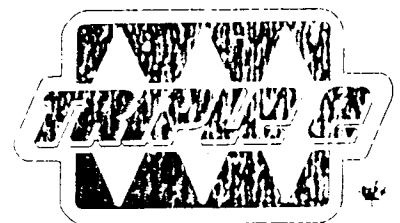


# **1990 Owner's Manual**

**TRIPLE E  
Empress SE Series  
Motorhomes**



**CANADA LTD.**

## WARRANTY

Triple E Canada Ltd. warrants the specified new Motorhome free from defects in material and workmanship, under normal use and service. Obligation, under this warranty, shall be limited to 12 months or 20,000 km (whichever comes first) after the date of purchase by the original retail purchaser from an Authorized Dealer and shall be limited to making good, at our factory, any part or parts thereof upon return to the factory.

This warranty will not apply where a Motorhome has been altered outside our factory in any way so as, in our judgment, to affect its stability or reliability, or which has been subject to misuse, negligence, or accident. This warranty does not cover tires, refrigerator, stove, heaters, chassis, powertrain, or any other component which is under a separate guarantee from the manufacturer and can be obtained from their service facilities throughout Canada.

The warranty is expressly in lieu of all other warranties expressed or implied and all other obligations or liabilities on our part of any kind or character, including liabilities for alleged representation or negligence. We neither assume nor authorize any other person to assume for us any liability in connection with the sale of our Motorhome other than expressed in the above paragraph.

All correspondence should be directed to the Dealer from whom the Motorhome was purchased and must specify the serial number and date of purchase of the Motorhome in question.

This warranty is not valid unless the Warranty Registration has been completed at the time of purchase, and the warranty card must be presented at the time of any claim.

**NOTE:** Production improvement is a continuing process at Triple E Canada. Thus, we reserve the right to change specifications, operating instructions, standards and options on any and all products without prior notice. Errors and omissions excepted.

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## A WORD TO MOTORHOME OWNERS

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Welcome to the growing number of discerning people who own and operate a Triple E Motorhome.

Our company takes great pride in the quality and excellence that the Triple E name represents. We have sought to anticipate your needs and desires with respect to safety, convenience, styling, and engineering.

We appreciate having you as our customer and have

provided this manual to introduce you to the many features of your new Motorhome. Each person using the motorhome should take time to read this manual before operation. It will help you to better understand the many built-in operational features of this recreational vehicle.

We hope you will enjoy your new Motorhome, and we wish you many kilometres of pleasant and carefree driving.

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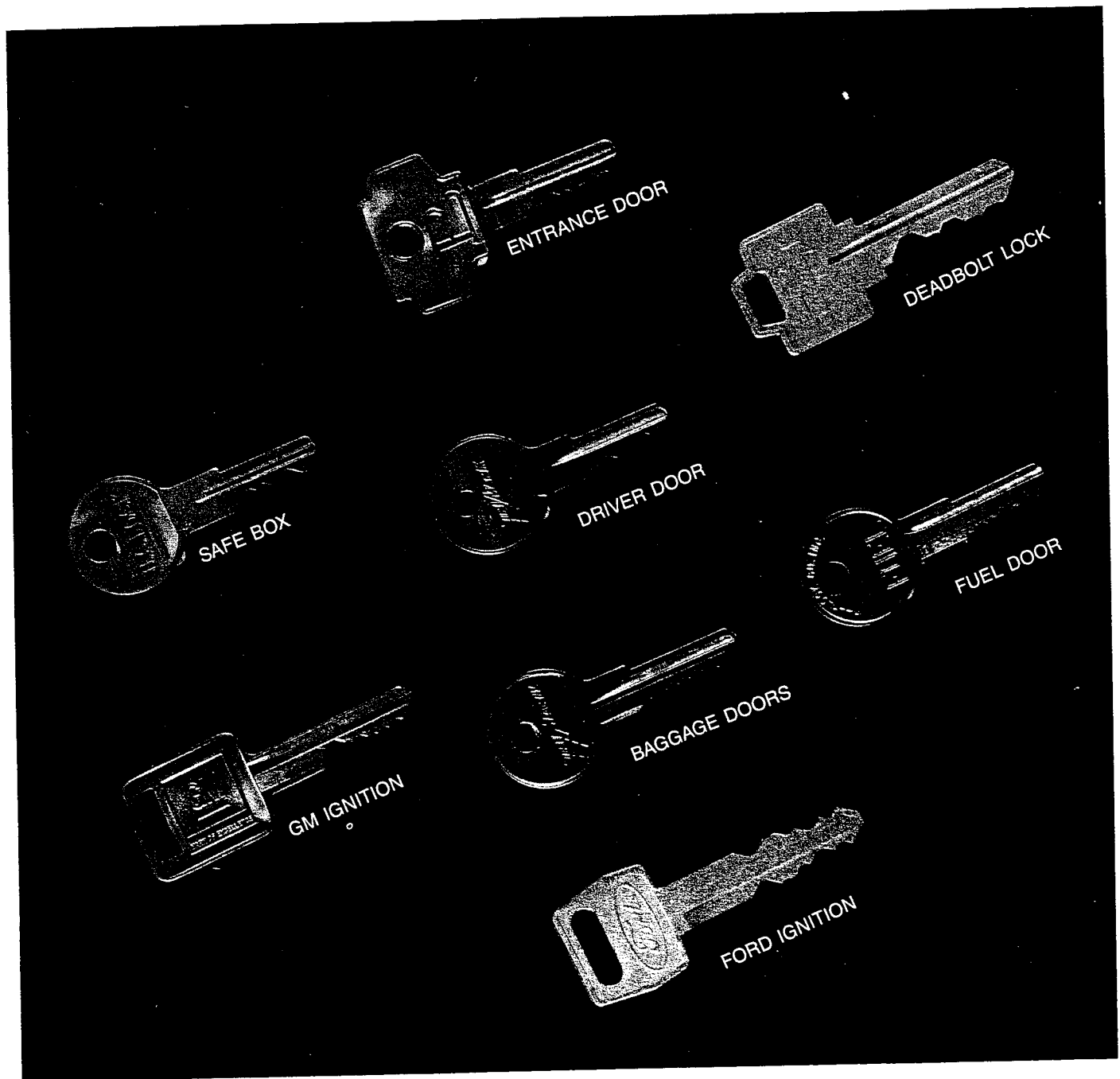
THIS MANUAL APPLIES TO ALL 1990 TRIPLE E EMPRESS SE MOTORHOMES MANUFACTURED BY  
TRIPLE E CANADA LTD.

**BEFORE DRIVING**

## KEYS

It is a good idea to record key code numbers and keep them in a safe place (not your vehicle). If the original

keys are lost, duplicates can be made using the key codes.



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## VEHICLE LOADING

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The components of your vehicle are designed to provide satisfactory service if the vehicle is not loaded in excess of either the gross vehicle weight rating (GVWR) or the maximum front and rear gross axle weight ratings (GAWR's). These ratings are listed on the Transport Canada Sticker located on the driver door post.

The GVWR is the maximum the motorhome should weigh with all systems full and with passengers and supplies aboard. The GAWR is the maximum load bearing capacity of each axle.

To check that your motorhome is properly loaded, drive the fully loaded vehicle to a scale and weigh as follows:

- 1) Drive only the front wheels on the scale and obtain the front gross axle weight.
- 2) Next, place the entire vehicle (both axles) on the scale to obtain the gross vehicle weight.
- 3) Drive forward till only the rear wheels are on the scale and obtain the rear gross axle weight.

Compare the gross vehicle weight (#2) with the GVWR on the sticker. If the gross vehicle weight exceeds the GVWR, you will have to reduce the total vehicle load. If the gross vehicle weight (#2) is less than the GVWR on the sticker, check the front and rear gross axle weights against the front and rear GAWR's on the sticker. If either axle weight exceeds the GAWR for that axle, redistribute the load to ensure that loads on front and rear axles are within the required limit.

Heavier items should be loaded as centrally and as low as possible. Lighter items may be stored in cabinets, closets and drawers. Luggage or similar cargo inside your RV should be secured to prevent it from causing damage.

### MAXIMUM LOADING CAPACITY

75 Kg(150 lbs)/Compartment

### Important

### MAXIMUM VEHICLE LOADING CAPACITY

(All Compartments)

500 Kg(1000 lbs)

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## CHECKLIST

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1. Be sure all equipment is serviced and ready for travel.
2. Inspect wheel lugs for tightness. Examine all tires for road damage. Ensure that all tires are inflated to proper pressure. (See Transport Canada sticker on driver door post.)
3. Check All Fluids: Engine/Crankcase oil  
Transmission Fluid  
Power Steering Fluid  
Radiator Recovery System  
Reservoir Level  
Master Cylinder Brake Fluid  
Battery Electrolyte Level  
Windshield Washer Reservoir
4. Check oil level in generator power plant (if installed). Refer to Instruction and Maintenance Manual provided by the generator manufacturer for other pre-use requirements.
5. Check to see that all lights are in working order.
6. Fill LP gas tank. Be careful not to overfill LP gas tank. An overfilled LP gas tank will cause the gas regulator to fail, and may result in problems with LPG components. Turn off LP gas valve on LP tank. Make sure all LP gas controls are turned off. (Furnace, Oven, Fridge) Check for LP gas leaks regularly using soapy water.
7. Sanitize and fill fresh water tank if required. Turn off the water pump. (Unless water is needed) The water pump should also be turned off when leaving the unit for any length of time.
8. Start the refrigerator a day ahead of time so it will be cold for your trip. Use only LP Gas or 120 Volt to avoid draining batteries.
9. Check that sewer connections are properly stored and all external compartments and filler openings are closed and/or locked.
10. Be sure all doors are closed and latched, and all loose objects secured (Including refrigerator contents).
11. Deodorize waste holding tank.



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## DRIVING TIPS

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The motorhome driver controls are automotive type and the steering and braking controls are power assisted to help make driving as comfortable as possible. However it must be remembered that the motorhome is much higher, wider, and heavier than a family automobile.

The motorhome power-to-weight ratio is lower than that of the average automobile. Therefore it is essential to compensate for less acceleration when moving into traffic or when passing another vehicle. Allow extra room to turn a corner and to change lanes. When going underneath a bridge or similar overhang you should have a minimum of 11' 9" (3.58 M) of clearance. (Measurement includes T.V. antenna)

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## SAFETY TIPS

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- When backing the motorhome, have a person stand to the rear on the driver's side to guide you.
- Before departing on a trip, check your routes. Remember, some tunnels prohibit motorhomes with LP gas systems.
- While traveling, **make sure** all occupants use their seatbelts.
- While traveling, **make sure** all doors are closed and that cabinets, drawers, and loose objects are secure.
- Instruct your family on what to do in case of fire, and hold fire drills periodically.
- Maintain proper charge in the fire extinguisher.
- Gas and smoke detectors are available from your RV equipment dealer, and may be considered as safety accessories.
- Keep a well stocked first aid kit handy.
- Keep a tool box handy.
- Check tires often while traveling. Pay special attention to inside rear duals. Make it a habit to check tire pressures before each trip, and each time you refuel.

# **STARTING & OPERATING**

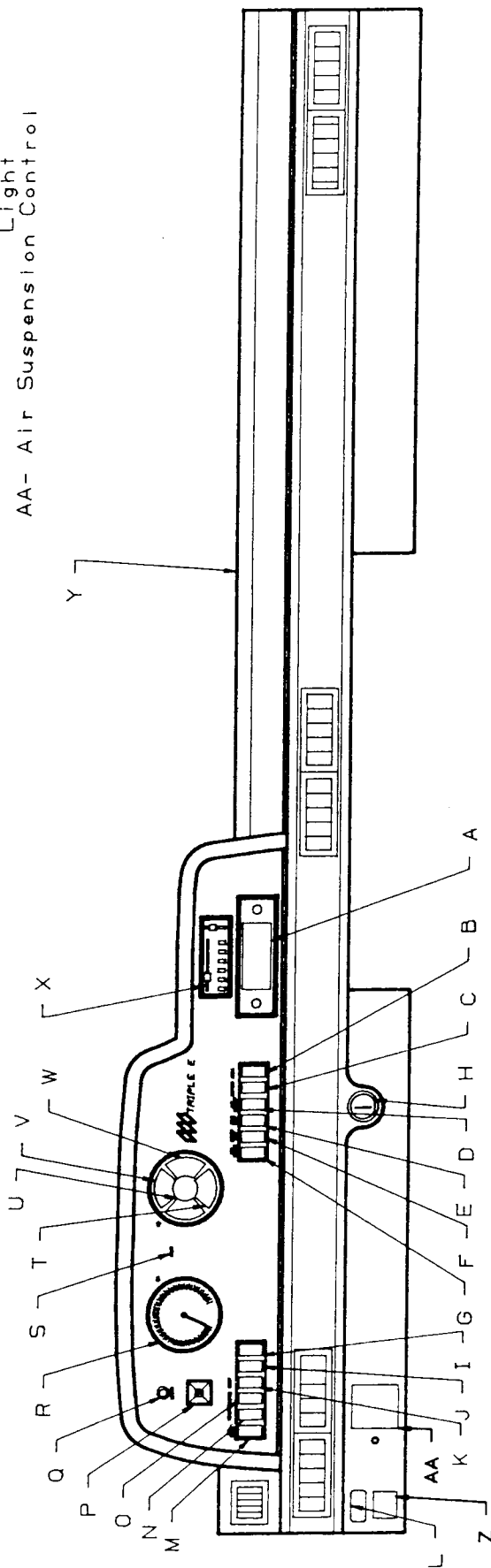
# TRIPLE E EMPRESS SE DASHBOARD

- P - Exterior Mirror Control (Opt.)
- Q - Light Switch
- R - Speedometer
- S - Park Brake Light
- T - Temperature Gauge
- U - Voltage Gauge
- V - Fuel Gauge
- W - Oil Pressure Gauge
- X - Heater/Air Conditioner Control Panel
- Y - Glove Box
- Z - Gas Engine-Choke Light, Check Engine Light, Diesel Engine-Wait Light, Water in Fuel Light
- AA - Air Suspension Control

- A - Radio
- B - Aisle Light Switch
- C - Docking Light Switch
- D - Overhead Defrost Switch
- E - Rear Heater Switch
- F - Mirror Heat Switch (Opt.)
- G - Fog Light Switch (Opt.)
- H - Ignition Switch
- I - Battery Boost Switch
- J - Hood Release
- K - Intermittant Wiper Control
- L - Windshield Wiper Switch
- M - Windshield Washer Switch
- N - Windshield Washer Switch
- O - Windshield Washer Switch



L.E.D. Speedometer and Gauge Panel  
Optional on Empress Motorhomes,  
Standard on Invitation Motorhomes.



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## ENGINE OPERATION

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See Chassis Manufacturer's starting instructions.

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## TRAILER TOWING

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Towing a trailer could affect handling, durability, performance and economy. Do not attempt to tow any trailer over 3,000 pounds gross trailer weight.

150 lbs.—Maximum hitch weight  
3000 lbs.—Maximum trailer weight (Check label on hitch)

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## PARKING AND LEVELING

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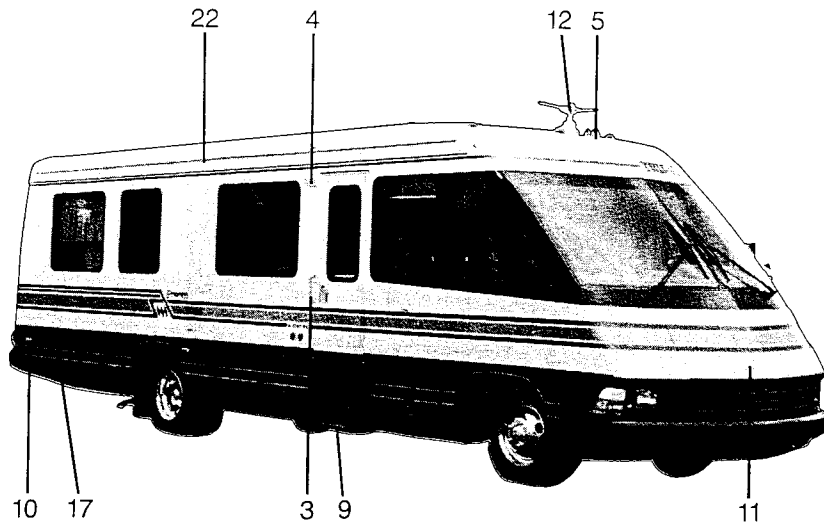
Most RV's require leveling and stabilizing for comfortable occupancy when parked. The unit must be level in order for the refrigerator and drainage system (which function by gravity) to operate properly.

Place a level in the freezer of the refrigerator or in a normally level location to determine proper level. Use leveling jacks or blocks under wheels to level side to side and front to back. Use wheel chocks for added stability.

Your motorhome may be equipped with an electric or hydraulic park leveling system. Refer to your Owner Information Pouch for operating instructions.

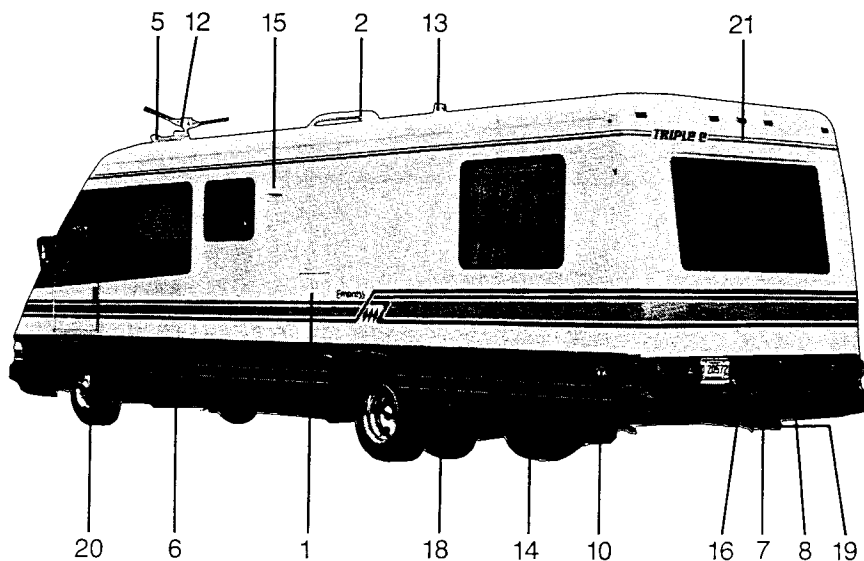
**SYSTEMS**

## A-1061 SE (illustrated)



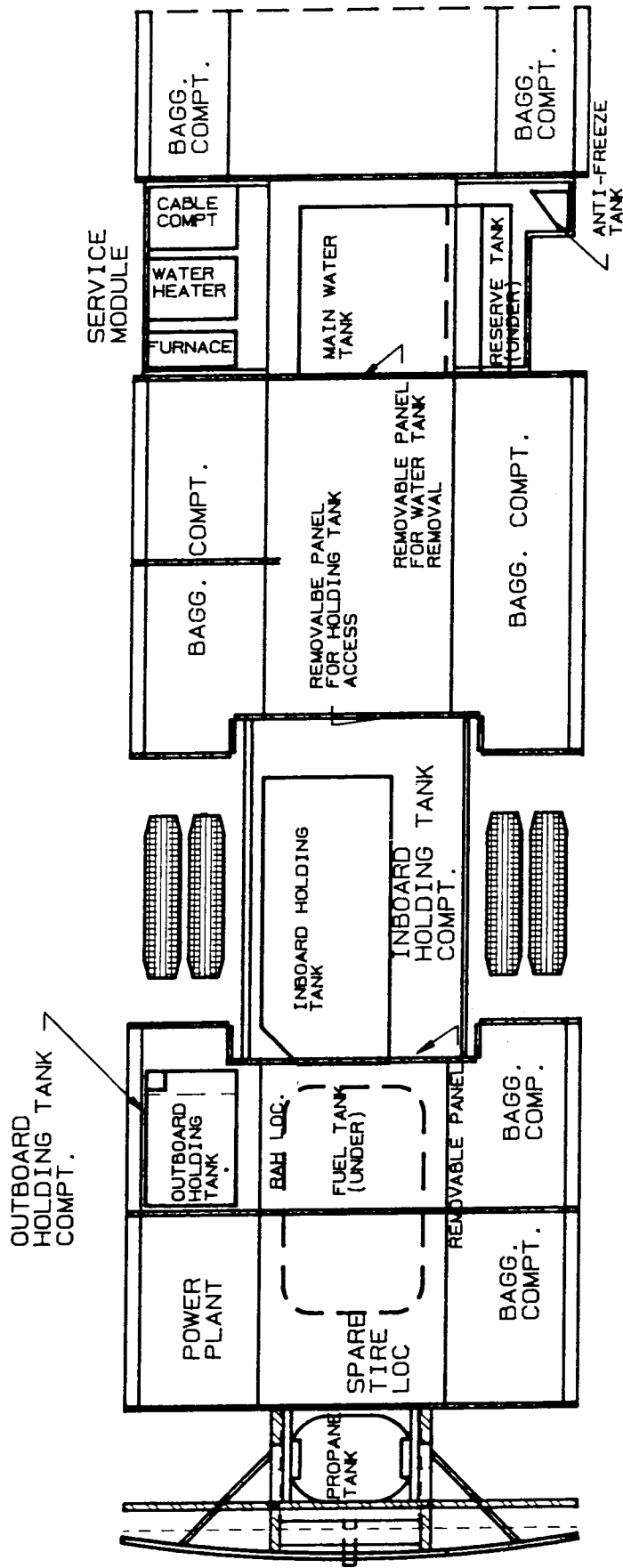
1. Refrigerator Wall Vent & Access
2. Refrigerator Roof Vent
3. Entry Assist Handle
4. Patio Lights
5. Roof Horns
6. Service Module: City Water/Water Tank Fill  
Water Heater Access & By-Pass  
Valves  
Furnace Vent & Access  
Electrical Cord/Water Hose  
Storage  
Cable TV Hook-Up
7. Fuel Fill
8. LPG Compartment & Fill In
9. Electric Entry Step
10. Docking Lights

11. Engine Access: Washer Fluid  
Coolant Reservoir  
Engine/Crank Case Oil Filler  
Transmission Fluid  
Power Steering Fluid
12. Television Antenna
13. Plumbing Roof Vent
14. Generator Set (option) Compartment
15. Range Hood Vent
16. Sewer Hose Storage
17. Spare Tire Storage
18. Termination Valve Access
19. Trailer Hitch
20. Driver Door Entry Step
21. Rear View Camera (option not installed)
22. Awning Mount Rail

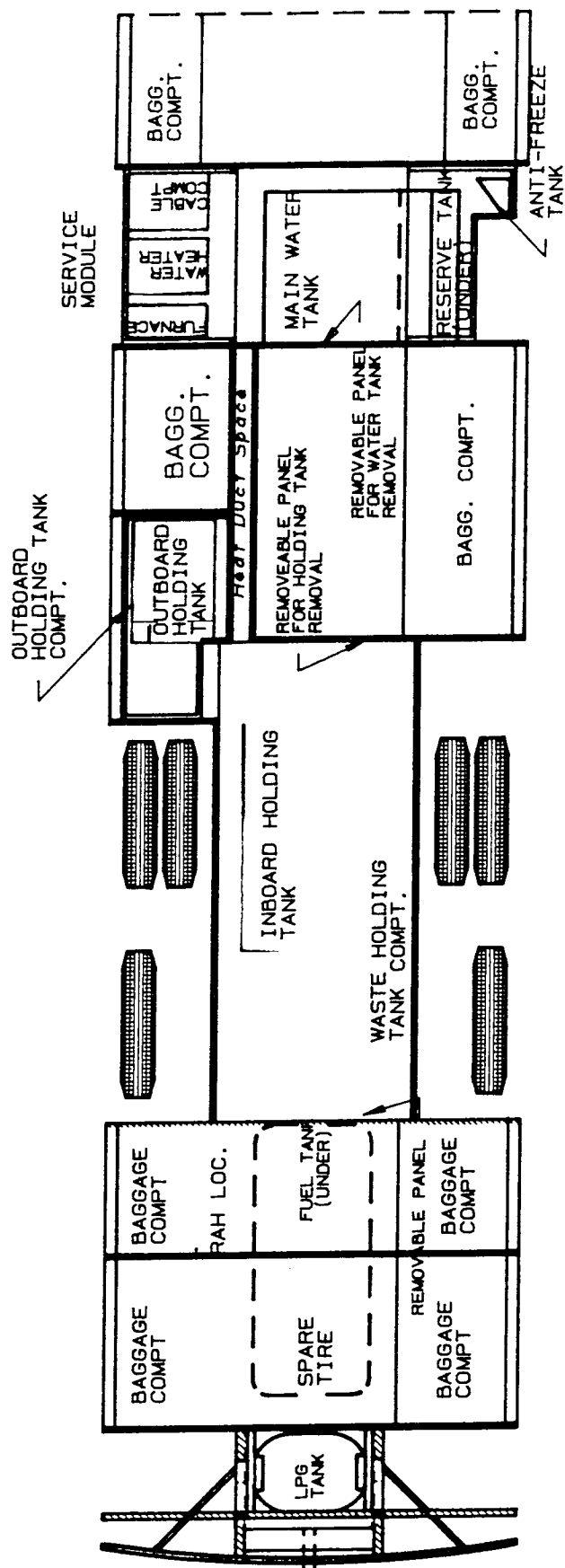


**Note:** Location of Components  
will vary depending on model.

# UNDERFLOOR DIAGRAM — Coach with Single Axle —



# UNDERFLOOR DIAGRAM — Coach with Tag Axle —





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## MONITOR PANEL

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The monitoring system in your motorhome covers the five basic systems of your motorhome.

Battery — indicates charge levels of battery.

Fresh Water — indicates amount of water remaining in water tanks.

Grey Water — indicates amount of water in grey water tank.

Black Water — indicates amount of waste in black water tank.

LP Gas — indicates amount of LP Gas in tank.

**CAUTION:** Never allow holding tanks to overfill or the overflow will back up through the toilet or bath tub/shower drain.

Also incorporated into the monitor panel is the switch for the main/reserve water tanks, hot water heater and generator set.

To operate, simply push the button for the system you are checking and read the quantity level. Calibration of the panel is done as follows:

1. Remove the panel by loosening the four screws on the face plate and pull out.
2. Locate the screw related to the function you are to calibrate.
3. When the tank is full, rotate the screw so that the LED indicates 'FULL'.
4. Replace the monitor panel into the overhead console.

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## ELECTRICAL SYSTEM

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### LIVING AREA ELECTRICAL SYSTEM

The motorhome living area electrical system is designed for convenience. It is capable of supplying the vehicle with power from at least 2 sources (3, if equipped with a generator).

A 12 volt auxiliary battery supplies power to the interior (except plug receptables, water heater, and roof air conditioners) for short term use. This battery is automatically charged whenever the motorhome is running. Time required to charge battery will depend on how low battery is.

For long term power, your vehicle may be plugged into a 120-volt external power source which will supply 120-volt power throughout the interior, power all 12 volt components through a power converter, and charge the auxiliary battery. Battery levels should be checked weekly, since the converter's charging system functions continually and can overcharge the battery and cause it to malfunction.

The furnace, range and oven operate only on LPG (propane), and the refrigerator can operate on all three sources (propane, 12v, 120v). The range hood fan and light, furnace ignition and fan operate on 12 volts.

Your unit is equipped with a 120v/12 volt power converter. Its function is to take a part of the 120 volt current that is received when the unit is plugged into an external power source, or when the generator is running, and change it

to 12 volts which powers much of the motorhome. It will also charge the auxiliary battery anytime 120 volt current is being received.

The converter (with 120 volt circuit breakers and 12 volt automotive fuses for the interior lights and furnace) is located in the lower cabinets. (See p. 11 for fuse and breaker locations and descriptions.)

The chassis battery is not tied into the coach living area system. In order to provide constant starting power for the chassis engine, an isolator allows both batteries to be charged when the engine is running, but does not allow the chassis battery to discharge when using the coach living area system. Auxiliary batteries will charge at a slower rate when using driving lights, chassis air, etc.

Your motorhome is prewired for a roof air conditioner and may be prewired for a power plant even if these options are not installed.

#### Please Note:

In the design and production of your motorhome, Triple E Canada has made allowance for the user to draw power from the auxiliary battery when not plugged into an external power source (i.e.: 120V or Generator Set).

However, excessive use of batteries in this application may cause premature drain on battery power.

## EXTERNAL POWER

A 6 meter 30 amp power supply cord is provided in the power cord compartment located on the left side of the coach in the service module.

To make an external power connection, remove the cord from the compartment and plug it into any adequate 120 volt power source to activate all power circuits. The connector is rated for 30 amp capacity.

**NOTE:** There is an opening in the compartment door which allows the door to remain closed while the power cord is in use.

## GENERATOR

The optional generator power plant allows operation of all 120 volt appliances without an external power connection.

Before starting the generator the external power cord must be plugged into the generator receptacle located in the power cord compartment. Make sure the crank-case is full of oil.

The unit can be started from inside the motorhome by using the remote switch located on the monitor panel mounted to the overhead cockpit console. The remote switch is a three position rocker switch. Press the top half of the switch to start the generator and hold until the unit is started, then release the switch. To stop the unit, depress the bottom half of the switch and hold until the generator has come to a full stop. The unit also has a start-stop switch on the right side of the generator.

**CAUTION:** In order to avoid high voltage surges to motorhome components during generator warmup, be sure all components remain switched OFF until the generator is running smoothly.

The generator's fuel is supplied from the vehicle's main fuel tank or auxiliary tank when installed in diesel powered units. A high fuel pick-up prevents the generator from draining the main fuel tank. Refer to generator operating manual for servicing requirements.

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## BATTERY DISCONNECT

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### POWER OFF BATTERY DISCONNECT

All units are equipped with a battery disconnect switch, which provides a simple and safe means of disconnecting the coach and chassis battery(s). This panel is located underneath the overhead cabinets by the entrance door. The solenoids for the battery disconnect are located on the hood support brackets — passenger side.

The Battery Disconnect allows you to:

1. Prevent unwanted discharging of batteries during extended periods of storage;
2. Prevent shorts or fire hazards while working on the 12 volt electrical system.

### HOW AND WHEN TO USE BATTERY DISCONNECT:

**To Use RV:** Press the "USE/STORE" switch to the "USE" position momentarily. The indicator light for the battery will glow indicating the presence of 12 volts on the system. Repeat this step for the second "STORE/USE" switch.

**To Store RV:** To prevent the discharge of your batteries, press the "STORE/USE" switch to the "STORE" position momentarily. Repeat this step for the second "STORE/USE" switch. If no external power (shore power or generator) is applied to the system, the indicator light(s) should be extinguished.

**Extended Plug-In:** (A week or more) — If you plan to leave your RV plugged into 120 volt at your home or campsite, it is advisable to disconnect your batteries according to the procedures described under "**To Store RV**". This procedure prevents overcharging of the batteries.

**NOTE:** If you are plugged into any 120 volt source, the "IN USE" indicator light may remain lighted. (See BATTERY DISCONNECT OWNER'S MANUAL For More Information).

**CAUTION:** It is recommended that the battery cables be disconnected when parking for an extended period of time if your unit is NOT equipped with a Powered Battery Disconnect System.

**CAUTION:** With the Battery Disconnect in the off position and with the external power cord plugged into an electrical source, current may by-pass the Battery Disconnect and allow some motorhome components to operate at a reduced rate. In order to prevent component failures, we recommend that the Battery Disconnect switch for the coach be turned ON before operating components which could be damaged when operated at a reduced rate (i.e. suspension compressors, electric and hydraulic jacks, electric step, etc.)

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## FUSE/BREAKER LOCATIONS & DESCRIPTIONS

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The wiring circuits in this unit are protected by a combination of fuses, circuit breakers and thermal links in the wiring itself. This greatly reduces the hazard of electrically caused fires in this vehicle. The following is a list of fuses and circuit breakers and their locations:

### Automotive Fuses

- Located under the dash on driver's side
- Diagram p. 13
- Description p. 12

### Converter Fuses/Circuit Breakers

- Located behind access door on front of converter
- Diagram p. 14
- Reverse wiring diagram p. 15
- Check diagram on converter panel for circuit breaker and fuse sizes

### Reset Circuit Panel

- Located next to 12v converter behind access cover
- Diagram p. 16

### Battery Disconnect Solenoid Fuses

- Located on the Battery Disconnect solenoids mounted on the hood supports on the passenger side
- 2-5 Amp fuses on each Battery Disconnect Solenoid

### Condenser Fan Fuse

- Located on the engine firewall (passenger side)
- 1 Fuse @ 30 Amps

### Blower Fan Fuse

- Located on the engine firewall (passenger side)
- 1 Fuse @ 20 Amps

### Air Suspension Circuit Breaker

- Located on the engine firewall (passenger side)
- 1 Breaker @ 50 Amps

### Power Converter Circuit Breaker

- Located on the engine firewall (passenger side)
- 1 Breaker @ 50 Amps

### Furnace Circuit Breaker

- Located behind the furnace door at end of the blower fan housing.
- See furnace owner's manual

### Rear View Camera & Monitor Fuses (Optional)

- Located under dash on driver's side
- 2 — in-line fuses @ 5 Amps ea.

### Step Light, Utility Lights & Step Signal Fuse

- Located behind upper access door on entrance step
- 1 — in-line fuse @ 10 Amps.

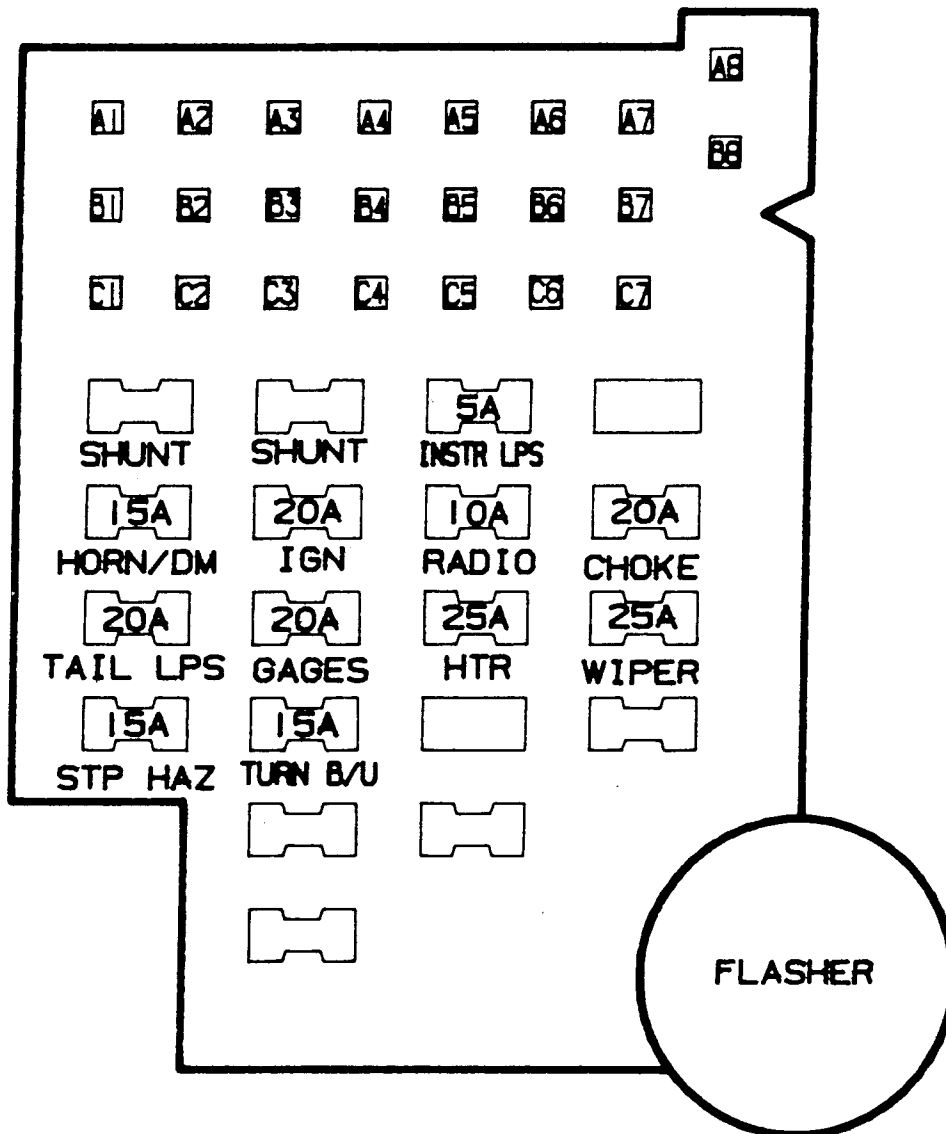
**NOTE:** Do not use fuses of higher amperage rating than those recommended above.

## GM — AUTOMOTIVE FUSE PANEL

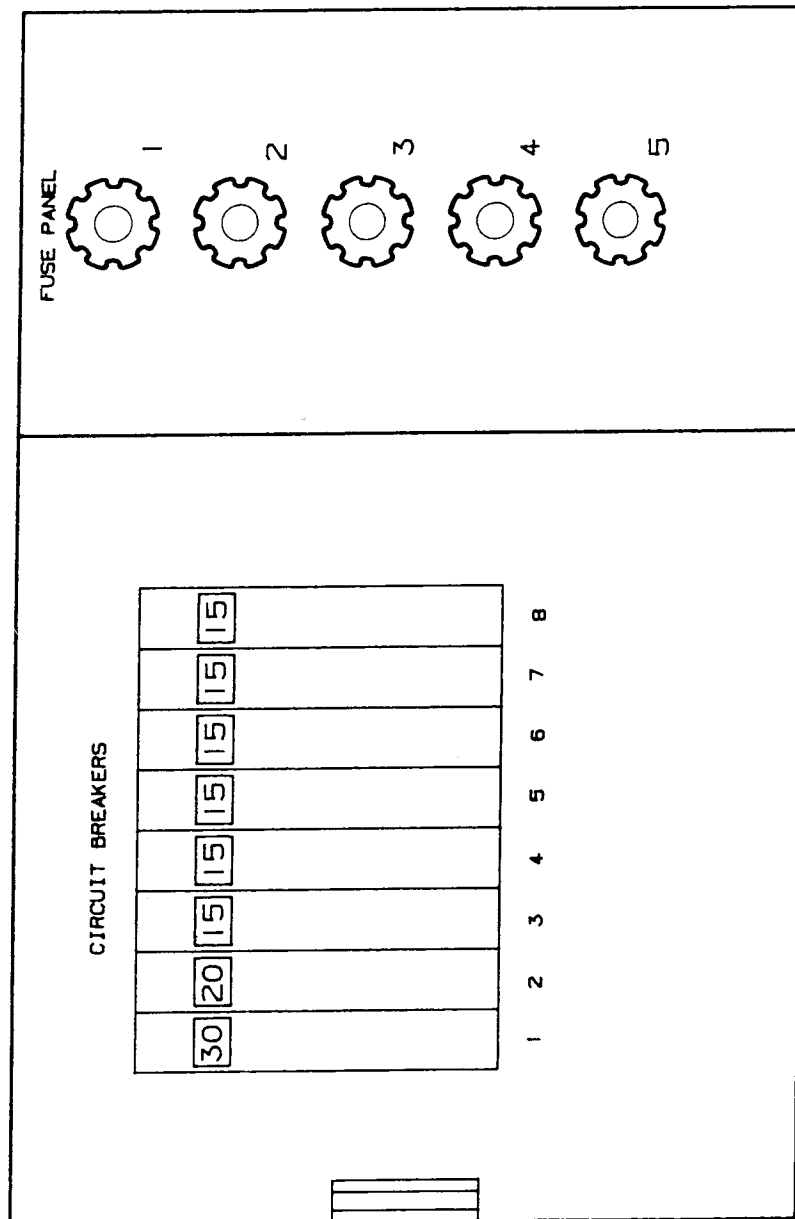
Fuse Label	Size	Power Source	Additional Items Fused
Horn/Dome Lt.	15A	Constant Live	A1 Intelli Dash Trip Computer (Option) B1 C1 Radio Clock A2 Alarm Option B2 C2
Ignition	20A	Ignition	A3 Intelli Dash Trip Computer (Option) Electric Step Sensor Fridge Sensor (1202 Option) Air Suspension Relay Signal B3 Cruise Control C3 Rear View Monitor & Noise Suppressor Battery Disconnect Isolator Exciter Wire C4 Alarm Option Cornering Lights Light Reminder Check Engine & Choke Light
Heater	25A	Accessory	A4 Acme Heater B4 Power Window Overhead Defrost
Radio	10A	Accessory	A5 Remote Mirror B5 Radio C5 Rear Aux Heater Alarm (Disarm) Levelling Jack Relay Signal
Inst. Lamps	5A	Constant Live	A6 Dash Lights B6 Shifter Light C6 Light Reminder
Blank			A7 B7 C7
Wiper	25A	Ignition	A8 Service Module Heater B8 Intermittent Wiper Control Windshield Wipers
Tail Lamps	20A	Constant Live	
Gauges	20A	Ignition	
Stop Hazard	15A	Constant Live	
Turn & B/U	15A	Ignition	
Choke	20A	Accessory	

FORD AUTOMOTIVE FUSE PANEL — Refer to chassis owner's manual.

# GM — AUTOMOTIVE FUSE PANEL

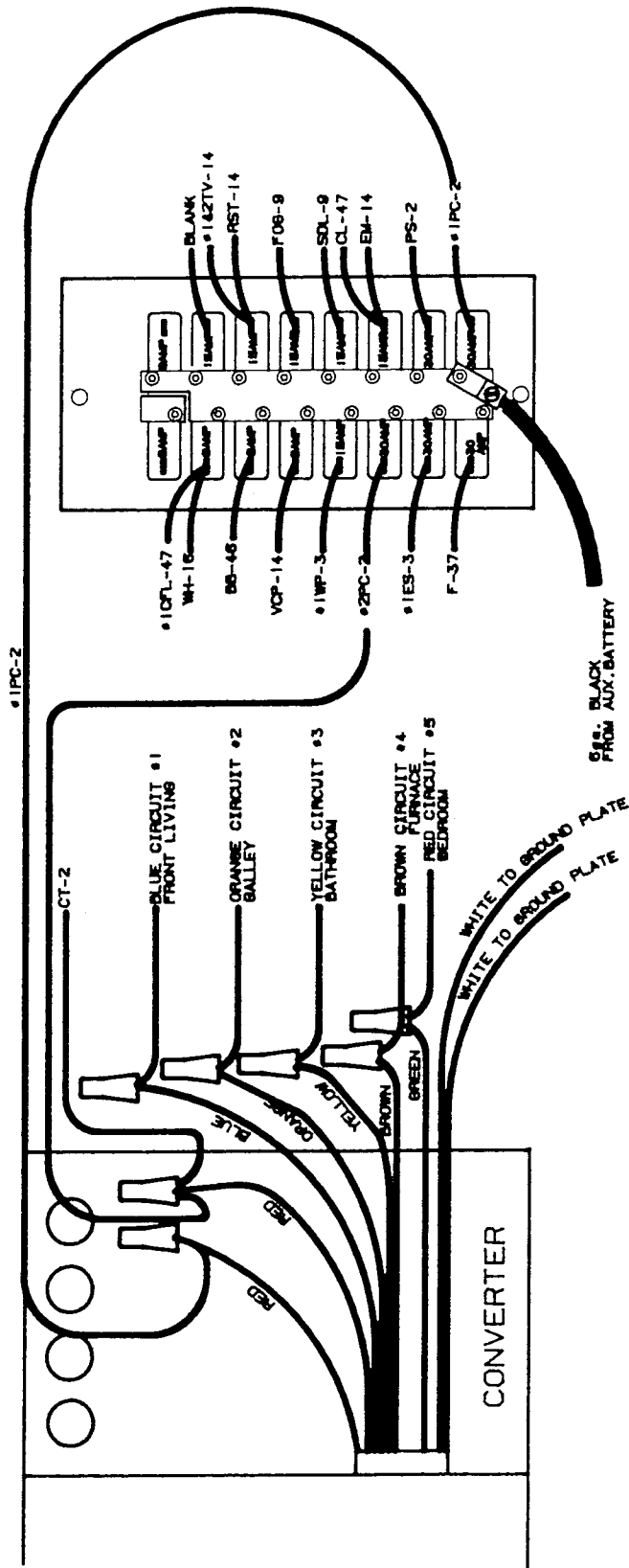


# VOLTAGE CONVERTER



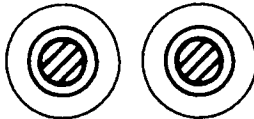
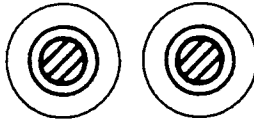
- CIRCUIT BREAKERS**
- 1: Main 30A
  - 2: Front A/C 20A
  - 3: Converter 15A
  - 4: Galley 15A
  - 5: Microwave 15A
  - 6: Fridge 15A
  - 7: General 15A
  - 8: Rear A/C 15A
- FUSE PANEL**
- 1: Front Living 15A
  - 2: Galley 15A
  - 3: Bathroom 15A
  - 4: Furnace 15A
  - 5: Bedroom 15A

# CONVERTER/CIRCUIT BOARD WIRING



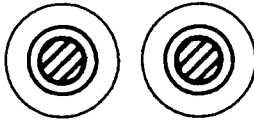
## RESET CIRCUIT PANEL

UTILITY/STEP  
LITES 8AMP



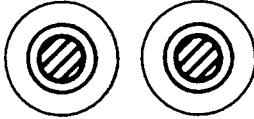
COURTESY FLOOR LITES  
WATER HEATER 8AMP

TV/REAR STEREO 15AMP



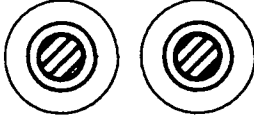
BATTERY BOOSTER 8AMP

FOG LITES 15AMP



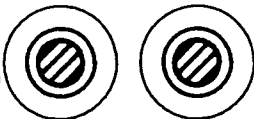
VIDEO PLAYER 8AMP

SIDE DOCKING LITES 15AMP



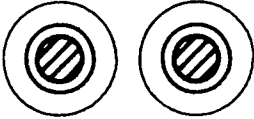
WATER PUMP 15AMP

CIGARETTE LIGHTER/  
REMOTE MIRROR 15AMP



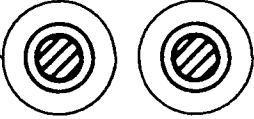
POWER CONVERTER 30AMP

POWER SEAT 30AMP



ELECTRIC STEP 30AMP

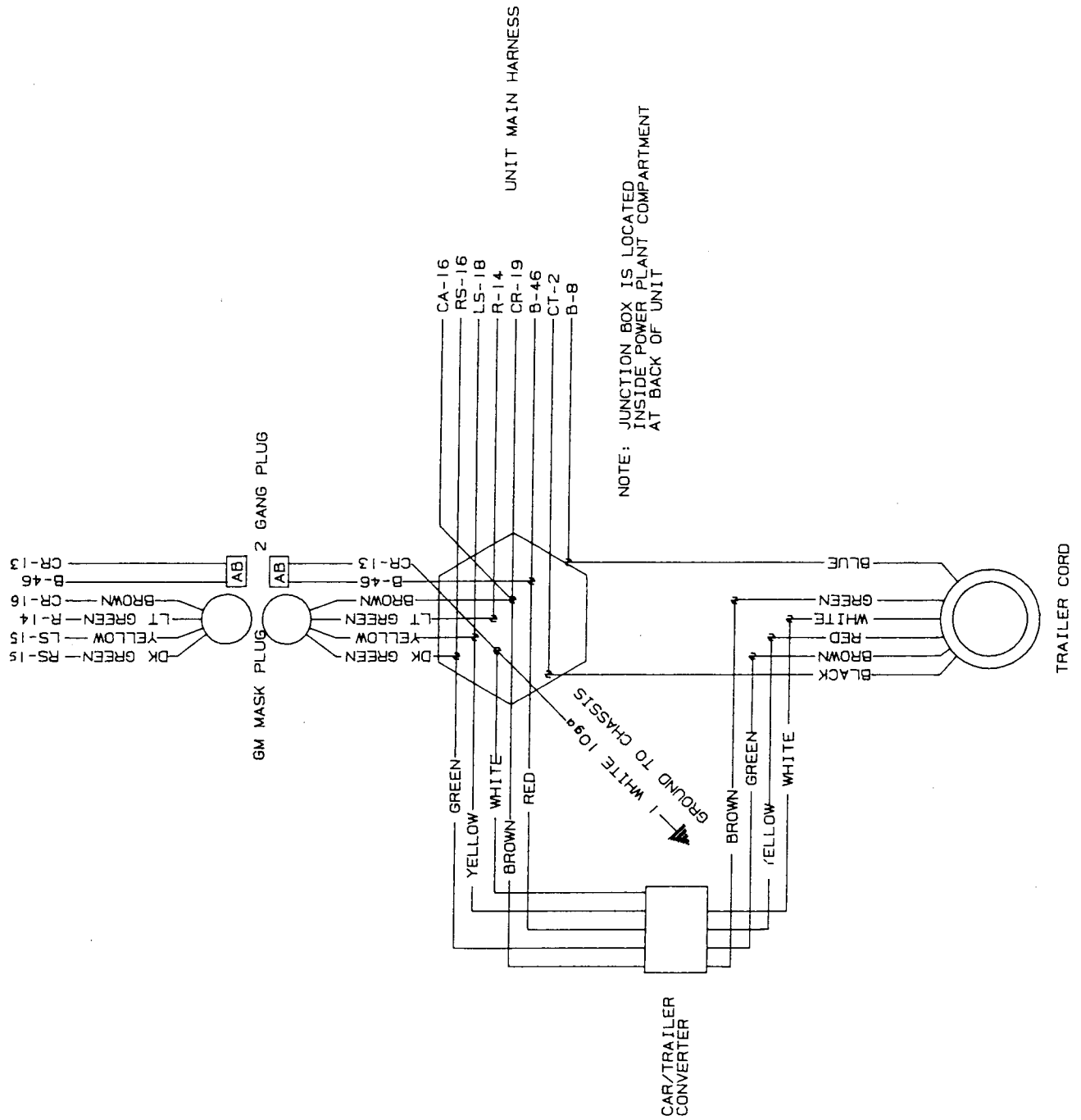
POWER CONVERTER 30AMP



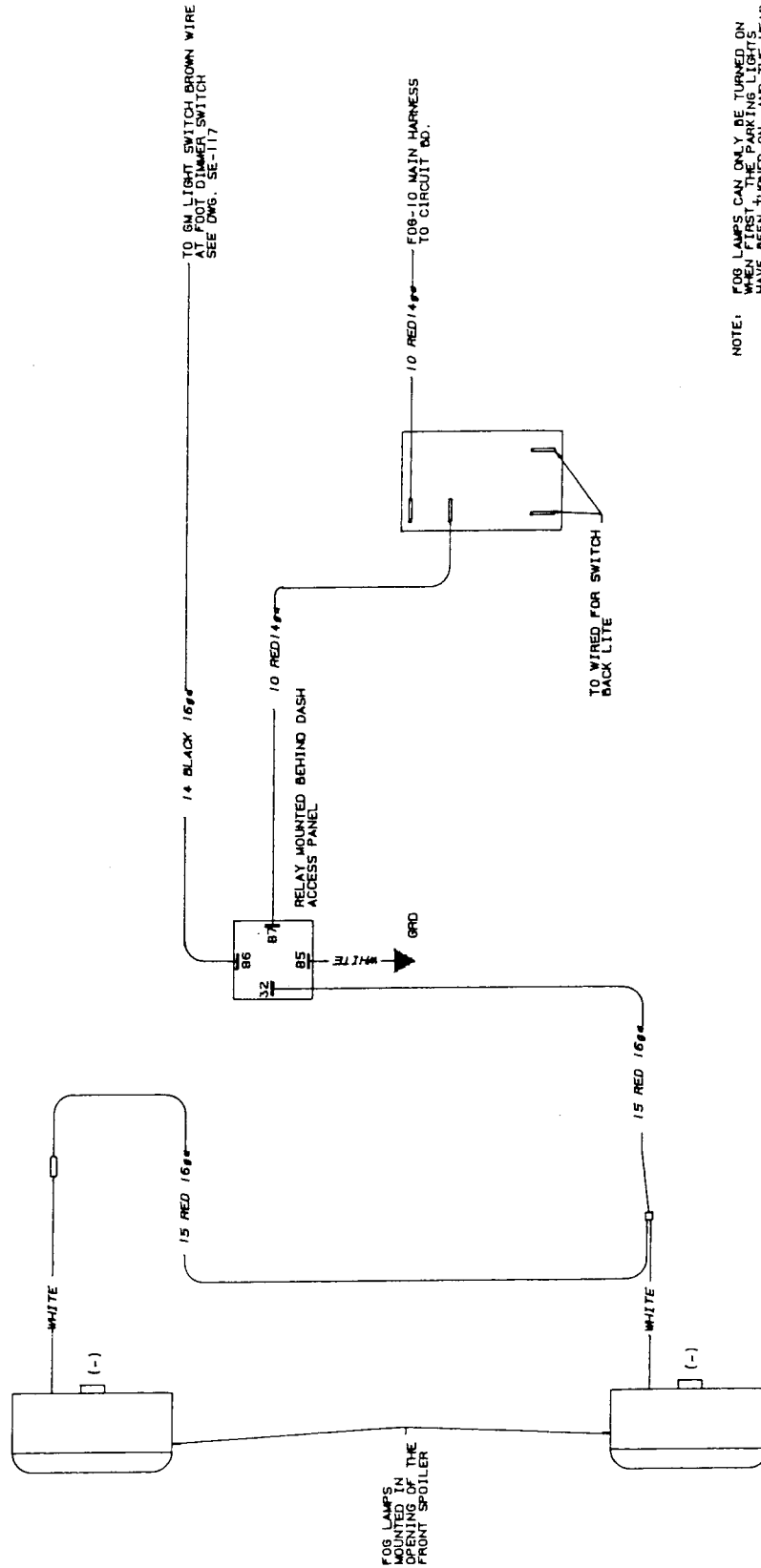
FRIDGE 30AMP



# REAR JUNCTION BOX



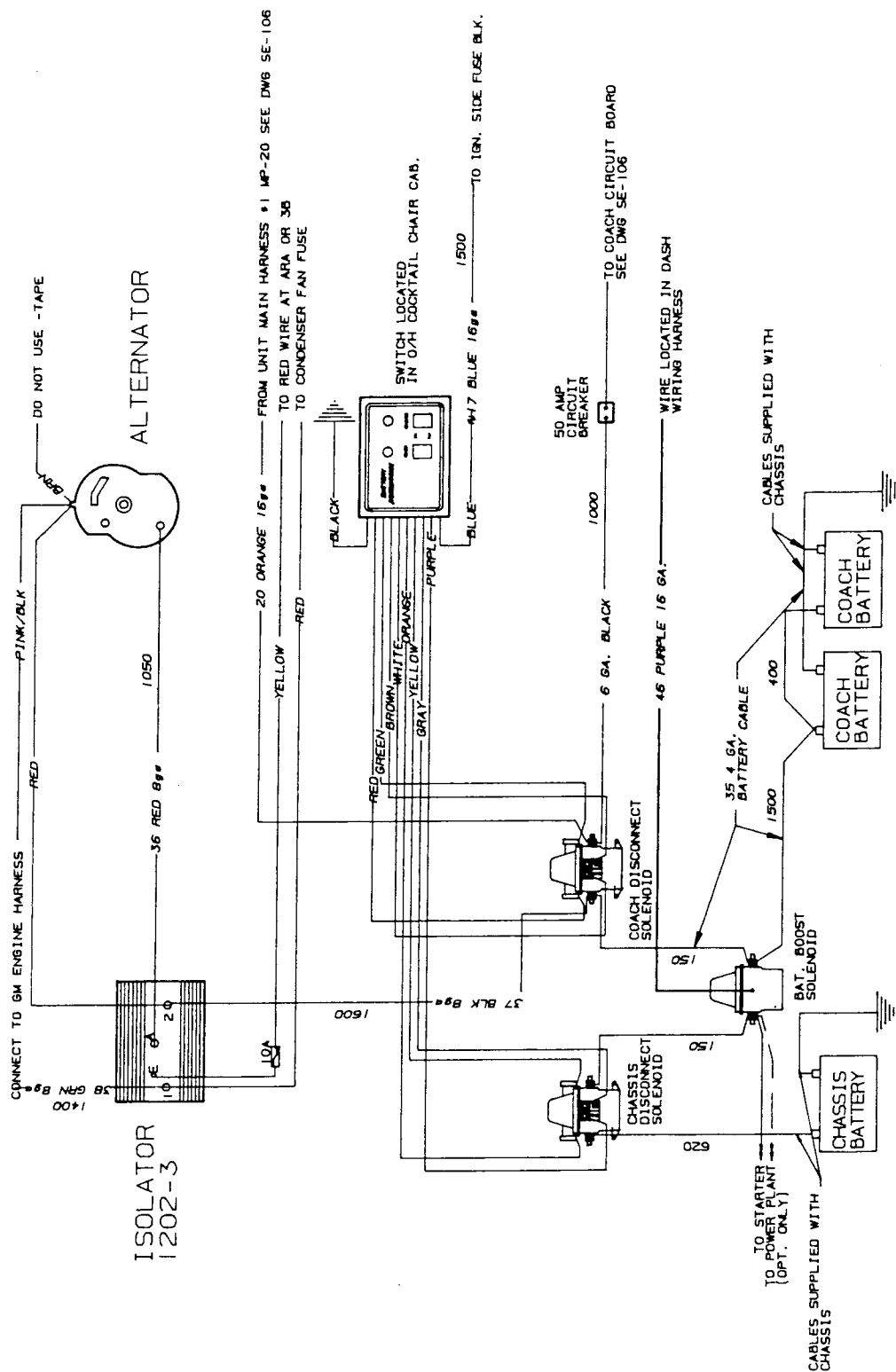
# FOG LAMP WIRING



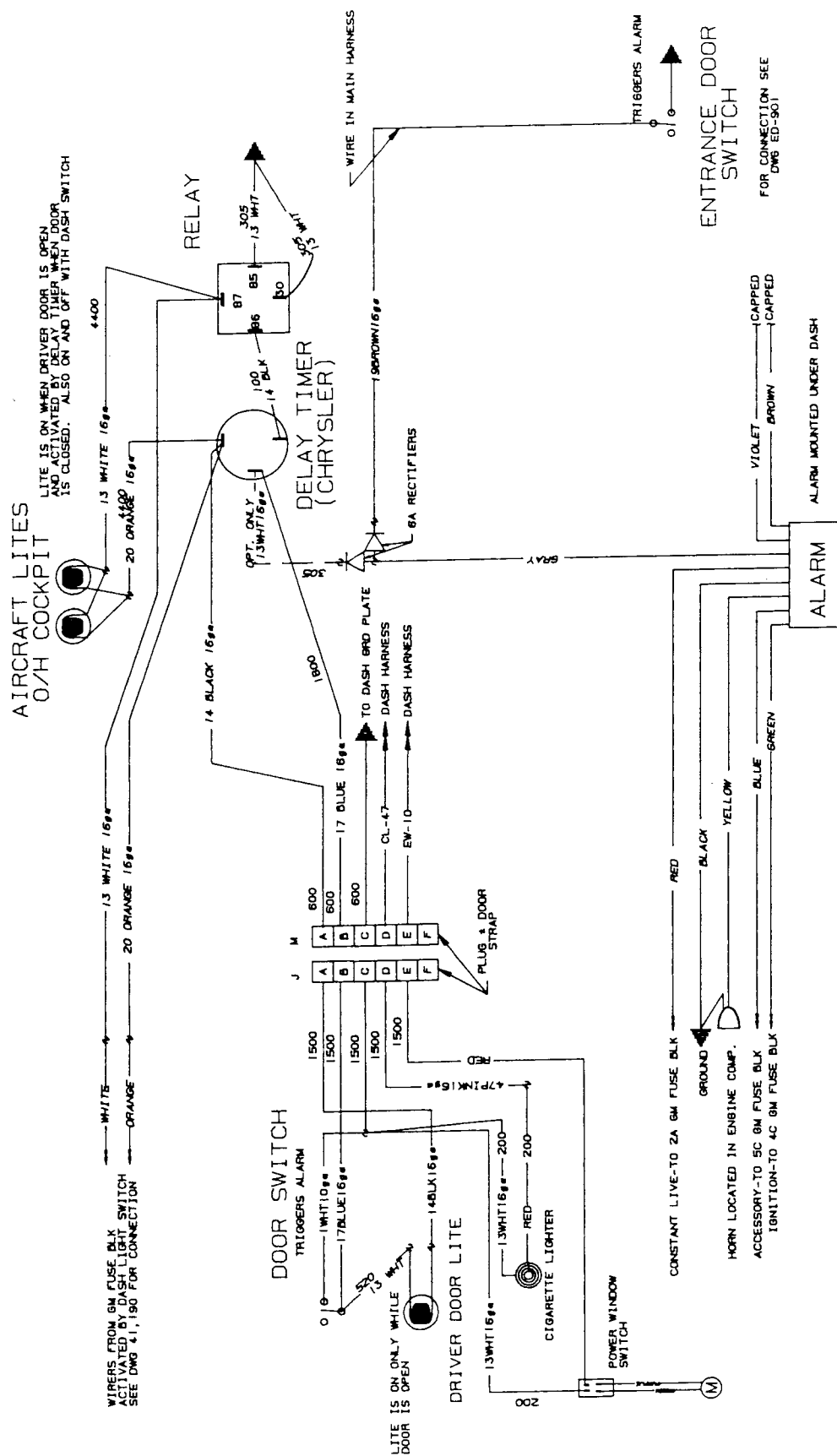
NOTE: FOG LAMPS CAN ONLY BE TURNED ON WHEN FIRST THE PARKING LIGHTS HAVE BEEN TURNED ON, AND THE HEAD LIGHTS ON DIM.

OPTIONAL FOR ALL UNITS EXCEPT A1202 -STD.

# ISOLATOR/BATTERY DISCONNECT SWITCH WIRING

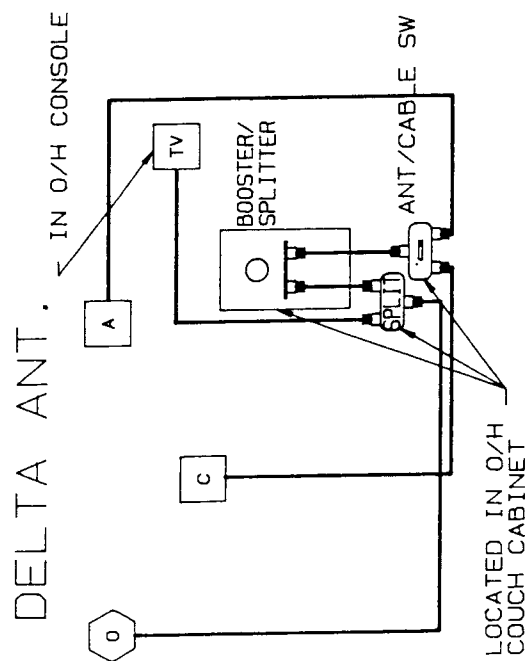
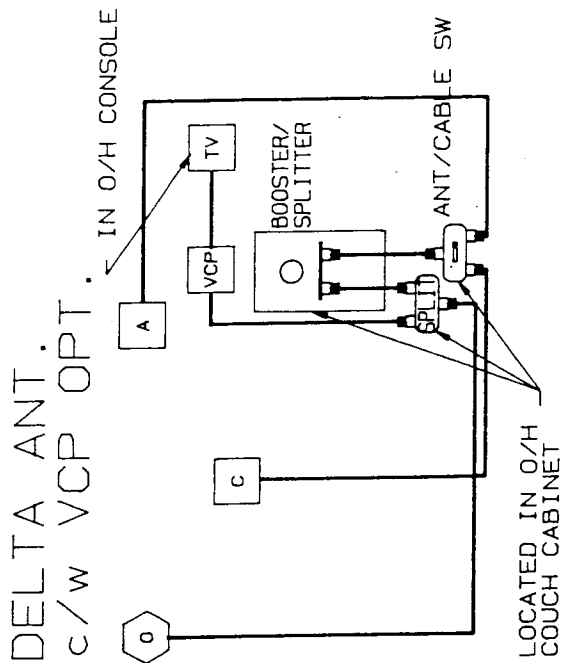
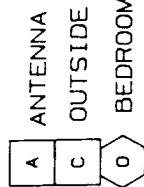


**LIGHT DELAY/ALARM OPT. WIRING**

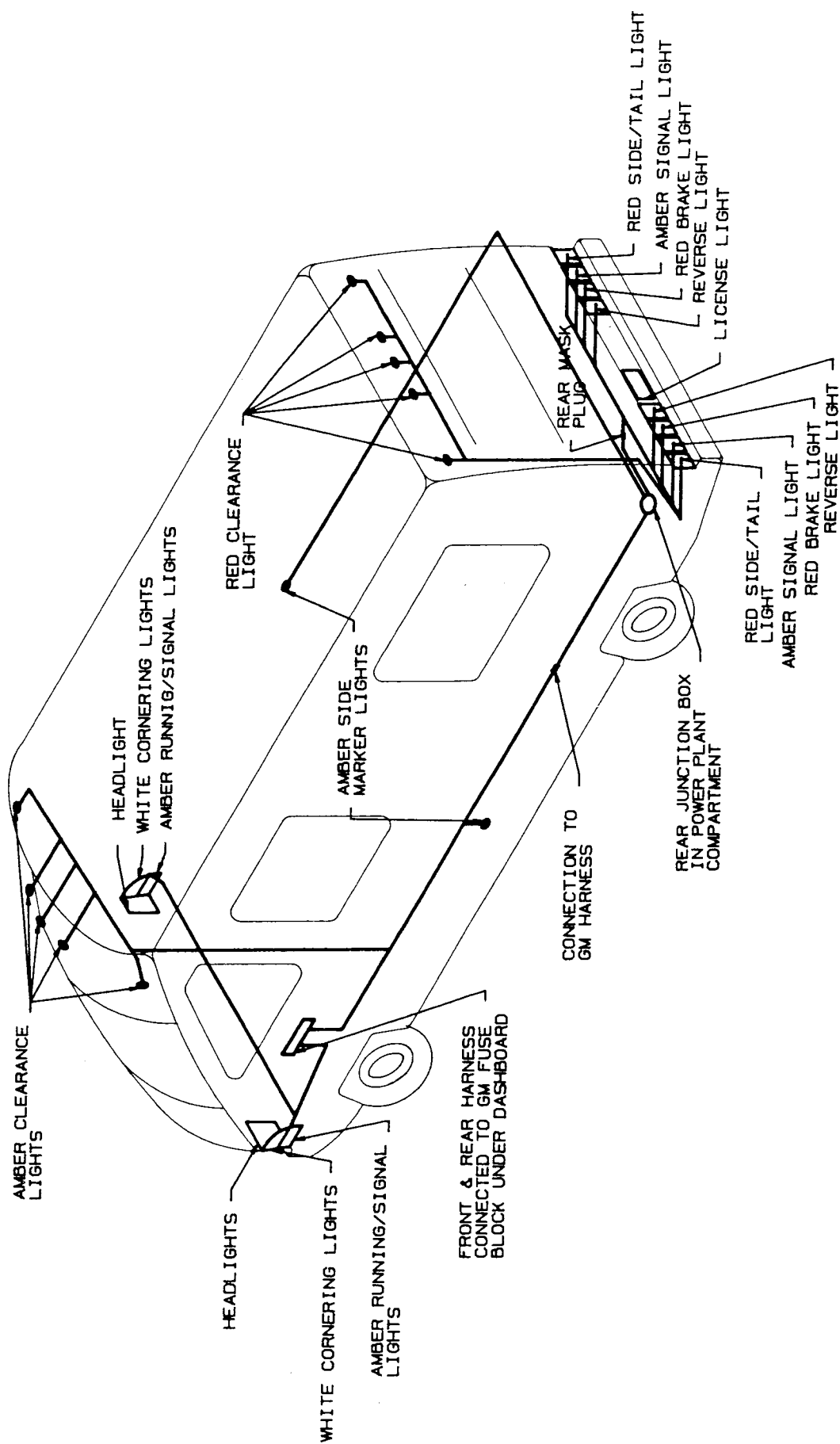


# ANTENNA WIRING

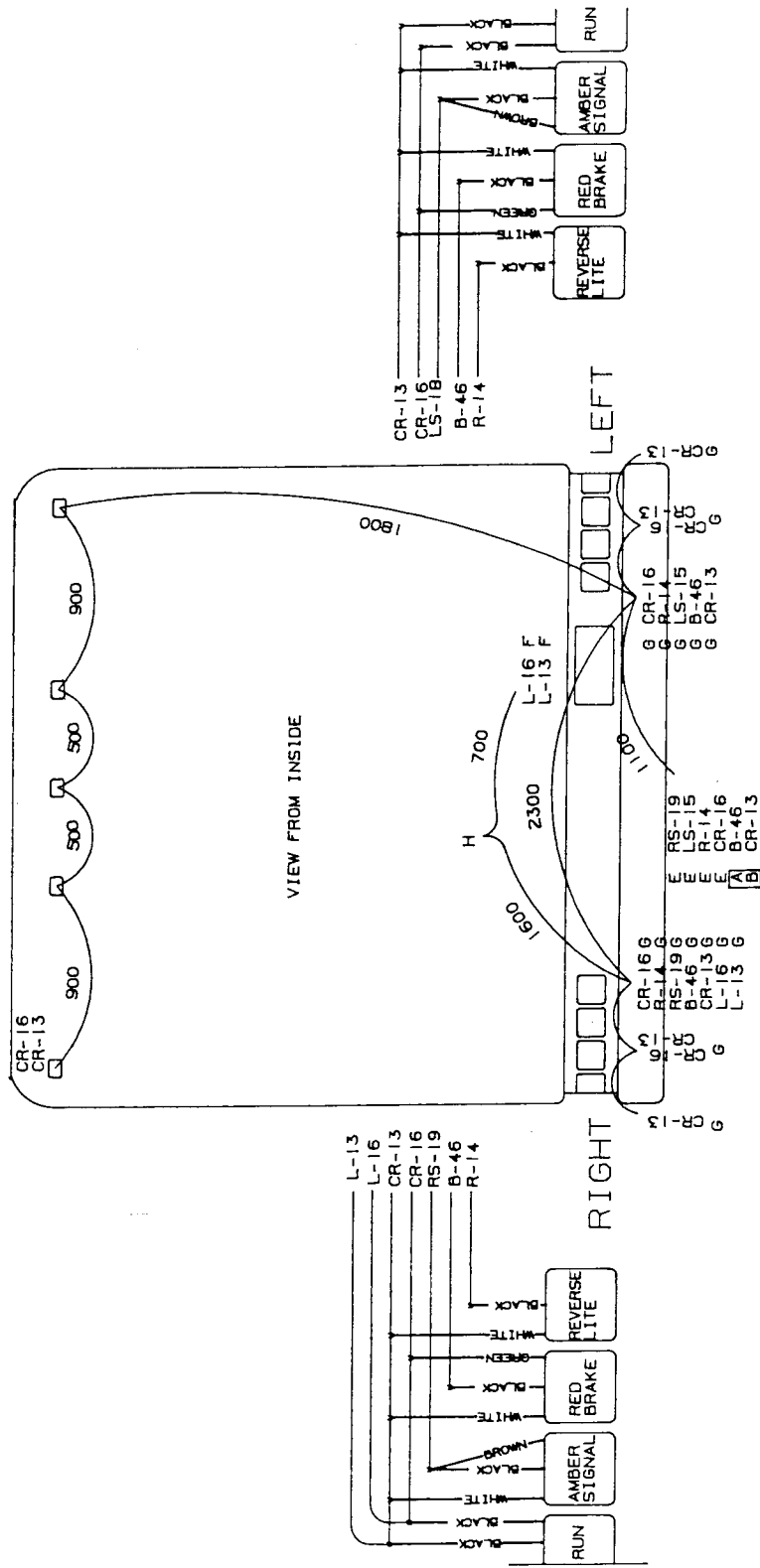
## LEGEND



# TRIPLE E EMPRESS SE RUNNING LIGHTS



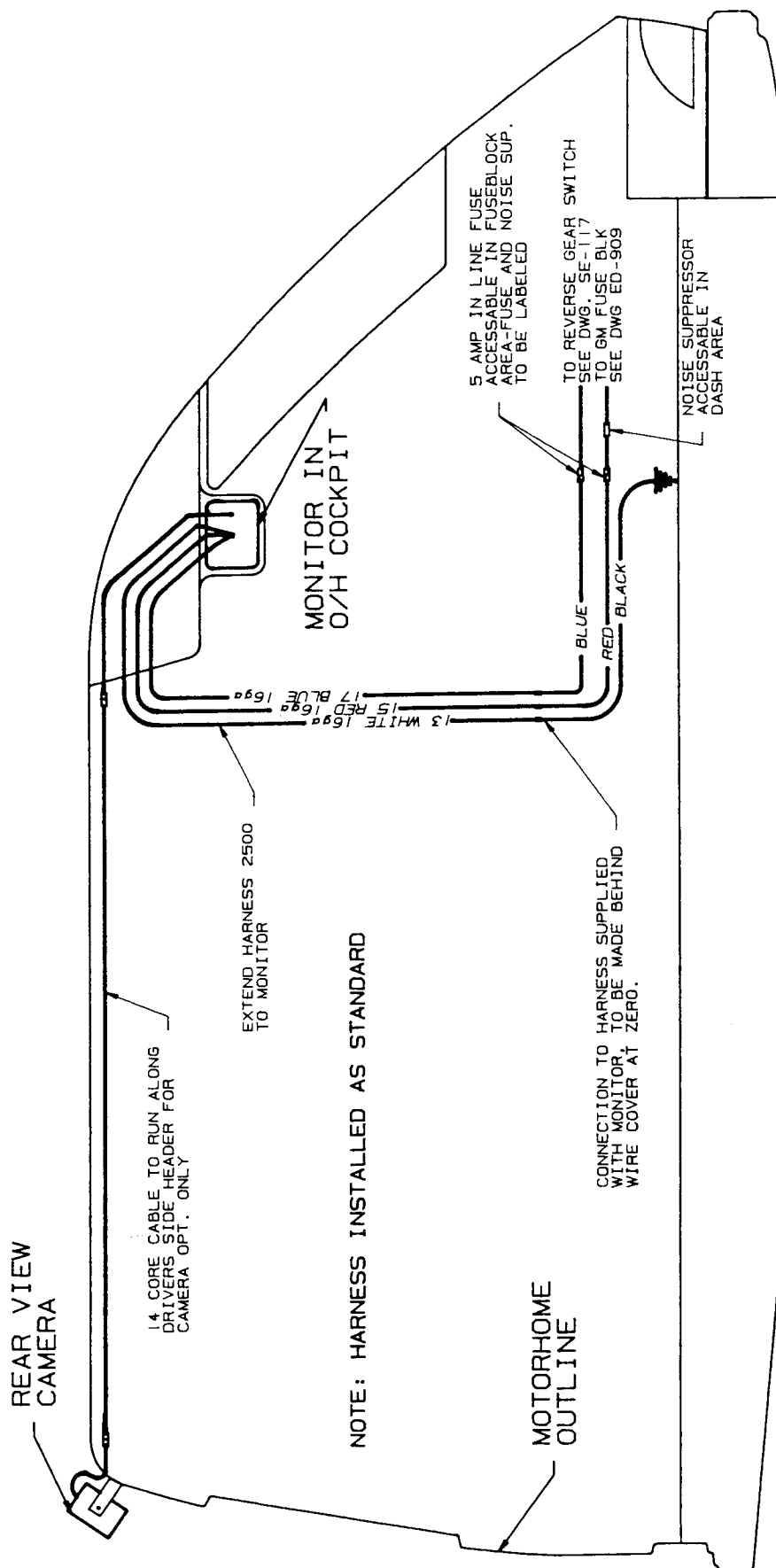
# REAR MASK WIRING



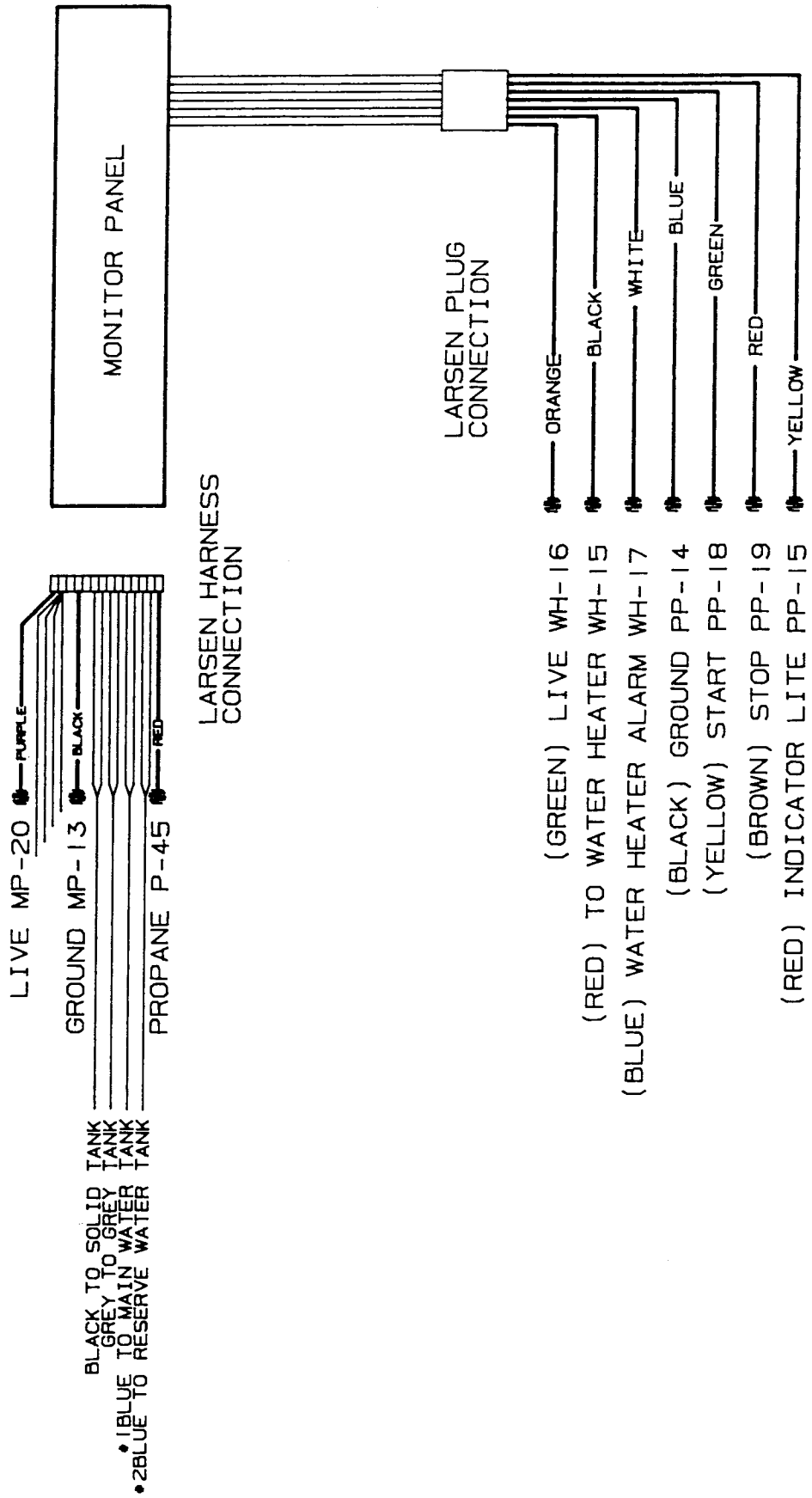
[illegible]



# REAR VIEW CAMERA/MONITOR WIRING



# LARSEN MONITOR PANEL



NOTES:

1. LEAD DESIGNATION FOLLOWS THE FOLLOWING CONVENTION:  
CONNECTION TO OEM WIRING WIRE COLOR CHEVY/GMC CIRCUIT NUMBER

FUNCTIONAL DESCRIPTION (CLR) 52

RT. TURN INDICATOR 55  
GROUND 130  
ILLUMINATION-DIMMER 8  
BRAKE SIG. 33  
+12 V IGNITION 39  
CHECK ENGINE INDICATOR 631  
SEAT BELT INDICATOR 237  
OIL PRESS. SENDER 31  
COOLANT TEMP. SENDER 35  
FUEL GAUGE SENDER 30  
HIGH BEAM INDICATOR 11  
LT. TURN INDICATOR 54

GMC/CHEVY OEM CONN.

GMC/CHEVY VAN INTELLIDASH

+12 V BATTERY (UNSWITCHED) (RED)  
+12 V IGNITION (YEL)

INTELLITRIP  
GMC/CHEVY TRIP COMPUTER

16 PIN HEADER

UNUSED

**NOTES:**

- LEAD DESIGNATION FOLLOWS THE FOLLOWING CONVENTION:  
CONNECTION TO OEM WIRING    WIRE COLOR    FORD CIRCUIT/WIRE NUMBER  
 $\swarrow$  FUNCTIONAL DESCRIPTION (CLR) [50]
- X INDICATES A SPLICE BETWEEN OEM AND INTELLITRIP WIRING.
- ALL STANDARD FORD CONNECTORS ARE SHOWN AS VIEWED FROM THE CONNECTOR END UNLESS OTHERWISE NOTED.
- NUMBERS IN PARENTHESES () INDICATE INDIVIDUAL ITEM PART NUMBERS.

**FORD VAN INTELLIDASH**

**FORD TRIP COMPUTER**

**TANK SWITCH CONNECTOR C-13A**

**VIEWED FROM WIRE END**

**REAR FUEL TANK PUMP MOTOR POS (GRN/RED)**

**GROUND BUS ON STEERING COLUMN**

**FORD 19 PIN OEM CONN. C211**

**+12V BATTERY (UNSWITCHED) (RED)**

**+12 V IGNITION (YEL)**

**RADIO MEMORY (GRN/YEL) [54]**

**RADIO POWER (YEL/BLK) [57]**

**RADIO CONNECTOR C108-A**

**INTELLITRIP FORD TRIP COMPUTER**

**16 PIN HEADER**

**TANK SENSE (VID)**

**FUEL SIG. (BLU)**

**SPEED SIG. (GRN)**

**GROUND (BLK)**

**+28VDC (GRY)**

**OIL PRESS. SENDER (WHT/RED) [51]**

**FUEL SENDER (GRN) [52]**

**I.T. TURN INDICATOR (GRN/WHT) [53]**

**ILLUMINATION - DIMMER (LT BLU/RED) [54]**

**GROUND (BLK) [55]**

**COOLANT TEMPERATURE SENDER (RED/WHT) [56]**

**H.I. TURN INDICATOR (WHT/BLU) [57]**

**HIGH BEAM (GRN/BLK) [58]**

**SEAT BELT INDICATOR (GRN) [59]**

**BRAKE INDICATOR (PUR/WHT) [60]**

**+12V IGNITION (RED/YEL) [61]**

**CUT**

**NOTE: TANK SENSE WIRING SHOWN IS FOR A 5.0L ENGINE. BECAUSE THE ACTUAL WIRING SEEMS TO VARY WITH THE ENGINE SIZE AND VEHICLE CONFIGURATION TO THE POINT "TANK SENSE" WIRE SHOULD BE CONNECTED TO A POINT THAT PROVIDES OUTPUT WHEN THE TANK IS FULL. IN THE REAR TANK POSITION, +12 VOLTS WHEN IN THE FRONT TANK POSITION, WHILE THE ENGINE IS RUNNING.**

## FRESH WATER SYSTEM

The water system built into your motorhome provides full service similar to the system used in your home. A 12-volt self-priming pump draws pressurized water from the fresh water storage tank to all cold faucets and the water heater. An automatic pressure switch, located in the water pump maintains a positive line pressure between 20-30 p.s.i.

The water system of the SE is contained in the service module on the left side of the coach. Two fresh water storage tanks, an anti-freeze tank for winterization, water pump, filter, water heater, and city water fill-in valve are all located in the service module.

The potable water valve, anti-freeze valve, water pump and filter are accessible through the upper access panel on the main entrance step. The drain valve is located behind the lower access panel, also on the main entrance step.

The water fill selector valve, water heater by-pass valve, water heater and city water fill-in are located behind the service module door on the driver's side.  
See p. 7 & 8 for diagram

### NORMAL WATER TANK OPERATIONS

For normal water use, the anti-freeze valve should be in the "CLOSED" position and the potable water valve in the "OPEN" position. The drain valve should be closed. The water fill selector valve should be in the "CITY WATER" position and all three water heater by-pass valves should be in the "NORMAL" position.

The water is drawn from the tanks by the pump through the open potable water valve. It is pumped to the cold water taps, the cold entry at the water heater, the toilet and ice-maker (option).

If a constant city water hook-up is used, the valves remain in the same positions.  
See p. 33 for diagram

### WATER TANK FILL OPERATION

To fill the fresh water storage tanks, maintain all valve positions for normal water use except the water fill selector valve, which must be turned to the "water tank fill" position.

1. Turn water pump switch to "OFF" (Pump switch is on the range hood).
2. Remove water fill cap from opening.
3. Thread hose into filler opening and fill tank.
4. Check monitor panel to see when tank is full.
5. If the pump has not been operated for some time, open kitchen faucets (Hot & Cold) to release line pressure.

6. Turn on water pump switch.
7. Open kitchen faucets until water flows to clear air from lines and fill water heater.
8. Remove hose and install filler cap securely to prevent contamination of the water system.

To resume normal water use, return the water fill valve to the "CITY WATER" position.  
See p. 34 for diagram

**CAUTION:** Pump damage may occur if water pump is run while dry. It is a good idea to travel with the water pump "OFF".

### EXTERNAL WATER CONNECTION

Connecting to a park or city water supply is easily accomplished. It is not necessary to drain your vehicle water system. The external water source will supply your motor home water system with water at city pressure when the water pump is switched "OFF".

1. Turn water pump switch to "OFF"
2. Attach garden hose to city water connection.
3. Turn on external water supply.

**NOTE:** Water Heater by-pass valves must be turned to "NORMAL" to prevent from getting hot water in cold water lines.

Some parks have high water pressure which may result in water system problems. A gauge or pressure reducer is available to reduce water pressure.

A check valve is included in the system to prevent city water from being fed back through the pump into the water tank. In the same manner, another check valve prevents water in your tank from being pumped out through the city water connection.

### WATER SYSTEM WINTERIZATION

To winterize your motorhome water system:

1. Drain both fresh water tanks via the drain valve at the entrance step.
2. Close the potable water valve.
3. Open the anti-freeze valve.
4. Turn water fill selector valve to 'CITY WATER' position.
5. Turn Water Heater by-pass valves to 'BY-PASS' position.

6. Shut off in-line valve below kitchen sink to the ice-maker and drinking water filter (options).
  7. Turn on water pump and open taps to flush the water out.
  8. Allow water to run until the colored anti-freeze is visible.
  9. Enough anti-freeze should flow through the sink drains to fill the P-traps with anti-freeze.
  10. Flush the toilet until anti-freeze is visible in the bowl.
  11. Drain the water heater via the drain cock on the face of the water heater.
  12. Disconnect the water line to the ice-maker and drain via the plug on the face of the bottom panel of the ice-maker.
- (See manual for more complete details)  
See p. 35 for diagram

## WATER PUMP TROUBLESHOOTING

1. If pump will not prime
  - check to make sure there is water in the tank.
  - check to make sure battery is not run down.
  - check for kinks in the inlet hose.
  - check for air leaks at inlet fittings. If air is leaking into inlet fittings, tighten fittings or apply clamps as necessary.
  - check for clogged line.
2. If water pressure drops
  - check faucets and connections for leaks.
  - make sure faucet aerators are clean.
  - check to make sure there is water in tank.
  - check to make sure the battery is not run down.
3. If pump runs when there is no apparent demand for water
  - check all faucets and fixtures to make sure they are shut off and not leaking.
  - check line for leaks.
  - make sure there is water in the tank.

## WATER HEATER

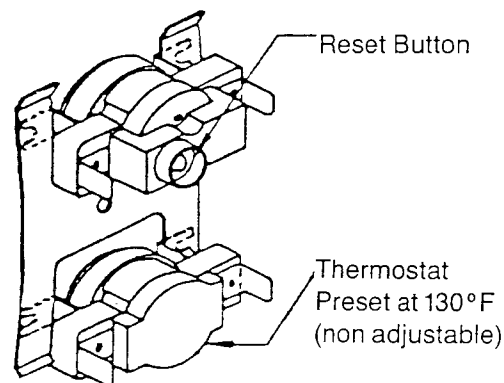
Your motorhome is equipped with a 6 gallon water heater. Refer to the instruction manual for lighting instructions. LP gas is automatically supplied (See section on LP Gas) to heat water to a desired temperature and then automatically shut off, leaving the pilot light burning. A regulated mixture of gas and air is ignited by the pilot to provide a flame which is directed into the heating tube. The heating assembly is sealed off from the RV interior and is vented to the outside.

If gas supply to the water heater is cut off for any reason or if the pilot is blown out, all gas supply is automatically cut off and controls will have to be reset to obtain pilot relighting.

If your water heater is equipped with a motoraid heat exchanger, the water will be heated by the engine coolant circulating through the heat exchanger in the water heater. This will supply hot water when traveling.

This water heater is equipped with a high temperature limit in the form of a cut-off device. If the temperature exceeds a certain degree, it will cause the manual reset button to trip, shutting down the burner.

To activate the water heater burner, the water temperature must be below 100°F. Push the reset button to re-activate burner. (See WATER HEATER INSTRUCTION MANUAL for further information).



Located under access cover on rear of water heater.

## WATER PUMP FILTER

When water flows from the fresh water tank, it circulates through the water pump filter before entering the water pump which supplies the coach.

The water pump filter, mounted on the line leading from the water tank to the water pump is located behind the upper access door on the entrance step. This filter should be checked periodically and cleaned annually.

To Check Fresh Water Tank Filter:

1. Turn water pump switch to "OFF"
2. Disconnect the fittings on both sides of the filter.
3. Remove the filter if needed and clean or replace.
4. Replace the filter and connect fittings.
5. Turn on water pump.
6. Open the cold water tap nearest to the water pump and flush out any foreign particles that may have entered.

## SANITIZING FRESH WATER SYSTEM

To help assure complete sanitation of your fresh 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 chloride solution using one gallon of water and ¼ cup of household bleach (5% sodium hypochlorite solution). Pour one gallon of solution into water 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 (drinkable) fresh water.
5. To remove any excessive chlorine taste or odor which might remain, prepare a solution with one quart of vinegar to five gallons of water and allow this solution to agitate in tank for several days by vehicle motion.
6. Drain tank and again flush with potable water.

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## WASTE SYSTEMS

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### WASTE HOLDING TANK (BLACK WATER)

Before using your waste holding tank, deodorize it by adding one gallon water and a commercial holding tank deodorizer through the toilet.

**NOTE:** If holding tank is allowed to overfill, the overflow may back up through the toilet drain.

Draining Waste Holding Tanks:

1. Be sure the holding tank valve is closed. Then remove the termination cap.
2. Join sewer hose to coupling on the main drain outlet.
3. Put end of sewer hose into sanitary dumping station opening. Make sure the hose does not sag and create a P-trap.
4. Open the termination valve on the holding tank. Open the solid waste first. Once empty, open grey waste valve. A garden hose may be left running into the toilet with valve open to further rinse the tank and sewer hose.
5. Close termination valve and replace dust cap.

**NOTE:** All units have the bathroom sink drain plumbed into the black water waste tank. This aids in the prevention of solid build-up in the tank.

6. Deodorize empty tank by adding one gallon water and a commercial holding tank deodorizer through the toilet.

### WASTE HOLDING TANK (GREY WATER)

The drainage from the kitchen sinks and shower pan is collected in a separate grey water holding tank. This tank has its own dump valve but ties into the same termination valve outlet as the waste holding tank.

**NOTE:** If grey water holding tank is allowed to overfill, the overflow may back up through the bathtub/shower drain.

Drain grey water holding tank in the same way after draining the waste holding tank. This will help flush solids out of the sewer hose.

**NOTE:** If you are using a sewer hook-up in an RV park, keep the valve closed until the holding tank is at least partially full and then drain. The large quantity of waste flow will provide more effective drainage and reduce tank stoppages.

### DO'S AND DON'TS — HOLDING TANKS

- DO keep your holding tank clean using any cleaner approved for recreational vehicle sanitation systems.
- DO add a special deodorizer or chemical additive approved for recreational vehicle systems to sanitize and improve the tank action.

- DO make sure that the rear auxiliary heater switch is in the "on" position while driving during winter months. This will help to prevent holding tank freeze-up.
- DO keep your tank termination valve closed, permitting the tank to get as full as convenient before emptying.
- DO keep both the tank termination valve(s) and the drain cap tightly in place when traveling to permit use of the system when on the road.

- DO use any soft, single-ply, non-dyed, biodegradable toilet tissue.
- DO open the bath vent to keep bathroom fresh.
- DON'T put facial tissues, paper, permanent (automotive) anti-freeze, sanitary napkins, or household toilet cleaners in your holding tank.
- DON'T put anything solid in your holding tank which can scratch or damage the plastic.

For specifications on tank sizes see — DATA & SPECIFICATIONS p. 81

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## BATHROOM

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### TOILET

See Manufacturer's operating instructions.

Troubleshooting:

**1. Problem: Water keeps running into the bowl.**

Check to see that the levers return all the way to the left. Sticking may be caused by foreign material on the waste valve blade or blade seal at the bottom of the bowl. If problem persists, replace water valve.

**2. Problem: Toilet leaks, there is water on the floor.**

If the leak is in the back of the toilet, check the water supply line connection and refer to the installation instructions. If the leak is at the closet flange area, check the closet flange nuts for tightness. If leak continues, remove the toilet and check the closet flange height. The height should be between ¼" and 7/16" above the floor. Adjust accordingly and replace the closet flange seat if damaged.

**3. Problem: Poor flush.**

The levers must be held fully open during the flush. A good flush should be obtained within 2 to 3 seconds. If the problem persists, remove the water supply line and check the water supply. The water supply line flow rate should be at least 10 litres per minute to ensure an adequate flush.

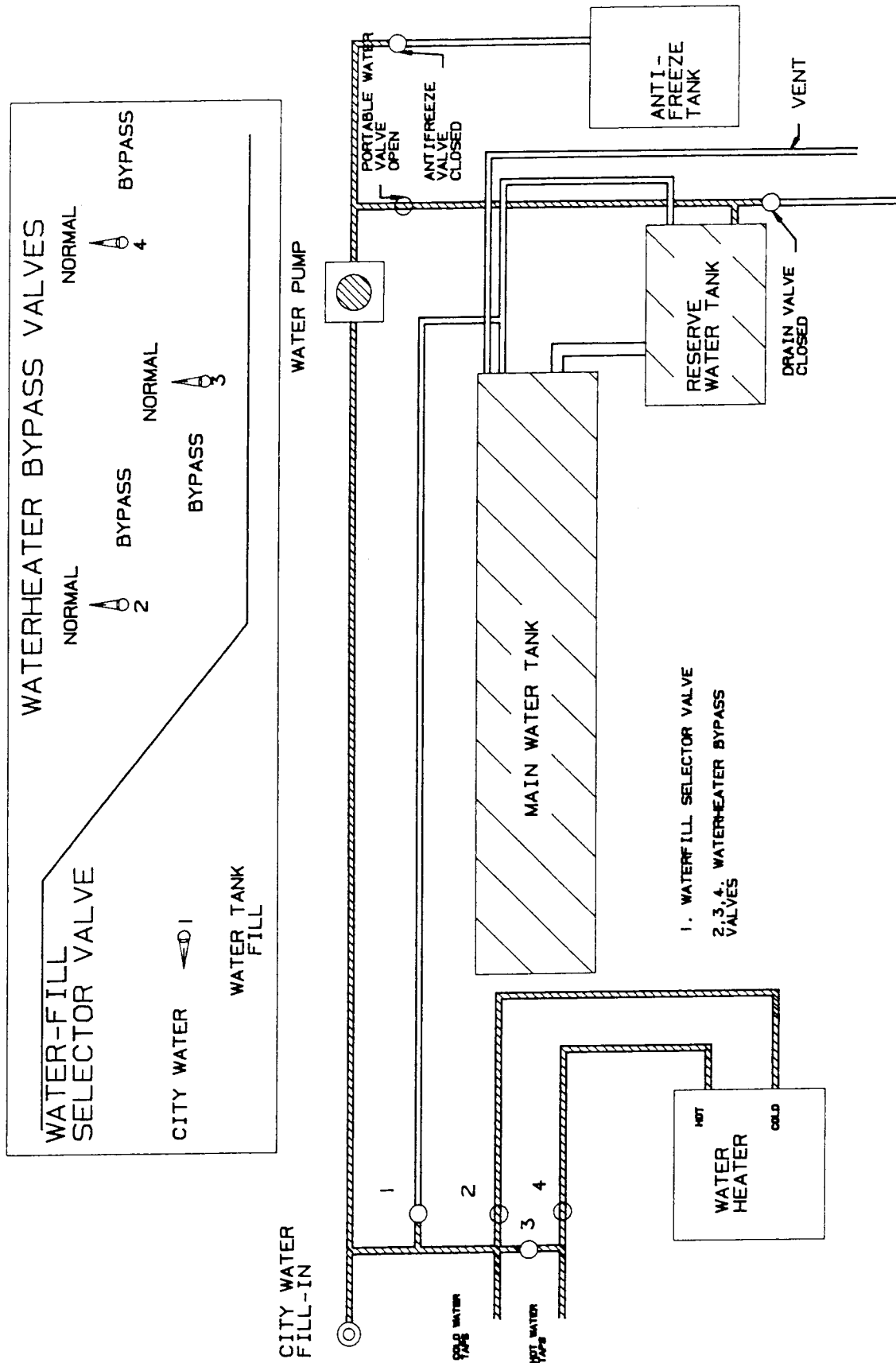
### SHOWER

To protect the surface of your ABS plastic shower pan, it is recommended that a rubber shower mat be placed in the shower pan.

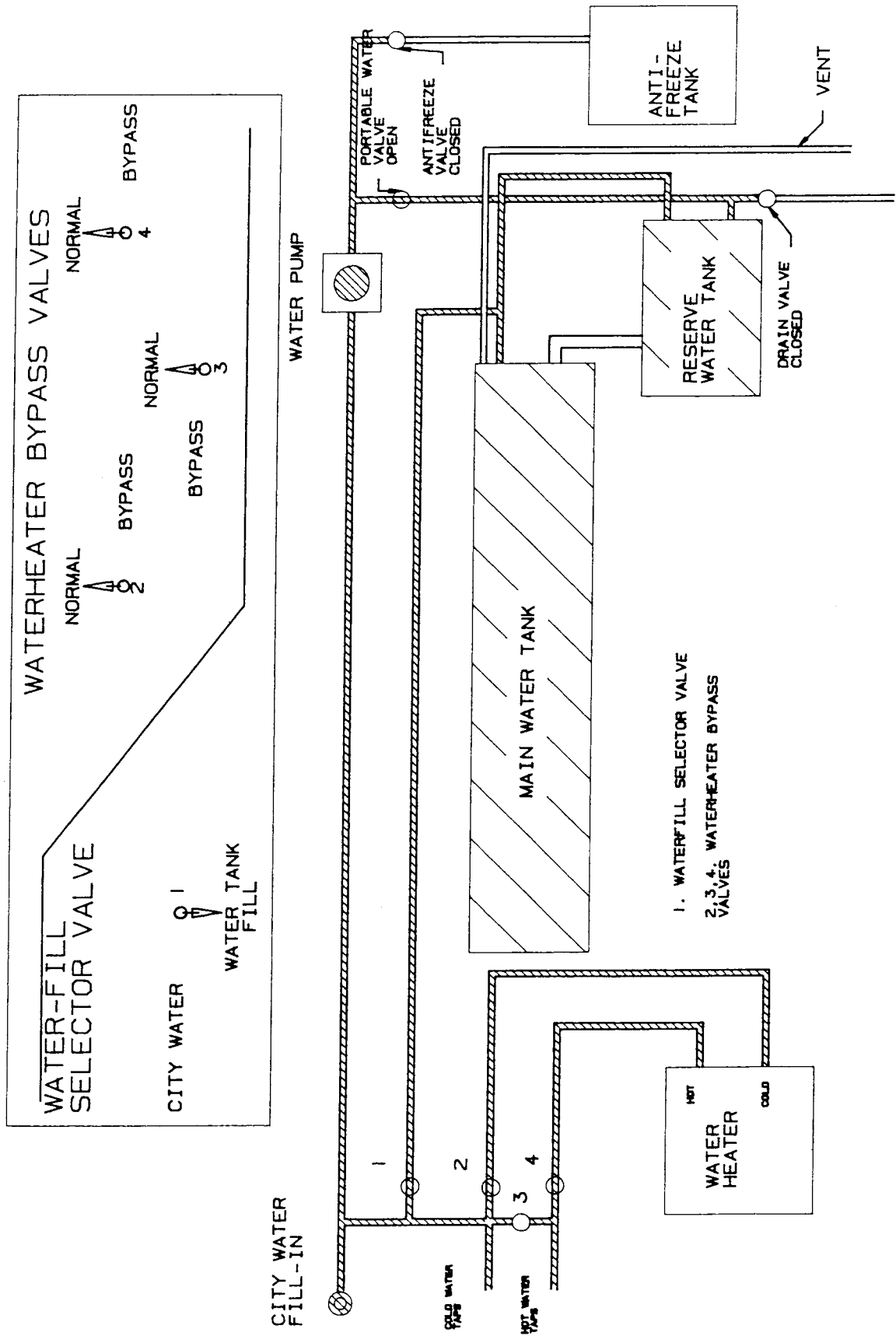
Use a non-abrasive cleaner to clean your shower compartment. Do not use highly concentrated or high acid content household cleaners, as these may damage the shower compartment.



# NORMAL OPERATION



# NORMAL OPERATION WHILE FILLING TANKS



[illegible]

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## WATER SYSTEM DIAGRAMS

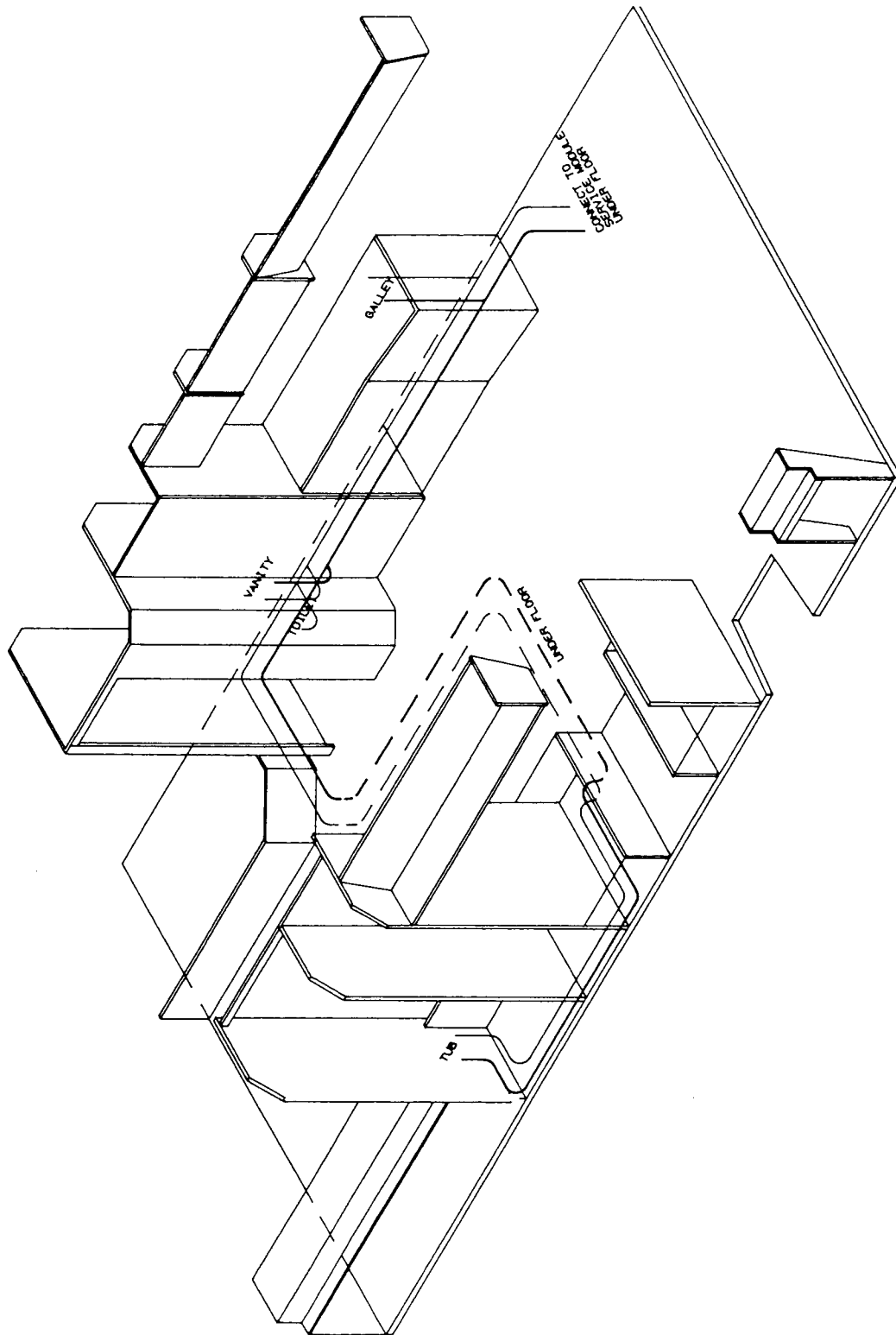
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The diagrams which follow outline the water supply lines and plumbing/drainage lines for each of the four Triple E Empress SE models:

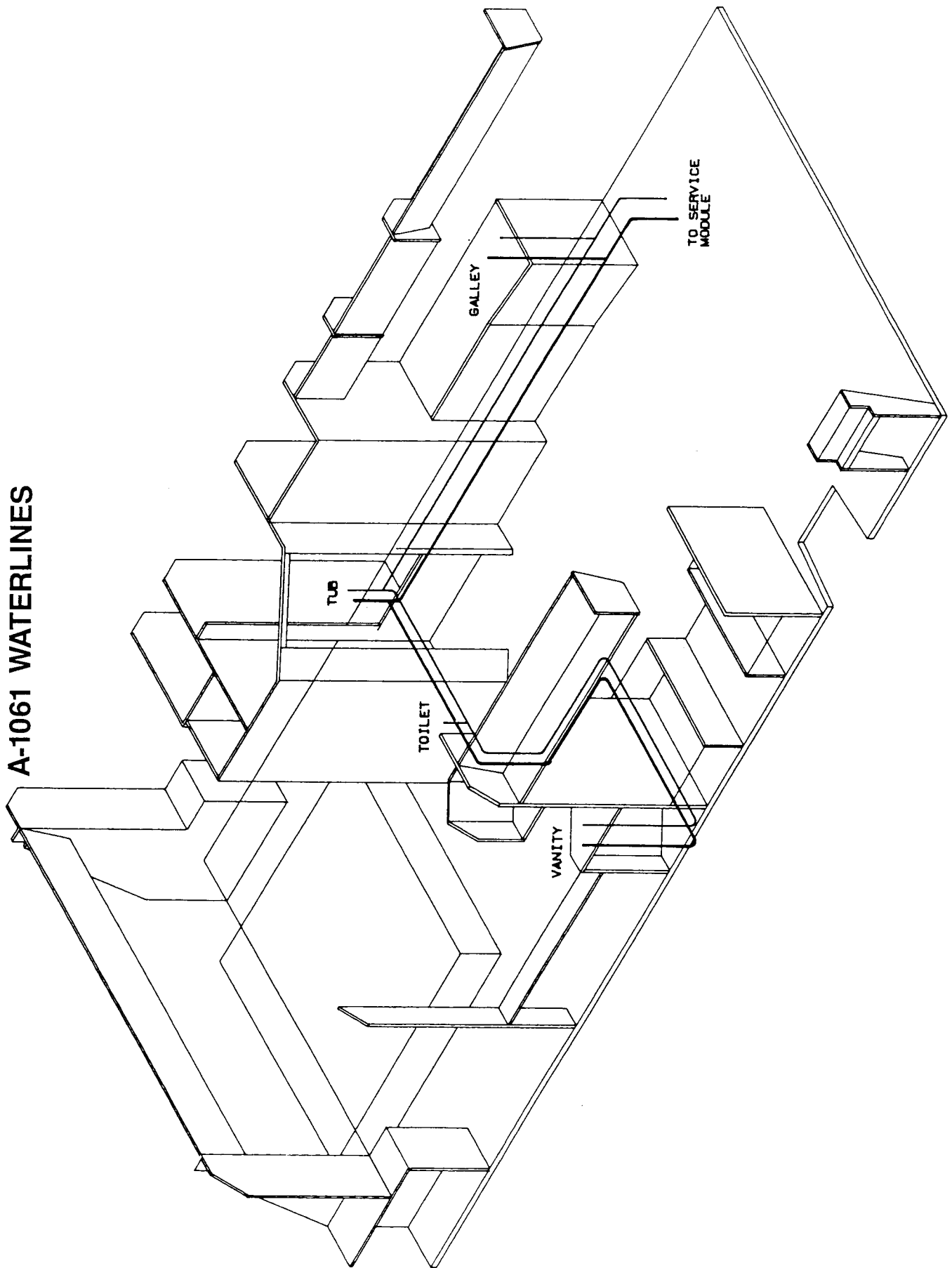
A-991  
A-1061  
A-1201  
A-1202

**NOTE:** These diagrams are provided as a guide only.

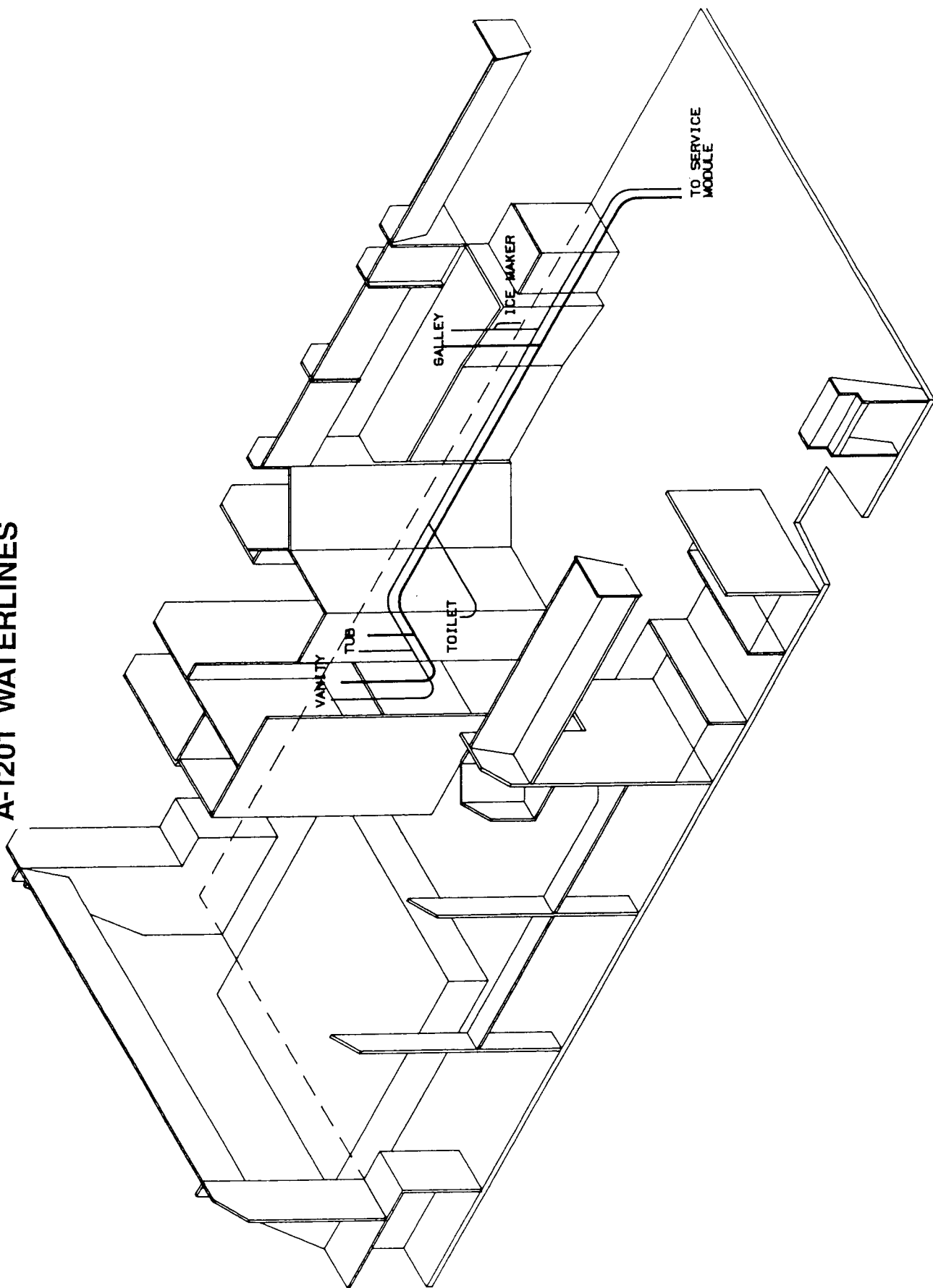
# A-991 WATERLINES



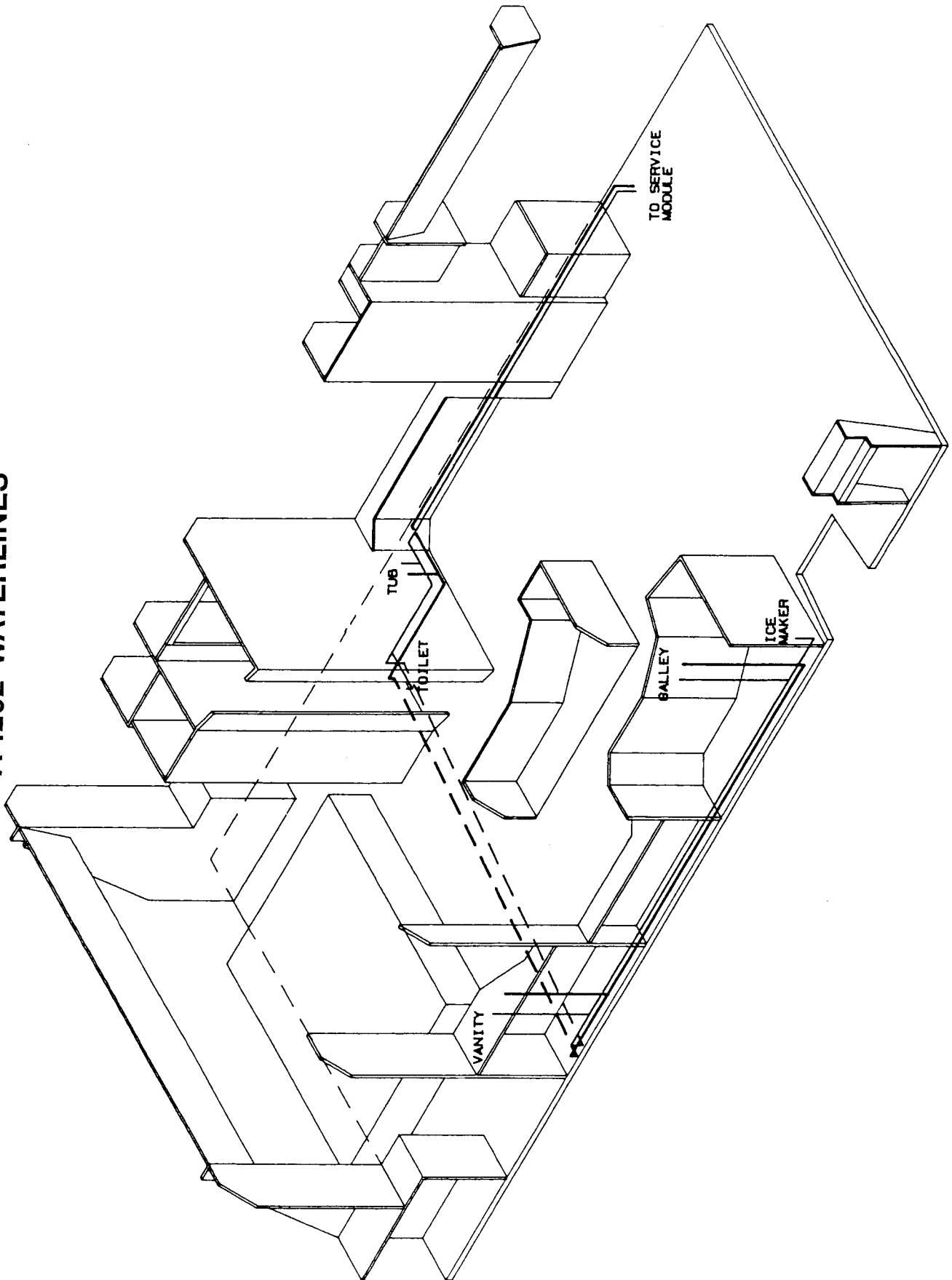
# A-1061 WATERLINES



# A-1201 WATERLINES

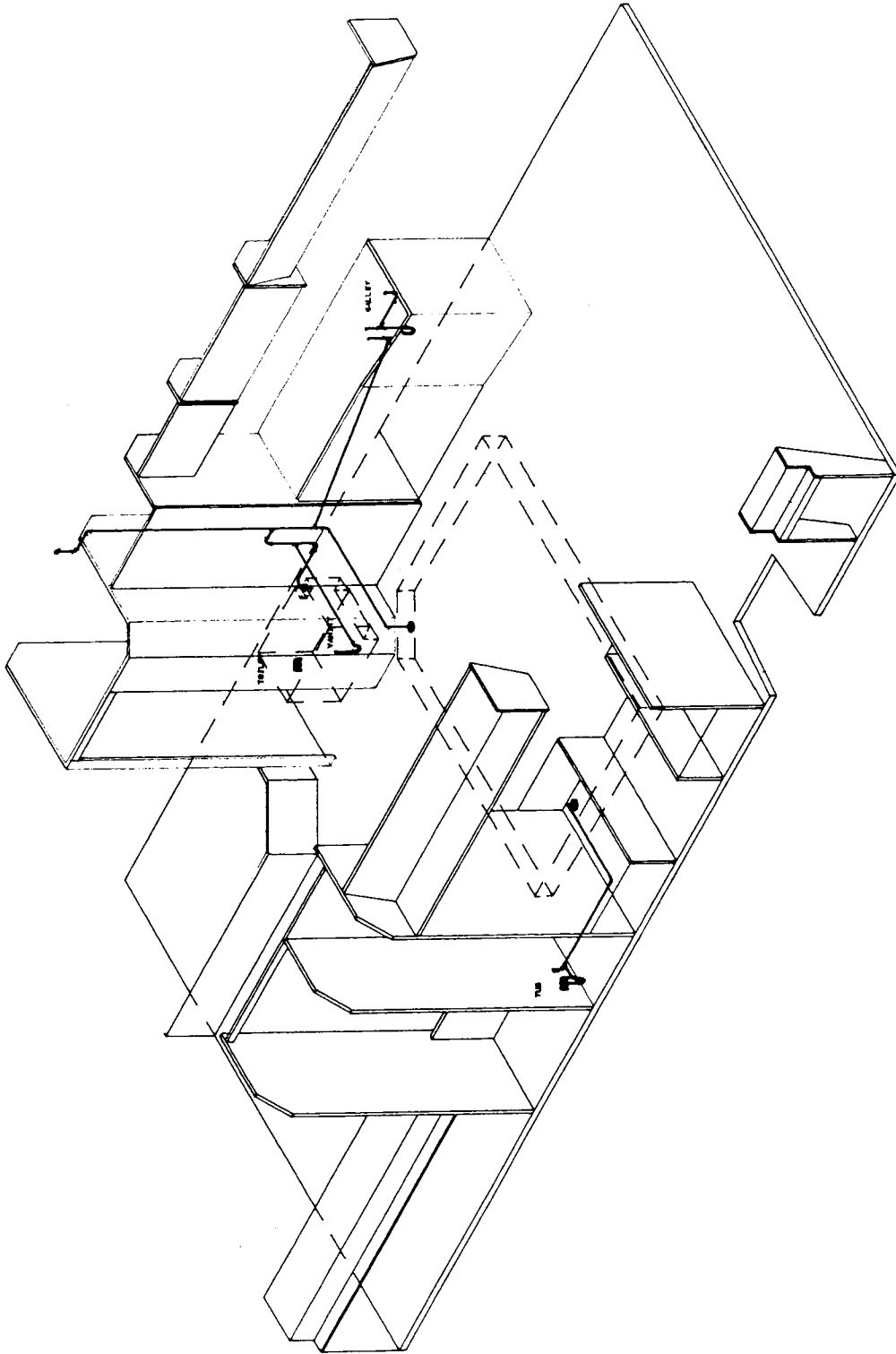


# A-1202 WATERLINES

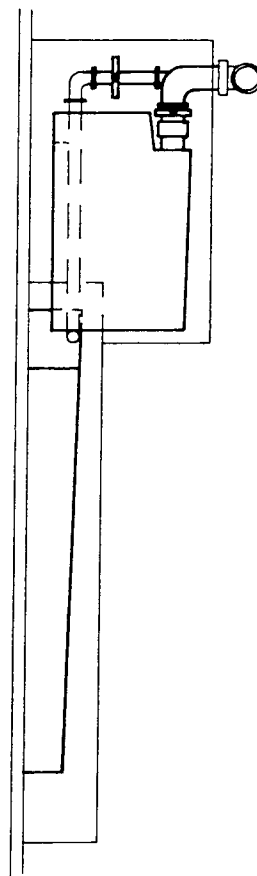
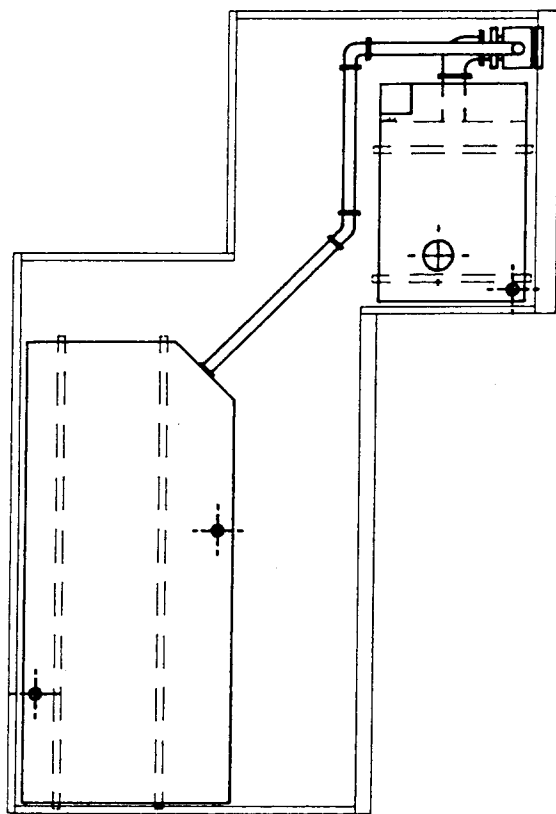




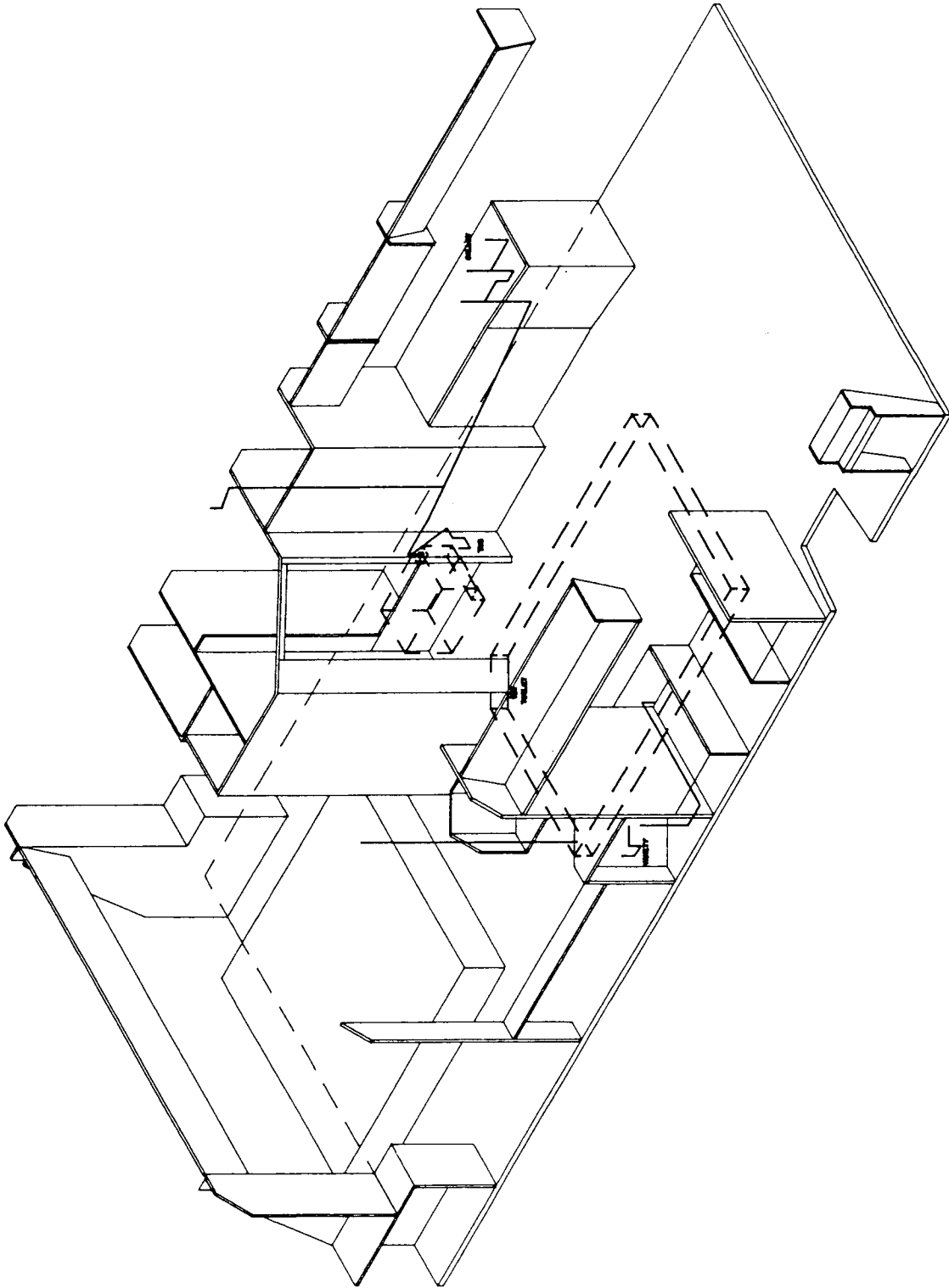
# A-991 DRAINAGE



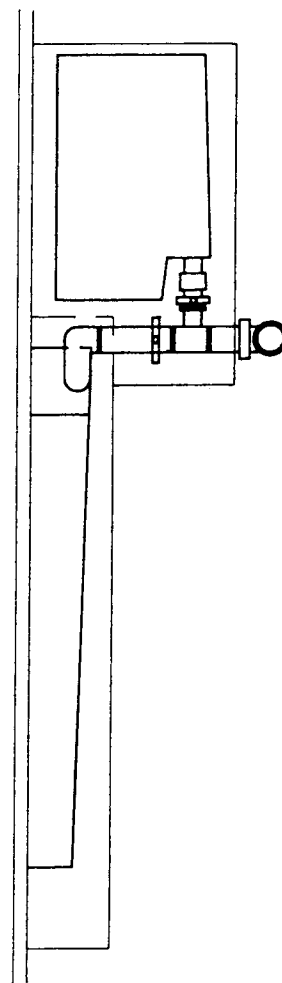
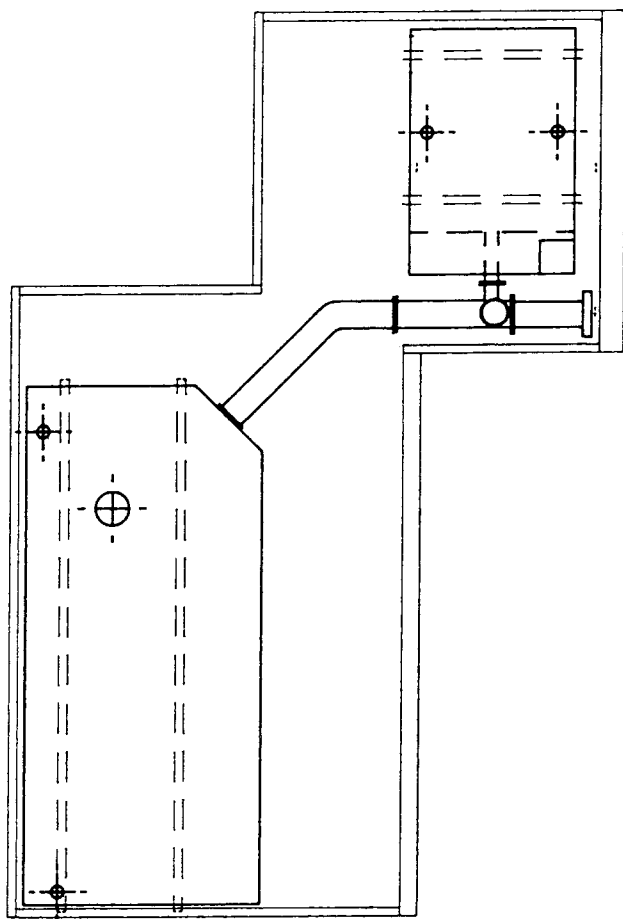
## A-991 HOLDING TANKS



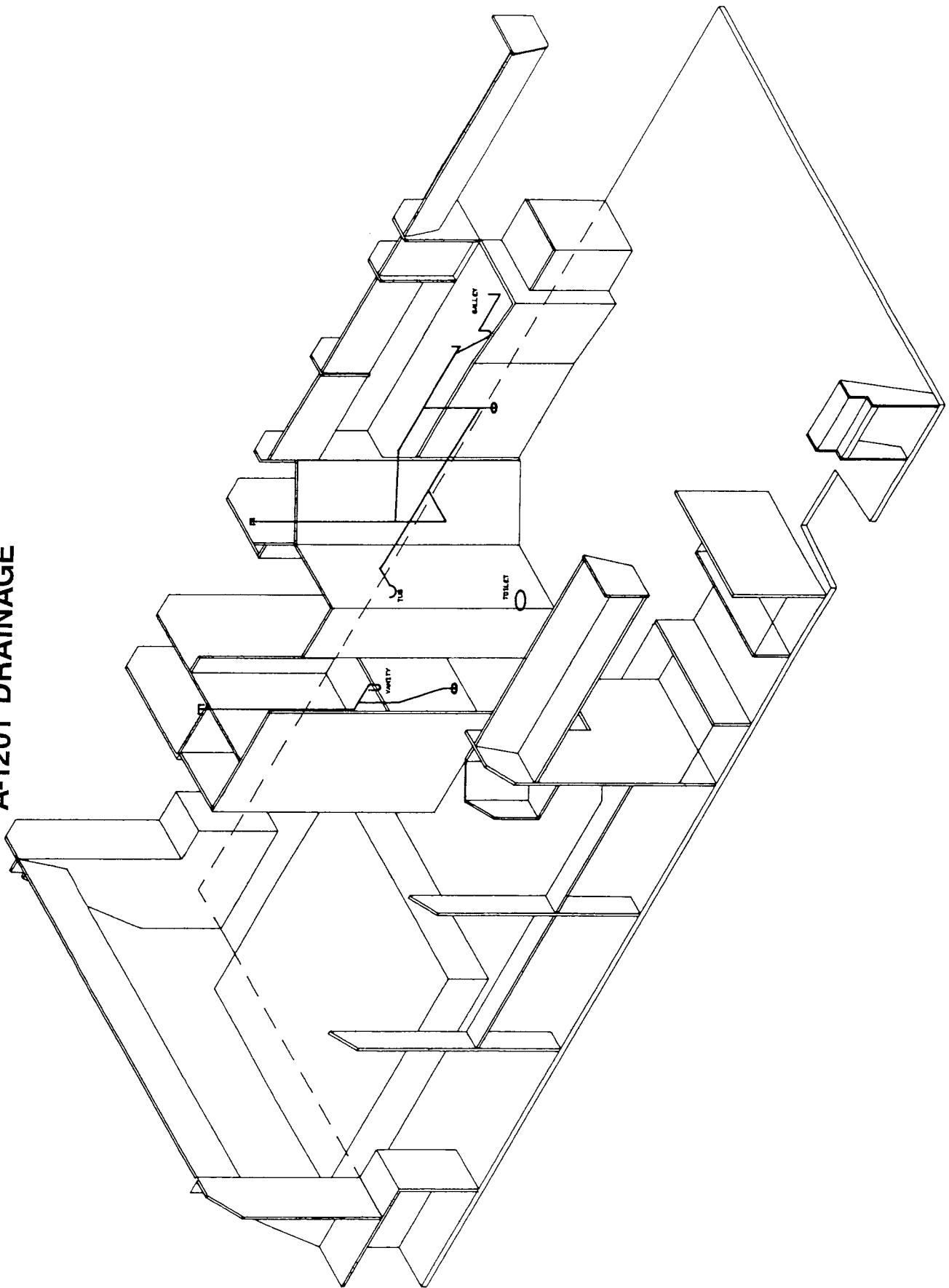
# A-1061 DRAINAGE



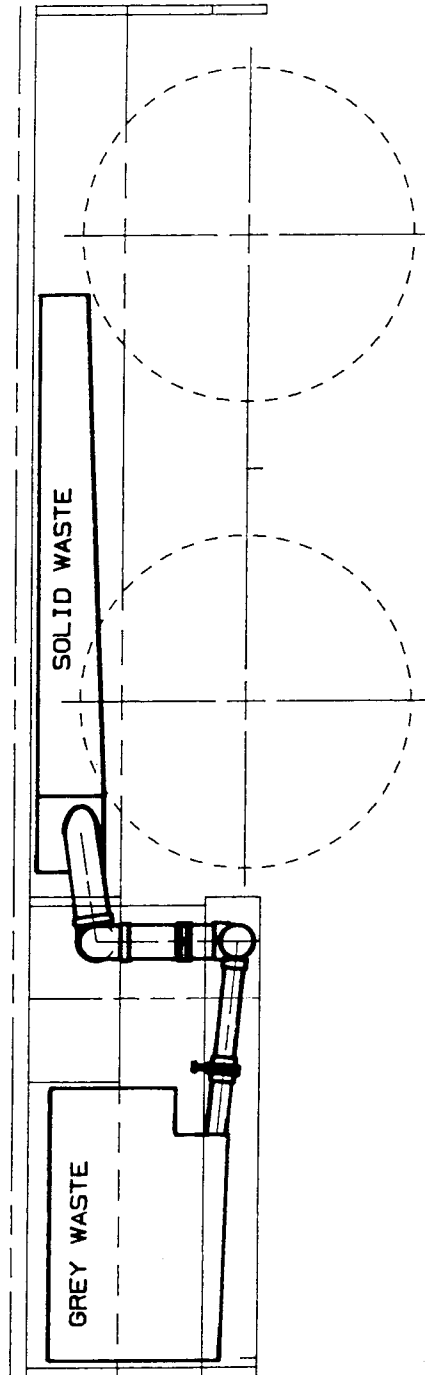
## A-1061 HOLDING TANKS



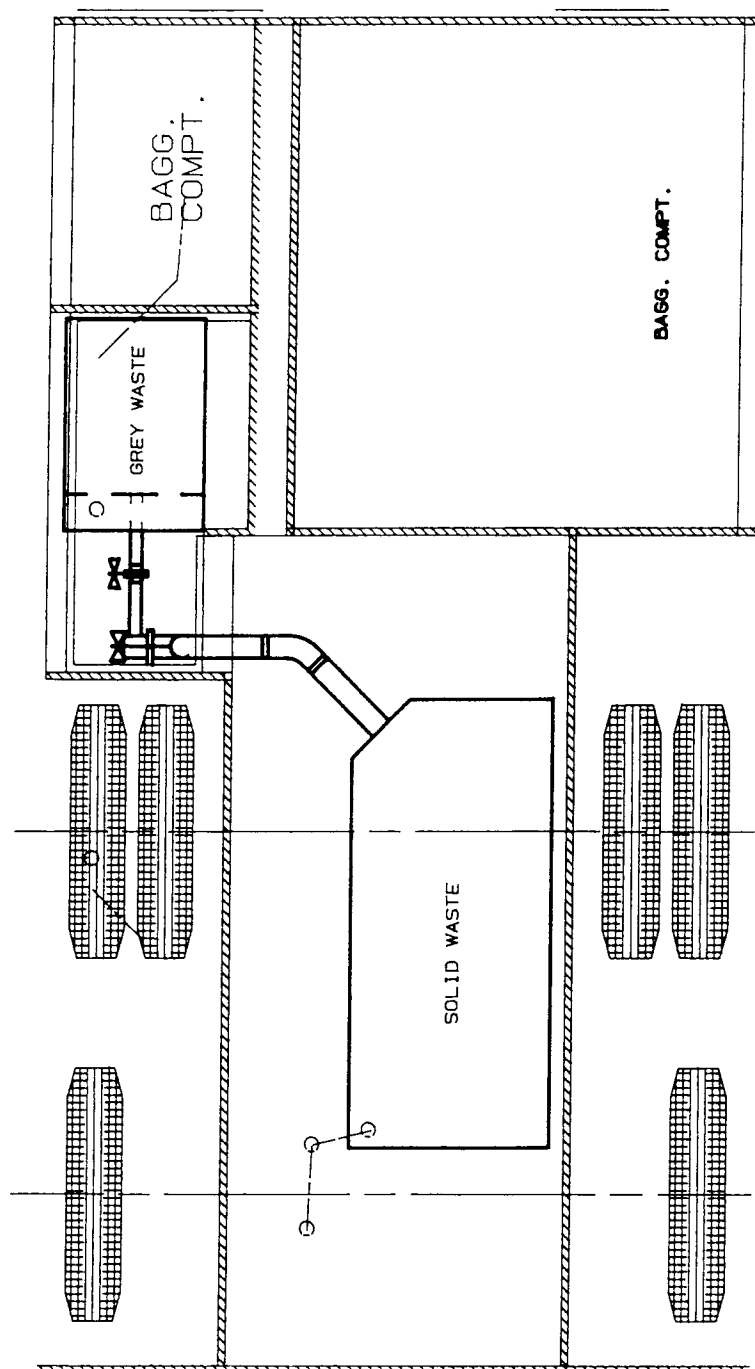
# A-1201 DRAINAGE



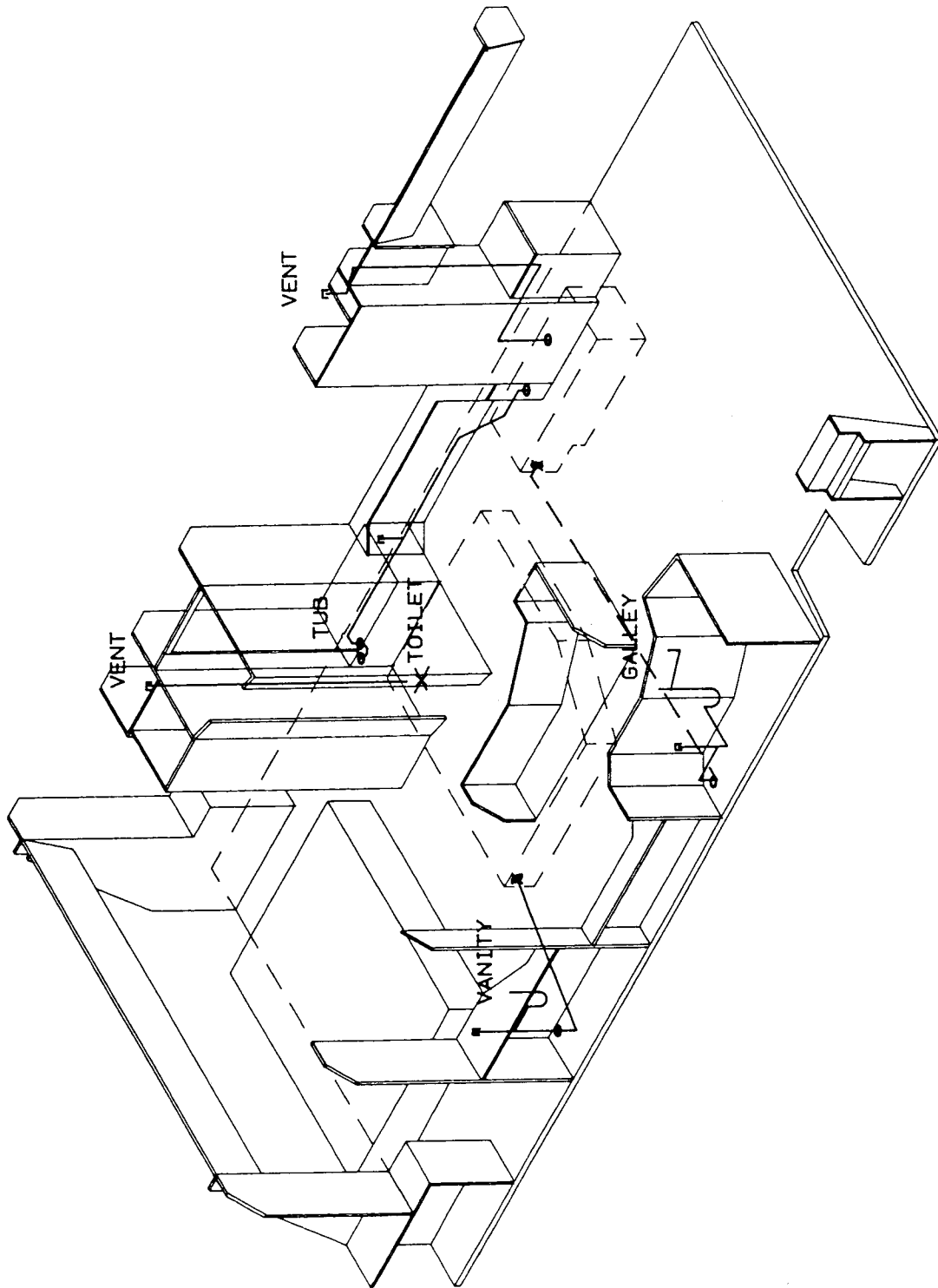
# A-1201 & A-1202 HOLDING TANKS



# A-1201 & A-1202 HOLDING TANKS



## A-1202 DRAINAGE





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## WATER SYSTEM REMOVE & REPLACE PROCEDURES

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### WATER HEATER

#### Remove & Replace Procedure

1. Turn off propane supply at LPG tank.
2. Turn off water pump and release line pressure.
3. Drain water heater.
4. Remove the six screws from the panel underneath the water heater and slide the insulated panel toward the center line of the coach to gain access to the water heater from the bottom.
5. Disconnect LPG copper flare nut fitting.
6. Disconnect the water lines at the water heater.
7. Disconnect the 12 volt auto ignition wires at the water heater junction box.
8. Slide the copper motor air heat exchanger out of the water heater.
9. Remove the 12 screws in the front mounting panel and slide the water heater out through the frame opening.
10. To replace, repeat the above steps in reverse order.

### FRESH WATER TANK — MAIN

#### Remove & Replace Procedure

1. Drain both fresh water tanks.
2. Remove the fiberglass step.
3. Remove the panel behind the top tank inside the baggage compartment.
4. Disconnect the tank level indicator wire connections at their location behind the step.
5. Disconnect the vent line, fill line and drain line to bottom tank behind the fiberglass step.
6. Slide the tank rearward through the opening into the baggage compartment.
7. To replace, reverse the above procedure and recalibrate the tank monitor levels.

### FRESH WATER TANK — RESERVE

#### Remove & Replace Procedure

1. Remove the fiberglass step.
2. Disconnect filler and vent lines, as well as electrical connections.
3. Slide floor from under the tank towards center of motorhome and drop water tank. (Tank is 12½" high)
4. To replace, repeat the above steps in reverse and recalibrate the tank monitor levels.

### BLACK WATER TANK

#### Remove & Replace Procedure

1. Remove front and back access panels to tank inside baggage compartments.
2. Remove 2" x 2" cleat from forward end of tank.
3. Cut main dump pipe approximately 4" from adapter which is screwed into tank.
4. Remove toilet, and flange into tank.
5. Cut 1½" drain from sink and vent line at an accessible place so it can accept a coupler later on.
6. Twist out remaining pipe and nipple from black water tank.
7. Disconnect the electrical connections from the tank which indicates tank level.
8. Slide the tank forward and out the large baggage compartment.
9. When installing the new tank, be certain all fittings are water tight by flushing the tank and lines.
10. Recalibrate the tank monitor levels.

### GREY WATER TANK

#### Remove & Replace Procedure

1. Remove left muffler and tail pipe.
2. Loosen the clamp around the sink drain at the tank.
3. Cut the drain pipe above the clamp high enough to install a coupler for reassembly.
4. Separate the two halves of the grey and black water termination valve by removing the four screws and nuts on each valve.
5. Disconnect the tank level wires.
6. Remove the floor from underneath the grey water tank and drop the tank down.
7. The chassis will have to be raised to remove the tank from the chassis.
8. To replace, repeat the above steps in reverse and recalibrate the tank monitor levels.

## LP GAS SYSTEM

### BASIC FACTS ABOUT LP GAS

	PROPANE	BUTANE
Pounds per gallon	4.24	4.81
Dew point in degrees F	-44°	32°
Vapor pressure at 0°F	28	0
Vapor pressure at 70°F	120	16
Vapor pressure at 100°F	190	37
Vapor pressure at 110°F	220	46

### AVERAGE LP GAS CAPACITIES (PROPANE)

Note: Allow 20% for vapor space.

	LBS. OF GAS	BTU's
1 - 5 gallon DOT tank	20	431,820
2 - 5 gallon DOT tanks	40	863,640
1 - 7 gallon DOT tanks	28	604,548
1 - 10 gallon DOT tank	40	863,640

11" OF WATER COLUMN

6¼ OZS. PER SQ. IN. PRESSURE

To find out how long your LP gas supply will last, simply total the BTU demand of all your gas appliances and the BTU capacity of your container at 80% full. Divide container BTU capacity by total appliance demand.

### BTU AVAILABLE AT:

(65 LB. UNDER MTD. LP GAS TANK)

% FULL	+20°	0°	-5°	-10°	-15°
60%	95,600	47,800	36,000	23,900	12,100
50%	86,000	43,000	32,350	21,500	11,750
40%	77,000	38,500	29,250	19,625	9,625
30%	68,000	34,000	25,500	17,000	8,500
20%	58,000	29,000	21,750	14,500	7,250
10%	43,200	21,600	16,200	10,800	5,400

(20 LB. BOTTLE)

% FULL	+20°	0°	-5°	-10°	-15°
60%	36,000	18,000	12,750	8,500	4,250
50%	32,400	18,200	12,150	8,100	4,050
40%	28,800	14,400	11,400	7,600	3,800
30%	25,200	12,600	10,450	7,300	3,150
20%	21,600	10,800	8,100	5,400	2,700
10%	16,200	8,100	6,075	4,050	2,025

(30 lb. bottle, multiply by 1.40)

LP (Liquified Petroleum) gas is a colorless gas compressed into liquid form for easy transportation and storage. It is the energy source for your range, oven,

furnace, water heater, and an alternate source for your refrigerator.

### PROPER PURGING OF CONTAINERS

If the natural volume of atmosphere in the vessel is not removed before the first fill, these problems will result:

— Installations made in Spring and Summer will experience excessive and false container pressures. This will cause the safety relief valve to open, blowing off excessive pressure.

— The air mixture in the vapor space will be carried to the appliances. This may result in as many as five or more service calls from pilot light extinguishment.

— If a vapor return equalizing hose is not used, the contained air will be compressed above the liquid level, resulting in slow filling.

— If a vapor equalizing hose is used, the air, and any moisture it contains, will be transferred from the storage tank to the transport.

Additionally, if atmospheric air is properly purged from the storage tank:

- Transfer will be faster
- The pump will not stall
- Less energy will be required to fill the container.

### PROPER NEUTRALIZING OF MOISTURE

Even if a careful inspection (using a pen flashlight) reveals no visible moisture, the container must still be neutralized, since dew may have formed on the walls. Additionally, the contained air may have relative humidity up to 100%.

A rule of thumb for neutralizing moisture in an ASME container calls for the introduction of at least one pint of genuine absolute anhydrous methanol (99.85% pure) for each 100 gallons of water capacity of the container. On this basis, the minimum volumes for a typical container would be as shown below:

Container Type	Minimum Volume Methanol Required
100 lb. ICC cylinder	1/8 pt. (2 fl. ozs.)

**\*IMPORTANT:** Avoid substitutions; they will NOT work. The secret of effectiveness of methanol over all other alcohols is its high affinity for water plus a boiling point lower than all other alcohols, and most importantly: a boiling point lower than water.

## FILLING YOUR LP GAS CONTAINER

The LPG tank is located at the back of the coach behind the access door which is between the tail lamps.

Simply open the access door, and fill the tank via the fill-in valve as indicated on the tank.

**Caution! Overfilling is hazardous! Do not overfill your LP gas container. Stop filling when liquid appears at the fixed liquid gauge. Most LP gas containers are equipped with a fixed liquid level gauge (often called a 10% valve) which contacts the liquid level at 80% of container capacity allowing 20% for expansion. LP gas containers not equipped with a fixed liquid level gauge can only be filled by weight. Check after each filling by opening small outage valve and bleed gas in well-ventilated area until white liquid stops. Overfilling may cause damage to regulator and cause malfunction of LPG appliances.**

Shut off all pilot lights and the control valve on the LPG tank when filling the tank and during travel. Always refill empty LP gas tank as soon as possible.

Check all tank and line connections periodically to be sure they are tight. When testing for leaks, use soapy water (never a match). LPG has a distinct garlic odor.

If gasoline or LPG fumes are noticed at any time, the

cause should be determined and corrected without delay.

In winter, always have methyl alcohol added to your tank for winter operation to prevent freezeup.

The regulator is preset. Do not attempt to adjust it. This should only be done by an authorized service outlet. The regulator should not be exposed to the elements. If regulator fails: LP gas tank may be overfilled, or there may be impurities in the propane. Regulator failure could cause LPG components to malfunction.

Before opening the control valve at the LPG tank, check that controls for all gas appliances are in the off position. If this is not done, LPG could accumulate inside the vehicle creating a fire or explosion hazard.

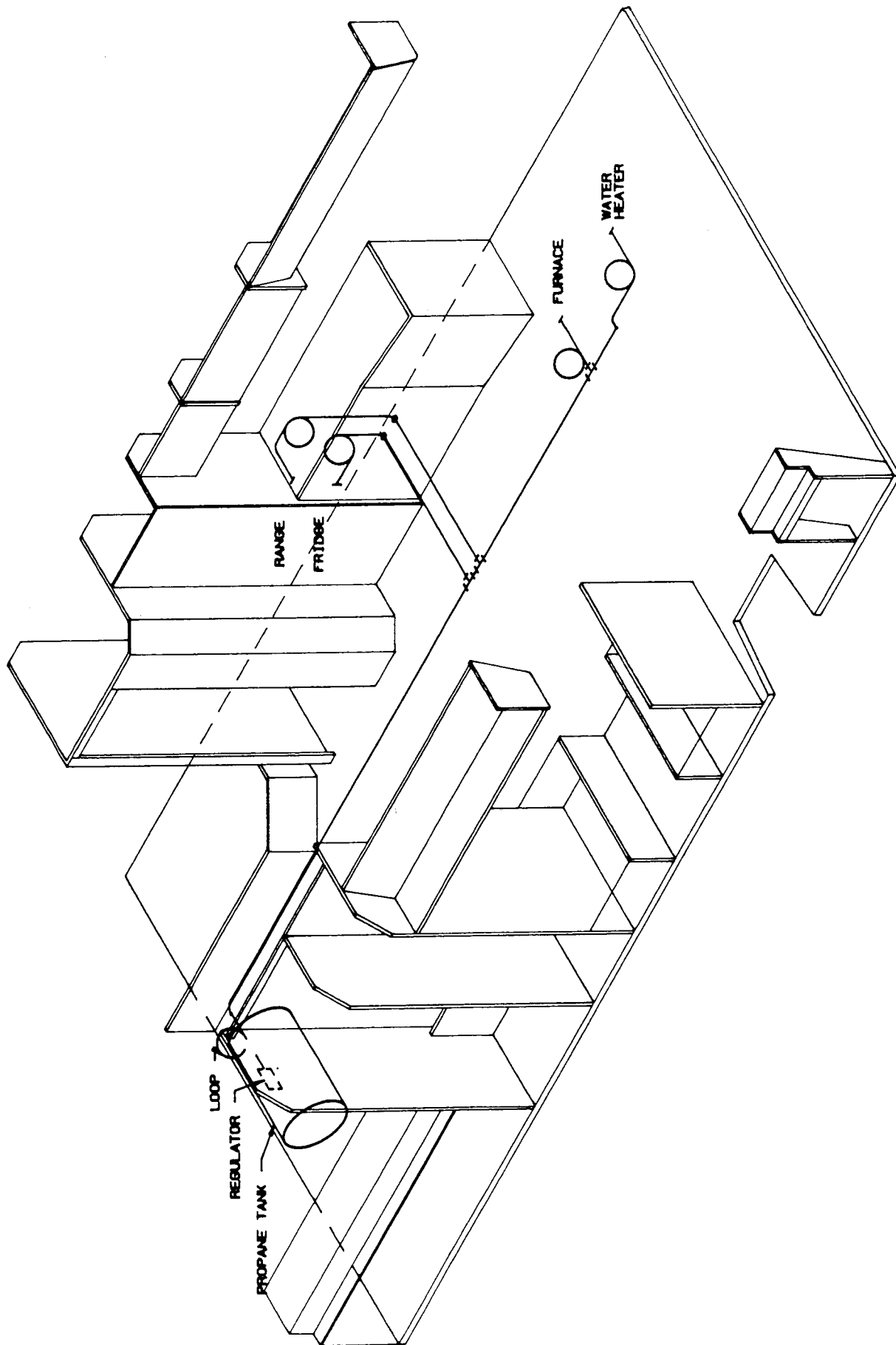
LPG is also potentially lethal if inhaled.

## PROPANE DETECTOR

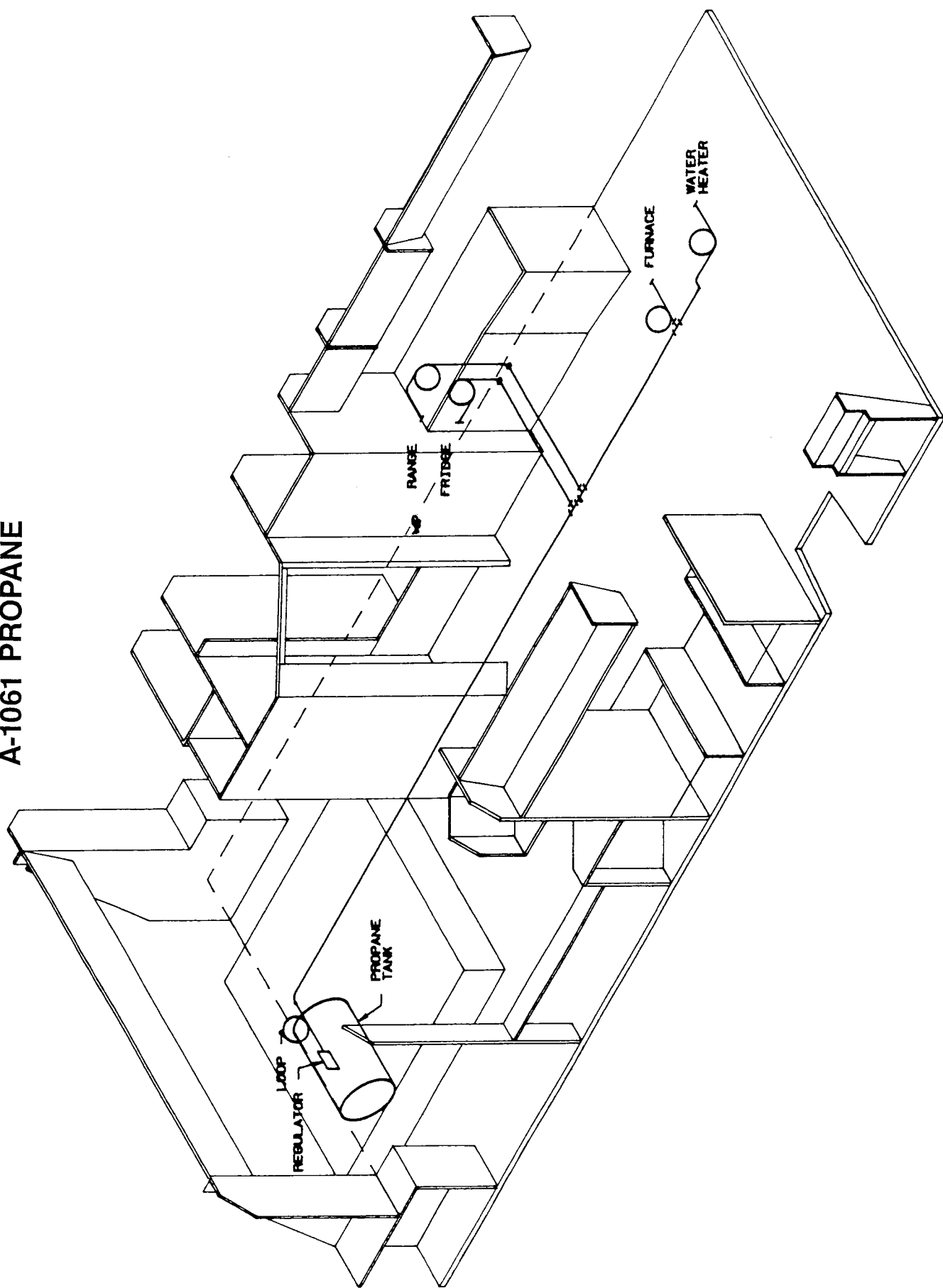
A standard propane detector has been installed in your unit. (Note: It is not equipped with an automatic propane shut-off valve.)

Please refer to manufacturer's manual for further instructions.

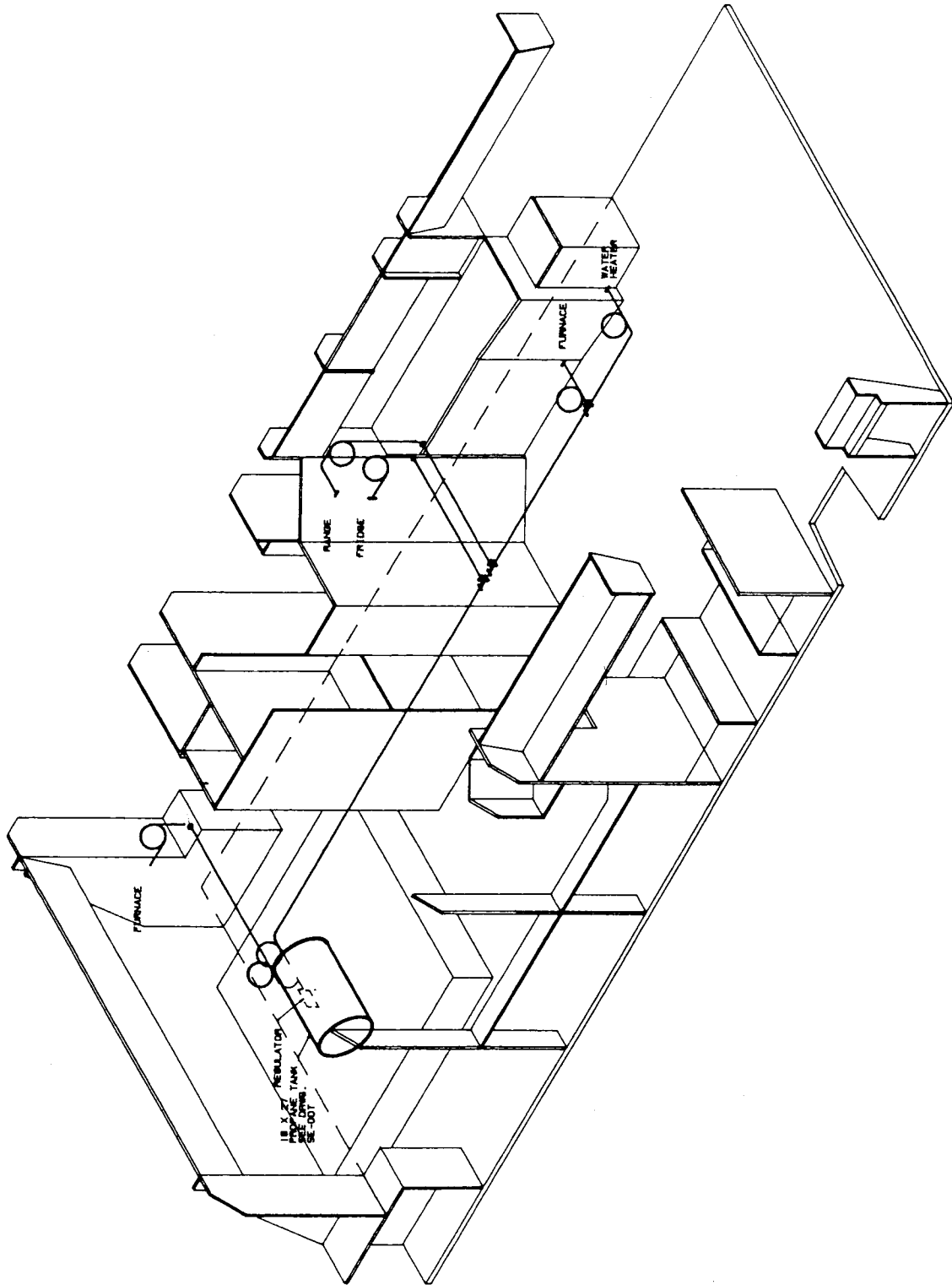
# A-991 PROPANE



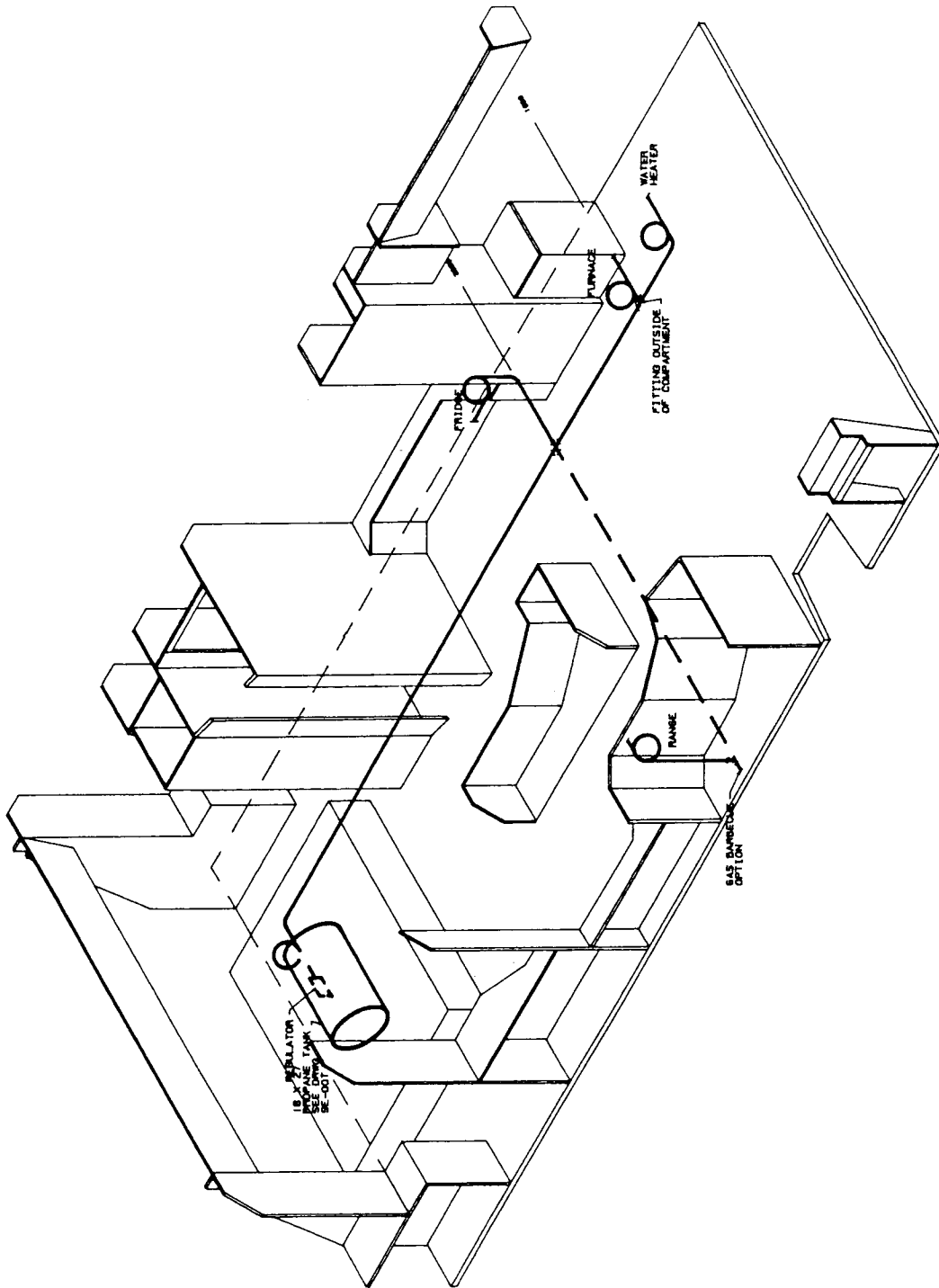
# A-1061 PROPANE



# A-1201 PROPANE



# A-1202 PROPANE



# **APPLIANCES**



## FURNACE — LP Gas

The furnace should not be operated when the vehicle is under way, and the LP gas should be turned off at the LP tank.

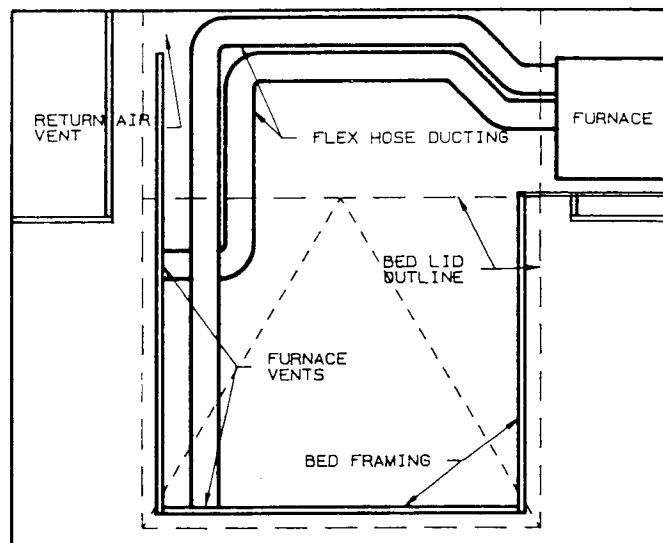
The furnace has no pilot light but is ignited by a direct spark ignition system. No manual lighting is required.

Lighting Instructions — Refer to furnace manufacturer's manual.

### FURNACE

#### Remove & Replace Procedure

1. Turn off propane supply at the LPG Tank.
2. Remove the furnace door complete with bezel via the 12 screws on the face of the furnace.
3. Remove the copper flare nut fitting at the furnace.
4. Disconnect the 12 volt and thermostat wires at the butt connectors.
5. Remove the eight screws which hold the furnace inside the furnace casing.
6. Slide the furnace out of the casing. (For diagnosis and corrective maintenance, see manufacturer's operating and service manual.
7. To replace, repeat the above steps in reverse.



NOTE: If your motorhome is equipped with a two furnace heating system, be sure not to block the vents which are located under the bed.

## REFRIGERATOR — 12V/120V/LP Gas

When your RV is stationary, it should be levelled. A bubble level should be placed on the freezer shelf to check refrigerator for levelness.

When the refrigerator is switched to electric operation, the ammonia/water mixture is heated by a heating element instead of the burner flame.

All refrigerators are designed for 3-way operation using LP gas, 120 volt AC or 12 volt DC power.

For LP gas operation, turn the selector to "gas" and follow the instructions on the fridge for lighting. Turn the thermostat to the highest temperature that will still provide adequate refrigeration. For 120-Volt AC operation, make sure the power cord is connected, and switch the refrigerator selector to electric. For 12-Volt DC operation, switch the selector to 12V setting. Power is now furnished by the RV battery. However, 12-Volt power should not be used when the unit is parked in order to prevent battery drainage.

### AES SYSTEM

If your motorhome is equipped with an automatic energy selector (AES) system, the control system will automatically select the most suitable available energy source. Highest priority will be 120V, second priority 12V, and lowest priority LP gas. No manual operation is necessary for change of energy. The refrigerator will light the LP gas automatically. If your battery voltage drops, the control system will switch over to continuous gas operation bypassing the thermostat. When the voltage increases, 12V electrical operational will start up again.

When refrigerator is not in use, it should be emptied and cleaned. Set thermostat to it's lowest setting and switch to "off". Leave door slightly ajar to permit air circulation.

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## RANGE/OVEN — LP Gas

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Your range and oven operate on LP gas.

Lighting Instructions — Refer to manufacturer's operating instructions.

**CAUTION:**

1. Always wait 5 minutes before relighting range/oven to allow gas to dissipate.
2. The range/oven is not designed for and should never be used as a space heater.
3. Do not operate range/oven while traveling or while refueling your vehicle at a gasoline service station. The pilot lights or burners may ignite gasoline fumes.
4. Do not leave the top burners on without a utensil for any length of time. Overheating of the grates may cause the porcelain enamel to crack and chip.
5. Anytime the range/oven is in operation, the power range hood fan should be operating to help ensure proper ventilation.

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## RANGE HOOD — 12V

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Always turn the range hood fan on while cooking. This will aid in removing cooking odors, steam or other fumes. The power range hood filter should be cleaned

regularly. Remove filter and wash in hot soapy water. Rinse thoroughly and let dry. Replace filter.

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## MICROWAVE OVEN — 120V

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**CAUTION:**

1. Do not attempt to operate microwave oven with the door open since this can result in harmful exposure to microwave energy.
2. Do not defeat or tamper with the safety interlocks.
3. Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
4. Do not operate the oven if it is damaged. Do not operate if the oven door does not close properly (bent) or there is damage to the hinges and latches (broken or loosened) or the door seals and sealing surfaces.
5. The oven door should not be adjusted or repaired by anyone except properly qualified service personnel.

Please read the manufacturer's instruction manual before operating your microwave oven.

### MICROWAVE OVEN — OVERHEAD CABINET

#### Remove & Replace Procedure

1. Remove the eight screws holding trim kit to the cabinet face.
2. Remove range hood via the four screws which anchor the range hood to the underside of the overhead cabinet.
3. Remove the four screws holding the microwave from underneath the overhead cabinet.
4. Pull oven out and disconnect power supply.
5. To replace, repeat above steps in reverse.

### MICRO-CONVECTION OVEN — LOWER CABINET

#### Remove & Replace Procedure

1. Remove the eight screws holding trim kit to the cabinet face.
2. Slide out the oven and disconnect power supply.
3. To replace, repeat above steps in reverse.

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## FOOD CENTRE — 120V

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### *Operating Instructions*

1. Place turntable into power unit.
2. Press locking lever clockwise to lock turntable.
3. Place mixing bowl on turntable.
4. Push beater blade into beater head until it locks in position.
5. Insert beater into mixing bowl in any of 6 positions.

**WARNING:** The bowl is designed to turn at all times. Do not grab bowl or attempt to stop it. This will cause damage.

See manufacturer's manual for further operating, maintenance and servicing instructions.

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## CENTRAL VACUUM — 120V

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The vacuum system operates when the motorhome is connected to a 120 volt power source and the inlet valve lid is lifted.

Avoid picking up water or spilled liquids with vacuum. The vacuum is designed for dry pick up only. Electric

shock could occur if used on wet surfaces.

To clean, lift canister cover assembly and carefully remove the full filter bag from the canister. Replace with a clean filter bag. See manufacturer's manual for further operating, maintenance and servicing instructions.

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## ROOF AIR CONDITIONER — 120V

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Refer to manufacturer's manual for operating instructions and maintenance information.

### **MAINTENANCE**

We recommend that the filters be cleaned or changed at least every two weeks when the air conditioner is in operation. Do not operate your air conditioner without the filter installed.

### **CLEANING AND/OR CHANGING FILTERS**

1. Remove the selector switch and thermostat knobs from ceiling assembly.
2. Remove the two screws that secure the ceiling assembly shroud to the ceiling assembly.
3. Lower the shroud and gently slide it off the control knob shafts.
4. Take filters out and clean them with warm soapy water or replace them.
5. Replace filters and reinstall ceiling shroud.

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## REAR VIEW CAMERA

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### **Remove & Replace Procedure**

1. Remove access panel inside rear overhead cabinet.
2. Unplug electrical cable.
3. Remove cable connector from outside of rear mask.
4. Remove bolts from mounting brackets to free camera.
5. To replace, repeat above steps in reverse.

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## REAR VIEW CAMERA MONITOR

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### Remove & Replace Procedure

1. Remove the eight screws holding the ABS monitor cover to the overhead cockpit console.
2. Unplug the monitor.
3. Remove monitor from the mounting bracket via the four plastic finger bolts.
4. To replace, repeat the above steps in reverse.

**CAUTION:** Do not leave monitor in 'ON' position when in 'PARK' as the image may burn on to the lens.

Refer to manufacturer's manual for complete operating instructions.

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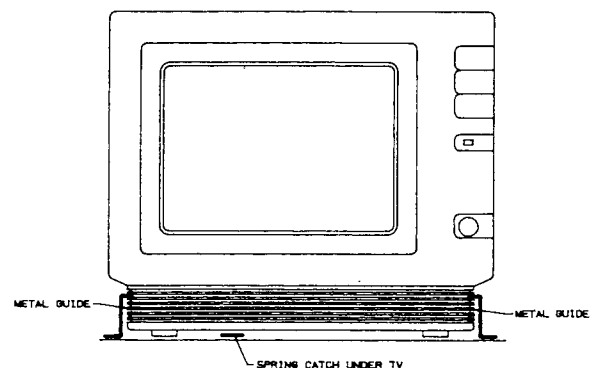
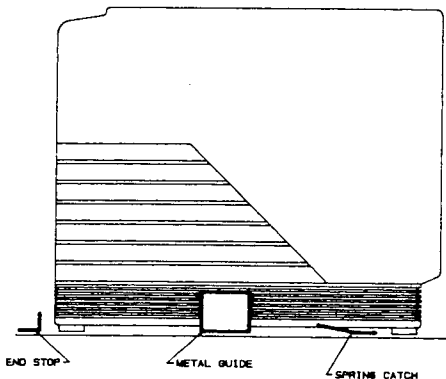
## OVERHEAD CONSOLE T.V.

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### Remove & Replace Procedure

To remove T.V., slide a 3" wide piece of metal (not included) under the T.V. to deflect the spring catch down, then pull T.V. out on guides.

To mount T.V., simply slide in by matching the guides mounted inside the overhead console with the grooves on the base of the T.V. The T.V. will lock into place when the spring catch takes hold.



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## OVERHEAD DEFROST FAN

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### Remove & Replace Procedure

1. If rear view camera monitor option is installed, remove this first.  
(See p. 58 for R&R Procedure)
2. If the above option is not installed, remove the ABS cover from the underside of the overhead console via the eight screws on the cover.
3. Remove the TV from the overhead console. (See p. for R&R Procedure)

4. Remove the two screws from underneath the overhead console which anchor the overhead defrost fan mounting bracket and two screws from inside the console.
5. Remove the screws holding hoses to the defrost fan housing. Be careful not to pull hoses off the air vent louvers.
6. Disconnect the wires at the butt connectors near the fan motor.
7. To replace, repeat the above steps in reverse.

## **FURNITURE & ACCESSORIES**

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## SEATS

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To move the captain's chairs forward or backward, use the lever mounted underneath the chair on the left. To recline, use the lever on the right hand arm rest. The lever on the left hand arm rest controls the swivel of the chair.

Controls for the electronic captain's chairs (if installed) are located on the left side of the driver's seat and on the right side of the passenger's seat.

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## SOFA

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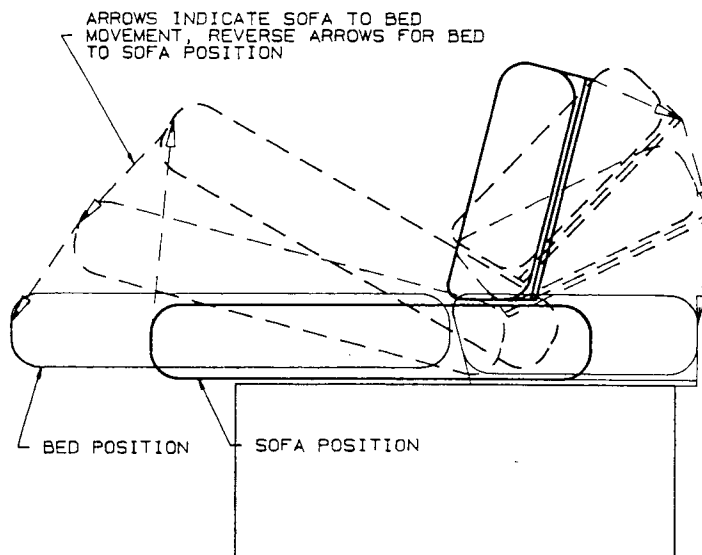
The front sofa converts into a bed.

To convert to bed:

1. Move the driver seat forward as far as possible.
2. Adjust the cocktail chairs opposite the sofa to make room for the bed.
3. Grasp the front edge of the sofa seat and pull up and away from the wall until flat.

To revert to sofa:

Pull the front of the sofa seat up while pushing in toward the wall until the sofa is fully seated against the wall.



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## DINETTE

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The dinette also can be converted into a bed.

1. Remove cushions.
2. Lift table and remove table legs.
3. Place table between seats so that the edge of the table rests on dinette seat faces.

4. Arrange cushions to form a bed, placing larger cushions in the centre.

To convert back to dinette, reverse above instructions.

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## ELECTRIC STEP

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*Normal Operation* — Step switch in *ON* position (located on switch panel beside door entrance). Open the door. The step should descend and lock in extended position with the understep light on. Close the door. The step should retract and lock in up position.

*Step Locked in DOWN Position* — Open the door and allow step to descend. Flip switch to *OFF*. The step should remain in down position with the understep light off when the door is closed.

*Step Locked in UP Position* — Flip switch off while door is closed and step is up.

*Ignition Safety System* — When the ignition switch is turned on, step will activate with door movement, regardless of door switch position.

Periodic maintenance including lubrication and cleaning are necessary to keep the step functioning properly.

See manufacturer's manual for operating instructions.

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## SCREEN WINDOWS

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The screen windows have been designed so that the screen may be removed. To remove the screen, unlock and open the window. Unlock the screen and slide it open a few inches. Push the screen up and lift out the bottom. To replace the screen, reverse the above procedure.

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## OPTIONAL STORM WINDOWS

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To remove storm windows, unlatch the slide catches, and lift the window out of position.

When reinstalling the storm windows, make sure that the foam tape weather seal is in place.

### WINDSHIELD REMOVE & REPLACE PROCEDURE

1. Remove inside windshield trim.
2. Remove the windshield wipers.
3. With one person inside and one outside, cut the sealant all around the window with a piano wire using a sawing motion. Too much prying on the windshield will crack the fiberglass.
4. Clean off the old sealant with scrapers.
5. Place the new windshield upside down on a foam cushion.
6. Clean bonding area and edges of glass with a leading automotive glass cleaner.
7. Mask off the windshield 30 mm from each edge.
8. Apply primer to the area which has been masked off, including the edge.
9. Apply  $\frac{1}{2}$ " x  $\frac{1}{8}$ " black butyl tape around the perimeter of the glass, 7 mm from the edge.

10. Using a leading automotive glass cleaner, clean fiberglass mask where windshield will be installed.
11. Install the new windshield inside the clips riveted to the fiberglass mask so the top tinted edge is even with the other windshield glass.
12. Using 2" masking tape, mask both edges of the desired sealant area.
13. Force windshield caulking between the fiberglass and windshield to fill the 7 mm gap beneath the surface.
14. Fill the exposed gap between the fiberglass and windshield with the same caulking.
15. Smooth out the beads with scrapers or a straight edge leaving a small crown.
16. After removing the tape, a final touch-up is possible with your hands if a soapy water solution is applied first.
17. Allow the sealant to cure at least 48 hours with the temperature at 20°C, (longer time required if temperature is cooler).
18. Do not move the unit before the cure time is complete, as the adhesive will crack along the glass edge, forming leaks.

**SAFETY**



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## FIRE SAFETY

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### FIRE EXTINGUISHER

Remember:

- Fire extinguishers are designed to quickly put out fires in their initial stage, not after they are blazing out of control. If you cannot approach a fire within about 10 feet, it is probably too big for you to fight.
- Do not discharge to test your extinguisher. Once activated, even for a fraction of a second, the extinguisher will gradually lose pressure making it useless in a few hours.
- Check pressure indicator monthly or more often. The dry chemical powder in the extinguisher is discharged by air pressure. If it loses air pressure, it loses its ability to fight fires. Check pressure by pressing green pressure indicator stem. Be sure to record your inspection on the tag provided.

#### How to Operate

1. Keep safe at least 6 feet away from fire and near an exit. Powder stream will shoot over 10 foot distance. Stay low to avoid smoke and heated fumes.
2. Break seal. Grasp unit firmly. Hold upright.
3. Aim nozzle at base of fire (not at flames or smoke). To discharge powder, press white button.
4. Spray powder at base of entire burning area in quick, side to side sweeping motion to erase the flame. (If stream scatters the fire, move back.) After fire is out, keep careful watch for "flashback".
5. Discharge completely and replace after use.

### FIRE SAFETY TIPS

1. Establish good housekeeping practices. Do not allow combustible materials to accumulate. Be sure that flammable liquids are stored in approved containers in a well ventilated space.
2. Provide readily accessible fire extinguishers.
3. Avoid the use of flammable solvents or products containing these solvents with the RV unit.
4. If not already installed, install smoke detectors following the smoke detector manufacturer's installation instructions. These detectors provide early warning in the event of a fire.
5. Do not smoke in bed. Do not overload electrical wiring. Do not leave food cooking unattended. Do not permit children to play with the controls of LP Gas or electrical appliances. Do not use matches or other open flame to check for LP Gas leaks.

If a fire does start, get all members of your party outside. If it is a small fire, use the fire extinguisher. If the fire cannot be extinguished quickly, get out of the RV. Close the LP Gas service valves on tanks, if possible. Call the fire department and stay a safe distance from the vehicle. Do not re-enter the RV until officials declare it safe to do so.

Your motorhome has been undercoated with a Polyurethane Foam Spray, which acts as an effective dust and road noise insulator. Polyurethane foam, while virtually flame-proof, should not be exposed to any constant source of radiant heat or open flame.

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## EMERGENCY STARTING

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Do not push or tow your RV to start it.

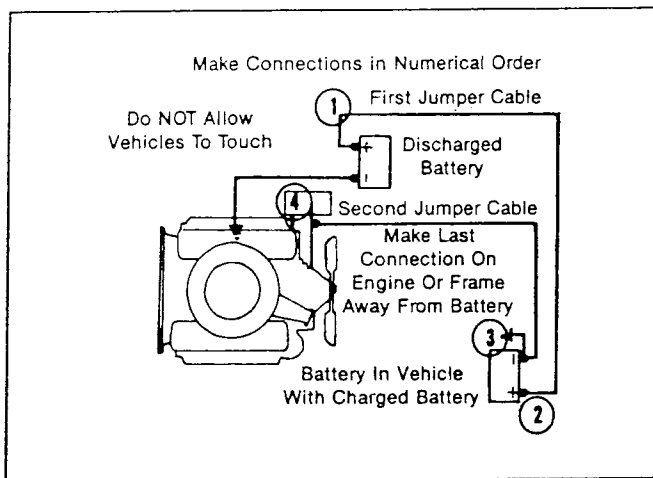
If the main battery is discharged, it can be boosted from the auxiliary battery by pressing the boost switch on the instrument panel.

If all batteries on your vehicle are discharged, it can be started by jumpstarting from another vehicle.

### JUMP STARTING INSTRUCTIONS

**CAUTION:** Batteries produce explosive gases, contain corrosive acid, and supply levels of electrical current high enough to cause burns. Therefore, to reduce the risk of personal injury when working near a battery:

- Always shield your eyes. Avoid leaning over the battery whenever possible.
- Do not expose the battery to open flame or sparks.
- Be sure any batteries that have filler caps are properly filled with fluid.
- Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately and thoroughly. Get medical help.
- Follow each step in the jump starting instructions.



1. Position the vehicle with the good (charged) battery so that the booster (jumper) cables will reach. But never let the vehicles touch. Also, be sure booster cables to be used do not have loose or missing insulation.
2. In both vehicles:
  - Turn off the ignition and all lights and accessories except the hazard flasher or any lights needed for the work area.
  - Apply the parking brake firmly. Shift the automatic transmission to "P" (Park), or "N" (Neutral) if your vehicle does not have a Park position. Manual transmissions should be shifted to the "N" (Neutral) position.

3. Make sure the cable clamps do not touch any other metal parts. Clamp one end of the first booster cable to the positive (+) terminal on one battery. Never connect (+) to (-).
4. Clamp one end of the second cable to the negative (-) terminal of the good (charged) battery. Make the final connection to a heavy metal bracket (such as mounting bracket for the Delcotron generator or air conditioner compressor) on the engine about 450 millimeters (18 inches) from the discharged battery. Make sure the cables are not on or near pulleys, fans, or other parts that will move when the engine is started.
5. Start the engine of the vehicle with the good (charged) battery. Run the engine at a moderate speed for several minutes. Then, start the engine of the vehicle that has the discharged battery.
6. Remove the booster cables by reversing the above installation sequence exactly. While removing each clamp, take care it does not touch any other metal while the other end remains attached.

## OVERHEATING

*Please refer to chassis manual for specific instructions.*

Your cooling system may overheat during severe operating conditions. This may occur when:

- climbing a long hill on a hot day.
- stopping after high speed driving.
- idling for long periods in traffic or
- towing a trailer.

If the hot light comes on or gauge indicates engine is hot:

- Turn your air conditioner off if it is on.
- Put the transmission in neutral if stopped in traffic.

If the light doesn't go off within a minute or two:

- Pull over to a safe place and move your shift control lever to "PARK" on Ford Chassis and "NEUTRAL" on GM Chassis. Apply parking brake.
- **DON'T TURN OFF THE ENGINE. INCREASE THE ENGINE IDLE SPEED** to about twice as fast. Bring idle back to normal after two or three minutes.
- Check the level of the coolant by looking at the "see through" coolant recovery tank. (It is not necessary to remove the radiator cap to check coolant level, and it can be dangerous if engine is still hot.)

**CAUTION:** To help avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure if the cap is taken off too soon.

The proper coolant level when engine is operating is between the "Full" and "Add" marks on the tank.

If coolant level is low:

- Check for fluid leaks at hose connections or from radiator or water pump. Check to see that drive belts are intact, and that the fan is turning.
- Add coolant at the first opportunity. Coolant should be added only to the recovery tank.
- If you are losing coolant because of leaks, or a fan belt is broken or loose and/or the red light persists, stop the engine until the cause of overheating is corrected.

After the red light is out, resume driving at a reduced speed. If the light does not come back on in about ten minutes, return to normal driving.

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## TOWING

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Proper equipment must be used to prevent damage to your motorhome during any towing. Your vehicle should always be towed from the front. It should be towed on all wheels if possible. When towing on all wheels, the vehicle should be towed at speeds less than 35 mph (60 km/h) for distances up to 50 miles (80 kilometres), provided the final drive, axle, transmission and steering system are normally operable. However, if the front of the vehicle must be raised before it can be towed, it is important that you follow this precautionary procedure:

When towing the motorhome, the driveshaft should be disconnected to prevent damage to the transmission.

If the front of the vehicle must be raised for towing, raising the front wheels four inches off the ground will leave about five inches ground clearance at rear (as-

suming the vehicle started at design ride height with proper loading). Use a cradle so that the weight is not bearing on the bumper.

Connect towing equipment to engine front crossmember. Do NOT attach to bumper or brackets. Remember also that power brakes and power steering will not work when engine is off.

If the vehicle is to be towed by a wrecker, use only equipment designed for this purpose. A safety chain system must be used.

IT IS NOT RECOMMENDED THAT VEHICLE BE TOWED WITH THE REAR LIFTED, AS THIS COULD RESULT IN FRONT SUSPENSION OR CROSSMEMBER DAMAGE.

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## JACKING/CHANGING A TIRE

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*Caution:*

1. Use jack only when changing wheels.
2. Exercise extreme caution when raising vehicle with jack. (Use of jack stands as a precaution is recommended).
3. Do not start or run engine while vehicle is on jack.

The jack is located in the rear baggage compartment on the passenger side.

1. Park on level surface and set parking brake firmly.
2. Set automatic transmission in "PARK" on Ford chassis and "NEUTRAL" on GM Chassis. Apply the parking brake.
3. Activate hazard warning flasher.
4. Block both front and rear of the wheel diagonally opposite the jack position.
5. Loosen, but do not remove, wheel nuts by rotating wrench counterclockwise.
6. Place hydraulic jack under the axle.
7. Close valve at base of jack and insert jack handle.
8. Operate jack with slow, smooth motion. Raise vehicle so tire just clears surface.
9. Replace wheel and, using lug wrench provided, slightly tighten wheel nuts. Wheel must be seated on hub.
10. Open valve at base of jack to lower vehicle. Fully tighten wheel nuts, using lug wrench provided, by applying clockwise pressure near end of wrench. Be sure to tighten lug nuts in an alternate sequence.

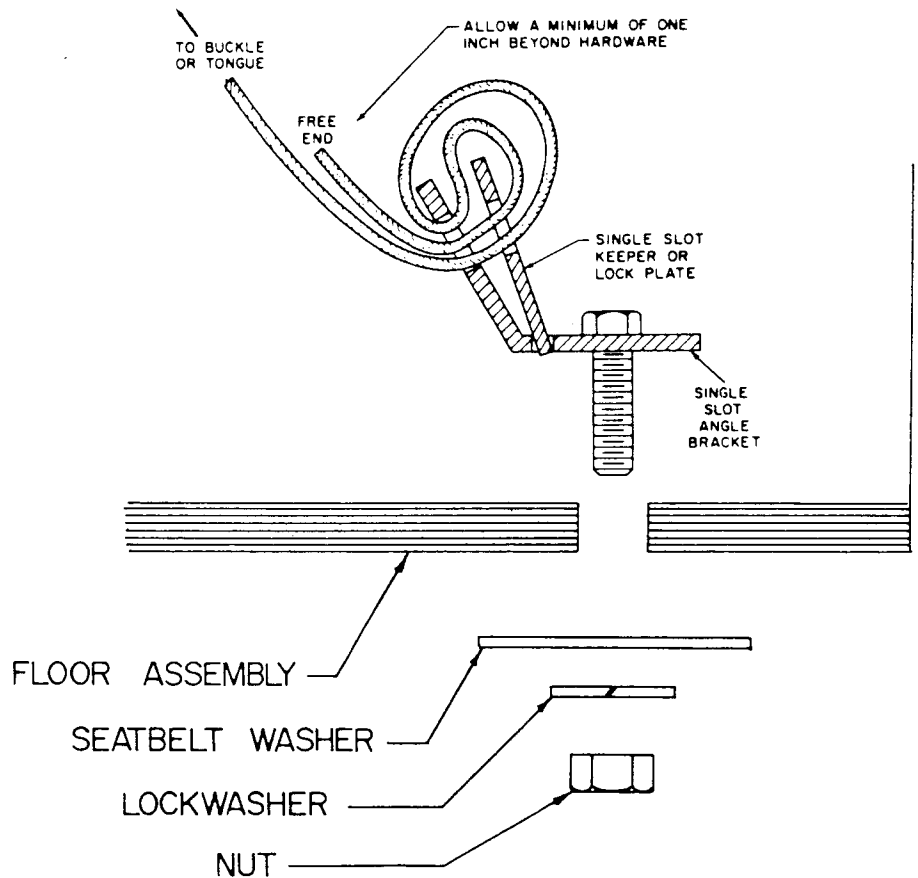
**REMEMBER:** Always use your warning flashers to warn other drivers anytime you pull your vehicle to the side of the road, day or night.

**CAUTION:** As soon as possible after installing a wheel, AND at 500 miles (800 kilometres) after such installation, have a mechanic tighten wheel nuts with a torque wrench to 250 foot-pounds. IN ADDITION, when the motorhome, or wheel, or fasteners are new, have the torque set at the first 500 miles (800 km).

## SEAT BELT INSPECTION

Twice a year check that belts, buckles, latch plates, retractors and anchorages work properly: look for loose parts or damage (without disassembly) that could keep the restraint system from doing its job. Have a belt assembly replaced if the webbing has been cut or otherwise damaged. Also, restraint systems should be re-

placed and anchorages properly repaired if they were in areas damaged by a collision, whether the belt was in use or not. If there is any question, replace the belt system. Damage whether visible or not, could result in serious personal injury in the event of an accident.



## **WINTERIZATION & STORAGE**

## WINTERIZATION

All Triple E motorhomes are built for year-round travel including:

- polyurethane undercoating
- insulated and heated holding tank compartment
- all plumbing located in heated interior spaces

Although your motorhome is designed to withstand winter temperatures, **we cannot guarantee the vehicle not to freeze.** Certain precautions should be taken in preparing for sub-zero temperature traveling.

*Do not use alcohol-based anti-freeze or other petroleum products.*

### FRESH WATER SYSTEM

The fresh water system consists of the water tank, the pump and all lines. This entire system is contained inside heated interior spaces. In cold weather, it is usually necessary to have the furnace operating. The heated air in the motorhome will circulate around the water tank, pump and water pipes and reduce the possibility of freezeup.

See p. 29 for complete water system winterization procedures.

### ICE-MAKER

To winterize the ice-maker, shut off water valve installed on water line under galley sink area. Remove front servicing grill and unscrew copper and plastic water lines to drain manually.

### WATER PURIFIER

To Winterize:

1. Shut off in-line water valve located under the galley sink.
2. Unscrew the plastic water lines from the purifier.
3. Remove and drain the unit.
4. Store water purifier in an area where temperature is above the freezing point. (0°C/32°F)

### CHASSIS

Check coolant level and add anti-freeze, if required, to protect against lowest expected temperature. Change engine oil to the recommended viscosity to aid cold weather starting. See the manufacturer's manual for further recommendations.

### LP GAS

When traveling in winter, propane is recommended as it will vaporize in extreme cold (Above -42°C. Butane is not recommended due to its high vaporization temperature (0°C). Use of butane in cold temperatures may block the system and cause components to malfunction. Add approximately .25 litre methyl alcohol to your LP gas tank to prevent freeze-up.

### WASTE SYSTEM

To prevent winter freeze-up, add regular RV anti-freeze through the toilet and kitchen drains, directly into the holding tanks. Be sure to add sufficient amounts in order to protect the total volume of the holding tank.

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## CONDENSATION

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Good building practices, including thicker styrofoam insulation and weather stripping, may result in water vapor being trapped in the motorhome.

Water vapor is not produced by the building components of the unit, but is generated by the occupants of the unit and their everyday living habits. For example, the simple act of breathing generates approximately one-half pint of water per hour per occupant.

There is no absolute preventive formula which can be applied with success in every case, since a direct relationship exists between individual living habits and the amount of moisture generated within the unit. This moisture is produced in the form of an invisible vapor. The vapor exerts pressure and as the volume builds up, it tends to move toward outside surfaces, including

windows. The use of storm windows should reduce frost build-up on windows.

*Water vapor must be reduced at its source.* Ventilation is the simplest means of ridding the motorhome of excessive moisture. Periodic ventilation in winter is one of the most effective and yet most often neglected remedies. After showering, bathing or washing dishes, open a window slightly while allowing the appropriate fans (range hood fan or bath fan) to run. This will assist in reducing condensation build-up by allowing the moisture to escape outdoors. The regular use of the range hood fan is highly recommended to help reduce water vapor and cooking odors.

We trust that this information will assist the motorhome owner in reducing levels of condensation.

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## STORING YOUR RV

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All systems, components and appliances should be inspected and repaired prior to storage.

### CHECKLIST

1. Fill fuel tanks to reduce excessive build-up of moisture in the fuel tanks.
2. Check coolant level and add anti-freeze if required, to protect to the lowest expected temperature during storage.
3. Change engine oil to the recommended viscosity to aid cold weather starting.
4. Park motorhome as level as possible, end to end and side to side.
5. Ensure that battery has a full charge, then disconnect both the main and auxiliary batteries via the battery disconnect switch.
6. Wash motorhome. If exposed to road salts, the exterior and underside should be thoroughly washed and flushed.
7. Remove all perishables and anything which may freeze (canned goods, medicine, etc.). Leave the refrigerator door open. Be sure controls are turned off.
8. To ventilate living area, open drawers, cabinets, closets, etc.
9. Drain the holding tanks, toilet and living area water system. Deodorize and allow to dry. Turn off the water heater. Drain fresh water tank and water heater. Then add anti-freeze solution (5 gallons R.V. anti-freeze and 5 gallons water) to water tank. Close the valves in the water lines entering the water heater and open all faucets before turning on the water pump. When colored water comes out of the faucets, close faucets and turn off water pump.
10. Turn off LP gas tank valve.
11. Make sure furnace manual valve and thermostat are set at "OFF", range/oven burners at "OFF", oven at "PILOT OFF". Be sure gas on refrigerator is turned off at unit's control panel.
12. Add R.V. anti-freeze ( $\frac{1}{2}$  cup each) to the kitchen, bathroom and shower drains.
13. Tape over drain openings (except toilet) to prevent evaporation if storage is lengthy (6 months or more).
14. Check engine transmission and motor generator (if equipped) for evidence of oil leaks.
15. Tape over vents to prevent possible entry of snow. Be sure to remove tape before operating LP gas appliances.
16. Before moving, run engine at least two minutes with the transmission selector in "PARK" position on Ford chassis and "NEUTRAL" position on GM chassis.

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## BATTERY STORAGE

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*Caution:* Batteries in storage may eventually self-destruct through a process called self-discharge.

Maintenance free batteries should be checked every 60 to 90 days.

In order to slow down this process, be sure to check battery charge level every 30 to 60 days. Store batteries in a cool place.

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## GENERATOR STORAGE

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If the generator will be out of service for more than 30 days, the following steps should be taken to protect the unit:

1. Run the unit until thoroughly warm.
2. Disconnect fuel supply and run until unit stops.
3. Drain oil from crankcase while still warm. Refill and attach a tag stating oil viscosity used.
4. Remove each spark plug. Pour one ounce of rust inhibitor (or SAE 50 oil) into each cylinder. Crank engine several times. Install spark plugs.

5. Service air cleaner.
  6. Clean governor linkage and protect by wrapping with a clean cloth.
  7. Plug exhaust outlet to prevent entrance of moisture, dirt, bugs, etc.
  8. Wipe entire unit with a clean cloth. Coat rustable parts with a light film of grease or oil.
- Refer to manufacturer's instructions for further details.

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## TOILET

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**Draining Method:** Completely drain the toilet water supply line leaving the toilet water supply valve (white lever) open. The water valve may be kept open by blocking the water lever in the open position with a suitable object, such as a wad of paper.

*Caution:* When using air pressure to blow water from lines, toilet valve should be held in open position.

**Anti-freeze Method:** Use R.V. anti-freeze to winterize the fresh water plumbing system. Follow directions on anti-freeze container.

*Caution:* Never use automotive type anti-freeze in fresh water system. These are highly toxic.

**NOTE:** If water is inadvertently frozen in the toilet, do not attempt to flush until the ice is thawed. Otherwise damage to toilet could occur.



# **APPEARANCE CARE**

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## EXTERIOR

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### BODY

The best way to preserve your motorhome's finish is to keep it clean by frequent washings. Wash with cold or lukewarm water and a mild soap.

Do not use hot water or wash in the direct rays of the sun. Do not use strong soap or chemical detergents. All cleaning agents should be promptly rinsed from the surface and not be allowed to dry on the finish.

Polishing is recommended to maintain your RV's original finish and durability. We recommend Formula Five FRP cleaner by Costa Chemicals.

Any stone chips, cracks or scratches should be repaired promptly to avoid further damage. See your dealer for body shop repairs.

Corrosive materials used for ice and snow removal and dust control accumulate on the underbody. If allowed to remain, these materials can result in accelerated rusting and deterioration of underbody components such as fuel lines, frame and floor pan and exhaust system.

At least once each year, preferably after a winter's exposure, these corrosive materials should be removed by flushing the underbody with plain water. Particular attention should be given to cleaning out those areas where mud and other foreign materials collect.

### WEATHERSEALING

Twice a year (Spring and Fall) inspect the entire exterior of the motorhome for proper weathersealing

around the frames of all windows, doors, compartments, vents, roof, wall vents and moldings. Missing, dried or damaged caulking should be replaced using commercial caulking.

### VENTS, DOORS AND SCREENS

Replace damaged vents, vent pipes and bent or damaged compartment doors. Lubricate all hinges, locks, window mechanisms and springs periodically. Clean windows and window screens.

### PLUMBING SYSTEM

Periodic inspections of plumbing vent pipes where they emerge through the roof of the unit should be made to insure that they are not damaged or blocked.

### EXTERIOR LIGHTING

Before each trip, inspect all clearance lights, identification lights, marker lights, stop lights, turn signal lights and back-up lights. Replace burned-out bulbs immediately. Keep all light lenses clean with soap and water.

### UNDERCARRIAGE

The all-steel frame of your motorhome has been treated for rust resistance and corrosion (extended frames — painted only). For added protection, the undersurface of the floor has been sprayed with polyurethane to prevent rust, dust, water leaks and road noise. The foam insulation gives your floor a superior "R" rating compared to automotive undercoating.

NOTE: Rust may still occur, depending on road and weather conditions.

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## INTERIOR

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### IMPORTANT:

All interiors conform to Section 302 of CMVSS/FMVSS flammability standards.

### GENERAL CLEANING

Dust and loose dirt that accumulate on interior fabric should be removed regularly with a vacuum cleaner or soft brush.

Vinyl trim should be wiped regularly with a clean damp cloth.

The carpet should be vacuumed regularly, and cleaned with a quality carpet cleaner. Curtains and blinds should be kept closed to prevent sun rays from discoloring.

### VELVETS

Come with fire rating  
Cleaning Code "S"

## CLEANING CODE "S"

Clean this fabric with pure solvents (Petroleum Distillate-based products). Professional dry-cleaning is recommended. Cushion covers should not be removed and dry cleaned.

**CAUTION:** Use of water-based and detergent-based solvent cleaners may cause excessive shrinking. Water stains may become permanent and unable to be removed with solvent cleaning agents.

## DRAPERY

Inherently flame retardant  
Machine washable  
Required little ironing  
100% Polyester

## BEDROOM FABRICS

Treated for flame retardancy  
Cleaning Code "S"

## WALL FABRICS (Invitation Bedroom)

Clean with warm soapy water

## STAIN REMOVAL

Before trying to remove spots or stains, determine what kind and how old the stain is. Spots or stains should be removed as soon as possible.

### **Vinyl**

Ordinary soilage can be removed from vinyl with warm water and a mild soap such as saddle soap or oil soap, or approved equivalent. Apply a small amount of soap solution and allow to soak for a few minutes to loosen dirt; then, rub briskly with a clean, damp cloth to remove dirt and traces of soap. (This operation may be repeated several times if necessary.) Soilage such as tars, asphalts, shoe polish, etc. will stain if allowed to remain on trim. They should be wiped off as quickly as possible and the area cleaned with a clean cloth dampened with vinyl cleaner (solvent type).

### **Fabric**

**Water Spots** — A multi-purpose powdered cleaner is excellent for removing water spots from upholstery, as well as for sections where a minor ring may be left from spot cleaning.

Vacuum area thoroughly to remove excess loose dirt. ALWAYS clean a full trim assembly or complete section. Mask adjacent trim along stitch or welt lines. Mix multi-purpose powdered cleaner in strict accordance with directions on label of container. Mix proportionally for smaller quantities. Use suds only on a clean sponge or soft bristle brush. DO NOT wet fabric too much or rub harshly with brush. Immediately after cleaning, wipe off any excess cleaner residue with slightly damp absorbent towel or cloth.

**NOTE:** Water stains can also be removed by using a vinegar and water solution.

**IMPORTANT** — Immediately after wiping, force-dry fabric with air hose, heat dryer or heat lamp. (Use caution with heat dryer or heat lamp to prevent damage to fabric.) When trim materials with a sheen or luster finish are dry, wipe fabric lightly with a soft, dry clean cloth to restore its sheen or luster.

**Grease or Oil Stains** — Includes grease, oil, butter, margarine, shoe polish, coffee with cream, chewing gum, cosmetic creams, vegetable oils, wax, crayon, tar and asphalts. Carefully scrape off excess stain; then clean with fabric cleaner (solvent type). Use very little cleaner, light pressure, and clean cloths (preferably cheese cloth). Cleaning action should be from outside of stain feathering towards centre of stain. Keep changing to a clean section of cloth. When stain is cleaned from fabric, immediately dry area with an air hose, heat dryer or heat lamp to help prevent a cleaning ring (use caution with heat dryer or heat lamp to prevent damage to fabric). If a ring forms, immediately repeat the cleaning operation over a slightly larger area with emphasis on feathering towards centre of area. If ring still persists, mark off surrounding trim sections and clean entire affected trim panel section with a multi-purpose powdered cleaner as previously described under waterspots. Shoe polish, wax crayons, tar and asphalts will stain if allowed to remain on trim; they should be removed as soon as possible — use caution as cleaner will dissolve them and may cause them to "bleed."

**Non-Greasy Stains** — Includes catsup, coffee (black), egg, fruit, fruit juice, milk, soft drinks, wine, vomit and blood. Carefully scrape off excess stain; then sponge stain with cool water. If stain remains, use multi-purpose powdered cleaner (foam type) as previously de-

scribed. If odor persists after cleaning vomitus or urine, treat area with a water-baking soda solution — 1 teaspoon baking soda to 1 cup of warm water — finally, if necessary, clean lightly with fabric cleaner (solvent type).

**Combination Stains** — Includes candy, ice cream, mayonnaise, chili sauce and unknown stains. Carefully scrape off excess stain; then clean with cool water and allow to dry. If stain remains, clean with fabric cleaner (solvent type).

**CAUTION:** Many cleaners may be poisonous or flammable, and their improper use may cause personal injury or damage to the inside of the vehicle. Therefore, when cleaning the interior, do not use volatile cleaning solvents such as: acetone, lacquer thinners, enamel reducers, nail polish removers; or such cleaning materials as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose. Always use solvent type cleaners in a well ventilated area.

## KITCHEN SINK

The stainless steel sink should be cleaned with a liquid or finely ground powder. Scouring powder is not recommended for stainless steel and will ruin the finish. Stainless steel cannot be harmed by boiling water. However, salt, mustard, mayonnaise and catsup will cause pitting and should be cleaned off immediately.

## REFRIGERATOR

The cabinet interior should be cleaned regularly. Remove shelves and wash the lining with lukewarm water to which a mild soap may be added. Dry thoroughly, especially around door frame and door gasket. Warm water only should be used to wash the cooling evaporator, ice trays and shelves. Never use strong chemicals or abrasive cleaning materials on any part of the cabinet.

## PANELING/CEILING BOARD

To remove spots or stains from the walls or the ceiling, use a damp cloth with a mild detergent. Rub the area dry with a soft cloth. Avoid the use of abrasive cleaning agents.

## TABLETOPS AND COUNTER SURFACES

The laminated table top and counter surfaces are impervious to stains and will retain their original lustre and appearance if you wipe them with a damp cloth after each use. DO NOT place hot pans, skillets or pots on them.

## POWER RANGE HOOD

The filter on your power range hood should be removed, washed with detergent and hot water, rinsed and replaced after each trip. Before replacing the filter, wash the grease and collected dust from the inside hood surfaces, fan and light. Wipe the outside and top surface with a damp cloth.

## RANGE/OVEN

**General** — Regular cleaning with a warm detergent solution and a soft cloth will keep your range looking bright and new. This should be done as soon as range cools.

**Chrome** — To keep the mirror bright finish, wipe with a damp cloth and dry thoroughly. Stubborn stains may be removed with lemon juice, vinegar, or chrome polish.

**Broiler Pan** — Remove the broiler pan from oven immediately after use. Drain fat. Sprinkle rack with detergent and cover with wet paper towels and let soak before washing in hot soapy water.

**Oven Interior** — Clean as soon as possible after use when the oven is cool. Grease spatters that are allowed to become hard and baked on become very difficult to remove. Care must be taken to avoid bending the thermal sensing element, which could cause a variation between the oven temperature and the dial setting. If oven cleaners are used, protect aluminum gas tubing, thermostat sensing element and electrical components from the cleaners. Thoroughly rinse oven with a solution of one tablespoon vinegar to one cup of water and wipe dry.

**Top Burners** — Top burners (caps and grates) may be cleaned with a detergent solution. If any burner port should become clogged, clean with a toothpick. Never use pins or other metal objects to clean the ports, as they may become enlarged. If the burner is washed in a sink, dry immediately by shaking off all excess water and lighting the burner until all water has evaporated.

**NOTICE:** Properly clip the top burner grates and oven rack after cleaning to help prevent them from rattling or becoming dislodged while the vehicle is underway.

## MICROWAVE OVEN

Keep the door and inside of your microwave oven clean. No grease, soil or spatter should be allowed to build up. A build up of soil will absorb microwave energy, just the same as the food you are cooking and may increase the cooking time.

1. When food spatters or spilled liquids adhere to oven walls, wipe with a damp cloth. Mild detergents may be used if the oven gets very dirty. The use of harsh detergent or abrasives is not recommended.

2. The outside oven surface should be cleaned with soap and water, rinsed and dried with a soft cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into the ventilation openings.

3. If the control panel becomes wet, clean with a soft, dry cloth. Do not use harsh detergents or abrasives on control panel. When cleaning the control panel, leave the oven door open to prevent oven from accidentally turning on. After cleaning touch cancel pad to clear display window.

4. It is necessary to remove the glass tray for cleaning. Wash the tray in warm sudsy water or in a dishwasher.

5. The roller ring and oven cavity floor should be cleaned regularly to avoid excessive noise. Simply wipe the bottom surface of the oven with mild detergent water or window cleaner and dry. The roller ring may be washed in mild sudsy water or dishwasher. Cooking vapors collect during repeated use but in no way affect the bottom surface on roller ring wheels. When removing the roller ring from cavity floor for cleaning, be sure to replace it in the proper position.

# **MAINTENANCE**

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## MAINTENANCE INFORMATION

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The maintenance details for most components are included with their operating instructions in the Owner

Information Pouch. Service Centre locations are also included. See index.

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## ENGINE ACCESS

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Access to the engine is provided by an engine cover located between the driver and passenger seats. Access to parts of the engine is also possible at the front of your motorhome through the hood covers.

### MINOR HOOD ADJUSTMENT

To align hood with mask:

1. Locate the bar with threads and two nuts on one end.
2. Tighten the bar to bring down the top corners of the hood.
3. Loosen the bar to bring up the top corners of the hood.
4. Close hood to check and repeat if necessary.

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## MAINTENANCE SCHEDULE

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The chassis manufacturer has supplied a folder which provides a complete maintenance schedule. Please consult that manual for complete vehicle care, maintenance and information.

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## OWNER MAINTENANCE CHECKS

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Listed below are vehicle checks that should be made periodically by either the owner or a qualified technician. Any problems and repairs should be handled immediately.

### While Operating Your Vehicle

#### **Automatic transmission shift indicator operation** —

Make sure the indicator points to gear chosen.

Note: GM chassis does not have 'PARK' feature.

**Brake system operation** — Be alert to abnormal sounds, increased brake pedal travel or repeated pulling to one side when braking. Also, if a brake warning light goes on, something may be wrong with part of the brake system. Have it inspected and repaired at once. Please consult the chassis manufacturer's manual for details.

**Exhaust system operation** — Be alert to any changes in the sound of the system or any smell of fumes. These are signs the system may be leaking or overheating. Have it inspected and repaired at once.

**Tire and wheel operation** — Be alert to a vibration of the steering wheel or seat at normal highway speeds. This may mean a wheel balance is needed. Also, a pull right or left on a straight, level road may show the need for a tire pressure adjustment or wheel alignment.

**Steering system operation** — Be alert to changes in steering action. An inspection is needed when the steering wheel is harder to turn or has too much free play or if abnormal sounds are noted when turning or parking.

**Headlight aim** — Take note of the light pattern. If beam aim does not appear correct, headlights should be adjusted.

### At Each Fuel Fill

**Engine oil level check** — Check engine oil level and add if necessary.

**Engine coolant level and condition** — Check engine coolant level in coolant reservoir tank and add if necessary. Replace if dirty or rusty.

**Windshield washer fluid level check** — Check washer fluid level in container and add if necessary.

### **At Least Monthly**

**Tire and wheel inspection and pressure check**—Check tires for abnormal wear or damage. Also check for damaged wheels. Keep tires inflated to the recommended tire pressure (on tire placard on the driver's door). Be sure to include the spare. Pressure should be checked when tires are "cold".

**Light operation check** — Check operation of licence plate light, side marker light, headlights including high beams, parking lights, tail lights, brake lights, turn signals, backup lights, instrument panel illumination and hazard warning flashers.

**Fluid leak check** — After the vehicle has been parked for a while, inspect the surface beneath the vehicle for water, oil, fuel or other fluids. Water dripping from the air conditioning system after use is normal. If you notice fuel leaks or fumes, the cause should be found and corrected at once.

### **Each Time Oil Is Changed**

**Automatic transmission fluid level check** — Check transmission fluid level and add as required.

**Steering and suspension** — Inspect front and rear suspensions and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Inspect final drive axle output shaft seals for leaking.

**Air bag pressures** — Motorhomes equipped with Air Assist/Ride Rite air suspension systems should maintain a minimum pressure of 20 lbs., and a maximum pressure of 90 lbs., depending on the load carried. (Refer to the Air Suspension Operating Instructions for specific information).

**Brake systems inspection** — For convenience the following should be done when wheels are removed for rotation: Inspect lines and hoses for proper hookup, binding, leaks, cracks, chafing, etc. Inspect disc brake pads for wear and rotors for surface condition. Also inspect drum brake linings for wear and cracks. Inspect other brake parts, including drums, wheel cylinders, parking brakes, etc. at the same time. Check parking brake adjustment. Inspect brakes more often if driving habits or conditions result in frequent braking.

**Exhaust system inspection** — Inspect complete system including catalytic converter. Inspect body near the exhaust system. Look for broken, damaged, missing or out-of-position parts, as well as open seams, holes, loose connections or other conditions which could cause a heat buildup in the floor pan or could let exhaust fumes seep into the passenger compartments.

**Throttle linkage inspection** — Inspect for interference, binding, damaged or missing parts. Replace parts as needed.

**Engine drive belts inspection** — Inspect all belts for cracks, fraying and wear. Adjust or replace as needed.

**Standard differential** — Check fluid level and add as needed at every oil change. In dusty areas, or trailer towing applications, drain fluid every oil change and refill.

### **At Least Twice A Year**

**Power steering pump level check** — Check power steering pump fluid and add fluid if necessary.

**Brake master cylinder reservoir fluid level check** — Check fluid level and add fluid if necessary. A low fluid can indicate that worn disc brake pads may need to be serviced.

**Battery** — Check the battery and recharge if necessary. Check connections for tightness. Clean corrosion from terminals and top of battery. Check battery electrolyte level. Maintain battery charge at a proper level to prevent freezing in winter.

**Springs, etc.** — Check the spring leaves for being evenly stacked and the spring clips or U-bolts, rear spring front eye bolts and shackle bolts for being tight.

**Key lock cylinder** — Lubricate key lock cylinders with a lubricant. Lock de-icers which contain alcohol may wash away lubricants. It is recommended that you lubricate the lock cylinder after you have used a de-icer of this type.

**Weatherstrip lubrication** — Clean surface and then apply a thin film of silicone grease with a clean cloth.

### **At Least Once A Year**

**Transmission neutral operation** — Ford

**CAUTION:** Before performing the following safety switch check, be sure to have enough room around the vehicle. Then, firmly apply both the parking brake and the regular brakes. Do not use the accelerator pedal. If the engine starts, be ready to turn off the ignition promptly. Take these precautions because the vehicle could move without warning and possibly cause personal injury or property damage.



Try to start the engine in each gear. The starter should crank only in "P" (PARK) or "N" (NEUTRAL).

#### **Parking brake and transmission "P" (PARK) mechanism operation**

To check the parking brake with engine running and transmission shift lever in "N" (NEUTRAL), slowly remove foot pressure from the regular brake pedal until the vehicle is held by only the parking brake.

To check the automatic transmission "P" (PARK) mechanism holding ability, release all brakes after shifting the transmission to "P" (PARK).

**CAUTION:** Before checking the holding ability of the parking brake and automatic transmission "P" (PARK) mechanism, park on a fairly steep hill with enough room for movement in the downhill direction; to reduce the risk of personal injury or property damage, be prepared to apply the regular brakes promptly if the vehicle begins to move.

#### **Transmission neutral operation — GM**

**CAUTION:** Before performing the following safety check, be sure to have enough room around the vehicle. Then, firmly apply both the parking brake and the regular brakes. Do not use the accelerator pedal. If the engine starts, be ready to turn off the ignition promptly. Take these precautions because the vehicle could move without warning and possibly cause personal injury or property damage.

Try to start the engine in each gear. The starter should crank only in "N" (NEUTRAL)

**CAUTION:** Before checking the holding ability, park on a fairly steep hill with enough room for movement in the downhill direction to reduce the risk of personal injury or property damage, be prepared to apply the regular brakes promptly if the vehicle begins to move.

To check the parking brake with the engine running and transmission shift lever in "N" (NEUTRAL), slowly remove foot pressure from the regular brake pedal until the vehicle is held only by the parking brake.

**Lap belt condition and operation** — Inspect belt system, including: webbing, buckles, latch plates, retractors, guide loops and anchors.

**Seatback latch and recliner operation on vehicles equipped with recliner seat** — Be sure seatbacks latch on those vehicles with folding seats using mechanical latches. Make sure the recliner is holding by pushing and pulling on top of the seatback while it is reclined.

**Spare tire and jack storage** — Be alert to rattles in the rear of the vehicle. Make sure the spare tire, all jacking equipment, and any covers or doors are securely stowed at all times. Oil the jack ratchet or screw mechanism after each use.

**NOTE:** Spare tire is located in the rear storage compartment.

**Engine cooling system service** — Inspect coolant and freeze protection. If dirty or rusty, drain, flush and refill with new coolant. Keep coolant at the proper mixture. This provides proper freeze protection, corrosion inhibitor level and engine operating temperature. Inspect hoses and replace if cracked, swollen or deteriorated. Tighten hose clamps. Clean outside of radiator and air conditioning condenser. Wash radiator filler cap and neck. To help ensure proper operation, a pressure test of both the cooling system and cap is also recommended.

**Body Lubrication Service** — Lubricate all body door hinges. Also lubricate the electric step, fuel door and compartment door hinges and latches including interior glove box and console doors, and any folding seat hardware.

**Rotate tires** — Every 10,000 miles (16,000 kilometers) or sooner if abnormal wear is experienced.

**Body Inspection** — Inspect body, windshield and seals for leaks or cracks.

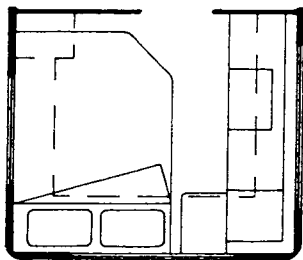
**Water Pump Filter** — Check and clean water tank filter.

**As Required**

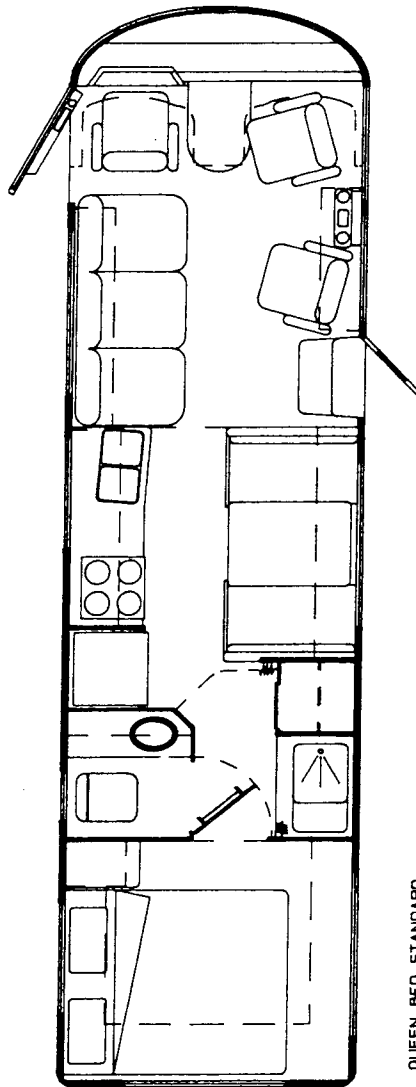
- Clean windshield wiper blades.
- When wiper blades do not clean windshield after wiper blades and glass have been properly cleaned, replace windshield wiper blades.
- At frequent intervals when operating off-highway or if front wheel shimmy is experienced, remove excessive mud build-up from wheels, undercarriage and steering linkage. Inspect for and replace any bent or damaged components.
- At frequent intervals when operating off-highway, check the driveshaft for damage or looseness.
- If excessive noise emanates from the engine compartment, inspect engine air induction system (including air duct, air cleaner, and air cleaner element) for loose fitting, damaged, or missing components and inspect the fan and fan shroud for damage.
- If you experience slow engine cranking, hard starting, headlights dimming at engine idle speed, early or repeat electrical component malfunction, check alternator and regulator output.

## **DATA & SPECIFICATIONS**

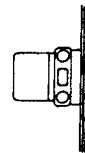
# EMPRESS A-991 SE



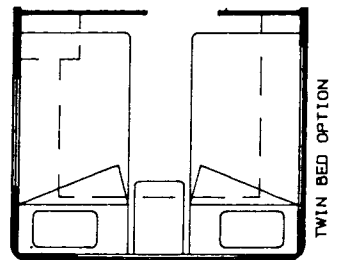
DOUBLE BED/DRESSER OPTION



QUEEN BED STANDARD

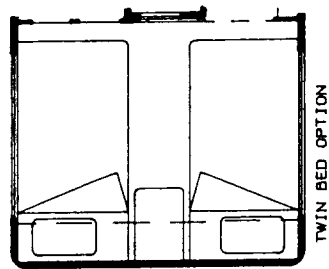
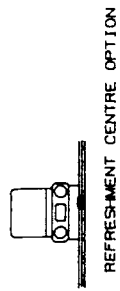
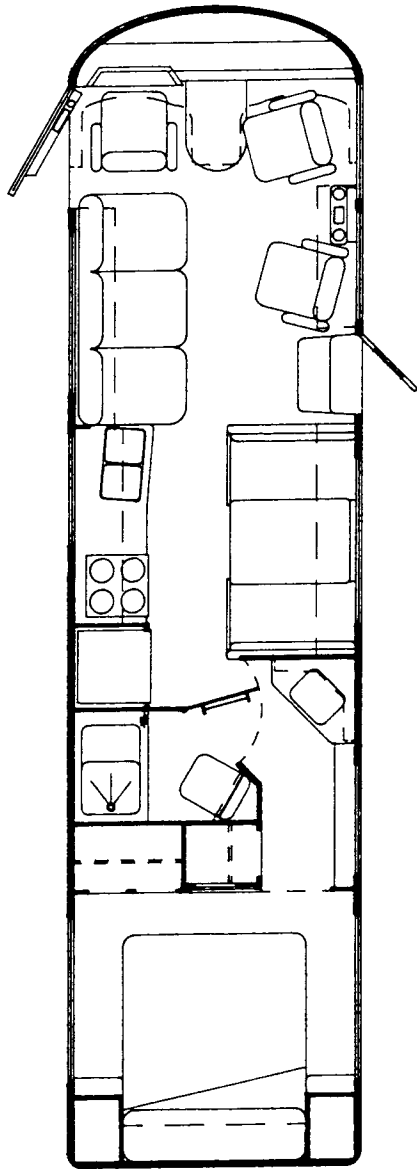


REFRESHMENT CENTRE OPTION

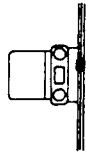
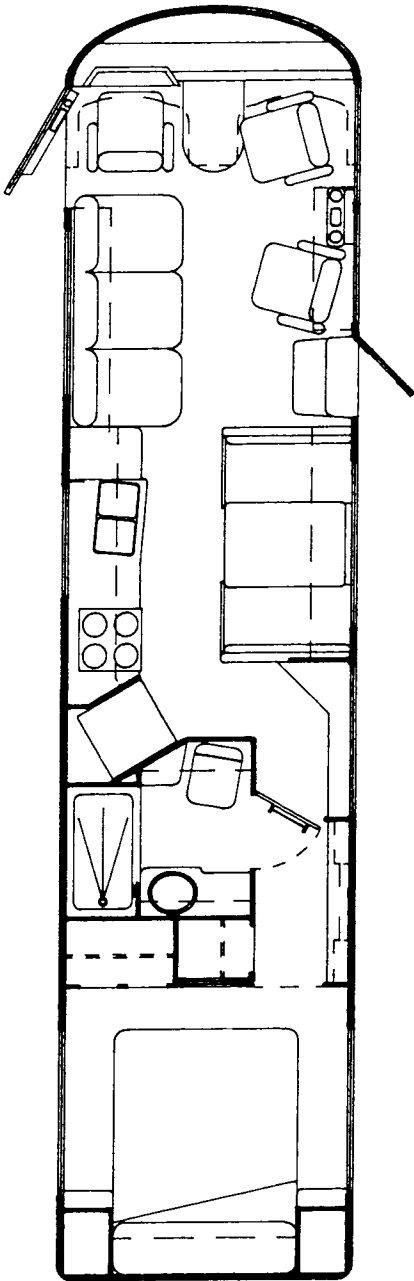


TWIN BED OPTION

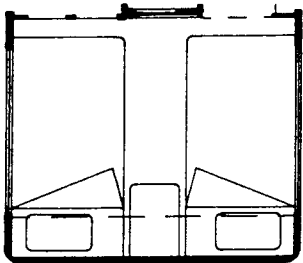
# EMPRESS A-1061 SE



EMPRESS A-1201 SE

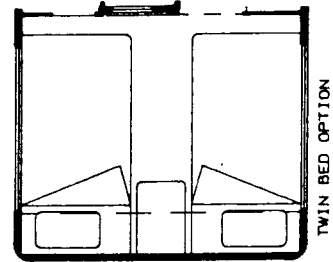
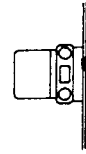
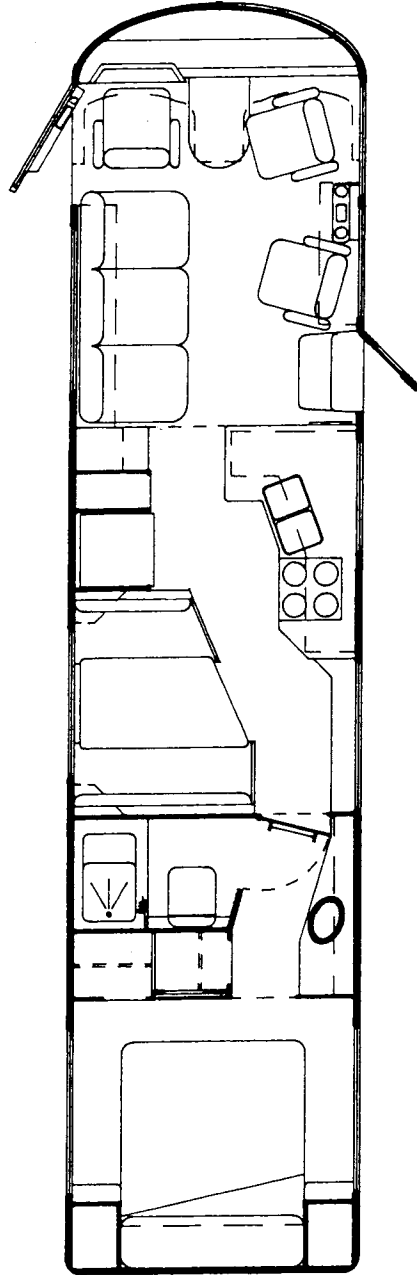
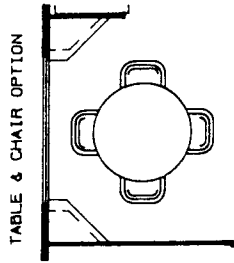


REFRESHMENT CENTRE OPTION



TWIN BED OPTION

# INVITATION A-1202 SE



# TRIPLE E EMPRESS SE SPECIFICATIONS

MODEL:		Empress A-991 SE	Empress A-1061 SE	Empress A-1201 SE	Invitation A-1202 SE
Engine: FORD	L (CID)	7.5 (460) EFI V-8	7.5 (460) EFI V-8	7.5 (460) EFI V-8	7.5 (460) EFI V-8
GM	L (CID)	7.4 (454) 4BBL V-8	7.4 (454) 4BBL V-8	7.4 (454) 4BBL V-8	7.4 (454) 4BBL V-8
Horsepower: FORD	SAE Gross	235@3600 RPM	235@3600 RPM	235@3600 RPM	235@3600 RPM
GM	SAE Gross	230@3800 RPM	230@3800 RPM	230@3800 RPM	230@3800 RPM
Torque: FORD	Max lbs.-ft.	390@2000 RPM	390@2000 RPM	390@2000 RPM	390@2000 RPM
GM	Max lbs.-ft.	370@2800 RPM	370@2800 RPM	370@2800 RPM	370@2800 RPM
GVWR: FORD	kg (lb)	7258 (16,000)	7258 (16,000)	8167 (18,000)	8167 (18,000)
GM	kg (lb)	7258 (16,000)	7258 (16,000)	8167 (18,000)	8167 (18,000)
Axle Ratio: FORD		5.13	5.13	5.13	5.13
GM		4.63	4.63	4.63	4.63
Dry Weight	kg (lb)	5273 (11,600)	5700 (12,540)	6669 (14,700) EST	6669 (14,700) EST
Tires: FORD		LT235/85 R 16E	LT235/85 R 16E	LT235/85 R 16E	LT235/85 R 16E
GM		8.00x19.5	8.00x19.5	8.00x19.5	8.00x19.5
Wheel Base	mm (in)	4826 (190)	5283 (208)	5283 (208) + 1232 (48) Tag	5283 (208) + 1232 (48) Tag
Overall Length (Bmpr to Bmpr)	mm (ft.in)	10,090 (33'1")	10,670 (35'0")	11,600 (38'0")	11,600 (38'0")
Overall Width	mm (ft.in)	2495 (8'2")	2495 (8'2")	2495 (8'2")	2495 (8'2")
Overall Height (including A/C)	mm (ft.in)	3225 (10'7")	3225 (10'7")	3225 (10'7")	3225 (10'7")
Water Capacity (including W/H)	L (imp.gal)	290 (64)	290 (64)	290 (64)	290 (64)
Holding Tank Capacity	L (imp.gal)	295 (65)	295 (65)	295 (65)	295 (65)
Fuel Capacity FORD	L (imp.gal)	284 (62.5)	284 (62.5)	284 (62.5)	284 (62.5)
GM	L (imp.gal)	227.2 (49.9)	227.2 (49.9)	227.2 (49.9)	227.2 (49.9)
Propane Tank Capacity	kg (lb)	39 (86)	39 (86)	39 (86)	39 (86)
Fridge Standard — Norcold		663	663	663	Dometic RM3801 AES
Option — Norcold		683	683	683	—
Awning	mm (ft)	4876 (16)	4876 (16)	4876 (16)	4876 (16)
Generator — Onan	kW	4.0/6.5	4.0/6.5	4.0/6.5	6.5
Dinette Bed	mm (in)	1000x1880 (40x74)	1000x1880 (40x74)	1000x1880 (40x74)	1000x1880 (40x74)
Sofa Bed	mm (in)	1170x1880 (46x74)	1170x1880 (46x74)	1170x1880 (46x74)	1170x1880 (46x74)
Queen Bed	mm (in)	1525x2030 (60x80)	1525x1880 (60x74)	1525x2030 (60x80)	1525x1880 (60x74)
Twin Bed	mm (in)	915x1880 (36x74)	915x1880 (36x74)	915x1880 (36x74)	915x1880 (36x74)



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## ADDITIONAL INFORMATION

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If you should require additional information, contact your nearest Triple E Dealer, or, contact Triple E Canada Ltd., 301 Roblin Blvd., Box 1230, Winkler, Manitoba, Canada R6W 4C4 (204) 325-4361.  
Fax: (204) 325-5241  
Winnipeg: (204) 453-4315

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## CHASSIS CUSTOMER SERVICE

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GM — Canada: 1-800-263-3777  
GM — U.S.A.: 1-313-696-4200  
Ford — Canada: 1-800-387-7923

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## GENERAL DATA

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The serial number plate is located on the dashboard.

The department of transport sticker can be found inside the door jam.

The specification sheet is located in the wardrobe. Also located in the wardrobe, beneath the specification sheet are exterior color codes.

### NOTICE

Motorhomes designated for U.S. retail are built according to RVIA — U.S. Standards.

The following items may differ from that of Canadian-built product:

Plumbing System  
Electrical System  
Chassis Emission Controls

For further details, contact Triple E Canada Ltd. — Winkler at the above address.