglass companionway slider, deck hatches and fixed ports when using a deck brush, since these surfaces can scratch.

It is also a good idea to wax the fiberglass once or twice a year to maintain a deep, glossy appearance. Your local marine supply should be able to provide an appropriate wax.

Sail Care: Sunlight is a sail's worst enemy, so cover the sails when they are not in use. An ultraviolet guard, fitted down the leech of a roller headsail, will protect the exposed part from the weathering effect of the sun and from dirt and grit. Mildew, which discolors, is prevented by storing sails dry and by hand-washing twice a season.

MAINTENANCE

Sail care continued.

Check all sails regularly for chafe, particularly where they chafe on deck fittings or rigging, at reef points, batten sleeves and the foot of the headsail. Sail batten pockets should be inspected on a regular basis.

To stow the mainsail, start at the leech and flake it on to the boom, left and right, in about 18-in. (46-cm) folds, while pulling the leech aft. Secure with a sail tie and continue to the luff. Lash to the boom with sail ties or shock cord.

The headsail, neatly rolled and fastened, can be temporarily stowed along the lifelines. To stow below, flake it into a length; 1. then roll from luff to leech, 2. Take care not to crease the leech. Pack in a clearly marked bag.

Fabric Care

If wet, prop cushions vertically to promote airflow around each cushion. Cushions can be cleaned by most dry cleaners. **Dry clean only.**

Winch Maintenance

Follow the maintenance instructions prescribed by the winch manufacturer. We recommend a minimum of an annual cleaning and light greasing.

General Hardware Maintenance

Check all fittings regularly to be sure screws are tight. Occasionally lubricate (use silicone lubricants) all moving parts on such fittings as blocks, turnbuckles and cam cleats, as well as the locking pins of snatch blocks, track slides, spinnaker poles, etc. Inspect cleats and fairleads for roughness and smooth with fine grained emery paper if necessary. Also, replace any missing or damaged cotter pins in turnbuckles and shackles, and either tape them or use protective covers manufactured for that purpose.

MAINTENANCE

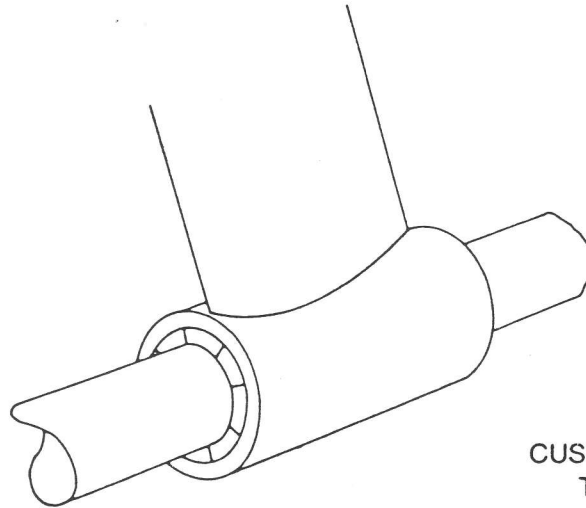
Shaft Alignment Procedure

1. Separate the coupling, move the shaft end back to clear the pilot in the center.
2. Establish the shaft in the center of the shaft log by raising the shaft until it touches the top of the log - note position - lower the shaft until it touches bottom of the log - note position - repeat sidwise and locate shaft in the center; block shaft in this position, using a block of wood under the shaft packing gland.
3. Now, adjust the engine mounts to allow the pilot on the coupling halves to slip together without moving shaft up, down, or sideways.
4. Adjust the engine mounts as necessary until a 0.004" feeler gauge will not enter anywhere along the edge of the flange between the faces.
5. Tighten the locks on the adjustable mounts.
6. Recheck coupling with feeler, readjust if necessary.
7. Check stuffing box (allow to drip slightly).

MAINTENANCE

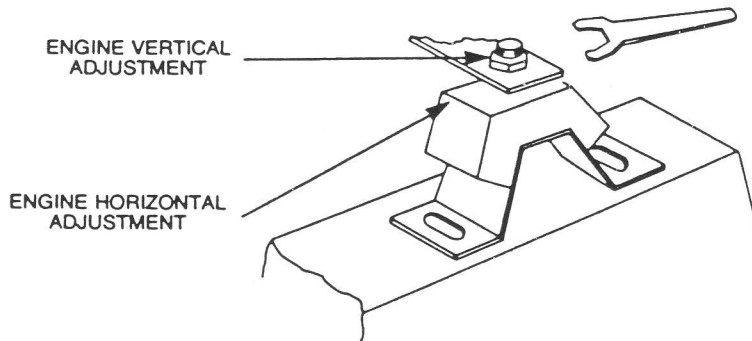
ALIGNMENT DIAGRAM

Step 1



CUSTLASS BEARING
THRU-STRUT

Step 2

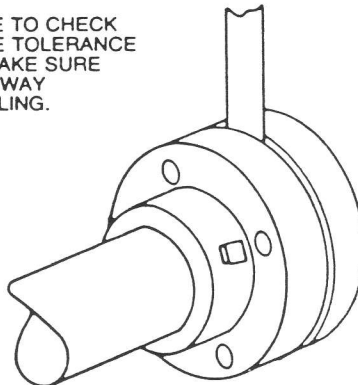


ENGINE VERTICAL
ADJUSTMENT

ENGINE HORIZONTAL
ADJUSTMENT

Step 3

USE FEELER GAUGE TO CHECK
COUPLING GAP. THE TOLERANCE
SHOULD BE .004". MAKE SURE
TO CHECK ALL THE WAY
AROUND THE COUPLING.



NOTE: CHECK COUPLING GAP
WITHOUT COUPLING
BOLTS IN PLACE.

STORAGE/WINTERIZATION

IMPORTANT: Winter storage is recommended to be done in one of the following three ways, either: 1) by blocking the boat via a cradle; or 2) with chained stands on level ground; or 3) by storing the boat in the water with a bubbler system to prevent icing. Damage to your boat, including engine misalignment caused by twisting, is not covered by the warranty.

SAILS

Sails should be properly folded and stowed in a dry, well ventilated place. Many sailboat owners send their sails back to the sail manufacturer at the end of each season. The sailmaker will check the stitching and sailcloth for wear and store the sails until the start of the next season.

ELECTRICAL

Remove battery from boat. (Refer to Engine Manual.) and charge. It is a good idea to also to remove the electronics (Radio, Radar, etc.) and store in a safe place.

CUSHIONS

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote airflow around each cushion. *Dry Clean Only!*

HATCHES

Tenting the deck during storage will help prevent ice from forming and damaging hatches and deck fittings. The installation of a passive vent will help with ventilation while the boat is in storage.

WATER SYSTEM - WATER HEATER

WATER SYSTEM:

Open a faucet and allow the pump to empty the tank. Then add approximately two gallons of nontoxic antifreeze solution to the tank and repeat the pumping out procedure.

A second method is to disconnect the hoses at the pump, allowing them to drain. Find the lowest point in the system and disconnect the fitting. Open all faucets to allow the lines to drain. If possible, use a short piece of hose on the faucet to blow through the lines to clear all water. A diluted solution with baking soda will help freshen the system.

WATER HEATER:

Open valve and drain fully. Leave valve open during lay-up time.

TOILET AND HOLDING TANK

Drain and flush toilet. Using automotive antifreeze (ethyleneglycol) in a 50/50 mixture with water, pump through toilet and into holding tank. Refer to Galley/Head section for instructions.

STORAGE/WINTERIZATION CONTINUED.

ENGINE

1. Drain the cooling water completely out of the engine and flush the line thoroughly with fresh water. Don't use high pressure through the line.
2. Remove the fuel completely from all fuel lines.
3. Disconnect the main battery cables from the battery terminals.
4. To prevent corrosion inside the cylinders, pour a little lubricating oil into the suction pipe while turning the engine. Enough oil to reach the intake/exhaust valve is sufficient.
5. Put the piston at top dead center of compression stroke so that the intake/exhaust valves are completely closed.
6. Apply a thin anticorrosion treatment to the plating and exposed painted surfaces.
7. The engine should be in a well ventilated area, and protected from any kind of dampness.
8. Put a dust cover over the engine.
9. Check your operation manual for engine diagram and for "Manufacturer's Recommended Winterizing Procedures."

OUTBOARD ENGINE

Take it home and store it in a safe place. Be very careful storing the gas tank as the gasoline is very flammable. Refer to "Engine Manual" for specific maintenance schedule.

DEPARTURE FROM THE BOAT

The check list for leaving a boat unattended is very important because items overlooked often will not be remembered until you are far from the boat and corrective actions are impractical or impossible. Primary choices for this list are items relating to the safety and security of the unattended craft—turning off fuel valves, the proper settings for electrical switches, pumping out the bilge and leaving the switch on automatic (or arranging for periodic pumping out). Other departure check list items are securing ports, windows, hatches, and doors.

ROUTINE MAINTENANCE

Routine maintenance check lists should include items based on how much the boat is used (usually in terms of engine hours) and on calendar dates (weekly, monthly, or seasonal checks). Typical of the former are oil level checks and changes, and oil and fuel filter changes.

On a calendar basis the lists should note such matters as electrolyte levels in storage-batteries, pressure gauges on dry-chemical fire extinguishers, and all navigation lights. Check the operation of automatic bilge alarms or pump switches by running water into the boat. Periodically close and open seacocks several times to ensure their free and easy operation in case they are needed in an emergency. Equipment and supplies carried on board for emergencies should be inspected for any signs of deterioration.

MAINTENANCE

Electrolysis and Galvanic Protection

Salt water allows electric current to flow from anodic to cathodic material. Any two metals from two components, and their relative positions in the galvanic rating table, will determine which loses material (the anode) and which remains largely undisturbed (the cathode). The rate of wear is determined by the distance apart on the galvanic table of two metals. Thus a sacrificial zinc anode is often fitted to the underwater area of a boat to attract any destructive currents away from bronze or steel propeller shafts, for example.

It is not enough to know that your boat does not suffer from electrolysis: a newcomer in the adjacent marina berth may start a too-friendly association with metal components on it. An easy place to fit an anode is on the propeller shaft, or covering the propeller nut. The anode should not be painted because this will only defeat the purpose.

To prevent electrolysis in sea water, the difference between the voltage of two adjacent metals should not exceed 0.20V. Zinc and carbon steel, for example, used together, risk corrosion, while lead and active stainless steel are compatible. Metals with a high voltage corrode faster and need a larger area to diffuse the electrochemical reaction.

HUNTER MARINE LIMITED WARRANTY

Hunter Marine warrants to the first-use purchaser for a period of twelve (12) months from the date of sale any part manufactured by Hunter to be free of defects caused by faulty workmanship or materials under normal use and service.

During this period Hunter Marine will replace any part judged to be defective by Hunter Marine free of charge at its plant or at the option of Hunter, by an authorized Hunter Marine dealer. Transportation costs are the responsibility of the first-use purchaser. The labor cost reimbursement will be based on a labor allowance schedule established by Hunter Marine and, where not applicable, on a reasonable number of hours as determined by Hunter Marine. All repairs and replacements must be approved in advance by an authorized Hunter Marine representative.

The warranty does not cover:

- (1) Paint, window glass, gel coat, upholstery damage, plastic finishes, engines, engine parts, propellers, shafts, controls, instruments and equipment not manufactured by Hunter Marine.
- (2) Boats or parts which have been altered or subjected to negligence or misuse.
- (3) Commercially used boats.

This warranty is expressly in lieu of any and all other remedies and expressed warranties. Any implied warranties, including the warranties of merchantability and fitness are limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so that the above limitation may not apply to you.

Any consequential damages which may be incurred are excluded and the liability of Hunter Marine and the purchaser's remedy shall be limited to repair or replacement of any part or party judged defective by Hunter Marine. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation exclusion may not apply to you.

The purchaser acknowledges that no other representations were made to him with respect to the quality and function of the boat.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

This warranty shall not be effective unless the Hunter Marine warranty card and pre-delivery service record are completed and returned to Hunter Marine within ten (10) days after the date of sale to the first-use purchaser.

HUNTER

FIVE YEAR BOTTOM BLISTER LIMITED WARRANTY

Hunter Marine warrants to the original purchaser that each new sailboat, manufactured by Hunter Marine, will be free from gel-coat blistering on underwater surfaces of the hull for a period of five years from the initial date of delivery.

During this period, Hunter Marine will supply or reimburse 100% of the parts and labor required to repair a blistered underwater surface of the hull by an authorized Hunter dealer. The labor cost reimbursement will be based on a Labor Allowance Schedule established by Hunter Marine, however if the repair is performed by a non-Hunter dealer, the repair cost must be authorized by Hunter Marine and based on a reasonable number of hours as determined by Hunter Marine. Transportation, hauling, launching, bottom paint, storage, dockage, cradling rental, rigging and derigging, or other similar costs will not be covered by Hunter Marine's Warranty Policy. It is recommended that the repair be done during a seasonal haul out for service or storage.

The following circumstances will void this Limited Warranty:

- 1) If the gel-coat has been sanded, sandblasted, or subjected to abrasion or impact.
- 2) If the instructions provided in the Hunter owner's manual are not followed according to Hunter Marine's required bottom preparation procedures.
- 3) If prior approval is not obtained by Hunter Marine for repair.
- 4) If the Hunter Warranty Card is not sent to Hunter Marine within 10 days of delivery.

This warranty is expressly in lieu of any and all other remedies and expressed warranties. Any implied warranties including the warranties of merchantability and fitness are limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Any consequential damages which may be incurred are excluded and the liability of Hunter Marine and the purchaser's remedy shall be limited to repair or replacement of any part or parts judged defective by Hunter Marine. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

The purchaser acknowledges that no other representations were made to him with respect to the quality and function of the boat.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Effective date, September 15, 1989

HUNTER MARINE CORPORATION

HUNTER MARINE * P.O. Box 1030 * Rt. 441 * Alachua, Florida 32615 * (904) 462-3077

HUNTER 29.5 Owner's Manual

Model 110A

Diesel or Gasoline

Fuel Filter/Water Separator

MARINE



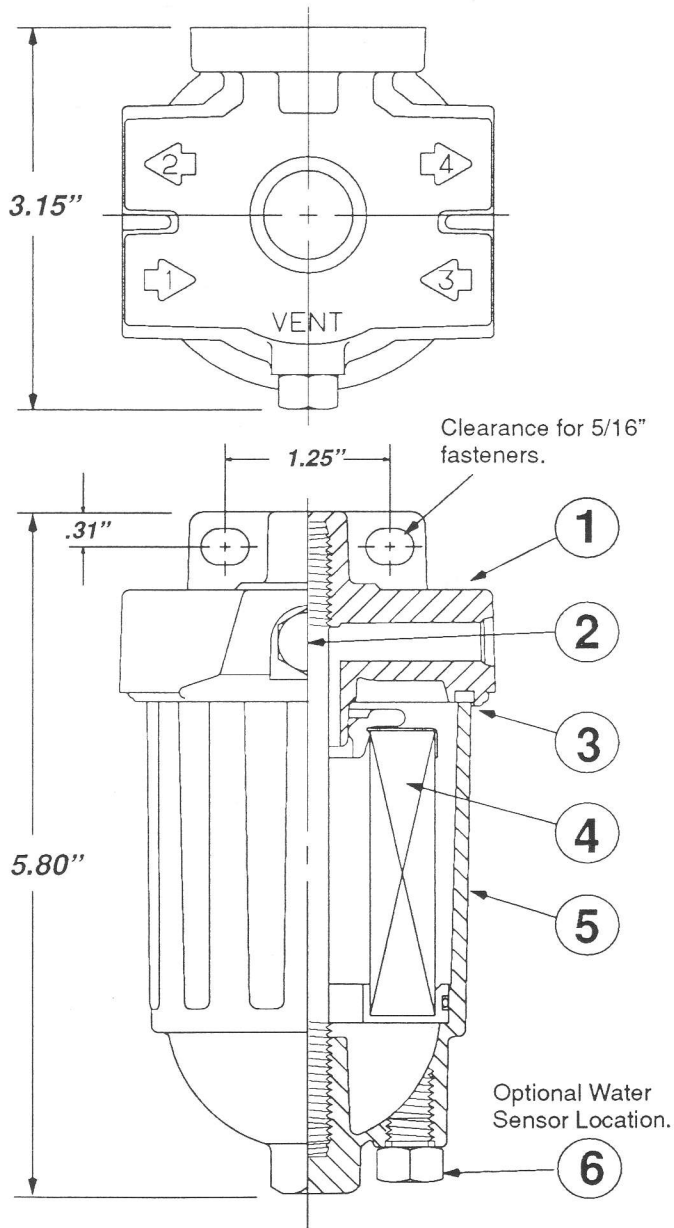
LISTED

RACOR®

Parker Hannifin Corporation
 Racor Division
 P.O. Box 3208, 3400 Finch Rd.
 Modesto, CA 95353 USA
 209/521-7860, 800/344-3286
 FAX 209/529-3278



Filtration



The Racor Model 110A Diesel or Gasoline Fuel Filter/Water Separator may be installed on the vacuum or pressure side of the fuel system (up to 150 PSI, with high pressure fittings) with a maximum flow capacity of 15 GPH for Diesel fuel systems or 35 GPH for Gasoline fuel systems.

The compact size and 4-port versatility make the Model 110A the most popular small fuel filter/water separator on the market today. Servicing is also made easier by the spin-on bowl assembly and simple element change procedure.

The Model 110A is extremely effective in removing better than 99% of free water normally found in fuel due to condensation. The R11T replacement filter uses Racor's proprietary Aquabloc™ filtering media which removes particulates and prevents water from entering the injection system.

An optional In-bowl Water Sensor is available which will inform the operator when servicing is required. *NOTE: Not recommended for pressure side installations above 150 PSIG.*

INSTALLATION

WARNING! Exercise caution when installing the 110A in gasoline applications to avoid fire hazards. **DO NOT SMOKE**, allow open flame or heat which could ignite a fire. Perform the installation in a well ventilated area.

Refer to the installation diagrams on the reverse side and keep a few points in mind when installing the 110A.

A. For diesel applications, install the 110A underhood for protection against extreme cold temperatures. This will help in preventing fuel gelling. *Diesel fuel additives containing alcohol can damage non-metal components in fuel systems and are not recommended.*

B. Ensure that the fuel lines are secured in all applications to protect them from rubbing on other surfaces. Avoid tight bends and high heat sources. *Continued >*

PARTS LIST

Item	Part No.	Description
1a	RK21359	Replacement Head, 9/16" SAE
1b	RK21361	Replacement Head, 1/4" NPT
1c	RK21362	Replacement Head, 14mm
2	RK10110	Metal Vent Plug
3	RK21363	Gasket / O-ring Kit
4	R11T	Replacement Element, 10 mic.
5	RK21364	Replacement Bowl Assy.
6a	RK20022	Drain Plug Kit
6b	RK10054	Optional Water Sensor Probe

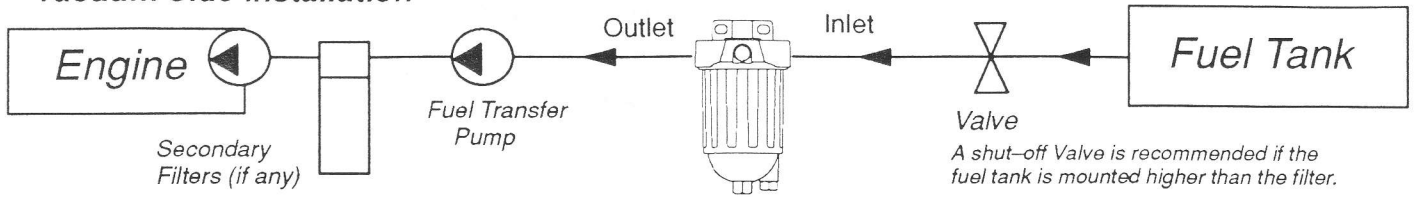
also order RK20725, Water Sensor Alarm Kit.

SPECIFICATIONS

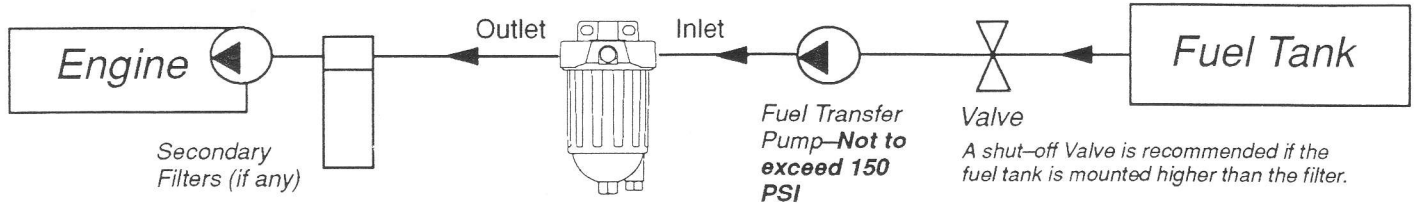
Fuel Ports	9/16"-18 SAE, 1/4"-18 NPT or 14 MM
Maximum Flow Rate	Diesel: 15 GPH / 57 LPH Gasoline: 35 GPH/ 132 LPH
Replacement Element	R11T
Element Removal	
Underunit clearance, Min.	1" (25.4mm)
Clean Vac./Press.Drop*	1.25 inHg.(4.23 kPa)
Height	5.8" (147 mm)
Width	3.2" (81 mm)
Depth	3.15" (80 mm)
Weight, Dry	1.3 lbs. (.59 kgs)
Temp. Rating	-50 / 255 dg.F (-46 / 107 dg.C)

* Specifications result from tests conducted at the maximum flow rate.

-Vacuum Side Installation



-Pressure Side Installation NOTE: PRESSURE FITTINGS MUST BE USED. SEE FITTINGS CHART BELOW.



WARNING! Fuel and vapors are extremely flammable! Do not smoke, allow open flame or heat which could ignite and create a fire.

PRIMING.

VACUUM SIDE APPLICATIONS: Spin the bowl from the Head and fill with clean fuel. Spin the bowl onto the Head and tighten firmly by hand. Note: If using a torque wrench, do not exceed 60 inch pounds. Start the engine and check for leaks. Correct as necessary with the engine off.

PRESSURE SIDE APPLICATIONS: Follow instructions under Vacuum Side Applications above or use the engine fuel pump to prime the filter as follows: Crank the engine until the engine starts. Do not exceed 10 seconds of cranking. Let the starter motor cool before cranking again to avoid unnecessary damage.

DRAINING THE COLLECTION BOWL. Water is heavier than fuel and will settle to the bottom of the bowl and appear different in color once collected in a clear jar. If your Model 110A is equipped with an In-bowl Water Sensor Probe (RK 10054) and Alarm Kit (RK 20725-12 volt d.c.) the operator will be warned when a high water level condition exists and servicing is needed. In marine or high humidity environments, check the collection bowl frequently (daily if a poor fuel source is suspected).

WITH ENGINE OFF: Remove the Drain Plug momentarily to evacuate contaminants, then replace. NOTE: In some applications it may be necessary to open the Vent Plug first before removing the Drain Plug to 'break the vacuum'. Follow PRIMING instructions, above.

ELEMENT REPLACEMENT. Element replacement frequency is determined by the contamination level in fuels. Fuel flow to the engine becomes restricted as the element slowly plugs with contaminants, resulting in noticeable power loss and/or hard starting. When any one occurs, change the element as soon as possible. (As a guideline: every 500 hours, 10,000 miles, every other oil change or annually). Always carry an extra replacement element as one tankful of excessively contaminated fuel can plug a fuel filter.

1. Drain the unit of fuel by removing the Drain Plug.
2. Spin the Bowl from the Head and remove the Element.
3. Install the new element and coat the new Head-to-Bowl Seal with a coating of motor oil.
4. Spin the Bowl onto the Head and tighten firmly by hand. Note: If using a torque wrench, do not exceed 60 inch pounds. Follow PRIMING instructions, above.

TROUBLESHOOTING. If your unit will not prime or fails to hold prime, first check that the Vent Plug, Drain Plug and the Head / Bowl are properly tightened. Next, check fitting / fuel line connections for security, and ensure none of the lines are pinched or that the fuel tank strainer is clogged. If problems persist and the element is new, call Racor Customer Service for assistance. See phone numbers on reverse side.

FITTINGS CHART FOR 9/16"-18 SAE PORTS *			
PRESSURE or VACUUM FITTINGS (Plated Steel)			
SAE 37° Elbow	T2	T2	Part Number
		7/16"-20 9/16"-18	9010-6-4 9010-6-6
SAE 37° Straight	T2		9020-6-4 9020-6-6
NPT Female	T2		1/4" NPT 3/8" NPT 9040-6-4 9040-6-6
VACUUM FITTINGS ONLY (Plated Steel)			
Barbed Elbow	T2		9010HF6-5/6
Barbed Straight	T2		9020HF6-5/6
		5/16" to 3/8" (8 to 10mm) inside dia.	

* For NPT or Metric port fittings, see your dealer or call toll-free 800-C-PARKER for the Parker Fittings dealer nearest you..

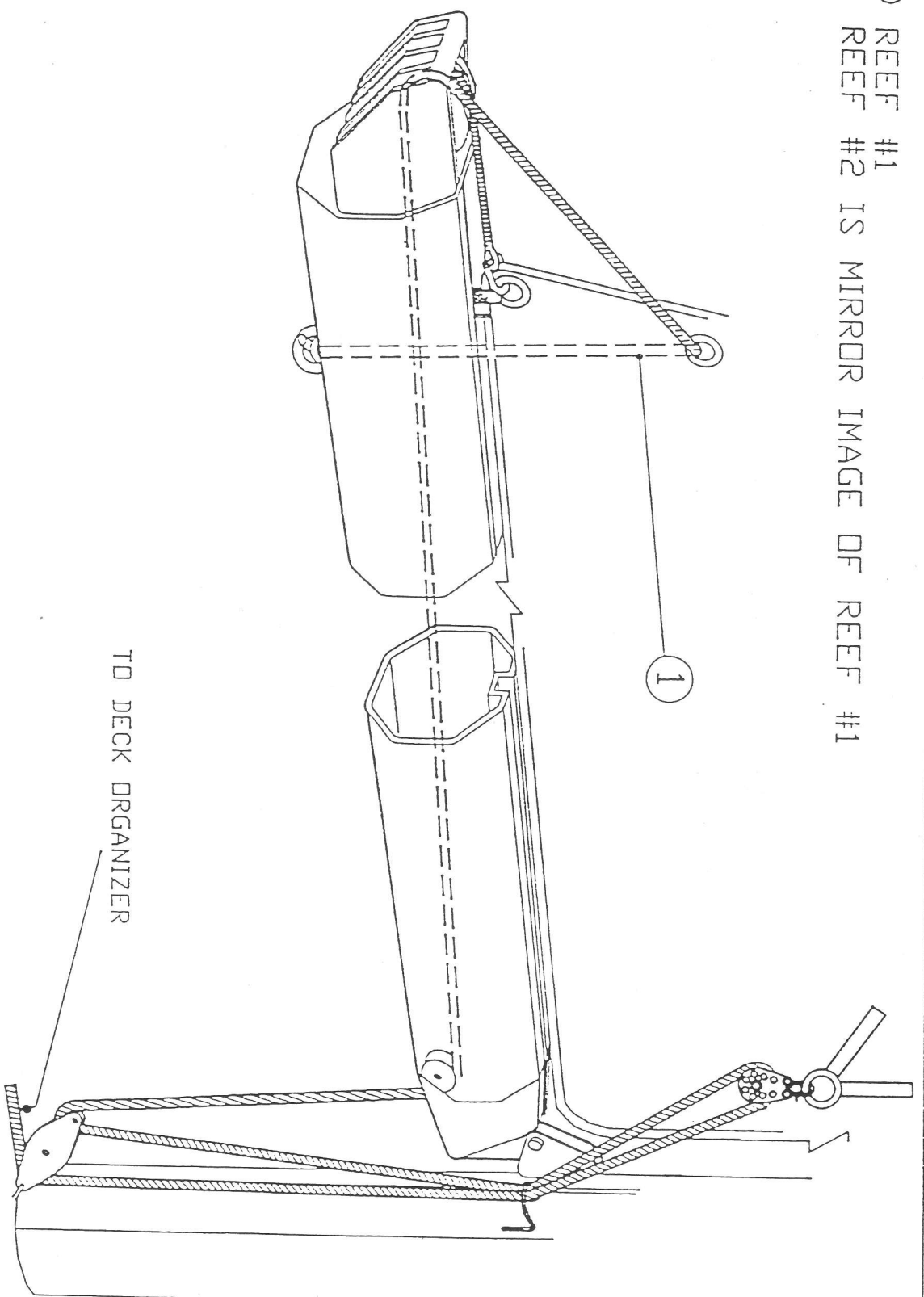
WARNING This product may contain a chemical known to the State of California to cause cancer. **WARNING** Failure or improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage. This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operation conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the applications are met. The products described herein, including with limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

RACOR LIMITED WARRANTIES STATEMENT

All products manufactured or distributed by Racor are subject to the following, and only the following, LIMITED EXPRESS WARRANTIES, and no others: For a period of one (1) year from and after the date of purchase of a new Racor product, Racor warrants and guarantees only to the original purchaser-user that such a product shall be free from defects of materials and workmanship in the manufacturing process. The warranty period for pump and motors is specifically limited to ninety (90) days from date of purchase. A product claimed to be defective must be returned to the place of purchase. Racor, at its sole option, shall replace the defective product with a comparable new product or repair the defective product. This express warranty shall be inapplicable to any product not properly installed and properly used by the purchaser-user or to any product damaged or impaired by external forces. THIS IS THE EXTENT OF WARRANTIES AVAILABLE ON THIS PRODUCT. RACOR SHALL HAVE NO LIABILITY WHATSOEVER FOR CONSEQUENTIAL DAMAGES FLOWING FROM THE USE OF ANY DEFECTIVE PRODUCT OR BY REASON OF THE FAILURE OF ANY PRODUCT. RACOR SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE (EXCEPT FOR THOSE WHICH APPLY TO PRODUCT OR PART THEREOF THAT IS USED OR BOUGHT FOR USE PRIMARILY FOR PERSONAL, FAMILY, OR HOUSEHOLD PURPOSES), WARRANTIES OF DESCRIPTION, WARRANTIES OF MERCHANTABILITY, TRADE USAGE OR WARRANTIES OR TRADE USAGE.

Racor's policy is one of continual improvement in design and manufacturing to insure still finer products; therefore, specifications, equipment and product information (while correct at the time of publication) is subject to change without notice. Product Brochure PN. 21410 Rev. B

① REEF #1
REEF #2 IS MIRROR IMAGE OF REEF #1



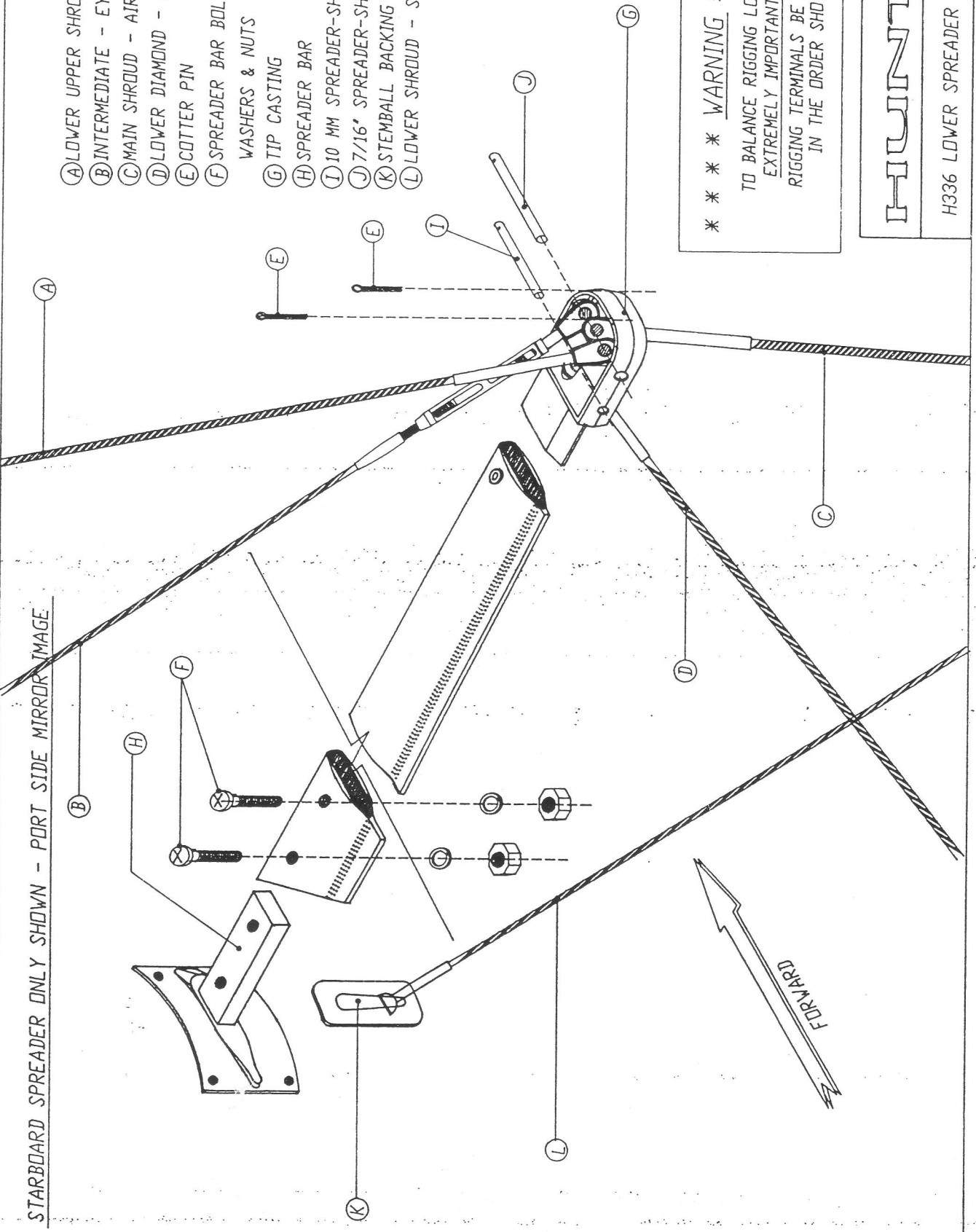
TO DECK ORGANIZER

HUNTER
BOOM AND REEF LAYOUT

STARBOARD SPREADER ONLY SHOWN - PORT SIDE MIRROR IMAGE

- (A) LOWER UPPER SHROUD - AIRCRAFT EYE
- (B) INTERMEDIATE - EYE TURNBUCKLE
- (C) MAIN SHROUD - AIRCRAFT EYE
- (D) LOWER DIAMOND - MARINE EYE
- (E) COTTER PIN
- (F) SPREADER BAR BOLTS, WASHERS & NUTS
- (G) TIP CASTING
- (H) SPREADER BAR
- (I) 10 MM SPREADER-SHROUD PIN
- (J) 7/16" SPREADER-SHROUD PIN
- (K) STEMBALL BACKING SHELL
- (L) LOWER SHROUD - STEMBALL

***** WARNING *****
 TO BALANCE RIGGING LOADS IT IS
 EXTREMELY IMPORTANT THAT
 RIGGING TERMINALS BE PINNED
 IN THE ORDER SHOWN



HUNTER

H336 LOWER SPREADER DETAIL H33A2635