

1963-1982 Power Steering Valve Rebuild

Control Valve

Disassembly

- 1. Place Valve assembly in vise with dust cap end up and remove dust cap.
- 2. Remove adjusting nut.
- 3. Remove valve-to-adapter bolts and remove valve housing and spool from adapter.
- 4. Remove spool from housing
- 5. Remove spring reaction spool, washer, reaction spring and seal. O-ring may now be removed from reaction spool.
- 6. Remove annulus spacer, valve shaft washer and plug-to-sleeve key. Remove the ball stud seal and ball stud seal clamp.
- 7. Carefully turn adjuster plug out of sleeve. Use care not to nick the top surface.

Remove adapter from vise and turn over to allow spring and one of the two ball seats to drop out.

Remove ball stud with other ball seat and allow sleeve to fall free.

Assembly

- 1. Replace sleeve and ball seat in adapter, then the ball stud and then the other ball seat and spring. (small end down)
- 2. Place adapter in vise. Put the shaft through the seat in the adjuster plug and screw adjuster plug into sleeve.
- 3. Turn plug in until tight, then back off until slot lines up with notches in sleeve.
- 4. Insert key. Be sure small tangs on end of key fit into notches in sleeve.
- 5. Install valve shaft washer, annulus spacer and reaction seal (lip up), spring retainer, reaction spring and spool, then washer and adjustment spring. Install O-ring seal on reaction spool before installing spool on shaft. Install washer with chamfer up.
- 6. Install seal on valve spool with lip down. Then install spool, being careful not to jam spool in housing.
- 7. Install housing with spool onto adapter. The side ports should be on the same side as the ball stud. Bolt the housing to the adapter.
- 8. Depress the valve spool and turn the locknut into the shaft about four turns. Use a clean wrench or socket.

Refer to GM Service Manual for Installation and Adjustment.



Control Valve, Disassembled View

Removing Adjuster nut from

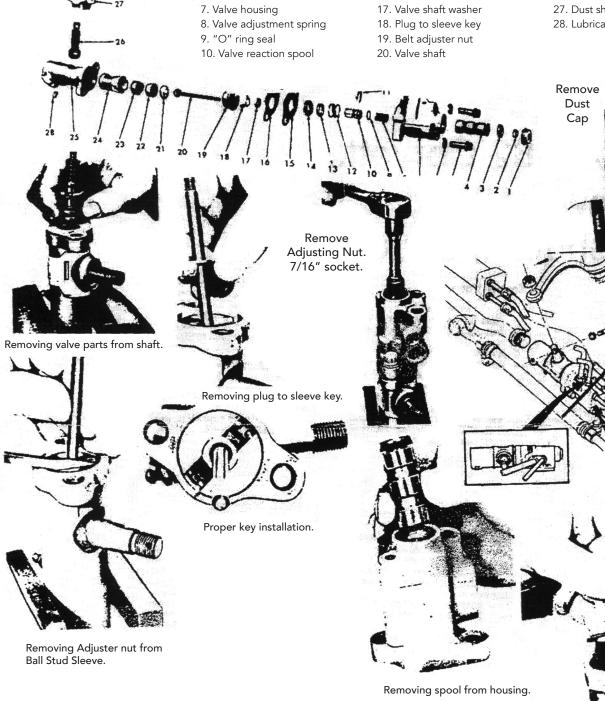
Ball Stud Housing.

- 1. Dust Cover
- 2. Adjusting nut
- 3. Vee block seal
- 4. Valve spool
- 5. Valve mounting bolts
- 6. Lock washer

- 11. Spring thrust washer
- 12. Valve spring
- 13. Spring retainer
- 14. Annulus seal
- 15. Annulus spacer
- 16. Gasket

- 21. Ball seat spring
- 22. Ball seat
- 23. Ball seat
- 24. Sleeve bearing
- 25. Adapter housing
- 26. Ball stud
- 27. Dust shield
- 28. Lubrication fitting

Hose Installation



Inspection

- 1. Wash all parts in clean, non-toxic solvent &blow dry with air.
- 2. Inspect all parts for scratches, burrs, distortion or excessive wear and replace worn or damaged parts.
- 3. Replace all seal and gaskets.