FRONT ABS WHEEL-SPEED SENSOR INSPECTION

id041500800400

Sensor Output Value Inspection

Caution

- Resistance inspection using other testers may cause damage to the ABS wheel-speed sensor internal circuit. Be sure to use the M-MDS to inspect the ABS wheel-speed sensor.
- 1. Switch the ignition to off.
- 2. Connect the M-MDS to the DLC-2.
- 3. Select the following PIDs using the M-MDS:
 - WSPD_SEN_LF (LF wheel-speed sensor)
 - WSPD SEN_RF (RF wheel-speed sensor)
- 4. Start the engine and drive the vehicle.
- 5. Verify that the display of the M-MDS shows the same value as the speedometer.
 - If there is any malfunction, replace the ABS wheel-speed sensor.

Installation Visual Inspection

- 1. Inspect for the following:
 - If there is any malfunction, replace the part.
 - (1) Excessive play of the ABS wheel-speed sensor
 - (2) Deformation of the ABS wheel-speed sensor
 - (3) Deformation or damage of the ABS sensor rotor

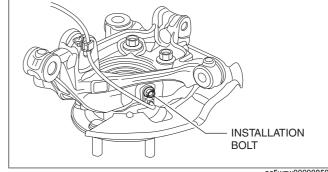
Clearance Inspection

Preparation prior to inspection

- 1. Remove the ABS wheel-speed sensor. (See FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.)
- 2. Remove the wheel hub and steering knuckle as a single unit. (See WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION.)
- 3. Install the ABS wheel-speed sensor to the removed wheel hub, steering knuckle component, and tighten to the specified torque.

Tightening torque

8—10 N·m {82—101 kgf·cm, 71—88 in·lbf}



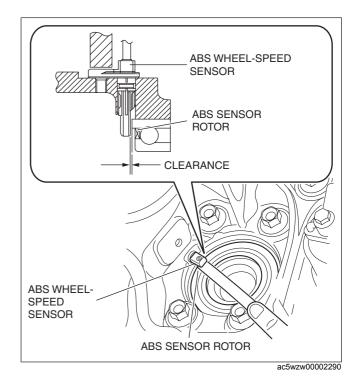
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Clearance Inspection

- 1. Measure the gap between the ABS sensor rotor and ABS wheel-speed sensor using a feeler gauge.
 - If not within the specification, verify the following items and repair or replace if necessary.
 - Is there deformation or damage to the ABS sensor rotor?
 - Is there deformation or damage to the ABS wheel speed sensor?
 - Is there foreign material adhering?

Clearance

0.87—1.53 mm {0.035—0.060 in}



Servicing after inspection

- 1. Remove the ABS wheel-speed sensor from the wheel hub, steering knuckle component.
- 2. Install the wheel hub, steering knuckle component. (See WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION.)
- 3. Install the ABS wheel-speed sensor. (See FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.)
- 4. Inspect the front wheel alignment. (See FRONT WHEEL ALIGNMENT.)