CHASSIS (cont'd)

- B. Locating dowel pin bent, causing rotor to cam interference.
- C Burrs or nicks on cam I.D., slipper and rotor O.D.
- D Improperly assembled (cocked) stamped housing.

7. EXCESSIVE NOISE WHILE THE PUMP IS OPERATING.

- A Aerated oil or low oil level (See air bleeding procedure in 1968 and prior Shop Manuals for correction of aerated oil).
- B Slippers are not assembled correctly or one or more left out.
- C One or more of the corners of the rotor teeth at the scalloped recess are chipped.
- D Imperfections on the rotor O.D. or end surface.
- E Rotor shaft or rotor splines damaged.
- F Rotor hitting cam.
- G Excessively worn or scored pumping elements and pressure plates.
- H Damaged outlet fitting orifice.
- I Housing to plate screws improperly torqued.
- I Baffle in the reservoir broken off.

NOISES AND LEAK DEFECTS

DESCRIPTION OF NOISES

Noise characteristics and their causes are as follows:

- 1. Swish

 A noise created by the flow of excess fluid into the by-pass port of the pump valve housing, with the fluid temperature below 130 degrees. The shearing effect of the cooler (heavier) oil is not detrimental to pump operation and should diminish at normal operating temperature.
- 2. Whine

 A noise created due to possible interference of the components in the pumping element and/or aeration of the steering system fluid.
- 3. <u>Click</u> A noise cause by the pump slippers being too long, broken slipper springs or excessive wear.
- 4. On-Center- A noise caused by flow passing through Hiss a damaged outlet fitting or excessive flow.
- 5. <u>Chatter</u> A noise caused by a chipped corner at the rotor O.D.

LEAK DEFECTS

There are five (5) points of possible external leakage on the Ford design power steering pump assembly (See Fig. 2).

- 1. Reservoir Large Rubber Ring
- 2. Seal Pump Shaft
- 3. Valve Outlet Fitting
- 4. Filler Cap Leakage
- 5. Brazing and Soldering at:

Filler Tube to Reservoir Return Tube to Reservoir

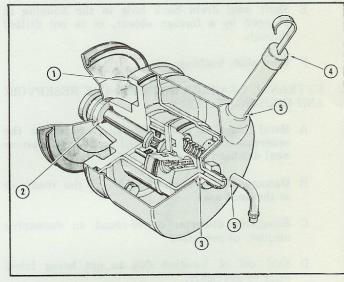


Fig. 2 - Leakage Points 9018A

POWER STEERING OIL COOLER ASSEMBLY

1968-69 MONTEGO AND COUGAR Models Equipped with 427-4V or 428-4V C.J. Engines Built After 6-20-68

(This article cancels and supersedes the article published in 1969 Series Service Bulletin No. 3, dated 9-30-68, same subject).

The subject vehicles have incorporated a power steering oil cooler to provide additional fluid cooling due to the higher axle ratios and restricted cooling system used on the 427-4V and 428-4V Cobra Jet engines.

If an overheating power steering fluid condition results on subject vehicles built prior to 6-20-68, a power steering oil cooler assembly should be installed using the following installation procedure:

- 1. Drill one (1) 9/32" diameter hole in the left sidemember forward of the spring tower as indicated in Fig. 3.
- 2. Install the oil cooler assembly (Part No. C8OZ-3D746-A) with a self tapping screw (Part No. 378459-S2) and torque to 7-12 lb. ft. (See Fig. 3).

- Install the existing power steering return line on the longer tube of the cooler assembly and secure with a hose clamp.
- 4. Install a 14" return hose (cut from Part No. C7AZ-3A005-A) to the oil cooler assembly and the power steering pump return tube. Secure with hose clamps and torque to 1-3 lb. ft.

NOTE: The clamps installed to the cooler tube must be installed with the heads facing downward. This will preclude possible chaffing of the fuel hose which is routed underneath the cooler clamps.

Part No. C8OZ-3D746-A is classified "C".

Part No. C7AZ-3A 005-A is classified "A".

Part No. 378459-S2 is classified "S".

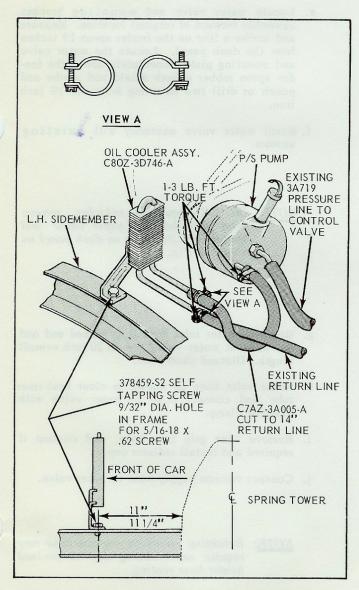


Fig. 3 - Power Steering Oil Cooler Assembly 9033A

ELECTRICAL

ERRATIC IGNITION SWITCH OPERATION

1968-69 ALL CAR LINES

PROBLEM:

Erratic ignition switch operation.

CAUSE:

Improper installation and/or removal (tipping or twisting) of the ignition switch wiring connector. This causes the receptacle terminals within the multiple connector to spread and create a poor connection with the pin terminals.

CORRECTION:

- Remove the ignition switch from the instrument panel. (Refer to the appropriate car line Shop Manual, Group 15).
- Disconnect the wiring connector from the ignition switch. <u>Do not "tip" or "twist"</u> the wiring connector, as this can spread the receptacle terminals in the connector. The connector must be removed on a straight line from the ignition switch as illustrated on Fig. 4. (continued on page 6)

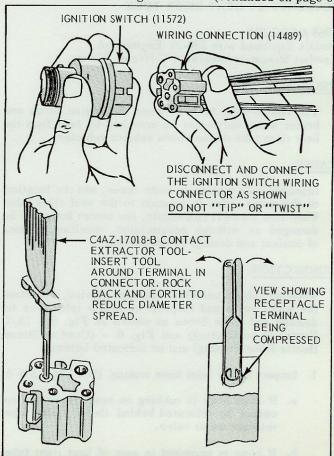


Fig. 4 - Erratic Ignition Switch Operation 9025A