

SERVICE Counselor

PACKARD MOTOR CAR COMPANY



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Front Universal Joint Repair Kits

24th-25th-26th-54th Series

ULTRAMATIC

A few reports have been received of front universal joint noise after a repair kit has been installed. This has been reported only on 25th Series Ultramatic equipped cars, but it could occur on the 24th, 26th and 54th Series Ultramatic equipped cars as well.

We have found in most cases of front universal joint noise after a repair kit has been installed, that the engine had shifted forward a half inch or more (by an accident of some kind) thus causing the trunion balls to strike the rear of the trunion body. This will also cause premature dust cover failure.

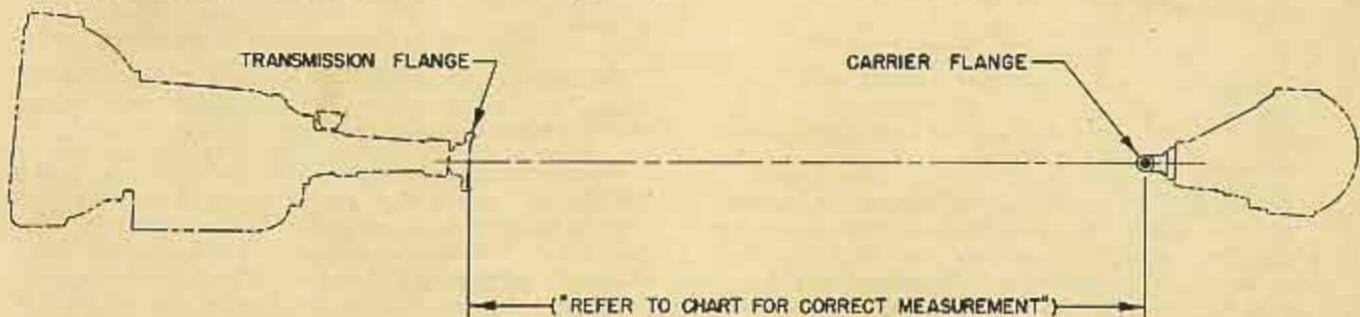
Engine location is a *very* important factor as it affects throttle linkage, transmission control linkage and most important is the space between the fan blades and the radiator core which controls cooling.

During the middle of 25th Series production, the front universal joint trunion body was shortened $\frac{3}{8}$ " (from 4" to $3\frac{5}{8}$ ") for greater rigidity, as there was excessive space between the rear of the trunion body and the trunion ball and roller assemblies. Therefore, with the shorter trunion body that is used in production and also supplied in the repair kits, it is *very* important that the engine be properly located.

For your ready reference, we are furnishing 24th,

25th, 26th and 54th Series measurements taken from the rear face of the Ultramatic Transmission universal joint flange to the center of a trunion bearing hole in the rear axle universal joint flange. "See illustration."

$47\frac{7}{8}$ "	2601 2611—(With $2\frac{1}{2}$ " dia. prop. shaft) 5400-01-11
$47\frac{5}{8}$ "	2401—(Bodies 2462-65-92-95-98) 2501 2501—(With 300 eng. & $2\frac{1}{2}$ " dia. prop. shaft)
$47\frac{13}{16}$ "	2401—(Bodies 2467-69) 2401—(With 300 eng.) 2501—(With 300 eng. & $2\frac{3}{4}$ " dia. prop. shaft) 2531
$47\frac{3}{16}$ "	2611—(With $2\frac{3}{4}$ " dia. prop. shaft) 2631 5431
$52\frac{13}{16}$ "	2402-06 2502-06
$52\frac{9}{16}$ "	2602-06-33 5402-06-33



Whenever front universal joint dust cover failure or universal joint noise due to the trunion ball striking the rear of the trunion body is encountered, the following items should be checked.

1. Measure the distance from the rear face of the transmission universal joint flange to a trunion bearing hole in the rear axle universal joint flange.
2. If measurement is excessive, check the rear spring center bolts for proper centering in the rear axle case spring pads. Check the engine mounting brackets for being bent or distorted.
3. The engine can be shifted back by loosening all front motor mount bolts and the two rear lower stud nuts that attach the rear support to the frame cross channel. Using a pinch bar against the vibration damper, push the engine back until the proper measurement is obtained and while holding the engine in this position tighten the rear support nuts securely. Release the pinch bar and then tighten the front motor support bolts and nuts securely.

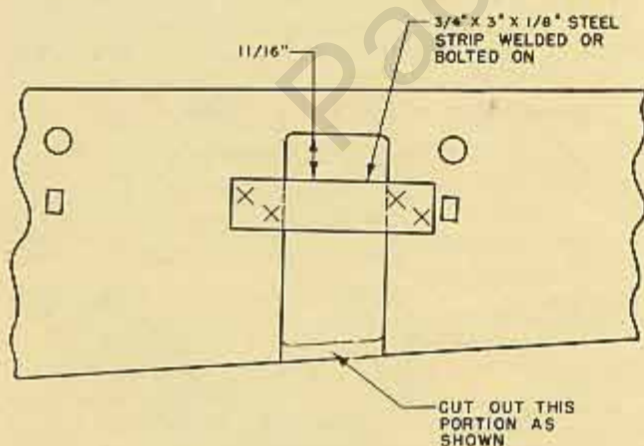
NOTE: In some instances it will be necessary to readjust the throttle and transmission control linkage.

Front Fender Replacement

21st Series

Part No. 383572 front fender (right) and Part No. 383573 front fender (left) will be cancelled for service replacement when present stock is exhausted. This cancellation affects the following models: 1946, 21st Series, body types 1650-51. 1947, 21st Series, body types 2150-51.

Part No. 370320 front fender (right) and Part No. 370321 front fender (left) will be shipped in place of No. 383572 and No. 383573. It will be necessary to rework these front fenders slightly to provide clearance for the front bumper supports. "See illustration."



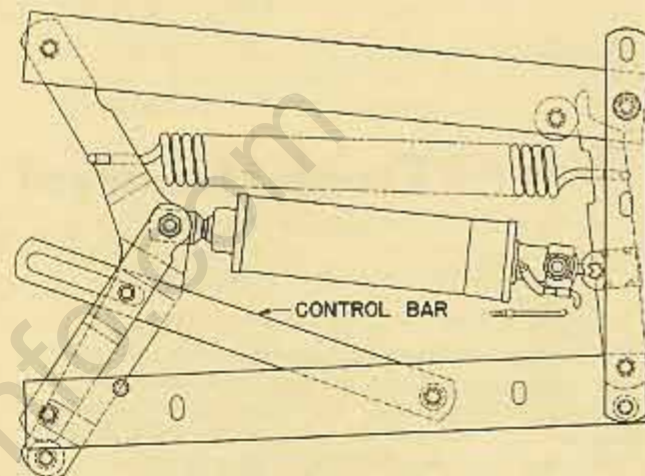
1. Using a hack saw, cut out the lower portion of the front fender at the front bumper support hole.
2. Attach a piece of strap iron across the bumper support hole using the measurements shown on the illustration. The strap iron can be welded or bolted on as it is below the gravel shield and will not show.

Rear Quarter Window Regulator

New Type

In checking rear quarter window hydraulic cylinders that were returned from the field because of fluid leaks, it has been found that most of the cylinders were leaking at the end plates because the plates were loose, cracked or distorted.

If the window pivot bracket does not contact the stop screw when the window is in the raised position, the piston is permitted to travel to the extreme end of the cylinder. When this occurs and the car is subjected to a temperature rise, the hydraulic fluid expands enough to move the piston against the end plate with such force that the plate is distorted and loosened.



REAR QUARTER WINDOW REGULATOR

A control bar with a slotted end has been added to the hydraulic window regulator which controls the amount of cylinder travel. "See illustration." Stop screw adjustments are still required to control window travel.

Whenever rear quarter window hydraulic cylinder failure is encountered due to end plate leaks, it is suggested that a new regulator having the control bar also be installed.

All rear quarter window hydraulic regulators for the 24th, 25th, 26th series Convertibles and Mayfairs shipped from the Utica Warehouse now incorporate the new control bar.

Mag-Nu-Matic Windshield Washer

Installation Instruction—Change

An installation instruction change has been made in the location to connect the windshield washer feed wire. This is the wire in which a fuse is attached.

The instructions furnished with the kits under item 3 "WIRING" states that the windshield washer feed wire is to be connected to the ignition switch. *The feed wire should be connected to the battery terminal of the 10 amp. circuit breaker. The 10 amp. circuit breaker is the one nearest the temperature gauge.*

On any PA-448652 Packard Mag-nu-matic windshield washers you may have in stock, please use the following instructions for item 3 WIRING.

"Note Fig. 1 and attach short end of wire "E" (in which fuse is attached) to "feed" post on 10 amp. circuit breaker, then run other end of wire through hole in dash and connect to pigtail terminal running to top of washer jar, nearest to center. Assemble cable "F" through hole in dash and connect Douglas female to pigtail on top of washer jar farthest from center and make connection of other end with male terminal "G" on end of wire running from steering post washer knob. Strap to windshield wiper motor control cable Bowden wire."

The above instructions apply to 26th and 54th Series cars.

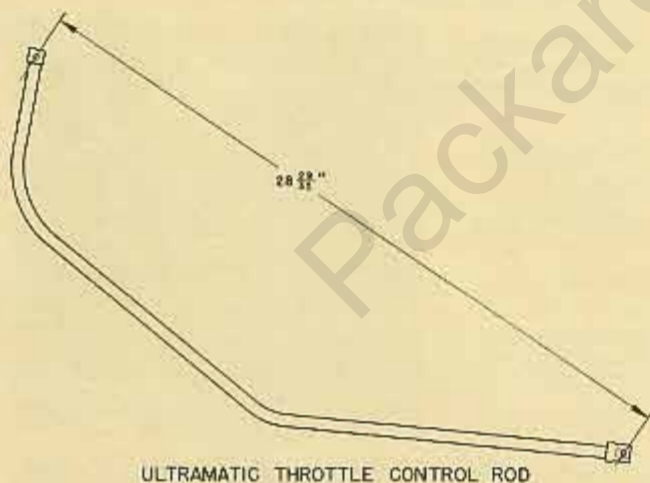
Late windshield washer kits will incorporate the instruction change "item 3 WIRING."

Ultramatic Throttle Control Rod

24th-25th-26th-54th Series

Occasionally the Ultramatic transmission throttle control rod becomes bent due to an accident of some kind. Due to its peculiar shape, it is difficult to determine whether or not it is bent.

Because of its function in controlling throttle pressure, which affects modulated pressures as well as clutch engagements, it is very important that the rod be of the proper length.



The illustration shows the proper length of the rod used on all 24th, 25th, 26th and 54th Series models.

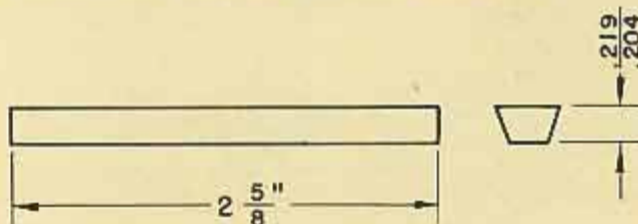
Rear Main Bearing Oil Seals

All Models

A few reports have been received of rear main bearing oil leaks that could not be corrected by installing new oil seals, Part No. 300191.

If the seals have been soaked in oil and properly installed but still leak, then it is possible that the seals may have been undersize.

To avoid the possibility of leaks recurring, it is suggested that replacement seals be checked for proper size. The seals should be checked with a micrometer across the flats as shown in the illustration. Measure the seals before soaking them in oil.



Any seals that measure under .204" should not be used. Be sure the measurement is approximately the same the entire length of the seal, also make sure the wood is clear, soft textured and not coarse grained. Do not use coarse grained seals as they will not seal properly.

Transmission Removal—Warning

359 Cu. In. Engine

All 54th Series cars using the 359 cu. in. 212 HP engine are equipped with a heavy duty air cleaner having a large diameter oil bath reservoir.

Due to the small amount of clearance between the air cleaner reservoir and the heater, it is *important* that the air cleaner be removed before lowering the rear of the engine to remove the transmission assembly.

Possible damage might occur to the air cleaner, even to breaking the carburetor air horn if the air cleaner should strike the heater unit when lowering the engine.

New Type Differential Gears and Pinions

(RECYCLE TEETH)

1800-1900

Part No. 329599 rear axle differential gear and Part No. 329619 rear axle differential pinion will be cancelled for service replacement when present stock is exhausted.

Whenever replacement of either the differential side gear or pinion is required in models 1800 or 1900, it will be necessary to replace the set of gears, as the Revacyle gears will not mesh with the early type of gears.

The Revacyle gears are available as a kit at the Central Warehouse under Part No. 436946. The kit consists of the following parts:

- | | | |
|--------|------------------------------------|---|
| 436872 | Rear axle differential pinion..... | 2 |
| 403058 | Rear axle differential gear..... | 2 |

How To Reseal Tubeless Tires

INJURIES NOT EXCEEDING 3/32"—GUN METHOD

MATERIALS REQUIRED—Tire Resealing Cartridge and Gun



1. JACK UP THE CAR so that the wheel revolves.
2. DO NOT REMOVE THE TIRE from the wheel.
3. INFLATE TIRE to operating pressure—24 lbs.
4. WIPE THE TREAD CLEAN and inspect carefully by applying water to the tread and slowly revolving the wheel.
5. MARK AROUND THE PLACE or places where the bubbles appear, and then reduce pressure to 5 lbs.
6. WIPE TIRE DRY.
7. PROBE INJURY with hand rasp removing all foreign matter. Then dip rasp in solvent (gasoline) and thoroughly clean injury.
8. TURN THE SCREW in the heel of gun until the sealing material appears and pinch off the end.
9. FORCE NOZZLE directly into the hole and hold firmly against the tire. Turn the screw three half turns while slowly withdrawing nozzle.
10. ALLOW TO STAND FOR 15 MINUTES minimum before reinflating to operating pressure.
11. BE SURE TO REPLACE NAIL in nozzle after use.

INJURIES 3/32" to 3/16"—PLUG METHOD

MATERIALS REQUIRED—No. 3 Repair Plug • Rubber Cement • Rubber Solvent (High-test Gasoline)



1. PROBE INJURY with hand rasp removing all foreign matter. Then dip rasp in solvent (gasoline) and thoroughly clean injury.
2. REMOVE LOOSE OR DAMAGED MATERIAL around injury.
3. BUFF SURFACE so that the plug will sit on smooth solid surface.
4. CLEAN AND CEMENT. Clean an area 3-in. in diameter on the inside of the tire by light rasping or buffing. Wash, using solvent sparingly and apply Rubber Cement. Allow to dry.



5. PREPARE PLUG NO. 3 by wire brushing or rasping flat side. Apply cement and allow to dry.
6. INSERTING PLUG. Dip the wire needle in cement and push through the hole from the inside, then apply cement to the stem of the plug as a lubricant and pull through while cement is still wet. Pull plug into place with steady continuous pull. (Don't stop or jerk.) When plug is firm against the inside, use stitcher to remove all air pockets.
7. TRIM PLUG slightly above flush of the tread surface.
8. DO NOT CURE.

