

SERVICE COUNSELOR

PACKARD DIVISION

OF

STUDEBAKER-PACKARD CORPORATION



counselor

VOL. 30, NO. 2

FEBRUARY, 1956

Low Speed Disturbance

54th-55th Series Ultramatic

A low speed disturbance, emanating from the transmission, has been reported occasionally on 54th and 55th Series Transmissions. This condition, when it exists, is most pronounced while in direct drive at a steady car speed slightly higher than the direct drive clutch disengagement speed.

This disturbance can be eliminated or reduced considerably by having the direct drive clutch disengage above the point at which the disturbance was most pronounced in direct drive. However, it must be remembered that when the direct drive clutch is made to disengage earlier, the clutch engagement will occur later. For example; if the clutch disengagement point is raised 5 M.P.H., the clutch will engage approximately 5 M.P.H. later.

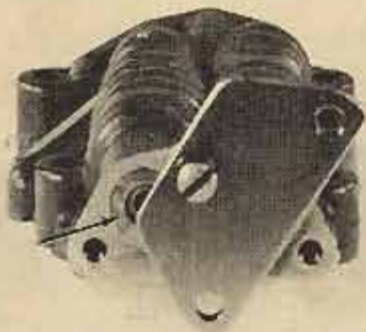


Fig. 1

The direct clutch disengagement point can be raised by placing shims or thin, flat washers behind the

direct shift valve piston spring seat as indicated by the arrow in figure 1. The shims must be installed inside the valve bore and between the spring seat and the body end plate. No clearance should exist between the body and the end plate when checked with a feeler gauge as shown in figure 2.

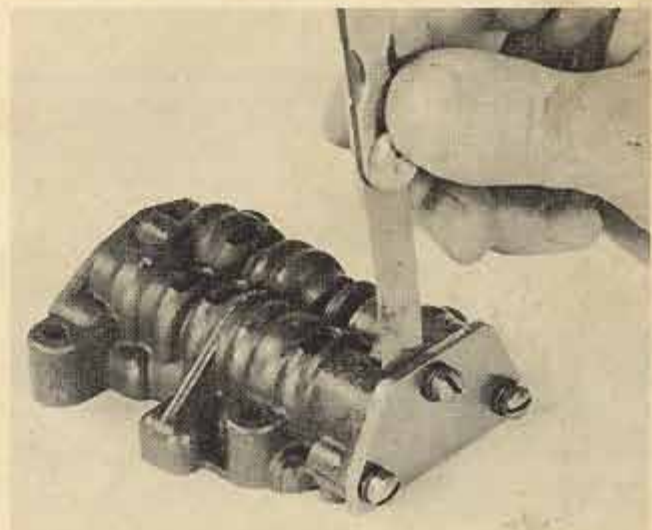


Fig. 2

On Packards with a 3.54 axle ratio, use a shim pack which totals approximately .100". The car then should be road-tested and the shim pack increased or reduced, if necessary, to bring the clutch disengagement to the desired speed.

On Clippers with a 3.07 axle ratio, the shift pattern is considerably later and an initial shim pack of approximately .060" is recommended and the car road-tested.

NOTE: Do not use an excessive amount of shims

because it is possible to limit the travel of the direct shift valve so that it cannot uncover the passage leading to the direct drive clutch.

It must be remembered that when adding these shims, both the direct clutch disengagement and engagement points will be affected and the "squeeze-off" into high range converter will be more sensitive.

Hydraulic Valve Lifter Checking Tool

V-8 Engine

The new hydraulic tappets having the greater oil reservoir have a narrower oil groove in the body and the groove is raised slightly as shown by the right hand tappet in figure 1.

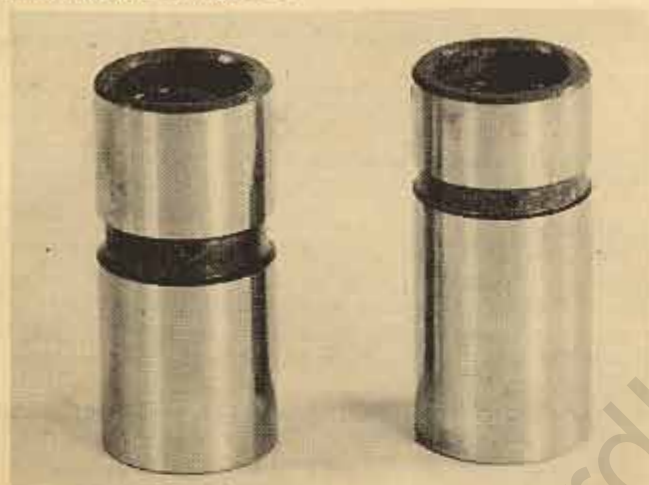


Fig. 1

Figure 2 illustrates the new hydraulic tappet Checking Tool J-5978-A that will test either type tappet.

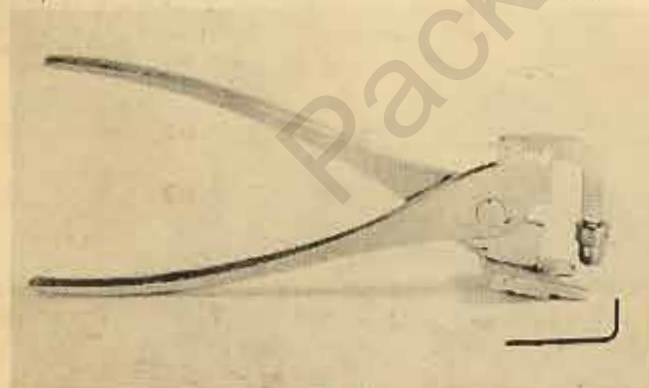


Fig. 2

If you previously purchased J-5978 Checking Tool you can bring the old tool up to date by ordering the Adapter Kit (figure 3) and grinding down the lower jaw of the old tool as shown by the arrow in figure 4. Grind the two ears of the lower jaw down to a $5/32$ " thickness and back $5/8$ " as shown.

IMPORTANT: Dealers that have Checking Tool J-5978 may order the Adapter Kit J-5978-6 which will be supplied *no charge*. Orders for the Adapter Kit must be sent to Kent-Moore Organization Inc., 1501 South Jackson Street, Jackson, Michigan.



Fig. 3

Dealers that wish to purchase the complete tool J-5978-A Hydraulic Valve Lifter Checking Tool, should order direct from Kent-Moore Organization Inc., 3044 W. Grand Blvd., Detroit 2, Michigan. The price is \$9.50.

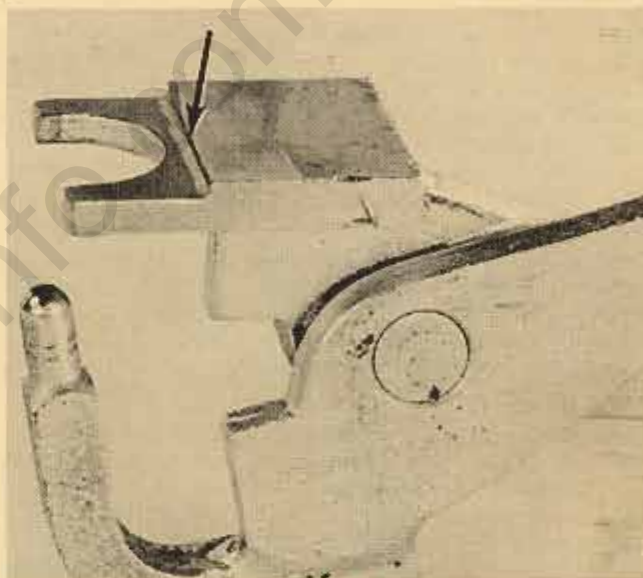


Fig. 4

NOTE: Export Dealers may order from the Studebaker-Packard Corporation, Export Division, 635 South Main Street, South Bend, Indiana.

Ignition Resistors

55th-56th Series

Burned or oxidized ignition points on a few 55th and 56th Series cars has been caused by incorrect ignition resistors.

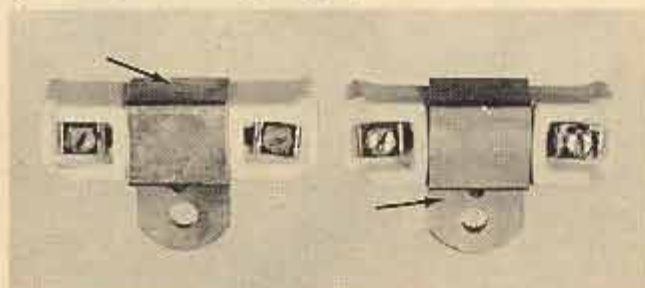
The Delco-Remy Ignition Resistor has 1.52 Ohms resistance and the Auto-Lite Resistor has .665 to .735 Ohms resistance therefore, they should not be interchanged.

Should an Auto-Lite resistor be installed on a car with Delco-Remy system, a higher amperage will flow through the primary circuit than the coil is designed to carry resulting in burned or oxidized ignition points and possibly shorten spark plug life.

If a Delco-Remy resistor is used with the Auto-Lite system, the greater resistance of the Delco-Remy re-

sistor may extend the life of the ignition points but will be reflected by a weaker secondary spark which may cause spark plug mis-firing under certain load conditions.

The resistor is by-passed when the starter is operating to provide full battery current for easy starting. After the engine starts, the voltage is reduced by the resistor to approximately 9 volts to provide longer ignition point and spark plug life.



Illustrated are the two resistors. The one on the left is Auto-Lite and the identification mark is located at the arrow. The one on the right is Delco-Remy and the arrow indicates the location of its identification mark.

"Tips From The Editor"

STEERING RECOVERY

55th-56th Series

Steering recovery after right or left hand turns is slightly slower on power steering cars compared to conventional steering equipped cars.

If no recovery or exceptional slow recovery is encountered, it may be caused by a binding at the ends of the Nylon Spacer between the steering wheel and the column.

Loosen the steering column bracket bolts at the instrument panel and the lower clamp bolt, lower the column slightly to eliminate the bind at the Nylon Spacer.

If the Nylon Spacer binds it may also cause a sticky condition in the steering gear when driving in the straight ahead positions.

Power Brake Vacuum Check Valve

Power brakes that fail to respond occasionally is probably due to the spring in the vacuum check valve winding itself through the spring seat. The check valve is located on the intake manifold at the rear of the carburetor flange.

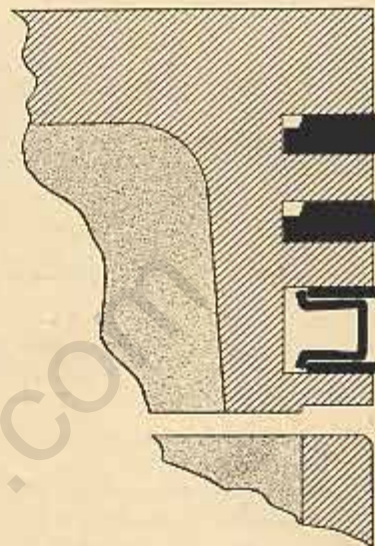
If the check valve does not seat when applying the brakes at low engine vacuum then hard brake pedal action may occur at times.

A stop washer has been added to the check valve assembly to prevent the spring from uncoiling and is available for service replacement. It can be ordered under Part No. 6489024.

Chrome Piston Rings

55th-56th Series

A few reports have been received of excessive oil consumption after chrome ring sets were installed in 55th and 56th Series Engines. In most all cases it was found that either the top groove compression rings or second groove compression rings or both were installed upside down.



Chrome piston rings sets should be installed as shown in the illustration. The chrome compression ring is installed in the top groove.

When cylinder walls are scuffed or glazed, a surface hone or spring loaded glaze-buster may be passed through the cylinders before installing rings. Surface honing should be done *only* if cylinder bores are thoroughly cleaned of abrasives after honing. Clean bores thoroughly with soap and water or No. 10 oil. Do not clean with gasoline or a solvent.

Rochester Carburetor Gasoline Fumes

5560-80

Please refer to your Service Technical Bulletin 55T-41, Dealer 32, September 14, 1955, on the above subject.

The carburetor fuel bowl to throttle body gasket used by United Motors Service in reworking these carburetors is now available for service and can be ordered under Part No. 6484427.

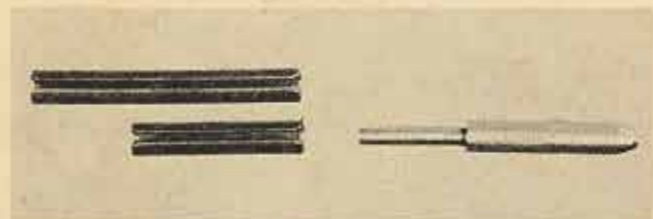
When cleaning and/or reconditioning a Rochester Carburetor, be sure to install the new type gasket and bend the atmospheric Idle Vent Arm away so that it will not contact and open the vent valve. Seal the vent valve opening with liquid solder or a suitable sealer.

The new gasket will not be in the Gasket Sets Part No. 458989 or Repair Kits Part No. 458988 until new kits are made up, therefore we suggest you stock

a few of the new gaskets to use in place of the old type gasket furnished in the Gasket Sets and Repair Kits.

Power Seat Actuator Roll Pin Tool

Removing and installing the roll pins in the power seat assembly can be very difficult without the proper tools.



Illustrated is an inexpensive tool which can be made up in your shop using 5/16" cold roll stock.

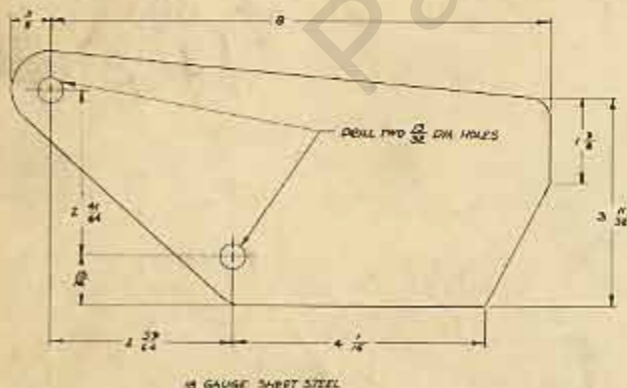
The small diameter end should be 1 inch in length and 3/16 inch in diameter with a square shoulder at the large diameter as shown.

The large diameter of the tool should be the same length as the roll pin to act as a pilot when driving the pins. Three different length roll pins are used therefore, three different length tools will be required.

Torsion Level Suspension Limit Switch Wiring Guard

56th Series

The proving ground has informed us that the compensator limit switch and wiring closest to the propeller shaft can be damaged by stones while driving over gravel roads.

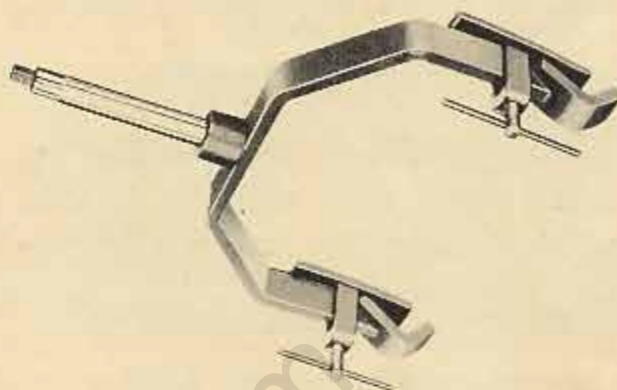


Illustrated is an inexpensive guard which can be made up in your shop. The guard should be made from 18 gauge flat steel stock to the dimensions shown.

Install the guard on the rear inner side of the left front X member under the compensator bracket bolt and control switch rear bolt.

Rear Axle Holding Adapter

Illustrated is the Rear Axle Holding Adapter, designed and supplied by K. R. Wilson Inc. for holding the 1956 rear axle assembly while it is being serviced.



The adapter permits the use of the standard K. R. Wilson Engine Stand to safely hold the rear axle unit. The axle assembly may be rotated to any desired position while installed in the adapter on the stand.



Place your orders direct with K. R. Wilson, Inc., Arcade, New York for Rear Axle Adapter No. PK-4005. The list price is \$37.50.

NOTE: Export Dealers may order from the Studebaker-Packard Corporation, Export Division, 635 South Main Street, South Bend, Indiana.

Push Button Control Pressure Switch

A few reports have been received of water getting into the push button control pressure switch thereby shorting out the switch. The water gets in past the crimped edge at the base of the switch.

Whenever a pressure switch is removed or replaced for any reason, tighten the tee connection $\frac{1}{4}$ turn, change the $\frac{1}{8}$ " pipe plug to the bottom opening of the tee and install the pressure switch in an upright position in the upper opening of the tee.