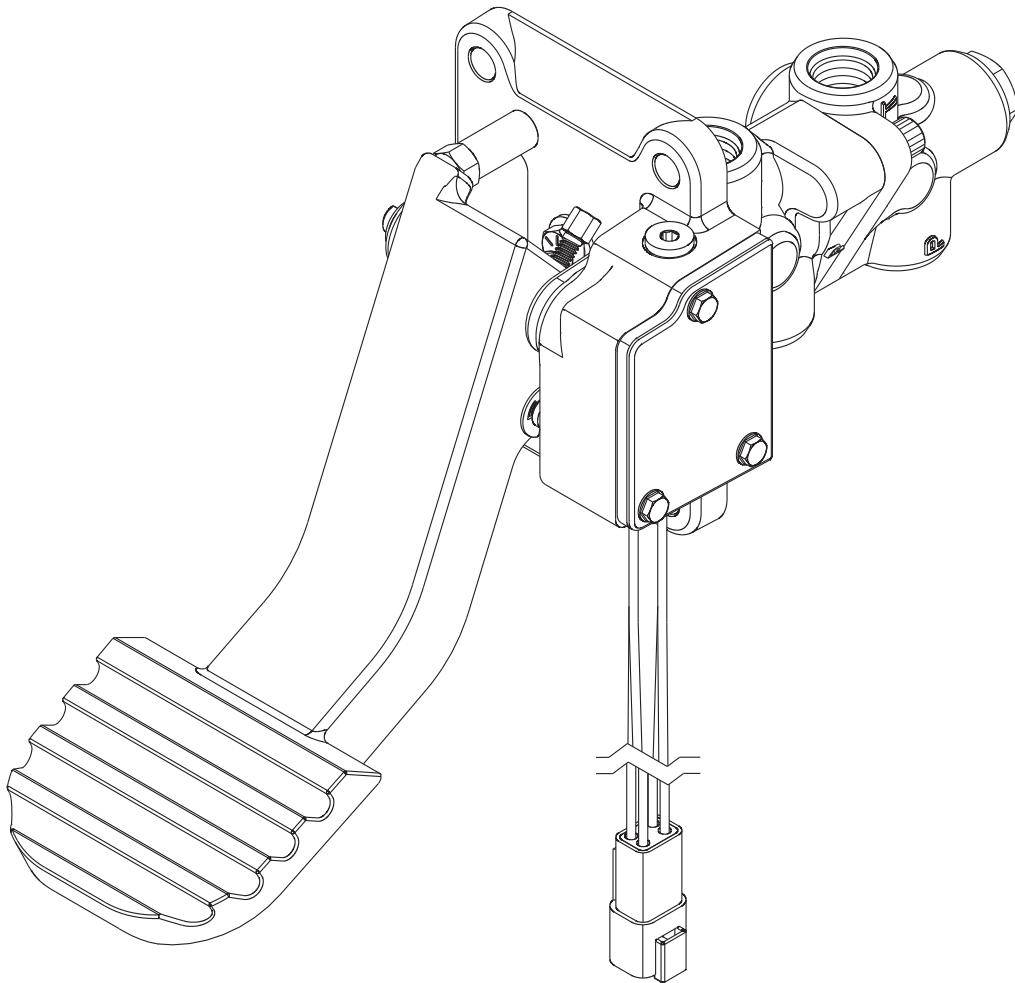


PEDAL ASSEMBLY for Modulating Valves



Switch Replacement Instructions



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DISASSEMBLY

(Refer to Figure 1)

NOTE

Not all components shown in Figure 1 require disassembly to install Switch Replacement Kit.

1. Remove three machine screws (1), cover (2), and seal (3) from base (9).
2. Remove plug (15) from base (9). Remove o-ring (14) from plug (15).
3. Through plug (15) hole in base (9) turn set screw (26) counter-clockwise until set screw (26) no longer contacts switch (7). See Figure 1b.
4. Loosen screw (10), carefully remove shaft assembly (17) while separating pedal assembly (11) from base (9). **NOTE: Spring (22) must be partially compressed while removing shaft assembly (17). See Figure 1b.**
5. Remove cap screws (12) and washers (13). Separate valve assembly (16) from base (9). TO SERVICE VALVE ASSEMBLY (16) REFER TO BRAKE VALVE SERVICE INSTRUCTIONS.
6. Remove two machine screws (4).
7. Remove switch (5) while disconnecting the harness wires (27) from switch (5).
8. Remove spacer (6).
9. Remove switch (7) while disconnecting the harness wires (27) from switch (7).
10. Remove spacer (8).
11. Loosen the screw on the wire harness (27) grommet and remove the wire harness from base (9).
11. Remove set screw (24) and knob (25) from cam (17). See Figure 1b.
12. Inspect the pins and cam on pedal assembly (11) for wear, be sure cam moves freely. See Figure 1a.

ASSEMBLY

(Refer to Figure 1)

1. Install new knob (25) and set screw (24) in cam (17). Tighten set screw 1.1-1.7 N·m (10-15 lb·in). See Figure 1b.
2. Install new wire harness (27) in base (9) and torque grommet screw 1.13-1.70 N·m (10-15 lb·in).
3. Install two machine screws (4) through new switch (5), spacer (6), new switch (7), and spacer (8). While holding switch assembly in your fingers, reattach harness wires to the proper switch pins, see Figure 1c.
4. Apply one drop of Loctite 242 or equivalent to the exposed threads of machine screws (4) and install switch assembly into base (9). Align and torque machine screws (4) 0.11-0.34 N·m (1-3 lb·in).
5. Install valve assembly (16) to base (9) using cap screws (12) and washers (13). Torque cap screws 24.4-29.8 N·m (18-22 lb·ft).
6. Lubricate shaft assembly (17) with a good quality polymer base moly grease. Align holes of base (9) and pedal assembly (11) and carefully install shaft assembly (17). Note direction of shaft assembly (17). Make sure spring (19) on shaft assembly (17) is properly positioned and does not impede seating of shaft assembly. Spring (22) must remain in slot of cam (21) during assembly. **NOTE: Be careful not to damage switches.**
7. Be sure pedal assembly is equally spaced between ears of base (9), moves freely, and is in an upright position. Torque screw (10) 7.0-7.7 N·m (62-68 lb·in).
8. Install new o-ring (14) on plug (15). Plug (15) will be installed in base (9) after adjustment to switches have been made.
9. New seal (3), cover (2), and three machine screws (1) will be installed after adjustment to switches have been made.
10. Adjustment of set screw (26) and possibly cam plate (20) will be necessary for the proper settings of stop lamp switch (5) and transmission neutralizer switch (7). Proceed to page 4 for switch adjustment information.

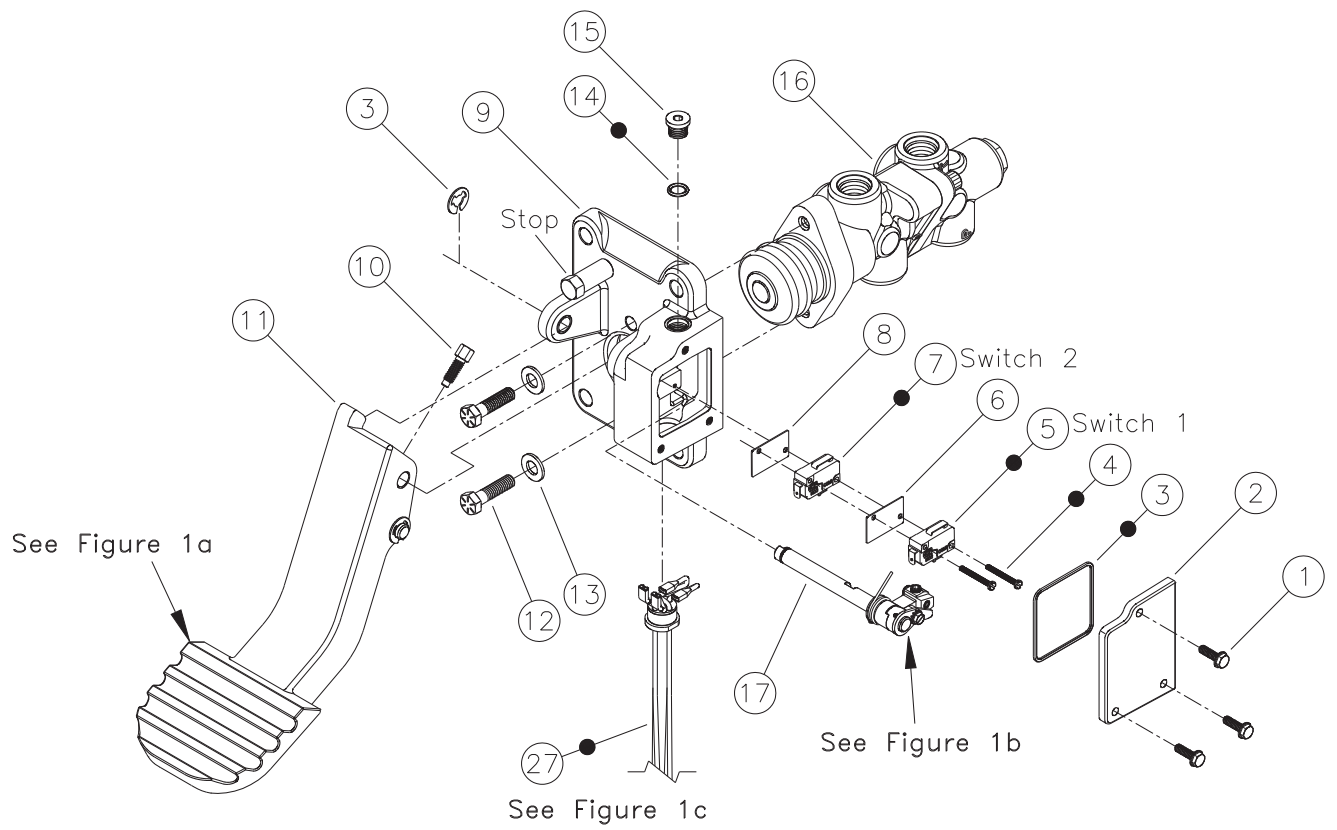


FIGURE 1

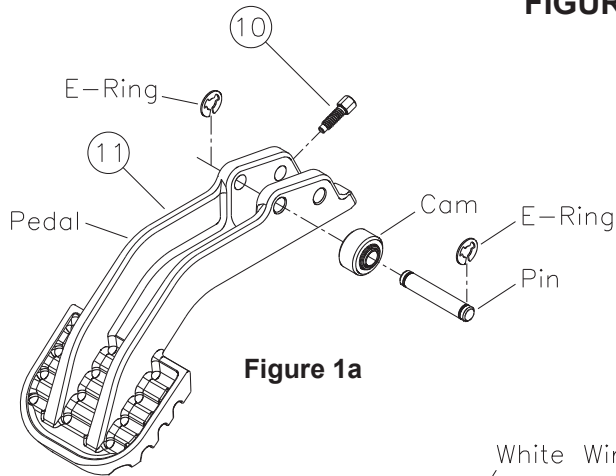


Figure 1a

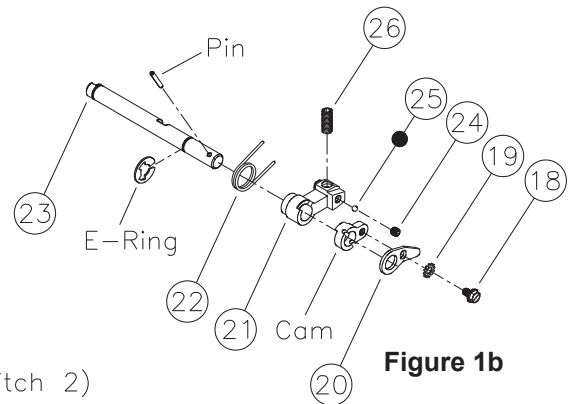


Figure 1b

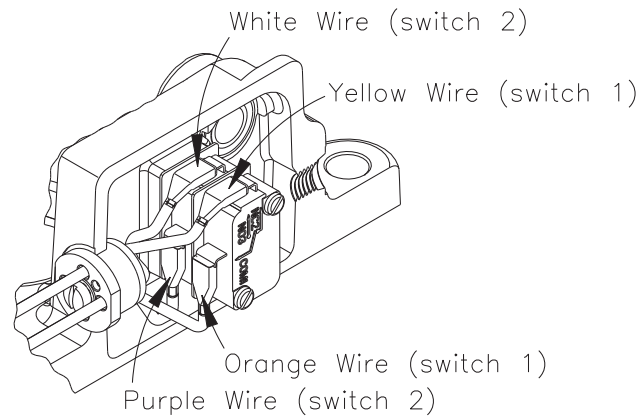


Figure 1c

NOTE

The adjustment of the switches have been correctly preset at the factory. However, the following procedures should be used if the switches required service.

SWITCH ADJUSTMENT

(Refer to Figures 1, 2, and 3)

1. Switch 1 setting adjustment -

Loosen screw (18) and adjust cam plate (20) so that switch 1 contacts close when a 1.19 mm (0.047 in) thick shim is installed between the pedal and pedal stop. An audible “click” should be heard from the switch. Verify that the switch contacts open, “click”, when the 1.19 mm (0.047 inch) thick shim is removed and replaced with a 0.51 mm (0.020 in) thick shim. Repeat until setting is achieved. Torque screw (18) 1.13-1.70 N·m (10-15 lb·in).

2. Switch 2 setting adjustment -

Adjust set screw (26) through plug (15) hole so that switch 2 contacts close when a .19 mm (0.047 inch) thick shim is installed between the pedal and pedal stop. An audible “click” should be heard from the switch. Verify that the switch contacts open, “click”, when the 1.19 mm (0.047 inch) thick shim is removed and replaced with a 0.51 mm (0.020 in) thick shim. Repeat until setting is achieved.

3. Use an ohmmeter to verify switches are functioning properly. Refer to Figure 1c on page 3 for wire contact information.

Voltage: 30 Vdc maximum.

Current: 50 mA maximum resistive load.

4. Install new seal (3), cover (2), and three machine screws (1) on base (9). Apply Loctite 242 or equivalent to threads of machine screws (1). Torque machine screws (1) 1.13-1.70 N·m (10-15 lb·in).

5. Install plug (15) in base (9) and torque 5.7-6.8 N·m (50-60 lb·in).

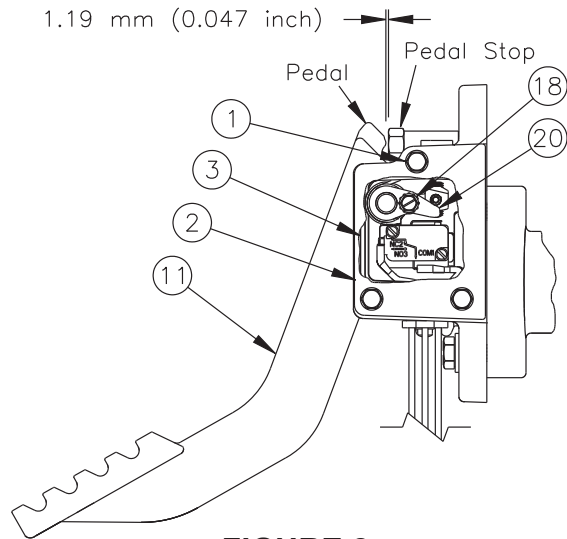


FIGURE 2
(switch 1 adjustment)

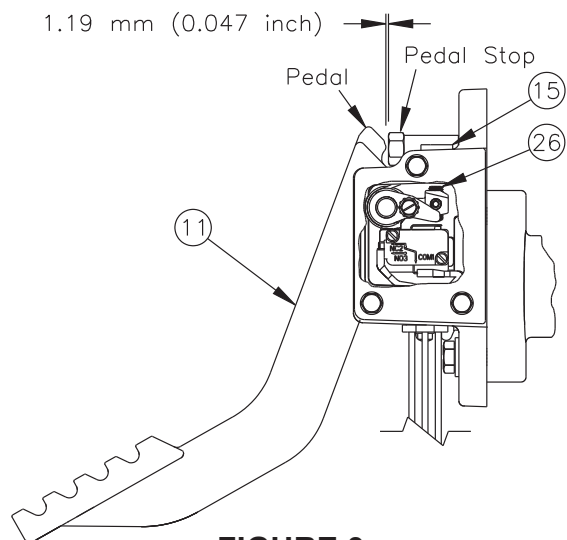


FIGURE 3
(switch 2 adjustment)