
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

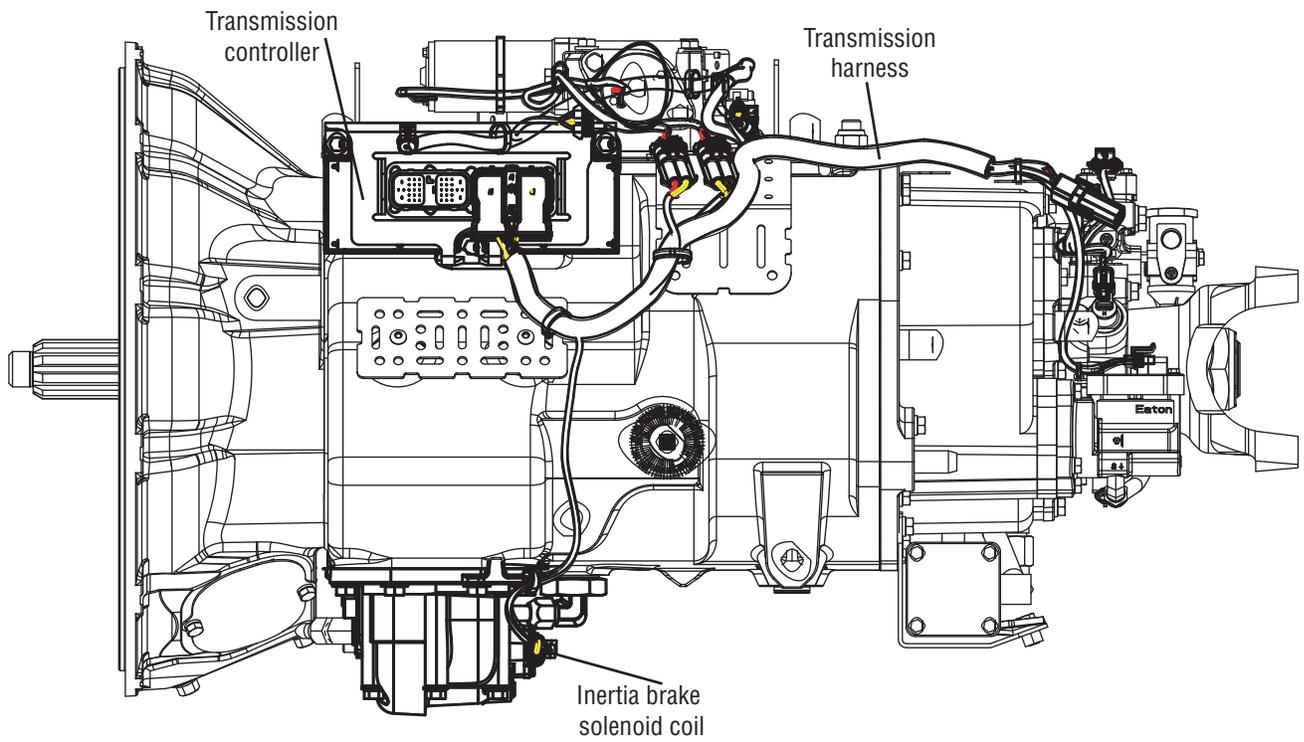
No Fallback Mode; however, if the Inertia Brake system failed, it may be difficult to engage a gear from a stop if the Inertia Brake was providing assistance (due to a dragging clutch). Also, hill shifting performance may be reduced.

Possible Causes

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

- Inertia Brake Solenoid
- Transmission Harness
- TECU

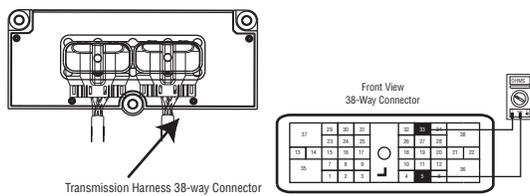
Component Identification



Fault Code 44 - Inertia Brake Solenoid Coil

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

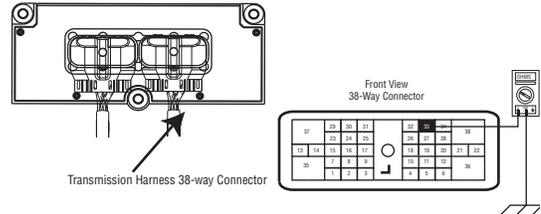
1. Key off.
2. Disconnect negative battery cable.
3. Disconnect the Transmission Harness 38-way connector.
4. Measure resistance between the Transmission Harness 38-way connector Pin 33 and Pin 5.



- 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.

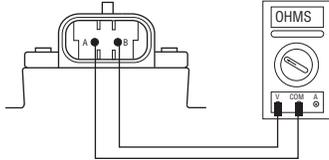


- If resistance is OL, (if fault code is Active) replace the:
 - **Medium-Duty Transmission Electronic Control Unit (TECU)**
 - **Heavy-Duty Transmission Electronic Control Unit (TECU)**
 Go to **Step V.**
- If resistance is less than 10K ohm, go to **Step C.**

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.



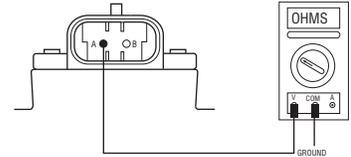
- If resistance is 2 to 6 ohms, go to **Step D.**
- If resistance is outside of range, replace the:
 - **Medium-Duty Inertia Brake**
 - **Heavy-Duty Inertia Brake**

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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