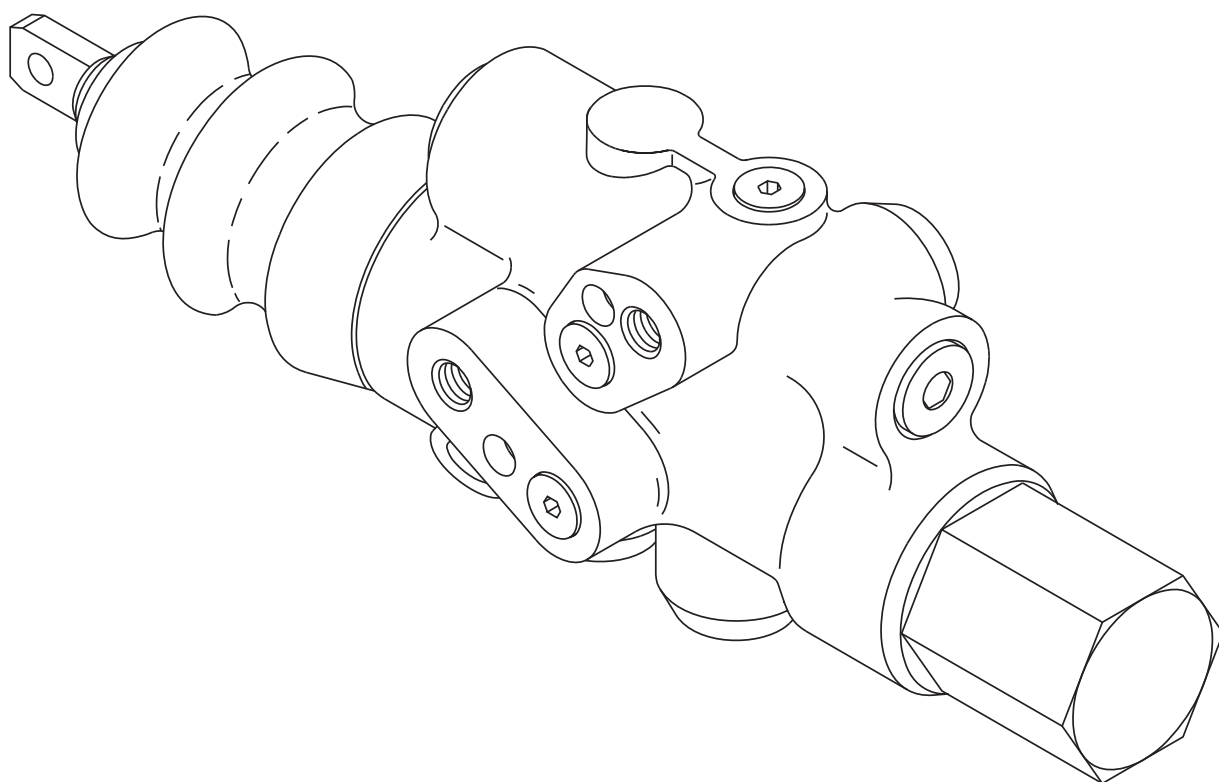


PARK BRAKE VALVE

(with auto apply)

Service Instructions



DISASSEMBLY

(Refer to Figure 1)

NOTE

Housing (4) and spools (23 & 18) are manufactured as a matched set and must not be intermixed with other parts.

1. Remove two plugs (8), springs (6) and balls (5) from housing (4). Remove o-rings (7) from plugs (8).
2. Remove three plugs (10) from housing (4). Remove o-rings (7) from plugs (10).
3. Remove boot (15) from end plug (11) and push rod (16).
4. Carefully remove end plug (1) from housing (4).
NOTE: End plug (1) is under tension of spring (3).
5. Remove spring (3) and spool (29) from housing (4). Remove o-ring (2) from end plug (1). Remove back-up rings (27 & 9) and o-rings (28 & 30) from spool (29).
6. Carefully remove end plug (11), push rod (16) and spool (18) assembly from housing (4) bore.
NOTE: Be careful not to scratch or mar spool (16) or housing (4) bore.
7. Remove end plug (11) from push rod (16) and spool (18) assembly. Separation of push rod (16) and spool (18) is not necessary if parts are in good condition.
8. Remove o-ring (2), retaining ring (14), washer (13) and seal (12) from end plug (11).
9. Remove plug (19) from housing (4) bore. Remove o-ring (20) from plug (19). **NOTE: Plug (19) is under tension of spring (21).**
10. Remove spring (21), shim(s) (22) and retainer assembly (23) from housing (4) bore. **NOTE: Be aware of the number of shim(s) being removed from housing.**
11. Remove plug (26) from housing (4) bore. Remove o-ring (25) from plug (26).
12. Remove spool (24) from housing (4) bore.
NOTE: Be careful not to scratch or mar spool (24) or housing (4) bore. A wooden dowel will help in the removal of spool (24).

ASSEMBLY

(Refer to Figure 1)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT AND SPOOLS (24 & 18) WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Install new o-ring (25) on plug (26).
3. Carefully insert spool (24) in housing (4). Note direction of spool (24). **NOTE: Spool must slide freely in housing bore. Resistance indicates damage to the spool or housing bore.**
4. Install plug (26) into housing (4) and torque 27.1-32.5 N·m (20-24 lb·ft).
5. Install new o-ring (20) on plug (19).
6. Install shim(s) (22) on retainer (23) and carefully install retainer (22) and spring (21) in housing (4). Note direction of retainer (22).
7. Install plug (19) in housing (4) bore and torque 54.2-61.0 N·m (40-45 lb·ft).
8. Install new o-ring (2) on end plug (11). Install new seal (12), new washer (13) and new retaining ring (14) in end plug (11). Note direction of seal (12) and order of components. See Figure 1a.
9. Slide end plug (11) onto stem of push rod (16).
10. Carefully insert spool (18) push rod (16) assembly and end plug (11) into housing (4) bore. Torque end plug (11) 54.2-61.0 N·m (40-45 lb·ft). **NOTE: Be careful not to scratch or mar spool (18) or housing (4) bore. Spool must slide freely in housing bore. Resistance indicates damage to the spool or housing bore.**
11. Install new o-rings (28 & 30) and new back-up rings (27 & 9) on spool (29). Note order of components.
12. Install spool (29) and spring (3) into housing (4) bore. Note direction of spool (29).
13. Install new o-ring (2) on end plug (1). Install end plug (1) into housing (4) and torque 54.2-61.0 N·m (40-45 lb·ft).
14. Install new o-rings (7) on plugs (10). Install plugs (10) in housing (4) and torque 5.1-5.7 N·m (45-50 lb·in).
15. Install new o-rings (7) on plugs (8).
16. Insert new balls (5) and new springs (6) into housing (4) bores. Install plugs (8) in housing (4) and torque 5.1-5.7 N·m (45-50 lb·in).
17. Install new boot (15).

● Items included in Repair Kit

