Owner's Guide

NATIONAL RV

PACIFICA

NATIONAL RV REALLY CARES ABOUT YOU - PLEASE BUCKLE UP WHILE DRIVING

NATIONAL RV HAS PLACED VARIOUS WARNING LABELS THROUGHOUT YOUR MOTORHOME. WE STRONGLY ENCOURAGE YOU TO THOROUGHLY FAMILIARIZE YOURSELF WITH THEM AND TAKE THE TIME TO LEARN THE PROPER OPERATION OF YOUR MOTORHOME, ITS APPLIANCES AND COMPONENTS

EVEN IF YOUR ARE FAMILIAR WITH MOTOR HOMES AND THEIR COMPONENTS, IT IS RECOMMENDED THAT YOU READ ALL OWNER'S GUIDES BEFORE OPERATING ANY APPLIANCES OR EQUIPMENT. INFORMATION NOT PROVIDED IN THIS MANUAL IS PROVIDED BY THE MANUFACTURERS AND THEIR RESPECTIVE PRODUCTS. NATIONAL RV DOES NOT ACCEPT LIABILITY FOR PROBLEMS ARISING FROM FAILURE TO FOLLOW THE INFORMATION PROVIDED IN THE IMPORTANT PAPERS PACKET AND THIS OWNER'S GUIDE.

IN ORDER TO HIGHLIGHT PERTINENT INFORMATION, THIS MANUAL MAKES LIBERAL USE OF ALERT SYMBOLS.

THESE SYMBOLS ARE INTENDED TO CALL YOUR ATTENTION TO CERTAIN ASPECTS OF YOUR MOTOR HOME. FAILURE TO FOLLOW THESE SYMBOLS CAN RESULT IN DAMAGE TO THE MOTOR HOME, ITS EQUIPMENT OR CAUSE INJURY OR EVEN DEATH.

⚠ CAUTION ⚠

Caution messages contain information to warn the user of potential safety hazards. Not adhering to a ***Caution*** alert may result in minor damage and or inconvenience.

IMPORTANT ✓

Important symbols typically designate operational procedures, care or maintenance. The ***Important*** symbols should be memorized to get the most efficiency from your motor home.

MFG INFO

In the important papers packet, each component has its respective owner's manual. The ***MFG.*** Info symbol will refer you to the individual component's manual for either operating instructions or general information.

⚠WARNING⚠

Generally used to set apart information containing important safety tips. The ***Warning*** symbol is also used to designate where failure to adhere to the provided information can cause major equipment damage, personal injury, or even ***DEATH***.

DRAWINGS AND OTHER VISUAL ELEMENTS HAVE BEEN CLEARLY LABELED TC INDICATE WHICH ITEM IN THE TEXT IS BEING REFERENCED. THESE CALL-OUTS WILL BE YOUR VISUAL INDICATORS FOR ITEMS LIKE SWITCHES, PLUGS, CONTROLS, KNOBS, ETC. PLEASE FAMILIARIZE YOURSELF WITH THE ITEMS BEING CALLED OUT AS THESE WILL BE THE ITEMS TO WHICH YOU WILL REFER WHEN USING THE VARIOUS FEATURES OF YOUR MOTOR HOME.

CALL OUTS WILL BE MARKED AS SHOWN HERE: **1**

OPERATIONS WILL BE MARKED AS SHOWN HERE: **A**

SAFETY WHEN TRAVELING

Your motor home was designed to be open and spacious. While this design provides delightful aspects to traveling, it requires additional safety awareness. All loose objects can become potentially dangerous projectiles in the event of sudden stops and maneuvers. To eliminate this hazard, be sure all loose objects are properly secured. Closets, drawers and cabinet doors are provided with latches for this purpose. Free standing dinette chairs are equipped with restraining belts; please use them.

Prior to each trip, check all open areas to verify that gear has been properly stowed. Check all appliances, doors and drawers for proper locking or latching. All passengers should sit in designated areas only. Fasten the seat belt by engaging the buckle and adjusting the belt by pulling the excess through the clamping mechanism at the buckle so that the belt is snug and the buckle is located for comfort and easy access.

⚠ WARNING ⚠

Children should always be restrained in an appropriate child safety seat while traveling in a motorhome or any vehicle. The best information about required child safety restraints is typically available from child safety seat manufacturers and state department of motor vehicles. ***Failure to properly restrain children could result in serious injury or death.***

SEAT BELTS

Not all seating positions are equipped with safety belts due to the unique configuration of motor homes. Those seats not equipped with safety belts should not be occupied while the vehicle is in motion. A warning label adjacent to the seat identifies these seats. Since these seats are not equipped with safety belts, they provide no protection in the event of an accident.

While in transit, all occupants must sit in seats equipped with safety belts. For your own safety, do not get up and move arounc the unit while it is in motion.

⚠ CAUTION ⚠

Serious injury can result from a twisted belt. In a crash, you wouldn't have the full width of the belt to spread impact forces. If a belt is twisted, make it straight so it can work properly. Make sure seat belts are properly fitted to each person before driving.

FIRE EXTINGUISHER

Your unit is equipped with a portable dry chemical fire extinguisher with a minimum UL rating 10-B:C. It is mounted close to the entry door or behind the passenger's seat. This unit can be used to extinguish various categories of fires including oil, diesel, grease, flammable liquid and electrical fires. Please read the Service/Inspection tag that is attached to your fire extinguisher and follow the instructions contained therein. If the dial indicator is not in the green area, the extinguisher will not work properly and must be replaced immediately.

Typically located near main entry door

SMOKE DETECTOR

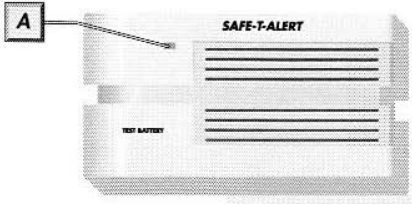
A smoke detector has been placed in the living area of your motor home. It is battery operated and depends upon you for proper performance. Please install, check and maintain the 9V battery. A label is in place adjacent to the smoke alarm to remind the owner of the required service.

⚠WARNING⚠

Test the smoke detector operation after the vehicle has been in storage, before each trip and at least once per week during use.

CARBON MONOXIDE DETECTOR

A carbon monoxide (CO) detector has been installed for your safety. Carbon monoxide is a non-irritating, colorless, odorless, and tasteless gas. Carbon monoxide poisoning can be fatal. Always take the appropriate action when the detector sounds an alarm. For convenience the CO detector has been installed in the monitor panel area of your coach. The green light *(A)* on the front of the CO detector will indicate different alarm levels.



VISIBLE AND AUDIO ALARMS:

A. ***NORMAL*** - Under normal operation levels the green power light will glow continuously. If CO levels remain below 70 ppm there will be no audible alarm.

B. ***LOW CO ALARM*** - Indicated by a flashing red light and four beeps then off for five seconds. This occurs if CO levels rise above 70 ppm. ***IMMEDIATE ACTION IS REQUIRED.*** The red light will continue to flash until the CO levels have cleared.

C. ***HIGH CO ALARM*** - Indicated by a steady red light and four beeps then off for five seconds. This occurs if CO levels rise above 100 ppm. ***IMMEDIATE ACTION IS REQUIRED.*** The red light will stay on until CO levels have cleared.

When CO levels have dissipated, the alarm can be cleared by pressing the test/reset button.

There are three exposure levels that can be contributed to CO POISONING.

1. ***MILD EXPOSURE*** - Headaches, running nose and eye pain
2. ***MEDIUM EXPOSURE*** - Dizziness, drowsiness, vomiting

If any of the above symptoms occurs, immediately move to a location that has fresh air then seek immediate medical attention.

3. ***EXTREME EXPOSURE*** - Unconsciousness, brain damage and death

⚠WARNING⚠

The ***CO DETECTOR*** must be replaced within ***three*** years of the motor home purchase date.

LP-GAS LEAK DETECTOR

The motor home is equipped with an LP-Gas leak detector. The detector will sound an alarm if it detects the presence of LP-Gas inside the coach living space. The red LED light on the alarm will flash and the alarm will sound if there is a dangerous level of propane gas. The alarm will continue to sound until the coach is cleared of gas or levels return to normal.

IMPORTANT

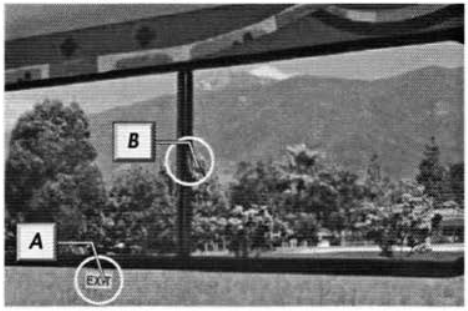
The LP-Gas detector is disabled when the main battery disconnect is switched to ***OFF***.

IF THE ALARM SOUNDS:

1. Turn off all gas appliances (stove, water heater, furnace). Extinguish all flames and smoking material if any.
2. ***DO NOT*** switch on or off any electrical appliances or equipment. Doing so may cause electrical sparks or fire.
3. Turn off the main propane tank located in the luggage compartment.
4. Find the leak source and repair the leak. Seek professional help.
5. Once the leak has been repaired the coach can be re-entered.

EMERGENCY EXIT FACILITIES

Motor homes are required to have a minimum of two emergency exits. Please take the time to familiarize yourself with the emergency exits located in the rear bedroom on the window. ***NOTE:*** It is clearly identified as ***EXIT (A)***. It is equipped with either one or two handles that are colored red. To gain egress, you must either pull or twist the handle(s) ***(B)***, then push out the window.



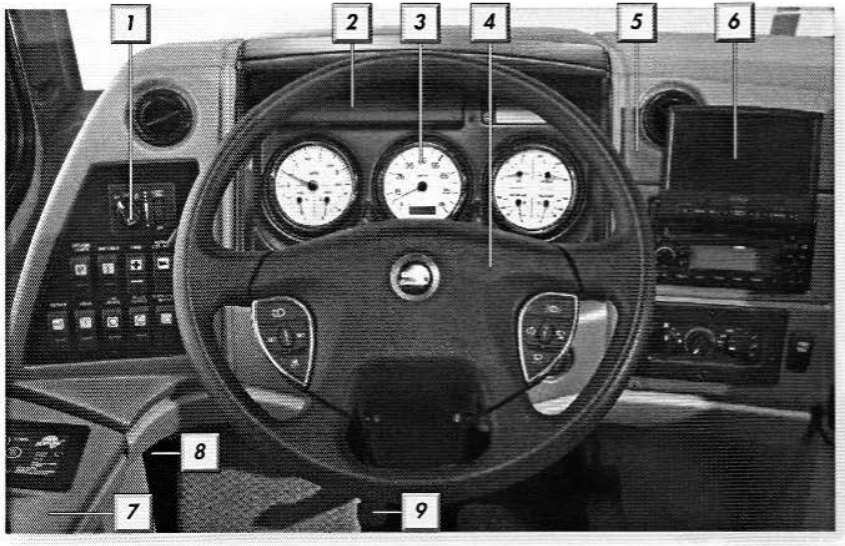
⚠WARNING⚠

To ensure safety, everyone who travels in the motor home should know where the exits are located and how to use them.

TIRE SAFETY

The tire designed for motor homes are very technical and precisely engineered products. To obtain the maximum safe use and best service out of your tires, it is helpful to understand the function of the tire. A tire is a container that holds air. It is the combination of air and tire that supports the vehicle and its contents. In addition, since the tire is the only contact that the vehicle has with the road surface, it must provide other functions such as traction for moving, stopping and steering as well as providing a cushion for the vehicle.

The most important factor in maximizing the life of your tires is maintaining proper inflation. Driving on any tire that does not have the correct inflation pressure for the load of the vehicle is dangerous and may cause premature wear, tire damage and or loss of control of the vehicle. It is vital before driving your motor home to check the tire pressure.

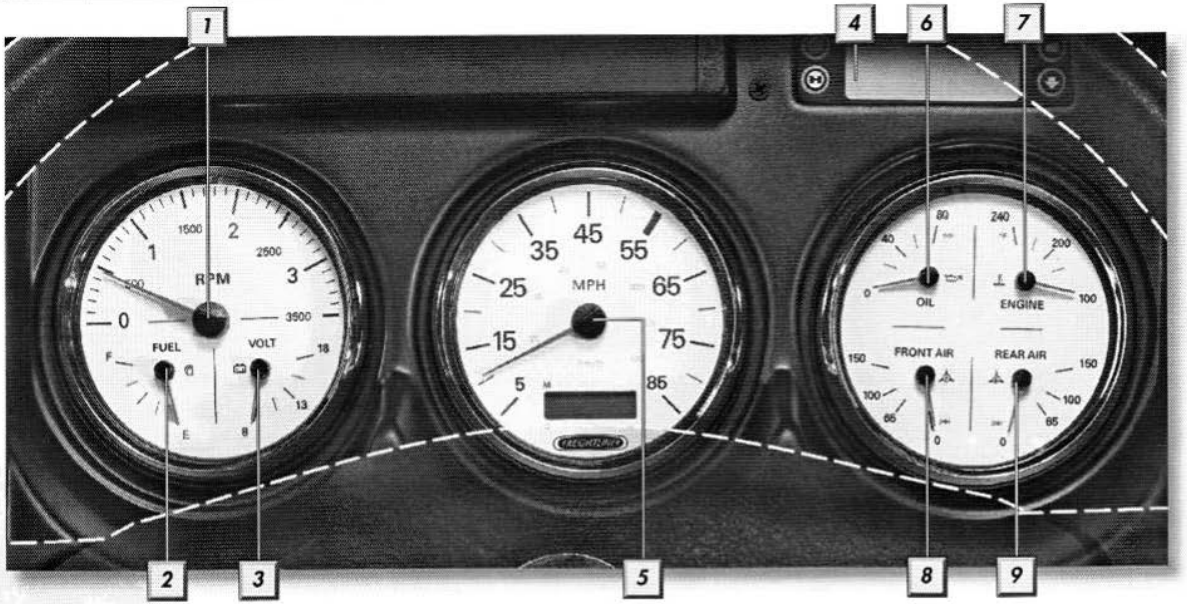


IMPORTANT

Familiarize yourself with all cockpit instruments and controls before attempting to drive your motor home.

DASH CONTROLS AND FEATURES

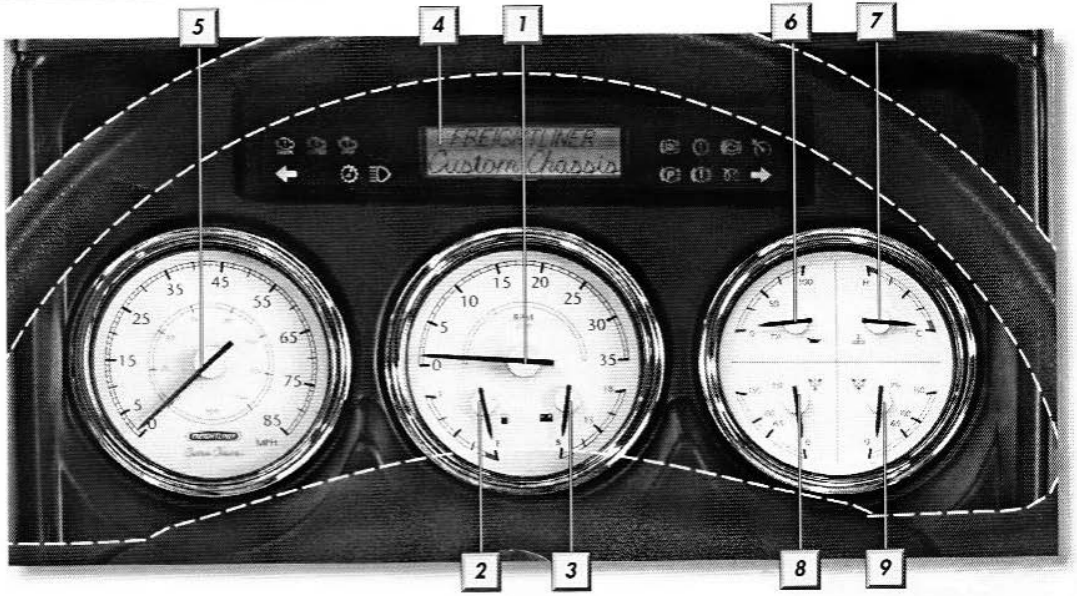
1. ***Left Dash Panel*** - The left dash panel contains some of the auxiliary controls of the motor home such as mirror adjustment, headlights, and generator switch.
2. ***Warning Indicators*** - The warning indicators will display any conditions pertaining to the chassis and drive train. All lamps will illuminate briefly when the engine is first turned on. If any of the lamps do not turn on or off, inspect the system immediately. On some models the driver information system is located within the warning light bar.
3. ***Instrument Cluster*** - The instrument cluster contains analog gauges for monitoring vital vehicle performance. It will tell the driver the current traveling speed, how much fuel is being consumed and all other vital information needed to drive safely and economically.
4. ***Steering Wheel*** - Tilt and telescoping steering wheel.
5. ***Right Dash Panel*** - The ignition switch, radio and dash A/C controls are located on the right dash panel.
6. ***Back Up Monitor*** - The backup monitor functions as a rearview mirror. Shifting the motor home into reverse will automatically activate the system allowing you to see what is located behind the motor home.
7. ***Dash Side Console*** - This area houses the leveling system, push button shift selector extended auxiliary features as equipped, and a manual air suspension system dump switch.
8. ***Parking Brake*** - Activates the pneumatic parking brake. Pull to engage or push to disengage the brake. Before the parking brake can be released there must be sufficient air pressure in the braking system.
9. ***Steering Wheel Adjustment Pedal*** Adjustment for the tilt and telescoping features of the steering column. *(Consult the steering column section of this manual for operation procedures.)*



EARLY MODEL INSTRUMENT CLUSTER

INSTRUMENT CLUSTER

1. ***TACHOMETER*** - Indicates the engine speed in revolutions per minute (RPM).
2. ***FUEL GAUGE*** - Indicates the relative amount of fuel remaining in the fuel tank.
3. ***VOLT METER*** - Displays the volt reading for the automotive battery and charging system. A fully charged battery level will be between 12.7V and 12.8V when the engine is in the off position.
4. ***DRIVER INFORMATION CENTER*** - The info center communicates real-time chassis information about the performance of the vehicle to the driver. It also provides diagnostics and a trip meter. ***NOTE:*** Some models the driver information center may be located in the warning lamp cluster. *(CONSULT THE CHASSIS MANUFACTURERS DOCUMENTATION FOR SPECIFIC OPERATION INSTRUCTIONS.)*
5. ***SPEEDOMETER/ODOMETER*** - Indicates the current traveling speed in MPH or KPH. The speedometer is equipped with a digital odometer/tripmeter that records the total travel and trip distance.
6. ***ENGINE OIL PRESSURE GAUGE*** - Indicates engine oil pressure. If the needle falls outside the normal operation range (about 40 psi), stop the vehicle, turn off the engine immediately and have the engine checked by a qualified technician.



LATE MODEL INSTRUMENT CLUSTER

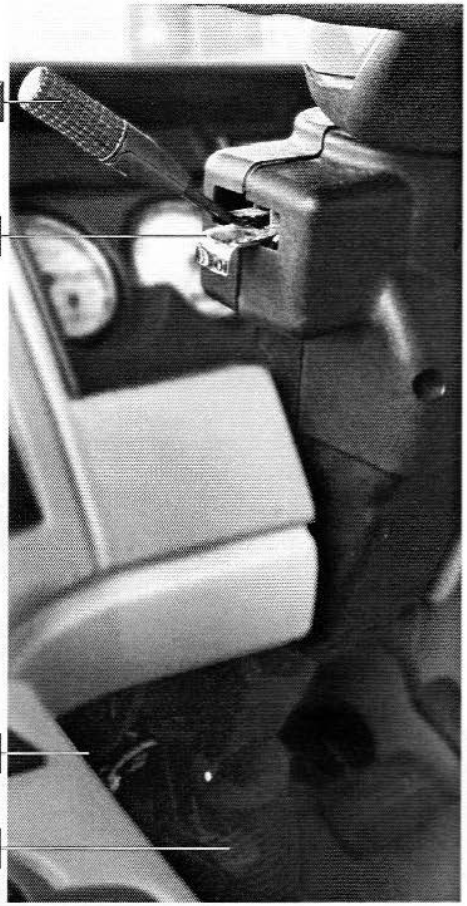
7. ***ENGINE COOLANT TEMPERATURE GAUGE*** - The middle section (about 40 psi) represents normal operation levels. If the operating needle rises too high, the engine is overheating; stop the vehicle and let the engine cool. If the engine coolant does not cool down or the motor home overheats again, have a qualified technician check it as soon as possible.

8. ***REAR TANK AIR PRESSURE*** - Displays the primary (service brakes on the rear axle) air pressure in Pounds per Square Inch (PSI) of the on-board compressed air system.

9. ***FRONT TANK AIR PRESSURE*** - Displays the secondary (service brakes on the front axle) air pressure in Pounds per Square Inch (PSI) of the on-board compressed air system.

⚠ CAUTION ⚠

When attempting to start the engine do not crank the engine for more than *30* seconds at a time; wait two minutes after each attempt to allow the starter to cool.



STEERING COLUMN

1. ***TURN SIGNAL CONTROLS*** - The turn signal lever is mounted on the steering column. Push the lever up to activate a right turn. Pull the lever down will activate a left turn. When one of the turn signals is initiated, either the left or right arrows on the warning lamp cluster will illuminate. When the turn is completed, the signal will automatically return to the neutral position. The high beam headlights can also be activated by pulling the turn signal control knob toward the driver.
2. ***HAZARD WARNING LIGHTS*** - Pull the hazard switch to activate the hazard warning lights. When the switch is pulled out, all exterior turn signals and the turn signal indicators located on the warning lamp cluster will flash.
3. ***PARKING BRAKE*** - Intended to secure an unattended vehicle. Since the transmission does not have a park position, the transmission relies on the ***NEUTRAL*** (***N***) position and the parking brake to emulate the park position. The parking brake may not have enough capacity to restrain the vehicle if the transmission is left in the ***REVERSE*** (***R***) or the ***DRIVE*** (***D***) position. Always make sure the transmission is in the ***NEUTRAL*** (***N***) position and that the parking brake is set before leaving the driver's seat. If the transmission is left in gear an alarm will sound.
4. ***TILT AND TELESCOPE PEDAL LEVER*** - Adjusted by the foot pedal located at the bottom of the steering column. Pushing the foot lever downward will allow for adjustment of the steering wheel. While the foot pedal is in the downward position the steering column may also be extended or retracted. Release the lever to lock the desired position.

MFG INFO

Consult your Chassis, Engine and Transmission owner's guide for complete operating instructions and maintenance support.

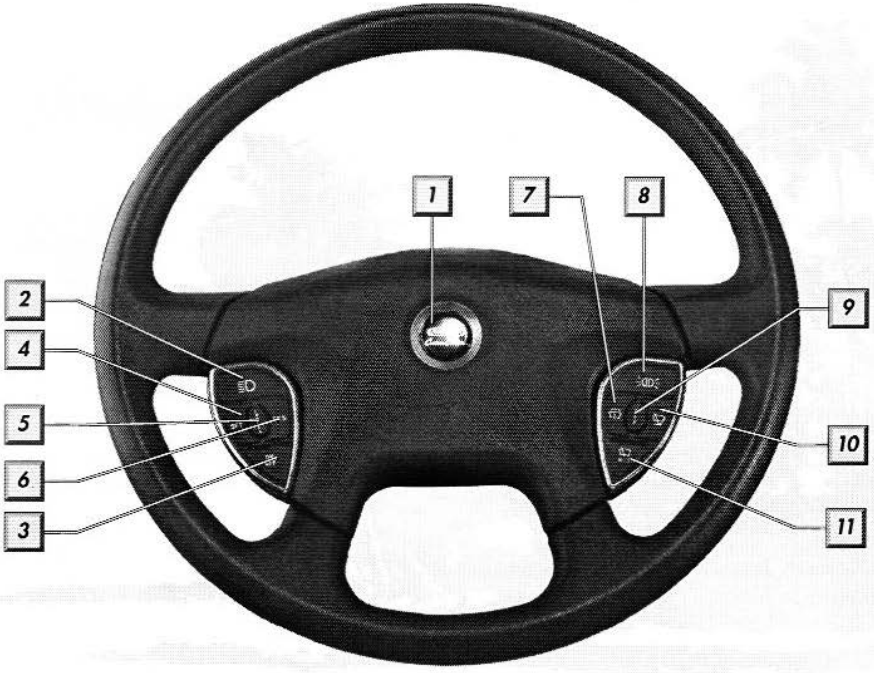
STEERING WHEEL AND CONTROLS

1. **HORN BUTTON** - A horn is provided for driver safety. Horn settings may be controlled by using the **HORN CONTROL SWITCH** located on the **LEFT DASH PANEL.**
2. **HEADLAMP INTERRUPT** - Press and hold to turn head lamps on; Press and hold to turn off.
3. **CRUISE CONTROL ON/OFF** - Press to activate or deactivate cruise control settings.
4. **CRUISE SET** - Press to activate the cruise control at the current driving speed.
5. **CRUISE CANCEL** - Press to disengage the cruise control. The current driving speed will be memorized.
6. **CRUISE CONTROL RESUME** - Press to reactivate the cruise control from the previous set driving speed.
7. **WIPER WASH** - Press to activate the wiper pump. When using this feature make sure there is a washing solution in the wiper fluid bottle.

⚠ CAUTION ⚠

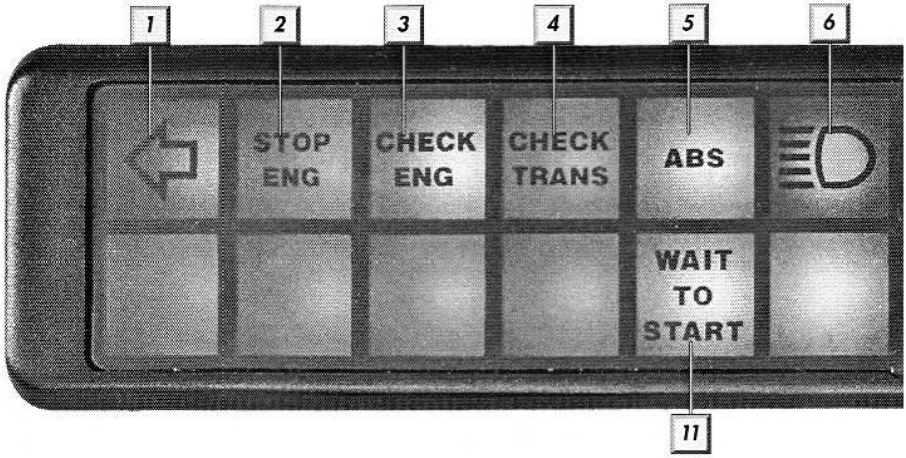
Lack of solution in the wiper washer bottle can cause damage to your wipers, and running the wipers dry may scratch the windshield.

8. **MARKER LAMP INTERRUPT** - Press to turn the hazard lamps on; Press and hold to turn them off.
9. **WIPER OFF** - Press to cancel all wiper operations.
10. **WIPER VARIABLE SWITCH** - Press to activate the wipers for a one speed wipe. Press the switch again will cycle variable speeds.
11. **WIPER HI/LO** - Press the wiper switch once to activate a low speed wiper function. Press twice to activate high speed wiper speed. Press again to cycle between high and low wiper functions.



WARNING LAMP CLUSTER

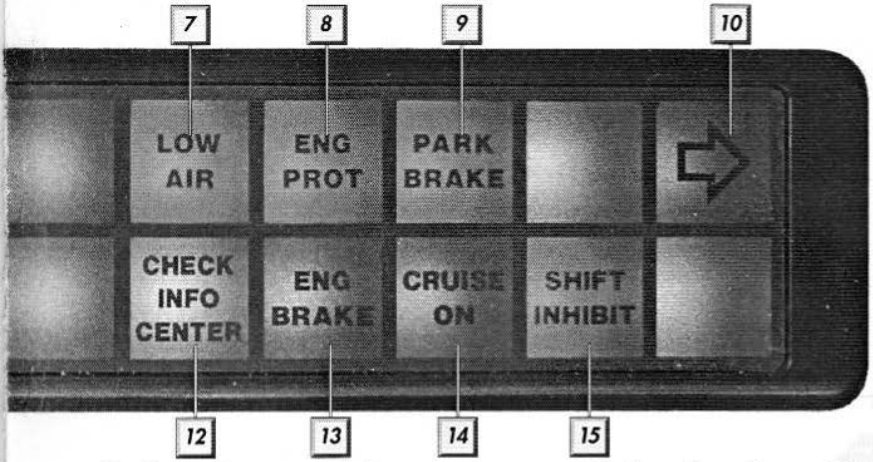
When the ignition is first turned on, the warning lamp cluster will illuminate and an audio buzzer will sound for five seconds. If there are no faults recorded the lights and audio buzzer will disengage. If a fault has been recorded the warning system will remain illuminated; have the system checked before proceeding.



1. ***Left Turn Signal*** - Illuminates when the left turn signals are operating.
2. ***Stop Engine*** - If the coolant temperature or oil pressure is outside its normal operating range or if certain fault codes have been generated within the engine's control system, the engine protection system will illuminate the appropriate warning lamps. If the condition persists or worsens, the stop lamp will flash for ***30*** seconds before the engine is automatically shut down.

> **⚠WARNING⚠**
>
> If the stop engine light illuminates while in transit, pull over and shut down the engine immediately! ***Do not*** continue on your journey until the problem is corrected.

3. ***Check Engine*** - The engine warning lamp will illuminate when an engine fault requires repair at the first opportunity. Operation anomalies within the control system may result in various fault codes that are kept in the engine control module's memory for diagnosis by qualified service technicians.
4. ***Check Transmission*** - Indicates a problem with the transmission system and that the vehicle data computer (VDC) is taking action to protect the operator, vehicle and transmission. If the check transmission lamp does not illuminate during ignition or if the light remains on after ignition, the system should be checked immediately. Continued illumination of the check transmission lamp during vehicle operation indicates that the VDC has signaled a diagnostic code which should be checked by a qualified technician immediately. The VDC may restrict shifting to prevent further damage to the vehicle or injury. ***(Consult the transmission manufacturer's manual for further information.)***
5. ***Anti-Lock Brake System (ABS)*** - Illuminates momentarily on start-up to signal that the ABS system is being checked for anomalies. This light will remain illuminated during operation if problems arise within the ABS system. If the ABS lamp remains illuminated, seek qualified service immediately.
6. ***Hi-Beam Indicator*** - Illuminates when the high beams are operating.
7. ***Low Air Pressure*** - Indicates that there is insufficient air pressure at the brakes to safely operate them. Wait for air pressure to build sufficiently before operating the vehicle.



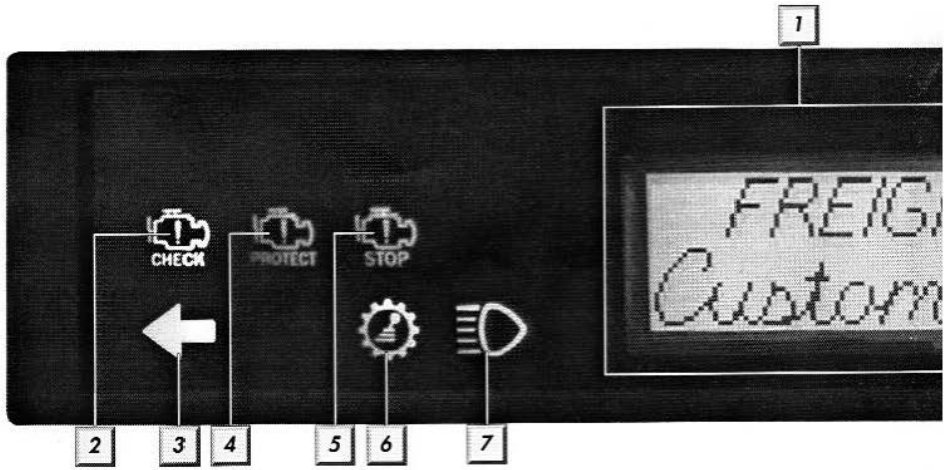
⚠WARNING⚠

If the warning system does not initialize when the ignition is in the **ON** position, repair the system before operating the motor home.

8. ***Engine Protection*** - Indiccates that an engine fault code has been logged. Typically indicates very high temperatures, or other items that can cause major damage to the engine. When this occurs the engine will go into a de-rated mode of operation that limits power to the engine. To prevent damage to the engine safely pull over to the side of the road and seek qualified service immediately. *(Consult the engine manufacturer's manual for further information.)*
9. ***Parking Brake*** - Indicates that the parking brake is set and must be disengaged prior to moving the vehicle.
10. ***Right Turn Signal*** - Illuminates when the right turn signals are operating.
11. ***Wait to Start*** - Illuminates if the key is turned on but the air intake manifold is not warm enough to start the engine. An air intake heater warms the manifold automatically. Wait until the lamp extinguishes before trying to start the engine.
12. ***Check Information Center*** - Illuminates when there has been an active fault logged for the info center. *(Consult the engine manufacturer's manual for further information.)*
13. ***Engine Brake*** - The engine is equipped with an automatically controlled exhaust brake. The exhaust brake lamp illuminates when the exhaust brake is engaged.
14. ***Cruise On*** - Indicates that the cruise control is on.
15. ***Shift Inhibit*** - Indicates a problem with the transmission system and that the Vehicle Data Computer (VDC) is taking action to protect the operator, vehicle and transmission. When this is illuminated the transmission will log a fault code. This will inhibit the transmission from shifting.

WARNING LAMP CLUSTER

When the ignition is first turned on, the warning lamp cluster will illuminate and an audio buzzer will sound for five seconds. If there are no faults recorded the lights and audio buzzer will disengage. If a fault has been recorded the warning system will remain illuminated; have the system checked before proceeding.

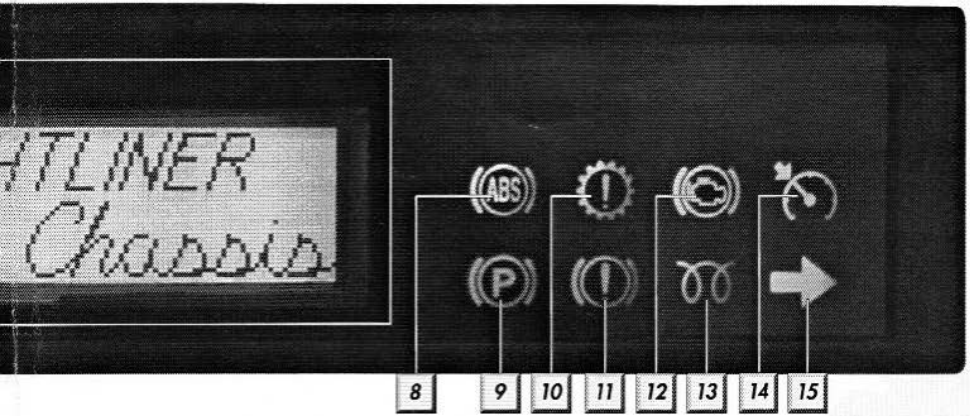


1. ***DRIVER INFORMATION CENTER*** - The info center communicates real-time chassis information about the performance of the vehicle to the driver. It also provides diagnostics and a trip meter. *(CONSULT THE CHASSIS MANUFACTURERS DOCUMENTATION FOR SPECIFIC OPERATION INSTRUCTIONS.)*
2. ***CHECK ENGINE*** - The engine warning lamp will illuminate when an engine fault requires repair at the first opportunity. Operation anomalies within the control system may result in various fault codes that are kept in the engine control module's memory for diagnosis by qualified service technicians.
3. ***LEFT TURN SIGNAL*** - Illuminates when the left turn signals are operating.
4. ***ENGINE PROTECTION*** - Indicates that an engine fault code has been logged. Typically indicates very high temperatures, or other items that can cause major damage to the engine. When this occurs the engine will go into a de-rated mode of operation that limits power to the engine. To prevent damage to the engine safely pull over to the side of the road and seek qualified service immediately. *(CONSULT THE ENGINE MANUFACTURER'S MANUAL FOR FURTHER INFORMATION.)*
5. ***STOP ENGINE*** - If the coolant temperature or oil pressure is outside its normal operating range or if certain fault codes have been generated within the engine's control system, the engine protection system will illuminate the appropriate warning lamps. If the condition persists or worsens, the stop lamp will flash for **30** seconds before the engine is automatically shut down.

⚠WARNING⚠

If the stop engine light illuminates while in transit, pull over and shut down the engine immediately! ***DO NOT*** continue on your journey until the problem is corrected.

6. ***SHIFT INHIBIT*** - Indicates a problem with the transmission system and that the Vehicle Data Computer (VDC) is taking action to protect the operator, vehicle and transmission. When this is illuminated the transmission will log a fault code. This will inhibit the transmission from shifting.
7. ***HI-BEAM INDICATOR*** - Illuminates when the high beams are operating.
8. ***ANTI-LOCK BRAKE SYSTEM (ABS)*** - Illuminates momentarily on start-up to signal that the ABS system is being checked for anomalies. This light will remain illuminated during operation if problems arise within the ABS system. If the ABS lamp remains illuminated, seek qualified service immediately.



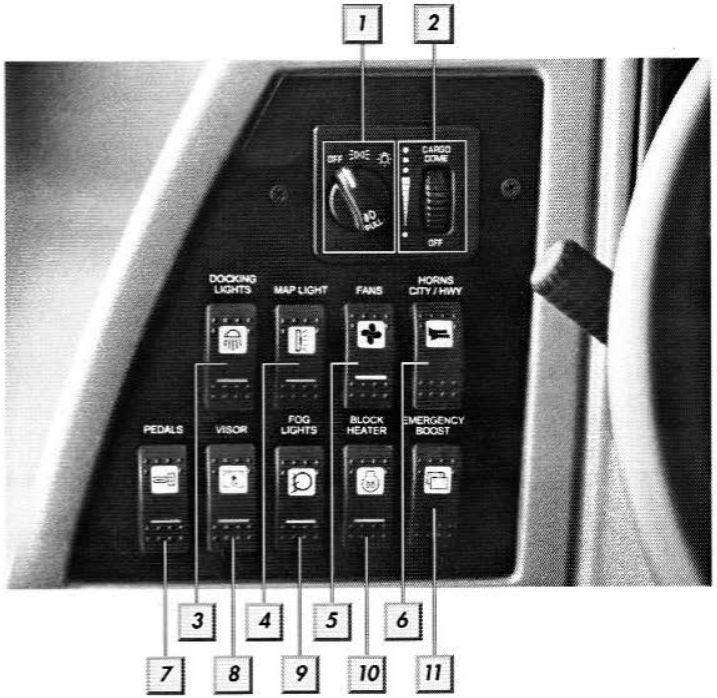
⚠WARNING⚠

If the warning system does not initialize when the ignition is in the **ON** position, repair the system before operating the motor home.

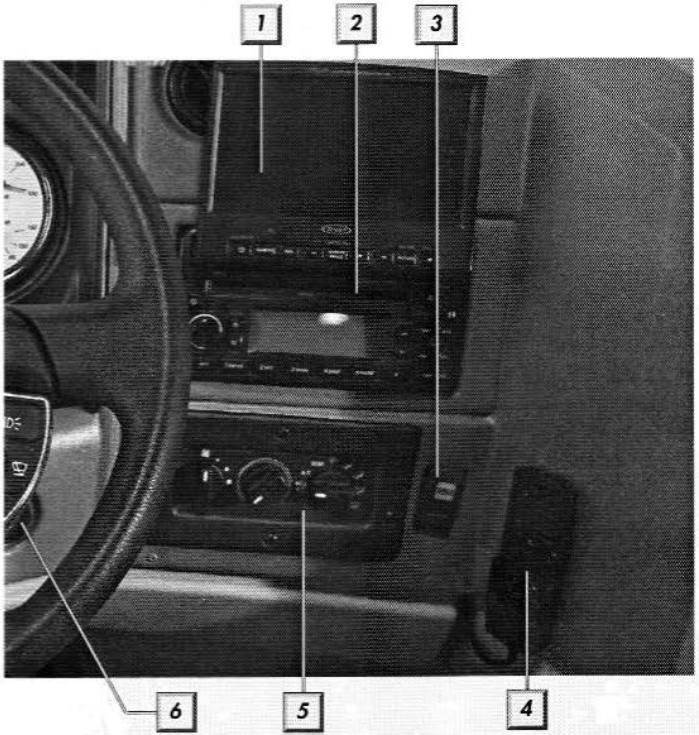
9. ***Parking Brake*** - Indicates that the parking brake is set and must be disengaged prior to moving the vehicle.
10. ***Check Transmission*** - Indicates a problem with the transmission system and that the vehicle data computer (VDC) is taking action to protect the operator, vehicle and transmission. If the check transmission lamp does not illuminate during ignition or if the light remains on after ignition, the system should be checked immediately. Continued illumination of the check transmission lamp during vehicle operation indicates that the VDC has signaled a diagnostic code which should be checked by a qualified technician immediately. The VDC may restrict shifting to prevent further damage to the vehicle or injury. *(Consult the transmission manufacturer's manual for further information.)*
11. ***Low Air Pressure*** - Indicates that there is insufficient air pressure at the brakes to safely operate them. Wait for air pressure to build sufficiently before operating the vehicle.
12. ***Engine Brake*** - The engine is equipped with an automatically controlled exhaust brake. The exhaust brake lamp illuminates when the exhaust brake is engaged.
13. ***Wait to Start*** - Illuminates if the key is turned on but the air intake manifold is not warm enough to start the engine. An air intake heater warms the manifold automatically. Wait until the lamp extinguishes before trying to start the engine.
14. ***Cruise On*** - Indicates that the cruise control is on.
15. ***Right Turn Signal*** - Illuminates when the right turn signals are operating.

LEFT DASH PANEL

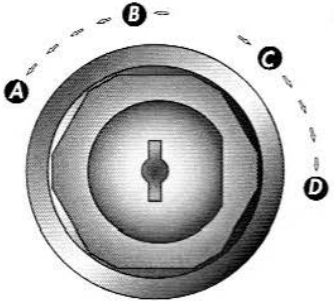
1. **DASHBOARD LIGHTS DIMMER** - Dims the instrument panel lights and gauges.
2. **HEADLIGHT CONTROLS** - Turns the headlights and parking lights on or off. The high and low beams are controlled by a switch integrated into the turn signal lever on the steering column.
3. **DOCKING LIGHTS** - Press switch forward to turn the docking lights on; back to turn the lights to the off position.
4. **MAP LIGHT** - Turns the map light above the driver on and off.
5. **FANS** - Controls the Driver and Passenger side fans.
   - **Forward Position** - Driver side fan on
   - **Middle Position** - Driver and Passenger side off
   - **Back Position** - Driver and Passenger side on
6. **HORNS CITY/HWY** - Controls the city and highway horns. The horn may be activated by pressing the **HORN BUTTON** on the steering wheel.
   - **Forward Position** - City horns
   - **Middle Position** - Off
   - **Back Position** - Highway and city horns
7. **PEDALS** - Press switch forward to extend the driver's pedals; back to retract.
8. **FULL LENGTH FRONT WINDSHIELD VISOR** - Press switch forward to extend the visor; back to retract. The visor may be extended to the dash to function as a privacy screen wile parked.
9. **FOG LIGHTS** - Turns the fog lights on or off. The engine must be **ON** or in **ACC** mode for the lights to function.
10. **ENGINE-BLOCK HEATER** - Activates the engine block heater. The engine block heater can be used to warm the engine block in cold weather. *(CONSULT THE CHASSIS MANUFACTURERS OWNERS GUIDE FOR EXACT USAGE AND PROCEDURES.)*
11. **EMERGENCY BOOST** - Temporally connects the house batteries to the engine batteries to start the engine when the engine batteries are discharged.



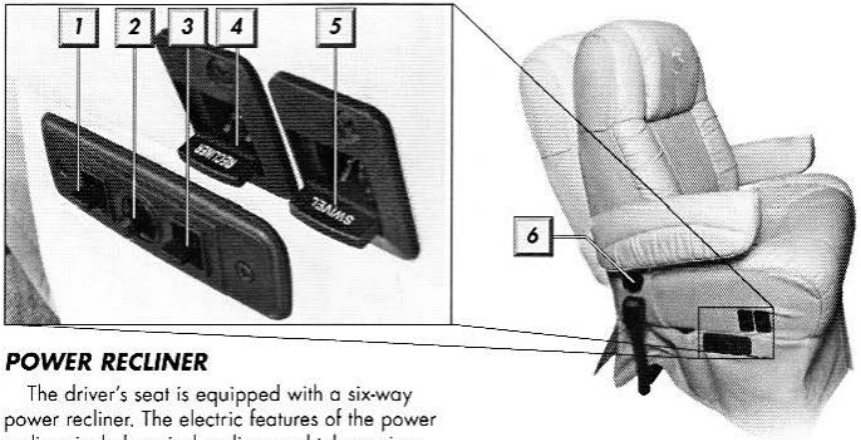
RIGHT DASH PANEL

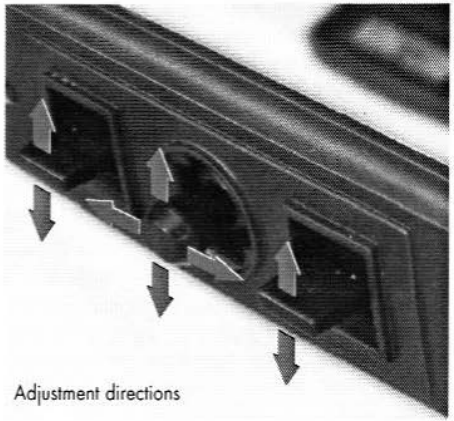


1. **BACKUP MONITOR AND LCD NAVIGATION SYSTEM** - While the transmission is in the **REVERSE** (**R**) position the LCD display functions as the backup monitor for the rear, left and right mounted cameras. As a secondary function the LCD display is used as an onboard navigation system. *(CONSULT THE RESPECTIVE MANUFACTURERS DOCUMENTATION FOR SPECIFIC OPERATION INSTRUCTIONS.)*
2. **RADIO (AM/FM STEREO SYSTEM)** - *(CONSULT THE RADIO MANUFACTURERS DOCUMENTATION FOR SPECIFIC OPERATION INSTRUCTIONS.)*
3. **RADIO BUTTON** - Turns the radio on or off. The radio button will allow the radio to be function without the use of a key in the ignition or in **ACC** mode.
4. **NAVIGATION CENTER REMOTE AND HOLDER** - Remote control used to control the LCD navigation system. *(CONSULT THE NAVIGATION OWNERS MANUAL FOR COMPLETE OPERATION INSTRUCTIONS.)*
5. **DASH HEAT & AIR CONDITIONING SYSTEM** - Controls for the dash A/C and heat. Controls are similar to those found in automobiles.
6. **IGNITION** - The headlights, brake lights, fog lights, clearance lights, turn signals, parking lights and the hazard warning lights will operate with the ignition in the **OFF** position. The ignition also has an **ACC**essory mode that activates the electrical accessories such as the A/C when the engine is not running.



   A. ***Acc*** - Accessories
   B. ***Off*** - Turns the engine off. Headlights, brake lights, fog lights, clearance lights, hazard lights, turn signals and parking lights may still be operated.
   C. ***On*** - Turns on the ignition system and electrical accessories.
   D. ***Start*** - Turn the key clockwise to start the engine. When the engine starts release the key. The key will return to the **ON** (**C**) position.





Adjustment directions

POWER RECLINER

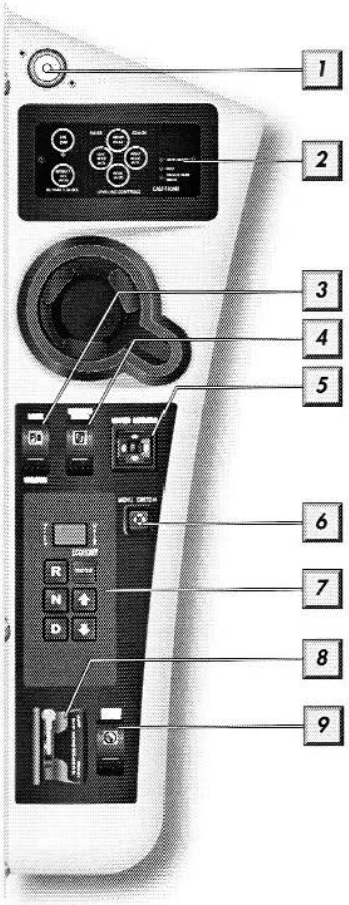
The driver's seat is equipped with a six-way power recliner. The electric features of the power recliner include swivel recliner and telescoping adjustment features.

1. ***Rear Angle Adjustment*** - Push the control switch in the desired direction to adjust the angle for the rear portion of the chair. Releasing the switch will stop the seat in that position.

⚠WARNING⚠

Do not adjust the seat while the motor home is in motion. Moving the seat may unexpectedly move and cause the driver to lose control of the motor home.

2. ***Main Adjustment*** - Push the control switch in the desired direction to adjust the position of the chair. Release the switch will stop the seat in that position.
3. ***Front Angle Adjustment*** - Push the control switch in the desired direction to adjust the angle for the front portion of the chair. Releasing the switch to stop the seat in that position.
4. ***Seat back Recliner*** - Lift the lever and push the seat back until desired angle is obtained. Release the lever to lock the seat back. To bring the seat back forward, lift the switch and lean forward.
5. ***Chair Swivel*** - Lift the lever to allow the chair to swivel; release the lever to lock the chair in the desired location. To bring the chair to the forward direction, lift the lever and turn the chair in the appropriate direction.
6. ***Lumbar Support*** - The lumbar support feature provides lower back support. Turn the dial to adjust the seat lumbar area.



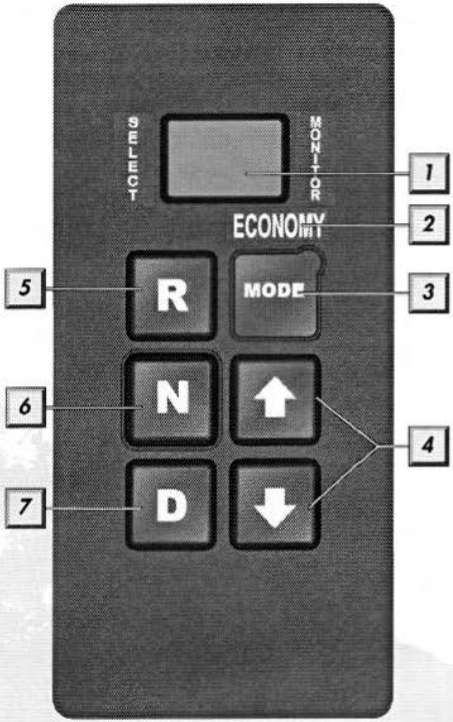
DASH SIDE CONSOLE

1. **MANUAL LEVEL BUBBLE-** Used for horizontal and vertical leveling.
2. **ELECTRONIC LEVELING SYSTEM -** The leveling system is used to level the motor home while in the parked position.
3. **AUTOMATIC FRONT ENTRY LOCK -** Locks and unlocks the front entry door. Press the switch forward to lock the door. Press the switch back to unlock.
4. **MIRROR DEFOG -** Press and hold to defog the side mounted mirrors.
5. **MIRROR CONTROLS -** Adjusts the side-mounted electric mirrors. The center switch toggles between **LEFT**, **OFF** and **RIGHT** and the **OUTER** directional switches adjust the selected mirror.
6. **MENU CONTROL SWITCH -** Used to control the **DRIVER INFORMATION CENTER** that is located on the **WARNING LAMP CLUSTER**. For models that have the **DRIVER INFORMATION CENTER** located on the right control panel, this switch will be removed.
7. **TRANSMISSION SHIFTER CONTROL -** Push-button operation for the automatic transmission. *(CONSULT THE TRANSMISSION CONTROLS SECTION OF THIS OWNER'S GUIDE FOR EXACT USAGE AND STARTUP PROCEDURES.)*
8. **AIR DUMP TOGGLE SWITCH -** Used to manually dump air suspension. *(CONSULT THE AIR SYSTEM COMPONENTS SECTION OF THIS MANUAL FOR OPERATION.)*
9. **ENGINE BRAKE -** Enables the engine exhaust brake. *(CONSULT THE ENGINE OPERATION SECTION OF THIS OWNER'S GUIDE FOR EXACT USAGE AND STARTUP PROCEDURES.)*

⚠ CAUTION ⚠

Make sure you are leveling the coach on a solid surface or the jacks may sink into the ground. Before extending jacks make sure there are no objects in the path of the jacks.

MAKE SURE ALL JACKS ARE RETRACTED BEFORE DEPARTING.



TRANSMISSION CONTROLS

The transmission is controlled with a electronic control unit or **ECU**. The **ECU** processes information from the sensors and shift selector to automatically control the transmission. Under normal operating conditions the transmission will make the appropriate shift; however, the versatile controls of the transmission allow the driver to manually select the desired transmission speed. *(CONSULT THE TRANSMISSION AND CHASSIS MANUFACTURERS OPERATING MANUALS BEFORE ATTEMPTING TO MANUALLY UPSHIFT OR DOWNSHIFT GEARS.)*

NOTE: The transmission does not have a **PARK POSITION**; therefore, the **PARKING BRAKE** must be applied whenever the unit is parked.

1. **MODE ON** - Displays the current transmission speed. Shift positions include ***R***, ***N***, ***3***, ***2***, ***1***. When **DRIVE (D)** is selected, the **MODE ID DISPLAY** shows the highest forward range attainable for the shift schedule in use. If a fault occurs, the display shows certain selector-related fault codes and **CHECK TRANSMISSION** lamp in the **WARNING LAMP CLUSTER** of the instrument panel will illuminate. *(CONSULT THE TRANSMISSION OPERATOR'S MANUAL FOR FURTHER DISCUSSION OF FAULT CODES AND THE DIGITAL DISPLAY.)*

IMPORTANT

Consult the transmission and chassis manufacturers operators manual before attempting to use the **UPSHIFT** and **DOWNSHIFT** features of the transmission.

2. **MODE ID DISPLAY** - Displays the name of the current pre-programmed shift schedule if available.
3. **MODE BUTTON** - The mode button allows the driver to create and select a secondary shift selection routine, or other special function programmed into the **ECU**.
   - When in **DIAGNOSTIC MODE**, the mode button is used to toggle through diagnostic code information. Continue to press the mode button to cycle through remaining codes.
4. **UPSHIFT & DOWNSHIFT CONTROLS**
   - Press the **UP** arrow while the transmission is in drive will request the next higher range. After requesting a different range the transmission will automatically shift to the desired range when the engine and motor home conditions are appropriate.
   - Press the **DOWN** arrow will request the next lower range. After requesting a different range the transmission will automatically shift to the desired range when the engine and motor home conditions are appropriate. Downshifting is useful mostly on downhill grades where compression breaking is necessary to maintain a safe downhill speed.
   - Continuously press the **DOWN** arrow will request the lowest range possible.
   - Simultaneously press the **UP** and **DOWN** arrows to enter diagnostic mode and to display diagnostic data.

5. **REVERSE (R)** - Use **REVERSE (R)** to back up the motor home. Before removing the motor home out of reverse make sure it is completely stopped. Failure to do so may cause damage to the transmission.
6. **NEUTRAL (N)** - Use **NEUTRAL (N)** in conjunction with the **PARKING BRAKE** to place the motor home in park. Always select **NEUTRAL (N)** before turning **OFF** the engine.

⚠WARNING⚠

DO NOT let the motor home coast in neutral; coasting can cause loss of control and severe transmission damage.

7. **DRIVE (D)** - Normal driving conditions are suitable for **DRIVE (D)**. Only shift into the drive when the motor home is stopped and the engine is at idle speed. The transmission will initially start in **FIRST (1)** gear. When the gas is pressed and acceleration occurs the speed increase will cause the transmission to automatically upshift. Decreasing speed will automatically downshift to a lower gear. The pressure on the gas pedal will cause the upshifts to occur at a decreased rate.

AIR SYSTEM COMPONENTS

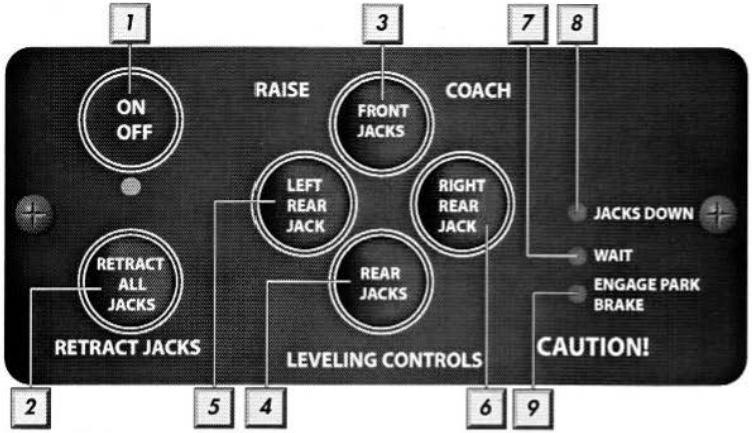
- **AIR TANKS** - The chassis equipped air tanks have automatic heated drains located on the bottom of each tank. While driving, the automatic ejectors will operate and dissipate moisture from the tanks.
- **AIR DRYER** - The air dryer keeps the air in the air brake system free of moisture and other contaminants such as oil.
- **AIR BRAKES** - This motor home is equipped with a dual air brake system that uses a single set of brake controls. Each system has its own reservoir, plumbing and brake chambers. The primary system operates the service brakes on the rear axle while the secondary system operates the service brakes on the front axle. Located on the instrument cluster are the instrument gauges that will display the air pressure contained in each air tank. **THE LOW AIR PRESSURE WARNING LIGHT** and **WARNING BUZZER** will warn you if the air pressure falls below **38** to **42** psi. If the air pressure in the braking system falls below **40** psi, the **PARKING BRAKE** will re-engage. If the air system falls this low, safely bring the motor home to a complete stop and correct the problem.

SUSPENSION AIR - AIR DUMP

- **AUTO** - Activate the toggle switch to the **AUTO** position to reinflate the air suspension. Before driving, allow the air system to build up the minimum of **95** PSI in the primary and secondary systems. Monitor the system with the air gauges located on the instrument cluster. The **LOW AIR PRESSURE** warning light and buzzer will shut off when the systems reaches **65** to **73** psi.
- **LOWER** - After placing the vehicle in **NEUTRAL (N)** and setting the **PARKING BRAKE**, momentarily activate the toggle switch in the **LOWER** position to dump air and deflate the air suspension.

⚠WARNING⚠

The motor home will not move until the air pressure has reached at least **65** pounds.



POWER LEVELERS - HYDRAULIC JACKS

The hydraulic leveling system is designed to level and stabilize the motor home. Move the unit to a relatively level surface before beginning the power leveling process. It is recommended to level the motor home after the slide-outs have been extended.

On a four point jack system the front jacks cannot be operated independently. Operation of these switches will result in the red LED illuminating indicating that the jacks are down.

1. ***On/Off*** - Push button to illuminate panel and activate system. This button controls the supply of power for all panel functions. Activation of this button is indicated by its green LED indicator located below the button.
2. ***Retract All Jacks*** – Automatically retracts jacks when ***jacks down*** LED is not lit. Activation of this switch causes all legs to retract to the travel position. When the LED is extinguished, it is safe to move the motor home.
3. ***Front Jacks*** - Lowers both the left and right front jacks simultaneously. Press and hold until jacks make contact with the ground.
4. ***Rear Jacks*** - Lowers the right rear and left rear jacks simultaneously. Press and hold button until jacks make contact with the ground.
5. ***Left Rear Jack*** - Press and hold to lower the left rear jack independently. Press and hold button until jacks make contact with the ground.
6. ***Right Rear Jack*** - Press and hold to lower the right rear jack independently. Press and hold button until jacks make contact with the ground.
7. ***Wait*** - Illuminates when the system is initializing. When the wait LED is flashing, the system is busy. The system will not be operational until the LED is off.
8. ***Jacks Down*** – Illuminates when any jack is not fully retracted.
9. ***Engage Park Brake*** - Flashes when the parking brake is not engaged. The LED will extinguish when engaged.

⚠ CAUTION ⚠

Always level the coach on a solid surface or the jacks may sink into the ground. Before extending jacks make sure there are no objects in the path of the jacks.

EXTENDING THE LEVELING JACKS

A. Park the coach in a level area.

B. Place the transmission in the neutral position and leave the engine idling.

C. Set the ***PARKING BRAKE***.

D. Switch the air dump lever to the lower position to drain air from the suspension.

E. Turn the leveling system on by pressing the ***ON/OFF*** button.

F. Verify that all jacks are fully retracted by pressing ***RETRACT ALL JACKS***.

G. With the jacks retracted press the ***FRONT JACKS*** button until the jacks make contact with the ground.

H. Press the ***REAR JACKS*** button until the jacks make contact with the ground.

I. Review the leveling indicator to determine if the coach is leveled correctly. The indicators will be centered in the leveling bubbles.

J. If further leveling is required, press the appropriate button for leveling.

K. Turn the leveling system off by pressing the ***ON/OFF*** button.

L. Turn the engine to the ***OFF*** position.

RETRACTING THE LEVELING JACKS

A. Turn the engine to the ***ON*** position. Alternatively the ignition can be in ***Acc MODE***.

B. Turn the leveling system on by pressing the ***ON/OFF*** button.

C. Press the ***RETRACT ALL JACKS*** button to retract the jack system.

D. When the ***JACKS DOWN*** light extinguishes, turn the leveling system off by pressing the ***ON/OFF*** button.

⚠ CAUTION ⚠

Visually inspect that the leveling jacks have been fully retracted before departing.

IMPORTANT PRECAUTIONS

⚠WARNING⚠

DO NOT use the leveling jacks as a lift for changing tires or to support the vehicle while under the coach.

⚠WARNING⚠

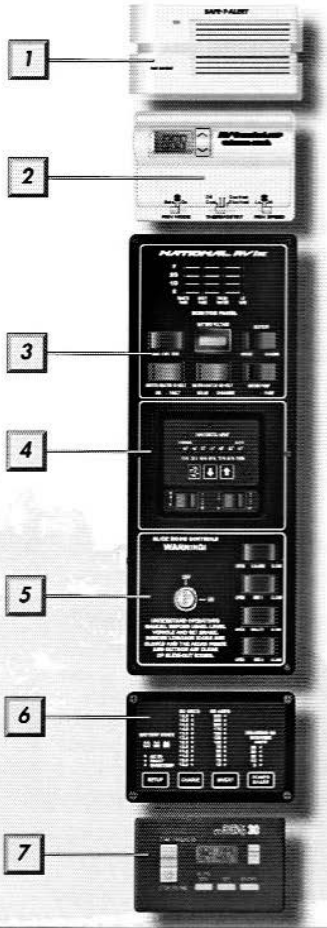
When extending the rear jacks, ***DO NOT*** lift the wheels off of the ground. Doing so overrides the chassis parking brake.

⚠WARNING⚠

Never expose hands or other parts of the body near hydraulic leaks. The high pressure of an oil leak may cut and penetrate the skin causing serious injury.

⚠WARNING⚠

Park the motor home on reasonably solid surfaces or the jacks may sink into the ground or blacktop. When on extremely soft surfaces, use wood planking as load distribution pads under each jack.

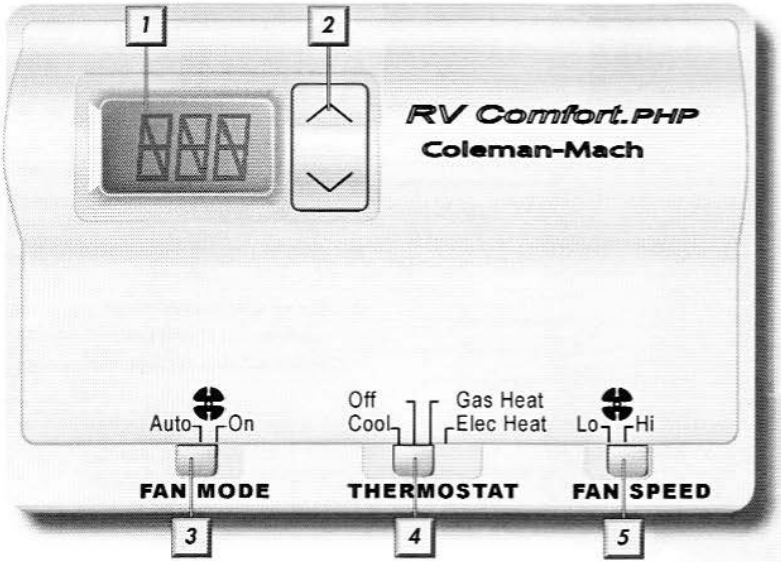


MONITOR PANEL

The monitor panel is designed for instant access to climate control features and systems information. The monitor panel typically houses the slide-out room controls, tank monitoring system, Fan-Tastic Vent and remote inverter/charger controls.

1. ***CO DETECTOR*** - See ***SAFETY FEATURES*** section of this manual for further information.
2. ***COMFORT CONTROL CENTER*** - The comfort control center enables easy operation of the ceiling mounted air conditioners and gas operated appliances. ***NOTE:*** When heat controls are used the furnace and LPG system must be turned on.
3. ***TANK MONITORING SYSTEM*** - Monitoring panel shows tank, battery capacities and usage.
4. ***FAN-TASTIC VENT*** - The fan will either draw outside air into the motor home or exhaust interior air to the outside.
5. ***SLIDE-OUT CONTROLS*** - A 12V DC motor and drive shaft operates each slide-out room and is powered by the house (auxiliary) battery. A specially designed control system provides full control of room movement. (***OPEN*** or ***CLOSE***).
6. ***INVERTER/CHARGER CONTROL PANEL*** - Controls the inverter/charger system. The Inverter is designed to deliver power to small appliances, TVs and any other onboard electronics. ***(CONSULT THE INVERTER/CHARGER SECTION OF THIS OWNER'S MANUAL FOR COMPLETE OPERATING INSTRUCTIONS.)***
7. ***GENERATOR ENERGY COMMAND CENTER*** - Automatic generator starting system that provides energy related systems information such as battery state, charge state, operations information and service information.

*Optional on some models.



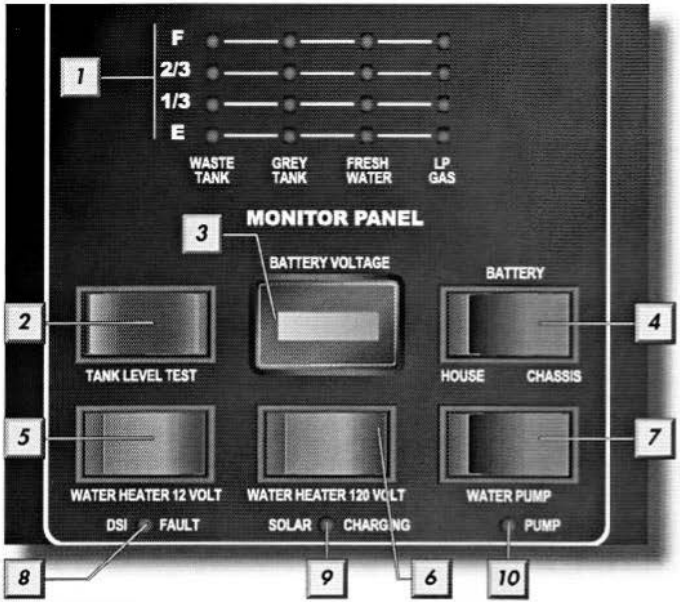
COMFORT CONTROL CENTER (CCC)

1. ***LCD*** - The comfort control center is equipped with an easy to read liquid crystal display unit. This LCD displays the mode of operation, temperature, set point, fan speed and zone identifications and any other features that can be controlled by the CCC. When a selection button is pressed the LCD will illuminate making the display easy to view for both day and night use.
2. ***TEMPERATURE SELECTION ARROWS*** - Press the ***UP*** or ***DOWN*** arrows to set the desired temperature level. The ***UP*** arrow increases the temperature setting while the ***DOWN*** arrow decreases the temperature setting. The adjusted temperature will display on the LCD..
3. ***FAN MODE*** - Press the switch to cycle through the various settings. Fans settings include ***AUTO***, and ***ON***.
4. ***THERMOSTAT*** - Selections include: ***OFF, COOL, GAS HEAT, ELECTRIC HEAT***.
   - ***Off*** - Turns the ***COMFORT CONTROL CENTER*** to the ***OFF*** position.

IMPORTANT

The A/C unit(s) function using a 120V power source and LPG controlled furnace. In order to properly use the A/C unit(s) a shore power source or generator will need to be connected. When the heat controls are used the furnace and the LPG system need to be in the ***ON*** position.

   - ***Cool*** - Under the thermostat control set the sliding knob to cool. Set the desired temperature using the ***TEMPERATURE SELECTION ARROWS***.
   - ***Electric Heat Mode*** - While in electric heat mode heat is provided by which is integrated into the A/C unit. While in electric heat mode the LP-Gas furnace will act as a backup. The heat pump has three lockout periods and an operation range of about ***69° - 65°***. If the temperature falls below ***65°*** the lockout period will begin and the gas furnace will take over the heating functions. The word ***DIFF*** will display when the backup heat is operating and the heat pump is locked out. ***(CONSULT THE RV COMFORT OWNER'S MANUAL FOR COMPLETE OPERATING INSTRUCTIONS.)***
   - ***Gas Heat Mode*** - While in gas heat the gas furnace provides the only source for heat. The heat pump will be locked out.
5. ***FAN SPEED*** - Press the switch to cycle through the various settings. Fans settings include ***LO***, and ***HI***.

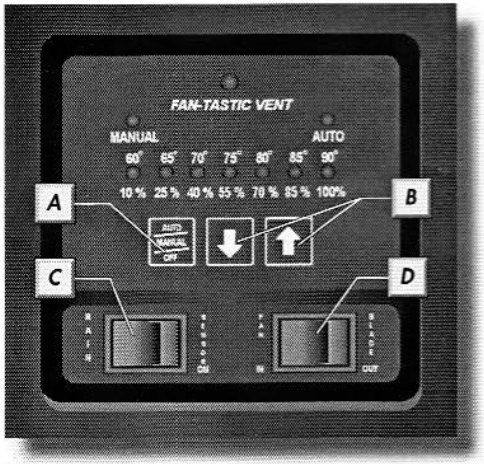


CAPACITY INDICATORS

1. ***Tank/Battery Indicators*** - These indicator lights are used in conjunction with the ***tank level test*** button. When pressed the lights will indicate current capacities ranges including **F**ull, ***2/3***, ***1/3*** and **E**mpty.
2. ***Tank Level Test Button*** - Press to display the levels on the ***tank indicators***.
3. ***Battery Voltage Meter*** - LCD screen that is used to display voltage for the house and chassis batteries when the battery button is pressed.
4. ***Battery Switch*** - Press the ***house*** side to test the house battery and the ***chassis*** side to test the chassis battery. The associated voltage will display on the battery voltage meter screen.
5. ***Water Heater 12 Volt*** - Press this button to ignite the LPG burner in the water heater.
6. ***Water Heater 120 Volt*** - When a 120V power source is applied, press this button to turn ***on*** or ***off*** the 120V heater coil in the water heater.
7. ***Water Pump*** - Turns the water pump on or off. The pump indicator light illuminates when the water pump is turned on.
8. ***DSI/Fault*** - Indicator light illuminates when there is a fault in the LPG ignition system.
9. ***Solar Charging*** - Pre-wired for installation for aftermarket solar panels.
10. ***Pump*** - Indicates if the water pump is on or off.

IMPORTANT

Before lighting the water heater purge the air that may have collected in the water lines by turning on water at all faucets. When a solid flow of water is present the air has been purged.



FAN-TASTIC VENT

The source of airflow is determined by whatever window(s) or door is open. A rain sensor is built into the fan that will automatically close the dome whenever water is detected.

A. AUTO/MANUAL/OFF SWITCH

- **Auto** - Once the temperature is set the controller will compare the actual temperature against the set temperature The fan automatically maintains the ambient temperature.
- **Manual** - Set the desired temperature by using the **UP** and **DOWN** arrows.
- **Off** - Used to close the dome and shuts off the fans motor.

B. ARROWS - Use the **UP** and **DOWN** arrows to set the temperature.

C. RAIN SENSOR - When the dome is open and moisture contacts the sensor, the dome will close and turn off the motor if it is running. When the rain sensor dries, the dome will reopen and resume the last fan setting. Press the rain sensor switch to the **OFF** position to disable the rain sensor.

D. FAN BLADE - Press the **IN** direction on the switch to allow fresh air from the outside to be brought into the motor home. Press the **OUT** direction to expel air from inside the coach to the outside.

SLIDE ROOM CONTROLS

To operate the slide-out, the engine must be in IDLE and the parking brake must be set. After the motor home has been leveled using the leveling instructions indicated in this guide, the slide-out switch can be pressed to open or close the slide-out.

TO EXTEND A SLIDE-OUT ROOM

A. Insert the key and rotate the key lock switch to the **ON** position.

B. Depress and hold the appropriate switch on the right hand side of the panel to the open position.

C. Release the switch when the room is fully extended.

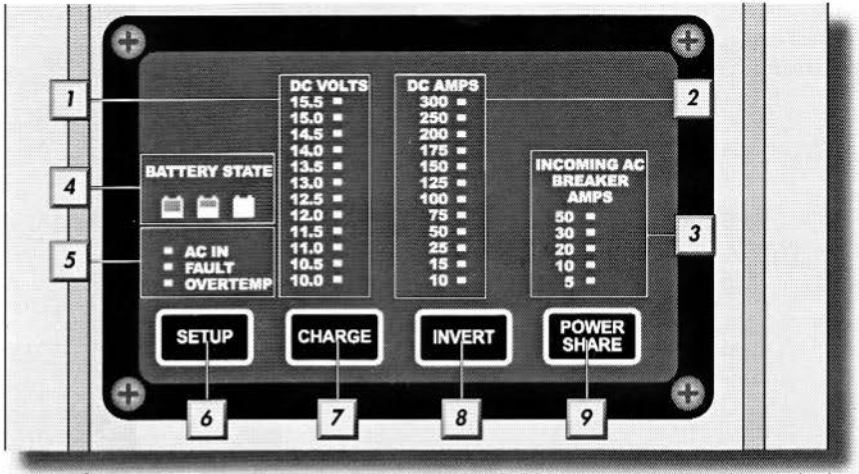
D. For safety, turn the key switch to **OFF** and remove the key when not in use.

TO RETRACT A SLIDE-OUT ROOM

A. Insert the key and rotate the key lock switch to the **ON** position.

B. Depress and hold the switch in the **CLOSE** position and release it when the room is fully retracted.

C. For safety, turn the key switch to **OFF** and remove the key when not in use.



INVERTER/CHARGER

This display illuminates important information about the inverter/charger. While in charge mode the panel displays charging information. While inverting it acts as a battery monitor and inverter display. The DC voltage, DC amps, incoming AC amps, charge, battery state, fault conditions and power sharing settings are either shown or can be controlled by this display. The display activates automatically anytime there is a solid connection to a battery or external AC power. This display updates itself once per second.

1. ***DC Volt indicator*** - Indicates the battery voltage for the inverter/charger. When there is a possible fault error, the DC Volt meter can determine ***high*** or ***low*** battery states.
2. ***DC Amps*** - Shows the current flow in or out of the inverter/charger. When an AC load is present the appropriate load will illuminate indicating current being drawn.
3. ***Breaker Amps*** - Indicates the incoming AC current. Power sharing will limit the amount of external AC current used by the charger.
4. ***Battery State*** - Indicates the charge state for the batteries while in invert mode. While in charge mode the battery state indicates charge stage. ***Note:*** The battery state does not indicate amp-hour capacity for the battery.

Lowest State - Battery voltage conditions are low; charging is recommended. In charge mode indicates a charge is occurring.

Middle State - Battery voltage is in normal range. In charge mode indicates acceptance stage. During acceptance stage the battery is accepting its final amount of charge.

Highest State - Battery voltage is fully charged. Float charge is reached and battery voltage will be held at a constant level.

5.STATUS INDICATORS - Indicates current of status inverter.

- ***AC IN*** - Shows available external AC power when a shore power connection or generator is connected.
- ***Fault*** - Indicates that a fault has occurred. The inverter/charger will shut down to protect from further damage. ***(Consult the inverter/charger manufacturers documentation for specific troubleshooting instructions.)***
- ***Overtemp*** - Indicates that the inverter/charger has overheated. The unit will automatically reset once the temperature returns to normal operating conditions.

IMPORTANT

The inverter draws about .5 Amps when the inverter is on and no load is present. When not in use it is best to turn off the inverter to avoid battery drain.

6. **SETUP** - The setup button is used to set the various functions for the inverter. If the setup button is solid green, the battery charger is on and charging. When this light is off, the charger is off.

⚠WARNING⚠

These settings for the inverter/converter have been pre-set by National RV. Set-up should only be changed if there is a major change in the system such as battery changes.

7. **CHARGE** - If an external AC connection is present, press the **CHARGE** button to activate charge mode. While in charge mode, the green LED on the charge switch will illuminate. Press the **CHARGE** button again to disengage charge mode.

8. **INVERT** - When the invert light is solid green, the inverter is supplying AC power from the DC battery source. When the light is off, the inverter is not operating. When an external power source is present and the **INVERT** led is blinking, the inverter is in standby mode. Remove the external AC power to begin inverting. If no external AC power is connected, the LED indicates that the inverter is in Idle mode.

IMPORTANT

Turn the inverter **OFF** before leaving the motor home unattended for long periods of time or during storage. Doing so will reduce the power consumption levels.

9. **POWER SHARE** - Power share is used to limit the amount of power the inverter will use. If breakers begin to trip reduce the power share amount to a lower setting. Changing these settings will only work if an AC power source is present; they will not work in Invert mode. To select the desired power share setting press the **POWER SHARE** button until the appropriate Incoming AC Breaker *(3)* is selected.

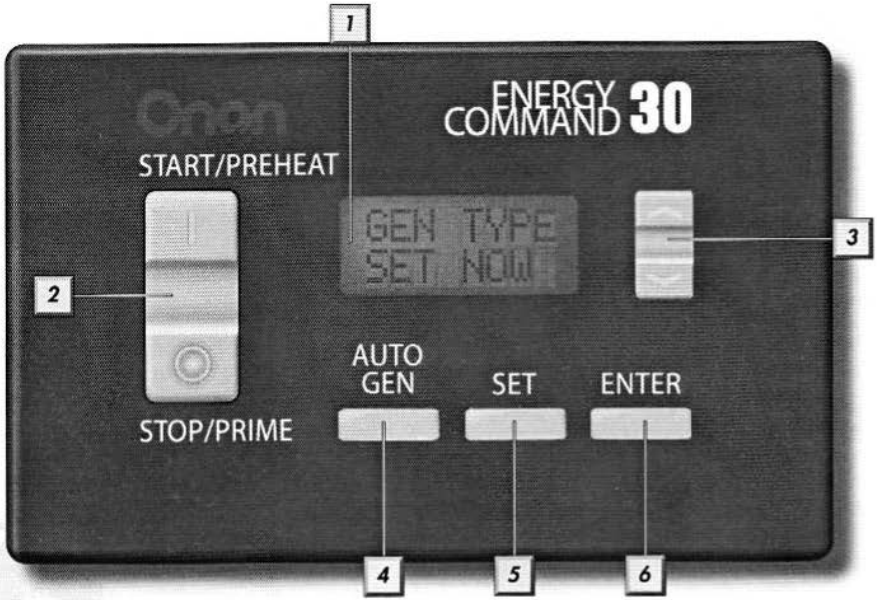
NOTE: PACIFICA MODELS USE A 50 AMP SERVICE.

If the total AC load is larger than the AC power available, the external AC circuit breakers may trip. If this is the case, select a lower power share setting to reduce the AC power consumption.

(CONSULT THE INVERTER OWNER'S GUIDE FOR EXACT REMOTE POWER SHARE NUMBERS).

EXTERNAL AC POWER

When an external power source or generator is active the three-stage battery charger, transfer switch and power sharing will automatically activate. If the external power source or generator are not available the inverter will automatically turn on if the invert switch is in the **ON** position.



⚠WARNING⚠

Before any operation of the generator, make sure the exhaust pipe is not bent, cracked or damaged. A damaged exhaust pipe may result in exhaust entering into the motor home.

1. ***LCD DISPLAY*** - Displays critical control information about the generator. The default display will indicate local time and the operation mode of the generator. When a generator command is entered, the display will indicate the appropriate action. After ten minutes of not being used the display will go back to the default display.
2. ***START/STOP SWITCH*** - Used to manually start and stop the generator. This switch has the same functions as the start stop switch located on the front panel of the generator. A red backlight will indicate when the generator is activated.
3. ***UP/DOWN CONTROLS*** - Used to change the different user control parameters and navigate through the different display modes as indicated on the ***LCD DISPLAY***.

ENERGY COMMAND MODULE (ECM)

The energy command module or ecm provides automatic and manual control of the generator on the motor home. The module also provides energy related systems information such as battery state, charge state, operations information and service information.

When the battery state becomes discharged or an energy request from an external request like the Air Conditioning is needed the energy command module will automatically turn the generator on. When the batteries have been charged or the request is no longer needed the energy command module will automatically disengage.

4. **AUTO GEN** - Used to select between the different operations available to the generator. It can also be used to turn the generators **QUIET MODE ON** or **OFF**.
   - Manual Mode - Operates in manual mode. The **START/STOP** switch must be used to turn the generator on.
   - Auto Mode - Operates when the battery state becomes low or a 120V AC request is made to the generator. While in **AUTO MODE** the safety signal prevent automatic operation when conditions are unsafe.
5. **SET** - Used to adjust the different user controlled parameters.
   - Select the desired setting using the **UP/DOWN** arrows. The value in the **LCD DISPLAY** will flash indicating the function can be changed.
   - Use the **UP/DOWN** arrows to change the function.
   - To confirm commands use the **ENTER** button.
6. **ENTER** - Used to store any changes that may have been updated. Secondary functions include setup mode and info display menus.

GENERATOR SAFETY SIGNAL

The generator is wired with a safety input that prevents the generator from unexpectedly starting when the motor home is being stored or in confined spaces. The safety signal will prompt for verification every 30 days if there is not a safety input change. When the coach is moved the Auto feature will be reset to manual mode. The Safety Signal can be setup to utilize on of the three safety signals:

- The **TRANSMISSION** must be in **NEUTRAL**.
- The **PARKING BRAKE** in the set **POSITION**.
- The **IGNITION SWITCH** must either be turned to **ACC MODE** or the engine must be idle.

SAFETY SIGNAL VERIFICATION

A. Press the **UP/DOWN** arrows until the setup & Info options shows on the **LCD DISPLAY**.

B. Press the **ENTER** button

C. Press the **UP/DOWN** arrows until the test system shows on the **LCD DISPLAY**.

D. Press the **ENTER** button

E. The **LCD DISPLAY** will show the selected safety input.

F. Press **ENTER** to confirm the safety input and exit to the safety test display.

STARTING THE GENERATOR: MANUALLY

The **ECM** can be used to manually start the generator using the Stop/Start switch. When the **ECM** is switched on a red backlight will illuminate to indicate that the generator is on.

To enter **MANUAL MODE**

- Press and hold the **STOP/PRIME** switch until the red backlight illuminates. This primes the generator.
- Press and hold the **START/STOP** switch until the generator starts.

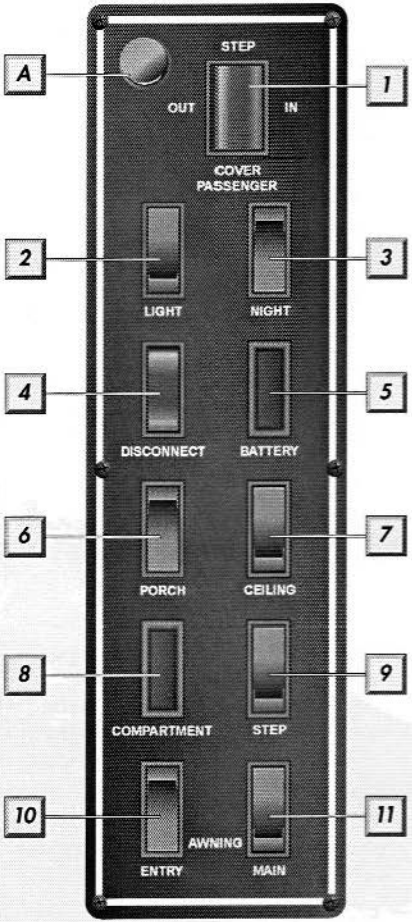
STARTING THE GENERATOR: AUTOMATICALLY

The **ECM** can be used to automatically start the generator when the battery state becomes discharged or a request has been made to run 120V AC powered components. When the **ECM** is switched on a red backlight will illuminate to indicate that the generator is on.

To enter **AUTO MODE**

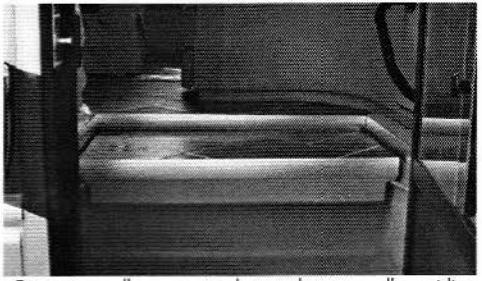
- The **GENERATOR TYPE** and **SAFETY SIGNAL** will need to be set in order for Automatic Operation to function. **(CONSULT THE ENERGY COMMAND OWNER'S GUIDE FOR EXACT SETUP PROCEDURES)**. Once set **AUTO MODE** will be available.
- Press the **AUTO MODE** button until **ENTER FOR AUTO** shows in the LCD Display.
- Press the **ENTER** button to confirm the selection.

* Some Models



ENTRY SWITCH PANEL

1. ***Step Cover*** - Push switch ***in*** to retract the interior stepwell cover. Push toward the ***out*** position to extend the cover over the step providing a floor for the front passenger.
2. ***Light*** - Operates the small reading light *(A)* that illuminates the entry switch panel.
3. ***Night*** - Turns the night lights on or off.
4. ***Disconnect*** - Disconnects the house batteries.
5. ***Battery Light*** - When the battery disconnect switch is ***on*** this indicator will illuminate. It indicates when power is being drawn from the house batteries.
6. ***Porch*** - Turns the exterior porch light on or off.
7. ***Ceiling*** - Turns the ceiling lights on or off.
8. ***Compartment Lights*** - Master switch to turn on all compartment lights. If light does not illuminate, check the individual light switch as it may have manually been turned off.
9. ***Step Switch*** - Turn the switch to the ***on*** position to keep the exterior entry step extended whether the main entry door is closed or open. In the ***off*** position the step will function as normal, extending when the door is opened and closed when the main door is shut.
10. ***Entry Awning*** - Press and hold the switch in the ***up*** position to extend the entry door awning. With awning extracted press and hold the switch in the down position to retract.
11. ***Main Electric Awning*** - Press and hold the switch in the up position to extend the main awning. With the awning extracted press and hold the switch down to retract.

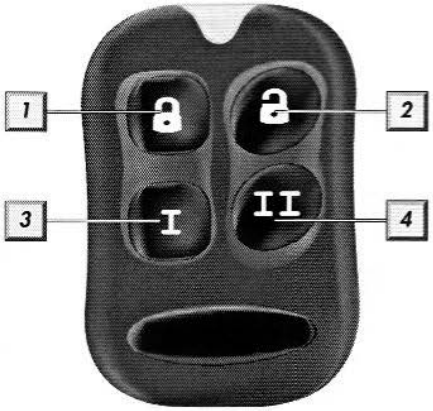


Entry step well cover extends over the step well providing a floor for the front passenger.

⚠WARNING⚠

This vehicle is equipped with an automatic electric entry step. Turning the ignition switch to the ***on*** position while the vehicle is parked will cause the step to retract. Visually confirm that the step is fully extended prior to exiting the vehicle.

BE SAFE - LOOK BEFORE YOU LEAP!

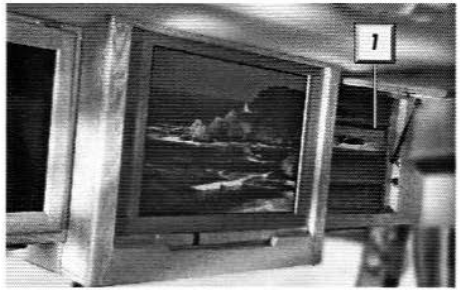


Keyless Entry Remote

KEYLESS ENTRY*

Pacifica models come standard with a keyless entry system for locking and unlocking the main entry door. This system is available as an option on Pacifica models.

1. **LOCK** - Locks the main entry door.
2. **UNLOCK** - Unlocks the main entry door.
3. **AUXILIARY FEATURE 1** - Not installed by National RV. This button can be used for dealer/OEM installed features.
4. **AUXILIARY FEATURE 2** - Not installed by National RV. This button can be used for dealer/OEM installed features.



AUDIO VIDEO EQUIPMENT

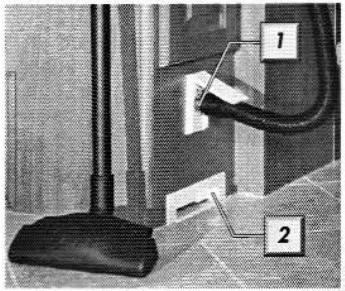
The televisions and DVD players operate only when a 120V AC power source is available via shore power or a combination of the generator and inverter. Compliant with federal law, the cockpit TV is locked out when the automotive ignition switch is turned to the **ON** position.

MFG INFO

Consult your television and DVD owner's guides for complete operating instructions and maintenance.

1. **HOME STEREO SWITCH** - Press the switch to the TV speakers to receive sound from the TV; Press the switch to the H.T. Speakers to receive sound from the home theater system.

NOTE: The home theater receiver must be on.



CENTRAL CLEANING SYSTEM*

The motor home may be equipped with a Central Vacuum System along with an additional VacPan that is installed at the base of one of the kitchen cabinets.

1. **VACUUM** - To activate, lift the lid on the vacuum cover.
2. **VACPAN** - To activate press the switch; the vacuum will automatically start. Dust and debris can then be sweep into the vacuum port.

CHANGING THE FILTER BAG

To maintain cleanability the filter bag must be replaced when it **2/3** or **3/4** full.

A. Locate the canister in the storage compartment and pull the bag collar off of the connector.

B. Use a new bag slide the collar securely onto the inlet connector.

*Optional Equipment

FURNACE

The furnace supplies heat to the interior, water tank and holding tank compartment simultaneously. This appliance is equipped with an ignition device that automatically lights the burner. ***DO NOT*** try to light the burner by hand.

NOTE: Ensure that the gas control valve (accessed from the outer door) is in the ***ON*** position by following the manufacturer's operating instructions. The unit can then be controlled by the central aisle way thermostat or the thermostat in the bedroom.

IMPORTANT

The gas furnace may activate if the difference between the ambient and selected temperature is ***5*** degrees or greater. This aids in maintaining the temperature in the motor home until the roof unit activates and the furnace shuts off.

Furnace controls typically located in the bedroom.

HEAT PUMP

The heat pump operates with a two stage cooling system. When the A/C requirement is minimal, a single compressor will activate. When cooling demands are high, the second compressor will activate. For the heat pump to operate efficiently, the motor home must be powered by the generator or from the shore power connection. The second stage will operate when the thermostat senses the room temperature is 2-5 degrees higher that the set temperature and when there is sufficient power.

WATER HEATER

The water heater is designed to work in conjunction with the LPG system. In order to work properly, the water heater requires that the fresh water tank be filled or a direct water source be connected. The water heater can be then turned on using the electronic ignition switch located on the monitor panel. If it fails to operate properly, it may be in a lock-out condition due to high water temperature. Wait until the water cools, reset by placing the water heater switch to the ***OFF*** position for at least ***30*** seconds and return it to the ***ON*** position.

WASHER/DRYER*

The optional washer/dryer is a compact space-saving combination unit. The removable drain screen which protects the pump from lint and foreign matter needs to be cleaned periodically. If the washer/dryer option has not been installed the electrical and plumbing is pre-routed for future installation.

(CONSULT THE MANUFACTURER'S OWNER'S MANUAL SUPPLIED FOR THE WASHER/DRYER FOR CORRECT OPERATING PROCEDURES.)

Pre-plumbing for the optional washer/dryer includes hot and cold water lines with hose bib valves to attach the washer/dryer hoses to. It also includes the drain plumbing stand pipe to attach the washer/dryer drain hose to. Pre-plumbing also includes a separate electrical breaker and wiring circuit to a 120VAC receptacle to plug the washer/dryer cord into.

REFRIGERATOR

The refrigerator is designed specifically for motor home use and uses an absorption principle of operation. Absorption refrigeration uses heat in the form of burning gas or propane to produce cold inside the refrigerator. Before operating the refrigerator, make sure the motor home is level. The thermostat has an automatic memory function that saves the last selected temperature. This eliminates having to reset the thermostat each time a different energy source is employed.

REFRIGERATOR OPERATION

Turn on the gas supply to the refrigerator and then select the mode of operation listed below.

- **AUTO MODE** - When operating in the **AUTO MODE**, the **AUTO** indicator light will illuminate. The control system will automatically select between 120V AC and LP-Gas operation with electrical power having priority over gas.
- **GAS MODE** - When operating in the **GAS** mode, the **AUTO** mode indicator lamp will be off. The gas indicator light will illuminate. This mode provides for LP-Gas operation only.
- **THERMOSTAT** - When the desired mode has been set, the temperature can be adjusted to the desired level.

LP-GAS RANGE/COOKTOP

The LP-Gas range or cooktop is operated much like the gas range in a home.

RANGE OVEN OPERATION*

If the motor home is equipped with an LP-gas oven, the pilot light will be replaced with a control valve in the range top that can be turned to **PILOT ON**. The oven pilot can be lit with a match or a hand-held spark igniter. Rotate the knob to the desired setting.

⚠WARNING⚠

It is important to provide adequate ventilation when using the gas cooking appliances to prevent the danger of asphyxiation.

COOK TOP BURNER OPERATION

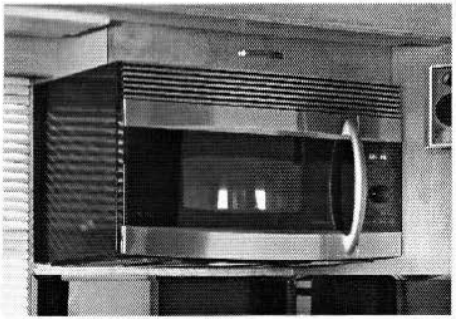
- Turn on the LPG supply to the gas range or cook top. Allow a few minutes for the LPG lines to fill.
- Turn the appropriate burner knob counterclockwise to **ON** or **LITE/HI**.
- **DO NOT** attempt to light more than one burner at a time.
- Turn the spark knob clockwise one click to light. If it fails to light, try again.
- To extinguish the top burner flame, turn the appropriate burner knob clockwise to **OFF**.

RANGE HOOD

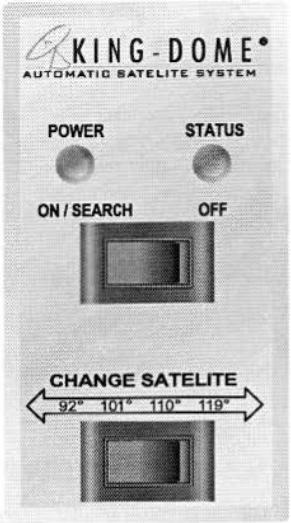
The range hood is used to eliminate cooking odors and to exhaust hot cooking vapors. It is built into the microwave/convection oven mounted over the range top. It will work when 120V AC power is available from either shore-power, the on-board generator or the inverter/charger. The filter requires periodic cleaning. *(CONSULT THE MANUFACTURER'S INSTRUCTIONS FOR REPLACEMENT INSTRUCTIONS.)*

MICROWAVE/CONVECTION OVEN

The microwave/convection oven is wired to operate whenever a 120V AC source is available. It can also operate from the inverter/charger. *(CONSULT THE MANUFACTURER'S GUIDE FOR OPERATING INSTRUCTIONS.)*



*Optional Features



KING-DOME SATELLITE*

The King-Dome Automatic Satellite System provides quick and easy access to satellite television broadcasts. To adjust the dish, press the ***ON/SEARCH*** button and the system's electronic controller will position the internal dish for optimal reception. The King-Dome system is designed to work with all satellite receivers.

Remote and Wall mounted units shown

IMPORTANT

In order to properly operate the King-Dome satellite, there must be a clear line of sight toward the southern sky. Buildings, trees, mountains, antennas, telephone poles, etc. can obstruct the signal received by the satellite.

KING-DOME SATELLITE OPERATION

A. Turn on the TV and King-Dome receiver. The ***SEARCHING FOR SATELLITE*** message will appear on screen.

B. On the wall mount controller, press and hold the ***ON/SEARCH*** switch for ***3 SECONDS***.

C. The receiver may take up to ***2 MINUTES*** depending on location of last downloaded programing.

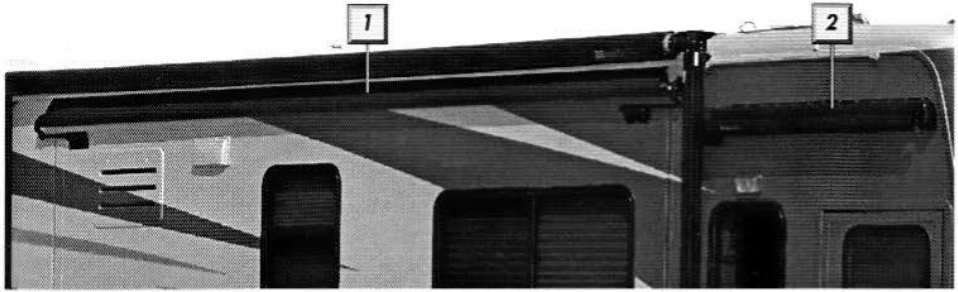
D While the receiver is searching for a signal the status lights will blink indicating status of operation.

STATUS INDICATOR

- ***Flashing Multiple Colors*** - Self-diagnostic mode
- ***Red Blinking*** - Search in progress
- ***Green Blinking*** - Potential satellite found
- ***Solid Green*** - Signal locked

E. Once the desired programming is found, the King-Dome can be turned off.

*Optional equipment



ELECTRIC AWNINGS

Located on the exterior of the motor home is an electric main awning (*1*) and door awning (*2*). There are three methods to open the awning, remote control key, control box, remote switch. The following information will work for all three control methods.

Controls located in the passenger side luggage compartment before the rear wheel well.

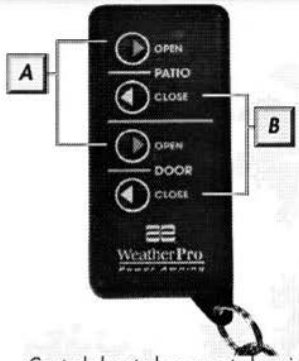
A. ***OPEN*** - Press and hold the ***OPEN*** (*A*) switch for *3* seconds to automatically open the awning. If the switch is not held the awning will stop in position. Press the button again to resume extracting the awning.

B. ***CLOSE*** - Press and hold the ***CLOSE*** (*B*) switch for *3* seconds to automatically close the awning. If the switch is not held the awning will stop in position. Press the button again to resume retracting the awning.

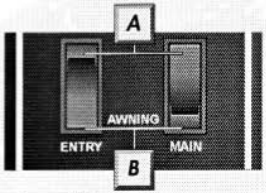
C. ***WIND SENSOR OVERRIDE SWITCH*** - The electric awning is equipped with an wind sensor that automatically closes the awning when winds reach 18 MPH or greater. To activate the wind sensor the toggle switch must be set to ***ENABLE***. To disable the sensor place the toggle switch to ***DISABLE***.

⚠WARNING⚠

DO NOT operate the awning during heavy rain or winds. The awning may be used during light wind or light rain only. When leaving the motor home unattended retract the awning.



Controls located on remote key ring.

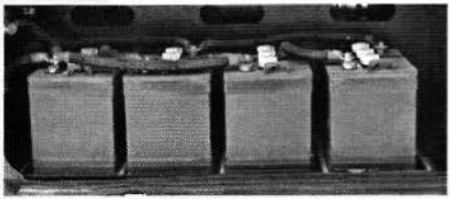


Controls located on entry panel

ELECTRICAL SYSTEM

The electrical system provides power for lights, appliances, air conditioning and other equipment in your motor home. The motor home is equipped with three electrical power systems to meet the electrical requirements:

- ***12V DIRECT CURRENT (DC) AUTOMOTIVE ELECTRICAL SYSTEM*** - Battery supplied
- ***12V DIRECT CURRENT (DC) HOUSE SYSTEM*** - Battery and inverter/charger supplied
- ***120V ALTERNATING CURRENT (AC) SYSTEM*** - Supplied from shore power or generator power



The 12V house batteries are typically located in the luggage compartment next to the shore power compartment.

12V ELECTRICAL SYSTEM

The chassis or vehicle 12V DC electrical system powers the following:

- Headlights
- Turn indicators and hazard warning lights
- Instrument panel lights
- Windshield wipers and washers
- Engine ignition switch
- 12V DC outlet/cigarette lighter
- Automotive heater and air conditioning fans
- Night Lights
- Clearance lamps
- License and back-up lights
- Electrical dash gauges
- Starter motor
- In-dash radio memory
- Remote control mirrors
- Cruise control
- Cabinet lighting
- Horn
- Windshield fans
- Entry step
- Leveling components
- King-Dome Satellite*

120V ELECTRICAL SYSTEM

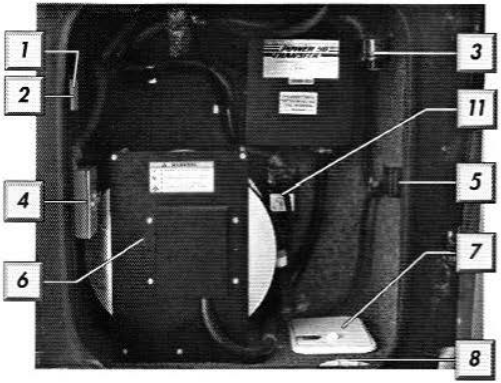
The house 120V AC electrical system powers the following:

- Main power source
- 2 Ton Basement A/C unit
- Microwave
- Inverter/charger
- Heat pump*
- Furnace
- Television(s)

⚠WARNING⚠

DO NOT attempt to modify or add options to the electrical system. Unauthorized changes to the electrical system may void the warranty.

* Optional equipment



SHORE POWER COMPARTMENT

1. **TELEPHONE JACK** - Attach shore telephone connection here.
2. **CABLE TV JACK** - Attach shore cable connection here.
3. **AIR RESTRICTION INDICATOR** - Notification to change the air cleaner. *(CONSULT THE ENGINE SECTION OF THIS MANUAL FOR FURTHER INFORMATION.)*
4. **TRANSFER BOX** - Automatically selects from either the shore connection or generator as the primary 120V power source. Priority is given first to the shore power connection then to the generator.
5. **AUTOMATIC SHORE REEL SWITCH** - Press switch forward to extend the shore power cord; back to retract.
6. **SHORE POWER CORD** - The shore cord plugs into the shore utility receptacle to deliver power to the coach. This is the preferred power source when operating for long periods.
7. **SHORE CORD EXIT HOLE** - When using a shore power connection, the shore cord can be placed through this hole so the luggage compartment door can be closed.
8. **AUXILIARY CORD EXIT HOLE** - When using a cable or telephone connection, the cords can be placed through this hole so the luggage compartment door can be closed.

⚠ WARNING ⚠

Ensure that the shore cord is firmly connected to the exterior receptacle and that the retaining ring is secured. Loose connections can cause overheating or electrical arcing.

SHORE POWER UTILITY CONNECTION

A. Locate the shore attachment cord (*6*) provided with the coach.

B. Open the shore cord exit hole (*7*) and place the needed amount of shore power cord through the hole.

C. Turn the main breakers located on the 120V power distribution panel to the **OFF** position.

D. Turn the campground's main shore connection circuit to the **OFF** position.

E. Plug the shore connection into the exterior shore utility receptacle.

F. Plug the shore power cord into the campground main shore connection circuit.

G. Make sure all connections are secure.

H. Turn the campground's main shore connection circuit to the **ON** position.

I. Turn the main breakers at the 120V power distribution panel to the **ON** position.

⚠ CAUTION ⚠

Before connecting the shore power cord to the campground's receptacle, make sure the main shore connection circuit and the main breakers are in the **OFF** position. This will prevent damage to the coach until a solid connection can be made.

GENERATOR

When shore power is unavailable, the auxiliary generator can be operated to generate 120V AC electricity. The generator is wired directly to the motor homes 120V AC wiring harness, allowing the owner to operate appliances via wall outlets. The generator is also designed to use fuel directly from the chassis fuel tanks. An hour meter on the dash panel makes it convenient to log the generator hours. Since the generctor is one of the more complex pieces of equipment, read the generator manual that came in the owner's box thoroughly.

⚠WARNING⚠

Before any operation of the generator, make sure the exhaust pipe is not bent, cracked or damaged. A damaged exhaust pipe may result in exhaust entering into the motor home.

GENERATOR PRECAUTIONS

- The function of the generator is to produce electricity. Whenever there is electricity present, there is a potential danger of electrocution.
- Keep away from electrical circuits and wiring while the generator is operating.
- Keep away from hot engine and generator parts to avoid being burned.
- While operating the generator, make sure the compartmert door for the generator is securely latched, so children or other unqualified persons can not gain access to the generator.
- Keep the generator compartment and generator clean ard free of debris to minimize potential fire hazards.
- While operating the generator exhaust gases must be free to discharge; obstructing the exhaust may cause carbon monoxide to deflect under ard into the vehicle, enter through open doors, windows, or vents.
- Make sure the generator exhaust does not interfere with neighboring motor homes or buildings.

STARTING THE GENERATOR

The generator typically starts within five seconds; however, if it fails to start after ten seconds of cranking, release the switch and wait a few seconds before attempting to crank the generator again.

A. Check the engine oil level and, if necessary, fill to dipstick Full mark.

(CONSULT THE GENERATOR'S OWNERS GUIDE FOR EXACT PROCEDURES.)

B. Check the vehicle's fuel tank. It must be at least ***1/4*** tank full.

C. Check that the generator exhaust pipe is clear of any debris.

D. Check that both the air inlet and outlet are free of any obstructions.

E. Turn off all electrical loads by switching them to the ***OFF*** position or setting main circuit breakers to ***OFF***.

F. The battery disconnect switch must be turned to the ***ON*** position for the generator to be started.

G. Refer to the generator's owner's manual for cranking instructions.

H. Let the engine warm up for about ***5*** minutes to allow internal temperatures to stabilize.

I. Carefully inspect the engine-generator for fuel, oil or exhaust leaks.

J. Turn on the loads or circuit breakers.

K. Allow the generator to warm for about ***60*** seconds before placing an electrical load on the system.

STOPPING THE GENERATOR

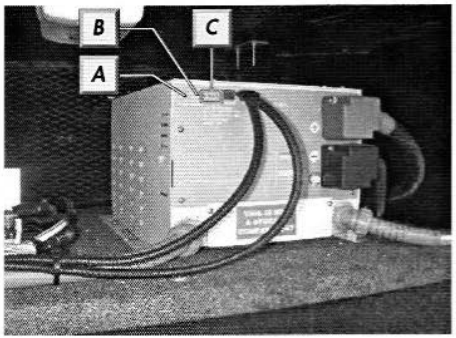
A. Turn off and electrical loads that are being used by the generator.

B. Allow the generator to operate without a load for a few minutes before stopping the generator.

C. Press the generator switch to the ***OFF*** position.

INVERTER/CHARGER

The electronic power converter converts 120V power to 12V power. The convertor that has been installed is maintenance-free. When connected to a 120V AC power source or the generator, the converter provides nominal 12V DC power for all of the 12V operated devices located on the motor home. The inverter/charger functions can be set by using the **MONITOR CONTROL PANEL** (located in the hallway) or directly on the inverter/charger.



FRONT PANEL CONTROLS

There are two push-buttons located on the front of the unit, along with a LED that indicates the different capabilities of the inverter/charger.

A. INVERT - Turn the power to the inverter **ON** or **OFF** resets the inverter after a fault occurs.

- When the green invert LED is solid green the inverter is in invert mode.
- When the LED is blinking, the invert is in standby mode.
- Press and hold the **INVERT** button for five seconds to enter battery select mode. The status LEDs will change from inverter indicating mode to battery indicating mode.
- While the inverter is **OFF** pressing the invert button will turn the invert off.

B. CHARGE - Turns the power to the charger **ON** or **OFF**. When external AC power is available, press the charge button will turn charge mode on.

- When the green charge LED is solid green the charger is in charge mode.
- When the LED is blinking the charger is awaiting AC power. When AC power is supplied the charger automatically turns on.
- While in battery mode press the **CHARGE** button will select the battery type. The selected indicator light will blink indicating which battery type has been selected.

#	DESCRIPTION	AMP
1	INVERTER/CONVERTER	30
2	MICROWAVE	20
3	ALL TELEVISIONS	15
4	ICE MAKER*	15
5	BEDROOM RECEPT	15

C. STATUS LED - Each status light performs two distinct functions, battery selection and operation status.

- **Invert** - Indicates invert functions.
- **Charge** - Indicates charge functions.
- **Low Battery** - When the red LED is off, battery voltage is within normal operating levels of 10.5V - 15.0V DC.
- When the red LED is solid red the battery voltage is below 10.5V DC or above 15.0V DC
- When the LED is blinking a battery shutdown has occurred. The battery voltage is below 10.5V DC or above 15.0V DC
- When the LED is blinking rapidly there is a potential problem with the DC system. Check the batteries connections for problems.

- **OVERTEMP/OVERLOAD** - When the LED is off, operations are normal.
  - When the red LED is solid an overload has occurred. Check for excessive loads or a short circuit in the system.
  - When the LED is blinking slowly a fault condition has occurred. Correct the fault condition before turning the system on.

*Some Models

BATTERIES

Interior lights, furnace motor, exhaust fan, water pump and other interior electrical equipment operate on the 12V DC system. The 6V batteries are connected in parallel and the inverter/charger when connected to the 120V shore power cord or the generator. There are two types of batteries

- Chassis Batteries
- House Batteries

CHARGING THE BATTERIES

The batteries are automatically charged by the vehicle's alternator while traveling. Whenever the motor home is connected to a 120V AC source, either shore-power or generator, the batteries will be automatically charged.

The electrolyte levels of the batteries should be checked at least once a week when connected to a 120V AC shore power (campground or park) receptacle for an extended period of time. Use distilled water only to refill the battery levels.

IMPORTANT

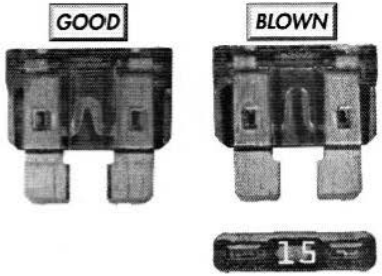
Each battery's electrolyte levels must be checked regularly in order to maintain a complete charge.

FUSES AND CIRCUIT BREAKERS

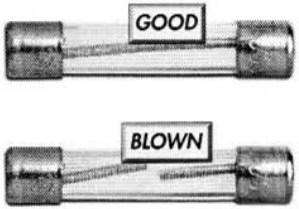
Fuses and circuit breakers are designed to protect circuits in the event of electrical overload.

A fuse is placed in an electrical circuit. If the current flow exceeds the rating of the specific fuse, the fuse ***BLOWS*** or ***TRIPS***. A blown fuse or tripped circuit breaker may indicate a serious electrical problem such as a short circuit or an electrical device that is using more current for which the circuit is designed.

The electrical system is equipped with two types of low-voltage replaceable fuses: Blade fuses (**1**) and cartridge type fuses (**2**). Both types of fuses are designed to open the appropriate electrical circuit if an electrical overload occurs.



1. ***BLADE FUSES*** - Each fuse is color-coded and labeled with the fuse elements capacity.



2. ***CARTRIDGE FUSES*** - The amperage rating is stamped on the metal casing.

REPLACING FUSES

If an electrical device is not functioning properly, a fuse may need to be replaced.

A. Ensure that the electrical equipment that is not functioning is off.

B. Locate the appropriate fuse in the electrical system.

C. Remove the suspected fuse with the provided fuse puller. Check to see if it is blown. If it is blown, replace the fuse.

NOTE: When replacing a fuse, use the same amperage rating as designated on the replaced fuse.

⚠WARNING⚠

DO NOT use a fuse with a higher amperage rating than specified on the fuse box cover. Doing so could damage the electrical system or cause a fire.

D. If the new fuse immediately blows, there is a problem with the electrical system or device. Have a qualified technician check it as soon as possible.

CIRCUIT BREAKERS

Circuit breakers are used in place of fuses for the protection of more complicated electrical systems. Circuit breakers consist of a bimetal strip connected to two terminals and have a contact in between. Manual circuit breakers when tripped will open and must be reset manually. Typical circuit breakers include:

- Single pole switch breakers
- Double pole switch breakers
- Push button breakers

IMPORTANT

Familiarize yourself with the various types and locations of the breakers and which appliances or features are applicable, before using the motor home.

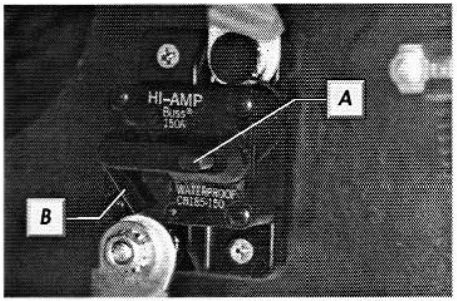
RESETTING A BREAKER

The main breakers provide circuit overload protection. If a circuit becomes tripped it will need to be reset.

A. Determine the cause of the circuit interruption.

B. Reset the breaker by switching it to the ***OFF*** position.

C. Return the breaker to the ***ON*** position.



TYPE III PUSH-TO-TRIP BREAKERS

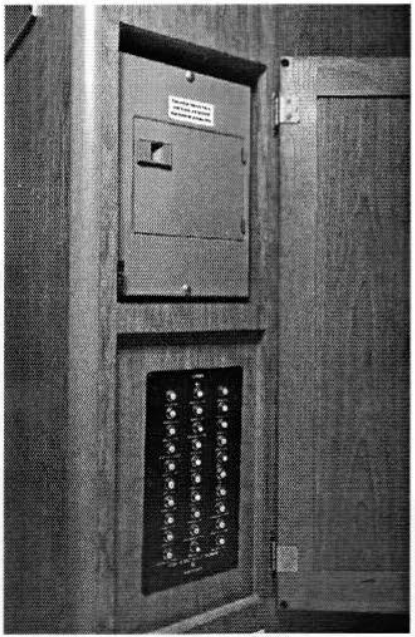
High amp circuit breakers are used as primary feed circuit connectors for the motor home. The type III circuit protectors are single pole, thermal devices rated up to 30V of DC 150 Amp protection. The breaker has a manual reset button (***A***) and visible indicator arm, (***B***) that displays a tripped circuit connection. The high amp circuit breakers are rated water resistant and dust proof. Standard operation temperatures range from 0°F to 180° F. The high amp breakers are typically located in the battery and inverter/charger compartments of the motor home.

A. ***PUSH BUTTON*** - Manually opens the circuit breaker. Doing so will disconnect the appropriately connected battery.

B. ***OPEN/CLOSE BREAKER INDICATOR*** - Indicates an ***OPENED*** or ***CLOSED*** circuit. If circuit breaks, manually push the arm to close the circuit.

12V DC POWER FUSE PANEL

The 12V DC power distribution panel is a centralized power supply system that performs switching, fusing and distributing of 12V DC power. The auxiliary batteries are connected to this panel. It can typically be found in the main hallway or the bedroom.

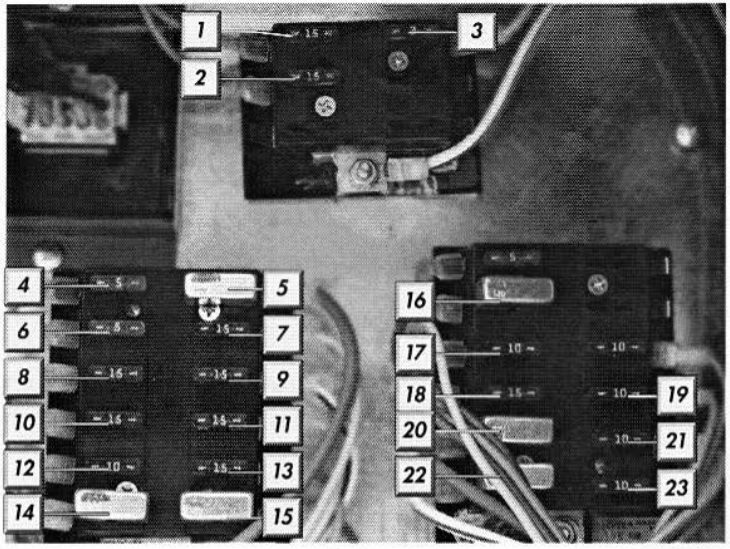


12V DC Fuse Panel Detail

12V CIRCUIT BREAKERS

- The motor home electrical system is fused to protect all 12V DC circuits. The chassis batteries are connected to this circuit breaker. This breaker panel protects all interior lighting and equipment circuits. If one of the 12V breakers trips, push it back in to reset the breaker.
- A 300-Amp inline fuse protects the main cable between the auxiliary battery and the inverter/charger. The 12V DC breakers in the main distribution panel protect all interior lighting and equipment circuits. ***Note:*** These breakers are located in the 12V DC power distribution panel.
- Amp breakers located inside the main distribution panel protect both the carbon monoxide detector and propane gas leak detector.
- The dash radio has two fuses located on the backside of the case.
- The inline fuse for the back-up camera is located on the cable going from the back of the monitor into the overhead cabinet. ***Note:*** To check or change this fuse, pull the wire cable from the overhead until the fuse holder is visible.
- 12V DC circuit breakers are Type III and must be reset manually with a push button or lever.

12V CIRCUIT FUSES



#	DESCRIPTION	
1	KEYLESS ENTRY SWT	15
2	KEYLESS ENTRY PWR	15
3	KEYLESS ENTRY CONTROL	3
4	BLOCK HEATER	5
5	POWER SEAT DRIVER	30
6	TOILET/POWER CORD REEL	15
7	FOG LIGHT	15

#	DESCRIPTION	AMP
8	COMP LIGHT MAP LIGHT	15
9	WHT/BLK AWNING	3
10	STEREO MEMORY	5
11	B/U CAMERA	5
12	DOCKING LIGHTS	15
13	STEP SLIDE	15

#	DESCRIPTION	AMP
14	PWR SEAT PASS	30
15	12 DC OUTLET	15
16	VACUUM PUMP	15
17	OVERHEAD TV	10
18	MIRRORS	15
19	AWNING	10
20	WIPERS	21
21	LEVELING JACKS	10
22	HEATER A/C	30
23	CAMERA	10

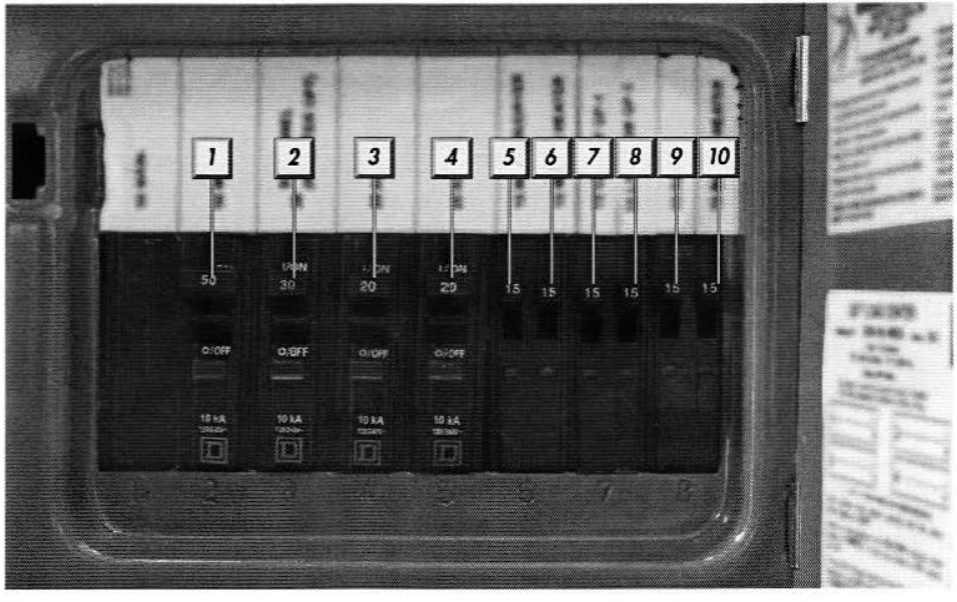
IMPORTANT

Locations are shown with a typical configuration. Consult the fuse indicator sticker located in the same compartment as the 12V circuit fuses for your specific floorplan.

120V POWER DISTRIBUTION PANEL

Located in the hallway under the monitor panel is the 120V AC power distribution panel. 120V power is available when the motor home is connected to a 120V connection. In order to provide the appropriate power to the outlets, either the generator or the shore power must be connected. When connected to a 120V AC power the auxiliary or house batteries will automatically be charged. The inverter/charger and the 120V AC outlets will become energized.

Regardless of whether the shore connection or generator is online the available 120V power is directed immediately from the transfer switch to the main breakers. If the main breakers are off the distribution of 120V power will stop.



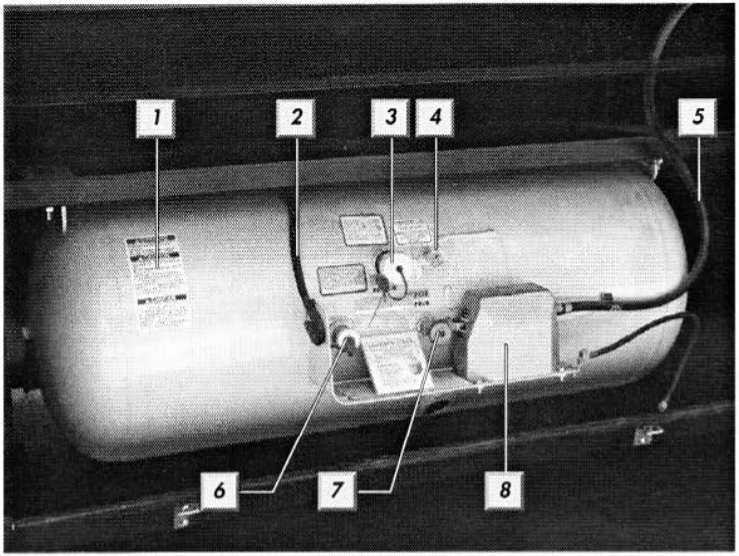
120V AC CIRCUIT BREAKERS

#	DESCRIPTION	AMP
1	MAIN (DUAL 50 AMP)	50
2	INVERTER/CHARGER	30
3	AC - 1 (FRONT)	20
4	AC - 2 (REAR)	20
5	GALLEY GP-1	15
6	LIVING ROOM	15
7	REFER	15
8	(GP-3) WASHER/DRYER	15
9	WATER HEATER	15

IMPORTANT

The main breaker (*1*) is a dual 50 AMP breaker. Placing the 120V main breakers in the **OFF** position, will disconnect 120V power to the motor home.

* Optional equipment



LPG COMPARTMENT

1. ***Information Plate*** - Contains specifications about your LPG tank.
2. ***Wiring Harness*** - Main harness that is fed to the monitor panel. When the ***tanks*** button located on the ***monitor panel*** is pressed, the LPG portion of the panel will light and display current levels of the LPG tank.
3. ***LP-Gas Fill Valve*** - Used to fill LPG tank with LP-gas. Use only certified propane fill locations.
4. ***Outage (Spitter) Valve*** - Safety release valve to discharges liquid LP-Gas if pressure exceeds safe levels.
5. ***LP-Gas Line*** - Main line to all gas controlled appliances.
6. ***Sight Gauge*** - Shows current LPG fuel level.
7. ***Vapor Cylinder Valve*** - Shuts off the connection between the main LP-Gas line and the LPG tank. ***On*** or ***off*** direction indicated on dial.
8. ***Two Stage Regulator*** - Two stage regulation allows for consistent inlet pressure. The inlet pressure caused by the changes in outside temperature reduces the likelihood of freezing lines and stoppage.

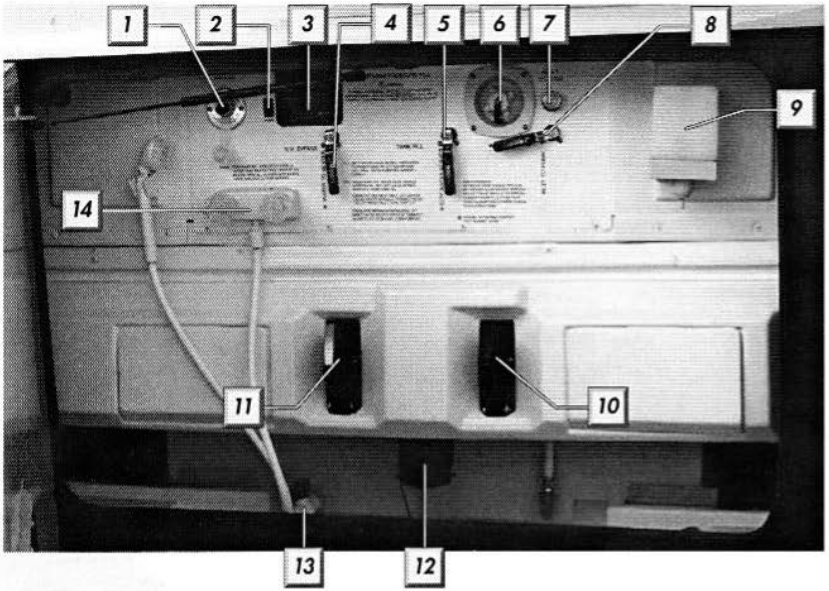
⚠WARNING⚠

For safety's sake, travel with LP-gas powered appliance pilots or burners lit is not recommended.

BE SAFE - SWITCH OFF THE GAS BEFORE YOU DRIVE!

⚠WARNING⚠

Do not fill the LPG tank unless the tank is ***off*** and the appliances that use LP-gas are off. ***Do not*** fill the tank over 80%; the remaining 20% will allow for gas expansion. An overfilled tank can result in damage to the regulator and may cause the tank to vent.



PLUMBING SERVICE COMPARTMENT

1. **WATER TANK GRAVITY FILL** - Used for flushing the solid waste tank. After the solid waste tank has been emptied, attach a standard hose to flush the tank.
2. **WATER PUMP SWITCH** - On or off positions
3. **SECONDARY TANK MONITORING SYSTEM** - Secondary monitoring system can be used to check tank capacities.
4. **WATER HEATER BY-PASS SELECTOR VALVE** - Used to bypass water heater when winterizing your motor home.
5. **TANK FILL/CITY WATER SELECTOR VALVE** - Select between fresh water tank or city water.
6. **CITY WATER INLET WITH WATER PRESSURE REGULATOR** - Primary fresh water connection port (¾" hose swivel). Connection used to fill fresh water tank.
7. **INLET TO PUMP** - For use with clean potable water. Connect an approved water hose to the inlet. This inlet can be used to fill the fresh water tank if a city water hose is unavailable.
8. **TANK TO PUMP/INLET TO PUMP SELECTOR VALVE** - Used to hook-up a non-pressurized water connection.
9. **SOAP DISPENSER**
10. **GREY TANK DRAIN HANDLE** - Pulling this handle will release the contents of the grey holding tank.
11. **BLACK TANK DRAIN HANDLE** - Pulling this handle will release the contents of the black holding tank.
12. **DRAIN COVER** - Remove before pulling drain valve; sewer hose will fix to bottom of cover
13. **FRESH WATER TANK DRAIN VALVE** - Turn clockwise to open. Turn to the open position to drain the fresh water tank.
14. **OUTSIDE SHOWER** - Draws water from selected water source (fresh water tank or city water).

⚠WARNING⚠

Before performing the black tank rinsing procedures, the drain handle *(11)* must be in the open position. Failure to do so may result in damage to the venting system.

BEFORE STARTING THE ENGINE

- Perform the engine pre-trip inspection and daily maintenance checks as required in your chassis owner's manual.
- All occupants should take their seats and buckle their safety belts.
- Turn off the head lamps and accessories.

STARTING YOUR ENGINE

- Make sure that the gearshift is in **NEUTRAL** (**N**) and the **PARKING BRAKE** is set.

  NOTE: - The engine should not start with the engine in gear.
- Turn on the **IGNITION SWITCH**. When the engine starts, let go of the key. The idle speed will reduce as the engine warms.
- Place driver's foot on the brake pedal.
- Use the transmission selector to place the transmission in the **DRIVE** (**D**) position.
- Pull the **PARKING BRAKE** to release the brake.
- Ease driver's foot off the **BRAKE PEDAL** and slowly apply pressure to **GAS PEDAL**.

⚠ CAUTION ⚠

DO NOT drive the unit until the oil pressure gauge reading is normal. If there is no oil pressure indicated on the oil pressure gauge in the dashboard display, shut down the engine immediately to prevent serious damage. **DO NOT** operate until the cause of the problem has been corrected.

ENGINE SHUTDOWN

- With the vehicle stopped, apply the **PARKING BRAKES** and reduce the engine speed to low idle.
- Place the **TRANSMISSION RANGE SELECTOR** in **NEUTRAL** (**N**).
- Push the **PARKING BRAKE** to park the motor home.
- If the engine has been operating at low loads, allow it to idle for thirty seconds.
- If the engine has been operating at highway speeds or on hills, allow it to idle for three minutes to reduce and stabilize engine temperatures.
- Turn off the **IGNITION SWITCH** to shut down the engine.

NOTE: - Stopping the engine immediately after it has been operating under load can result in overheating and accelerated wear of the components.

⚠ CAUTION ⚠

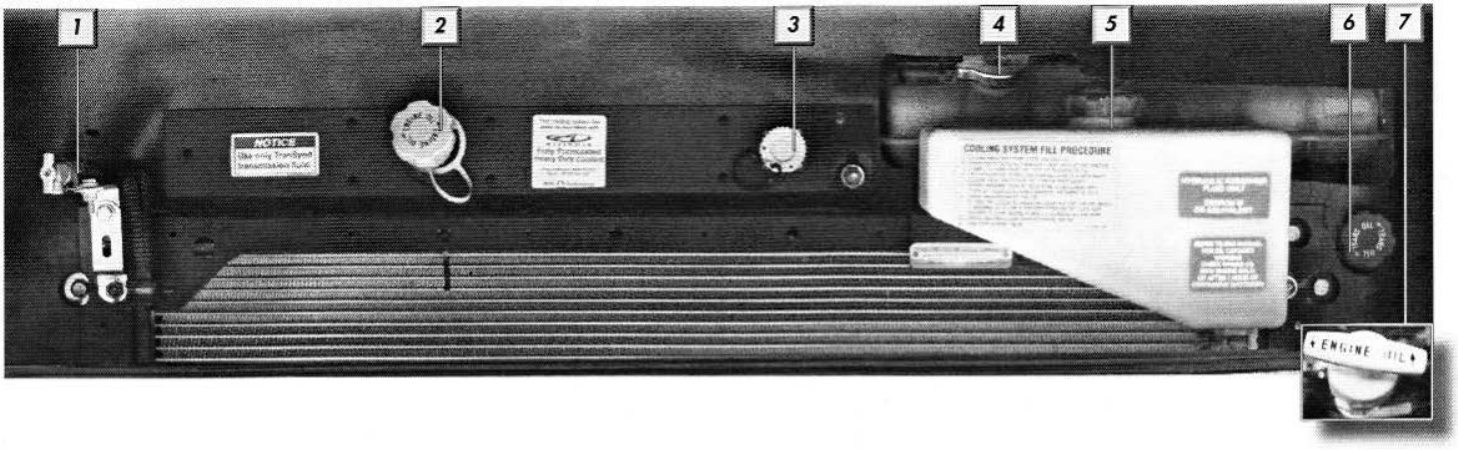
Always place the transmission in the Neutral (**N**) position and set the parking brake before exiting or leaving the driver's seat. Failure to do so may cause the motor home to move unexpectedly.

ENGINE EXHAUST BRAKE

The exhaust brake system is designed to help slow your vehicle when applying the service brakes. It is not a replacement for these brakes. Use the exhaust brake for downhill control and while on level grade roads, helps keep the service brakes cool and available for emergency usage. This slowing power is achieved by restricting the flow of exhaust gasses and increasing back pressure inside the engine. This increased back pressure creates resistance against the pistons in your engine, slowing the crankshaft's rotation and ultimately helping to slow your vehicle.

The exhaust brake can be activated by pressing the engine brake located on the left dash console.

(CONSULT THE CHASSIS OPERATION MANUALS FOR EXACT USAGE AND APPLICATIONS.)



ENGINE BREAK-IN PERIOD

The engine must pass a full-load operation test on a dynamometer before shipment from the chassis manufacturer, thereby eliminating the need for an extended break-in period. Only an initial operational check is necessary. Proper operation and maintenance are key factors in obtaining the maximum life and economy from your vehicle engine. *(CONSULT THE ENGINE OPERATION AND MAINTENANCE MANUALS FOR TROUBLE-FREE ENGINE OPERATION.)*

1. **HEATER OUTLET GATE VALVE** - Used to purge air from the radiator lines. Used in conjunction with cooling system fill procedure. *(CONSULT THE CHASSIS OPERATION MANUALS FOR EXACT USAGE AND APPLICATIONS.)*
2. **ENGINE OIL FILL** - Engine oil fill location.
3. **COMPUTER DIAGNOSTICS PORT** - Used by technicians to diagnose engine and transmission services.
4. **RADIATOR RESERVOIR BOTTLE** - Radiator fill location.
5. **ENGINE COOLANT BOTTLE** - Engine coolant fill location.
6. **TRANSMISSION FLUID FILL & DIPSTICK** - Transmission oil fill location and transmission oil check dipstick.
7. **ENGINE OIL LEVEL CHECK** - Dipstick to check engine oil levels.

AIR INTAKE RESTRICTION INDICATOR

Located in the shore power compartment, the air restriction indicator measures the vacuum on the engine side of the air cleaner at the air cleaner outlet. The air cleaner needs to be replaced every two years, or when filter restriction reaches 25 inches of vacuum. **NOTE:** Rain, snow and other wet elements can temporarily cause a higher than normal reading.

- Reset the indicator by pressing the button on the bottom of the indicator.

(CONSULT THE CHASSIS OPERATION MANUALS FOR EXACT AIR INTAKE RESTRICTION LEVEL.)

DATE	ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED

DATE	ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED

DATE	ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED

DATE	ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED

Pacifica Supplement

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