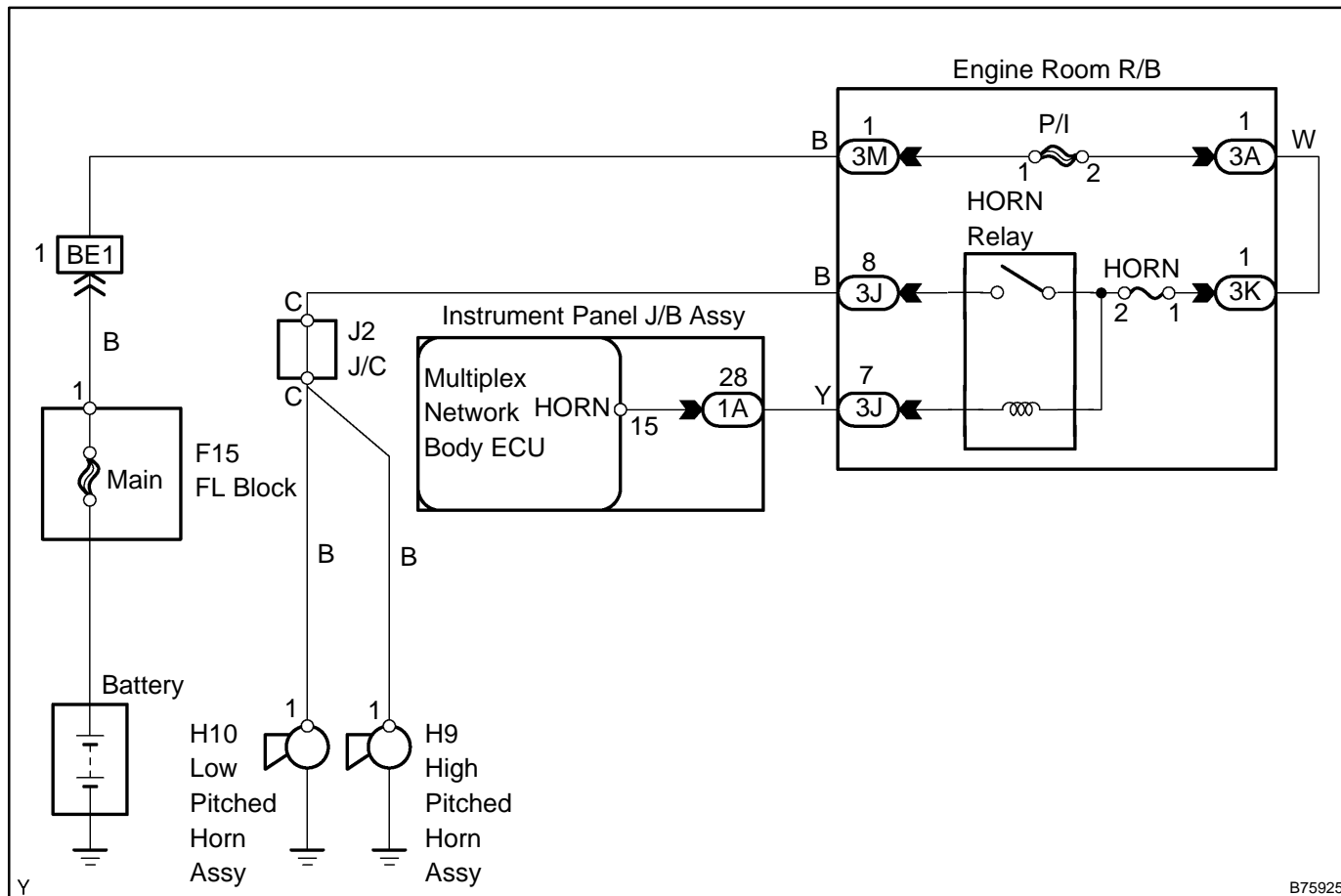


# HORN CIRCUIT

## CIRCUIT DESCRIPTION

When the theft deterrent system is switched from the armed state to the alarm sounding state, the multiplex network body ECU turns on the HORN relay, causing the horn to sound at intervals of 0.4 seconds.

## WIRING DIAGRAM



B75925

**INSPECTION PROCEDURE****1 | PERFORM ACTIVE TEST USING HAND-HELD TESTER**

- (a) Connect the hand-held tester (with CAN VIM) to the DLC3.
- (b) Turn the power switch ON (IG) and press the hand-held tester main switch ON.
- (c) Select the item below in the ACTIVE TEST and then check that the horn operates.

**Multiplex network body ECU:**

Item	Tester Detail	Diagnostic Note
VEHICLE HORN	Vehicle horn ON/OFF	-

**OK: Vehicle horn sounds normally.****NG** → **Go to step 2****OK****REPLACE MULTIPLEX NETWORK BODY ECU****2 | INSPECT FUSE (HORN)**

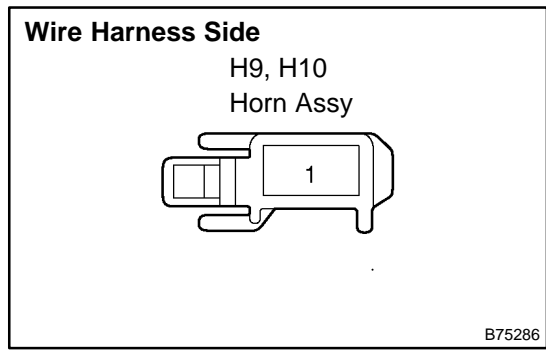
- (a) Remove the HORN fuse from the engine room R/B.
- (b) Measure the resistance.

**Standard: Below 1  $\Omega$** **NG** → **REPLACE FUSE****OK****3 | CHECK HORN ASSY**

- (a) Press the horn switch and check if the horn sounds.
  - (1) If the horn sounds, proceed to A.
  - (2) If the horn does not sound, proceed to B.

**B** → **Go to step 4****A****REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY**

**4 CHECK WIRE HARNESS**



- (a) Disconnect the H9 and H10 connectors.
  - (b) Measure the voltage of the wire harness side connectors.
- Standard:**

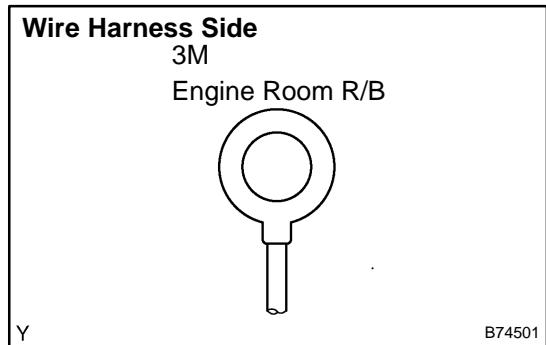
Tester Connection	Condition	Specified Condition
H9-1 - Body ground	Horn switch pushed	10 to 14 V
H9-1 - Body ground	Horn switch pushed	10 to 14 V

**NG** Go to step 5

**OK**

**REPLACE HORN ASSY**

**5 CHECK WIRE HARNESS (ENGINE ROOM R/B - BATTERY)**



- (a) Disconnect the 3M R/B connector.
  - (b) Measure the voltage of the wire harness side connector.
- Standard:**

Tester Connection	Condition	Specified Condition
3M-1 - Body ground	Constant	10 to 14 V

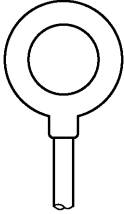
**NG** REPAIR OR REPLACE HARNESS AND CONNECTOR

**OK**

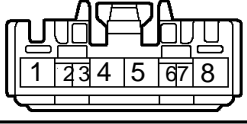
**6 CHECK WIRE HARNESS (ENGINE ROOM R/B - HORN ASSY AND BODY GROUND)**

**Wire Harness Side**

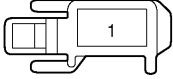
3A  
Engine Room R/B



3K, 3J  
Engine Room R/B



H9, H10  
Horn Assy



B81027

- (a) Disconnect the 3A, 3K and 3J R/B connectors.
- (b) Disconnect the H9 and H10 horn connectors.
- (c) Measure the resistance of the wire harness side connectors.

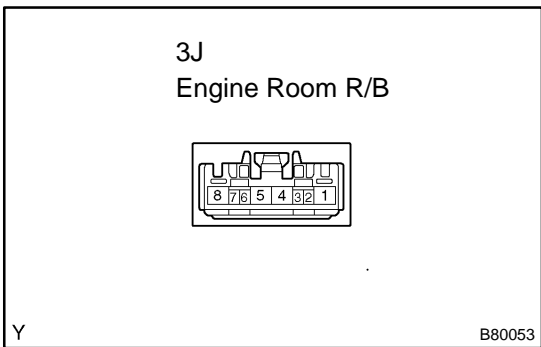
**Standard:**

Tester Connection	Specified Condition
3A-1 - 3K-1	Below 1 Ω
3J-8 - H9-1	Below 1 Ω
3J-8 - H10-1	Below 1 Ω
3A-1 or 3K-1 - Body ground	10 kΩ or higher
3J-1 or H9-1 - Body ground	10 kΩ or higher
3J-1 or H10-1 - Body ground	10 kΩ or higher

**NG REPAIR OR REPLACE HARNESS AND CONNECTOR**

**OK**

**7 INSPECT ENGINE ROOM R/B**



- (a) Disconnect the 3J R/B connector.
- (b) Measure the voltage of the terminal side connector.

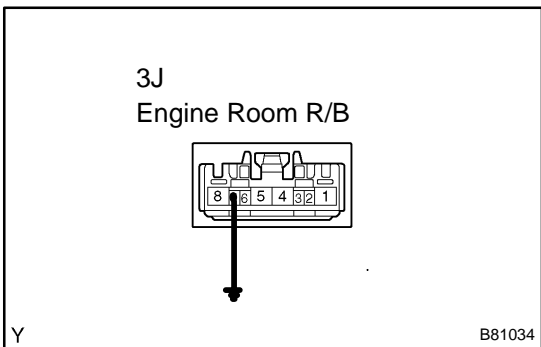
**Standard:**

Tester Connection	Condition	Specified Condition
3J-7 - Body ground	Constant	10 to 14 V

**NG** → **REPLACE ENGINE ROOM R/B**

**OK**

**8 INSPECT ENGINE ROOM R/B (OPERATION CHECK)**



- (a) Reconnect the 3J J/B connector.
- (b) Check that the horn sounds.

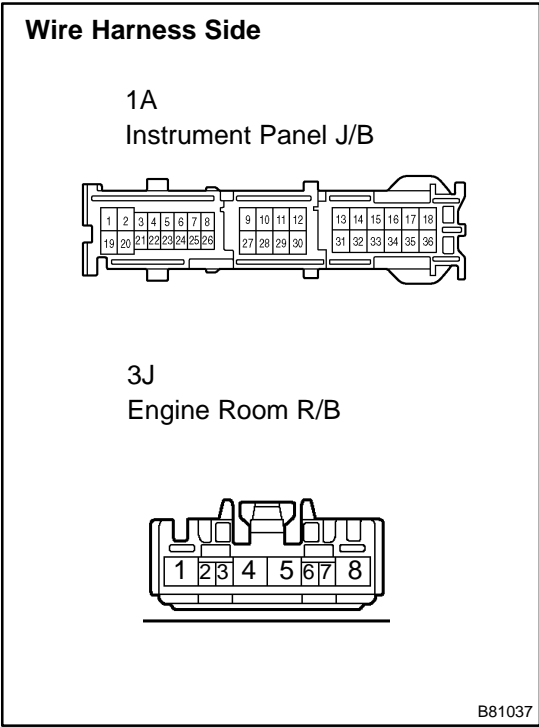
**Standard:**

Connection	Specified Condition
When connect R/B terminal 3J-7 and Body ground	Horn sounds
When does not connect R/B terminal 3J-7 and Body ground	Horn not sounds

**NG** → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

**OK**

**9 CHECK WIRE HARNESS (INSTRUMENT PANEL J/B - ENGINE ROOM R/B AND BODY GROUND)**



- (a) Disconnect the 1A J/B connector.
- (b) Disconnect the 3J R/B connector.
- (c) Measure the resistance of the wire harness side connectors.

**Standard:**

Tester Connection	Specified Condition
1A-28 (HORN) - 3J-7	Below 1 Ω
1A-28 (HORN) or 3J-7 - Body ground	10 kΩ or higher

**NG** REPAIR OR REPLACE HARNESS AND CONNECTOR

**OK**

**REPLACE INSTRUMENT PANEL J/B ASSY**