1979 Airstream Motorhome
Owner's Manual

WITH 1980-81 SUPPLEMENT

Introduction

Your Airstream Motorhome offers you excellence in travel luxury and mobility. It has been designed, manufactured and tested by Airstream to provide you with comfortable trouble free travel. This owner's manual is your key to carefree travel fun. Please read it carefully so you will be able to obtain the most economical, safe and efficient way of operation and travel. Consult it when you have a question regarding the proper operation and maintenance of the vehicle and its components. It has been designed to aid you in better knowing your Airstream Motorhome.

All information, illustrations and specifications contained in this literature are based on the latest product information available at the time of publication approval. The right is reserved to make changes at any time without notice. Should you trade or sell your Airstream Motorhome please leave the manual with the Motorhome.

NOTE: If and when new materials and production techniques are developed which can improve the quality of its product or material substitutions are necessary due to availability, Airstream reserves the right to make such changes.

DIESEL

For information pertaining to the diesel power motorhome and components used in conjunction with the diesel, see folder entitled ISUZU.

Body Limited Warranty Service and Maintenance

You have purchased with your Airstream Motorhome a meaningful warranty that covers many things not ordinarily covered by other manufacturers. Read your limited warranty, we have made it short and right to the point. As soon as you receive your limited warranty please attach it over the facsimile for safekeeping.

Upon delivery of your Motorhome and presentation of your identification and limited warranty card to any Airstream Certified Dealer Service center or participating Argosy Certified Dealer Service center, any defect in material or workmanship (except vehicle chassis and tires) will be repaired or replaced without cost to the owner for a period of twelve (12) months from the original purchase date, or 12,000 miles whichever occurs first. Warranties offered by component manufacturers, such as your Dometic refrigerator and Suburban furnace, will be honored by Airstream for the duration of that manufacturer's warranty. This means if you find anything wrong with your Airstream Motorhome body or its original component equipment (such as heater, stove, air conditioner, even bulbs and fuses) within the limited warranty, please contact your Airstream dealer.

The Motorhome chassis and tires are warranted by their respective manufacturers, and will be handled by their service centers according to the terms of their written policy.

Your Motorhome chassis is prechecked by the manufacturer before delivery from Airstream. All components supplied by the vehicle chassis manufacturer are warranted by that manufacturer. All service must be performed by them according to their warranty and service policies. Literature is supplied with each Motorhome chassis which gives important information concerning the care and operation instructions and its warranty coverage.

Some items, which appear to be part of the chassis, but are actually covered by the body limited warranty, include the chassis heater; defrosters; speed control; dash instrument cluster; windshield wiper blade, motor washer; LP gas bottle and gas regulator. What we are saying is this, "If it's a defect, and it's not included in the vehicle chassis or tire warranty, we have it covered for you in the body limited warranty".

The body battery is covered by the body limited warranty for twelve (12) months or 12,000 miles whichever occurs first. The balance of the battery warranty is covered by its respective manufacturer on a prorata basis.

Inasmuch as this warranty covers defective material and/or workmanship, adjustments and checking are excluded. All adjustments are made at the factory prior to shipment, and rechecked by the dealer prior to delivery to the customer. An additional check-up, including adjustments, is given at the 1,000 mile or 60 day inspection. Adjustments thereafter become a customer responsibility.

Paint and appearance items which show imperfections should be brought to the attention of your dealer at the time of delivery and during pre-delivery inspection. Normal deterioration by use and exposure is not covered by warranty.

Damage to enameled or porcelain surfaces resulting from abrasion or blows is the result of accident or abuse, and is not covered by warranty. Window glass broken and what is termed by the automotive industry as "mysterious explosions" although not covered by this warranty, is covered by the comprehensive clause of most insurance policies.

This limited warranty does not include failure caused by normal wear, accident, abuse, exposure, overload or any cause not attributable to a defect in original material or workmanship of the Motorhome or component equipment as installed by the factory.

EXCLUSIONS:

1. **Normal Wear.** Items such as water purifier packs, curtains, upholstery, floor coverings, window, door and vent seals will show wear or even wear out within the one year limited warranty period depending upon the amount of usage, weather, and atmospheric conditions.

2. **Accident.** We can all recognize damage caused by accident because it is visible, and we strongly urge our dealers and customers to inspect the Motorhome upon receipt of delivery for any damage caused by accident while being delivered to the dealer, or while it is on the dealer's lot. Damage of this nature becomes the dealer's or customer's responsibility upon acceptance of delivery, unless Airstream is notified and the damage is verified by the person making the delivery.
3. **Abuse.** Lack of customer care and/or improper maintenance will result in early failure for which Airstream cannot be held responsible.
4. **Exposure.** Deterioration by sunlight is possible to such items as tires, curtains or upholstery. Steel or metal surfaces are subject to the elements, causing rust and corrosion which is normal and beyond the control and responsibility of Airstream.

   One other type of exposure is one resulting from an accident, rain or plumbing leak. Although it is our obligation to correct a rain or plumbing leak under the terms of the warranty it is the owner's responsibility to use reasonable, prudent care to minimize foreseeable secondary damage, such as a delaminated floor, stained upholstery, carpeting, drapes, etc.
5. **Overload.** Damage due to loading, either beyond capacity or to cause improper handling because of improper balance, is beyond Airstream's responsibility. The Airstream Motorhome body is engineered to properly handle any normal load with an overload factor added. There are limits to the amount of load that can be safely transported depending upon speed and road conditions, and reasonable cause to believe these factors have been exceeded could void the Airstream limited warranty. For additional information on the loading of your Motorhome, consult your Owners Manual or gross vehicle weight rating plate.

Airstream will not be responsible for any consequential damages incurred as a result of any defect. Consequential damages include, but are not limited to, travel expenses, gasoline, oil, lodging, means, telephone tolls, loss of work and loss of use of the Motorhome.

In the event of a warranty defect, the warranty holder should take corrective action to lessen the damages which might result from such defect. Airstream will not be responsible for resulting damages which could have been avoided.

The extent of Airstream's limited warranty is set forth in the "Airstream Motorhome Body Limited Warranty" and this "Body Limited Warranty Service and Maintenance". Airstream will not be responsible for additional representations or implied warranties made by any of its dealers to the extent those representations are not a part of, or are contrary to, the terms and conditions of the Airstream Motorhome Body Limited Warranty and the Body Limited Warranty Service and Maintenance.

If you believe your Motorhome needs repairs under the terms of the Airstream Motorhome Body Limited Warranty, you should contact the Service Manager at any Airstream Certified Dealer Service center or participating Argosy Certified Dealer Service center. The Motorhome or defective part must be returned to the authorized service center at the owner's expense.

This limited warranty is transferrable to subsequent owners for the duration of the warranty period. Warranty transfer application forms are available from your dealer or any Airstream/Argosy factory.

Airstream Dealers

An up to date list of Certified Airstream Motorhome Dealers is due for publication on or about Jan. 1, 1979. If you would like a copy of this list, just contact your local Airstream Dealer after that date.

Chevrolet Zone Offices

When calling for assistance, please ask for Consumer Relations Representative.

ATLANTA
5730 Glenridge Dr., N.E.
Atlanta, Georgia 30328
(404) 256-5613

BALTIMORE
1800 Parkway Drive
Hanover, Maryland 21076
(301) 796-3640
(202) 638-0338 Washington, D.C.

BIRMINGHAM
3490 Independence Dr.
Homewood, Alabama 35209
(205) 870-5306

BOSTON
505 Blue Hill Drive
Westwood, Mass. 02090
(617) 329-1057

BUFFALO
2615 Walden Avenue
Cheektowaga, N.Y. 14225
(716) 684-8025

CHARLESTON
1205-1211 Virginia St., E.
Charleston, W. Va. 25300
(304) 344-2301

CHARLOTTE
6000 Monroe Road
Charlotte, N.C. 28212
(704) 371-5116, 5105

CHICAGO
2021 Spring Road
Oakbrook, Ill. 60521
(312) 654-6380

CINCINNATI
11575 Reading Road
Sharonville, Ohio 45241
(513) 841-5927

CLEVELAND
12990 Snow Road
Parma, Ohio 44130
(216) 265-5600

DALLAS
8635 Stemmons Freeway
Dallas, Texas 75247
(214) 688-5241

DENVER
4355 Kearney St.
Denver, Colo. 80216
(303) 320-5023

DES MOINES
818 5th Avenue
Des Moines, Iowa 50309
(515) 247-8666

DETROIT
25200 Telegraph Road
Southfield, Mi. 48034
(313) 424-2011

FARGO
1111 38th St., So.
Fargo, N.D. 58102
(701) 282-4451

FLINT
5198 Territorial Road
Grand Blanc, Mi. 48439
(313) 694-7007

HARRISBURG
Pennsboro Office Center
Taylor Bridge Bypass
Wormleysburg, Pa. 17043
(717) 255-6416

HOUSTON
4807 Wake Forrest St.
Houston, Texas 77005
(713) 521-5225

INDIANAPOLIS
6910 N. Shadeland Avenue
Indianapolis, Indiana 46206
(317) 269-5031

JACKSONVILLE
8206 Phillips Hwy.
Jacksonville, Fla. 32216
(904) 733-3682

KANSAS CITY
8900 Marshall Drive
Lenexa, Kansas 66215
(913) 281-6702

LOS ANGELES
233 Wilshire Blvd., Suite 800
Santa Monica, Ca. 90401
(213) 394-6966

LOUISVILLE
4501 Indian Trail
Louisville, Ky. 40213
(502) 968-6203

MEMPHIS
3495 Lamar Avenue
Memphis, Tenn. 38118
(901) 346-5160, 5161, 5162

MILWAUKEE
333 Bishops Way
Brookfield, Wisc. 53005
(414) 784-2578

MINNEAPOLIS
7600 Metro Blvd.
Edina, Minn. 55435
(612) 830-4044

NEWARK
385 Nordoff Place
Englewood, N.J. 07631
(201) 894-7100, 7101

NEW ORLEANS
3545 I-10 Service Road
Metairie, La. 70002
(504) 888-9013

NEW YORK
175 Central Ave., S.
Bethpage, L.I., N.Y. 11714
(516) 420-4340

OAKLAND
39465 Paseo Padre Pkwy.
Fremont, Calif. 94538
(415) 498-5060

OKLAHOMA CITY
7901 W. Britton Rd.
Oklahoma City, Okla. 73132
(405) 721-0131

OMAHA
11616 "I" Street
Omaha, Neb. 68137
(402) 399-5515

PEORIA
2009 N. Knoxville
Peoria, Ill. 61601
(309) 688-1021

PHILADELPHIA
935 First Avenue
King of Prussia, Pa. 19406
(215) 265-9380

PHOENIX
1625 W. 23rd St.
Tempe, Arizona 85282
(602) 968-2425

PITTSBURGH
507-527 Forrest Ave.
Carnegie, Pa. 15106
(412) 928-5125

PORTLAND, ORE.
15005 S.W. Tualatian
Valley Hwy.
Beaverton, Ore. 97005
(503) 641-8271

RICHMOND
5450 Lewis Road
Sandston, Va. 23150
(804) 257-7567

SALT LAKE
303 East South Temple
Salt Lake City, Utah 84111
(801) 532-2345

ST. LOUIS
83 Progress Parkway
Maryland Heights, Mo. 63043
(314) 878-3304

SAN DIEGO
5353 Mission Center Road
San Diego, Calif. 92110
(714) 299-9480

SEATTLE
Bellevue Business
Center Building
Suite 300
777 106th Ave. N.E.
Bellevue, Wa. 98004
(206) 464-5111

SYRACUSE
107 Twin Oaks Drive
Syracuse, New York 13206
(315) 432-5300

TARRYTOWN
371 S. Broadway
Tarrytown, N.Y. 10591
(914) 332-0136

GM OF CANADA ZONE OFFICES

VANCOUVER, B.C., V6A 2N6
900 Terminal Avenue
(640) 684-9444

CALGARY, ALTA, T2P 2M7
P.O. Box 2510
(403) 243-4621

REGINA, SASK. S4N 5A9
581 Park St.
(306) 543-2224

WINNIPEG MAN. R2X OY9
1345 Redwood Avenue
(204) 633-1080

LONDON, ONT. N6A 4P6
951 Pond Mills Road
P.O. Box 5412
(519) 452-5151

OTTAWA, ONT. K1G 0Z4
875 Belfast Road
(613) 237-5051

TORONTO, ONT. M3C 1J1
1200 Eglinton Ave. E.
(416) 446-5053

MONTREAL, QUE. H9R 4R2
5000 Trans-Canada Highway
Pointe Claire, Quebec
(514) 687-9160

STE. FOY (QUEBEC),
QUE. G1V 4K7
979 Avenue de Bourgogne
P.O. Box 10800
(418) 653-2054

MONCTON, N.B. E1C 8M2
653 St. George St.
(506) 854-1500

HAWAII, GUAM
AMERICAN SAMOA
General Motors Overseas Distribution Corp.
1600 Kapiolani Boulevard, Suite 714
Honolulu, Hawaii
Mail — P.O. Box 341
Honolulu, Hawaii 96809
(808) 946-3988

MEXICO
General Motors de Mexico S.A. de C.V.
Av. Ejercito Nacional No. 843
Mexico 5, D.F.
Mail — Apartado 107 Bis
Mexico 1, D.F.
5 45-70-20

PUERTO RICO,
U.S. VIRGIN ISLANDS
General Motors Overseas Distribution Corp.
Suite No. 10
Centro Comercial San Francisco
Avenida De Diego
Rio Piedras, Puerto Rico
Mail — G.P.O. Box 4382
San Juan, Puerto Rico 00936
(809) 763-1315

PANAMA CANAL ZONE
General Motors Overseas Distribution Corp.
Edificio De Diego
Esq. Calle 40 Y
Avenida Balboa
Panama, R.P.
Mail — Apartado 7872
Panama 9, Republic of Panama
25-1983

Owner Assistance

Your satisfaction and good will are important to your dealer and Chevrolet. Normally any problems that concern the sales transaction or the operation of your vehicle will be handled by your dealer's Sales or Service Departments. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your problem has not been handled to your satisfaction, we suggest you follow these steps:

Step One - Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Sales or Service Manager, contact the Dealer himself or the General Manager.

Step Two - Contact the Chevrolet Zone Office closest to you listed on the previous pages. (or in Canada, contact the General Motors Zone Office). **If your problem can't be quickly resolved by the dealership without further help, contact the Zone's Consumer Relations Department, and provide them with:**

- Your name, address, telephone number
- Vehicle Identification Number*
- Dealer's name and location
- Vehicle's delivery date and mileage
- Nature of problem

Step Three - Contact the Consumer Relations Representative, Chevrolet Central Office, General Motors Division, Detroit, Michigan 48202 (313-556-5219). (In Canada, contact the Customer Services Manager, Oshawa, Ontario; 416/644-6624). The representative will review all the facts involved. Then, if it is felt that some further action can be taken, the zone office will be so instructed. In any case, your contact will be acknowledged providing Chevrolet's position in the matter.

When contacting the Zone or Central Office, please bear in mind that your problem will likely be resolved in the dealership, using the dealer's facilities, equipment, and personnel. So it is suggested that you follow the above steps in sequence when you have a problem.

Your purchase of a Chevrolet product is greatly appreciated by both your dealer and Chevrolet. We want to help you in any way we can to make sure you are completely satisfied with your vehicle.

*Available from vehicle registration, title or plate attached to the left top of instrument panel and visible through the windshield.

Trailer Towing and Driving Tips

Since this vehicle is designed and intended to be used primarily as a load carrying vehicle, **towing a trailer** will affect handling, durability and economy. Maximum safety and satisfaction depends upon proper use of correct equipment and avoiding overloads and other abusive operation.

The maximum loaded trailer weight which you can pull with your vehicle is 2,000 lbs. Vehicle should be properly equipped for towing trailers. Information on trailer hauling capabilities and special equipment required may be obtained from your Airstream dealer.

To assist in attaining good handling of the vehicle-trailer combination, it is important that the trailer tongue load be maintained at approximately 10% of the loaded trailer weight, but not to exceed 200 lbs. Tongue loads can be adjusted by proper distribution of the load in the trailer, and can be checked by weighing separately the loaded trailer and then the tongue.
When towing trailers, tires should be inflated to the highest pressures shown on the information plate attached to the firewall of your Motorhome or on page 45 of this manual. The allowable passenger and cargo load (GVW) of this vehicle is reduced by an amount equal to the trailer tongue load on the trailer hitch. Refer to page 20 for further information on vehicle loading.

Trailer brakes are required on all axles of trailers over 1,000 lbs. loaded weight.

Do not tap into the chassis hydraulic brake system if operation of the trailer brake system requires more than 0.02 cubic inch of fluid displacement from the vehicle's master cylinder. The vehicle's master cylinder fluid capacity will not be sufficient to operate both chassis and trailer brakes under all conditions of use if more than 0.02 cubic inch of fluid displacement is required. All brake fluid parts must be able to stand 3,000 psi. The brake fluid tap must be made to the master cylinder port supplying fluid to rear brakes. Copper tubing is subject to fatigue failure and must not be used.

More frequent service is required when using your vehicle to pull a trailer. Change the:

- Automatic transmission fluid each 12,000 miles.
- Rear axle fluid each 12,000 miles.
- Engine oil each 60 days or 3,000 miles, whichever occurs first.
- P.C.V. (Positive Crankcase Ventilation) valve each 12 months or 12,000 miles, whichever occurs first.

Proper lifting or towing equipment is necessary to prevent damage to the vehicle while **towing the Motorhome.** State (provincial in Canada) and local laws applicable to vehicles in tow must also be followed. Detailed towing instructions are available at your authorized Chevrolet dealer.

Your vehicle may be towed on all four wheels, at speeds of less than 35 MPH, for distances up to 50 miles, provided the driveline, axle and transmission, and steering system are otherwise normally operable. Use only towing equipment specifically designed for this purpose, following the instructions of the equipment manufacturer. A separate safety chain system must be used. For such towing the steering must be unlocked, transmission in neutral and the parking brake released. Attachments must be made to main structural members of the vehicle. Do not attach to bumpers or associated brackets. Remember that power brake and power steering assists are not available when engine is inoperative.

If it becomes necessary to rock the vehicle to **free it from sand, mud or snow,** move the selector lever from "D" to "R" in a repeat pattern while simultaneously applying moderate pressure to the accelerator.

Caution: Do not spin wheels in excess of 35 MPH as indicated on the speedometer. Personal injury and severe damage may result from excessive wheel spinning including tire disintegration or rear axle failure.

Caution: As with any vehicle, care should be taken to avoid sudden accelerations when both drive wheels are on a slippery surface. This could cause both drive wheels to spin, and allow the vehicle to slide sideways on the crowned surface of a turn.

Engine exhaust gas caution (carbon monoxide) 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 exhaust fumes are entering the passenger compartment, have the cause determined and corrected as soon as possible. If you must drive under these conditions, drive only with ALL windows FULLY open.

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system, body and body ventilation system. It is recommended that the exhaust system and body be inspected by a competent mechanic:

- Each time the vehicle is raised for an oil change.
- Whenever a change is noticed in the sound of the exhaust system.
- Whenever the exhaust system, underbody or rear of the vehicle is damaged.

See your Vehicle Lubrication and Maintenance Schedule (page 49) for inspection procedure.

Sitting in a parked vehicle with the engine running for an extended period is not recommended.

Do not run engine in confined areas such as garages any more than needed to move vehicle in or out of area. When the vehicle is stopped in an UNCONFINED area with the engine running for any more than a short period, adjust vents to bring outside air into the vehicle as follows:

1. Open ceiling vents, turn fan on.
2. Slightly open a roadside and curbside sliding window.

Doors and rear windows should be closed while driving to avoid drawing dangerous exhaust gases into the vehicle. If for some reason they must remain open for a period while driving, the following precautions should be observed:

- Open all vents, turn on vent fans.
- Close driver's and passenger's sliding window.

Note: Particular care should be taken to prevent the possibility of carbon monoxide exposure if modification is made to the vehicle or other equipment is added to the vehicle, for recreational or other purposes. Additionally, some recreational vehicle appliances (such as gas lights, refrigerators, stoves, heaters) may generate carbon monoxide and should be used only if there is adequate ventilation.

Important Facts You Should Know About Gasoline Mileage and How to Improve It

How you drive, where you drive, and when you drive all affect how many miles/kilometres you can get from a gallon/litre of gasoline. The careful attention you give your vehicle as far as maintenance and repairs are concerned will also help fuel economy.

Fuel Selection:
Your vehicle engine is designed to operate on unleaded gasoline. It minimizes spark plug fouling and emission control system damage. Regular grade leaded gasoline should be used only when needed to eliminate knock. Knock is a metallic rapping noise that sometime happens during the combustion process. The engine does not require Premium grade fuel, so its use would be an unnecessary expense. If knocking persists, consult your dealer. Continuous or excessive knocking may result in engine damage. Failure to take steps to stop such knocking is misuse of the engine for which the manufacturing division is not responsible under terms of the new vehicle warranty. Use unleaded gasoline meeting Federal government regulations. The Federal government specifies the minimum octane

number of unleaded gasoline. Federal regulations require that pumps delivering such gasoline be labeled with the word UNLEADED.

"Jackrabbit" starts:
Gasoline can be conserved (and engine and tire life prolonged) by avoiding unnecessarily rapid acceleration away from lights and stop signs.

Stop-and-start driving:
Frequent stops and starts during a trip really cut down on your miles per gallon. Plan even your short shopping trips to take advantage of through streets to avoid traffic lights. Pace your driving like the professional drivers to avoid unnecessary stops.

Excessive idling:
An idling engine uses gasoline, too. If you're faced with more than a few minutes wait you're better off to "turn off" and start again later.

Sudden stops:
Sudden stops themselves don't waste gasoline, but energy is wasted as heat in braking. Energy in the form of gasoline is also needed to accelerate back to driving speed.

Lubricants:
A properly lubricated vehicle means less friction between moving parts. Consult this manual and the maintenance schedule for the proper lubricants to use and the lubrication intervals.

Air cleaner:
Your vehicle receives its power from a mixture of gasoline and air. The air is taken into the system through the air cleaner so it's important to replace the air cleaner at required intervals. A dirty air cleaner reduces engine efficiency.

Properly tuned engine:
Overall tuning (a check on timing, spark plugs, emission control devices, etc.) can improve your vehicle's gas mileage. You just can't expect an "out-of-tune" engine to give you good gas mileage and cleaner air.

Excess weight:
Fuel economy is related to the work the engine must do. The heavier the load, the more power it takes. Keep excess weight to a minimum by removing any personal effects or luggage from the vehicle when they are not needed.

Tire inflation:
Underinflation not only causes needless wear of tires, but can also waste gasoline. It's a good idea to check tire pressures regularly.

Wheel alignment:
"Toe in" or "toe out" has the effect of dragging your front tires sideways and causes premature tire wear. It takes power to carry this extra load and that takes gas from your tank.

Vehicle Weights

Your Airstream is designed to provide satisfactory service if it is not loaded in excess of the Gross Vehicle Weight Rating (GVWR) or the maximum Front and Rear Gross Axle Weight Ratings (GAWR). Per Federal regulations, your Motorhome has a placard on the driver's side of the instrument panel to be viewed from outside through the driver's side windshield showing a GVWR and GAWR.

The **gross vehicle weight rating** is the maximum the Motorhome can weigh when it is in operation. The **gross axle weight rating** is the maximum load that can be on each axle when the Motorhome is in operation.

The GVWR is established by the manufacturer taking into consideration the engine, transmission, frame, springs, brake, axle and tire capabilities. Overloading can create a serious potential safety hazard.

Actual front and rear end weights at the ground can only be determined by weighing the vehicle. This can be accomplished through highway weigh stations or other such commercial facilities.

Shown below is a typical vehicle in a loaded condition. Note that the front and rear GAWR's and GVWR are not exceeded.

Charts A and B, page 20 and 21 may be used as a guide only to help you estimate the GVW. The sum of the optional weights, variable weights, personal cargo and passengers must not exceed the allowable additional weight specified in Chart A, page 20.

Column A

Column A represents the Total Maximum Personal Cargo and Passenger Weight that can be added to your Motorhome. Personal cargo includes food supplies, clothing, other personal items, etc. Find the total curb weight of your Motorhome, Chart A, page 20 and enter it across from Item 1 Column A (Curb Weight = Weight without Options and Variable Weights including gasoline and coolants (i.e. 9653 lbs.).

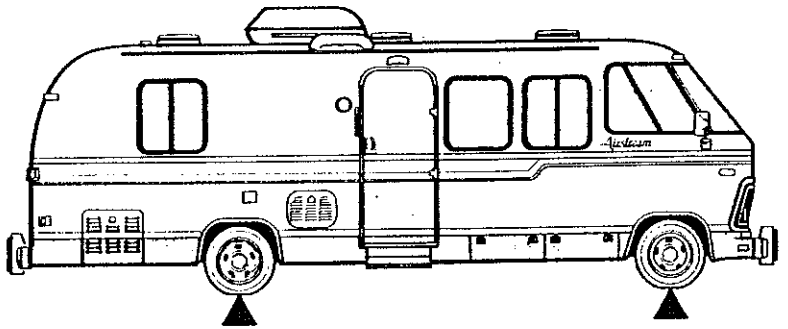
Next fill in the total weights of the Options and Variable Weight with which your Motorhome is equipped. This information is on Chart B,

MFD. BY: AIRSTREAM
DATE OF MFR. MARCH 1979
INC. VEH. MFD. BY: CHEVROLET MOTOR, DIVISION OF G.M.C.
DATE OF INC. MFG. DECEMBER, 1978
G.V.W.R. 12,500
G.A.W.R. FRONT 5,000 WITH 8.00-19.5 LRD
TIRES, 19.5 x 6.75 RIMS, AT 65
PSI COLD SINGLE
REAR 7,500 WITH 8.00-19.5 LRD
TIRES, 19.5 x 6.75 RIMS, AT 45
PSI COLD DUAL
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT IN: FEBRUARY 1979
V.I.N. # M28T9V5015
TYPE: MOTORHOME
A Member of RECREATION VEHICLE INDUSTRY ASSOCIATION

G.V.W.R/G.A.W.R. Placard

Gross Vehicle Weight Rating

Loaded—Maximum G.V.W.R.: 12,500 lbs. (28 ft. R.B. Twin)



Rear G.A.W.R.:	7500 lbs.	Front G.A.W.R.:	5000 lbs.
*Rear Curb	5701	*Front Curb	3952
Max. Allowable Rear Cargo & Pass. Load	1799	Max. Allowable Front Cargo & Pass. Load	1048
	*7500 lbs.		*5000 lbs.

Total Weight at Ground: 12,500 lbs.
Under no circumstances shall the G.V.W.R. be exceeded.

*Curb weight equals the weight of the vehicle without driver, passenger or cargo, but including gasoline and coolant.

page 21. Add all of the weights together and this total becomes Item 2, Column A (i.e. **775 lbs.**).

Next add Item 1 and Item 2. This becomes Item 3, Column A (i.e. **10,428 lbs.**). This is the sum total of your Motorhome's Curb Weight plus the Options and Variable Weights.

Next, enter in Item 4, Column A (i.e. **12,500 lbs.**), your Motorhome's Gross Vehicle Weight Rating (G.V.W.R.). This information is on the placard located on the driver's side of the instrument panel to be viewed from outside through the driver's side window which corresponds to information on Chart A, page 20. The Gross Vehicle Weight Rating is the maximum the Motorhome can weigh when it is in transit. Next, subtract Item 3, Column A from Item 4, Column A; this amount indicates the total Maximum Personal Cargo and Passenger Weight that can be added to your Motorhome (i.e. **2,072 lbs.**). Under no circumstances shall the G.V.W.R. be exceeded.

Column B

Column B represents the Maximum Personal Cargo and Passenger Weight that can be added to the front axle. Find the front axle curb weight of your Motorhome and enter it in Item 1 Column B (Front Axle Curb Weight = Weight without Options and Variable Weights (i.e. **3,952 lbs.**). This information is on Chart A page 20. Column B has + weight and - weight. Due to the location of optional items within the Motorhome, their weight will either have a + weight or - weight effect on the front axle. If the option is behind the rear axle, it will tend to have a - weight, or lifting effect on the front axle; if the option is forward of the rear axle, it will have a + weight or loading effect on the front axle. Next fill in + weights or - weights of the options and variable weights with which your Motorhome is equipped, indicated in the front axle weight columns on Chart B page 21.

Next total both the + weight (i.e. **115 lbs.**) and - weight (i.e. **-229 lbs.**) columns and find the difference between the two columns; this becomes Item 2 Column B (i.e. **-114 lbs.**). Next add Item 1 Column B and Item 2 Column B; this becomes Item 3 (i.e. **3838 lbs.**). This is the total of your Front Axle Curb Weight, plus the weight of the options and variable weights on the axle. Next enter in Item 4 Column B your Motorhome's Front Axle G.A.W.R. (i.e. **5000 lbs.**); this information is located on Chart A page 20 or on the placard located on the driver's side of the instrument panel.

Next subtract Item 3 Column B from Item 4 Column B and the amount indicates the Maximum Personal Cargo including passengers, on the front axle (i.e. **1162 lbs.**). Under no circumstances shall the front G.A.W.R. be exceeded.

Column C

Column C represents the Maximum Personal Cargo and Passenger Weight that can be added to your Motorhome's rear axle. Find the rear axle curb weight and enter it in Item 1 Column C (Rear Axle Curb = Weight without Options and variable weights (i.e. **5701 lbs.**). This information is on Chart A Page 20. Next fill in the weights of the options and variable weights with which your Motorhome is equipped from the Rear Axle Weight column on Chart B page 21. Add all of the weights together and this total becomes Item 2, Column C (i.e. **889 lbs.**).

Next add Item 1 Column C, Item 2, Column C; this becomes Item 3 Column C (i.e. **6590 lbs.**). This is the sum of the Rear Axle Curb Weight, the weight of the options and variable weights on the rear axle. Next enter in Item 4 Column C the rear G.A.W.R. (i.e. **7500 lbs.**); this information is located on Chart A page 20, or on the placard located on the driver's side of the instrument panel. Next subtract Item 3 Column C from Item 4 Column C. The remainder is the Maximum Personal Cargo including Passengers, on the rear axle (i.e. **910 lbs.**).

Under no circumstances shall the rear G.A.W.R. be exceeded.

Sample Form

Model: 28 Ft. Twin, R.B.	Column A: Total Maximum Personal Cargo and Passenger Weight (includes both axles)		Column B: Recommended Personal Cargo on Front Axle			Column C: Maximum Personal Cargo on Rear Axle	
Total Curb Weight—w/o Options and Variable Weights	Item 1	9653					
Rear Axle Curb Weight—w/o Options and Variable Weights	→					Item 1	5701
Front Axle Curb Weight—w/o Options and Variable Weights	→		Item 1		3952		
Options:			+ Weight	− Weight			
Microwave Oven							
Ceiling Vent Fan	4		2			2	
Central Control Panel	2		1			1	
Cruise Control	5		5			0	
Dash Air Conditioner (Automotive)	71		69			2	
Engine 454 cu. in							
Entertainment Group							
Heavy Duty Stabilizer							
Onan Generator 4 kw							
Range Vent Fan							
Spare Tire Wheel and Carrier	87			-59		146	
Roof Air Conditioner (Living Area)	139		12			127	
Trailer Hitch							
T.V. Antenna							
Water Purifier							
Variable Weights:							
Gas Tank gal (Standard or optional)							
L.P.G. Tank and Liquid (Standard or optional)	50		26			24	
Water Tank	417			-170		587	
Item 2 / Total	775 →	775	+115	-209	= -114	889 →	889
Item 3 / Item 1 and 2 Total		10,428	−Add Item 1 and 2		3838	+Add Item 1 and 2	6,590
Item 4 / GVWR		12,500	Front GAWR		5,000	Rear GAWR	7,500
Enter Item 3 and Subtract from Item 4		10,428	←		3,838	←	6,590
Total Maximum Personal Cargo and Passenger Weight		2,072			↓		↓
Total Maximum Personal Cargo and Passenger Weight on Front Axle		→			1162		
Total Maximum Personal Cargo and Passenger Weight on Rear Axle		→					910

Blank Form

Model:	Column A Total Maximum Personal Cargo and Passenger Weight (includes both axles)	Column B Recommended Personal Cargo on Front Axle			Column C Maximum Personal Cargo on Rear Axle
Total Curb Weight—w/o Options and Variable Weights	Item 1				
Rear Axle Curb Weight—w/o Options and Variable Weights	→				Item 1
Front Axle Curb Weight—w/o Options and Variable Weights	→	Item 1			
		+ Weight	– Weight		
Options:					
Microwave Oven					
Ceiling Vent Fan					
Central Control Panel					
Cruise Control					
Dash Air Conditioner (Automotive)					
Engine 454 cu. in.					
Entertainment Group					
Heavy Duty Stabilizer					
Onan Generator 4 kw					
Range Vent Fan					
Spare Tire Wheel and Carrier					
Roof Air Conditioner (Living Area)					
Trailer Hitch					
T.V. Antenna					
Water Purifier					
Variable Weights:					
Gas Tank gal. (Standard or optional)					
L.P.G. Tank and Liquid (Standard or optional)					
Water Tank					
Item 2	Total →		+	– =	→
Item 3	Item 1 and 2 Total		–Add Item 1 and 2		Add Item 1 and 2
Item 4	G.V.W.R		Front G.A.W.R.		Rear G.A.W.R
Enter Item 3 and Subtract from Item 4			←		
Total Maximum Personal Cargo and Passenger Weight				↓	
Total Maximum Personal Cargo and Passenger Weight on Front Axle – →					
Total Maximum Personal Cargo and Passenger Weight on Rear Axle – →					

Chart A: Weights and Ratings

Model	G.V.W.R.	Curb Weight Total	Allowable Additional Weight*	G.A.W.R. Front	G.A.W.R. Rear	Curb Weight Front	Curb Weight Rear	Allowable Weight Per Axle Front	Rear
24 ft. Rear Bath 40 gal. tank	12,500	8485	4015	5000	7500	3920	4565	1080	2935
28 ft. T&D Rear Bath 70 gal. tank	12,900	10,910	1990	5000	7900	3910	7000	1090	900
28 ft. T&D Center Bath 70 gal. tank	12,900	10,890	2010	5000	7900	4020	6870	980	1030
28 ft. T&D (diesel) 70 gal. tank	12,900	11,280	1620	5000	7900	4190	7090	810	810
28 ft. T&D Rear Bath **60 gal. tank - California Emission	12,900	10,855	2045	5000	7900	3925	6930	1075	970
28 ft. T&D Rear Bath 40 gal. tank - California Emission	12,900	10,740	2160	5000	7900	3966	6774	1034	1126

Curb Weight - Weight of unloaded Motorhome with standard equipment - includes coolant and full tank of gas.

*Allowable additional weight includes all options and accessories, passengers, L.P.G., waste, water, food, supplies, clothing, other personal cargo, etc.

**Effective when available.

Chart B: Airstream Motorhome

Optional Equipment Variable Weights	Total Weight	24 Ft. Model, 1979		28 Ft. Model, 79/80		28 Ft. Model, 1981	
		Rear Axle	Front Axle	Rear Axle	Front Axle	Rear Axle	Front Axle
Microwave Oven	66	N/A	N/A	57	9	57	9
Ceiling Vent Fan	4	3	1	2	2	2	2
Solid State Control Panel	2	1	1	1	1	1	1
Cruise Control	5	0	5	0	5	0	5
Dash Air Conditioner (Automotive)	71	2	69	2	69	2	69
Engine 454 cu. in.**	208	38	170	STD	STD	STD	STD
Entertainment Group	12	-2	14	-2	14	-2	14
Gas Tank 70 gal.** (FULL)	312	N/A	N/A	400	-88	400	-88
Heavy Duty Stabilizer	20	10	10	STD	STD	STD	STD
Engine, Isuzu Diesel	N/A	N/A	N/A	N/A	N/A	22	128
L.P.G. TANK**	80	60	20	38	42	38	42
Onan Generator—4 kw	350	485	-135	395	-45	395	-45
Range Vent Fan	3	2	1	2	1	2	1
Roof Air Conditioner, - 13,500	139	117	22	127	12	127	12
Spare Tire, Wheel and Carrier	87	139	-52	146	-59	146	-59
Trailer Hitch	12	17	-5	17	-5	17	-5
T.V. Antenna	5	1	4	1	4	1	4
Water Purifier	3	1	2	——	——	——	——
Water Tank (Full) 24, 28 Ft.	417	560	-143	587	-170	587	-170

**Replaces Standard Equipment

Safety Check List

Your Airstream Motorhome should be given a thorough safety check before a trip. Regular use of the following list will provide safe operation of your Motorhome and will help you spot any malfunctioning equipment and correct the problem as soon as possible. In addition, see page 134 for Pre-Travel Check List.

Exterior Check List—before entering vehicle:

1. Check condition of tires for proper inflation.
2. Turn off L.P.G. valve on L.P.G. tank.
3. Check that sewer connection, all external compartments, and filler openings are properly stowed or closed and/or locked.
4. Check that items stored on exterior of vehicle are securely tied down.
5. Would any items stored on exterior of vehicle present a clearance problem?

Interior Check List—before driving off:

1. It is important that the main door be completely closed and locked with the dead bolt lock during travel. If it is not locked, the constant vibration of travel may cause it to open with possible damage. Check to make sure that door light on instrument panel goes out.
2. Turn off living area water pump.
3. Check that refrigerator door is fastened.
4. Check that nothing heavy is stored in overhead or high cabinets, which could fall out and cause injury. Heavy items should be stored in low cabinets.
5. Check that counter tops, range top, credenza tops and shelves are clear of even small items that could become projectiles in an accident.
6. Do not cook while underway—hot food or liquid could scald due to a sudden stop or accident.
7. Be sure all L.P.G. controls on furnace, range/oven and gas/electric refrigerator are turned off.
8. Check that any internal stowage is securely held in place.
9. Check that lights and switches are set in positions safe for travel.
10. Adjust the driver's seat so that you can easily reach and operate all controls. Make sure seat is locked in position. Do not adjust driver's seat swivel or fore and aft mechanism while vehicle is moving. The seat could move unexpectedly causing loss of control.
11. Check that front passenger's seat is locked in position—both fore and aft adjustment and swivel mechanism.
12. Check rear view mirror adjustment, inside and outside. Adjust curtains if necessary for maximum visibility
13. Fasten lap belts.
14. Check that step light goes out and that vacuumatic step has retracted.

In the forward driver's area of the Motorhome, **safety seat belts** are provided for the use of the driver and the right front passenger. Safety belts are available for other seats. It is strongly recommended that all occupants remain seated with their safety belts firmly attached while the Motorhome is in motion. The driver should adjust his seat so that he is able to reach all controls easily with the belt on, especially able to use all the travel on the foot brake. The belt should be placed as low as possible around the hips to prevent sliding out from under them in case of accident. This places the load of the body on the strong hip bone structure instead of around the soft abdominal area. Two people should never try to use the same seat belt.

Engine Starting

To start the engine:

1. Apply the parking brake.
2. Place transmission selection in "P" or "N" ("P" preferred). A starter safety switch prevents starter operation while the transmission selector is in any drive position. (If it is necessary to re-start the engine with the vehicle moving, place the selector lever in "N".)
3. Depress accelerator pedal and activate starter as outlined below for different conditions.

Important: Do not keep the starter engaged for more than 15 seconds at a time. Wait 10 or 15 seconds before trying again.

To start a cold engine, fully depress accelerator pedal and slowly release. With foot off the pedal, crank the engine by turning the ignition key to the Start position — release when engine starts. If engine starts, but fails to run, repeat this procedure. DO NOT kick down from fast idle.

When engine is running smoothly (approximately 30 seconds) the idle speed may be reduced by slightly depressing the accelerator pedal and then slowly releasing.

Caution: Extended running of engine (5 minutes or more) without depressing accelerator pedal could cause damage to engine or exhaust system due to overheating.

To Start a warm engine

- **Warm Engine (454 V-8)**
  Depress accelerator pedal about halfway and hold while cranking. Start engine.
- **V-8 (exc. 454)**
  Do not depress the accelerator pedal. Start engine with throttle closed. If crank time exceeds three seconds, depress accelerator pedal to one-third of travel while cranking.

If Engine Fails to Start

Depress accelerator pedal and hold to floor while starting until engine is cleared of excess fuel and is running smoothly. Never "pump" the accelerator pedal.

Warm-up

Always let the engine idle for 20 to 30 seconds after starting and drive at moderate speeds for several miles, especially during cold weather.

To start the engine in extremely cold weather (below 0° F.) (-18° C.) or after vehicle has been standing idle several days, fully depress and release accelerator pedal two or three times before cranking the engine. With foot off the accelerator pedal, crank the engine by turning the key to the Start position and release when engine starts.

After the engine is started, **note the oil gauge and voltmeter readings.** Voltmeter should show charge unless engine is idling slowly. The charging rate shown on a voltmeter with a fully charged battery may be so slight that the needle may appear to remain centered on the gauge and not move away from the gauge center mark. The oil gauge should show some pressure. If it does not, stop engine and determine fault. In unusually cold weather the oil gauge needle may move all the way over to the extreme right. If so, run the engine just above idling speed until the indicator hand drops to around the center of the gauge before driving vehicle.

After the engine is started, **check the temperature gauge.** If the needle moves to the "H" hot end of the gauge, stop the engine until the cause of overheating is determined.

Note: Your vehicle is equipped with a clutch type fan. The clutch engages at approximately 85° F (29°C.), increasing fan r.p.m. for additional cooling. An increase in noise level occurs when the clutch engages which may cause the sensation that the transmission is slipping.

Engines in vehicles with automatic transmissions cannot be started by pushing or towing the vehicle.

A vehicle with a discharged battery may be started by transferring electrical power from a battery in another vehicle or the auxiliary battery. This is called **"jump starting."**

The following procedure is for use only under the following conditions. Departures from these conditions and procedures could result in: (1) serious personal injury (particularly to eyes) or property damage from such things as battery explosion, battery acid or electrical burns, or (2) damage to electronic components in either vehicle. If all the conditions cannot be met, or if you are uncertain about them, we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic. The battery in the other vehicle must be the same nominal voltage, 12 volts, and must be negatively grounded. The auxiliary battery in your Motorhome is 12 volt negatively grounded, and therefore meets the requirements.

The nominal voltage and grounding of the other vehicle's battery may be determined by checking the specifications in its owner's manual. Use of a booster battery of a higher nominal voltage, or which is positively grounded may result in serious personal injury or property damage.

The **battery** in your vehicle must be equipped with flame arrester type filler/vent caps on all filler openings, or it must be a sealed-type battery which does not have filler openings or caps.

To Jump Start:

1. Wear eye protection and remove rings, metal watch bands, and other metal jewelry.
2. Set parking brake firmly, and place automatic transmission in "**park**" in both vehicles (don't let vehicles touch). Also turn off lights, heater, and all unnecessary electrical loads.
3. Attach one end of a jumper cable to one battery's positive terminal (identified by a red color, "+" or "P" on the battery case, post, or clamp), and the other end of the same cable to the positive terminal of the other battery.
4. Attach the remaining jumper cable first to the negative terminal (black color "-" or "N") of the vehicle with the good or charged battery and then to the negative terminal of the battery to be charged.
5. Start the engine of the vehicle that is providing the jump start (if it was not running). Let run a few minutes, then start the engine in the vehicle that has the discharged battery.
6. Reverse the above sequence exactly when removing the jumper cables, taking care to remove the cable from the negative terminal of the battery to be charged as the first step.

Driver Controls

Automatic transmission driving cautions:

1. Do not accelerate engine for over 10 seconds while holding vehicle with brakes.
2. Never move selecter lever to "R" when vehicle is moving forward, except when "rocking" in mud, snow, sand, etc.
3. When stopped on an upgrade, do not hold vehicle with engine. Use service brake.
4. Do not move selector lever from "D" to "L_1," at speeds over 40 mph.
5. Engage "P" only when vehicle is completely stopped and **after** setting parking brake (see page 35).

The 1979 Motorhome has a 3 speed **Turbo-hydra-matic 400 transmission.** The selector lever is located on the right side of the steering column. The shift positions are indicated on the quadrant located on the top forward part of the steering column.

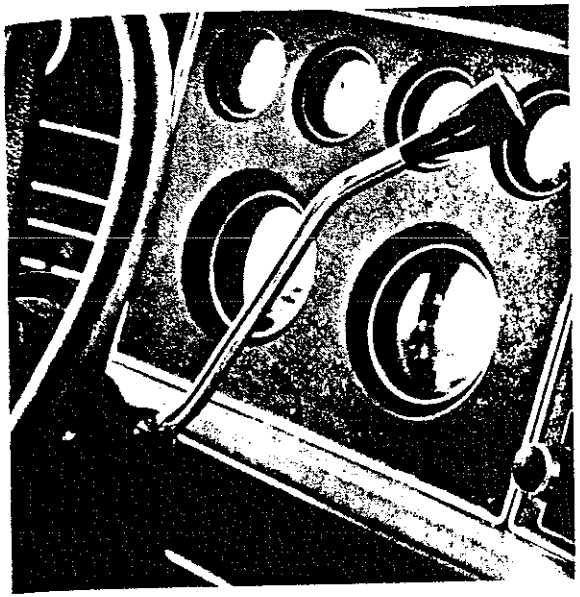
Park Position: The Park position is a mechanical lock for the transmission. Use this position when parked or starting the engine. To select this position move the lever up and all the way to the left. The Motorhome must be completely stopped before selecting this position or damage to the transmission will result.

Note: Always apply the parking brake first before selecting Park position to prevent "torque lock." If parked on a slight grade or hill the Motorhome will exert enough force on the transmission that the weight on the pawl will prevent the selector from being taken out

Turbo Hydra-Matic Shift Positions

P-Park	Use only when vehicle is stopped.	Vehicle Parked
*Lift		
R-Reverse	For backing vehicle from stop.	
*Lift		
N-Neutral	For standing (brakes applied).	
D-Drive	For forward driving. Downshift for acceleration below 65 mph by depressing accelerator pedal to the floor; below 30 mph by depressing halfway to floor.	Normal Driving Range
*Lift		
L_2—LOW_2	For driving in heavy traffic or on hilly terrain.	Higher Performance Range
L_1—LOW_1	For descending steep grades or hard pulling at low speeds — The unit will not downshift into L_1 unless vehicle speed is 40 mph or below.	Sand, Snow or Mud and on Steep Grades

*Lifting clears stops that prevent unintentional shifts to Reverse, Park or Low.



Shift Position Quadrant

of the "Park" position. Before driving off, always select "Drive" position **before** releasing emergency brake. If "torque lock" does occur, another vehicle must be used to push the Motorhome uphill to take the load off the transmission while the driver moves the shift lever out of the Park position.

"Reverse" -R- Always bring the Motor home to a complete stop before selecting Reverse.

"Neutral" -N- The transmission will be out of gear when this position is selected; the engine can be started, if stalled, while the Motorhome is still moving. Do not coast in neutral.

"Drive" -D- In this range the transmission is completely automatic and will provide the correct gear for all city and highway driving.

Low$_2$-L$_2$- This gear will provide for faster acceleration in traffic, or help in climbing hills. Use also for engine braking while going down steep hills to conserve the brakes. Do not select Low$_2$ at speeds above 75 mph.

Low$_1$-L$_1$- Use L$_1$ for hard pulling through mud, sand, or when going down very steep hills. This transmission will not upshift automatically from Low$_1$ when selector is in L$_1$ position. It will not downshift to L$_1$, if selected, until speed is below 40 mph.

Note: If driving in snow, and vehicle becomes stuck, rock vehicle back and forth by moving selector from R to D, but do not let wheels spin faster than an indicated 35 mph or serious damage may result to drive train or tires. Use a higher gear (D or L$_2$), when in snow to gain more traction.

Forced down shift for passing: When you want to pass and speed is between 35 and 65 mph, by depressing the accelerator pedal all the way down to the floor, the transmission will downshift to L$_2$. If speed is under 35 mph, you can downshift from Drive by depressing the accelerator part way down.

Caution: Before descending a steep or long grade, down a mountain or hillside, reduce speed and shift into a lower gear. Under such conditions, use the brakes sparingly to prevent them from overheating which reduces brake effectiveness.

Caution: Use caution when shifting into lower range on slippery surfaces with vehicle moving — the abrupt engine braking action could cause the rear wheels to skid.

If the **power steering** fails due to some malfunction, or because the engine has stalled, the vehicle can still be steered. However, much greater effort is required, particularly in sharp turns.

The **tilt steering wheel** can be tilted up above normal position to provide additional room for entrance and exit as well as selected driving positions below normal height. This permits individual selection of the most natural position for all driving conditions. On long trips the steering wheel position can be changed to minimize fatigue.

The tilt mechanism is operated by lifting up on the small control lever on the left side of the steering column just below the directional signal, moving the steering wheel to the selected position, and releasing the lever.

Actuate the **horn** by depressing the horn pad located in the center of the steering wheel.

The **turn signal lever** is located on the left side of the steering column. The lever is moved upward to signal a right turn and downward to signal a left turn. Lamps on the front and rear of the vehicle transmit this signal to other motorists and pedestrians. The ignition switch must be in the "ON" position in order for the turn signals to be operational. This feature prevents battery drain if the lever is left in an "ON" position when your vehicle is not in use.

In a normal turning situation such as turning a corner, the turn signal is cancelled automatically after the turn is completed. However, in some driving maneuvers such as **changing**

lanes on an expressway, the steering wheel is not turned back sufficiently after completing the turn to automatically cancel the turn signal. For convenience in such maneuvers the driver can flash the turn signals by moving the turn signal lever part way (to the first stop) and holding it there. The lever returns to the neutral or cancelled position when the driver releases hold of the lever.

A green light on the instrument cluster flashes to indicate proper operation of the front and rear turn signal lamps. If the indicator lamp remains on and does not flash, or flashes rapidly, check for a defective signal lamp bulb. If the indicator fails to light when the lever is moved, check the fuse and indicator bulb.

Use the **hazard warning flasher** to warn other drivers any time your vehicle becomes a traffic hazard, day or night. Avoid stopping on the roadway if possible. Turn on the hazard warning flasher by pushing in on the button located on the column just below the steering wheel. Flasher can be actuated with engine ignition either off or on. Turn signals do not work with the hazard flashers operating. If the brake pedal is depressed, the lights will not flash but glow continuously instead. To cancel the flasher, pull the button outward.

The optional **speed control** is an automatic control system which enables your Motor home to maintain a desired speed while traveling on the highway.

To activate, slide switch from "OFF" to "ON" (located on turn-signal lever).

To engage, maintain desired speed and depress "SET SPEED" button (located in the end of the engagement switch); then release button slowly. You may also engage your speed control by moving slide switch from "OFF" to "RESUME" and releasing. You may remove your foot from the accelerator pedal as speed will be automatically maintained.

The slide switch operates in two modes as follows:

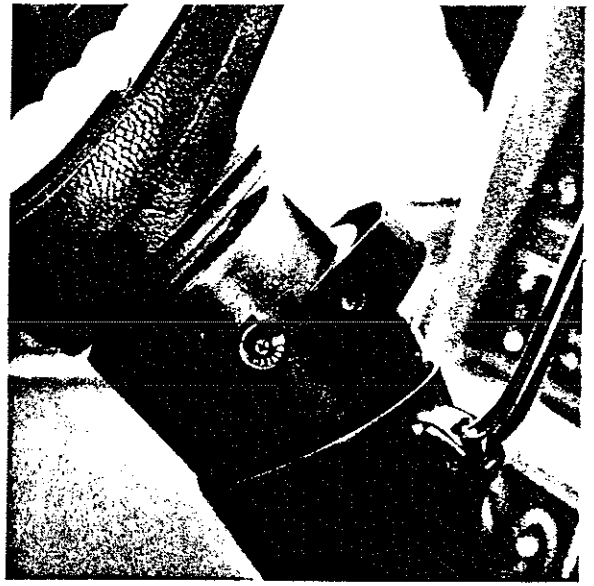
1. **Retard speed** — Slide switch to "OFF" position, vehicle speed will decrease.
2. **Resume speed** — When system is engaged and the brakes have been applied, former set speed can be resumed by sliding the switch to "RESUME" momentarily and releasing.

   Speed can be increased at any time with normal pressure on the accelerator pedal.

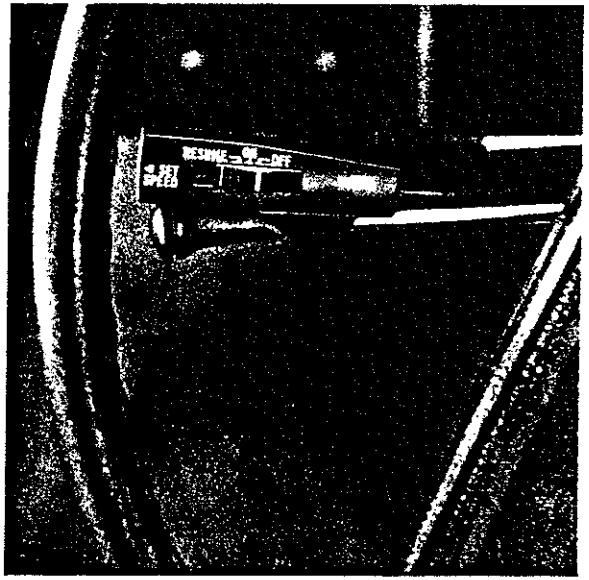
   Your speed control is disengaged by lightly depressing brake pedal, by sliding the switch to "OFF" position, or by turning the ignition off.
   Caution: The use of the speed control is not recommended on icy or wet roads or in congested traffic.

   Considering the fact that the speed control is controlled by vacuum, there will be times when the unit may appear to malfunction.

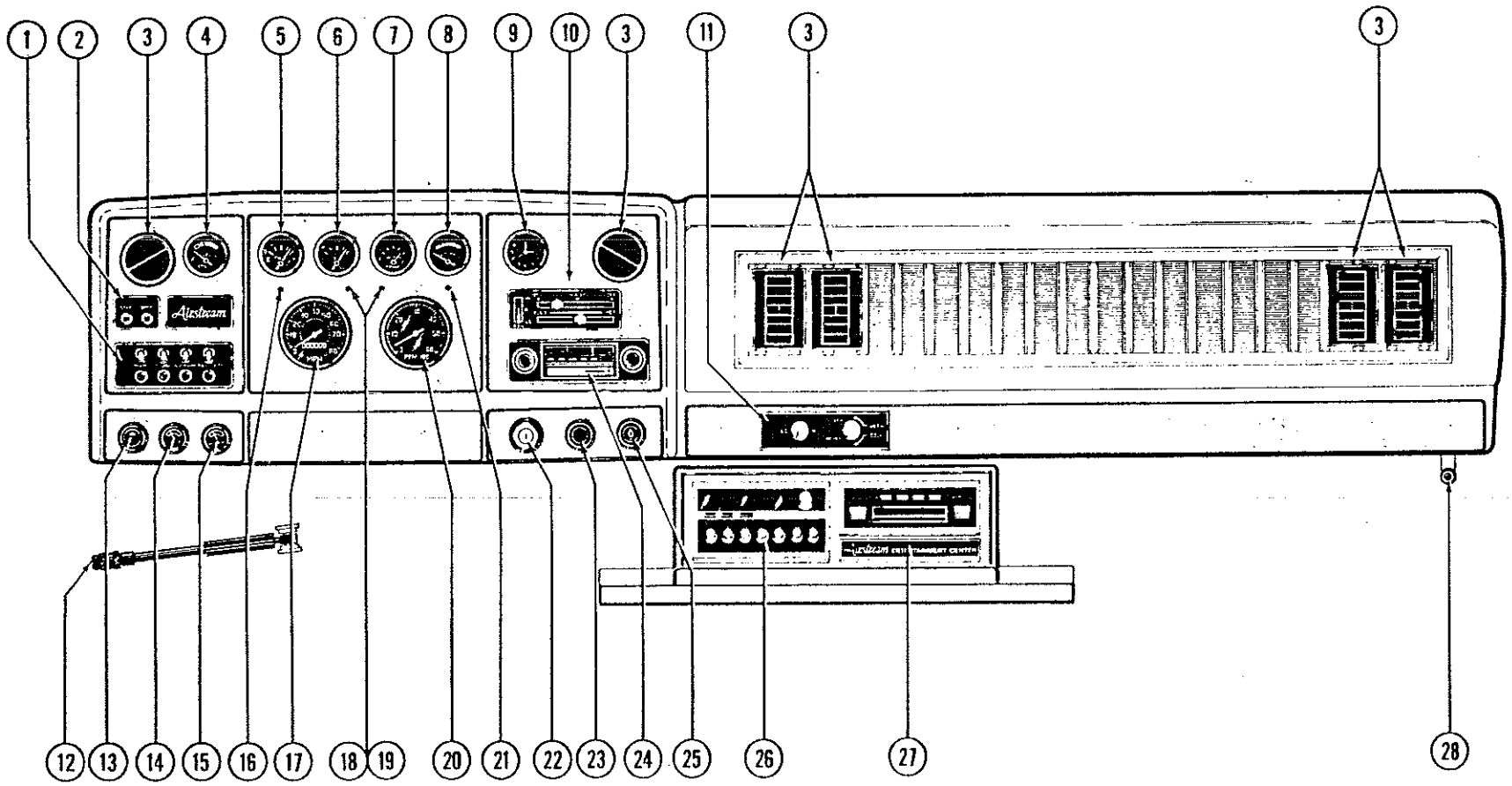
   This situation could occur when the vehicle is subjected to extremely heavy loads, severe upgrades or driving into an excessive headwind; any one of which would create a low vacuum situation, thus causing the vehicle to drop off speed.



Hazard Warning Flasher



Speed Control



Instrument Panel

No.	Description	Page No.
1.	Light Panel	—
2.	Step/Door Warning Lights	76
3.	A.C. Outlets	32
4.	Fuel Economy Gauge	—
5.	Fuel Gauge	30
6.	Oil Pressure Gauge	30
7.	Temperature Gauge	31
8.	Voltmeter	31
9.	Clock	—
10.	Heater-Defroster Controls	—
11.	Air Conditioner Controls	32
12.	Parking Brake Release Lever	35
13.	Headlamp Switch	31
14.	Windshield Wiper/Washer L.H.	31
15.	Windshield Wiper/Washer R.H.	31
16.	Left Turn Indicator	27-28
17.	Speedometer	30
18.	Brake Warning Light	31
19.	Headlamp High Beam Light	36
20.	Tachometer	—
21.	Right Turn Indicator	27-28
22.	Ignition Switch	30
23.	Speaker Fader Control (Front to rear)	33
24.	AM-FM Stereo Radio w/Tape Player	33
25.	Cigar Lighter	—
26.	AM-FM Stereo Radio	34
27.	Tape Player	34
28.	Heat Pull	—

The solution to overcome this apparent malfunction is to temporarily use the accelerator pedal to assist during the period of low vacuum or an excessive reduction in speed. Under normal driving conditions you can expect the speed control to maintain the set speed plus or minus two miles per hour.

The **ignition switch** is located on the dash panel at the right side of the steering column. The switch has four positions:

Accessory — Permits operation of electrical accessories when engine is not running. To engage, push key in and turn counter-clockwise. It also permits charging of engine battery when 120 v. power cord is plugged into 120 v. source.
Off — Turns off engine and accessories.
Run (On) — For normal operation after engine has been started.
Start — Used only when starting engine. When released, switch returns on "ON."

The code number of each **key** is stamped on the "knock out" plug in the key head. Remove these plugs for your protection and:

Record the number on the key envelope and discard the key plugs. Keep the key envelope in a safe place such as your wallet, not in the vehicle.

In the event the original keys are lost, duplicates can be made by a Chevrolet dealer or a locksmith using the key code information.

Reminder: For greater security while your Motorhome is in use always lock the doors to keep children safely inside, to help prevent injuries in the event of an accident and to keep out unwelcome persons while momentarily stopped.

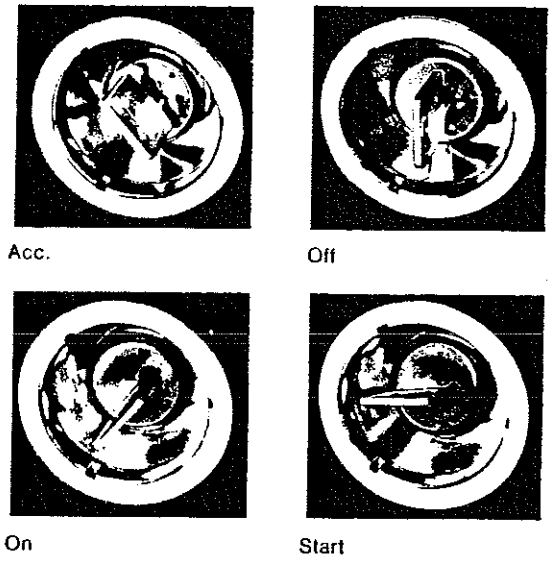
Be sure that all keys other than ignition key are retained by you whenever it is necessary to leave the ignition key with an attendant.

The **speedometer** hand indicates vehicle speed in miles per hour.

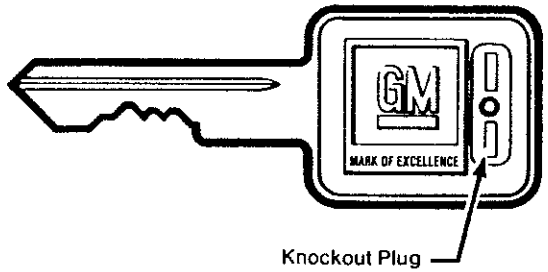
The **odometer**, the group of six figures in the speedometer lower center section indicates the accumulated mileage.

The **fuel gauge** is wired through the ignition switch and indicates the level of fuel in the tank when the ignition switch is turned on. This gauge uses a "balanced needle" for greater accuracy. The gauge needle will not necessarily return to the empty position with the ignition switch off. The needle may stop in the center of the gauge or go off at either end when the ignition switch is turned off.

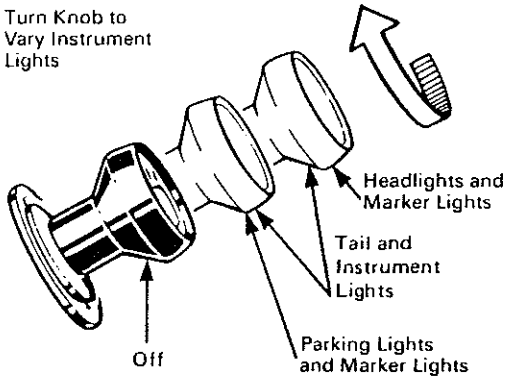
The **oil pressure gauge** indicates the pressure at which oil is being delivered to the various parts of the engine requiring lubrication. Pressures registered by the gauge may vary according to outside air temperatures or weight of oil being used. In unusually cold weather the oil gauge needle may move all the way over to the extreme right. If so, run the engine just above idling speed until the indicator hand drops to around the center of the gauge before driving vehicle. Readings in the mid range may be considered normal during moderate road speeds with the engine at proper operating temperatures. Gauge readings which are consistently high or low under these conditions may indicate lubrication system and/or engine malfunction.



Ignition Switch Positions



Key



Light Switch

The water temperature gauge indicates coolant temperatures which will vary with air temperature and operating conditions. The ignition switch must be on for accurate readings. Hard driving or prolonged idling in very hot weather will cause the pointer to move beyond the center of the band. Should pointer move to the "H" end of the band, stop engine or reduce speed to permit engine to cool. If the gauge indicates hot during extreme driving conditions, such as an extended idle, turn off the air conditioner (if used) and run the engine slightly faster than idle speed with the transmission in neutral gear. If the temperature does not reduce within a short period of time (1-2 minutes), then turn the engine off until the cause of the overheating is corrected. Glance at the instrument cluster frequently as you drive to note temperature indication.

The voltmeter indicates the state of the charging system. The alternator is equipped with a regulator which controls the voltage at which the alternator delivers 11 volts to 15 volts depending on ambient temperature and vehicle electrical requirement — larger electrical demand at night (headlights) and in the summer months (air conditioning). When the voltmeter is operating in this range, it indicates proper alternator operation and consequently will maintain the battery at the proper level of charge.

The service brake system is designed so that part of the brake system will provide some braking action in the event of a hydraulic leak in the other part of the system. If the **brake system warning light** located in the instrument panel area, glows continuously when the ignition is on and after the brakes have been firmly applied it may indicate that there is a malfunction in one part of brake system.

The light should glow during engine starting to verify that the bulb is operating properly. Have system repaired if light does not come on during check. This warning light is not a substitute for the visual check of brake fluid level required as part of normal maintenance.

If the light glows red and **your emergency brake is released,** the service brake system is partially inoperative. If this occurs, pull off the road and stop carefully. Remember that stopping distances may be greater, greater pedal effort may be required, and pedal travel may be greater.

Try out braking operation by starting and stopping on road shoulder. Then, if you judge such operation to be safe, proceed cautiously at a safe speed to nearest dealer for repair or have vehicle towed to dealer for repair. Continued operation of the vehicle in this condition is dangerous.

The three position **light switch** controls the instrument lamps, headlamps, marker lamps, parking lamps, tail lamps and interior lamp. Instrument light intensity can be varied by turning knob clockwise or counterclockwise.

The headlight circuits are protected by a circuit breaker in the light switch. An overload on the breaker will cause the lights to "flicker" on and off, or in some cases to remain off. If this condition develops, have your headlight electrical circuit checked immediately.

The **windshield wiper and washer controls** are located to the left of the steering column on the instrument panel.

Each wiper blade is controlled by a separate switch. Both controls are two speed.

To activate windshield washer, press knob marked "wiper-washer."

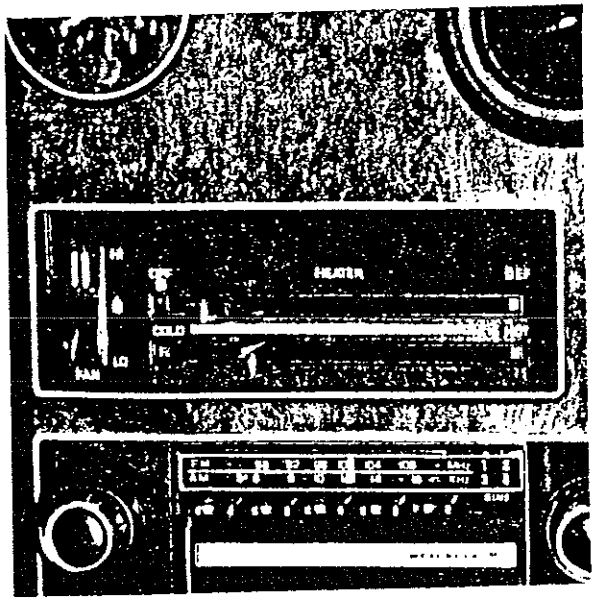
Check **washer fluid** level regularly — do it frequently when the weather is bad. Use a recommended fluid to prevent freezing damage and to provide better cleaning. Do not use radiator anti-freeze in windshield washer; it could cause paint damage.

Do not use washer solution in radiator coolant recovery tank; it could result in radiator boilover and paint damage. In cold weather, warm the windshield with defrosters before using water to help prevent icing that may seriously obscure vision. Fill the washer jar ¾ full during the winter to allow for expansion in case the temperature should fall low enough to freeze the solution.

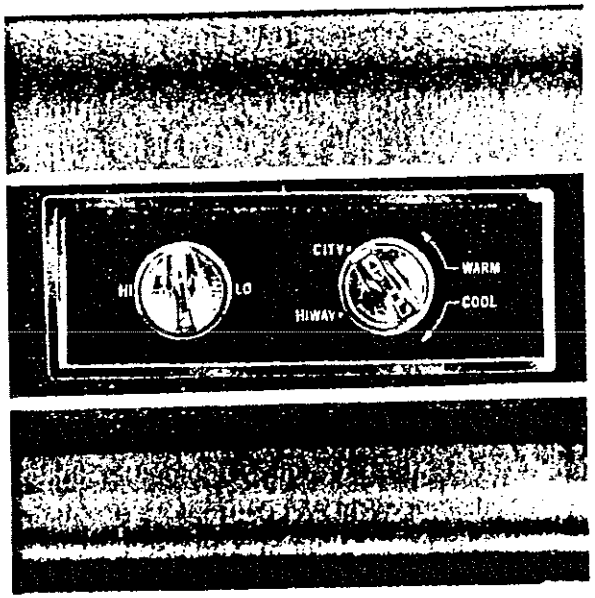
Your Motorhome is equipped with **automotive type air conditioning and heating units.** the controls are located to the right of the steering column.

To operate the heater.
When the **upper lever** is in the OFF position, air is directed up under the instrument panel. Moving the lever to HEATER position allows full air flow at the heater outlets. Move the lever full right to DEF position when windshield defrost is needed.

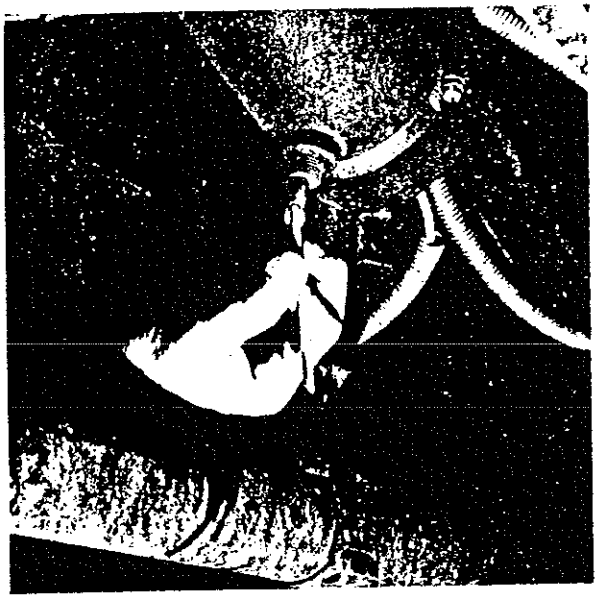
Push the lower lever as required to give the desired degree of heat. Full right position provides maximum heat.



Heating Unit



Air Conditioning



Draining Air Cushion System

The fan lever has two (2) positions. The bottom position marked "LO" is actually OFF. The center position is low speed and Hi is at the top.

To operate the air conditioner.
Close all windows and vents when operating air conditioner except for the first few minutes of operation when the Motorhome interior is very hot. Close all windows as soon as the excessively heated air has escaped.

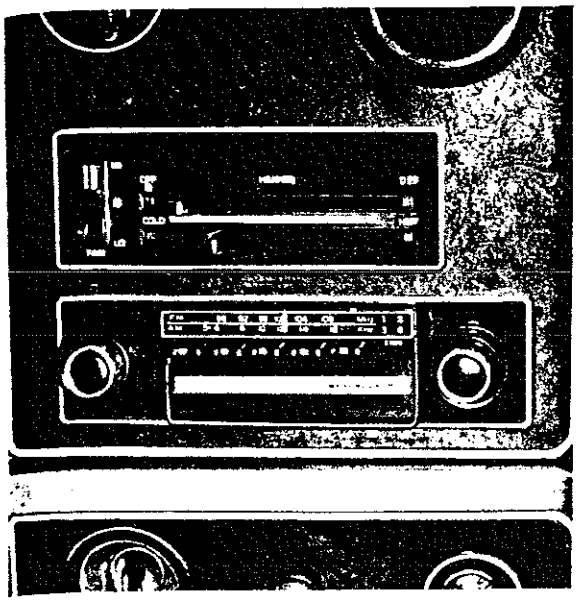
During some A/C operations, slight increases and decreases of engine speed/power may be noticed. This characteristic should be considered normal as the system, when switched to HIWAY will cycle the compressor intermittently "on and off" to maintain desired cooling. The reduced compressor operation should benefit fuel economy. This position is recommended for normal air conditioning situations. Switch the dial to CITY when in heavy "stop and go" traffic. The air compressor and fan will operate continually to maintain maximum cooling.

The **CITY/HIWAY switch** provides a selection of air conditioning combinations to handle various cooling requirements throughout the year.

Turning the **temperature selector** controls the graduation of air temperatures from cool to warm.

All 28' Airstream motorhomes are equipped with an air cushion type rear suspension system. Heavy duty air cushions, one adjacent to each dual rear wheel, support most of the weight over the rear axle. These cushions are kept constantly inflated to the correct air pressure by means of an air compressor located inside the rear roadside storage compartment on center bath models, and inside the roadside storage compartment on rear bath models. Leveling valves at each air cushion location automatically compensate for variations in load, increasing or decreasing pressure as necessary in order to keep your motorhome in proper trim.

The air cushion systems contain an accumulator tank that should be drained every few days while traveling to prevent moisture build up. To drain, the valve stem is depressed until moisture is no longer present. Air pressure may also be added into the air cushion system through this valve, should the built in compressor fail. The tank on the 1979 and 1980 model is located under the floor to the rear of the curbside wheel on center bath models and behind the roadside wheel on the rear bath models. The 1981 model has the tank mounted vertically under the floor directly behind the differential. Air lost during draining will be replenished automatically.



Stereo AM-FM Radio/Tape Player

Stereo AM-FM Radio with separate Tape Player

Your Motorhome will be equipped with either a dash mounted combination Stereo AM-FM Radio with a Stereo Tape Player or a console mounted AM-FM Stereo Radio with separate Stereo Tape Player as options.

Dash Mounted Motorola AM-FM Stereo Radio with 8 Track Stereo Tape Player.

The combination Motorola AM-FM Stereo Radio with 8 Track Stereo Tape Player is dash mounted. It has a "fader" control which allows the front speakers to be turned on by themselves, or the rear speakers by themselves, or any combination of front and rear speakers.

To operate the radio

1. Switch power on by pressing Power Button to "in" position. Switch power off by pressing Power Button again, releasing it to "out" position.
2. Turn Select control to desired mode of operation (AM, FM, FM Stereo, FMLC, or Tape) **Note:** FMLC position is useful only in strong FM signal areas, especially where many FM stations may tend to interfere with each other. FMLC position minimizes this type of interference. For best FM reception under normal conditions, the "FM Stereo" position should be used. The "FM" position is useful in fringe areas to lock receiver into monaural mode, thus eliminating stereo threshold noise.
3. Turn Turning Control to select desired station.

To operate stereo

The indicator light will go on automatically when selected FM station is broadcasting in stereo. The light is not on when monaural broadcasts are being received, or when a stereo signal drops below a predetermined level. The radio is designed to reproduce weak stereo signals monaurally to provide more noise free reception. When the signal increases beyond the threshold level, the stereo indicator will light again.

To operate the tape deck

Insert tape cartridge into slot (behind hinged panel) to a fully seated position to switch tape deck on. Receiver Select Switch must be in Tape Position to operate tape deck. Retracting tape cartridge approximately one inch from seated position or removing tape cartridge completely switches tape deck off.

The Program Indicator Lights indicate which tape program is playing.

When Repeat Button is in "in" position, the tape deck will continue playing the same program until another program is selected or button is released to "out" position.

Press and release Program Button to position tape deck pick-up head to the next program on the tape. **Note:** If Program Selector Feature is not used, the four programs will play in sequence except when "Repeat" Button is in "Repeat" Position. The tape deck will play continuously in this manner until tape cartridge is pulled out from its seated position.

Store tapes in a cool area with open end down. Protect tapes from dust and direct sunlight.

In time, oxide from recording tape will accumulate on the tape head and capstan shaft which can cause tape hiss and erratic operation. The more often the tape player is used, the more often it should be cleaned.

Clean the head with a cotton swab moistened with isopropyl alcohol. **Do not use carbon tetrachloride.**

To clean the capstan shaft, first turn on the motor by depressing the motor switch (next to the capstan shaft) with the eraser end of a pencil. Use a cotton swab moistened with alcohol on the shaft.

The fuse for the radio, or radio/tape is located in an in-line fuse holder behind the unit. Gain access behind the instrument panel.

Console mounted Motorola AM-FM Stereo Radio

To operate the radio

1. Switch power on by pressing Power Button to "in" position. Switch power off by pressing Power Button again, releasing it to "out" position.
2. Turn Select Control to desired mode of operation (AM, FM, FM Stereo, FMLC, or Tape) **Note:** FMLC position is useful only in strong FM signal areas, especially where many FM stations may tend to interfere with each other. FMLC position minimizes this type of interference. For best FM reception under normal conditions the "FM Stereo" position should be used. The "FM" position is useful in fringe areas to lock receiver into monaural mode, thus eliminating stereo threshold noise.
3. Turning Tuning Control to select desired station.
4. Turn Volume Control to right to increase volume and to left to decrease volume.
5. Turn Balance Control either right or left as required for desired left and right sound level.
6. Turn Fader (front to rear) Control either right or left as required for desired front and rear sound level.
7. Turn Bass Control either right or left as required for desired bass response.
8. Turn Treble Control either right or left as required for desired treble response.
9. Press Noise Filter Button to "in" position to reduce annoying noise during reception.

To operate stereo

The Indicator Light will go on automatically when selected FM station is broadcasting in stereo. The light is not on when monaural broadcasts are being received, or when a stereo signal drops below a predetermined level. The radio is designed to reproduce weak stereo signals monaurally to provide more noise free reception. When the signal increases beyond the threshold level, the stereo indicator will light again.

To operate console mounted tape player

Insert tape cartridge into slot (behind hinged panel) to a seated position to switch tape deck on. Receiver Select Switch must be in Tape position to operate tape deck. Retracting tape cartridge approximately one inch from seated position or removing tape cartridge completely switches tape deck off.

The Program Indicator Lights indicate which tape program is playing.

When Repeat Button is in "in" position, tape deck will continue playing the same program until another program is selected or button is released to "out" position.

Press and release Program Button to position tape deck pick-up head to the next program on the tape. **Note:** If Program Selector Feature is not used, the four programs will play in sequence except when "Repeat" Button is in "Repeat" Position. The tape deck will play continuously in this manner until tape cartridge is pulled out from its seated position.

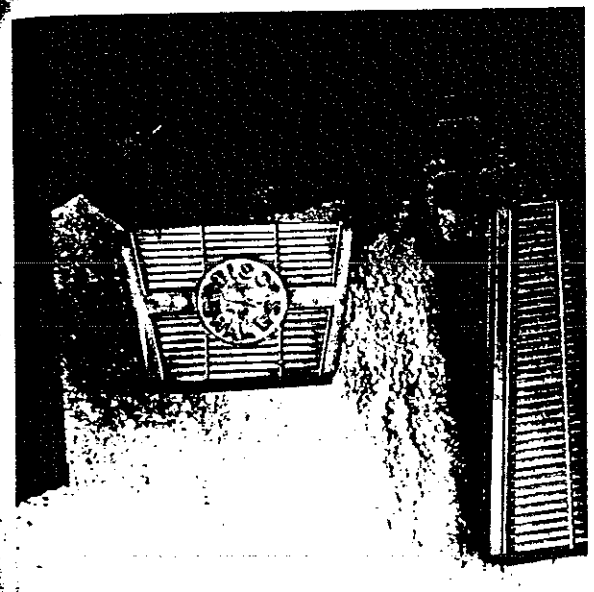
Store tapes in a cool area with open end down. Protect tapes from dust and direct sunlight.

In time, oxide from recording tape will accumulate on the tape head and capstan shaft which can cause tape hiss and erratic operation. The more often the tape player is used, the more often it should be cleaned.

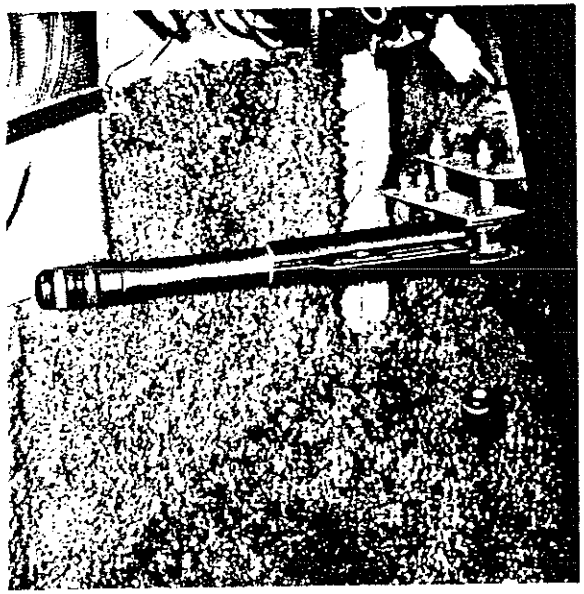
Clean the head with a cotton swab moistened with isopropyl alcohol. **Do not use carbon tetrachloride.**

To clean the capstan shaft, first turn on the motor by depressing the motor switch (next to the capstan shaft) with the eraser end of a pencil. Use a cotton swab moistened with alcohol on the shaft.

The fuse for the radio, or radio/tape is located behind the unit. To gain access, carefully pull the silver colored bezel from the front of the radio unit. This bezel snaps into position. Next, remove the four screws which attach the control plate flange to the console. Pull radio out to expose wire.



Brake Pedal



Parking Brake and Headlight Dimmer Switch

If power assist to the **power brakes** is interrupted due to a stalled engine or some malfunction, two or more brake applications can be made using reserve power in system.

If the brake pedal is held down, the system is designed to bring the vehicle to a full stop on reserve power. However, the reserve power is partially depleted each time the brake pedal is applied and released. Do not pump brake when brake power assist has been interrupted, except when necessary in order to maintain steering control on slippery surfaces.

When reserve power is exhausted, the vehicle can still be stopped by applying greater force to the pedal.

Caution: Driving through deep water may wet the brakes and adversely affect brake performance so that the vehicle will not slow down at the usual rate and may pull to the right or left. Applying the brakes lightly will indicate whether they have been so affected. To dry them quickly, apply the brakes while maintaining a safe forward speed with an assured clear distance ahead until brake performance returns to normal.

Rear drum brakes on this vehicle are equipped with **automatic brake adjusters** designed to eliminate periodic brake adjustments. Adjustment is made automatically as the brakes are applied while vehicle is moving backwards. If excess brake pedal travel develops, drive alternately backward and forward several times and apply brakes firmly in each direction. See your dealer if normal pedal travel is not restored, or if there is a rapid increase in pedal travel, which could be a sign of other brake trouble. Front brakes are disc type and need no adjusting.

Note: "Riding the brake" by resting your foot on the brake pedal when not intending to brake can cause abnormally high brake temperatures, excessive lining wear and possible damage to the brakes.

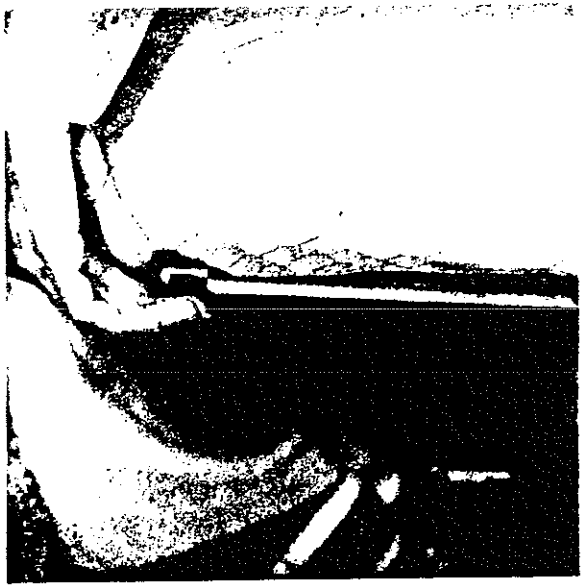
The Orscheln type **parking brake controls** are mounted to the left of the steering column under the instrument panel. On Orscheln, or over-center type levers, the amount of force required to apply the parking brake can be adjusted by turning a tension adjustment knob located at the upper end of the lever. This also adjusts the degree of brake application. The greater the force required at the lever the greater the degree of brake application.

- To set parking brake, pull lever all the way toward you.
- For increased holding power, first depress regular brake pedal and hold it while setting the parking brake.
- To release parking brake: push lever back.
- Never drive vehicle with parking brake set as this may overheat or other wise damage rear brakes.

To check the effectiveness of the parking brake, start the engine, and, with the parking brake on and your foot on the floor brake, engage the transmission and slowly remove your foot from the floor brake.

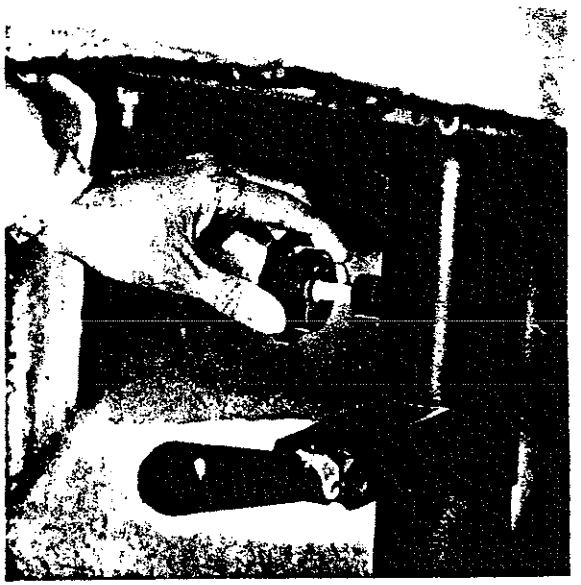
If your Motorhome moves easily the parking brake is not holding properly and should be repaired or adjusted.

Always release the parking brake before travel. Check the brakes at a low speed. Bring your Motorhome to a complete stop.



Forward and Backward Lock

Passenger Seat Tilt Handle



Raise or Lower and Seat Swivel Lock

The vehicle should stop in a straight line without skidding, swerving, or pulling to one side. The brakes should not grab, lock, or make excessive noise. If any of these conditions exist, do not operate the Motorhome until they have been corrected.

Note: The parking brake should be set first whenever leaving the driver's seat. If the vehicle is parked on a grade and the transmission selector lever is placed in "Park" before the parking brake is set, the weight of the vehicle may exert so much force on the parking pawl in the transmission that it may be difficult to pull selector lever out of "Park".

When preparing to move the Motorhome, the selector lever should be moved out of the "Park" position before releasing the parking brake. It is good driving practice to set the parking brake first, and release the transmission from "Park" first at all times, even on the level. If "torque lock" does occur, it may be necessary to have another vehicle nudge your Motorhome uphill to take some of the pressure off the transmission while the driver pulls on the transmission selector lever.

To obtain high or low beam headlights, push the **headlight foot dimmer switch** located on the floor to the left of the brake pedal. Each time the switch is depressed, the light beam changes. A headlamp beam indicator on the face of the speedometer is designed to light up when headlights are on high beam.

The sun visors may be rotated 90° to the side to provide shading. A bracket that secures the loose ends is located on the headliner in front to steady the sun visor.

The pedestal type driver's seat will adjust 4 ways for maximum comfort and efficiency for the driver and passenger. To move seat **forward** or **backward;** grasp the locking lever on left side of seat, pull outward to release. Then exert slight body pressure on seat in direction desired. Release lever to lock seat in desired position. The passenger seat may also be **tilted.** The release lever is on the left side under the seat cushion. Push the release lever down and tilt seat to desired position. The seats may be adjusted **upward** or **downward** and **swiveled** to provide easy entry and exit. To operate use the locking lever located on side of seat pedestal; pull up to unlock, then exert body pressure on seat in direction desired. Return seat to forward facing position, then push lever down to lock seat in position. The knob on the front of the pedestal acts as a safety lock to prevent the seat from accidentally raising, lowering or rotating. Turn clockwise to lock.

Fuel Stop Servicing

The fuel cap is located in a housing marked **Motor Fuel,** see photo.

Note: If the gas cap requires a replacement, only a cap with the same features should be used. Correct replacement caps may be obtained from your Chevrolet dealer.

Warning: All pilots and appliances must be turned off during refueling of motor fuel tank and permanently mounted L.P. gas tank.

Fuel Requirements

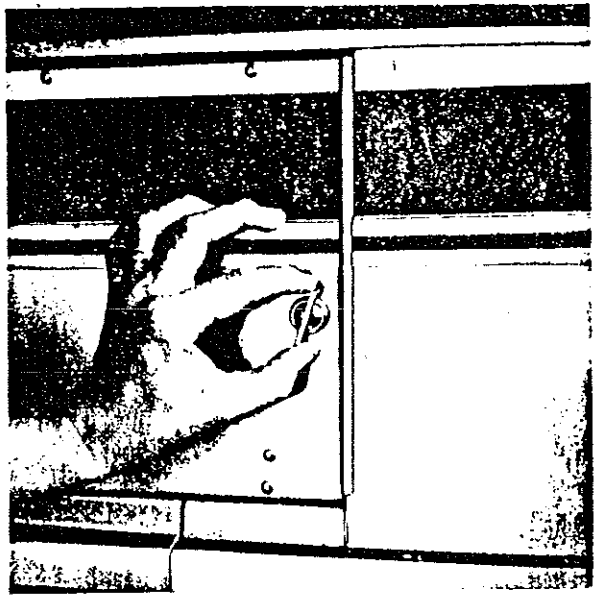
Your **Heavy Duty Emission Class Vehicle** engine is designed to operate on unleaded gasoline. It minimizes spark plug fouling and emission control system damage. Regular grade leaded gasoline should be used only when needed to eliminate knock. Knock is a metallic rapping noise that sometime happens during the combustion process. The engine does not require Premium grade fuel, so its use would be an unnecessary expense. If knocking persists, consult your dealer. Continuous or excessive knocking may result in engine damage. Failure to take steps to stop such knocking is misuse of the engine for which Chevrolet is not responsible under the terms of the new vehicle warranty.

Fuel Cap

Use unleaded gasoline meeting Federal government regulations. The Federal government specifies the minimum octane number of unleaded gasoline. Federal regulations require that pumps delivering such gasoline be labeled with the word UNLEADED.

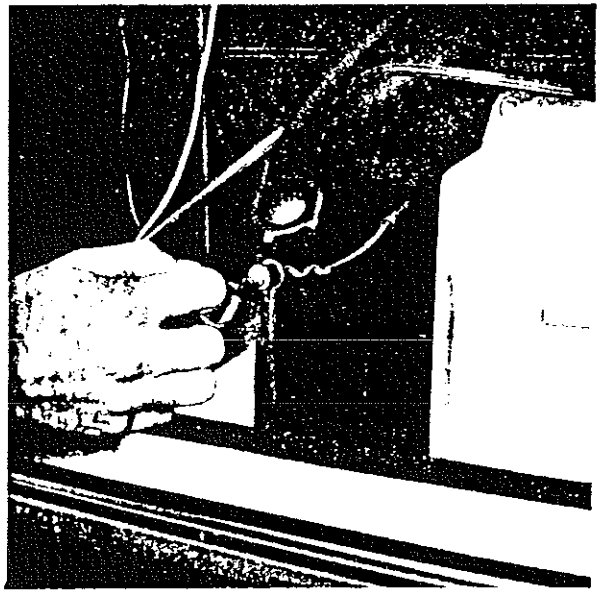
CAUTION: Motorhomes with the 70 gal. fuel tank should not be over filled. Only fill until the gas pump nozzle kicks off automatically.

To open forward service door, turn latches located on both curbside and roadside, see photo. Pull out on lower edge of door and lower to open position, see photos.

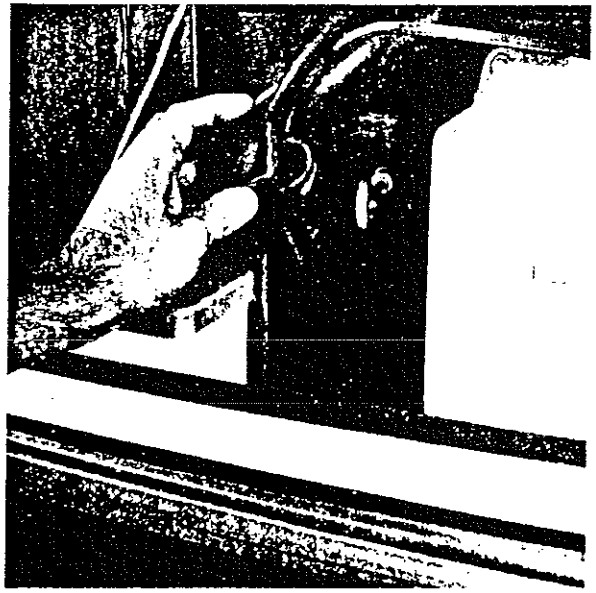


Forward Service Door Opening

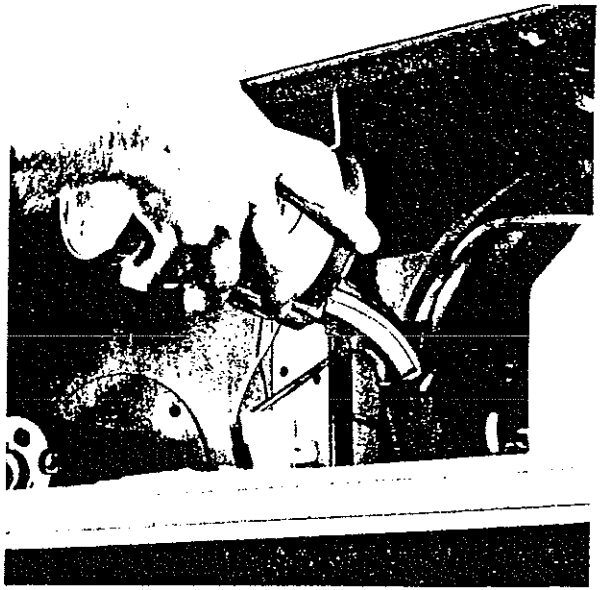
2.



Dipstick 454 Cu. In. Engine



Oil Filler Cap Removal



Adding Engine Oil

The **engine oil** should be maintained at the proper level. If engine has been running, allow 2-3 minutes for oil to drain back into the crankcase before checking oil level.

To check the oil level, remove the dipstick (see photos for location), wipe it clean and reinsert it completely for an accurate reading. If the oil is at or below the "add oil" mark on the dipstick, oil should be added as necessary. The oil level should be maintained in the safety margin, neither going above the "full" line nor below "add oil" line.

To add oil, remove the filler cap, see photos, and add oil. Use only a high quality SE engine oil to the viscosity recommendation indicated on page 50.

The **engine recovery type cooling system** is standard on all Motorhomes and is designed to maintain the engine at proper operating temperatures. The recovery tank collects coolant that expands with rising temperature that would otherwise overflow from the system. When the system temperature drops, the coolant is drawn from the recovery tank back into the radiator by the suction created by coolant contraction. The cooling system has been filled at the factory with a high-quality, inhibited year-around coolant that meets the standards of General Motors Specification 1899-M. This coolant solution provides freezing protection to -20°F, and it has been formulated to be used for two full calendar years or 24,000 miles, whichever first occurs, of normal operation without replacement, provided the proper concentration of coolant is maintained.

To help avoid the danger of being burned, do not remove radiator cap while engine and radiator are still hot, because the cooling system will blow out scalding fluid and steam under pressure.

Check the coolant level visually in the **"see through" coolant recovery tank.** Level should be at the "full cold" mark on the recovery tank when the system is cold. At normal operating temperature the coolant should be at the "full hot" mark on recovery tank. Add sufficient coolant to recovery tank.

Use a 50/50 mixture of high-quality ethylene glycol anti-freeze and water for coolant additions. If regular additions are required, see your dealer for a cooling system check.

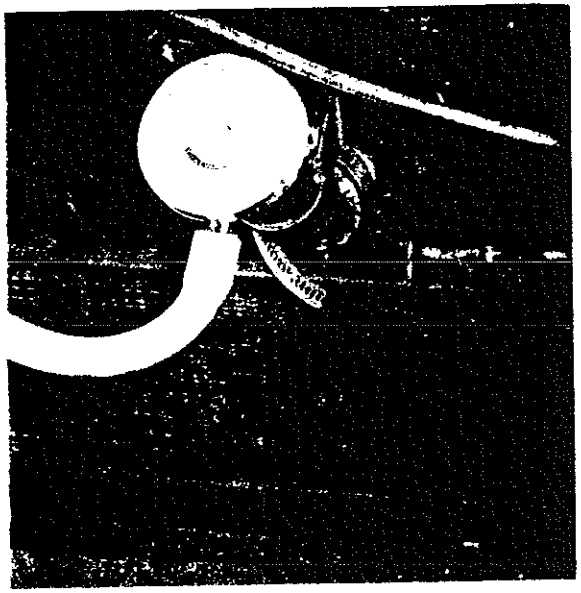
Note: If recommended quality antifreeze is used, supplemental inhibitors or additives claiming to provide increased cooling capability are not necessary. They may be detrimental to the efficient operation of the system, and represent an unnecessary operating expense.

Check the fluid level in the **pump reservoir** (see photo) at each fuel stop and oil change period. The reservoir contains special hydraulic fluid for the operation of the **power steering, power brake booster.**

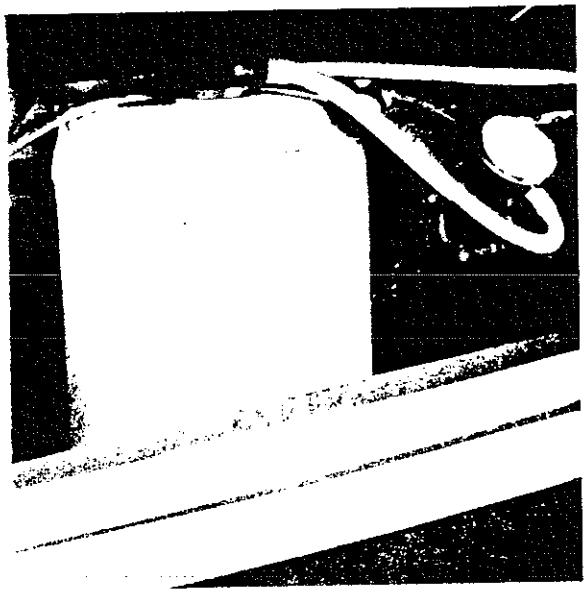
Add GM power steering fluid or automatic transmission fluid Dexron®-II as necessary to bring level to half full depending upon fluid temperature.

If at operating temperature (approximately 150°F—hot to the touch), fluid should be between ½ and ¾ full. If at room temperature (approximately 70°F), fluid should be at the half full level. Fluid does not require periodic changing.

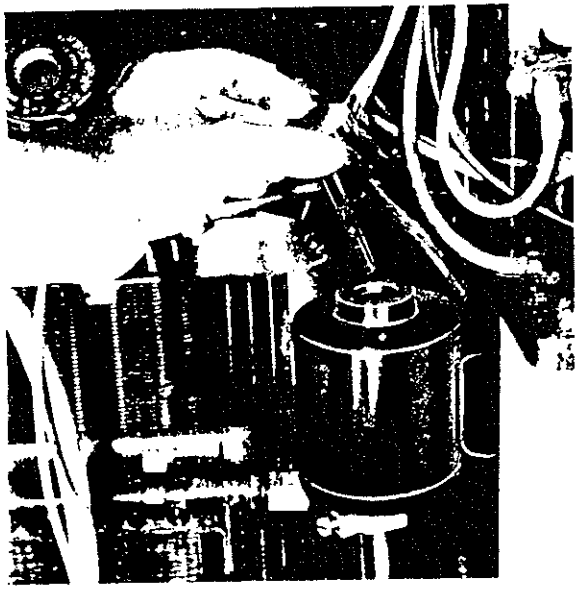
Check reservoir fluid level of the **windshield washer** regularly. Use a washer fluid such as GM Optikleen. The tank is located in the forward service area on the curbside behind the grill. See photo.



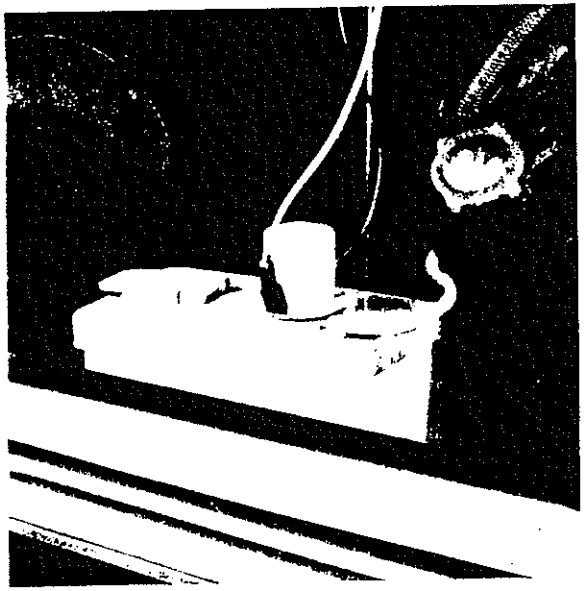
Radiator Cap



Coolant Recovery Tank



Pump Reservoir

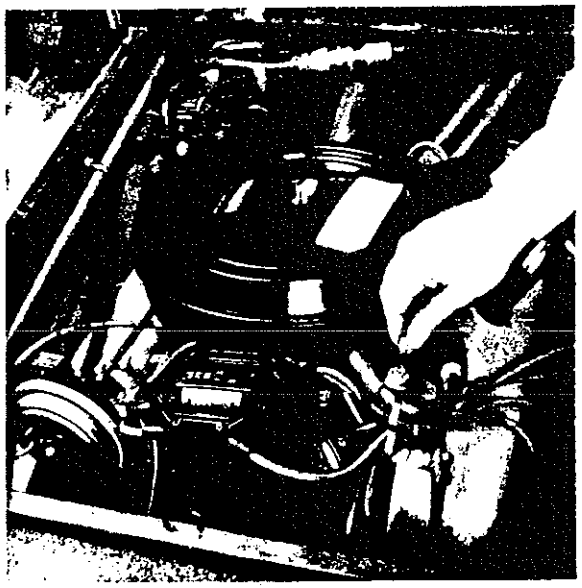


Windshield Washer Tank

Check the **automatic transmission fluid level** at each engine oil change period. More frequent checking may be necessary when towing a trailer. To make an accurate fluid level check:

1. Drive the vehicle several miles, making frequent starts and stops, to bring transmission up to normal operating temperature (approximately 180-190°F).
2. Park vehicle on a level surface.
3. Place selector lever in "Park" and leave engine running.
4. Cover carpeting, then lift up the hinged portion of the engine cover.
5. Remove dip stick, see photo, and wipe clean.
6. **Reinsert dipstick until cap seats.**
7. **Remove dipstick and note reading.**

If fluid is at or below the ADD mark, add sufficient fluid to raise the level to the FULL mark. Fluid should be poured into dipstick tube. One pint raises the level from ADD to FULL. Do not overfill. Use only automatic transmission fluids identified with the mark Dexron®-II available from your dealer or local service station.



Automatic Transmission Dipstick (454 Cu. In.)

Batteries

Your Airstream Motorhome is equipped with three batteries, an engine battery and two Univolt batteries.

The engine battery is used for starting the engine, Onan generator and operating the headlights, taillights, running lights, instrument panel lighting, and the automotive air conditioning and heater fans. The engine battery is charged by the alternator while driving and by the generator when it's been operated.

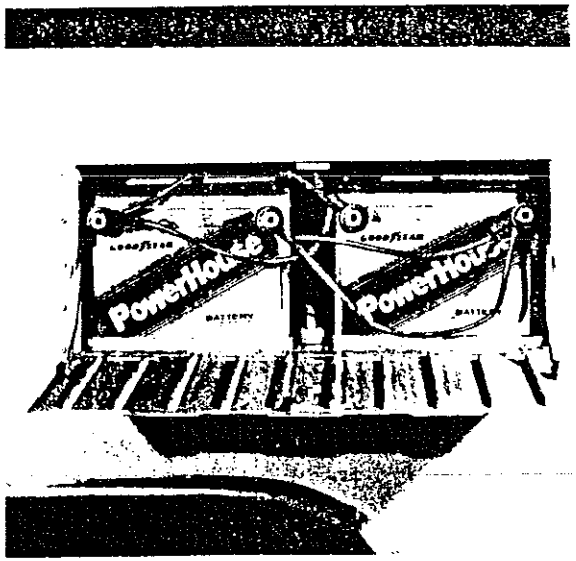
The Univolt batteries are used for interior lighting, exhaust fans, water pump, central control panel, entertainment center, optional 12V convenience outlets and the refrigerator when it is switched to 12V power. These batteries are charged by the engine's alternator when driving, by the Univolt when the power cord is connected to 120V city power or by the 120V auxiliary power plant that is in operation.

Univolt batteries on the 1979-80 and early 1981 motorhomes can be used to start your engine, using jumper cables, if the engine battery has become discharged. Later 1981 gasoline units have an auxiliary start switch that can be activated to engage all three batteries in the starting function. On 1981 diesel models, the auxiliary switch is wired so it's engaged automatically when starting. A battery isolator, located in the engine service compartment, electronically isolates your auxiliary batteries from the engine battery, allowing you to operate your extra accessories without draining the starting battery. The engine alternator properly charges each battery as you drive.

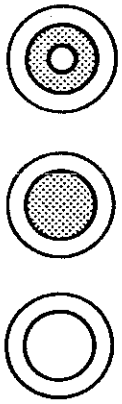
The 1979 Univolt batteries are located behind the forward roadside service door. Unlock and unlatch cover for accessibility. The engine battery is located in the lower roadside storage compartment.

On the 1980-81 models, both Univolt batteries and the Engine battery are located under the floor directly behind the step well. To gain access, turn the SCREW LATCH one quarter turn and lift.

Check fluid level in the Univolt batteries. Add only colorless, odorless drinking water or distilled water to bring level to split ring in filler opening. The engine chassis uses a Delco sealed type battery. Refer to Battery Charge Indicator (illus.) to determine charge of battery. The test indicator provides information for testing purposes only. The fluid level need not be checked.



Univolt Battery Service Compartment - 1979



Darkened Indicator With Green Dot
- OK for Testing

Darkened Indicator No Green Dot
- Charge Before Testing

Light Yellow Indicator
- Do Not Charge or Test
- Replace Battery

Battery Charge Indicator

Caution: Never expose battery to open flame or electric spark—battery action generates hydrogen gas which is flammable and explosive. Don't allow battery fluid to contact skin, eyes, fabrics, or painted surface—fluid is a sulfuric acid solution which could cause serious personal injury or property damage. Flush any contacted area immediately with water. Wear eye protection such as industrial safety spectacles or goggles when working on or near battery. Remove rings, metal watchbands and other metal jewelry before jump starting or working around a battery, and be careful in using metal tools—if such metal should contact the positive battery terminal (or metal in contact with it) and any other metal on the vehicle, a short circuit may occur which could cause personal injury. Batteries and battery acid should always be kept out of the reach of children.

A normal battery will discharge by itself in 30 to 45 days when not in use, therefore, **it is necessary to periodically check the battery and charge it as is necessary.** We suggest checking the battery at least every two weeks in freezing weather. The temperature at which a battery will freeze depends on the condition of its charge. As an example, a fully charged battery with specific gravity of 1.265 will not freeze until the electrolyte temperature drops to -71.3°F, while a discharged battery will freeze at +19°F. The following table shows the freezing points of batteries at various specific gravity readings, temperature corrected to 80° F.

1.265 -71.3°F
1.250 -62°F
1.200 -16°F
1.150 +5°F
1.100 +19°F

Note: Do not add water to a battery in freezing temperatures unless the vehicle will be put in use at once. Otherwise, the added water may freeze. Neglect is expensive. Care costs little. Check your batteries regularly.

Maintain a clean battery top and check terminals and cables for tightness and cleanliness. A dirty battery will dissipate its charge through surface contamination. Clean battery top with a damp cloth and dry thoroughly. The terminals should be tight and free of corrosion. To clean terminals, neutralize with a solution of baking soda, rinse with clear water, and dry.

Important: Always reconnect the battery cables to the correct battery terminals. The black cable should be connected to the negative terminal (-) and the red cable to the (+) terminal.

During the winter the batteries should be removed from the vehicle and stored in a cool, dry place, kept full of water, cleaned and charged monthly. A battery which is allowed to completely lose its charge will never regain its original power, or a full charge.

For battery service or replacement, go to any service station or dealer who sells and services this battery. See Body Limited Warranty Service and Maintenance page 5.

Tires

The tires installed on your Airstream Motorhome are engineered to provide a proper balance of performance characteristics for normal vehicle operation.

This section contains some tips on how you can obtain the most benefit from these tires.

The maximum cold **inflation pressures** for your factory installed tires are listed on the Certification Label. Your tires must be inflated to these pressures when the GVWR (Gross Vehicle Weight Rating) or GAWR (Gross Axle Weight Rating) is reached. These pressures may also be used to provide best fuel economy when running with lighter loads.

Incorrect tire inflation pressures can have adverse effects on tire life and vehicle performance. Too low an air pressure causes increased tire flexing and heat build-up. This weakens the tire and increases the chance of damage or failure and can result in tire overloading, abnormal tire wear, adverse vehicle handling, and reduced fuel mileage. Too high an air pressure can result in abnormal wear and harsh ride, and also increase the chance of damage from road hazards.

Lower inflation pressures can be used with reduced vehicle loads. After finding the load on each tire by weighing the Motorhome on a scale, the minimum cold inflation pressures can be found in the Inflation Pressure Chart.

The load on each tire of a single wheel axle (2 tires per axle) may be determined by weighing the axle and dividing by two. The load on each tire of a dual wheel axle (4 tires per axle) may be determined by weighing the axle and dividing by four.

Tire inflation pressures should be checked at least monthly and when significantly changing the load you plan to carry in your Motorhome. Always check tire inflation pressures when tires are "cold".

1. The "cold" tire inflation pressure applied to the tire pressure when the Motorhome has not been driven more than one mile after sitting for three hours or more.
2. It is normal for tire pressures to increase 4-8 psi or more, when the tires become hot from driving. **Do not** "bleed" or reduce tire inflation pressures after driving. Bleeding serves to reduce "cold" inflation pressure and increase tire flexing which can result in tire damage and failure.
3. **For sustained driving at speeds over 65 mph, where permitted by law,** cold inflation pressures should be increased 10 psi above those stated in the Inflation Pressure Chart for the load being carried. Do not exceed the wheel capacity limit shown in the chart (page 45). **Sustained speeds over 65 mph are not advised** where the 10 psi pressure increase would exceed the capacity limit.

   For special operating conditions, cold inflation pressures may be increased up to 10 psi above those shown in the table. The total increase in cold inflation pressures, however, must not exceed capacity limit shown on the Tire Load Limits Chart.
4. Always use a tire pressure gauge (a pocket-type gage is advised) when checking inflation pressures. Radial tires may look underinflated when at the recommended cold inflation pressure.
5. Be sure to reinstall the tire inflation valve caps, if so equipped, to prevent dirt and moisture from getting into the valve core which could cause air leakage.
6. If an air loss occurs while driving, do not drive on the deflated tire more than needed to stop safely. Driving even a short distance on a deflated tire can damage a tire and wheel beyond repair.

Front and rear tires perform different jobs and can wear differently depending on the types of roads driven, your driving habits, etc. To obtain the longest tire life you should **inspect and rotate** your tires regularly. (See Tire Rotation Illustration.) Many GM dealers and tire dealers will perform a free tire inspection to look for uneven or abnormal tire wear.

Tire Rotation Schedule

Tire Construction	Truck Type Tires
Bias And Bias Belted	Every 6,000 Miles
Radial	First 6,000 Miles and at Least Every 12,000 Miles Thereafter.

Tire Load Limits in Pounds (At various inflation pressures)*

Cold Inflation Pressure (PSI)	30	35	40	45	50	55	60	65	70
Front Axle									
Tire Size 8.75-16.5 (LRE)	1570	1720	1850	1990	2110	2240	2350	2470	2570
Tire Size 8.00-19.5 (LRD)	——	——	——	——	2110	2270	2410	2540	2680
Rear Axle									
Tire Size 8.75-16.5 (LRD)	1380	1515	1630	1750	1855	1970	2070	——	——
Tire Size 8.00-19.5 (LRD)	——	——	1850	1990	2110	2230	2350	2460	——

Minimum Tire Inflation Pressure (PSI) at Gross Vehicle Ratings (cold inflation)*

Model		Tire Size	Front (LRE)	Rear, Duals (LRD)
24 Ft.	12,500 G.V.W.R.	8.75-16.5	70 p.s.i.	55 p.s.i.
28 Ft.	12,500 G.V.W.R.	8.00-19.5	65 p.s.i.	45 p.s.i.

*If your Motorhome is equipped with radial tires, add 5 lbs. pressure for any load.

For the longest tire life, any time irregular wear is seen, have the tires checked and rotated by your truck or tire dealer and have the cause of uneven wear corrected. After rotation be sure to check wheel nut tightness (See page 47) and to adjust the tire pressures, front and rear. (See tire inflation chart).

NOTICE: Wheel nuts should be tightened at certain intervals; see Wheel Nut Tightening Sequence, page 47.

NOTICE: The disc brake pads should be inspected for wear when the tires are rotated.

The outer tire of a pair on dual wheel installations generally wears faster than the inner tire. If this occurs, reverse position of the tires to equalize wear and achieve optimum tire life.

In addition, when vehicles are driven continuously on high crown roads, an increase in air pressure of from 5 psi to 10 psi in the outside tire of each dual produces maximum tire life. Be sure not to exceed the inflation pressure limits shown in the Tire Inflation Chart.

Proper **front-end alignment** improves tire tread mileage. Your front-end suspension parts should be inspected periodically and aligned when needed. (See the maintenance Schedule information.) Improper alignment may not cause the vehicle to vibrate. However, improper toe alignment will cause front tires to roll at an angle which will result in faster tire wear. Incorrect caster or camber alignment will cause your front tires to wear unevenly and can cause the vehicle to "pull" to the left or right.

Proper tire balancing provides the best riding comfort and helps to reduce tire tread wear. Out of balance tires can cause annoying vehicle vibration and uneven tire wear such as cupping and flat spots.

A decrease in driving, cornering, and braking **traction** occurs when water, snow, ice, gravel, or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tire and road surface. This is known as hydroplaning and may cause partial or complete loss of traction, vehicle control, and stopping ability. To reduce the chance of traction loss, follow these tips:

1. Slow down during rainstorms or when roads are slushy.
2. Slow down if road has standing water or puddles.

3. Replace tires when tread wear indicators are showing.
4. Keep tires properly inflated.

If you equip your vehicle with snow tires, use the same size, load range, and construction type (bias, bias-belted, or radial) as your other tires.

Snow tires should be inflated above the advised cold inflation pressures for the load being carried.

Vehicle speed should be limited to 65 mph with truck type snow tires.

To prevent **chain** damage to your vehicle:

- Install the chains as tightly as possible, then tighten again after driving 1/4 to 1/2 mile.
- Do not exceed 45 mph, or the chain manufacturer's speed if lower.
- Drive in a restrained manner avoiding large bumps, potholes, severe turns and other maneuvers which could cause the vehicle to bounce up and down.
- Follow the chain manufacturer's instructions.

CAUTION: Do not mix different construction types of tires on your vehicle such as radial, bias, and bias-belted tires except in emergencies, because vehicle handling could be affected and may result in loss of control.

You should replace your tires when -

1. Your tires are worn to a point where 2/32 inch or less tread remains, or the cord or fabric is exposed. To help detect this, your tires have built-in tread wear indicators and appear between the tread grooves when the tread depth is 2/32 inch or less. When the indicators appear in two or more adjacent grooves at three spots around the tire, the tire should be replaced.
2. Your tire tread or side wall is cracked, cut, or snagged deep enough to expose the cord or fabric.
3. Your tire has a bump, bulge, or split.
4. Your tire sustains a puncture, cut, or other injury that can't be correctly repaired because of the size or location of the injury.

When replacing tires, you should use the same size, load range, and construction type (bias, bias-belted, or radial) as the original tires on your vehicle (see the Certification Label). Use of any other size or type tire may affect load carrying capacity, ride, handling, speedometer/odometer calibration, vehicle ground clearance, and tire clearance to the body and chassis. If replacing only a single tire, it should be paired on the same axle with the least worn tire of the other three.

When removing wheel rim **to change a tire,** loosen all wheel nuts approximately flush with end of stud; then clamp ring to loosen rim. Do not remove nuts until clamp rings are free or clamp ring may fly off at stud. When installing rim be sure pins on clamp ring face outboard. Then tighten attaching nuts alternately and evenly to avoid excessive wheel run-out. See torque values and sequence diagram.

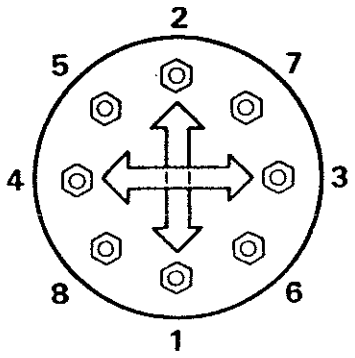
Wheels must be replaced if they become damaged (for example: bent, heavily rusted, leak air) or if lug nuts often become loose. Do not straighten bent wheels or use inner tubes in leaking wheels used with tubeless tires. Such wheels may have structural damage and could fail without warning.

The wheels originally equipped on your vehicle will provide optimum life up to the maximum load and inflation pressures shown in the Tire Load Limits Chart. Maximum loads, maximum inflation pressures, wheel identification codes, and wheel sizes are stamped on each wheel. When replacing wheels for any reason, the new wheels should be equal in load capacity, inflation pressure capacity, diameter, width, offset, and mounting configurations to those originally installed on your vehicle.

A wheel of the wrong size or type may adversely affect load carrying capacity, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance, and tire clearance to the body and chassis. Replacement with "used" wheels is not advised: they may have been subjected to harsh treatment or very high mileage and could fail without warning.

NOTICE: The use of wheels and/or tires with higher load carrying limits than originally equipped on your vehicle does not in itself increase the GAWR of the GVWR of the vehicle.

Wheels having diameters ranging from 16 inches through 19.5 inches that have been



Nut Tightening Sequence

certified for radial tire application have the word "radial" stamped on the rim. Wheels in the 16 inch through 19.5 inch diameter range without the "radial" identification stamp are not to be used with radial tires. Because of the greater forces exerted by radial tires, these wheels could become fatigued and fail without warning.

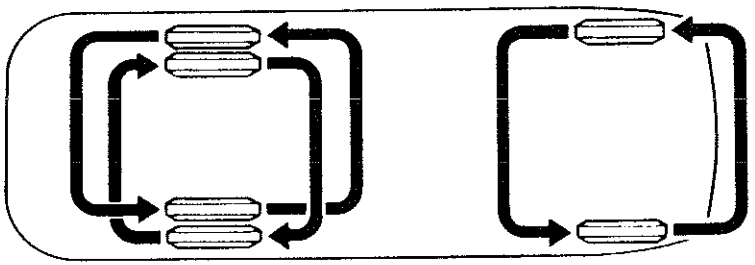
Proper replacement wheels can be obtained from your dealer.

WARRANTY

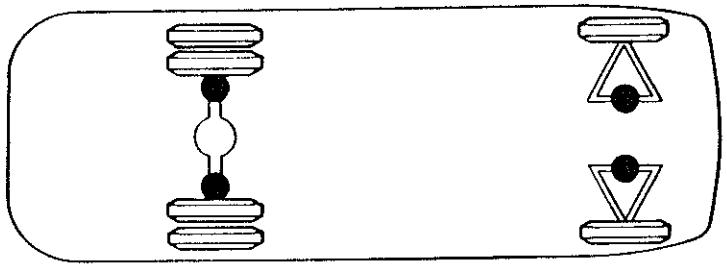
Tires are warranted by the tire manufacturers. Warranty information is included in the manufacturer's warranty folder furnished with your vehicle.

Wheel nut torque must be checked at 100, 1,000 and 6,000 miles and every 6,000 miles thereafter.

	Description	Torque
Rear		Power Torque
Dual Wheels	9/16" Bolts (8)	110-140 lb. ft.
		Hand Torque
		140-180 lb. ft.



Tire Rotation



● *Jacking Points*

Jacking Points

Vehicle Lubrication and Maintenance

Vehicle Lubrication and Maintenance recommendations are covered in detail in the literature provided by the chassis manufacturer. The following recommendations are presented here for your convenience.

To retain the safety, dependability and emission control performance originally built into your Airstream Motorhome, it is essential that it receives periodic inspections, maintenance and service parts replacements. If this is not performed the manufacturer's obligation under the provisions of the new vehicle warranty may be affected.

Vehicle operations under conditions such as heavy dust, continuous short trips, use of other than unleaded or low lead fuels, is not considered normal use and therefore more frequent maintenance will be required. Such additional maintenance requirements are included where applicable.

Your new Airstream Motorhome was designed, built and tested using genuine GM or Airstream parts. Accordingly, it is recommended that any replacement parts used for required maintenance services be new, genuine GM or Airstream parts.

The warranty obligations are not dependent upon the use of any particular brand of replacement parts. The owner may elect to use non-genuine GM or Airstream parts for replacement purposes. Use of replacement parts which are not of equivalent quality however, may impair overall effectiveness.

Genuine GM or Airstream parts when used in connection with Airstream vehicles, means parts manufactured by or for Airstream, designed for use on Airstream vehicles and distributed by Airstream or General Motors Corporation. **Maintenance service can be performed by any qualified service outlet; however, warranty service must be performed by an authorized Airstream or Chevrolet dealer.** Receipts covering the performance of regular maintenance should be retained in the event questions arise concerning maintenance. These receipts should be transferred to each subsequent owner of this vehicle.

If other than new genuine GM or Airstream parts are used for required maintenance service replacements, the owner should assure himself that such parts are warranted by their manufacturer to be equivalent to genuine GM or Airstream parts in performance and durability.

In addition to the in-shop type services detailed in the schedule, this section also includes safety checks which you, the vehicle owner or driver, should perform periodically.

After each of the following maintenance services is performed, it is recommended that you insert the date in the maintenance schedule under the appropriate "Owner Service Log" column. For example, if the first chassis lubrication is performed at approximately 4,000 miles, the date should be entered under the column headed "4"; if performed closer to 6,000 miles, enter the date under the "6" column, etc.

Note: The shaded blocks indicate when services should be performed based on mileage intervals as shown in the "When To Perform Services" column.

VEHICLE MAINTENANCE SCHEDULE

Code: ☐Lubrication ☐Safety ☒Emission Control

When To Perform Services (Months or Miles, Whichever Occurs First)	Item No.	Services (For Details, See Numbered Paragraphs)
Every 4 months or 6,000 miles	1	Chassis Lubrication
	2	‡†Fluid Levels
	3	*Engine Oil
	4	Air Conditioning System
Every 6,000 miles	5	Tire Rotation
At 1st oil change—then every 2nd	6	*Engine Oil Filter
Every 12,000 miles	7	Rear Axle
Every 12 months or 12,000 miles	8	Cooling System
Every 24,000 miles	9	Wheel Bearings
	10	Automatic Transmission
Every 4 months or 6,000 miles	11	Owner Safety Checks
	12	Tires and Wheels
	13	Exhaust System
	14	*Engine Drive Belts
	15	Suspension and Steering
	16	Brakes and Power Steering Reservoir
Every 6,000 miles	17	Brakes
Every 12 months or 12,000 miles	18	Parking Brake
	19	Throttle Linkage
	20	Headlights
	21	Underbody
At 1st 4 months or 6,000 miles—then at 12 month/12,000 miles† intervals	22	Carburetor Choke and Hoses
	23	Timing, Distributor Cap, Engine Idle
	24	Carburetor Mounting
Every 12 months or 12,000 miles	25	Thermostatically Controlled Air Cleaner
	26	Manifold Heat Valve
	27	Engine Timing Adjustment
Every 12,000 miles	28	Spark Plugs
Every 12 months or 12,000 mi.	29	EGR System
	30	Carburetor Fuel Inlet Filter
	31	Engine Idle Mixture
	32	Throttle Return Control
	33	Idle Stop Solenoid
	34	PCV System
Every 24 months or 24,000 mi.	35	ECS System
	36	Fuel Cap, Tank and Lines
Every 12,000 miles	37	Air Cleaner Element
Every 12 months or 42,000 mi.	38	Spark Plug Wires
Every 6 months or 6,000 mi.	39	Air Injection Reactor (A. I. R.)
Every 6 months or 6,000 mi.	40	Engine Compartment Insulation

OWNER'S SERVICE LOG

Insert month and day (i.e. 11/10) in mileage square† closest to the mileage when service is performed.

4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50

*Also an Emission Control Service ‡Also a Safety Service †Figures represent miles in thousands

1 Chassis

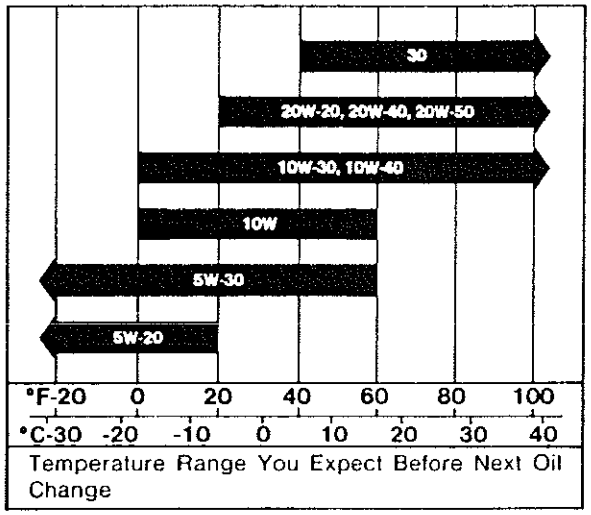
Lubricate all grease fittings in front suspension, steering linkage, and constant velocity universal joint. Also lubricate transmission shift linkage, hood latch, hood hinge, parking brake cable guides and linkage, clutch linkage, propellor shaft slip joint, universal joints and brake and clutch pedal springs. Lubricate suspension and steering linkage every 4 months or 6,000 miles, whichever occurs first, or every 2 months or 3,000 miles when operating under dusty or muddy conditions and in extensive offroad use.

All **universal joints** are the needle bearing type. Lubricate those universal joints equipped with lube fittings every 6,000 miles or 4 months with water resistant EP chassis lubricant which meets General Motors Specification GM 6031M. More frequent lubes may be required on heavy duty or "Off the Road" operations.

2 Fluid Levels

Check level of fluid in brake master cylinder*, power steering pump*, battery, engine, axles, transmission, and windshield washer*. Engine coolant should be checked for proper level and freeze protection to at least -20 degrees F or to the lowest temperatures expected during the period of vehicle operation.**

*Also a Safety Service
**Also an Emission Control Service



NOTICE: Do not use SAE 5W-20 oils for continuous high-speed driving.

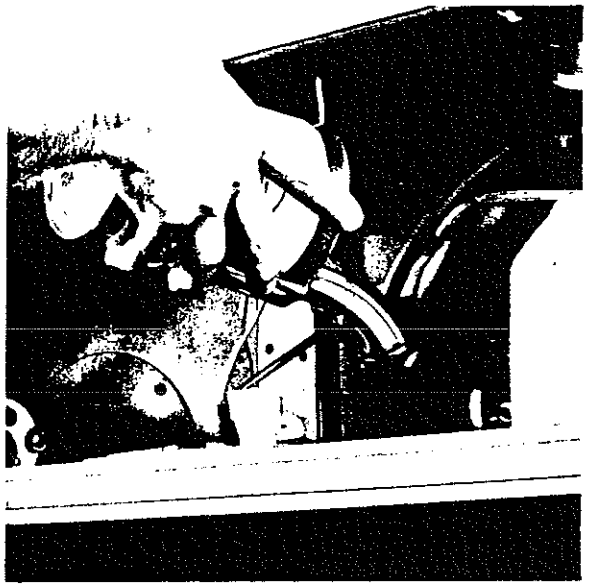
Recommended SAE Viscosity Number

Proper engine coolant also provides corrosion protection. Any significant fluid loss in any of these systems or units could mean that a malfunction is developing and corrective action should be taken immediately. A low fluid level in the brake master cylinder front reservoir could also be an indicator that the disc brake pads need replacing.

3 Engine Oil**

A high quality SE oil was installed in your engine at the factory. It is not necessary to change this factory-installed oil prior to the recommended normal change period. However, check the oil level more frequently during the break-in period since higher oil consumption is normal until the piston rings become seated.

Note: Non detergent and other low quality oils are specifically not recommended.



Engine Oil Fill

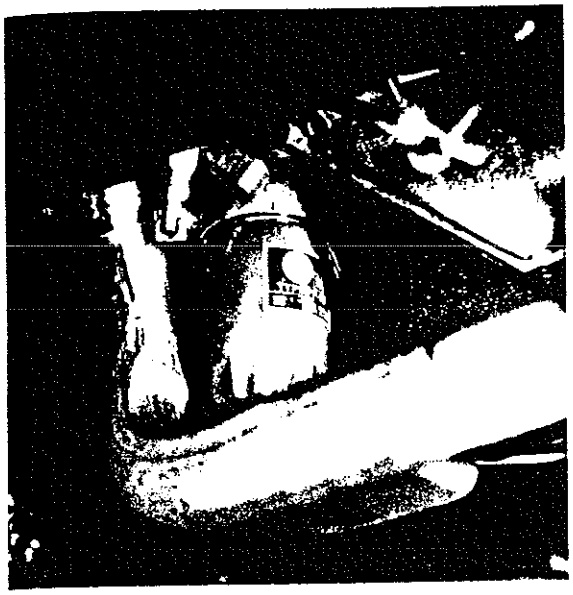
Only the use of SE engine oils and proper oil and filter change intervals assure you of continued proper lubrication of your engine.

Select the proper oil viscosity from the chart above.

Note: SAE 5W-20 oils are not recommended for sustained high-speed driving. SAE 30 oils may be used at temperatures above 40°F, SAE 5W-30 oils are recommended for all seasons in vehicles normally operated in Canada.

The proper oil viscosity helps assure good cold and hot starting.

The regular use of **supplemental engine oil additives** is specifically not recommended and will increase operating costs. However, supplemental additives

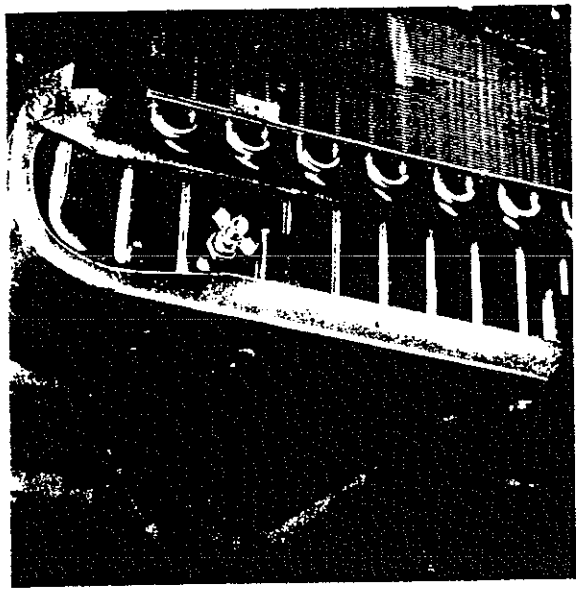


Engine Oil Filter

are available that can effectively and economically solve certain specific problems without causing other difficulties. For example, if higher detergency is required to reduce varnish and sludge deposits resulting from some unusual operational difficulty, a thoroughly tested and approved additive—"Super Engine Oil Supplement"—is available at your dealer. In the event of an operational problem, consult your dealer for advice before using supplemental additives.

4 Air Conditioning

Check condition of air conditioning system hoses and refrigeration charge at sight glass (if so equipped). Replace hoses and/or refrigerant if need is indicated.



Radiator Drain Valve

5 Tires

To equalize wear, rotate tires. See page 44-45.

6 Engine Oil Filter**

Replace at the first oil change and every other oil change thereafter.

7 Rear axle

Change lubricant every 12,000 miles.

Every 4 months or 6,000 miles, whichever occurs first, check lubricant level and add lubricant, if necessary, to fill to level of filler plug hole. Use GL-5 Gear Lubricant of viscosity shown in following table: (For vehicles normally operated in Canada; use SAE 80 GL-5 Gear Lubricant.)

Outside Temperature	Viscosity Lubricant To Be Used
Below 10°F	SAE 80
Below 100°F	SAE 90
Above 100°F Consistently	SAE 140

8 Cooling System

At 12-month or 12,000 mile intervals, wash radiator cap and filler neck with clean water, pressure test system and radiator cap for proper pressure holding capacity, tighten hose clamps and inspect condition of all cooling and heater hoses. Replace hoses every 24 months or 24,000 miles or earlier if checked, swollen or otherwise deteriorated.

Also each 12 months or 12,000 miles, clean exterior of radiator core and air conditioning condenser. Every 24 months or 24,000 miles, drain, flush, and refill cooling system with a new coolant solution.

To drain and flush the cooling system: Remove radiator cap when engine is cool by slowly rotating cap counterclockwise to detent. (Do not press down while rotating.) Wait until any residual pressure (indicated by a hissing sound) is relieved. After all hissing ceases, press down on cap while continuing to rotate counterclockwise.

Caution: To avoid the danger of being burned, do not remove radiator cap while engine and radiator are still hot because scalding fluid and steam will be blown out under pressure.

If necessary, run engine with radiator cap removed until normal operating temperature is reached and upper radiator hose is hot (indicates thermostat is open).

Stop engine and open radiator drain valve located at the base of the radiator, to drain coolant.

Close valve and add sufficient water to fill system.

Run engine, drain and refill the system, as described above, a sufficient number of times until the drained liquid is nearly colorless.

Allow system to drain completely and close radiator drain valve tightly.

Remove recovery cap leaving hoses in place. **Remove coolant recovery tank and empty the fluid.** Fill tank with clean water, drain and reinstall.

Add sufficient ethylene glycol coolant, meeting GM Specification 1899-M, to provide the required freezing and corrosion protection—at least a 44 percent solution (-20°F). Fill radiator to the base of the radiator filler neck and add sufficient coolant to the recovery tank to raise level to the "FULL HOT" mark. Reinstall recovery tank cap.

Run engine, with radiator cap removed, until normal operating temperature is reached. (Radiator upper hose becomes hot.)

With engine idling, add coolant until level reaches bottom of filler neck and install radiator cap making certain arrows line up with overflow tube.

It is the owner's responsibility to keep the freeze protection at a level commensurate with the temperatures which may occur in the area of vehicle operation.

Maintain cooling system freeze protection at -20°F, or below to ensure protection against corrosion and loss of coolant from boiling, even though freezing temperatures are not expected.

Add ethylene glycol base coolant that meets GM Specification 1899-M when coolant additions are required because of coolant loss or to provide additional protection against freezing at temperatures lower than -20°F (-35°F in Canada).

Note: Alcohol or methanol base coolants or plain water are not recommended for your engine at any time.

The radiator cap, a 15 lb. pressure type, must be installed tightly, otherwise coolant may be lost and damage to engine may result from overheating. Radiator pressure caps should be checked periodically for proper operation. If replacement is required specify AC.

The cooling system is protected and controlled by a **thermostat** installed in the engine coolant outlet to maintain a satisfactory operating temperature of the engine. This thermostat is designed for continuous use through both winter and summer and need not be changed seasonally. When replacement is necessary, Delco parts are recommended.

9 Wheel Bearings

Front wheel bearings—Use wheel bearing lubricant GM Part No. 1051344 or equivalent. This is premium high melting point lubricant which meets all requirements of General Motors Specification GM 6031M.

Due to the weight of the tire and wheel assembly it is recommended that they be removed from hub before lubricating bearings to prevent damage to oil seal. Then remove the front wheel hub to lubricate the bearings. The bearings should be thoroughly cleaned before repacking. Front wheels are equipped with tapered roller bearings on all vehicles. Wheel bearings should be lubricated every 24,000 miles. Do not mix wheel bearing lubricants.

Caution: "Long fibre" type greases should not be used on roller bearing front wheels.

When replacement is necessary, specify United Delco parts.

Rear wheel bearings—The rear wheel bearings receive their lubrication from the rear axle. When installing bearings which have been cleaned, prelube with wheel bearing grease.

10 Automatic Transmission

Use only automatic transmission fluids identified with the mark Dexron®-II available from your dealer or local service station.

Check the fluid level at each engine oil change period. To make an accurate fluid level check:

a. Drive the vehicle several miles, making frequent starts and stops, to bring transmission up to normal operating temperature (approximately 180-190°F).
b. Park vehicle on a level surface.
c. Place selector lever in "Park" and leave engine running.
d. Cover surrounding carpet, lift and prop up inside engine access cover.
e. Remove dipstick and wipe clean.
f. Reinsert dipstick until cap seats.
g. Remove dipstick and note reading.

If fluid is at or below the ADD mark, add sufficient fluid through dipstick table to raises the level to the FULL mark. One pint raise the level from ADD to FULL. Do not overfill.

Under normal driving conditions, the transmission fluid should be changed every 24,000 miles. If your vehicle is driven extensively in heavy city traffic during hot weather, or is used to pull a trailer, change fluid every 12,000 miles.

To change **Turbo Hydra-Matic fluid**—remove fluid from transmission sump, add approximately 7.5 pints U.S. measure (6.25 pints Imperial measure) for the Turbo Hydra-Matic of fresh fluid, to return level to proper mark on dipstick.

Every 24,000 miles, the **Turbo Hydra-Matic transmission sump filter** should be replaced.

Every 6,000 miles or 4 months, lubricate **transmission shift linkage lever** contacting faces with water resistant EP chassis lubricant which meets GM Specification GM 6031M.

Check **starter safety** switch by placing the transmission in each of the driving gears while attempting to start the engine. The starter should operate only in the Park ("P") or Neutral ("N") positions.

Caution: Before making the check above, be sure to have a clear distance ahead and behind the vehicle, set the parking brake and firmly apply the foot brake. Do not depress accelerator pedal. Be prepared to turn off ignition switch immediately if engine should start. Check to be sure automatic transmission shift indicator accurately indicates the shift position selected.

Safety Maintenance

11 Safety checks to be performed by owner

Listed below are safety checks that should be made by the owner (items a through j). These checks should be made regularly during operation, at no greater interval than 4 months or 6,000 miles, whichever occurs first, and more often when the need is indicated. Any deficiencies should be brought to the attention of your dealer or another service outlet, as soon as possible, so the advice of a qualified mechanic is available regarding the need for repairs or replacements.

a Windshield wipers and washers—Check operation of wipers, as well as condition and alignment of wiper blades. Check amount and direction of fluid sprayed by washers during use.

In cold weather, warm the windshield with defrosters before using washer—to help prevent icing that may seriously obscure vision.

Fill the washer jar ¾ full during the winter to allow for expansion in case the temperature should fall low enough to freeze the solution.

b Defrosters—Check performance by placing selector lever in defrost position, noting temperature and amount of air.

c Rearview mirrors—Check that friction joints are properly adjusted so mirrors stay in the selected position.

d Horn—Blow the horn occasionally to be sure that it works.

e Lap—Check belts, buckles, and anchors for cuts, fraying or weakened portions, loose connections, damage, and for proper operation. Check to make certain that anchor mounting bolts are tight.

f Lights—Check all instrument panel illuminating and warning lights, interior lights, license plate lights, side marker lights, headlamps, parking lamps, tail lamps, brake lights, turn signals, backup lamps, and hazard warning flashers. Have someone observe operation of each exterior light while you activate the controls.

g **Glass**—Check for broken, scratched, dirty or damaged glass on vehicle that could obscure vision or become an injury hazard.

h **Door latches**—Check for positive closing, latching and locking.

i **Hood latches**—Check to make sure hood closes firmly.

j **Fluid leaks**—Check for fuel, water, oil or other fluid leaks by observing the ground beneath the vehicle after it has been parked for a while. (Water dripping from air conditioning system after use is normal.) If gasoline fumes or fluid are noticed at any time, the cause should be determined and corrected without delay because of the possibility of fire.

12 Tires, Wheels, Balance and Alignment

Check tires for excessive wear, nails, glass, cuts or other damage. Make certain wheels are not bent or cracked and wheel nuts are tight. Uneven or abnormal tire wear may indicate the need for alignment service. This may be indicated by a pull to the right or left when driving on a straight and level road. The need for wheel balancing is usually indicated by a vibration of the steering wheel or seat while driving at normal highway speeds. Tire inflation pressure should be checked by the owner at least monthly, or more often if daily visual inspection indicates the need. See page 45-47.

13 Exhaust System

Check complete exhaust system, including optional generator, and nearby body areas for broken, damaged, missing or mispositioned parts, open seams, holes, loose connections or other deterioration which could permit exhaust fumes to seep into the passenger compartment. Dust or water in the passenger compartment may be an indication of a problem in one of these areas. Any defects should be corrected immediately. Be alert to any change in the sound of exhaust system or a smell of fumes which may indicate a leak. See page 13.

14 Engine Drive Belts**

Every 4 months or 6,000 miles whichever comes first, inspect fan and drive belts for wear, fraying, cracking and tension. Belts which are in poor condition should be replaced immediately. If any of the fan blades are bent or broken, replace fan. Check fan shroud for looseness or damage.

Check belt tension by applying moderate thumb pressure midway between pulleys. If the center-to-center distance between pulleys is 13 to 16 inches, the belt should deflect ½ inch. If the center-to-center distance is 7 to 10 inches, the belt should deflect ¼ inch. Loose belts should be retensioned to give the correct deflection.

If it becomes necessary to replace any of the belts, we recommend that you contact your nearest Chevrolet dealer. If he is not completely familiar with Airstream products, however, it may be necessary to provide him with the following procedures for removing the engine cover, to gain service access.

Before starting this procedure, make sure that all surrounding furniture and carpeting are covered to protect from dirt, grease, or oil.

1. Carefully pull bezels from the front of radio and tape player on models so equipped.
2. Remove and disconnect radio and tape player.
3. Remove the screws located along the bottom edge of the console used to attach the console to the engine cover. Remove the console.
4. Remove four long screws, two on each side of the engine cover just below the storage box mounting position. Remove the front engine cover carpeting shroud. **Note:** It may not be necessary to remove the carpeting from the triangular shaped, hinged rear portion of the cover.
5. Remove all of the screws securing the metal top of the engine cover and remove the top with the carpeted, hinged rear portion attached.
6. When belt servicing is completed, replace engine cover components by reversing the removal procedures. It is recommended that belts be replaced every 24 months or 24,000 miles.

15 Suspension and Steering

Check for damaged, loose or missing parts, or parts showing visible signs of excessive wear or lack of lubrication in front and rear suspension and steering system. Questionable parts noted should be replaced by a qualified mechanic without delay.

Be alert to any changes in steering action. The need for inspection of servicing may be indicated by "hard" steering, excessive free play or unusual sounds when turning or parking.

Maintain correct front end alignment to provide easy steering, longer life, and driving stability. Check control arm bushings and ball joints for wear. Lubricate tie rods, pitman arm, idler arm, upper and lower control arms, and ball joints at fittings with water resistant EP chassis lubricant which meets General Motors Specification GM 6031M every 6,000 miles or 4 months. Lubricate every 3,000 miles or 2 months whichever occurs first when driving in dusty or muddy conditions or after extensive off-road use.

Note: Ball joints must be at +10°F. or more before lubricating.

Airstream Motorhomes are equipped with rubber air cylinders inside the front coil springs. Air pressure in these cylinders may be increased or decreased to adjust vehicle trim and minimize "crash through" on large road bumps or depths. Inflation pressure must be maintained between 40 psi minimum and 50 psi maximum. Valve stem is located at base of cylinder. All 28' models are equipped with air cushion rear suspension. See page 32 for a description.

16 **Power Booster Reservoir**

Check lines and hoses for proper attachment, leaks, cracks, chafing, deterioration, etc. Any questionable parts noted should be replaced or repaired immediately. When abrasions or wear is evident on lines or hoses, the cause must be corrected.

Check the fluid level in the **pump reservoir** at each fuel stop and oil change period. This reservoir contains hydraulic fluid for the operation of the power steering, and power brake booster.

Add GM Power Steering Fluid (or Automatic Transmission Fluid Dexron®-II as necessary to bring level into proper range on filler cap indicator depending upon fluid temperature.

If at operating temperature (approximately 150°F—hot to the touch), fluid should be between one half and three quarters full. If at room temperature (approximately 70°F), fluid does not require periodic changing.

If the steering system power assist fails due to some malfunction, or because the engine has stalled, the vehicle can still be steered. However, much greater effort is required, particularly in sharp turns.

17 **Power Brakes**

Be alert to illumination of the brake warning light or changes in braking action, such as repeated pulling to one side, unusual sounds when braking or increased brake pedal travel. Any of these could indicate the need for brake system inspection and/or service.

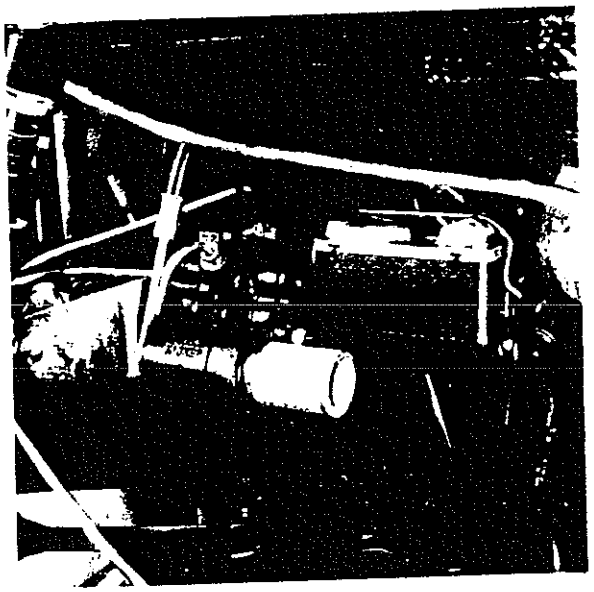
Be alert for disc brake wear. Check brake pads and condition of rotors while wheels are removed during tire rotation. The linings should be replaced prior to the point where the remaining thickness is 1/32" above the shoe table or rivet head whichever is applicable. Brake rotors incorporate numbers which indicate the minimum useable thickness of the rotor.

Check drum brake linings and other internal brake components at each wheel (drums, wheel cylinders, etc.). Parking brake adjustment also should be checked whenever drum brake linings are checked.

Note: More frequent checks should be made if driving conditions and habits result in frequent brake application. Your Chevrolet dealer can advise you how often these checks should be performed. When brakes require relining, it is recommended that you use those genuine General Motors parts specified for your vehicle, and Delco fluid as required or their equivalent.

Lubricate brake pedal spring every 6,000 miles or 4 months with engine oil.

The master cylinder is located inside the front roadside wheel well behind the wheel. The master cylinder fluid level in both reservoirs should be checked every 6,000 miles or 4 months. To check, remove the front wheel or turn it all the way to the right to give you access. It is recommended that you check fluid level, using a small mirror and flashlight. If the fluid is low in the reservoir, it should be filled to a point about ¼" below lowest edge of each filler opening with Delco Supreme No. 11 or DOT-3 fluids.



Master Cylinder

18 Parking Brake

Parking brake adjustment also should be checked for drag and lubricated at every chassis lube period.

Note: More frequent checks should be made if driving conditions and habits result in frequent brake application. Your Chevrolet dealer can advise you how often these checks should be performed.

When brakes require relining, it is recommended that you use those genuine General Motors parts specified for your vehicle, and Delco Fluid as required.

Check parking brake holding ability by parking on a fairly steep hill and restraining the vehicle with the parking brake only.

Every 6,000 miles or 4 months clean and lubricate all parking brake pivot points with water resistant EP chassis lubricant which meets General Motors Specification GM 6031M.

19 Throttle Linkage

Check for damaged or missing parts, interference or binding. Any deficiencies should be corrected without delay by a qualified mechanic. Lubricate the ball stud at the carburetor lever with engine oil every 12,000 miles. Do not lubricate the accelerator cable.

20 Headlights

Check for proper aim. Correct as necessary. More frequent checks should be made if oncoming motorists signal when you are already using your low beams, or if illumination of the area ahead seems inadequate.

21 Underbody

The effects of salt and other corrosive materials used for ice and snow removal and dust control can result in accelerated rusting and deterioration of underbody components such as brake and fuel lines, frame, underbody floor pan, exhaust system, brackets, parking brake cables.

These corrosive effects, however, can be reduced by periodic flushing of the underbody with plain water. In geographic areas having a heavy concentration of such corrosive materials it is recommended that the complete underbody be inspected and flushed at least once a year, preferably after a winter's exposure. Particular attention should be given to cleaning out underbody members where dirt and other foreign materials have collected.

If desired, your dealer can perform this service for you. In addition, he can provide recommendations on undercoating materials which will help protect your vehicle from corrosion.

Emission Control Maintenance

Note: Additional recommended maintenance instructions relating to vehicle use, evidence of maintenance, and service replacement parts are included in the New Vehicle Warranty Information Folder.

22 Carburetor Choke and Hoses

Check choke mechanism for proper operation. Any binding condition which may have developed due to petroleum gum formation on the choke shaft or from damage should be corrected. Check carburetor choke hoses for proper connection, cracking, abrasion or deterioration and correct or replace as necessary.

23 Timing, Distributor Cap
Engine Idle Speed

Adjust ignition timing following Chevrolet specifications. Also, carefully inspect the interior and exterior of the distributor cap and rotor for cracks, carbon tracking and terminal corrosion. Clean or replace as necessary.

Adjust engine idle speed accurately (following Chevrolet specifications). Adjustments must be made with test equipment known to be accurate.

24 Carburetor Mounting
Torque carburetor attaching bolts and/or nuts to compensate for compression of gasket at first 4 months or 6,000 miles of vehicle operation, then at every 12,000 miles thereafter.

25 Thermostatically Controlled Air Cleaner
Inspect installation to make certain that all hoses and ducts are connected and correctly installed. Also, check valve for proper operation.

26 Manifold Heat Valve
Some engines are equipped with a manifold heat valve which should be inspected and repaired as necessary to insure free operation.

27 Engine Timing Adjustment & Distributor Check
Adjust ignition timing following the specifications shown on label under the hood. Also, carefully inspect the interior and exterior of the distributor cap and rotor for cracks, carbon tracking and terminal corrosion. Clean or replace as necessary.

28 Spark Plugs
Replace at 12,000 mile intervals. Use of leaded fuels results in lead deposits on spark plugs and can cause misfiring at mileages less than 12,000 miles. Where misfiring occurs prior to 12,000 miles, spark plugs in good condition can often be cleaned, tested and reinstalled in an engine with acceptable results.

29 Exhaust Gas Recirculation System (EGR)
At 12 month/12,000 mile intervals, inspect and if deposits exist, clean the EGR valve. Inspect the EGR passages in the inlet manifold and clean as required. A damaged EGR valve must be repaired or replaced. Check thermal vacuum switch for proper operation. A malfunctioning switch must be replaced. Check hoses for proper connection, cracking, abrasions, or deterioration and replace as required.

30 Carburetor Fuel Inlet Filter
Replace filter at 12-month/12,000 mile intervals or if clogged.

31 Engine Idle Mixture
At 12,000 mile intervals or in case of a major carburetor overhaul, or when poor idle quality exists, adjust mixture by a mechanical method (lean drop), following Chevrolet specifications.

32 Throttle Return Control (TRC) System
Check hoses for proper connections, cracking, abrasion, or deterioration and replace as necessary.

Check for proper operation of system.

33 Idle Stop Solenoid
Check for proper operation. An inoperative solenoid must be replaced.

34 Positive Crankcase Ventilation System (PCV)
Check the PCV system for satisfactory operation at 12-month or 12,000 mile intervals. Replace the PCV valve at 24-month or 24,000 mile intervals, blow out PCV valve hose with compressed air and replace the filter. The PCV valve should be replaced at 12-month or 12,000 mile intervals when the vehicle is used in operations involving heavy dust, extensive idling, trailer pulling, and short trip use at freezing temperatures where engine does not become thoroughly warmed up. The PCV filter should be replaced at 12-month/12,000 mile intervals under dusty driving conditions.

35 Evaporation Control System (ECS)
Check all fuel and vapor lines and hoses for proper connections and correct routing as well as condition. Remove canisters and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter in lower section of canister. If vehicle is equipped with two canisters, filter is located in lower canister only.

36 Fuel Cap, Fuel Lines and Fuel Tank
Inspect the fuel tank, cap and lines for damage which could cause leakage. Inspect fuel cap for correct sealing ability and indications of physical damage. Replace any damaged or malfunctioning parts.

37 Air Cleaner Element
Replace the engine air cleaner element under normal operating conditions every 12,000 miles. Operation of vehicle in dusty areas will necessitate more frequent element replacement. Your Chevrolet dealer can be of assistance in determining the proper replacement frequency for the conditions under which you operate your vehicle.

Caution: Do not operate the engine without the air cleaner unless temporary removal is necessary during repair or maintenance of the vehicle. When the air cleaner is removed, backfiring can cause fire in the engine compartment.

8 Spark Plug Wires

Clean exterior of wires; remove any evidence of corrosion on end terminals. Inspect spark plug wires for evidence of checking, burning, or cracking of exterior insulation and tight fit at distributor cap and spark plugs, or other deterioration. If corrosion cannot be removed, or other conditions above are noted, replace wire.

9 Air Injection Reactor System (A.I.R.) Controlled Combustion System (C.C.S.) (On models so equipped.)

The Air Injection Reactor system should have the drive belt inspected for wear and tension, check the muffler for looseness and obstructions to air flow every 4 months or 6,000 miles, whichever occurs first. In addition, complete effectiveness of either system, as well as full power and performance, depends upon idle speed, ignition timing, and idle fuel mixture being set according to specification. A quality tune-up which includes these adjustments should be performed periodically to assure normal engine efficiency, operation and performance.

10 Engine Compartment Insulation

Check every 6 months or 6,000 miles to make sure the insulating material is firmly in place, there are no unnecessary tears or pieces missing.

Operating Record

Date	Mileage	Gasoline		Oil		Repairs	
		$		$		$	

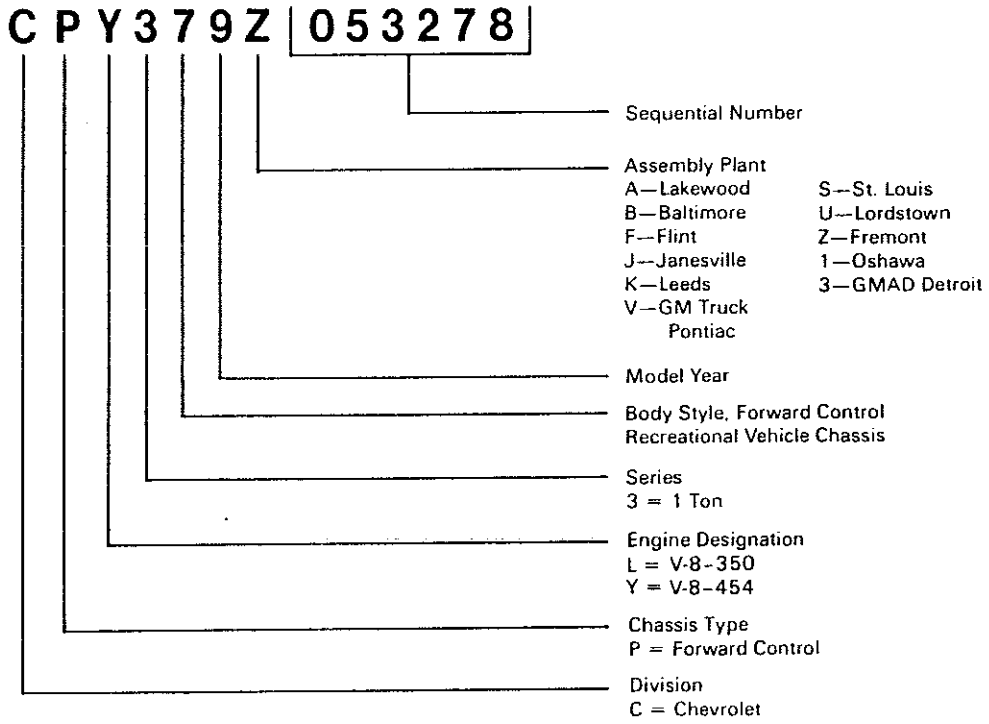
Date	Mileage	Gasoline		Oil		Repairs	
		$		$		$	

Vehicle Specifications

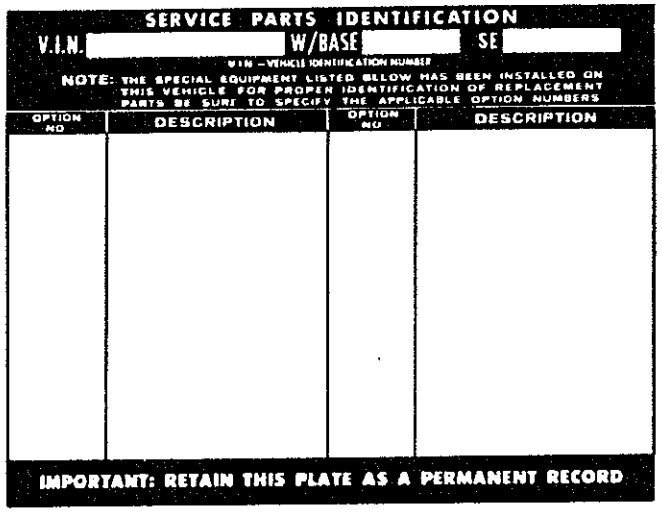
A **vehicle identification number** is stamped on a combination vehicle identification number and rating plate located on the dash and toe panel.

The **Service Parts Identification Plate** is located in the forward Service Door Area. The plate lists the V.I.N. (vehicle identification number), wheelbase, paint information and all Production Options or Special Equipment on the vehicle when it was shipped from the factory. **Always refer to this information when ordering parts.**

Vehicle Indentification Number



Service Parts Identification Plate



Lubricant Capacities		
Item	U. S. Measure	Imperial Measure
Rear Axle		
10½" Ring Gear (Chev.)	5.4 Pints	4.4 Pints
10½" Ring Gear (Dana)	7.2 Pints	6.0 Pints
Crankcase		
454 V-8	12.0 Pints	10.0 Pints
350 V-8	8.0 Pints	6.5 Pints
Add 1 qt. for filter		
Oil Filter		
350 Cu. In.	2 Pints	1.5 Pints
454 Cu. In.	2 Pints	1.5 Pints
AC PF-35; Throwaway Type		
Fuel Tank (cap. approx.)		
Standard 24 Ft. (1979)	24.0 Gallons	20.0 Gallons
Standard 28 Ft. (1979)	50.0 Gallons	41.7 Gallons
Standard 28 Ft. (1981)	70.0 Gallons	58.1 Gallons
California Emission 28Ft. (1981)	40.0 Gallons	33.2 Gallons
Automatic Transmission		
Turbo Hydra-Matic 400 - Total	19.0 Pints	16.0 Pints
- Refill	7.5 Pints	6.0 Pints
Cooling System		
350 Cu. In. V-8	16.9 Quarts	14.0 Quarts
454 Cu. In. V-8	21.0 Quarts	17.5 Quarts
353 Cu. In. 6 (diesel)	23.0 Quarts	19.3 Quarts

A 195°F thermostat is standard equipment on all models except diesel which is 179°F.

The cooling system is protected and controlled by a thermostat installed in the engine coolant outlet to maintain a satisfactory operating temperature of the engine. This thermostat is designed for continuous use through both winter and summer and need not be changed seasonally. When replacement is necessary, specify United Delco parts.

Pressure Cap Capacity.....15 psi
AD Type RC15

Engine	Piston Displacement	Compression Ratio	Standard Spark Plug
350 Cu. In. V-8	350	8.5:1	R44-T
454 Cu. In. V-8	454	8.25:1	R44-T

Engine-Number
Stamped on a Boss (Right Front Side of Block.)

Lamp Bulb Data
Always replace with AC type Guide # Lamps.

Used in	Trade #
Instrument cluster lamps	168
Headlamp beam indicator lamp	168
Lamp assembly-tail & stop lamp (3)	1157
Head lamps (1)	6014
License lamp (2)	67
Directional signal (front park lamps) (3)	1157
Directional signal indicator lamp	168
Running lights	1895
Brake warning indicator	168
Transmission control	1445
Backing lamp	1156

1. Double filament sealed beam: 50W low beam, 60W high beam.
2. Two lamps used
3. Double filament lamp

Spark Plug Gap	.035

Note: For additional information refer to the Chevrolet Light Duty Truck Service Manual. See your Chevrolet Owner's and Driver's Manual or contact your nearest Chevrolet Dealer for information on obtaining a Service Manual.

Fuses-Circuit Breakers
The chassis wiring circuits are protected from short circuits by a combination of **fuses, circuit breakers, and fusible thermal links in the wiring itself.** This greatly reduces the hazard of electrically caused fires in the vehicle.

The headlamp circuits are protected by a circuit breaker in the light switch. An electrical overload on the breaker will cause the lamps to go on and off, or some cases to remain off. If this condition develops, have your wiring circuits checked immediately.

Fuses located in the Junction Block beneath the dash on the driver's side are:

Instrument Panel Lights ..... 5 Amp
Instrument Panel Gauges,
Transmission Downshift,
Idle Stop Solenoid ..... 10 Amp
Stop Lamp, Traffic Hazard,
Brake Warning Lamp..... 15 Amp
Directional Signal Indicator Lamp,
Backing Lamps ..... 15 Amp
Cigarette Lighter, Horn,
Dome Lamp ..... 15 Amp
Tail Lamps, License Lamp,
Parking Lamp, Side Marker Lamps 20 Amp
Heater, Air Conditioner..... 25 Amp
Windshield Washer/Wiper..... 25 Amp

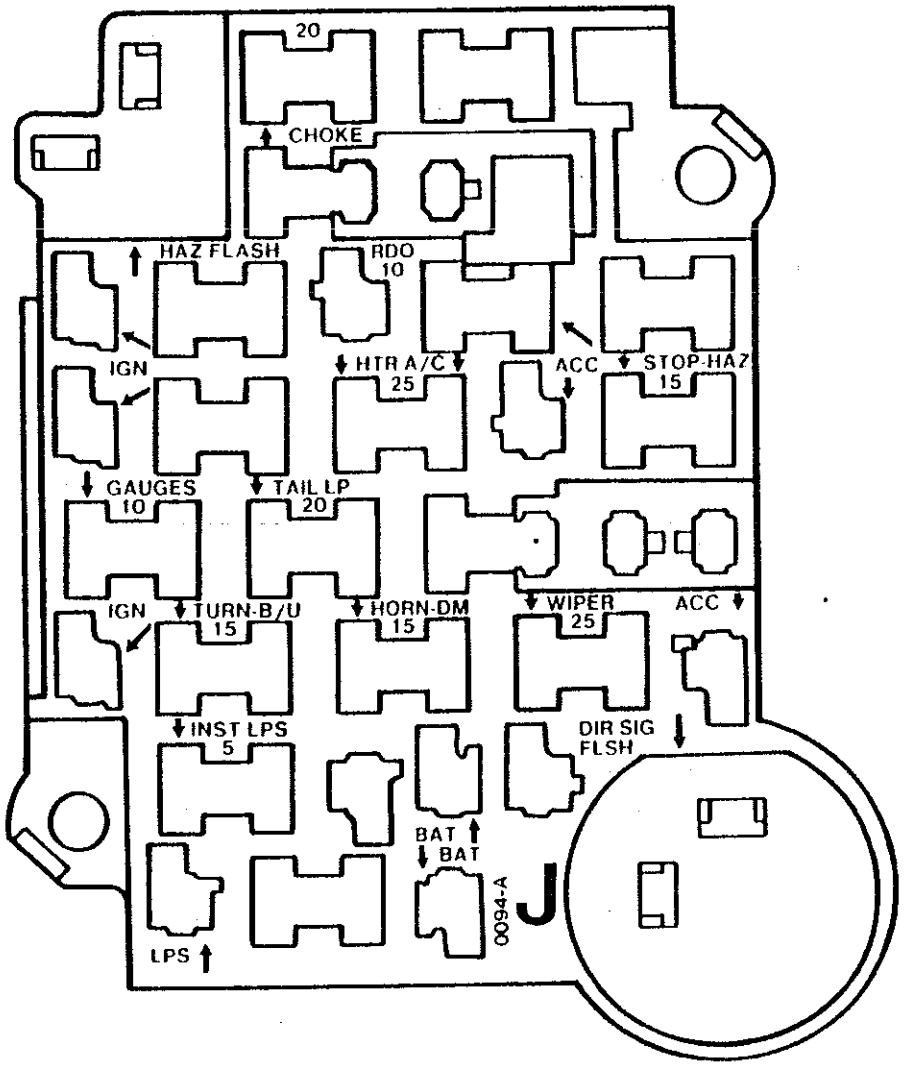
Note: Do not use fuses of higher amperage than those recommended.

The following wiring harnesses are protected by a "fusible link" which is a special wire incorporated in the circuit; headlamp hi-beam indicator, horn and ignition circuits. Should an electrical overload occur, this wire will fail and prevent damage to major harness.

Circuit Breaker

Device or circuit protected	Amperes	Location
Headlamp and parking lamp circuit.	15 AMP	light switch

Vehicle Junction Block



Overnight Stop

In time you will develop a knack for spotting wonderful little roadside locations by turning off the main highway and exploring.

There are many modern recreational vehicle parks including State, County and Federal parks with good facilities, where you may obtain hook-ups of electrical, water and sewer connections. Directories are published which describe in detail these parks and tell what is available in the way of services and hook-ups.

On overnight or weekend trips chances are you will not use up the capacity of the sewage holding tank, deplete the water supply or run down the batteries which supply the living area 12 volt current.

On a longer trip, when you have stayed where sewer connections and utility hook-ups were not available, it will be necessary for you to stop from time to time to dispose of the waste in the holding tank and replenish the water supply. Many gas stations (chain and individually owned) have installed **sanitary dumping stations** for just this purpose. Booklets are available which list these dumping stations.

When you stop for the night, your Airstream Motorhome is built to be safely parked in any spot that is relatively level and where the ground is firm. **Your facilities are with you, you are self-contained.** Try to pick as level a parking spot as possible.

All you need to do to enjoy the self-contained luxury is to:

1. Light the water heater, refrigerator and furnace pilots if required. See pages 90-98 for complete details on LPG system and gas operated appliances.
2. Turn on the gas supply at the range and light the pilot.

Before moving on, check your campsite, both for cleanliness and also to be sure you haven't left anything behind. Turn off the gas to the range and make sure everything is properly stowed.

Winter Traveling

Traveling in your Airstream Motorhome during the cold winter months can be a most exhilarating experience.

There are of course certain precautions which must be taken as you would in your home in low temperatures.

1. You must have a plentiful supply of propane gas.
2. If your stay is longer than overnight and you do not have the generator option, then you should endeavor to have 120V electricity available. The battery (full charged) will not last more than about 15 hours in freezing weather. Of course you can always run your Motorhome to recharge the battery and normally the battery will attain sufficient power to run another 5 hours by running your engine for approximately one hour at fast idle. For more detailed information on the battery see page 42.
3. Minimize use of electricity if 120V power source is not available.
4. Leave cabinet doors, bed doors and wardrobe doors slightly open at night to allow circulation of air in and around all furniture components.
5. Use propylene glycol type anti-freeze in waste and drain water tanks to prevent freezing. Quantity of anti-freeze needed will vary with ambient temperature and the amount of liquids in tank.
6. For extended stays in cold weather, insulate the water line outside the Motorhome. You should remember that low temperatures in combination with high winds cause an equivalent chill temperature much below what your thermometer is reading. For instance, with an outside temperature of zero degrees and the wind velocity of 10 miles per hour, the equivalent chill temperature is minus 20°F.

It is also important to guard against excessive humidity inside your Motorhome during winter camp-outs. When windows and window frames fog up or "sweat", it means that there is too much moisture in the air. Moisture comes from water vapor and water vapor is the direct result of water evaporating. Many things such as baths and showers, boiling foods, washing dishes, mopping the floor, washing clothes, even breathing, contribute to evaporation. The inside air can only absorb so much of this moisture before it becomes saturated. At this point it can hold no more, and any additional water vapor condenses back to liquid water in the form of droplets on any available cool solid surface. Temperature has a direct effect on the air's saturation point. Cold air holds less moisture than warm air. For this reason, the air immediately adjacent to cold outside walls and windows cools down and causes water vapor to condense and form moisture droplets even though warmer inside surfaces are still dry.

The best way to keep condensation under control is to reduce moisture producing activities. It is also important to provide adequate ventilation and keep the air circulating as much as possible. Use your exhaust fans to remove moisture before water vapor mixes with the air. Open windows slightly once in a while, while operating fans to bring in drier outside air and aid in overall air circulation. In extremely cold weather, when outside ventilation is not practical, it may be necessary to use a small de-humidifier to aid in reducing condensation.

For added cold weather comfort, a 120V generator that operates on the Motorhome's gasoline, is available as an option. We recommend this option when you are planning extensive winter usage.

There is no substitute for common sense in cold weather.

NOTE: For proper use of anti-freeze refer to page 52,68,69.

Extended Stay

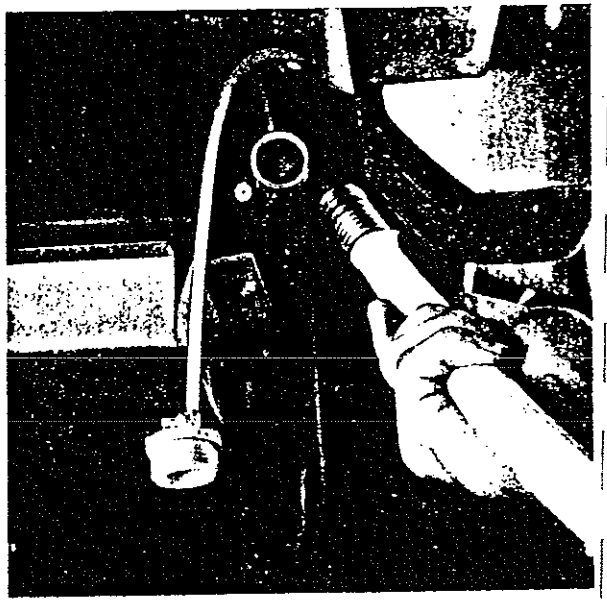
Making a long trip is not very different from making a weekend excursion. Since everything you need is right at hand you are at home wherever you go. When packing for an extended trip take everything you need, but only what you need.

When you plan to stay in the same place for several days, weeks, or months, you will want your Motorhome to be as level as possible. Check the attitude with a small spirit level set on the inside work counter. If a correction is necessary then **you must level from side to side first.** This can be done most easily by driving up a small ramp consisting of 2" x 6" boards tapered at both ends. **We do not recommend placing tires in a hole for leveling.**

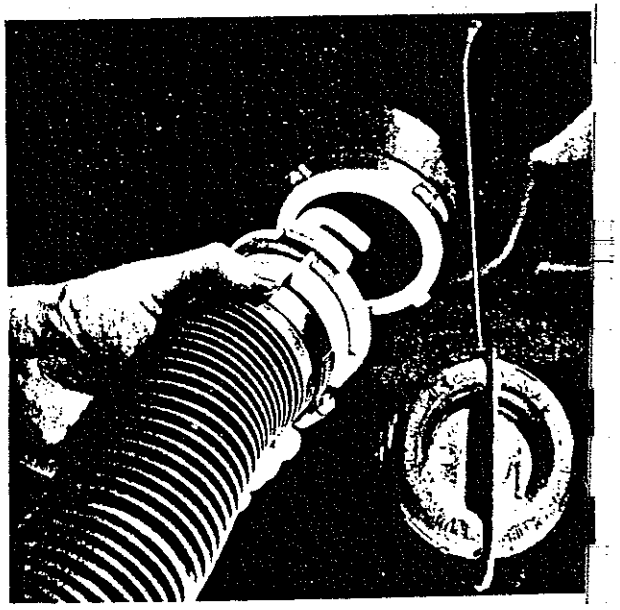
Hook up to water by attaching a ½" minimum high pressure water hose to the city water service.

Plug the **electrical cable into the city power service.** Be sure you have the wire grounded and have the proper polarity. See page 105 for technical details.

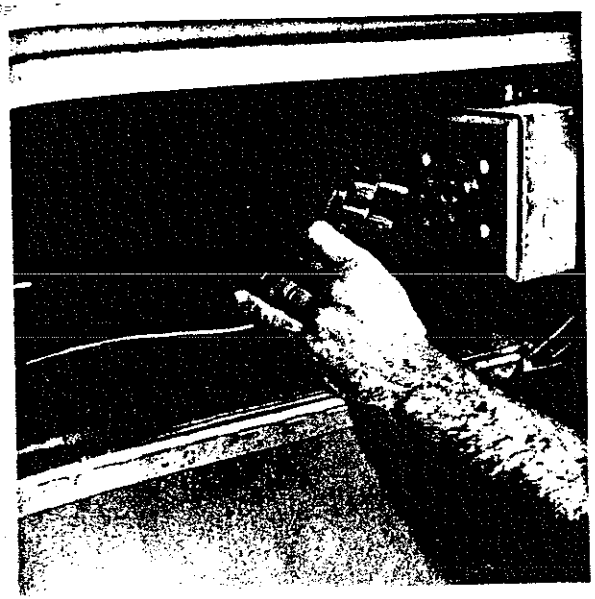
If city power service is not available, plug your electric cable into the generator outlet located inside the trunk compartment, where power cord is stored. See page 108 for details of generator operation.



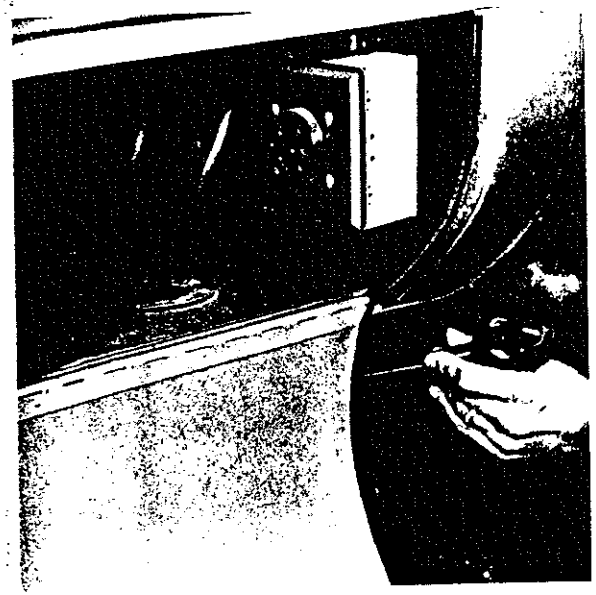
City Water Hook-Up



Waste Drain Hose Hook-Up



120 Volt Electrical Supply - Self Contained



120 Volt Electrical Supply - City Power

Hook your **waste drain hose into the sewer disposal facility** and attach to the drain outlet in your Motorhome. For details on this procedure refer to page 102.

Turn on gas supply; light the oven pilot, light the water heater and refrigerator pilots.

When you stay for extended periods where electric or water hook-ups are not available, you must make regular checks on the condition of your 12 volt battery and the contents of your water tank. Try to conserve electricity. You can recharge your battery by running the engine in your Motorhome at a fast idle. 1 hour per day should provide about 5 hours of power. Carry drinking water in a clean bucket to refill your tank. Be sure to light your refrigerator pilot. When your waste tank nears capacity, move your Motorhome to a dumping location.

Storage and Winterizing

When storing your Motorhome for short or long periods use the same precautions as you would in your own home in regard to perishables, ventilation and rain protection. In addition, for prolonged storage periods, flush out all the drain lines and the holding tanks. Also, drain the entire water system including the water heater and the water storage tank. Instructions for draining the water system are explained in the following paragraphs on winterizing.

Twice a year or after a long storage period, we suggest you take your unit in to your Airstream Dealer for a check-up and cleaning of the gas operated appliances.

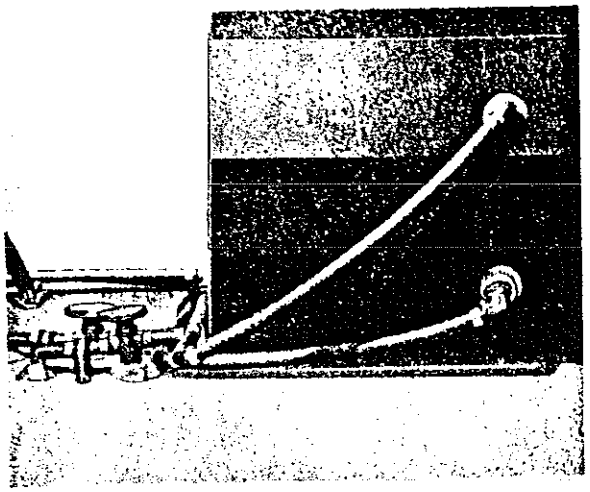
Living Area

The main consideration in winterizing is to guard against freezing damage to the hot and cold water systems, the waste drain system (including the traps), the waste holding tanks, the water heater and the batteries. To completely winterize your Motorhome follow this procedure:

1. Level the Motorhome from side to side and front to rear. Open all the faucets.
2. Turn the water pump switch to the OFF position.
3. Open all drain valves. One drain valve on all models is located on the water heater exterior and is accessible through the water heater access door. On the 24 ft. models, valves are located in the roadside wardrobe and under the refrigerator. On the 28 ft. rear bath models, valves are located in the roadside bathroom closet. On the 28 ft. center bath models, valves are located under the roadside bed.
4. The toilet water valve should be left in open position while draining water. It is located in the lavatory cabinet on all models.
5. While the water is draining from the system, open and flush the toilet flushing valve. Depress hand spray thumb button of the optional water saver toilet and hold the spray head below rim of the toilet and drain the hand spray line. There is danger of damage from freezing if water remains in these lines and valves. Depress hand spray thumb button on the telephone showerhead and drain all water. Unscrew the heads on both spray units and store.
6. Remove the flexible hose from the check valve. The check valve is part of the water pump's outlet fitting.
7. Disconnect the water pump inlet connection and expel water by turning pump on for approximately 1-2 seconds.
8. After the water has stopped running from the drain lines, apply at least 60 lbs. of air pressure at the city water inlet. Be sure the toilet valve and all drain valves and faucets are open and pump outlet hose is disconnected. This can be accomplished at a service station and will force any remaining water from the water heater and remove any water which may be trapped in low areas.
9. Pour a cup of non-toxic antifreeze into the lavatory, sink, and tub drains to prevent freezing of water in traps.
10. Be sure to open the waste-holding tank drain valves and drain and flush the tanks thoroughly. (This is very important as the sewage in the tank, if frozen, could seriously damage the tank.)
11. Remove the cartridge of the water purifier, if your Motorhome is so equipped, and drain the purifier.
12. Remove the batteries from your Motorhome and store in a cool dry place, where there is no danger of freezing. It is very important for optimum life of your battery to check it periodically and to keep it fully charged. This is especially true in winter months when the temperature may drop below freezing. Please refer to the battery section for more information on battery maintenance.
13. Remove any items (food, cosmetics, etc.) from the interior that might be damaged by freezing—or might damage the Motorhome if containers break.

For additional winterizing protection add non-toxic anti-freeze (approved for drinking water systems), to your water lines using the following procedure:

1. Reconnect all lines except the hose to the pump inlet port. Close all drain valves (see step #3).
2. Attach a length of hose to the pump inlet port. This piece of hose should be long enough for the free end to be inserted into and reach the bottom of the anti-freeze container.
3. Dilute the antifreeze solution in accordance with the manufacturer's instructions.

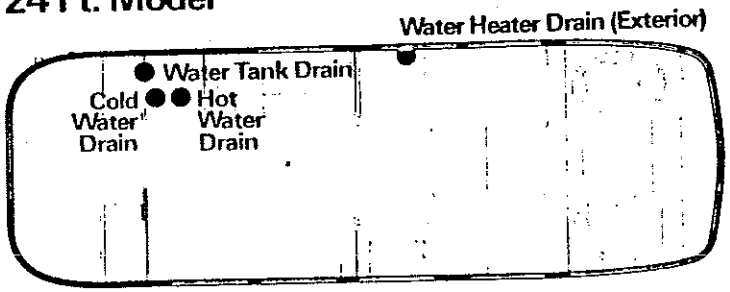


Drain Valves

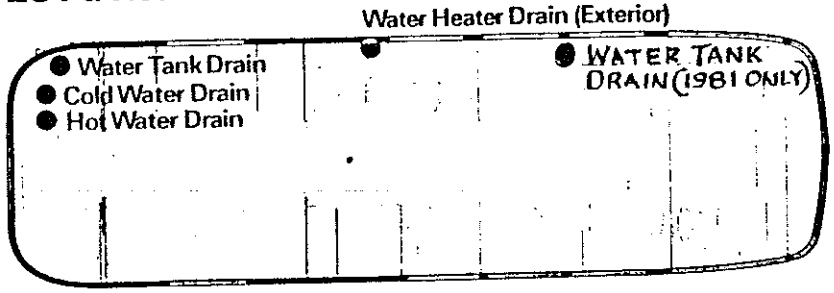
4. Open all water faucets.
5. Insert hose length into the antifreeze container, turn the pump switch on, and run the water pump until the antifreeze solution fills all water lines and the water heater. Flush toilet, work hand spray, while holding down in bowl. Work hand shower spray while holding down in the tub.
6. Shut off the pump and close all faucets.
7. Disconnect the hose length from pump inlet fitting and reconnect water system inlet line.

Note: If you wish to bypass your water heater in order to cut down on the amount of antifreeze necessary, you may purchase a kit for this purpose from a Wally Byam Store.

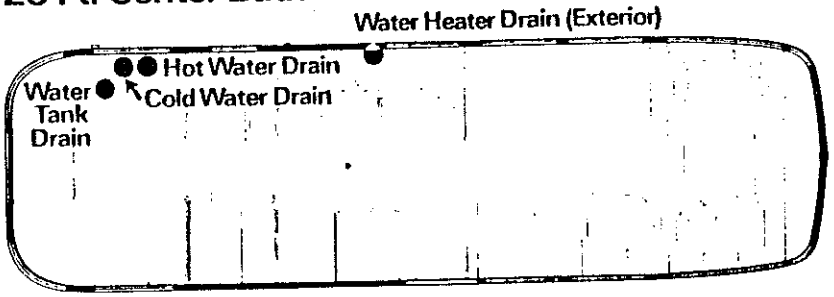
24 Ft. Model



28 Ft. Rear Bath Model



28 Ft. Center Bath Model



Drain Valve Locations

In addition to the living area storage protection the vechicular drive train and accessories must be protected. Check with your Chevrolet dealer for proper procedures.

Vehicle Drive Train

Less than 30-day storage:

1. Wash vehicle exterior completely to remove surface dirt.
2. Check engine coolant level and, if necessary increase "anti-freeze" protection, see page 52.
3. Check batteries and charge if below 1.225 specific gravity to avoid freezing and deterioration. All battery cables should be disconnected at the battery to prevent gradual discharge and the possibility of fire due to short circuits.
4. Check and inflate tires to correct pressure, see page 45.
5. Vehicles are best stored in a clean, dry, closed or roofed area. If vehicle is subject to corrosive fumes or bird droppings, it should be covered. If the vehicle is to be stored where the wind might move the cover extensively during storage, secure the cover carefully as it may cause rub-through of paint.
6. Run engine until completely warmed up before shutting off ignition (at fast idle for a minimum of 15 minutes).
7. **Make sure all windows are closed.**
8. Leave parking brake in "OFF" position. Place selector lever in "PARK" position and place blocks fore and aft of wheels.

Extended storage beyond 30 days:

In the event your Motorhome is to be stored for extended periods beyond 30 days, the following items are suggested in addition to the steps given for vehicles that are to be stored less than 30 days:

1. Apply a coat of wax to all the exterior surfaces.
2. Start and run engine until completely warm. Shut off engine, drain engine oil and replace filter element; refill with fresh oil. After oil has been replaced, remove air cleaner and pour one-half to one pint of 10W or lighter oil into carburetor air intake with engine running. Pour slowly at first; then rapidly, using last quarter to stall engine. Replace air cleaner, if vehicle is equipped with air conditioning, the unit should be operated during this final engine warm-up to lubricate compressor seals.
3. Drain coolant from radiator, cylinder block and heater.
4. If freezing temperatures are expected the battery should be removed from the vehicle and stored in a cool, dry area at above freezing temperatures. Also, do not place the batteries directly on a concrete floor—use a piece of wood between the batteries and floor.
   Caution: As part of the normal function of an automobile storage battery, hydrogen gas is produced through chemical action. This gas is toxic and extremely combustible when mixed with air. Do not store battery where it will be exposed to sparks or open flame, nor where it is exposed to children.
5. Jack up vehicle and place blocks under front and rear suspension so that tires do not contact the ground.
6. Drain gasoline from fuel tank, fuel lines, and carburetor to reduce the fire hazard and to prevent gumming of the fuel as it evaporates.
7. Remove windshield wiper arms and blades and store in vehicle.