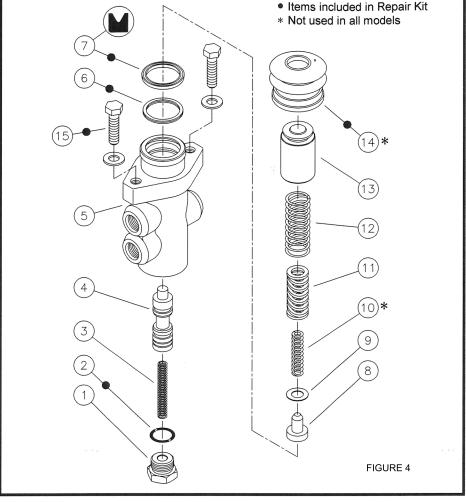


SERVICE INSTRUCTIONS

For Brake Valves: 592201



DISASSEMBLY (Refer to Figures 1 and 4)

NOTE

Housing (5) and the spool (4) are manufactured as a matched set. This set (Housing & Spool) should not be intermixed with other parts.

- Remove boot (14) from piston (13) and housing (5). Not all models use boot (14).
- Remove piston (13), springs (12, 11 & 10), shim(s) (9) and retainer assembly (8) from housing (5). Not all models use spring (10). NOTE:
 Be aware of the number of shim(s) being removed from housing.
- Carefully remove cup (7) and seal (6) from housing (5) bore. NOTE: Be careful not to scratch or mar housing bore.
- Remove end plug (1) and spring (3) from housing (5). Remove o-ring (2) from end plug (1).
- Carefully remove spool (4) from end plug (1) end of housing (5).
 NOTE: Be careful not to damage spool or housing bore.

ASSEMBLY

(Refer to Figures 1 and 4)

LUBRICATE ALL RUBBER COMPONENTS FROM REPAIR KIT WITH CLEAN TYPE FLUID USED IN THE SYSTEM.

- Clean all parts thoroughly before assembling.
- Lubricate spool (4) with clean system fluid and carefully slide into plug (1) end of housing (5) bore.
 Note direction of spool (4). NOTE: Spool must slide freely into bore. If either part is damaged, a new valve assembly may be required.
- 3. Install new o-ring (2) on end plug (1).
- Install spring (3) and end plug (1) into housing (5). Torque 47.5-54.2 N·m (35-40 lb·ft).
- 5. Carefully install new cup (7) and new seal (6) into housing (5) bore.

- Note direction and order of cup and seal. **NOTE: Be careful not to scratch or mar housing bore.**
- Install springs (10, 11 & 12), shim(s) (9) and retainer assembly (8) in piston (13). Not all models use spring (10). Be sure to install the same number of shim(s) as were removed.
- 7. Carefully install piston (13) assembly into housing (5) bore.
- 8. Install new boot (14) on housing (5) and piston (13).
- When reinstalling pedal actuated valve use new hex cap screws (15), 5/16-18UNC SAE grade 8. Torque cap screws 24.4-29.8 N·m (18-22 lb·ft). NOTE: Not all repair kits include new cap screws (15).

NOTE

After service, the valve must develop pressure of 69.0 +/- 3.5 bar (1000 +/- 50 PSI). Shim(s) (9) are used to obtain the correct pressure setting. Contact Allied Systems service dept if brake pressure setting is not able to be obtained.