because the small pedal actuates the water inlet valve; and the rim storage is filled, when both pedals are depressed.

D. Release both foot pedals. This closes the slide valve and stops usage of fresh water, and the bowl refills automatically from the rim storage.*

3. Directions for Flushing with the Water Saver Package Installed:

A. Hold the hand spray in ready position over the bowl.

B. Depress thumb button on the hand spray.

C. Depress both foot pedals, thus opening the slide valve, dropping the waste into the holding tank, and sending fresh water through the hand spray.

D. Spray the bowl clean with the hand spray. Release the foot pedals, thus closing the slide valve, and shutting off the water flow through the hand spray. Be sure all paper is flushed from the bowl. If wedged in the valve seat, paper will prevent sealing.

The Aqua Magic Toilet does not require lubrication. Ordinary household cleaners may be used for routine cleaning. Common toilet bowl cleansers may be used; however, they should be flushed on through the system within four hours, and should not be left in the holding tank for any extended period of time.

The Thetford Toilet is warranted by the manufacturer for a period of two years, according to the terms and conditions of the Guarantee statement. Warranty service and parts may be obtained from: **THETFORD ENGINEERING CORPORATION, 6539 Jackson Road, Ann Arbor, Michigan 48103.** Their telephone number is AC 313 426- 4612.

10. WASTE HOLDING TANKS

Your trailer is equipped with two holding tanks; a waste holding tank and a rinse water holding tank. Each has a 25-gallon capacity.

The waste holding tank collects only waste from the toilet stool. The rinse water tank collects the liquids from the tub and from both lavatory and galley sinks.

The two tanks are located adjacent to each other and drain through a single sewer hose connection. Each tank is equipped with a valve. These are located behind an access door near the rear of the coach on the left side.

The rear-most valve controls the flow from the waste holding tank.

It is not wise to keep this tank valve open. The volume of water used with each flush may not be adequate to flood away all the solids. The result can be a build-up that is difficult to remove. Keep the dump valve closed, run about 2″ of water in the tank before using and flush every few days.

To flush, open the valve by pulling the handle all the way out. This will send a large volume of sewage through the drain hose at one time, setting up a swirling action that will flush away the solids.

The drain valve nearest the front of the coach controls the flow from the rinse water tank. This valve may be kept open when your drain outlet is connected to a sewage disposal system. Keep the valve closed to retain the rinse water when no disposal facilities are available.

A drain cap is provided to prevent accidental dumping of accumulated waste. Cap should be in place while traveling, but must be removed before opening either tank valve.

When draining both tanks open the waste tank valve first. After this tank has been drained and the valve closed, open the rinse water tank valve. The flow of rinse water will aid in flushing both the drain outlet and the sewer hose.

When using the coach in freezing temperatures, a permanent type anti-freeze may be added to the waste holding tanks. Use an Ethylene Glycol type anti-freeze. Follow the directions on the container to obtain the desired protection.

When preparing to travel, flush and refill with 2″ of water. Add a commercial cleaner if desired. Be sure that the tank valves are closed and locked with the wire clips to prevent accidental opening while driving.

When two coaches are traveling together it is sometimes necessary to share water and/or sewage disposal facilities. A standard garden hose "Y" fitting, available at any hardware store, will permit two to share a single water source. Connect the "Y" directly to the coach water inlet faucet. Trailer supply stores can provide a sewage connection "Y" that will also permit sharing a single sewage disposal system.

11. GAS-ELECTRIC REFRIGERATOR

Lighting instructions for the refrigerator are located on the inside of the panel below the refrigerator door. These instructions are duplicated in the Instruction Booklet that is supplied with each unit.

It is important that the refrigerator be level in all directions for proper operation. Place a small level on the freezer shelf and observe with the aid of a small mirror. For leveling instructions refer to Section II of this manual. For best results operate the refrigerator on "gas". Some locations have wide fluctuations in the line voltage which can cause unsatisfactory operation when switched to "electric".

Gas-Electric Refrigerator (cont'd)

Periodic maintenance procedures are described in the Instruction Booklet which is furnished with each refrigerator.

Components in Dometic refrigerators are warranted for various periods from 3 months to 5 years. Refer to the warranty policy, included with each refrigerator, for specific information. Warranty service and parts may be obtained from **DOMETIC SALES CORPORATION, P.O. Box 490, 2900 W. Mishawaka Road, Elkhart, Indiana 46514.** The telephone number is AC 219 523-4510.

On the West Coast contact **WARD & SON, INC., P.O. Box 3505, 15343 Proctor Avenue, City of Industry, California 91744.**

12. RANGE and OVEN

The Magic Chef Range installed in your coach is equipped and adjusted for use with L.P. gas. To light the range burner hold a lighted match to the edge of the burner orifice ring and turn the burner control knob to the "ON" position. The primary cone of the flame should be approximately ½" long. For adjustment instructions refer to the Installation and Service Manual which is provided with each range.

The range top pilot valve has been turned off at the factory to prevent accidental gas-build-up in the coach. Under normal conditions it is best to use a match to light the burners. When stopping for any length of time the top pilot may be turned on for added convenience. **BE SURE THIS VALVE IS TURNED OFF BEFORE LEAVING THE CAMP SITE.** Turn the valve clockwise to close it. Turn only enough to cause the pilot flame to go out. Excessive tightening of the valve screw will damage the seat.

How the Oven System Operates

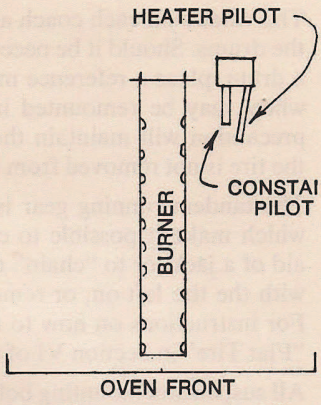
When the oven thermostat is turned on, gas will flow to the heater pilot, which will be ignited by the constant pilot flame. The flame from the heater pilot will heat the responsive element of the safety valve and open the valve seat allowing gas to flow to the oven burner. The burner then is ignited by the standby pilot flame.

When the oven reaches the set temperature, the thermostat will shut the gas off to the heater pilot, the capillary will cool closing the valve seat and shut off the gas to the oven burner. When the temperature drops, the thermostat will again allow gas to flow to the heater pilot, activating the safety valve and allow the oven burner to be relit. This action will continue throughout the cooking period.

Oven Lighting Procedure

A. The shut off valve for the Safety Control gas supply line is located on the oven control. Depress the oven control knob and turn counterclockwise to the "OFF" position. This will allow gas to flow to the constant pilot.

B. Light the Constant Pilot. This is the small tube located at the back of the oven, just to the right of the main oven burner. Use a match or straw to introduce a flame to the end of the pilot tube. See illustration at right.



C. Turn the oven Control Knob to 300°F. temperature setting on the dial. This will allow gas to flow to the heater Pilot Tube, to be ignited by the Constant Pilot.

The Range Oven is equipped with a safety ignition system that requires a minimum of 30 seconds to operate after turning the oven knob on.

After the oven burner has lighted, set the control knob to the desired temperature. Turn the oven control knob to "OFF" when the oven is not in use. This will allow the constant pilot flame to burn while the coach is parked.

To turn off the constant pilot, depress the control knob and turn clockwise to the "PILOT OFF" position. **ALWAYS PLACE THE CONTROL KNOB IN THE "PILOT OFF" POSITION WHEN TOWING THE COACH.**

The Magic Chef model 728DR Range is warranted to the original purchaser for a period of **90 days** according to the terms of the warranty policy. Warranty service and parts may be obtained from: **MAGIC CHEF, INCORPORATED, 3333 Hammond Avenue, Elkhart, Indiana 46515.** The telephone number is: AC 219 264-9578.

On the West Coast you may contact **MAGIC CHEF, INCORPORATED, PAN PACIFIC DIVISION, 245 North Vineland, City of Industry, California 91744.**

13. RANGE HOOD

The Range Hood is equipped with a filter, fan and sidewall duct to filter and discharge fumes and cooking odors from the coach. The filter may be removed for cleaning by sliding it out. A 12-volt lamp provides illumination of the cooking area. This lamp uses a 25 watt, 12-volt standard base bulb.

14. RUNNING GEAR

Suspension

Avion Coaches are equipped with Smooth-Glide suspen-

continued on next page

sion. The rubber springs require no lubrication. They may be washed with soap and water to remove road dirt.

Wheels

The wheels on each coach are electronically balanced on the drums. Should it be necessary to remove a wheel from a drum, place a reference mark on both parts so that the wheel may be remounted in the original position. This precaution will maintain the factory balance, as long as the tire is not removed from the wheel.

The tandem running gear is equipped with chain hooks which make it possible to change a flat tire without the aid of a jack, or to "chain" the axle so that you can drive with the tire left on, or removed, to a tire repair station. For instructions on how to use this exclusive feature see "Flat Tire" in Section VI of this manual.

All suspension mounting bolts should be checked periodically to be sure that they are tight. The wheel bearings should be packed with grease and adjusted every 5,000 miles. Wheel lug bolts should be torqued to 100 lbs. Check these at the end of the first 100 miles and before starting each trip.

Brakes

The 25-ft., and 28-ft. models are equipped with 10″ electric brakes. The 31-ft. model is equipped with 12″ brakes. Adjustment of the coach brakes should be done by a dealer's service department, or by a competent automotive mechanic. The method of adjustment is the same as most automotive brakes.

The axle system on your coach has been designed to provide adequate cargo capacity.

Tires

Your new trailer is equipped with General Tires, known for over 50 years as a manufacturer of high quality tires. These tires are built to give you long trouble-free mileage at highway speeds in long haul service.

The 31 foot model is equipped with L78-15 Jumbo 780 tires, load range D. These tires should be inflated to 40 PSI.

The 25 foot and 28 foot models are equipped with H78-15 Jumbo 780 tires, load range B. These tires should be inflated to 32 PSI.

Strong glass belts under the tread provide increased tire mileage and more resistance to impacts and punctures. Deeper, wider tread gives you a wider tire footprint for improved traction on wet or dry pavement, giving greater control at all normal driving speeds and sure handling response.

The Belted Jumbo 780 featuring a wide flat tread provides a 9 rib tread for fast stopping action. The single wide strip styling complements your new AVION Coach.

CHECK TIRE PRESSURE BEFORE EACH TRIP. DO NOT OVER-INFLATE. Safety skids are available as an optional item to prevent excessive damage to tires, wheels and drums when a flat tire occurs.

Tire sizes and load ratings used as original equipment on trailers have been approved by the General Tire Development Department. Maximum load capacities for each coach size are shown in Table A, Section VIII of your manual.

GENERAL TIRE NEW PASSENGER TIRE GUARANTEE

If any new original equipment General passenger tire fails from defects in workmanship or material, we will either repair it free of charge or replace it with a new General tire of like quality.

The adjustment price will be based on the purchaser's cost of the guaranteed tire equivalent to the percentage of tread depth used, plus state and local taxes.

Prorated adjustments will be based on the tire having delivered its full tread life when subjected to tread wear indicators.

This warranty is applicable only to the original purchaser and claims must be submitted only to authorized General Tire dealers.

If you should require an adjustment on a faulty or defective tire, take the tire to a General Tire Store, and they will make an adjustment according to the terms and conditions of the guarantee.

DO NOT THROW A DEFECTIVE TIRE AWAY. You must have it to receive an adjustment.

When storing coaches for an extended period of time, block up the axles to remove weight from the wheels and prevent flat spots from forming on the tires. Reduce tire pressure to 10 pounds. Re-inflate to recommended pressure before removing blocks.

15. CONVERTER

This coach is equipped with a Model PD-708 converter. It is located on the floor at the right front corner of the coach. It provides 12-volt direct current whenever the power cord is plugged into a standard 110-120-volt, 60 cycle AC source. The converter has two output circuits. One circuit supplies the energy for the 12-volt lights and motors in the coach. The second circuit provides the energy to recharge the batteries, as needed. This model is designed to provide maximum power even when the batteries are not installed in the coach.

The converter has a built-in switching relay which isolates the self-contained batteries whenever the power cord is connected to 115-volt AC source.

When the power cord is disconnected the relay automatically connects the two coach batteries to the interior lighting system so that service will not be interrupted.

Both the converter output circuits are protected with

built-in circuit breakers. If a short or overload is occurring, a 7 to 10 second clicking sound will be heard as the automatic reset breaker clicks off and on. **DO NOT PERMIT THE BREAKER TO CONTINUE TO CYCLE.** Prolonged cycling will cause heat build-up in the 12-volt circuits, resulting in damage to the coach wiring.

The Model PD-708 converter is equipped with a removable electronic circuit board. Should the 12-volt circuitry in the converter fail to operate properly, the board can be replaced without the necessity of exchanging the complete converter. The circuit board may be removed by squeezing together the plastic clips at each end and pulling out the board. These parts are located behind the converter end panel. Do not attempt to remove them until the converter is disconnected from the wall outlet.

The PD-708 converter is warranted by the manufacturer for a period of one year, according to the terms and conditions of the warranty certificate. Warranty service or replacement circuit boards may be obtained from **PROGRESSIVE DYNAMICS, INCORPORATED, P.O. Box 168, Marshall, Michigan 49068.** Their telephone number is: AC 616 781-4241.

16. BREAK-AWAY SWITCH

The Break-Away Switch is provided as a safety feature. It is equipped with a steel cable which must be anchored to the towing vehicle at the time of hook-up. If the coach should be accidentally disconnected from the towing vehicle, the cable will pull the switch pin causing the coach brakes to be applied automatically.

The removal of the pin from the switch closes the brake circuit, applying electrical energy from the coach battery to the brake magnets. Replacing the switch pin opens the circuit, releases the brakes and allows the coach to roll free again.

17. INSTRUMENT SIGNAL CENTER

The signal center is located in the overhead cabinet at the front of the trailer. THE PANEL OFFERS the following features:

A series of five horizontally spaced lamps are arranged on the panel to indicate the level of the three tanks in the system. These lamps illuminate five levels of the tank: "0", "¼", "½", "¾" and "F" for full. The highest illuminated level is the correct reading.

1. **Water Level Indicator.** The extreme left switch will indicate the water level in the potable water storage tank.
2. **Waste Holding Tank (Tank 1).** Depress the second switch from the left end to determine the liquid level in the tank retaining waste from the stool.
3. **Rinse Holding Tank (Tank 2).** Depress the center switch to determine the liquid level in the tank holding drain water from the tub and sinks.
4. **Battery Condition.** Depress the "Battery Condition" switch to observe the indicator lamps marked "Low", "Fair" and "Good". Disconnect the power cord or turn off the main breaker before checking the batteries if the trailer is plugged into a 115 V. power supply. The reading should be taken with lights and fans turned off.
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 traveling, or when leaving the coach unattended. A panel light will illuminate the word "pump" whenever the pump switch is in the "on" position.
6. **Power on.** A panel lamp is provided to indicate "Power on". This lamp will be lit whenever the trailer power cord is plugged into a 115 V receptacle. It is provided to prevent discharge of the batteries which might be caused by accidental disconnection of the power cord. This circuit is protected by a 2 ampere fuse which is located in the power converter. The panel legend plate is retained with 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.

The signal center is warranted for a period of one year. For warranty work, service parts or information contact: **WEMAC, 3433 Harvard, Santa Ana, California 92704.** Defective panels returned to this address within the warranty period will be repaired at no charge.

18. AIR CONDITIONER (Coleman – Opt.)

The Coleman Polar Pal air conditioner is designed to provide comfort in a wide variety of applications. The unit is turned "ON" or "OFF" with the selector switch.

Use "LO FAN" or "HI FAN" setting on selector switch for air circulation during mild weather.

Use "HI-COOL" and maximum thermostat setting for hot, humid weather. Use "HI-COOL" and medium thermostat setting for hot, dry weather. Use "LO-COOL" and maximum thermostat setting for mild, humid weather.

Clean the filter regularly. Wash in mild suds water, rinse thoroughly and dry. Occasionally, check the outdoor coil for leaves, lint, paper, etc. This coil grill must remain free and clear for efficient cooling.

Check the air inlet above the filter occasionally. Remove lint or other foreign material with a brush or vacuum.

NOTE: After air conditioner has been shut off, it will not start again for approximately 5 minutes.

Both the Coleman MACH I (10,000 BTU) and the MACH II (12,000 BTU) air conditioners are warranted for a period of one year. Warranty terms and conditions are described on the Certificate supplied with each unit. Warranty service and parts may be obtained from any

Coleman Recreational Vehicle Service Center. Refer to the service center list provided with each air conditioner.

19. TV ANTENNA (Opt.)

The all channel SKYLINER TV Antenna operates entirely from inside the coach. BE SURE TO CHECK THE AREA OVER THE ANTENNA before attempting to operate. To raise the antenna pull the crank down and rotate counter clockwise to the stop.

To rotate the antenna push crank up with turning motion engaging driving pin – rotate until best picture or signal is received.

To lower the antenna rotate clockwise to the stop-pull crank down and rotate clockwise to the stop.

Your Skyline TV Antenna has two convenient outlets. One is located at the galley sink and one in the bedroom area. Each is combined with a 12 volt utility outlet.

RAISE THE ANTENNA BEFORE ATTEMPTING TO RAISE THE REAR CEILING VENT COVER. **BE SURE TO LOWER ANTENNA BEFORE TOWING THE COACH.**

The antenna is warranted for a period of 90 days, according to the conditions listed on the warranty card. Warranty service, parts and information may be obtained from **BRAUND MANUFACTURING COMPANY, 730 East Michigan Avenue, Battle Creek, Michigan 49017.** The telephone number is: AC 616 963-3855.

20. OGDEN WATER PURIFIER (Opt.)

The Ogden Water Purifier is designed to remove harmful bacteria, odors and impurities from your drinking water. It uses replaceable cartridges which have a capacity of from 200 to 500 gallons. The cartridge should be changed when the water begins to run slowly.

Use the following procedure to install a new cartridge:

1. Turn off water supply and open nearby water faucet to relieve the water pressure.
2. Remove wing-nut and cover from the purifier.
3. Remove used cartridge and clean inside of unit with stiff brush and rinse thoroughly.
4. Clean upper and lower seals in cover and bottom of purifier body. Replace seals if broken or deformed.
5. Install new cartridge in purifier and replace cover and wing-nut.
6. Turn on water and allow it to enter unit and wet the new cartridge.
7. After cartridge is wet, tighten wing-nut firmly by hand. **DO NOT USE A WRENCH.**
8. Allow water to flow from purifier for about 5 minutes for purposes of activation.

Gasket sets and replacement cartridges, Type SM-1, may be obtained from many trailer supply stores, from many Avion Dealers, or from:

Avion Service Corporation
1576 East Empire Avenue
Benton Harbor, Michigan 49022

Western Ogden Purifier Corporation
7063 Vineland Avenue
No. Hollywood, California 91605

21. SOUND SYSTEMS

If your AVION is equipped with a Skyliner T.V. Antenna it will have a special coupler connecting the radio antenna lead in cable to the T.V. antenna. This coupler is automatically installed with each T.V. antenna, adapting it for use with both AM and FM radios.

Antenna lead-in cable, stereo speaker wires and a 12 V.D.C. power cable are all located in the overhead cabinet at the front of the trailer. The antenna cable has a standard plug on the end, ready to insert in the radio jack. The 12 volt D.C. wires are connected directly to the radio or tape player, with a 4 amp fuse inserted in the positive lead.

For full stereo, four speakers are used. They are located at both ends of the front cabinet and in a rear-facing closet panel on each side of the coach. Color-coded pairs of wires connect to each of the speakers.

A speaker cut-off switch is located in the bottom of the front overhead cabinets. It controls the two speakers in the bedroom area.

STEREO RADIO-TAPE PLAYER (Opt.)

The Model C-975 Audiovox sound system combines AM, FM and MULTIPLEX RADIOS with an 8-Track Tape Deck. Four 5¼" speakers distribute the sound to all areas of the coach. Operating instructions are provided with each unit.

Tape cartridges should be protected when the coach is not in use. Do not leave a tape in the player. Place cartridges in a plastic bag and store in a place where they will not be exposed to excessive heat. Avoid storing near the speaker magnets or other strong magnetic field, as this may cause distortion or erasure of the tape.

The Audiovox Model C-975 is warranted against defects in material or workmanship for a period of 24 months, according to the terms and conditions of the warranty certificate. Warranty service or the name and address of an approved warranty station, may be obtained from **AUDIOVOX CORPORATION, 300 Denton Avenue, New Hyde Park, New York.**

AM-FM RADIO (Opt.)

The **Model C-505** radio features all transistorized push-button tuning. Four 5¼" speakers distribute the sound to all areas of the trailer. The radio is warranted for a period of 90 days according to the terms of the warranty certificate. Warranty service, or the name and address of an approved warranty station, may be obtained from **AUDIOVOX CORPORATION, 300 Denton Avenue, New Hyde Park, New York.**

SECTION VI

TROUBLE SHOOTING

AIR CONDITIONER

Trouble: Will not run.

Cause and Remedy:

a. Power Cord not making good connection at parking area service receptacle. Make sure that plug is fully inserted and the weight of the cord does not pull it from the receptacle.

b. Circuit breaker is in "Off" position. Reset.

Trouble: Does not cool properly.

Cause and Remedy:

a. Dirty filter. Clean and replace.

b. Low voltage from source and compressor will not run. Move to spot where voltage is proper.

BATTERY

Trouble: Batteries do not charge while coach is being towed.

Cause and Remedy:

a. Blown fuse. Replace with correct size.

b. Poor connection at hitch. Clean 7-wire connector contacts and reconnect.

c. Charge wire not "Hot". Rewire car so charge wire is "Hot".

Trouble: Batteries do not charge when 25 ft. Power Cord is connected to 120-volt source.

Cause and Remedy:

a. Power cord is not making good contact at receptacle. Check connection.

b. Blown fuse. Replace with correct size.

c. Low line voltage at 120-volt source. Use outlet nearer to power source.

d. Circuit Breaker is in "Off" position. Check and reset.

Trouble: Both batteries dead, power cord not plugged in.

Cause and Remedy:

a. Check for light or fan left turned on while trailer was unattended for an extended period. Turn off the fixture or appliance which was accidentally left on. If unable to find the cause of discharge, remove the battery fuses until a service man can correct the trouble.

Recharge dead batteries as soon as possible. Allowing them to remain in a state of discharge for any length of time will cause permanent damage.

When plugging in the trailer power cord to charge dead batteries, be sure to do so at a time when the batteries can be observed during the charging cycle. Inspect the battery cases periodically for signs of heating or boiling of the electrolyte. IF HEATING OCCURS, DISCONTINUE CHARGING AT ONCE TO AVOID CAUSING PERMANENT DAMAGE.

Contact your local auto service station, or your nearest Avion Dealer for assistance in recharging batteries that have a tendency to heat up. This condition may be a sign of temporary battery damage.

Trouble: One battery dead.

Cause and Remedy:

a. Poor battery connections. Clean terminals and tighten connections.

b. Defective battery. Replace. See warranty procedure on page 10.

BRAKES

Trouble: No brakes.

Cause and Remedy:

a. Broken wire in brake circuit. Use continuity tester or voltmeter to trace brake wires and splice.

b. Poor connection between car and coach. Clean terminals and check for broken wire at the 7-wire connector.

Trouble: Unequal brakes.

Cause and Remedy:

a. Broken wire at brake drum. Locate and splice.

b. Improper shoe adjustment. See a service shop.

Trouble: Poor brakes, brakes inadequate.

Cause and Remedy:

a. Inadequate voltage to brake magnets. Check brake control for good connection to battery.

b. Brake shoes need adjusting. See service shop.

Trouble: Brakes lock and will not release.

Cause and Remedy:

a. Short in break-away switch. Replace.

b. Break-away switch pin has been pulled. Replace pin.

c. Incorrect brake adjustment. Too much shoe clearance. Have brakes re-adjusted.

Trouble Shooting (cont'd)

CONVERTER

Trouble: Loss of D.C. power.

Cause and Remedy:

a. Power cord may be disconnected. Check service receptacle and plug.
b. Breaker off. Check breaker box in coach closet and reset.

Trouble: Circuit breaker feeding power converter circuit continues to break.

Cause and Remedy:

a. Bad diode in converter. Have converter replaced or repaired.

Trouble: Converter does not charge batteries.

Cause and Remedy:

a. Blown fuses. Disconnect wire from battery positive post. Replace fuses, then reconnect wire.

FUSES

Trouble: Replaced fuses continue to blow.

Cause and Remedy:

a. Loose wiring connections. Tighten all wire clamps and terminals.
b. 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, disconnect the wire from the positive battery terminal to prevent throwing the full load into a single fuse while making the replacement.
c. Improper fuse size. See page 10 for recommended fuse sizes.
d. Incorrect wiring of batteries or fuse block. Refer to wiring illustration on page 10.
e. Short in wiring. See nearest Avion Dealer.

REFRIGERATOR – DOMETIC

Trouble: Refrigerator does not freeze satisfactorily.

Cause and Remedy:

a. Jet orifice clogged. Remove burner barrel, unscrew jet and blow clear or wash in alcohol. **Do not** use a pin or wire to clean orifice.
b. Check the leveling of the refrigerator.
c. Flame has gone out. 1) Gas in the bottle is used up – refill. 2) Feeler point of the flame failure device is not heated enough by flame – refer to figure "5" in the Dometic Instruction Booklet. 3) Clogged by-pass screw – clean or exchange it.
d. Air circulation around cooling unit is restricted. Be sure that refrigerator is properly ventilated.
e. The evaporator is heavily coated with frost. Defrost by setting thermostat to zero.
f. Flue baffle not inserted into the central tube of the cooling unit.
g. The thermostat is incorrectly used. See paragraph on thermostat in the Instruction Booklet.
h. Gauze in burner head clogged. Clean.
i. Burner damaged. Replace.
j. Burner may be dislocated. Relocate.
k. Wrong gas pressure at burner. Have pressure checked at burner and at the gas bottle. Pressure at the burner must not fall below 11″ W.C. when thermostat is set on "Max".
l. Improper operation of the thermostat. Thermostat will have to be changed.

Trouble: Odor from fumes.

Cause and Remedy:

a. The flame touches side of the boiler due to dislocation of the burner. Relocate. Burner dislocation may also cause smoke and discoloring of walls and ceiling.
b. Burner damaged. Replace.
c. The flame touches flue baffle. 1) Burner damaged. Replace. 2) Flue baffle too low. Correct the position of baffle.
d. Flue tube is dirty. Clean flue as follows: Remove burner barrel and cover the jet. Remove flue top and baffle. Clean flue with special flue brush. Clean baffle and burner head before putting them back in place.

TIRES

Trouble: Overheating or wearing unevenly.

Cause and Remedy:

Improperly inflated. Refer to inflation information on page 16.

Trouble: Flat tire.

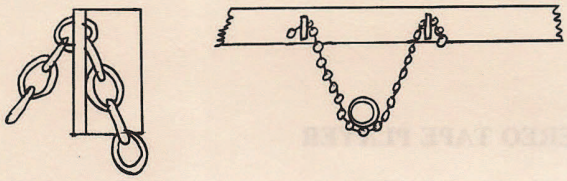
Cause and Remedy:

On a tandem axle coach with the exclusive chain hooks, supplied as standard, it is possible to "chain up" the axle with the flat and drive to a tire repair station on three wheels. The flat tire may be left on or removed from the trailer while "limping in" when the axle is chained up. By utilizing the chain hooks it is also possible to remove a flat tire and replace it with a spare when no jack is available.

continued on next page

Trouble Shooting (cont'd)

If you have a jack, you can "chain up" the axle by placing the jack under the axle at the end which has the flat and raising it as high as it will go. Take the chain, which is supplied and which is exactly like the safety chains on the front of the coach, and insert one end into the slotted angle iron welded to the frame of the trailer. Place the chain under the slot of the other angle iron as tightly as possible. Be sure to hook the chain as illustrated below.



Remove the jack. The tire should clear the road slightly. If it is convenient you can remove the tire. If not, you may leave it on the axle. In any case you should drive slowly while the axle is "chained up" and refrain from driving any further than necessary.

For ease in removing a wheel from a tandem axle coach, first jack up the good wheel on the same side as the flat. Place a 4″ or 5″ block under the good tire and lower the wheel onto the block. Now place the scissor jack under the axle with the flat tire and lift it off the ground just enough to allow removal of the wheel, and mounting of the spare.

When re-tightening the lug bolts, torque them first to about 25 FP skipping every other one so that the wheel is pulled into the drum uniformly. Continue around the wheel in the same order, increasing the troque until all bolts are torqued to 90-100 Foot Pounds.

WARNING: Be sure to place blocks against both wheels on the side of the trailer opposite the flat tire to prevent the coach from rolling while the wheel is being changed.

To change a tire when no jack is available, the following steps will permit lifting the flat tire off the ground:

1. Drive the flat tire up on a wedge or stack of boards that is approximately 5″ high.
2. Chain up the axle as described above. Adjust the chain as tight as possible.
3. Pull the wheel with the flat tire off the blocks and pull the good wheel up on the same blocks. This should raise the flat tire off the ground to permit changing.

This procedure is suggested as an emergency measure only.

WARNING: Never get under the coach when it is blocked up.

Caution: Do not discard a defective tire, it will be necessary to present it if an adjustment is sought.

WATER PURIFIER

Trouble: No water flow, or very slow flow rate.

Cause and Remedy:

a. Restriction in water line. Make sure all valves are open and there are no kinks in copper tube lines.
b. Low water pressure. Use low pressure cartridge if water is pre-chlorinated.
c. Plugged cartridge. Install new one.

Trouble: Very short cartridge life.

Cause and Remedy:

a. Large amount of suspended matter in raw water. Install new cartridge.

Trouble: Off-taste, color, or odor in purified water.

Cause and Remedy:

a. Install new cartridge.
b. Reduce flow rate through purifier.

Trouble: Suspended matter in purified water.

Cause and Remedy:

a. Purifier is leaking internally. Install new rubber kit.

WATER HEATER

Trouble: Will not heat on "Electric".

Cause and Remedy:

a. Power Cord not making good connection at parking area service receptacle. Make sure that plug is fully inserted and the weight of the cord does not pull it from the reecptacle.
b. Circuit breaker is in "Off" position. Reset.
c. Switch on heater jacket is turned off. Turn on.
d. Water heater cord is not plugged into wall outlet. Plug in.

continued on next page

e. Heater element overheated. Energy cut-out was activated. Remove electrical box cover on heater jacket and depress red "RESET" button. NOTE: It may be necessary to temporarily disconnect copper water line to facilitate removal of cover plate.

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.

b. Bi-pass valve may not be completely closed. Tighten as needed.

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 IV, Item 4.

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:

Blown fuse. Check fuse block at front of coach. Replace with correct size fuse.

Trouble: Pump runs when no water is being used.

Cause and Remedy:

a. Bypass valve is open, allowing water in system to circulate. Close valve.

b. Leak in water system. Examine all plumbing lines and water heater drain.

STEREO TAPE PLAYER

Trouble: Excessive hum.

Cause and Remedy:

a. Blown fuse between batteries and trailer 12-volt electric system. Replace fuse or fuses.

b. Loose wire connections at battery or at fuse block. Tighten connections. Batteries must be in the 12-volt circuit to reduce hum.

Trouble: Does not play.

Cause and Remedy:

Blown fuse. Check the line fuse located behind the player, and the fuse block at the front of the coach.

SECTION VII

WARRANTY INFORMATION

Service, repairs and parts for your Avion Coach may be obtained through any of the many Avion dealers 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 VIII

TABLES, DIAGRAMS, AND ILLUSTRATIONS

TABLE A
SUSPENSION SYSTEM CAPACITIES

Model	*Maximum Cargo Weight*	*Gross Axle Weight*	*Gross Vehicle Weight*	*Recommended Hitch Weight*
25 FT. TANDEM	1,875	6,370	7,238	12%-15%
28 FT. TANDEM	1,615	6,370	7,238	12%-15%
31 FT. TANDEM	2,025	7,260	8,250	12%-15%

CARGO may be defined as water, fuel, luggage, supplies, and optional equipment not installed at the factory.

GROSS AXLE WEIGHT RATING is the maximum total weight on both axles. This weight can be checked on any scale that will accommodate all four trailer wheels at the same time. GAW can be checked with the trailer coupled to the tow vehicle with an equalizer hitch.

GROSS VEHICLE WEIGHT is the maximum recommended weight of the trailer when a minimum of 12% of the trailer weight is carried by the hitch. This weight can be checked on any scale that will accommodate the four trailer wheels and the jack post at the same time.

Hitch weight can be determined by placing only the jack post on a platform scale and adjusting it until the trailer is level. Trailer must be disconnected from towing vehicle.

THE RECOMMENDED HITCH WEIGHT is represented as a percentage of the Gross Vehicle Weight. As cargo weight is added to the coach it may be necessary to place heavier objects forward to preserve the proper weight distribution.

TIRE INFLATION PRESSURES, for the gross axle weights shown above are:

GENERAL TIRE JUMBO 780, H78-15, Load Range "B" .....32 PSI

GENERAL TIRE JUMBO 780, L78-15, Load Range "D" .....40 PSI

MICHELIN L 78-15, Load Range "D" .....65 PSI

GENERAL NYGEN 700 x 15, Load Range "D" .....60 PSI

TABLE B
PROTECTION FROM FREEZING WEATHER
TWIN BED MODELS

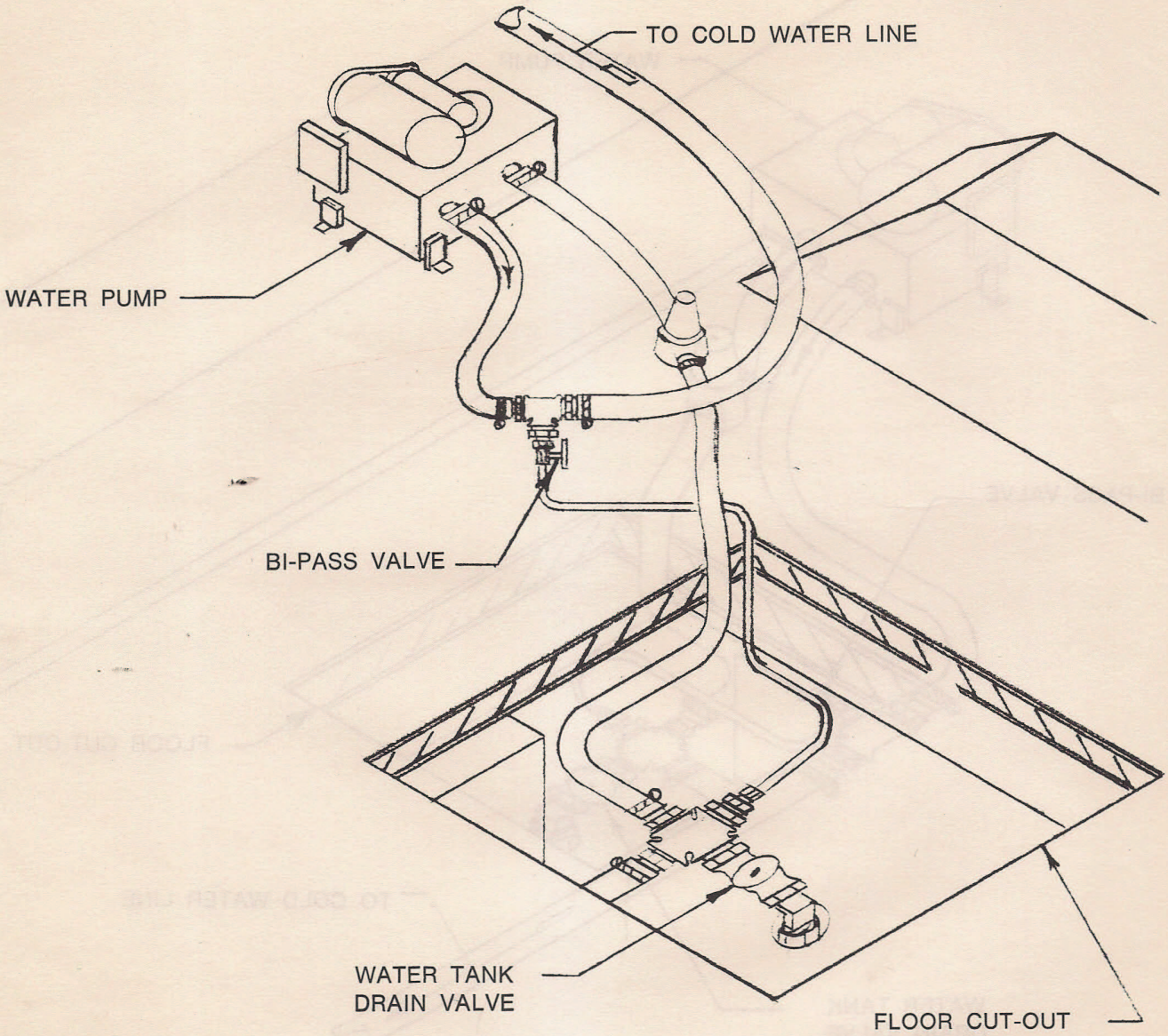


TABLE C
PROTECTION FROM FREEZING WEATHER
DOUBLE BED MODELS