DTC C1095 7.8

DESCRIPTION AND OPERATION

PART NUMBER	TOOL NAME
HD-48650	DIGITAL TECHNICIAN II

The ABS module monitors the front brake switch input. When the brake lever is applied the ABS module receives voltage on the front brake switch circuit. The ABS module uses this signal to enhance ABS operation.

Table 7-16. Code Description

DTC	DESCRIPTION
C1095	Front brake switch open

Conditions for Setting the DTC

The DTC will set if the rear brake switch is not closed (brake applied) and all of the following conditions exist for 2 seconds:

- The ABS module detects an open in the front brake input circuit.
- The ABS module detects an open in the ground circuit to the front brake switch.

Action Taken When the DTC Sets

No action is taken when this code is set. The ABS indicator DOES NOT illuminate and the ABS is still active.

Conditions for Clearing the DTC

The condition for the DTC is no longer present and the DTC has been cleared in self-diagnostic mode or DIGITAL TECHNICIAN II (Part No. HD-48650).

The ECU automatically clears the historic DTC when a current DTC is not detected in 50 consecutive drive cycles.

Connector Information

For additional information about the connectors in the following diagram(s) and diagnostic procedure(s), including the color of the harness test kit terminal probes, see <u>B.1 CONNECTORS</u>.



2011 Touring Diagnostics: ABS 7-19

HOME

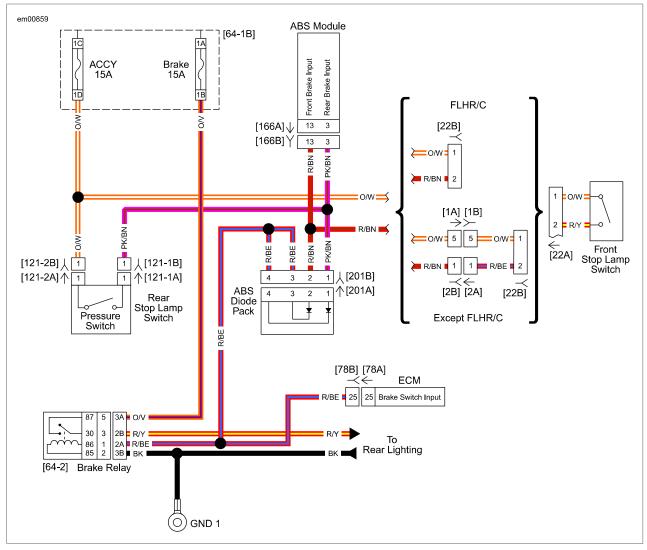


Figure 7-14. Brake Switches Schematic

DTC C1095

PART NUMBER	TOOL NAME
HD-41404-C	HARNESS CONNECTOR TEST KIT
HD-48642	ABS BREAKOUT BOX

Table 7-17. DTC C1095 Diagnostic Faults

POSSIBLE CAUSES
Open front brake input circuit
Open tail/stop lamp ground circuit
Internal ABS module problem in the front brake circuitry
Tail/stop lamp malfunction
ECU malfunction
ABS Diode pack malfunction
Front stop lamp switch malfunction

1. Validation of Current DTC Test

- 1. Clear the DTC. See 2.1 INITIAL DIAGNOSTICS.
- Start engine and wait 10 seconds for ABS to complete initialization test.
- 3. Did the DTC set?
 - a. Yes Go to Test 2.
 - b. No. See diagnostic tips.

2. DTC Verification Test

- 1. Check for additional DTCS.
- 2. Is DTC C1216 set?
 - a. Yes Go to Test 3.
 - b. No. Go to Test 5.

3. Tail/Stop Lamp Test

- 1. Disconnect tail lamp [93].
- 2. Turn IGN ON.
- 3. While applying the brakes, use a multimeter to test for voltage between [93A] terminal 3 and terminal 4.
- 4. Is battery voltage present?
 - a. Yes. Replace tail/stop lamp. See the service manual.
 - b. No. Go to Test 4.

4. Ground Circuit Open Test

- While applying the brakes, use HARNESS CONNECTOR TEST KIT (Part No. HD-41404-C) and a multimeter to test for voltage between tail lamp [93A] terminal 3 and ground.
- 2. Is battery voltage present?
 - Yes. Repair open in (BK) wire between tail/stop lamp [93A] terminal 4 and battery negative.
 - b. **No.** Repair open in (R/Y) wire between tail/stop lamp [93A] terminal 3 and ABS diode pack [201B].

5. Front Stop Lamp Switch Test

- 1. Apply the front brake.
- Does the tail/stop lamp illuminate?
 - a. Yes. Go to Test 6.
 - b. No. Go to Test 7.

6. Front Stop Lamp Switch Input Circuit Open Test

- Connect ABS BREAKOUT BOX (Part No. HD-48642) to wiring harness [166B] leaving ABS module [166A] disconnected. See <u>1.2 DIAGNOSTIC TOOLS</u>.
- Turn IGN ON with the engine stop switch in the RUN position.
- Using HARNESS CONNECTOR TEST KIT (Part No. HD-41404-C), with the front brake applied, use a multimeter test for voltage at breakout box terminal 13 to ground.
- 4. Is battery voltage present?
 - a. Yes. Replace ECU. See the service manual.
 - No. Repair open in ABS module [166B] terminal 13 (R/BN) wire.

7. ABS Diode Pack Test

- Disconnect ABS diode [201].
- 2. Jumper [201B] terminal 1 and terminal 4.
- Apply front brake.
- 4. Does tail/stop lamp illuminate?
 - Yes. Replace ABS diode pack. See the service manual.
 - b. No. Go to Test 8.

8. Tail/Stop Lamp Circuit Open Test

- While applying the front brake, use HARNESS CON-NECTOR TEST KIT (Part No. HD-41404-C) and test for voltage between [201B] terminal 1 and ground.
- 2. Is battery voltage present?
 - Yes. Repair open in (R/Y) wire between ABS diode pack [201B] and tail/stop lamp [93A].
 - b. No. Go to Test 9.

9. Front Stop Lamp Switch Test

- 1. Disconnect right hand controls [22].
- 2. Jumper [22B] terminal 1 and terminal 2.
- 3. Test for voltage between [201B] terminal 1 and ground.
- 4. Is battery voltage present?
 - a. **Yes.** Replace front stop lamp switch. See the service manual.
 - b. **No.** <u>Go to Test 10.</u>

10. Accessory Circuit Test

- Test for voltage between front stop lamp switch [22B] terminal 1 and ground.
- 2. Is battery voltage present?
 - Yes. Repair open on front stop lamp switch [22B] terminal 2 (R/BN) FLHR/C, (R/BE) except FLHR/C wire.
 - No. Repair open on front stop lamp switch [22B] terminal 1 (O/W) wire.