

PREVENTATIVE MAINTENANCE

PERIODIC MAINTENANCE

The required maintenance of your Bertram during the boating season depends to a great extent on the conditions under which the boat is used. Adequate ventilation of the cabin during periods of non-use will reduce the interior maintenance and keeping the exterior waxed minimize the exterior maintenance.

In this section, a suggested preventative maintenance program is set forth for the boat under "average" conditions. If this program is used, it should be used in conjunction with the periodic maintenance recommended in the operating manual for the outboard motors.

DAILY

1. Pump bilges as required.
2. Check fuel system for leaks.
3. Check battery water level.
4. Top off fuel tank at end of day's operation.
5. Wash down boat with fresh water.

EVERY 100 HOURS OR 60 DAYS

The following is the breakdown of items to check and inspect associated with the areas indicated:

Exterior

1. Exterior fiberglass finish - clean and wax.
2. Clean all hardware and apply protective polish.
Tighten any loose fittings.
3. Clean all exterior seat cushions. Clean covers with mild soap solution or light Clorox solution. Wash any cleaning materials off with fresh water.

Interior

1. Completely air out the boat.
2. Air out all life jackets.
3. If any mildew is found, thoroughly wash down the area with a Clorox solution.
4. Operate all drawers and doors. Slight adjustment may be necessary on the doors and drawers due to expansion from moisture. Drawers can be made to slide easier by using wax or lubricant.

5. Check all hand fire extinguishers for full charge.

V-Berth

1. Check operation of lights.
2. Check bow hatch for operation and water tight fit.

Galley (Optional)

1. Check water pump for operation.
2. Check sink drain for pluggage and leaks.
3. Check lights and duplex plug-in for operation.
4. Check refrigerator for operation. Defrost and clean refrigerator with a solution of baking soda.

Outboard Motors & Electrical

1. Follow periodic preventative maintenance as specified in the outboard manual.
2. Check outboard mounting bolts to see that they are tight.
3. Check fuel lines for leaks.
4. Check control cable brackets for tightness.
5. Check electrical connections. Clean if corroded.
6. Check exhaust blower for operation and hose for leaks.
7. Check wiring to see that it is not rubbing or insulation worn off.
8. Check all battery cells with hydrometer. They should be between 1.250 and 1.265. Add water if necessary.
9. Check battery terminals, scrape and pack with Vaseline.
10. Clean out stringer limber holes.
11. Remove and clean screen on bilge pump and check operation of pump.

Helm Station

1. Check operation of all switches, gauges and controls.
2. Check electrical connections for tightness and corrosion.
3. Lubricate control heads and cables.

AS REQUIRED

Haul boat out of the water, scrub bottom if necessary, and repaint with anti-fouling paint.

STORING YOUR BERTRAM

DRY STORAGE

Indoor storage is generally preferred if there is good ventilation and the location is otherwise safe and dry. For any special instructions on covering for outdoor storage, refer to "Docking Plan" drawing. To keep the bilge dry, remove the bilge drain plug. Drain water tank, water lines and pump water to prevent damage from freezing.

Open hatches sufficiently to allow air to circulate. Also leave locker doors and drawers open. Dry out ice chests and refrigerator. If possible, remove mattresses and cushions, clean and store in a dry place. If they must be left aboard, prop up on one end for maximum ventilation.

Synthetic material lines need only proper handling and occasional cleaning. Natural fiber lines should be dried and kept in a well ventilated place.

To protect chrome, stainless or aluminum deck hardware, first remove any salt deposits with water. Then clean with a good quality non-abrasive type metal cleaner. Finally give items a light coat of grease.

Check propellers for nicks, dents and bent blades. Any replacement or repairs should be made at this time instead of during the spring rush. Be sure all linkage on steering, motors and other controls are free and well lubricated. Remove batteries and make arrangements for storage for periodic recharging.

APPEARANCE AND CARE

CARE OF FIBERGLASS

The fiberglass construction which makes up the entire hull and most of the superstructure consists of several parts. The exterior layer gelcoat is a special polyester resin into which coloring pigments have been incorporated to give built-in color. Just beneath the gelcoat is a series of glass fabric laminations bonded together with polyester resin. The complete lamination and gelcoat are bonded together by a chemical action and the part is a one-piece unit. The outside gelcoat--approximately 0.015 inch depth--gives the fiberglass part its glossy finish. The following recommendations will help you keep this unique material in the same condition it was when it left the factory.

Seasonal Care (At Fitting Out Time)

1. Clean surface with soap and water.
2. Treat with white automotive type polishing compound; use lightly.
3. Wax and polish the surface with an automotive type wax. Some modern products give you rubbing and waxing action in one. These products are acceptable.

Loss of Gloss

To restore the glossy appearance of the gelcoat surfaces, a light buffing may be advisable. For hand buffing, use a slightly abrasive rubbing compound similar to DuPont Number 7. If a power buffer is used, Mirror-Glaze Number 1 or a similar product is recommended. After buffing, the surface should be waxed and polished as described above for "Seasonal Care".

Stains

The fiberglass gelcoat surface is highly resistant to stains, most of which can be removed easily with household detergent. Crayon, lipstick or shoe polish can be removed with plain alcohol. Ink spots will come off with Ajax or similar detergent. While penetrating stains are very uncommon, some products with unusual chemical contents may go too deep for ordinary methods of removal.

In such cases, weak solutions of acids or alkalies, such as hydrochloric acid or ammonia, can be tried. These may, however, produce a slight discoloration in the gelcoat. If none of the above methods are successful, it may be necessary to sand down through the gelcoat to remove the stain. This will require refinishing (see below).

Scratches and Abrasions

Those that do not penetrate the full thickness of the gelcoat can be treated by lightly sanding and buffing the area. Larger scratches that penetrate the gelcoat but do not go deeply into the fiberglass or weaken the structure can also be repaired as follows:

- a. Clean the damaged area first with mineral spirits or turpentine to remove dirt and wax then follow with detergent and rinse. Allow to dry completely.
- b. Secure a small amount of pigmented gelcoat resin matching the color of the area to be repaired. This is available to you from your Bertram dealer.
- c. Add two drops of catalyst per cubic inch of gelcoat and mix thoroughly; the mixture will gel in 15 minutes.
- d. Fill scratch with the mixture before it hardens and round off about 1/16" to 1/8" above surrounding surface.
- e. Lay a piece of wax paper or cellophane on top of the patch and press lightly to remove air. Take off wax paper after 20 minutes and allow patch to cure overnight.
- f. Sand down patch with 600 grit wet sandpaper. Finish by rubbing and buffing with regular buffing compound.

Any repairs to fiberglass that are more extensive than those described here should be made only with the help and advice of your Bertram dealer.

BOTTOM BLISTERS

Prolonged and continuous contact with water, in some cases, cause blisters formation in the fiberglass laminates.

These blisters occur immediately behind the gelcoat or behind the surface layer of mat.

Osmosis causes the blister to expand which will separate the glass fiber from the resin in the surface mat. When the blister is removed the remaining mat fibers will give the appearance of having little or no resin. This "dry" appearance is a normal result and can be restored to a smooth surface with fine sandpaper.

Repairs should be made by a yard having experience with this type of problem. Contact an authorized Bertram dealer or the Bertram Service Department.

PAINING FIBERGLASS SURFACES

1. Thoroughly clean the fiberglass part to be painted removing any wax with mineral spirits, turpentine or other commercial solvents. Then wash with detergent and rinse.
 2. After surface is dry, sand lightly with garnet, fine oxide or #220 sandpaper. Wipe clean of all dust.
 3. Apply two thin coats of primer as recommended by marine paint manufacturer.
 4. Apply a marine paint of good quality as the manufacturer recommends.
 5. Bottom anti-fouling paint should be applied per the manufacturer's instructions. Bertram's usual procedure is to apply Pettit Trinidad "75" anti-fouling paint, unless an owner requests a different brand. Before repainting the bottom, a check should be made to insure that the brand and type is compatible with the type presently on the bottom.
- NOTE: Some types of bottom paint are not compatible with Pettit unless a primer is used first.

BATTERY CARE

BATTERY WATER

Distilled water is best for adding to the electrolyte; however, a good grade of drinking water can be used if it is free of minerals, particularly iron.

Adding water to a cell will temporarily lower the specific gravity of the electrolyte, but this does not mean that the cell has lost any of its charge.

Fill cells when required; the top of plate separators should never be exposed. Fill with water until liquid level is about 3/8 inches above the top of separators. Do not overfill. Excessive liquid level will cause acid to spill out the vents when battery is charging and will cause corrosion at the terminals and to the battery cables.

EXCESSIVE LOSS OF LIQUID

Under proper operating conditions, batteries should require only a slight amount of water every few weeks. If an excessive amount of water is required, it is usually a sign that the battery is being overcharged and the engine alternators and converter should be checked.

MAXIMUM CHARGE VOLTAGE

Use an accurate voltmeter to check the voltage directly at the batteries.

12 Volt System Maximum Charge Rate: 13.9 Volts

CLEANING BATTERIES

Be sure battery caps are on tight, then clean battery top with a stiff (non-metallic) brush, being careful not to scatter corrosion products. Wipe off with a cloth wetted with ammonia or baking soda in water.

Clean the battery terminals and cable terminals to a bright metal finish whenever the cables are removed. Coat the contact surfaces with petroleum jelly (Vaseline) before the terminals are reconnected.

BATTERY GASES - EXPLOSIVE

WARNING

The gases issuing from a charging battery are a mixture of hydrogen and oxygen gases and will explode with great violence and spraying of acid if a spark or flame is brought too near them.

To avoid sparks, do not disturb connections at batteries while charging. Be sure engines are not running and that converter has been turned off when working on battery terminals.

SPILLED BATTERY ACID

If battery acid is spilled, immediate action is required to check or eliminate its damaging effects:

1. Acid splashed in the eye should be washed out immediately and thoroughly with plenty of cold, fresh water, then, play it safe and see a doctor.
2. Acid on other parts of the body should be removed immediately by washing thoroughly with cold water.
3. Acid on clothing or parts of the boat should be washed immediately with cold water and the area neutralized with a solution of baking soda or household ammonia.

If a considerable amount of acid is spilled from the battery, it should be replaced. This is a job for a battery repairman.

BERTRAM 26II
SPORT CONVERTIBLE

MODEL 261
OUTBOARD

OPERATOR'S MANUAL

18A8400

A WORD OF WELCOME

We are pleased that you have chosen a Bertram, and know that its unique design will give you outstanding performance and many years of boating pleasure.

Your Bertram is built with fine, modern materials and is manufactured to Bertram's demanding quality standards. It comes to you as a factory-tested and inspected boat.

As durable as its construction is, your Bertram will benefit by reasonable care. And, as is always true with things mechanical, maintenance, adjustments, or repairs may be required from time-to-time for certain components. Thus, this Operator's Manual, containing a wealth of detailed information, has been prepared for your particular model as a guide for keeping it in good operating condition.

To fully enjoy your Bertram, you should understand it completely. To this end, we suggest that you read this manual thoroughly. If any points arise that you do not completely understand, your Bertram dealer will be glad to assist you.

In the Electrical Section of this manual is a complete set of Wiring Diagrams that will help you understand the boat's systems and be an indispensable tool for service people.

In the Mechanical Section of the manual is a set of Mechanical Plans that will also help you to be better acquainted with your boat.

In addition, there is a packet of manuals and instructions supplied by the various equipment manufacturers.

Included are warranties; ours, plus those of manufacturers of engines and accessories.

When your boat requires service, contact your Bertram dealer. He has been factory trained to help you and our factory service representatives are available to help him if need be.

We wish you many years of pleasurable yachting on your new Bertram.

GETTING ACQUAINTED
WITH MODEL 261 OUTBOARD

OUTBOARD MOTORS - These have been furnished and installed by your dealer. Be sure that the dealer has filled in the required information on the Technical Data - Outboard Model (page 2B of this manual).

To help you become familiar with the factory installed equipment in your Bertram we would like to point out the location of certain features.

HULL DRAIN - The bilge drain is accessible through the center hatch at forward end of the cockpit. Be sure the plug is inserted and watertight.

BATTERIES & MAIN SWITCHES - These are located under the cockpit hatch just forward of the motor well.

12 VOLT DISTRIBUTION PANEL - This panel and the motor hourmeters are inside the cabin on the starboard side.

120 VOLT SHORE POWER - If your boat has this optional feature, the distribution panel is in the aft end of the open side locker on the port side of the cockpit well. The GFI outlet is at the forward end of this locker. If you also have the optional converter (battery charger) it is behind the removal panel just forward of the shore power inlet.

HYDRAULIC STEERING RESERVOIR - This is behind the removable panel in aft starboard corner of the cockpit.

BILGE PUMPS - Your boat has two automatic/manual bilge pumps. The forward pump (750 GPH) and its float switch is under the cabin hatch. The aft pump (1750 GPH) and its float switch are under the motor well.

VENTILATION - The natural air intakes are located on deck amidships. The natural air exhaust is aft through the hull side on starboard side. The blower and its vent are on port side aft.

FUEL FILTERS & PRIMING PUMPS - These are located port and starboard under the cockpit hatches just forward of the motor well.

WATER TANK - If your boat has the optional galley/dinette, the tank and its fill are under the dinette's aft seat.

TOILET SYSTEM - The optional Monomatic toilet is equipped with a deck plate for dockside pump-out. There is also a manual pump under the berth forward of the toilet and an overboard discharge valve under a hatch at the helm station.

TABLE OF CONTENTS

Dealer Evaluation Card
Title Page
A Word of Welcome
Getting Acquainted with Model 261 Outboard

CONTENTS SECTION

Table of Contents A-1,2,3

TECHNICAL DATA SECTIONS

Boat Data Sheet B-1
Technical Data - Outboard Model B-2

CONTROLS & INSTRUMENTS SECTION

Switches

Battery Power C-1
Before Starting Motors C-1
Fuel Priming C-1
Battery Paralleling Switch C-1
Starting Difficulty C-1
Accessory Switches C-1
Navigation & Anchor Lights C-2

Instruments

Outboard Motor Instruments C-3
Fuel Gauge C-3
Hour Meters C-3

Mechanical Controls

Throttle and Gear Controls C-4
Steering System C-4

BOAT OPERATION SECTION

Fueling Instructions	D-1
Power Trim	D-1
Cruising	D-1
Motor Well Splashboard	D-2
Personal Equipment and Accessories	D-2
Water In The Bilge	D-2
Marine Growth	D-2

Safety Equipment

Life Preservers	D-3
Ring Buoy	D-3
Portable Fire Extinguishers	D-3
Visual Distress Signals	D-3

ELECTRIC SECTION

12 Volt D.C. System

Batteries	E-1
Battery Switches	E-1
Main Fuses	E-1
12 VDC Terminal Blocks	E-1
12 VDC Distribution Panel	E-2
Ground and Bonding System	E-2

120 Volt A.C. System (Optional)

Shore Cord	E-3
Distribution Panel	E-3
Warning	E-4

Electrical Equipment

Converter (Optional)	E-5
Refrigerator (Optional)	E-5
Wiring Diagram Index	E-6

MECHANICAL SECTION

Docking Plan	F-1
<u>Fuel System</u>	
Fuel Tank	F-2
Fuel Mixture	F-2
Fuel Filters	F-2
Steering System	F-3
Seawater Washdown System (Optional)	F-4
Toilet System (Optional)	F-5
Mechanical Plans Index	F-6

MAINTENANCE SECTION

Preventative Maintenance

Periodic Maintenance	G-1
Daily	G-1
Every 100 Hours or 60 Days	G-1
Exterior	G-1
Interior	G-1
V-Berth	G-2
Galley (Optional)	G-2
Outboard Motors & Electrical	G-2
Helm Station	G-2
As Required	G-2

Storing Your Bertram

Dry Storage	G-3
-------------	-----

Appearance and Care

Care of Fiberglass	G-4
Seasonal Care	G-4
Loss of Gloss	G-4
Stains	G-4
Scratches & Abrasions	G-5
Bottom Blisters	G-5
Painting Fiberglass Surfaces	G-6

Battery Care

Battery Water	G-7
Excessive Loss of Liquid	G-7
Maximum Charge Voltage	G-7
Cleaning Batteries	G-7
Battery Gases-Explosive	G-8
Spilled Battery Acid	G-8

TECHNICAL DATA - OUTBOARD MODEL

MOTORS

Make _____

Model _____

Horsepower Rating _____

Max. R.P.M. _____

Port Motor Serial No. _____

Stbd. Motor Serial No. _____

PROPELLERS

Port No. _____

Size _____

BATTERIES

Make _____

Type _____

REMOTE FUEL FILTERS

Make Fram FBM 1110 PLM

Cartridge C1110 PL

CONTROLS AND INSTRUMENTS

WARNING

GASOLINE VAPORS CAN EXPLODE

BEFORE STARTING ENGINE OPERATE BLOWER FOR 4 MINUTES. CHECK BILGE AREAS FOR GASOLINE VAPORS.

SWITCHES

BATTERY POWER

Check first to see that both Main Battery Switches are on. These feed power to the outboard motors and to the 12 Volt Distribution Panel in the forward cabin. On this panel turn on the Horn, Fuel Primer and Blower switches and any others that may be needed.

BEFORE STARTING MOTORS

Turn on Blower switch at helm station, allow blower to run at least 4 minutes before starting motors.

FUEL PRIMING

It is recommended that each motor be primed for about 30 seconds before starting.

STARTING MOTOR

Be sure control is in Neutral. Do not crank motor more than 20 seconds. Allow a 2-minute cooling period between starting attempts.

BATTERY PARALLELING SWITCH

If battery is weak this switch can be used while starting to momentarily parallel both batteries.

STARTING DIFFICULTY

Each make of outboard has unique starting techniques. Carefully study the Owner's Manual furnished by the Outboard Manufacturer to learn their methods and their suggestions for troubleshooting this and other problems.

ACCESSORY SWITCHES

At the helm station are switches for the Horn, Instruments, Wipers, Blower, Bilge Pumps and Navigation/Anchor Lights.

The Instrument Switch controls the instrument and compass lights.

The Bilge Pump switches are normally kept in the Automatic position but can be operated manually if desired. Both pumps are connected directly to the batteries and are protected by in-line fuses at the Main Battery Switches. These switches, when off, do not turn off power to the bilge pumps.

NAVIGATION AND ANCHOR LIGHTS - Your boat is equipped with international lights for night running. These should be used between one-half hour before dusk and one-half hour after dawn. The "running lights" consist of red and green lights in the forward bow chock. Their visibility is one mile. The 20 point white masthead light has a visibility of two miles. The 12 point white stern light has a visibility of two miles.

When the switch is placed in the "Anchor" position both sections of the mast light are lit forming a 32 point light.

INSTRUMENTS

OUTBOARD MOTOR INSTRUMENTS

Your dealer should be able to supply you with tachometers and gauges that you desire and instruct you as to their use and their normal readings.

FUEL GAUGE

This gauge has been installed by Bertram and should be connected by the dealer to either of the outboard ignition circuits.

Because of the configuration of the fuel tank, the fuel gauge does not register as gallonage. The tank is much larger at the top portion so there are actually more gallons in the upper half of the tank than the lower half. This should be considered during long range trips to avoid running too low on fuel or the possibility of running out of fuel.

Fuel gauge readings indicate the approximate amount of usable fuel as follows:

Full	131 gal.
3/4	82 gal.
1/2	40 gal.
1/4	15 gal.
Empty	0 gal.

HOUR METERS

These instruments are installed by Bertram and should be connected by your dealer to the outboard ignition circuits. You should determine their port and starboard motor relationship.

They register the number of hours that the motors have been operating, regardless of engine speed (RPM).

CONTROLS

THROTTLE AND GEAR CONTROLS

These controls and their cables should be installed by your dealer. Different types are usually available and their selection and use should be discussed with your dealer.

STEERING SYSTEM

The Bertram 26 is equipped with a hydraulic steering system. The basic system is composed of three working parts: the steering station pump, the slave or steering cylinder; and the unitank.

When the steering wheel is turned, hydraulic fluid is pumped to the steering cylinder attached to the rudder arm. The hydraulic fluid reservoir contains 2 quarts of fluid under 30 PSI air pressure. The system is designed to prevent any outside air from entering the reservoir. The reservoir has a sight glass indicating the fluid level. The air pressure can be recharged by using an ordinary bicycle tire pump attached to the valve on top of the reservoir. The reservoir is located behind a removable panel at aft starboard corner of the cockpit.

Your dealer will make the connection of the cylinder to the outboard motors.

BOAT OPERATION

FUELING INSTRUCTIONS

For maximum safety the following steps should be followed each time your Bertram is fueled.

1. Close all hatches, door and engine boxes.
2. Do not operate any equipment. This means engines, stove, pumps or bilge blower
3. Make sure the filling hose nozzle is touching the deck fill plate before any fuel is pumped.
4. Top the tank until fuel overflows through the vent fitting on hull side below the fuel fill.

WARNING: The first time the tank is filled a thorough check should be made to insure that fuel does overflow through the vent. If it does NOT occur, do not start engines. Immediately notify your dealer and the Bertram Service Department.

5. Open hatches, cabin door and engine boxes. Then visually and by smell, check for fuel leaks or fuel fumes.
6. Operate bilge blowers for at least four minutes and leave running until engines are started.
7. Close hatches and boxes after engines have run for a while.

POWER TRIM

It is most important that you learn to use this control function of your outboard motors. Your Outboard Manual should have detailed instructions and suggestions on how the use of this feature affects the speed, planing angle, steering and handling of your boat.

CRUISING

The famous Bertram V Hull cushions pounding by slicing rather than slapping waves. You'll be able to go out in weather that keeps ordinary boats at their moorings. But even Bertrams can encounter extreme conditions that call for sensible seamanship. While your Bertram will withstand far greater punishment than you will probably ever subject her to, speed should be reduced under severe conditions in the interest of your comfort, and to reduce needless strain on the engines.

Your Bertram has an inherent ability to carry comparatively heavy loads without appreciably reducing performance; however, for the best results try to maintain the original trim of the boat. This can be done by noticing the trim carefully when the boat is first launched, before extra equipment is placed aboard. Of course, all gear and equipment should be properly stored while cruising.

MOTOR WELL SPLASHBOARD

We have made the splashboard removable to provide easy access to the motors for servicing.

WARNING

WHEN BOAT IS IN OPERATION THE SPLASHBOARD MUST BE IN PLACE. ITS PURPOSE IS TO REDUCE THE POSSIBILITY OF FLOODING THE COCKPIT AND ADDS PROTECTION TO PASSENGERS FROM FALLING OVERBOARD.

PERSONAL EQUIPMENT AND ACCESSORIES

All personal equipment and accessories added to the boat will tend to decrease the speed, just as adding passengers will. Often the effect of this added weight is not taken into consideration in the performance.

WATER IN THE BILGE

Since a barrel of water weighs over 400 pounds, the bilges must be kept pumped dry in order to keep excess weight to a minimum. As mentioned before, added weight will reduce boat speed.

MARINE GROWTH

In order to obtain maximum speed, the bottom of the boat must be kept free of marine growth, including moss. Any growth on the boat's bottom will increase the resistance of the boat as it moves through the water, thus decreasing speed.

SAFETY EQUIPMENT

LIFE PRESERVERS

U.S. Coast Guard requires that at least one approved Personal Flotation Device (PFD) of suitable size be provided for each adult and each child on board.

PFD's may be of Type I, II, or III, of suitable size, if boat is not used commercially. PFD's must be Type I if used commercially and carrying 6 or fewer passengers for hire.

Bertram has supplied for the boat 2 Type II Adult Size PFD's.

RING BUOY

In accordance with Coast Guard requirements, a throwable Type IV device must be carried and placed where it is IMMEDIATELY AVAILABLE.

Bertram has supplied an approved 20" diameter ring buoy and 3 ring buoy brackets for the operator to mount in a suitable location. It is recommended that about 60 feet of line be attached to the ring buoy.

PORTABLE FIRE EXTINGUISHERS

Bertram has supplied two 2-3/4 pound dry chemical extinguishers with brackets. They are mounted in strategic locations.

Class ABC extinguishers are effective on the following types for fires:

Class A Fire - Paper, wood fabric, rubber, and certain plastics.

Class B Fire - Flammable liquids, such as gasoline, oil, paint, and cooking fat.

Class C Fire - Energized electrical equipment, such as motors, appliances, and switches.

These extinguishers are U.S.C.G. approved Type BC-1.

VISUAL DISTRESS SIGNALS

A regulation became effective January 1, 1981, requiring Coast Guard approved visual distress signals be on board when operating in most U.S. waters and on the high seas.

Bertram does not supply such equipment. The operator should study the Coast Guard pamphlet "Visual Distress Signals for Recreational Boats" which has been placed aboard and then purchase such equipment as may be required or desired.

12 VOLT D.C. SYSTEM

BATTERIES

Each outboard has its own starting battery (supplied by your dealer) which is charged by the engine alternator or by an optional 120 VAC converter. These batteries are always independent of each other, except that a battery parallel switch permits momentary paralleling for assistance in starting only.

BATTERY SWITCHES

To activate the boat's 12 volt system the main battery switches must be turned on. These switches should be used to cut off battery current when the boat is left unattended, especially if for long periods of time. Turning these switches off does not cut off power to the bilge pumps. In-line fuses at the main switches protect these circuits and allow automatic operation to protect the boat continually.

Also, if you have the optional converter it can be used to keep the batteries charged even if the main battery switches are turned off.

CAUTION: Battery switch should not be turned off while engine is running. To do so may damage diodes in the engine driven alternator.

MAIN FUSES

Two 45 amp cartridge type fuses are located below the battery switches. These protect the feeder wires to the distribution panel.

12VDC TERMINAL BLOCKS

These blocks and the negative ground bus are located below the instrument panel and can be serviced by access through the forward cabin locker.

If additional room is required for servicing these terminals or the instrument panel, the bulkhead at the head of the starboard berth can be removed. Remove screws at top of bulkhead on forward side and at bottom of bulkhead on aft side. Also, remove the screws holding the electrical panel to the forward bulkhead.

12 VDC DISTRIBUTION PANEL

This panel is located inside the forward cabin on the starboard side. It is divided into two sections. Those circuits including the Fuel Prime are powered by the port battery. The other section is powered by the starboard battery.

Each circuit has a toggle switch and fuse. If any fuse requires replacement do not exceed the amperage rating shown for that circuit on the wiring diagram (see Plan D 7902).

GROUND AND BONDING SYSTEM

Your Bertram is fitted with a bonding system which is designed to minimize galvanic corrosion. Two copper strips run fore and aft through the bilge area. All underwater fittings and hardware as well as the negative terminals of batteries are connected with wire jumpers to these straps.

All AC equipment and devices are bonded with a green wire to this system. This is done to reduce danger of an electrical shock.

120 VOLT A.C. SYSTEM

(OPTIONAL)

SHORE CORD

A 34 foot shore cord is provided with a capacity of 30 amperes.

CAUTION:

WHEN CONNECTING SHORE CORD, ALWAYS PLUG CORD TO THE BOAT FIRST, THEN CONNECT TO THE OUTLET ON SHORE. WHEN DISCONNECTING SHORE CORD, ALWAYS REMOVE THE SHORE END FIRST, THEN THE BOAT END. THIS IS THE SAFE WAY, AS IT PREVENTS ACCIDENTLY DROPPING A "HOT" SHORE CORD INTO THE WATER. WHEN CONNECTING OR DISCONNECTING SHORE CORDS, BE SURE THAT ALL AC PANEL BREAKERS ARE OFF. THIS WILL PREVENT ANY ARCING AT THE SHORE CORD CONNECTIONS.

SHORE CORDS HAVE TWIST-LOCK FITTINGS ON EACH END. BE SURE THEY ARE LOCKED PROPERLY THIS WILL PREVENT ARCING AND DAMAGE TO THE FITTINGS.

WARNING

DO NOT CUT OR DISCONNECT THE GREEN WIRE IN SHORE CORD OR AT DOCK OUTLET OR BOAT INLET.

THIS SAFETY WIRE IS REQUIRED TO PROVIDE THE SAME EARTH POTENTIAL BETWEEN SHORE GROUND AND BOAT GROUND.

ITS PURPOSE IS TO MINIMIZE SHOCK HAZARD TO PERSONS ON THE BOAT OR IN THE WATER.

DISTRIBUTION PANEL

This panel is located in the forward side locker on port side. The shore line is wired in accordance with current industry standards; however, you may occasionally find some dock outlets improperly wired. For your protection, lights are mounted on the 120 volt AC electrical panel to indicate proper or reversed polarity. Check the polarity lights. If the amber light is lit, the polarity is correct and you may safely turn on the main circuit breaker. If the red light is lit, the polarity is reversed and a connection must be made on the dock before turning on the circuit breakers.

WARNING

IF BOTH "NORMAL" AND "REV. POL" LIGHTS ARE LIT, IT INDICATES A HAZARDOUS CONDITION WHERE THE HOT (BLACK) WIRE AND GROUNDING (GREEN) HAVE BEEN REVERSED. IMMEDIATELY DISCONNECT THE SHORE CORD AT THE DOCK AND CHECK OUT THE DOCK CONNECTION AND IF NECESSARY, ALL CONNECTIONS ON THE BOAT. DO NOT USE UNTIL FAULT HAS BEEN CORRECTED.

ELECTRICAL EQUIPMENT

CONVERTER (OPTIONAL)

The Newmar Model ABC 12-15 is located behind a removable panel on portside.

120 VAC power is supplied by a 15 amp circuit breaker on the AC distribution panel.

Wires from the batteries to the converter are protected by 30 amp cartridge fuses at the main battery switches.

The converter is automatic and will charge each battery as required then drop back to maintain a full float charge without overcharging.

The converter may be left on at all times, even while engines are running.

Batteries are not disconnected from the converter when the main battery switches are turned off.

REFRIGERATOR (With Optional Galley/Dinette)

The built-in Norcold refrigerator operates from either 12 volt battery power or from 120 VAC shore power. When turned on it operates on battery power until shore power is applied. It then automatically switches to shore power thus preventing further drain on the battery.

Shore power is supplied by the "outlet" circuit breaker on the AC distribution panel.

Power from the port battery is supplied through a 15 amp fuse at the main battery switch.

WIRING DIAGRAM INDEX

12 V.D.C. SYSTEMS

Wiring, 12VDC

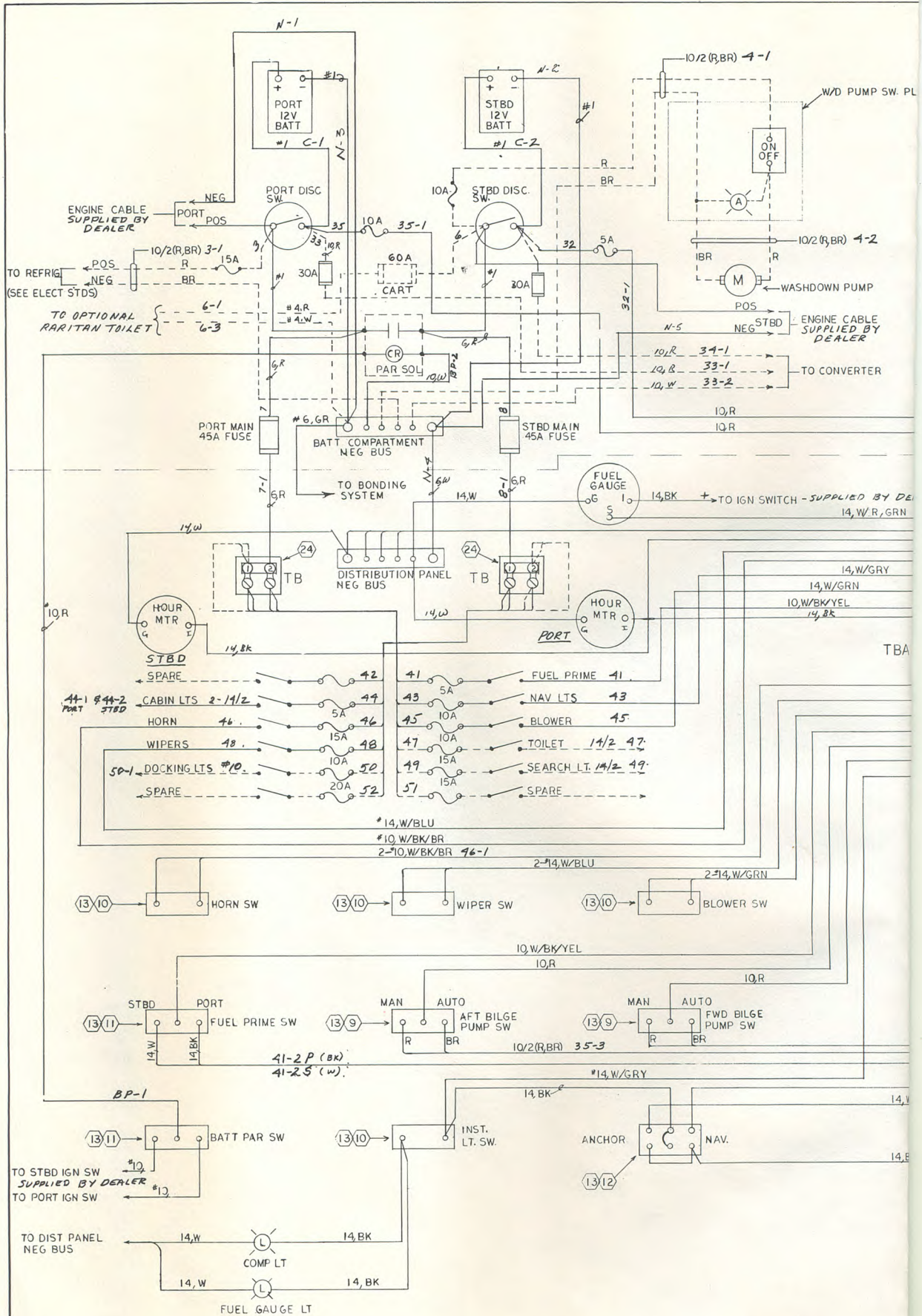
PLAN NO.

D7902

12 V.A.C. SYSTEM

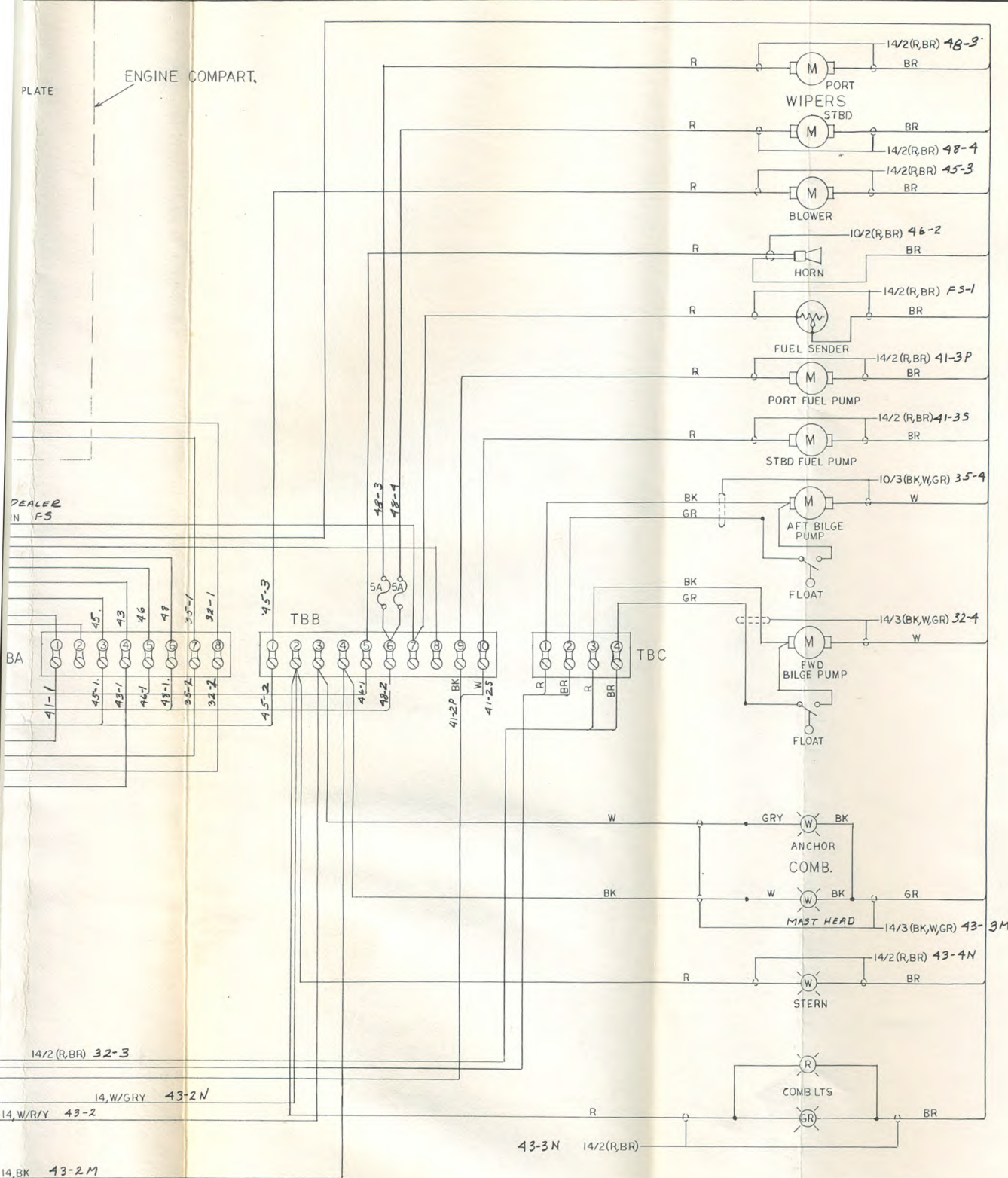
Wiring Primary, 120VAC

B8076



ELECTRICAL 200

REVISIONS		
LET.	ZONE	DESCRIPTION
C		SEE SH-1 FOR REV.



BERTRAM
MIAMI, FLORIDA
A SUBSIDIARY OF WHITTAKER

MODEL 261 OUTBOARD
TITLE WIRING, 12VDC

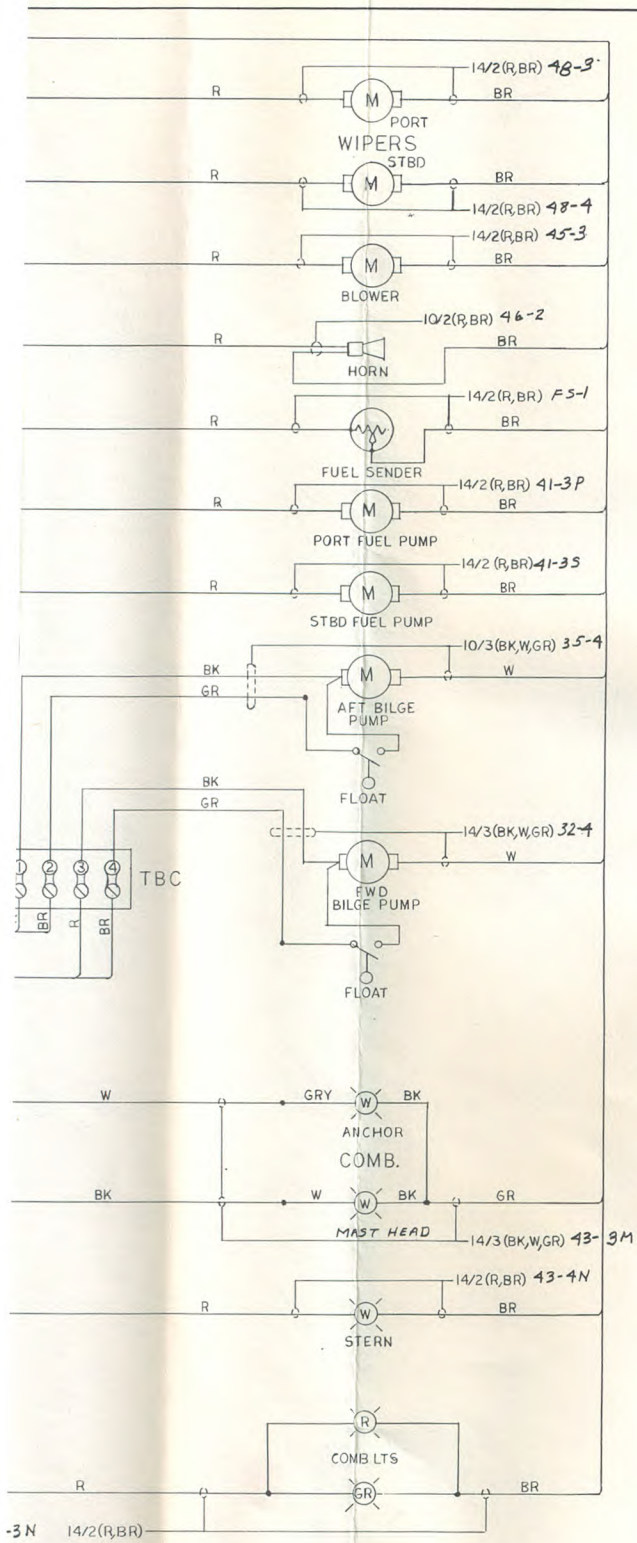
SCALE

BY NFW APP'D [Signature] DATE 9-2-82

FILE

REVISIONS

LET.	ZONE	DESCRIPTION	BY	DATE	APPV.
C		SEE SH1 FOR REV.			



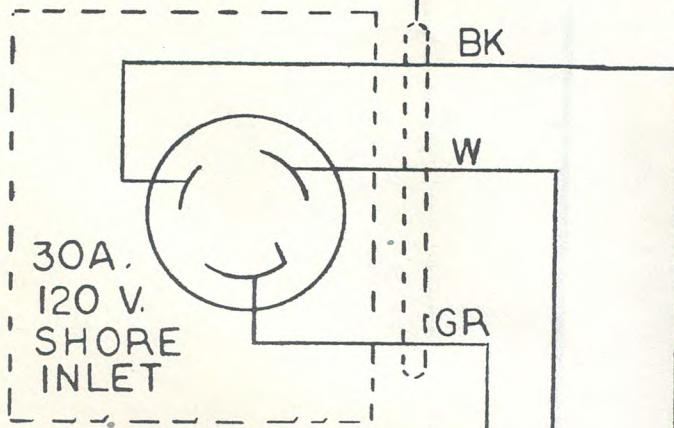
F
E
D
C
B
A

BERTRAM YACHT
 MIAMI, FLORIDA, U.S.A.
 A SUBSIDIARY OF WHITTAKER CORPORATION

MODEL 261 OUTBOARD
 TITLE WIRING, 12VDC

SCALE	PLAN NO.	REV.
BY NFW	APPROV. DATE	D 7902 C
DATE 9-2-92	DATE 9/1/92	SHEET 2 OF 2
FILE		

10/3, 100, (BK,W,GR)



TO BONDING STRAP #10,GR

⚠

ITEM
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

SPARE

30A. MAIN

#14, BK

#14, W

#14, W.

#14, BK

CONVERTER (OPT) 10A.

SPARE

101, 14

BK
W
GR } TO CONVERTER

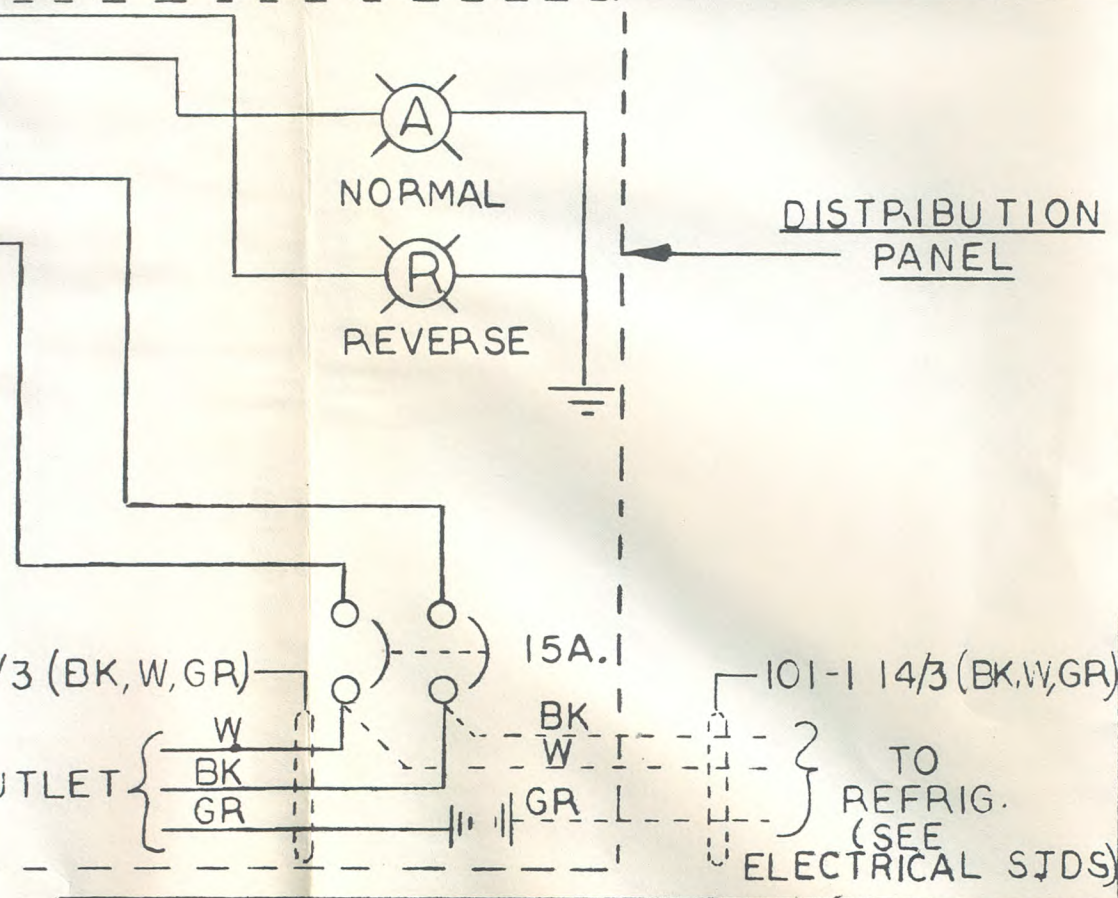
TO C

102, 14/3, (BK,W,GR)

B 8076 A

QTY	U/M	DESCRIPTION	BYD NO
1	EA	SHORE INLET, 30 A, 125V	141311
1	EA	SHORE CORD 30A, 125V, 3A FT	141312
1	EA	SHORE ADAPTER, 30F/15M 125 PGT	141313
AR	FT	WIRE # 10/3 WHT/BLK/GR	13086
1	EA	PANEL, DIST. 120 VAC	14C5787
1	EA	BOX, PULL, 8X6X4	14C6378
1	EA	LIGHT, IND. RED, 125V. 1/2 D. QC	14S30008-1
1	EA	LIGHT, IND. AMBER, 125V. 1/2 D. QC	14S300082
4	EA	CONNECTOR, BOX	14006
1	EA	CIR. BR. B 2P, AC, 30A, N, 10 ST	14626
1	EA	CIR. BR. A 2P, AC, 15A, N, QC	14624
AR	FT	WIRE # 14/3 WHT/BK/GR	13087
1	EA	WALL PLATE, W.P, GFCI LEV 6196	141659
1	EA	OUTLET, WALL, DUPLEX, GFI, 15A, IV.	141632
1	EA	BOX, OUTLET, NOM-MBT 2 3/4 DEEP	141596
AR	FT	WIRE # 10, GREEN	13125

REVISIONS	
LET.	DESCRIPTION
A	DELETED ITEM 3 ECO 6435 HULL 338



BERTRAM
MIAMI, FLORIDA
 A SUBSIDIARY OF WHITTAKER

MODEL 26
 TITLE
WIRING, PRIMARY

SCALE
 BY E.G. APYD: [Signature]
 DATE 6-29-82 DATE 6/24/82

CODE	TITLE	BYD NO
	DRAWING REFERENCE	

ECO 6434

B
 FILE

REVISIONS

LET.	DESCRIPTION	BY	DATE	APPV.
A	DELETED ITEM 3 ECO 6435 HULL 338	E.G.	12/14/82	HW

BERTRAM YACHT
MIAMI, FLORIDA, U.S.A.

A SUBSIDIARY OF WHITTAKER CORPORATION

MODEL 261

TITLE

WIRING, PRIMARY, 120 VAC.

SCALE

PLAN NO.

REV.

BY E.G.

APPV. *[Signature]*

B

8076

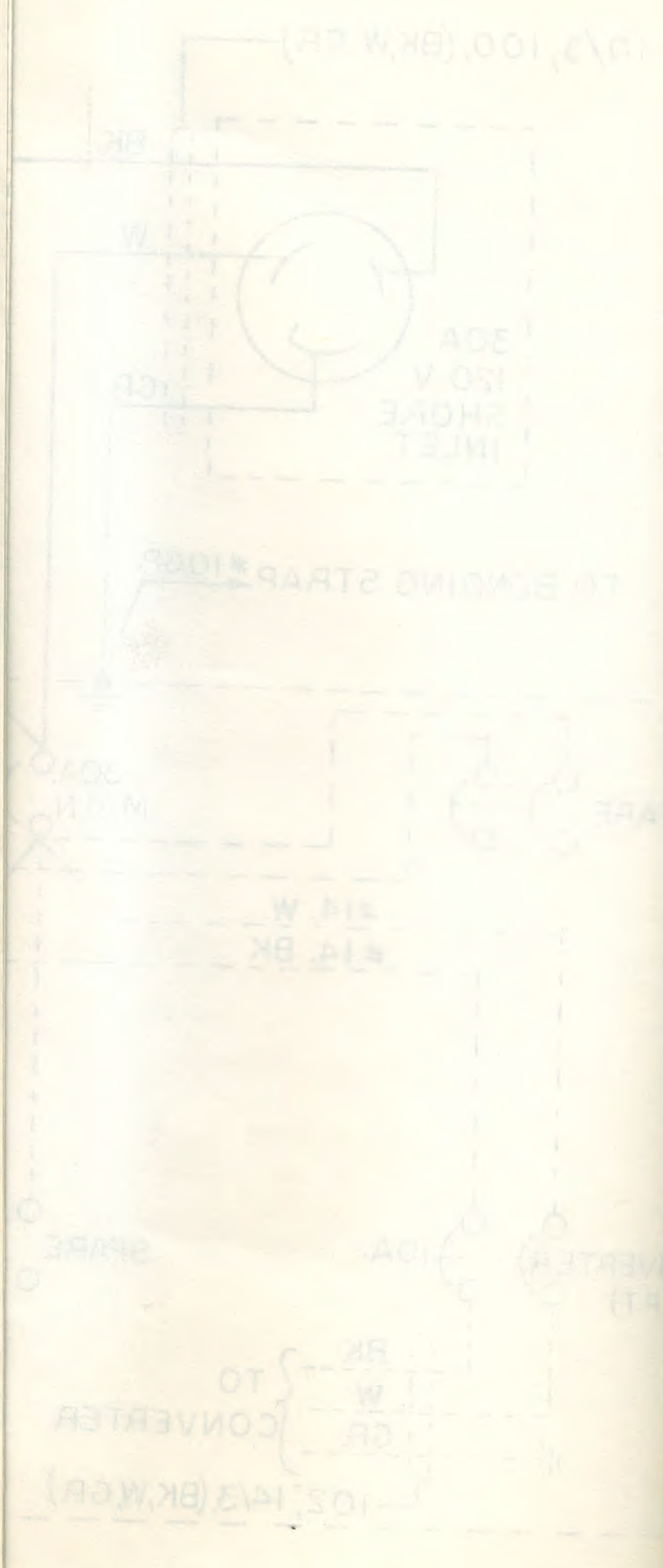
A

DATE 6-29-82

DATE 6/29/82

ECO 6434

FILE



DOCKING PLAN

The Docking Plan No. D8138 shows the location of the cradle designed for this boat and the shape of the hull at these points.

It also shows the vertical heights for clearance purposes.

The Designed Water Line (DWL) is strictly a theoretical line established during the development of the boat's design.

The actual load waterline will vary considerably on a boat of this size depending on how boat is loaded.

The locations of forward and aft slings is shown on this plan and also by labels attached on the deck of the boat.

There is no way for us to tell you what your boat will weigh, but here is an example: If equipped with 2 150 H.P. outboards, full fuel, wth galley/dinette option and full water tank, the total weight will be about 6950 pounds. The load on the aft sling will be about 4217 pounds and the load on forward sling will be about 2733 pounds.

The above is based on center of gravity being located 9' 1-5/16" forward of transom corner. This may vary, so add about 10% to each of the above sling figures in your load calculations.

FUEL SYSTEM

FUEL TANK

The fuel tank has a capacity of about 135 gallons, 131 gallons being usable. The tank is molded fiberglass made with fire retardant resins.

Access to the fuel gauge sender, with sight gauge, is through the center hatch at aft end of the cockpit. Also under this hatch is the fuel supply tube with a strainer at bottom of tank and with two anti-siphon valves at top, one for supply to each engine.

FUEL MIXTURE

Refer to your Outboard Manual to determine the recommended types of gasoline and oil and the proper mixture.

During the break-in period follow the manufacturer's instructions carefully.

FUEL FILTERS

The Fram filters are provided to assure clean fuel being delivered to your outboards. Cartridges (C110PL) should be replaced at least once a season or more often if there is a restriction in the fuel flow.

WARNING

BE CAREFUL WHEN OPENING FUEL FILTER OR ANY OTHER FUEL FITTING; GASOLINE IS EXTREMELY FLAMMABLE AND HIGHLY EXPLOSIVE UNDER CERTAIN CONDITIONS.

ALWAYS STOP ENGINES AND DO NOT SMOKE OR ALLOW OPEN FLAMES IN THE AREA WHEN FUEL FITTINGS ARE OPEN.

STEERING SYSTEM

The Teleflex (Capilano) Hydraulic system provides positive and dependable steering with comfortable effort.

Use only fluids recommended by the manufacturer. Keep filled to the upper level indicator.

Maintain air pressure between 25 to 35 PSI. An ordinary manual tire pump can be used.

SEAWATER WASHDOWN SYSTEM

(OPTIONAL)

A centrifugal pump provides seawater to a hose connection in cockpit.

Electrical power is provided by an in-line 10 amp fuse at the starboard main battery switch.

A switch and indicator light is located near the hose connection. Do not turn on pump if cap is on outlet and do not use a closable nozzle on hose; the build-up of pressure could cause damage to the pump.

TOILET SYSTEM

MONOMATIC (Optional)

The Monomatic Model 342 is a recirculating type that retains the chemically treated waste in a self-contained holding tank, which requires periodic pump-out.

Two methods of pump-out are provided. A "waste" fitting on deck is used at dockside installations where a pump is used to remove the waste and dispose of it properly.

The toilet should be filled with about four gallons of water and the required amount of Monomatic chemical added. Chemicals are available at most marinas and marine or recreational vehicle supply stores.

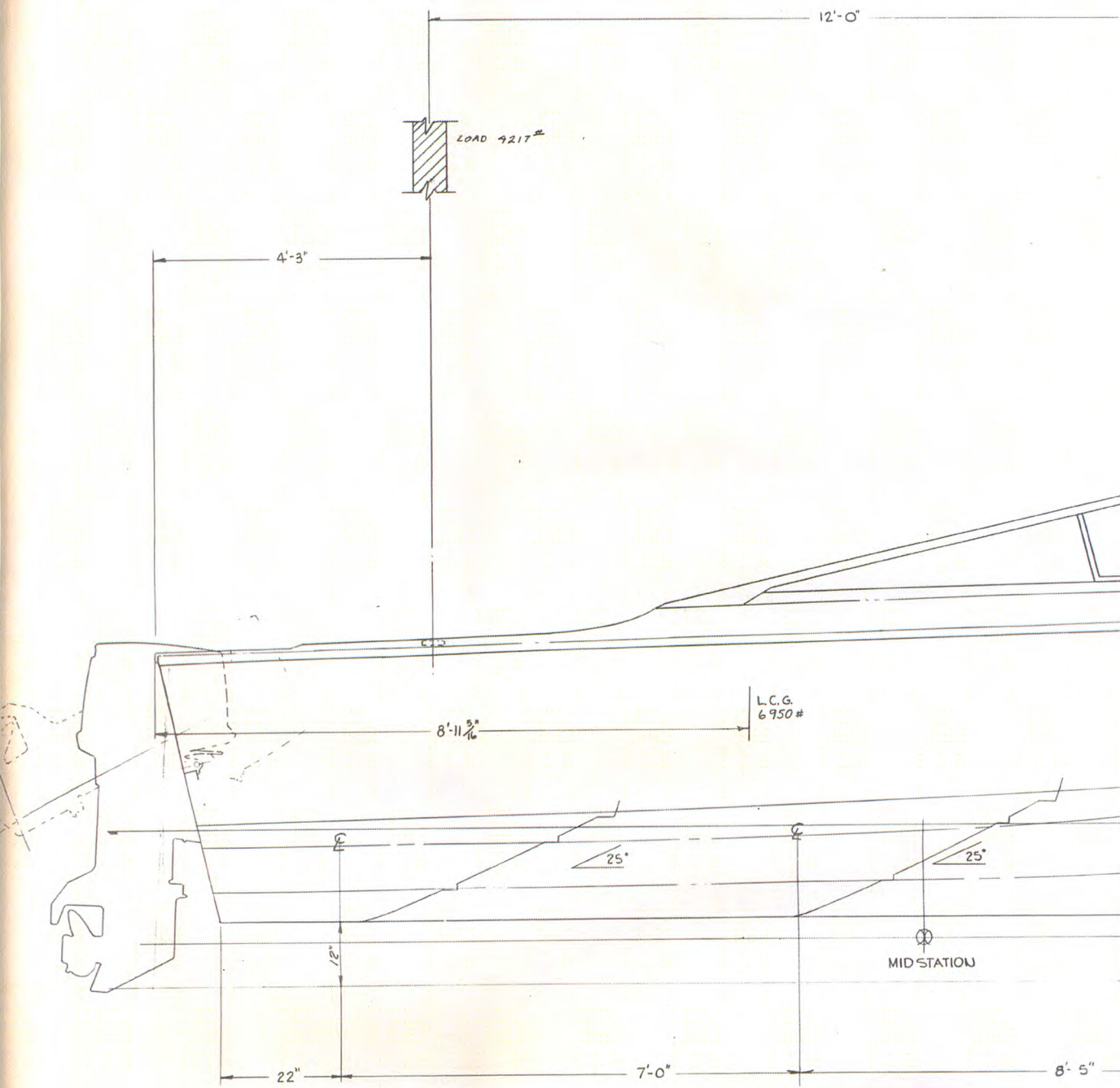
It is important that you become familiar with all the instructions in the Monomatic Operating Manual.

Power for the toilet is provided by a 15 amp fuse on the 12VDC distribution panel.

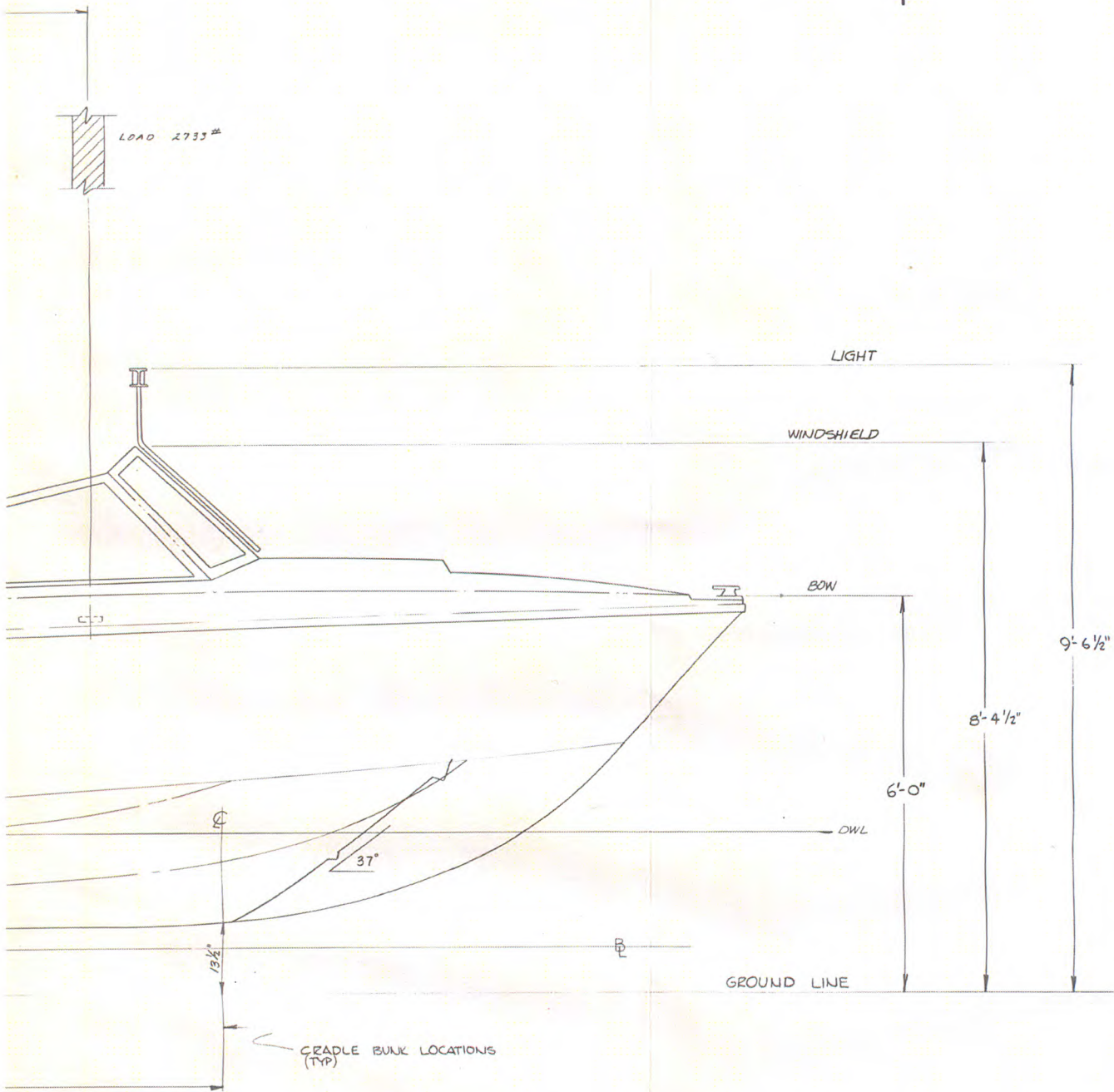
WARNING: Overboard discharge of waste from this type of toilet system is prohibited by federal and local laws in restricted waters, in addition, it is required that the seacock be locked in a closed position. This may be accomplished by using a padlock, a non-releasable wire-tie or by removing the seacock handle.

MECHANICAL PLANS INDEX

Docking Plan	D8138
Fuel System	B8399
Steering System	B8401



REVISIONS					
LET.	ZONE	DESCRIPTION	BY	DATE	APPV.



F
E
D
C
B
A

D 8138

BERTRAM YACHT MIAMI, FLORIDA, U.S.A. <small>A SUBSIDIARY OF WHITTAKER CORPORATION</small>			
MODEL 261 OUTBOARD			
TITLE DOCKING PLAN			
SCALE 1" = 1'-0"	PLAN NO.	REV.	
BY W.D.P. <i>[Signature]</i>	D 8138		
DATE 9-14-82	FILE 26		

4

3

2

1

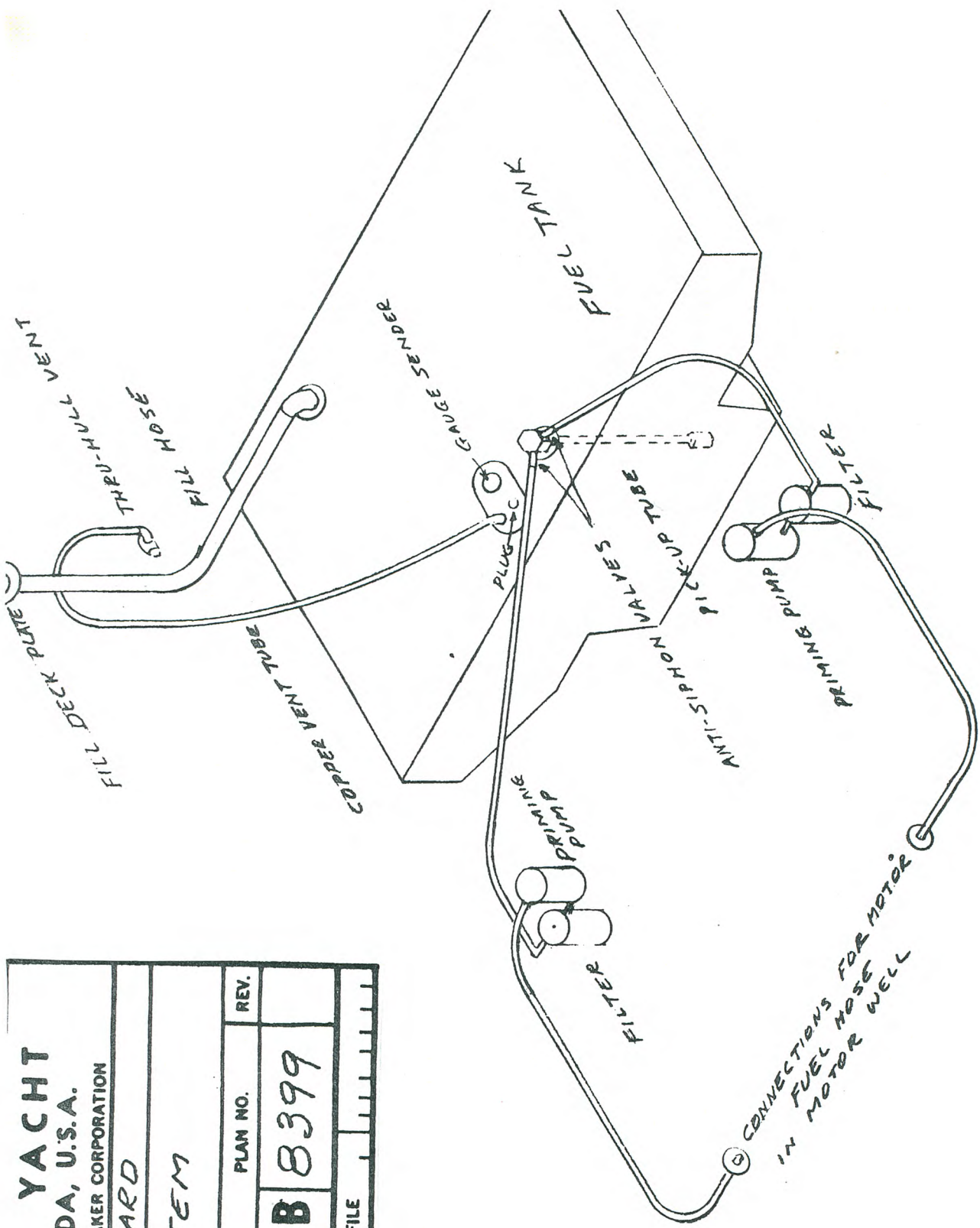
BERTRAM YACHT
MIAMI, FLORIDA, U.S.A.

A SUBSIDIARY OF WHITTAKER CORPORATION

MODEL 261 OUTBOARD

TITLE FUEL SYSTEM

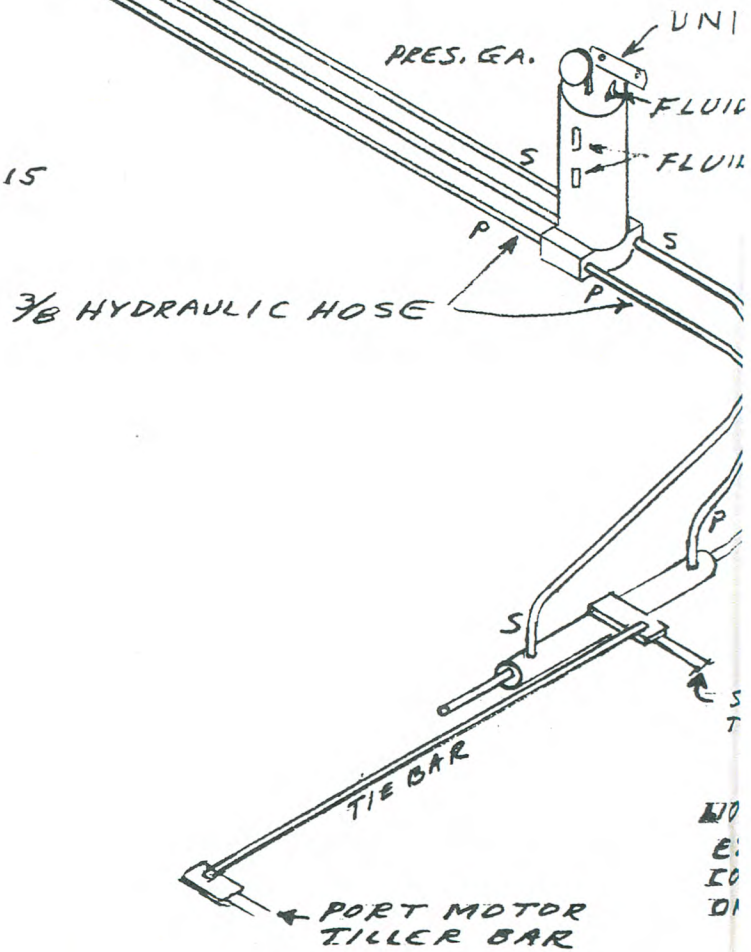
SALE	NONE	PLAN NO.	REV.
DATE	7/24/83	B	8399
APPROVED BY		FILE	
DATE	7/24/83		



CONNECTIONS FOR MOTOR
 IN MOTOR WELL



HYDRAULIC SYSTEM
 TELEFLEX (CAPILANO) MODEL 220V
 FLUID- TELEFLEX P/N HO 1030
 OR TEXACO AIRCRAFT OIL HO 15
 OR MIL. SPEC H5 6060D
 KEEP FILLED TO UPPER LEVEL
 AIR PRESSURE - 25-35 PSI



B2

BERTRAM YACHT			
MIAMI, FLORIDA, U.S.A.			
A SUBSIDIARY OF WHITTAKER CORPORATION			
MODEL 261 OUTBOARD			
TITLE STEERING SYSTEM			
SCALE NONE		PLAN NO.	REV.
BY L.C.H.	APP'D <i>[Signature]</i>	B 8401	
DATE 7/22/83	DATE 8/1/83		
FILE			

