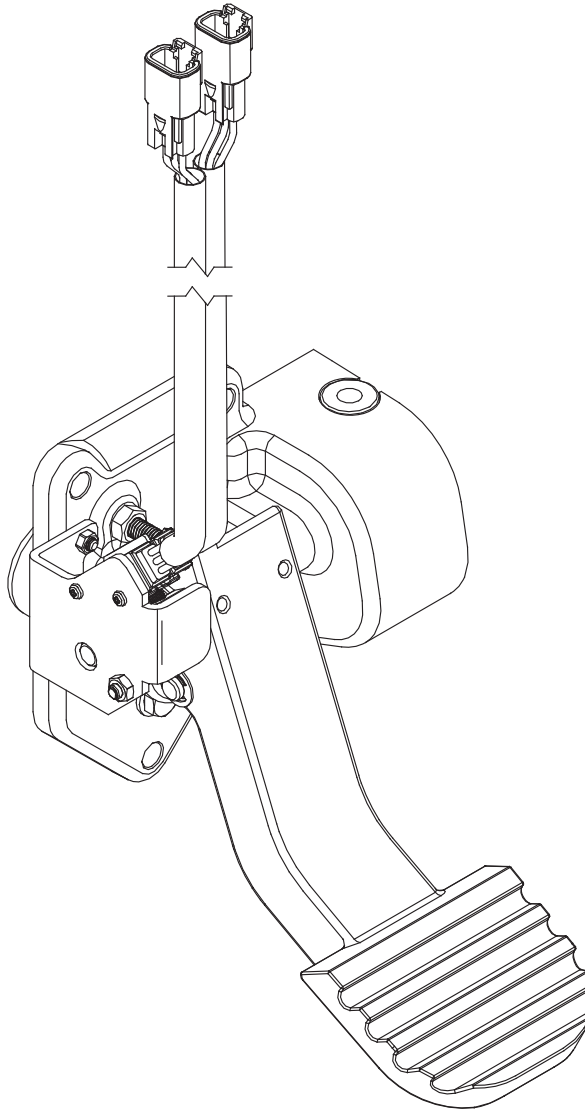


# Pedal Assembly Switch Replacement



## Service Instructions



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.



## DISASSEMBLY

(Refer to Figure 1)

1. Disconnect electrical connections and remove pedal assembly from machine as recommended in the machine service manual.
2. Remove two nuts (7) from two screws (1).
3. Remove two screws (1), two spacers (3), switch assembly (4), spacer (5), and switch assembly (6) from pedal assembly (2).

## ASSEMBLY

(Refer to Figure 1)

1. Note the directional orientation of spacer (5). Assemble two new spacers (3), new switch assembly (4), new spacer (5), and new switch assembly (6) to pedal assembly (2) using two new screws (1). Apply Loctite provided to the end threads of screws (1) and install two new nuts (7). Torque nuts (7) 0.68-1.02 N·m (6.0-9.0 lb·in).
2. Proceed to Switch Adjustment procedures.

## Switch Adjustment

(Refer to Figure 1)

### NOTE

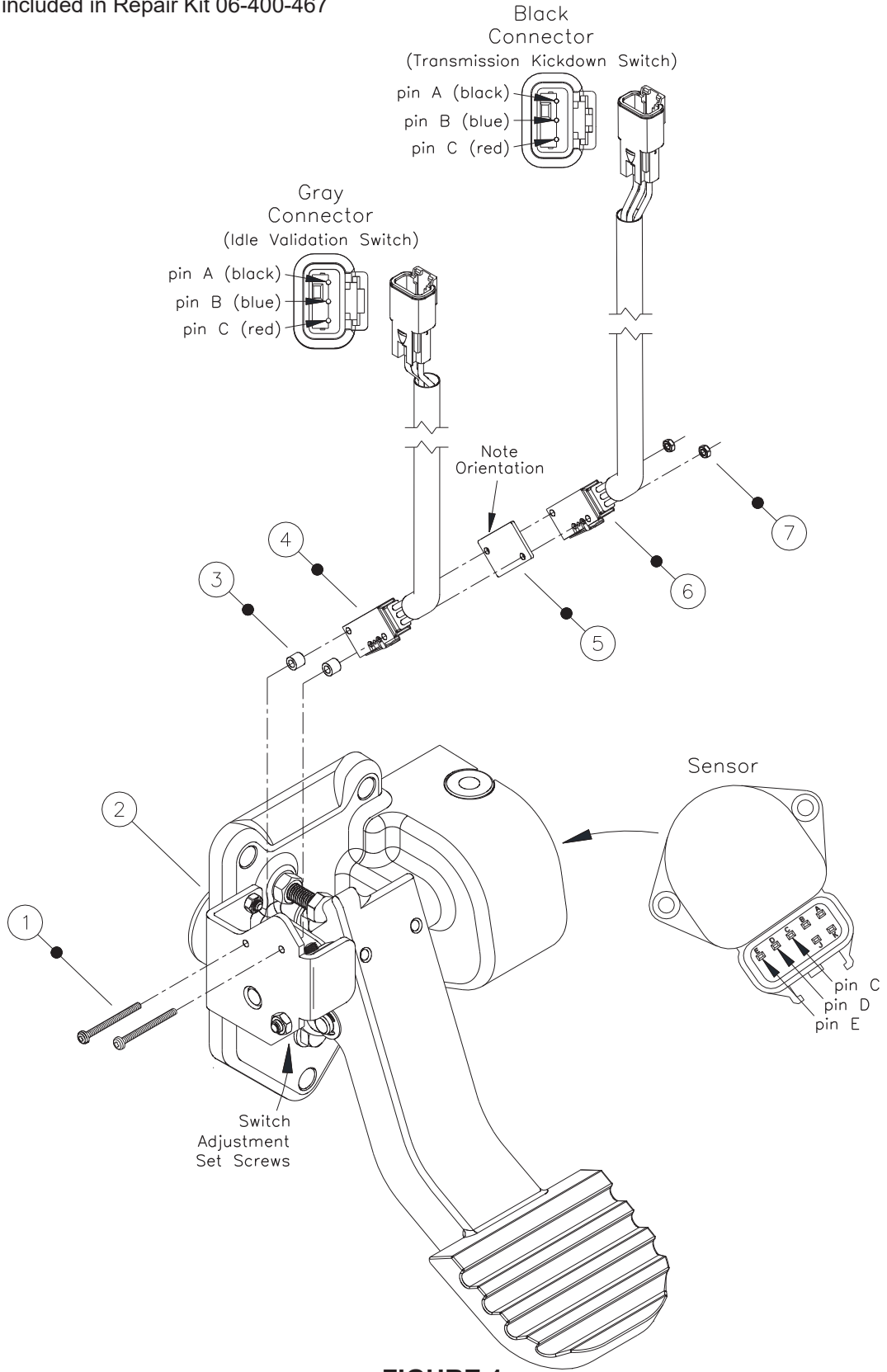
Voltage measurement device must provide at least 200K ohms resistance.

1. Make electrical connection to the sensor where pin C is connected to ground. Connect pin D to 5.04 ± 0.05 Vdc and measure sensor output at pin E.
2. **Idle Validation Switch** (black connector).
  - A. Verify first and adjust as necessary the set screw for the idle validation switch to a position where the continuity between pin C (red wire) and pin A (black wire) changes from open to closed as the pedal is depressed and voltage at pin E of the sensor passes through 1.08 ± 0.05 Vdc. The continuity of the switch is to reset back to open within the same voltage range at pin E of the sensor as the pedal is returned to its normal position.
  - B. Confirm continuity changes between pin B (blue wire) and pin A (black wire) of the idle validation switch from closed to open as the pedal is depressed and back to closed as the pedal is released for the same voltage range at pin E of the sensor.
  - C. Repeat steps A and B at least 3 times. Each time the pedal is cycled the switch points must remain in step A specified range.

### 3. Transmission Kickdown Switch (gray connector)

- D. Verify first and adjust as necessary the set screw for the transmission kickdown switch to a position where the continuity between pin C (red wire) and pin A (black wire) changes from open to closed as the pedal is depressed and voltage at pin E of the sensor passes through 3.76 ± 0.05 Vdc. The continuity of the switch is to reset back to open within the same voltage range at pin E of the sensor as the pedal is returned to its normal position.
  - E. Confirm continuity changes between pin B (blue wire) and pin A (black wire) of the transmission kickdown switch from closed to open as the pedal is depressed and back to closed as the pedal is released for the same voltage range at pin E of the sensor.
  - F. Repeat steps D and E at least 3 times. Each time the pedal is cycled the switch points must remain in step D specified range.
4. Reinstall pedal assembly on machine as recommended in the machine service manual. With the machine in normal operating conditions apply the pedal several times to be sure the system is functioning in accordance with machine manufacture recommendations.

● Items included in Repair Kit 06-400-467



**FIGURE 1**