

shim into the slot in the end of the shaft.

(16) Test the end clearance shown in Figure 13. The screw must be free to turn with no perceptible end play to .004 inch lose. Three different thickness shims are available to obtain the specified clearance.

(17) Start the cross shaft and adjuster screw into bearing in the housing cover. Then, using a screw driver through the hole in the cover, turn the screw counter-clockwise to pull the shaft into the cover.

(18) Install the adjusting screw lock nut, but do not tighten at this time.

(19) Rotate the wormshaft to centralize the ball nut.

(20) Place a new cover gasket on the housing cover.

(21) Carefully install the cross shaft and cover assembly into the steering gear housing (Fig. 5).

NOTE: The cross shaft and sector teeth should be coated with the steering gear lubricant before installing the cross shaft in the housing.

(22) Make certain some lash exists between the cross shaft sector teeth and the ball nut rack then install and tighten the cover bolts to 25 foot pounds torque.

Installing The Steering Gear (In the Vehicle)

(1) Slide the steering column assembly upward to where the column coupling will clear the end of the wormshaft and permit installation of the steering gear. Also make sure the clamp is in place on the steering shaft coupling.

NOTE: On models equipped with six cylinder engines the steering gear can be entered through the hood opening. However, when installing the steering gear in models equipped with eight cylinder engines, limited clearance makes it necessary to place the

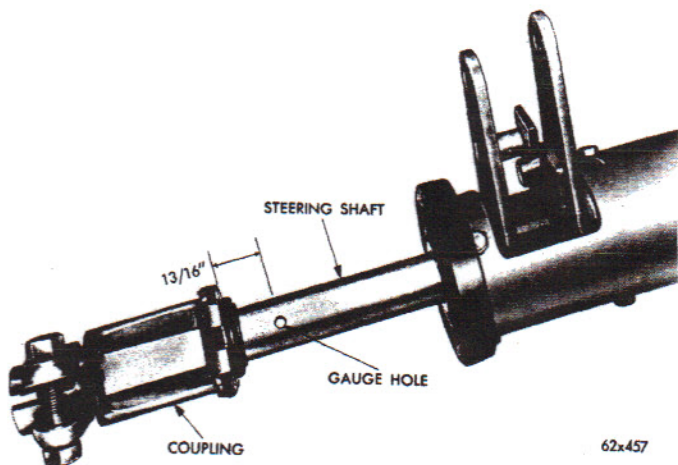


Fig. 14—Positioning Steering Shaft Coupling (Manual Steering and Standard Transmission)

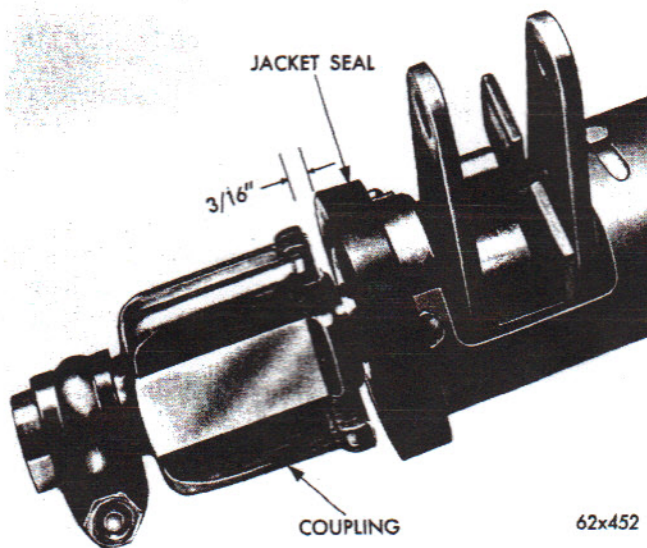


Fig. 15—Positioning Steering Shaft Coupling (Power Steering and Standard Transmission)

gear in position from underneath the vehicle.

(2) Position the steering gear in position and install the three mounting bolts.

(3) Tighten mounting bolts to 50 foot pounds torque.

(4) With the master serration the wormshaft aligned with the notch mark on the coupling housing slide the steering column assembly down far enough to engage the column coupling with the wormshaft.

(5) Align the groove on the steering column coupling with the groove in the wormshaft and install the coupling bolt, washer and nut.

(6) Tighten the nut to 30 foot pounds torque.

(7) While the jacket clamp bolts are loose, position the jacket assembly so the steering shaft coupling is centered at the midpoint of its travel.

The coupling travel midpoint can be determined by a $\frac{3}{16}$ " diameter gauge hole which is provided in the steering shaft (Fig. 14).

When the dimension from the top of the coupling to the center of the gauge hole is $1\frac{3}{16}$ inch the coupling is centered in its travel.

NOTE: On Valiant models with both power steering and standard transmission, the column jacket should be positioned so the dimension between the top of the coupling and the column jacket seal is $\frac{3}{16}$ inch (Fig. 15).

(8) After centering the coupling, tighten the column jacket to instrument panel clamp bolts to 95 inch pounds torque.

NOTE: On vehicles equipped with manual transmission and concentric shift linkage, it will be necessary to readjust the length of the 1st and reverse