# ACCELERATOR PEDAL POSITION (APP) SENSOR INSPECTION

BHE014041600W01

## **Note**

• Before performing the following inspection, make sure to follow the troubleshooting flowchart. (See <u>Troubleshooting Procedure</u>.)

# **Voltage Inspection**

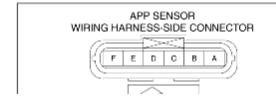
- 1. Turn the ignition switch to the ON position.
- 2. Verify that the voltage at PCM terminals 5F (WDS PID: APP1) and 5C (WDS PID: APP2) increases while gradually increasing the accelerator pedal opening angle according to the accelerator pedal opening angle.
  - If it can be verified, go to the next step.
  - If it cannot be verified even though the related wiring harnesses have no malfunction, replace the accelerator pedal.
- 3. Verify that the voltage at PCM terminals 5F (WDS PID: APP1) and 5C (WDS PID: APP2) is as indicated in the table.
  - If it cannot be verified, replace the accelerator pedal. (See <u>ACCELERATOR PEDAL REMOVAL/INSTALLATION</u>.)

#### APP sensor output voltage

	PCM terminal (WDS PID)	
Measurement condition	5F (APP1)	5C (APP2)
When the accelerator pedal is depressed.	3.78-3.93 V	3.23-3.38 V
When the accelerator pedal is released.	1.555-1.655 V	1.005-1.105 V

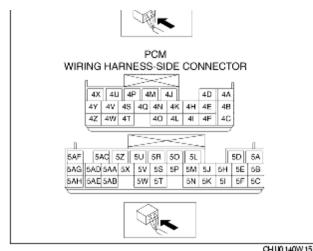
# **Circuit Open/Short Inspection**

- 1. Disconnect the PCM connectors.
- 2. Disconnect the APP sensor connector.
- 3. Inspect the following wiring harnesses for open or short circuit. (Continuity inspection)



## Open circuit

If there is no continuity in the following wiring harnesses,



there is an open circuit. Repair or replace the wiring harness.

- APP sensor terminal A and PCM terminal 4X
- APP sensor terminal B and PCM terminal 5AB
- APP sensor terminal C and PCM terminal 5C
- APP sensor terminal D and PCM terminal 4Y
- APP sensor terminal E and PCM terminal 5AE
- APP sensor terminal F and PCM terminal 5F

## Short circuit

CHU0140W 151• If there is continuity in the following wiring harnesses, there is a short circuit. Repair or replace the wiring harness.

- APP sensor terminal D and body ground
- APP sensor terminal D and power supply
- APP sensor terminal A and body ground
- APP sensor terminal A and power supply
- $-\ \mbox{APP}$  sensor terminal F and body ground
- APP sensor terminal F and power supply
- APP sensor terminal C and body ground
- APP sensor terminal C and power supply