

REPAIR KIT

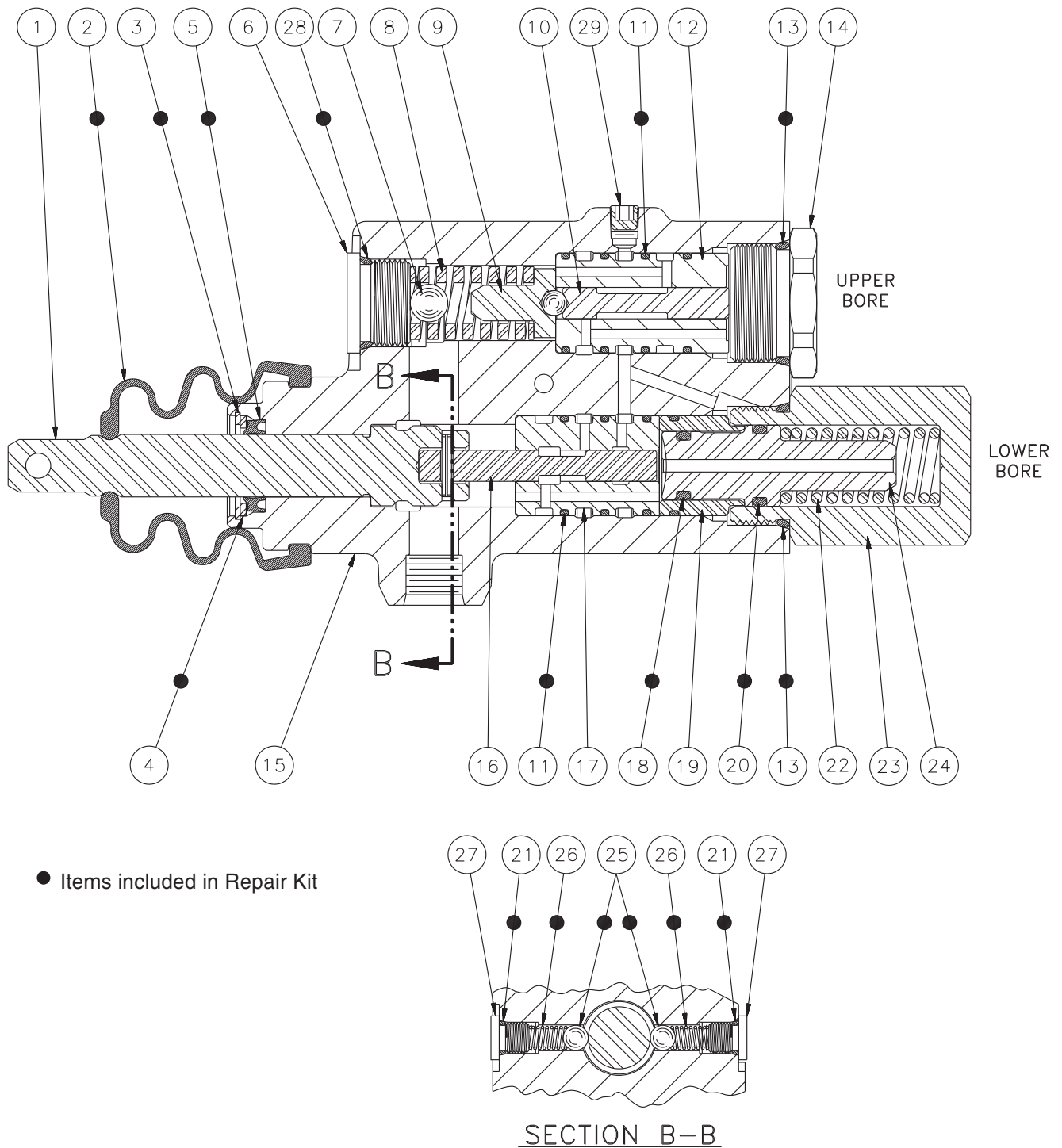


FIGURE 1

Disassembly

NOTE

Spool (10) / sleeve (12) and spool (16) / sleeve (17) are matched sets and must not be intermixed with other parts.

1. Remove plugs (27), springs (26) and balls (25) from housing (15). Remove o-rings (21) from plugs (27).
See Section B-B Detail.
2. Remove boot (2) from lower housing (15) and push rod (1).
3. Carefully remove end plug (23) from lower housing (15). **NOTE: End plug (23) is under tension of spring (22).**
4. Remove spring (22), spool (24), sleeve (19) and sleeve (17) from lower housing (15) bore by carefully moving push rod (1) inward. Separate spool (24) and sleeve (19).
5. Carefully remove push rod (1) and spool (16) assembly from lower housing (15) bore. **NOTE: Be careful not to scratch or mar lower housing bore.**
6. Carefully inspect push rod (1) and spool (16) assembly. Disassembly is not necessary if parts are in good condition.
7. Carefully remove four o-rings (11) from sleeves (17 & 19) and o-rings (18 & 20) from spool (24).
NOTE: Be careful not to scratch or mar sleeves or spool.
8. Remove o-ring (13) from end plug (23).
9. Carefully remove retaining ring (3). Remove washer (4) and seal (5) from lower housing (15).
10. Remove plug (6) from upper housing (15). Remove o-ring (28) from plug (6). **NOTE: Plug (6) is under tension of spring (8).**
11. Remove ball (7), spring (8) and retainer (9) from upper housing (15) bore.
12. Remove end plug (14) from upper housing (15). Remove o-ring (13) from end plug (14).
13. Remove spool (10) and sleeve (12) from upper housing (15) bore. **NOTE: Use a wooden dowel for this procedure.**
14. Separate spool (10) and sleeve (12).
15. Carefully remove four o-rings (11) from sleeve (12).
NOTE: Be careful not to scratch or mar sleeve.

Assembly

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT AND SPOOLS (10 & 16) WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

1. Clean all parts thoroughly before assembling.
2. Install new o-ring (13) on end plug (14) and new o-rings (11) on sleeve (12).
3. Insert spool (10) into sleeve (12). Note direction of spool (10).
4. Carefully install sleeve (12) into upper housing (15) bore. Note direction of sleeve.
5. Install end plug (14) into upper housing (15) bore. Torque 67.8-81.4 N·m (50-60 lb·ft).
6. Carefully install retainer (9), spring (8) and ball (7) in opposite end of upper housing (15) bore. Note order of retainer, spring and ball.
7. Install new o-ring (28) on plug (6) and install into upper housing (15) bore. Torque 47.5-54.2 N·m (35-40 lb·ft).
8. Install new seal (5), new washer (4) and new retaining ring (3) in boot end of lower housing (15). Note direction of seal (5).
9. Install new o-rings (11) on sleeves (17 & 19) and new o-rings (18 & 20) on spool (24). **NOTE: Be careful not to scratch or mar sleeves or spool.**
10. Carefully insert spool (16) into sleeve (17). Note direction of sleeve.
11. Carefully install push rod (1) and spool (16) / sleeve (17) assembly into lower housing (15) bore through plug (23) end of housing. **NOTE: Be careful not to damage seal (5) at boot (2) end lower housing.**
12. Carefully install sleeve (19) on spool (24) and install into lower housing (15) bore. Note direction of sleeve and spool.
13. Install new o-ring (13) on end plug (23).
14. Slide spring (22) over end of spool (24) and install end plug (23) in lower housing (15). Torque 54.2-67.8 N·m (40-50 lb·ft).
15. Install boot (2) on push rod (1) and housing (15).
16. Install new o-rings (21) on plugs (27).
17. Install new balls (25), new springs (26) and plugs (27) into housing (15). **See Section B-B Detail.**
Torque plugs (27) 7.4-8.5 N·m (65-75 lb·in).