

Fig. 3—Valve Body Disassembled View

pressed 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, compress spring and install brass washer and fitting, 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 gear housing making sure the valve lever enters hole in valve spool and key section on 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 valve up or down to correct. **When tapping valve "down," hit valve body on end plug. When tapping valve "up," tap on head of screw attaching the 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 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 both started or stopped.

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

Gear Shaft Oil Seal Replace

The gear shaft oil seal may be replaced without removing the steering gear from the vehicle.

(1) Remove steering arm nut.

(2) Disconnect steering gear arm from sector shaft with Tool C-3646 (Fig. 4).

(3) Slide threaded adapter SP-3609 of Tool C-3880 over end of gear shaft and thread tool nut SP-3610 on gear 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.

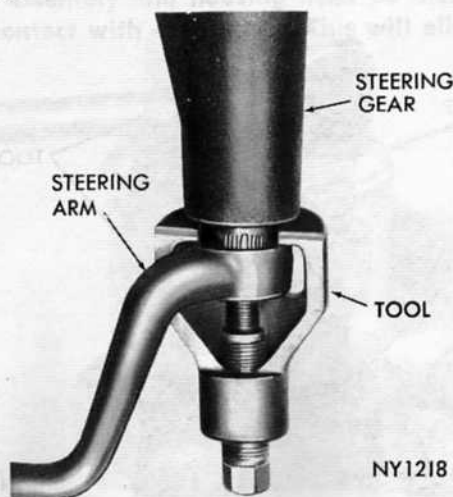


Fig. 4—Removing Steering Gear Arm