OWNER'S GUIDE

BALBOA Motor Homes

IMPORTANT PLEASE READ

INDEX

INTRODUCTION	1
WARRANTY	2
REFRIGERATOR	A-1
SUBURBAN FURNACE	B-1
SPACE HEATER	C-1
WATER SYSTEM and HEATER	D-1
RANGE and OVEN	E-l
TOILET	F-1
ELECTRICAL	G-1
CARE and REPAIR of FIBERGLASS	H-1
HELPFUL HINTS - DO'S & DON'TS	I-1
BUTANE SYSTEM	J-1
WINTERTAING	K-1

OWNER'S GUIDE - BALBOA MODELS 110, 110-2 and 100

Welcome to your new Balboa Motorhome. It is our goal at Balboa Motorhomes to deliver a high quality Coach with a minimum amount of maintenance. It's one piece fiberglass construction will not squeak, leak, rattle, or rust and will maintain its showroom appearance through the years.

Your Balboa uses all nationally advertised appliances and components tried and proven over the years to be the most dependable, regardless of cost.

Upon delivery of your Coach you will find a packet containing all warranty documents and detailed instructions on each appliance for your convenience. Please take time to read this material, fill out all warranty cards and mail to their manufacturer to register the warranties.

Congratulations and happy camping with your new Balboa.

Balboa Motorhomes

Merle J. Van Wie

WARRANTY

Your Balboa Motorhome Warranty should be validated immediately by mailing the pre-addressed coupon which requires no postage.

Upon receipt of your completed Warranty Registration Card, we will send the Rand McNally Tour America Guide to you with our compliments. This book will be very helpful in planning those long awaited outings.

Balboa motorhomes

A BANGOR PUNTA COMPANY 235 FISCHER ST. / COSTA MESA , CALIF. 92626

BALBOA MOTORHOME WARRANTY

Warranty covers all products manufactured by Balboa Motorhomes, to be free from defects in material and workmanship under normal use and service for a period which shall expire on the sooner of 12,000 miles or 12 months after commissioning to the original retail purchaser.

In commercial or rental applications, the warranty will be six months and/or 6,000 miles, which ever comes sooner.

Balboa Motorhomes makes no warranty, express or implied, fitness or otherwise as to chassis, toilets, stoves, tires, refrigerators, lighting devices, blowers, and/or other equipment or trade accessories manufactured by others. Dealer will deliver to the original retail purchaser the warranties, if any, extended to Balboa Motorhomes by other manufacturers.

Balboa Motorhomes make no warranty, express or implied, of merchant ability, fitness or otherwise, on each new product which is not operated or maintained in accordance with the Owner's Guide furnished with each new product, or as to any product or part thereof which has been subjected to misuse, negligent acts or omissions, or accident.

If within the foregoing time period it is established to Balboa Motorhomes satisfaction that the product, or any part thereof included in this warranty, is defective in material or workmanship under normal use and service then the sole and exclusive remedy and Balboa Motorhomes liability shall be, at Balboa Motorhomes sole option, the repairing of the defective product or part thereof, or the replacement of same by shipment to purchaser F.O.B. Balboa Motorhomes factory.

3 WAY GAS-ELECTRIC REFRIGERATOR

This refrigerator derives it's name from the fact it operates three ways.

- 1. In a park with outside utilities use 110V.
- 2. Self contained use LP gas.
- 3. Over the highway use 12 volts.

Before departure we suggest plugging the Coach into 110V at least six hours before leaving. This will cool the refrigerator before you leave.

Over the highway, switch to 12 volts until you reach your campsite.

Upon arrival, switch to LP gas or 110V if available.

For 110V operation when parked:

- 1. Turn gas selector switch to "Gas Off."
- 2. Turn electric selector switch to "110V On."
- 3. Turn electric thermostat to "C."

For gas operation when parked:

- 1. Turn electric switch to "Off."
- 2. Turn gas selector switch to "Gas On."
- 3. Turn gas thermostat to "C."
- 4. Push Red and Black buttons at the same time.
- Release Black button when you see flame through viewer window in lower right hand corner inside viewer.
- Continue to hold Red button at least 20 seconds.
- 7. Release Red button.
- 8. If burner goes out, repeat above sequence.

(CAUTION) Do not use LP gas when in transit. Switch to 12 volts.

For 12V operation over the Highway.

- 1. Turn gas selector switch to "Gas Off."
- 2. Turn electric selector switch to "Low Volts On."
- 3. Turn electric thermostat to "C."

Your refrigerator is now operating off your Coach Battery. Upon arrival at your destination switch to LP gas or 110V.

THERMOSTAT CONTROLS

- 1. "C" is the coldest setting.
- 2. "D" is for defrost.
- 3. The highest number is the coldest setting.

CLEANING THE REFRIGERATOR

1. Same procedure as your home units.

SUGGESTIONS:

- When unit is not in service, remove refrigerator door to prevent odors.
- The door will swing either way by reversing the hinge pins.

SUBURBAN FORCED AIR FURNACE

OPERATING INSTRUCTIONS

- To light the furnace, be sure that the main gas valve on the propane tank is turned "ON", turn the manual valve located on the main gas line next to the furnace "Off" and wait at least 5 minutes. Set the thermostat at it's lowest setting. Open manual valve all the way. (Unit will not operate otherwise.)
- Remove front cover of furnace by releasing catches on each side of the furnace, unscrew lighter hole cover.
- 3. Press reset button and hold in approximately 2 minutes. Insert a lighted match through opening, so flame is near the pilot. If lighting for the first time it may be necessary to hold reset button for several minutes due to air bleeding from the system. Once the pilot is lighted hold reset button in for approximately 1 minute until the thermocouple is heated enough to keep the pilot lighted.
- 4. Replace the lighter hole cap.
- 5. Replace furnace access door.
- 6. Set thermostat to desired temperature.

For trouble shooting of this appliance please consult the operating and service instructions contained in the pack of documents delivered with your Coach.

SUGGESTION:

When lighting furnace, if wind is blowing directly into outside vent, have someone hold a cover over the outside vent temporarily to prevent the wind from blowing out the match. Use wooden kitchen matches to prevent burning your fingers.

GAS SPACE HEATER

The 9000 BTU heater is located in the right rear corner of the Coach, and is fed from the external Butane Tank.

- A. To activate, please follow these directions:
 - 1. Turn "ON" External Butane Tank.
 - 2. Remove Louvered Face Plate by sliding UP and swinging OUT.
 - Open access hatch to pilot light on right front face of heater.
 - 4. Turn Thermostat to "OFF."
 - 5. Push IN Gas Cock Dial, turn counter-clockwise to "Pilot Position" and release.
 - Place lit stick match in Pilot Light Access Hole, push
 IN Gas Cock Dial, and hold for about 30 seconds.
 - 7. Release Gas Cock Dial, if Pilot remains lit, turn Gas Cock Dial to "ON."
 - 8. Set Thermostat to desired temperature.
- B. To secure the Heater:
 - 1. Turn Thermostat to "OFF."
 - 2. Push IN Gas Cock Dial and turn clockwise to "OFF."
 - Turn OFF external Butane Tank unless Refrigerator or Range is being used.

WATER SYSTEM & HEATER

The fresh hot and cold water system consists of a 32 gallon corrosion free water storage tank, a demand pump, and a 7 gallon hot water tank with 110V electric and re-circulating heating system direct from the engine. A park side water connection is located outside the Coach on the passenger side. By attaching a common garden hose to this coupling, hot and cold water is available under pressure without using the demand pump. A check valve is installed in the system to prevent this water from entering your Coach water supply tank.

A. FILLING THE 32 GALLON WATER STORAGE TANK.

- Remove water fill cap, located on top of tank located under right dinette cushion.
- 2. Insert water fill hose and turn on faucet.
- The tank is transparent and water level is easily observed.
- 4. When full, turn faucet off.
- To drain tank, open plastic jet cock and let water evacuate.
- B. FILLING THE 7 GALLON WATER HEATER. (BLEEDING THE SYSTEM)

 If filling for the first time, or re-filling an empty one,

 air <u>must</u> be bled from the entire water system
 - 1. Fill water tank.
 - 2. Turn on the water pump.
 - 3. Open the dump valve on the holding tank and leave open.
 - 4. Turn the HOT water faucet ON, hold your hand under the faucet because water will spurt out, due to air trapped in the tank and lines.
 - 5. Let run at full pressure until a steady stream

begins to flow. The pump will continue to run until the pressure is built up and automatically shut off.

- 6. Repeat this procedure on the cold water system
- 7. Repeat this procedure at Bath Sink.
- 8. After bleeding the hot and cold systems, refill the water tank to replace the water wasted from this procedure.

C. THE WATER PUMP

- As water is used, pressure will drop below 25# P.S.I. The pump will automatically start and build the pressure back up.
- 2. The main pump switch can remain on except:
 - a. when the tank runs dry, the pump will run erratically.
 - b. when the unit is left unattended for long periods or while in route. This will prevent water entering the Coach, should a leak develop.

D. HOT WATER HEATER

- 1. Radiant circulation automatically takes engine cooling water through one of the hoses in front of the tank, through a copper coil inside the heater tank and back out the other hose, directly to the engine. In 40 to 45 minutes, heat produced by the engine will automatically heat the seven gallons of fresh water as you drive. The water heater is glass insulated and will keep hot for up to 12 hours. The advantages of this system are many:
 - No mechanical parts to wear out or break down.
 - b. Diffusion of the engine water helps cool the engine.
 - c. While driving on the highway, water is being heated, with no gas burning for your complete safety. Upon arrival you already have "HOT" water
- When plugged into 110V parkside electricity merely turn on the switch, and your water is heated electrically.
- 3. The water heater is supplied with a Pressure-Relief valve which opens automatically if:

- a. Temperature in the water heater goes over 210 degrees because:
 - 1. Radiator boiling over.
 - 2. Thermostat is set too high.
- b. Water pressure in the tank goes over 125 P.S.I. when:
 - Too much pressure from the Parkside hookup, if so turn the faucet partly off.
- 4. Trouble shooting the Water System.
 - a. No water pressure? Be sure water pump is "ON."
 - b. Check fuse in marked water pump.

RANGE and OVEN

To light burners and oven:

Please refer to Butane section before attempting to light this appliance. If lighting for the first time air <u>must</u> be bled from Butane lines for satisfactory operation.

- 1. Turn on main gas valve at "gas bottle."
- 2. Turn front burner "on", light burner with a wooden match and allow to burn at high heat until flame burns with a blue flame.
- 3. The oven control has two "off" positions, OVEN OFF and PILOT OFF. The PILOT OFF saves fuel and eliminates the hazard of accidents while refueling the Coach. Use this position when moving the Coach.
- 4. Lighting the oven pilot.
 - a. Leave main control in pilot "off" position.
 - b. Push control knob in, hold approximately 2 min.
 - c. Light pilot with a wooden kitchen match. Hold in approximately 2 minutes.
 - d. Set thermostat to desired temperature, burner will light in approximately 50 seconds.
 - e. Turn oven "Off" when through using. Pilot will remain lighted until you again turn to PILOT OFF.

ELECTRA MAGIC TOILET

1. CHARGING

- a. Fill with water, (until water reaches the charge level, "c" on indicator lens.)
- b. Add aqua kem concentrate, or any other approved chemical.
- c. Depress flush button & toilet is ready for use.

2. TO FLUSH TOILET

- a. Depress flush button. (Timer will automatically provide a (7) second flush cycle.)
- b. Do not depress flush button when toilet is empty.
- c. Use only recommended toilet tissue to prevent jam ups.

EVACUATION

- a. Connect sewer hose to dump valve, located at the left rear of unit.
- b. Open outside valve by moving lever down.
- c. Pull the dump valve located on the lower front of the toilet, this will now evacuate the toilet.
- d. Push inside dump valve back in. (Make sure it is in all the way.)
- e. Refill toilet.
- f. Let stand for 5 minutes and evacuate again if storing unit.

- g. Repeat changing procedure when ready to re-use.
- h. Flexible sewer hose is <u>not</u> included with your Coach, these are available at any good trailer supply house or your Balboa Dealer.

ELECTRICAL SYSTEM

On Balboas equipped with a Dual Battery system, the 12 volt D.C. system, which powers the chassis driving operations has it's own fuse panel. Consult the chassis owners manual for it's location. While underway, the alternator charges both batteries. While parked, the house battery is automatically isolated from the main truck battery to prevent accidental discharge, assuring a quick start when breaking camp.

Your Balboa is equipped with a 110V parkside A.C. system. The circuit breaker panel and 25 foot power cord are located in the left dinette storage area under the bunk. To hook up to the 115 volt system, open the small round metal door on the left front side of Coach, pull out the large 3 prong plug and cord as far as is necessary. (Suggest you carry an adaptor that converts from the approved range connector plug to the standard 3 prong A.C. grounded one.) These are available at any trailer supply house and not included with the Balboa. For your safety either of these plug in methods, with or without the adaptor, are grounded to the chassis to prevent shock and also act as a lightning rod.

When the Balboa is plugged into 110V, the power converter automatically converts 110 volt AC current into 12

volt D.C. current that operates most of the equipment in the Coach. This is also a valuable safety factor, as it reduces the danger of damage from shock by utilizing the lower 12 volt D.C. current. While plugged into the outside AC power source, current also powers the hot water heater and 110V recepticals, in addition, the Coach battery is being charged.

CARE and MAINTENANCE OF FIBERGLASS

One of the major benefits of a fiberglass molded Coach is the elimination of maintenance chores required by other materials. There are three relatively easy maintenance rules to follow to keep your Balboa looking new.

- 1. Periodically clean, buff and wax the exterior.
- Touch up and patch scratches, scars and small breaks.
- Repair any major breaks as soon as possible, to avoid additional damage.

The Balboa body is built of two layers of material, permanently bonded together by chemical action. The outside surface is formed by a colored gel coat (Thompson Co. White Gelcoat #NF-61-OH White) which is a special resin material which provides a smooth finished surface.

When buffing the Balboa to restore it's finish, care should be taken not to cut through this gel coat surface, especially on corners and edges. The buffing can be accomplished with a power buffer, or by hand, using a light abrasive rubbing compound such as Dupont #7 or Mirro Glaze #1. After buffing, any good quality paste wax may be applied.

For damage to the gelcoat surface, you will need a small amount of gel coat of the # previously mentioned, and a few drops of catalyst. For deeper holes or gouges

we suggest having the work done by: A boat dealer,
Automobile dealer such as Chevrolet who repairs the
Corvette, or a reputable trailer supply house knowledgable
with Fiberglass repair.

For more detailed information relative to Fiberglass repair and maintenance you may write directly to:

Ferro Corporation Fiber Glass Division Nashville, Tennessee 37211 There is a slight charge for this booklet.

HELPFUL SUGGESTIONS

Motorhoming is fun but as in business the success or failure of your trip is dependent upon how much preparation you've done prior to departure.

Make up a check list of those necessary items and use it. These items will vary with each individual. Here is a recommended list you should check before you depart.

- 1. Spare Tire
- 2. Lug Wrench
- 3. Jack and Handle
- 4. Emergency flares
- 5. Fire extinguisher
- Tire chains (dependent upon your winter camping habits.)
- 7. Assortment of hand tools
- 8. Electrical tape
- 9. (2) spare "D" cell flashlight batteries
- 10. Flashlight
- 11. Wooden Blocks for leveling while setting up camp
- 12. Litter bags Waste Basket
- 13. 110V A.C. adaptor
- 14. 25 foot non toxic water supply hose
- 15. Sewer hose, adapter and clamp assembled in holder
- 16. Clothesline for wet towels etc.
- 17. Plastic clothes pins
- 18. Box of wooden kitchen matches to light stove and pilots

- 19. Bedding
- 20. Fuses, both Chassis & Coach
- 21. Drinking water in plastic containers
- 22. Check oil and water
- 23. Rear door windows are easily removed for cleaning on some models. Squeeze both release buttons, force window to left as far as possible, window will now come out. To replace, reverse procedure, if so equipped.
- 24. Side screens are easily removed, at center vertical sides of frame, push down at the top and screen will now pop out.
- 25. While washing Coach with full hose pressure, it is normal for water to run over the window channels inside the coach. Water standing in the channels is normal during a rain storm but be certain the weep holes along the bottom edge are open.

DO'S and DONT'S

- DO: Try to park level for your own comfort while sleeping and to assure proper operation of all systems.
- DO: Evacuate the toilet after each trip and use a deodorant to prevent odors when toilet stands empty.
- DO: Thoroughly clean inside of refrigerator and either remove or leave door open for airing after each use, to prevent odors.
- DO: Drain and throughly flush water tank after each use.
- DO: Evacuate and flush holding tank after each use. (If equipped).
- DO: Plug refrigerator into 110V A.C. at home to precool refrigerator at least 6 hours before departure, or operate using butane.
- DO: Secure all loose gear for over the road traveling.
- DO: Check oil, water and battery level (DON'T FORGET HOUSE BATTERY) tire pressure, running lights etc. before departure.
- DO: Observe all instruments while underway to prevent undue damage to chassis components.
- DO: Maintain exterior surfaces of chassis and fiberglass body.
- DO: Be careful when going down steep driveway ramps or off road to prevent damage to the holding tank.
- DO: Be sure dust cap is in place on holding tank while traveling.

- DO: Use a good coolant in radiator to prevent rust and over heating.
- DO: Lock rear door while underway.
- DO: Close rear window while traveling, if so equipped.
- DO: Turn water pump "OFF" when Coach is unattended.
- DO: Place thermometer in refrigerator to avoid freezeups and conserve butane.
- DO: Observe vertical clearances. Measure your Coach
 height and put decal on dash indicating overall
 height of your unit, including roof air conditioner,
 if so equipped.
- DO: Leave upper cabinet doors open in extreme cold to prevent sweating.
- DO: Refer to A.C. auxillary generator for oil change and maintenance. Manually choke generator when cold or after long idle periods.
- DO: Check lower 180° side mirror when lane changing.
- DO: Refer to check list for necessary gear before departure.
- DO: Clean aereator screen on galley faucet periodically.
- DO: Close roof vents when Coach is unattended.
- DO: If necessary to use an extension cord to "hook up", please refer to local electrical codes for adequate wire sizes.
- DO: Turn furnace thermostat "off" when Coach is unattended.
- DO: Should house battery become fully discharged for any reason, have it charged at a gas station as the alternator takes too long to bring it back to full charge.

- DO: Fill out and return all warranties to their respective vendors to validate warranties.
- DO: Use recommended toilet paper for re-circulating toilet.
- DO: Turn main propane valve "off" while Coach is out of service.
- DO: Keep holding tank empty. If full, waste water backs up in shower.
- DO: When replacing house battery use equivalent or higher amperage battery never less.
- DON'T: Operate Coach if gauges indicate trouble.
- DON'T: Operate water pump if water tank is empty.
- DON'T: Operate refrigerator on "gas" while traveling.
- DON'T: Leave pilots lighted when refuelling Coach.
- DON'T: Travel with Dinette table in cab over storage unless adequately secured.
- DON'T: Overload refrigerator, particularly in and around freezer compartment.
- DON'T: Cut through body or floor to accommodate accessory items such as generators, roof air conditioners, etc. without prior approval to avoid structural damage and/or voiding the warranty.
- DON'T: Overfuse any electrical circuits.
- DON'T: Turn circuit breakers "off."
- DON'T: Leave medicine cabinet light on for long periods of time.
- DON'T: Block vents in overhead cabinets by overloading, front vents prevent sweating in extreme cold.

DON'T: Drive with roof vents fully opened.

DON'T: Leave back up lights "on" for extended periods of time.

DON'T: Use range burners or oven to heat Coach. Use furnace.

DON'T: Leave refrigerator on 12 volts for extended periods of time.

DON'T: Operate toilet, should foreign material fall in bowl until obstruction is removed.

DON'T: Overload toilet motor - Dump after each trip.

DON'T: Store anything in electrical compartment.

DON'T: Operate water heater on 110 volts with an empty water tank. Be sure tank has water and system is bled of air.

DON'T: Overload roof area.

BUTANE SYSTEM

The 10 gallon 40# Butane Tank is located on the lower right side of the Balboa approximately mid-way between the right wheels. The furnace, range, and refrigerator operates from this system. When filling for the first time the system must be bled of air in the lines.

- A. Open the small knurled brass bleed screw, leave open until all pressurized air has escaped.
- B. Turn Main Valve on Butane Tank "Off."
- C. Turn all gas appliances "Off."
- D. Fill the tank.
- E. Re-open the main Valve.
- F. The range is the most convenient place to begin bleeding the system.
 - 1. Turn any one of the top burners on.
 - Because air will escape first, it could take several matches to ignite the burner.
 - Leave burning until a steady blue flame is present.
 - Air has now bled from a major portion of the system. Other appliances should light easily.
 - Follow instructions for each appliance when lighting.

Suggestion:

A box of wooden kitchen matches should be kept in the Coach for lighting all appliances.

WINTERIZING

TOILET --

- For winter storage evacuate toilet leave dump valve open.
- 2. For winter use, replace one half of the charge water with an approved anti-freeze, available from any good trailer supply house.

WATER TANK --

 For winter storage - drain tank completely, leave drain cock open.

WATER HEATER --

- 1. For winter storage turn hot water faucet "on" with water pump "on." Allow all water to pump out. Do the same with the cold water faucet. Turn pump "off."
- 2. At the outside water hook up remove dust cover. With a small screwdriver, pry out filter screen and washer. Stand aside and push in on the spring loaded one way valve until all water escapes. Replace screen and washer. Leave faucets "on."

ON BALBOA MODEL 110-2 OMIT STEP #2

P-TRAPS - LAVATORY and SINK

- For winter storage pour approximately 1 pint of rubbing alcohol in each P-trap to prevent freeze-ups.
- For winter use leave bathroom door open and heat "on" in coach.

