

ULTRA VAN

CUSTOMER HANDBOOK

"THE ROAD TO
CAREFREE TRAVELING"

Your new Ultra Van is fully warranted as stated in the booklet. (Engine and Transmission 4000 mile or 90 days whichever comes first.) All Ultra manufactured parts are guaranteed one year. For any manufactured part, follow the same procedure as under the motor warranty. Certain maintenance items as explained in the booklet and listed here will be at your expense when needed. So that Warranty Service may be handled properly, please contact our service department in advance for approval.

Items Not Covered By Warranty

1. Engine tune up.
2. Cleaning or replacement of spark plugs.
3. Adjusting or replacement of ignition points.
4. Adjusting or cleaning of carburetor.
5. Adjusting valves and/or engine timing.
6. Front wheel alignment and wheel balancing.
7. Clutch or transmission adjustment.
8. Brake & clutch lining replacement.
9. Wiper blades replacement.
10. Lubrication and oil and filter change.
11. Tires or tubes (warranted by tire manufacturer.)
12. Brake cleaning, bleeding system, or shoe adjustment.
13. Adjustment for body rattles and squeaks due to normal road hazards.
14. Engine or chassis damage, due to weather and/or normal road hazards.
15. Paint, chrome and trim damage due to after delivery use.
16. Any modification other than factory recommendations to any unit as to use for competition racing will void warranty.
17. Positive crankcase ventilation valve cleaning.
18. Service charges will be made for 6,000 mile, 12,000 18,000 mile and 24,000 mile check-ups.
19. All appliances warranted by manufacturer.

The Corvair engine carries the regular Chevrolet guarantee, however, Ultra Van must handle the repair warranties. Should serious trouble develop, call collect to L. P. Knipe and, or Fred Baker, area 316, MO-3-1187. Outline as clear as possible the problem. Purchase orders will be issued to the dealer for repairs or you may prefer to pay for repairs and send billings to us. We will reimburse you direct.

All appliance warranties are in the coach. Owners should fill in all cards and mail them directly to the manufacturers.

THE ROAD TO HAPPY CAREFREE TRAVELING

A more prosaic title might be "Operating Manual", but it is our hope to make this a bit more than that. While you have taken possession of your ULTRA VAN, our interest in you does not stop there.

It is our desire that you get full use and value from your vehicle with a minimum of care and effort. It is often said that "A little knowledge is a dangerous thing."; in this case we think a little knowledge will be very valuable to you. We don't expect you to be, or to become an expert mechanic, but it is well for you to familiarize yourself with various parts and their locations.

Don't think of your ULTRA VAN as just another motor vehicle. It is your home on wheels. While you have been "checked out" before taking possession, this will point out some of the same things, so you can review points that are not clear.

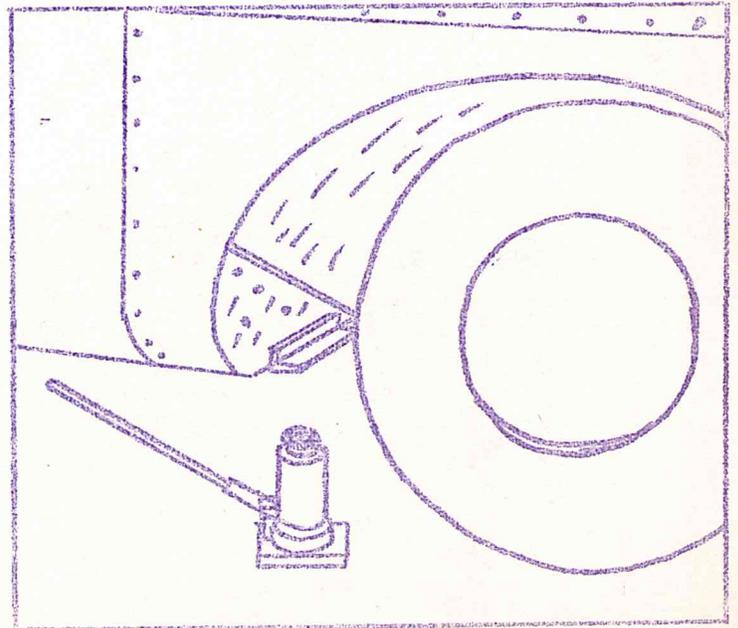
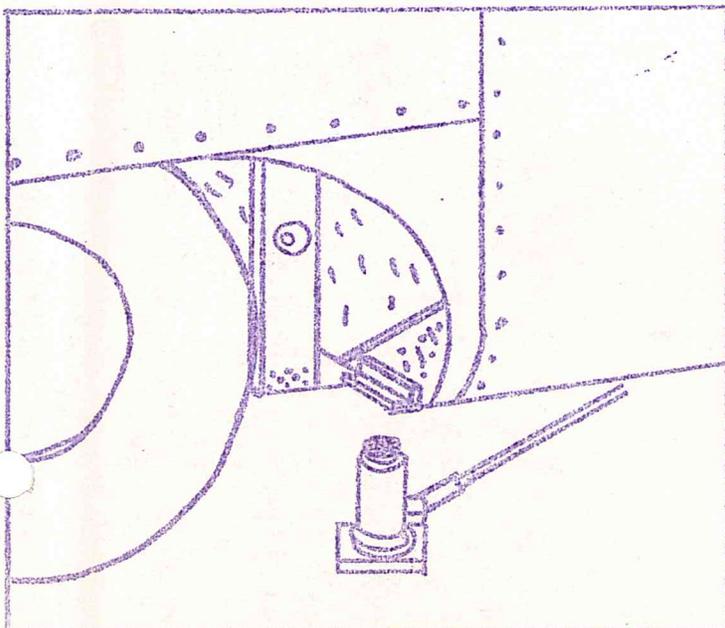
Normal equipment calls for 2-ply, 4-ply rated tires. This is standard original equipment of practically all new cars. In case you are not familiar with the "ply" ratings, etc., it means that when standards were set up for tires using cotton cords, 4-ply were used. Now that nylon and rayon is being used, they use 2-ply that gives the same strength as four plies of cotton.

There is considerable difference of opinion as to the merits of 2 versus 4-ply and some advantages of each. The two ply will run cooler. They will give a softer or more comfortable ride. There is more flexing and more heat built up in a four ply. Built up heat of course is the great enemy. Underinflation causes excess wear and tear in all tires.

The prototype ULTRA VAN using 2-ply, 13" tires ran 30,000 miles and there had been no casing breaks. Now we are using 7:35 x 14 tires, you should carry about 28 pounds of air in the rear tires and 24 pounds in the front. In case of carrying extra passengers or a heavy load, you might like to put in about 2 pounds more air.

Your spare tire, with jack and tire wrench, is in the back compartment. Of course, it is hoped that you never need to use them. In case you do, however, it is important that the jack be properly placed under the special points at the ends of bulkheads.

JACK PLACEMENT ON ULTRA VAN



In case you should ever need to be towed, hook onto the two "A" frames under the front end. If the tow chain or cable is not low enough to miss touching the front end, have them place heavy mats, or a wide board for protection. Some towing units have wide rubber belts that distributes the weight over their width.

Your L P Gas tank is located at the left rear. It is unnecessary to remove it for filling. Most stations will know exactly how to take care of this. They will remove the cap and screw their service hose onto the opening. The exhaust vent is opened. There is a gauge on the front to the left of the driver that shows how much gas you have left and how much is put in the tank. The vent of course is closed when the tank becomes full.

110 Volt Hookup

Coiled up in the next compartment forward, you will find an extension cord or shore line, that may be plugged into an outside electric service. You have four inside 110 volt double outlet plugs. This is more fully explained later.

The next compartment just in front of this, holds the 50-foot length of hose. Remove the cap from the end, and run the hose well down into the toilet. Inside the compartment is a toggle switch. Turn it on, and when the pump begins to make a different noise like it was running empty, run some water through the toilet or lavatory to flush out the final tank. Flush the toilet to clean off the hose end. Turn off the switch, replace the cap on the end of the hose, and rewind it into the compartment. It is as simple as that.

You are furnished two sets of keys for all locks. The small flat key locks the door with a quarter turn to the right, then turn back to the left to withdraw the key. To unlock, turn left, then back. Inside the door is a small knob. (inside latch) A push to your right when facing the door also activates the lock. Owing to the tightness of the weatherstrip around the door, be sure you have it tightly closed before starting to move. Push on the door to be sure the latch has caught.

To your left inside the front door is a small toggle switch. This turns on the top light on the table lamp. When you get in the driver's seat and are all set to take off, if it is dark, there is the other toggle switch that will turn the light off. Note there are three positions, and when straight out they are neutral. A little experience will show you the correct position for BOTH switches. All lights, including the ceiling, over stove, etc., are 12-volt, DC current, operating from the dual batteries.

At the back of the front side windows, note the knobs that will pull out to open. Pushed in when the windows are closed, they are safely locked. The small red light bulb just to the left of the driver's seat is explained later. Just in front of this is a panel, that can be removed by pushing up, then down. Behind that is the box of fuses for various electric circuits. These take a regular 15 amp auto fuse.

Next is the switch that operates the gas gauge, on the INSTRUMENT PANEL which indicates the tank level of GASOLINE, WATER, AND PROPANE. Turn to the left for "fuel", to the right for the "water". And up for PROPANE.

The instrument panel is standard, showing speed, etc. To the right is the shifting lever. Place in "N" or neutral and start the engine with the key turned full to the right. The "L" is for low, but you normally put in "D" for starting off and driving. The "R" of course is for reverse.

Note the pull handle below this near the steering column. Suppose you forget to get gas, and suddenly your motor sputters and stops. Your gas tank is empty. Pull this lever or handle out, and you have another 75 or 80 miles driving from a reserve supply. SPECIAL NOTE: If you are on a location where your vehicle slopes to the left, and the gas tank is not fairly full, you may need to use this valve to get started.

Here is how this works. All of the four aluminum tanks have baffles across them to prevent sudden surging of liquid from one end to the other. There are holes in the bottom of these baffles in three of the tanks to let the liquid flow through.

The first baffle in the gasoline tank, is sealed across the bottom, and the holes are in the top. When filling, this area is filled first, then the gas flows over into the balance of the tank space. You normally use from this when driving. However, as explained above, if you should run out, or sloping to the left, pulling the handle out opens a valve and switches over to the reserve supply in the left end of the tank. BE SURE TO PUSH THE HANDLE BACK IN WHEN YOU REFILL THE TANK. That switches back to using from the main supply.

Most people find that in driving any vehicle for the first time, they need to get the "feel" of it. This is especially true of driving the ULTRA VAN. By observing a few points you will soon find out that it is handling just like a passenger car.

Remember that you are sitting right over the left front wheel. You do not have the long hood extending out in front of you. So when you wish to turn a corner, you drive "past" the point where you would normally start to turn the steering wheel. When you do turn, cut it sharply to left or right. When turned or heading around the corner, turn the steering wheel back to line up the vehicle for going in the new direction. A few practice turns will show you exactly how this works.

Remember that in turning or parking, the inside front wheel will turn to a 50 degree angle. This means you can turn in a much narrower space than you can with a car, and also it helps in parking in short spaces.

There is just one other point to keep in mind. You are sitting much farther to the left (you're right over the left front wheel) than you would be in a car. Check your rear vision mirrors. You will see exactly where you are in relation to the middle road marker, as well as the right side of the road. You may wish to check these two positions occasionally when you start driving. DON'T TRY TO GO TOO FAST until you have the feel of exactly where you are tracking.

One good way is to imagine that you are riding a bicycle. You figure that you are riding about two or three feet (depending upon width of your lane) inside the white line, or the middle of the road. Check your position by the mirrors occasionally. Soon you know exactly where you are going without giving it a second thought.

You have been shown how the seats may be moved at will, or turned to any position. When driving of course, you should use the seat belts.

There is a piece of plywood under the mattress. Place this across the opening between the wheel wells. Turn the seats with the backs to the outside. Spread the four cushions across this to make up an additional bed. For nighttime you will note that the curtains may be pulled around and across the windshield, and the drapes on the windows may be drawn. A "SNAP-ON" curtain is provided for the entrance door window.

Once you have been shown the operation of the dinette table it should be simple. Note that when it is in the down position it purposely wedges against the carpet so that it will not swing when driving. Raise it up part way and it can be slid forward or backward. Occasionally put some floor wax in the hinge to help it operate smoothly. When in the up position there is a leg for each corner. There is a small button that holds these in position and a quarter turn of that will let the legs drop down.

FURNACE (Liquid Petroleum)

You next come to the 15,000 BTU LP gas furnace. The LP gas, of course, should be turned on by turning the valve full according to the directions at the tank. ALWAYS WAIT ABOUT FIVE MINUTES FOR GAS TO ESCAPE FROM ANY LP UNIT BEFORE ATTEMPTING TO RELIGHT.

The knob that regulates the temperature can be pulled off the shaft coming through the grill. Pull the loop at the top out and make a quarter turn to match the slot at the top of the grill. The grill will then come off and you can get to the pilot light.

There is a safety valve that keeps the gas from getting into the chamber except when the thermostat calls for heat and the pilot light is off. To light, there is a small peep-hole which may be raised. Press in on the small button below and hold for approximately 30 seconds. The first time it may take longer to get all of the air out of the line. You can then place a match to the pilot light. Continue to hold it for another 15 or 20 seconds until the thermocouple warms up. If the pilot light should go out, repeat the performance and hold the button in a bit longer. When you have replaced the grill, replace the knob and set at the desired temperature. There is a thermostat which will turn the heat off and on according to the setting you have made.

This is a safety approved sealed combustion chamber. You will note, fresh air is taken in the lower portion from the outside, and the flame is likewise vented from the top through this same area.

NOTE: Remove the screws on the small plate on the outside to get to the LP gas line connecting the heater.

Your folding closet door may be cleaned occasionally with a damp cloth. Putting a little floor wax in the track now and then will keep it running smoothly. On the outside wall, back of the closet door is a button. In case you should over-load your 110 volt circuit, this will pop out. It may be reset by pushing it in when the over-load is disconnected. This circuit breaker is 15 amp on standard installation. (20 amp on air-conditioned models)

Just above the step-up in the back as you face the rear, you will see two switches. The two with the handle regulate the "on and off" position, (up is on, down is off), for the two batteries. When the engine is running, both batteries are automatically charged, if the switches on "on". When the switches are "on" you likewise are using current from both batteries. If you are using the 110 volt hookup to an outside source of power, you can re-charge your batteries at any time as explained later. When using current from the batteries only, it is recommended that you use from one battery and turn the other off so you will be sure to get the engine started.

Each battery when fully charged is capable of delivering 48 watts. This means for example, one 25 watt lamp pulls 2 amps. The battery would last 2 1/2 hours. (The 12 volt watt light is equal to a 60 watt lamp using 110 volt) From this you can figure how much and how long you can burn various lights and still have power left for starting. The amount required will vary with the season and the outside temperature for starting engines.

Your batteries are located in the left rear compartment under the mattress. Raise the mattress and lift out the small door. Be sure that the batteries do not run dry. Always keep liquid above the battery plates. They will use more water in hot weather than cold. If you are doing it yourself you probably will want to get to them from the inside; however, if you are having this checked at a service station, you likely would want them to open the back door and reach in from there. A fully charged battery should test out 1250 to 1285 with a hydrometer.

HEATING

As you face the rear, you will note the radiator grill. This has a damper that may be opened and closed. In cold weather here is where you get the advantage of heat from the engine.

Two ducts bring heat from the engine cooling system to this grill. In the summertime, of course, you will not wish this. In one of the cabinets you will find a couple of round pieces of foam rubber, about four inches long. Place one of these in each duct in the summer to keep the heat out.

ENGINE COMPARTMENT

Your engine is located beneath the floor in the area between the mattresses. There is a fastener at each end. When opened the hinged floor boards open up. Normally this is all you would need but if there is prolonged work on the engine you might like to pull the pins out of the hinges and the doors will come out.

The battery charger is located in the spare tire compartment and when it is turned on, you get a slow charge to the batteries which might take several hours.

ENGINE

Your engine has break-in oil to start; change after 1,000 miles. After that it is recommended that you change oil every 2,000 miles. There is a drain plug which can be reached from underneath. The filling opening is just in back of the breather. It takes 4 quarts of oil. Normally use SAE 30. In hot weather, it is better to use SAE 40. In extremely cold weather, you might wish to use SAE 20. The stick for checking the oil is in the front next to the larger stick where you check the differential and the transmission level. For engine service it is recommended that you go to your Chevrolet Dealer as their mechanics will be familiar with the Corvair engine. In case you have to add or are changing the transmission fluid, use Automatic Transmission Fluid TYPE A FEARING MARK AQ-ATF., followed by a number and the suffix letter "A". In case it is ever necessary to remove the engine it is taken out from the bottom.

Remember, in case of needing work on the engine, go to a Chevrolet Dealer. However, if you should need any body work done, it is best to go to an Airplane Service Center. They will be accustomed to working with fiber glass and aluminum.

The front wheels should be repacked about every 6,000 miles. There are four hydraulic grease fittings underneath the front on both the right and left hand sides. These should be serviced every 1,000 miles. There is a plug on the left, near the grease fittings and this fitting inside greases the steering column. (see following page)

The engine performs best on high test gasoline. When filling, ask the attendant to use slow speed at the pump, to allow the air to get out of the tank.

BATHROOM

The lavatory has a hot and cold water mixing faucet. In back of the wall to the right is the tankless instantaneous water heater. An access door is provided to get to the controls, pilot light, etc. Turn the handle up, (counter-clockwise), press in on the red button below. Hold for 30 to 45 seconds then insert the match through the upper hole. Hold the red button until the thermocouple bar heats up so that the pilot will stay on. If the pilot goes out, repeat the procedure holding the button in longer. With the pilot lit, you turn handle to "on" position (or clockwise). When the hot water is turned on in the sink or lavatory, a pressure switch activates the LP gas valve and 7 jet flames come on.

The temperature of your water is regulated by the black knob below the pilot light. The shower head is opened by depressing the lever down with the thumb. The temperature is controlled by the thermostat. In cold weather drain the heater. There is a small pet cock reached through the outside door. After draining the water system run some antifreeze through the bath drain, lavatory, and sink. Use enough so there will be some in the goosenecks as well as in the pumps in case they have not thoroughly drained.

FILLING YOUR FRESH WATER TANK

Open the vent door just back of the entrance door. Inside you will find TWO hose ends. One is labeled "Tank Filling Line". It is the one with the cap on the end of the hose. Hook this up to a water supply system to fill your fresh water tank. One loop of hose you will see comes up and over. This is the overflow line, as well as an air vent. There is also an air vent on the other end of the tank.

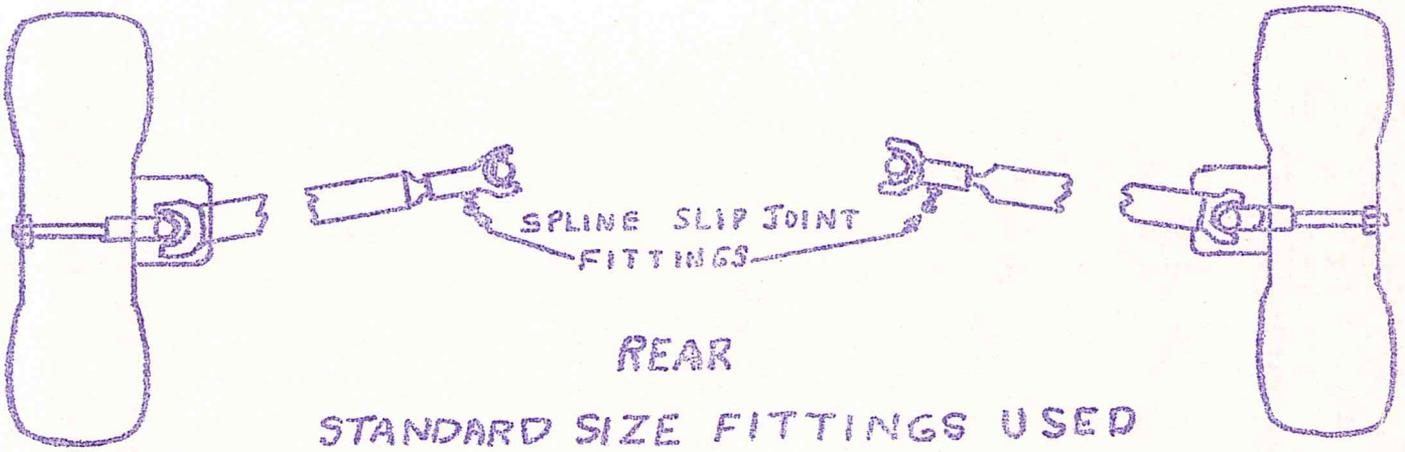
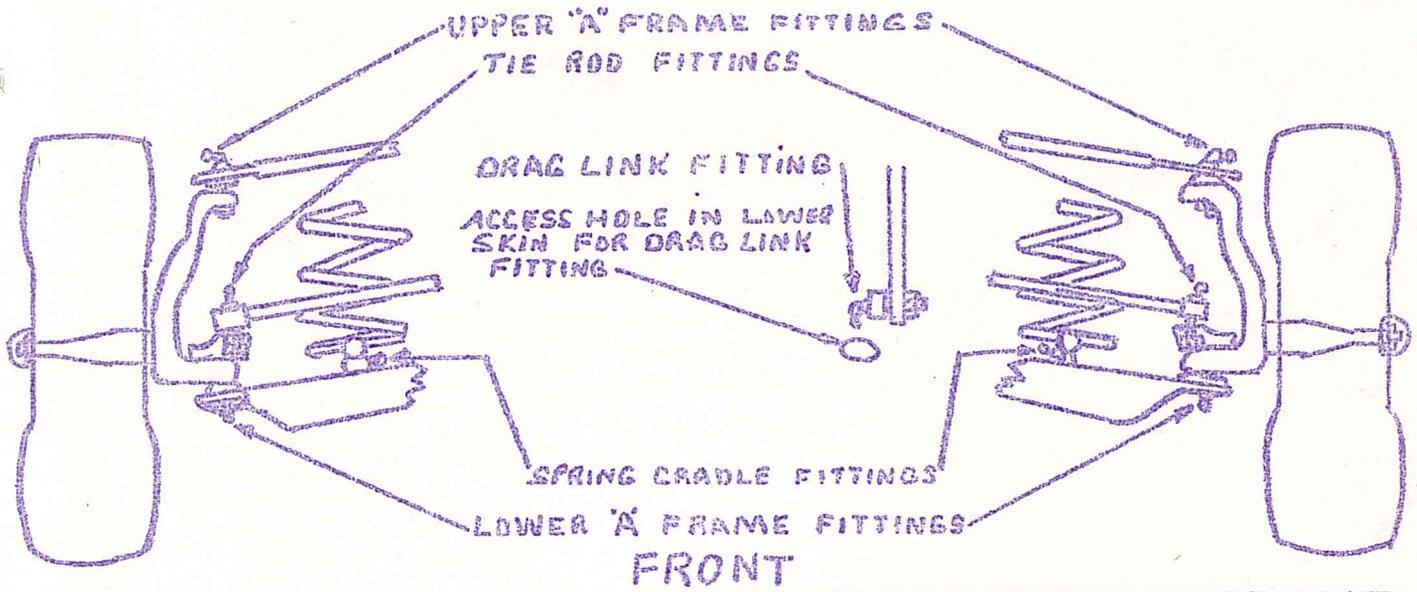
If you are in a location for some time and wish to use the regular water supply, connect the supply hose from a hydrant, to the other short piece of hose. This is labeled, and is the one not capped. This bypasses the pump. The check valve in the line stops the water from going into the holding tank. Instead, it allows it to flow directly to the sink, lavatory, shower, and hot water heater.

TO OPERATE TOILET

On the lower right hand side of the shower wall you will find three toggle switches labeled "flush," "grind," and "shower". Turn the flush switch on and this pumps the water to the toilet. In the base of the toilet is a pump with the blades that emulsify all solids WHEN THE GRIND SWITCH IS TURNED ON.

The right switch labeled "shower" turns on the pump underneath the drain and pumps this water into the #3, or water holding tank. The lavatory water likewise drains into the same tank. This is the water that is pumped up for flushing the toilet. The final flush or the emptying of the toilet bowl is made when the black lever in front is pushed down.

Note that the bathroom door, which is normally closed when driving, may be swung across to the closet wall and this makes two separate compartments.



MAGIC CHEF RANGE

Sometime you may wish to make a thorough study of the directions that come with your range. In this you will find a book of suggested recipes. In case you have not had experience in cooking at various altitudes, you will have to make some allowances if you are traveling in the mountains. Some firms give special high altitude recipes.

As everyone knows, water boils at 212 degrees. This however is at sea level. As altitude increases, there is less atmospheric pressure, and water boils at a lower temperature. A little practice and understanding of this will enable you to soon catch on if you are traveling in the high country.

Your Magic Chef is a high class unit in every way. With it you will find a book of instructions and illustrations of parts. However, here are a few simple points that will take care of your normal needs.

It is a small thing, but note the spring clasp that holds the grates down to prevent rattling. The top of the range is hinged at the back and may be lifted up from the front. Just inside of the front top of the gas line that runs to the burners, you will see a small setscrew. To completely shut the gas off, this is turned to the right.

To light a burner, press the black control knob in and turn to the left, light, then regulating the flame to desired height.

Just to the left under the range top is a shut-off valve that regulates the gas to the oven. Turn this on and you can then light the oven pilot light. This is a double thermocouple light. The small pilot light will warm up the second thermocouple. When this is warmed up the oven burner will come on. The red handle on the front of the range may be set to desired temperature and the thermostat will automatically control your oven heat. Note you have "B" position which is "broil". A drip and broiler pan are included.

The drain water from the sink drains directly into the final holding tank. Remember, to regulate the temperature of the hot water you will use the thermostat in the bathroom.

Just above the storage drawers is a toggle switch. You turn this up to supply the fresh water. When the lavatory or sink faucet is open the small red light just to the left of the driver's seat will come on. This serves as a warning signal to the driver that a pump is running. To open the drawers below the sink, lift a bit on the handles and slide out. They are notched underneath so that they will not slide out when you are moving.

REFRIGERATOR

You will find an excellent instruction booklet in your refrigerator as well as a list of service centers. You probably won't need service but if you should, there are people familiar with the LP gas-operated refrigeration units.

There are just a few basic points that you should bear in mind. You will find a level comes with the refrigerator and when you are picking a spot to park, find one that is as level as possible. Some people carry some 2 in. and 3 in. thick boards that are about 6 inches wide and 18 inches long. They are beveled on the end. By sighting you can place these in front of the wheels that need leveling. Drive up on them and check your level again. When not in use they can be stored in the right rear compartment.

Some people carry a small trenching shovel for digging out a bit under the wheels. Normally this is not necessary.

When in motion there are enough change and variation that your refrigerator will operate properly. To light the pilot, there is a door underneath the unit which may be opened. Set the thermostat on position 4. There is a button to push in and hold for 30 to 45 seconds then give a clockwise turn of the knurled knob. There is a wheel and flint in the back and the spark from this will ignite the pilot light. Holding this for 15 to 20 seconds until the thermocouple is warmed up and the pilot light will stay on. You may then set the thermostat to high or low, according to the temperature you wish. Remember, if you turn it too high, it is possible that everything will freeze in the storage compartment. The lighter uses a regular flint as in a cigarette lighter. In case you need to replace this, your booklet gives you the direction for removing the lighter.

WATER

There are five pumps in the ULTRA VAN. Their location and the various water lines are shown by the outline sketch. In other sections you have been told the location of some of these and directions for operating. This will give you a better overall picture of the complete system.

ELECTRIC SYSTEM

There is a diagram that shows the electrical system and the various wires and outlets. Seldom if ever will you have occasion to be concerned with this but this will give you a better grasp of the overall operation.

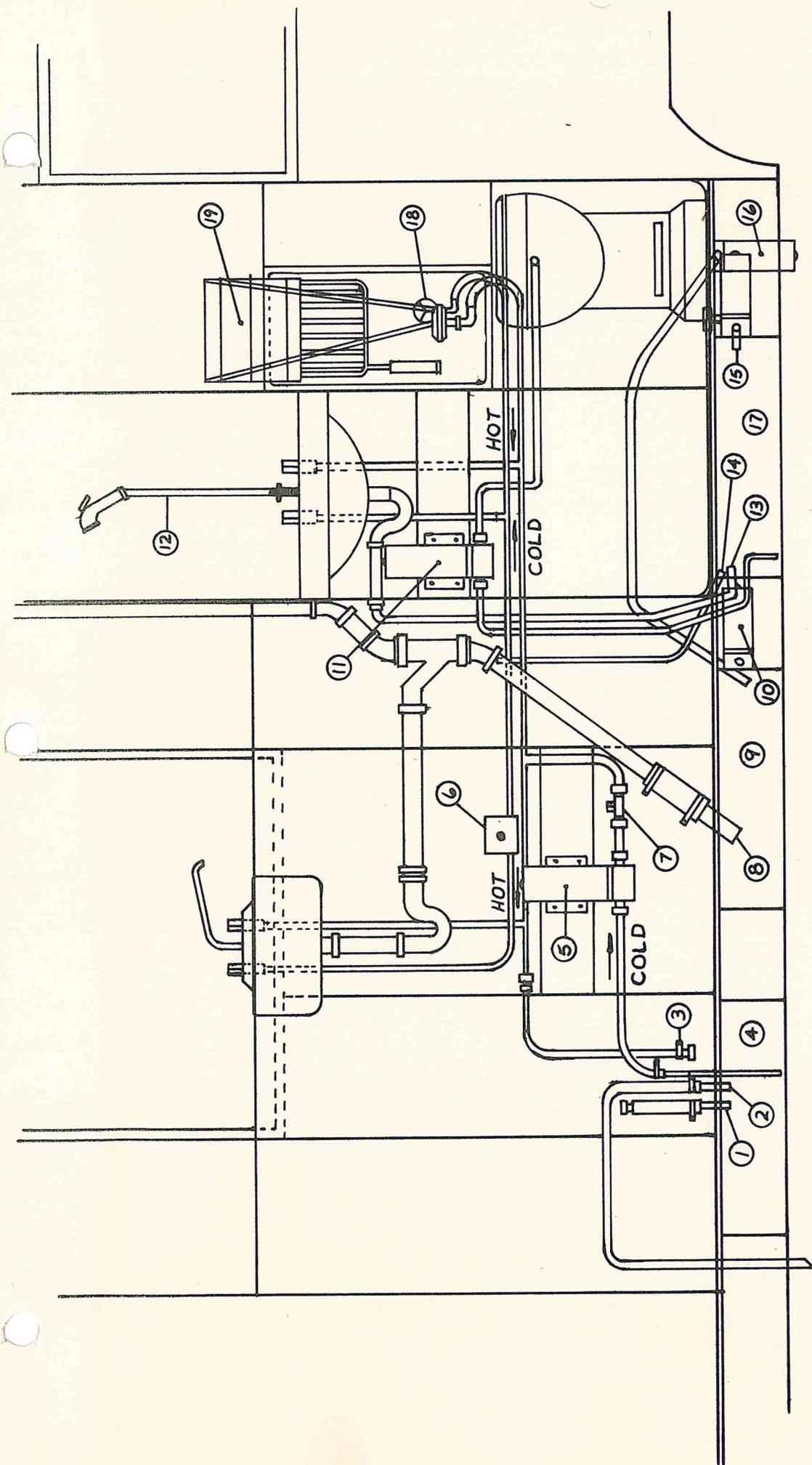
The lights work on a 12 volt system from the batteries. It is explained elsewhere that you should watch and have one battery turned off so that you do not run a battery so low that the engine will not start.

Of course, where you have 110 volt outside hookup, you can recharge your batteries from this and use your lights indefinitely. There are four double plugs for using 110 volt electricity.

You will recall previous mention of the 110 volt, 15 amp circuit breaker in the outside wall of the closet.

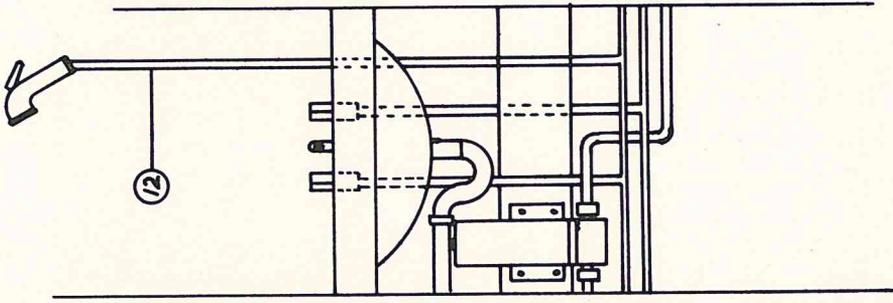
There are about seven inches between the tanks. Each tank has a drain plug. Regularly these are closed over with gap covers. These may be removed by taking out a few screws. In these areas between the tanks, you will find some of the pumps, wires, and water lines, as well as the LP gas lines. See separate diagram for gas fixture system.

The separate schematic illustrations, show these various units. As you will see you can reach all areas of the plumbing, etc., either from the inside, like under the sink, or from underneath by removing the proper gap cover.

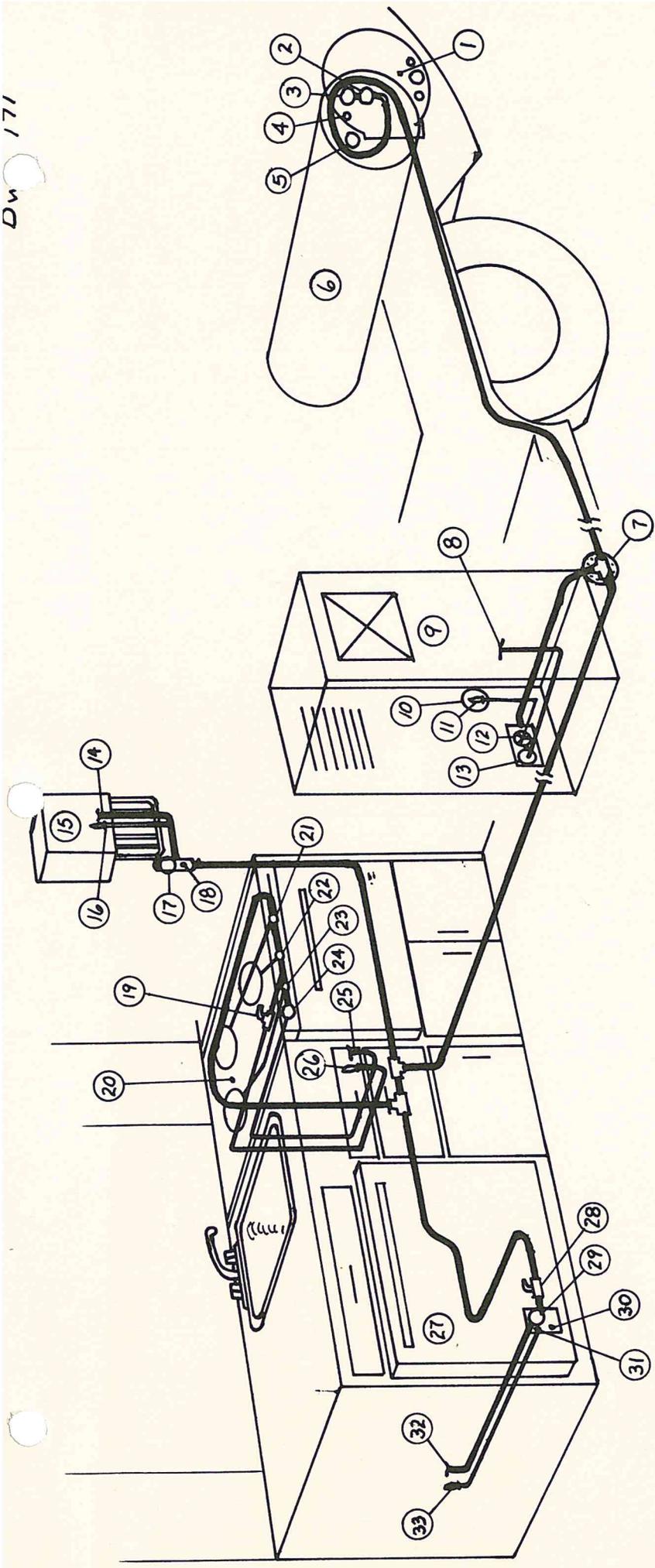


ULTRA VAN PLUMBING SYSTEM

- 1 FRESH WATER INLET
- 2 FRESH WATER TANK VENT
- 3 CITY WATER HOOK-UP
- 4 FRESH WATER TANK
- 5 FRESH WATER PUMP AND SYSTEM
- 6 WATER PRESSURE SWITCH
- 7 FRESH WATER CHECK VALVE
- 8 SINK DRAIN AND ROOF VENT
- 9 FINAL HOLDING TANK
- 10 HOLDING TANK EMPTYING PUMP
- 11 TOILET FLUSHING PUMP SYSTEM
- 12 SHOWER
- 13 LAVATORY DRAIN
- 14 FLUSH TANK VENT
- 15 SHOWER DRAIN PUMP
- 16 ULTRA TANK
- 17 FLUSH TANK
- 18 TEMPERATURE HEATER
- 19 HOT WATER HEATER

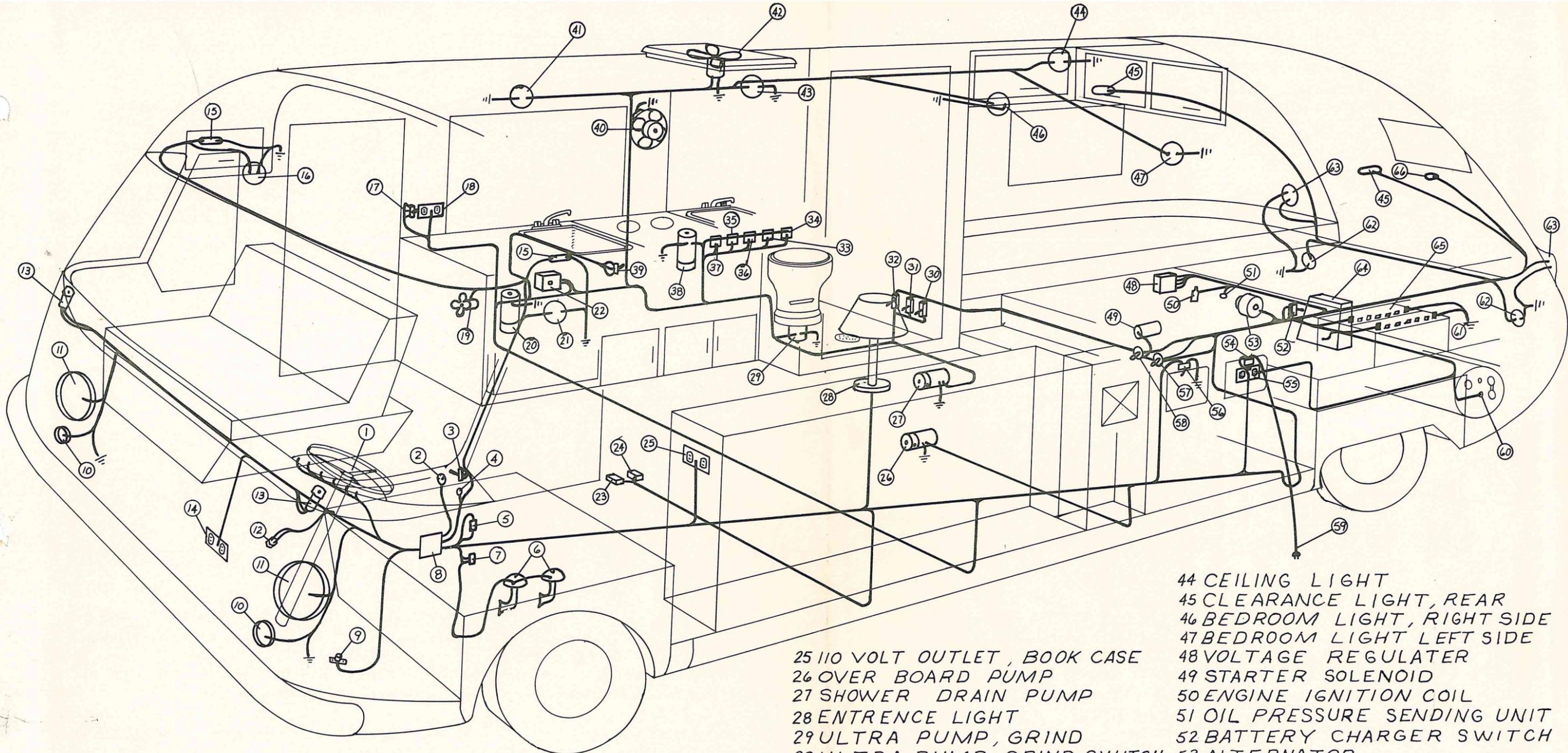


12 SHOWER



ULTRA VAN PROPANE GAS SYS.

- 1 PROPANE TANK ACCESS DOOR
- 2 PRESSURE REGULATOR
- 3 SHUT OFF VALVE
- 4 TANK BLEEDER VALVE
- 5 TANK FILLER
- 6 PROPANE TANK
- 7 ACCESS PLATE
- 8 WALL HEATER, BURNER
- 9 WALL HEATER
- 10 WALL HEATER PILOT LIGHT ACCESS
- 11 WALL HEATER PILOT LIGHT
- 12 WALL HEATER, ON, PILOT, OFF CONTROL
- 13 COACH TEMPERATURE CONTROL
- 14 WATER HEATER BURNER
- 15 WATER HEATER
- 16 WATER HEATER PILOT LIGHT
- 17 WATER HEATER, ON, PILOT, OFF, CONTROL
- 18 WATER HEATER PILOT START BUTTON
- 19 OVEN PILOT, ON/OFF VALVE
- 20 STOVE
- 21 RIGHT REAR BURNER CONTROL
- 22 FRONT CENTER BURNER CONTROL
- 23 LEFT REAR BURNER CONTROL
- 24 OVEN, ON/OFF TEMPERATURE CONTROL
- 25 OVEN BURNER
- 26 OVEN PILOT LIGHT
- 27 REFRIGERATOR
- 28 REF. PROPANE GAS SHUT OFF VALVE
- 29 REF. TEMP. CONTROL
- 30 REF. PILOT START BUTTON
- 31 REF. SPARK LIGHTER
- 32 REF. BURNER
- 33 REF. PILOT LIGHT



ULTRA VAN 12V & 110V ELECTRICAL SYSTEM

- 1 INSTRUMENT PANEL
- 2 PROPANE, FUEL, WATER LEVEL SELEC. SWITCH
- 3 ENTRENCE LIGHT SWITCH 2 WAY
- 4 FRESH WATER PUMP IND. LIGHT
- 5 IGNITION RESISTOR
- 6 HORNS
- 7 HORN RELAY
- 8 FUSE BOX
- 9 HIGH, LOW BEAM SWITCH
- 10 PARK & TURN LIGHT
- 11 HEAD LIGHT
- 12 BREAK LIGHT SWITCH

- 13 WINDSHIELD WIPER
- 14 110 VOLT OUTLET, FRONT END
- 15 CLEARANCE LIGHTS, FRONT
- 16 MAP LIGHT, RIGHT SIDE
- 17 ENTRENCE LIGHT SWITCH, 2 WAY
- 18 110 VOLT OUTLET ABOVE REF.
- 19 DEFROSTER FAN
- 20 FRESH WATER PUMP
- 21 MAP LIGHT, LEFT SIDE
- 22 PRESSURE REGULATOR SWITCH
- 23 FUEL LEVEL SENDING UNIT
- 24 FRESH WATER LEVEL SEND. UNIT

- 25 110 VOLT OUTLET, BOOK CASE
- 26 OVER BOARD PUMP
- 27 SHOWER DRAIN PUMP
- 28 ENTRENCE LIGHT
- 29 ULTRA PUMP, GRIND
- 30 ULTRA PUMP, GRIND SWITCH
- 31 SHOWER DRAIN PUMP SWITCH
- 32 FLUSH PUMP SWITCH
- 33 CIRCUIT BREAKER FOR #40 #41 #42 #43
- 34 CIRCUIT BREAKER FOR #44 #46 #47
- 35 CIRCUIT BREAKER FOR #27 #38
- 36 CIRCUIT BREAKER FOR #36
- 37 CIRCUIT BREAKER FOR #20 #26
- 38 FLUSH PUMP
- 39 AUTO, MANUEL, OFF PRESS. REG. SWITCH
- 40 GALLEY EXHAUST FAN
- 41 GALLEY LIGHT
- 42 BATHROOM EXHAUST FAN
- 43 BATHROOM LIGHT

- 44 CEILING LIGHT
- 45 CLEARANCE LIGHT, REAR
- 46 BEDROOM LIGHT, RIGHT SIDE
- 47 BEDROOM LIGHT LEFT SIDE
- 48 VOLTAGE REGULATOR
- 49 STARTER SOLENOID
- 50 ENGINE IGNITION COIL
- 51 OIL PRESSURE SENDING UNIT
- 52 BATTERY CHARGER SWITCH
- 53 ALTERNATOR
- 54 CIRCUIT BREAKER, SHORE LINE
- 55 110 VOLT OUTLET, CLOSET WALL
- 56 OVER BOARD PUMP SWITCH
- 57 NO. 2 BATTERY DISCONNECT SWITCH
- 58 NO. 1 BATTERY DISCONNECT SWITCH
- 59 50 FOOT SHORE LINE, 110VOLT
- 60 PROPANE FUEL LEVEL SENDING UNIT
- 61 NEGATIVE BATTERY GROUND
- 62 BACK-UP LIGHTS
- 63 TAIL & TURN SIGNAL LIGHTS
- 64 110V BATTERY CHARGER TO 12V BAT.
- 65 TWO 12 VOLT BATTERY
- 66 TAG LIGHT

ELECTRICAL REPLACEMENT PARTS

12 Volt Bulbs & Lamps

Instrument Panel lites	G.E. - 1895
Transmission Shift lite	G.E. - 53X
Dome & Backup lites	G.E. - 1141
Tail, Stop & Signal lites	G.E. - 1034
Rear License lite	G.E. - 67
Sealed Beam lamps	G.E. - 6012
25 watt lamp	G.E.
50 watt lamp	G.E.

Miscellaneous 12 Volt

Three Fixture Pole Lamp	2 - 25 watt household type bulbs 1 - 50 watt household type bulb
Signal-Stat #142 flasher	
Cole-Hersee 15 amp circuit breaker (automatic)	
Cole-Hersee 10 amp circuit breaker (automatic)	
Buss SFE 20 amp fuse	
Buss AGC 10 amp fuse	

110 Volt

Klixon PSM-PCA 15 & 20 amp circuit breaker (push button)

TUNE UP CHART

HORSEPOWER			110	140
OIL PRESSION*			130psi	
SPARK PLUGS	MAKE & NUMBER	STANDARD COLD	AC - 41FF	
	GAP		AC - 42FF (Competition) AC - 42FF (Competition)	
			.030"	
DISTRIBUTOR	VALVE Dwell		31-34 Degrees	
	POINT GAP		.016 (used) .019 (new)	
	AIR SPRING TENSION		19 - 23 ounces	
	CONDENSER		.18 - .23 Microfared	
	* T I N G 4 ^o	STANDARD ENGINE	SYN.	1 1/4 degrees R.T.D.C.
AUTO			1 1/4 degrees R.T.D.C.	
AUTO & A/C			2 1/4 degrees R.T.D.C.	
WITH AIR INJECTION		SYN.	1 degrees A.T.D.C.	
	AUTO.	4 degrees A.T.D.C.		
DRIVE BELT	FLOWER BELT		55 ± 5 lbs (used) 75 ± 5 lbs (new) USE STRAIGHT GAGE	
	AIR INJECTION BELT		55 ± 5 lbs (used) 75 ± 5 lbs (new) USE STRAIGHT GAGE	
	A/C COMP. BELT		95 ± 5 lbs (used) 110 ± 5 lbs (new)	
AIR CLEANER ** (4)			OIL WETTED COPPER FIBER	
VALVE LASH			HYDRAULIC - 1 TURN DOWN FROM ZERO LASH	
IDLE RPM ****	STANDARD ENGINE	SYN.	600 - 650	
		AUTO.	450 - 500	
	WITH AIR INJECTION	SYN.	700	
		AUTO.	600	
FUEL PUMP	PRESSURE		3 1/2 - 5 lbs @ idle - 1,000 RPM	
	VOLUME		1 pint in 30 - 45 seconds	
CRANKCASE VENTILATION		SERVICE PERIOD	12,000 miles	
		ORIFICE SIZE	.062"	

- * At cranking speed, throttle wide open- vacuum variation 20 lbs between-cylinders.
- ** At idle speed with vacuum advance line disconnected and plugged.
- *** Oil-wetted metal fiber elements-Check at 12,000 miles initially-Check every 6,000 miles thereafter until replaced.
- **** Automatic Transmission-As low as possible to reduce creep in "Drive" and maintain smooth idle and to prevent harsh shifts.