

# PEDAL ASSEMBLY Modulating Valves



## Service Instructions

### PEDAL DISASSEMBLY

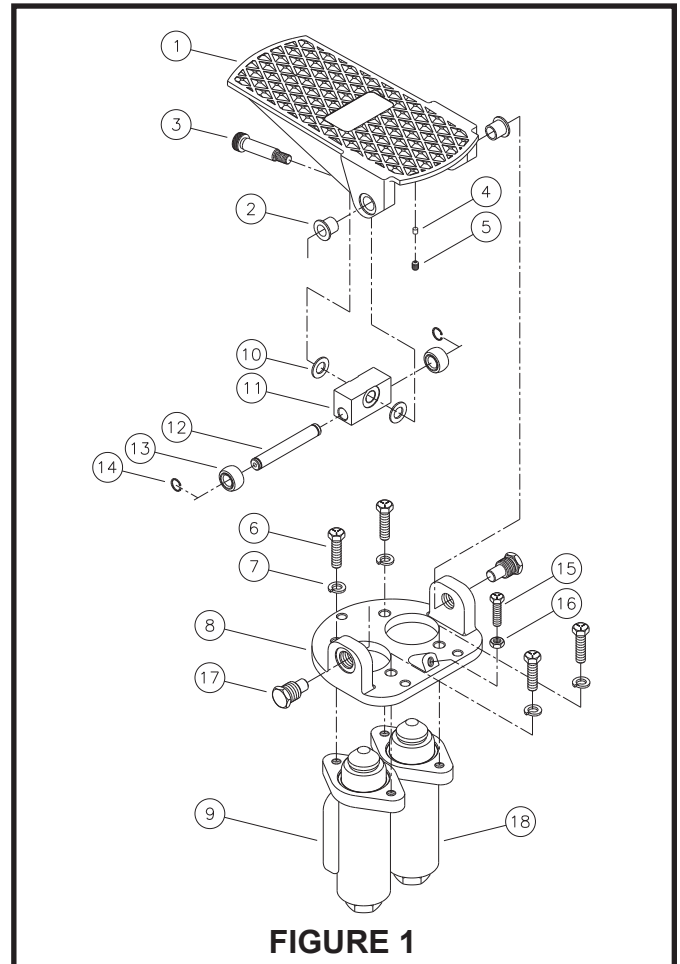
(Refer to Figure 1)

1. Remove cap screws (6) and washers (7) and separate pedal assembly from valves.
2. Separate pedal (1) and base (8) by removing both studs (17) from base (8).
3. Thoroughly inspect pedal assembly for worn or damaged parts. Pay particular attention to bushings (2). If further disassembly is necessary continue with disassembly procedures.
4. Loosen set screw (5) and remove shoulder bolt (3). This will free trunnion (11) assembly and washers (10).
5. Remove retaining rings (14) and rollers (13) from pin (12). Remove pin (12) from trunnion (11).
6. Using a suitable arbor, carefully remove both bushings (2).
7. It is unnecessary to loosen or remove cap screw (15) or jam nut (16).

### PEDAL ASSEMBLY

(Refer to Figure 1)

1. Coat bushing (2), shoulder bolt (3), washers (10), and pin (12) with a good multi-purpose grease.
2. Insert pin (12) into trunnion (11). Attach rollers (13) and retaining rings (14) to both ends of pin (12).
3. Attach trunnion assembly (11) and washers (10) to pedal (1) using shoulder bolt (3). Torque shoulder bolt 12.2-16.3 N·m (9-12 lb·ft). **NOTE: Shoulder bolt (3) must not be over tightened to allow for free movement of trunnion (11).**
4. Torque set screw (5) locking shoulder bolt (3) in place 1.7-2.3 N·m (15-20 lb-in).
5. Using a suitable arbor, carefully install new bushings (2).
6. Apply Loctite 242 or equivalent to threads of studs (17).
7. Align pedal (1) between ears of base (8) and install studs (17). Torque 40.7-67.8 N·m (30-50 ft·lb).
8. Reassemble pedal assembly and valves using cap screws (6) and washers (7). Torque cap screws 29.8-36.6 N·m (22-27 ft·lb).



**FIGURE 1**

**TABLE 1** (Specifications)

Model Number	Valve Assembly Repair Kit Number	Brake System Pressure		Approximate Pedal Effort	
		bar	(PSI)	N	(lb)
06-460-406	06-400-124	32.7	(1200)	289.1	(65)
06-460-412	06-400-124	93.1	(1350)	289.1	(65)
06-460-416	06-400-146	103.4	(1500)	333.6	(75)
06-462-348	06-400-121	69.0	(1000)	244.7	(55)
06-462-350	06-400-121	103.4	(1500)	333.6	(75)
06-462-354	06-400-121	124.0	(1800)	400.4	(90)
06-462-356	06-400-121	84.5	(1225)	289.1	(65)
06-462-360	06-400-121	151.7	(2200)	311.4	(70)
06-462-364	06-400-122	22.4	(325)	400.4	(90)

**NOTES:** Brake system displacement controlling factors are accumulator capacity, pressure, and brake response time required. Maximum input pressure rating is 206.8 bar (3000 PSI).

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

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