STUDEBAKER-PACKARD CORPORATION

Service Bulletin

FEBRUARY 1957 NO. 321

SOUTH BEND 27, INDIANA

Studebaker and Packard Clipper

OIL PRESSURE SIGNAL LIGHT SWITCH- 1957 SEDAN AND STATION WAGON MODELS

Please record this article on the Service Bulletin Reference page in your 1957 Studebaker and 1957 Packard Clipper Supplements.

Two types of oil pressure signal switches are being used on the Studebaker and Packard Clipper sedan and station wagon models. Although there is a difference in the terminals of the two switches, the connector on the wire will fit both types. Fig. 1 illustrates the installation of the connector on both types of switches.

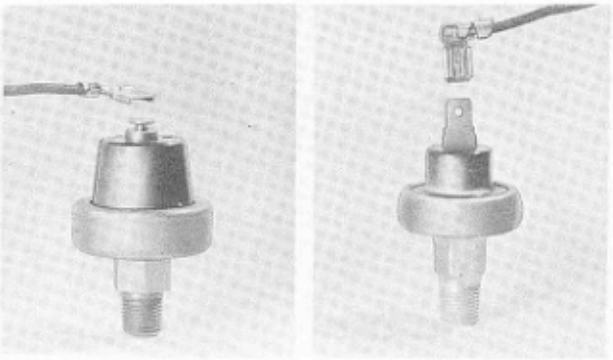

Fig. 1

SUPERCHARGER PARTS FOR SERVICE - GOLDEN HAWK AND PACKARD CLIPPER

Please record this article on the Service Bulletin Reference page of the 1957 Studebaker and 1957 Packard Clipper Supplements.

The supercharger assembly will not be available to dealers from Parts Depot stocks since there is very seldom any necessity which would justify replacement of the complete unit. In an emergency where it is proven that the supercharger cannot be satisfactorily repaired, a supercharger unit may be released on authorization obtained from your Zone Service Manager and shipment would then be made direct fron South Bend.

In this issue

Several individual parts items which are now shown in the preliminary parts list will not be serviced as individual items and these will be deleted from the next reprint of the parts catalog. Such deleted items are now only available as parts of an assembly.

The following parts are being deleted because it is desirable to obtain a properly balanced assembly. Therefore when any one of the three parts mentioned below are in need of replacement, it will be necessary to order a Pulley Assembly, Part No. 1542912:

Part No. 1542913 Pin
Part No. 1542914 Bushing
Part No. 1542915 Pulley Flange

The following parts are being deleted as individual items and are only available as part

of the Output Drive Element Set - Matched, Assembly Part No. 1542961:

Part No. 1542962 Ball Race Set
Part No. 1542963 Drive Ball Set
Part No. 1542964 Output Shaft Assembly

We consider this necessary and advisable as experience has shown that in the event it is necessary to replace either the Ball Race, Drive Pulley or the Output Shaft, that the other parts should also be replaced to make the unit operate satisfactorily as a unit.

OVERHEATING, CLUTCH AND BAND FAILURE - FLIGHTOMATIC TRANSMISSION - POLICE CARS, TAXI CABS, RURAL MAIL CARRIERS AND SIMILAR HEAVY DUTY SERVICE

Please record this article on the Service Bulletin Reference page at the end of the Transmission-Flightomatic section of your 1956 Studebaker Passenger Car Shop Manual and the Transmission-Automatic (Warner Gear) section of your 2E Series Trucks Shop Manual.

Investigation indicates that automatic transmissions used in police cars, taxi cabs, rural mail carriers, etc., are subjected to unusual conditions because of the frequency of shifting, repeated starts and periods of driving at slow speeds that aren't conducive to good cooling. In view of this, it is felt that some special maintenance instructions would be helpful.

1. Adjust the transmission bands at 500 miles, 4,000 miles and at each subsequent 5,000 mile interval thereafter.

2. Check control pressure with a gauge and adjust when necessary to 85 psi. at 1,000 rpm. in "D" range with the transmission at normal operating temperature. This should be done when the car is new, at 4,000 miles and at each subsequent 5,000 mile period thereafter.

3. Remove the pressure regulator valve assembly and note whether or not the converter return passage is restricted to approximately 3/32" in the valve body (indicated by arrow in Fig. 2). If the converter return oil passage has a restriction, disassemble the unit and carefully enlarge the orifice by drilling with a 9/32" drill. Opening this passage to 9/32" speeds up the oil flow through the converter.

4. When starts are made up a steep grade or with a heavy load, it will be helpful to use Low range as a starting gear instead of Drive range.

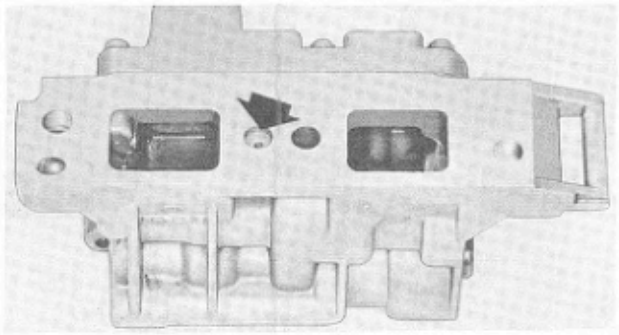

Fig. 2

IDENTIFICATION OF CONTROL VALVE ASSEMBLY AND GOVERNOR - FLIGHTOMATIC TRANSMISSION - 1957 GOLDEN HAWK AND PACKARD CLIPPER MODELS

Please record this article on the Service Bulletin reference page of your 1957 Studebaker and 1957 Packard Clipper Supplements.

The control valve assembly and governor used in the Flightomatic Transmission on the 57H-K and 57L models are different than the units used in the 57B and other 57H models. Outwardly, it is difficult to determine the differences between the units. Therefore, a positive means of identification is necessary.

The Control Valve Assembly is identified by a numeral stamped on the lower valve body cover near the front servo apply and release tubes. It is stamped in the same area as the Warner Gear Part Number. The numeral "1" identifies Control Valve Assembly, Part No. 1543076 which is for the 57H-K and 57L models. The numeral "2" identifies Control Valve Assembly Part No. 1542992 which is for the 57B and all other 57H models.

The Governor Assembly for the 57H-K and 57L models is identified by a narrow groove which has been machined into the smallest diameter of the governor valve (sleeve). It is necessary to remove the governor assembly cover plate to check the governor valve identification. The governor valves used in the other models do not have the groove.

OIL DISTRIBUTOR TUBE POSITION IN OUTPUT SHAFT- FLIGHTOMATIC (WARNER GEAR) TRANSMISSION

Please record this article on the Service Bulletin Reference page at the end of the Transmission-Flightomatic section of your 1956 Passenger Car Shop Manual and Transmission-Automatic section of the 2E Series Truck Shop Manual.

Inability to secure rear clutch application or any automatic upshift despite the fact that the control pressure and all adjustments are normal, can be caused by shifting of the distributor tube in the output shaft. Shifting of the tube, depending on the direction, may obstruct or not confine the governor and clutch pressures to their respective passages. Furthermore, inspection of the governor, control and pressure valves, front and rear clutch operating parts, and all sealing rings may indicate that all these parts are normal.

Dependent on how the tube has shifted the following conditions may occur:

1. No governor action, in which case the transmission would not upshift automatically.
2. Obstruct the rear clutch passage, in which case the transmission would not provide third gear or reverse.
3. Allow a common passage to supply pressure to both front and rear clutches simultaneously, in which case a locking (or partial locking) condition will exist in D, L, or R range.

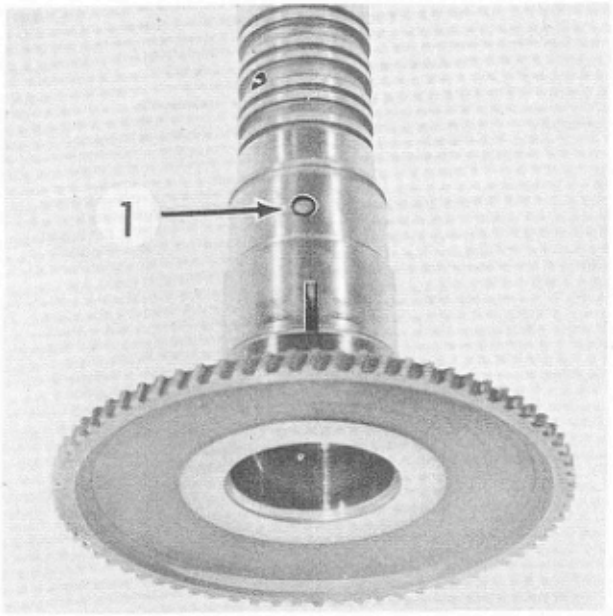

Fig. 3

1. Governor Drive Ball Pocket

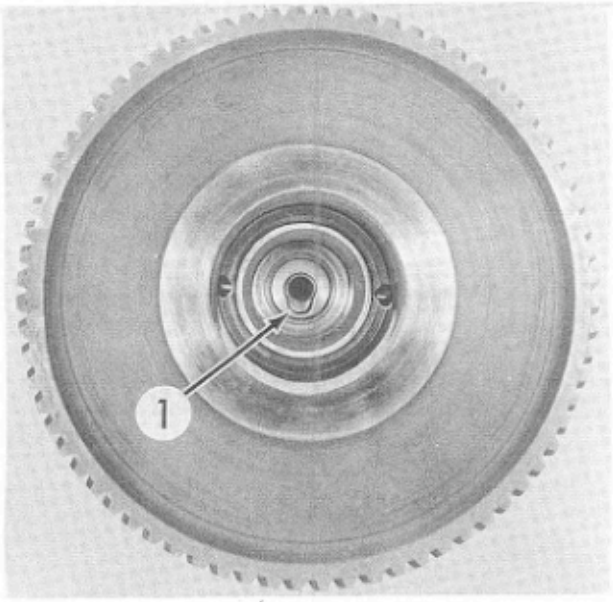

Fig. 4

1. Elongation of Oil Passage

The correct position of the tube within the output shaft can be determined as follows: With the output shaft out of the transmission locate the governor drive ball pocket in the shaft (see Fig. 3). Then, looking at the front of the output shaft assembly, locate the elongation of the oil passage in the center of the distributor tube (see Fig. 4). Using the governor drive ball pocket as a reference point, the elongated portion of the passage should be located 180^0 from (or relatively opposite) the governor drive ball pocket.

Studebaker

FILLER PLUG INTERFERENCE WITH RING GEAR- TWIN TRACTION REAR AXLE

Please record this article on the Service Bulletin Reference page of your 1957 Studebaker Supplement and at the end of the Rear Axle section of your 2E Series Trucks Shop Manual.

There is a possibility of noise in the rear axle which is created by interference between the housing filler plug and the ring gear; especially if the plug has been removed and installed a number of times so that it seats deeper than normally.

If this occurs, remove the plug and grind off the end to provide necessary clearance.

CAMSHAFT AND LIFTER REPLACEMENT - 1954 COMMANDER MODELS

Our practice of granting *parts only* credit for camshafts and/or lifters replaced in 1954 model Commander V-8 engines is discontinued effective immediately. Accordingly, the special provisions with respect to such replacements as published in a letter dated February 8, 1956, to all Studebaker dealers are withdrawn.

POWER STEERING NOT EFFECTIVE ON LEFT TURNS - 1957 STUDEBAKER MODELS

Please record this article on the Service Bulletin Reference page at the end of Front Suspension and Steering System section of your 1956 Studebaker Passenger Car Shop Manual.

Interference between the steering wheel and the top of the steering post jacket may cause loss of power assist on left turns. In normal operation of the power steering unit there is slight up and down movement, depending on direction of the turn, of the steering wheel and the post as the control valve is moved into position for that turn. On a left turn the wheel and post must move downward. Therefore, interference between the hub and the jacket will prevent the downward movement of the control valve for the left turn operation.

Loosening the steering post jacket clamp and moving the jacket down slightly to provide the necessary clearance will eliminate the condition.

RADIO REAR SEAT SPEAKER OPERATION - 1957 STUDEBAKER MODELS

Unsatisfactory rear seat speaker operation is usually caused by an improper ground. The ground is made by the star washer installed on one of the radio grille-to-rear shelf bolts. When properly installed, the bolt is first put through the rear shelf, then, the star washer is installed. Next the wire terminal and nut are installed. The speaker is then put in place and fastened with four washers and nuts. This installation when properly made will provide adequate ground. However, if the operation is not satisfactory, the quickest method of correction is to install a ground wire from one of the speaker mounting bolts to a good ground on the car.

Packard Clipper

CLIMATIZER KITS - 1957 PACKARD CLIPPER MODELS

Please record this article on the Service Bulletin Reference page of your 1957 Packard Clipper Supplement.

When ordering the Climatizer or making an original installation of Climatizer and Defroster Kit, Part No. AC-2833 in the 57L models, it will be necessary to also include the Heater and Defroster Kit, Part No. 1543693.

TRUCKS

PROPELLER SHAFT SUPPORT SPACER - 3E40 MODELS

Please record this article on the Service Bulletin Reference page at the end of the Propeller Shaft and Universal Joints section of the 2E Series Truck Shop Manual.

To improve the alignment of the front propeller shaft in the 3E40 model trucks, an additional Spacer, Part No. 676744 has been added to each side of the propeller shaft support bracket. This change became effective in production with Serial No. E40-450.

The improved alignment of the propeller shaft materially reduces the inherent noise of the 5-speed direct and 5-speed overdrive transmissions. Should you receive a complaint of noisy transmission on a model having a serial number prior to E40-450, try to correct the condition first by installing additional spacer before removing and/or disassembling the transmission.

STUDEBAKER-PACKARD CORPORATION

South Bend 27, Indiana

PRINTED IN U.S.A.