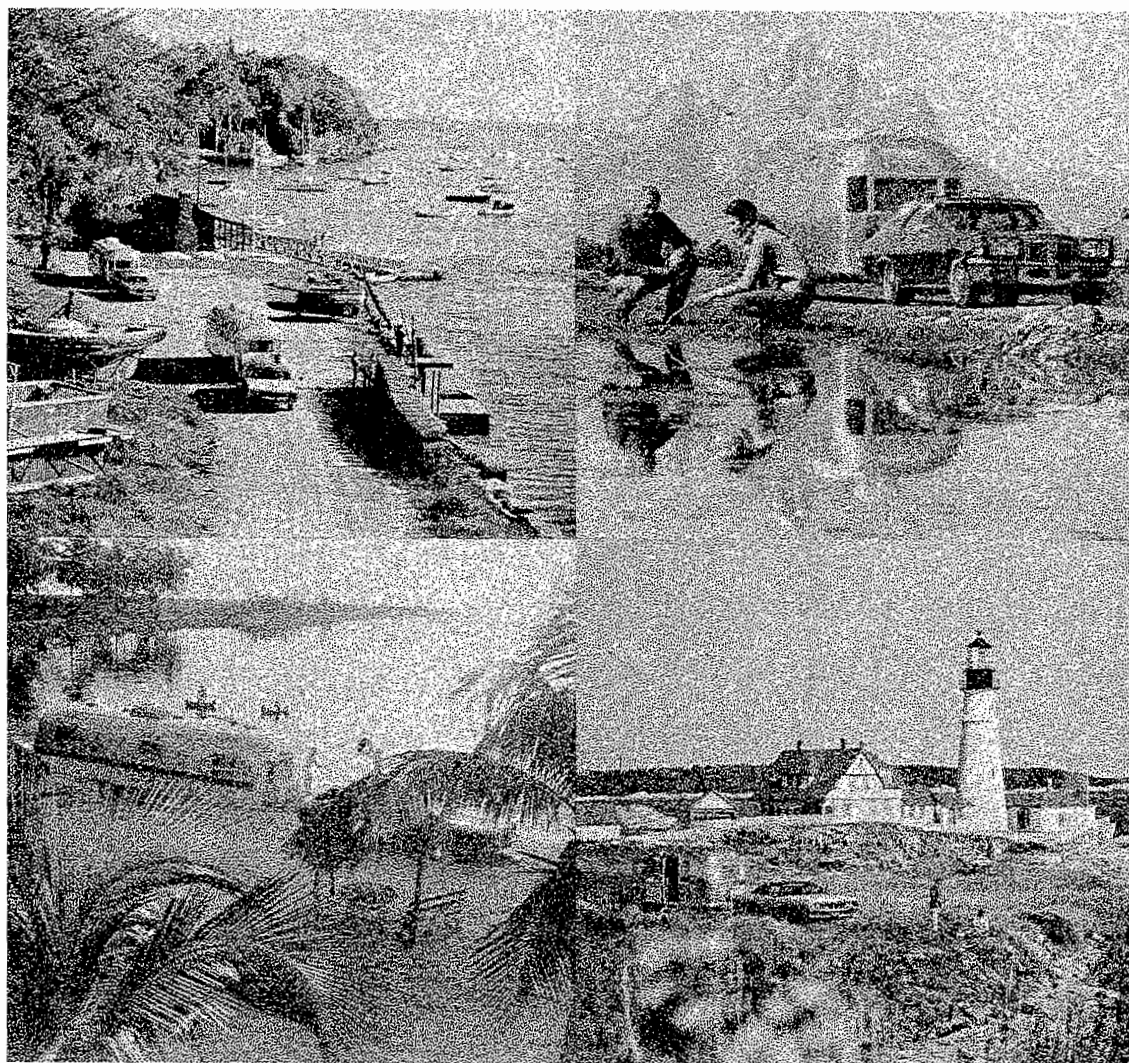


Excella 500

1975 Excella 500 Owner's Manual



Introduction

An Airstream travel trailer offers you the ultimate in travel luxury and mobility. This owner's manual is your key to care-free travel fun. It contains information necessary to avoid problems. Consult it when you have a question about your new Airstream. It has been designed to aid you in knowing your trailer better. 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, please leave the manual with the trailer. Go Airstream and make this your year for carefree vacations.

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Wally Byam Caravans and Clubs

When you bought your Airstream, you bought a whole new way of life. Airstream owners enjoy endless opportunities for friendship, fun and adventure. You may join every **Airstream Wally Byam Caravan** and **Airstream Company Rally**. We arrange for such rallies each year: one in the North West, South West, North East and South East. You also become eligible to join the **Wally Byam Caravan Club International**, the largest single make trailer club in the world. The **WBCCI** is made up of 22,959 family memberships and 131 local chapters or units throughout the United States, Canada and Mexico. They meet at monthly rallies, or where weather conditions prevent year round rallies, Caravanners come together for pot luck dinners to plan events for the good seasons.

Since the first Wally Byam Caravan in 1951, 89 Airstream Caravans have gone to most parts of the world. Caravans to Canada and Mexico are now so popular that there are eight each year. Many a lifelong friendship was started on these trips. Old-timers and new owners share experiences and find a new kind of fellowship, and there is no better way to learn to use your Airstream. Caravanners enjoy many advantages: the security of traveling in a group, planned entertainment and exceptional sightseeing opportunities. The prestige and good will established over many years by our Caravans adds further benefit to Caravanner membership.



The "**Caravanner**" and the "**Blue Beret**" are the official Caravan Club publications. The bi-monthly "**Caravanner**" is for general distribution to owners and prospective buyers, while the monthly "**Blue Beret**" is for WBCCI members only.

Several months before a Caravan rolls, the "**Caravanner**" and the "**Blue Beret**" publish a description and a registration coupon. Everyone who registers receives a detailed bulletin with complete information on the caravan. When going abroad, all official matters such as insurance, tourist cards and border crossing formalities are handled for you by the Caravan staff.

On every Airstream Caravan, the route is carefully planned, and a day by day



itinerary, including mail stops, is given to all Caravanners in advance. Our staff also makes all the arrangements for parking, entertainment, tours, etc. well ahead of the starting date. Airstream Caravan Programs always take caravanners of all ages into account. Airstream provides the Caravan Staff: a leader, a recreation director, a service representative and an advance representative. This staff is backed by committees composed of interested Caravan members who assist in the day-to-day operations.

Wally Byam, pioneer trailer traveler, and founder of the Airstream Company, was born on July Fourth and the first International Rally was in the form of a huge birthday party for him at Bull Shoals, Arkansas. It was patterned after the Inter-



national Rallies in Europe which Wally and his wife Stella had attended for many years. Everyone enjoyed this first big rally so much that the club decided to make it an annual event. Since then, International Rallies have grown and grown. Some 4,000 Airstream Travel Trailer families recently gathered at Notre Dame, Indiana for the 1974 International Rally.

Only Wally Byam Caravanners and WBCCI members are entitled to have an official **Trailer Number** and be listed in the **Annual Directory**. The Annual Directory contains a schedule of all major rallies and Airstream Wally Byam Caravans for the year, and announces the activities of the Ham Radio, C.B. Radio, Square Dance and the many other

WBCCI special interest clubs.

Along with the fun, Airstream owners recognize the need for better legislation, more and better overnight parking facilities, more sanitary stations and other travel conveniences.

They are alert to adverse bills governing travel trailers and have achieved much through the actions of the strong **WBCCI National Legislative Committee**.

The Way of Life Department, of the Airstream Company dedicates its full time staff to improving the owners' fun and makes use of all the information and experience gained by owners over the years to help develop even better Airstreams.

Become part of the Airstream Way of Life. Join our WBCCI activities and we believe you will enrich your life. Owners join through a local unit of WBCCI. All operate autonomously, elect their own officers and fix their own dues. Annual International dues are paid with the unit dues at the time of application. These are at present: International dues, \$5.00 per trailer and unit dues from \$1 to \$6. If you are interested, please write to the following address and we will forward your letter to the unit nearest you:

WBCCI Headquarters Office
15939 Piuma Avenue
Cerritos, California 90701

Warranty and Service

Airstream offers the most complete and explicit warranty in the industry. Your valuable warranty covers every item in your trailer (except tires and battery) against failures resulting from defects in either material or workmanship for two years from date of purchase as the original owner.

Adjustments to appliances, gas pressure or other normal service and maintenance requirements are not a part of the warranty. Fading or deterioration of upholstery, curtains or other material due to sunlight, normal use or exposure is not warrantable. Your warranty is designed to cover defects in material and workmanship.

Your tires and battery are warrantied by their respective manufacturers and will be handled by their service centers according to the terms of their written policy.

Axle alignment and wheel balancing was checked on your Airstream before it left the factory. The axles will not need realignment unless your tires receive a severe blow, such as road hazards, curbs, etc. Your tires and wheels will require rebalancing each time they are removed or rotated. All balancing or alignment charges will be a customer's obligation.

Please read the facsimile warranty carefully. As soon as the factory has received your signed check-out and acceptance

sheet, a formal warranty is issued to you, together with an owner's identification card. As soon as you receive your warranty, please attach it over the facsimile for safekeeping. **In order to qualify for service without charge under the Airstream Warranty Program, your owner's identification card or warranty must be presented to the service representative.**

The Airstream Certified Performance Checkout, or C.P.C., is an exclusive Airstream program. Before leaving the factory, each and every vital part of an Airstream is tested for performance. Each test is signed and certified by an inspector. After the Airstream arrives on your dealer's lot, all of these vital parts and systems are again tested. When you take delivery of your new Airstream, a factory trained trailer expert personally gives you a complete check-out on the trailer.

C.P.C. does not stop here. After you have traveled with your Airstream for 1000 miles (or 60 days, whichever comes first) you can make an appointment with any one of the 155 Airstream dealers or service centers for still another check-out of your trailer. At that time, a specified list of performance checks on your trailer equipment will be conducted and any deficiencies you have experienced since taking delivery will be corrected. Give the C.P.C. card overleaf to the dealer when you take your Airstream for the 1000 mile check.



Please contact your dealer if you need service. Major service under your Airstream Warranty is available through our nationwide network of factory trained specialists at Airstream Certified Dealer Service Centers listed on pages 6—9 of this manual. **All centers operate on an appointment basis for the utmost efficiency.** When you require service from the Airstream factory or a certified service center, please contact the service manager for an appointment, and kindly inform him if you are unable to keep the appointment date or wish to change it.

Airstream factory service may be arranged by contacting the service manager:

Airstream
15939 Piuma Avenue
Cerritos, California 90701
(213) 860-4411

Airstream
Jackson Center, Ohio 45334
(513) 596-6129

1000 Mile Check Authorization Card

This card entitles you, under the exclusive Airstream Certified performance checkout program, to a 1000 mile (or 60 day... whichever comes sooner) Performance Check of your Airstream travel trailer.

In the event you are traveling or moving, this service may be performed by any franchised Airstream dealer in the United States or Canada but, of course it is recommended that the check-up be performed by your selling dealer because of his logical interest in you as his customer.

We would suggest that you make an appointment with your dealer in advance of your arrival or inspection date.



1976 Airstream Service Manual Order Form

Service information for the 1975 Excella will be included in the 1976 Airstream Service Manual. The 1976 Airstream Service Manual will be available in December, 1975.

If you would like more information on the maintenance and specifications of your new Airstream, fill in order form completely and mail to:

Airstream Inc.
Jackson Center, Ohio 45334
or
Airstream Inc.
15939 Piuma Avenue
Cerritos, California 90701

Please send me the **1976 Airstream Service Manual**, price \$20.00* per copy, to the following address:

Name _____

Address _____

City _____ State _____ Zip Code _____

☐ Enclosed \$20.00* check or money
order payable to Airstream Inc.

☐ Please send C.O.D.

*Ohio Purchasers—Add 4½% Sales Tax
California Purchasers—Add 6% Sales Tax

1

The Exclusive Caravanner Travel Trailer Insurance Plan

A complete comprehensive policy, including these five big bonus benefits at no additional cost:

- Collision coverage (low deductible)
 - Theft coverage against personal effects
 - Personal effects coverage against damage or loss by collision, etc.
 - Vacation expense allowance
 - Mexico travel coverage (90 days)
- And, there are no other deductibles!

Already over 25,000 Airstream owners are benefiting from this program. Fast, efficient claim service, coast to coast. Underwritten by Central National Insurance Company of Omaha, with assets of over \$60 million. This program also includes complete protection against these losses: fire, lightning, explosion, wind-storm, hail, landslide, flood, all accessories, vandalism, and many more perils commonly insured by comprehensive coverage.

2

The New Airstream Owner's Association Accident Insurance Program

A big bonus benefit available only to Airstream owners.

This program includes 24-hour protection for accidental death or dismemberment—anywhere in the world, on or off the job; on business, on vacation—or at home PLUS 2½ times the benefits while on a trip with your Airstream.

No medical statement is required and you will not be bothered by a physical examination or investigation. But you must be an Airstream owner, under age 70. There are 4 specialized plans from which to choose. Here's an example of benefits:

Plan B-1 (While at home) Plan offers the owner and spouse full 24-hour protection against accidents anywhere in the world, whether on or off the job, on business, pleasure, or vacation.

This plan pays \$20,000 and \$10,000 to owner and spouse respectively in event of accidental death or dismemberment, and \$14.00 a day for up to 365 days while in the hospital.

Plan B-1 (While on a trip with an Airstream) Benefits are payable if the accident occurs when the insured is away from his permanent address while on a trip with his Airstream Travel Trailer. Coverage is provided 24-hours a day for all types of accidents during a trip. At this time the accidental death benefit would increase to \$50,000 and \$25,000 respectively. The daily in-hospital allowance would increase to \$35.00 a day for up to 365 days. The annual premium for plan B-1 is only \$89.

For fast efficient service and answers to your specific questions, call (213) 385-7461.

Travel carefree. Fill out and mail the following request card today!

Please rush information on these exclusive Airstream money-saving programs:

- ☐ Caravanner Travel Trailer Insurance Plan
- ☐ Airstream Owner's Association Accident Insurance Program

Name _____

Address _____

City _____ State _____ Zip _____

Business Reply Mail

No postage necessary if mailed in the United States

First Class
Permit No. 36321
Los Angeles, CA.

Postage will be paid by

Caravanner Insurance, Inc.
2411 West Third Street
Los Angeles, CA 90057

Please place your Registered Warranty over this Facsimile within the line, the folded edge on top. There is a glue strip on the back for this purpose.



For the lifetime of the Registered Warranty Holder, or so long as he continues as the original owner of the Airstream Travel Trailer, Airstream warrants the metal shell, frame, axle and axle assembly to and including spindle (excluding shock absorbers) to be free from defects in material and workmanship; all other component parts, including shock absorbers (excluding tires and batteries) are likewise warranted for a period of two years from the date of purchase. Any warranty defects will be corrected without cost upon return of the trailer, or defective part, to any Airstream factory or authorized Airstream service center.

This warranty is in lieu of all other warranties of merchantability or fitness expressed or implied, there being no warranties which extend beyond the description on the face hereof and expressly excludes conditions resulting from normal wear, accident, abuse, exposure or overload.

AIRSTREAM

Ohio factory: 177 West Church Street, Jackson Center, Ohio 45334

California factory: 15939 Piuma Avenue, Cerritos, California 90701



Service Centers

Alabama

Alabama Auto Carriage Company
2359 West Fairview
P.O. Box 1695
Montgomery, Alabama 36108

Camper City
2205 Highway 31 S.
Birmingham, Alabama 35294

Arkansas

Fred & Jack Trailer Sales
10318 New Benton Highway
I-30 West
Little Rock, Arkansas 72209

Arizona

Gunn's Recreational Vehicles, Inc.
1912 Prince Road West
Tucson, Arizona 85705

Robert Crist & Company
2025 East Main Street
Mesa, Arizona 85203

Robert Crist & Company
8833 North Black Canyon Hwy.
Phoenix, Arizona 85021

California

Adventure Trailer Center
5810 S. Union Avenue
Bakersfield, California 93307

Bill Barry Pontiac
2000 East 1st Street
Santa Ana, California 92705

Caswell's Vacation Vehicles
700 East Foothill Boulevard
Pomona, California 91767

Coastline Trailer Sales
303 North Ventura Avenue
Ventura, California 93001

Haller Trailer Sales
15711 South Lakewood Boulevard
Paramount, California 90723

Holiday Trailer Sales
770 East Baseline
San Bernardino, California 92410

Moore Recreation Center
4099 North Wilson Way
Stockton, California 95204

Nelson's RV Enterprises, Inc.
28001 Mission Boulevard
Hayward, California 94544

Pulmobile Trailer Sales
4563 San Fernando Road
Glendale, California 91204

Ralph's Trailer Sales & Supply
1025 East Main
El Cajon, California 92021

Torvick Open Road
2625 Santa Rosa Avenue
Santa Rosa, California 95401

Toscano Recreation Center
617 W. Pacheco Boulevard
Los Banos, California 93635

Valley Trailer Sales, Inc.
1650 El Camino Avenue
Sacramento, California 95815

Colorado

Chisman Trailer Sales
2500 East Boulder Street
Colorado Springs, Colorado 80909

Leo Payne Recreational Plaza
4350 S. Federal Boulevard
Englewood, Colorado 80110

Connecticut

A-1 Trailer Sales
Route 66 and Jackson Hill Road
Middlefield, Connecticut 06455

Camperama of Danbury, Inc.
Mill Plain, Route 6
Between Exit 1 and 3, I-84
Danbury, Connecticut 06810

Delaware

Richard Rice Trailer Company, Inc.
2343 South DuPont Highway
Dover, Delaware 19901

Florida

Airstreams by General
5610 Okeechobee Road
West Palm Beach, Florida 33406

Bell's Trailer Park & Sales
Route 4, Box 382
Highway 90W
Tallahassee, Florida 32310

Camptown USA, Inc.
23905 SW 132nd Ave.
Miami, Florida 33171

Carpenter's Campers, Inc.
8450 Pensacola Boulevard
US 29 North, Between I-10 & 90
Pensacola, Florida 32504

C. J. Stoll, Inc.
5985-34th Street, North
US 19
St. Petersburg, Florida 33714

Indian River Trailer Sales
5855 US Highway 1
Cocoa, Florida 32922

Indian River Trailer Sales, Inc.
5001 Sand Lake Road
Route 528, 1 mile E. of I-4
Orlando, Florida 32809

Kropf Eldorado, Inc.
6915-14th Street West
US 41, S.
Bradenton, Florida 33507

Murphy of Florida, Inc.
940 Crevasse Street
Lakeland, Florida 33801

Pleasure World Inc.
5408 San Juan Avenue
Jacksonville, Florida 32210

Illinois

Crystal Valley, Inc.
4220 Northwest Highway
US 14 at Route 31
Crystal Lake, Illinois 60014

Rocket Trailer Sales
Route 30 and Sixth Avenue
Rock Falls, Illinois 61071

Wilderness Lake Camp Ground
Route 2
Martinsville, Illinois 62442

Vacationland Trailer Sales
U.S. 30
Shabbona, Illinois 60550

Indiana

Berning Trailer Sales, Inc.
5220 New Haven Avenue
Fort Wayne, Indiana 46803

C & G Recreational Center, Inc.
R.R. 3, Box 46
Muncie, Indiana 47302

Camp-Land, Inc.
1/2 Mi. W. of S. Lake Mall
Merrillville, Indiana 46410

Four Seasons Trailer Sales Corp.
8225 W. Washington Street
Indianapolis, Indiana 46231

Travel Center of Elkhart, Inc.
1421 Midlake Road
Elkhart, Indiana 46514

Iowa

Barrows Camp O Rama
1912 Washington Boulevard
Camanche, Iowa 52730

Imperial RV Center
1727 Ankeny Road
Ankeny, Iowa 50021

Ace Fogdall, Inc.
5324 University Avenue
Cedar Falls, Iowa 50613

Kansas

Scholfield Winnebago, Inc.
dba Scholfield's Boulevard Trailers
11516 East Kellogg
Wichita, Kansas 67209

Kentucky

Crouch Campers & Trailers
4450 Clarks River Drive
Hwys. 60-62-68 SE
Paducah, Kentucky 42001

Murphy Sales Company, Inc.
Winchester Road (US 60W)
Box 404
Mt. Sterling, Kentucky 40353

Louisiana

Camper Village, Inc.
705 Florida Boulevard, S.W.
Denham Springs, Louisiana 70726

Givens Travel Center
9724 Mansfield Road
Shreveport, Louisiana 71108

Maryland

B & J Trailer Sales
Box 369, US Route 40
Aberdeen, Maryland 21001

Maine

Giant Advance Camper Country
765 Center Street
Auburn, Maine 04210

Massachusetts

Donahue's Trailer Sales
88 Mountain Road, Box 126
Off Rte. 128 at Exit 413
Burlington, Massachusetts 01803

Michigan

Kolbe Trailer Sales
4401 East Eight Mile Road
Warren, Michigan 48091

Leisure Wheels, Inc.
3098 W. Huron
Pontiac, Michigan 48054

Caswell & Co.
243 South Dexter
Ionia, Michigan 48846

Moore's Recreation
1222 E. North Territorial Road
Whitmore Lake, Michigan 48189

Northwoods Trailer Sales
G-6369 North Dort Highway
Mt. Morris, Michigan 48458

Vicars Trailer Sales, Inc.
9080 Pelham at Wick
Taylor, Michigan 48180

Woodland Travel Center, Inc.
5190 Plainfield Road
Grand Rapids, Michigan 49505

Minnesota

Camperland, Inc.
Rural Route #1, Highway 52
Rochester, Minnesota 55901

Hart Trailer Sales

Highway 71
Long Prairie, Minnesota 56347

Minnesota Trailer Sales, Inc.
11350 Highway 65 N.E.
Minneapolis, Minnesota 55434

Mississippi

Buster's Service Center
Military Road, Box 324
Columbus, Mississippi 39701

Missouri

Bill Thomas Camper Sales, Inc.
5217 N. Lindbergh Boulevard
Bridgeton (St. Louis) Missouri 63042

I-44 Recreational Vehicles, Inc.
Box 93, S. Side Halltown Exit on I-44
14 Mi. W. of Springfield, Mo.
Halltown, Missouri 65664

Kansas City Trailer Sales, Inc.
11530 South 71 Highway
Kansas City, Missouri 64137

Wineinger, Inc.
3408 S. Belt Highway
St. Joseph, Missouri 64503

Nebraska

Autosport RV Center
6101 "L" Street
Omaha, Nebraska 68117

Nevada

"95" Trailer Sales
N. Rancho Drive
Las Vegas, Nevada 89106

Webb's Travel Trailers
295 Kietzke Lane
Reno, Nevada 89502

New Jersey

Airstream by Angell
Route 78 & 173 Interchange
Box 94
Bloomsbury, New Jersey 08804

South Jersey Travel Trailer Center, Inc.
Route 47
Delsea Drive
Franklinville, New Jersey 08322

New Mexico

Gunn's Recreational Vehicles, Inc.
12020 Central Avenue, S.E.
Albuquerque, New Mexico 87123

New York

Ballantyne Trailer City, Inc.
7447 Route 96
Victor, New York 14564

Callahan's Recreational Service, Inc.
Route 15, R.D. 1
Lindley, New York 14858

Ken's Camper Sales
Noxon Road
Poughkeepsie, New York 12603

Maroone Family Travel Ctr., Inc.
2550 Walden Avenue, Exit 52
E. from NY Thruway
Buffalo, New York 14225

Niblack Trailer Sales
691 McLean Avenue
Corner NY Thruway

O'Malley Enterprises, Inc.
Traffic Circle—Route 9 & 7
P.O. Box 116
Latham, New York 12110

Ralph's Sport Center
R. D. 5
Route 57
Fulton, New York 13069

North Carolina
College Park
4208 New Bern Avenue
Raleigh, North Carolina 27610

College Park
North Church Street Extension
US 301 and 301A North
Rocky Mount, North Carolina 27801

Faires, Inc.
3217 N. Tryon Street
Box 5205, Routes 29 and 49
Charlotte, North Carolina 28206

Hawley's Cycle & Camping Center, Inc.
4784 Raeford Road
Fayetteville, North Carolina 28304

Out of Doors Mart, Inc.
Winston-Salem, Greensboro Highpoint
I-40 at Sandy Ridge Road Exit
Drawer 799
Kernersville, North Carolina 27284

North Dakota
McLaughlin Equipment Co.
320-27th Street, South
Fargo, North Dakota 58102

Ohio
Avalon Travel Center, Inc.
11761 Portage Road
Canal Fulton, Ohio 44614

Buckeye Airstream Ser. & Sls., Inc.
Baltimore Road, Box 13
N. of E. I-70 on 310 at Rte. 40
Etna, Ohio 43018

Camping World, Inc.
37200 Vine Street
Willoughby, Ohio 44094

Coachman Camping Center
410 East Sandusky Street
Findlay, Ohio 45840

Frank B. Ricketts Travel Trailers
P.O. Box 683
I-77 at US 40
Cambridge, Ohio 43725

H&H Recreation World
P.O. Box 108, N. County Rd. 25A
Piqua, Ohio 45356

Murphy Travel Trailers of Ohio, Inc.
11526 Chester Road
I-75 at Howard Johnson
Cincinnati, Ohio 45246

Sylvan Industries, Inc.
dba *Sylvan Airstream*
5247 Alexis Road
Sylvania, Ohio 43560

Oklahoma
Brassfield Mobilhomes
7227 NW 39th Expressway
Bethany, Oklahoma 73008

Oregon
Cascade Trailer Sales
1876 Highway 99, North
Eugene, Oregon 97402

Spencer Mobile Homes, Inc.
9341 S.E. 82nd Avenue
Portland, Oregon 97266

Pennsylvania
Farnsworth Camping Center
Route 54
Elysburg, Pennsylvania 17824

Glasgow Recreational Vehicles, Inc.
1650 Lincoln Way East
Chambersburg, Pennsylvania 17201

Lo-Jan Travel Center
Route 6
Scranton—Carbondale Hwy.
Scranton, Pennsylvania 18508

Robison Trailer Sales
Route 198 at Blooming Valley
R.D. #3
Meadville, Pennsylvania 16335

Trav-L-Homes
Lewis Road
Royersford, Pennsylvania 19468

Turner Airstream Sales
412 Lincoln Highway, W.
Jeannette, Pennsylvania 15644

Universal Motor Sales of Butler, Inc.
1030 North Main Street
Route 8 and 422
Butler, Pennsylvania 16001

Village Green Trailer Sales Co.
MR 26 (Route 452)
Media, Pennsylvania 19063

Wise Trailer Sales
Division of F.W. Wise Gas Co.
1501 Airstream Way
Clearfield, Pennsylvania 16830

Rhode Island
Arlington Trailer Sales
966 Quaker Lane, Route 2
Warwick, Rhode Island 02818

South Carolina
Crescent Travel Home Center
4080 Broad Street
Sumter, South Carolina 29150

Dixie Lee Trailer Sales
Highway US 1 and 78
P.O. Box 306
Clearwater, South Carolina 29822

Skyway Trailers
Box 262, US 25 and 276
4 mi. North of Greenville
Travelers Rest, South Carolina 29690

South Dakota
Spader, Inc.
5500 North Cliff, Box 963
Sioux Falls, South Dakota 57101

Tennessee
Bobby Jones Trailer Sales
4222 James Road (in Raleigh)
Memphis, Tennessee 38128

Cullum & Maxey Camping Center
Elzie Miller Road
2 Miles North of Opryland
Donelson (Nashville), Tennessee 37214

Jewell's Camping Center
Route 4, Highway 45
Trenton, Tennessee 38382

Jim Crowder Recreational Vehicles
Route 4, Bristol Highway
Johnson City, Tennessee 37601

Murphy Motors Manors
P.O. Box 99, Murphy Park
3163 Airport Road
Alcoa, Tennessee 37701

Texas

A & A Trailer Sales
118 Arnold Boulevard
Abilene, Texas 79605

Abbott Trailer Sales
408 Avenue Q
Lubbock, Texas 79401

Austin-Buda Trailer Center
I-35 at Niederwald Overpass
Buda, Texas 78610

Bear Trailer Sales
1630 S. Beckley (I-35) S.
Lancaster, Texas 75146

D & M Trailer Sales, Inc.
3900 I-40 East
Amarillo, Texas 79103

Eastex Camper Sales
15422 Eastex Freeway
Houston, Texas 77039

Land Yacht Trailer Sales, Inc.
4616 Titanic Avenue
El Paso, Texas 79904

May Trailer Sales
1715 N. Stemmons Fwy.
Lewisville, Texas 75067

May Trailer Sales
3611 North Beltline Road
Irving, Texas 75062

Otis Thomas Sales, Inc.
2606 Jacksboro Highway
Wichita Falls, Texas 76302

South Texas Trailers & Supplies
Highway 77, S., P.O. Box 880
Sinton, Texas 78387

Utah

Brasher's R.V. Sales & Service
2089 West North Temple
Salt Lake City, Utah 84116

Virginia

Bay Camping, Inc.
3757 Bonney Road
Virginia Beach, Virginia

Cheek & Shockley Auto & Tlr. Sls.
2712 W. Broad Street
Richmond, Virginia 23220

James River Camper Sales, Inc.
Box 834, US 460E
Lynchburg, Virginia 24505

Koons Recreational Vehicles
Route 66 & 234
Manassas, Virginia 22110

Travel Trailers of Virginia
2211 South Main Street
P.O. Box 1089
Harrisonburg, Virginia 22801

Washington

Central Trailer Exchange, Inc.
14433 Pacific Hwy., South
Seattle, Washington 98168

Devon Lee Corporation
11257 Kirkland Way
Kirkland, Washington 98033

Tveten Motor Company
45th and Pacific Avenues
Tacoma, Washington 98408

West Virginia

Airstream by Stanley
1400 N. Eisenhower Drive
Box 1545
Beckley, West Virginia 25801

Don's Travel Trailers, Inc.
459 Winfield Road
US 35 at 60
St. Albans, West Virginia 25177

Wisconsin

Donna Lee, Inc.
dba Du-B-Do Sales & Service
Route 4, Box 182E
Mosinee, Wisconsin 54455

Northside Trailer Sales, Inc.
N 56 W 13180 Silver Spring Road
1 mi. W. of Hwy 100 on Silver Spring Rd.
Menomonee Falls, Wisconsin 53051

Spitzer Trailer Sales
2300 W. Beltline Highway
Middleton, Wisconsin 53562

Swee Trailer Sales
US 2 and US 51
Hurley, Wisconsin 54534

Wyoming

B & B Trailer Sales
P.O. Box 1747
Jackson, Wyoming 83001

Canada

Barber Motors, Ltd.
19-2nd Street
Weyburn, Saskatchewan

Can-Am Trailers, Ltd.
Box 370
Hwy. 4, ½ mi. N. 401, Exit 19
Lambeth, Ontario

Claynor Trailer Sales
20720-42nd Avenue
Langley, B.C.

Kanata Tent & Trailer
Highway 7, Box 190
Sittsville, Ontario

Laurentian Trailer City, Ltd.
1260 Boulevard LaBelle
Route 11
Blainville (St. Therese), Quebec

Pik-A-Dilly Trailer & Marine Sales
34th Street and Victoria Avenue
Brandon, Manitoba B7B OMO

Totem Trailers, Ltd.
85 Plains Road, West
Burlington, Ontario

Totem Trailers, Ltd.
1701 Dundas Highway East
Mississauga, Ontario

Travel Trailers Western, Ltd.
6006-104 Street
Edmonton, Alberta

Twin City Trailer Sales, Ltd.
Dartmouth Highway, Box 395
Bedford, Halifax Co., Nova Scotia

Wally Byam Stores

To make trailering more enjoyable, there are Wally Byam Stores established at the majority of Airstream dealers. All Airstream dealers have the opportunity of purchasing for you the necessary equipment which would enable you to enjoy your new Airstream trailer to the utmost. The Wally Byam Stores authorized dealerships stretch from coast to coast, and these dealers stock hundreds of items which are tested and approved by travel experts. Be sure and get a Wally Byam Stores Catalog from your dealer or write to:

Wally Byam Stores

Ohio Building
Ohio Avenue
Sidney, Ohio 45365

The following is a list of equipment we recommend:

1. First aid kit
2. Flashlight
3. Fire extinguisher (B:C-type)
4. Emergency road flares
5. Handi-Roll Trailer Tool File—with small hand tools—hammer, pliers, crescent wrench and screwdrivers. Rec-V Tool Kit—contains: one 4 in 1 screwdriver with slotted and Phillips head bits, Scrulox square recessed bits #1 and #2, plus clutch head double end bits 5/32" and 3/16"
6. Crosstype lug wrench for trailer wheels
7. Pop rivets (3 sizes) plus pop rivet gun

8. Battery booster cables
9. Tire gauge (up to 100 lbs. P.S.I.)
10. Hitch ball lube
11. Small bi-directional spirit level
12. Heavy-duty turn signal flasher
13. Four stabilizing jacks
14. Leveling ramps and chocks to fit against and under tires for leveling, and to prevent trailer from moving while parked
15. Spare tire for single axle trailers
16. One 50 ft., one 25 ft. length of 5/8" high pressure water hose, spare rubber washers and two "Y" connections with caps which enable two trailers to be hooked up to one faucet
17. Two plastic pails for carrying fresh water
18. Quick disconnect garden hose coupling
19. One 10 ft. or 20 ft. sewer hose and coupler
20. One rubber sewer elbow, plus two 2-1/2 to 3-3/4 adjustable hose clamps
21. One Thetford sewer hose adaptor (elbow or straight)
22. One 1/2 gal. holding tank cleaner and deodorizer
23. 50 ft. electric cord (#12-3 wire) with a 30 amp. capacity
24. Cord adapter, 3-15 amp. and service cord adaptor
25. Spare 20, 40 and 50 amp. cartridge fuses and light bulbs (see pages 67-68 for sizes)
26. Can of Spra-Kleen
27. Short handled shovel (G.I. type, Army surplus)



Jackson Center, Ohio



Cerritos, California

Tow Car Equipment

If you plan to buy a new car to tow your Airstream, we suggest that you include in your purchase the trailer towing options offered by most automobile manufacturers. These include such things as an oversized generator and radiator, heavy duty springs and shock absorbers, automatic transmission cooler, oversized fan, heavy duty flusher unit and others, depending on the make of the vehicle.

Transmissions may be manual or automatic, but an automatic transmission will prolong your car's engine life and does a better job of controlling engine loads than the average driver using a manual shift.

Having adequate power is very important when considering the purchase of a new car or the trailer towing capability of your present one. Emission controls that are required by the Federal Government have reduced overall engine power. To determine generally what the tow capability of your car is, divide the total weight of your trailer by the cubic inch displacement of your automobile engine. This ratio should be between 10 and 20 pounds of trailer weight per cubic inch of engine displacement with 15 pounds per cubic inch considered optimal. For example, with a 31' Airstream weighing 6500 pounds totally loaded for travel and a car with 400 cubic inch displacement engine, divide 6500 by 400 giving a value of 16.25 pounds of trailer

weight per cubic inch engine displacement. This is very close to the optimal value and the automobile should have adequate power for towing the trailer. Remember that engine power is only one indication of the car's towing capabilities; the axle ratio and cooling capabilities certainly must be considered. We suggest you review the owner's manual of your present car and discuss your automobile towing capabilities with your Airstream dealer and your automobile dealer.

The majority of new trailerists carry more food and other supplies than really needed. Remember that every item you take along is one more thing to stow and adds weight to the total load you must pull. Consolidate items in shelves, lockers, and in the refrigerator. It is better to have one full and one empty locker than two half empty ones. Special care must be taken not to overload the front and rear ends of the trailer.

See tire section for correct tire sizes and pressures for your trailer and load on page 22.

Chassis

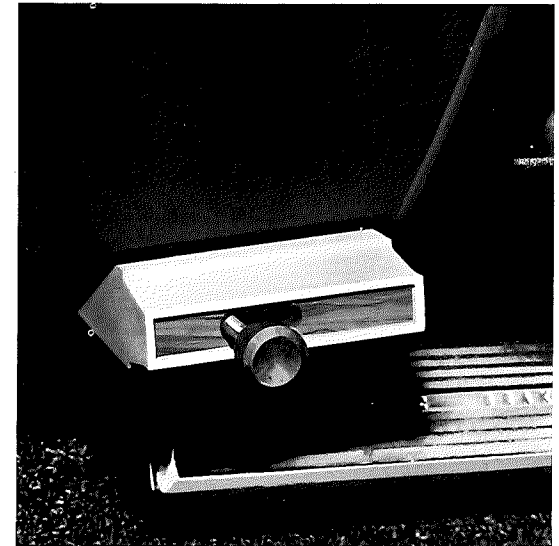
The **Dura-Torque axle** is designed to last the life of your trailer without service, except for lubrication of the wheel bearings. **Under no circumstances should welding be done on or near the axle.**

The **Kelsey Hayes Brakes** are operated by 12 volt current from your car and **must be hooked up so that you have an integral system with your car brakes.** To prevent problems and insure satisfactory braking action, install a Kelsey Hayes Controller (or equivalent) and selective resistor in line with the controller in your car.

A **Kelsey Hayes Controller** (or equivalent) installed in your car will synchronize the trailer brakes with your car brakes. It is designed to apply the trailer brakes just before your car brakes. To adjust, turn the handle counterclockwise to apply trailer brakes earlier and clockwise to apply trailer brakes later. The controller will hold this setting.

A **selective resistor** to match the weight of your trailer to the controller should be installed on the fire wall of your engine compartment. It should be correctly adjusted during installation. However if you wish to change the action of your brakes proceed as follows:

Check the initial trailer brake application with the controller fully applied (clockwise). If the resistor setting is correct, the controller full "on" position should

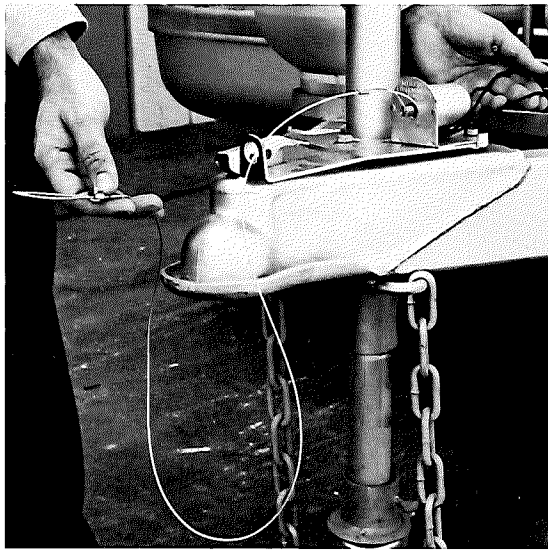


Trailer Brake Controller

provide firm braking action just short of skidding on dry pavement. Follow the chart below and change the setting to achieve greater or less braking, as required. The adjustment setting of the controller and the selective resistor should be checked by your dealer during regular maintenance inspection.

Setting shown is for 12 volt tow car with 12 volt brakes, and trailers with 2 axle-4 brake arrangement.

Trailer Wt. (lbs.)	Setting
6500—8000	
8000—8500	No Resistor Required



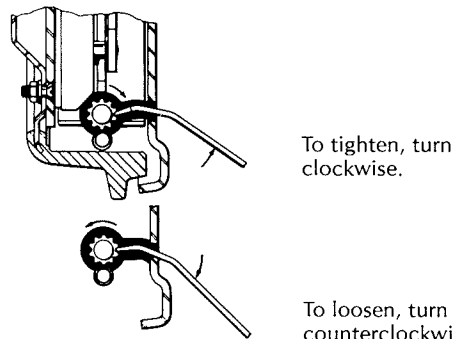
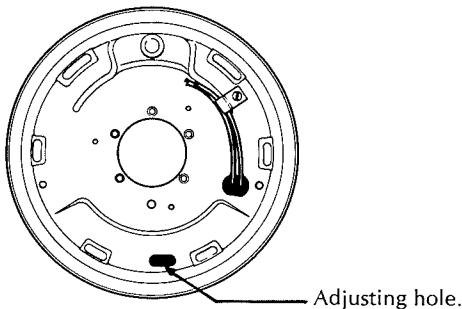
Break-Away Switch
Brake Adjustment

In the event of an accidental separation of the tow car and trailer, the **break-away switch** is a device which will set and lock the trailer brakes for a sufficient length of time to stop the trailer. The switch is activated when the small pin in the front of the unit is pulled out by the wire attached to it and to the car. This pin should be pulled out, lubricated with light household oil and replaced every 90 days.

When the trailer is connected to the tow car, the break-away switch loop should be attached to the permanent frame of your hitch. When disconnecting trailer from tow car, remove wire loop from the frame, do not remove pin from switch, because this will apply the trailer brakes.

Airstream recommends that your brake system be checked and adjusted by a Certified Service Center. However, in emergencies, to adjust brakes:

1. Remove the small rubber plug at the base of the backing plate on the brake drum.
2. Jack the wheel up so that you can spin it by hand. Tighten the brakes (using a brake adjusting tool or a screwdriver that has been bent to a 90° angle) until the wheel is locked, then back off until you have a free spinning wheel, which will be approximately 8 notches.
3. Repeat this operation with all trailer wheels.



The optional **Tru Track Sway Control** is a single package system which momentarily applies the trailer brakes when sway develops as the result of such occurrences as rapid maneuvers to avoid road obstacles, air disturbances caused by passing vehicles and accidental travel on and off the shoulder of the road. Because of its design, it will not react to any normal driving maneuver that is smoothly performed. However, it will interpret any maneuver that jerks the trailer as an indication of sway and the restraint felt from the short brake application will normally alert the driver to steer with greater care.

An important feature of the system is an auto dash mounted light which illuminates each time the sway control applies the brakes. It also illuminates when the brakes are applied by the driver in normal braking. The intensity of the light increases as the braking effort is increased.

Frequent operation of the Sway Control indicates that the car-trailer combination is basically unstable and prone to excessive sway. The problem should be corrected; check for improper load distribution in the trailer, an inadequate hitch, insufficient or excessive tire pressure, etc.

Important: If at any time dash light remains on or Sway Control is continually applying trailer brakes, disconnect Sway Control unit at power source and correct problem.

Loading

For the last 40 years, Airstream has been building trailers and have rarely found an instance where people have overloaded their trailer. Because it can happen we are giving you instructions for weighing your trailer. We are also providing you with an alternate method of determining the weight of your trailer without the use of scales. The following weight information and form will help you determine the actual weight of your trailer, with all its options and variable weights, and how much personal cargo weight can be added, staying within the weight ratings of your trailer.

Per Federal regulations, your trailer is placarded on the front roadside area with a gross vehicle weight rating and a gross axle weight rating. The gross vehicle weight rating is the maximum the trailer can weigh when it is being towed. The gross axle weight rating is the maximum load that can be on each axle when the trailer is being towed.

The diagrams on the following pages illustrates the use of scales in determining (1) your trailer's total weight, (2) weight on axle assemblies and (3) weight on tongue.

The allowable personal cargo, and placement within the trailer, may be determined by the following methods.

Before weighing trailer **add all trailer's variable weights** which are full water



Gross Vehicle Weight Rating

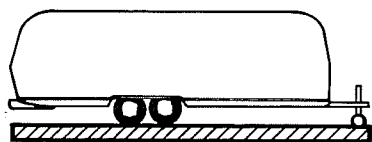
tank, LPG tanks and water heater.

Note: The variable weights of the main and auxiliary holding tanks are not used because, under typical usage, if the water tank is full, there is storage capacity in the holding tanks. As the water tank is emptied, the holding tanks are filled.

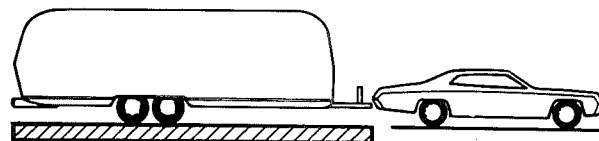
Remove personal cargo which includes food, clothing, kitchen utensils, etc. from trailer. Your trailer is now ready for weighing.

The **trailer's total weight** is determined by placing the trailer, without tow vehicle, on a scale. This weight indicates your trailer's total weight without personal cargo. The allowable personal

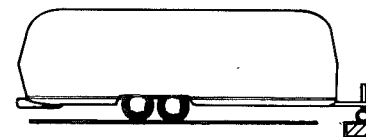
Trailer Weighing



1. Trailer's Total Weight
(cannot exceed G.V.W.R.)



2. Trailer's Weight on Axle Assemblies
(cannot exceed G.A.W.R.)



3. Weight on Trailer's Tongue

cargo that you add to your trailer **shall not exceed** the difference between the Gross Vehicle Weight Rating (G.V.W.R.) and this weight. Example: if the G.V.W.R. rating on the placard is **8500 lbs** and the trailer's total weight is **7500 lbs**, your personal cargo may not exceed 1000 lbs ($8500 - 7500 = 1000$).

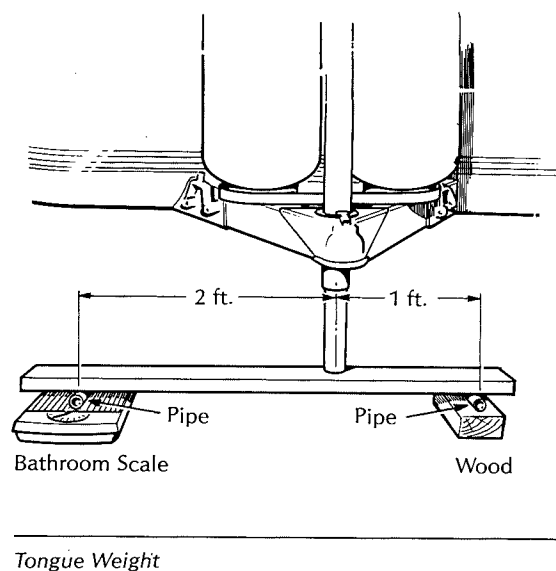
The **allowable personal cargo**, determined above, must be distributed in your trailer in such a manner that the **Gross Axle Weight Rating** (G.A.W.R.) is not exceeded.

To determine this, it is necessary to load all of your allowable personal cargo (example above 1000 lbs total) and variable weights. Then hitch trailer to tow vehicle with load equalizing hitch properly ad-

justed, see diagram page 23.

Place trailer on scale with both axles only on scale, see (2). If the weight on the axles exceeds the axle system G.A.W.R. then some personal cargo must be redistributed forward in order to place some of this weight on the tongue.

The **tongue weight** should be between 10%-15% of the trailer's total weight but **must not exceed 1000 lbs**. Some tow vehicle manufacturers may restrict the amount of tongue load to a lower value. To determine tongue load, unhitch tow vehicle and place tongue hitch post on scale, see (3). The trailer must be properly loaded, as determined above, with your allowable personal cargo and variable weights.



A scale which has a lower weight limit than your tongue load, such as a bathroom scale, may be used to check the tongue weight by using the following method (see illustration):

Place a piece of wood of approximately the same thickness as the bathroom scales on the ground in line with the trailer hitch jack as shown. It should be so spaced that a short piece of pipe or other round piece will lay exactly one foot from the center line of the jack extension. Place the scales so that another round piece can be exactly two feet from the center line of the jack extension in the other direction. Place a 2x4, or 4x4 on the two round pieces and screw the jack extension down on the top of the 2x4 until the tongue of the

trailer is supported by it. Multiply the scale reading by three. This will be the tongue weight of your trailer. If you exceed the capacity of the bathroom scales, increase the two foot dimension to three or four or more feet but always multiply the scale reading by the total number of feet between the wood and scales.

Caution: Be sure trailer is level when you read scales.

An alternate method for determining the weight of your trailer, without the use of scales, is by using the following information and form.

Before you fill in the blank form that pertains to your trailer, please read the sample form, page 18, to see what type of information will be needed.

First enter the model length, type of beds, and type of bathroom of your trailer on the first line (i.e. **Excella Twin Rear Bath**).

Column A

Column A represents the Total Maximum Personal Cargo weight that can be added to your trailer. Personal Cargo includes food supplies, clothing, other personal items, etc. Find the Factory Weight of your trailer, Chart A, page 20 and enter it across from ITEM 1 Column A (Factory Weight = weight without options and variable weights (i.e. **5684 lbs.**).

Next fill in the total weights of the options and variable weights with which your trailer is equipped. This information is on Charts B and C, 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 4, Column A (i.e. **6459 lbs.**). This is the sum total of your trailer's Factory Weight plus the Options and Variable Weights.

Next enter in ITEM 5, Column A (i.e. **8500 lbs.**), your trailer's Gross Vehicle Weight Rating (G.V.W.R.). This information is on the placard located on the front road side area of your trailer which corresponds to information on Chart A, page 20. The Gross Vehicle Weight Rating is the maximum the trailer can weigh when it is being towed. Next subtract ITEM 4, Column A from ITEM 5 Column A; this amount indicates the Total Maximum Personal Cargo that can be added to your trailer (i.e. **2041 lbs.**). Under no circumstances shall the G.V.W.R. be exceeded.

Column B

Column B represents the Recommended Personal Cargo that can be added to your trailer's tongue. Find the Factory Tongue Weight of your trailer and enter it in ITEM 1 Column B (Factory Tongue = weight without options and variable weights (i.e. **600 lbs.**). This information is on Chart A page 20. Column B has +

weight and — weight. Due to the location of optional items within the trailer, their weight will either have a + weight or — weight effect on the tongue. If the option is behind the axle system, or rear of trailer, it will tend to have a — weight, or lifting effect on the tongue; if the option is forward of the axle system, or the front of the trailer, it will have a + weight or loading effect on the tongue. Next fill in + weights or — weights of the options and variable weights with which your trailer is equipped, indicated in the Tongue Weight Columns on Chart B, C or D.

Next total both the + weight (i.e. **223 lbs.**) and — weight (i.e. **55 lbs.**) columns and find the difference between the two columns; this becomes ITEM 2 Column B (i.e. **+168 lbs.**). Next add ITEM 1 Column B and ITEM 2 Column B; this becomes ITEM 4 (i.e. **768 lbs.**). This is the total of your trailer's Factory Tongue Weight, plus the weight of the Options and Variable Weights on the tongue. Next enter in ITEM 5 Column B $12\frac{1}{2}\%$ of your trailer's G.V.W.R. or 1000 lbs., whichever is smaller (i.e. $.125 \times 8500 = 1063$, therefore use **1000 lbs.**). This information is located on Chart A, page 20.

Next subtract ITEM 4 Column B from ITEM 5 Column B and the amount indicates the amount of Recommended Personal Cargo that can be added to your trailer's tongue (i.e. **232 lbs.**).

The maximum tongue load must not exceed 1000 pounds. Some tow vehicles may restrict the amount of tongue load to a lower value. The tongue load is a total of the weight in ITEM 4 Column B plus your personal cargo.

Column C

Column C represents the Maximum Personal Cargo that can be added to your trailer's axle system. Find the Factory Axle Weight of your trailer and enter it in ITEM 1 Column C (i.e. **5084 lbs.**—Factory Axle Weight = weight without options and variable weights). This information is on Chart A page 20. Next fill in the axle system weights of the options and variable weights with which your trailer is equipped from the Axle System columns on Chart B or C, page 21. Add all of the weights together and this total becomes ITEM 2, Column C (i.e. **607 lbs.**).

Next calculate 34% of ITEM 5 Column B (i.e. $.34 \times 1000 = 340$). This becomes ITEM 3 Column C and represents the amount of tongue weight that is transferred to the trailer's axle system when properly hitched with a load equalizing assembly. (The remaining 66% is transferred to the tow vehicle.) Next add ITEM 1 Column C, ITEM 2 Column C, and ITEM 3 Column C; this becomes ITEM 4 Column C (i.e. **6031 lbs.**). This is the sum total of your trailer's Factory Axle Weight, the weight of the Options and Variable Weights on the axle system; and 34% of the tongue weight. Next

enter in ITEM 5 Column C, the sum of your trailer's Gross Axle Weight Rating (G.A.W.R.—i.e. **$3860 + 3860 = 7720$ lbs.**).

This information is on the placard on the front roadside area of your trailer which corresponds to information on Chart A page 20.

The Gross Axle Weight Rating is the maximum load that can be carried on the axle system when the trailer is being towed. Next subtract ITEM 4 Column C from ITEM 5 Column C. The remainder is the amount of total Maximum Personal Cargo that can be added to your trailer's axle system (i.e. **1689 lbs.**).

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

Sample Form

[illegible]

Blank Form

	Column A		Column B			Column C	
Model:	Maximum Personal Cargo Total (includes axle systems & tongue)		Recommended Personal Cargo on Tongue			Recommended Personal Cargo per Axle System	
Factory Weight (without options and variable weights)	Item 1						
Factory Axle Weight (without options and variable weights)	<div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> </div>					Item 1	
Factory Tongue Weight (without options and variable weights)	<div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> </div>		Item 1	→			
Options:			+ Weight	- Weight			
Bunk Bed (each)							
Hanging Wardrobe (each)							
Micro Wave Oven							
Spare Tire Bracket							
Spare Tire							
Variable Weights:							
Water Heater							
Water Tank							
L.P.G. (tank and liquid)							
Item 2	Total	→	+	-	=	→	
Item 3	34% of Item 5 Column B	<div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> <div>→</div> </div>					
Item 4	Items 1 & 2 Total		Add Items 1 & 2		Add Items 1, 2, 3		
Item 5	G.V.W.R.		Enter 12½% G.V.W.R. or 1000 lbs. whichever is smaller.		G.A.W.R.		
Enter Item 4 and subtract from Item 5	-		-		-		
Maximum Personal Cargo							
Recommended Personal Cargo on Tongue		→	→	→	→	→	
Maximum Personal Cargo per Axle System		→	→	→	→	→	

Chart A—Weights and Ratings

		Gross Vehicle Weight Rating G.V.W.R.	Factory Weight Without Options or Variable Weights	Allowable Additional Total Weight Incl. Personal Cargo	Gross Axle Weight Rating G.A.W.R. (Axle System)	Factory Axle Weight (Axle System)	Allowable Additional Weight (Axle System)	Factory Tongue Weight Without Options or Variable Weights
Rear Bath	T	8500	5684	2816	7720	5084	2636	600
	D	8500	5674	2826	7720	5086	2634	598
Center Bath	T	8500	5581	2919	7720	4798	2922	783
	D	8500	5576	2924	7720	4753	2967	823

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

T-Twin Bed Models
D-Double Bed Models

Chart B—Rear Bath

Optional Equipment	Total Weight	Twin		Double	
		Axle System	Tongue	Axle System	Tongue
Bunk Bed	45 each	103	—13	52	—7
Hanging Wardrobe	10 each	13	—3	NA	NA
Spare Tire Bracket	9	2	7	2	7
Spare Tire	60	14	46	14	46
Micro Wave Oven	70	63	7	63	7
Water Tank—Liquid Only	373	281	92	281	92
Water Heater—Liquid Only	83	122	—39	122	—39
L.P.G. 10 gal. Tank and Liquid	80	9	71	9	71

Chart C—Center Bath

Optional Equipment	Total Weight	Twin		Double	
		Axle System	Tongue	Axle System	Tongue
Bunk Bed	45 each	NA	NA	NA	NA
Hanging Wardrobe	10 each	NA	NA	13	—3
Spare Tire Bracket	9	2	7	2	7
Spare Tire	60	14	46	14	46
Micro Wave Oven	70	63	7	63	7
Water Tank—Liquid Only	373	282	91	282	91
Water Heater—Liquid Only	83	102	—19	102	—19
L.P.G. 10 gal. Tank and Liquid	80	9	71	9	71

Liquid weights indicate full container. NA—Not Available.

Tires

Your Excella is equipped at the factory with name brand trailer tires. Airstream dealers cannot make adjustments to tires. This must be done by a dealer who handles that particular brand. If you ever have tire problems, check the local telephone directory for the nearest dealer.

To get the maximum performance from your tires check the air pressure often, but only when the tires are cool. Never bleed out air immediately after driving.

It is also important to periodically check on the tightness of lug bolts. They should be tightened to a torque of 90-95-ft.-lbs. on both the steel and forged aluminum wheels. Care should be taken at all times when handling the forged aluminum wheel because of possible damage to its appearance.

In a warm climate, park out of the sun whenever possible. In desert regions use the tire covers to prevent ultraviolet deterioration to tires.

To change a tire with a jack, see the label affixed to the underbelly just to the rear of the wheels. This indicates the proper jack placement. On tandem axle models a flat tire may be changed without the aid of a jack. Drive the unit up a ramp 8" wide, 6" high and about 3 feet long at the base (see photo).

All tire, wheel, hub and drum assemblies

are dynamically balanced at the factory. **Be sure to rebalance the tire, wheel, hub and drum assemblies each time a tire is changed or rotated.**

In an emergency remove the flat tire and the independent suspension of the Dura-Torque Axle allows a four wheel unit to be safely towed on three wheels for a short distance (100 miles maximum) and only at a low speed (30 MPH). Be especially cautious in crossing holes or dips in the road. It is good practice to set your rear view mirrors so that you can observe your tires at all times.

Tire Load and Inflation Pressure Notes

1. Tire inflation pressure may increase as much as 6 pounds per square inch (PSI) when hot.
2. For sustained high speed driving over 65 MPH, with truck type tires cold inflation pressures must be increased 10 PSI above those specified in the above table for the load being carried. The total increase in cold inflation pressures shall not exceed 10 PSI above those specified in the above table for the load being carried.
3. Cold tire inflation pressure: after vehicle has been inoperative for 3 hours or more, or driven less than 1 mile. Hot tire inflation pressure: after vehicle has been driven 10 miles or at speeds of more than 60 miles per hour.



Tire Changing

Minimum Tire Pressure (cold inflation)

Tire Size	Load Per Axle (pounds)	Pressure
7.00-15XC	up to 2845	45 p.s.i.
Steel radial	2845-3385	55 p.s.i.
6 ply	3385-3860	65 p.s.i.

Hitching Up

Hitching up your Airstream trailer is something that will become almost second nature with practice. The following section includes proper hitch load distribution and a procedure for hitching up.

The electric jack is strongly recommended for anyone who, for any reason, should not physically exert himself. Available as a factory option or through the Wally Byam Stores, the electric jack makes hitching and unhitching a much easier operation.

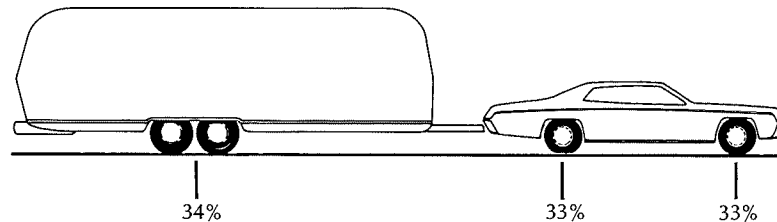
Equalizing Hitch Load Distribution

When a trailer is hitched up properly to a tow vehicle, with a load equalizing hitch, 1/3 of the trailer weight will be on the trailer's axles and 2/3 will be transferred to the tow vehicle. 1/3 of this weight transfer will be carried by the front wheels and 1/3 by the rear wheels of the tow vehicle (see diagram). Thus, the tire loading of each wheel on the tow vehicle will be increased by 1/6 of the trailer weight. The tire air pressure of the tow vehicle should be increased to compensate for this additional weight. Refer to the vehicle owner's manual for this information.

The **tongue weight** should be between 10%-15% of the trailer's total weight but **must not exceed 1000 lbs.** Some two vehicle manufacturers may restrict the amount of tongue load to a lower value.

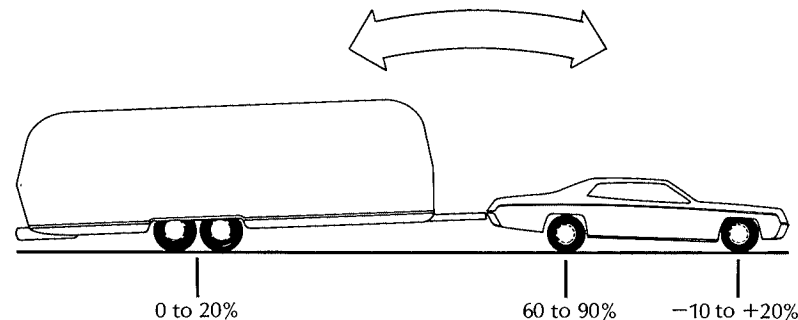
Equalizing Hitch Load Distribution

Proper Installation

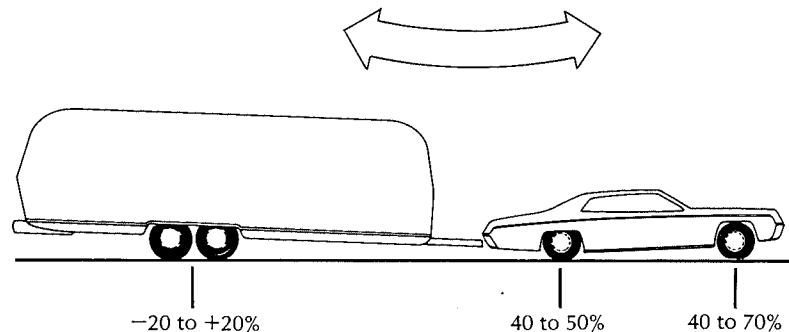


Percentage of Tongue Load distributed to car and/or trailer wheels

Hitch Low

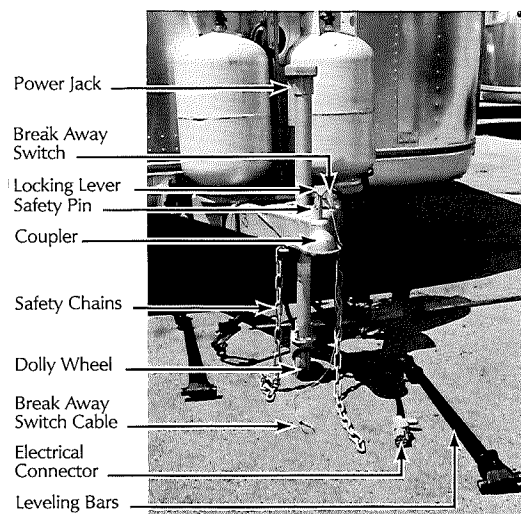


Hitch High



Steps for Hitching Up

1. Jack up the trailer hitch until there is clearance for the **hitch ball** to slide under, remove safety pin and raise the **locking lever**.
2. Back the car straight back to the hitch. This can best be accomplished through the use of pre-arranged hand signals with the help of another person, but if you are hitching up by yourself we recommend the use of a **hook-up view mirror**.
3. Lower the trailer hitch onto the hitch ball; then close the locking lever and insert safety pin.
4. Now raise the trailer and car to the full height of the hitch jack and then attach the **leveling bars**. Lower the car and trailer. The hitch ball should be level to slightly higher (see photo). Re-adjust leveling bars until this condition is correct. This will result in the best balance for towing and steering control as the weight equalizing hitch distributes the hitch load. Approximately 1/3 of the load is distributed onto the front wheels of the tow vehicle, 1/3 onto the rear wheels of the tow vehicle and 1/3 onto the trailer axle assembly. With proper hitch installation and hitching up the bar should have a noticeable amount of deflection or bending (see photo 4.f.). A little practice with your rig will teach you how far to pull up the bar, and you may wish to mark the chain links that match your rig. Always choose level ground for checking cor-

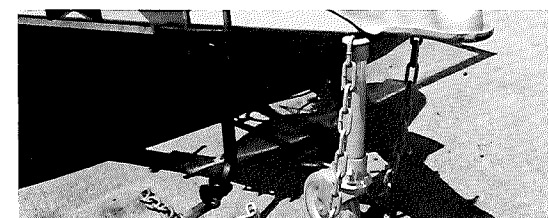


Hitching Up Equipment

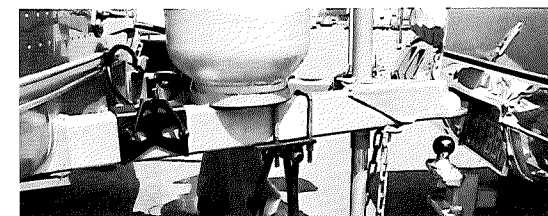
rect hook-up. For further information see hitch manufacturers' literature.

Note: If your car is equipped with adjustable load leveling air shocks, you must load the car first with typical luggage and passengers and bring it back to level. Then attach the trailer and adjust the load leveling bars. Otherwise the air shocks on your car will overload the rear wheels.

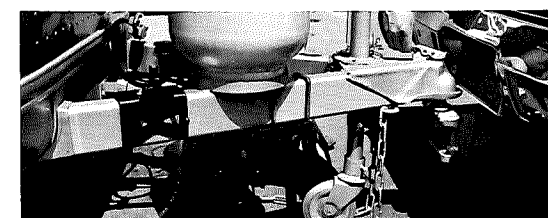
The hitch ball on your car should be installed at a height of 19-1/2" to the top of the hitch ball, measured when the car



Hitching Up Step 1.



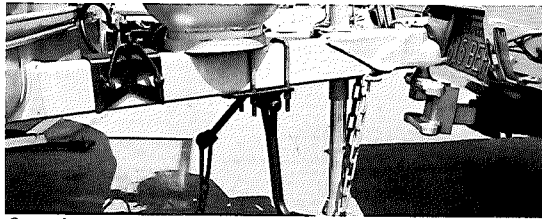
Step 2.



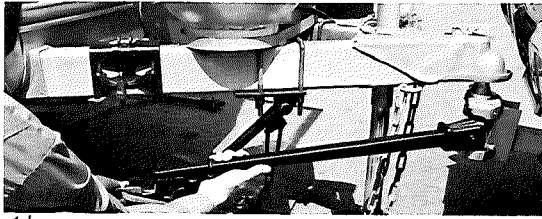
Step 3

is loaded. A low hitch ball increases tail-wagging tendencies by lowering the nose of the trailer thus changing the center of support for the trailer and reducing the weight on the front wheels of the car.

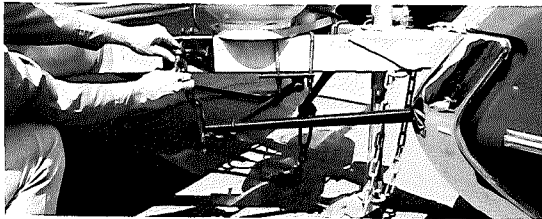
5. Plug in the electrical connector cord and check running, directional, and brake lights. The electrical connector cord should be completely removed and stored when not in use.
6. Attach the break-away switch cable and the safety chains to the welded portion of the hitch or the car's frame, but never to the removable ball



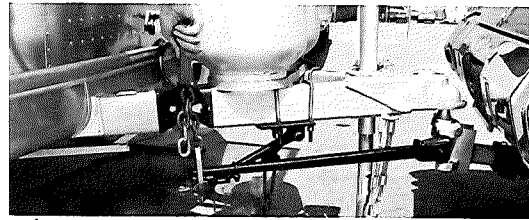
Step 4.a.



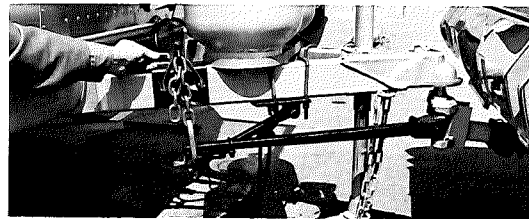
4.b.



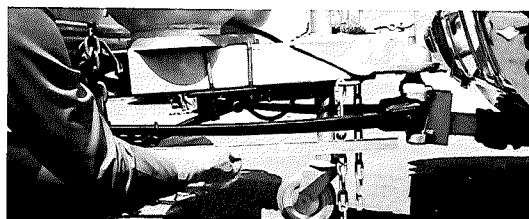
4.c.



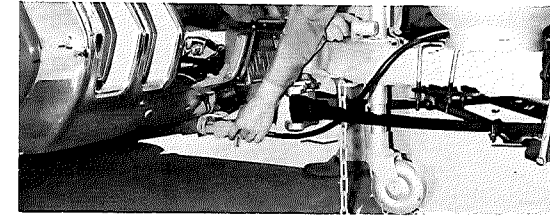
4.d.



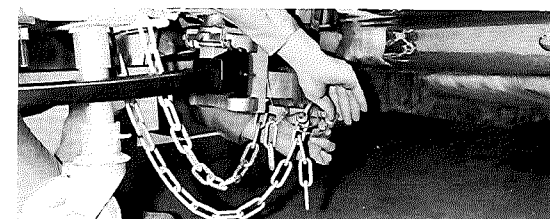
4.e.



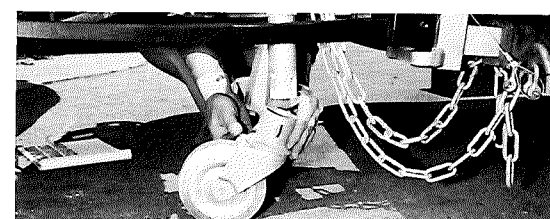
4.f.



Step 5.



Step 6.



Step 7.

mount. Cross the safety chains under the hitch.

7. Retract the hitch jack completely for maximum ground clearance. Remove the dolly wheel and jack pad, and stow them in the car's trunk, along with leveling jack and other gear used when stopped. Never tow your trailer with the jack down or the dolly wheel on. Check that the fold-away step is up and that the main door is completely closed and locked for towing. If it is not locked the constant vibration of travel may cause it to open with possible damage.

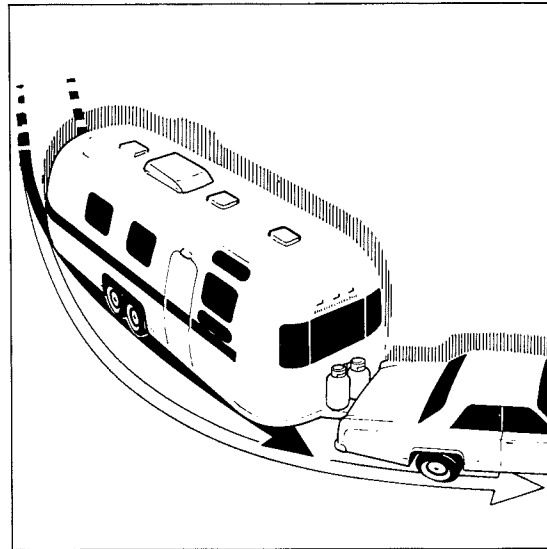
8. Move the rig ahead about 50 feet and test the trailer brakes, then check the ground for forgotten objects. Regularly check the condition of your tires, air pressure, and the tightness of the lug bolts. For specific tire pressures refer to page 22.

Towing Tips

A few hours of towing practice in a large empty supermarket parking lot will make pulling your Airstream over the road much easier. Line out two corners for both left and right turns. You may also use these corners to practice backing and parking. **Observe that the tracks made by the trailer wheels are distinctly different from those made by your car.** Studying this will make it easier for you to correct mistakes. Truck or trailer type fender or door grip rear view mirrors are a must for maximum visibility and in most states they are required by law.

You are now ready to tow. After checking the traffic, signal that you are about to pull away and start slowly. Look often in your mirrors, and observe the action of the trailer, then carefully move into the proper lane of traffic. Remember that the trailer wheels will not follow the path of the car's wheels, therefore, **wider turns are necessary when turning to the left or to the right.**

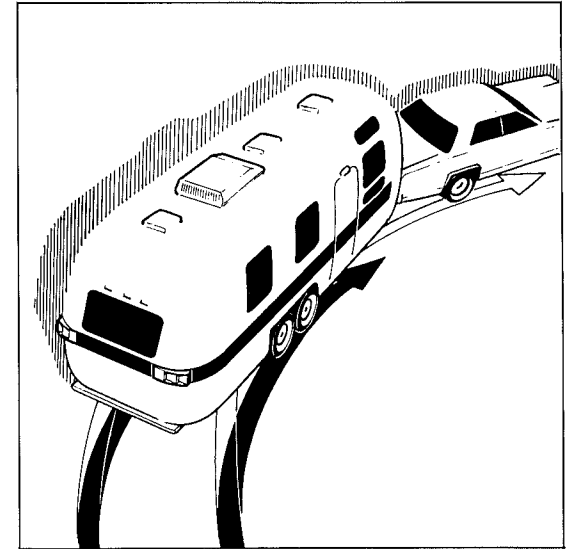
On freeways or expressways try to pick the lane you want, and stay in it. Always maintain plenty of space between you and the car ahead, at least the length of the car plus trailer, for every ten miles per hour. Remember that in order to pass another vehicle, you will need longer to accelerate. You must also allow for the length of the trailer when returning to the right hand lane. On a two lane road, cars will be lining up behind you because you travel at a lower



Tracking

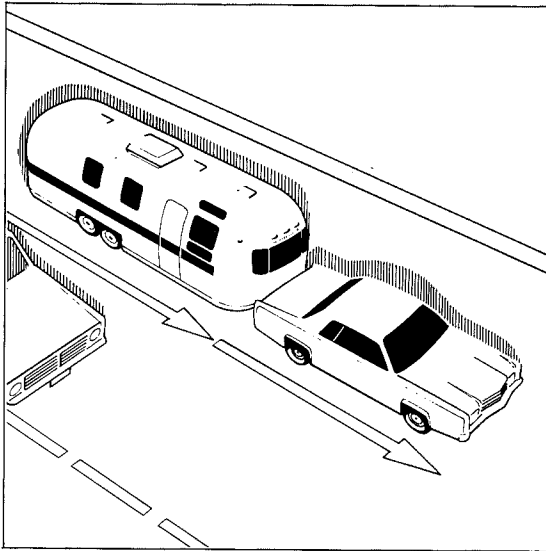
speed. It is both courteous and sensible to signal, pull onto the shoulder, and let them pass. Your Airstream is designed to be towed easily at any legal speed, so if you are not careful you may be inclined to forget it is there. Your car brakes will automatically apply the trailer brakes first if properly adjusted. This will make you stop as if you were driving the car alone and keep your car and trailer in a straight line.

When trailering, you might encounter a temporary cooling system overload during severe conditions—such as hot days when pulling on a long grade, when slowing down after higher-speed driving, or driving long idle periods in traffic jams. If the hot indicator light comes on and you have your air conditioning



turned on, turn it off. If the light doesn't go off in about a minute, pull over in a safe place and put on your emergency brake. Don't turn off the engine. Increase the engine idle speed. Lift the engine hood and check for fluid leaks at the radiator hoses, radiator, or radiator overflow outlet. Check to see that all drive belts are intact and the fan is turning. Light should go off within one minute. When the light is out, proceed on the highway a little slower. Ten minutes later resume normal driving. Caution: Never open a radiator cap when the car is hot! Check the car coolant level when the car is cool.

When going downhill in dry weather, down shift so that engine compression will slow the whole rig down. Take dips

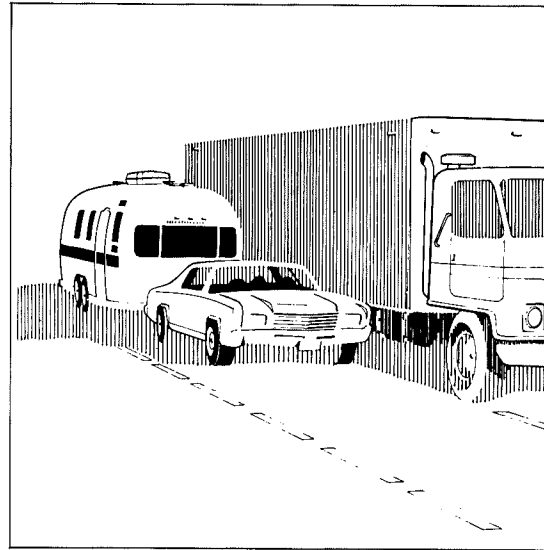


Passing

and depressions in the road slowly and do not resume normal driving speeds until you are sure that the trailer wheels are clear of the dip.

On slippery pavement do not use engine drag to help slow down as this may cause the rear wheels of the car to skid. On icy pavement drive slowly and if you feel the car is skidding, gently apply the trailer brakes only. This will bring the car and trailer back into a straight line. Chains do not help trailer wheels.

When driving in mud and sand let the momentum carry the rig through. Apply power gently and use as little as possible. Stay in the tracks of the vehicle ahead and keep the car in the highest possible gear. If you do get stuck it is best to tow



out both car and trailer together without unhitching.

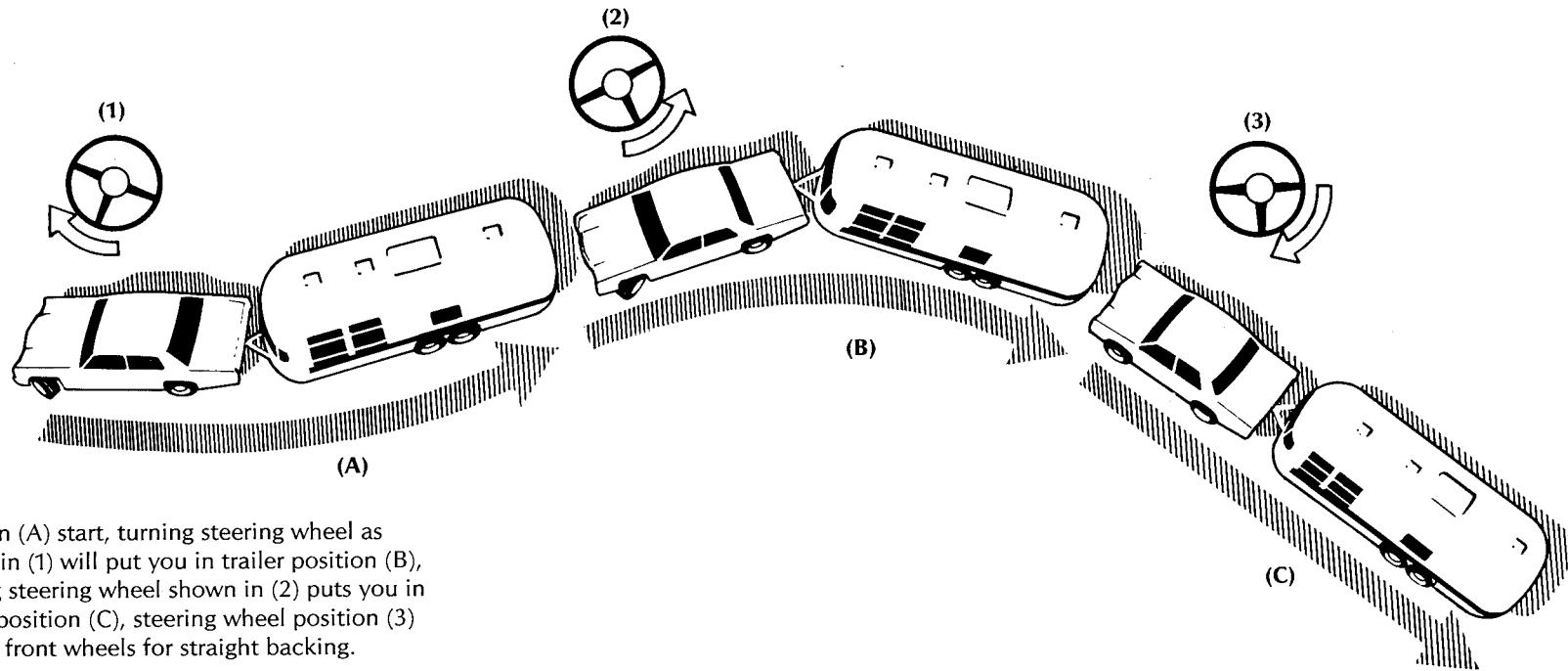
If you have to tow long distances over bad roads, the stones and gravel thrown back by your tires will dent and scratch the aluminum finish of your Airstream. To prevent this, use masking tape to secure heavy sheets of cardboard to the lower front end of the trailer.

Despite the best hitch, you will notice that whenever a large bus or truck overtakes your rig the displaced air first pushes the trailer rear to the right and then affects the front. **Do not apply the brakes.** Steer very slightly, momentarily, toward the bus or truck. This will compensate for the sway induced by the passing vehicle. If your trailer is equipped

with the optional sway control, the brakes will automatically be applied in controlled increments to help compensate for this.

When stopping on a hill or slope, leaving your car in gear is not enough for stand-still-safety. **Chock the trailer wheels** to be double sure. Never use the break-away switch as a parking brake because it will burn out the magnets and drain the trailer battery.

Backing Up



Position (A) start, turning steering wheel as shown in (1) will put you in trailer position (B), turning steering wheel shown in (2) puts you in trailer position (C), steering wheel position (3) returns front wheels for straight backing.



Indicates steering direction

In backing up, the important thing to remember is to **do everything slowly** and to correct immediately if you see the trailer turning the wrong way. Concentrate on the rear of the trailer. With your car and trailer in a straight line, back up slowly and turn the bottom of the steering wheel in the direction you want the

trailer to go. Watch out the window or in the mirror until the rear of the trailer is pointing in the desired direction. Then turn the steering wheel in the opposite direction.

Your car will be following the trailer in an arc. Straighten the car and trailer by

turning the steering wheel more sharply, then when they are in line, straighten the steering wheel. **Always try to back to your left because the visibility is much better.** (See illustration.) When you don't make it on the first try it is usually much easier to pull forward to your original position and start over.

Overnight Stop

Airstream owners have parked virtually every place imaginable from filling stations to farm lands. 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 trailer 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 battery which supplies the 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.

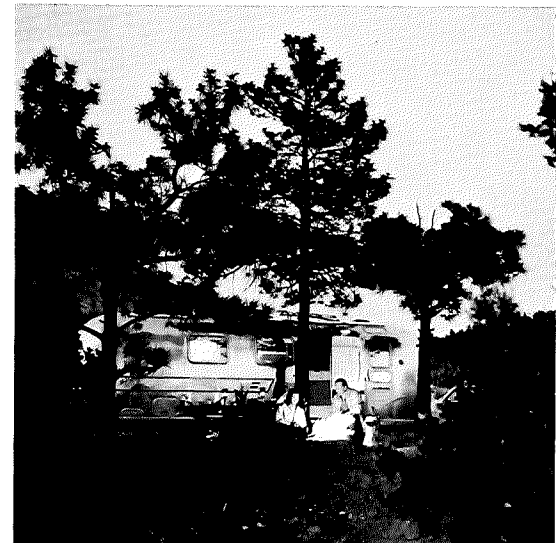
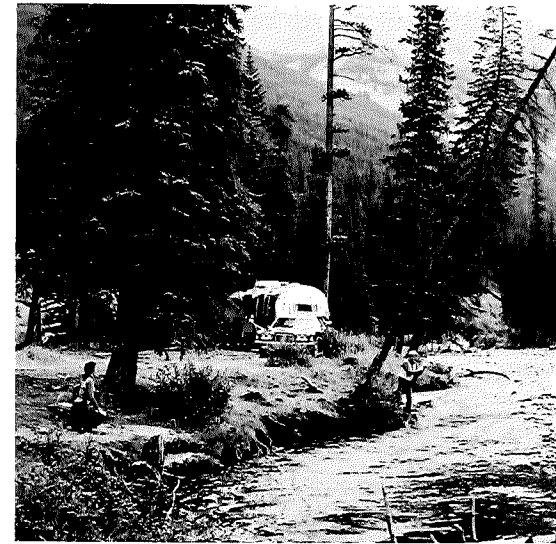
When stopping for the night your Airstream is built to be safely parked in any spot that is relatively level and where the ground is firm.

Your facilities are with you, you are self-contained. Unless the car is needed for transportation, it is not necessary to unhitch. Try to pick as level a parking spot as possible. **Stabilizing jacks or blocks** probably won't be required for an overnight stay; however if you put the jack pad on the hitch jack and run the hitch jack down to take the weight off the car's springs this will provide some stability. If you must park on a slope, **park facing downhill;** it is easier to level the Airstream this way.

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

1. Light the water heater and refrigerator pilots if required. See pages 50-60 for complete details on LPG system and gas operated appliances.
2. Turn on the range gas supply 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 supply petcock to the range and make sure everything is properly stowed. Use your Pre-Travel Check List on page 76 and you are ready for more travel adventure.

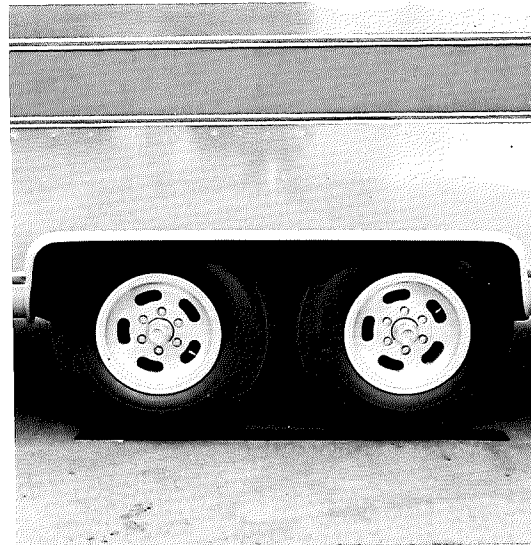


Extended Stay

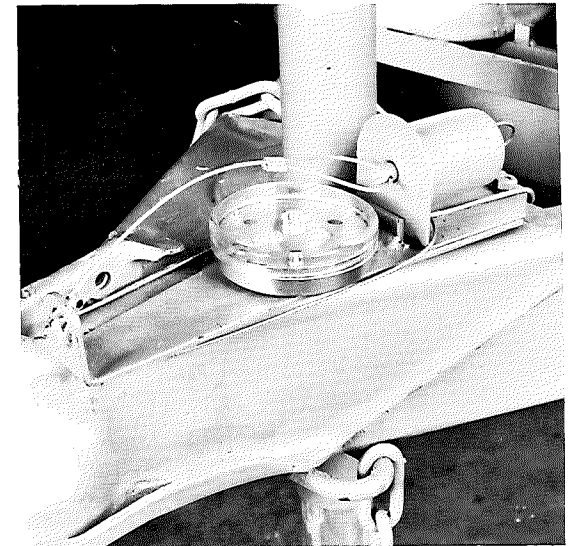
Making a long trip in your Airstream is not very different from making a weekend excursion. Since everything you need is right at hand you are at home wherever you go. When packing for an extended trip take everything you need, but only what you need.

When you plan to stay in the same place for several days, weeks, or months, you will want your trailer to be as level and steady as possible. Check the attitude of your Airstream with a small spirit level set on the inside work counter or the trailer hitch "A-Frame." If a correction is necessary then **you must level from side to side first**. This can be done most easily up a small ramp consisting of 2"x6" boards about four feet long and tapered at both ends. (See photo.) We do not recommend placing tires in a hole for leveling.

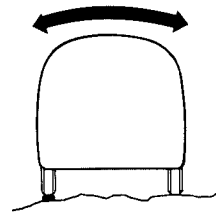
Level from front to rear by disconnecting the hitch from the car, putting the jack pad under the hitch jack and adjusting the jack up or down until you are level. Block or chock the wheels to keep the trailer from rolling. Use the wrench, located in the hose carrier, to lower the two **B.A.L. stabilizing jacks** on the low side. Bring the trailer to a level position side to side. Lower opposite stabilizing units to a firm position. **Note:** Whenever the trailer must be lifted with a jack as when changing a tire or leveling on very rough terrain, **always place the jack under the main frame rail**. A label is provided to indicate the proper position for the jack. Never



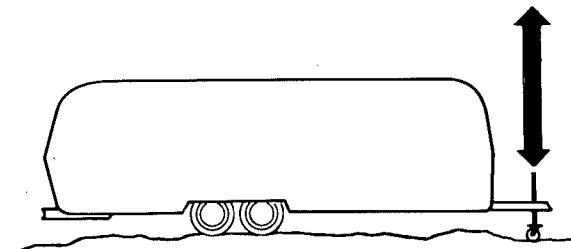
Trailer Leveling



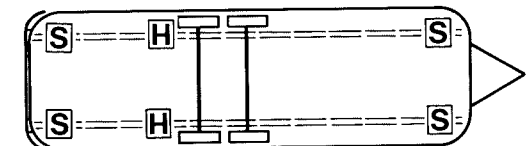
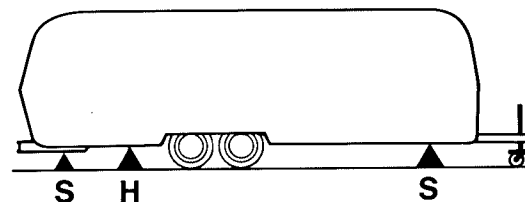
Spirit Level



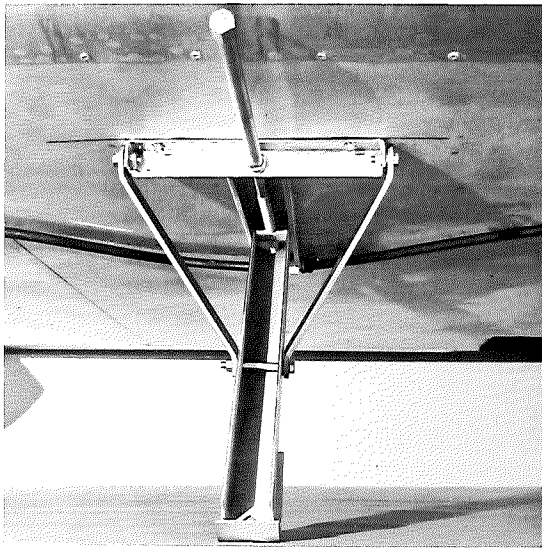
1. Level from Side to Side



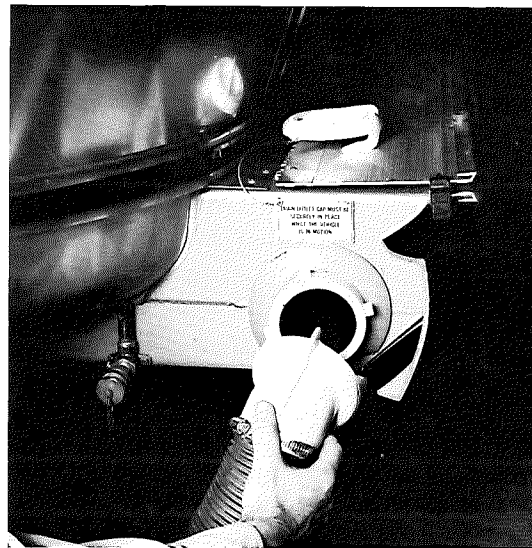
2. Level from Front to Rear



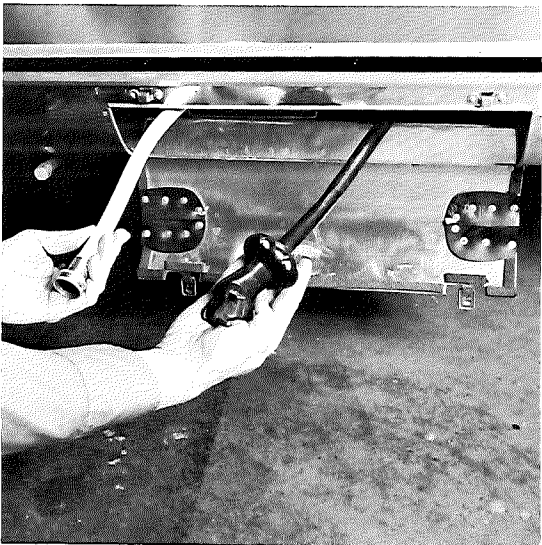
H—Hydraulic Jack Positions
S—B.A.L. Stabilizers



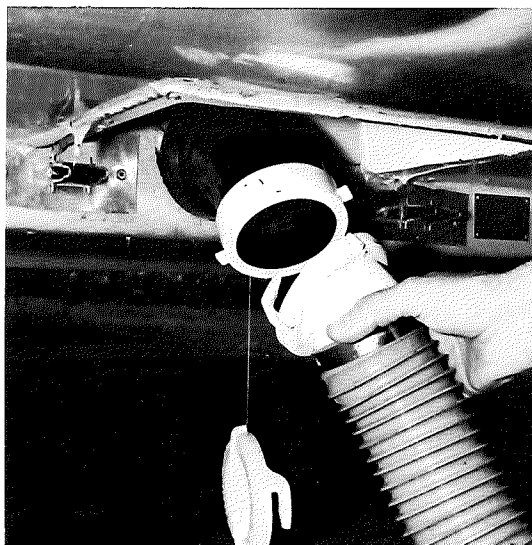
B.A.L. Stabilizing Jack



Waste Drain Hose Hook-Up (Rear Bath)



City Water and Power Inlets



Waste Drain Hose Hook-Up (Center Bath)

use stabilizing jacks to lift the trailer.

The water line connection for city water and electrical connection for 120 volt, 60 cycle city power is located on the road-side of the trailer in back of the wheels. Unlatch the access cover and pull the connections out to the desired length. They will automatically lock in this position. The access door can now be closed to prevent the entry of any foreign objects. On the electrical connection, be sure you have the wire **grounded** and have the **proper polarity** (see pages 61 and 67 for water and electrical system details).

To stow the electrical cable when leaving, unlatch the access cover, unhook the electrical cable from its connection, give a slight pull on the cable, and it will automatically wind up. To stow the water hose, move the release lever to its left hand position. Caution: Keep a light hold on the cable and hose as they are winding up so that they do not whiplash against the side of the trailer.

Hook your **waste drain hose** into the sewer disposal facility and attach to the drain outlet in your trailer. For details on this procedure refer to page 64.

Turn on gas supply; light the range and oven pilots, light the water heater and refrigerator pilots. See pages 50-60 for complete details on L.P.G. system and gas operated appliances.

Winter Airstreaming

Traveling in an Airstream during the cold winter months can be one of the most exhilarating experiences in all trailering. When we speak of cold, we are talking about temperatures of zero to -10 degrees. Airstreams properly outfitted with dual pane windows have been cold-soaked at -20 degrees with no adverse effects and with no real discomfort. Dual pane side windows do not require storm windows and, along with window shades, improve the efficiency of the heating system.

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

1. There should be heat in the trailer at all times.
2. You must have a plentiful supply of propane gas.
3. If your stay is longer than overnight then you should endeavor to have 110 volt electricity available. The battery (fully charged) will not last more than about 10 hours in zero weather. Of course you can always run your car to recharge the battery and normally the battery will attain sufficient power to run another 3-4 hours by running your engine for approximately 45 minutes to one hour at fast idle. For more detailed information on the battery see page 69.
4. Minimize use of electricity if 110 volt power source is not available.
5. Your Airstream has forced air heating in the holding tank and trunk area.

There is also heating around the water tank.

6. In extreme cold conditions and when 120 volt electricity is available, porcelain lamp receptacles, with 75 watt bulbs, and adequate wire guards, over bulbs, may be used. These should be permanently attached to the floor adjacent to the inside wall in the area between the inside wall of the trailer and the storage compartment below the front travel lounge. When lamps are in use this area should be emptied of all other items. This will give a more comfortable feeling to the living room area and will minimize condensation.
7. Leave cabinet doors, bed doors and wardrobe doors slightly open at night to allow circulation of air in and around all furniture components.
8. For extended stays in cold weather, insulate the water line outside the trailer.

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 degrees F.

There is no substitute for common sense in cold weather.



Storage and Winterizing

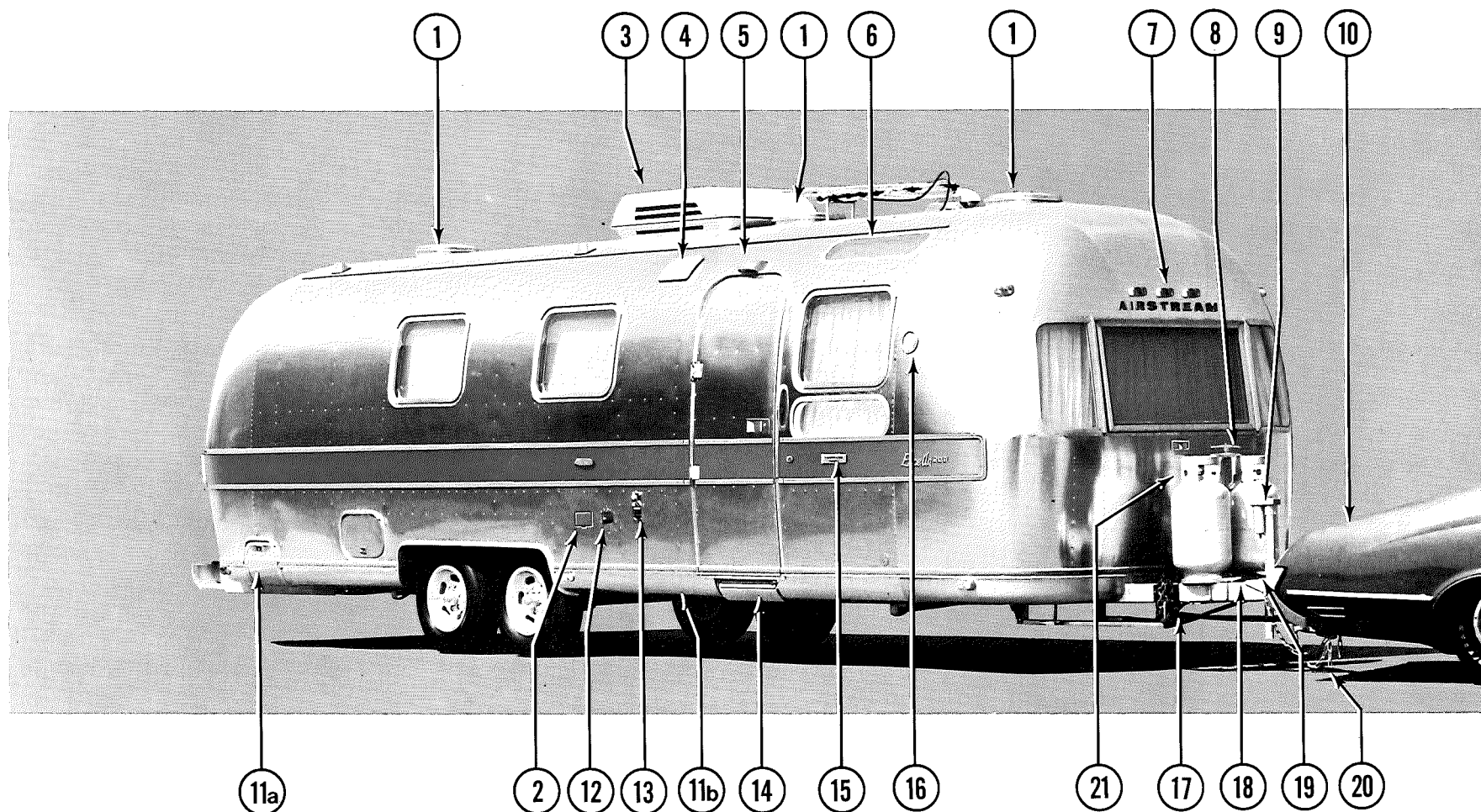
When storing your trailer for short or long periods use the same precautions as you would in your own home in regard to perishables, ventilation and rain protection. In addition, for prolonged storage periods, flush out all the drain lines and the holding tanks. Also, drain the entire water system including 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 for a check-up and cleaning of the gas operated appliances.

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 battery. To completely winterize your Airstream, follow this procedure:

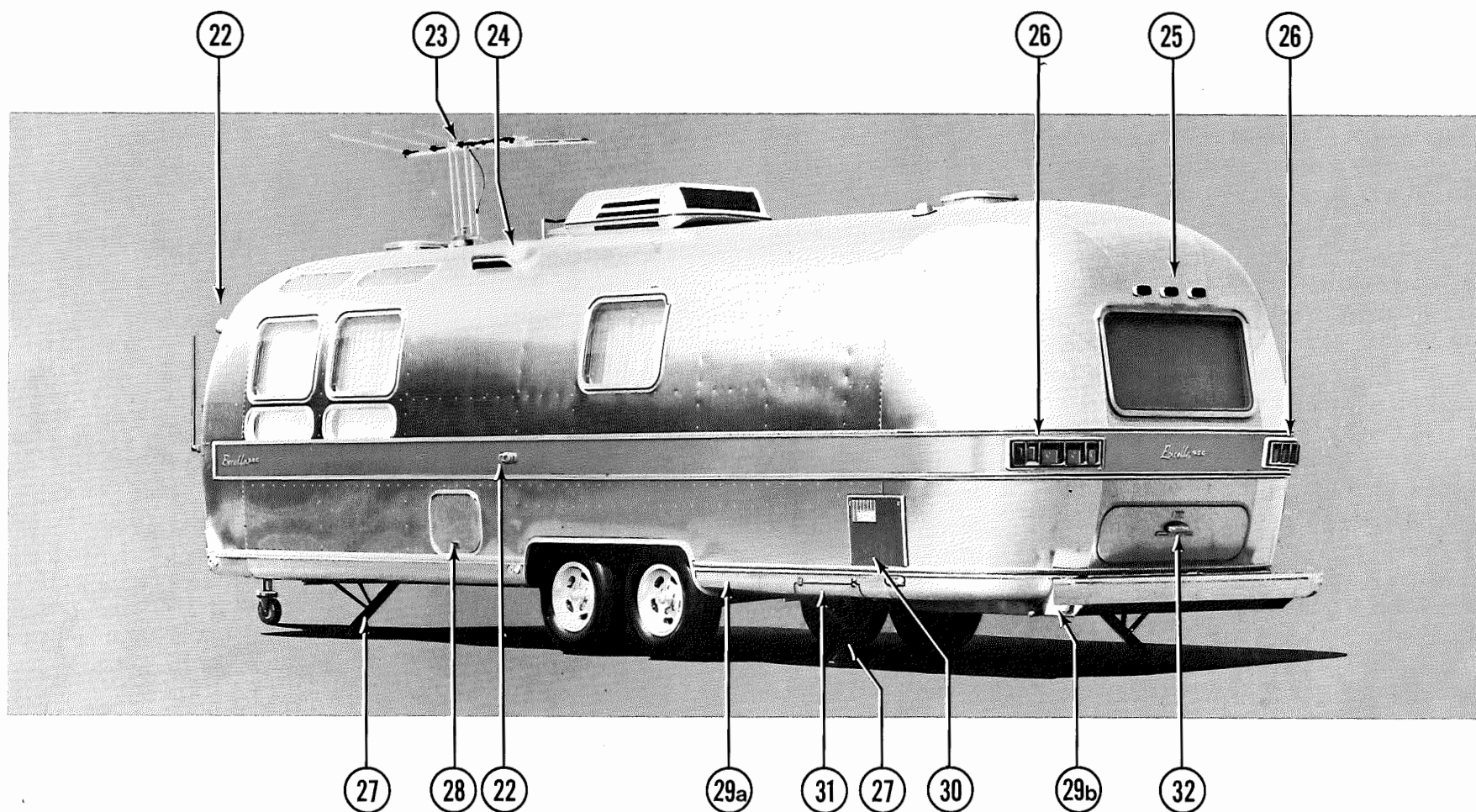
1. Level the trailer from side to side and front to rear. Open all the faucets.
2. Turn the water pump switch to the OFF position.
3. Open all drain valves. On rear bath models, two are located in the rear trunk (roadside), and three are under the galley sink. On center bath models, one is located under the bed on the roadside and three are under the galley sink. On all models one is located on the water heater accessible through the exterior access panel.
4. While the water is draining from the system, open and flush the toilet flushing valve. Depress hand spray thumb button 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.** Drain all water from telephone showerhead flexible hose.
5. Remove water pump check valve, located between pump outlet flexible hose and copper tubing.
6. Lower the front of the trailer as far as the jack will allow until water ceases to drain, then crank the jack up as high as it will go and let any remaining water drain out the rear drain valves.
7. Disconnect the water pump inlet connection, and with check valve removed, turn the pump by hand until all the water is expelled.
8. After the water has stopped running from the drain lines, apply air pressure at the city water inlet. Be sure all drain valves and faucets are open. This 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 antifreeze (Glycol) 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 tanks, if frozen, could seriously damage the tanks.)**
11. Remove the lower portion of the water purifier, if your trailer is so equipped, and drain the purifier.
12. 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 trailer interior that might be damaged by freezing—or might damage the trailer if containers break.

For additional winterizing protection add anti-freeze, approved for drinking water systems, to your water lines. This may be accomplished by reconnecting check valves, (see step No. 7) and then disconnecting the flexible line from the water tank and inserting it into the anti-freeze that has been diluted in accordance with the manufacturer's instructions. Run water pump until anti-freeze solution fills all water lines and water heater.



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No. Description

Page No.

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Exterior

The Airstream exterior has been covered by an acrylic lacquer finish providing years of environmental protection. Washing the exterior of your Airstream is similar to washing an automobile. Both have high quality finishes and certain precautions must be taken to protect them. Oil, grease, dust, and dirt may be removed by washing with any mild nonabrasive soap or detergent. Automatic dishwasher detergents and acid etch cleaners are too strong and should never be used. **Always clean your Airstream in the shade or on a cloudy day when the aluminum skin is cool.** Cleaning should be followed by a thorough clean water rinse. Spots and streaks may be prevented by drying the unit with a chamois or a soft cloth.

After cleaning and drying, a good grade of nonabrasive automotive paste or liquid wax will increase the life of the finish, especially in coastal areas where the finish is exposed to salt air or in polluted industrial areas. It will also protect the shell from minor scratches and make subsequent cleaning easier. Wax should normally be applied every three to six months.

It is important to remove sap, seeds, gum, resin, asphalt, etc., as soon as possible after they appear by washing and rewaxing. Sunlight and time will bake-harden these materials making them almost impossible to remove without heavy buffing. If asphalt remains on the trailer after washing, use a small amount

of kerosene on a rag and wipe the spots individually, being careful not to scratch the aluminum.

For small areas of damage to the acrylic protective coating, or where oxidation is beginning to occur, remove all traces of the acrylic coating with a good grade of lacquer solvent and then thoroughly clean the aluminum with an aluminum cleaner. Then respray the area with clear acrylic lacquer. **All items needed for these minor repairs to the exterior shell are available at Wally Byam Stores.** For extensive refinishing we recommend that you contact an Airstream Service Center or the factory for instructions or to arrange for factory service. To keep your trailer looking new, paint the "A-Frame," L.P.G. tanks, and rear frame periodically, by brushing on aluminum lacquer or, if possible, by spraying.

Each time you connect the **7-way electrical connector** check for dirt and corrosion. Keep the contacts clean with "Spra-Kleen."

It is important that the main door be completely closed and locked during towing. If it is not locked the constant vibration of travel may cause it to open with possible damage.

For your security **the lock has been designed as a dead bolt.** For this reason never try to shut the door when it is locked. The door is properly closed when



Fold-Away Step

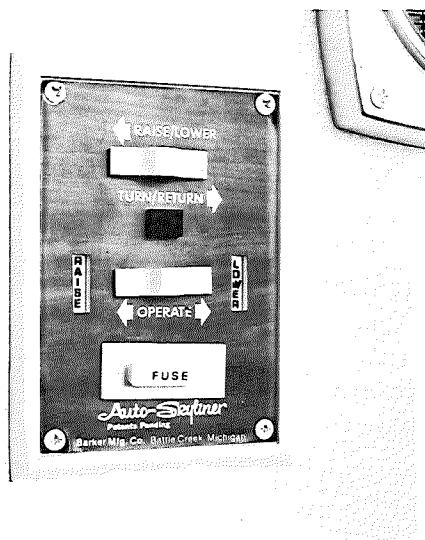
the handle is firm. If the door is difficult to open, push in to release the latch.

When the door swings open it will automatically latch against the side of the trailer.

The **screen door** latches to the main door or operates independently using the same type latch that holds the main door open.

To operate the **fold-away step** just press down the latch on the right hand side and the step will automatically drop into position. To stow the step simply lift the front edge and then push it up under the trailer to its stowed position.

The **extension step** is permanently at-



Motorized TV Antenna Controls

tached to the main step and when needed it is simply flipped out. **Never travel with step lowered.**

Your Airstream has a new **high strength safety glass front window that is stronger than car windshields.** Inside this window is a **second window of tempered glass.** The combination represents a great improvement in safety and convenience as it eliminates the need for a rock guard and also acts as a double pane for better temperature control.

The **windows** in your trailer are of tempered safety plate glass. To open: release the two lever locks at the bottom, pull the two side operator handles toward the center and pull down until the window is in the desired position, and place the

operators into one of the five positioning holes. To close: pull the two side operator handles toward the center and slowly lift.

These windows are cleaned in the same manner that ordinary windows are. Clean the seals with a damp cloth or mild detergent every three to six months taking care not to use strong solvents as they will damage the seals. A coat of natural silicone lubricant applied after the seal has dried will keep it flexible. Spread the lubricant evenly with a brush or finger, working it into the surface. This is a good practice for all rubber seals in your Airstream. For replacement of a damaged window contact an Airstream Service Center or the factory.

The **double-pane side windows** include metalized mylar tint. They eliminate the need for storm windows and improve the efficiency of the air conditioning system.

Screens are made of plastic for hard wear and easy maintenance. Clean with a damp cloth. Note: They will melt at the point of contact if touched by a cigarette.

Vistaview windows, an exclusive Airstream feature, allow for interior lighting while maintaining privacy and are equipped with integral shades.

Factory recommended awnings give

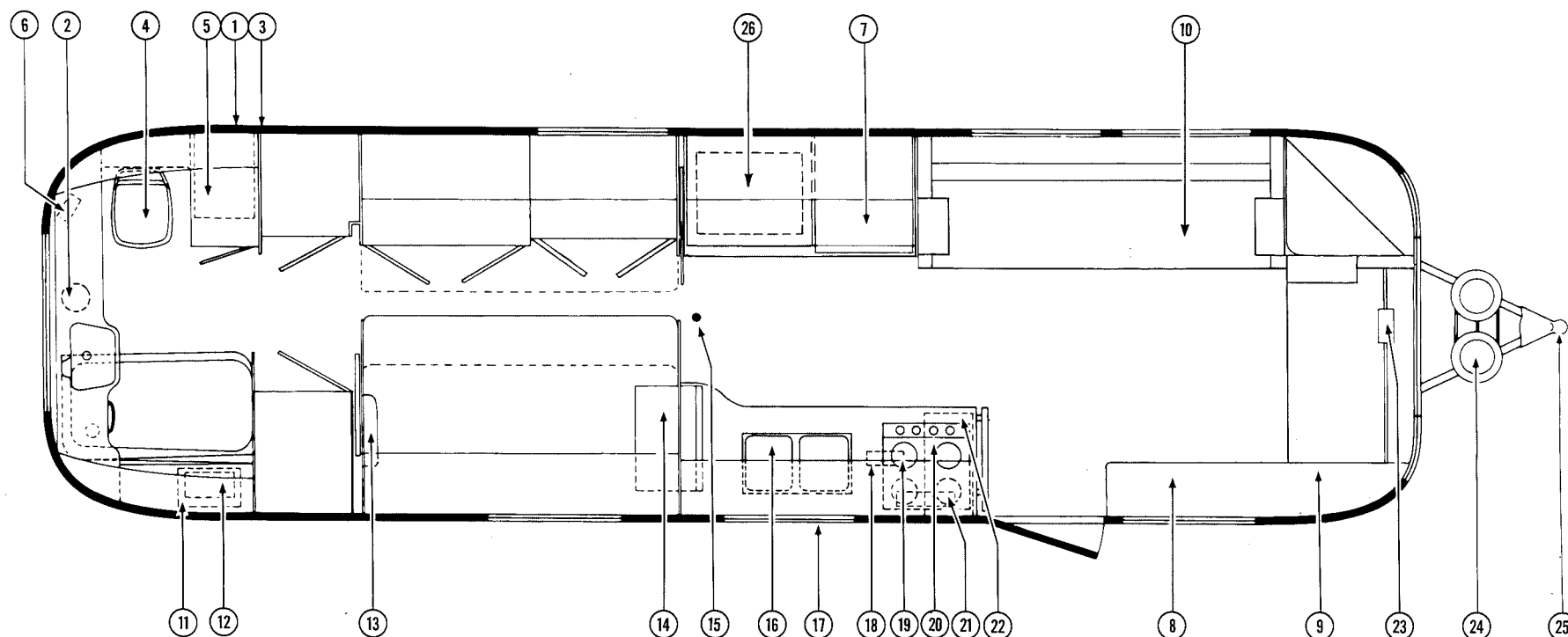
shade during trips and rallies. They are easy to operate and can be installed by your dealer.

The aluminum construction of your trailer creates a radio-shield and you will need outside antennas for perfect reception.

Your Excella is equipped with a **motorized TV antenna.** An Auto Coupler enables you to utilize your T.V. antenna for AM-FM radio reception.

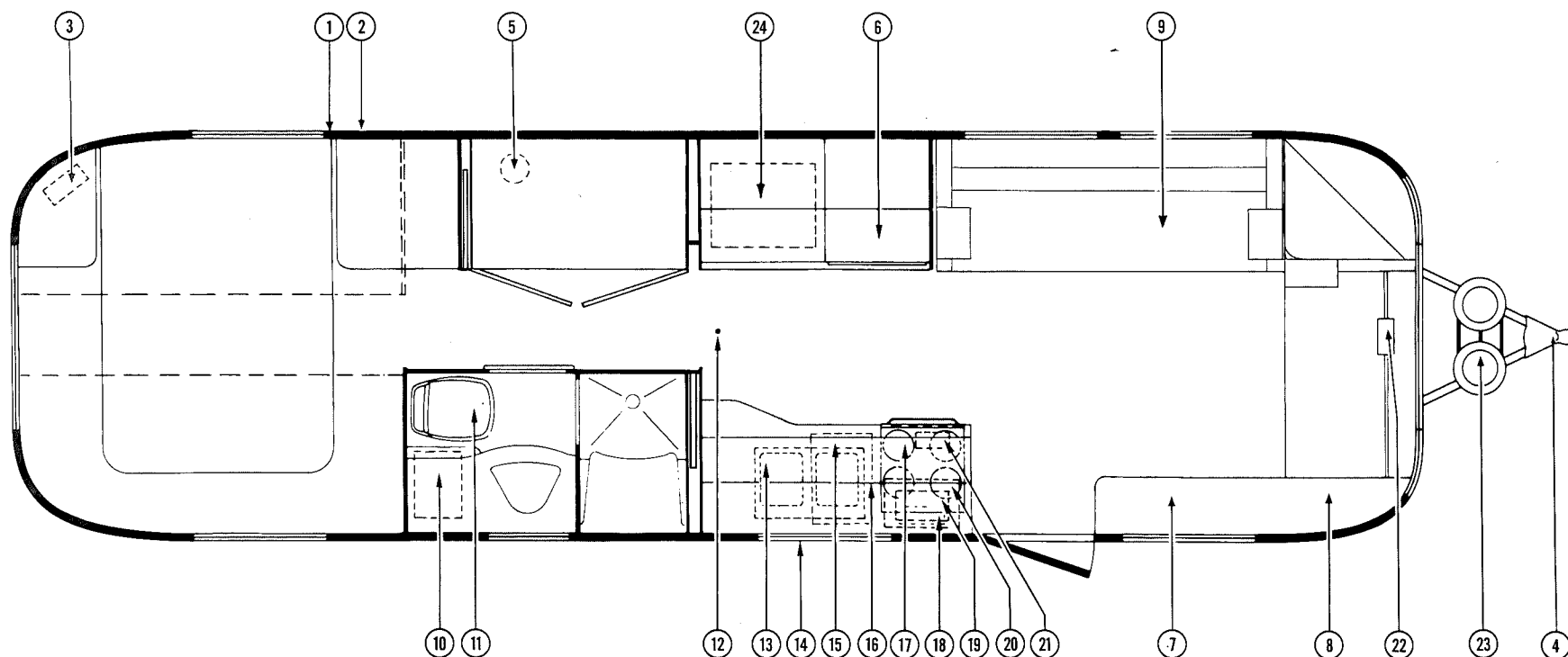
The controls are located on the curbside wall just above the arm rest. To raise the antenna, depress the up button and hold it in place until the red light goes off. The antenna is now ready for rotating to the desired position. Press the top of the rotating button and rotate the antenna until you get the best possible TV picture. If you go too far, press the lower portion of the rotating button and the antenna will move in the opposite direction. To stow the antenna, press the bottom of the rotating button and allow the antenna to rotate until the red light goes off. The antenna is now ready for lowering so press the "lower" button and hold it until the red light goes off again. You are now ready for travel.

Floor Plans



Rear Bath

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2.	Waste outlet	64
3.	Water inlet—city	61
4.	Toilet	64
5.	Water heater	58
6.	120 volt circuit breaker panel	68
7.	Refrigerator	51
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20.	Range	55
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23.	Clock and thermometer	42
24.	L.P.G. tanks and regulator	50
25.	Hitch	23
26.	Micro wave oven (optional)	53



Center Bath

No. Description

Page No.

1. Electrical inlet—city	68	10. Water heater	60	19. Univolt	68
2. Water inlet—city	61	11. Toilet.....	64	20. Battery.....	69
3. 120 volt circuit breaker panel	68	12. Air conditioner	44	21. Water pump	62
4. Hitch.....	23	13. Sink.....	45	22. Clock and thermometer.....	42
5. Waste outlet	64	14. Water inlet—tank	61	23. L.P.G. tanks and regulator.....	50
6. Refrigerator.....	51	15. Furnace.....	58	24. Micro wave oven (optional).....	53
7. Table	43	16. Range exhaust hood	55		
8. Stereo AM/FM Radio/Tape	42	17. Range and oven.....	55		
9. Front lounge	40	18. Central control panel.....	41		

Interior

The Airstream interior has been designed for comfort, convenience, durability and appearance. An understanding of the operational procedures and maintenance techniques of the interior appointments will add to your pleasure as well as the long life of your trailer.

Drapery, upholstery and mattress covers must be professionally dry cleaned with a mild, pure, water-free solvent.

Your Airstream upholstery is treated with Scotchgard® and will repel moisture. Minor spills may be removed by blotting. Avoid rubbing as this will work soil into the fabric.

To convert the **lounge** into a bed, grasp the front rail of the seat in the center, lift it up slightly and pull it out until it stops. Push the back of the seat down to finish the bed. To return, grasp the fabric loop at the top of the seat back, pull the seat back to its upright position and slide the lounge into its normal seating position.

The **bunk beds** (optional), located in the bedroom, serve as the bolster for the bed when not in use.

In order to place bunk into sleeping position:

1. Depress latch (A) located on the center back side of the bolster.
2. With latch depressed pull up on fabric loop (B) located on the center front



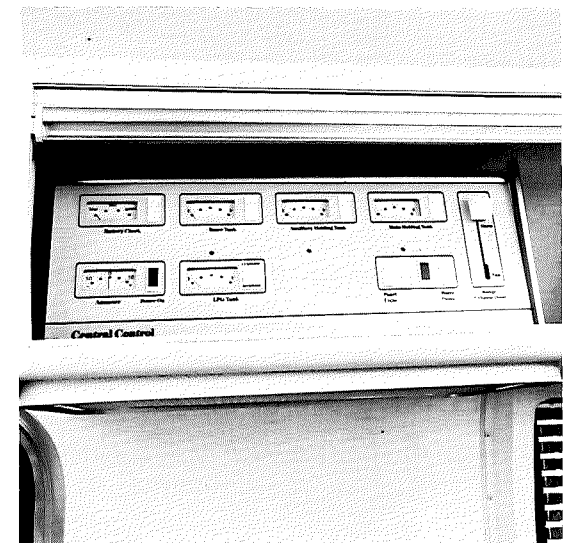
Lounge Into Bed 1.



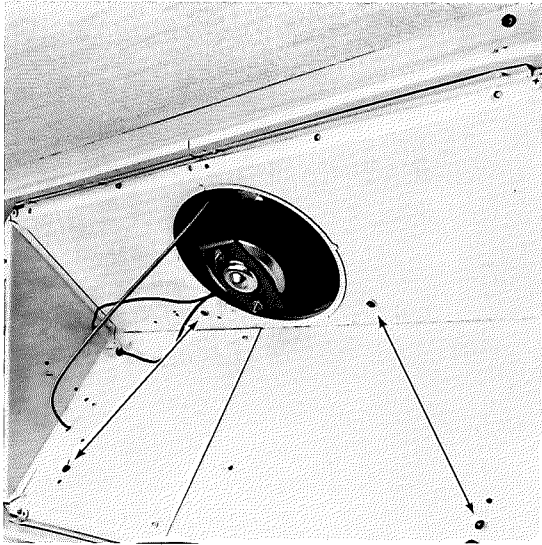
2.



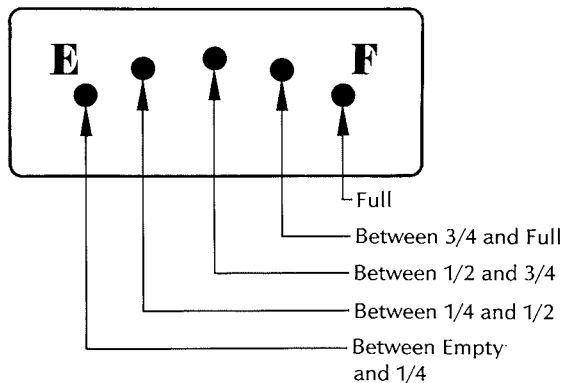
Bunk Bed



Central Control Panel



Central Control Panel Removal



Water Tank and Holding Tank Gauges

- bottom of bolster. This will allow bolster filler to hinge down.
3. Bring bolster filler up to horizontal position and attach both straps onto bracket on ceiling.

To lower bunk:

1. Release straps.
2. Rotate bolster filler into latched position.
3. Lower bolster down against wall.

Make beds in the usual way, using fitted sheets 3/4 size. The space behind the rear cushion is ideal for storing bedding for both front travel lounges and side pull-out beds. An easy method of storing bedding is to remove and store pillows and then fold back the ends of the bedding neatly to expose about 2" of the mattress; then, starting from the edge nearest to you roll up the bedding as tightly as possible towards the back wall. Raise the rear cushion to its normal position.

To make fixed twin beds, lift mattress slightly, pull it away from the wall and then tuck bedding in along wall. Note: Please do not launder mattress ticking; it has to be dry cleaned to prevent shrinkage.

The **central control panel**, located in the galley roof locker of your unit, contains the necessary instrumentation to monitor your Airstream's systems.

The **panel light** switch lights the gauges.

The **battery condition tester** has a switch which operates a meter indicating: Good, fair and low condition. (This meter does not indicate true battery state of charge while you are hooked-up to 120 volt city power.) When it shows low condition, you should take every reasonable step to conserve power by using as few lights as possible and switching off appliances. The battery should be charged as soon as practical with the tow vehicle charging system or connection to 120 volt power.

The **ammeter** indicates whether the trailer battery is being charged. If discharge is indicated, reduce your power usage. The Univolt System charges the battery only to the extent of any surplus over and above the electrical demands you make. The battery will not be able to recharge until the power usage is reduced. Therefore, before leaving on a trip, conserve power usage the night before to insure a fully charged battery.

The **water pump switch**, when on, also lights the indicator light. For a complete discussion of the pump, please refer to page 61.

The **water tank, main holding tank and auxiliary holding tank gauges** indicate the amount of liquid in their respective tanks. Press the appropriate switch and the gauge will indicate in one of the five

positions (see diagram).

The needle position may be slightly off the indicated mark due to varying voltage in the Univolt System. With a partially discharged trailer battery, the needle would be to the left of dot. A higher voltage would move the needle to the right of the dot. Under these conditions the correct tank level is indicated by the closest dot.

Before leaving the factory the tank level gauges are calibrated. Periodic recalibration may be necessary due to mineral deposits on tank probes. In rare cases, when the water tank has been filled with very pure water, as from a mountain stream, the gauge needle will not align with an indicator dot. This can be corrected by recalibration. To recalibrate any of the three tank gauges: fill the tank to its maximum capacity with water. Press switch and align gauge needle to the middle of the F dot by turning adjustment screw. This screw, located in a hole directly below meter, may be turned with a narrow blade screwdriver. Accumulation of oxides, dirt, etc. may prevent alignment of needle with dot. In this case remove probes and scrape clean. Apply sealant to thread area only and replace probes. Care must be taken to keep probes free of sealant.

The **L.P.G. gauge** indicates the amount of liquid in each tank. To check the

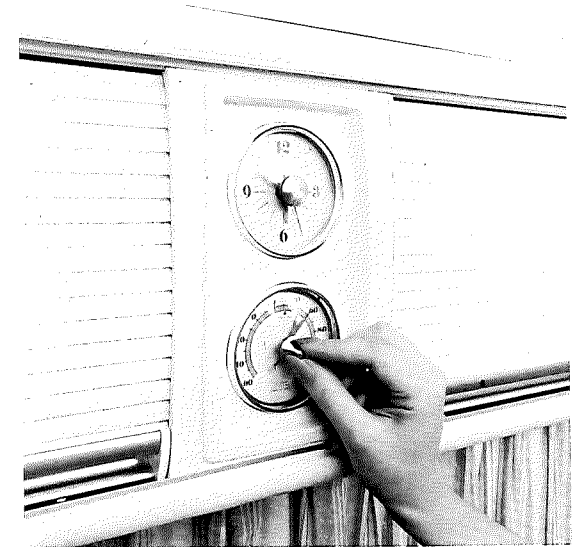
level, press the test switch near the L.P.G. gauge on the Central Control Panel and read the amount of liquid in either the roadside or curbside tank. This gauge will indicate any quantity between empty and full. It is calibrated at the factory and needs no further adjustment.

The **power-on light** will glow automatically when you are hooked up to city power. This light and the polarity warning light are your checks on a proper 120 volt connection.

Access to the rear of the Central Control Panel is necessary for replacement of panel light bulbs and the Central Control Panel fuse. To remove Central Control Panel: remove 2 screws that secure the filter to the range exhaust hood housing and drop it out, remove 4 screws up inside exhaust hood (see photo), remove range exhaust fan knob from lever by pulling straight out on knob, remove screws on side panel inside roof locker, and pull electrical connector apart.

The **clock** is operated by a 'C' cell battery which will last from nine months to a year. Battery replacement and time reset is located at the rear of the clock.

The **thermometer** indicates the outside temperature, and the minimum and maximum temperatures reached since the last setting. The lowest temperature reached the night before and the highest

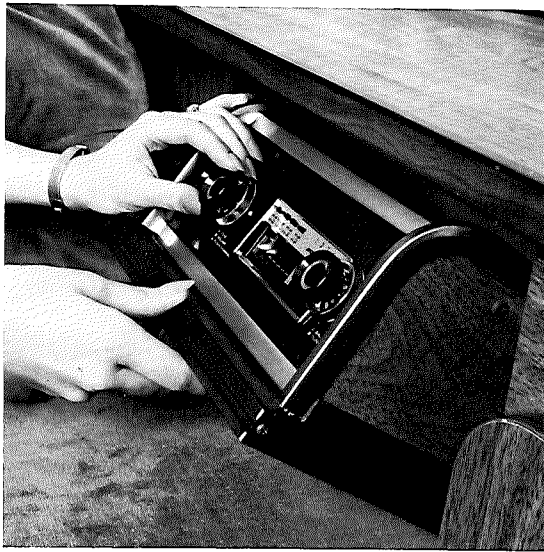


Clock and Thermometer

temperature reached during the day may be determined by resetting the pointers the night before. To reset the pointers turn the center adjusting knob on the bezel clockwise and counterclockwise until the pointers are against the temperature hand. **Do not apply excessive pressure against the temperature hand.**

A Motorola AM-FM stereo radio and a combination Motorola Stereo AM-FM radio with 8 track stereo tape player are available. The "fadar" control allows the front speakers to be turned on by themselves, or the rear speakers by themselves, or any combination of front or rear speakers.

To operate the AM-FM stereo radio:
1. Push on/off selector button in and



Stereo Tape and AM/FM Radio



AM/FM Radio Fuse

- radio/tape selector button in.
2. Push band selector button in for FM; out for AM.
3. Adjust volume control to desired listening level.
4. Tune in desired station. On FM stereo signals the FM stereo indicator will light.
5. Adjust tone control for desired bass or treble response. Adjust balance control for desired sound level between speakers.

To operate the 8 track stereo tape:

1. Push on/off selector button in and radio/tape selector button out.
2. Insert the 8 track cartridge into the tape slot (dial scale will open inward); insert cartridge open end first, label side up, until it is firmly seated in

- mechanism.
3. Adjust volume control to desired listening level.
4. Adjust tone control for desired bass or treble response. Adjust balance control for desired sound level between speakers.
5. To change programs, push the manual program selector. Each time the selector is pushed and released, the next program will play. Programs will play in succession (change automatically), and continuously, if manual selector is not pushed. The tape program indicator lights will light indicating which program is being played.
6. To turn tape player off, remove cartridge from tape slot, push the on/off selector off (button out). Never leave a cartridge in the tape slot when play-

er is not in use. 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 to fuse, remove seat cushion and let unit hinge down. The fuse is secured within an inline fuse holder.

To open the table, lift the table into a horizontal position, depress latch and pull the folding leg down until it locks in position. **To extend the table** pull out on the latch underneath the table right next to the leg and lift the table and leg slightly off the floor. Now pull the extension frame and leg out as far as they will go. Release the catch on the extension table leaf and rotate it over onto the extended frame. By raising the leg the entire table can be slid forward and aft for your seating comfort.

To stow simply reverse the procedure and unlock the leg and drop the table to the wall.



Table Opening 1.



2.

The **Armstrong air conditioner** can be used for cooling or heating your trailer or for air circulation only.

To operate for cooling:

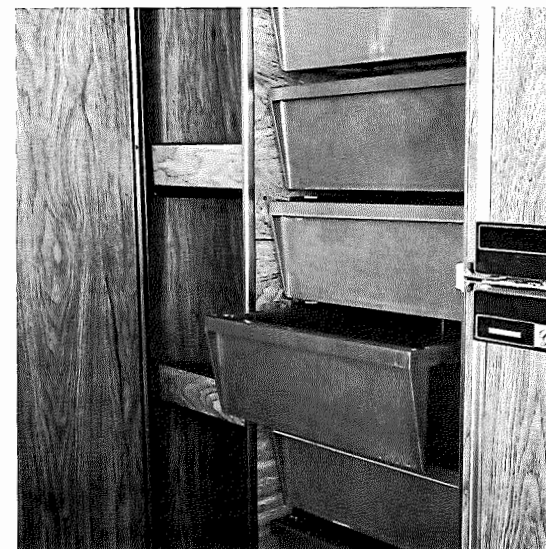
1. Close doors, windows and ventilators.
2. Set wall thermostat to "COOL" position and set thermostat indicator to your desired comfort level.
3. Set system switch (located at ceiling cover of air conditioner) to your preferred speed setting.

Note: The air conditioner will not operate until speed selection is made. The recommended cooling speed for various outdoor temperature ranges are:

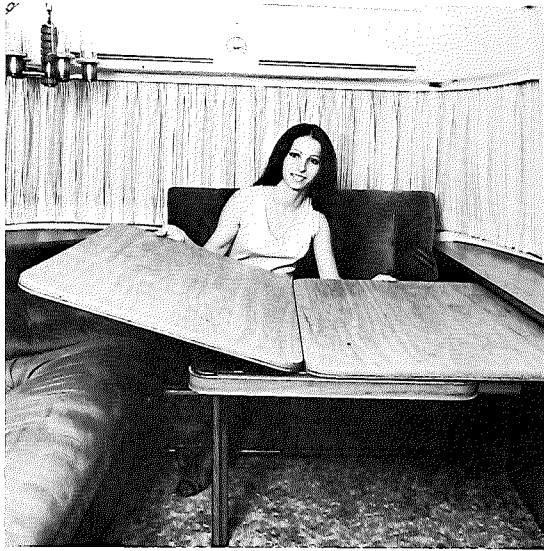
Hi—Cool	70—120 F
Med—Cool	60—110 F
Lo—Cool	50—100 F



Air Conditioning Ducts and Filter



Storage Drawers



3.



Wardrobe Catches

To operate for heating:

1. Set wall thermostat to "HEAT" position and set thermostat indicator to your desired comfort level.
2. Set system switch to your preferred speed setting.

Note: The heater will not operate until speed selection is made.

To use for air circulation, set wall thermostat to "OFF" position and system switch to any of the three speed selections. To shut unit off, set system switch to "OFF" position.

Shut unit off to clean or replace the filters. Clean both filters with vacuum cleaner once a week. Once a month, remove filters and wash in warm soapy water.

Stainless steel sinks cannot be harmed by boiling water. However, salt, mustard, mayonnaise and ketchup will cause pitting. Stubborn stains will yield to paste made of water and slightly abrasive cleaner. Be sure to work in the direction of the polish-lines on the steel, to keep the original finish. Fingerprints are sometimes a problem. They can be mimimized by applying a cleaner that leaves a film of thin wax: simply wipe it on and remove the excess with a dry cloth. After this, fingerprints can be wiped off with a soft dry cloth, or one moistened with a little wax cleaner. The surface should always be washed before wax is applied. Regular cleaning will prevent build-up of

scale and film. Ordinary soaps or detergents are best for routine cleaning of the stainless steel sinks. Rinse thoroughly with warm water and wipe dry with a cloth to avoid streaks and spots.

For further information on galley equipment refer to page 51 for the refrigerator and page 55 for the range and oven.

All the **drawers** are removable allowing you storage flexibility and ease of packing and unpacking. Wardrobe catches are self-locking and they may be opened by sliding the touch plate away from the door opening.

A **space locker** attached to the roof lockers is available for additional storage space for bedding, etc. in the bedroom.

When attaching **wall hung improvements**, like hooks for clothing, bookshelves and extra towel racks, secure with half-inch No. 8 sheet metal screws ~~(1/4")~~ with flat binder heads. Make holes in the aluminum inner walls with a small hand drill (No. 30 drill bit).

A fire proof **safe deposit box** is located under the front corner table. To gain access, lift hinged table top.

Bed-lights are operated by a switch on the side. To replace bulbs snap the lens out by squeezing gently the long side of the lens until it drops out of the fixture.

Area lights have switches on the rim.

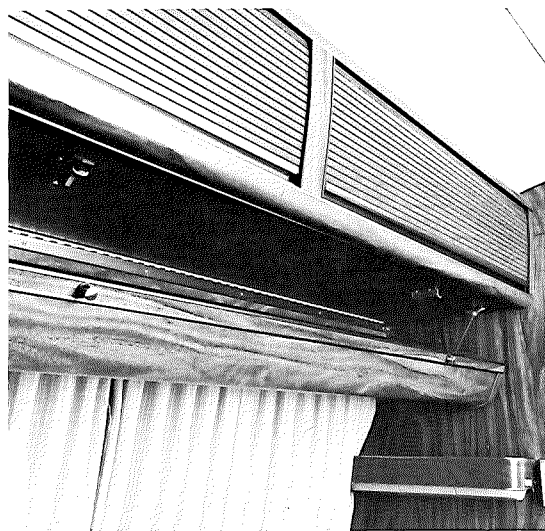
Ceiling light fixtures are incorporated with the ceiling fresh air vents. To operate the lights turn the forward control knob clockwise; first position 2 lights, second position 4 lights, third position 6 lights, fourth position off.

To remove the lens and replace the bulbs, pull knob from light switch shaft and remove nut. Remove the screw from the aft control handle. This will release the lens.

The **fresh air vents** are operated by the aft control handle. Turning clockwise will raise the vent and at the maximum extension vents with fans will automatically turn on. For maximum air without fan, open until fan starts and back up just enough to turn fan off. Turning counter-clockwise will close the vent.

Airstream vents are designed to allow air circulation while still keeping out rain and can be used in any weather. Screens should be removed for periodic cleaning.

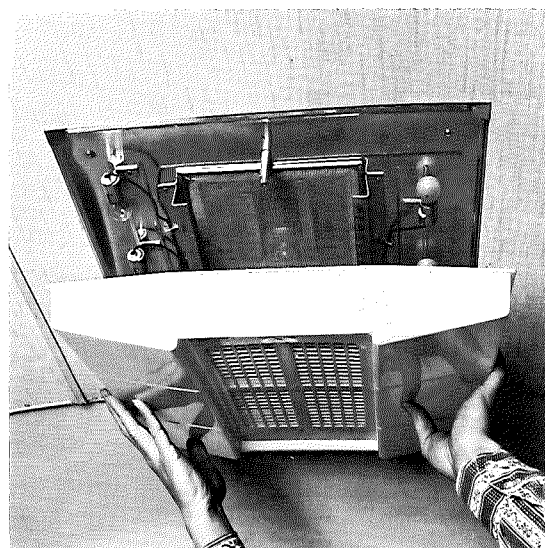
The **below bed storage** is available on fixed twin and double models for added storage of bedding and linen or fishing and hunting gear.



Space Locker



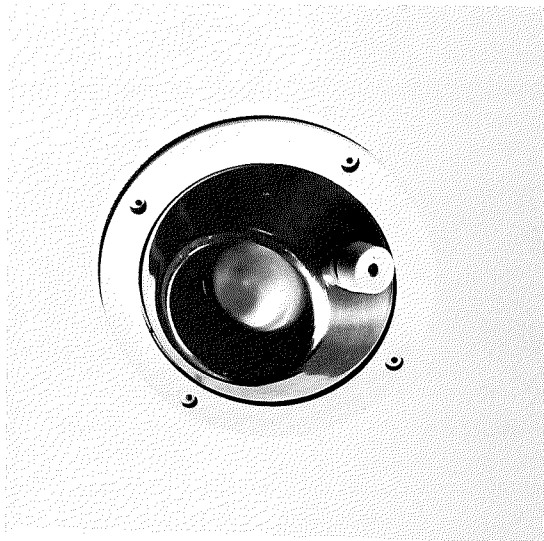
Bed Lights



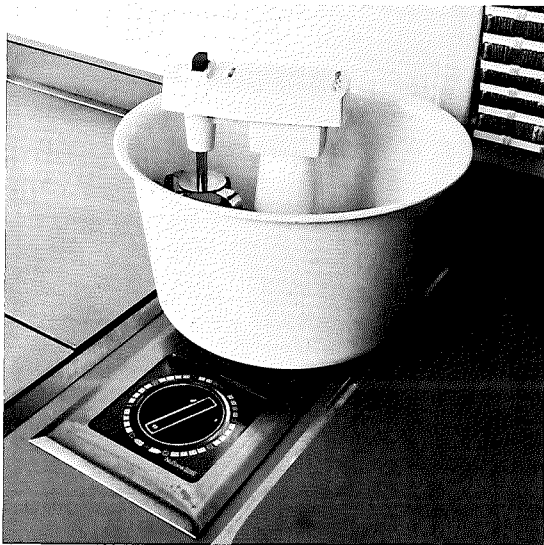
Ceiling Light Fixture



Below Bed Storage



Area Lights



Nu-Tone Appliance Center

The **NuTone Food Center** allows you to operate several appliances with just one built-in power unit. Your Excella is equipped with three attachments, mixer, blender, and knife sharpener. Other appliance attachments are available.

The 6-speed dial offers quick cycling in either direction, from 'off' to any desired speed.

Because it is a highly efficient motor—designed to handle heavy loads as well as light loads—you may notice a hum when you use it. This is normal and indicative of the motor's power.

Your power unit was oiled at the time of manufacture but a storage period may have permitted oil to drain back into the reservoir. Before using it for the first time, please run the power unit for one to two minutes to insure lubrication... before attaching an appliance. At intervals of from one to two months, depending on the amount of use, a few drops of ordinary household oil should be placed around the motor shaft opening.

The unit will warm up in proportion to the length of time it's run and the load it carries. If you run it unusually long or hard, give it a rest before putting it to work again.

The **mixer** was designed for convenience and efficient operation. The bowl rests on a turntable directly connected to

power unit. The motor, not the beater, turns the bowl—automatically keeps it revolving during mixing, regardless of the consistency of the batter. This feature eliminates hand-turning the bowl. And, while the bowl revolves automatically, the beater turns in the opposite direction. This 'counter-motion' feature helps prevent lumpy, incomplete mixing.

To operate the mixer:

1. Place turntable in position on the power unit.
2. Lock the turntable in place by pressing the locking lever clockwise.
3. Place the mixing bowl on the turntable.
4. Push the beater blade into the beater head. Blade will 'click' when it's locked in position.
5. Insert beater head shaft into center tube of bowl. Place it in one of six positions until it snaps into turntable.
6. Turn dial to desired speed.

Note: To remove beater head, turn counter-clockwise, and lift it out of mixing bowl. If the turntable should become locked into power unit and cannot be easily removed, insert beater head and turn it counter-clockwise.

The **blender** makes meal preparation and entertaining less work and more fun. It performs quickly and easily the time-consuming and tiring tasks of grating, chopping, shredding and mincing; it even liquefies solids and blends them to perfection.

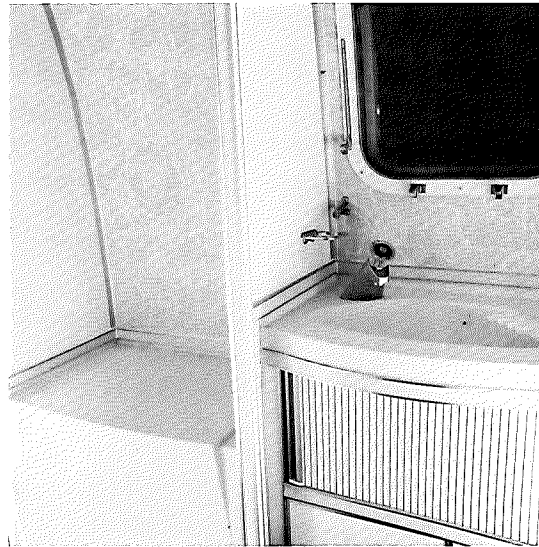
To operate the blender:

1. Place blender in position on power unit, and turn clockwise to lock securely in place. Never attempt to place blender in position while power unit is running.
2. Put food in blender. Cover. Turn dial to desired speed. Or...
3. When adding solids, cover, then turn dial to desired speed. Remove insert from lid. Add food through opening while blades are in motion.
4. To remove contents from blender, use a long-handled rubber bottle and jar scraper or a wooden spoon or fork. Don't use a metal spatula or spoon.

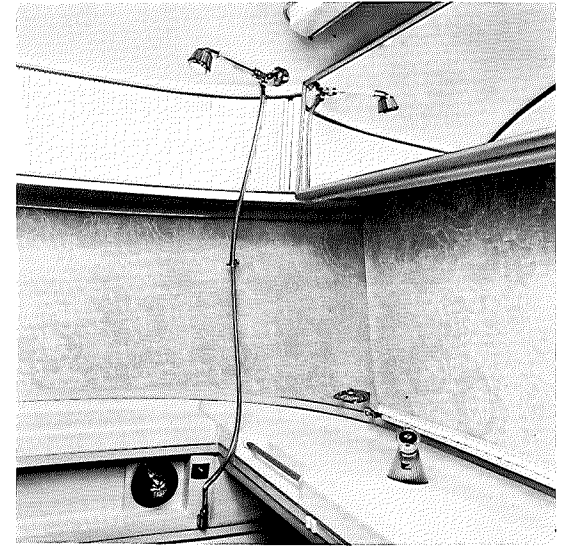
The **knife sharpener** will allow you to sharpen your knives in just seconds.

To operate the knife sharpener:

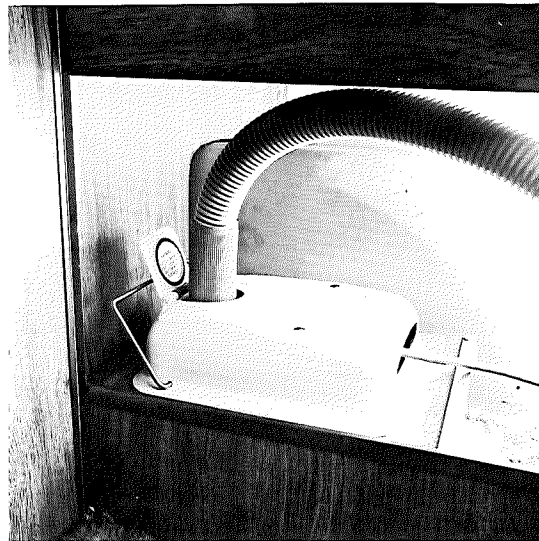
1. Place sharpener in power unit; turn clockwise to lock in position. Be sure sharpening stone is on left as you face the knife sharpener.
2. Turn control dial to speed 3. Be sure knife is clean and dry.
3. Place heel of knife blade into guide slot next to sharpening stone (left or right). Hold knife firmly by the handle and draw it slowly toward you with cutting edge against stone. Allow weight of the knife and the guide slot to apply necessary pressure and positioning.
4. Repeat operation, alternating to left and right side of stone with each stroke, until desired sharpness is obtained.



Center Bath



Rear Bath



Vacuum Cleaner Hose and Outlet



Vacuum Cleaner

Caution: Don't test blade edge with fingers. Don't place hands, fingers or other objects on spinning sharpening stone.

Don't sharpen knives with an irregular edge such as serrated, scalloped, fluted, corrugated or hollow edges... and don't sharpen scissors. **Don't clean sharpener while attached to power unit.** Be sure speed control dial is turned 'off' before attaching or removing sharpener.

A **12 volt two-tone door bell** is installed on the forward side of the main door with the chimes located under the credenza.

The **hanging wardrobe** (optional), located over the foot of the bed, increases storage for short items like shirts, blouses, skirts and short coats.

The **bathroom exhaust fan** in rear bath models is in the bathroom wardrobe wall left of the toilet and is operated by a switch under the roadside roof locker. In center bath models the fan is located behind the toilet and is operated by a switch located to the right of the toilet. Complete toilet instructions are on pages 64-66.

The **lavatory bowl, counter top, tub and shower pan** in your Airstream bathroom are made of a special ABS long-wearing, light weight, high strength plastic material. When cleaning, use soap or detergent only—never use scouring powder.

The **telephone shower head** is designed to give maximum flexibility in usage and provide for water saving techniques when using your trailer on self-containment. When using the shower head, it should be held in the hand and moved about the body. Normally the best water conservation procedure is to wet the entire body and then turn the water off with the push button at the shower head. Apply soap, lather thoroughly, then rinse the soap off. The shower can be turned on and off without disturbing the hot-cold adjustment. The telephone shower head is also used to fill the tub for taking a bath.

The **medicine chest** is behind the mirror in the rear bathroom. The 120 volt and 12 volt outlets are located below the medicine compartment on the roadside of the unit. The medicine chest in the center bath is to the right of the lavatory with the 120 volt and 12 volt outlets located behind the mirror.

The **light** in the rear bathroom is operated by a switch under the roadside roof locker. The light in the center bath is operated by a switch located on the side of the medicine cabinet. To change bulbs, squeeze the lens at each end and pop it out.

The living room has an **indirect fluorescent lighting system**. The switch is located under the front roof locker on the curbside. Replacement bulbs are readily available, since they are the type used in

120 volt lamp fixtures.

The **vacuum cleaner** is located in the storage cabinet below the Micro Wave oven. To start the unit, raise the flap on the outlet and insert the hose with a slight twist. Make sure the dust bubble is connected to the hose before using. To stop the unit, simply remove the hose from its outlet.

To open and empty the dust bubble, hold it over a trash container and twist the lower lid carefully. Tap the two halves to release any dirt trapped on the filters. The dust bubble can also be rinsed out after removing both upper and lower filters.

To remove the filters, remove the lid and grasp the large outer red ring in the upper half of the bubble. Pull it gently toward you until free. Lift out the small inner red ring from the center of the bubble. Remove the lid filter ring by pulling gently. To reposition the filters reverse this procedure. When properly positioned, the large outer red ring should rotate freely on the flange.

L.P.G. System

Your Airstream is equipped with two tanks for LPG (Liquid Petroleum Gas). LPG burns with a clean blue flame and produces more heat than natural gas. There are two basic types of LPG in common usage: **Butane and Propane**. Butane is widely used where temperatures are normally above freezing the year round and Propane is used where subfreezing temperatures are common, since Butane freezes at 32°F as compared to -40°F for Propane. **All of the orifices in your Airstream LPG appliances are of the universal type which will burn either fuel.**

How long a full tank of gas will last is dependent on usage. In cold weather when you are using the furnace, large amounts of hot water, and are doing extensive cooking, you will naturally use more than you will in warm weather when you may do limited cooking. On the average, with normal cooking and other appliance use, you can probably count on three weeks service from each 28-lb. tank.

The Excella is equipped with an **Automatic Gas Regulator**. Both tanks are connected to this regulator and are turned on. Gas is drawn from only one tank at a time and when the tank being used is depleted the regulator automatically switches to the full tank. An indicator on the regulator points toward the tank being used to give you a visual reminder when one tank is empty. Additionally a tank gauge is on each tank indicating

fuel level. The empty tank can be removed for refilling without disturbing the tank being used. Simply close the tank valve, disconnect it, have it filled and reconnect.

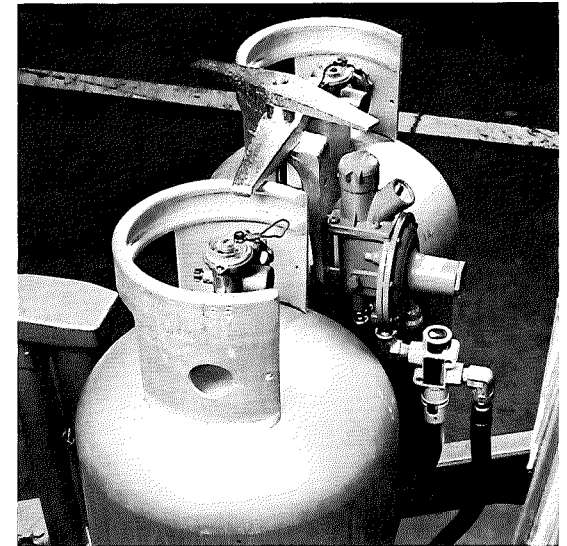
To remove the gas tanks, disconnect the tubing nut with a wrench and loosen the bar handle which holds the tanks in place. The tubing nut has a left hand thread so be sure to always turn it clockwise to loosen and counterclockwise to tighten. When replacing a tank, connect and tighten the tubing nut before clamping it in place.

If you have allowed both tanks to run out, air may have gotten into the lines. In this event, the air must be forced out through the lines by gas pressure before you will be able to light the pilots. Hold a match to the pilot of the appliance closest to the tanks until it lights and stays lit. Then move to the next closest, etc. For complete appliance operating instructions, refer to pages 51-58.

Gas lines should be checked periodically for leaks with the **L.P.G. leak detector**. Do not use open flame.

To operate L.P.G. leak detector, follow these instructions:

1. Close gas tank shut-off valves.
2. Open trailer door and windows for ventilation and shut off all gas appliances, including pilots.
3. Open one gas valve and light burner



L.P.G. Leak Detector

to deplete any gas pressure. **Then close the valve.**

4. While depressing leak detector red button, open the main tank valve. A stream of bubbles will be immediately visible. Continue to depress the plunger for 5 to 10 seconds. If no bubbles are released, your system has a leak and you should conduct a soapy water test at all joints. Tighten if necessary and retest.
5. If test still shows a leak, contact your Airstream Service Center.

Note: In some states it is illegal to leave the gas tanks turned on while towing a trailer.

Refrigerator

Your Airstream is equipped with an **A.G.A. approved Dometic gas-electric refrigerator**. These are the finest refrigerators available for trailer use and will give you many years of faithful service.

For best operation of this refrigerator it is important to level your trailer. When parking try to avoid having a strong wind blowing directly against the vent outlet for most efficient operation.

Controls for both gas and electric operation are located inside the food storage compartment, at the bottom of the unit, and in the Outside Access Compartment. (See photos.)

For gas operation, follow these instructions:

1. Open refrigerator door, all controls for gas operation are located at bottom of unit.
2. To start the refrigerator turn the valve knob (A) to gas position. The gas valve is now open and the electric circuits are not in use. Set thermostat knob (C) to setting No. 4.
3. Pull knob (D) of the automatic pilot, and keep it out for 15 seconds. Press in knob (E) of the piezo lighter. The pressing may have to be repeated.
4. After the burner is lit, which can be seen through reflector window(F), keep the knob (D) pulled outward for an additional 15 seconds.
5. Release the knob (D) and check that the burner is operating.

If the burner is not operating, repeat the lighting procedure.

After a replacement of a gas bottle or a long shut-off period the gas lines are likely to be filled with air. In such cases the lighting procedure has to be repeated until the air is pushed out of the lines and the gas has reached the burner.

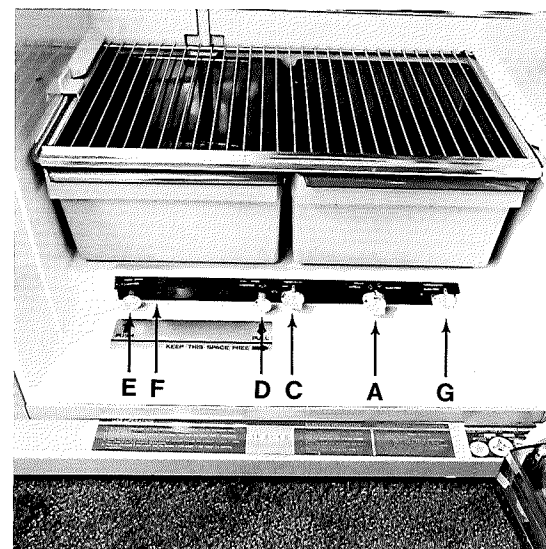
As soon as the required cold temperature inside the cabinet is reached, the thermostat cuts the burner main flame to the by-pass flame sufficient to keep the safety valve open during gas operation. During electric operation the thermostat cycles the flow of the electrical current to maintain the set temperature.

Incorporated in the burner bracket is an automatic flame failure device which allows gas to pass only when the burner is lighted, keeping the thermocouple hot. Should the flame be blown out, the thermocouple will cool and the device will cut off the flow of gas to the burner.

The refrigerator is fitted with a piezo lighter which does not require flint.

For electric operation, follow these instructions.

1. Open refrigerator door and outside access compartment door. Outside access doors are opened by unlocking and turning the handle 1/4 turn counterclockwise. Controls for electric operation are located in both areas.



Controls Inside Refrigerator

2. To start the refrigerator turn the valve knob (A) to the off position.
3. Plug the electrical cord into the 120 volt outlet (B) located on the back wall of the storage compartment below the Micro Wave oven.
4. Press knob (A) in, until it stops, then turn to electric position.
5. Turn the electric thermostat knob (G) to setting No. 4.

For best operation even during extended stays in parks your unit should be periodically run on gas.

The refrigerator has automatic thermostatic control of the temperature in the food storage space. The gas thermostat (C) controls the temperature during gas operation, while the electric thermostat

(G) controls the temperature during electric operation. **Be sure to make the temperature setting on the correct thermostat.**

Your Dometic incorporates a unique, **fully automatic defrosting device** for the general food storage compartment, which eliminates the necessity for manual defrosting at frequent intervals normally associated with most conventional refrigerators in the medium size range. Furthermore, the time interval of each defrosting cycle, and the frequency, have been so arranged that during defrosting there is no noticeable effect upon the temperature of the foods stored in the refrigerator, and the frozen food storage conditions can be maintained at all times in the frozen storage compartment.

When cleaning, remove all food and clean the interior and all other plastic parts with warm water, and mild detergents. Never use abrasive or caustic cleaning powders, polishes, cleaning paste, gasoline, turpentine or other solvent type cleaners. Use a damp cloth for cleaning and finish with a soft dry cloth.

When the refrigerator is to be out of operation for some time, always leave the door slightly open or place a pie tin of barbecue charcoal on the shelf.

The following are some trouble shooting tips for emergency use only. They relate

to gas operation and should normally be done by the dealer.

Problem: Flame goes out. The thermostat is out of adjustment. To adjust it, turn the dial to "zero." If the flame does not go down to the "low" by-pass setting, follow this procedure:

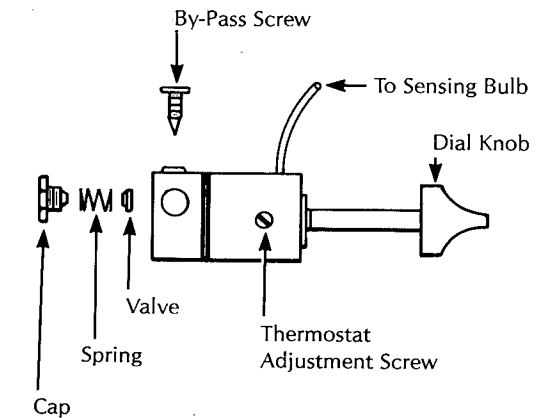
1. Unscrew the large cap screw at the rear of the thermostat and remove the valve. Clean the seat and valve, and replace.
2. If procedure (1) does not correct the problem, adjust the set screw out (in counterclockwise direction) until the flame goes down to the "low" position.

If the flame keeps going out when the dial is turned to (O), remove and clean the by-pass screw which is located as shown in the diagram above.

Problem: Burner does not light. Remove and clean the burner barrel, and/or check the gas supply.

On gas refrigerators, the flue will require cleaning at least every six months. To do this, it will be necessary to gain access to the back of the cabinet. When cleaning the flue proceed as follows:

Unscrew the burner housing, then lift out the baffle on its support wire from the top of the boiler tube. From the top, clean the flue with a suitable flue brush. Also clean the baffle, before putting



Thermostat

back in place. An obstruction in the flue will reduce or stop flue draft. Flue obstructions will cause odors outside refrigerator, slow freezing and higher cabinet temperatures.

Micro Wave Oven

The Litton Industries, **portable micro wave oven** is available as an option in your Excella. Airstream dealers cannot service or make adjustments to the oven. This must be done by an authorized Litton Industries dealer. If you ever have problems with the oven check the local telephone directory for the nearest dealer.

To operate your electronic oven, follow these simple steps:

1. Open door by pushing down on door release.
2. Place food in oven.
3. Select and push one of the cooking method buttons; COOK, DEFROST or VARI-COOK.
4. Set the timer.
5. Close the door. Orange panel light will illuminate to indicate cooking operation.

NOTE: Closing the door begins the cooking operation; thus, Step 5 should be done last. If you wish to stop cooking, simply turn the timer to zero or open door.

The **Vari-Cook™** feature of your oven gives you total flexibility of choosing your speed of cooking. The "HIGH" setting provides the greatest cooking speed and settings between "HIGH" and "WARM" provide decreasing amounts of cooking speed.

After pushing Vari-Cook button, select

the type of cooking desired: high, reheat, roast, simmer, defrost or warm, by setting dial, as explained in the *Vari-Cook Cooking Guide*.

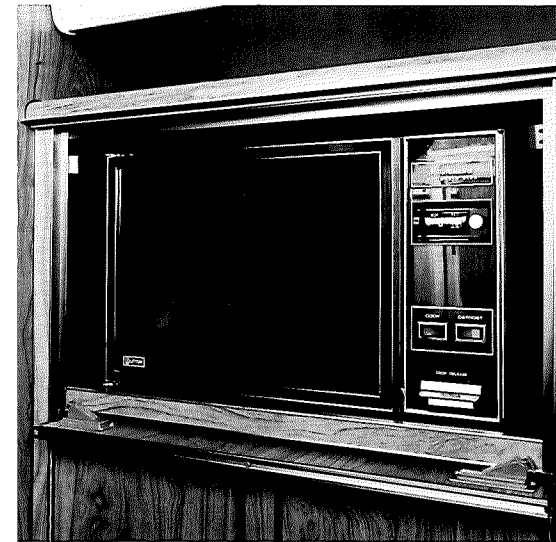
While your oven is operating in the **Vari-Cook** and **Defrost** Cooking Methods, the interior light will vary in intensity and the oven will make a slight humming sound. These are normal occurrences and an indication that oven is operating as designed.

The **digital timer** has two convenient operating controls:

1. A knob for setting seconds and minutes. Push in and turn clockwise to set time; counter-clockwise to decrease time. For time settings of 35 seconds or less, it is recommended that you turn the knob past 35 seconds and then back to the desired time.
2. A thumb wheel for convenient setting of tens of minutes. Rotate upward to set time; downward to decrease time. The timer thumb wheel will not rotate until the timer is set to a time other than 0:00.

Please read your cooking guide carefully. It will help you learn about your new Litton Electronic Oven quickly.

Your micro wave oven is a portable and can be removed for use in your home when your trailer is not in use. This can be done by removing the attachment screw that is located in the top of the



Micro Wave Oven

cabinet directly below the oven.

IMPORTANT

Safety and Maintenance Instructions

Litton microwave ovens are one of the safest kitchen appliances. Each Litton microwave oven meets all safety standards set by the U.S. Dept. of Health, Education and Welfare. Look for the safety seal and UL tested label on your oven.

However, it is important for you as a user to observe certain precautions and care in utilizing your Litton oven for maximum performance and safety. The door on your oven has been carefully designed to contain the micro wave energy; therefore, it is important that you observe the following:

1. Do not operate the oven with any ob-

- ject closed between the door and the oven face.
2. Do not operate the oven if there has been any damage to the oven face or door including loose or broken hinges or latch, or if the door does not close firmly against the oven front.
 3. Do not attempt to defeat the interlock switches. They are there for your protection. You will note that upon operating the door latch while the oven is in the cook cycle, the panel light will go out. If the light does not go out, the interlock system is not operating properly. In such case, do not operate the oven until the interlock switch has been repaired. If the oven shows no indications of operation (no interior light, no panel indicator light, and no sound from the blower motor) when connected to the proper outlet, the safety circuit may have detected an interlock malfunction and automatically shut down the oven. A Litton Authorized Service Agency should be contacted for proper repair of your oven.
 4. Remember that it requires considerable electrical power to operate the micro wave oven (15 amps). Operation of other 120 volt appliances should be kept at a minimum when operating the oven.

The door enclosing the micro wave oven can also be used as additional counter space.

Your new oven requires very little maintenance except for cleanliness. Do not allow grease, soil or splatter to build up on the door seal to the oven cavity. Use only a mild detergent, water and a soft cloth to clean the door surface and the interior surfaces. Litton maintains trained service technicians in all principal metropolitan areas. It is suggested that these authorized service agencies be utilized for proper repair and adjustment of your oven.

The light bulb in the oven interior can be easily replaced if it burns out. Simply remove the "Lamp Access Panel" on the back of the oven by removing the screw. Light bulb replacement is 40 watt incandescent bulb available at any hardware store.

The Litton **Micro-Browner® Steak Grill** allows you to brown and sear steaks, hamburgers and chops, fry eggs, grill a cheese sandwich.

Range and Oven

Your Airstream is equipped with a Magic Chef **gas range** and **oven**. The following are some hints on how to keep them operating at their best.

The range is equipped with coaxial orifices for use with LPG. The flame will be approximately 1/2 inch long. **Do not attempt to adjust gas to burner.** The orifices have no adjustment.

Air shutters on top burners are to be adjusted so that each cone of the flame is separate and distinct and appears as illustrated in the figure to the right. Air shutters set too far open will cause the flame to lift away from the burner head and it will be difficult to light. If the air shutters are closed too much, the flame will look hazy and the distinct cones will be missing.

Problem: Flame lifts off ports—Too much air.

Problem: Soot formations— Not enough air.

Problem: Flame flashes back into air mixture chamber—Too much air in proportion to gas. Slightly decrease air.

Problem: Orange flame; caused by small filings in new burners or dust in air—Clean burners.

Problem: Burner fails to light—Usually too much air.

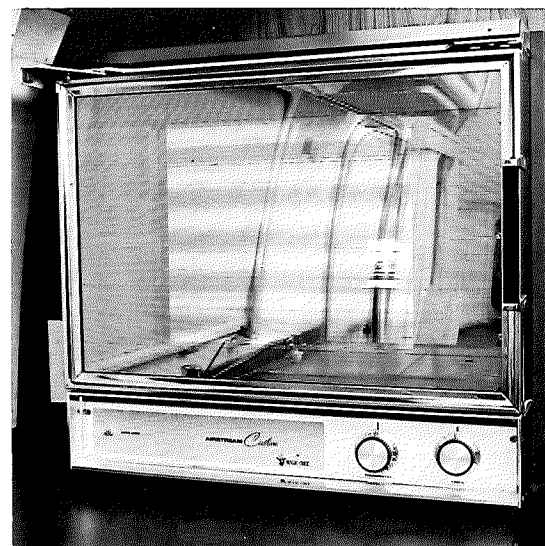
Note: To adjust air-gas mixture, rotate the sleeve behind the burner control knob. Decrease air by closing the opening, and increase air by opening it.



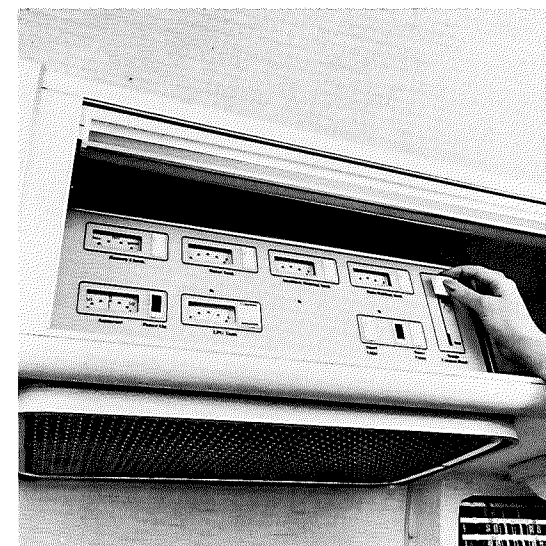
Range Rear Bath



Range and Oven Center Bath



Oven Rear Bath



Range Exhaust Hood

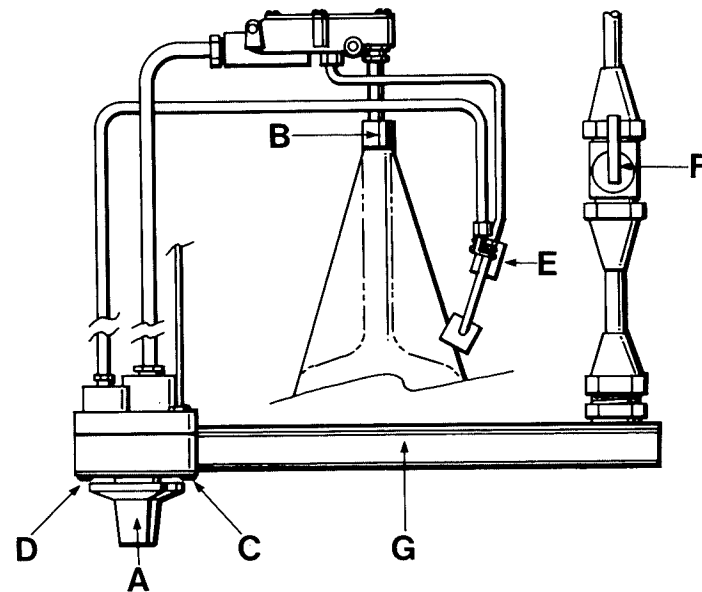
Adjust the top pilot so that the tip of the flame is just over the edge of the inner cone. The burners should light within 4 seconds. If lighting is difficult, refer back to the previous step.

Never allow the top cover to be closed while the range is in operation, as this will extinguish the flame and permit gas to escape into the trailer.

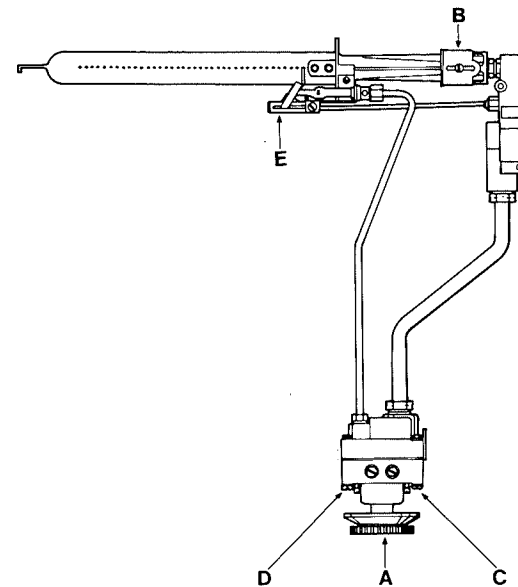
The **range exhaust hood** provides venting of cooking heat and smoke from the trailer. To operate, pull lever on right hand side of central control panel, down. This will open the shutter and turn on the switch for the power fan. Clean the filter regularly with warm water and detergent. To remove the filter, remove the two screws that secure it to the housing and let it drop out. Keep the vent housing clean from grease and dirt by frequent washing.

Note: The range gas line shut-off valve located on the lower exterior of the trailer below the range, must be turned off when towing the trailer, when changing the gas tanks, or if the gas supply is turned off for any reason. Be sure oven pilot light has been relighted as soon as range shut-off valve is turned on.

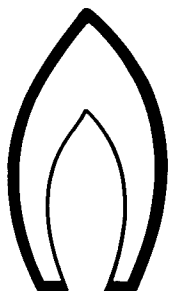
The **thermostat** on your oven does not have a by-pass setting. It will cycle off and on at all temperature settings except broil. No by-pass adjustment is necessary.



Combination Range and Oven Controls



Wall Oven Controls



Separation of Flame into Distinct Cones

Oven Section

The Thermostat Control Knob (A) is combined with the constant pilot shut-off. For normal use: turn only between "OFF" and "BROIL." When traveling, turn to "PILOT OFF." Relight only when you want to use the oven, by turning from "PILOT OFF" to "OFF" and lighting with a match.

The air shutter (B) on the main burner is to be adjusted so that each cone of flame is separate and distinct, as illustrated.

Constant Pilot Adjustment

1. Remove Control Knob and Bezel (A).
2. Using a screwdriver, turn slotted red-colored Constant Pilot Selector (C) to "LP" position. When the slot is in the vertical position, the Selector Cart-

ridge is in the "OFF" position.

Heater Pilot Adjustment

1. Replace Control Knob and turn to the 300 degree setting on the Control Knob Dial. This opens the thermostatic valve in the thermostat and allows gas to flow through the Heater Pilot Tube to the Heater Pilot.
2. Remove the Control Knob.
3. Using a screwdriver, turn the slotted green-colored Heater Pilot Adjusting Cartridge (D) in either direction until the pilot flame just envelopes the Temperature Responsive Element (E).
4. Replace Bezel and Control Knob.
5. Make any air shutter adjustments for oven burner flames.

Important: Your oven is equipped with a **safety ignition** that requires a minimum of 30 seconds to operate after turning the oven control knob on. The oven pilot may be slow in lighting due to air in the gas lines.

Cleaning Instructions

1. The main top has been hinged from the back so that it can be raised for cleaning around the top burners.
2. When cleaning the top burner heads, care should be taken that all ports are opened up with a toothpick afterwards.
3. Spill-over or spotting in the oven or broiler are more easily cleaned when removed promptly after they occur.

Never wash porcelain when warm.

Never use cleaning powder containing grit or acid. When oven bottom is replaced after cleaning and servicing, be sure that it is locked in place. The front return flange on the oven bottom must hook under the side support angles to prevent warping.

Furnace

The Airstream furnace is an American Gas Association approved Suburban unit with an electronic ignition and is designed specifically for travel trailers. It has a sealed combustion system with a dual blower for maximum air circulation. One blower circulates room air while the other draws in air for combustion. The adjustable louvered heat registers control warm air flow while cold air returns through the galley cabinet toe kick opening.

The heat duct system also circulates warm air around the holding tank, water tank, and one-stop-service center, a vital feature when operating in below freezing weather.

The Suburban furnace is thermostatically controlled. When the thermostat calls for heat, the blower starts and only after it has reached nearly full speed will the burner light. After the temperature set on the thermostat is reached, the blower will continue to run for a short time, removing most of the remaining heat from the furnace as well as forcing the combustion gases from the heat exchanger. To turn the furnace off for an extended period of time turn the thermostat and the gas valve to their "OFF" positions. Operating instructions are printed on the front of the furnace.

Trouble-free operation of the Suburban furnace will depend on your adherence to recommended operating procedures

and precautions. Corrections of possible malfunctions presented here will be helpful in an emergency situation, but servicing should be done by a dealer. One note of caution regarding flue gases: they are vented from the furnace to the outside of the trailer through a vent in the outside wall. Do not in any way obstruct this vent by placing clothing or other flammable material on the vent assembly. Check it often to make certain it does not become clogged.

To operate the furnace:

1. Turn main gas valve to full "ON" position.
2. Set thermostat to desired temperature.
3. The main burner will normally light within 3-4 seconds, not exceeding 15 seconds.
4. If burner does not light, set thermostat to "OFF," wait 120 seconds and try again for ignition.
5. If, after three tries, the burner does not light turn the main gas valve and the thermostat to their "OFF" positions and determine cause. **Do not attempt to light burner with matches.**

Caution: The air shutter adjustment cover must be tightly secured for proper operation of the heater.

If your fuel supply is depleted the main burner will go into lockout. To reset the lockout, turn gas valve to "OFF" and set thermostat to "OFF." Wait 2 minutes and return to operation.



Furnace Thermostat

Adjustment of Main Burner (Primary Air): Set the furnace into operation by advancing the thermostat and allow to run until it reaches near-maximum operating temperature. Observe the main burners through the burner observation window. The flame should be without a trace of yellow and be "sitting" on the burner. As the furnace was tested at the factory before shipment, it may be found that the primary air is already in proper adjustment. However, adjustments may vary from one location to another due to differences in elevation and in characteristics of the fuel gases.

If the flame burns yellow or "lifts" off the burner, it needs adjustment. Take out the screws retaining the rectangular cover plate and lift the plate off.

Inside the opening is a threaded rod with the visible end slotted to receive a screwdriver. By turning the rod you will adjust the position of the main burner air shutter. This air shutter should be adjusted to the point where a slight trace of yellow remains in the tip of the flame. Replace the cover and check that the yellow tips have now disappeared. **Caution: The primary air adjustment cover plate must be in place for proper operation of the furnace.**

When the humidity is high inside your trailer and you wish to remove moisture, open a roof vent and turn on a vent or open a window slightly for cross ventilation.

Water Heater

The **Bowen Gas Water Heater** is equipped with a Robertshaw 100% shut-off safety valve which shuts off the gas supply if the pilot flame is extinguished or the water temperature becomes excessively hot. It is lighted and serviced from the outside through an access panel at the roadside, rear, of the trailer.

Procedure for lighting or relighting:

1. **Be sure the water heater is filled with water.** Open the hot water faucet at the sink and when the water flows, the heater is full.
2. Turn manual gas valve, on the lower exterior of the trailer below the water heater, to the "ON" position.
3. Turn the gas valve knob (A) to the "OFF" position and the temperature indicator dial (B) to the lowest temperature position.
4. Wait sufficient length of time to allow gas, which may have accumulated in the burner compartment, to escape (approximately five minutes).
5. Turn gas valve knob (A) to "PILOT."
6. Depress and hold the red reset knob (E) and push the lighter (D) in and turn until the pilot flame ignites. This may take several turns of the knob. Or you may light it with a match.
7. Keep the reset knob depressed for one-half minute after the pilot flame ignites.
8. Turn the gas cock knob to "ON."
9. Set the temperature indicator dial to the desired water temperature.

10. To shut down the water heater, turn the gas cock knob to the "OFF" position.

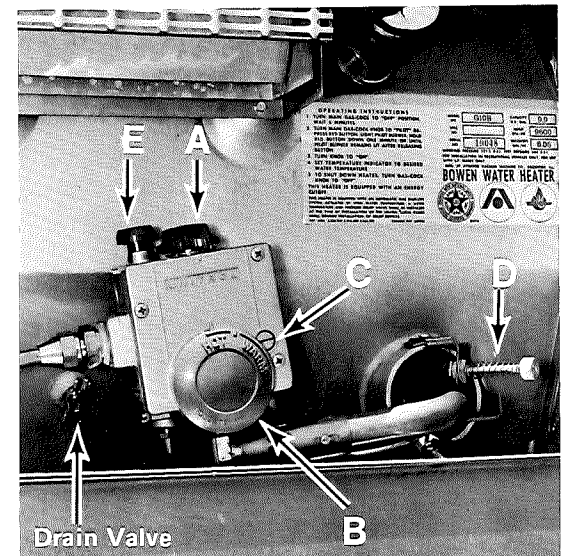
Pilot Flame Adjustment

If the pilot flame does not have a small orange tip, the pilot is not getting enough gas. The flame should be about 1/4 inch in vertical height when the water in the tank is cold and the burner is off, 1/4 to 3/8 inch in horizontal length when the tank is warm.

A large orange flame indicates excessive gas supply, which will result in short pilot life and early replacement. The pilot has been properly adjusted at the factory and should operate with a blue, orange tipped flame enveloping the pilot thermocouple. Removal of the pilot adjustment cap (C) in the lower right corner of the control will reveal the pilot adjustment screw. Turning this screw clockwise reduces the flow of gas to the pilot (blue flame) and counter-clockwise, the gas supply will increase (orange flame). Always replace the Pilot Adjustment Cap to prevent gas leakage.

Air Shutter Adjustment

All fuels depend upon air (oxygen) to give them proper burning characteristics. A yellow, smoking flame indicates a lack of air and a noisy hard blue flame indicates too much air. The air shutter slides back and forth along the burner tube and is held in place by a small shutter adjustment screw (D). Loosen the screw



Water Heater Controls and Drain Valve

for adjustment. A good method of adjusting the air shutter is to slide the shutter to the right until yellow tipping occurs on the main burner flame (not the pilot) and then slowly slide the shutter to the left until all signs of yellow tipping are gone. When proper adjustment has been obtained, tighten the screw holding the air shutter. The outside access door must be kept firmly locked for proper operation.

Water System

The Airstream Water System provides full service both when the trailer is self-contained, or when city water is available. Water heater capacity is 10 U.S. gallons. The water tank stores 45 gallons of clean fresh water for all your needs.

When self-contained, the Water Pump should be turned on. Switches are located on the Central Control Panel in the galley roof locker and in the bathroom. The bathroom switch is located under the roadside rooflocker on rear bath models and to the right of the toilet on center bath models. The Water Pump will run whenever a faucet is opened, and will shut off whenever a faucet is closed. It will deliver 3 gallons per minute under constant pressure.

Note: The Water Pump must be turned off when hooked up to city water supply and when you leave your Airstream unattended.

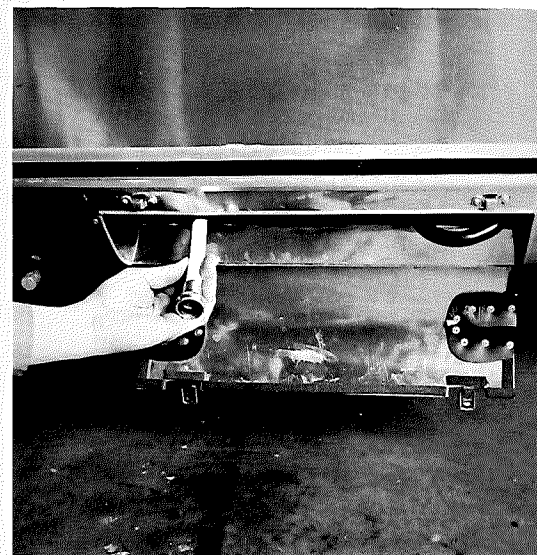
For city water supply, move the water hose reel lever, located inside the water hose storage compartment, to its right hand position and pull the water hose out far enough to connect with the city water source. Or you can connect a 1/2" high pressure hose to the water inlet fitting located under the rear roadside corner of the trailer, just forward of the bumper. Turn the hose on and slowly open an inside faucet until the water flows free of air. The system will now

be ready for use. If you are staying for some time where city water is available, drain the water storage tank. The drain valve is accessible through a hole in the floor below the galley sink. Be sure to refill the tank with fresh water before departing. The system has check valves in the water lines to protect the water tank while you are connected to the city water supply.

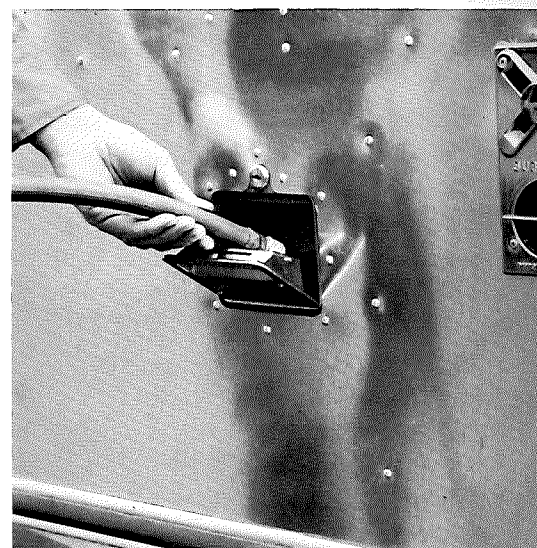
The **water tank** is located under the floor just forward of the axle. To fill the water storage tank, open the filler spout (see photo) on the exterior wall adjacent to the galley, and fill with a hose or a bucket, until the water supply pipe is overflowing. Close and lock the spout and the water system is ready to use.

To clean the tank, pour some bicarbonate of soda into the filler spout with several gallons of water and allow to stand for a minimum of four hours. Then flush the tank out by opening the drain valve and running fresh water through it. If the water tank must be cleaned further, the following procedure is recommended:

1. Prepare a sodium hypochlorite solution using potable water and household bleach (5-1/4 or 6%) in the ratio of 1/4 cup of bleach to 1 gallon of water. (Common household bleaches are Purex and Clorox.)
2. Pour 1 gallon of hypochlorite solution for each 15 gallons of capacity into the empty water tank.
3. Add enough potable water to com-



Water Supply Inlet and Water Hose Storage



Water Tank Fill Spout

pletely fill the water system.

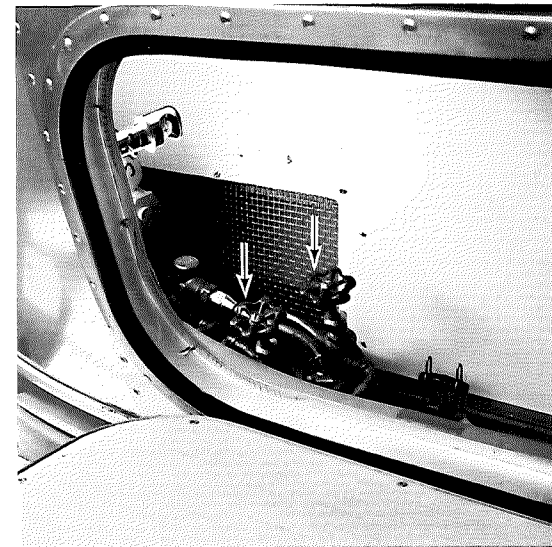
4. Allow closed system to stand for three hours.
5. Drain the hypochlorite solution from the system and refill with potable water.
6. Excessive hypochlorite taste or odor remaining in the water system is removed by rinsing the system with a vinegar solution mixed in the ratio of 1 quart of vinegar to 5 gallons of water.
7. Drain the system, flush with potable water, and refill with potable water.

The **water pump and filter** are under the Galley Sink. The filter screen should be cleaned periodically to prevent accumulation of dirt and sand. To remove the screen, disconnect the rubber hoses from both ends, separate the screen housing, remove the screen, clean and replace.

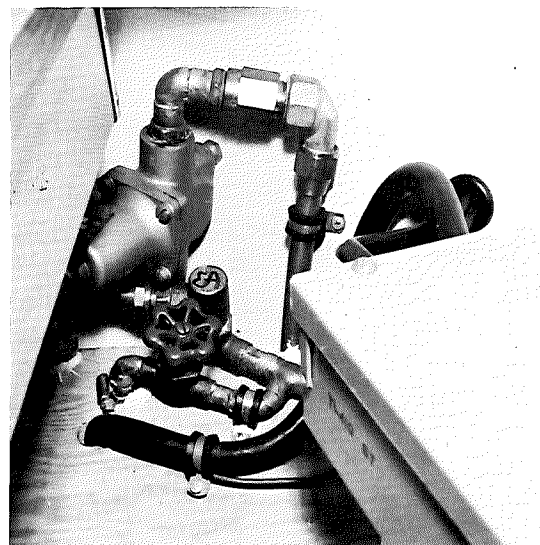
The **Everpure QC-2 Water Purifier** is located under the galley sink. It will remove all dirt and colloidal matter, and eliminate most chlorine, phenol and similar odors and tastes while delivering sparkling taste-free water for drinking and cooking. The filter is connected to the cold water galley drinking faucet only. The purifier is not guaranteed to remove the tastes and odors of iron and sulfur. To remove these tastes, chlorinate the water supply. Super chlorination will precipitate dissolved iron, and the purifier will then remove the formed chlorine salts. To purify any questionable water



Water Pump Filter and Water Purifier



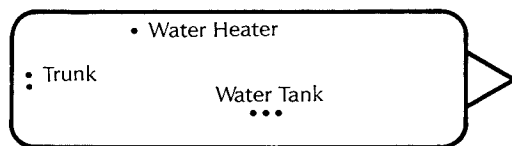
Water Drain Valve (Rear Bath)



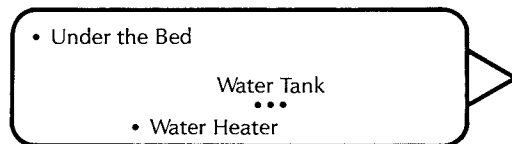
Water Drain Valve (Center Bath)



Manville Dishmaster



Rear Bath



Center Bath

• Drain Valve Locations

add 1 tsp. of chlorine (ordinary household bleach) per 10 gallons of water to the water tank (i.e. 4-1/2 tsp. for a 45 gallon tank). We recommend the use of tablets available at Wally Byam Stores. The quality of the water never varies even at the end of the filter pack life, however as the minute pores slowly fill up with impurities, this will gradually reduce the rate of flow until it is necessary to change the filter. Instructions are in each box and we advise buying two at a time, always keeping one in reserve.

To remove used cartridge:

1. Shut off water by lifting valve handle. Move counterclockwise as far as possible.
2. Turn colored ring all the way to the left. Ring will drop about 1/2".

3. Lift cartridge slightly and turn it further to the left until it can be disengaged.
4. Lower cartridge to disengage it from ring. Discard used cartridge.

To install new cartridge:

1. With colored ring in lowered position (turned all the way to the left) orient lug on cartridge with cutout under label on ring.
2. Insert cartridge straight up into ring as far as it will go. Holding colored ring steady, turn cartridge as far to the right as possible.
3. Then turn colored ring far to right to drive cartridge up into head.
4. To lock ring in place and turn water on, move valve handle down. Be sure handle leg engages ring locking-lug.

The **Water Pressure Regulator** is on the roadside of the rear trunk in rear bath models, below the bed in center bath models. It protects the plumbing inside your trailer, regardless of the variation in city water pressures. The pressure at the faucet is kept constant.

The water system has built in drain valves to protect it from winter freezing. For complete details see Storage and Winterizing, page 33.

Your Manville Dishmaster is designed to use detergents only. Do not use soaps or soap powders. Always use a liquid detergent and use only one tablespoonful to a tank of water.

Your Dishmaster has a double hose which carries hot water and detergent to an all nylon brush with a push button control providing clean hot suds and clean hot rinse for every dish.

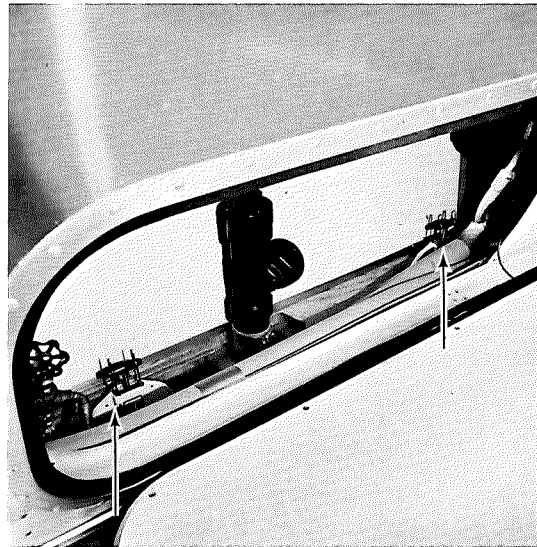
1. Remove the Tank Lid (A) and pour one tablespoonful of **liquid detergent** into the Detergent Tank, then finish filling the Detergent Tank with warm water.
2. Turn on the hot and cold water valves to get the water flow and temperature desired from the spout.
3. Pick up the Dishwashing Handle and pull up on the Black Knob on the Spout to direct the Water through the Brush.
4. Direct the water spray onto your dishes and press the Red Button for suds; release the Red Button for clear hot rinse.
5. When finished washing dishes, turn off your faucet valves and replace the Dishwashing Handle into its holder in back of the spout. The Holder is spring loaded to hold the Brush Handle in place. The Taper Tube will snap in or out of the Holder with little effort. See photograph for correct position of Spray Handle and Brush. Note that the Black Knob on top of the Spout automatically drops down when the water is shut off, thus returning your **dishwasher** to a regular water faucet.
6. When traveling, be sure the detergent tank is empty.

Drain and Waste System

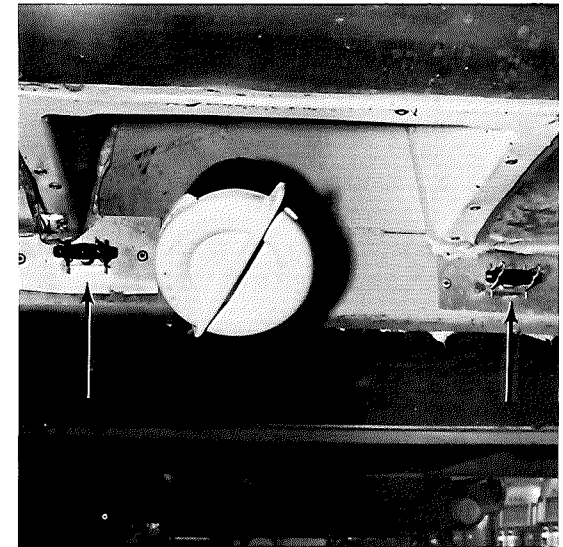
Your Airstream has a **drain and waste system**. The system includes **waste holding tanks** made from molded plastic, free from corrosion problems, with trouble free dump valves. The **main holding tank** enables you to use the toilet for several days away from disposal facilities. Waste water from the sink, shower, bath and lavatory drain into the **auxiliary holding tank**. Each tank has its own dump valve, however both tanks drain through a common outlet. Therefore you need to make only one connection when hooking up in a trailer park with sewer facilities.

When the toilet will no longer drain, the main holding tank is full and must be emptied. Watch this closely, because **when the tank is full, sewage cannot be emptied from the toilet bowl.** In models with a central control panel, check the main holding tank gauge. The auxiliary holding tank must be emptied when the gauge on the central control panel indicates full.

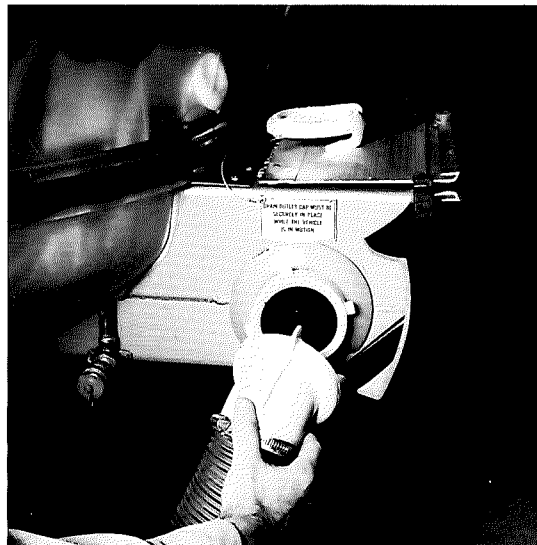
On rear bath models the dump valves are located in the rear trunk compartment. The main holding tank dump valve is located on the roadside and the auxiliary holding tank dump valve is located on the curbside (see photo). On center bath models the dump valves are located on the roadside, just behind the rear wheels, on the main frame rail. The main holding tank dump valve is located to the rear of the sewage outlet and the



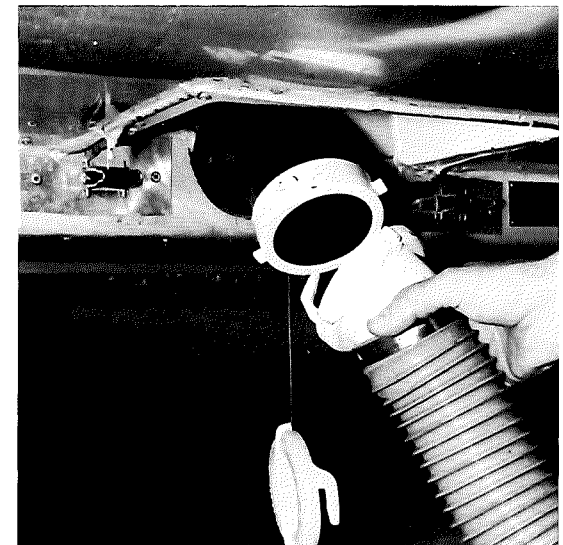
Rear Bath Dump Valves



Center Bath Dump Valves



Rear Bath Sewage Outlet



Center Bath Sewage Outlet



Toilet Hand Spray



Toilet Pedal Operation

auxiliary holding tank dump valve is located forward of the sewage outlet (see photo).

To empty one or both tanks attach the sewer hose by pressing the bayonet fitting onto the dump valve outlet and rotate clockwise until it feels solid and secure. Attach the outlet end of the hose to the sewage outlet, making sure that the hose is placed so that it will drain completely. The dump valves have two wire loops that lock the handle in the closed position. To unlock push outward on the wire loops and they will snap loose, permitting you to open the valve. Pull up the dump valve handle as far as it will go and wait until the tank is drained. When dumping, the main holding tank should be dumped first; then the auxiliary holding tank. This will help to rinse out the sewer line with auxiliary holding tank water.

The main holding tank must be flushed out until all paper and waste material is removed. Close the dump valve and refill the tank with 10 gallons of clean water and repeat until clean.

On rear bath models, a convenient fitting for flushing the holding tank is in the center of the rear trunk compartment. Replace the plug after using the fitting. The sewer hose is stored in the rear bumper compartment. Rinse out the sewer line before storing.

When in a park and connected to a sewer outlet, keep the main holding tank dump valve closed and empty the tank every few days or whenever it becomes almost full. **Only by sending a large volume of liquid through the main holding tank at a time will toilet paper and other solids completely wash away.** This practice will avoid the accumulation of solids in the main holding tank which could lead to an unpleasant cleaning job. Should solids accumulate and close the dump valve, fill the tank about half full with water, then tow the trailer for a few miles. The turbulence and surging of the water will usually dissolve the solids into suspension so the tank can be drained. Keep the tank valve of the auxiliary holding tank open when connected to a sewer outlet.

The **Aqua Magic toilet** employs a sliding self-cleaning positive seal blade. Odors cannot escape from the holding tank into the trailer. The unit uses less than 2 quarts of water for automatic flush. A special feature is the second pedal attached to the main foot pedal which, when pressed by itself, allows fresh water through either the fill rim or hand spray without opening the slide valve.

When conserving water, use the hand spray in the following way:

1. Hold the hand spray in ready position over bowl.
2. Depress thumb button and step on

the foot pedal, which sprays water and dumps the contents at the same time.

3. Spray bowl clean.
4. Release foot pedal, shutting off water flow.
5. If you wish to refill bowl with water for next use, depress small foot pedal till water reaches desired level.

When using automatic flush:

1. Step on main foot pedal, and this will automatically open the slide valve and drop the waste into holding tank.
2. Hold pedal down until water begins to swirl. This fills rim storage and rinses the bowl.
3. Release the foot pedal. This will close the valve blade and stop fresh water from flowing. The bowl will refill automatically.

If you are certain to empty your holding tank every few days, you can use the toilet on automatic flush. It uses very little water and the tank will provide for the requirements of two adults from 2 to 4 days.

Whenever water is scarce, the hand spray flush makes it possible to stay a week or longer in areas where you cannot empty the holding tank. In flushing for urine only, first, wet the bowl with fresh water, and again after use. Starting with a dry bowl takes more water for the final rinse. To flush for urine and solid matter: spray just enough water in the dry bowl to provide for floating the pa-

per and solids. After use, rinse down the sides with the hand spray and empty the bowl. Hold the slide valve open and spray and rinse the lower surfaces. Even if it appears clean, quickly spray it one more time, then release the pedal and it is ready for the next use.

There are certain items that should never be put into the toilet or tank.

Facial and other similar tissues: because they have wet strength and do not dissolve easily. Toilet paper, especially white, dissolves well after a period of traveling.

Use only trailer sewage tank deodorizers. Antifreeze, Ammonias, Alcohols and Acetones may cause damage to the tank, valve parts, tank fittings, and drain hose. For protection against freezing, use recommended fluids (See Winterizing, page 33).

Some state and federal parks prohibit draining sink and bath waters into the ground, although this is done in the wilderness. Your auxiliary holding tank will hold this water until you are at a dump area.

The **auxiliary holding tank should be flushed out periodically** to wash away sediments that may accumulate on the bottom of the tank. To flush, close dump valve, fill tank with water and then release dump valve. This volume of water will wash sediment away.

Electrical System

The exclusive **Airstream Univolt System** enables you to use the lights and appliances whether operating on self-contained battery power or hooked up to 120 volt city power. This combination unit is designed for protection from damage up to and including a dead short. The 12 volt light bulbs give off the same light as regular household bulbs, so that when operating on self-contained battery power, everything works normally except the 120 volt convenience outlets and electrical operation of the refrigerator.

Convenience outlets for 120 volts and 12 volts are located throughout the interior of the trailer, see diagrams page 70.

Exterior outlets for 120 volts are located on the curbside exterior wall, aft of the main door.

Each 120 volt circuit is protected with circuit breakers to prevent damage due to electrical shorts or overload.

A 30 amp main breaker is provided for additional protection, which will trip should you overload the overall 120 volt system. Example: If you are operating the air conditioner, Micro Wave oven and vacuum cleaner at one time, the trailer's main breaker would trip. The operation of two of these appliances alone in any combination would not trip the breaker.

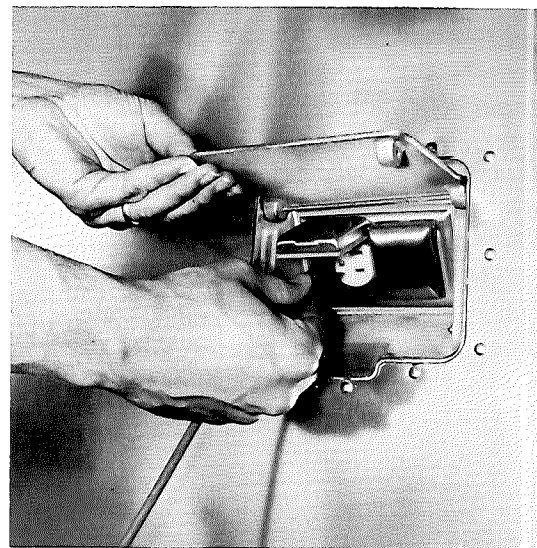
When operating with city power, make very certain that the service is 120 volt

and not 220 volt. Roll out the power cord from the automatic reel to the desired length and plug it into the city power source.

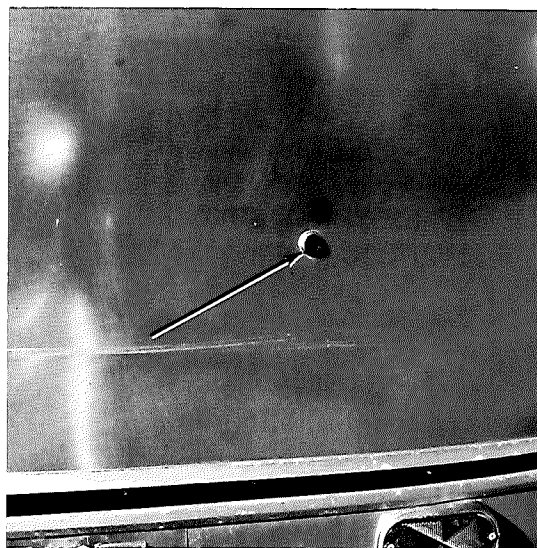
The univolt system has a new transformer designed to maintain constant output voltages regardless of the variances that occur in city power systems. The transformer design eliminates the need for complex electronic sensing systems to charge the battery, minimizing the possibility of failures and greatly increasing its overall reliability.

When the three pronged plug can be used, there will be no problem with proper polarity or grounding. In some older parks and other locations where three pronged outlets are not available, **certain precautions to insure proper grounding and polarity must be taken:**

1. Attach the three pronged plug to a two prong adapter. The third conductor line of this adapter has a short wire lead which must be grounded.
2. For proper grounding connect the ground lead to a grounded outlet box or to a cold water pipe. When no water pipe is available, experienced trailering people will drive a metal rod two feet into the ground and attach the ground lug to it thus providing the unit with proper grounding.
3. Check the polarity light located above the water heater access panel.



120 Volt Exterior Outlet



Polarity Warning Light

The **polarity warning light** indicates improper polarity and it should be off when the power supply cable is used with a two pronged adapter. It may occasionally glow when the three wire system is in use, but your trailer is properly grounded, and in this case you may ignore the light.

To **operate self-contained**, simply disconnect the power supply cable from the city power receptacle. Store the supply cable in the hose storage compartment.

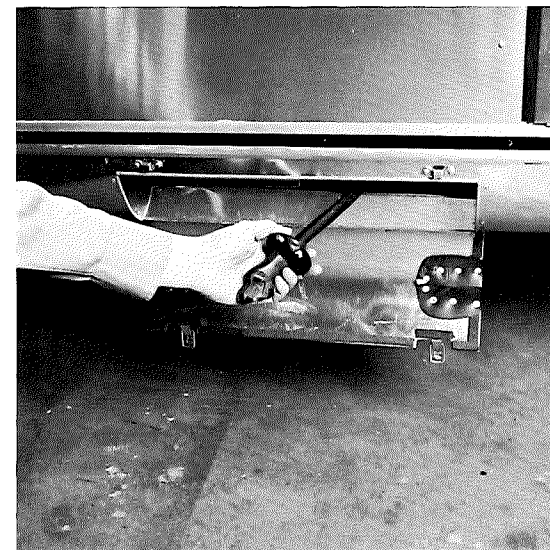
When your Airstream is hooked up to 120 volt A.C. the **Univolt System automatically charges the trailer battery** and, if it is hooked up, your automobile battery as well. The speed and degree of charge depends on how much power is used for lights and appliances, as only the surplus goes to charging the battery. (Please refer to the specifications section for more information on power consumption.) If you are making an extended stay or storing your Airstream, then you should (if it is available) **keep your trailer hooked up to 120 volt current**.

Whenever possible, use the automatic built-in charger of the Univolt System for charging. The charging circuit automatically controls the current, reducing it as the battery increases in charge. At service stations, make certain they give your battery a slow charge because quick charges will drastically shorten the life of the battery as will allowing repeated complete discharges.

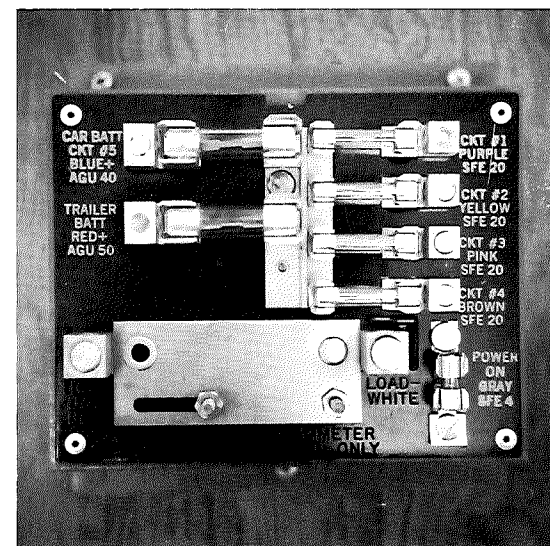
The **Univolt** fuse panel is located in the rear curbside wardrobe next to the bathroom in the rear bath models. On center bath models the Univolt fuse panel is located under the gallery and is accessible through a sliding door. See page 73 for fuse and lamp specifications. On rear bath models the 120 volt circuit breaker panel is accessible in the rear bathroom cabinet. On center bath double bed models it is located in the rear night stand. The panel is located in the road-side wardrobe in center bath twin models.

In the event of failure of a 120 volt circuit, check your circuit breaker first. While you are connected to the 120 volt receptacle, the wiring is protected by circuit breakers in the breaker panel providing the polarity and grounding is correct. If a breaker continues to trip after you have reset it several times, your circuit may be overloaded with appliances or there may be a short in the circuit. If lessening the load does not solve the problem consult an Airstream Service Center or the factory.

When being towed, the 12 volt battery in your Airstream is receiving a constant charge from the car's generator or alternator through the Seven Way Connector. The charge rate is controlled by your automobile's voltage regulator. It is important to keep the seven way connector clean: one method is to use "Spray-Kleen".



120 Volt Inlet



Univolt Fuse Panel

Battery

A normal battery will discharge by itself in 30 to 45 days, 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. A fully charged battery will not freeze under any normal circumstances, therefore, it is imperative that you keep your battery charged during the winter. A safe level of charge is a specific gravity reading of 1.225. A fully charged battery has a specific gravity of 1.250 to 1.280. Always use a hydrometer which has a temperature correction scale.

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 in clear water, and dry.

To insure maximum battery capacity on both charge and discharge, the battery terminals and the inside portion of the cable connector should be scraped or brushed until both of these surfaces are shiny bright. The cable connectors should then be reconnected to the battery and tightened. The complete assembly battery post and cable connector should be coated with a heavy bodied

mineral grease or petroleum.

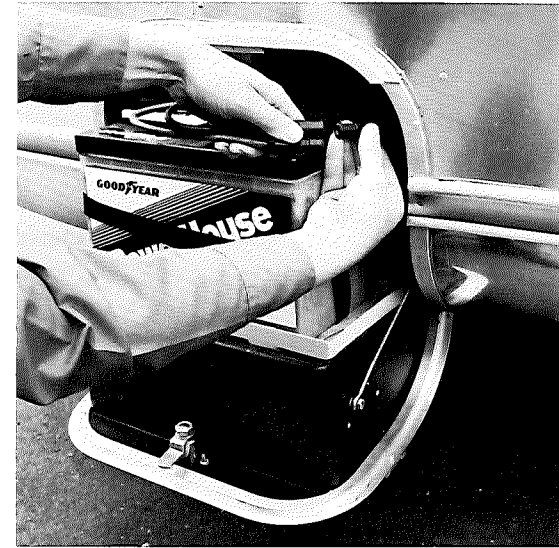
Important: Reconnect the battery cables to the correct battery posts. For example, if negative ground the black cable should be connected to the negative (−) post and the red cable to (+) post. The polarity may be determined by inspecting the battery post which is grounded on the tow vehicle, since it must always match the trailer. For example, if negative pole of the tow vehicle is grounded, the polarity of the trailer battery is negative ground.

Add water to cells as necessary. Check the electrolyte level at least once a month. When you are traveling steadily and for an extended period of time, or you are in climates above 90°F check the electrolyte level every two weeks.

Caution: The gases generated within a storage battery cell may be ignited by an open flame or spark in the vicinity of the battery. Do not use a match to provide light for checking the level of water.

During the winter the battery should be removed from the Airstream 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.

On rear bath models the battery is lo-

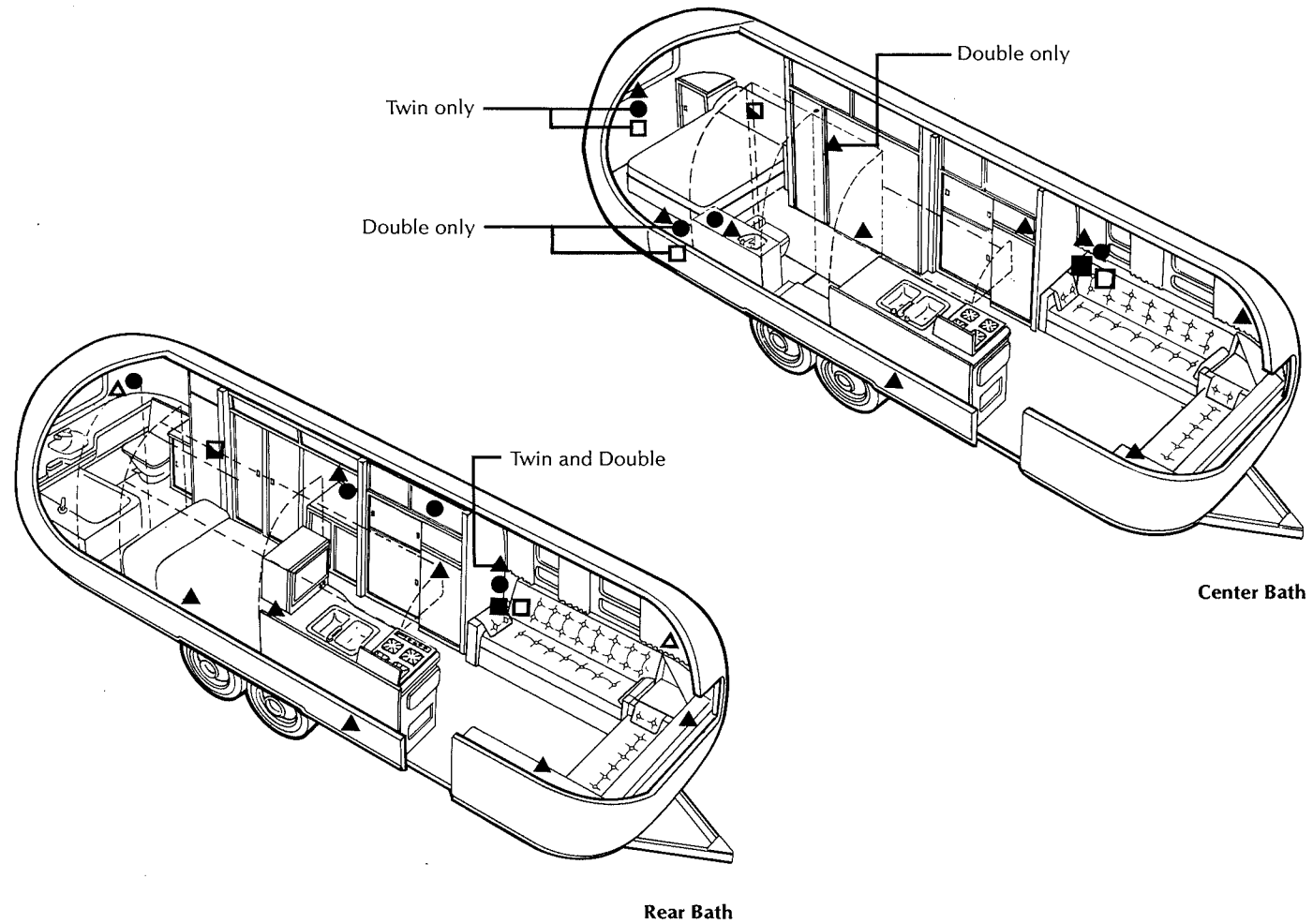


Battery Cable Quick Disconnects

cated in a rear curbside compartment. On center bath models it is located in a front curbside compartment. The battery slides out onto the opened door for service and removal. For removal it is not necessary to remove cables from battery terminals, just pull quick disconnects apart (see photo).

For battery service or replacement, go to any service station or dealer who sells and services this battery. The battery is rated for 105 amp. hours at 80°F and has a 5 year prorated warranty.

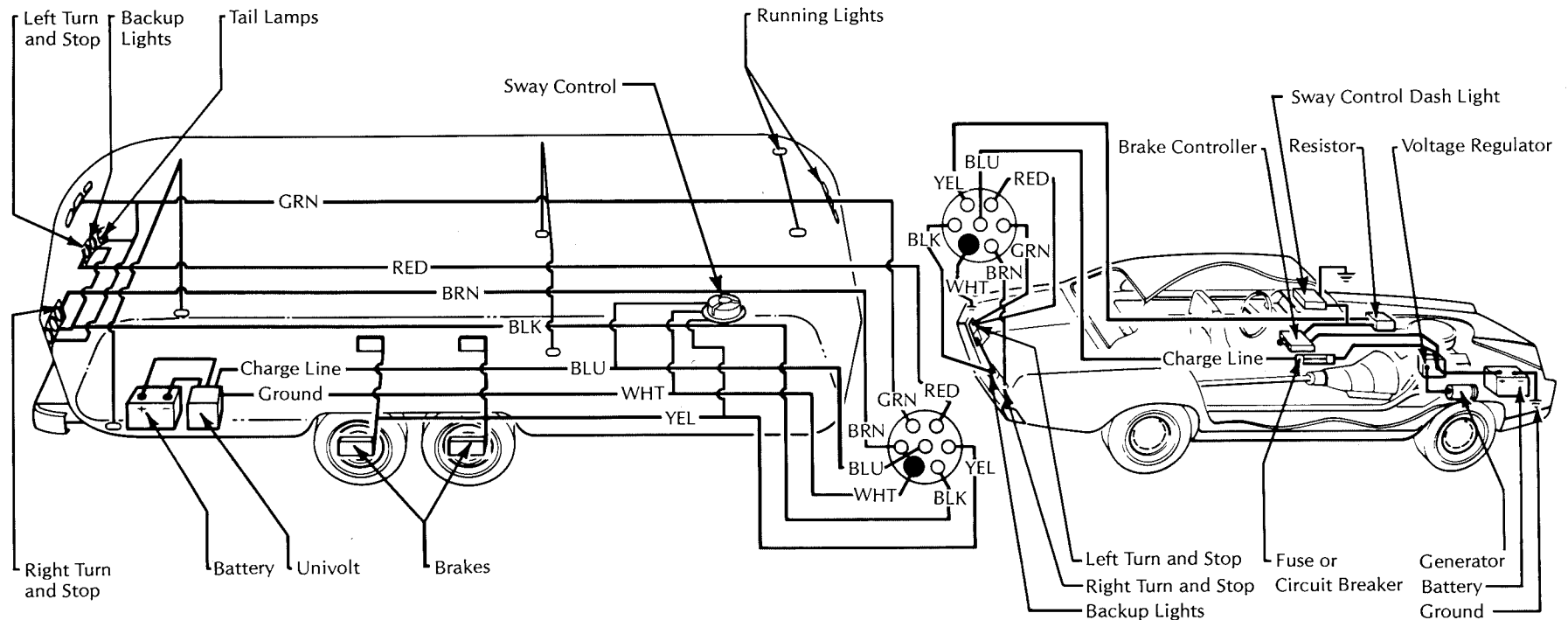
Electrical Outlet Locations



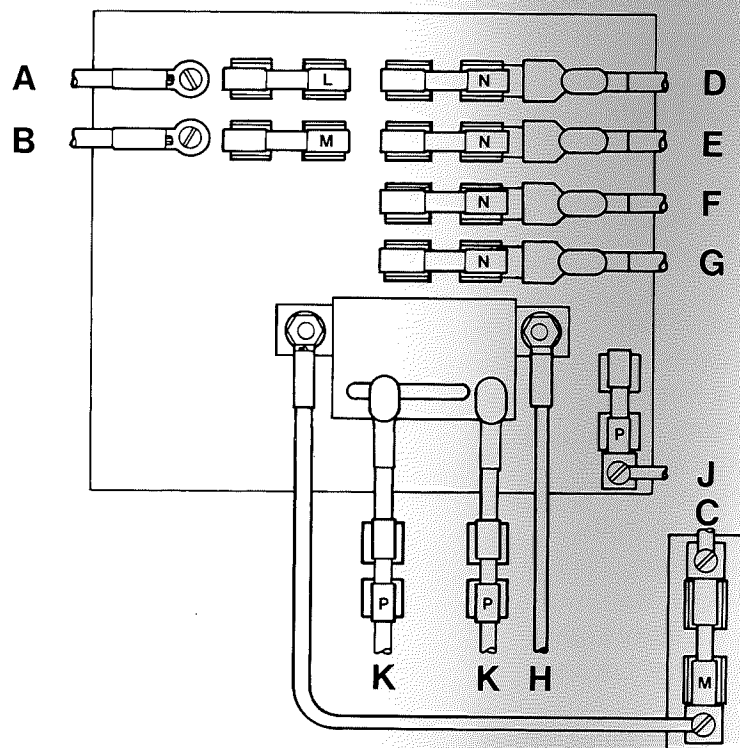
Electrical Trouble Shooting

Symptom	Possible Cause	Remedy
No 12-volt power (Lights, appliances do not work)	1. Input line and/or battery not connected 2. Discharged trailer battery 3. Trailer battery on wrong polarity	1. Make necessary connections 2. Charge battery 3. See Item 6
Blown fuse	4. Overloaded circuit (over 50 amps) 5. Electrical short 6. Shorted battery 7. Battery terminals not properly connected to UNIVOLT + and - terminals	4. Turn off switches to reduce load. Re- place blown fuse in Univolt or next to Univolt. 5. Find blown fuse in Univolt and identify circuit. From wiring diagrams check the circuit for defective wiring, lamps or motors. 6. Replace battery and fuse. 7. Make proper connections; replace fuse.
Dim lights or slug- gish fan motor	8. 25- or 50-cycle power (some foreign countries) 9. Discharged battery (when operating with- out 120-volt line) 10. Battery is low on water	8. Use 60-cycle power 9. Charge battery 10. Add distilled water to battery
UNIVOLT will not charge battery	11. Input line not connected 12. Battery not connected (or polarity reversed) 13. Bad battery 14. Too many lights and appliances in use 15. Fuse blown	11. Connect input line 12. Connect battery to UNIVOLT 13. Replace battery 14. Reduce electrical load 15. Replace fuse

Car-Trailer Electrical Connector

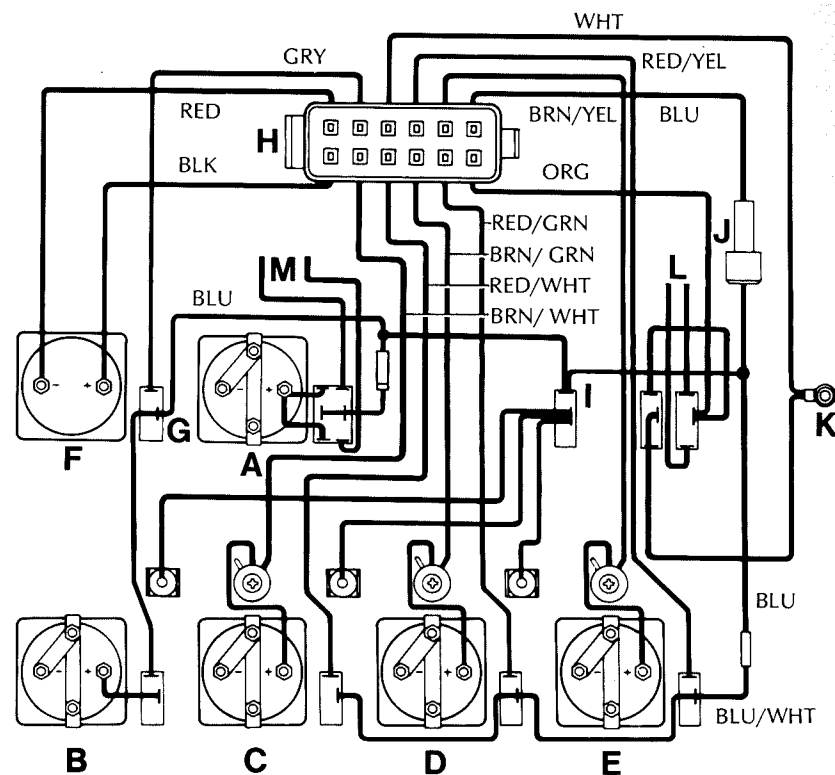


Polarity of trailer battery must match polarity of car battery. e.g. If negative pole of car battery is grounded, negative pole of trailer battery must be grounded.



Low Voltage Distribution Panel

- A — Car Battery (pos) & Circuit #5
- B — Trailer Battery + (pos)
- C — Trailer Battery — (neg)
- D — Circuit #1
- E — Circuit #2
- F — Circuit #3
- G — Circuit #4
- H — Negative Load
- J — Power-On-Light
- K — Ammeter
- L — AGU 40-amp-Fuse
- M — AGU 50-amp-Fuse
- N — SFE 20-amp-Fuse
- P — SFE 4-amp-Fuse



Central Control Panel

- A — LPG Tank Gauge
- B — Battery
- C — Water Tank
- D — Auxiliary Holding Tank
- E — Main Holding Tank
- F — Ammeter
- G — Power On Light
- H — Connector
- I — Panel Light
- J — Fuse
- K — Ground to Panel
- L — Wires to Bath Pump Switch
- M — Wires to Curbside and Roadside Tanks

Specifications

Capacities

Appliance	Capacity
Main Holding Tank (Rear Bath)	20 gal.
Main Holding Tank (Center Bath)	17 gal.
Auxiliary Holding Tank (Rear Bath)	10 gal.
Auxiliary Holding Tank (Center Bath)	17 gal.
Water Tank	45 gal.
Water Heater	10 gal.

Light and Appliance Amperages

Item	Lamp Number	Amperage
Control Panel Light	53X	.1
Water Pump	—	9.9 max.
Ceiling Fan	—	4.8
Bathroom Exhaust Fan	—	2.0
Range Exhaust Fan	—	2.0
Furnace Fan	—	5.0
Toilet Exhaust Fan	—	2.0
Reading Lights:		
Living Room	1383	1.6 each bulb
Bedroom	1141	1.6 each bulb
Main Door Light	1141	1.6
Exterior Light	1156	
Ceiling Light (6 Bulbs):		
Living Room, Galley	1141F	1.6 each bulb
Bedroom, Bathroom	1141F	1.6 each bulb
Galley and Vanity Lights		
under Roof Locker	1141	1.6 each bulb
Trunk Lights:		
Service Center, Trunk	67	.6 each bulb
Clearance & Cluster Lights	1895	
Stop & Turn Signal	1156	
Tail Light	1157	
License Plate Light	89	
Backup Lights	1156	
Battery		105 amp hrs. at 80°F.
Fluorescent Lights	F15T8WW	

Fuses and Circuit Breakers

Circuit	Location	Rating
Main Breaker	120 volt panel	30 amp
General Circuit	120 volt panel	15 amp
Appliance Circuit	120 volt panel	20 amp
Air Conditioner	120 volt panel	20 amp
Main Charge Line Breakers	Under front window	25 amp
Exterior Light Breakers	Under front window	15 amp
Charge Line from Car	Univolt	AGU 40 amp fuse
Low Voltage Circuits	Univolt	SFE 20 amp fuse
Trailer Battery Fuse (+)	Univolt	AGU 50 amp fuse
Trailer Battery Fuse (-)	Nxt. to Univolt	AGU 50 amp fuse
Power On Circuit	Univolt	SFE 4 amp fuse
Ammeter	Nxt. to Univolt	SFE 4 amp fuse
Central Control Panel	Main Cen. Ctrl. Pnl.	AGC 15 amp fuse
Radio, Radio/Tape	Radio, Radio/Tape	IAG 5 amp fuse
Water Pump	Water Pump	6¼ Slo-Blo

Pre-Travel Check List

Interior

1. Turn off water pump switch.
2. Check battery water level.
3. Close windows and vents.
4. Turn off Gas to Range & Oven.
5. Lock all interior cabinet doors.
6. Lock refrigerator door
(Seal containers first.)
7. Hold down or stack securely, all loose, hard and sharp objects.
8. Fasten sliding & foldette doors.
9. Drain toilet bowl.
10. Turn off interior lights.
11. Secure and lock the Main door.
12. Pull up step.

Exterior

1. Disconnect and stow:
 - a) electrical hook-up cord
 - b) sewer-hose hook-up hose. (flush out)
 - c) water hook-up hose.
2. Turn off gas line shut-off valve to appliances.
3. Remove and stow leveling jacks and wheel chocks.
4. Check hitch: it must be properly attached.
5. Check safety chains and breakaway switch cable.
6. Fully retract jack. Remove and stow dolly wheel.
7. Check clearance and stop lights.
8. Check lug bolts.
9. Check tires, for correct pressure see page 22.
10. Check that TV antenna is pointed forward and dipoles closed.
11. Adjust car mirrors.
12. Pull forward some 50 ft., test brakes, and check site for forgotten objects and cleanliness.

Home

1. Leave key with your neighbor.
2. Store valuables and important papers in a safe place.
3. Discontinue newspaper, milk and other deliveries.
4. Ask the Post Office to hold your mail for you.
5. Arrange with the Telephone Company for discontinued or 'Vacation Service'.
6. Arrange care for your pets.
7. Have your lawn, garden and house plants cared for.
8. Lock all windows and doors securely. Keep shades open for a lived-in look.
9. Cover all food to keep out mice and insects.
10. Eliminate all fire hazards. Place matches in a tin box or glass jar.
11. Store oil, gasoline and other inflammables properly.
12. Destroy all newspapers, magazines and oily rags.
13. Notify police.

Personal

14. Automobile insurance to cover you and your family fully.
15. Avoid cash. Use travelers checks and credit cards.
16. Confirm reservations.
17. Have sunglasses for everyone.
18. Pack cameras and films.
19. Make a check list of clothing for everyone, and toilet articles.

Motoring Essentials

1. Display car and trailer registration properly.
2. Carry driver's license. In Canada you will need a non-resident liability insurance card.
3. In Mexico you must have special auto insurance.
4. Carry an extra set of ignition and trunk keys in a separate pocket, or in your wallet.
5. Keep an operating flashlight with fresh batteries in the glove compartment.
6. Pack the trunk so that you can reach the tools and spare tire without completely unpacking.
7. Keep sharp or hard articles securely packed wherever they may be.
8. Do not pack things in the passenger sitting area, you need maximum space for comfort.
9. Wear easy-wash, drip-dry traveling clothes.
10. Do not make your vacation trips a mileage marathon! Stop and relax frequently.
11. Carry a first aid kit.
12. Carry your pet's dish, food, leash and health and registration papers.

Lubrication and Maintenance

Your Airstream is without a doubt the finest engineered travel trailer ever to be mass-produced. Every design feature and component has been chosen with the thought in mind of giving you thousands of miles of trouble-free operation. By adhering to the following minimum maintenance schedule and the additional

exterior and interior maintenance suggestions you will enjoy all of the pleasure you dream of from your trailer...and more.

Item	Every 1,000 miles or 30 days	Every 5,000 miles or 90 days	Every 10,000 miles or 6 months	Procedure
All Exterior Door Locks	X			Lubricate by shooting in dry graphite.
Battery	X			Check water level—fill with distilled water only.
Brakes			X	Inspect and adjust.
Break Away Switch		X		Pull pin and lubricate with light household oil.
Entrance Door Hinges	X			Lubricate with light household oil.
Hitch Ball Latch	X			Lubricate with engine motor oil.
Hitch Jack	X			Lubricate with light household oil (put oil can spout up under handle and allow oil to run down post).
LPG Hold Down Knob	X			Lubricate with light household oil.
Main Door Step	X			Lubricate moving parts.
Range Exhaust Hood				Clean fan blades and wash filter.
Refrigerator Flue Cleaning		X		See page 52.
Roof Vent Elevator Screws	X			Lubricate with light household oil.
Strike Pocket on Main Door	X			Coat with paraffin.
Tires	X			Check for foreign objects. Air pressure—page 22.
Water Pump		X		Check belt for wear and proper tension.
Wheel Bearings			X	Clean, repack, and adjust.
Wheel Lug Bolts		X*		Check for tightness.
Window Seals/Door Seals		X		Clean with mild detergent and coat with "Slipicone."
7-Way Plugs and Receptacle		X		Clean contacts and coat with "SPRA-KLEEN."

Note: If and when new materials and production techniques are developed which can improve the quality of its product, Airstream reserves the right to make such changes.

*Note: On new trailers check lug bolts every 200 miles for the first 1,000 miles.

Maintenance Record

[illegible]

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