

PEDAL ACTUATED (Modulating Valves)



Service Instructions

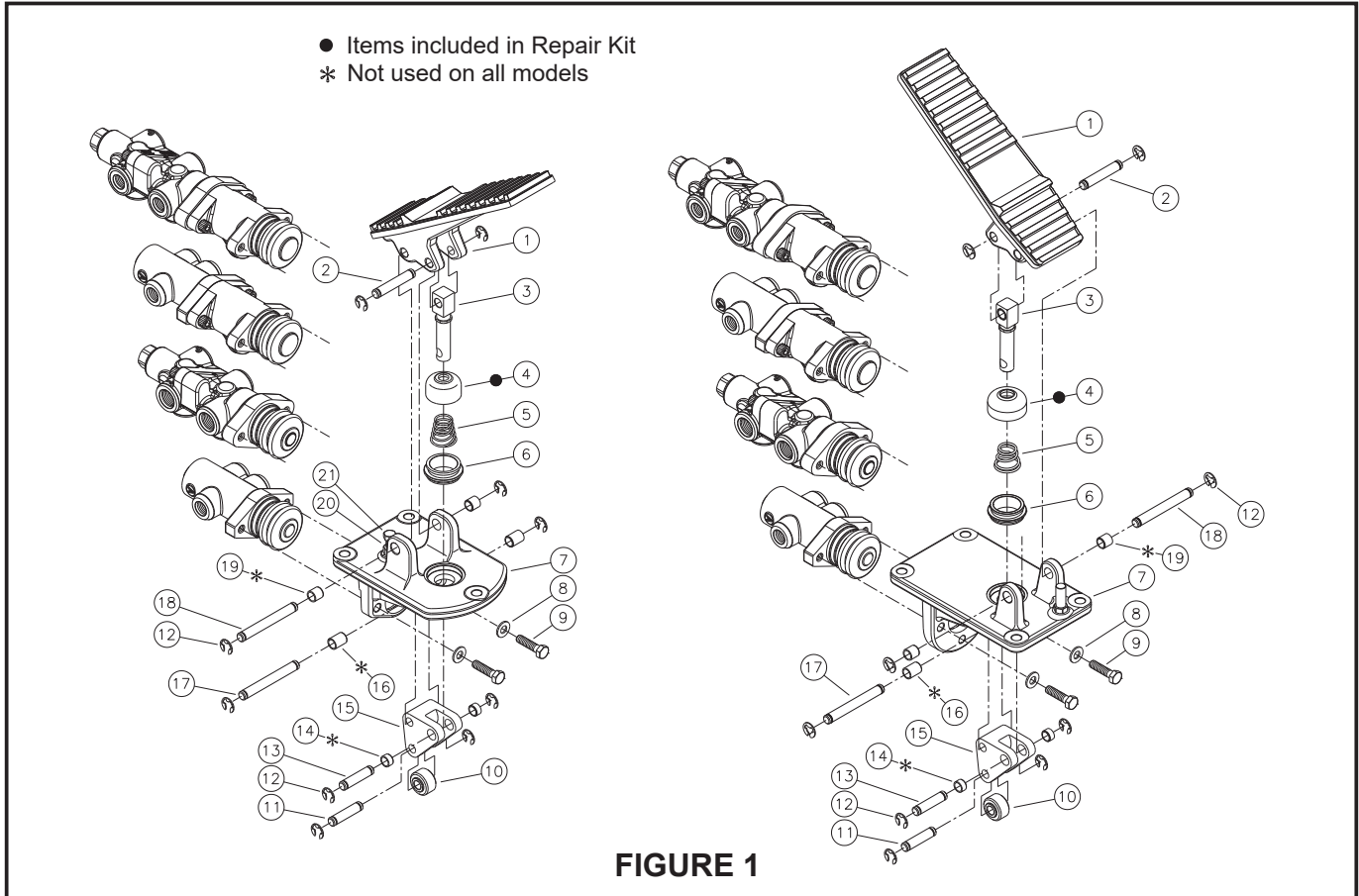


FIGURE 1

PEDAL DISASSEMBLY

(Refer to Figure 1)

1. Separate pedal (1) from base (7) by removing one e-ring (12) from each pin (13 & 18) and sliding pin (13) from clevis (15) and pin (18) from base (7).
2. Remove boot (4) and spring (5) from base (7).
3. Inspect pin (2) and push rod (3) to be sure the push rod is in good working order and is moving freely.
4. Inspect pins (11 & 17), clevis (15), and cam (10) to be sure the clevis and cam are in good working order and are moving freely.
5. Any further disassembly is unnecessary unless there is damage.
6. Separate the valve assembly from base (7) by removing cap screws (9) and washers (8).

PEDAL ASSEMBLY

(Refer to Figure 1)

NOTE
Before assembly, lubricate pins (13 & 18) with good quality polymer base moly grease.

1. Install spring (5) and new boot (4) on base (7).
2. Align push rod (3) with the hole in new boot (4). Align pedal (1) between the ears of base (7).
3. Insert pin (18) through pedal (1) and base (7). Install e-ring (12). Slide new boot (4) over retainer (6) and over push rod (3).
4. Insert pin (13) through base (7) and clevis (15). Install e-ring (12).
5. Attach valve assembly to base (7) using cap screws (9) and washers (8). Torque cap screws 24.4-29.8 N·m (18-22 lb·ft).

NOTE

If cap screw (21) or nut (20) are loosened or removed, they must be properly adjusted. With all parts assembled, adjust screw (21) to allow the valve spool to fully release. After adjustment is made torque nut (20) 24.4-29.8 N·m (18-22 lb·ft). Some models use a one piece stop in place of screw (21) and nut (20).

PEDAL DISASSEMBLY

(Refer to Figures 2 and 3)

1. Separate pedal (1) from base (7) by removing one e-ring (12) from each pin (13 & 17) and sliding pin (13) from clevis (15) and pin (17) from base (7).
2. Remove boot (4) and spring (5) from base (7).
3. Inspect pin (2) and push rod (3) to be sure the push rod is in good working order and is moving freely.
4. Inspect pins (11 & 18), clevis (15), and cam (10) to be sure the clevis and cam are in good working order and are moving freely.
5. Any further disassembly is unnecessary unless there is damage.
6. Separate the valve assembly from base (7) by removing cap screws (9) and washers (8).

PEDAL ASSEMBLY

(Refer to Figures 2 and 3)

NOTE

Before assembly, lubricate pins (13 & 18) with good quality polymer base moly grease.

1. Install spring (5) and new boot (4) on base (7).
2. Align push rod (3) with the hole in new boot (4). Align pedal (1) between ears of base (7).
3. Insert pin (17) through pedal (1) and base (7). Slide new boot (4) over retainer (6) and over push rod (3).
4. Insert pin (13) through base (7) and clevis (15). Install e-ring (12).
5. Attach valve assembly to base (7) using cap screws (9) and washers (8). Torque cap screws 24.4-29.8 N·m (18-22 lb·ft).

NOTE

If cap screw (21) or nut (20) are loosened or removed, they must be properly adjusted. With all parts assembled, adjust screw (21) to allow the valve spool to fully release. After adjustment is made torque nut (20) 24.4-29.8 N·m (18-22 lb·ft). Some models use a one piece stop in place of screw (21) and nut (20).

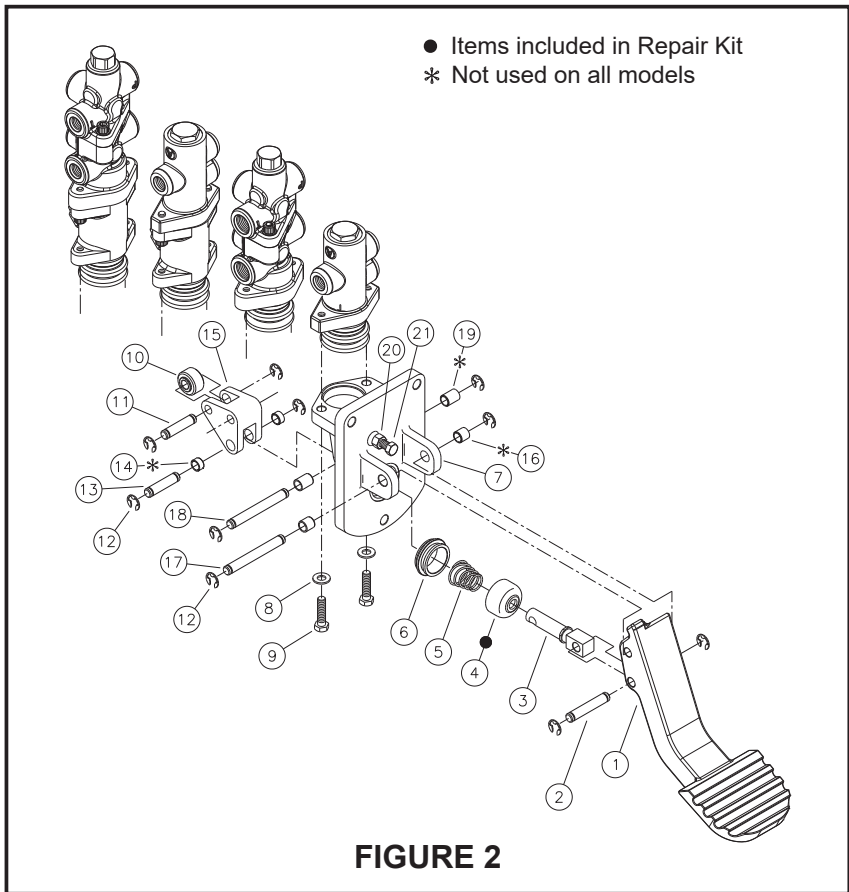


FIGURE 2

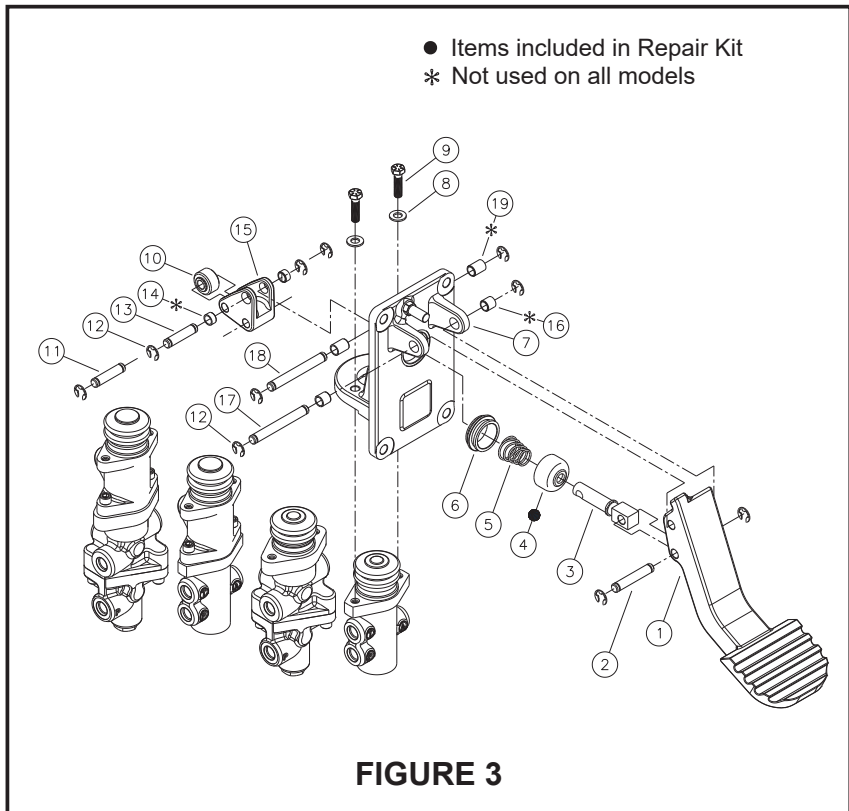


FIGURE 3

PEDAL DISASSEMBLY

(Refer to Figure 4)

1. Separate pedal (1) from base (7) by removing cap screw (22) and removing one e-ring (12) from each pin (13 & 18) and sliding pin (13) from clevis (15) and pin (18) from base (7).
2. Remove boot (4) and spring (5) from base (7).
3. Inspect pin (2) and push rod (3) to be sure the push rod is in good working order and is moving freely.
4. Inspect pins (11 & 17), clevis (15), and cam (10) to be sure the clevis and cam are in good working order and are moving freely.
5. Any further disassembly is unnecessary unless there is damage.
6. Separate the valve assembly from base (7) by removing cap screws (9) and washers (8).

PEDAL ASSEMBLY

(Refer to Figure 4)

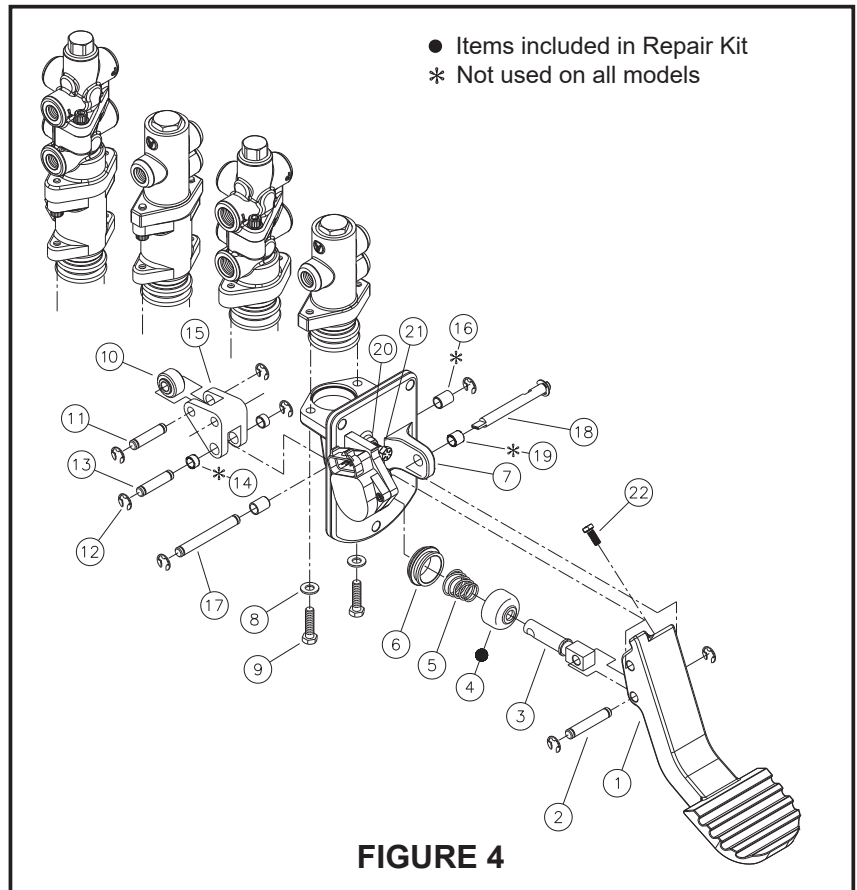
NOTE

Before assembly, lubricate pins (13 & 18) with good quality polymer base moly grease.

1. Install spring (5) and new boot (4) on base (7).
2. Align push rod (3) with the hole in new boot (4). Align pedal (1) between ears of base (7).
3. Insert pin (18) through pedal (1) and base (7). Apply Loctite 242 to the threads of cap screw (22). Reinstall cap screw (22) and torque 5.7-6.8 N·m (50-60 lb·in) against the flat on pin (18). Slide new boot (4) over retainer (6) and over push rod (3).
4. Insert pin (13) through base (7) and clevis (15). Install e-ring (12).
5. Attach the valve assembly to base (7) using cap screws (9) and washers (8). Torque cap screws 24.4-29.8 N·m (18-22 lb·ft).

NOTE

If cap screw (21) or nut (20) are loosened or removed, they must be properly adjusted. With all parts assembled, adjust screw (21) to allow the valve spool to fully release. After adjustment is made torque nut (20) 24.4-29.8 N·m (18-22 lb·ft). Some models use a one piece stop in place of screw (21) and nut (20).



This publication is not subject to any update service. Information contained in this publication was in effect at the time the publication was approved for printing and is subject to change without notice or liability. ZF Off-Highway Solutions Minnesota Inc. reserves the right to revise the information presented or to discontinue the production of parts described at any time.

