

ALNASTRON[®]

THE Choice **OF EXPERIENCED BOATERS**

**OWNER'S MANUAL
CRUISERS SUPPLEMENT**



This booklet contains additional information (not found in the Glastron Owner's Manual) concerning major systems and components that are or can be installed on your Glastron Sport Cruiser. Please read this booklet, the separate Glastron Owner's Manual and all other literature supplied with your boat.

Safety labels for many of these items appear throughout your boat. Glastron cannot over-emphasize the importance of SAFETY. Please read ALL SAFETY LABELS on your boat. It is vitally important that you understand the information contained on each label. If you have any questions concerning these labels, or if they are missing from your boat, please contact your Glastron dealer. The safety labels are shown as follows:

⚠ CAUTION

FOR SAFETY AND ENJOYMENT, CHECK EACH OF THE FOLLOWING BEFORE STARTING YOUR ENGINE.

- READ YOUR OPERATORS MANUAL
- DRAIN PLUG (Securely in Place?)
- FUEL SYSTEM (Leaks, Fumes, Adequate Fuel)
- BATTERY (Fully Charged, Proper Water Level)
- ENGINE AND CONTROLS (Free Operation, Neutral)
- ELECTRICAL EQUIP. (Lights, Horn, Pump, etc.)
- CAPACITY PLATE (Are you overloaded or overpowered?)
- POSITIVE FLOTATION DEVICES (Life Preservers Required)
- WEATHER CONDITIONS (Safe to go out?)
- EMERGENCY EQUIP. (Fire Extinguisher, Bailor, Paddle, Anchor & Line, Tool Kit, Signaling Device)

⚠ CAUTION

HIGH SPEED REVERSE THROTTLE IS NOT RECOMMENDED. EXTENDED OPERATION IN THIS MANNER MAY CAUSE WATER TO ENTER THE COCKPIT AREA.

⚠ CAUTION

BATTERY INFO.

- DO NOT RELOCATE HOLDING TRAY.
- HOOK POSITIVE CABLE TO POSITIVE POST
- INSULATOR BOOT MUST BE INSTALLED ON POSITIVE TERMINAL.
- READ INSTRUCTIONS FOR PROPER BATTERY INSTALLATION.

⚠ WARNING

POTABLE WATER ONLY

 **WARNING**

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD.
INSPECT FUEL SYSTEM OFTEN.
EXAMINE FUEL TANK FOR LEAKS AND CORROSION
AT LEAST ANNUALLY.

 **WARNING**

DO NOT STORE FUEL OR FLAM-
MABLE LIQUIDS HERE.
VENTILATION HAS NOT BEEN
PROVIDED.

 **DANGER** 

CARBON MONOXIDE IS COLORLESS, ODORLESS AND
DANGEROUS.
ALL GASOLINE POWERED ENGINES AND GENERATORS
EXHAUST CARBON MONOXIDE (CO).
DIRECT AND PROLONGED EXPOSURE TO CO WILL
CAUSE BRAIN DAMAGE OR DEATH.
SIGNS OF EXPOSURE TO CO INCLUDE NAUSEA,
DIZZINESS AND DROWSINESS.
KEEP CABIN AND COCKPIT AREAS WELL VENTILATED
AVOID BLOCKAGE OF EXHAUST OUTLETS.



DANGER



DO NOT SIT, STAND, OR RIDE ON
DECK WHILE UNDERWAY.
SUDDEN MOVEMENT OF VESSEL
MAY CAUSE LOSS OF BALANCE
AND INJURY.



DANGER



CLOSE GATE WHILE UNDERWAY.
DO NOT USE PLATFORM WHILE
MOTOR IS IN OPERATION.

CRUISER SAFETY LABELS



DANGER



**CABIN DOOR MUST BE LATCHED
CLOSED OR OPEN WHILE UNDERWAY
SERIOUS INJURY COULD OCCUR FROM
UNEXPECTED DOOR CLOSING**



DANGER



**SHUT OFF MOTOR WHEN STERN
IS APPROACHED.
SEVERE INJURY WILL RESULT
FROM CONTACT WITH ROTAT-
ING PROP.**



DANGER



**NEVER APPROACH STERN WHEN MOTOR IS
RUNNING. SEVERE BODILY INJURY WILL
RESULT FROM CONTACT WITH ROTATING
PROPELLER
NEVER USE MOTOR OR STERN UNIT AS A
STEP**

SYSTEMS

IMPORTANT operation, maintenance, and safety information is outlined by the manufacturer of most installed equipment. Properly operating and maintaining the equipment on your boat will help you to enjoy many years of **SAFE** boating.

CAUTION

CAUTION: Glastron recommends you **READ ALL** literature materials supplied with your boat prior to operating any of the systems and components. Any electrical accessories you would like to add to your boat should be installed by your dealer or a qualified electrician. Improper installation could result in damage to your boat's electrical system and/or cause a fire.

12 Volt DC Electrical System

Your boat's 12 Volt DC system obtains its power from a battery. The battery is charged through the engine-driven alternator and/or an AC battery charger. The voltmeter on the helm dash instrument panel indicates the charging level of the battery. Power from the battery is supplied through either a battery isolator or a dual battery switch. It is then routed to the instrument panel and DC distribution panel located in the galley. The DC circuit breakers on the instrument panel and DC distribution panel have indicator lights and operate all 12 volt equipment onboard.

The negative terminal of the battery is connected to the grounding studs of the main engine and generator. This type of negative ground system is the approved system for marine DC electrical systems. If additional equipment is to be installed, it must be adaptable to the negative ground system. When installing additional equipment, ensure that each item's current supply is taken from the main DC distribution panel. All required additional circuit protection must also be added at the DC distribution panel.

NOTE: Power feeds for accessory equipment must NOT be taken from the voltmeter terminals.

A typical Cruiser 12 Volt DC cabin schematic is shown in Figure 2.1. Consult your Glastron dealer for additional DC power requirements on your Glastron model.

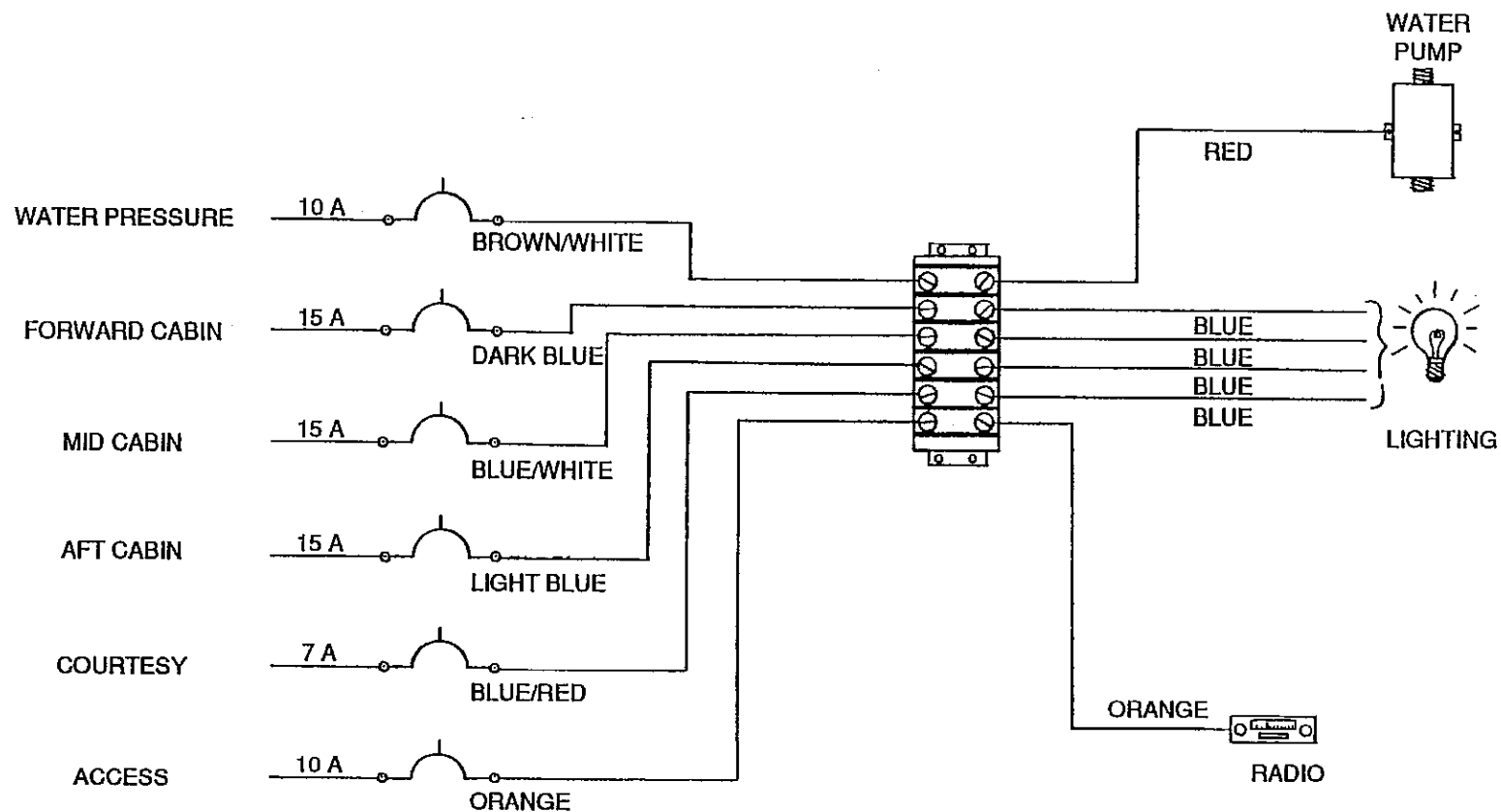


FIGURE 2.1 - TYPICAL CRUISER 12 VOLT DC CABIN SCHEMATIC

110 Volt AC Electrical System

The AC electrical system operates from a dockside shore power (30 amp 110 volt, 60 cycle). The dockside system uses three wire, color-coded circuitry. The black, or hot wire, is the ungrounded current carrying conductor. The white, or neutral wire, is the grounded current carrying conductor. The bare copper, or green wire, referred to as the "equipment ground," is a grounded conductor, and under normal conditions is not a current carrying wire. The neutral wires are connected together at a buss bar. The equipment grounds are similarly connected together at another buss bar. Each hot wire is connected to, and protected by, a circuit breaker in the main distribution panel located in the cabin.

The main distribution panel houses the system circuit breakers. The dockside system has a MAIN circuit breaker which protects the overall distribution network. The MAIN breaker protects both the hot and neutral input leads. The MAIN breaker will also trip if reverse polarity should occur. This breaker is very sensitive. The resulting power surge which occurs when connecting into the shore power cord may cause the MAIN breaker to trip.

To avoid this power surge, turn OFF all MAIN breakers before plugging into the shore power cord. Securely connect the power inlet of the boat and the shore power receptacle. If the connection is broken and later re-secured, the MAIN breaker will trip. Connections must be secure for uninterrupted dockside service.

Appropriately labeled breakers control actuation of the optional electric stove and optional electric hot water heater. The electric stove also has heat controls governing the burner elements

All AC receptacles can be used for 120 volt household appliances.

CAUTION

CAUTION: Do Not overload the receptacle circuits. Most receptacle circuits are capable of handling 15 amps (amperes).

The following list of equipment specifies the required electrical current to operate each item:

<u>Item</u>	<u>Electrical Load</u>
Battery Charger	Up to 800 watts (7.3 amps)
Coffee Maker	550 to 700 watts (6.3 amps)
Electric Blanket	50 to 200 watts (2 amps)
Electric Drill	See drill motor load plate
Frying Pan	1350 watts (12.3 amps)
Lights	Wattage as marked on bulb
Space Heater	1500 watts (13.7 amps)
Television	1500 watts (10.5 amps)
Vacuum Cleaner	See vacuum motor load plate

The power requirement is usually specified on the electrical equipment. The above listed items are only an approximation of the electrical current usage normally experienced. Monitor the voltmeter when using electrical equipment. Amperage draw must not exceed 30 amps.

Figures 2.2 and 2.3 are examples of 110 Volt AC Panel Wiring Schematics. Consult with your dealer for specific schematic information for your boat.

AC Lighting

Courtesy and compartment AC lighting are controlled by an AC circuit breaker located on the main AC electrical panel. Each lamp is individually controlled by a switch. For information regarding bulb replacement, see your Glastron dealer.

Electrical Wiring Diagrams

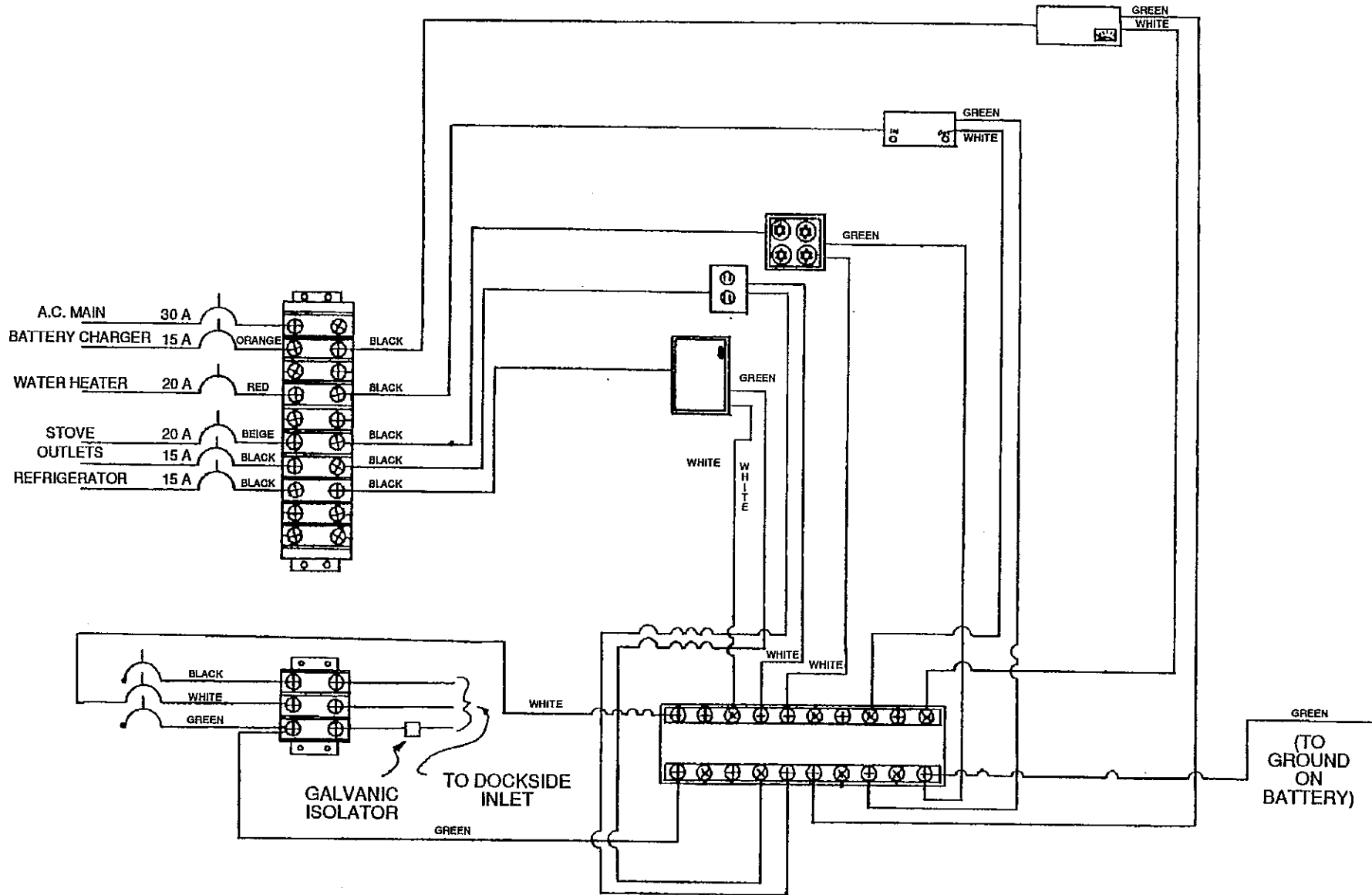


FIGURE 2.2 - TYPICAL 110 VOLT AC PANEL WIRING DIAGRAM

The electrical schematics reflect how your boat's AC wiring harness and DC wiring harness are connected to standard and optional electrical components.

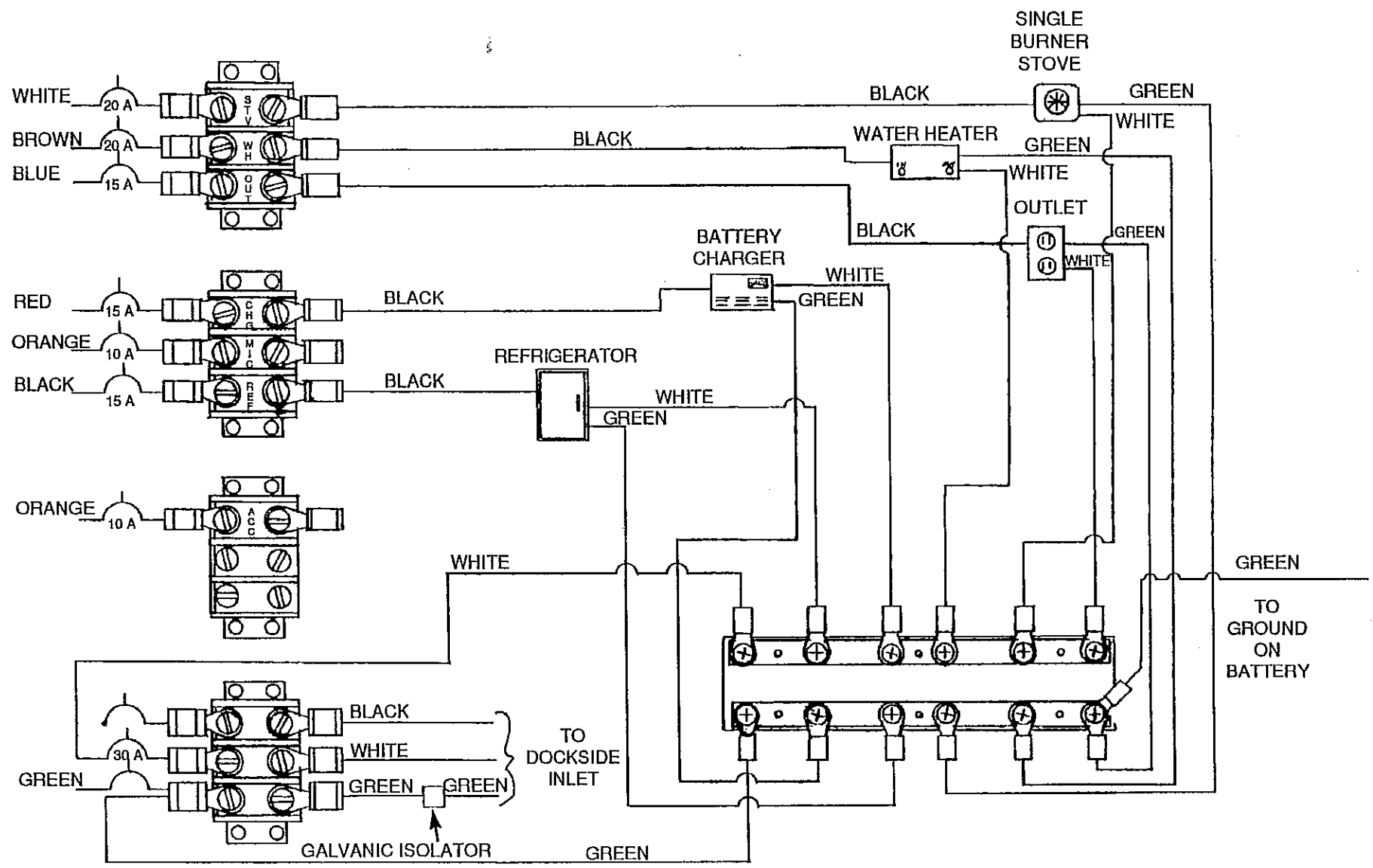


FIGURE 2.3 – TYPICAL 110 VOLT AC PANEL WIRING DIAGRAM

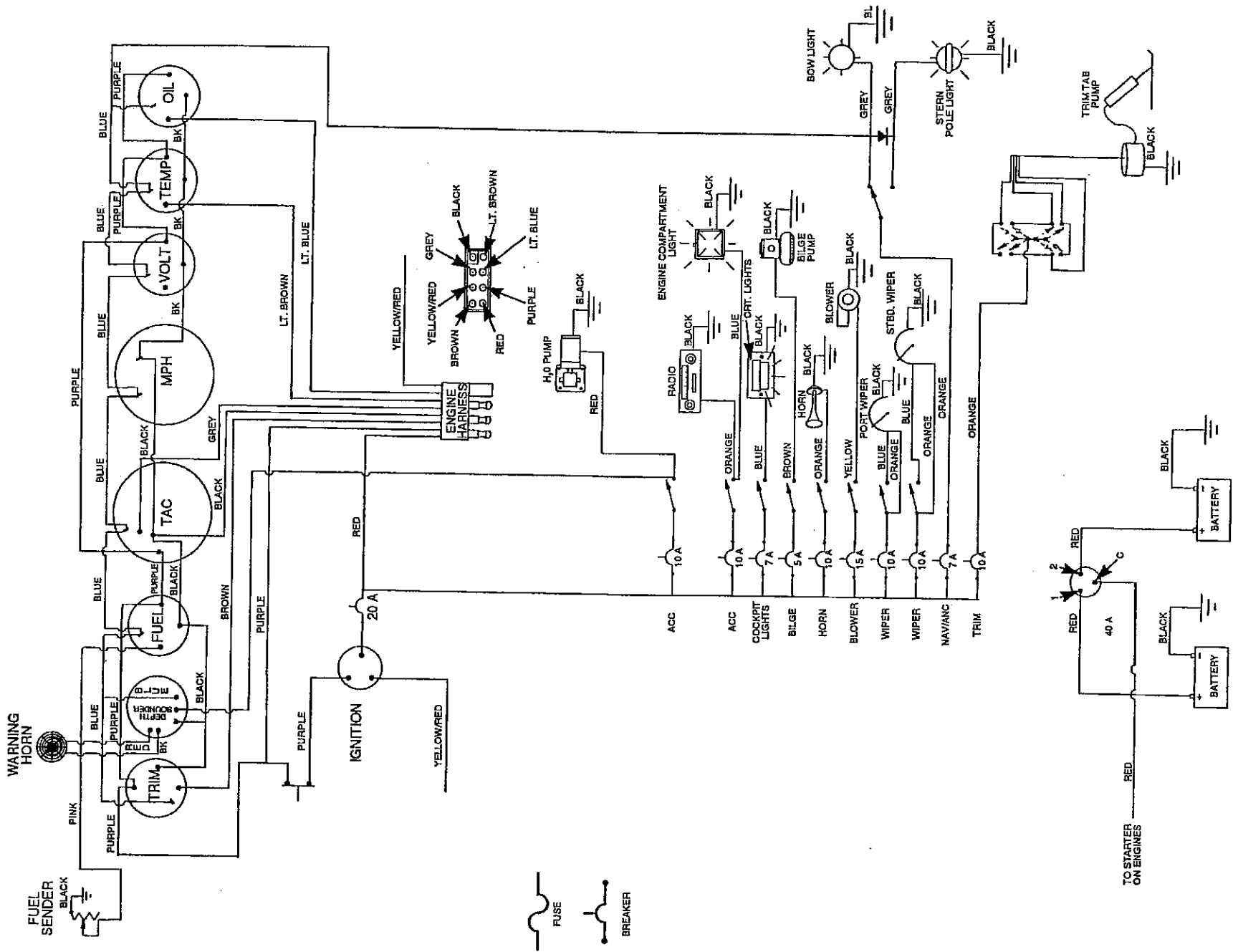


FIGURE 2.4 - TYPICAL CRUISER ENGINE 12 VOLT DC SCHEMATIC

Ground-Fault Circuit Interrupt (GFCI)

The GFCI is a device that gives added personal protection against electric shock or loss of life. The GFCI outlet on your boat is located in the galley. It is equipped with a test and reset switch in the middle of the face plate. If there is a difference of more than 5 milliamperes, a safety switch trips in the GFCI and interrupts the circuit. This protects the person who is operating the electrical equipment from serious electric shock. The GFCI will not eliminate the feeling of an electric shock. However, it does open the circuit quickly enough to prevent injury to a person of normal health. Thus, a GFCI provides protection against dangerous currents that will not overload 15- or 20-ampere circuit breakers. The GFCI protects all 110 volt outlet(s).

When a circuit breaker is tripped by the GFCI, you must push the RESET button. The GFCI outlet should be checked periodically by pushing the TEST button. Pushing the TEST button will cut power to the 110 volt outlets.

Shore Power

CAUTION

CAUTION: Never operate the shore power system at less than 105 volts.

Shore power is connected through an outside receptacle. A ten gauge, three wire, shore power cord is provided with dockside wiring. The shore power cord has 30 amp twist-lock type connectors, which are approved by the American Boat and Yacht Council. **Always connect the cord to the power inlet receptacle of the boat before making connection to the shore power source.**

CAUTION

CAUTION: Do Not use a two-wire adapter to connect to a three-wire system. This type adapter does not provide adequate grounding.

Some marinas are not equipped with approved twist-lock type receptacles. An adapter is supplied with your boat which converts the twist-lock shore plug to a three-wire grounded household type plug. Use only an approved adapter when this type connection is required.

DANGER

DANGER: Observe the polarity warning light and circuit breaker when using this system. Never override or bypass the system. Severe electrical shock hazard may be present which could cause death or injury.

All Glastron shore power systems are of the single male receptacle type. When not in use, a water resistant cover protects the outside receptacle on your boat.

Fuel System

The internal fuel system onboard your Glastron boat is designed to meet or exceed federal requirements, at the time of manufacture, of the U.S. Coast Guard and are certified by the National Marine Manufacturers Association (NMMA).

The fuel system has been factory inspected and pressure tested in accordance with regulations in effect at time of manufacturer. Additionally, each fuel tank must pass rigid tests and inspections performed by the fuel tank manufacturer.

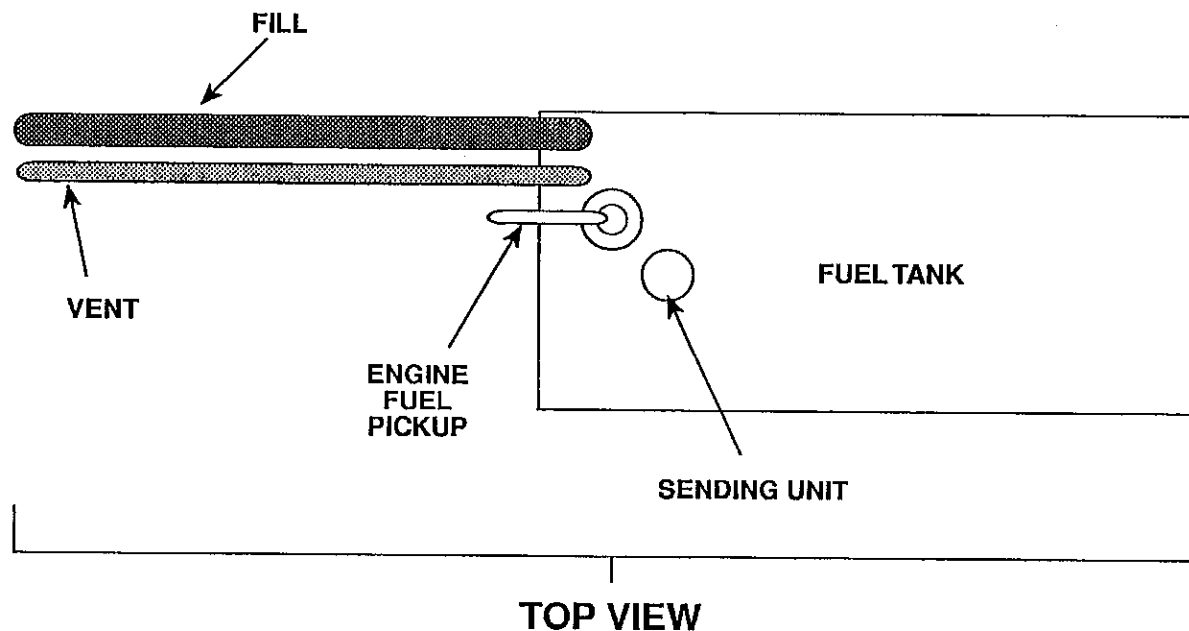
Prior to taking delivery of your boat, it is important that a full inspection be made of the entire fuel system by your Glastron dealer.

1. **Fuel Fill Plate** - All Glastron are equipped with a fuel fill plate and are labeled FUEL. Be sure to utilize the proper grade fuel as specified in your engine's owners manual.
2. **Fuel Vent** - The fuel tank is vented overboard. While the tank is being filled, the air is expelled by the fuel and escapes through the fuel vent. When the fuel tank is almost FULL, fuel will be ejected from the fuel vent.

If your boat's fuel tank vent is equipped with a screen, occasionally remove the screen from the fuel vent and clean both the vent and screen of any dirt, foreign material, etc. Be sure the screen is replaced securely

after cleaning. The screen prevents insects and other foreign material from contaminating the fuel system.

3. **Anti-Siphon Valve** - Engine fuel pickup lines are equipped with an anti-siphon valve where the line attaches to the fuel tank. The valve prevents gasoline from siphoning out of the fuel tank in the event of a fuel line separation.
4. **Fuel Filters** - Fuel filters supplied by engine manufacturers are installed on or near the engine. The filters should be cleaned frequently to maintain an adequate supply of clean, uncontaminated fuel to the engine.
5. **Fuel Tank** - The fuel tank is accessible through the aft cabin area and is equipped with a fuel vent line, fuel fill line, sending unit, and engine fuel pickup (See Figure 2.5).



NOTE: Fill and Vent location varies by model. See dealer for location.

FIGURE 2.5 - FUEL SYSTEM

Fresh Water System

The fresh water system provides water for drinking and bathing. A fresh water holding tank provides an onboard supply of fresh water. The holding tank is filled through a fill plate and is vented to allow air to enter and escape as water levels change.

The plumbing provides fresh water from the holding tank through a pressure pump to the optional hot water heater. Hot and cold fresh water is available to the sink and shower in the head compartment, and galley sink. A typical plumbing diagram is shown in Figure 2.6.

IMPORTANT: Fill tank only with fresh water. Using and refilling the tank often will help keep it a source of fresh and clean drinking water.

SANITIZING FRESH WATER SYSTEM

The fresh water system should be sanitized **before initial use**, after winter storage, or when system has not been used for extended periods of time.

CAUTION

CAUTION: Notify all persons aboard that the fresh water system is being sanitized. **Do Not** allow anyone to drink from the fresh water system during the sanitizing process.

NOTE: Fresh water tank must be empty before beginning sanitizing process. If necessary, empty the tank.

1. In an appropriate size container, make a solution of 1-1/4 cups (10 oz.) of household bleach and 5 gallons

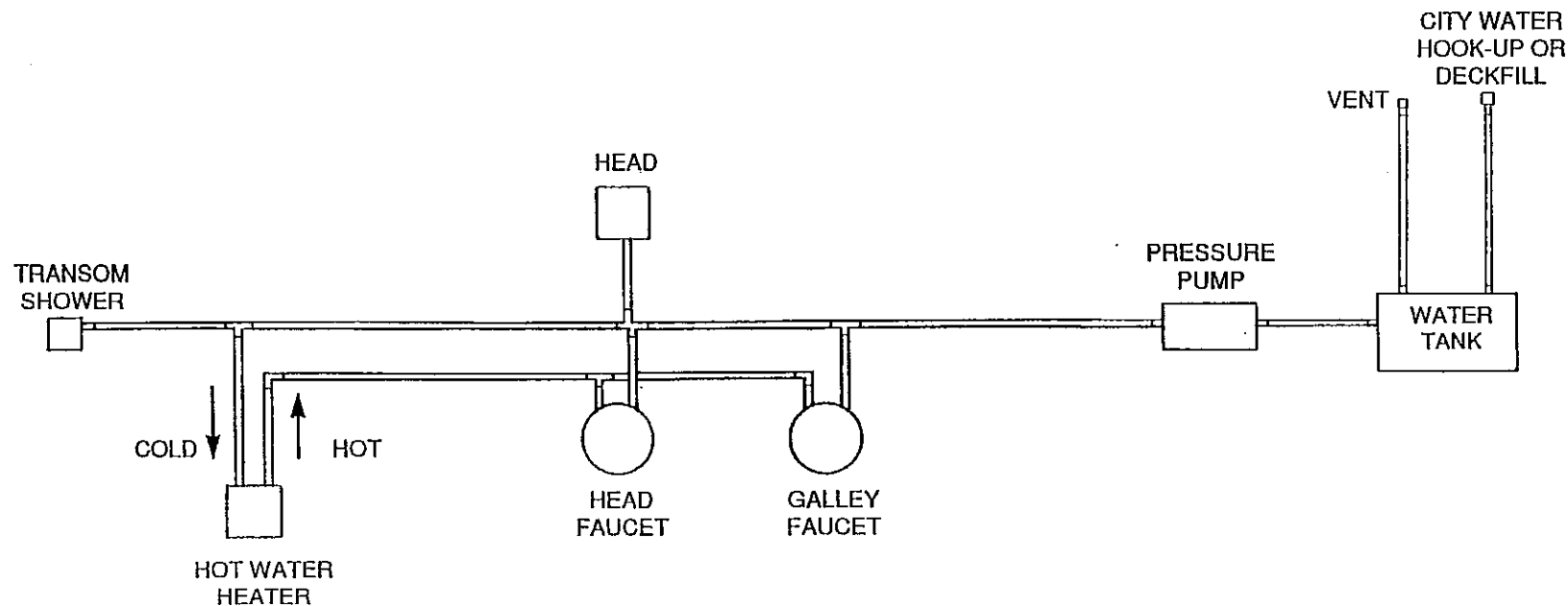


FIGURE 2.6 – TYPICAL CRUISER PLUMBING DIAGRAM

(19 liters) of fresh water. For fresh water capacities greater than 5 gallons, increase quantity of bleach by 1/4 cup (2 oz.) per gallon (i.e., 10 gallons of fresh water, add 2-1/2 cups or 20 ounces of bleach).

2. Place solution into empty tank, then fill to capacity with fresh water.
3. Treated water solution should remain in tank for 3 to 4 hours.
4. Turn fresh water pump ON. Open all faucets, beginning with faucet located farthest from pump, to bleed air from entire fresh water system.
5. Drain treated water solution from tank and lines.
6. Flush entire system with fresh water.

IMPORTANT: Thoroughly flush entire system with fresh water after each sanitizing process.

If excessive chlorine taste is present in fresh water system after sanitizing, perform the following:

- Pour a solution of 1 quart (approx. 1 liter) of vinegar and 5 gallons (19 liters) of fresh water into tank.
- Allow solution to stand in tank for several days.

CAUTION

CAUTION: Notify all persons aboard that the fresh water system is being treated. Do Not allow anyone to drink from the fresh water system during the treatment.

- Drain entire system and flush with fresh water.

IMPORTANT: Thoroughly flush entire system with fresh water after treatment.

INITIAL START-UP

IMPORTANT: The fresh water system should be sanitized before initial use. See previous text information.

1. Partially fill the fresh water holding tank with approximately four (4) gallons of fresh water.
2. Turn Fresh Water Breaker to ON position. Breaker is located on main distribution panel in galley area.
3. Open cold water galley faucet to allow air to escape. Close faucet when steady flow of water is visible.
4. Open hot water galley faucet to fill optional hot water heater and allow air to escape from line. Close faucet when steady flow of water is visible.
5. Bleed air from remaining faucets as performed in steps 3 and 4.
6. Fill fresh water holding tank to capacity.

City Water Hook-Up



CAUTION: Monitor water system during initial usage of *city water* hook-up. In this process, the boat is connected to an unlimited supply of water. Never leave boat unattended while using *city water* hook-up. Any major leak or break in the system will allow abnormal bilge water accumulation which in turn could cause sinking or swamping of batteries and engine. Damage from swamping and/or submergence are not covered by the Glastron Warranty.

To conserve your fresh water tank supply, the fresh water system can be connected to *city water* at the receptacle on port side of the transom in cockpit. Due to the water entering the boat under pressure, it bypasses the tank, filter, and pump of the fresh water system on your boat.

Using *city water* hook-up does not replenish water supply in the tank. The tank can only be filled at the fresh water fill plate. When using a dockside hook-up, you must bleed all lines just as you would for the fresh water tank system.

IMPORTANT: Refer to initial start-up procedures explained in the fresh water system section.

Electrolysis

Electrolysis is the decomposition of compounds, such as metals, exposed to an electric current. This is a common occurrence for boat owners. When a shore power AC electrical system is connected to your boat, it is also connected to an earth ground circuit. The earth ground circuit "grounds" all onboard metal parts to the earth on shore. This circuit provides the protection against hazardous

shocks, but unfortunately it also creates an electrolytic current which causes the decomposition of all submerged metal.

Protection Against Electrolysis

IMPORTANT: It is the boat owner's responsibility to periodically inspect and replace the sacrificial zinc anodes. Damage resulting from electrolytic corrosion is not covered by the Glastron Warranty.

1. Sacrificial zinc anodes, installed by the dealer or the engine manufacturer, protect the hardware that is exposed to the water. Electrolysis attacks the softest or least "noble" metals first. Because zinc is a less "noble" metal, it will decompose before the more "noble" metals. Check these zinc anodes periodically and have them replaced as required. See your Glastron dealer for parts and service.

Zinc is also used to protect metal that is exposed to salt water. The salt causes a galvanic action that decomposes metals.

2. Use of a Ground Circuit Isolator will prevent the flow of relatively low electrolytic currents, but provide a path for catastrophic, short-circuit currents which are sufficient to actuate circuit breakers.

Galvanic Isolator

The galvanic isolator is a galvanic corrosion protection device. It is installed between the AC safety ground and DC bonding system as shown in Figure 2.2. Electrical currents produced by two dissimilar metals in an electrolytic solution is galvanic corrosion. Polluted and salt water are much better electrolytic solutions than clean, fresh water. The galvanic isolator will block the majority of low voltage currents and reduce the corrosive action on the zinc anodes.

Marine Sanitation Device (MSD)

The Marine Sanitation Device (MSD), or head, installed on your Glastron boat, is similar to your home toilet. There are three (3) MSD illustrations depicting the various head configurations which may be installed on your Glastron boat (See Figures 2.7 through 2.9). Some units incorporate a Y-Valve that must be selected on the valve based upon your choice of directing waste. All MSDs are equipped with an air vent and pump-out plate.

IMPORTANT: It is illegal to discharge waste from your marine sanitary device in most areas. It is your responsibility to be aware of and adhere to all local laws concerning waste discharge. Consult with the coast guard, local marina, or your Glastron dealer for additional information.

MARINE HEAD WITH PUMP-OUT (SEE FIGURE 2.7)

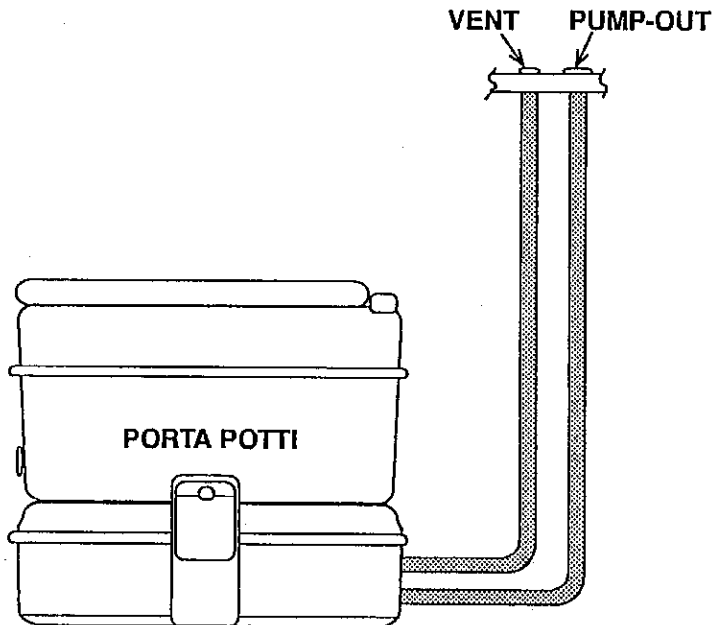


FIGURE 2.7 - MARINE HEAD WITH PUMP OUT

This portable toilet (porta potti) provides simple operation and convenient disposal of waste. (See Figure 2.7) The waste can be either transported off the boat by removing the holding tank, or can be pumped out at dockside.

CHINA HEAD TO HOLDING TANK (SEE FIGURE 2.8)

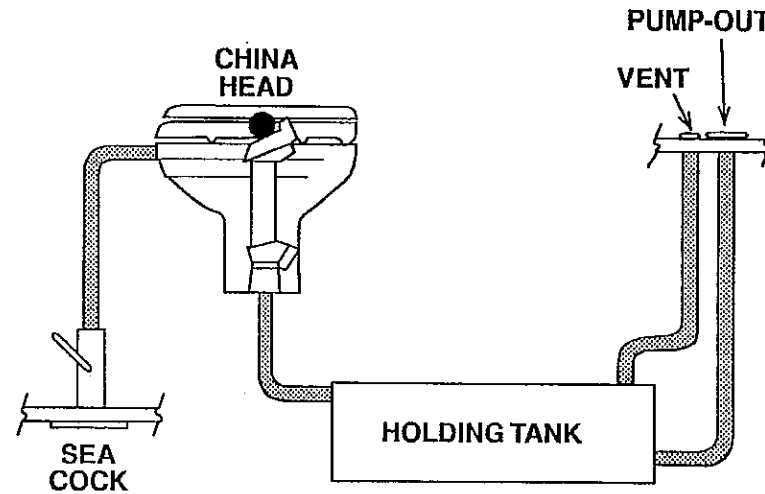
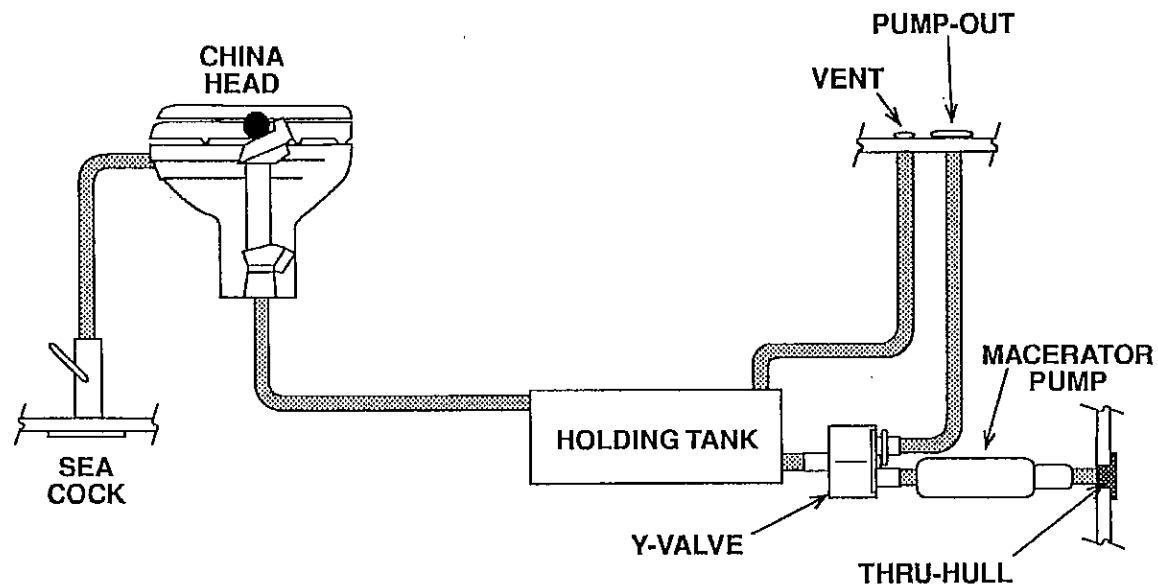


FIGURE 2.8 - CHINA HEAD TO HOLDING TANK

This system incorporates a china head.

This china head relies on sea water drawn through a sea cock thru-hull fitting for flushing waste to the holding tank for dockside pump-out. The sea cock must only be open when flushing the head and should be closed when not in use.

**CHINA HEAD TO HOLDING TANK WITH MACERATOR
TO OVERBOARD DISCHARGE (SEE FIGURE 2.9)**



**FIGURE 2.9 – CHINA HEAD TO HOLDING TANK
WITH MACERATOR TO OVERBOARD DISCHARGE**

This china head version operates the same as the china head referenced in Figure 2.8 except waste is routed from the holding tank to the Y-Valve. Here the option exists to either direct waste to a macerator pump and discharge overboard via the thru-hull fitting, or route waste to the dockside pump-out through the Y-Valve from the holding tank. Overboard discharge of waste is prohibited in many areas. Check local laws before discharging waste overboard.

COMPONENTS

The engine compartment (Figure 2.10) illustration provides a means of locating components located within your boat. Your boat may be configured slightly differently depending upon the model and optional equipment installed. Some of the components described may be optional equipment, or may not be available on particular boat models.

⚠ WARNING

WARNING: When using electrical components, observe basic safety precautions to reduce the risk of fire, electrical shock, personal injury or damage to your boat and/or component.

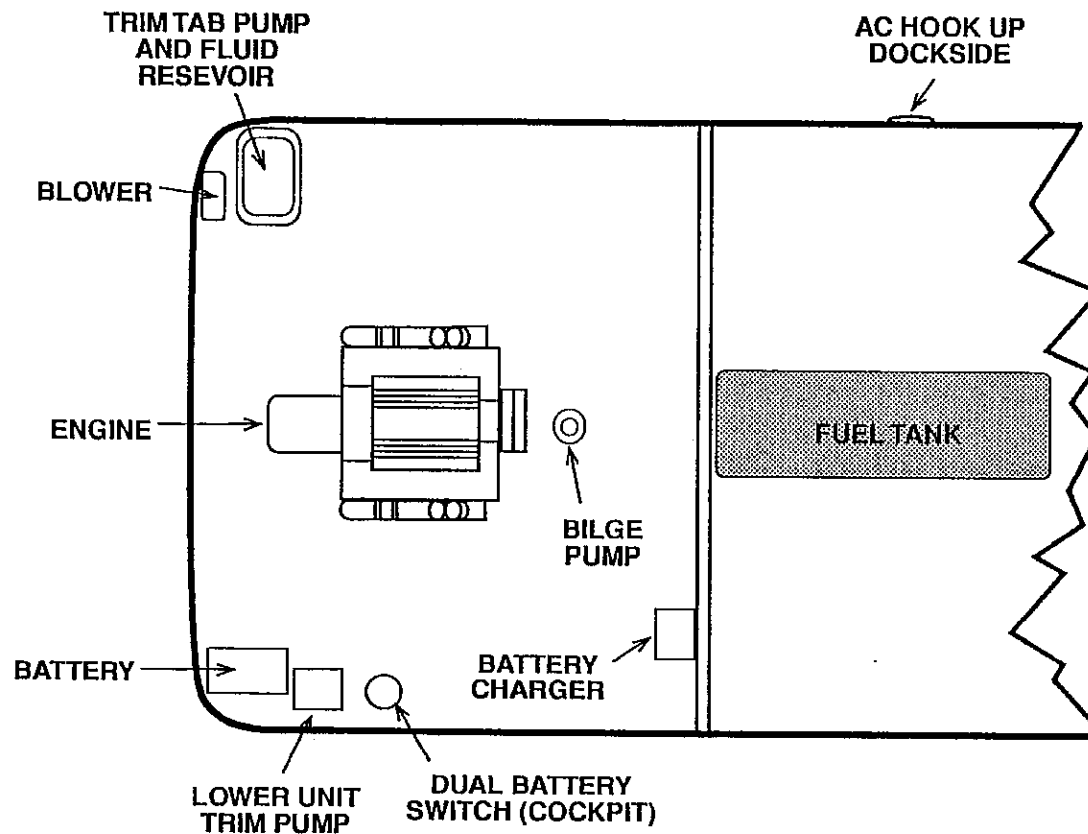


FIGURE 2.10 – TYPICAL ENGINE COMPARTMENT

Battery

Marine batteries are completely sealed using an absorbent electrolyte principle to provide high reserve capacity, plus cold cranking performance.

If more than one (1) battery is being installed, all batteries are electrically isolated from one another. When the engine is running, each battery is charged automatically and independent of the other. This provides complete freedom of battery selection for power use plus alternator protection supplied by an isolator.

▲WARNING

WARNING: Battery electrolyte can cause severe eye damage and burns to the skin. Wear goggles, rubber gloves and a protective apron when working with battery. If spillage occurs, immediately wash area with a solution of baking soda and water.

Dual Battery Switch

The dual battery switch enables DC power to be used from one or two batteries. Power to the engine and all 12 volt electrical equipment, except the **automatic bilge pump and 12 volt refrigerator**, is controlled by the dual battery switch. The dual battery switch settings available are OFF, 1, 2, and ALL.

IMPORTANT: The dual battery switch should be in the OFF setting when not in use and especially while the boat is unattended. While in the OFF setting, only the **automatic bilge pump and 12 volt refrigerator** is supplied with DC power. All helm dash instrumentation is OFF.

The description and function for each of the settings is described here:

- **OFF** - All 12 volt power to boat is shut OFF, except for the **automatic bilge pump and 12 volt refrigerator**. Always turn dual battery switch to OFF setting when boat is unattended for extended periods.

▲CAUTION

CAUTION: Do Not turn dual battery switch to OFF setting while engine is running; alternator and wiring damage could occur.

- **1** - Will use battery #1 to power engine and all 12 volt equipment. Battery #2 is isolated and remains in reserve. Battery #1 is charged by the alternator.
- **2** - Will use battery #2. Except for automatic bilge pump, battery #1 is isolated and remains in reserve. Battery #2 is charged by the alternator.
- **ALL** - Batteries are connected in parallel. Both batteries are used by the engine and all 12 volt equipment, and charged by the alternator when the engine(s) is running.

Glastron recommends the use of only one (1) battery at a time. This is accomplished by using the number 1 or 2 setting. Avoid using the ALL setting. Only use the ALL setting when a single battery is not sufficient to start the engine(s).

NOTE: Rotating your battery usage will increase battery longevity.

Battery Charger

The battery charger will automatically maintain the battery, while plugged into the dockside power on shore. Abnormal conditions or loads may cause circuit breaker to trip. Circuit breaker can be reset with power applied.

Lanyard Stop Switch

The purpose of this safety device is to stop the engine when the operator leaves the control station accidentally by falling into the boat or by falling or being ejected overboard.

CAUTION

CAUTION: The lanyard stop switch should not be used as the normal engine shut-off.

Carbon Monoxide (CO) Monitor (Used with camper top option)

To activate the monitor, you must turn the battery switch ON to apply power. The CO monitor samples carbon monoxide concentration every 2-1/2 minutes. Once an alarm condition has been detected, the horn will be locked ON for the next 2-1/2 minutes at which time the next concentration will again be checked. At sample time, if the concentration is below the alarm threshold, the horn will be turned OFF. If the concentration is above the threshold, the horn will remain ON.

Automatic Bilge Pump

The automatic bilge pump with manual override removes water from the bilge area. If the pump motor runs but no water is discharged, it may be clogged. If there is no visible debris clogging the pump and water is still not being removed, inspect the discharge hose for kinks or obstruction.

WARNING

WARNING: The Federal Water Pollution Act prohibits the discharge of oil or oily waste into or upon the navigable waters and contiguous zone of the United States if such discharge causes a film or sheen upon, or discoloration of, the surface of the water, or causes a sludge or emulsion beneath the surface of the water. Violators are subject to a penalty of \$5000.

Bilge Blower

The bilge blower forces fumes out of the engine compartment area and circulates fresh air in through the deck vents. The bilge blower must be running before and during engine start-up, while boat is operating below cruising speed, and whenever the generator is in use.

WARNING

WARNING: Never assume all explosive fumes have been removed from the engine compartment. If you detect any fuel odors, shut down the engine and electrical circuits, and immediately determine where the odor is developing.

Water Pump & Filter

The water pump draws water from the fresh water tank. The water is then pressurized and circulated to the faucet, water heater, etc. The water pump filter prevents foreign matter from entering the pump reservoir and should be periodically inspected and cleaned.

Before servicing the system, turn the water system breaker OFF and release pressure on the system by opening all faucets. To clean the filter, remove screen and rinse with clean water. Replace filter and make sure the O-ring is seated properly when installing cover.

Hot Water Heater

The hot water heater circuit breaker (15 amp) is located on the main AC distribution panel. Located on the water heater is a check valve to prevent hot water from back washing into the cold water line, and a pressure relief valve to prevent damage to the heater from over pressure. The water heater thermostat is pre-set and is not adjustable.



CAUTION: The heating element inside the water heater will be damaged if 110 volt power is supplied to the water heater when there is an insufficient amount of water in the tank.

Transom Shower

The transom shower utilizes a pump to draw fresh water from the main fresh water systems water tank.

Navigation Lights

Although activities are limited at night, night cruising can be pleasurable. Be especially careful of shallow waters and be on the watch for submerged debris, rocks, and other obstacles in the water. Your navigation lights are intended for collision avoidance only and are not intended to improve the operator's night vision.

Your Glastron boat has one white (mast), one red (port), and one green (starboard) light. Check for proper operation before heading out. You should also learn to identify

the running light combinations for other vessels. Glastron recommends your participation in a boating safety course to further learn about navigation lights and safe boating practices.

The navigation lights are controlled at the helm by a three position rocker switch. This allows for selection of the mast (white) light ON when anchored or moored, or to have the mast (white), port (red) and starboard (green) lights all ON while underway and all lights are off in the OFF position.

Depth Sounder

The depth sounder is connected to a transducer installed in the hull. After turning the unit ON, it automatically starts searching for the bottom. Once it's found, it will automatically adjust the sensitivity to keep the bottom depth displayed.

The display shows tenths of a foot when the water is less than 100 feet deep. Metric units show tenths of a meter below 100 meters. Both units are equipped with a visual and audible (speaker) alarm for shallow and deep pre-set limits.

Refrigerator/Freezer

The refrigerator/freezer operates on either 110 volt AC or 12 volt DC power. A built-in relay automatically switches to the correct power. Keep the temperature control dial setting at the #3 position (#5 if storing frozen foods) when outside temperatures are between 70 to 90 degrees F. When using 12 volt DC power, run the engine occasionally to ensure your battery maintains an adequate charge. The master On/OFF switch for the refrigerator is located on the main AC panel for 110 volt operation.

Stove

⚠ WARNING

WARNING: Use marine stove alcohol only. Always provide adequate ventilation when using an alcohol flame.

Your boat is or can be equipped with either an alcohol or alcohol/electric stove. The fuel reservoir holds approximately one quart (.95 liter) of ethyl alcohol. The alcohol/electric stove uses either alcohol or 110V 30 amp electrical power. When operating the stove by using 110 volt power, the master switch on the main Ac panel must be in the ON position.

⚠ DANGER

DANGER: Follow instructions from stove manufacturer carefully when refueling; never refuel while unit is in operation.

Marine Stereo

The unit is a highly sensitive electronic tuning AM/FM stereo receiver with cassette tape player.

The system employs several electronic circuits especially designed for superb radio reception on both AM and FM bands. Built into the unit are the SNC (Stereo Noise Cut) for noise reduction on FM broadcasts and the HCC (High Cut Circuit) which automatically cuts hissing noise.

Your boat is equipped with waterproof marine stereo speakers, quantities and locations will vary per model. Some of the other features include AM/FM selector buttons, weather-band selector with channel selector, 7 band equalizer, head phone jack, CD (Compact Disc) input jack, automatic seek control, clock, battery back-up, memory, and mute control.

NOTE: The above listed features may vary on some marine stereo models. See the manufacturer's owner's manual for a complete list of features.