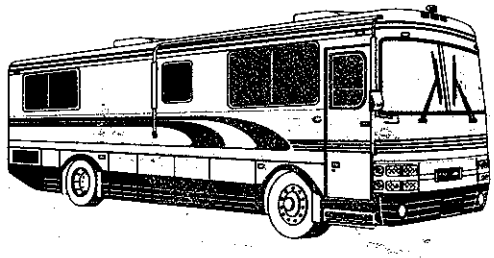
1995

BMC

BLUE BIRD MOTOR COACH



ONE WANDERLODGE WAY, FORT VALLEY, GA

1995
BLUE BIRD
MOTOR COACH
OWNER'S
MANUAL

Dear BMC Owner:

Thanks for choosing BMC!

We want to personally welcome you to our Family of Friends and we invite you to visit us at our Fort Valley facilities whenever you wish. We are always happy to see you and we are deeply interested in your experiences as you use and enjoy your BMC coach. We recognize that it is our relationship to you, the BMC owner, that contributes most to the prestige of ownership of this finest over-the-road coach.

We trust that as you become more intimately acquainted with your new coach, the sound, careful thoughts behind every aspect of its design will become increasingly evident and your initial decision to choose BMC will be positively reinforced with every mile.

We acknowledge the good faith you have demonstrated in our product. All of us at Blue Bird take great pride in our handiwork and want to do everything possible to engender in you what has become the Blue Bird experience; the deep satisfaction that comes from years of a sure confidence of having chosen ... the very best.

INTRODUCTION

This section of your Owner's Manual contains general hints and recommendations for using your motor home. Checklists and suggestions are offered which cover just about every phase of motor home travel.

The remaining sections of this manual describe the operation and use of the individual items and systems which comprise your motor home.

Manufacturer's manuals for components and appliances are included in your owner's kit. Please refer to these for more detailed information.

We hope that this manual will help answer questions that may arise about the use operation and maintenance of your motor home. Any suggestions or recommendations that you might have for including or expanding on material of interest will be carefully considered for incorporation in future publications. We are always interested in providing our coach owners with the most current and comprehensive information about our product.

CHECKLISTS

A little preliminary planning will go a long way to help make your trips successful and enjoyable. As an aid to planning your travels, review the following checklists. If there are any additional items that you should be reminded of, add them where you see fit. These lists are only recommendations based on the experience and suggestions of sources well-versed in motor-coach expertise. You will eventually find that a short *"walk-around"* the coach, outside and inside, will be adequate and comprehensive enough to ensure that you are ready for travel.

BEFORE YOU LEAVE

- Store valuables and important papers in a safe place.
- Arrange care for your pets.
- Cover all food to keep out mice and insects.
- Store oil, gasoline, matches and other inflammables properly; get rid of newspapers, magazines and oily rags.
- Connect timers to several inside lamps and outside lights; keep some shades open for a lived-in look.
- Discontinue newspaper, milk and other deliveries; store trash cans and outside equipment.
- If weather permits, shut down hot water and heating systems; close main water supply.
- Ask the Post Office to hold your mail.
- Have your lawn, garden and house plants cared for.
- Arrange with the Telephone Company for discontinued or *"Vacation Service"*.
- Lock all windows and doors securely.
- Leave your key with your neighbor and let them know your basic itinerary.
- Notify police.

CHECKOUT YOUR COACH - OUTSIDE

- Disconnect and stow:
  1. Electrical cord.
  2. Sewer hose (flush out).
  3. Water hose.
- Check all exterior lights for proper operation.
- Check wheel lug nuts for tightness. (See Tire/Wheel Change Procedure).
- Check tires for correct pressure. (See Tire Inflation).
- Check that all external compartments and filler openings are properly closed and/or locked.
- Check that items stored on exterior of coach are secured. (Be sure that these items present no clearance problems.)

NOTE

If the trip you are planning will take the coach well past suggested maintenance intervals, it may be advisable to perform these procedures before leaving. This may avoid unscheduled stops or interruptions during your trip.

- Check that there are no obstacles to avoid above or under the coach. Be sure that there is sufficient clearance front and rear.

CHECK YOUR AUTOMOTIVE SYSTEMS

- Check that fluid levels are normal (oil, power steering, engine coolant, windshield washers, transmissions, etc.).
- Check generator oil level, coolant level, battery condition.
- Check operation of turn signals, emergency flasher, stoplights and backup lights.
- Check that headlight high- and low-beams operate.
- Check horn operation.
- Check fuel gauge, and add fuel if needed.
- Start engine and check gauges for signs of trouble.
- Check operation of foot brakes and parking brake.

CHECKOUT YOUR COACH - INSIDE

- Close windows and vents.
- Check that cabinet doors and drawers are secured.
- Check that refrigerator door latch is in locked position.
- Check that no heavy item is stored in an overhead cabinet.
- Store large items in base cabinets.
- Check that counter tops, range top, table tops and shelves are clear of unsecured items.
- Turn off interior lights; check that entrance step is retracted. Secure and lock the entrance door.

Limited Warranty - BMC

Thank you for purchasing a new BMC. We hope you enjoy your BMC and will have no need for repairs under the warranty. If you do need such repairs, this warranty describes how to obtain them.

The BMC Division of Blue Bird Body Company gives this warranty. The terms "we," "us," and "our" in this warranty refer to BMC Division. The terms "you" and "your" in this warranty refer to the original purchaser or a new owner to whom the warranty has been transferred under the terms of this warranty.

ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS, ARE LIMITED TO THE WARRANTY PERIOD OF THIS WRITTEN WARRANTY. WE WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. Some states do not allow certain limitations to apply, so these exclusions may not apply to you.

We warrant each BMC to be free from defects in factory material or workmanship under normal use and service within the limits described below.

1. The Warranty Period is 12 months/ 12,000 miles, whichever occurs first. The Warranty Period begins on the date the vehicle is delivered to the first retail purchaser or when first placed in service as a demonstrator or company vehicle, whichever is earlier. Mileage accumulated while in the possession of the dealer is included in the 12,000 mile total. BMC Division warrants the:

   a. **Body shell (those structural metal components welded or riveted together forming floor, sidewalls, roof, front and rear sections) including rust-through.**
   b. **Paint adhesion, except when paint failure is caused by deterioration of paint from weather and exposure or damage to paint after you accept delivery of the BMC. This warranty does not cover fading of any paint.**

2. For a period of (12) months from the date of delivery to the original purchaser or first placed in service as a demonstrator or company vehicle, BMC Division warrants all other body components not covered in 1.a. and 1.b. above, excluding components warranted by other manufacturers. Your owner's package contains many of those warranties.

3. Non-Blue Bird chassis are warranted by the chassis manufacturer.

The preceding paragraphs describe the complete coverage of the warranty. Anything else is not covered. Without limiting this general statement about what is not covered, non-covered expenses include: telephone calls, loss of time, commercial loss, inconvenience, loss of use of the vehicle, towing charges, hotel or motel accommodations, equipment we do not manufacture or supply and maintenance services such as but not limited to; wiper blades, oil, filters, bulbs, fluids, front end and tag axle alignment, brake linings and drums. Damage from things we could have no control over such as: collision, modifications, misuse, lack of maintenance, misuse of electrical systems, broken glass, any part of the vehicle which fails or malfunctions as a result of work done by any other than BMC, any equipment added to the vehicle by customer or dealer, or temporary installation at the factory designed to accommodate such additions or alterations may not be covered by this warranty, parts or accessories which you or your dealer bought or installed, and BMC makes no warranty

whatsoever regarding tires.

Repair or replacement of defective parts (at the option of BMC Division) is your exclusive remedy under this warranty.

BMC Division will pay for all reusable parts and labor needed to make necessary repairs due to defects in factory material or workmanship covered under this warranty.

This warranty covers the original owner of the BMC and a subsequent owner if the subsequent owner has given us written notice and paid us a transfer fee within 30 days of the sale of the BMC. The Warranty Period is not extended by the transfer.

In order to have defects repaired under this warranty, you should promptly take your BMC to the dealer who sold it to you or to the nearest BMC dealer. (You may obtain the name and address of the nearest dealer by writing or calling us at the address and number set forth below. In the event there is some geographic or mechanical reason you cannot get to a BMC dealer, you may (with prior approval) use any capable and reputable repair facility for the repairs. The BMC dealer will make any needed repairs (or arrange for them to be made) within a reasonable time after you deliver the vehicle to that dealer. You must take the vehicle promptly to the dealer after discovering the defect and, in any event, within the Warranty Period. Warranty applications must be submitted no more than 60 days after repairs are completed.

All defective parts should be retained until BMC Division requests their return or the warranty application is paid.

You are responsible for properly operating, maintaining, and caring for your BMC in accordance with the instructions contained in your Owner's Manual.

You are responsible for keeping maintenance records, since in some instances, it may be necessary for you to show that proper maintenance has been performed.

This warranty applies to those BMC's which are legally registered and normally operated in the United States or Canada.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

All disputes arising under this warranty or alleging defects in the BMC will be presented in a non-binding mediation before any lawsuit may be filed. You must begin that mediation by filing a written demand within the Warranty Period addressed to Manager, BMC Division, Blue Bird Body Company, Fort Valley, Georgia, 31030. BMC Division hopes mediation will be successful, but if not, any lawsuit alleging a defect in the product must be filed within ninety (90) days of the scheduled mediation meeting or within one (1) year of the discovery within the Warranty Period of the alleged defect, whichever comes later.

No person, including salesmen, dealers, distributors or factory representatives of BMC Division, or Blue Bird Corporation, is authorized to make any representation or warranty covering the BMC except to refer purchasers to this limited warranty. This limited warranty is expressly in lieu of all other warranties expressed or implied and all other obligations or liabilities.

- Adjust exterior mirrors.

WARNING

Mirrors provide needed additional driver visibility. To be effectively used, mirrors must be properly adjusted for each driver and the driver must be aware of the limitations on viewing area that exist even when mirrors are properly used.

AND, BEFORE DRIVING AWAY

- Check operation of appliances and special equipment.
- Check that fire extinguishers are fully charged.
- Check operation of interior and exterior lighting.
- Start generator and check 120 VAC system and wall outlets.
- Adjust driver's seat so that all controls are within easy reach.
- Make sure that seat is locked in position. Do not adjust driver's seat swivel or fore aft mechanism while vehicle is moving or seat could move unexpectedly, causing a loss of control.
- Check that front passenger's seat is locked in position.
- Fasten seat belts. Belts should be placed as low as possible around the hips. This places the load of the body on the strong hip bone structure instead of around the soft abdominal area and prevents sliding to in case of accident.

CAUTION

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. Children could be endangered in a crash if their child restraints are not properly secured in vehicle.

- Check that warning lights are lit when the ignition key is turned to on or start position.

SOME ITEMS YOU MIGHT WANT TO TAKE ALONG ON YOUR TRIP

NOTE

You may find that many items taken were not needed and that some items that were needed were overlooked during planning of your last trip. Make notes of these items to prevent duplicating the same errors.

- Adequate supply of prescription medicines.
- Prescription sunglasses or reading glasses.
- Camera equipment and film supply.
- Heating pads, ice bags, etc.
- Stationery, envelopes, stamps
- Telephone number list.
- Reading material

- Special pet supplies.
- Extra toilet chemicals and toilet articles.
- Spare belts for engine operated equipment.
- Spare parts for generator: suggested spares include oil filter, fuel pump, air filter, solenoid. Five quarts of approved motor oil.
- A professional-type double-action tire pressure gauge. (Included in coach.)
- Under the heading of Emergency Equipment, it is advisable to consider outfitting your coach with these items:
  1. First aid-kit
  2. Emergency highway flares
  3. Flashlight or lantern (with extra batteries)
  4. Tool kit
  5. Replacement lamp assortment
  6. Replacement fuse and breaker assortment.
  7. Trouble light with a long cord

AND SOME OTHER THOUGHTS TO CONSIDER

- Automobile insurance to cover you and your family.
- Avoid cash. Use traveler's checks and credit cards wherever possible.
- Confirm reservations well in advance of arrival.
- Make a clothing check list for everyone.

CITIZEN'S BAND TRANSCEIVER

You might also bear in mind that your coach is equipped with a CB unit (Citizen's Band receiver-transmitter). In the event of an emergency situation which requires outside assistance, remember to call for help on Channel 9. This channel is restricted to emergency use only and it is monitored 24 hours per day! Don't hesitate to use your CB if you see someone else in need of assistance.

HOT WEATHER OPERATION

Wherever possible, choose a shaded parking site so that the coach will be cooler during the hottest part of the day. The optional patio awning will be especially useful in lowering inside temperature. Air conditioning units are indispensable in hot climates. Keep in mind that their proper operation depends on adequate line voltage. Low voltage causes motors to run hotter and reduces compressor motor life. Supply voltage in some campgrounds may not be as high as necessary, especially when there are heavy loads on the lines from other air conditioners.

COLD WEATHER OPERATION

If frost or condensation accumulates in closets or cabinets during long periods of cold weather operation, leave the doors to these areas slightly ajar to provide air circulation. Be sure that roof vents are open when using the gas cooktop.

CAMPGROUND COURTESY

Don't forget the *"Golden Rule"*. Being considerate of your neighbors will help make friends. A few of the *"Do's"* and *"Don'ts"* are:

- Good housekeeping-put all litter in the proper receptacles and leave your site neat and clean.
- Don't allow your water or sewer hook-ups to leak.
- Respect your neighbor's desire to retire at an early hour. Avoid loud noises and bright lights after dark.
- Drive slowly through camp areas at any hour for the safety of pedestrians.

INSURANCE

As with your automobile, it is important that you have adequate protection with insurance coverage for personal liability, property damage, comprehensive, collision, medical payments, loss of use, etc.

Canadian and Mexican Insurance

Insurance for travel in Canada can usually be covered by your present U.S. policy for the recreational vehicle, often at no extra cost. Consult your individual company for procedures and be sure of your coverage before entry.

For travel in Mexico (at the present time) there are no U.S. insurance companies that can provide recognized Mexican coverage, with the exception of that required for travel through a narrow strip of Mexican territory in and around parts of entry and the U.S./ Mexican border.

Mexican insurance is controlled, and rates are set, by the Mexican government. There are several reliable companies handling Mexican insurance, with similar rates for the necessary coverage. The principal differences between them are the *"fringe benefits"*, received in the form of informational travelogues and other helpful information, such as dining places considered acceptable for sanitary conditions, fuel stations, and so on.

Some insurance services include detailed route maps with *"where to stay"* recommendations and *"things to see"* mile-by-mile (or kilometer-by-kilometer post). While the rates set by Mexico may seem quite expensive at first glance, you usually end up not spending quite as much as expected because you can usually arrange to hold your state-side policy in abeyance during the same period you are in Mexico, thus not having to pay unnecessarily for double coverage. In addition, you may be able to obtain substantial refunds on the Mexican collision insurance after your return to the U.S. Be sure to obtain a certification from the park operator at each location in Mexico to certify the dates that your coach was parked there. If your coach is parked for most of the time, instead of constantly traveling, your refund may be a major portion of the original cost. This feature is referred to as the *"in-storage"* credit. (It is a good idea to always check with your insurance company before taking a trip to find out whether applicable insurance rules and regulations have changed. Keep up to date on your coverage.)

Carry insurance papers at all times!

SAFETY CONSIDERATIONS

Using LP Gas

Check for leaks at the connections on the LP gas system soon after purchase and initial filling of LP tank; continued periodic checks of the system are recommended. Even though the manufacturer and dealer have already made tests for leakage, this check is advisable because of the vibrations encountered during travel. Apply a soapy water solution to the outside of gas piping connections to find gas leakage (bubbles). Do not use products that contain ammonia or chlorine. Usually, tightening of connections will be sufficient. If not, ask your authorized dealer service to make the needed repairs.

Liquefied Petroleum Gas (LPG) is heavier than air. Leaking gas tends to flow to low places, and will sometimes pocket in a low area. LP gas can usually be detected by an identifiable odor characteristic to garlic.

CAUTION

Never light a match or allow any open flame in the presence of leaking gas!

Be sure that the main LP gas supply valve is closed or galley panel switch OFF during refueling to prevent accidental ignition of gas fumes by appliance ignitors.

WARNING

When coach is to be stored in a confined area, turn off the LPG at the main tank shutoff valve or, more conveniently, at the galley systems control panel.

Your BMC has been provided with an automatic 80% fill valve to protect you from the dangers of an overfilled LPG tank.

Electrical Systems

Your coach has been engineered and checked for your complete electrical system safety. Circuit breakers and fuses are installed to protect electrical circuits from overloading. Before making modifications or additions to the electrical system, consult your dealer for assistance in obtaining a safe and secure installation.

Do not *"jump"* circuit protectors!

Emergency Stops

Always carry road flares and/or reflective triangular highway warning markers for emergency warning display Pull off the roadway as far as possible when changing flats or for other emergency situations. Turn on your hazard warning flashers when parked alongside a roadway, even if only for a short while. Have your coach occupants leave the vehicle and stand clear of the area when parked on the edge of a highway.

In Case of Tire Blowout

Michelin Tire Corp. has tested extensively and recommends the following when a blowout occurs:

1. Quickly remove foot from accelerator pedal..
2. Adjust steering as needed.
3. Stay off the brakes.
4. Keep driving until you find a safe place to pull over.

Engine Exhaust Gas

Avoid inhaling exhaust gases because they contain carbon monoxide, which by itself is colorless and odorless. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal. If at any time you suspect that any exhaust fumes are entering the passenger compartment, have the cause determined and corrected as soon as possible.

The best protection against carbon monoxide entry into the vehicle body is properly maintained engine exhaust system, body and ventilation system. It is a good practice to have the exhaust system and body inspected by a competent mechanic each time the vehicle is raised for lubrication or oil change. It should also be inspected whenever a change is noticed in the sound of the exhaust system and if the exhaust system, underbody or rear of the vehicle has been damaged.

To allow proper operation of the vehicle's ventilation system, keep ventilation inlets clear of snow, leaves, or other obstructions.

Sitting in a parked vehicle with the engine on for extended periods, without proper ventilation, is not recommended!

More Safety Considerations

- Sanitize fresh water supply system periodically.
- Prevent water connection fittings from contacting the ground or drain hose to reduce chances of contamination.
- Consider using a qualified technician for repairing gas or electrical appliances.
- Check fire extinguishers periodically for proper charge.
- Avoid overloading your vehicle.
- Be careful not to cause an improper load distribution which can adversely affect roadability.
- Insure that tires are in good condition and properly inflated at all times.
- Under-inflated tires overheat and are blowout-prone!
- Check and tighten wheel lug nuts; manufacturer recommends after first 50-100 miles and every 1,000 miles thereafter.

EMERGENCY EXITS

Sliding windows, which can be easily opened, may be used as an emergency exit. Squeeze the window latch and slide window open. Emergency exit windows are identified by an EXIT decal on the glass.

VEHICLE LOADING

The Federal Certification Label, located inside and above the driver's windshield between the sun visor mounting brackets describes the maximum weight-carrying capacities of your motor home and for each axle, respectively abbreviated by "GVWR" and "GAWR".

The Gross Vehicle Weight Rating (GVWR) is the maximum motor home weight allowable with all systems filled and with passengers and supplies aboard.

Each axle also has a maximum load-bearing capacity referred to as the Gross Axle Weight Rating (GAWR).

The load capacity is the difference between the GVWR and the actual weight. This means the total weight of all food, clothing, other supplies and passengers, must not permit the load capacity to be exceeded.

To find the actual weight, with the motor home fully loaded, drive to a scale and read the weight on the front and rear wheels, separately, to determine axle loading. The load on each axle should not exceed its GAWR. If weight ratings are exceeded, move or remove items to bring all weights below the ratings.

When loading your motor home, store heavy gear first, keeping it on or as close to the floor as possible. Heavy items should be stored centrally to distribute the weight evenly between the front and the rear axles. Store only light objects on high shelves. Distribute weight to obtain even side-to-side balance of the loaded unit. Secure loose items to prevent weight shifts that could adversely affect the balance and roadability of the vehicle

COACH SERVICE-REPLACEMENT PARTS

A paint color label is located adjacent to the Federal Certification Label above the pilot's sun visor.

Data plates located on the rear of the chassis (raise rear engine compartment door for access) provide information useful for identifying your coach if you are planning on ordering parts. Identification plates provide information such as:

1. Body Serial Number
2. Model Year
3. Body Service Number
4. Chassis Serial Number
5. Chassis Service Number

ECONOMICAL DRIVING

How you drive, where you drive and when you drive — these factors all have an effect on determining how many miles you can get from a gallon of fuel. Careful maintenance will also contribute to fuel economy.

Frequent stops and starts during a trip diminish miles per gallon. Plan even short shopping trips so you can take advantage of through-streets to avoid the traffic lights. Pace your driving like the professional drivers to avoid unnecessary stops.

An idling engine also consumes fuel. If you are faced with more than a few minutes wait, and you are not in traffic, it may be advisable to shut off the engine and re-start later.

A properly lubricated vehicle means less friction between moving parts. Consult the maintenance schedules for proper lubricants, lubrication intervals and general coach maintenance scheduling.

Fuel economy is also related directly to the amount of work accomplished by the engine. Heavier loads require more power. Keep excess weight to a minimum.

DRIVING LIGHTS

Driving lamps are mounted stationary in the front bumper. The driving lamps illuminate only with high beam headlights, provided the corresponding dash switch is activated.

TRAVELING IN YOUR MOTOR HOME

NOTES

1. **Overall height is approximately 11 1/2 feet.**
2. **It is recommended that compartment doors be locked so they do not open while in transit. There are many modern recreational vehicle parks with good facilities, including State, County and Federal Parks, where electrical, water and sewer connections are readily available. Directories are published which describe these parks in detail and list available services and hookups.**

On overnight or short weekend trips, your motor home has more than adequate holding tanks and water supply capacity in the event that campgrounds or parking sites are not equipped with these facilities.

On longer trips, where sewer connections and utility hookups are unavailable, it will be necessary to stop from time to time to dispose of holding tank wastes and replenish the water supply. Many gas stations (chain and individually-owned) have installed sanitary dumping stations for just this purpose.

When stopping for the night, park the coach in a location that is relatively level and where the ground is firm. This will ensure your comfort as well as the leveling of your refrigerator (for most efficient operation)

Making a long trip is not very different from making a weekend excursion since everything you need is right at hand and you are home wherever you travel. When packing for an extended trip, try to avoid taking non-essential items.

When planning to stay in the same location for several days, weeks, or even months, be sure to maintain the motor home level. Use leveling jacks system for this purpose.

Hook up to the water supply by attaching the water hose to the commercial water supply inlet.

Plug the electrical cable into the shoreline receptacle. Be sure to observe all grounding and connection precautions!

Connect sewage hookup into the disposal facility.

WINTER TRAVELING

- Certain precautions should be taken when traveling in your motor home during the cold winter months. Keep these suggestions in mind:
- Provide heat in the coach at all times.
- Have a plentiful supply of LPG and diesel fuel.
- If your stay is longer than overnight, and you do not use the generator, try to have a shoreline hooked up to outside AC power.
- Minimize your use of electricity if 120 vac is unavailable.
- Leave cabinet doors and wardrobe doors slightly open at night to allow for proper air circulation.

Remember that low temperatures in combination with high winds will cause an equivalent chill temperature much below that indicated by your thermometer. For instance, with an outside temperature of zero degrees, and a wind velocity of 10 miles per hour, the equivalent chill temperature would be -20 degrees F!

There is no substitute for common sense when traveling in cold weather.

GENERAL STORAGE NOTES

Closed shades will reduce fading of rugs and upholstery. Leaving an air freshener agent will minimize odors from plastics and other materials. Slight opening of windows and vents will allow air circulation without worry of water entering. Covering wheels to eliminate direct rays of the sun on tires will reduce sidewall cracking.

NOTE

Remove all items from the coach which may freeze, including canned foods, miscellaneous liquids, etc. Remove all contents of the refrigerator/freezer, clean unit and leave doors ajar.

REPORTING SAFETY DEFECTS

If you believe your vehicle has a safety defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Blue Bird Wanderlodge.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Blue Bird Wanderlodge.

To contact NHTSA, you may either call the Auto Safety Hotline toll free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area). Or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about Motor Vehicle Safety from the hotline.

TABLE OF CONTENTS

SECTION ... CONTENT

AIR CONDITIONING/ DEFROSTING SYSTEM OPERATION

ROOF AIR CONDITIONING

The ducted system includes (2) two 13,500 BTU air conditioning units with condensate drains.

Operation: 120 VAC is required from either generator or shoreline. Remote thermostats are located in the kitchen and bedroom. Refer to the operator's manual in owner's kit for detailed operating instructions.

CHASSIS AIR CONDITIONING

The 21,000 BTU system has an engine driven compressor. Automotive style controls are located on the right hand side of the dash panel.

To operate the air conditioning, depress the black rectangular button on the upper left hand side of the panel. It will become blue in the center, indicating that the air conditioning is on. To control the temperature, move the thermostat switch arm located at the top of the panel to the left (blue indicator) for cooler air and to the right (red indicator) for warmer air. The fan motor switch at the lower left of the panel controls air flow. The four buttons at the lower right area control where the air flows from. From left to right, the controls are as follows:


Left - Dash face/upper vents only


Middle left - Dash face/upper vents and lower dash/floor vents


Middle right - Lower dash/floor vents only


Right - defroster vent

To operate defroster, depress far right defroster button (see diagram). Move temperature to far right (full heat). Place fan on high. In high humidity situations, it may be necessary to depress upper left air conditioning button (it will become blue).

CAUTION

For proper defroster operation, do not block areas between defroster vents and windshield.

AIR PRESSURE SYSTEMS

INTRODUCTION

The air pressure system on your coach is supplied by an engine driven compressor. It provides pneumatic power for brakes, suspension, and numerous accessories. This complex, but efficient system is not intended to be totally leak free. After overnight parking, you may notice a significant loss of pressure on the air pressure front/rear gauge, or in systems connected to auxiliary air. This condition is normal, and in fact, our air leakage tolerance is tighter than most manufacturers within the heavy duty equipment industry. Once the engine is running, the engine driven compressor will quickly build up the system to the correct pressure.

AIR BRAKES (SEE SPARTAN MANUAL FOR FURTHER DETAILS)

Your motor home is equipped with dual service air brake systems for front, rear and tag axle brakes, with integral fail/safe operation; and manual/automatic rear spring (parking) brakes. The service brakes are completely independent systems, each including a reservoir and separate distribution lines and valves. The reservoirs are pressurized from a single compressor. Both service brake systems are brought into operation each time the brake treadle is depressed to slow or stop the coach. Reservoir pressure for each service brake system is monitored by a respective pressure gauge on the front panel; system failure(s) are indicated by low pressure readings, illumination of the Low Air failure lamp and sounding of buzzer.

OPERATION

When the coach is parked, and the engine off, the rear spring brake will normally be set by operating the parking brake. The spring brakes cannot be fully released until the air pressure is above 65 psi. These brakes are in the released position when the control is pushed in. In the event that there is a loss of air pressure, the spring brakes will set automatically, at the brake-applied position, and will not release until the air reserve has again built up to required value. Consequently, there will be a normal delay, after the coach is first started, while the compressor builds up pressure before the brakes can be released and the coach driven. When the brake treadle is depressed, to slow or stop the coach, reservoir air is applied simultaneously to both front and rear service brakes to effect the braking action. The spring brakes are held in a released position by the air pressure supplied from the associated reservoir tank.

CAUTION

Do not attempt to drive the coach until system pressure is above 90 psi.

BRAKE FAILURES

To compensate for normal lining wear, each brake system is individually self-adjusting.

Protection against brake system failures is provided by fail/safe features. If the front brakes fail, operating the brake treadle still activates the rear service brakes to provide stopping capability.

If a failure occurs in the rear, the front service brakes and rear spring brakes provide braking action.

In the unlikely event of a failure where both service braking systems are disabled, the rear spring brakes will apply automatically and bring the vehicle to a stop. As a safety factor, the coach should not be moved until any type of brake failure is corrected.

NOTE

With the front brake system service reservoir fully charged, enough air pressure is available to provide for four full releases of the rear spring brakes. This will allow the coach to be brought to a safe position until repairs can be accomplished.

AIR SUSPENSION SYSTEM

Air suspension bags cushion the front and rear axles. Ride height is automatically maintained by height control valves. Dumping these air bags when the vehicle is parked allows the rubber bumpers to come together and eliminate vehicle springiness.

Refer to the manual in your owner's kit for additional information and maintenance instructions.

ADDITIONAL AIR-OPERATED EQUIPMENT

Besides providing the compressed air supply for the coach braking and suspension systems, the compressor also provides the air supply for the stepwell cover. (This compressed air source is furnished from the front right side reservoir.) A compressed air outlet fitting and air gun are contained in the front storage compartment on the road side of the coach, convenient for inflating tires, and so on.

COMPRESSED AIR SYSTEM AIR DRYER

The air dryer has three main functions. It cools, filters, and dries the systems air. The air dryer has a filter that needs to be changed once every (2) two years, and is serviceable from either end.

APPLIANCES

INSTANT HOT (OPTIONAL)

Provides an additional hot water source at the kitchen sink. Switch is located in the kitchen base cabinet. Operates from generator or shoreline.

ICE MAKER

The ice-maker, located in the lower pantry cabinet, is designed to provide a continuous automatic supply of ice cubes. It will operate unattended providing the water supply line is open and AC power is applied to the unit. The water supply cutoff valve is located under the kitchen sink. The AC power may be supplied from shoreline, generator or inverter.

OPERATION

1. Remove lower grille.
2. Put the ON-OFF Switch, located at the top of the front grill, in the ON position.
3. Open the water supply valve, located behind the front grille (small T-shaped valve).
4. Replace lower grille.

The compressor will start. As soon as the ice maker mold reaches the proper temperature, the ice maker mechanism will fill the mold with water. The first cubes may be small because of air in the water line. Subsequent cubes will be of standard size. Approximate time for the first cycle is 45 minutes.

The following suggestions are made for best results.

- When the ice bucket is full, the ice making mechanism will shut off but the refrigeration system will continue to cycle to maintain the cube supply.

IMPORTANT

Never use an ice pick, knife, or other sharp instrument to separate cubes.

- During periods of limited usage or high ambient temperatures, it is common for cubes to fuse together. Ruffle cubes as needed.
- If ice maker is not used regularly, the ice bucket should be emptied periodically to ensure fresh cubes.
- It is normal for cubes to appear cloudy. This is nothing more than air being trapped in the water due to fast freezing. It has nothing to do with the health, taste or chemical make-up of the water. It is the same air that is in every glass of water you drink.
- To provide for higher ice rate (production of more cubes), adjust the temperature control to a warmer setting. If hollow cubes result, adjust temperature somewhat colder. For less cube production, adjust to a colder setting.

NOTE

Use a flat tip screwdriver to turn adjusting screw, located behind front grill, clockwise for colder or counter-clockwise for warmer.

- Cube size may be adjusted by changing the amount of water injected into the ice maker assembly.

  A. Remove the ice maker assembly cover.
  B. Locate the adjusting screw on the ice maker assembly control box. The adjusting screw is just below the minus (-) and plus (+) signs on the control box.
  C. Turn the adjusting screw toward the minus (-) sign (clockwise) for smaller cubes or toward the plus (+) sign (counter-clockwise) for larger cubes.
  D. Install the ice maker assembly cover.

- To stop ice production, but maintain the existing ice supply, manually raise the bin arm to the full up position.

PERIODIC CLEANING AND MAINTENANCE

- The unit is not frost free and must be defrosted periodically. To defrost, turn the unit OFF, remove cubes and prop door open at least two inches. To speed defrosting place pans or trays of hot water inside the unit.

CAUTION

DO NOT use any type of electrical heating device, ice pick, knife, or other sharp instrument to defrost, as this would damage the inner lining and void the warranty.

- Avoid the use of solvent cleaning agents, abrasives, and all cleansers that may impart taste to the ice cubes. The exterior may be cleaned with cleansers and polish as used on fine furniture.
- The front grill should be kept free of dust and lint to permit free air flow to the condenser.
- The condenser coil, located behind the front grill, should be cleaned three to four times each year. Using a brush or vacuum cleaner, remove dirt, lint and other accumulations from the condenser coil.
- The condenser fins are SHARP. DO NOT run hands over condenser fins.
- The solenoid valve inlet screen must be cleaned at least once each year as follows:
  A. Shut off the water at the water supply valve, located under the kitchen sink.
  B. Remove the entire hose connector from the solenoid valve.
  C. Use a toothbrush to clean sediment from the inlet screen. DO NOT remove the screen.
  D. Attach the hose connector to the solenoid valve. Tighten connector securely with pliers. Open the water supply valve and check for leakage at the hose connector.

STORAGE

If the unit is to be stored or not used for extended periods, it will be necessary to drain the system of water.

1. Shut off water supply at the main water source.
2. Disconnect the water supply line from the solenoid valve.
3. Disconnect the water line from the solenoid valve outlet.
4. Allow the unit to run for an hour or more to drain all the water.
5. Dry out excess water from the ice maker assembly.
6. Prop the door open at least two inches.
7. Disconnect unit from main electrical power source.
8. Leave water supply line and power cord disconnected until ready to reuse.

NOTE

The use of anti-freeze or other products of this nature is not necessary and is not recommended.

REFRIGERATOR/FREEZER

This refrigerator is equipped with a semi Automatic Energy Selector (AMES) control system, which can be set to automatically select either 120 volt AC or LP gas operation, or if desired LP gas only. The control system can manually be set to DC operation. The refrigerator controls will work down to 9.6 volt DC. Refer to the manual in your owner's kit for detailed operating instructions. Refer to section on RM 2807 3-way model.

COOKTOP (RANGE)

The gas supply for the cooktop burners is provided from the LPG tank. The cooktop is equipped with a 120 volt electric igniter. Refer to the manual in your owner's kit for detailed operating instructions.

MICRO/CONVECTION OVEN

The microwave/convection oven provides programmed microwave cooking, convection operation for crisp, even broiling, or a combination of both. (See the manual in your owner's kit for detailed operation and caution notes.) Operates from shoreline or generator.

AWNING OPERATION (OPTIONAL)

A lift handle is furnished with the patio awnings in addition to the pull rod. This 6' aluminum handle may be used to lower/raise the rafter arm from/to locked position.

For complete awning operation refer to Zip Dee Owner's Manual.

CAUTION

The patio awning is equipped with a manual lock at both ends of the awning. Before driving your coach, verify that both front and rear locks are properly engaged. Failure to lock both ends may allow the awning to unroll while in transit.

CAUTION

Be sure to raise patio awning high enough to clear the top of the entrance door.

CHASSIS SPECIFICATIONS

SEE CHASSIS OWNER'S MANUAL

TURNING RADIUS

* CURB RADIUS 33.7'
** WALL RADIUS 38.5'

* Curb radius is the distance from the center of the turn to the outside edge of the front tire.

** Wall radius is the distance from the center of the turn to the outside edge of the front bumper.

NOTE
Turning Radii is with Standard 275/80R 22.5 tires

37' TOW 5000/500

UPPER DASH PANEL

NOTE

Some items operate at all times, some require the 12 volt master to be on, while others need the 12 volt master and the ignition on. Gauges marked with an * require the engine to be at normal operating temperature for correct readings.

*WATER TEMPERATURE

Normal: 180 degrees to 210 degrees F
Monitors engine coolant temperature.

CAUTION

If the engine temperature gauge indicates excessively high temperatures, the engine may be overheating and should be stopped to prevent damage. Allow the engine to cool before checking the radiator coolant level.

*OIL PRESSURE

Normal: 50 to 70 psi at cruising speed, 5 psi minimum at idle, This gauge indicates the pressure of the oil, not the amount of oil in the engine reservoir.

CAUTION

No oil pressure, or low oil pressure readings (below 25 psi) when engine is operating at cruising speeds are trouble indications! DO NOT Operate the Engine Under These Conditions!

TRANS. OIL TEMPERATURE

Indicates temperature of the transmission oil.

AIR PRESSURE FRONT/REAR - TAG AXLE PRESSURE 40' - PSI

Normal: 110 to 135 psi
The Dual Air Service Brake Pressure systems are engine operated and supply independent brake system air pressure for front and rear service brakes and the parking brake. During normal operation, each air pressure gauge reading will build up to 110 psi to 135 psi shortly after the engine is started. Note that, as a safety feature, the parking brake cannot be released until air pressure readings are at least 65 psi.

FUEL LEVEL

Indicates the amount of diesel fuel remaining in the tank. Note that the generator also gets its fuel supply from this tank. The gauge reads only when the ignition switch is in ON position. As a precaution against generator operation draining the fuel supply, the generator fuel pickup is shorter than the engine pickup. Separate fuel filters are provided for each fuel line.

DC VOLTS ENGINE

Registers the actual voltage at the engine batteries. With the engine running, gauge should read 14 volts (± 0.5).

DC VOLTS COACH

Normal: 14 Volts ± 0.5
Monitors the actual voltage at the coach batteries with the engine running.

SPEEDOMETER

Indicates speed and accumulated mileage (odometer) and trip meter. This is a solid-state electronic monitor.

TACHOMETER

Indicates actual engine RPM (Revolutions Per Minute) when scale (0-40) reading is multiplied by 100. Idle RPM should be 600 and full load (uphill) 2500 RPM. May go to 2800 RPM under no-load conditions (downhill).

HEADLIGHTS

The Headlight switch serves two functions. Pull first position for parking lights and gauge illumination. Pull to second position for headlights, parking lights and gauge illumination. The dimmer controls brightness of all gauges in dash. Turn counter-clockwise to increase or clockwise to decrease the brightness.

STEREO AM/FM/CASSETTE

(See video and audio section.)

A/C HEAT CONTROLS

FAN SWITCH

Slide to right to increase fan speed. Slide all way to left to turn off all functions.

AC SWITCH

Located at the upper left, push for air conditioning. The indicator light in switch will come on.

TEMPERATURE CONTROL LEVER

This lever controls the temperature of the discharged air in all modes of operation.

AIR OUTLET SELECTOR SWITCHES

Use these to select which vents distribute air circulated by the fan. The four switches are vent, bi-level, heat, and defrost.

HYDRONIC HEAT

The hydronic heat switch activates the diesel fueled portion of the Aqua-Hot heating system. Once activated, it takes approximately 30 seconds for the diesel burner to ignite. Allow 20-30 minutes for the system to reach operating temperature upon initial activation. The diesel fueled portion of the Aqua-Hot system may not be required when moderate ambient temperatures exist and/or when there is a low demand for domestic water heat, as the elctric heating element is capable of maintaining operative temperatures of 175 to 195 degrees F under these conditions.

ENGINE HEAT

This switch engages the engine preheat pump in the Aqua=Hot heating unit, circulating the engine's coolant through the engine preheat loop, warming the engine for easy starting. Allow approximately 1-2 hours of engine preheating time (longer for colder ambient temperatures). The pump can be allowed to operate overnight if desired.

SUPPLEMENTAL HEAT

The Aqua-Hot's engine preheating system acts as a suplemental heating source, in addition to the diesel burner and electric heating element. While traveling, the engine's heated coolant will automatically pass through the engine preheat loop, transferring heat into the Aqua-Hot's heat tank. This feature reduces the total operating hours of the diesel heater.

NOTE

Do not operate the engine preheat circulating pump while traveling.

MONITOR PANEL

REAR VIEW TELEVISION MONITOR

This system consists of a rear camera and a video monitor. System is designed to give the driver a full view of the rear of the motor home to aid in backing, parking and monitoring a towed vehicle.

To operate:

1. The ignition switch must be on.
2. With the switch in stand-by, the system will automatically come on when the transmission is shifted into reverse.
3. To turn system on while driving turn the switch to the ON position.
4. Use the switch at bottom of monitor to adjust system for daytime or night time use.
5. Adjust the contrast and brightness to your preference.

IGNITION SWITCH

A four-position, standard-type key switch. In OFF position (center), ignition and accessory positions are disabled and the key can be inserted or removed. In ON position (right) the battery is connected to the engine-run ignition circuits and the key can be advanced to START to start the engine, providing that the transmission selector is in neutral N position. The accessory position is not used.

LIGHTER

Depress to heat the element; pops out when hot.

SHIFTER PANEL

SHIFTER

This is the push button shift selector made available with the Allison Transmission Electronic Control (ATEC). See Transmission Section for detailed description.

DO NOT SHIFT LIGHT

See the manual in your owner's kit for operating instructions.

LOWER DASH PANEL

ELECTRIC MIRROR ADJUST

Switch controls both left and right mirror heads. Rotate the switch either left for the left mirror or right for the right mirror. Pushing the switch knob to the left rotates the selected mirror to the left, pushing the switch knob to the right rotates the selected mirror to the right, pushing the switch knob up rotates the selected mirror up, and pushing the switch knob down rotates the selected mirror down. The switch provided control the upper (flat) section of each mirror. The mirrors also contain a heating element to help prevent fogging over in inclement weather. The switch for the heater element is located on the lower dash panel. Just below mirror adjust switch.

MIRROR HEAT

This switch turns on thermostatically controlled heater in right and left outside mirrors. With the switch <u>on</u> the mirror heater will automatically come on to defog the mirrors.

LEFT LANDING LIGHT

At the ON position this switch turns on the landing lights on the left side of coach.

RIGHT LANDING LIGHT

At the ON position this switch turns on the landing lights on the right side of coach.

DRIVING LIGHTS

Driving lights will only operate with headlights on high beam.

WINDSHIELD WASHER

Momentary switch.

CRUISE CONTROL

When the desired speed is reached, press the SET/ACCEL switch to the SET position, hold for two seconds before releasing. The coach should automatically remain at that speed.

Following disengagement of the cruise control by braking, the previously set cruising speed may be obtained by depressing the Resume-Cancel switch to the Resume position for two seconds. Note that the coach should be at or above 35 MPH before attempting the Resume function. In addition, if the ignition switch has been turned off, the previous cruise speed will be erased from memory and the new cruise speed will be that speed when the Resume switch was pressed.

If a higher cruising speed is desired and the cruise is enabled, press the Set-Accel switch to the Accel position. The coach will begin to accelerate. When the higher desired cruising speed is obtained, immediately release the Accel switch. The coach should remain at the new speed.

WIPER DELAY CONTROL

Knob adjust wiper speed from 2 to 20 sweeps per minute when intermittent operation is selected.

WIPER SWITCH

This switch turns on the wiper, windshield either high position or low position - center is OFF wiper returns to the park position.

CLEARANCE LAMPS

This switch controls the operation of the clearance, identification and marker lights. The switch has three positions and each position has the following function. In the ON position the lights will remain lighted continuously. When the switch is in the middle (OFF) position, these lights are turned on by the headlight switch. The MOM OFF position is to flash lights as a courtesy signal when the headlight switch is ON.

ACCESSORY POSITION

This blank position may be used for the installation of an additional switch for customer add on equipment.

CAUTION

Use existing panel holes for installation of additional controls or indicators.

WARNING LIGHTS

Located on lower dash panel.

CAUTION

When indicators marked with ** are lit, it indicates a problem which could cause engine damage. Stop engine immediately and do not continue until problem has been corrected

LEFT TURN

When the turn signal lever is pulled down into the left turn position, this indicator flashes in conjunction with the outside directional lights.

**LOW OIL PRESSURE

(See operator's manual.)

HIGH BEAM INDICATOR

The indicator is illuminated when high beam is selected using steering column switch.

**LOW COOLANT

(See operator's manual.)

RIGHT TURN

When the turn signal lever is pushed up into the right turn position this indicator flashes in conjunction with the outside directional lights.

LOW AIR (LIGHTS & BUZZER)

These warn the driver that there is an insufficient supply of air (65 psi or less) to properly operate the coach. If the air pressure is low, when the ignition key is turned on, the light and buzzer will come on immediately. Both warnings will

continue until the air pressure is built back up, or the ignition key is turned off.

PARK BRAKE

Indicates park brake is still engaged.

****HIGH COOLANT TEMP.***

(See operator's manual.)

****HIGH TRANS. TEMP.***

(See operator's manual.)

EXHAUST BRAKE

This switch is a MOM ON/OFF/ON switch. In MOM-ON position the exhaust brake operates as long as switch is held. The ON position exhaust brake operates when called for.

SPOTLIGHT AIM CONTROL

Controls horizontal and vertical beam position of light.

SPOTLIGHT SWITCH

The switch turns on and off. The roof-mounted remote-control high intensity spotlight. The spotlight produces 100,000 BCP (beam candle power).

LEVELING JACK CONTROL PANEL

(See leveling jack system.)

ANTILOCK BRAKE SYSTEM (LIGHT)

(See operator's manual.)

INVERTER CONTROL PANEL

(See operator's manual.)

ENTRANCE DOOR SYSTEMS CONTROL SWITCHES

(Note: This is located on the wall beside the co-pilot's seat).

PORCH

Operates all exterior right hand side porch lights.

LIVING ROOM LIGHTS

Controls the fluorescent lights under the living room overhead cabinets.

MASTER SWITCH

Operates most 12 VDC systems that are associated with home functions of coach.

STEP-MASTER

If it is desirable for the step to be left in the extended position, for repeated trips into the coach, the step-master may be switched.

AISLE LIGHTS SWITCH

Operates aisle lights in coach.

VISTA LIGHTS SWITCH

Controls vista light around windows.

UPPER LIGHT SIWTCH

Controls upper fluorescent lights in living room valance.

LOWER LIGHT SWITCH

Controls lower fluorescent lights in living room valance.

ACCESSORY POSITION

These blank positions may be used for installation of additional switches for customer add on equipment.

GALLEY SYSTEMS CONTROL PANEL

The systems monitoring and control panel is located in the kitchen base cabinet. This panel provides a convenient means of displaying level of potable water supply, holding tanks, and LPG supply, as well as other functions discussed in the following paragraphs.

GENERATOR

Start-Stop switch; refer to **GENERATOR SECTION** for operating instructions.

PUMP

Switch for "Demand" water pumps in fresh water system. Indicator light shows when pumps are enabled.

LPG MASTER

Switch provides convenient means for controlling LPG supply to coach. Eliminates necessity of operating exterior LPG mechanical service valve, especially while refueling.

TANK MONITOR

The Tank Monitor panel provides an illuminated readout of the content level of the pure water, gray and waste water tanks, and the LPG tank level. Use the features of this panel as follows:

1. Monitor Pure, Gray or Waste Tank levels by depressing the respective button. The content level in the tank is indicated by five sets of lit readings. The E lamp, at the left of the display, is lit all the time; if the next indicator is lit, the tank is approximately 1/4 full; if the center indicator is lit, tank is between 1/2 and 3/4 full; if the 3/4 indicator is lit, tank is between 3/4 and full; and if the F indicator is lit, tank is full. IF only the E indicator is lit, the tank is between empty and 1/4 full.

2. LPG tank level can be monitored in the same manner as the water tank level by depressing the Propane Tank button. Note that this display is precalibrated. However, if it is necessary to recalibrate the display, this can be done when the tank is full by setting a rear-panel adjustment. Note that the display will read Full when the LPG tank float reads 80% because the remaining 20% volume is needed for vapor space.

DRIVER & CO-PILOT AREA

HAZARD

This switch turns on the emergency flashers. When switch is used, both left and right turn signals will flash in unison.

HORN

Operate the horn by pressing in on the center section of the wheel.

COMBINATION TURN SIGNAL/HIGH BEAM

Push lever toward dash for right turn signal, pull lever away from dash for left turn signal. Pull lever up toward steering wheel and hold for momentary high beam. When lever is released, low beams are activated. Push lever back away from steering wheel to go to high beam operation.

TILT LEVER

Pull lever up to release lock mechanism. While holding lever up, adjust the steering wheel to a comfortable position and release lever. Move the steering wheel slightly to make sure the column locks into position.

CAUTION

Always make sure that the lever is in the fully locked position in whichever detent setting is used. Do not change the wheel tilt setting while the coach is in motion.

PARKING BRAKE

The Parking Brake control is located under the lower dash, to the right of the steering column. Note that the parking brake cannot be released unless the system air pressure is at least 65 psi. Pull to set and push to release.

AIR HORN FOOT SWITCH

Operates highway horns. Located on the floor to the left of the steering column.

ACCELERATOR PEDAL

Controls engine fuel flow to select power output. See Diesel Engine Section for detailed description.

BRAKE PEDAL

The coach is equipped with a dual air brake system which includes independent systems for the front and rear service brakes. A separate reservoir and panel mounted pressure gauge is provided for each service brake system. Refer to Air Brake System Section.

SEAT CONTROLS

Electrically operated six-way seat adjustments are built into the pilot's and co-pilot's seats.

Three electric SEAT CONTROLS are used to control seat bench tilt, up-down and front-back seat movement. These seats may be rotated by a knob in the arm rest. A lever on the outboard side of seats controls back tilt. An additional switch controls lumbar support.

ELECTRICAL SYSTEMS

There are two interrelated electrical systems used in your motor home ... the 12 volt DC supply system; and the 120 volt AC supply system. The 12 volt DC system is divided into several branches, or zones, each functioning from the common 12 volt battery source. One branch provides the 12 volts required for the automotive starting, ignition and lighting systems; remaining branches supply those motor home circuits and appliances which require 12 volts DC for operation.

The 120 volt AC system includes those motor home appliances which require 120 volts for their operation, supplied from either the internal generator, or from the external 120 volt AC (or a split 240 volt AC) supply, via the shoreline hookup. The inverter will supply 120 volt power from the coach batteries to selected circuits.

12 VOLT DC SUPPLY SYSTEM

Wiring diagrams of the 12 volt supply and distribution system are included in the Illustrations and Diagrams Section.

The 12 volts supplied to all motor home appliances, outlets and accessories is routed from the batteries through a main 12 volt master switch and routed through buses to the individual branches, or zones, that are serviced from this supply. Circuit breakers are located behind the door front of co-pilot seat hood table area. The circuits supplied and fuse or circuit breaker protection at each zone are shown on the diagrams.

COACH BATTERIES

Four (4) 12 volt Marine/RV Deep Cycle batteries are located in the rear compartment on the curb side. These will provide 8.4 hours of operation, at a 25 ampere rate, when a charging source is not available.

BATTERY CHARGING

The 12 volt coach battery supply, is maintained fully-charged by either the engine alternators (when engine operates); or by battery charger. The engine battery system is normally charged by the alternators only. The coach and engine battery systems are separated by an isolator to prevent deterioration of voltage in the event of one or the other supplies becoming defective.

Batteries can become discharged because of coach 12 volt loads, while parked, without a 120 volt AC source. For overnight stops this presents no problem, with judicious use of 12 volt service, because the engine alternators will recharge the batteries rapidly during the next day's travel. When operating from shoreline or generator power, the batteries obtain the major portion of the charge during "sleeping" time, while coach loads are low, so that the battery charger can "top off" the batteries.

If it is planned to leave the coach parked without exterior power for two days or longer turn off the Master switch located in the entrance door area. This will ensure that there is minimal drain from the circuits.

While in transit, the DC volts gauges on the dash panel should reflect an alternator regulated setting of 14 volts (+ 0.5). When parked, with 120 volt source supplied, the DC VOLTS COACH gauge should read between 12.5 and 14.0 volts depending upon load. When parked, without 120 volt source, do not permit voltage to drop below 11.5.

AC SUPPLY SYSTEM

Motor home AC-operated appliances are supplied from either an external shoreline hookup or from the on-board generator. Selection of shoreline or generator power source is determined automatically by a remote changeover switch located in left-rear road side compartment above cable storage shelf. The 120 VAC circuits are normally supplied by the shoreline power cable. Whenever the generator is started, the automatic changeover switch will detect the generator voltage and will switch to the generator in approximately 25 seconds.

CAUTION

Use of excessively long and improperly rated extension cords may cause your auto changeover system to fail prematurely. If you must use an extension cord, follow these guidelines:

- **for 30 amp receptacles: USE 10 GAUGE WIRE**
- **for 50 amp receptacles: USE 6 GAUGE WIRE**

NOTE

Occasionally you may hear a slight humming or buzzing noise coming from the vicinity of your auto changeover or relay contractor box. This is completely normal behavior.

AC CIRCUIT BREAKER AND DISTRIBUTION PANEL

The main AC Distribution Panel is located in the bedroom behind the mirrored door on the road side.

BATTERY CHARGER

130 Amp battery charger (integral with the Freedom 2500 inverter) operates when a source of 120 volts AC is supplied either from shoreline or generator and the inverter is turned on. The charger is connected to the coach batteries. The engine batteries may also be charged by anabline the auxiliary battery switch on the lower dash.

CELLULAR PHONE WIRING (OPTIONAL)

A roof mounted antenna and wiring (terminates in driver area) are supplied for cellular phone hook up.

INVERTER

A 2500 watt inverter provides auxiliary power to all user accessible interior receptacles, ice maker, front overhead television, bedroom television, and electric drapes, while in transit, from 12 volt source. It is located in the road side rear compartment. See the manual in your owner's kit for operating instructions.

LOAD MANAGEMENT

There are two important 12v system gauges located in the driver's area which, if properly understood and occasionally monitored, will ensure proper operation and prevent an inconvenient and possibly damaging situation of discharged batteries.

On the dash are:

- Engine volt gauge for two engine batteries.
- Coach volt gauge for four coach batteries. Proper charger operation while parked will keep batteries between 12.5 and 14.0 volts depending on load.

Be sure, with load management techniques, that coach load does not exceed charger capacity. This is easily determined by ensuring that dash coach volt gauge does not drop below 11.5 volts. Should battery voltage fall below this range, remember:

CAUTION

Battery voltage below 9v will damage fluorescent light bulbs and possibly the light ballast. Turn off fluorescent lights with low battery voltage!

STORING THE COACH

If you plan to store your coach without 120 v power for (2) days or longer, be sure to turn off your master switch and inverter at both shifter panel and inverter switches. Your objective is to minimize power drain.

With both masters off, you can still expect a battery discharge of 2-4 amps because of non-mastered circuits to refrigerator, and transmission control circuits.

For storage over a (3) week time period, disconnect your batteries if there is no shore power available for the battery charger. The best storage technique is to turn off both master switches, turn off the inverter at both switch locations and run your battery charger 24 hours per week. This procedure will keep batteries up but avoid a damaging overcharge condition.

ENGINE, DIESEL

(SEE ENGINE OPERATOR'S MANUAL FOR INFORMATION)

FUEL TANK

Tank is a mid-mount tank which can be filled from curb or road side. Fill fuel tanks after completing a run. Partially-filled tanks will collect moisture if the coach is allowed to sit for an appreciable length of time.

FUEL ADDITIVE

Fuel Additive Recommended for use with #2 Diesel Fuel ... US Borax Biobor JF
Fuel Additive to use per 100 gallons ... 2.8 fl. oz.

EXHAUST BRAKE RETARDER OPERATION

(See PACBRAKE Owner's Manual for information.)

POWER STEERING & HYDRAULIC COOLING FAN

(See Chassis Manual for information.)

ENGINE COOLING SYSTEM REFILL

(See Engine Manual for information.) 70 qts

BATTERY MAINTENANCE

Your motor home is equipped with separate engine and coach battery systems for greater assurance that there will be sufficient voltage to crank the motor home engine.

Two engine batteries are located in the battery compartment top shelf on the curb side. The four batteries located in the curb side battery compartment lower shelf are used for coach loads.

All batteries are charged from either the alternator or battery chargers. In order for the battery chargers to operate, either the generator must be running or the coach must be connected to a shoreline supply.

To make sure that the batteries are always ready for use, periodically check and charge as necessary.

A dirty battery may eventually dissipate its charge through conductive surface contamination. Clean battery top surface with a damp cloth and dry thoroughly. Check that battery terminals and associated battery jumper terminals are tight and free of corrosion. To clean terminals, neutralize corrosive deposits with a solution of baking soda, rinse with clear water, and dry. Note that commercial type spray-on battery cleaners are available at automotive supply stores. Use as directed to keep the batteries clean. Spray-on cable and terminal protective coatings are also available, easy to use, and effective.

CAUTION

Avoid sparking of any form in the vicinity of the batteries.

CAUTION

Do not wear metal rings, watches or jewelry when working on or near the batteries, cables, solenoids, or chassis wiring. These can short out electrical wiring and cause injury.

BATTERY STORAGE IN FREEZING WEATHER

Batteries that are not kept full-charged must be given protection against freezing. Partially-charged batteries will freeze at low temperatures, so batteries must either be left charged or removed from the vehicle and stored in a warm location.

The motor home can be left connected to the shoreline AC supply and the coach battery chargers will keep the coach batteries charged. Note that even in a warm location is advisable to keep the batteries charged to prevent deterioration. The engine and coach batteries are the sealed type and require no electrolyte service.

Coat battery terminals with lubricant or protective coating to inhibit corrosion.

FANS, VENT & EXHAUST

KOOL-O-MATIC FAN

12 VDC power ventilator located in the kitchen.

OPERATION:

1. Open inlet dampers on fan.
2. Be sure windows are open to provide proper air flow cooling and ventilation.

FANTASTIC FAN/WITH RAIN SENSOR

12 VDC exhaust fan located in the bathroom.

OPERATION:

1. Open damper from control located on the face of the vanity.
2. Turn on fan from control located on the fan. Set desired speed. Switch on fan may be left on in order for the vanity (remote) switch to operate all functions.

FRESH WATER SYSTEM

WATER SUPPLY AND DISTRIBUTION SYSTEM

The dual purpose Tank Water Fill/Commercial Water inlet connection is located on the road side in the holding tank compartment. Tank Fill valve located in the same compartment, diverts the commercial water input to fill the pure water storage tank, located in the same compartment. System water pressure is provided by a water pump (located in the same compartment), rather than by tank pressurization. A water filter system filters all the water supplied to the coach.

COMMERCIAL WATER HOOKUP

When facilities are available, the Commercial Water hookup can be used to supply all coach water system requirements. In this manner, the coach water tank and pump system are automatically bypassed and water pressure is developed by the external connection. Water inlet pressure is regulated to 40-psi maximum, by a valve which is part of the city (commercial) water fill.

FILLING THE TANK - STANDARD CAPACITY APPROX. 100 GALLONS

To fill the water supply tank, connect the water hose to the commercial water inlet, open the Tank Fill valve, then turn on the water supply. When tank is full, as indicated by water overflow beneath the coach, close the Tank Fill valve, shut off the water supply and disconnect the hose. At this time, check that the Monitor panel readout indicates a full water tank. To check, press the Pure tank switch and observe that the E through F indicator segments are lit.

NOTE
The Tank Fill valve should be OPEN only when the water tank is being filled. This valve must be closed at all other times.

SANITIZING THE WATER SYSTEM

Water system sanitizing procedures should be followed before the system is used for the first time, after long idle periods, where water may become stagnant; or after any suspected contamination of the water supply. Whenever possible, use a commercially approved tank sanitizer and follow the procedures on the product package. If it is not possible to use a commercial product, prepare your own mixture and sanitize the tank in accordance with the following procedures:

1. **Empty the Water Tank** - To drain tank, open the Water Tank Drain Valve in the holding tank compartment. After tank is completely drained, close Water Tank Drain.

2. **Prepare the sanitizing solution** - using 1/4 cup of household bleach (sodium hypochlorite solution) for each gallon of water. Use one gallon of the solution for each 15 gallons of tank capacity. This procedure will result in a residual chlorine concentration of 50 ppm in the water system. If a 100 ppm concentration is required use 1/2 cup of household bleach with one gallon water to prepare the chlorine solution. Seven to eight gallons of solution will be adequate for the tank. (Approx. 100 Gallons).
3. **Add sanitizing solution to water tank** - Remove one of the 1/2" plugs from top corner of the f/w tank (on road side) and pour solution into tank. Reinstall plug in tank. A piece of garden hose and funnel will aid in this step.
4. **Fill tank to capacity** - Connect hose to the commercial water inlet, open the Tank Fill valve and fill water tank completely. Shut off hose, and close Tank Fill valve. Turn on the water pump, open each faucet (hot and cold) and run the water until a distinct odor of chlorine can be detected. Shut off the water pump.
5. **Allow the system to stand** - for at least 4 hours when disinfecting with 50 ppm residual chlorine. If a shorter time period is desired, then a 100 ppm chlorine concentration should be permitted to stand in the system for at least 1 hour.
6. **Drain tank** - Open the Water Tank Drain valve and allow the tank to drain completely.
7. **Refill tank** - Close the Water Tank Drain valve and turn on the water supply to the commercial water inlet, open Tank Fill valve and fill tank completely. When the tank is full, close Tank Fill valve, shut off water supply and disconnect hose, replace fill cap and turn on water pump. When water flows from opened faucets, close them and open other faucets until water flows. This flushes the system, removing trapped air from the piping and ensures that the fresh water supply is ready for use. Run water at faucets until system is flushed of sanitizing solution.

CAUTION

Do not permit sanitizing or antifreeze solutions to enter water filter.

FILTER REPLACEMENT

This filter removes sediment taste and odor and is installed on the output side of commercial water hookup. All water is filtered before it enters the water system. Cartridge life is not more than three months, and should be changed if water flow slows or bad tastes and odor return.

WATER HEATER

With the Aqua-Hot at operating temperature, the domestic water is automatically heated as it is being used. Open any hot water faucet and a continuous supply of domestic hot water will be present within a few seconds. This is accomplished by the Aqua-Hot's domestic hot water loop which is an integral part of the heating system. A mixer valve has been installed to assure that excessively hot water does not flow to the faucets.

CAUTION

The mixer valve is not an anti-scald device. Always exercise reasonable caution when using hot water.

CAUTION

Do not turn water heater off if outside temperature is 32 degrees or lower when potable water system is not drained.

OUTSIDE FAUCET

An outside faucet is provided in the holding tank compartment.

WATER PUMP

The water pump, located in the holding tank compartment, is equipped with a factory-calibrated pressure control switch which is preset to turn the pump on when the system pressure falls below 20 psi; and turn the pump off when the pressure reaches 35 psi. If the pump has been out of service for a period of time, it is advisable to open a faucet before turning on. When water flows steadily from the opened faucet, close faucet and observe that the pump shuts off when system becomes pressurized (It may also be necessary to bleed the air from the other faucets as well.) When the potable water supply tank level is low, or empty, shut the pumps off to prevent possible damage to the pump motor. In addition to integral motor overload protection, the pump mechanism is also protected from damage by the presence of a filter at the water pump inlet. The filter should be cleaned periodically.

Under normal usage, the water pump should require no periodic maintenance other than ensuring that the input water supply is properly filtered of particles that could damage the pump mechanism. Pump failures can generally be tied in to the plumbing system, or to electrical wiring. If a pump fails to operate properly, refer to the general troubleshooting guide. Note that detailed pump repairs and overhaul should be performed by a qualified repair facility.

WATER PUMP SWITCH

Switches enabling the water pump are located on the systems monitor panel and in the bathroom.

The associated indicator is lit whenever power is being supplied to the pump. Turning ON a switch pressurizes the water system, with the pump operating on demand to maintain constant pressure. Continuous or erratic pump operation can indicate an empty water tank, system leakage, or air lock in the water lines.

TOILET SHUT OFF VALVE

Is located behind and below the toilet.

AIR ACCUMULATOR

An accumulator in the water system (under the bed) will smooth out the water flow, and eliminates water hammer and pulsations from the water pump. This accumulator has a diaphragm which separates the air on top from the water so it will not become "water logged." It comes charged with 20 psi, which may be increased to 25 psi through Schrader valve on top if desired.

WATER PUMP TROUBLESHOOTING GUIDE

Symptom:
  Possible Cause:
    Corrective Action:

Pumps operate but no water flows through faucet:
  Low water level in tank.
    Add water.
  Suction line or filter clogged.
    Clear water lines and clean filter.
  Kink in water suction hose.
    Check water hose connections to tank and straighten or replace, as necessary.
  Air leak in suction line.
    Replace suction line.
  Defective water pump.
    Replace diaphragm or jammed check valve.
    (See Flojet's service instructions).

Pump cycles on and off when faucets are closed:
  Water leak in plumbing.
    Check for signs of leakage and tighten or replace fittings, pipe, etc.
  Defective toilet flush valve.
    Repair flush valve.
  Defective water pump.
    Replace upper housing.
    (See Flojet's service instructions).

Pump operates roughly and has excessive noise and vibration:
  Intake line is restricted, kink in suction hose or fittings are too small.
    Check input hose and straighten or replace, as necessary.
  Defective water pump.
    Replace lower housing.
    (See Flojet's service instructions)

Pump fails to start when faucet is opened:
  Clogged pressure piping.
    Blow out water lines with compressed air.

No voltage to pump.
Check input wiring circuit breaker and switches.
Defective water pump.
Replace upper housing or check valve.
(See Flojet's service instructions).

Pump gives low water pressure and flow:
Defective water pump.
Replace diaphragm or motor.
(See Flojet's service instructions).

WINTERIZING

If you are planning on storing your motor home in an unheated area during cold weather, it will be necessary to winterize the water system to prevent damage from freezing conditions. Winterizing procedures are covered in the following paragraphs.

DRAINING AND WINTERIZING THE FRESH WATER SUPPLY SYSTEM

The following procedures show the use of the various drain valves and controls to remove the water from the plumbing and appliances in the fresh water supply system.

1. Open the main circuit breaker box and turn off the Water Heater (and Instant Hot if equipped) circuit breakers.
2. Turn on Water Pump switch and open all faucets (galley sink, lavatory, shower, outside hose connection and toilet water valve - after depressing pedal insert block to maintain position). Note that the outside water hose connection should always be left open when freezing temperatures are expected. Also remove drain plugs at rear of toilet and at bottom of (optional) Instant Hot. Refer to the Ice-Maker and Toilet Manuals for winterizing these units.
3. Open the Cold Water Drains, Hot Water Drains, Tank Fill and Tank Drain valves located in road side holding tank compartment. Open Cold and Hot Water Drain valves located in roadside front compartment at Aqua-Hot.
4. Allow water to drain completely before proceeding to the next step.
5. Close all valves opened in step 3, except Hot Water Drain valve in Aqua-Hot compartment. Also, close cutoff valve at water filter.
6. Turn ON Water Purge Air Pressure switch to activate the solenoid which applies air pressure to the input water line to purge the water system. Note that it may be necessary to start the engine to build up air pressure.
7. Remove cap from cold water circuit at front of Aqua-Hot compartment and pour in 8 oz. of RV Antifreeze. Replace cap and repeat step 6. The proceed to step 8.
8. When only air remains in the lines, close Hot Drain valve in Aqua-Hot compartment and all faucets. Replace drain plugs in toilet and Instant Hot. Operate the Instant Hot valve to clear the heat exchanger of remaining water.
9. Turn Water Purge Air Pressure Switch and water pump off, and shut down

engine.

10. Open all faucets (toilet valve to remain open).
11. At this point, the only water remaining in the system is contained in the P traps beneath the lavatory, shower and kitchen sink. To prevent this water from freezing and damaging the traps, put one pint of RV system anti-freeze into each drain. See WASTE SYSTEM winterizing.

NOTE

When reactivating system, make sure (optional) Instant Hot is full of water before switching on.

FREEZE PROTECTION

(See Heating System - Section 13.)

GENERATOR

GENERATOR OPERATION

The generator can be started and stopped from any of two locations within the coach, at the driver's area and at the galley panel. In addition, the generator can also be operated from the switch in the front roadside compartment.

To start the generator, push the Generator switch to the Start position and hold until the generator starts, as indicated by the indicator light. Do not hold switch on for longer than 5 seconds at a time! If the generator does not start the first time, wait a minute and try again. Release the switch when the indicator light glows. After starting, there will be a delay of approximately 25 seconds before the automatic change over switch will permit the generator to pick up the load. The generator may be stopped at any time, by holding the switch to the Stop position until the generator stops (light extinguishes).

In cold weather, it is necessary to activate the cylinder glow plugs before starting. Push start-stop switch to stop position and hold for 15-20 seconds. See operator's manual for more detailed information.

GENERATOR MAINTENANCE

Refer to Operator's Manual in your owner's kit for inspection maintenance requirements.

CAUTION

The generator tray is electrically operated and extends outward with considerable force. To extend the tray, move around to the road side and operate the tray switch in the front compartment to out position. Be sure that there is sufficient clearance in front of the tray and that nobody is in the way! Use extreme caution when observing and operating generator with tray extended.

AIR CLEANER

Cleaning Instructions:

Donaldson does authorize cleaning the Dura-Lite unit (throwaway type) but this can be impractical in most cases. If it is cleaned, the following should be observed.

Blow air into the Dura-Lite's outlet neck causing dirt to flow off the media and out the dirty air inlet opposite the normal air flow direction. This procedure keeps the abrasive contaminants away from the clean air side.

Do Not use pressurized air higher than 100 psi.

Do Not use compressed air cleaning when the filter media is wet.

OIL CHECK/CHANGE

To be on the safe side, check oil (dipstick located on road side of generator) in engine crankcase daily, or before each start, to ensure that the level is in the safe range between the upper and lower marks on the dipstick. Do not operate generator if level exceeds the upper mark, or is below the lower mark.

CAUTION

Do not check oil level while engine is operating. Engine must be stopped to obtain a true reading, as well as for safety reasons!

Whenever possible, drain the oil while the engine is still warm. To drain, place a container below the unit, open the oil drain and allow sufficient time for the old oil to drain completely. After draining, close drain plug and tighten securely.

COOLING SYSTEM

Cooling system capacity is about 12 quarts of liquid. System should be filled using equal parts of water and ethylene glycol. (A drain petcock is provided on the underside of the radiator.)

When draining the coolant, remove the cap from the top of the engine and open the engine block drain cock located below the fuel injection pump.

Check coolant level frequently and add antifreeze mixture as needed to maintain full system.

HOURS RUN METER

Meter is located on generator control panel.

GENERAL TROUBLESHOOTING

Refer to the Generator Service Manual for repair and maintenance data. Generator repairs should be accomplished by a qualified repair agency.

GENERATOR OVERLOADS

If the rated capacity of the generator is exceeded, the safeguard circuit breaker, located on the front surface of generator electrical box, will trip to protect the generator against damage. This condition could be caused by a short in the coach AC supply circuits, or by operating too many appliances simultaneously, resulting in an overload condition. If the safeguard circuit breaker trips, the generator will continue running but no AC output will be supplied. Before resetting the circuit breakers, turn off some of the coach appliances and lighting to reduce the load to within the operating limits of the generator. If this is done, and the generator breakers still trip, a short circuit is indicated. Turn off the generator, locate and correct the cause of the short circuit.

STORAGE PROCEDURES

If the generator is to be out of service for a long period of time, perform the following procedures before placing the unit in storage:

1. Drain oil from crankcase (while hot) and refill with specified oil. Run generator after change to circulate new oil.
2. Clean exterior surfaces of generator set then spread a light film of oil over any unpainted metallic surfaces which could corrode.

GENERATOR SPECIFICATIONS

Electrical Rating	10 KW at 120 VAC
Fuel Supply	Diesel, separate pickup in main tank
Fuel Filter Element	WL P/N 3970860
Cooling System	12 quarts
Crankcase Capacity	6 quarts
Oil Filter	WL P/N 6075923
Oil Specifications for Generator	
API Classification	CD 10W30/10W40 *(See Operator's Manual)*
Air Filter Element	WL P/N 6075931

HEATING SYSTEMS

The Aqua-Hot Motor Coach and Marine Heating System is an on-board heating system that provides a continuous supply of domestic hot water, as well as interior heat where and when it is needed. Both heating features are accomplished by a 50,000 BTU diesel-fired burner and a 1650 watt electric heating element (located at breaker on 110 volt/ AC load center). These two heating sources operate separately or simultaneously (during high heat demand periods) tp maintain the temperature of the Aqua-Hot's 50/50 solution of water and antifreeze. In addition to domestic hot water and interior heating capabilities, the Aqua-Hot has also been designed to preheat the vehicle's engine prior to starting. This feature provides easy engine start-up on cool mornings.

NOTE

For freeze protection, leave the furnace operating to supply heat to the interior of the coach as well as the holding tank compartment.

ELECTRIC HEAT

An electric forced air heater (120 vac) is located in the bathroom. Your electric heater is provided for auxiliary heating. Since the heater draws 10-15 AC amps, operator load management becomes an important consideration.

BATHROOM HEATER OPERATION

1. On/Off thermostat control on heater must be turned on and set.
2. Bathroom thermostat must be turned on and set for temperature desired.

HEATING SYSTEM CHASSIS

(See A/C Heat Controls - Section 6.)

INTERIOR & EXTERIOR CARE

CORIAN TOPS

Even stubborn stains ... such as grape or beet juices ... wipe off with a damp cloth and household cleanser. Because CORIAN is solid all the way through, it cannot be harmed by abrasive cleansers and normal household cleaners.

CORIAN is strong and tough, but slicing on it with knives can cause scratches. Use a cutting board.

While CORIAN does provide an extra measure of protection (better than ordinary counter tops), it is not recommended as a hot pad. Do not place hot pots and pans directly on your CORIAN counter top.

Since it's a solid material with color and pattern all the way through, unusual damage such as cigarette burns, scratches, or other surface abuse can usually be removed using ordinary household cleansers or fine sandpaper. If the stain persists, or if the scratch is particularly deep, first use a medium sandpaper (120 or 240 grit) then fine sandpaper (320 or 400 grit) followed by circular motion buffing with a Scotch Brite pad to match the gloss of adjacent surfaces. Household cleanser, steel wool or DuPont No. 7 polishing compound can also be used if higher gloss levels are needed.

CAUTION

Certain chemicals found in the home-such as paint removers, paint brush cleaners, acid drain cleaners and certain brands of nail polish and polish removers - can harm CORIAN if left in contact even for short periods of time. These materials should be wiped away promptly and flushed with water. Depending on time of exposure, surface damage caused by these materials can sometimes extend too deeply for practical repairs.

INTERIOR CARE

The interior can be kept in good condition with the use of approved cleaning agents for wall coverings and ceilings, plastic fixtures, stainless steel, formica and so on. Never use abrasive cleaning agents on interior of refrigerators, or on the lavatory, tub/shower, or toilet, as they can cause permanent scratches. Be sure that the cleaning agent will not damage the material. Note that some plastics are incompatible with certain cleaners. Read the directions on the container before using. For the most part, the cleaners and polishes that would normally be used in your home are equally well-suited for use in your motor home.

EXTERIOR CARE

Exterior paint finish life can be extended by periodic cleaning and waxing. This will preserve the paint and allow easier removal of dirt and road tars. Use touch-up paint for small areas to keep the coach finish in like new condition.

Frequent washing of the coach is necessary to prevent corrosion in areas where heavy salt sprays are evident. A clear acrylic spray may be used, with care, to control corrosive effects of salt spray on metal surfaces.

CAUTION

Some car/truck wash facilities may use strong detergents or other chemicals that could cause permanent staining or streaking of exterior paint and aluminum trim. A strong alkaline solution, while useful for dissolving dirt, is a suspected harmful ingredient.

Before enlisting any commercial wash service or facility, you should determine that cleaning agents used will not damage the finish of your coach.

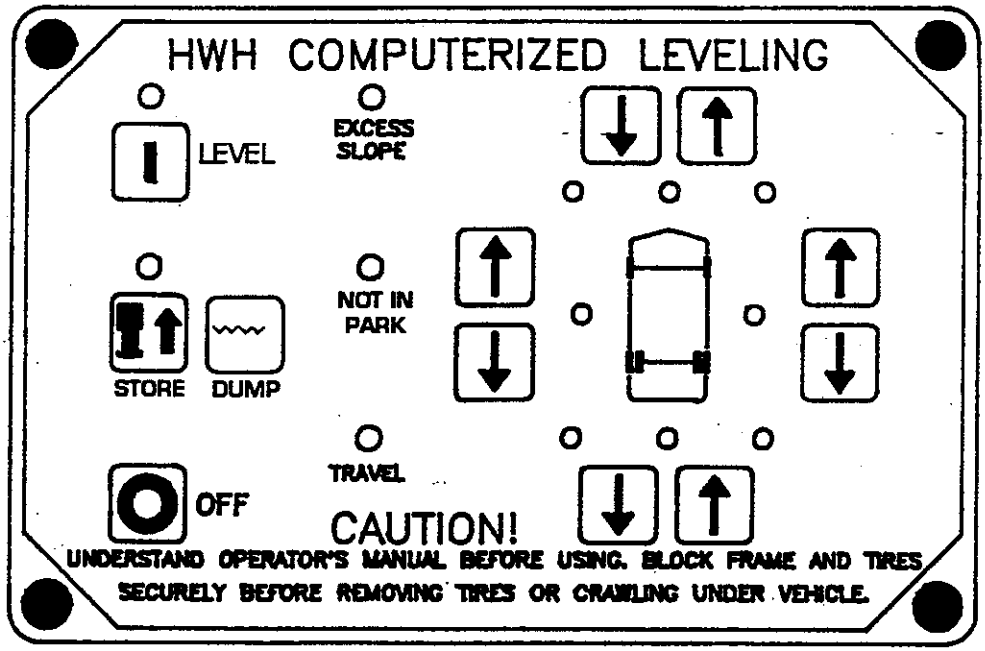
CAUTION

Avoid spraying water through the refrigerator vent door. Refrigerator PC control boards are not completely sealed and are vulnerable to an inadvertent dousing.

LEVELING JACK OPERATION

AUTOMATIC LEVELING JACKS CONTROL

The control panel is mounted on the sidewall beside the pilot.



CAUTION!

Read and understand entire operators manual before operating.

Block frame and tires securely before changing tires or crawling under vehicle. Do not use leveling jacks (or air suspension) to support vehicle while under vehicle or changing tires. Vehicle may move forward or backward without warning causing injury or death.

Keep all people clear of vehicle while leveling system is in use.

Do not over extend the rear jacks. If the weight of the vehicle is removed from one or both rear wheels, the vehicle may roll forward or backward, off the jacks.

Never place hands or other parts of the body near hydraulic leaks. Oil may cut and penetrate the skin causing injury or death.

Kickdown type leveling jacks may abruptly swing up anytime the foot clears the ground.

PANEL FUNCTIONS

1. CONTROL BUTTONS

The "OFF" button is in the lower left hand corner of the touch panel. Push the "OFF" button to stop hydraulic operation.

Top left is the "I" button with its operating light above it. Below the "I" button is the "STORE" button for retracting hydraulic jacks, with its operating light directly above it.

The remaining buttons on the right hand side of the panel are MANUAL control buttons that operate only during the manual mode. The manual buttons are the eight (8) buttons on the right half of the label, two for each of the FRONT, REAR, LEFT SIDE, and RIGHT SIDE. Pushing UP arrows will cause the coach to raise and DOWN arrows will cause the coach to lower.

2. INDICATOR LIGHTS

The four (4) yellow indicating lights are level sensing indicators. When a yellow light is "ON", it indicates that its side or end of the vehicle is low. No more than two (2) lights should be on at the same time.

The four (4) red lights surrounding the yellow level indicators are jack warning lights. They are functional only when ignition is "ON" or in "ACCESSORY". During the hydraulic mode they light when the respective jack is extended. The vehicle should not be moved while these lights are on.

The "EXCESS SLOPE" indicator will light when the leveling system cannot level the coach.

The "NOT IN PARK" indicator is "ON" when the control panel is "ON" and the park brake is not set.

The "TRAVEL" indicator is "ON" when the control panel is off, the jacks are retracted, and the ignition switch is on. Do not move vehicle unless travel light is "ON".

The "LOW BATTERY" indicator is "ON" when the controls sense low voltage set between 8.0 and 9.0 volts. The system will stop leveling functions when low voltage is detected.

GENERAL INSTRUCTIONS

Press the "OFF" button and turn the ignition switch OFF at any time to stop the operation of the system.

Any time a hydraulic leveling process is interrupted, retract the jacks according to the "JACK RETRACTION" section and then restart the leveling process.

Do not operate the system when the "LOW BATTERY" light is on. If the park brake is

not set when the "I" button is pressed, the "NOT IN PARK" light will come on and the system will not operate. It will remain "ON" only while the "I" button is pressed.

PREPARATION FOR TRAVEL

Before traveling, the red jack warning lights must be "OFF" and the travel light must be "ON". If lights are not correct for travel, retract jack as described in the "JACK RETRACTION" section.

CAUTION

Do not rely solely upon the warning indicator lights. It is the operator's responsibility to check that all jacks are up before moving the vehicle.

SYSTEM OPERATION

AUTOMATIC HYDRAULIC LEVELING

1. Place transmission in neutral position and set parking brake. Turn the ignition to the "ACC" position. Note: Coach engine must be off for leveling.

2. If the vehicle is parked on soft ground, blocks may be placed under the jacks for added support.

3. Press the (I) button to enter the hydraulic operation mode. The (I) indicator light will glow steadily.

4. Press the (I) button a second time. The (I) indicator light will start to flash. The controller starts out dumping the air bags. After 25 seconds, the system automatically extends the jacks to level the vehicle and then extends any remaining jacks until they touch the ground. In the event the jacks are unable to level the vehicle, the (excess slope) indicator light will come "on." One or more yellow level lights will be on indicating that its jack is fully extended.

5. After a pause of ten seconds the system will automatically shut off (warning indicator lights will remain on as long as the ignition is on or in the accessory position and the jacks are in extend position).

6. Turn the ignition switch to the "OFF" position.

JACK RETRACTION

1. The operator must be sure that there are no objects under the vehicle and that all people are clear of the vehicle.

2. Turn the ignition switch to "ACC" and press the (I) button one time. The (I) indicator light will glow steadily.

3. The "I" indicator light will glow steadily. Press the "STORE" button. The store

indicator light will flash. As each jack retracts, its red warning light will go out. Approximately one minute after the four red warning lights are off and the "TRAVEL" light is on the vehicle may be moved.

4. The system will automatically shut off six minutes after the four "Jacks Down" warning lights on the touch panel have gone out. If a "Jacks Down" warning light stays lit, the system will continue to run for thirty minutes. It will then shut off regardless of the touch panel warning lights. Note: DO NOT interrupt power to the control box until the red indicator light above the "I" button has gone out.

5. If jacks cannot be retracted by the above procedure see "VALVE RELEASE OPERATION" section.

MANUAL HYDRAULIC OPERATION

1. Place transmission in neutral and set the parking brake. Turn the ignition to the "ACC" position.

2. If vehicle is parked on soft ground, blocks may be placed under jacks for added support.

3. Press the (I) button. The indicator light will glow steadily.

4. Press the (DUMP) button and hold to dump air from the air bags. After the air is exhausted, advance to the next step.

5. The vehicle may be leveled using the manual raise buttons on the right half of the panel. If a yellow "LEVEL SENSING" light is "ON", that side or end of the vehicle is low. Jacks will extend (or retract) in pairs to raise (or lower) a side or end of the vehicle. When a jack is extended, approximately two (2) inches, the respective jack warning light on the right half of the panel will come on.

IMPORTANT

Do not continue to push a raise button for more than ten (10) seconds after that pair of jacks are fully extended.

6. When leveling is completed, push the "OFF" button on the leveling panel and turn the ignition switch to the "OFF" position.

VALVE RELEASE OPERATION

1. Use the valve release "T" handles for retracting only if the "STORE" button on the control panel will not retract the jacks for travel.

CAUTION

Keep away from the wheels, do not crawl under coach, keep a safe distance in front and rear of vehicle. The vehicle may drop and/or move forward or backward without warning or as the valve release is operated.

2. Locate the valve release "T" handles on the solenoid valves. The solenoid valves are located on the pump manifold assembly.
3. Allow clearance for the coach to lower.

4. Open the two outer valves slowly by turning counter clockwise. The handles may turn easily at first but as an internal spring is compressed, turning may become more difficult. The valves need only be opened enough to retract the jack.

5. Retract the front jacks by opening the two center valves as described in step 4.

6. Check that all four jacks are now retracted.

7. Close the valves by turning the release handles clockwise. Once the internal spring tension has been released, the handles will turn free for several turns. DO NOT tighten the handles past this point as internal damage may occur to the solenoid.

8. The system should now be repaired before being used again.

SERVICING OF LEVELING SYSTEM

HYDRAULIC OIL

Retract the four leveling jacks before checking oil level. Locate the pump/manifold assembly and clean any dirt away from the breather/filler cap on the oil reservoir. Check that the oil is within one (1) inch of the top of the reservoir.

The oil should be checked when the vehicle is first purchased and then once every two years. More often if there is an oil leak in the system. Use universal, multipurpose or Dexron transmission fluid. DO NOT USE brake fluid or hydraulic jack fluid. Use of these fluids can damage seals. The hydraulic tank should be filled to within one (1) inch from the top.

VISUAL INSPECTION

Periodically inspect the leveling jacks for damaged or missing parts such as pivot bolts, springs, or warning switches. Check the hydraulic lines and wiring for damage and wear.

"NOT IN PARK/BRAKE" CHECK

Set park brake. Switch ignition to the "ACC" position. Continuously press "I" button on touch panel to turn on system. Release parking brake and confirm that the "NOT IN PARK/BRAKE" indicator light comes on. Reset parking brake. Switch ignition to "OFF" position.

NOTE

If any of the above checks or inspections reveal a problem or if there are other problems or questions, consult your vehicle or coach manufacturer, or HWH Corporation for service or repair.

OPERATIONAL CHECK

Review operator manual and confirm that the system is operating correctly.

NOTE

If any of the above checks or inspections reveal a problem or if there are other problems or questions consult your nearest service center.

CAUTION

Do not drive the coach unless the air-suspension system is correctly pressurized to assure even weight distribution. There must be pressure in the air bags to prevent flat spotting of tires during brake application.

CAUTION

Severe injury or death may result. Do not use the leveling system for changing tires or working under the vehicle. Keep the rear wheels in firm contact with the ground with the parking brake set. With the leveling jacks extended, there is a possibility the vehicle may move either toward the front or rear.

LPG SYSTEM

LPG SYSTEM

The coach is equipped with a permanently mounted 45 gallon (148 pounds of fuel-net) LP gas tank which is the energy source for the cooktop (range) and alternate source for the refrigerator.

LPG TANK AND CONTROLS

The LPG supply tank is located in right hand front compartment. LPG system controls include a main gas service valve, solenoid shut-off valve, two stage pressure regulator, filler connection with Auto Stop (80%) fill valve, 20% vapor (stop filling when liquid appears) valve, and the pressure relief valve. The main gas service valve has an extension accessible through a door on the road side. Extensions for the filler connection and the 20% vapor valve terminate below the road side diesel fuel fill. The regulator and associated components at the tank are accessible after removal of a plate in a road side compartment.

WARNING

When the coach is to be stored in a confined area, turn off the LPG at the main tank shutoff valve. With the LPG leak detector this may now be accomplished by turning off the LPG Master Switch on the galley panel.

LPG tank level can be monitored at the galley panel above the microwave oven.

FUEL REQUIREMENTS

Liquefied petroleum gas is a material composed of various hydrocarbons such as propane, butane, or a mixture thereof. In its gaseous form (vaporized) it is colorless and has a garlic-scented additive to ensure detection. In addition to being highly inflammable, it is also dangerous to inhale. For ease of transportation and storage, LPG is compressed into a liquid state and stored, in this form, within the LPG tank. As fuel is used, vapor passes from the top of the tank into the two stage pressure regulator and to the various gas appliances.

Appliances will not function if the LP gas does not vaporize. Butane will not vaporize below 32° F. (the freezing point of water), but propane will continue to vaporize down to 44 degrees below zero. Propane has become the main type of LP gas used in RV's in recent years. Your LP supplier will have the correct type or blend for your locale. If your travels will take you into an area where climate differs, ask your LP dealer for his recommendations. The names of LP suppliers can be found in the yellow pages of the telephone directory under "Gas-Liquefied Petroleum-Bottled & Bulk". Many campgrounds now have LP gas fill facilities, as do some service stations.

Prevent condensation and possible regulator or line freeze-ups, when filling the tank, by requesting the dealer to add a small amount of methyl alcohol to the fill up. A common mixture is one ounce of Methyl Alcohol to each 20 pounds of LPG.

NOTE

Liquefied petroleum gas is heavier than air.

FILLING THE LP GAS TANK

When the tank is being filled, the service valve must be closed and the 80% liquid level valve (20% vapor valve) must be open. The 80% auto stop fill valve may close before liquid appears at the 80% liquid level valve, but if liquid does appear, stop filling immediately; the tank is filled to is LP capacity. Close the liquid level valve. Do not use a wrench to tighten this or the service valve; they are designed to be closed leak-tight by hand. If you cannot hand-tighten properly, the valve probably needs repair or replacement.

CAUTION

Be sure that the main LPG supply is shut off during refueling to prevent accidental ignition of gas fumes by appliance igniters.

CAUTION

All gas appliances must be cut off before filling the LPG tank. Check gas lines and fittings periodically for tightness and leakage.

REGULATOR

The two stage pressure regulator regulates the pressure of the LPG supplied to the appliances. The regulator functions automatically and is factory-preset to provide the correct line pressure. Do not attempt to tamper with or reset the regulator! Even a small variation above the normal gas line pressure can be sufficient to create a dangerous situation and cause possible damage to individual appliance components. If there is any doubt about the regulator setting it can be checked by your dealer or LPG supplier. The correct setting is 11-14 inch water column.

OPERATION

To operate any LPG appliance, the main gas (Service) valve, must be open. Also individual valves at each appliance must be opened prior to use. When first used, or after a refill, there may be some air in the gas lines which will escape when you open a range burner or similar LP gas valve. The air may extinguish your match or igniter the first time or two, before you get ignition. Remember, too, that when you close the tank's service valve some of the gas will remain in the lines. To completely bleed the lines of gas, close the tank's service valve and light a range burner to use up the excess. When the flame burns out, turn the range burner off.

CHECKING FOR LEAKS

Periodically check the LPG system for possible leakage. Do not wait for an alarm condition to occur before correcting a leak! Although the entire system and associated appliances undergo extensive factory testing for leakage, road shocks and heavy vibrations may loosen or damage piping or fittings. Leaks will usually become noticeable by the characteristic odor of the garlic-scented gas additive. To check, turn off all burners and pilot lights. Open all doors and windows. Open LPG tank service valve and use an ammonia and chlorine free soap-bubble solution on all connections. Any bubbles are evidence of leakage.

NOTE

The gas leakage detectors may momentarily sound an alarm when the engine is initially started or when a heavy electrical load is placed on the system. Further, the ultra sensitive response of these units may also cause an alarm to be given in the presence of certain pressurized-can sprays or cleaning agents. Do not assume! Always determine the reason for this vital alarm being given!

LPG CONSUMPTION

Most gas appliances are intermittently operated. However, operation during cold weather conditions does cause heavy consumption. The amount of LPG consumption depends on the total use and manner of use of these appliances.

Note that each gallon (4 1/4 lb) of LPG fuel produces approximately 91,500 BTU's of heat energy. The LPG tank used in your coach will furnish over 3 million BTU's.

For your guidance in estimating your anticipated fuel consumption, the following is a listing of typical appliance consumption ratings when the appliance is operated for one hour:

Refrigerator	1,500 BTU's
Cooktop Burners	5,200 BTU's each

LPG SYSTEM WARNINGS

WARNING

LP gas containers shall not be placed or stored inside the vehicle. LP gas containers are equipped with safety devices which relieve excessive pressure by discharging gas to the atmosphere.

WARNING

It is not safe to use cooking appliances for comfort heat.

This warning label has been located in the cooking area to remind you to provide an adequate supply of fresh air for combustion. Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle, and proper ventilation when using the cooking appliance(s) will avoid dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating as the danger of asphyxiation is greater when the appliance is used for long periods of time.

Cooking appliances need fresh air for safe operation. Before operation:

1. Open overhead vent or turn on exhaust fan.
2. Open Window.

A warning label has been located near the LP gas container. This label reads.

WARNING

Do not fill container(s) to more than 80 percent of capacity.

Overfilling the LP gas container can result in uncontrolled gas flow which can cause fire or explosion. A properly filled container will contain approximately 80 percent of its volume as liquid LP gas.

WARNING

Portable fuel-burning equipment, including wood and charcoal grills and stoves, shall not be used inside the recreational vehicle. The use of this equipment inside the recreational vehicle may cause fires or asphyxiation.

WARNING

Do not bring or store LP gas containers, gasoline or other flammable liquids inside the vehicle because a fire or explosion may result.

The following label has been placed in the vehicle near the range area:

IF YOU SMELL GAS

1. Extinguish any open flames, pilot lights and all smoking materials.
2. Do not touch electrical switches.
3. Shut off the gas supply at the tank valve(s) or gas supply connection.
4. Open doors and other ventilating openings.
5. Leave the area until odor clears.
6. Have the gas system checked and leakage source corrected before using again.

LP gas regulators must always be installed with the diaphragm vent facing downward. This will minimize any chances of vent blockage which could result in excessive gas pressure causing fire or explosion.

WARNING

Never check for leaks with an open flame. Do not check copper plumbing lines for leaks using ammoniated or chlorinated household-type detergents. These can cause cracks to form on the line and brass fittings. If the leak cannot be located, take the unit to your dealer or LPG supplier.

LPG LEAK DETECTOR SYSTEM

The system has been developed to the point where it is unique; it shuts off the LP gas at the high pressure source, yet holds the valve open to provide ample appliance flow with a minimum amount of current usage.

Three components make up the system

1. **Gas Detection Control Unit:** mounted on the rear dinette seat base. This is the "brains" of the system and provides an electrical signal to the solenoid valve when LPG service is required.
2. **Solenoid Valve:** installed in the high pressure LPG line feeding the two stage regulator. It is a "normally closed" solenoid valve and has a special winding of 22 ohms (approximate) resistance, so it uses very little current in the "hold open" position. In order to close the valve, it is only necessary to break the circuit. This provides a "fail-safe" feature in the event of loss of 12 volt power.
3. **LPG Master switch:** located on the galley panel.

The following events will result in an open/low voltage circuit and allow the solenoid valve to close and shut off the LPG supply:

1. Pushing the switch to OFF on LPG MASTER switch or the Gas Detection Control Unit. Green light will go out.
2. The Gas Detection Control Unit senses the presence of LP gas (or can be triggered by a propane lighter or even hair spray!) Green light out, Red light on, along with audible signal.
3. The Electronic Master switch is turned off. Green light will go out.

NOTE
System is not Master Switch activated.

In order to restore LP gas flow to the coach, use the following procedures corresponding to the events above:

1. Push switch on the LPG MASTER and the Gas Detection Control Unit to ON. Green light will come on.
2. Correct the cause of LP gas leak, or determine if other fumes caused the shut down. Green light will come on.
3. Turn Electronic Master Switch on. Green light will come on.

NOTE
Because of the presence of an excess flow valve in the LPG tank outlet (safety feature), sometimes an appliance will not relight after a shutdown. In this circumstance, wait five (5) minutes for LPG pressures to equalize before relighting.

OPTIONAL EQUIPMENT

DESCRIPTION	*AREA*
WASHER/DRYER COMBO Combo washer/dryer is installed in closet area of bath with short hanging above. Shut off valves for hot & cold water are located below combo unit. 120 VAC power is supplied by shoreline hookup or generator.	**BATH**
TOILET, MICROPHOR Includes vitreous china toilet, ultra-low water use and 12 VDC electric flush.	**BATH**
PREMIUM SOUND SYSTEM A 10 disc CD player is installed in cabinet area above windshield controlled by the radio in dash.	**DASH**
MUSICAL HORN A 100 tune PMMI musical horn is installed in dash area.	**DASH**
AIR COMPRESSOR, AUXILIARY, 120VAC A 120 VAC compressor located in an outside compartment. 12 volt switch located in the dash area operates the compressor via shoreline or generator power. The compressor provides a quick source of air for power tools or pressurizing the coach air system or tires without starting the coach engine.	**EXTERIOR**
INSTALL CELLULAR ANTENNA Cellular antenna installed on roof with wiring terminated in the hood table.	**EXTERIOR**
ZIP DEE PACKAGE This option includes the following: (2) bedroom awnings (1) driver/living room/kitchen awning (1) living room/kitchen awning (1) bath awning (when private toilet is used)	**EXTERIOR**

DESCRIPTION	AREA
INTERIOR PACKAGE, LAMINATE Cabinetry will be laminate in lieu of standard oak.	INTERIOR
INTERIOR PACKAGE, PICKLED OAK Cabinetry will be pickled oak in lieu of standard oak	INTERIOR
INTERIOR PACKAGE, WALNUT Cabinetry will be walnut in lieu of standard oak.	INTERIOR
DINETTE, 4-SEAT BOOTH A 4-seat booth dinette is installed in lieu of standard table and chairs.	KIT./DINETTE
BOOTH DINETTE, CONVERTIBLE a 4-seat booth dinette is installed in lieu of standard table and chairs. Booth converts into a sleeper.	KIT./DINETTE
EXTENSION TABLE AND FOLDING CHAIRS This installs an extension table w/12" leaf and two folding chairs covered in same fabric as standard dinette chairs.	KIT./DINETTE
KONSTANT HOT	KIT./DINETTE
LOVESEAT IN LEATHER A loveseat installs opposite the sofa covered in leather in lieu of table and chairs.	LIVING ROOM
LOVESEAT IN FABRIC A loveseat installs opposite the sofa covered in companion chair fabric in lieu of table and chairs.	LIVING ROOM
RECLINER W/LARGE TABLE A Flexsteel recliner and large table replace two swivel chairs and small table.	LIVING ROOM
LEATHER PACKAGE Includes companion chairs and dinette chairs in leather.	LR/DINETTE
STATE CERTIFICATION, CALIFORNIA	STATE DECAL
STATE OPERATING DECAL, FLORIDA	STATE DECAL
STATE OPERATING DECAL, TENN.	STATE DECAL

SAFETY & SECURITY FEATURES

FIRE EXTINGUISHER

A portable, multi-purpose dry chemical fire extinguisher is located behind the rear living room companion chair. A second fire extinguisher is located in an outside coach compartment. To use, release the clamp and remove the fire extinguisher from the bracket, pull safety pin from handle, squeeze handle and apply chemical under flame.

SMOKE DETECTOR

A smoke detector is installed over the rear dinette seat. A warning label is attached to the exterior of the smoke detector.

LP GAS LEAKAGE DETECTOR

The gas leakage detector, is located on wall forward of dinette seat. In the event of an LP leak, the unit sounds an alarm and closes the main LPG supply by deactivating the solenoid valve located in the high pressure gas line just before the regulator. See LPG Leak Detector System for additional information.

MIRRORS

All interior mirrors meet ANSI A119, and 297.1 codes, for your safety.

CARBON MONOXIDE DETECTOR

The carbon monoxide detector is located on wall forward of dinette seat at approximately eye level. In the event that carbon monoxide is detected the unit sounds an audible alarm and the green control light will flash on and off. When the carbon monoxide unit is in the alarm condition you need to get outside the vehicle as soon as possible into fresh air. Your recreational vehicle should be checked by a service center for the possible source and elimination of the carbon monoxide.

POWER CORDS & HOOK UP

Your coach is supplied with a permanently attached 50 amp power supply inlet on the exterior (road side rear) and a 50 to 30 amp adaptor for hook up to external power source.

Note that 50A cord has a ground pin which provides proper electrical system grounding.. The ground pin is your personal protection from electrical shock hazards. **Do not use any adapter, cheater, or extension cord that will break the continuity of the grounding circuit. Never remove the grounding pin for convenience of being able to make a connection to a non-grounded receptacle!**

Never operate your coach with a "hot skin"! If you can feel even a slight "tingling" shock from touching the coach body while standing outside on the ground, immediately disconnect the electrical hookup until the trouble is located. This fault is usually caused by a break in the grounding circuit, which should be continuous from the coach skin or frame to the distribution panel board to the ground pin on the power supply cord, and from there to the park receptacle and earth ground.

NOTE

In order to keep the utility compartment clean while traveling. Move the flap located at the bottom of the compartment to its outward position and then shut the compartment door.

SHORELINE OPERATION (COMMERCIAL POWER)

CAUTION

Your motor home has been wired in accordance with the National Electrical Code. All 120 volt AC wiring is two-wire service with ground; all 240 volt wiring is three-wire service with ground. For personal safety, check the polarity detector indicators on the power line monitors to be sure that lines are properly connected and grounded.

CAUTION

During thunderstorms lightening strikes may detrimentally impact the electrical system of your coach just as it would your home. To avoid potential catastrophic damage to sensitive electronic devices in your coach, disconnect shore power and cable television service prior to electrical storms reaching maximum intensity.

CAUTION

If the ground pin is used as a starting point for insertion of the 50 amp plug, the possibility exists that an over voltage condition will occur on the 120 volt lines, i.e., the neutral pin of the plug will not make contact at the same time the two 120 volt pins and thus, without the neutral pin making contact as a voltage reference 240 volts may be presented to the 120 volt appliances.

Therefore, to reduce the possibility of over voltage, switch off the 50 amp main breakers located in the 120 volt AC load center prior to insertion and removal of the 50 amp plug. In addition, insert and remove the 50 amp plug straight into the receptacle instead of tilting the plug. (See Power Cord Hookup Illustration in last section of manual.)

For purposes of safety, observe all precautions when making SHORELINE connections. Poor grounding or incorrectly-wired receptacles can cause personal harm as well as equipment damage or fire hazards. Check reverse polarity indicator in shoreline/utility compartment to verify correct polarity and grounding of hookup.

TRANSMISSION

(SEE OPERATOR'S MANUAL FOR INFORMATION)

VIDEO & AUDIO

STEREO TELEVISION RECEIVER

Installed in the front overhead. Operates from a 120 volt source (inverter, shoreline or generator). Refer to owner's manual supplied with set for operating instructions.

TELEVISION RECEIVER

Installed in the bedroom. Operates from a 120 volt source (inverter, shoreline or generator). Refer to owner's manual supplied with set for operating instructions.

AUTOMOTIVE STEREO

Installed in the dash panel. Is comprised of a tuner/cassette with two (2) 6 x 9 inch coaxial speakers, and two (2) 4 x 10 inch coaxial speakers. The tuner/cassette has auto reverse, electronic tuning sensor, Dolby noise reduction and metal tape capabilities.

The speakers are located two (2) in the living room and two (2) in the front overhead. See instruction manual for operating instructions.

STEREO SYSTEM

AM/FM tuner cassette with electronic tuning and auto reverse located in the bedroom night table with two (2) 6 1/2 inch coaxial speakers.

CB RADIO

CB radio is in compartment (floor) at driver's right leg. Refer to CB Operator's Manual for additional information.

VIDEO CASSETTE RECORDER

Installed in overhead dash. Operates from a 120 volt source (inverter, shoreline or generator). Refer to owner's manual supplied with the VCR for operating instructions.

TV ANTENNA & ROTATOR SYSTEM

The control components of the radome-type TV roof antenna, are a hand held rotator, switch for the antenna or cable inputs.

The antenna rotators, located in the front overhead compartment. The three-position momentary switch (center OFF) provides right/left antenna rotation.

The A/B Selector switch, located in the front overhead compartment, switches antenna or cable input.

The radome includes an amplifier and rotator mechanism. The remote power supply operates from 12 volts dc. Low-loss coaxial cable and three wire rotator control cable interconnect the antenna and power supply.

Note that the system is protected by a fuse in the front load center. In the event that the TV set exhibits problems relating to low antenna input (ghosts, etc.) check this fuse before servicing the TV set.

ANTENNA OPERATION

With the TV on and a station tuned in, rotate the antenna by pressing the rocker switch located on the control unit. Press the right side of the switch to run the antenna clockwise; press the left side to turn the antenna counter-clockwise. Although the actual antenna movement is not visible, the indicator arrow on the control unit lights and shows the direction of movement. When the antenna has made one full turn (360 degrees), the End of Rotation light comes on. Observe the picture while rotating the antenna, first in one direction, then the other, to obtain best picture quality.

MUSICAL HORN (OPTIONAL)

The dash panel has different switches for use with the musical horn. The POWER switch provides power to the horn. When this switch is turned on, the selection display will light up and indicate selection number 0.

The SONG select switch controls the scanning of the song desired. When this switch is pressed in the up position, the selection display will begin to increment up, slowly at first and then increase in speed. When this switch is pressed in the down position, the selection display will increment down.

The PLAY switch, when depressed, initiates the selection displayed on the selection display. If this switch is depressed while a song is playing, the horn will automatically reset and repeat the song.

The volume control operation is controlled by operating the PLAY switch and the SONG select switch simultaneously. To increase volume, depress the PLAY switch and the SONG select switch in the UP position at the same time. To decrease volume, depress the PLAY switch and the SONG select switch in the DOWN position at the same time. The volume level will be displayed on the selection display in levels from L1 (lowest) to L5 (highest).

PHONE OUTLETS, LAND LINE

Phone outlets are located in the bedroom and at rear of sofa. Connection is in utility box.

WASTE SYSTEM

Separate holding tanks for gray water and body waste are located in compartments directly in front of the drive wheels. Each holding tank has a separate drain valve, dumping gray water and wastes through a common single discharge connection. Separate vents from each holding tank extend through the roof of the coach.

Holding Tank Capacity: Approx. 50 Gallons Each

DRAINING THE HOLDING TANKS

The body waste (brown) holding tank is drained first, then the gray water tank. Drain the holding tanks as follows:

NOTE

It is advisable to drive your unit for a short distance to agitate the contents of the holding tank before dumping.

(SMALL & LARGE)

1. Check that both drain valves are in a closed position before removing drain cap.
2. Remove the safety cap from the single discharge connection by turning in a counter-clockwise direction and connect the 3-inch sewer hose coupling to the end of the valve. Tighten securely, in a clockwise direction. The sewer hose is stored in a tube in top of compartment. Place the discharge end of the hose into the sewer connection and check that all connections are secure to prevent accidental spillage.
3. Dump the body waste tank by pulling the handle (large valve) on the top of the dump vavle assembly. After body waste tank is empty, dump the gray tank by pulling the handle (small valve) on the side of the dump valve assembly.

NOTE

To clean the holding tanks, add a detergent solution to the tanks after they are emptied. The agitation action caused by vehicle movement will clean the tank.

4. Disconnect and wash out the sewer hose. Replace hose and replace safety cap securely.

WASTE TANK LEVEL INDICATORS

Each holding tank has a level detector which provides an electrical input to the Systems Monitor panel in the galley area. Activate the display to read the level of liquid remaining in each tank by pressing the appropriate push button switch.

WINTERIZING HOLDING TANKS

Drain the holding tanks and add RV antifreeze (several quarts) to each tank through the toilet (into the sewage tank), and through the tub/shower drain (gray water tank).

WINTERIZING FIXTURE TRAPS

In addition to the above, pour a pint of RV antifreeze into the kitchen sink and bathroom lavatory drains.

TOILET

The toilet, operates from the fresh water supply, flushing wastes directly into the sewage holding tank. After use, depress bowl drain pedal until water swirls, draining waste into tank, then release pedal. A water saver feature, consisting of a manually operated spray hose, is located at side of bowl. To raise the level of water in the bowl, lift up on the foot pedal.

NOTE

A water pump must be on or coach connected to city water to operate toilet.

WINTERIZING TOILET

See toilet user manual in owner's kit.

ILLUSTRATIONS

ILLUSTRATIONS NOT AVAILABLE AT TIME OF PRINTING

INDEX

DESCRIPTION **SECTION**

A

B

C

D

E

F

G

H

I

L

M

O

P

R

S

T

TAG 6

V

W

1995 BMC

CHASSIS STANDARD EQUIPMENT

ACCELERATOR
Mechanical cable with Morse foot control.

AIR COMPRESSOR
13.2 cfm capacity @ 1250 RPM, gear drive.

AIR RESERVE
Two tanks with 4000 cubic inch total capacity.

ALTERNATOR
12 volt, 160 amp with integral regulator.

AXLES
12,000 lbs. front; 19,000 lbs. drive; single speed, 5.29 ratio; all wheel bearings oil lubricated.

BATTERY
Two, 12 volt, group 31sp2250 cold cranking amps @ 0 degrees F.

BRAKES, EMERGENCY
3050N piston type brake system with treadle valve control - separate instrument panel mounted valve provided for parking.

BRAKES, SERVICE
This coach is equipped with a dual service air brake system which includes two independent systems for the front and rear service brake. The front system includes a 16 sq. in. brake chamber with 15 x 4 brake shoes and the rear system includes a 30 sq. in. brake chamber with 16-1/2 x 7 brake shoes for a total of 702 square inches of lining area. A Midland air dryer is included with the Midland air brake system. Each brake chamber has an automatic slack adjuster to compensate for brake shoe wear.

DRIVE LINE
Spicer 1610 seriies with protective guard around shaft.

ELECTRICAL SYSTEM
12 volt.

ENGINE
Cummins diesel engine, C8.3 turbo charged

EXHAUST SYSTEM
15 gauge stainless steel with heavy duty muffler (4 inch diameter - inlet & outlet)

FUEL FILTER
Fleet Guard fuel filter water separator.

FRAME
Channel 8" high with 2 1/2" flanges made of 1/4" 38,000 psi steel, section modulus - 8.35 in. channels doubled in high stress area - section modulus 33.4 in.

FUEL TANK
150 gallon capacity

GROSS VEHICLE WEIGHT RATE
31,000 lbs. max.

HORN
Electric dual

INSTRUMENT AND GAUGES
Speedometer, odometer, fuel level, oil pressure, water temperature, two air pressure gauges and low pressure warning light and buzzer for dual brake system,

tachometer, engine oil temperature, and transmission oil temperature.

SHOCK ABSORBERS
Direct acting, double action piston type; front, and drive.

SUSPENSION
Reyco air suspension, 12,000 lbs. front and 19,000 lbs.drive. Front and drive systems utilize 4 air springs each.

STEERING GEAR
Ross model TAS-65 with 20.4 to 1 ratio with integral power steering and tilt and telescoping steering wheel.

TIRES
Tubeless 275/80R 22.5 16 ply rating Michelin steel cord radial with XZA thread, single front and dual drive.

WHEELS
10 stud disc with 22.5 x 7.50 rims, polished aluminum, single front, dual drive.

ENGINE SPECIFICATIONS

MAKE
Cummins C8.3 TAAC

TYPE
4 cycle diesel turbo charged, jacket water after cooled.

NUMBER OF CYLINDERS
6 inline

BORE (INCHES)
4.49

STROKE (INCHES)
5.32

DISPLACEMENT
504.5 cubic inches

COMPRESSION RATIO
18 to 1

TAXABLE HORSEPOWER
45.0

MAX. (NET) BHP @RPM
300 @ 2400

MAX. (NET) TORQUE @RPM
820 LBS. FT. @ 1300

MAX. GOV. RPM
Load 2400
No load 2750

GOVENOR
Type - Mechanical

CRANKCASE CAPACITY
Dry 20
Quarts Refill 17

COOLING SYSTEM CAPACITY
(Quarts) 98 Fan 38" diameter - 8 blades, hyd. drive.

WATER PUMP CA. @ ENG. RPM
68 G.P.M. @ 2000

OIL FILTER
Type - Full flow, disposable.

AIR CLEANER

Type - Donaldson - dry type.

TRANSMISSION

Allison Automatic MD 3060 electronic, ATEC
6 forward - 1 reverse

Gears	Ratios
First	3.49
Second	1.86
Third	1.41
Fourth	1.00
Fifth	.75
Sixth	.65
Reverse	5.03
Torque Converter	TC 496-1.83 stall ratio
Lubricant Cap.	29 qts.
Bellhouse size	SAE #1

TURNING RADIUS

Wheelbase	*Curb radius	**Wall radius
237"	33.7 ft.	38.5 ft.

* Curb radius is the distance from the drive axle center line to the outside edge of the front tire.

** Wall radius is the distance from the drive axle center to the outside edge of the front bumper.

NOTE: Turning radii is with standard 275/80R22.5 tires.

**Specifications and contents are subject to change without notice.

BMC - BLUE BIRD MOTOR COACH FEATURES

CHASSIS SPECIFICATIONS

Spartan Mountainmaster chassis - - specially designed for the Blue Bird BMC in conjunction with Blue Bird engineering. The Spartan BMC chassis is built in accordance with specifications provided by Blue Bird engineering in order to be compatible with the steel body construction of the BMC. The following additional channels add structural integrity to the chassis. This minimizes twist and provides a sound structural base for the bay compartment storage area as well as provides minimal body floor flex.

☑ **Additional vertical and horizontal 11 gauge channels at rear.**

☑ **Additional horizontal 11 gauge channel at front along with 11 gauge triangular gusset plate.**

☑ **Additional horizontal, vertical and diagonal 11 gauge channels at each compartment division.**

☑ **Additional latitudinal and longitudinal 14 gauge channels full length and width of chassis.**

☑ **8 inch steel channel frame**

☑ **Cummins 8.3 liter 300 horsepower turbocharged.**

☑ **Engine exhaust brake**

☑ **Allison 6-speed World transmission with electric shift control.**

☑ **31,000 GVWR**

19,000 pounds rear axle
12,000 pounds front axle

☑ 275/80 R 22.5 Michelin pilot XZA-1 tires on forged aluminum wheels (steel on dual inner). Stainless steel hub and nut covers.

☑ 150 gallon fuel tank capacity

☑ 160 AMP alternator

☑ Oil lubricated wheel bearings on front axle; differential oil lubricated rear axle.

☑ Full air suspension with Bilstein shocks

☑ Electronic cruise control

☑ HWH computer-controlled 4 point leveling jack system

☑ FMVSS121 air brake system, anti-lock with automatic slack adjusters front and rear.

☑ Ross TAS65 integral power steering.

☑ Tilt and telescoping steering column

☑ Split battery system: 4 gel cell coach batteries and 2 engine batteries.

☑ 12 volt chassis master switch.

☑ Halogen headlamps.

☑ 2800 watt inverter.

☑ Holding tank capacities

100 gallon fresh water
50 gallon gray water
50 gallon black water

☑ All tanks are located in a heated lower compartment just forward of the rear axle.

☑ **10 KW Power Technology generator on electrically operated slide out tray in front nose of coach.**

☑ **148 pound (45 gallon) LPG tank.**

August 21, 1994
1995, BMC

GENERAL

Owner Delivery Process

The owner delivery process is a service offered to owners taking delivery at the factory. It's purpose is to train owners in the use of a Wanderlodge motor home by a factory trained professional.

General Statement About Interiors

Interiors will be a stained oak wood which will consist of the following items. Walls will be wood or wallpaper. Cabinets will be wood (with the exception of the living room overhead cabinets which will be wrapped in vinyl). All table tops, kitchen counter, and dinette table will be a solid color solid surfacing material with brass inserts.

Fixtures

Switches/receptacles are tapeeze type.

Light fixtures and bath accessories will be gold colored or brass

Carpet

Carpet is standard for all areas of the coach except the bathroom and kitchen. In addition loose carpet mats are included to be used on the steps in the step well.

Shades, Day/Night

Day/night shades are installed on all living area windows. This includes livingroom, dinette, kitchen, bedroom, and pilot/copilot windows.

Fire Extinguisher

Two dry chemical type extinguishers with a gauge are provided. One is located in the living area of the coach and another is located in an exterior compartment.

Headliner, Rolled And Pleated

Consists of individually wrapped panels attached to the ceiling substrate with panel clips. Each panel is wrapped with vinyl and one fourth inch thick polyethylene foam. These panels are removable for replacement or repair. These panels will be in the ceiling of the living area only. Ceilings of closets, cabinets, etc. will have carpet type ceiling glued in place.

LPG Leak Detector System

The gas leakage detector, sounds an alarm and closes down the main LPG supply in the event of an LPG leak.

Smoke Detector

A smoke detector is installed in the ceiling.

Carbon Monoxide Detector

A carbon monoxide detector is installed in living area of the coach.

(2) livingroom, (1) kitchen & (1) dinette

Horizontal single sliding, aluminum sash with spring loaded latches. 6% light transmission tinted, laminated glass.

Driver and companion

Windows will have a small slider at the bottom.

(2) Bedroom

Horizontal double sliding, aluminum sash with spring loaded latches and 6% light transmission tinted, laminated glass.

Sliding screens to cover any sliding window section on all 6% transluscent windows.

August 21, 1994
1995, BMC

BATHROOM

Ceramic Tile, Bathroom Floor

12" X 12" ceramic tile is installed on the floor on a diagonal. Tiles from the Laufen Charleston Series or Florida Tile's Natura Serene series will be standard. Other tiles selected will be billed at the difference.

Fantastic Fan With Ranin Sensor

The vent will automatically close when moisture is detected.

Lighting

Opera light or lights (depending on floorplan) 120 VAC installed over vanity with dimmer switch. A 12V thinlight is mounted in bathroom ceiling.

Medicine Cabinet

Configuration of cabinet is determined by the individual floorplan. Doors will have safety backed mirror. Interior will have adjustable shelves with ant-tip lips and a minimum of one 120VAC GFI receptacle.

Shower Stall

The shower stall will have a fiberglass pan w/non skid bottom and fiberglass walls w/built-in soap dish.

Glass tub enclosure (clear safety glass) with a travel latch on the glass door.

A 12VDC light fixture in the ceiling.

A hand held shower head with adjustable slide bar is included.

Toilet, Sealand

China bowl Sealand toilet is standard in most floorplans. Two (2) rolls of dissolvable tissue are provided, along with toilet chemical.

Vanity Top And Bowl

The vanity top and bowl are a molded one piece cultured marble. A gold colored single lever faucet is standard.

Mirror, Full Length

Each bath arrangement will contain at least one full length mirror.

Assessories

Included in each floorplan are the following accessories:

(1) Toilet tissue holder

(1) Single towel bar

(1) Double towel bar

(1) Robe hook

(2) Towel rings

August 21, 1994
1995, BMC

BEDROOM

Bedroom Arrangement, Standard

A 60 x 78 foam mattress with radius corners is standard. A quilted bedspread with fitted corners and a reverse flap (French flap) and two bed pillows are included. A fabric covered headboard to match the interior and a full width mirror behind the headboard is also standard.

Audio Visual

A 13" Toshiba remote control color cable ready television and a Kenwood AM/FM cassette radio is standard in the bedroom.

Lighting

Two 12V halogen decorator lights are installed over each side of the head of the bed with individual switches. 12 volt twin tube flourescent lights are installed in the ceiling with a remote switch on the wall.

Closet, Full Length Hanging

At least one full length hanging closet area is installed in each standard floorplan.

Night Tables

The night tables are a stained oak with a solid color solid surfacing material for tops with a coordinating insert.

August 21, 1994
1995, BMC

CHASSIS

Brakes, Anti-Lock

This motor home is equipped with dual service air brake systems with integral fail-safe operation ; and manual/automatic rear spring (parking) brakes. The service brakes are completely independent systems, each including a reservoir and separate distribution lines and valves. The reservoirs are pressurized from a single compressor. Both service brake systems are brought into operation each time the brake treadle is depressed to slow or stop the coach. Reservoir pressure for each service brake system is monitored by a respective pressure gauge on the front panel; system failure(s) are indicated by low pressure readings, illumination of the low air failure lamp and sounding of buzzer.

Air Suspension

Air suspension bags cushion the front and rear axles. Ride height is automatically maintained by height control valves. Dumping these air bags when the vehicle is parked allows the rubber bumpers to come together and eliminate vehicle springiness. Front air suspension w/Bilstein shock absorbers. Rear, air suspension w/Bilstein shock absorbers.

Air Dryer, Compressed Air System

The air dryer unit collects and removes moisture and contaminants from the compressor air output before the air reaches the reservoirs. This unit is different from a reservoir drain or an after cooler in that it provides

dry air for the brake system by elininating the possible accumulation of condensation in system reservoirs.

Cruise Control, Econo Cruise

The cruise control is a driver-controlled, automatic speed contol system. The system incorporates set/resume and accelerate/coast.

Fuel Filter, And Water Separator

A Fleet Guard fuel filter water separator is incorporated in the diesel fuel supply line and processes the fuel supply for maximum purity.

Fuel Tank, 150 Gallon, Diesel

The diesel fuel tank is located between chassis frame rails in the forward section of the coach. Dual fuel fills, one on each side of body with locking doors. Fuel capacity is 150 gallons.

Generator, 10 KW Diesel

The generator is driven by a 4 cylinder water cooled diesel engine and is located in a sound proof compartment between the chassis frame rails at the front of the coach. The engine/generator set is mounted on a roll out carriage using vibration isolators with a fixed attached exhaust system. The carriage is powered in and out of the compartment for service by a 12 volt electo-mechanical linear actuator. Operation of the generator may be controlled from one outside or two inside remote locations.

Engine, Cummins 6C 8.3, 300 HP Turbo

A Cummins 6C, 8.3 300 HP turbo diesel engine.

Transmission, Allison 6 Speed MD 3060

The BMC is equipped with an Allison 6 speed MD 3060 electronic transmission w/electronic shifter.

Retarder, Pacbrake

A Pacbrake engine exhaust retarder is provided. The Pacbrake is an auxiliary braking device for slowing down your vehicle. It reduces the need to use the service brakes, thus reducing wear and tear on the service braking

Hitch, Trailer, Reciever Type

system.

Tow Hooks

Removable receiver type draw bar with 2" diameter chrome hitch ball. The 2" ball provided is rated at 5,000 LB's.

Mud Flaps

Two tow hooks are provided behind the generator front panel. Remove generator front panel for access.

Power Steering, Ross TAS65

Individual rubber mud flaps with Blue Bird logo, are installed at the rear of the front and rear tires.

The BMC is equipped with Ross TAS65 power steering unit.

Tires, 275-80R 22.5 Pilot XZA

Equipped with Michelin steel cord radials 275-80R 22.5 pilot XZA-1. 4 Alcoa polished aluminum wheels, 2 inner, rear steel wheels and stainless steel hub and nut covers.

Switch, Chassis Master, 12V

12V chassis master switch is located in the engine compartment.

Heater, Engine Block

A 120 volt element that heats water in the engine block. On-off operation is controlled by a breaker located in the 120 VAC load center.

August 21, 1994
1995, BMC

ELECTRICAL

A/T Switch

A 12 volt coach master switch is located at the entrance, next to the copilot seat..

Alternator, 160 Amp

This unit is equipped with a 12volt negative ground 160 AMP alternator.

Antenna, TV, Power

The TV antenna is roof mounted and remotely rotated by controls located in the overhead dash. A switch is located in the front overhead area used to select antenna or cable reception.

Batteries, Chassis, 12 Volt Maintenance Limited

Three 12 volt 1125 CCA limited maintenance batteries wired parallel produce power for starting the coach engine.

Batteries, Coach (4) 12 Volt Gel Cell

Four 12 volt, deep cycle gel batteries are provided. Batteries are located in the curb side rear compartment. Batteries are wired parallel to

produce 12 volt power. These batteries supply power for the coach interior and are used for generator starting.

Battery Chargers, (1) 130 Amp

One 130 AMP battery chargers (integral with the Freedom 2500 inverters) operate when a source of 120 volts AC is supplied either from shoreline or generator and the inverters is turned on. The charger also charges the engine batteries whenever there is a source of 120 volts AC.

Inverter, (1) 2500 Watt

One 2500 watt Freedom 25 inverter is located in the left hand rear compartment. The inverter will power all 120 VAC devices in the coach as long as the power demand is below 2500 watts. The remote panel for control and status of the inverter is located on the wall adjacent to pilot seat.

Cable Connection & Cable For Cable TV Hookup

The utility compartment includes a connection for cable TV hookup and a 25' coax cable.

Kool-O-Matic Fan

This fan is a 12 VDC power ventilator located in the kitchen. The fan is thermostatically controlled by the area thermostat located in the kitchen.

Load Center

The load center has 50 amp capacity @ 240 VAC. The load center is located in the rear davenport area.

Chime, Door

An electric door chime is located next to the copilot seat.

Power Cords

Approved power cords supply the coach for hookup to external power sources. Each cord has a ground pin which provides proper electrical system grounding.

QTY.	FEMALE/MALE	VOLTS	LENGTH
1	50A/30A	120	1.5 FT.
2	30A/20A	ADAPTER	NA
1	50 AMP	250	25FT.
2	30 AMP/30 AMP EXT.	120	25 FT.

Split Battery Power System

Two separate battery systems are provided:

1. Coach battery system
2. Chassis battery system

Coach battery system supplies all 12 volt power for all interior items and exterior lighting as well as generator cranking. The chassis battery system provides power for engine cranking and ignition. The two systems are tied together only by the auxiliary battery switch on the lower dash.

Spotlight

A remote control high intensity spot/flood light with dual high output sealed beam lamp producing 200,000 candle power is installed on the roof and can be positioned horizontally or vertically. Controls are located in the lower dash panel.

Outlets, Land Line Phone

Two outlets are provided and are wired to the female plug in the utility compartment. Outlets are on the wall next to sofa and near a bedroom night stand.

August 21, 1994
1995, BMC

EXTERIOR

Air Outlet Auxiliary

An auxiliary air outlet from the chassis accessory air tank is located in an exterior storage compartment. An air hose and gauge is included.

Awning, Patio Curb Side

The patio curbside awning is color coordinated to complement the exterior paint design. The awning extends over the dinette window.

Awning is color coordinated to complement the exterior paint design.

Base Color, Indian Silver

Indian silver is the standard base color. Any other base may be used if specified before Body Co. line load.

Bumpers

Bumpers are formed integral with the front and rear body sections and are supported with structural steel. They are painted to match paint design.

Fenders

The fenders are painted to match the accent colors of the coach.

Handle, Assistance Entrance Door

The entry door assist handle is located on the exterior of the coach to the left of the entry door. The assist handle is a clear acrylic handle which is lighted when the RH porch light is on. Assist handles are also located on the interior of the interior of the coach on each side of the step well.

Horns, Air

Dual horns with covers are roof mounted, one on each side of the coach. Horns are activated by a foot switch in the driver floor board.

Lights, Landing, Left And Right Side

The 12 VDC recess mounted lights are located at the front and rear of the coach on both sides. Switches are located on the lower dash.

Lights, Porch

Two amber, double bulb fluorescent lights are located on the right hand side of the coach. One amber, double bulb fluorescent light is located on the left hand side of the coach. The lights are operated by switches on the entrance door control panel and a switch in the utility box.

Lights, Driving

Clear driving lamps are mounted stationary in the front bumper. The driving is on high beam, provided the corresponding dash switch is active.

Water Hook Up, Commercial

The water supply system is dual purpose and has a commercial water inlet connection that is located in the water tank compartment on the roadside of coach. Commercial water hookup can be used to supply all coach water system requirements in the campsite.

Water Hose

A 25 ft. water hose is placed loose in an outside compartment.

Windshield Wipers

Dual 2-speed electric intermittent wipers with non glare arms and blades. Wiper arms ar 26" parallelograms with 24" blades. Wipers have a delay position with the delay control on the lower dash. A washer fluid reservoir fill is located in the road side front compartment.

Water Filter System

A replacable carbon activated filter that cleans all water entering the coach is located in line after the commercial water hook up.

Lights, Parking, Rear

These lights operate when vehicle is in reverse gear.

Luggage Compartments

The luggage compartments are lined with carpeting on floors and vertical walls. Luggage compartments include lights which are activated by the individual light switches. The doors are hinge type and are gas spring operated.

Mirrors, Rear View, Remote Control & Heated

Exterior rear view mirrors are heated and remote controlled. Mirrors are non glare with cast aluminum heads and arms and an integral convex rear view mirror. The flat mirrors operate from controls located in the driver's area. A mirror heat switch is located on the lower dash panel.

Step, Entrance Door, Electrically Operated

The electrically operated entrance door step extends when the door is open and retracts when the door is closed. A rubber covering is over the entrance steps. A switch is provided in the co-pilot's area which allows the step to remain in the extended position.

Water Faucet, Exterior

An exterior water faucet is located in the road side third luggage compartment.

August 21, 1994

HEATING AND AIR CONDITIONING

Air And Heat System, Automotive, HVAC

The dash heat and air system is a new HVAC system to meet upcoming freon requirements. Unit provides the ability to mix heat and air providing better defrosting capability.

Air Conditioner, Condensate Drain

Separate drain lines are provided for each air conditioning unit to route condensation from the roof to the ground through the body side walls.

Ducted Roof Air Conditioner, W/Remote Thermostat (2)

Air conditioners and wall mounted thermostats. The air conditioners are operable from 120 VAC source (generator or shoreline power)

Freeze Protection

Additional insulation installed in outside water compartment along with heat from the Aqua Hot water heat system.

Heat, Electric

An electric forced air heater is located in bath, controlled by a remote thermostat.

Heat, Hydronic (Aqua Hot)

The diesel fired hydronic heating system consist of the following:

1) Diesel fired boiler rated at 50,000 BTU with three zones (front, bath, & bedroom).

2) Integral heat exchanger to provide hot water along with a heat exchanger that ties into the engine coolant to provide hot water, or engine preheat capability.

3) Bay heat provides heat for the holding tank compartment with a low-temperature thermostat located in the bay are.

4) The front zone is controlled by the heat side of the livingroom A/C thermostat and consist of a total of a total of 30,000 BTU's of power convectors.

5) The bath zone consist of 10,000 BTU's and is controlled by an individual thermostat located in that area.

6) The bedroom zone contains 10,000 BTU's and is controlled on the heat side of the A/C thermostat.

7) The boiler also has a 1650 watt electrical heating element to provide heat during low demand period.

August 21, 1994
1995, BMC

KITCHEN/DINETTE

Cook Top, Gas

The two-burner cook top is fueled by the coach LPG system. Unit includes a 120 VAC electronic ignition. A cook top cover is made of solid surfacing material and hinged.

Counter Top

The counter top is made of a solid color solid surfacing material with coordinating insert.

Cutlery Tray

A plastic tray is installed loose in an upper drawer in the kitchen base cabinet for storing kitchen utensils.

Table And Chairs

The dinette is a table and free standing chairs. Chairs are covered in fabric. The table is a solid color solid surfacing material with coordinating insert and mounted on a cantilever leg.

Dishtowel Rods

A dish towel rack is installed inside the kitchen base cabinet area.

Floor, 12" X 12" Tile

A standard selection 12" x 12" ceramic tile is installed in this are on a diagonal. Standard selections would be Laufen's Charleston series or Florida Tiles's Natura Serene series.

Galley Panel

The systems monitoring and control panel is located in the kitchen base cabinet. This panel provides a convenient means of displaying potable water level, holding tanks levels, and LPG supply, as well as other functions listed below.

1) Water pump switch w/indicator light - to indicate when power is being supplied to pump.

2) Refrigerator alarm - monitors the refrigerator temperature when the switch is on. An audible alarm sounds if unsafe temperature levels are encountered.

3) Generator switch - controls the stop/start operation of the generator.

Ice Maker

The ice maiker, located in a kitchen base cabinet, is designed to provide continuous automatic supply of ice cubes. The ice maker operates from shoreline, generator, or inverter.

Lighting

A 12 VDC halogen light bar is mounted at the kitchen and dinette overhead cabinets. A 12 VDC thin-lite is mounted under the kitchen and dinette overheads.

Micro-Convection Oven

A Sharp micro-convection oven is mounted above the gas cooktop and is powered by either shoreline or generator and by the inverter. It includes a light under the microwave and a temperature probe and vent.

Pantry

A pantry will be standard in each floorplan.

Refrigerator/Freezer

A Dometic 3 way refrigerator/freezer is standard. The refrigerator operates on 120 volts from shoreline, 12V, generator, or LP gas.

Mirrors

Mirrors are standard behind the kitchen backsplash, rear dinette wall, and small walls going into bath.

Kitchen Sink

A double bowl stainless steel sink is standard. A single lever chrome faucet with spray attachment is included.

Waste Basket

A plastic waste basket is included under the kitchen base cabinet.

August 21, 1994
1995, BMC

LIVINGROOM

Companion Chairs

Includes (2) Villa companion chairs covered in Ultraleather and mounted on a swivel base. Exclusive design for Blue Bird.

Sofa

A Villa sleeper sofa with buil-in storage drawer is fabric covered. Includes (2) two trow pilows and (2) two arm covers.

Lights, Fluorescent

12 VDC recessed fluorescent fixtures are installed in the bottom of the overhead Cabinets. 12 VDC fluorescent fixtures are located in the ceiling.

Table Or Tables

Livingroom table or tables are oak wood with a solid color solid surfacing counter material with coordinated inserts.

August 21, 1994
1995, BMC

MECHANICAL SYSTEMS

Leveling Jacks, Hydraulic, Automatic

Includes (4) Hydraulic operated jacks. Controls for automatically leveling the unit in the campsite are located on the wall next to the driver.

Tanks, Fresh Water, 100 Gallon

The tank is located in an outside water compartment. The tank is non-pressurized type so that system water pressure is developed by a demand pump when not connected to commercial water. Tank is equipped with a two-inch drain.

Water Pump

A factory calibrated pressure control switch is preset to turn the water pump on when the system pressure falls below 20 psi; and turns it off once pressure reaches 35 psi. Switches enabling the water pump are located on the systems monitor panel, and in the bathroom.

August 21, 1994
1995, BMC

PILOT/COPILOT AREA

CB Receiver/Transmitter

Forty-channel CB receiver/transmitter is installed in the hood table with all controls in the hand-held portion.

Closed Circuit Television System

A Sony black and white monitor is located in the dash. The camera is mounted inside the rear davenport area for viewing the tow vehicle.

Stepwell Area

An air powered stepwell cover retracts and extends from under the copilot's seat. In/out controls are located on the copilot's system control panel. An air override switch is located to the right of the copilot seat to permit manual retraction in the event of low air pressure.

Hood Table

The hood table has been designed to provide maximum clearance at the entrance. A drawer is provided with (2) two cup holders.

Seat, Pilot/Copilot

Includes Villa seats covered in Ultraleather with (6) six way adjustable power and electrically operated lumbar support. The adjustable lumbar support allows the driver or copilot to adjust the seat's lower back (lumbar) area to fit his or her lower back contour at the push of a button. The (6) six way controls adjust seat bench tilt up/down and front/back. Includes retractable seat belts.

Lighting, Bullet

12 volt bullet lights are provided in the pilot and copilot cabinets.

Steering Wheel With Tilt And Telescoping Column

Steering wheel is a 20" diameter wheel upholstered in leather. Inculdes two flat black rally type spokes tapering below the center of the steering wheel. The steering wheel tilt control allows multiple positioning of the steering wheel in increments of 7 degrees. Includes telescoping steering column which can be locked at infinite locations within it's telescoping range of 2.25 inches.

Stereo System

Tuner cassette features direct access tuning, 24 channel preset memory, seek and manual tuning, Dolby B & C noise reduction, metal tape capability, and loudness switch. Includes four full range coaxial speaker in the front living area.

Television, Front Overhead

A built-in 20" stereo color TV/monitor. TV has remote control, stereo MTS broadcast reception, audio video inputs, and is cable compatible. This television will not operate while in transit.

VCR

To be mounted in front overhead cabinet.

Visor, Sun

Pro-tec-tor sun visors are standard. These visors are tined and can be positioned in many positions.

Remote Control And Heated Mirrors

Located in a panel in the dash area are remote mirror controls. The controls provides full adjustments as indicated by the arrows on the switches.

August 21, 1994
1995, BMC

WASTE SYSTEMS

Tanks, Holding

Separate holding tanks for gray water and waste water are provided. Each holding tank has a separate drain valve, dumping gray water and wastes through a common single discharge connection. An individual vent system connects each holding tank to vent stacks located on the coach roof.

Connections for holding tanks are located in the enclosed compartment with access provisions through floor of compartment with covers when not in use.

Approximate Capacities

Gray - 50 gal. Waste - 50 gal.

The tanks are enclosed in an exterior compartment. This compartment is heated by the hot water heating system. The tanks include level indicators.

1995

BMC

BLUE BIRD MOTOR COACH

OPTIONAL EQUIPMENT

ONE WANDERLODGE WAY, FORT VALLEY, GA

*Specifications and/or features shown are subject to change without notice.

1995 BMC, BLUE BIRD MOTOR COACH

23-Aug-94

NUMERICAL BY OPTION NO.

OPT. NO	*DESCRIPTION*	*AREA*
0	*2 SWIVEL CHAIRS,SMALL TABLE.....*	*LIVINGROOM*
0	*CABINETS, NATURAL OAK,STD.....*	*INTERIOR*
0	*PAINT,BASE,WARM WHITE.....*	*EXTERIOR*
2313	*PAINT,BASE,IND.SILVER(SETUP AT BB LOAD).....* The silver base is standard, however, other base colors are available if selected before line load.	*EXTERIOR*
5870	*STATE CERTIFICATION,CALIF.....*	*STATE DECAL*
5888	*STATE SUPPLIED OPERATING DECAL,TENN.....*	*STATE DECAL*

OPT. NO	DESCRIPTION	AREA
5893	STATE SUPPLIED OPERATING DECAL,FLA.....	STATE DECAL
5897	STATE SUPPLIED OPERATING DECAL, WASHINGTON.....	STATE DECAL
9100	PREMIUM SOUND..... A 10 disc CD changer is installed in cabinet area above windsield controlled by the radio in dash.	DASH
9101	COMBO WASHER/DRYER..... Combo washer/dryer is installed in closet area of bath with short hanging above. Shut off valves for hot & cold water are located below combo unit. 120VAC power is supplied by shoreline hookup or generator.	BATH
9102	BOOTH DINETTE IN LIEU OF TABLE & CHAIRS..... A fully upholstered Villa booth dinette replaces the standard table and chairs.	KIT/DINETTE
9103	MUSICAL HORN..... A PMMI musical horn is installed in dash area.	DASH
9104	WINDOW AWNINS & CHAIRS..... This option includes the following: (2) bedroom window awnings, (1) driver/livngroom/kitchen awning, (1) livingroom/dinette window awning, (1) bath awning (with private toilet option), (2) add-a-lounges, (4) zip Dee chairs.	EXTERIOR

OPT. NO	DESCRIPTION	AREA
9105	CABINETS, OTHER THAN STANDARD, WALNUT..... Walnut replaces the standard oak cabinetry.	INTERIOR
9106	CABINETS, OTHER THAN STANDARD, LAMINATE..... A matte Formica laminate replaces the standard oak cabinetry.	INTERIOR
9109	TOILET, MICROPHOR ELECTRIC..... This option installs a vitreous china bowl toilet, ultra-low water use and 12VDC electric flush in lieu of standard Sealand.	BATH
9110	LOVE SEAT IN LIEU OF CHAIRS IN FABRIC..... The two barrel chairs and small table are replaced by a loveseat covered in fabric to match the sofa.	LIVINGROOM
9111	AIR COMPRESSOR,AUXILIARY,120VAC..... A 120VAC compressor located in an outside compartment 12 volt switch located in dash area operates the compressor via shoreline or generator power. The compressor provides a quick source of air for power tools or pressurizing the coach air system or tires without starting the coach engine.	EXTERIOR
9112	WIRE FOR AUX. AIR COMP.....	EXTERIOR
9120	CABINETS, OTHER THAN STANDARD, PICKLED OAK..... Pickled oak replaces the standard oak cabinetry.	INTERIOR

OPT. NO	DESCRIPTION	AREA
9128	***EXTENSION TABLE & 2 FOLDING CHAIRS.....*** A table with a 12" extention leaf replaces the standard table and 2 folding chairs covered in ultraleather to match interior is included in addition to the 2 standard dinette chairs.	***KIT/DINETTE***
9130	***RECLINER W/LARGE TABLE.....*** This option installs a Villa recliner and larger table in lieu of standard table and two swivel chairs.	***LIVINGROOM***
9132	***PLUMB/WIRE FOR WASHER/DRYER.....*** Plumbing and wiring only are installed for the combo washer/dryer.	***BATH***
9133	***BOOTH DINETTE(CONV).....*** A fully upholstered Villa booth dinette which converts to a bed replaces the standard table and chairs.	***KIT/DINETTE***
9134	***KONSTANT HOT.....***	***KIT/DINETTE***
9135	***INSTALL CELLULAR ANTENNA.....*** Cellular phone antenna installed on roof with wiring terminated in the hood table.	***EXTERIOR***
9136	***FAUCET, GROHE EUROPEAN———————*** A color coordinated Grohe European faucet replaces the standard chrome in the kitchen.	***KIT/DINETTE***

OPT. NO	DESCRIPTION	AREA
9137	***DRAWERS, WASHER/DRYER CAB.....*** A modular drawer stack will be added in the washer/dryer cabinet. Available only when washer/dryer is not specified.	***BATH***
9138	***CABINETS, GLOSS LAMINATE.....*** Gloss Formica laminate replaces the standard oak cabinetry.	***INTERIOR***
9139	***ACCENT PILLOW (1).....***	***INTERIOR***
9142	***OPT. BATH (A) PRIVATE TOILET.....*** This option install private toilet area in the standard BMC walk thru bath floorplan.	***BATH***
9143	***OPTIONAL BATH, (B).....*** This option flips the washer dryer cabinet to the road side of unit and installs a vanity on the curb side. This option applies to the standard walk thru bath.	***BATH***
9144	***REAR, ANTI-SWAY BAR———————*** Rear IPD anti-sway bar is installed on rear of unit.	***CHASSIS***
9145	***FRONT, ANTI-SWAY BAR———————*** Front IPD anti-sway bar is installed on front of unit.	***CHASSIS***

OPT. NO	DESCRIPTION	AREA
9146	TOOL BOX ON SLIDE OUT TRAY..... This option installs a toolbox on a slide out tray in lower storage area.	EXTERIOR
9147	FREEZER, 50LB. ON SLIDE OUT TRAY..... A 50 LB. freezer is installed on a slide out tray in outside compartment.	EXTERIOR
9148	LUGGAGE RACK AND ACESS LADDER..... Luggage rack and access ladder installed. This option will not be available	EXTERIOR
9149	CABINETS, OTHER THAN STAN.,CHERRY..... Cherry replaces the standard oak cabinetry.	INTERIOR
9150	CARPET, INLAY (A)-9150-01..... See drawing	LIVINGROOM
9150	CARPET, INLAY (B)-9150-02..... See drawing	LIVINGROOM
9150	CARPET, INLAY (C) 9150-03..... See drawing	LIVINGROOM

OPT. NO	DESCRIPTION	AREA
9151	**DOMETIC 7030 REFRIGERATOR**..... The Dometic 7030 refrigerator replaces the standard Dometic. The kitchen counter is reduced in size to accommodate.	KIT/DINETTE
9152	**INTERIOR 1A**..... See color boards	INTERIOR
9153	**INTERIOR 1B**..... See color board.	INTERIOR
9154	**INTERIOR 2A**..... See color board.	INTERIOR
9155	**INTERIOR 2B**..... See color boards	INTERIOR
9156	**INTERIOR 3A**..... See color boards	INTERIOR
9157	**INTERIOR 3B**..... See color board.	INTERIOR

OPT. NO	DESCRIPTION	AREA
9158	***INTERIOR 4A.....*** See color boards	***INTERIOR***
9159	***INTERIOR 4B.....*** See color board.	***INTERIOR***
9160	***CHAIRS, COMPANION, COVERED IN FABRIC———*** Companion chairs covered in fabric in lieu of standard Ultraleather.	***LIVINGROOM***
9161	***OPTIONAL BEDROOM (A) WITH DESK.....*** This option installs a rear cross bed with with bedroom vanity in lieu of standard center island bed in floorplan 95-2, L-kitchen.	***BEDROOM***
9162	***OPTIONAL BEDROOM (B)———*** This option installs a rear cross bed with a full height closet and drawer cabinet in lieu of standard bedroom in the L-kitchen floorplan.	***BEDROOM***
9163	***PAINT DESIGN, 1 (WINGS).....*** BMC Wings.See color printout.	***EXTERIOR***
9164	***PAINT DESIGN, 2 (RHAPSADY).....*** BMC Rhapsady. See color printout.	***EXTERIOR***

OPT. NO	DESCRIPTION	AREA
9165	***PAINT DESIGN, 3 (MACH III)*****.....** BMC Mach III. See color printout.	***EXTERIOR***
9166	***PAINT DESIGN, 4, (MARDI-GRAS)*****.....** BMC Mardi-gras. See color printout.	***EXTERIOR***
9167	***LOVE SEAT IN ULTRALEATHER*****——————————** Villa loveseat covered in Ultraleather replaces the 2 standard chairs and table.	***LIVINGROOM***
9168	***SOFA COVERED IN ULTRALEATHER*****.....** Sofa to be covered in Ultaleather in lieu of fabric.	***LIVINGROOM***
9169	***COMPASS, SYNTREK W/THERMOMETER*** A Syntrek electronic compass with indoor/outdoor thermometer is installed in the dash.	***ELECTRICAL***
9170	***CHAIRS, DINETTE, ULTRALEATHER*****——————————** Dinette chairs a covered in a color coordinated ultraleather in lieu of standard fabric.	***KIT/DINETTE***
9171	***INTERIOR 3C*****.....** This options changes the single color Ultraleather in interior 3A to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.	***INTERIOR***

OPT. NO	DESCRIPTION	AREA
9172	***INTERIOR 3D.....*** This options changes the single color Ultraleather in interior 3B to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.	***INTERIOR***
9173	***INTERIOR 4C.....*** This option includes interior 4A except with Ultraleather 2555 Nile in lieu of 5668 Silver Pearl.	***INTERIOR***
9174	***INTERIOR 4D.....*** This option includes interior option 4B except with Ultraleather 2555 Nile in lieu of 5665 platinum.	***INTERIOR***

1995 BMC, BLUE BIRD MOTOR COACH

23-Aug-94

ALPHA BY DESCRIPTION

DESCRIPTION	OPT. NO	AREA
2 SWIVEL CHAIRS,SMALL TABLE.....	0	LIVINGROOM
ACCENT PILLOW (1).....	9139	INTERIOR
AIR COMPRESSOR,AUXILIARY,120VAC.....	9111	EXTERIOR
A 120VAC compressor located in an outside compartment 12 volt switch located in dash area operates the compressor via shoreline or generator power. The compressor provides a quick source of air for power tools or pressurizing the coach air system or tires without starting the coach engine.		
BOOTH DINETTE IN LIEU OF TABLE & CHAIRS.....	9102	KIT/DINETTE
A fully upholstered Villa booth dinette replaces the standard table and chairs.		
BOOTH DINETTE(CONV).....	9133	KIT/DINETTE
A fully upholstered Villa booth dinette which converts to a bed replaces the standard table and chairs.		
CABINETS, GLOSS LAMINATE.....	9138	INTERIOR
Gloss Formica laminate replaces the standard oak cabinetry.		

DESCRIPTION	*OPT. NO*	*AREA*
CABINETS, NATURAL OAK,STD.....	***0***	***INTERIOR***
CABINETS, OTHER THAN STAN.,CHERRY.....	***9149***	***INTERIOR***
Cherry replaces the standard oak cabinetry.		
CABINETS, OTHER THAN STANDARD, LAMINATE.....	***9106***	***INTERIOR***
A matte Formica laminate replaces the standard oak cabinetry.		
CABINETS, OTHER THAN STANDARD, PICKLED OAK.....	***9120***	***INTERIOR***
Pickled oak replaces the standard oak cabinetry.		
CABINETS, OTHER THAN STANDARD, WALNUT.....	***9105***	***INTERIOR***
Walnut replaces the standard oak cabinetry.		
CARPET, INLAY (A)-9150-01.....	***9150***	***LIVINGROOM***
See drawing		
CARPET, INLAY (B)-9150-02.....	***9150***	***LIVINGROOM***
See drawing		

DESCRIPTION	OPT. NO	AREA
CARPET, INLAY (C) 9150-03.....	***9150***	***LIVINGROOM***
See drawing		
CHAIRS, COMPANION, COVERED IN FABRIC———	***9160***	***LIVINGROOM***
Companion chairs covered in fabric in lieu of standard Ultraleather.		
CHAIRS, DINETTE, ULTRALEATHER———	***9170***	***KIT/DINETTE***
Dinette chairs a covered in a color coordinated ultraleather in lieu of standard fabric.		
COMBO WASHER/DRYER.....	***9101***	***BATH***
Combo washer/dryer is installed in closet area of bath with short hanging above. Shut off valves for hot & cold water are located below combo unit. 120VAC power is supplied by shoreline hookup or generator.		
COMPASS, SYNTREK W/THERMOMETER	***9169***	***ELECTRICAL***
A Syntrek electronic compass with indoor/outdoor thermometer is installed in the dash.		
DOMETIC 7030 REFRIGERATOR.....	***9151***	***KIT/DINETTE***
The Dometic 7030 refrigerator replaces the standard Dometic. The kitchen counter is reduced in size to accommodate.		
DRAWERS, WASHER/DRYER CAB.....	***9137***	***BATH***
A modular drawer stack will be added in the washer/dryer cabinet. Available only when washer/dryer is not specified.		

DESCRIPTION	OPT. NO	AREA
EXTENSION TABLE & 2 FOLDING CHAIRS..... A table with a 12" extention leaf replaces the standard table and 2 folding chairs covered in ultraleather to match interior is included in addition to the 2 standard dinette chairs.	***9128***	***KIT/DINETTE***
FAUCET, GROHE EUROPEAN——————— A color coordinated Grohe European faucet replaces the standard chrome in the kitchen.	***9136***	***KIT/DINETTE***
FREEZER, 50LB. ON SLIDE OUT TRAY..... A 50 LB. freezer is installed on a slide out tray in outside compartment.	***9147***	***EXTERIOR***
FRONT, ANTI-SWAY BAR——————— Front IPD anti-sway bar is installed on front of unit.	***9145***	***CHASSIS***
INSTALL CELLULAR ANTENNA..... Cellular phone antenna installed on roof with wiring terminated in the hood table.	***9135***	***EXTERIOR***
INTERIOR 1A..... See color boards	***9152***	***INTERIOR***
INTERIOR 1B..... See color board.	***9153***	***INTERIOR***

DESCRIPTION	OPT. NO	AREA
INTERIOR 2A ..... See color board.	***9154***	***INTERIOR***
INTERIOR 2B ..... See color boards	***9155***	***INTERIOR***
INTERIOR 3A ..... See color boards	***9156***	***INTERIOR***
INTERIOR 3B ..... See color board.	***9157***	***INTERIOR***
INTERIOR 3C ..... This options changes the single color Ultraleather in interior 3A to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.	***9171***	***INTERIOR***
INTERIOR 3D ..... This options changes the single color Ultraleather in interior 3B to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.	***9172***	***INTERIOR***
INTERIOR 4A ..... See color boards	***9158***	***INTERIOR***

DESCRIPTION	OPT. NO	AREA
INTERIOR 4B ..... See color board.	***9159***	***INTERIOR***
INTERIOR 4C ..... This option includes interior 4A except with Ultraleather 2555 Nile in lieu of 5668 Silver Pearl.	***9173***	***INTERIOR***
INTERIOR 4D ..... This option includes interior option 4B except with Ultraleather 2555 Nile in lieu of 5665 platinum.	***9174***	***INTERIOR***
KONSTANT HOT	***9134***	***KIT/DINETTE***
LOVE SEAT IN LIEU OF CHAIRS IN FABRIC ..... The two barrel chairs and small table are replaced by a loveseat covered in fabric to match the sofa.	***9110***	***LIVINGROOM***
LOVE SEAT IN ULTRALEATHER ---------- Villa loveseat covered in Ultraleather replaces the 2 standard chairs and table.	***9167***	***LIVINGROOM***
LUGGAGE RACK AND ACESS LADDER ..... Luggage rack and access ladder installed. This option will not be available	***9148***	***EXTERIOR***

DESCRIPTION	OPT. NO	AREA
MUSICAL HORN..... A PMMI musical horn is installed in dash area.	***9103***	***DASH***
OPT. BATH (A) PRIVATE TOILET..... This option install private toilet area in the standard BMC walk thru bath floorplan.	***9142***	***BATH***
OPTIONAL BATH, (B)..... This option flips the washer dryer cabinet to the road side of unit and installs a vanity on the curb side. This option applies to the standard walk thru bath.	***9143***	***BATH***
OPTIONAL BEDROOM (A) WITH DESK..... This option installs a rear cross bed with with bedroom vanity in lieu of standard center island bed in floorplan 95-2, L-kitchen.	***9161***	***BEDROOM***
OPTIONAL BEDROOM (B)——————————— This option installs a rear cross bed with a full height closet and drawer cabinet in lieu of standard bedroom in the L-kitchen floorplan.	***9162***	***BEDROOM***
PAINT DESIGN, 1 (WINGS)..... BMC Wings.See color printout.	***9163***	***EXTERIOR***
PAINT DESIGN, 2 (RHAPSADY)..... BMC Rhapsady. See color printout.	***9164***	***EXTERIOR***

DESCRIPTION	OPT. NO	AREA
PAINT DESIGN, 3 (MACH III)**.....**	***9165***	***EXTERIOR***
BMC Mach III. See color printout.		
PAINT DESIGN, 4, (MARDI-GRAS)**.....**	***9166***	***EXTERIOR***
BMC Mardi-gras. See color printout.		
PAINT,BASE,IND.SILVER(SETUP AT BB LOAD)**.....**	***2313***	***EXTERIOR***
The silver base is standard, however, other base colors are available if selected before line load.		
PAINT,BASE,WARM WHITE**.....**	***0***	***EXTERIOR***
PLUMB/WIRE FOR WASHER/DRYER**.....**	***9132***	***BATH***
Plumbing and wiring only are installed for the combo washer/dryer.		
PREMIUM SOUND**.....**	***9100***	***DASH***
A 10 disc CD changer is installed in cabinet area above windsield controlled by the radio in dash.		
REAR, ANTI-SWAY BAR**——————————**	***9144***	***CHASSIS***
Rear IPD anti-sway bar is installed on rear of unit.		

DESCRIPTION	OPT. NO	AREA
RECLINER W/LARGE TABLE.....	***9130***	***LIVINGROOM***
This option installs a Villa recliner and larger table in lieu of standard table and two swivel chairs.		
SOFA COVERED IN ULTRALEATHER.....	***9168***	***LIVINGROOM***
Sofa to be covered in Ultaleather in lieu of fabric.		
STATE CERTIFICATION,CALIF.....	***5870***	***STATE DECAL***
STATE SUPPLIED OPERATING DECAL, WASHINGTON.....	***5897***	***STATE DECAL***
STATE SUPPLIED OPERATING DECAL,FLA.....	***5893***	***STATE DECAL***
STATE SUPPLIED OPERATING DECAL,TENN.....	***5888***	***STATE DECAL***
TOILET, MICROPHOR ELECTRIC.....	***9109***	***BATH***
This option installs a vitreous china bowl toilet, ultra-low water use and 12VDC electric flush in lieu of standard Sealand.		

DESCRIPTION	OPT. NO	AREA
TOOL BOX ON SLIDE OUT TRAY.....	***9146***	***EXTERIOR***
This option installs a toolbox on a slide out tray in lower storage area.		
WINDOW AWNINS & CHAIRS.....	***9104***	***EXTERIOR***
This option includes the following: (2) bedroom window awnings, (1) driver/livngroom/kitchen awning, (1) livingroom/dinette window awning, (1) bath awning (with private toilet option), (2) add-a-lounges, (4) zip Dee chairs.		
WIRE FOR AUX. AIR COMP.....	***9112***	***EXTERIOR***

1995 BMC, BLUE BIRD MOTOR COACH

23-Aug-94

ALPHA BY AREA

AREA	OPT. NO	DESCRIPTION
BATH	9101	**COMBO WASHER/DRYER.....** Combo washer/dryer is installed in closet area of bath with short hanging above. Shut off valves for hot & cold water are located below combo unit. 120VAC power is supplied by shoreline hookup or generator.
BATH	9137	**DRAWERS, WASHER/DRYER CAB.....** A modular drawer stack will be added in the washer/dryer cabinet. Available only when washer/dryer is not specified.
BATH	9142	**OPT. BATH (A) PRIVATE TOILET.....** This option install private toilet area in the standard BMC walk thru bath floorplan.
BATH	9143	**OPTIONAL BATH, (B).....** This option flips the washer dryer cabinet to the road side of unit and installs a vanity on the curb side. This option applies to the standard walk thru bath.
BATH	9132	**PLUMB/WIRE FOR WASHER/DRYER.....** Plumbing and wiring only are installed for the combo washer/dryer.
BATH	9109	**TOILET, MICROPHOR ELECTRIC.....** This option installs a vitreous china bowl toilet, ultra-low water use and 12VDC electric flush in lieu of standard Sealand.

AREA	OPT. NO	DESCRIPTION
BEDROOM	9161	OPTIONAL BEDROOM (A) WITH DESK..... This option installs a rear cross bed with with bedroom vanity in lieu of standard center island bed in floorplan 95-2, L-kitchen.
BEDROOM	9162	OPTIONAL BEDROOM (B)——— This option installs a rear cross bed with a full height closet and drawer cabinet in lieu of standard bedroom in the L-kitchen floorplan.
CHASSIS	9145	FRONT, ANTI-SWAY BAR——— Front IPD anti-sway bar is installed on front of unit.
CHASSIS	9144	REAR, ANTI-SWAY BAR——— Rear IPD anti-sway bar is installed on rear of unit.
DASH	9103	MUSICAL HORN..... A PMMI musical horn is installed in dash area.
DASH	9100	PREMIUM SOUND..... A 10 disc CD changer is installed in cabinet area above windsield controlled by the radio in dash.
ELECTRICAL	9169	COMPASS, SYNTREK W/THERMOMETER A Syntrek electronic compass with indoor/outdoor thermometer is installed in the dash.

AREA	OPT. NO	DESCRIPTION
EXTERIOR	*9111*	***AIR COMPRESSOR,AUXILIARY,120VAC.....*** A 120VAC compressor located in an outside compartment 12 volt switch located in dash area operates the compressor via shoreline or generator power. The compressor provides a quick source of air for power tools or pressurizing the coach air system or tires without starting the coach engine.
EXTERIOR	*9147*	***FREEZER, 50LB. ON SLIDE OUT TRAY.....*** A 50 LB. freezer is installed on a slide out tray in outside compartment.
EXTERIOR	*9135*	***INSTALL CELLULAR ANTENNA.....*** Cellular phone antenna installed on roof with wiring terminated in the hood table.
EXTERIOR	*9148*	***LUGGAGE RACK AND ACESS LADDER.....*** Luggage rack and access ladder installed. This option will not be available
EXTERIOR	*9163*	***PAINT DESIGN, 1 (WINGS).....*** BMC Wings.See color printout.
EXTERIOR	*9164*	***PAINT DESIGN, 2 (RHAPSADY).....*** BMC Rhapsady. See color printout.
EXTERIOR	*9165*	***PAINT DESIGN, 3 (MACH III).....*** BMC Mach III. See color printout.

AREA	OPT. NO	DESCRIPTION
EXTERIOR	9166	PAINT DESIGN, 4, (MARDI-GRAS)..... BMC Mardi-gras. See color printout.
EXTERIOR	2313	PAINT,BASE,IND.SILVER(SETUP AT BB LOAD)..... The silver base is standard, however, other base colors are available if selected before line load.
EXTERIOR	0	PAINT,BASE,WARM WHITE.....
EXTERIOR	9146	TOOL BOX ON SLIDE OUT TRAY..... This option installs a toolbox on a slide out tray in lower storage area.
EXTERIOR	9104	WINDOW AWNINS & CHAIRS..... This option includes the following: (2) bedroom window awnings, (1) driver/livngroom/kitchen awning, (1) livingroom/dinette window awning, (1) bath awning (with private toilet option), (2) add-a-lounges, (4) zip Dee chairs.
EXTERIOR	9112	WIRE FOR AUX. AIR COMP.....
INTERIOR	9139	ACCENT PILLOW (1).....

AREA	OPT. NO	DESCRIPTION
INTERIOR	*9138*	*CABINETS, GLOSS LAMINATE.....* Gloss Formica laminate replaces the standard oak cabinetry.
INTERIOR	*0*	*CABINETS, NATURAL OAK,STD.....*
INTERIOR	*9149*	*CABINETS, OTHER THAN STAN.,CHERRY.....* Cherry replaces the standard oak cabinetry.
INTERIOR	*9106*	*CABINETS, OTHER THAN STANDARD, LAMINATE.....* A matte Formica laminate replaces the standard oak cabinetry.
INTERIOR	*9120*	*CABINETS, OTHER THAN STANDARD, PICKLED OAK.....* Pickled oak replaces the standard oak cabinetry.
INTERIOR	*9105*	*CABINETS, OTHER THAN STANDARD, WALNUT.....* Walnut replaces the standard oak cabinetry.
INTERIOR	*9152*	*INTERIOR 1A.....* See color boards

AREA	OPT. NO	DESCRIPTION
INTERIOR	*9153*	***INTERIOR 1B.....*** See color board.
INTERIOR	*9154*	***INTERIOR 2A.....*** See color board.
INTERIOR	*9155*	***INTERIOR 2B.....*** See color boards
INTERIOR	*9156*	***INTERIOR 3A.....*** See color boards
INTERIOR	*9157*	***INTERIOR 3B.....*** See color board.
INTERIOR	*9171*	***INTERIOR 3C.....*** This options changes the single color Ultraleather in interior 3A to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.
INTERIOR	*9172*	***INTERIOR 3D.....*** This options changes the single color Ultraleather in interior 3B to a 2 tone Ultraleather on the pilot/copilot seats and comp. chairs.

AREA	OPT. NO	DESCRIPTION
INTERIOR	9158	INTERIOR 4A..... See color boards
INTERIOR	9159	INTERIOR 4B..... See color board.
INTERIOR	9173	INTERIOR 4C..... This option includes interior 4A except with Ultraleather 2555 Nile in lieu of 5668 Silver Pearl.
INTERIOR	9174	INTERIOR 4D..... This option includes interior option 4B except with Ultraleather 2555 Nile in lieu of 5665 platinum.
KIT/DINETTE	9102	BOOTH DINETTE IN LIEU OF TABLE & CHAIRS..... A fully upholstered Villa booth dinette replaces the standard table and chairs.
KIT/DINETTE	9133	BOOTH DINETTE(CONV)..... A fully upholstered Villa booth dinette which converts to a bed replaces the standard table and chairs.
KIT/DINETTE	9170	CHAIRS, DINETTE, ULTRALEATHER——— Dinette chairs a covered in a color coordinated ultraleather in lieu of standard fabric.

AREA	OPT. NO	DESCRIPTION
KIT/DINETTE	9151	DOMETIC 7030 REFRIGERATOR..... The Dometic 7030 refrigerator replaces the standard Dometic. The kitchen counter is reduced in size to accommodate.
KIT/DINETTE	9128	EXTENSION TABLE & 2 FOLDING CHAIRS..... A table with a 12" extention leaf replaces the standard table and 2 folding chairs covered in ultraleather to match interior is included in addition to the 2 standard dinette chairs.
KIT/DINETTE	9136	FAUCET, GROHE EUROPEAN—————————— A color coordinated Grohe European faucet replaces the standard chrome in the kitchen.
KIT/DINETTE	9134	KONSTANT HOT.....
LIVINGROOM	0	2 SWIVEL CHAIRS,SMALL TABLE.....
LIVINGROOM	9150	CARPET, INLAY (A)-9150-01..... See drawing
LIVINGROOM	9150	CARPET, INLAY (B)-9150-02..... See drawing

AREA	OPT. NO	DESCRIPTION
LIVINGROOM	*9150*	*CARPET, INLAY (C) 9150-03.....* See drawing
LIVINGROOM	*9160*	*CHAIRS, COMPANION, COVERED IN FABRIC* Companion chairs covered in fabric in lieu of standard Ultraleather.
LIVINGROOM	*9110*	*LOVE SEAT IN LIEU OF CHAIRS IN FABRIC.....* The two barrel chairs and small table are replaced by a loveseat covered in fabric to match the sofa.
LIVINGROOM	*9167*	*LOVE SEAT IN ULTRALEATHER* Villa loveseat covered in Ultraleather replaces the 2 standard chairs and table.
LIVINGROOM	*9130*	*RECLINER W/LARGE TABLE.....* This option installs a Villa recliner and larger table in lieu of standard table and two swivel chairs.
LIVINGROOM	*9168*	*SOFA COVERED IN ULTRALEATHER.....* Sofa to be covered in Ultaleather in lieu of fabric.
STATE DECAL	*5870*	*STATE CERTIFICATION,CALIF.....*

AREA	OPT. NO	DESCRIPTION
STATE DECAL	5897	STATE SUPPLIED OPERATING DECAL, WASHINGTON.....
STATE DECAL	5893	STATE SUPPLIED OPERATING DECAL,FLA.....
STATE DECAL	5888	STATE SUPPLIED OPERATING DECAL,TENN.....