

SERVICE & C

PACKARD DIVISION
OF
STUDEBAKER-PACKARD CORPORATION



Counselor

VOL. 29, NO. 4

APRIL, 1955

Torsion Level Suspension

Load Compensator

The exploded view of the load compensator in the illustration is furnished for your ready reference to acquaint you with the various parts and will be helpful when disassembling and assembling the unit. The parts are laid out in their exact sequence of installation.

The illustration also shows the part group number to assist you in ordering replacement parts.

ASSEMBLY NOTES:

Please note the small gear indicated by the arrow "A", this gear is slightly shorter than the similar one in the 1st stage and has two oil grooves on each end of the gear. The short gear must be installed in the 2nd stage as shown.

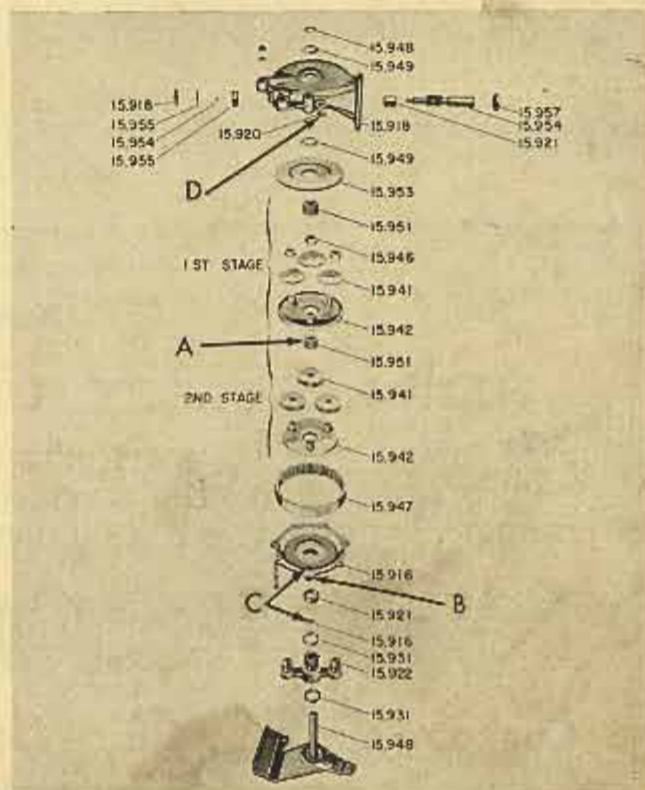
Note the long ear on the lower housing indicated by "B," when torquing the housing bolts, torque this bolt not over 6 ft. lbs. and the balance of the housing bolts to 12 ft. lbs.

LUBRICATION

Use special lubricant Part No. 474028, available in 1 lb. cans at the Central Warehouse.

The Compensator is filled at the time of manufacture and requires no periodic changes, however, after assembly, the unit can be packed by removing the $\frac{1}{8}$ " pipe plug from the lower housing indicated by "C", install a zerk or suitable fitting in its place, fill a pressure gun with 1 lb. of special lubricant and

fill the housing until grease comes out of the upper relief valve "D."



"Tips From The Editor"

HARD STEERING

55th Series

Hard steering in a few instances, has been traced to the steering knuckle thrust bearings being installed upside down.

The rotating plate in the thrust bearing has a larger inside diameter than the fixed plate in the opposite end of the bearing. This larger diameter permits lubricant to enter the bearing from the grooves in the lower knuckle bushing, therefore, if the bearing is installed upside down, no lubricant can enter the bearing, causing it to run dry resulting in hard steering.

The steering knuckle thrust bearing must be installed with the rotating plate downward and the closed end of the bearing upward.

The thrust bearing can be inspected for proper installation without disassembling, by observing whether the bearing assembly turns with the knuckle or not. If the bearing assembly turns with the knuckle, it is installed upside down.

Carburetor Air Cleaner Gasket

Carter WCFB-2232S

The air cleaner gasket at the top of the carburetor air horn on the Carter Carburetor (WCFB-2232S) used on 5540 models can be installed in several positions.

If the gasket is installed incorrectly, it will cover the fuel bowl vent tubes, causing a fuel percolating condition and excessive fuel consumption at high speeds.

When installing the air cleaner gasket, be sure that the notched openings are lined up with the fuel bowl vent tubes.

Torquing Valve Body Bolts

Twin Ultramatic

We continually receive reports of fluctuating and/or incorrect hydraulic pressures in the Twin Ultramatic Transmissions.

Occasionally, we get back a complete valve body assembly that was described as having erratic pressures and upon testing the assembly we find that the pressures are steady and to specifications, therefore, we feel that the valve body screws were incorrectly torque tightened.

Because of the different valve diameters, valve bore diameters, the valve body material, the slight variation in valve bore wall thickness and the heat that the valve assembly is subjected to, *it is very important that the screws be torque tightened* as described on page 50, in your Serviceman's Training Book "Packard Gear Start Ultramatic Drive."

When erratic hydraulic pressures are encountered, we suggest that you loosen the valve body screws and retorque them *correctly* before making any repairs or replacement.

Power Steering Pumps

55th Series

The power steering pumps used on the 5540, 5560 and 5580 Power Steering equipped cars are identical in appearance, however, the pressure regulation specifications are different.

For your information, the pump used on the 5560 and 5580 models with the Bendix power steering produces 550 to 800 P.S.I.

The pump used on the 5540 models with the Monroe power steering produces 650 to 900 P.S.I., and can be identified with the number "900" stamped on the pressure hose adapter on the pump.

Do not interchange the pumps as erratic steering action and noisy pumps may result.

Remember

NATIONAL SAFETY CHECK MONTH—MAY, 1955

JOIN THE ANNUAL NATIONAL CAR SAFETY-CHECK CAMPAIGN IN COOPERATION WITH THE NATIONAL SAFETY COUNCIL AND THE INTER-INDUSTRY HIGHWAY SAFETY COMMITTEE.

LET'S CHECK EVERY PACKARD OWNERS: LIGHTS • STEERING • BRAKES • TIRES

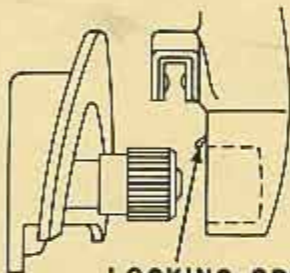
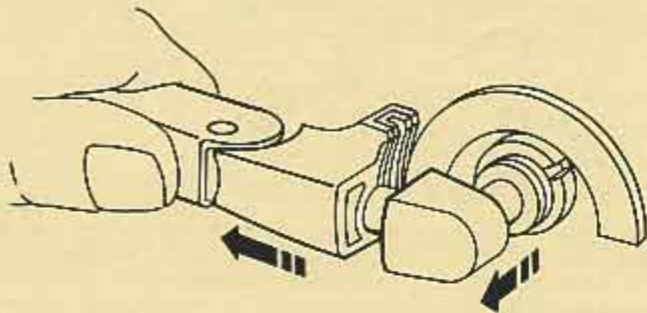
FOR GREATER HIGHWAY SAFETY—FOR MORE SERVICE SALES

Contact Your Zone Office for Details and Safety Kits Today

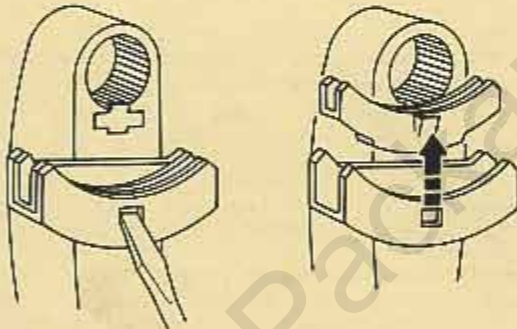
Windshield Wiper Arms

55th Series

The following information covers the servicing of the windshield wiper arms used on all 55th Series cars.



LOCKING SPRING



ARM REMOVAL:

1. With engine idling, turn off wiper control to bring blades to parked position.

Grasp arm above cam follower and elongate arm until the follower will clear the cam. "See upper illustration."

2. While arm is held in elongated position, remove arm head from shaft by pulling out straight from shaft.

ARM INSTALLATION:

1. Start engine and turn wiper control to "off" position.

2. Line up arm and blade in parked position, blade toward center of windshield and resting on upper edge of windshield lower moulding. Pull out to elongate the arm and start the arm on the shaft.

3. Check for correct park position. Hold the arm elongated, push the arm on the shaft and release the arm to engage the cam follower over the cam.

REPLACEMENT OF CAM FOLLOWER SHOE:

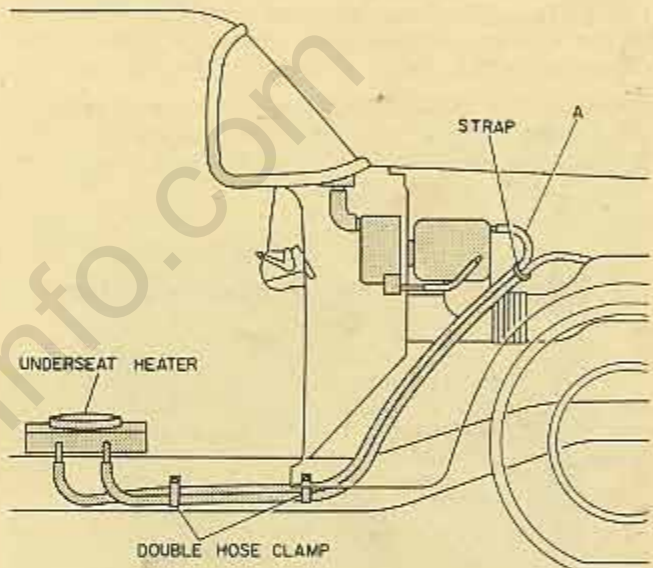
1. Push in and up on shoe locking lug with small screwdriver or punch and pry out shoe "See lower illustration."

2. Install shoe by pressing it down in place until lug engages hole in arm head.

Heater Hose Kinked

55th Series

A few reports have been received of a kink in the heater hose at the location "A" shown in the illustration. A kinked hose in the heater circuit will restrict the flow of coolant, resulting in insufficient heat from both the heaters.



In most cases it has been found that the heater hose indicated by "A" has been pulled down through the double hose clamps too far, causing it to kink, at the upper end.

It is suggested that the heater hoses directly under the underseat heater be inspected for excessive length and if found so, loosen the double hose clamps and pull the hose upward to provide a larger curve at the dash heater.

Inside Door Handle Retainer

55th Series

A number of reports have been received of the inside window regulator and door lock remote control handles falling off on 55th Series cars.

This condition can be corrected with a new improved handle retaining clip when properly installed in the handle.

Remove the old retainer by prying it out with a screwdriver.

Try the handle on the shaft making sure that it does not bind going on or coming off.

Install the new retainer clip in the handle, the clip should be just free enough so that the outer jaw will snap into the groove in the shaft.

Install a small piece of sponge rubber in the square opening of the handle so that when compressed by the shaft, it will steady the handle.

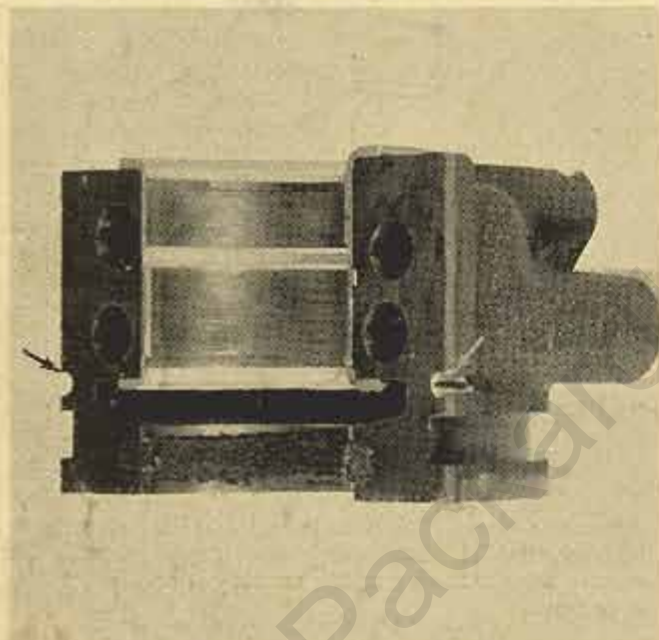
The new Window Regulator and Door Lock Remote Control Handle Retainer is available at the Central Warehouse under Part No. 475133.

Rear Main Bearing Oil Leaks

55th Series

Oil leaks at the upper outer corners of the rear main bearing cap may be caused by seepage of oil between the milled surfaces of the cap and the crankcase.

This condition can be corrected by removing the rear main bearing cap and filing a notch on each side of the cap approximately $\frac{3}{32}$ " deep, $\frac{1}{8}$ " ahead of the oil seal groove to drain off the oil. "See illustration."



Use a small three cornered file to file the grooves. Be sure to remove all chips and filings by washing the bearing and cap thoroughly in cleaning solvent.

Rear Universal Joint Cross Bearing Bolt Lockwashers

55th Series

It has been brought to our attention that some 55th Series Twin Ultramatic equipped cars were shipped with the rear universal joint cross bearing bolt lockwashers installed under the nut, instead of under the bolt head.

The lockwashers may have been spread or were possibly broken when the nuts were tightened, permitting the bolts to loosen up which resulted in loose cross bearings at the pinion flange.

The correct installation is as follows:

1. The lockwashers should be under the head of the bolt and installed from the front.

2. The nuts should be at the rear (pinion flange side) with one hex against the shoulder on the flange.

3. The bolts should be torque tightened to 15-18 ft. lbs. by turning the head of the bolts.

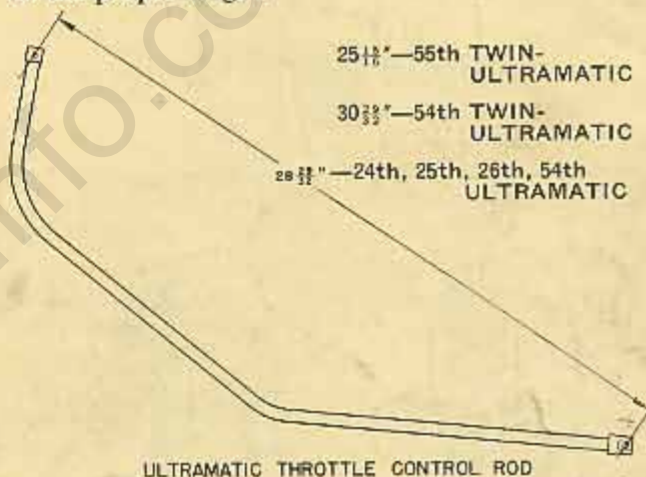
We suggest that you inspect all cars prior to vehicle numbers 5522-3768, 5542-3726, 5547-1762, 5562-2759, 5567-1536, 5582-1396, 5587-1283 for proper bolt lockwasher installation as they come in for lubrication service, etc. New lockwashers, Part No. G120214, should be installed on those found installed incorrectly.

Throttle Control Rod

All Models

Occasionally the automatic 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 other pressures, clutch engagements and upshifts, 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 Ultramatic. The 54th Series Twin Ultramatic and the 55th Series Twin Ultramatic.

Shock Absorbers—Front and Rear

22nd Through 54th Series

Stocking shock absorbers for all models and body types has been a problem for the dealers.

When the present supply of shock absorbers for most all 22nd-23rd-24th-26th and 54th Series cars is exhausted at the Central Warehouses, only the latest type service shock absorbers for those models will be shipped. You should continue to order shock absorbers for the different models as listed in the parts book; however, as the supply is exhausted, the number will be superseded by one of the latest type service shock absorbers.

It is recommended that shock absorbers be replaced in pairs, using new rubber grommets, to obtain a balanced ride, since shock absorbers in use for a long period of time lose their effectiveness.