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## Fault Code 44 - Inertia Brake Solenoid Coil

**J1587: MID 130    SID 54    FMI 3, 4, 5**  
**J1939: SA 3        SPN 787    FMI 3, 4, 5**

### Overview

This fault code indicates an electrical failure of the solenoid that controls the Inertia Brake.

When troubleshooting an Inactive code See “Product Diagnostic (PD) Mode” on page 11.

### Detection

Starting at key-on and throughout operation, the Transmission Electronic Control Unit (TECU) constantly measures this circuit. A failure mode of a short to battery, short to ground or open circuit is detected.

### Fallback

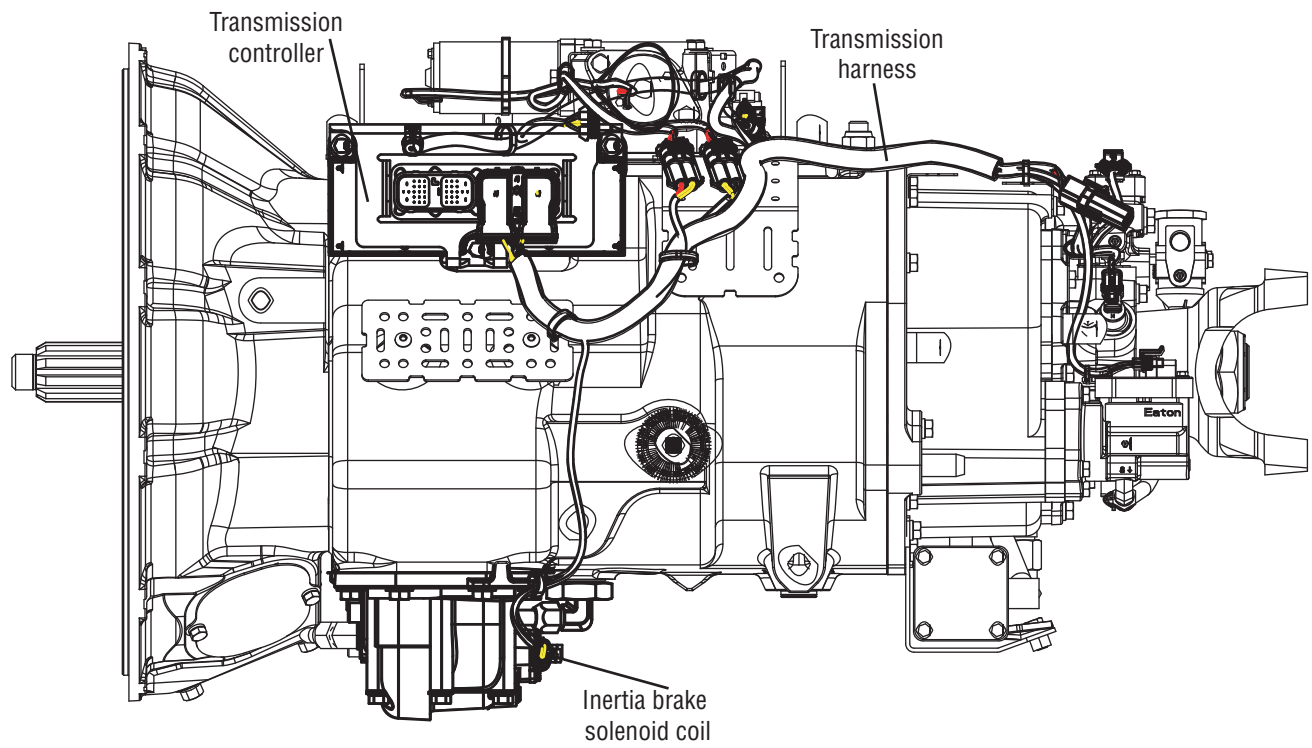
No Fallback Mode; however, if the Inertia Brake system failed, it may be difficult to engage a gear from a stop if the Inertia Brake was providing assistance (due to a dragging clutch). Also, hill shifting performance may be reduced.

### Possible Causes

This fault code can be caused by any of the following:

- Inertia Brake Solenoid
- Transmission Harness
- TECU

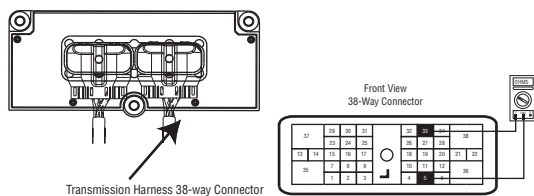
## Component Identification



## Fault Code 44 - Inertia Brake Solenoid Coil

**A** **Purpose:** Measure resistance of the Inertia Brake Solenoid coil through the Transmission Harness.

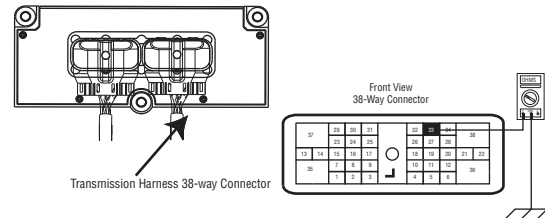
1. Key off.
2. Disconnect negative battery cable.
3. Disconnect the Transmission Harness 38-way connector.
4. Measure resistance between the Transmission Harness 38-way connector Pin 33 and Pin 5.



- If resistance is 2 to 6 ohms, go to **Step B**.
- If resistance is outside of range, go to **Step C**.

**B** **Purpose:** Test the high side solenoid coil for shorts to ground through the Transmission Harness.

1. Measure resistance between the Transmission Harness 38-way connector Pin 33 and ground.



- If resistance is OL, (if fault code is Active) replace the:
  - **Medium-Duty Transmission Electronic Control Unit (TECU)**
  - **Heavy-Duty Transmission Electronic Control Unit (TECU)**

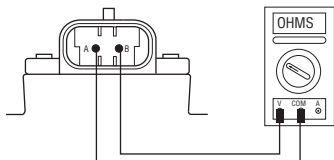
Go to **Step V**.

- If resistance is less than 10K ohm, go to **Step C**.

**C**

**Purpose:** Measure resistance of the Inertia Brake Solenoid coil at the Inertia Brake.

1. Disconnect the Transmission Harness from Inertia Brake coil.
2. Measure resistance between Inertia Brake coil Pin A and Pin B.



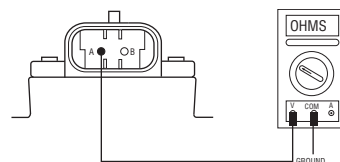
- If resistance is 2 to 6 ohms, go to **Step D.**
- If resistance is outside of range, replace the:
  - **Medium-Duty Inertia Brake**
  - **Heavy-Duty Inertia Brake**

Go to **Step V.**

**D**

**Purpose:** Test the solenoid coil for shorts to ground at the Inertia Brake.

1. Measure resistance between Inertia Brake coil Pin A and ground.



- If resistance is OL, replace the:
  - **Medium-Duty Transmission Harness**
  - **Heavy-Duty Transmission Harness**

Go to **Step V.**

- If resistance is less than 10K ohm, replace the:
  - **Medium-Duty Inertia Brake**
  - **Heavy-Duty Inertia Brake**

Go to **Step V.**

**V****Purpose:** Verify repair.

1. Key off.
  2. Reconnect all connectors and the negative battery cable.
  3. Key on.
  4. Clear codes. See “Fault Code Retrieval/Clearing” on page 5.
  5. Drive the vehicle and attempt to reset the code.
  6. Check for codes. See “Fault Code Retrieval/Clearing” on page 5.
    - If no fault codes, Test complete.
    - If Fault Code 44 appears go to **Step A.** to find error in testing.
    - If code other than 44 appears, See “Fault Code Isolation Procedure Index” on page 8.
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