

PLYMOUTH SERVICE INFORMATION BUI

Steering

Number 19-3

Date

Mar. 2, 1960

1960 Model

Of interest to: SERVICE MGR.

SHOP FOREMAN

PARTS MGR.

MECHANICS

SUBJECT: NEW POWER STEERING PUMP WITH LOAD REACTION BELT TENSIONER

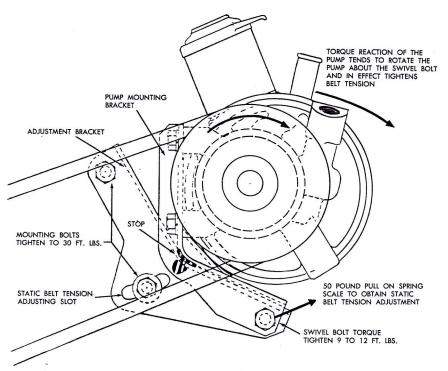
Recently a new power steering pump was incorporated in production on Plymouth cars equipped with high-performance engines, and air conditioning equipped cars.

The new pump is similar to the early production type pump in its construction. However, the detail parts are not interchangeable with the early production pump.

The pump's new features are as follows:

- (1) Larger shaft and seal diameters and a new drive belt and pulley arrangement.
- Use of a load reaction belt tensioner, consisting of a pump mount-**(2)** ing bracket and adjustment bracket.

(Over)



(3) Pump is mounted on a flexible swivel-type mounting to enable the steering pump load to be increased when the torque reaction of the pump, acting through the mounting bracket and adjustment bracket, moves the pump outward and increases the belt tension to the required amount. This prevents belt slippage under all load conditions, and in effect, lengthens the belt and service life, see illustration.

Servicing: The new power steering pump is serviced the same as earlier production models, as described in the 1960 Plymouth Service Manual under the heading of "Power Steering Pump." However, due to the difference in shaft and seal diameters, two new service tools are required: C-3783-Oil Seal Remover, and C-3782-Oil Seal Installer, These tools are included in the P-60 list and may be obtained from the Miller Manufacturing Company, Detroit, Michigan.

CAUTION: Use a washer on the end of the shaft when removing the pulley.

Belt Adjustment: The belt tension is adjusted when the engine is stopped by loosening the adjustment bracket-to-engine mounting bolts, and exerting an outward pull of 50 lbs. on a spring scale at the swivel bolt. Then tighten the adjustment bracket mounting bolts. At this time the pump mounting bracket is resting against the stop. With the engine running, the pump load reaction will move the pump mounting bracket away from the stop. Approximately .030 in. shaft end play is normal.

Diagnosis: If a knocking condition is encountered at the bracket stop when the engine is running, it is an indication that the belt tension is too tight, or the belt is worn to the extent that the belt tension cannot be properly adjusted. Adjust the belt tension, or install a new belt if necessary.

If a belt squeal is encountered under heavy steering load (such as entering a curb-side parking space), it is an indication that the belt tension is too loose, or the belt is worn to the extent that the reaction bracket cannot properly adjust the belt tension. Adjust the belt tension or install a new belt if necessary.

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