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**26 FT.  
MOTOR HOME  
AVION INTERIOR**

**Operation and Service Manual**

**Keep this book with your Motor Home at all times**

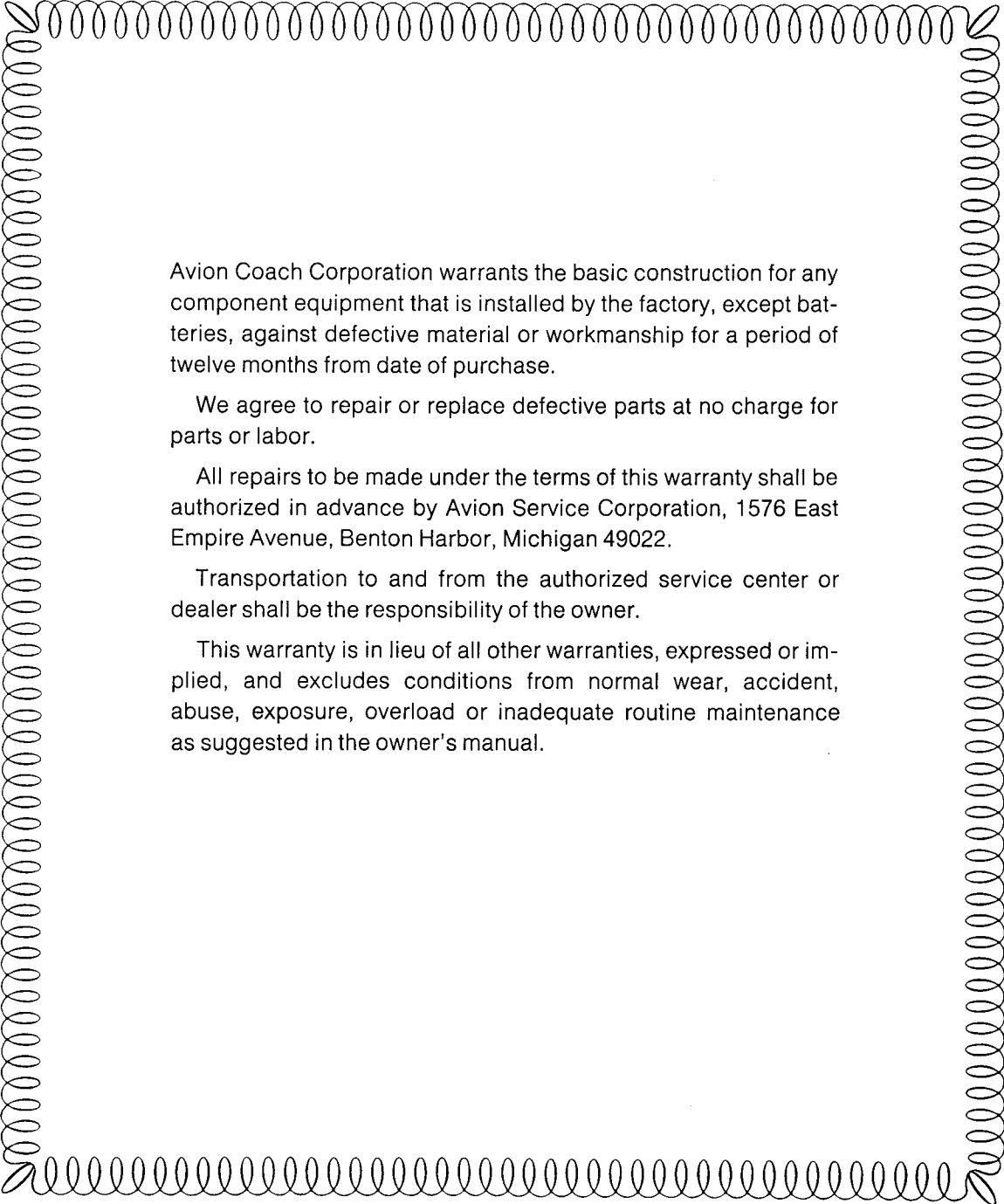
**AVION COACH CORPORATION**  
1300 E. Empire Avenue, Benton Harbor, Michigan 49022

# 26 FT. AVION INTERIOR

## OPERATION AND SERVICE MANUAL

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Avion Coach Corporation warrants the basic construction for any component equipment that is installed by the factory, except batteries, against defective material or workmanship for a period of twelve months from date of purchase.

We agree to repair or replace defective parts at no charge for parts or labor.

All repairs to be made under the terms of this warranty shall be authorized in advance by Avion Service Corporation, 1576 East Empire Avenue, Benton Harbor, Michigan 49022.

Transportation to and from the authorized service center or dealer shall be the responsibility of the owner.

This warranty is in lieu of all other warranties, expressed or implied, and excludes conditions from normal wear, accident, abuse, exposure, overload or inadequate routine maintenance as suggested in the owner's manual.

# SECTION I

## GENERAL OPERATING INSTRUCTIONS

The following steps are suggested as a check list before starting on a trip.

1. See that all clothing, dishes, supplies, and equipment are properly stored. Avoid traveling with opened food or liquid containers. Secure the refrigerator door with the travel latch. Close all cabinet doors and drawers. Avoid storing heavy objects in overhead cabinets.
2. Disconnect the 120/240 v. power cord and coil it in the storage compartment and lock the door.
3. Fill the water storage tank and lock the fill spout door.
4. Check the holding tank drain to be sure it is secured in the travel position, and lock the valve handle in the closed position.
5. Inspect the area around the vehicle to be sure nothing has been placed under it. Check for obstructions that might be in the path of the vehicle.
6. Turn off appliance gas valves and the main L.P. tank valve. Close the bifold top on the galley range.
7. Lock the entrance door. Adjust and secure the swivel seats in the forward-facing position before putting vehicle in motion. The permanent beds are not designed for seating while the vehicle is in motion.

### STORAGE SPACE

Storage space is provided under the dinette seats, the love seat, and the right bed. Space is also available under both vanity cabinets as well as in the closet, and the three overhead cabinets. A special ski locker is built under the raised floor area. This space is accessible from an exterior door, located on the right side of the vehicle, and through the opening under the love seat.

### EMERGENCY EQUIPMENT

Emergency equipment is located under the rear-facing dinette seat. This equipment includes the jack, jack handle, lug wrench, chain and wood block. See the GMC Transmode Vehicle Operating Manual for instructions relating to the use of this equipment.

### LOADING

Loading should be planned to distribute the weight as equally as possible. **DO NOT EXCEED GROSS AXLE OR GROSS VEHICLE RATINGS LISTED BELOW.**

The following information is provided to assist in proper loading.

	Curb Weight	Maximum Cargo Weight	Gross Axle Weight
Front	3820	420	4240
Rear	5490	2010	7500
Total	9310	2430	11,740-GVW

**Curb Weight** is the weight of the vehicle with fuel and coolant, but without the weight of cargo, passengers, driver, or optional equipment.

**Cargo** includes driver, passengers, water, luggage, and supplies.

**Gross Axle Weight (GAWR)** is the maximum load that may safely be applied to the axle, including cargo and options. This weight can be checked on any scale which will accommodate both front wheels, or all four rear wheels at the same time. Be sure driver and passengers are seated in the vehicle when the weight is checked.

**Gross Vehicle Weight (GVWR)** is the maximum permissible weight of the vehicle, complete with cargo. This weight can be checked on any scale that will accommodate all six wheels at one time. Be sure driver and passengers are seated in the vehicle when the weight is checked.

### TIRE INFLATION

Tire inflation pressures are listed on a placard on the glove compartment door. It is important that these recommended pressures be maintained. Check pressure before starting each trip. Additional information regarding your vehicle tires may be found in the GMC Transmode Vehicle Operating Manual supplied with this motor home.

### DINETTE CONVERSION

To make the dinette into a 42" double bed, use the following steps.

1. Remove the two seat cushions and fold the two keeper strips down flat.
2. Unlock the dinette table from the wall by releasing the latch on the underside. Support the table, fold the leg and lift the table from the wall bracket.
3. Place the table on the edge of the two dinette seats, in the notches provided.
4. Place all four cushions on the table and seat boards to obtain the 42" x 72" sleeping surface.

When converting the bed back to a dinette, be sure to support the table in a horizontal position until the leg is extended.

## SECTION II

### OPERATION – CARE – MAINTENANCE

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# SECTION II

## OPERATION – CARE – MAINTENANCE

### 1. ELECTRICAL SYSTEMS

All Avion Interior Motor Homes are equipped with two sources of electrical energy. If it is equipped with a generator, three sources of energy are available.

#### 120-VOLT SYSTEM

A 25-foot power cord is provided to permit the use of an external power source. The cord is stored in a compartment on the left side of the coach, just above the wheel housing. The door is secured with a keyed lock. The cord is equipped with a 4-wire plug to provide two 120-volt circuits when connected to a conventional 240-volt, 60-cycle receptacle. **DO NOT CONNECT TO AN OUTSIDE RECEPTACLE THAT DOES NOT MATCH THE POWER CORD PLUG.**

The distribution panel is located in the bath vanity cabinet. It provides a 40-amp main disconnect and individual circuit breakers for four separate circuits.

The water heater, power converter, wall outlets, and optional air conditioners operate directly from the 120-volt circuits. These circuits are shown in Section VI in the back of this manual.

#### 12-VOLT SYSTEM

The 12-volt electrical system is divided into two parts. The engine or chassis system, and the interior or household system. These circuits are shown in Section VI in the back of this manual.

**Chassis Batteries** – Two batteries are located behind the right front engine access door. The forward battery provides energy for the engine and chassis circuits. It is isolated from the interior system by a diode assembly to prevent accidental discharge of all batteries in the 12-volt circuits.

The second battery in the front compartment is part of the interior system. It feeds a fuse panel located in the bath vanity storage compartment. It can be isolated from the system by removing the panel fuse marked AUX. BATTERY. See Illustration on page 6.

**Rear Interior Batteries** – Two additional batteries are located in a sealed compartment under the rear end of the left bed. Access is through the rear section of the removable bed board. These are also connected to the fuse panel, providing 12-volt energy for all of the lights and

fans in the living area. They also provide the energy for starting the optional generator engine. Separate fuses are used to protect each battery circuit. The two rear batteries may be isolated by removing the 40-amp fuse from the in-line holder in the battery box.

**Battery Maintenance** – Check the batteries periodically to maintain proper electrolyte (water) level. When the electrolyte level is low, add distilled or filtered water to obtain the correct level. Batteries may be permanently damaged by traveling and/or charging with the plates not fully covered.

There are three ways in which the three house batteries may be charged:

- (a) by the converter
- (b) by the optional generator
- (c) by the engine alternator

The two batteries in the rear compartment are supplied by AVION. They are TITAN 85 A.H. Recreational Vehicle Batteries, carrying a 24-month service adjustment policy and a 90-day warranty against defects in workmanship or material.

For information as to the nearest TITAN Battery dealer or distributor, consult the yellow pages, or call collect GENERAL BATTERY CORP., AC 215 929-0771. The Titan Battery Stock No. is RVS-24-6. A copy of the battery Owner's Guide is included in each warranty package.

**Power Converter** – The combination converter-charger provides 12-volt direct current power whenever the power cord is plugged into a standard 120/240 volt, 60-cycle A.C. source, and when plugged into the cord box receptacle with the generator running. The converter has a dual output. One circuit provides energy to charge the batteries. The second circuit provides the energy to power the lights, fans, and water pump.

The battery charger circuit senses the state of the battery charge and will automatically charge and shut off as required.

The converter has a built-in relay that automatically switches the 12-volt system to the battery circuit when the power cord is disconnected from the generator, or from a 240-volt source.

*continued on next page*

## Electrical Systems (cont'd.)

The converter is protected by a built-in circuit breaker. If a short, or overload is occurring, a 7 to 10 second clicking sound will be heard as the automatic circuit breaker opens and closes. The load can be reduced by turning off a light or fan.

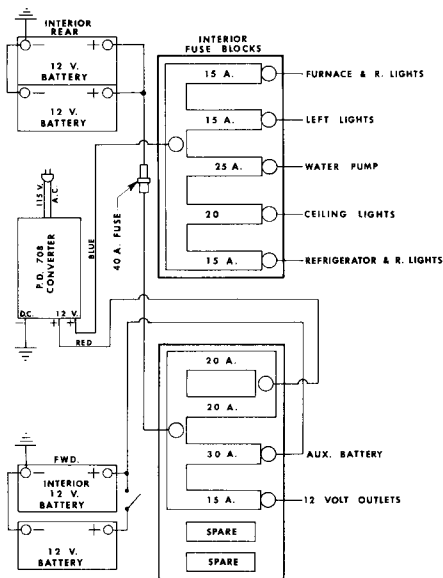
The converter is located under the galley cabinet shelf. It may be disconnected by removing the plug from the wall outlet adjacent to the unit. Do not pile things against it, so air cannot circulate around it.

The power converter is warranted for a period of one year. A copy of the warranty form and registration form are enclosed in the warranty package.

Parts and warranty information may be obtained from Progressive Dynamics, Inc., 604 S. Kalamazoo Ave., Marshall, Michigan 49068. The telephone number is AC 616 781-4241.

**Fuse Blocks** — Two fuse blocks are provided to protect the 12-volt system. They are located under the bath vanity top, behind the left cabinet door. The accompanying diagram shows the various fuses and their sizes. The battery-to-converter circuit is protected by two 20-amp fuses in parallel. Both fuses must be in place at all times so that the load is divided between them. Two extra clips are provided to store spare fuses.

**12-Volt Outlets** — Two 12-volt outlets are provided for convenient use of radios, T.V. sets, and appliances. One is located at the galley countertop, and the other is beside the bedroom vanity cabinet. These outlets are combined with T.V. antenna jacks and wired for connection to the optional T.V. antenna.



**Bulb Replacement** — The various cabinet cornice board, and ceiling light fixtures use an automotive No. 1141, 12-volt bulb.

The power range vent uses an automotive No. 1156, or a No. 1141 bulb. The vent face is held in place by the two switch nuts. These can be removed to facilitate bulb replacement and cleaning of the vent filter.

The oven light in the range uses a 12-volt, 15-watt standard-base bulb.

**Power Vents** — The ceiling fans and the bath exhaust fan operate on 12-volts. Be sure to raise these vents before turning on the fan motors, and be sure to close them before traveling.

## ONAN GENERATOR — OPTIONAL

The Onan 6000-watt, 110-volt generator provides a third source of electrical energy. The generator is located in a compartment behind the rear wheels on the left side of the vehicle. It is mounted on slides, so that it may be pulled out for ease of access. To open, depress the two latch buttons to release the latches, then turn the release handle and pull.

The generator uses fuel from the two CHASSIS engine gasoline tanks. To prevent running both tanks dry, be sure the fuel switch on the driver's instrument panel is in the 'FUEL MAIN' position.

A circuit breaker is mounted on the generator for protection from overload. Start-and-Stop controls are mounted on the generator and also wired from the remote switch on the Instrument Signal Center. The control board on the generator is protected by a 5-amp fuse, located under the control cover.

The generator electrical output is connected to a 240 volt receptacle installed inside the power cord box. Inserting the power cord plug into this receptacle will connect the generator output to the 120/240 volt distribution panel. If this connection is made each time the power cord is stowed in the compartment, the generator may be started remotely and used at any time without need to leave the motor home.

Regularly scheduled maintenance is important. The generator oil level should be checked after each 8 hours of operation. Other periodic maintenance work is required after 50 hours, 100 hours, etc. Consult the Operation Manual provided with each unit for detailed operating and maintenance instructions. A parts list is also included.

The ONAN R.V. Power Plant is warranted by the manufacturer for a period of one year. Be sure to fill out the Warranty Registration Card and mail it promptly. For warranty work, information, or parts, consult the Parts and Service Center list provided with each unit.

## 2. WATER SYSTEM

The motor home is equipped to provide water service from a city water system or from the self-contained water storage tank.

**City Water Supply** — Connections to a city water supply are made through a water hose connected from the city supply to the water inlet fitting on the coach. This fitting is located inside the cord storage compartment on the left side of the vehicle. A pressure regulator in the system prevents excessive city pressures from being introduced.

**Water Storage Tank** — The water storage tank is located beneath the right bed. It has a capacity of 36 gallons. A cold air return vent is built into the cabinet. This vent permits the circulation of warm air to prevent freezing during cold weather operation. A locking fill spout is located at the rear of the coach, near the right side. A diagram of the water system is included in Section VI of this manual.

To assure complete sanitation of your potable water system, it is recommended that the following procedures be followed on a new system, one that has not been used for a period of time, or one that may have become contaminated:

1. Prepare a chlorine solution using one gallon of water and  $\frac{1}{4}$  cup of Chlorox or Purex household bleach (5% sodium hypochlorite solution). Pour one gallon of solution into tank for each 15 gallons of tank capacity.
2. Complete filling of tank with fresh water. Open each faucet and drain cock until all air has been released from the pipes and entire system is filled.
3. Allow to stand for three hours.
4. Drain and flush with potable fresh water.
5. To remove any excessive chlorine taste or odor which might remain, prepare a solution of one quart vinegar to five gallons water and allow this solution to agitate in tank for several days by vehicle motion.
6. Drain tank and again flush with potable water.

The tank may be drained by opening any faucet with the pump turned on, or by opening the drain valve at the aft end of the tank.

A remote monitor switch is provided to indicate the water level. See Item No. 12 for additional information.

**Water Pump** — A demand pump is provided to supply water pressure whenever a valve is opened in the plumbing system. A switch is provided to turn the pump off whenever the vehicle is left unattended, or when connected to a city water system. The switch is located on the Instrument Signal Center.

The pump should also be turned off when traveling. The

surge of water, which can occur during vehicle starting and stopping, may cause the pump to turn on. With no open valve to allow the pump to cycle, it may run continuously and eventually be damaged.

The water pump is located at the aft end of the water tank. It has a built-in check valve to prevent water from backing up into the storage tank when the system is connected to a city water source.

The Model 6950-J pump is warranted by the manufacturer for a period of one year. Warranty service and parts may be obtained from: ITT, Jabsco Products, 501 W. Liberty Street, Springfield, Ohio 45501. The telephone number is AC 513 325-8701.

**Water Line Filter** — A filter is located in the water line between the tank and the pump. Inspect this filter periodically to be sure that an accumulation of foreign matter does not impair the water flow. The filter may be cleaned by removing it and rinsing or back-flushing.

**Shower** — The shower stall is constructed of molded fiberglass. Clean with a liquid detergent, then rinse. Do not use abrasive cleaners as they will dull the surface.

The shower is equipped with an adjustable shower head and flexible hose. The head may be removed from the bracket for maximum efficiency. The built-in push button on the shower head is designed for volume control (water saver) and is not intended as a shut-off valve. A slight trickle in the closed position is normal.

Note: Be sure to remove the shower pan drain plug before turning on the water. Keep it in the drain, except when using shower.

## 3. WATER CLOSET (Toilet)

Your motor home is equipped with a Thetford Aqua Magic pedal-operated water closet. To flush: step on the large pedal until the water swirls, then release the pedal. To add water to the bowl: step on the small pedal until water reaches the desired level, then release.

The Aqua Magic Toilet may be cleaned with any high grade, non-abrasive cleaner. Do not clean with a highly concentrated, or high acid content household cleaner. These may damage the rubber seals.

The Aqua Magic Toilet does not require routine maintenance. If the bowl sealing blade should fail to operate freely after extended use, apply a light film of silicone spray to the blade.

The Thetford Aqua Magic Toilet is warranted by the manufacturer for a period of one year according to the terms and conditions of the warranty statement. Warranty service and parts may be obtained from Thetford Corporation, 3001 S. State St., Ann Arbor, Michigan 48106, P.O. Box 1285. Their telephone number is AC 313 769-6000.



#### 4. WASTE HOLDING TANK

Your motor home is equipped with a 40-gallon waste holding tank. This tank is installed beneath the floor near the rear of the vehicle.

Waste water from the two lavatories and the shower flow into the tank through drain lines. Waste from the stool goes into the tank through an opening in the top. A diagram of the drain system is included in Section VI of this manual.

A remote monitor switch is provided to indicate liquid level in the holding tank. Refer to Item 12 for more detailed information.

The tank drain valve and connection is located at the rear of the vehicle. The valve handle is locked in the closed position with a red plastic nut. Turn this nut several times counterclockwise to release the handle. Always lock the handle to prevent accidental discharge when not in use.

It is not wise to keep the tank valve open. The low volume of water used with each flush may not be adequate to flood away all of the solids. The result can be a build-up that is difficult to remove. Keep the dump valve closed, run about 1" of water into the tank, and dump every few days.

A drain cap is provided to prevent accidental dumping of accumulated waste. The cap should be in place while traveling, but it must be removed and the sewer hose connected before opening the valve.

The waste holding tank drain extension pipe is designed to swing down for draining. A cable supports it in the normal 'drain' position. When preparing to travel, the pipe should be capped and secured tight to the frame with the rubber strap.

When using the coach in freezing temperatures, a permanent antifreeze may be added to the waste holding tank. Use an ethylene glycol type antifreeze. Follow the directions on the container to obtain the desired protection.

#### 5. OPTIONAL THERMASAN WASTE DISPOSAL SYSTEM

The Thermasan unit uses the heat energy of the engine exhaust to disintegrate the holding tank wastes. This is done after a breaking-down action is initially created in the contents of the holding tank. The waste is next pumped into a sanijector which screens and sprays it into the engine's exhaust system. The waste is destroyed to the extent that all remaining gaseous by-products are rendered invisible, bacteria free, harmless, and meet emission requirements of Public Health and Federal Emission Standards.

To operate your Thermasan System, two factors must be

present: an engine under work load, and the vehicle's speed exceeding 35 MPH. Operation of the control panel, without these factors being available, will not activate the system. If the engine load should drop below limits, or the vehicle speed is reduced, operation of the system will be temporarily interrupted.

The Thermasan controls are located to the left of the steering column in the driver's compartment. The panel face contains an "ON"/"OFF" switch, a pull to test feature, and three indicator lights. The "ON"/"OFF" switch also contains a rheostat control to be used if dimming the indicator lights is desired during night operation.

When switched to the "ON" position, the green "READY" indicator will light. This tells you the system is operational. When the speed and engine load requirements are met, the red "REACTION" indicator will light, which tells you the system is operating. When the white indicator lights, the system has destroyed all waste above the holding tank evacuation probe and the system should be turned "OFF". When the "ON"/"OFF" switch is pulled out, the "REACTION" indicator light will blink if the pump is running.

The system operates on 12-volts and will destroy approximately one gallon of waste for every fifteen miles of driving.

#### CAUTION

**DO NOT PUT ANY HIGHLY COMBUSTIBLE MATERIALS SUCH AS KEROSENE, ALCOHOL, OR GASOLINE IN YOUR HOLDING TANK SINCE IT COULD CREATE AN EXPLOSION HAZARD IN THE VEHICLE EXHAUST.**

Do not winterize your motor home with fuel oil or kerosene, which might get into the holding tank. We also recommend that facial-type tissue, paper towels, etc. be kept from the holding tank because they have 'wet strength' and they will not properly dissolve for passage through the waste pump.

Occasional draining and flushing of your holding tank at an approved dumping station is recommended. This should be done periodically to remove any foreign particles or other insoluble matter. The use of Aqua Kem holding tank chemical is recommended.

#### 6. L.P. GAS SYSTEM

The motor home gas system consists of a gas tank, a regulator, the gas distribution piping, and the following appliances: range & oven, refrigerator, and furnace. A schematic diagram is shown in Section VI of this manual.

**This system is designed for use of liquefied petroleum (LP) gas only. Do not connect natural gas to this system. Before turning on gas, make certain all gas connections have been made tight, all appliance valves are turned off, and any unconnected outlets are capped.**

## L.P. Gas System (cont'd.)

### After turning on gas, test piping and appliances for leakage with soapy water, and light all pilots.

The gas tank is located in an exterior compartment at the right rear side of the coach. It is equipped with a valve to control the flow of gas, a combination visual/remote level indicator, and a pressure regulator to control the pressure in the piping system. The regulator is preset at the factory to maintain a pressure of 11 inches water column, or approximately 6½ ounces per square inch. All appliances are adjusted to operate at this pressure.

**DO NOT REMOVE THE TANK TO FILL IT.** Drive the motor home to an L.P. gas dealer to have it filled. Turn off the tank valve before entering the fill depot. The valve is located on the side of the tank. Except when operating the gas system, it should be closed at all times.

All gas line fittings, except those at the individual appliances, are located outside the coach. Several connections will be found under the coach, where the main gas line branches off to supply the individual appliances. These gas lines and fittings should be inspected and tested periodically for possible damage and leaks. Brush or spray a soap suds solution over all fittings and any damaged areas in the line. The bubbles will grow in size to indicate the presence of a leak.

If the odor of gas is detected inside the coach, extinguish all flames and test for leaks. If the leak cannot be detected, turn off the valve on the gas bottle and see your dealer's service department, or a competent gas appliance service man. **DO NOT CONTINUE TO USE YOUR GAS SYSTEM UNTIL THE LEAK IS LOCATED AND ELIMINATED.**

The gas appliances in your coach are designed and adjusted to use L.P. gas. Propane gas is the most common type. Butane may be used but will not vaporize, or turn to gas, at temperatures below 31°F.

## 7. WATER HEATER

Your coach is equipped with a 6-gallon, 110-volt electric water heater. It is located under the forward end of the left bed. A separate circuit breaker is provided in the distribution panel to protect this circuit. In addition, an "ON"/"OFF" switch is located on the front face of the water heater. Be sure that water is in the heater tank before turning it on. Open the hot water faucets until all air is eliminated before turning on the switch and breaker.

A thermal protective device is located inside the electrical box on the water heater front. It may be reset by removing the cover and pushing the reset button.

If your water heater is equipped with the optional Engine Preheat, it will have two hoses connecting it to the engine heater lines. These will provide automatic hot

water whenever the engine is running. This will help conserve electrical energy.

The water heater is equipped with a drain valve and tube extending down through the floor. Location is shown on a pictorial diagram in Section III of this manual.

A combination temperature/pressure relief valve is also located on the front of the heater jacket, and is drained through the floor. It protects the heater tank and water system against excessive temperatures or pressures. It is normal for water to drip from this drain while being heated.

The Atwood Bowen Model EH6 water heater is warranted for a period of two years according to the terms of the statement included in the Warranty package.

Warranty service and parts may be obtained from any of the authorized service stations on the list, or by contacting **ATWOOD MOBILE PRODUCTS DIVISION**, 1400 Eddy Avenue, Rockford, Illinois 61101. Their telephone number is AC 815 877-5771.

## 8. GAS FURNACE

Your motor home is equipped with a Sol-Aire gas-fired, forced air furnace. The furnace blower operates on 12-volt electricity. It has an automatic spark ignition unit. There is no pilot light, and no manual lighting is required.

The furnace is located under the range in the sink cabinet. Hot air is distributed to different areas of the coach through ducts. These are shown in a diagram located in Section VI of this manual.

To operate the furnace, use the following procedure:

1. Open the tank valve and the line valve. The line valve is located at the front of the furnace.
2. Turn the thermostat to the lowest setting.
3. Press the manual reset button on the furnace.
4. Turn the thermostat to a temperature setting above room temperature. The furnace should start.
5. Set the thermostat to the desired temperature and it will cycle the furnace on and off as the temperature satisfies the thermostat.
6. To turn the furnace off, set the control to the lowest, or "OFF", setting. The burner will shut off immediately and the blower will stop as soon as the furnace cools slightly. Turn the gas valve off when not in use.

Temperature adjustment can be made by rotating the louvers on the hot air registers to direct more warm air in the desired areas.

The furnace is protected by safety devices which will stop

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## Gas Furnace (cont'd.)

the furnace in the event of: (1) burner ignition failure (2) burner flameout during operation (3) poor combustion (4) lack of fuel (5) low voltage.

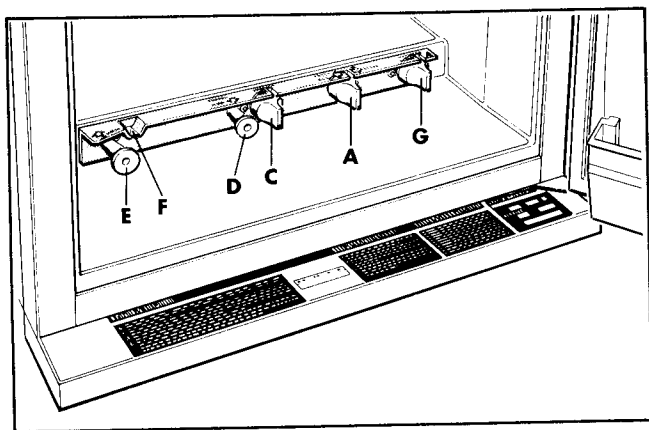
If the furnace has shut off for any of these reasons, the Reset Button must be pressed to reactivate the control circuit. Before the Thermal Relay will properly reset, a wait of at least 5 minutes is required after the furnace has stopped. The D.C. portion of the control circuit is also fused at the furnace and at the 12-volt fuse panel. See furnace illustration in Section VI for identification and location of controls.

Detailed instructions for periodic inspection and maintenance check-out are provided in the furnace manual which is included in the warranty package.

The Model 30-I-4P-12 Sol-Aire furnace is warranted by the manufacturer for a period of one year. For warranty information and parts, contact TRI-MEN MANUFACTURING, INC., SOL-AIRE DIV., 1359 W. Jackson Street, Painesville, Ohio 44077. Their telephone number is AC 216 352-6158.

## 9. GAS-ELECTRIC REFRIGERATOR

The refrigerator in your motor home may be operated from any of three sources of heat energy: L.P. gas, 12-volt electricity, or 110-volt electricity. By setting the control to 12-volt electric, the refrigerator may be operated with power from the engine alternator while traveling. When parked, the refrigerator may be operated from L.P. gas if no outside source of electrical energy is available. When the electrical power cord is connected to an external power source, or when running the optional power generator, the refrigerator may be operated on 110-volts.



The control knobs are located inside the refrigerator, under the bottom shelf.

### Gas operation —

1. To start the refrigerator turn the knob A to position "Gas". The gas valve is now opened and the electric circuits are broken.
2. Turn the gas thermostat knob C to setting 4.
3. Pull the knob D of the flame failure safety device and after 15 seconds press the button E of the piezo lighter. The pressing may have to be repeated. Through the reflector F it can be observed that the burner is lit.
4. After the burner has been lit keep the knob D in pulled out position for another 15 seconds. Then release the knob and check through the reflector that the burner stays lit.

Note: After refilling the gas container or a long shut-off period the gas lines are likely to be filled with air. In such a case the lighting procedure has to be repeated until the air is pushed out of the lines and the gas has reached the burner.

### Electric operation —

1. Check that the attachment plug of the flexible cord is correctly connected to the main supply. The 12 Volt connection is made at the marked terminals at the rear of the refrigerator.
2. Turn the knob A to "off" position then press the knob to the bottom and turn to desired electric position.
3. Turn the thermostat knob G to setting 4.

Note: When the refrigerator is equipped for 110 Volts and 12 Volts operation the turning movement of the knob A should be made as follows:

In Gas OFF position the knob is pressed and turned clockwise to position 12 Volts. If 110 Volts operation is desired press once more and continue the clockwise turning to position 110 Volts.

**Gas Thermostat** — The refrigerator is equipped with a gas thermostat which is regulated by turning knob C to different settings.

At zero, (indicated by a dot), the thermostat valve remains closed and the burner runs continuously at the bypass rate, which is just enough to keep the burner lit.

At MAX the thermostat valve remains open and the burner is running continuously at the full gas rate. The lowest cabinet and freezer temperatures are obtained at this setting.

Between these two extremes is a numbered portion of the dial, the higher the number, the lower the temperature. As soon as the required cold temperature inside the cabinet is reached, the thermostat cuts off the main burner

## Gas-Electric Refrigerator (cont'd.)

flame, leaving the by-pass flame to keep the safety valve open.

**Electric Thermostat** — Turn knob G to regulate cabinet and freezer compartment temperature. The higher the number, the lower the temperature.

**Maintenance** — Periodic maintenance procedures are described in the Instruction Booklet which is included in each refrigerator.

If the refrigerator is to be shut down for a period of weeks, empty and clean it, and keep the door open. Use warm water to clean trays and shelves. The interior lining of the cabinet may be cleaned with lukewarm weak soda solution.

Components in your Dometic Model RM66 refrigerator are warranted for various periods from 3 months to 5 years, according to the terms of the Warranty Policy included with each appliance.

Warranty service and parts may be obtained from Dometic Sales Corporation, 2320 Industrial Parkway, Elkhart, Indiana 46514. Their telephone number is AC 219 294-2511.

## 10. RANGE and OVEN

The Suburban Range is equipped with four top burners and an oven with broiler.

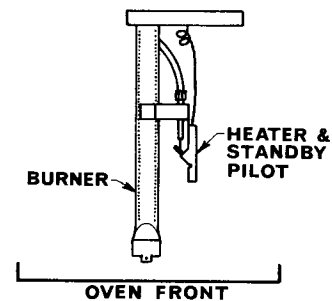
**Top Burners** — The top burners are lit by turning on the burner and then pressing the igniter button. Press in on the burner knob and turn it counterclockwise. Allow 3-4 seconds for the gas to reach the igniter tube before pressing the igniter button. Each time this button is pressed it creates a spark. The top burners may also be lit by placing a burning match over the burner. After the burner lights, continue turning the knob until the desired flame is attained.

**Oven** — To light the oven, use the following procedure:

1. Light oven standby pilot by pressing thermostat knob in and turn to off position. Wait a few seconds for air to clear from gas line and place burning match over standby pilot until pilot ignites.
2. Turn knob counterclockwise to desired temperature. At this time the heater pilot which is actually an extension of the standby pilot, will begin to heat the oven safety valve. In approximately 30 seconds the safety valve will open allowing gas to flow to the oven burner which is then ignited by the pilot.

To turn off the standby pilot, press in on the control knob and turn it clockwise to the pilot off position. **ALWAYS PLACE THE CONTROL KNOB IN THE PILOT OFF POSITION WHEN TRAVELING.**

Note: To turn oven burner off, simply turn thermostat knob to the off position. Standby pilot will remain lighted until thermostat knob is pressed in and turned counterclockwise to pilot off position.



**Sequence of Oven Operation** — With the thermostat set at 300°, for example, the following steps automatically occur:

- a. The thermostat “calls” for heat.
- b. The pilot flame increases to the higher position.
- c. The oven valve opens and lets gas into main burner.
- d. Burner heats up oven and thermostat quits calling for heat.
- e. Pilot heater flame subsides.
- f. Oven safety valve closes.
- g. Oven is ready for another cycle.

**Cleaning** — To clean the area under the top burners, release the latch in front of the main top, and the main top can either be raised or completely removed.

If top burner heads are cleaned with any cleaning compound, care should be taken to see that all ports are opened up with a toothpick to insure proper operation. It is especially important that the lighter ports on the side of the burner head are kept clear.

Never wash porcelain while warm. Never use cleaning powder containing grit or acid.

**Bifold Top** — A bifold top cover is provided to permit using the range top as a work space. When the top is folded up to expose the top burners, it acts as a splash shield to protect the window area behind the countertop.

**Warranty** — The Model SR-40LXC Suburban Range is warranted for a period of one year. Terms are stated in the warranty policy, which is printed in the Operation and Service Instruction booklet. Warranty information and parts may be obtained from Suburban Manufacturing Company, Box 399, Dayton, Tennessee 37321. The telephone number is AC 615 775-2131.

## 11. RANGE VENT

The range vent is equipped with an exhaust fan, filter, and roof duct to discharge moisture, fumes, and cooking

*continued on next page*

## Range Vent (cont'd.)

odors from the coach. The filter may be removed for cleaning by unscrewing the nuts from the two electrical switches and dropping the face panel. A 12-volt lamp is located in the left side of the filter housing. It uses a No. 1156 or No. 1141 bayonet-base automotive bulb.

## 12. INSTRUMENT SIGNAL CENTER

The signal center is located in the sidewall panel of the refrigerator cabinet, just inside the entrance door. This panel provides the following: water tank level, waste-holding tank level, L.P. gas level, battery condition, power-on light, water pump switch, generator start-stop switch, and generator running-time meter.

The panel legend plate is retained by two thumb screws so that it may be removed to facilitate the replacement of burned out bulbs. All lamps use No. 53, 12-volt bulbs. A panel wiring diagram is provided in Section VI of this manual.

A series of five horizontally-spaced lamps are arranged on the panel to indicate the level of the two tanks. The lamps illuminate five levels: "0", "1/4", "1/2", "3/4", and "F" for full. The highest illuminated level is the correct reading.

**1. Water Level Indicator** — The extreme left rocker switch will indicate the water level in the potable water storage tank. Depress and hold the left end of the switch to obtain a reading.

**2. Waste Level Indicator** — Depress the right end of the switch on the extreme left to obtain a reading.

**3. L.P. Gas Level Indicator** — Depress and hold the switch marked L.P. GAS to obtain a reading. A visual gage is also mounted on the L.P. tank.

**4. Battery Condition** — Depress the BATTERY CONDITION switch to observe the indicator lamps marked 'LOW', 'FAIR', and 'GOOD'. If the motor home is connected to a 120/240 A.C. power source, disconnect the power cord or turn off the main breaker before checking the batteries. The reading should be taken with the lights and fans turned off. The lamps will indicate the average condition of the three batteries in the house circuit.

**5. Water Pump Switch** — The switch on the extreme right is the water pump switch. It should be turned on when using water from the storage tank. Be sure the switch is turned off when leaving the motor home unattended. A panel light will illuminate the word 'PUMP' whenever the switch is in the 'on' position.

**6. Power-On Light** — A panel lamp is provided to indicate 'POWER ON'. This lamp will be lit whenever the motor home is plugged into a 120/240 volt A.C. receptacle. It is provided to prevent discharge of the house batteries which might be caused by accidental discon-

nection of the power cord, or a stoppage of the generator. This lamp circuit is protected by a 2-ampere fuse which is located in the top of the power converter.

**7. Generator Switch** — The large center switch controls the generator. Depress and hold the left end of the switch to start the generator. A lamp on the panel will light to indicate that it is running. Depress and hold the right end of the switch to stop the generator.

**8. Generator Running-Time Meter** — This meter records the running time of the generator. It is provided to aid in scheduling proper maintenance for this generator.

The signal center is warranted for a period of one year. For warranty work, service parts or information, contact: WEMAC, RVP DIV., 3433 Harvard, Santa Ana, California 92704. Their telephone number is AC 714 540-6040. Defective panels returned to this address within the warranty period will be repaired at no charge.

## 13. AIR CONDITIONER (Opt.)

The Duo-Therm roof-mounted air conditioner is designed to provide comfort in a wide variety of applications.

### OPERATING INSTRUCTIONS

1. Set thermostat dial to desired temperature.

2. Place blower switch in desired position.

Hi-Fan .....	High Speed Fan Only
Med. Fan .....	Med. Speed Fan Only
Low-Fan .....	Low Speed Fan Only
Hi-Cool .....	High Speed Fan with Cooling
Med. Cool .....	Med. Speed Fan with Cooling
Low-Cool .....	Low Speed Fan with Cooling

3. Adjust air flow for the desired air distribution.

4. Adjust louvers on air box for the best air distribution.

5. To completely shut down unit, place blower switch in the "OFF" position.

### MAINTENANCE

The air filter should be cleaned or replaced periodically. Filter may be washed in warm suds water, let dry and reinstalled. Replacement filters are available from nearest dealer, distributor or direct from factory. Part No. 3-8166.

Duo-Therm air conditioners are warranted by the manufacturer for a period of one year. To obtain information, parts, and warranty service, contact the nearest authorized Duo-Therm Service Center. Refer to the service directory supplied with your air conditioner. When requesting service, give complete model and serial number of the unit.

#### 14. TV ANTENNA (Opt.)

The Starliner T.V. Antenna is mounted on the roof. It can be raised, lowered, and rotated 360° by simply turning a crank inside your motor home.

Two outlets are provided for the antenna: on the wall adjacent to the bedroom vanity cabinet, and adjacent to the galley countertop. Each is combined with a 12-volt utility outlet. The outlet housing in the bedroom contains a booster/amplifier to provide greater signal strength. A switch on the side of the housing turns the booster/amplifier off and on. A small red pilot lamp on the outlet housing is lit whenever the booster switch is on.

#### OPERATING INSTRUCTIONS

- 1. To Raise:** Pull handle down and crank it *counterclockwise* (looking up).
- 2. To Turn:** Push crank up with small *clockwise* motion to engage drive pin. Turn *counterclockwise* until best picture is received.
- 3. To Lower:** First turn antenna (as in 2) *clockwise* to stop. Then pull handle down and crank it *clockwise* until antenna drops into travel support.

The Starliner antenna is warranted by the manufacturer for a period of one year. For information or service contact BRAUND MFG. CO., 730 E. Michigan Ave., Battle Creek, Michigan 49016. Their telephone number is AC 616 965-2371.

#### 15. GENERAL CARE AND CLEANING

**Cabinets and Woodwork** deserve the same care as the furniture in your home. A furniture wax or polish will aid in maintaining the fine factory finish. Upper cabinet doors are equipped with a single arm friction brace. Tighten the adjusting screw to increase friction if the door does not stay in the open position.

**Interior Walls** are covered with vinyl. They may be cleaned by wiping with a mild soap or detergent and water. Do not use an abrasive cleaner or solvent as it will damage the vinyl or dull the finish.

**Draperies** are of high quality synthetics and should be dry cleaned.

**Carpeting** is nylon or polyester. It may be cleaned with any good grade of foam carpet cleaner. Follow the instructions on the container.

**Upholstered Items and Bedspreads** are soil-resistant treated to minimize spotting. Small soiled areas may be cleaned with a damp cloth and mild detergent. (Sponge up spills immediately.) Upholstery fabrics may be removed for periodic dry cleaning as required.

**Stainless Steel Sinks** may be cleaned with the same detergent used to clean your dishes. Stubborn spots may be removed by using a scouring powder with a wet sponge or cloth. Rinse thoroughly after cleaning. **DO NOT USE STEEL WOOL PADS TO CLEAN YOUR SINK.**

Stainless steel should never be exposed to photographic chemicals, iodine, ferric chloride, hydrochloric acid, or sulphuric acid. Clean blood and salt solutions from your sink as soon as possible.

## SECTION III

### PROTECTION FROM FREEZING WEATHER

Use the following procedure to protect your plumbing system from damage in freezing weather when without heat.

1. Drain the water storage tank onto the ground by opening the drain valve at the rear of the tank. If connected to a septic system, the tank may be drained by opening faucets, pumping into the sinks, and draining through the holding tank.
2. The water lines in your motor home have been installed with a slope to permit gravity draining. Inspect the lines to be sure they have not been bent out of position. Water lines from the galley sink, bath vanity, and shower are designed to drain to the rear. Cold water lines drain through a valve at the rear. Hot water lines drain through the water heater.

Level the vehicle, disconnect the water supply hose, turn off the water pump at the switch, open all faucets to vent, and then open the line drain valve. (See the illustration on the back of this page.) This valve is located near the water pump, at the rear of the water tank. Lift the right bed mattress and remove the rear bed board to gain access to this area.

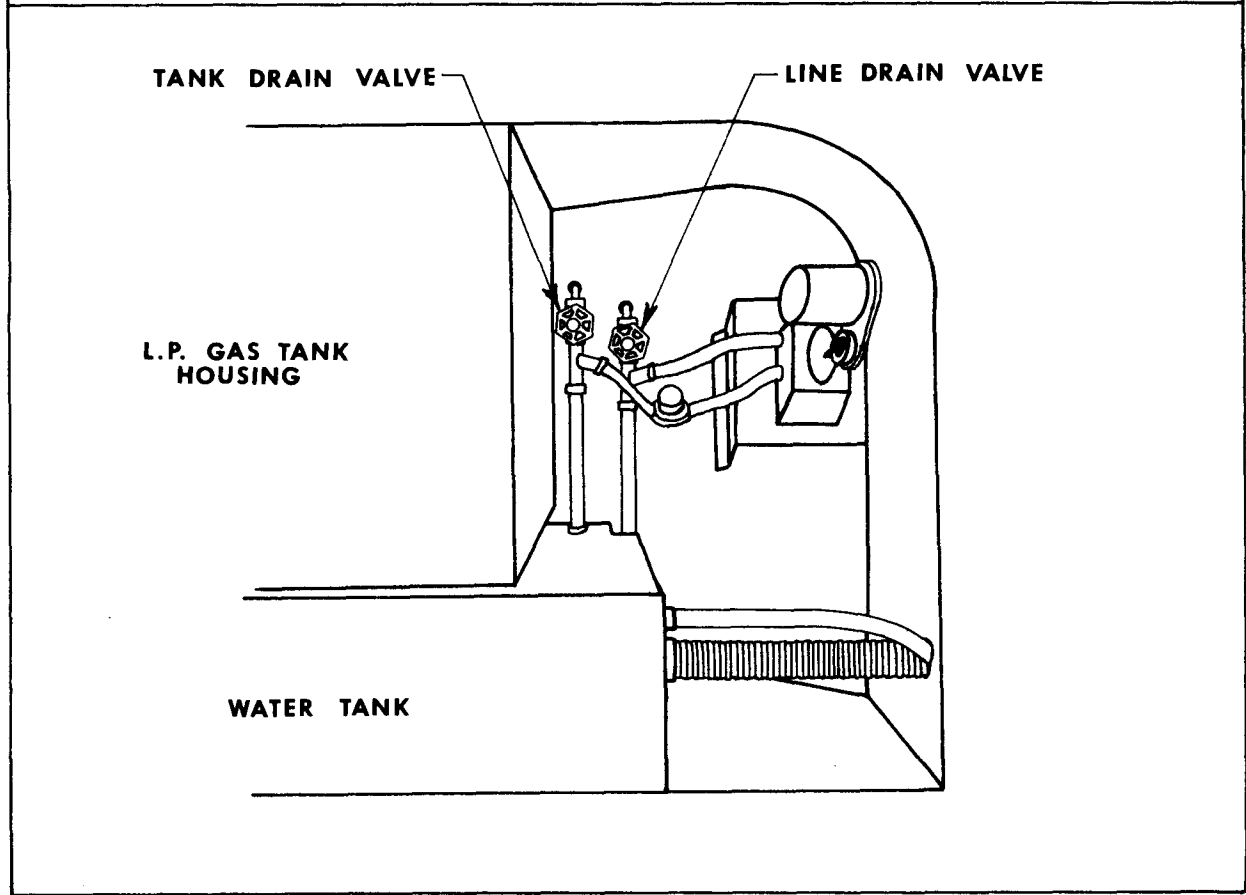
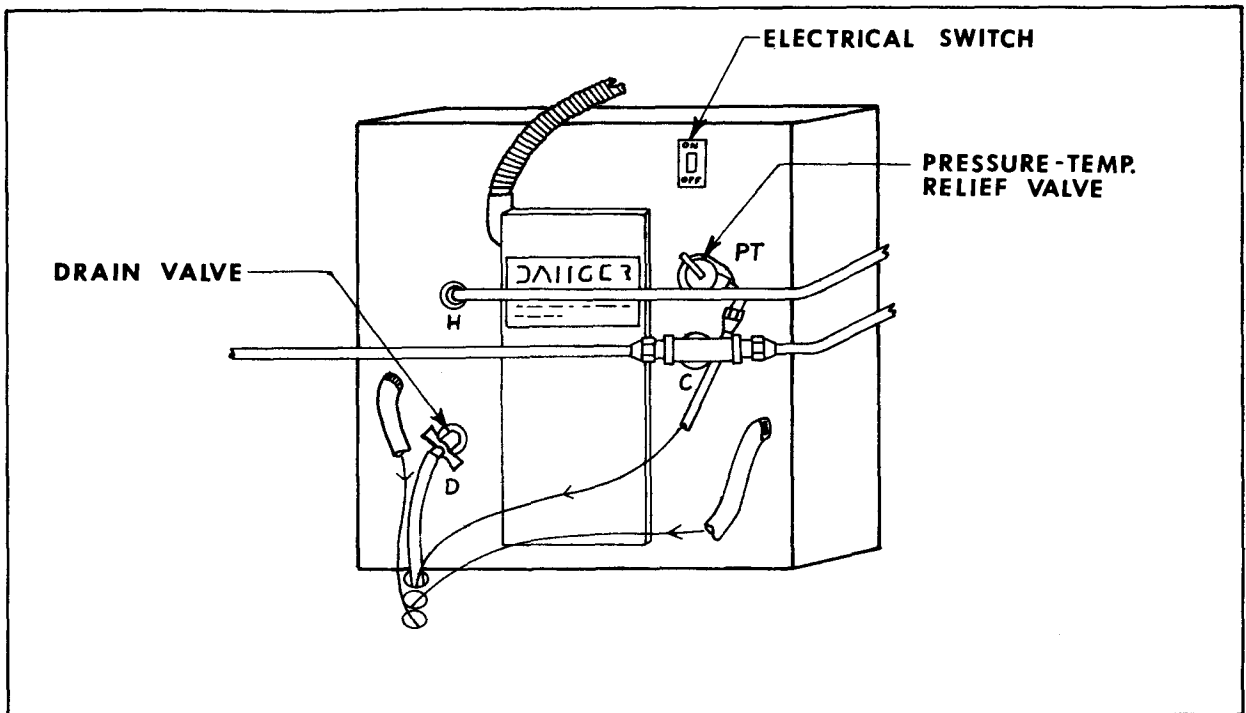
3. Turn off the electrical switch on the front of the water heater and open the heater tank drain valve. (See illustration on the opposite page.)
4. Remove water from the stool by holding both pedals down and allowing the system to drain into the holding tank. The water pump should be turned off. Open the cold water faucet in the bathroom to vent the line and allow it to drain.

Open the drain valve at the back of the stool. Hold the

pedals down, or open the sink faucets to vent. **BE SURE TO CLOSE THIS VALVE BEFORE USING THE WATER SYSTEM.**

Should water accidentally be left in the stool, damage may be prevented by allowing it to thaw out at room temperature before using. **DO NOT ATTEMPT TO FLUSH A FROZEN STOOL.**

5. Open shower valves, and allow shower head to drain. Be sure that the thumb button on the shower head is in the open position to vent the line.
6. Connect the holding tank drain to a septic system, open the valve and allow the tank to drain.
7. Use a suction pump to remove water from traps, or pour about one cup of ethylene glycol-type antifreeze in each of the three traps – galley sink, bath vanity sink, and shower pan. Use caution to avoid spilling the solution on plastic surfaces where discoloration may occur. **DO NOT** use an alcohol-base antifreeze.
8. The water pump will drain through the water tank drain valve and the line valve. Turn the water pump on and allow it to discharge any water remaining in it. Turn pump switch off, but keep valves open to allow gravity draining of any water that may be left in the lines.
9. Insert a stiff wire or slender rod into the water inlet fitting which is located in the cord storage compartment. Push inward to release the spring tension and break the check valve seal, allowing water to drain from it. Be sure faucets are open to vent the line.
10. Be sure all storage batteries are fully charged to prevent damage from freezing.



NO. 26076

GMC 26 FT. AVION INTERIOR  
OPERATION AND SERVICE MANUAL

**AVION COACH CORPORATION**  
1380 East Empire Avenue • Benton Harbor, Michigan 49022



# SECTION IV

## TROUBLE SHOOTING

### AIR CONDITIONER

#### **Trouble: Will not run.**

##### Cause and Remedy:

- Distribution panel circuit breaker tripped. Reset.
- Generator circuit breaker tripped. Reset.
- Power cord not plugged into generator receptacle. Plug in.

#### **Trouble: Does not cool properly.**

##### Cause and Remedy:

- Dirty filter. Clean and replace.
- Low voltage from parking area service receptacle. Move to location providing higher voltage, or use generator power.

### BATTERY

#### **Trouble: Batteries do not charge.**

##### Cause and Remedy:

- Blown line fuse in battery box. Replace.
- Poor connection at the batteries. Clean and tighten.
- Blown fuses on 12-volt distribution block. Replace.

#### **Trouble: Batteries are discharged by use of lights with power cord connected to 120/240 volt supply. 'Power On' lamp not burning.**

##### Cause and Remedy:

- Converter cord pulled from receptacle. Replace.
- Circuit breaker turned off. Reset.

### FURNACE

#### **Trouble: Noisy, rumbling burner, smoke or carbon at exhaust vent.**

##### Cause and Remedy:

- Improper air adjustment. Adjust primary air per instructions in Sol-Aire manual.
- Excessive fuel pressure. Have L.P. tank regulator checked. Pressure should be 11" water column.
- Faulty electrode. Replace.

#### **Trouble: Thermostat calling for heat – furnace blower does not start.**

##### Cause and Remedy:

- Safety lock-out. Press reset button on furnace.
- Blown fuse. Check fuse on furnace and replace. Check fuse on 12-volt distribution fuse block and replace.
- Dead batteries. Check and charge if needed.
- Loose wires. Examine wiring splices at furnace.

#### **Trouble: Blower runs for 30-60 seconds and shuts off. Requires manual reset before blower will restart. Burner will not ignite.**

##### Cause and Remedy:

- No fuel or low fuel pressure. Check L.P. tank.
- Tank valve or manual furnace valve closed. Open valve.
- Low voltage at furnace. Check voltage at furnace, with blower running. If below 10.2 volts, check wiring, battery voltage, and converter.
- Ignition connection loose at igniter or at ignition pak. Tighten both connections.
- Faulty or broken electrode. Replace.

#### **Trouble: Blower runs 30-60 seconds, then stops, and requires manual reset. Burner does ignite.**

##### Cause and Remedy:

- Low fuel pressure. Check L.P. tank.
- Faulty flame switch. Replace.
- Poor burner flame. Adjust primary air. See instructions in Sol-Aire Manual.

### FUSES

#### **Trouble: Replaced fuses continue to blow.**

##### Cause and Remedy:

- Loose wire connections. Tighten all wire clamps and terminals.
- Poor fuse contact. Inspect fuse clips to be sure they are not bent. In the battery circuit, two 20-amp fuses are used in parallel. When replacing these fuses, turn off all lights and fans or disconnect the red converter charging wire to prevent throwing the full load on one fuse while making the replacement.
- Improper fuse size. See page 6 for recommended fuse sizes.
- Incorrect wiring of batteries or fuse block, see page 6.
- Short in wiring. See nearest authorized service center.

## GENERATOR

See TROUBLE SHOOTING GUIDE in the ONAN Operator's Manual.

## REFRIGERATOR

### **Trouble: Refrigerator does not cool.**

Cause and Remedy:

- a-1. Set on 12-volt electric — Blown fuse. Check fuses on fuse block in bath vanity cabinet.
- a-2. Proper thermostat control not set to desired temperature. Adjust.
- b-1. 115-volt electric-refrigerator not plugged in. Check plug in wall receptacle inside service access door.
- b-2. Circuit breaker turned off. Reset.
- c-1. Set on L.P. gas — Proper thermostat control not set at desired temperature. Adjust.
- c-2. No L.P. gas, valve turned off. Turn on.

### **Trouble: Refrigerator does not freeze satisfactorily.**

Cause and Remedy:

See the Dometic Instruction Manual for detailed service information.

## WATER PUMP

**Trouble: Water from city pressure passes back through the pump and causes water storage tank to overflow at fill spout.**

Cause and Remedy:

- a. Improper seating of pump valves. Drain or pump water system dry. Remove, disassemble and clean dirt from valves. Inspect for damage and replace. When reassembling be sure to tighten the four bolts evenly to prevent cracking the pump base. All hose clamps should be tightened securely.

### **Trouble: Pump runs, but does not deliver full supply of water.**

Cause and Remedy:

- a. Dirt in filter. Clean and replace. See instructions in Section II, Water System.
- b. Severe kinking in pump hose. Adjust the hose to eliminate the restriction.
- c. Water tank empty. Refill.

### **Trouble: Pump will not run.**

Cause and Remedy:

- a. Blown fuse. Check fuse block in bath vanity cabinet and replace with correct size.
- b. Pump switch not turned on. Turn on switch on the Instrument Signal Center panel.

### **Trouble: Pump runs when no water is being used.**

Cause and Remedy:

Look in water system. Examine liner and ground underneath vehicle for evidence of leak. Check all drain valves to be sure each is completely closed.

## SECTION V

### WARRANTY INFORMATION

Service, repairs and parts for your Avion Interior may be obtained through any franchised GMC Motor Home dealer across the country, or from:

Avion Service Corporation  
1576 E. Empire Avenue  
Benton Harbor, Michigan 49022  
Telephone – 616-927-2271

The Avion Service Corporation is able to perform virtually any of the service work in accordance with our suppliers' warranty.

Avion Service Corporation operates on an appointment basis only. For a service or repair appointment call or write in advance.

\* \* \* \* \*

Warranty service and parts for many components that are manufactured by Avion suppliers may be obtained direct.

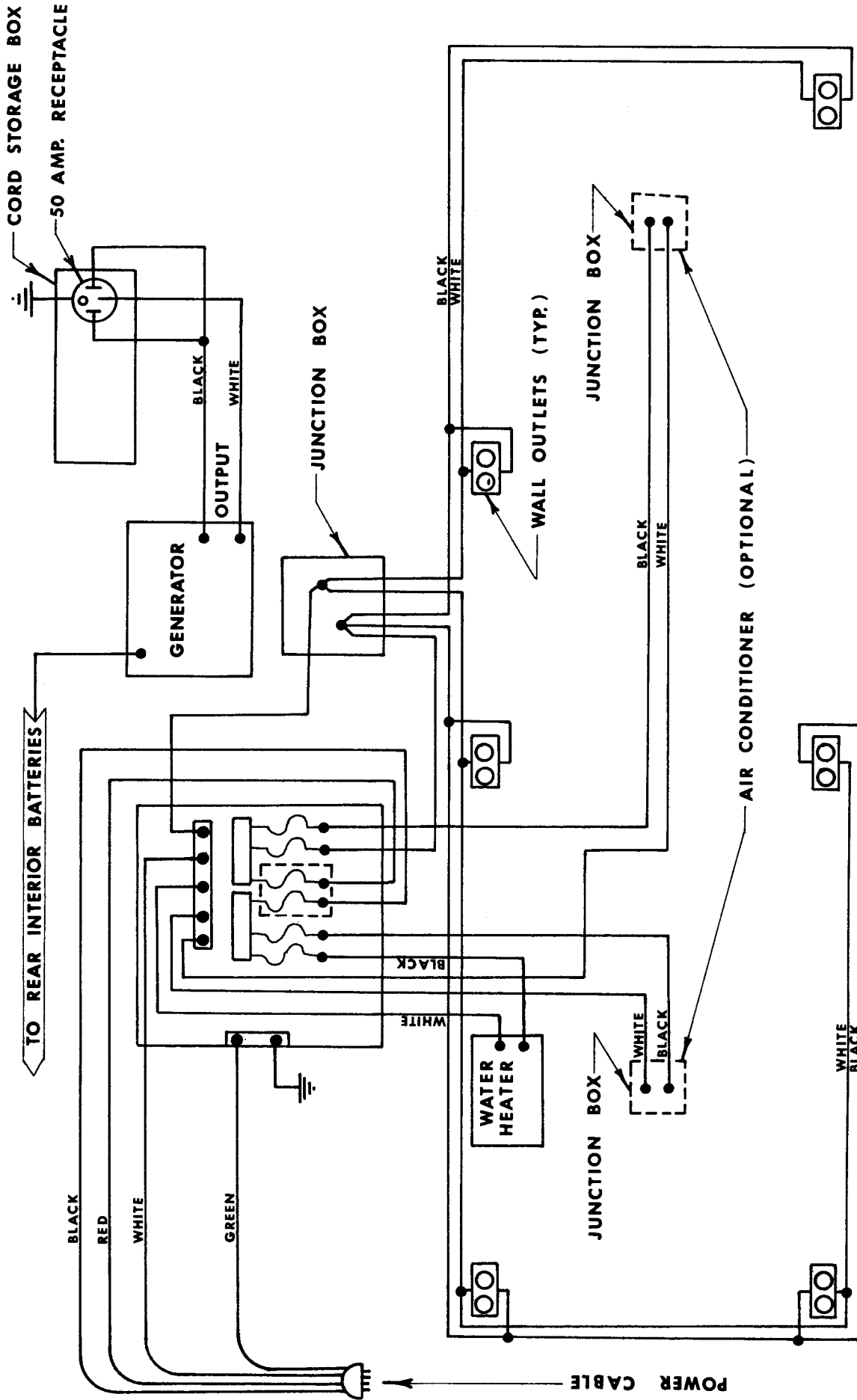
Addresses of these suppliers are found in your AVION WARRANTY, OPERATION and SERVICE KIT envelope.

## SECTION VI

The illustrations and diagrams in this section are provided to assist service personnel in understanding the systems in this motor home. Keep this manual with your motor home at all times so that the information will be available when needed.

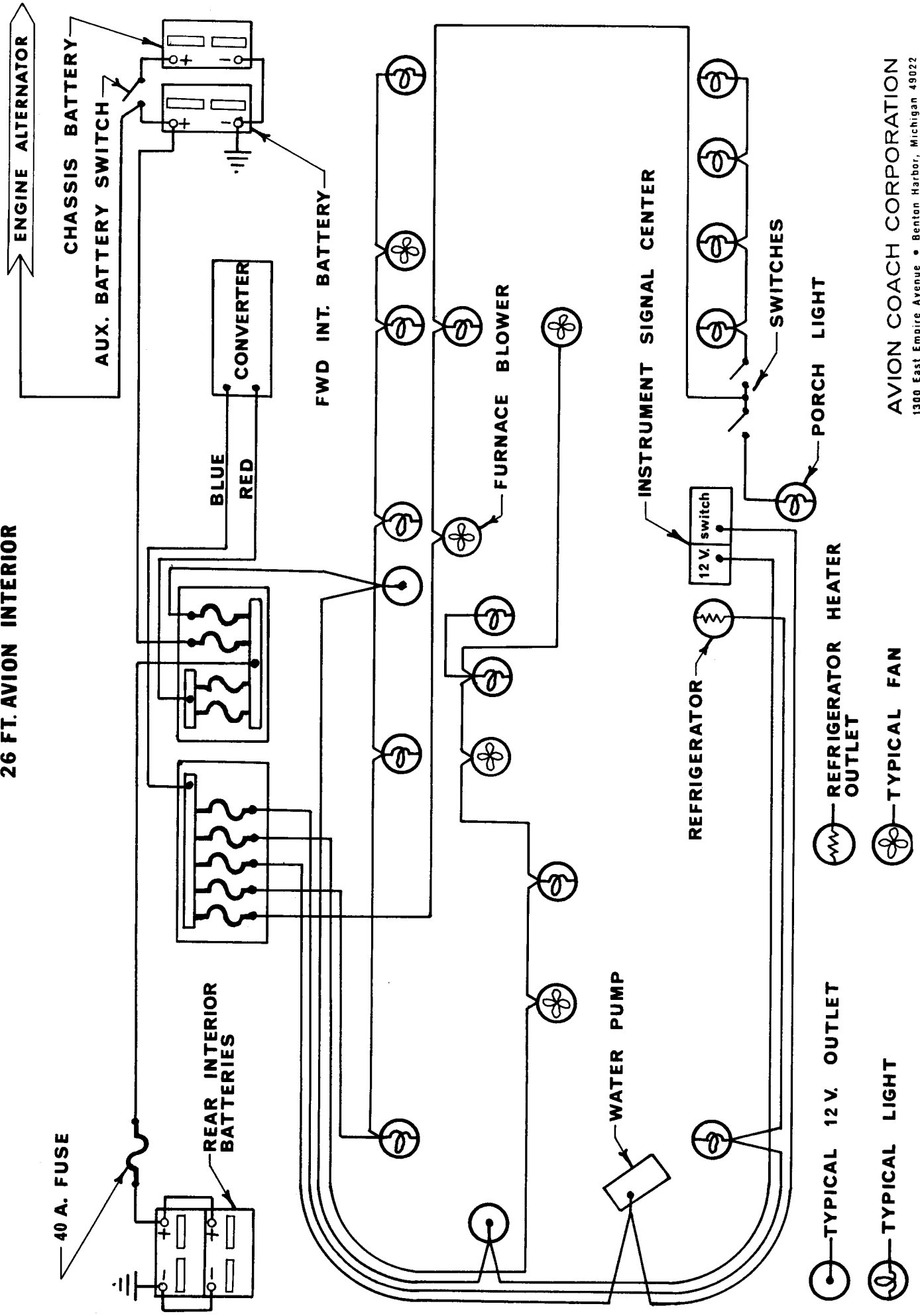
# 120 VOLT WIRING DIAGRAM

## 26 FT. AVION INTERIOR



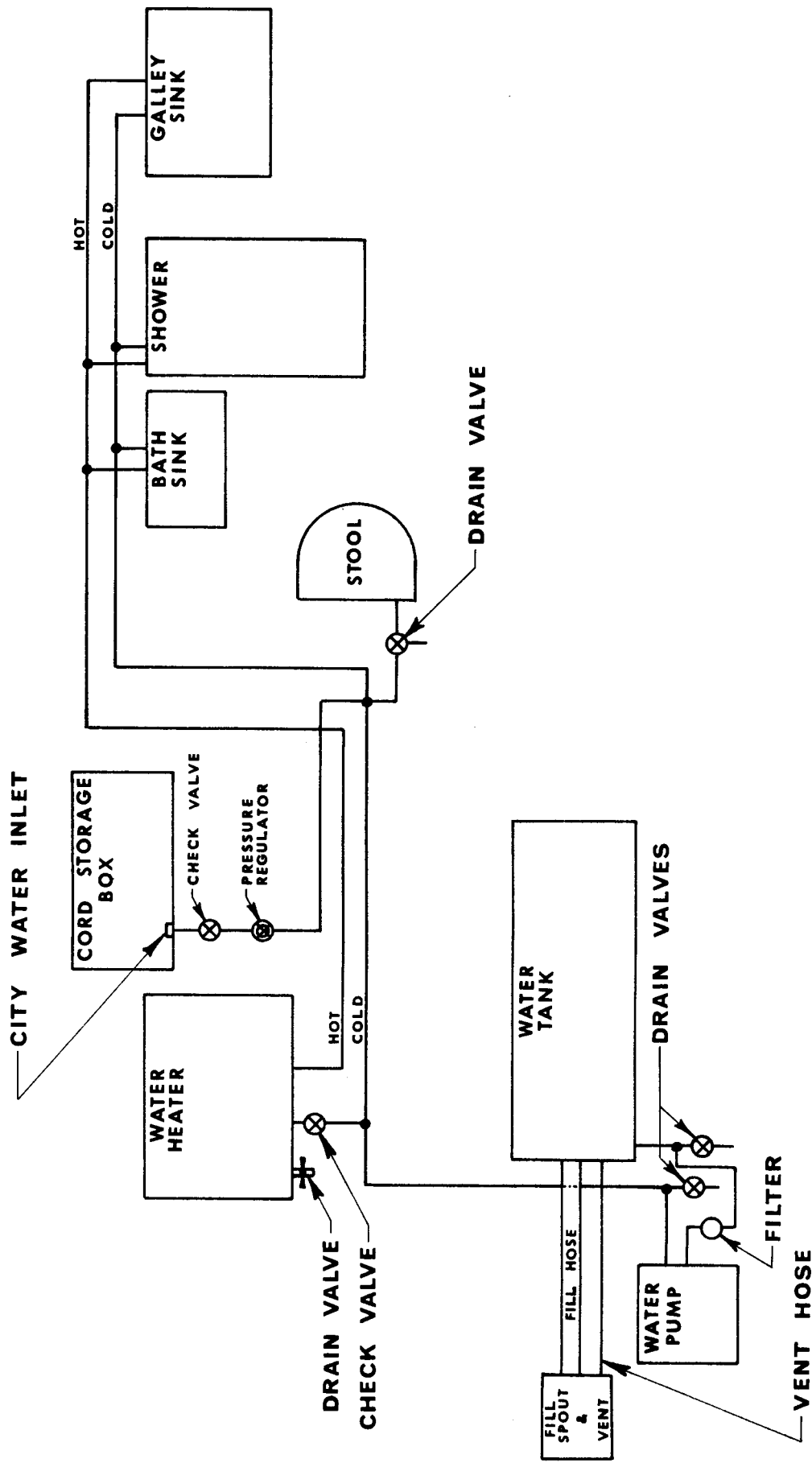
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# 12 VOLT WIRING DIAGRAM 26 FT. AVION INTERIOR



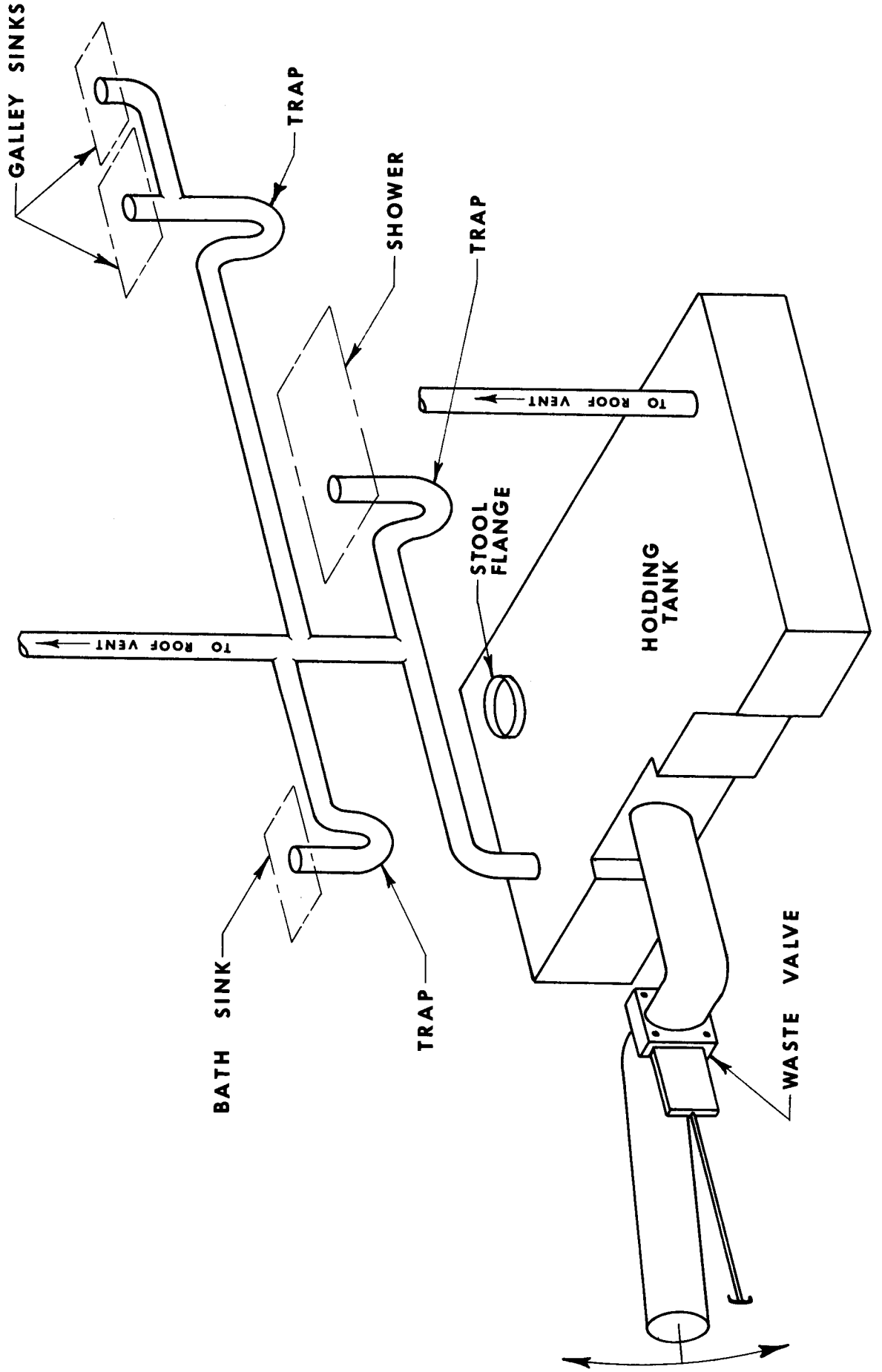
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# WATER SYSTEM 26 FT. AVION INTERIOR



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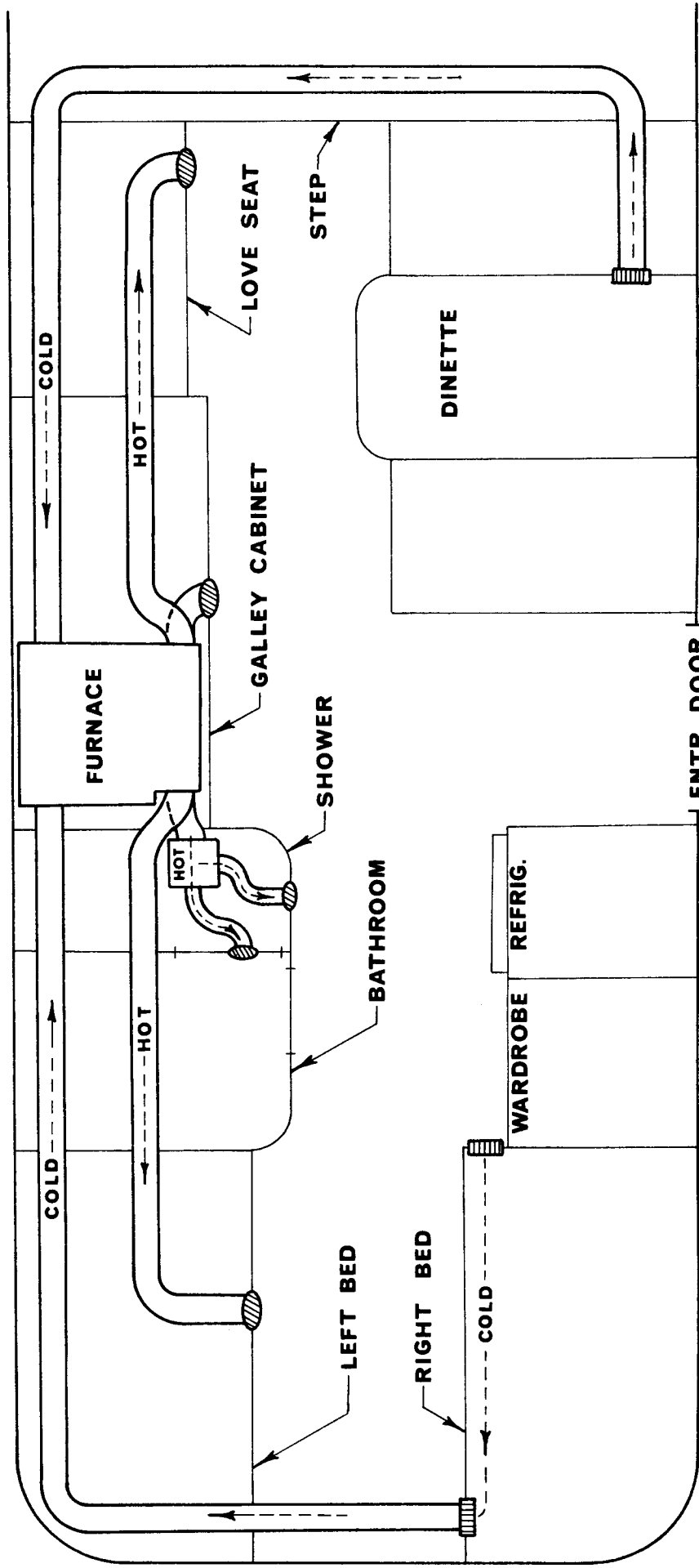
# DRAIN SYSTEM 26 FT. AVION INTERIOR





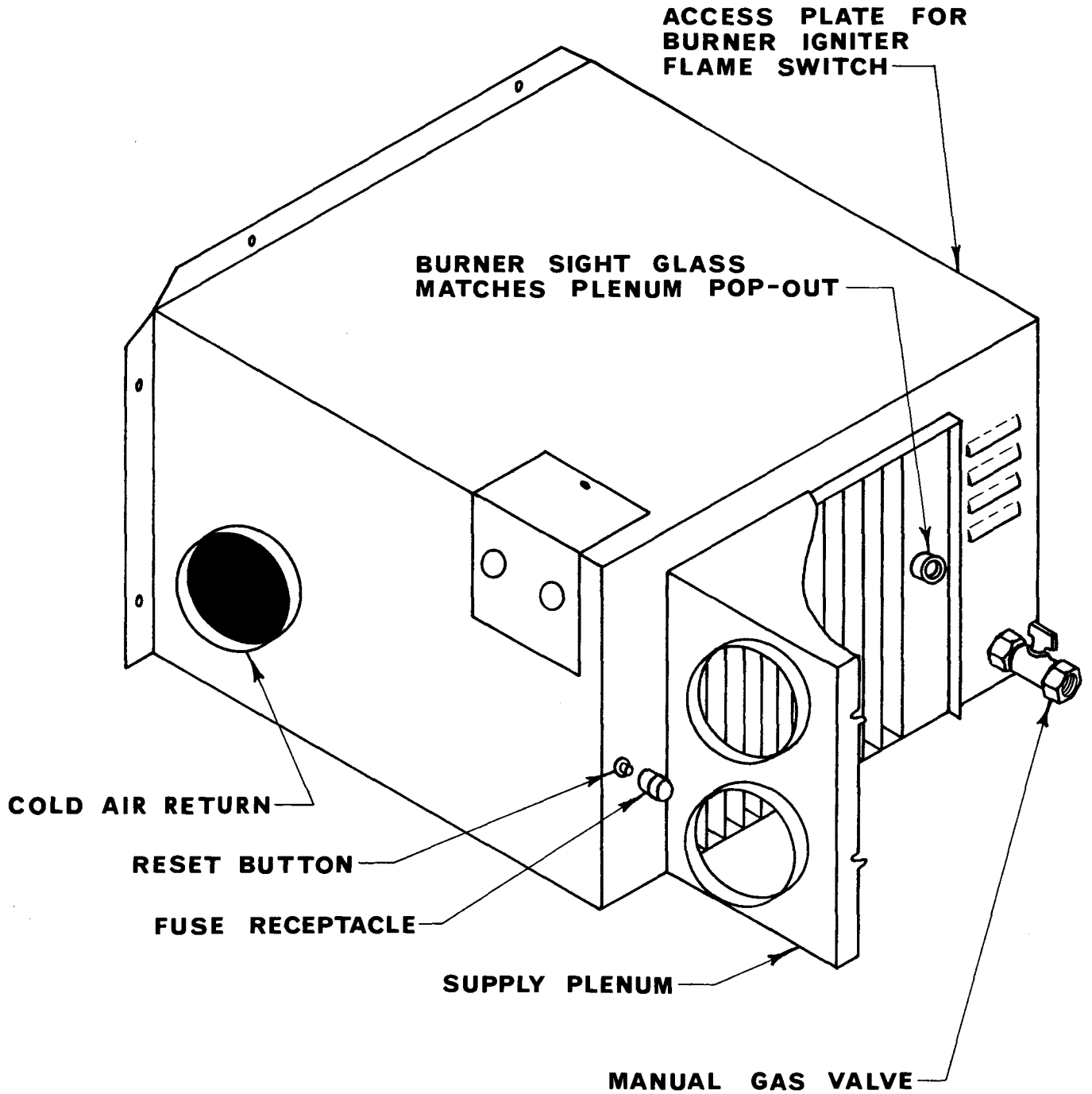
# HEATING SYSTEM

## 26 FT. AVION INTERIOR



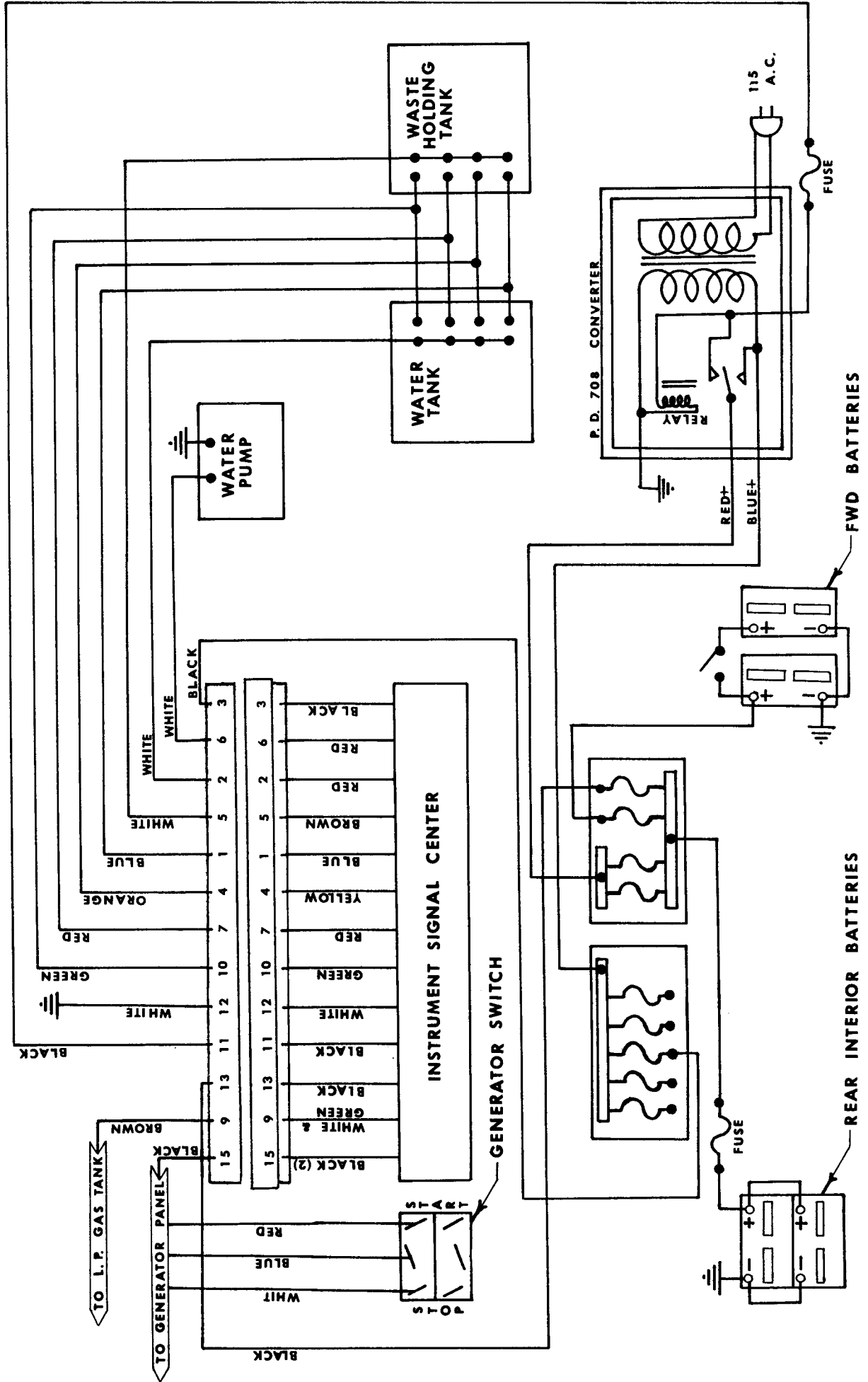
# FURNACE CONTROL ILLUSTRATION

## 26 FT. AVION INTERIOR



# INSTRUMENT SIGNAL CENTER WIRING DIAGRAM

## 26 FT. AVION INTERIOR



**L.P. GAS SYSTEM  
26 FT. AVION INTERIOR**

