

(4) Loosen adjusting screw until backlash is evident in steering gear arm. Feel backlash by holding end of steering gear arm between thumb and forefinger with a light grip. Tighten adjusting screw until backlash just disappears.

Continue to tighten to $3/8$ to $1/2$ turn from this position and tighten lock nut to 50 foot-pounds to maintain this setting.

Valve Body Recondition

(1) Disconnect high pressure and return hoses at the valve body and tie the ends above the reservoir fluid level.

(2) Remove two screws attaching valve body to main gear housing.

(3) Lift valve body upward to disengage from valve lever (Fig. 8).

(4) Remove the two screws attaching control valve body to steering valve body and separate two bodies (Fig. 3).

(5) Remove outlet fitting, washer, spring, valve piston and cushion spring.

(6) Carefully shake out spool valve and inspect for nicks, burrs and scores. Do not remove valve body end plug unless inspection indicates a leak at gasket. **If spool valve or valve body is damaged, replace valve and body assembly.**

Small burrs and nicks may be removed with crocus cloth if extreme care is used not to round off sharp

edges of valve. The sharp edge is vitally important to operation of this valve.

(7) Clean valve bodies and valve piston thoroughly in clean solvent. Blow out all passages with compressed air. Lubricate pistons and bores with power steering fluid.

(8) Install steering spool valve in valve body so valve lever hole is aligned with lever opening in valve body. Valve must be perfectly free in valve body without sticking or binding (Fig. 3).

(9) Install a new gasket on end plug (if removed). Tighten plug to 25 foot-pounds.

(10) Install piston cushion spring in control valve body being sure it seats in counterbore at bottom of housing. Lubricate piston and insert nose end of piston into body bore. Test for smooth operation. Be sure cushion spring is not cocked.

(11) Install spring on top of piston, and install copper washer and fittings. Tighten to 20 foot-pounds.

(12) Position two new "O" rings on control valve body and attach to steering valve body. Tighten the two attaching screws to 95 inch-pounds.

(13) If pressure inlet fitting has been removed, tighten fitting to 30 foot-pounds.

(14) Align lever hole in valve spool with lever opening in valve body.

(15) Install on gear housing making sure the valve lever enters hole in valve spool and key section on

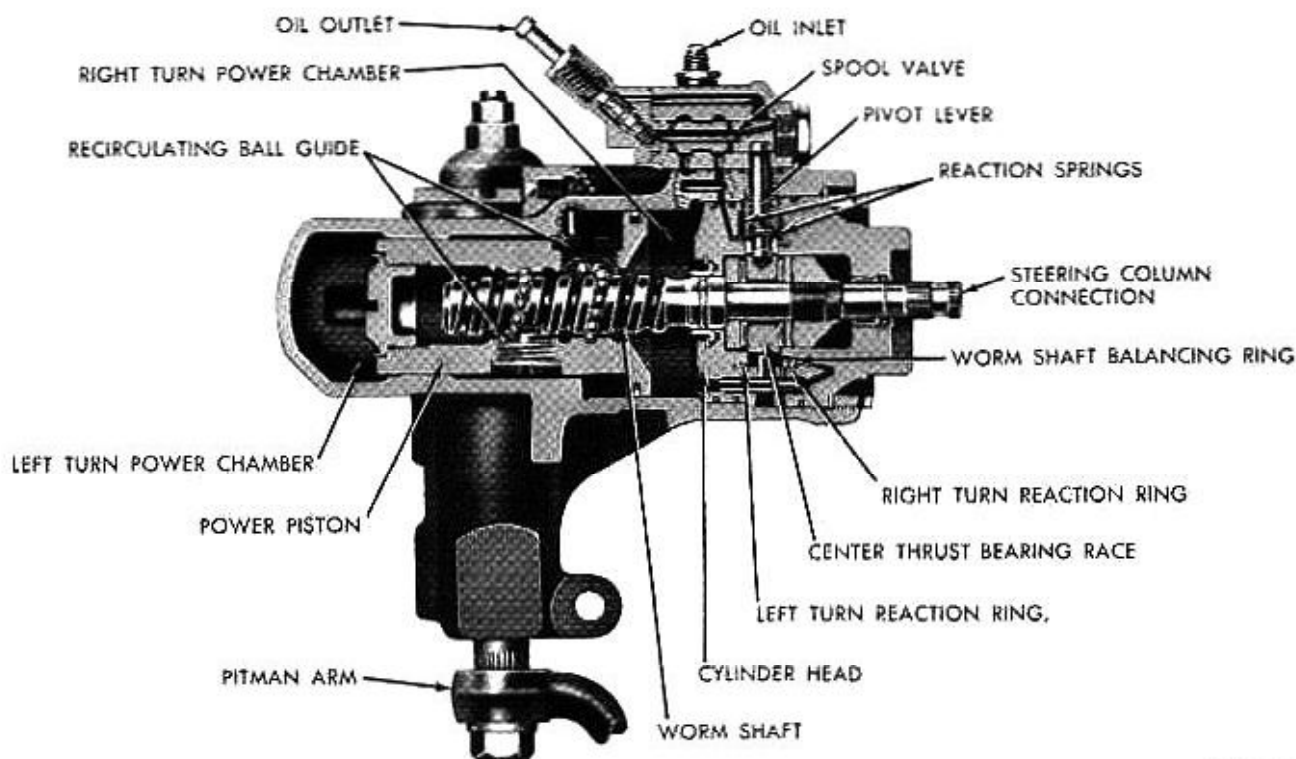


Fig. 1—Power Steering Gear

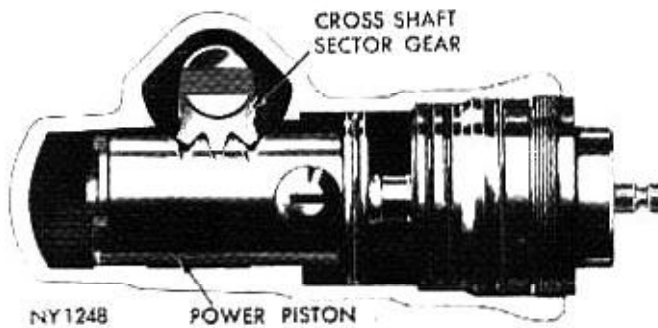


Fig. 2—Steering Gear Housing

bottom of valve body nests with the keyway in housing.

CAUTION: These parts should go together with relative ease. Use of force may damage the lever. If they do not go together easily, lift off valve assembly, realign valve spool hole with lever opening in valve body and install valve body.

(16) Install two screws and tighten to 7 foot-pounds to prohibit leakage during valve centering operation.

(17) Connect high pressure and return hoses to valve body.

(18) Start engine. If unit is self-steering tap the valve up or down to correct. When tapping valve "down," hit valve body on end plug. When tapping valve "up," tap on head of the screw attaching valve body to main valve body. Do not hit control valve body.

(19) Turn steering wheel from stop to stop several times to expel air from system. Refill reservoir as required.

CAUTION: Do not turn hard against ends of travel. This will generate high pressure and may blow out

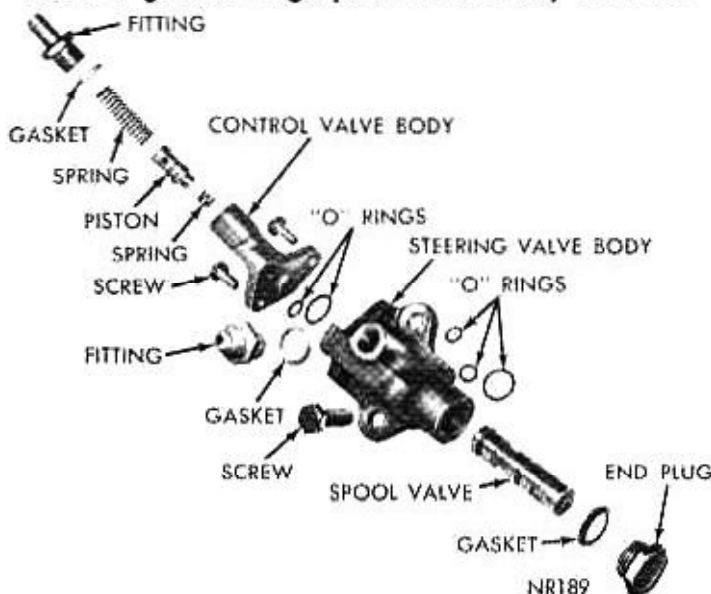


Fig. 3—Valve Body (Disassembled View)

the "O" rings since the valve body screws have not been finally tightened.

(20) With steering wheel in straight ahead center position, start and stop the engine several times, tapping the valve body up or down as required until there is no movement of the steering wheel when the engine is started or stopped.

(21) The valve is now centered. Tighten the two screws attaching valve body to housing to 200 inch-pounds.

Cross Shaft Oil Seal Replacement

The cross shaft oil seal may be replaced without removing the steering gear from the vehicle. Note: Tools designated in the following procedure are used on Fury and V.I.P. Models which have 1-1/4 inch diameter cross shaft. The same procedure may be followed for Valiant, Barracuda and Satellite models, which have a 1-1/8 inch cross shaft, using Tool C-3880 with appropriate adapters.

CAUTION: When replacing oil seal in vehicle, clean the exposed portion of cross shaft to help prolong oil seal life.

- (1) Remove steering arm nut.
- (2) Disconnect steering gear arm from sector shaft with Tool C-3646 (Fig. 4).
- (3) Slide threaded adapter SP-3056 of Tool C-3350-A over end of cross shaft and thread tool nut on cross shaft. Maintain pressure on threaded adapter with tool nut while screwing adapter far enough to engage metal portion of grease retainer. Place the two half rings SP-1932, and Tool retainer ring over both portions of the Tool (Fig. 5). Turn the tool nut counter-clockwise to withdraw grease retainer from housing.
- (4) Remove oil seal snap ring with snap ring pliers and remove seal back-up washer.
- (5) Use Tool C-3350-A in same manner as outlined

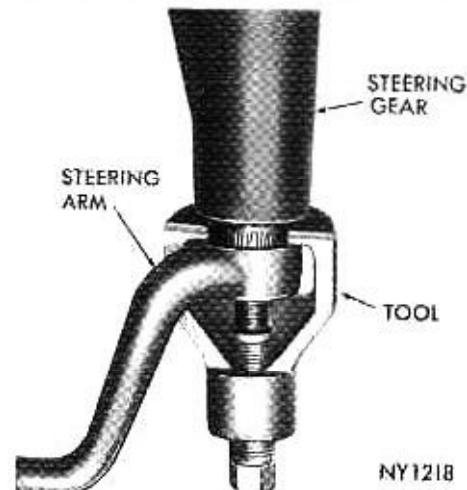


Fig. 4—Removing Steering Gear Arm