

TAILORING YOUR NEW PONTIAC FOR TRAILERING

TRAILER-HAULING OPTIONS FOR 1970 PONTIACS: BONNEVILLE, EXECUTIVE, CATALINA, GRAND PRIX, GTO, LEMANS SPORT, LEMANS AND TEMPEST.



The two most important things about trailering happen before you hitch up.

- 1. Choose a 1970 Pontiac.
- 2. Have your trailer-hauling options factory-installed.

This brochure is all about trailering, and how a little planning can save both time and money.

If your trailer weighs 1,000 lbs or more, you're way ahead—from both the standpoint of cost and convenience—if you order your new Pontiac with trailering equipment factory-installed. Experience over the years has shown that planning the right equipment and having it installed at the time your new Pontiac is built can save a large sum of time and money—plus untold expenses avoided later because you have the right equipment to do the job, properly installed.

The time to start planning is when you turn the page. There you'll find Pontiac's recommended trailering "Groups." Then sit down with your Pontiac dealer and let him show you how to save money on the equipment, and a great new '70 Pontiac, too!

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Available groups

Your best move is to order one of these complete groups according to the size of trailer you expect to pull. Pontiac strongly recommends that this equipment be installed for trailer hauling. In fact, all the recommended items in these groups are mandatory for successful trailering.

A couple of cautions: (1) For more enjoyable trailering, an automatic transmission is greatly encouraged. You'll have smoother gear changing and much less effort required in ratio selection, providing

greater driving satisfaction. (2) Pontiac recommends that trailers over 3,500 lbs. loaded weight, be pulled by the larger, longer wheelbased Pontiacs, specifically, Catalina, Executive and Bonneville.

On the Catalina model, the 350-cu.-in. engine is not available on the Hardtop Coupe, 4-door Hardtop or 4-door Sedan. The V-400 2-barrel carb. engine is mandatory on these models when any trailer group is ordered.







Catalina Executive Bonneville

LIGHT TRAILERS

(Class 1—1,000 to 2,000 lbs. loaded)
Tongue load up to 200 lbs. includes
most lightweight utility trailers.

GROUP 641-P-UPC V81

- Trailer-hauling Provisions*
- Higher Axle Ratio-2.93:1 automatic, 3.42:1 manual
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)

MEDIUM TRAILERS

(Class 2—2,000 to 3,500 lbs. loaded)
Tongue load of 200 to 350 lbs. includes
many travel and outboard cruiser travelers.

GROUP 642-P-UPC V82

Trailer-hauling Provisions*

- Higher Axle Ratio-2.93:1 automatic, 3.42:1 manual
- Heavy-duty Springs & Shock Absorbers (medium load)
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)
- · Heavy-duty, Super-cooling Radiator
- Heavy-duty, Turbo Hydra-matic Transmission with Heavy-duty Transmission Oil Cooler
- H78—15, Load Range D,** fiberglass black tires (except L78—15 or 9.15—15 Load Range B on station wagons)
- Dual Exhaust System (if 455-cu.-in. V-8 is ordered)

ILERS HEAVY TRAILERS

(Class 3-3,500 to 6,000 lbs. loaded) Tongue load of 350 to 600 lbs.

GROUP 643-P-UPC V83

- Trailer-hauling Provisions*
- Higher Axle Ratio 3.23:1 automatic, 3.42:1 manual
- Heavy-duty Springs & Shock Absorbers (heavy load)
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)
- Heavy-duty, Super-cooling Radiator
- Heavy-duty, Turbo Hydra-matic Transmission with Heavy-duty Transmission Oil Cooler
- H78-15, Load Range D,** fiberglass black tires (except L78-15 or 9.15-15 Load Range B on station wagon)
- Dual Exhaust System (if 455-cu.-in. V-8 is ordered)
- Heavy-duty Frame (except 4-dr. hardtops, convertibles and station wagons)

Grand Prix

GROUP 642-G-UPC V82

- Trailer-hauling Provisions*
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)
- Higher Axle Ratio—3.23:1, automatic, 3.23:1, manual
- Heavy-duty Springs & Shock Absorbers (medium load)
- Heavy-duty Radiator (no charge with air conditioning)
- G78—14, Load Range D,** fiberglass black tires

GROUP 642-G-UPC V82

- Trailer-hauling Provisions*
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)
- Higher Axle Ratio-3.23:1 automatic, 3.23:1 manual
- Heavy-duty Springs & Shock Absorbers (medium load)
- Heavy-duty Radiator (no charge with air conditioning)
- G78—14, Load Range D,** fiberglass black tires

Tempest LeMans LeMans Sport GTO

GROUP 642-T-UPC V82

- Trailer-hauling Provisions*
- Higher Axle Ratio (V-8)—3.55:1 automatic, 3.55:1 manual
- Heavy-duty, Power-Flex Fan (no charge with air conditioning)
- Heavy-duty Radiator (no charge with air conditioning)
- Heavy-duty Springs & Shock Absorbers (medium load)
- G78-14, Load Range D,** fiberglass black tires (except H78-14, Load Range B on Station Wagons)

GROUP 642-T-UPC V82

- Trailer-hauling Provisions*
- Higher Axle Ratio (V-8)—3.55:1 automatic, 3.55:1 manual
- Heavy-duty, Power-Flex Fan (no charge with air onditioning)
- Heavy-duty Radiator (no charge with air conditioning)
- Heavy-duty Springs & Shock Absorbers (medium load)
- G78—14, Load Range D,** fiberglass black tires (except H78—14, Load Range B on Station Wagons)
- *Trailer-hauling Provisions:
- Special, constant-rate, directional signal flasher
- Trailer-light wiring harness
- Special 44S spark plugs and heavy-duty wheels additional on Bonneville.
 Executive and Catalina

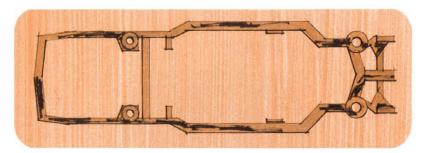
Note: These special provisions are available only when a full trailer group is ordered.

**With the advent of belted-tire construction, the term "ply-rating" has become obsolete. It has been replaced by the term "Load Range." The old 2-ply/4-ply rating now becomes Load Range B. The old 4-ply/8-ply rating becomes Load Range D. Standard Pontiac tires are Load Range B, unless otherwise specified.

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These trailer-hauling group options may be ordered separately.

In all cases, the best bet is to have your new Pontiac completely equipped at the factory with one of the option groups listed on pages 4 & 5. However, you may order any of the following individual items from the recommended option group separately at extra cost, except Power-Flex fan and heavy-duty Turbo Hydra-matic transmission.



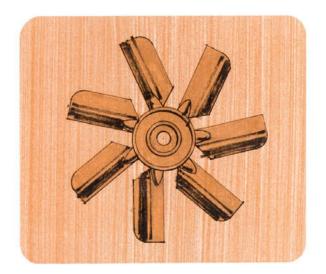
Heavy-duty Frame (Code 612-UPC F35).

This frame is constructed of heavier members and reinforced for greater strength for handling the additional strain of hauling heavy trailers. It is standard on all convertibles, available on all other models except 4-door hardtops and station wagons. See pages 4 & 5. (Not available on Grand Prix.)



Heavy-duty Springs and Shock Absorbers—Medium Load (Code 622—UPC F40).

They are designed to maintain firm handling, proper trim and improved control in trailering situations. They are especially helpful when heavy loads are carried in the trunk, also for heavy tongue loads. These are not the heavy load springs and shock absorbers available only through purchase of the Heavy Trailer Group. See pages 4 & 5 for recommendation. For extra-heavy tongue loads, Superlift shock absorbers are recommended. See page 9.



Heavy-duty Fan and clutch (Code 691—UPC K02).

This 7-blade, thermostatically controlled fan increases its rate of cooling as engine load increases, thus improving efficiency as compared to the standard fan in trailering situations. This fan is included when air conditioning is ordered, except with a trailer group.

This fan is a substantial improvement over the standard fan but does not have the high efficiency of the Power-Flex fan that is available only when a complete trailer group is ordered. The Power-Flex fan cannot be purchased individually.



Load Range D Blackwall and Whitewall Tires.

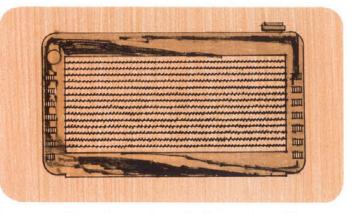
Increased capacity tires are available on all Pontiac models. See Pages 4 & 5 for tires provided in the groups. (See Page 9 for description of tires and oversize tires.)

Engines

High-performance engines that use premium fuel are available for all models. (Up to 455 cu. in. for most models.) A dual exhaust system is standard with the high-output V-8's, and is required with the 455-cu.-in. V-8's, when a trailer group is ordered. If a high-performance engine is ordered with a trailer group, the overall cost may be lower than anticipated because certain equipment is common to both engine and group.

Regular-fuel Engines

A 265-hp, 400-cu.-in. V-8 that uses regular fuel is available for Bonneville, Executive and Catalina, Grand Prix and



Super-cooling, Heavy-duty Radiator Assembly (Code 702—UPC V02).

Specially designed and built for extra cooling capacity under the most severe towing conditions. This assembly has greater cooling ability than the one that is standard on air conditioned cars. It is highly recommended for Bonneville, Executive and Catalina with medium or heavy trailers. A heavy-duty transmission oil cooler is included with this option on cars equipped with Turbo Hydra-matic. (Not available on Tempest and Grand Prix.)

Heavy-duty Radiator (Code 701-UPC V01).

Extra cooling capacity for Grand Prix, GTO, LeMans Sport, LeMans and Tempest. Standard on cars with air conditioning.

Tempest. Also, a 255-hp, 350-cu-in V-8, regular fuel engine is available on Tempest (except GTO). GTO is available with premium-fuel engines only.

Automatic transmissions are recommended for trailer hauling. A heavy-duty Turbo Hydra-matic is recommended for most trailering applications. See pages 4 & 5. *If a manual transmission is ordered with any trailer group, a heavy-duty clutch is provided.

For additional information on power train components and other equipment, consult your local Pontiac dealer.

*The heavy-duty Turbo Hydra-matic transmission is provided at no extra cost over regular Turbo Hydra-matic when either the medium or heavy trailer group is ordered. Heavy-duty Turbo Hydra-matic is not available as a separate option.

SERIES	STANDARD ENGINES (With Automatic Transmissions)	AVAILABLE V-8 ENGINES (With Automatic Transmission)
CATALINA	290-hp., 400-cuin., 2-bbl, V-8 Premium	265-hp., 400-cuin.—330-hp., 400-cuin. 360-hp., 455-cuin.—370-hp., 455 H.O.
EXECUTIVE	290-hp., 400-cuin., 2-bbl. V-8 Premium	265-hp., 400-cuin.—330-hp., 400-cuin. 360-hp., 455-cuin.—370-hp., 455 H.O.
BONNEVILLE	360-hp., 455-cuin., 4-bbl. V-8 Premium	265-hp., 400-cuin.—370-hp., 455 H.O.
GRAND PRIX	350-hp., 400-cuin., 4-bbl. V-8 Premium	265-hp., 400-cuin.—370-hp., 455-cuin.
GTO	350-hp., 400-cuin., 4-bbl. V-8 Premium	360-hp., 455-cuin.—366-hp., 400 Ram Air 370-hp:, 400 Ram Air IV
LEMANS SPORT	155-hp., 250-cuin., 1-bbl. L-6 Regular	255-hp., 350-cuin.—265-hp., 400-cuin. 330-hp., 400-cuin.
LEMANS	155-hp., 250-cuin., 1-bbl. L-6 Regular	255-hp., 350-cuin.—265-hp., 400-cuin. 330-hp., 400-cuin.
TEMPEST	155-hp., 250-cuin., 1-bbl. L-6 Regular	255-hp., 350-cuin.—265-hp., 400-cuin. 330-hp., 400-cuin.

A few suggestions ...

There are several items of equipment that are invaluable in certain trailer-hauling applications. Here is a partial list of Pontiac options and accessories. Your local Pontiac dealer can suggest others.

Heavy-duty Power Brakes (Code 512-UPC J51).

These have a high-capacity vacuum cylinder for braking heavy loads. Available with conventional drum-type power brakes only. Available on the Pontiac models only.

Power Front Disc Brakes (Code 502-UPC JL2).

Single-piston, floating-caliper design provides excellent braking. Vented rotor gives added cooling on heavy usage. Available all

Safe-T-Track Differential (Code 361-UPC G80).

Torque is transferred to the rear wheel that has the best traction. Helps your car and trailer move through snow, ice, mud and sand without becoming bogged down. Available all models.

Automatic Level Control (Code 631-UPC G67).

Adjustable air springs, built into the rear shock absorbers, maintain level ride, even with heavy trunk and trailer loads. A vacuumoperated air compressor in the engine compartment automatically keeps the rear of the car at constant height under varying loa conditions. Available on Grand Prix, Bonneville, Executive and Catalina. (Standard on Grand Prix S.J.)

Higher Axle Ratios.

Pontiac offers a wide range of axle ratios to provide additional pulling power and better performance. The correct ratio is determined by the weight of the loaded trailer and the Pontiac model pulling it-plus individual performance preferences. NOTE: Refer to trailer-hauling recommendations on pages 4 and 5 for guide to proper axles ratios. For very heavy trailers, axles ratios are available on special order. With some axle ratios, a Safe-T-Track differential is mandatory. Consult your Pontiac dealer.

Heavy-duty Battery (Code 692-UPC UA1).

This 62-ampere-hour battery provides longer life, better cranking ability, more reserve power for accessories. Available all models except Bonneville & 455 engines. A 76-amp, Heavy-duty Battery is provided with 455-cu.-in. engines and Bonneville models.

Custom Gauge Cluster (Code 484-UPC W63).

Available at extra cost for Catalina, Executive and Bonneville only. Enables driver to quickly check engine performance when subjected to the extra strain of trailer hauling. Oil-pressure, battery and water-temperature gauges, located in the speedometer irea, replace the conventional warning lamps. An electric clock is included with this package on Catalina models only.

Superlift Rear Shock Absorbers (Code 632-UPC G66).

An adjustable air spring is built into each Superlift shock. Varying the air pressure adjusts rear-end height to the requirements of the load. A convenient tire-type, air-filler valve is conveniently located in the rear license plate area. Superlifts help maintain a level vehicle, especially when rear-end load is exceptionally great. The versatility of Superlifts is particularly appreciated when light (Class I) trailers are towed only occasionally. With these light trailers, self-equalization hitches and/or heavy-duty springs are not generally used. They are also a good supplement where the heavier (Class II and III) trailers are towed and where trunk or passenger car load is variable. Air pressure can be increased when towing, reduced when not towing. A more level, comfortable and controlled ride is assured under a full range of load conditions, with or without a trailer. Available Bonneville, Executive and Catalina only.

Heavy-duty Delcotron Alternator (Code 682-UPC K82)

The 55-amp H.D. Alternator is designed to handle the higher electrical loads as encountered in trailering. Alternator only is standard with Air Conditioning. Includes a heavy duty battery as indicated in battery section above when ordered as an option.

Special Tires

Fiberglass-belted tires, of Load Range D (see footnote page 5 for description), are available for most models. These tires are designed specially for trailer towing where extra wheel loading is anticipated. These tires provide an extra margin of tire service.

CATALINA, EXECUTIVE AND BONNEVILLE

H78-15, Load Range D, Blackwall

Available on Catalina, Executive and Bonneville except station wagons, standard with Groups 642-p, 643-p, Code SP. (L78-15 or 9.15-15 Load range B belted tires standard on all station wagons with or without trailer groups.)

H78-15, Load Range D, Whitewall

Available on Catalina, Executive and Bonneville except station wagons, code SS.

Oversize Tires

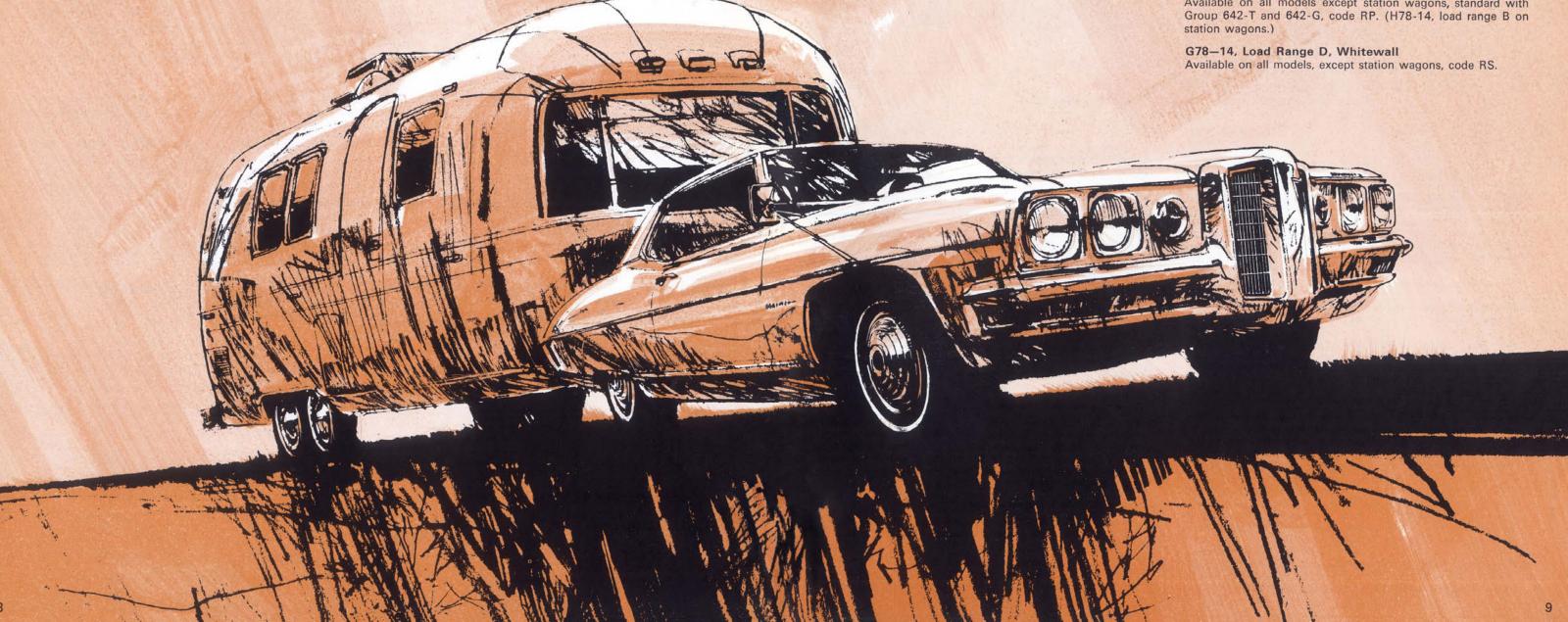
J78-15, Load Range D, Blackwall

Available on Catalina, Executive and Bonneville except station wagons, code KS.

TEMPEST, LEMANS, G.T.O. AND GRAND PRIX

G78-14, Load Range D, Blackwall

Available on all models except station wagons, standard with





A checklist for safe, successful trailering

- When towing a trailer, allow more stopping distance ahead than you would with the car alone.
- Stop smoothly and gradually—avoid sudden stops.
- Let faster motorists have the right of way. You'll find just plain courtesy pays off.
- When you're passing another vehicle, make sure there's plenty of room for your car and trailer in front of the vehicle you're passing. And don't forget to allow yourself more road distance in the passing lane.
- · Avoid quick maneuvers.
- When traveling in mountainous or hilly country, you can avoid overheating by downshifting manually to low. If your Pontiac should overheat, stop your car, place the gearshift in "neutral" and run the engine at fast idle until the engine temperature returns to normal. Never open the radiator cap, or pour water into an overheated engine.
- When descending grades of any length or steepness, use a lower gear—let your engine help your brakes.
- Get the right size tires for your type of trailering, and keep them properly inflated. (See Tire Pressures in this section.)
- When your Pontiac is heavily loaded in the rear, avoid use of high headlamp beams. If a heavy rear load is carried most of the time, have your lights adjusted to make sure they're properly aimed.

• Trailer Hitches (heavy trailers)

Hitches of the self-equalizing type are recommended for towing all trailers except light-duty. Heavy hitches should always be attached to the frame sidebars, never to the bumper. A reputable hitch installer will know how to attach your hitch properly, so it's wise to have the work done by a professional.

Trailer Hitches (light-duty)

Light-duty trailer hitches are available from various Pontiac dealers, trailer dealers and automotive accessory outlets. Use only those that are recommended for Pontiac models, for trailer weights as specified by the manufacturers. A light-duty hitch may be attached to the bumper, as long as it is also attached to side members or rear crossmember.

• Tire Pressures (Load Range B)

When towing a trailer, we suggest minimum cold inflation pressures of 24 lbs., front and 30 lbs., rear. We recommend increasing rear tire pressure consistent with rear-wheel loadings to the maximum recommended for the tire.

• Tire Pressures Load Range D

These tires are strongly recommended for use and are standard when the medium and heavy trailer groups are ordered. These tires may be inflated up to 40 lbs. cold, depending on rear-wheel loading. Front tires may be operated at 24 to 28 lbs., depending on load distribution in the vehicle and generally should be at least approximately 4 lbs. less than rear-tire pressure.

• Trailer Taillight & Signal Lamps

All models of 1970 Pontiacs are equipped with 12-volt electrical systems. The trailer should be equipped with accessory lamps to match this system.

Most trailers are equipped with approved connectors, which have the terminals protected when not coupled. This type is recommended. Electrical equipment on trailer should conform to local requirements.

Trailer Running & Signal Lamp Wire Harness

The wire harness provided with all trailer groups (as part of "Trailer-hauling Provisions") consists of an easily adaptable harness to bridge the taillight and signal lamp systems of the car and trailer.

On sedans, this harness may then be used for temporary installation by routing wire through trunk-lid opening, using flatted wire section at point of door closure. A connector is provided on the car side of flatted section for quick disconnection when not using the trailer. The trailer end of the harness may be permanently connected to the trailer wiring system. On station wagons, the arrangement is similar, except that the wire is attached to the bottom of the car, with access to the wires provided at center of rear bumper. Station wagon harness has 5 wires. Permanent installations may be made with approved connectors mounted on exterior of car, as desired. The harness may be routed or modified as required to suit individual applications.

Auxiliary wires are provided in the harness for use as required. Unused wires should be taped back in the harness.

Color-coding of wires used in the harness:

Wire Color	Circuit
Brown	Tail Lamps
Yellow Left S	top & Directional Signal
GreenRight S	top & Directional Signal
White	
Blue	Auxiliary
RedAuxilia	ry (Exc. Station Wagon)

The preceding applies when the trailer has turn signals, stop and tail-lamps, encased in a single unit having dual-filament bulbs. If the trailer has stoplights and taillamps that are individual bulbs or separate units from the turn signals, the above applies except that the stop-lamp circuit must be connected to the output side of the stop-lamp switch or to the white wire leading from the stop-lamp switch.

Constant-rate Directional Signal Flasher

With the additional electrical load of trailer lamps added to the car taillamp circuits, a marked variation in flash rate of the standard directional signals may be experienced; therefore, included in the "Trailer-hauling Provisions" is a Heavy-duty or "Constant-rate" Directional Signal Flasher. This is designed to maintain proper flashing frequency even with the added load of trailer signal lamps.

Since the Heavy-duty Flasher is less sensitive to load variations, it does not produce the usual indication of bulb failure in front signal lamps and stop lamps. That's why drivers should make sure that all car taillight and direction signal lamps are operating when the Heavy-duty Flashers are in use. When the car is used without the trailer for extended periods of time, the standard flasher should be reinstalled. This will provide standard flashing characteristics and bulb-failure indications as described in the Owner's Manual.

Brakes

The direct connection of hydraulic brake lines from car brake system to trailer system is strongly discouraged.

Trailer Brake Controller Installation

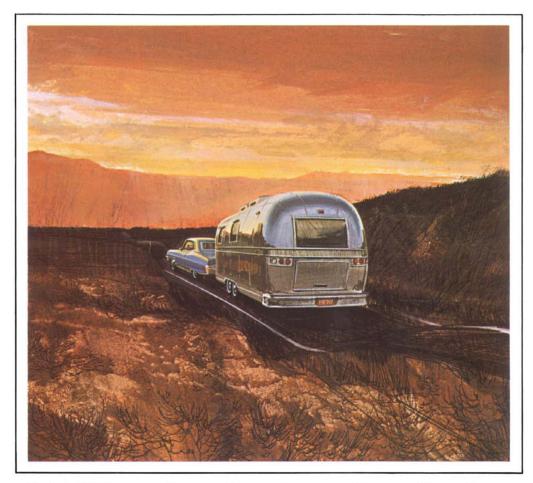
For best operation of trailer brakes, this procedure must be followed when installing the brake controller for trailer brakes. It is mandatory to take the hydraulic pressure for controller actuation from the *rear* brake line. The connector should be near the master cylinder, with a minimum line length to the controller.

Manual Transmission Clutch

Frequent starting with heavy trailer loads naturally causes faster wearing of the clutch on manual transmissions. Owners of cars with manual transmissions should become familiar with the clutch "lash" feel. This is the first inch of free travel of the clutch pedal before the positive load of the clutch release begins. When the free travel approaches ½", the clutch lash should be readjusted to 1". Pulling trailers when there is little or no clutch lash may result in excessive clutch slippage and ultimate destruction of the clutch facings.

. Rear Axle (boat users)

When the rear axle is submerged, as often happens when pulling a boat from the water, the axle should be inspected for water. If water is found, the axle should be drained and flushed and new lubricant installed.



We take the fun of trailering seriously.

