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PACKARD DIVISION

OF

STUDEBAKER-PACKARD CORPORATION



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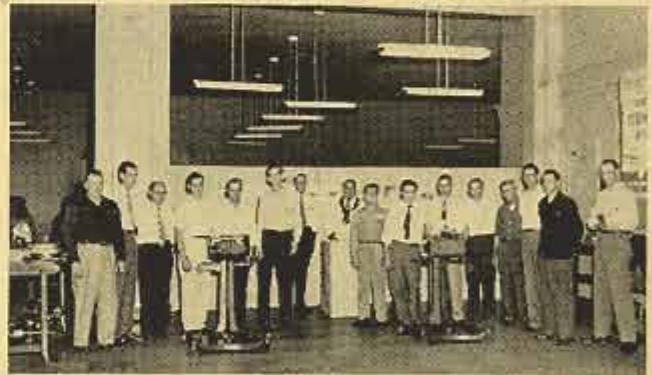
Nine Servicemen's Schools

Space limitations prevent publication of all of the fine pictures of Twin Ultramatic Transmission, 55th Series Mechanical Changes and Torsion Level Suspension Schools being held throughout the country as part of the Packard Serviceman's Training Program—these nine schools are representative of the fine work being done in every zone.

Servicemen attending these schools are rendering a real service to themselves, their Dealerships, and the Packard Service Department as a whole. For the basic theory plus the practical work offered enables the trained Serviceman to properly diagnose and correct troubles resulting in satisfied Packard owners.



Toronto, Canada—Twin Ultramatic Transmission School



Atlanta, Ga.—Twin Ultramatic Transmission School



Winnipeg, Manitoba—Twin Ultramatic Transmission School



Windsor, Ontario—Twin Ultramatic Transmission School



Edmonton, Alta.—Twin Ultramatic, 55th Series Mechanical Changes and Torsion Level Suspension School



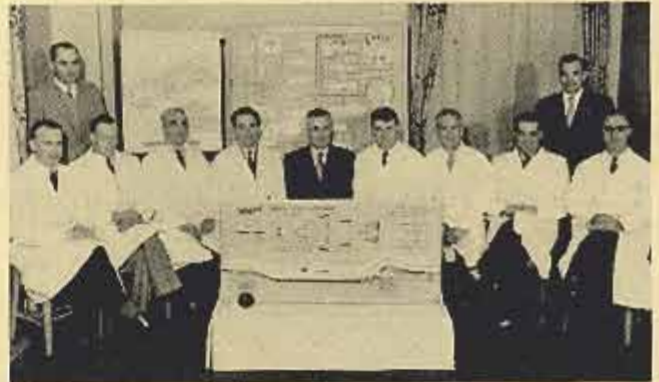
Calgary, Alta.—55th Series Mechanical Changes and Torsion Level Suspension School



Winnipeg, Manitoba—55th Series Mechanical Changes and Torsion Level Suspension School



Calgary, Alta.—Twin Ultramatic Transmission School

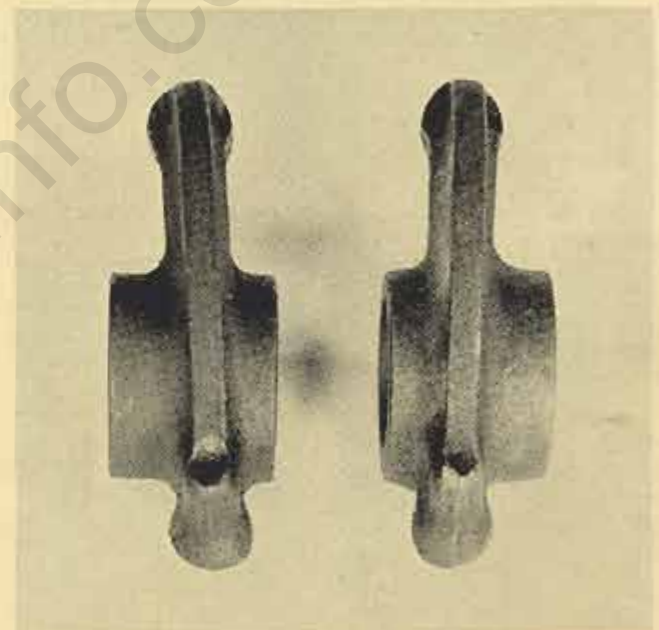


Vancouver, B. C.—55th Series Mechanical Changes, Torsion Level Suspension and Twin Ultramatic Transmission School

Engine Rocker Lever Identification

55th Series

The 55th Series engine rocker levers are called right and left levers because of the relation of alignment from the push rod end to the valve stem end.



The illustration shows both of the levers, the one to the right is a right hand lever and the other is a left hand lever. When viewing the levers from the push rod side, the valve stem end angles to the right on right hand levers and to the left on the left hand levers.

Engine Valve Spring Tool

55th Series

Illustrated is a new service tool which provides an easy method of removing the valve springs on the 55th Series V-8 engine without removing the cylinder heads.

This inexpensive tool is a time saver, when replacement of weak or broken valve springs is required or when installing the intake valve oil deflectors.

Valve spring removal and intake valve oil deflector installation is as follows:

1. The bent screw driver shown in figure 3 is not furnished with the tool. It is illustrated so that you can bend a small screw driver to the proper angle.

Loosen all four rocker shaft bolts to about the end of their threads, lift the assembly upward and shift the rockers over and tip the valve stem up as shown in figure 1.

NOTE: As the tool is slightly wider at its base than the one illustrated, it will be necessary to tip all of the rockers upward to clear the tool. Retighten two of the rocker shaft bolts to hold the assembly in place after the rockers have been tipped upward.

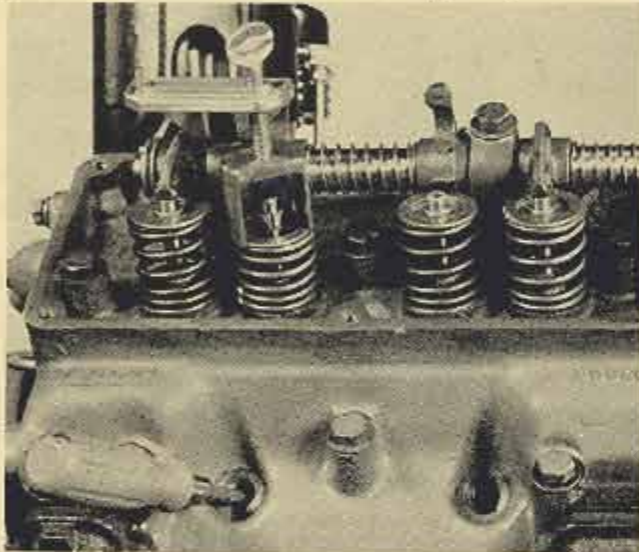


Fig. 1

2. Clamp the tool under a rocker shaft bolt so that the thumb screw aligns with the end of the valve stem. Place the bridge portion of the tool on the valve spring seat, turn down the thumb screw until its point enters the bridge as shown in figure 1.

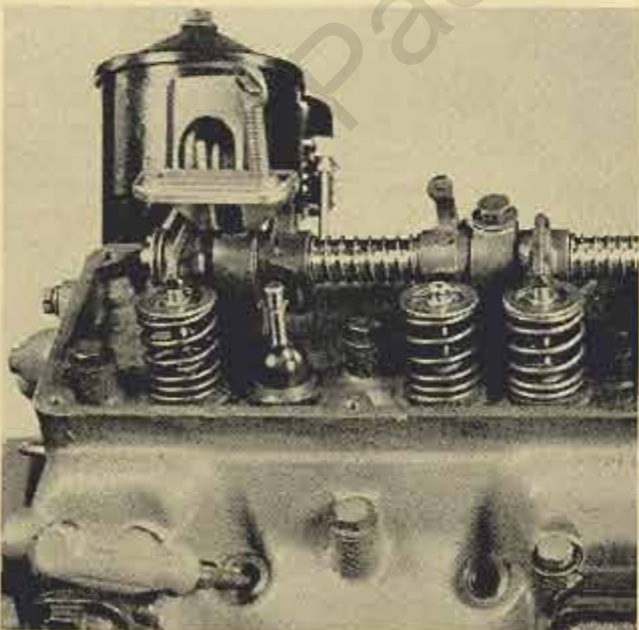


Fig. 2

3. Turn the engine crankshaft to position the piston at its highest point.

Insert the bent screw driver through the spark plug hole and hold the valve against its seat.

Turn down the thumb screw, compressing the spring far enough to remove the valve keys.

Release the thumb screw, remove the bridge, spring seat and spring.

While holding the valve against its seat, install the oil deflector as shown in figure 2.

Install the valve spring, spring seat and valve keys.

Due to the lack of clearance between the heater and the rockers at No. 8 cylinder, it will be necessary to use the hex headed screw instead of the thumb screw.

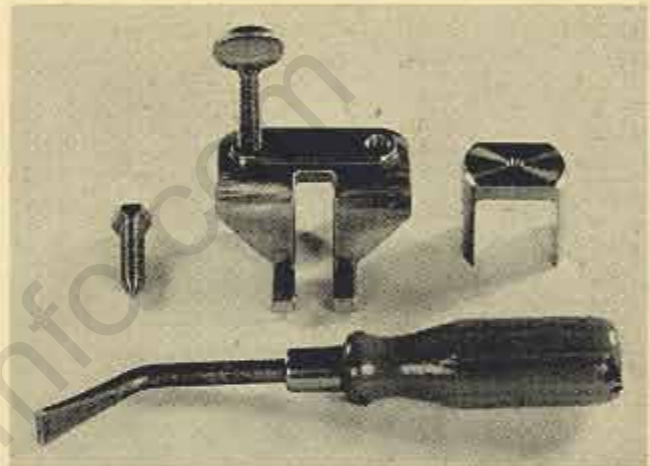


Fig. 3

The new tool is listed as J-6204, Valve Spring Compressor Set. Price \$8.50. Tool orders should be sent direct to the Kent-Moore Organization, Inc., 3044 W. Grand Boulevard, Detroit 2, Michigan.

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

Engine Numbers

55th Series

The new 1955 V-8 Packard and Clipper Engines are built at our new modern engine plant at Utica, Michigan, and are shipped to the Car Assembly Plant in Detroit, for installation.

The engine numbers cannot be determined until they reach the assembly line at the Car Assembly Plant, as they must be the same as the vehicles numbers.

For manufacturing identification purposes, the Engine Plant stamps a number on a milled boss at the right rear corner of the right cylinder bank. These numbers can be seen by looking upward at the boss, which is in back of the exhaust manifold.

Occasionally, changes are made in the engine, at the Engine Plant, and when such a change is made we cannot always supply you with the exact engine or vehicle number, therefore, in some cases we will

refer to the Engine Plant number when notifying you of engine changes.

Engines with the Engine Plant number preceded by "A" are used in the 5540 models, "B" in the 5560 models, and "C" in the 5580 models.

Direct Shift Valve Piston Spring Seat

Twin Ultramatic—55th Series

Please refer to your Service Counselor Vol. 29, No. 2, February, 1955 on the subject "Direct Drive Clutch Engagement."

We have received a few reports of early direct drive clutch engagement on transmissions which have the new direct shift valve piston spring seat, Part No. 470208. The reports also state that the direct drive clutch does not disengage by a short quick downward movement of the accelerator.

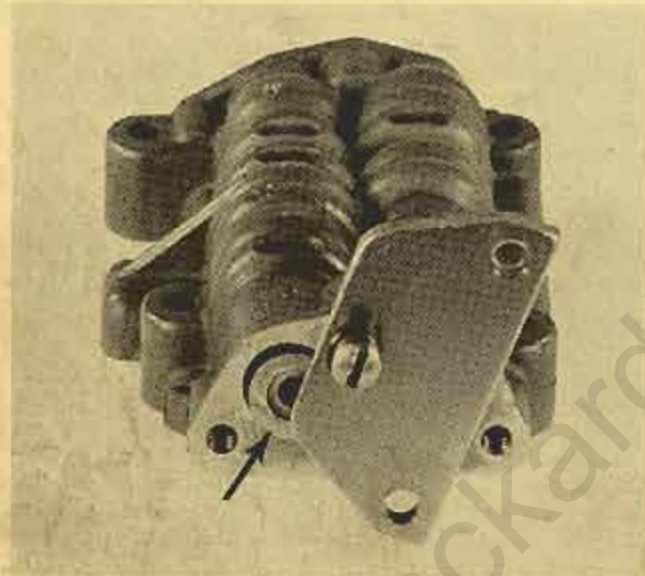


Fig. 1

In most cases, it was found that the spring seat was clamped over the edge of the bore in the valve body by the end plate (See figure 1), permitting the direct

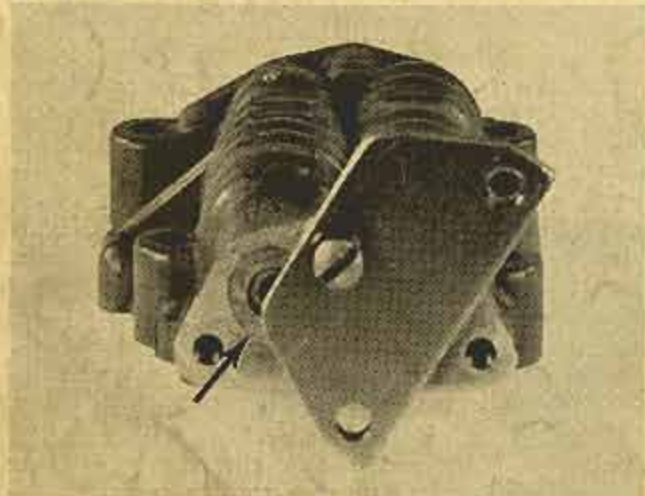


Fig. 2

shift throttle pressure to leak out. Therefore, the direct shift valve does not move to close off the passage to the direct drive clutch on a quick opening of the throttle.

When installing the piston spring seat, make sure it is in the bore as shown in figure 2, snug down the end plate with one screw and then turn the plate into its proper position, being careful to keep the spring seat in the valve body bore.

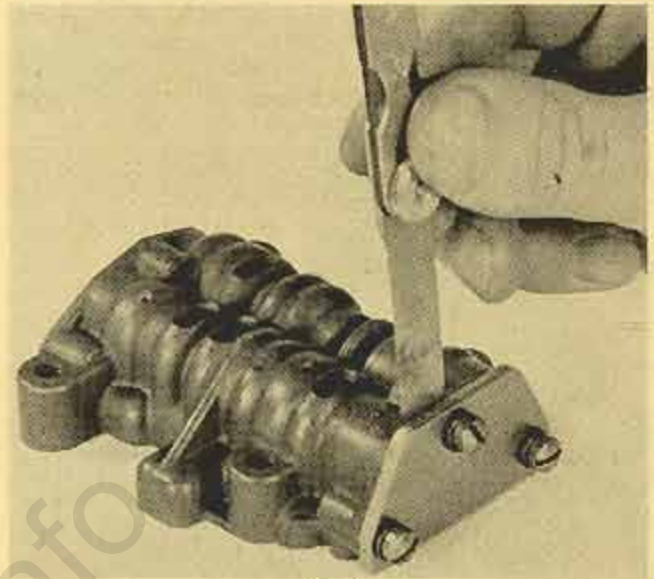


Fig. 3

After the end plate has been tightened by the three screws, check the end plate clearance with a feeler gauge as shown in figure 3. If a .004" feeler gauge can be inserted between the plate and the valve body, the spring seat is not in the bore.

Crankshaft Identification

55th Series

The crankshafts used in all 55th Series engines are identical in appearance and measurements.

However, the crankshafts used with 4" pistons are balanced differently than those using $3\frac{1}{8}$ " pistons and can be identified as follows:

a. The crankshaft used in the 4" bore engines (Clipper Custom and Packard, models 5560-5580) can be identified by the number "4" stamped on a milled surface on one end of the front counterweight.

b. The crankshaft used in the $3\frac{1}{8}$ " bore engines (Clipper Deluxe and Clipper Super, model 5540) can be identified by the number "3" stamped on the counterweight.

Dual Speed Wipers

55th Series

When wiper blades operate in only one wiping range or arc, usually a hissing noise can be heard in one position of the switch control lever.

Complaints of this nature can be remedied by reversing the two $\frac{1}{8}$ " wiper hoses that connect to the wiper control switch.