

PRESSURE MODULATING VALVE



Service Instructions

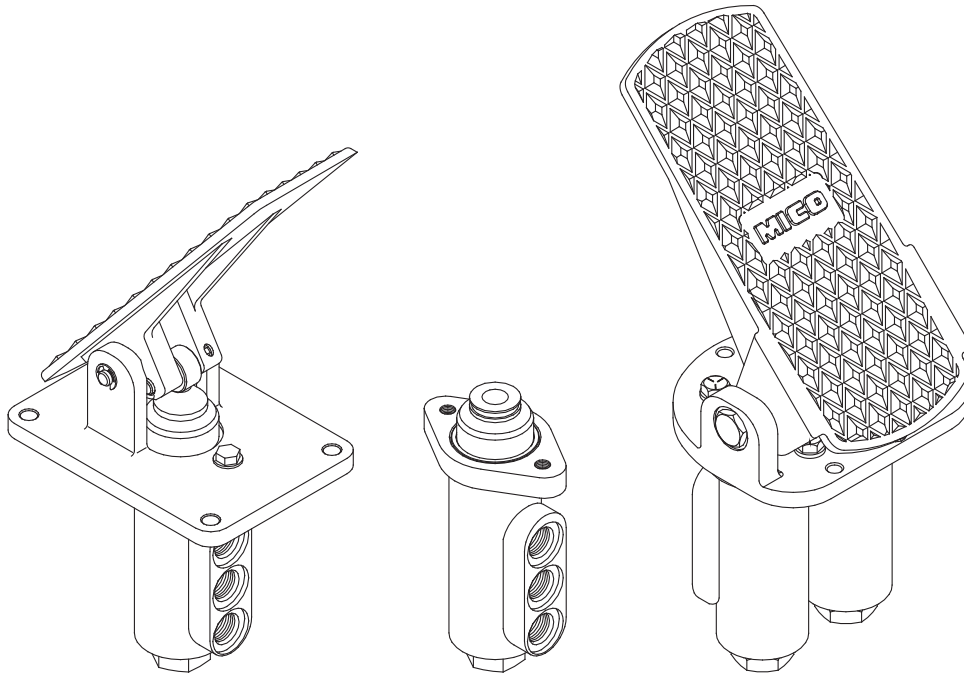
TABLE 1 (Specifications)

Model Number	Notes Symbol	Repair Kit Number	Brake Pressure Setting		Model Number	Notes Symbol	Repair Kit Number	Brake Pressure Setting	
			bar	(PSI)				bar	(PSI)
06-460-318	A	06-400-088	206.8 ± 3.5	(3000 ± 50)	06-460-424R	C, E	06-400-088	69.0 ± 5.2	(1000 ± 75)
06-460-346	A	06-400-109	137.9 ± 3.5	(2000 ± 50)	06-462-348	D	06-400-121	69.0 ± 5.2	(1000 ± 75)
06-460-366	A	06-400-109	82.7 ± 3.5	(1200 ± 50)	06-462-350	D	06-400-121	103.4 ± 1.7	(1500 ± 25)
06-460-370	B	06-400-088	82.7 ± 3.5	(1200 ± 50)	06-462-350R	D, E	06-400-121	103.4 ± 1.7	(1500 ± 75)
06-460-380	C	06-400-088	103.4 ± 3.5	(1500 ± 50)	06-462-354	D	06-400-121	124.1 ± 1.7	(1800 ± 25)
06-460-380R	C, E	06-400-088	103.4 ± 3.5	(1500 ± 50)	06-462-356	D	06-400-121	84.5 ± 1.7	(1225 ± 25)
06-460-382	C	06-400-088	206.8 ± 3.5	(3000 ± 50)	06-462-360	D	06-400-121	151.7 ± 3.5	(2200 ± 50)
06-460-424	C	06-400-088	69.0 ± 5.2	(1000 ± 75)	06-462-360R	D, E	06-400-121	151.7 ± 3.5	(2200 ± 50)

Notes: A - push rod actuated (valve only)
 B - lever actuated
 C - pedal actuated

D - two valves, actuated by one pedal
 E - "R" indicates valve(s) rotated 180°

NOTE: If your product number is not listed, contact ZF Off-Highway Solutions Minnesota Inc. for information.



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ZF Off-Highway Solutions Minnesota Inc.

1911 Lee Boulevard / North Mankato, MN U.S.A. 56003

Tel: +1 507 625 6426 **Fax:** +1 507 625 3212

NOTE

This literature services various models in the valve series. The components shown in Figure 1 may appear different than what is found in your valve.

DISASSEMBLY

(Refer to Figure 1)

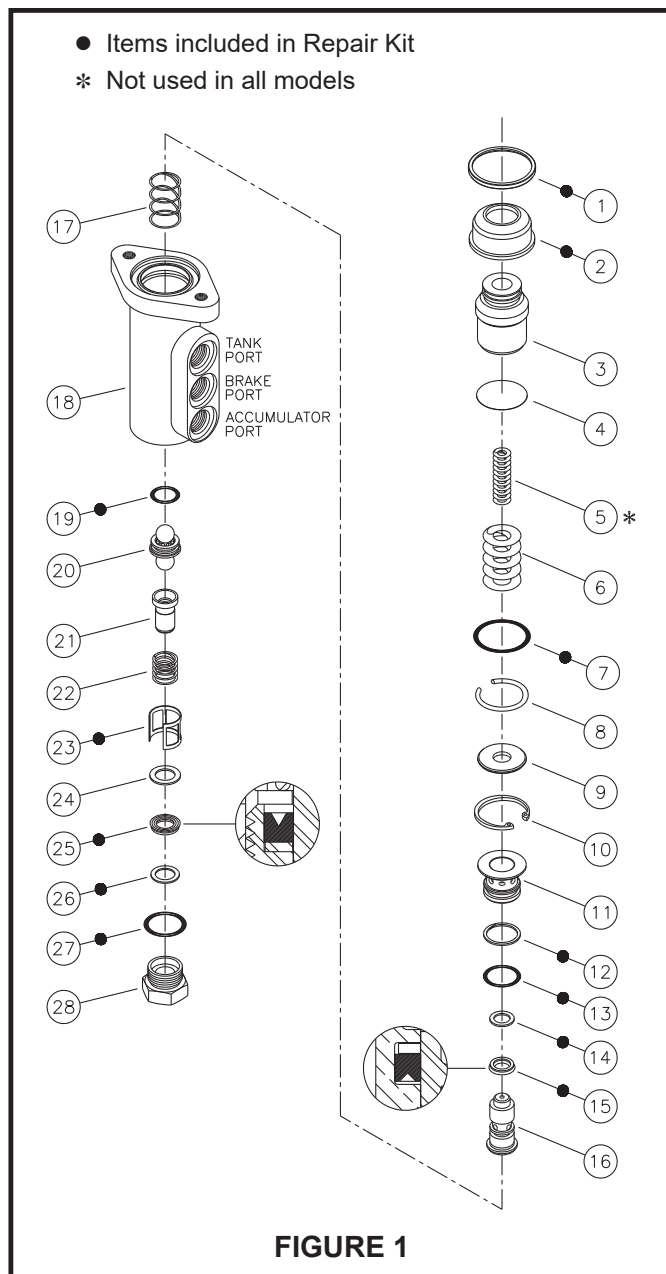
1. Remove valve(s) from pedal base or lever base.
2. Remove ring (1) and boot (2) from housing (18).
3. Remove piston (3), shim(s) (4), and springs (5 & 6) from housing (18). Note the number of shim(s) being removed for reassembly purposes. **NOTE: Not all models use spring (5).**
4. Remove o-ring (7) from housing (18). **NOTE: Be careful not to scratch or mar housing bore.**
5. Remove retaining ring (8) from housing (18). **NOTE: Be careful not to scratch or mar housing bore.**
6. Remove retainer (9) from housing (18).
7. Remove retaining ring (10) from housing (18).
8. Remove piston and sleeve assembly (16 & 11) from housing bore. Separate piston (16) and sleeve (11).
9. Remove o-ring (13) and back-up ring (12) from sleeve (11).
10. Remove spring (17) from piston (16).
11. Remove back-up ring (14) and cup (15) from piston (16).
12. Remove plug (28) from housing (18).
13. Remove o-ring (27), back-up ring (26), and cup (25) from plug (28).
14. Remove washer (24), sleeve (23), spring (22), and guide (21) from housing (18).
15. Remove valve assembly (20) from housing (18).
16. Remove o-ring (19) from valve assembly (20).

ASSEMBLY

(Refer to Figure 1)

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

1. Clean all parts thoroughly before assembling.
2. Install new o-ring (19) on valve assembly (20). Install valve assembly (20) in housing (18). Note direction of valve assembly (20).
3. Install new sleeve (23) in housing (18).
4. Install new o-ring (27) on plug (28).
5. Install new back-up ring (26) and new cup (25) in plug (28). Note direction and order of back-up ring (26) and cup (25).
6. Install guide (21), spring (22), and washer (24) in plug (28).
7. Install plug (28) in housing (18) and torque 47.5-54.2 N·m (35-40 lb·ft).
8. Install new cup (15) and new back-up ring (14) on piston (16).
9. Install new back-up ring (12) and new o-ring (13) on sleeve (11).
10. Install piston (16) into sleeve (11). Note direction of piston (16) and sleeve (11).
11. Install spring (17) on piston (16).
12. Install piston/sleeve assembly (16 & 11) in housing (18). Note direction piston/sleeve assembly.
13. Install retaining ring (10) in housing (18).
14. Install retainer (9) in housing (18).
15. Install retaining ring (8) in housing (18). **NOTE: Be careful not to scratch or mar housing bore.**
16. Install new o-ring (7) in housing (18) bore.



17. Install springs (5 & 6), shims (4), and piston (3) in housing (18). **NOTE: Not all models use spring (5). Be sure to install the same number of shim(s) as were removed.**
18. Install new boot (2) and new ring (1) on housing (18).
19. Reattach valve(s) to pedal base or lever base.

NOTE

After service, the valve must develop the pressure indicated in the specifications, TABLE 1. Shim(s) (4) may be added or removed to obtain the correct pressure setting.