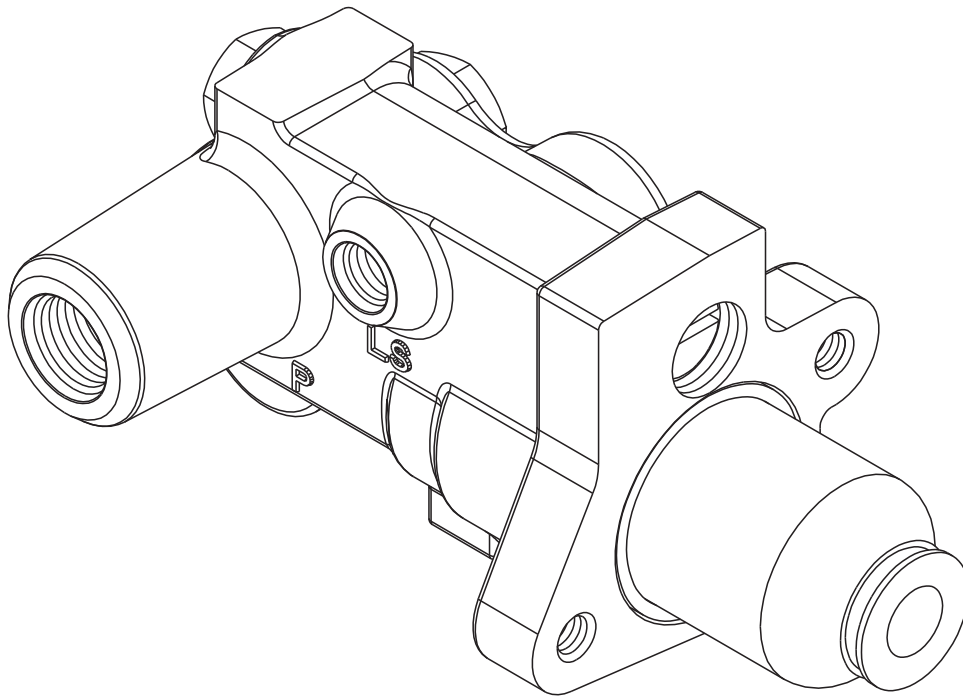


FULL POWER HYDRAULIC POWER BRAKE VALVE

Service Instructions

TABLE 1 (Specifications)

MICO Part Number	Customer Part Number	Brake Port Pressure		Accumulator High Limit (cut out)		Accumulator Low Limit (cut in)	
		bar	(PSI)	bar	(PSI)	bar	(PSI)
06-460-966	200-4333	41.4 ± 3.4	(600 ± 50)	155.1 ± 3.4	(2250 ± 50)	124.1 ± 3.4	(1800 ± 50)
06-460-968	200-4399	41.4 ± 3.4	(600 ± 50)	172.4 ± 3.4	(2500 ± 50)	131.0 ± 3.4	(1900 ± 50)
06-460-970	501025D1	41.4 ± 3.4	(600 ± 50)	172.4 ± 3.4	(2500 ± 50)	131.0 ± 3.4	(1900 ± 50)
06-460-972	505656D1	41.4 ± 3.4	(600 ± 50)	172.4 ± 3.4	(2500 ± 50)	131.0 ± 3.4	(1900 ± 50)



WARNING

Be sure system energy is relieved from accumulator charging valve before removing from machine. See machine operating instructions for procedures to relieve system energy.

NOTE

To avoid damage to internal components and/or housing bore, follow disassembly and assembly procedures in the sequence listed.

DISASSEMBLY

(Refer to Figure 1)

1. Remove ring (22) and boot (21) from housing (11).
2. Remove piston (20), shim(s) (19) and spring (18) from housing (11). Note the number of shim(s) removed for reassembly purposes.
3. Remove o-ring (17). Depress retainer (15) and remove retaining ring (16). **NOTE: Be careful not to damage retainer (15) or housing bore.**
4. Remove retainer (15), plunger (14) and spring (12) from housing (11). Remove cup (13) from plunger (14). Note direction of cup (13). **NOTE: Be careful not to damage plunger (14).**
5. Remove plug (1) from housing (11).
6. Remove washer (5), sleeve (6), spring (7) and guide (8) from housing bore. **NOTE: Earlier models did not use sleeve (6).**
7. Remove cup (4), back-up ring (3) and o-ring (2) from plug (1).
8. Remove valve assembly (9) from housing bore.
9. Remove o-ring (10) from valve assembly (9).
10. BEFORE moving screw (24), ACCURATELY MEASURE ITS DEPTH from the end of housing and record for reassembly purposes. Remove plug (24) from housing (11). Remove o-ring (25) from plug (24).
11. Remove nylon pin (23) from plug (24) using a drive pin punch. Be careful not to damage threads.
12. Remove spring (26), seat (27) and ball (28) from housing bore.
13. **Later models:** Loosen nut (37) and remove adjusting screw (36) from housing (11). Remove o-ring (35) from adjusting screw (36).
Earlier models: Remove plug (36) from housing (11). Remove o-ring (35) from plug (36).
14. Remove spring (34), stop (33) and ball (28) from housing bore.
15. Using a 6.35 mm (0.25 in) diameter wooden or plastic dowel, carefully push insert (31) and spool (32) from housing bore. **NOTE: Be careful not to scratch or mar valve seats on insert (31).**
16. Remove spool (32) from insert (31). Remove o-rings (29 & 30) from insert (31).
17. Loosen nut (38) and remove screw (39) from housing (11). Remove o-ring (40) from screw (39).
18. Remove spring (41), poppet (42), seat (43), o-ring (44), washer (45) and filter or washer (46) from housing bore. **NOTE: Earlier models used a filter in this bore next to washer (45). Remove and discard this filter as it is no longer used.**

ASSEMBLY

(Refer to Figure 1)

WASH ALL PARTS WITH CLEAN SOLVENT AND ALLOW TO DRY. INSPECT PARTS FOR DAMAGE OR EXCESSIVE WEAR AND CONTACT OEM FOR REPLACEMENT AS NECESSARY. LUBRICATE ALL RUBBER PARTS WITH CLEAN SYSTEM FLUID. BE SURE ENTIRE ASSEMBLY PROCEDURE IS DONE USING CONTAMINATION FREE METHODS.

1. Install new washer (46), washer (45), new o-ring (44), seat (43), new poppet (42) and spring (41) in housing (11). Be sure o-ring properly seats against washer (45). **NOTE: Earlier models used a filter in this bore. Install washer (46) found in repair kit in place of filter. Earlier models will now have two washers (46) and no filter.**
2. Install new o-ring (40) on screw (39) and install in housing (11). Torque screw (39) 24.4-29.8 N·m (18-22 lb·ft).
3. Install nut (38) on screw (39). Torque 43.4-51.5 N·m (32-38 lb·ft).
4. Install new o-rings (29 & 30) on insert (31).
5. Install spool (32) into insert (31). Note direction of insert (31) and spool (32). Carefully install insert (31) into housing (11).
6. Install ball (28) in housing bore.
7. Put a small amount of graphite based grease on end of spring (34) to hold stop (33) in place. Install stop and spring in housing bore. Note direction of stop and spring.
8. **Later models:** Install new o-ring (35) on adjusting screw (36) and install in housing. Torque adjusting screw (36) 24.4-29.8 N·m (18-22 lb·ft). Install nut (37) on adjusting screw (36). Torque nut (37) 43.4-51.5 N·m (32-38 lb·ft).
Earlier models: Install new o-ring (35) on plug (36) and install in housing. Torque plug (36) 47.5-54.2 N·m (35-40 lb·ft).
9. Position housing so plug (24) housing bore faces up. Drop ball (28), seat (27) and spring (26) into housing.
10. Insert new nylon pin (23) into plug (24). Be sure nylon pin is properly aligned and evenly driven into screw. Do not damage threads.
11. Install new o-ring (25) on plug (24). Thread plug (24) into housing TO THE DEPTH RECORDED during disassembly.
12. Install new o-ring (10) on valve assembly (9). Install valve assembly (9) into housing (11). Note direction of valve assembly.
13. Install new o-ring (2) on plug (1). Insert new back-up ring (3) and new cup (4) in plug (1). Note order and
14. Install guide (8), spring (7), sleeve (6) and washer (5) in plug (1). **NOTE: Earlier models did not use sleeve (6). For models that use sleeve (6), be sure it seats properly in housing on brass seat of valve assembly (9) to avoid damage to sleeve (6).**
15. Install plug assembly in housing (11). Torque 54.2-67.8 N·m (40-50 lb·ft).
16. Install new cup (13) on plunger (14). Note direction of cup. Install spring (12) and plunger (14) in housing (11). Note direction of plunger.
17. Install retainer (15) in housing bore.

● Items included in Repair Kit

* Not used in all models

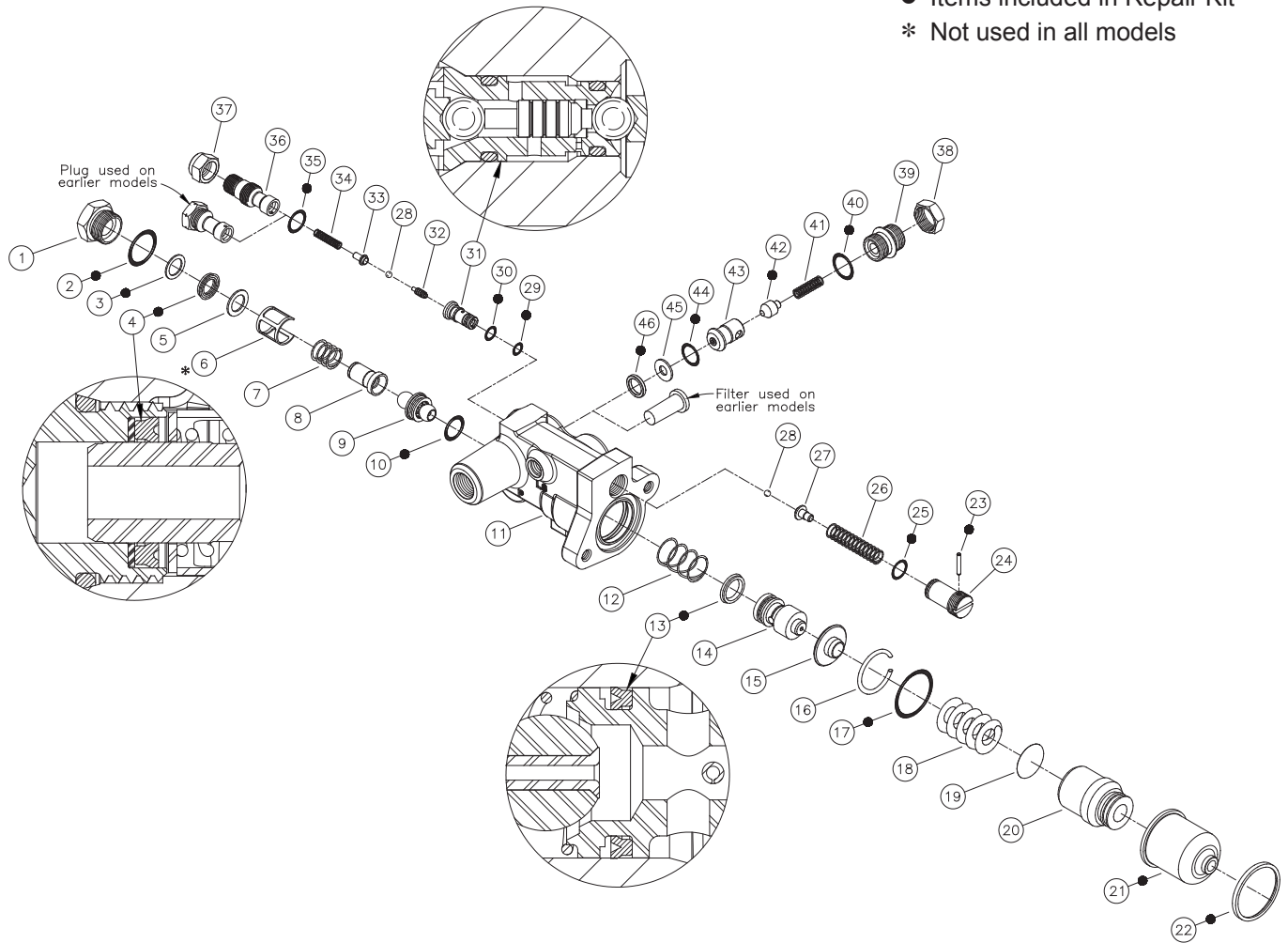


FIGURE 1

18. Install retaining ring (16) in housing bore.
19. Install new o-ring (17), spring (18), shim(s) (19) and piston (20) in housing bore. Be sure to install the same number of shim(s) as removed during disassembly.
20. Install new boot (21) and new ring (22) on housing (11).

specifications (see TABLE 1) and adjust screw (24) until the high limit setting is met. This pressure can be checked correctly only if after each adjustment of screw (24) the accumulator pressure is reduced below the low limit setting and the system recharges the accumulator pressure to its high limit. Repeat process until high pressure setting is accurately adjusted.

ACCUMULATOR CHARGING VALVE ADJUSTMENT

(Refer to Figure 1)

1. See machine servicing instructions to properly reinstall brake valve. Tee an accurate pressure gauge to an accumulator line.
2. Start pump and allow approximately one minute for charging to start (pressure in gauge will read accumulator precharge plus). If valve does not begin to charge, turn screw (24) in, stopping when gauge shows an increase in pressure. Check the high limit

▲ WARNING
Do not exceed the high limit pressure setting indicated in TABLE 1 or system damage or failure may occur.

3. Bleed brake lines and verify brake line pressure according to the machine operating instructions.