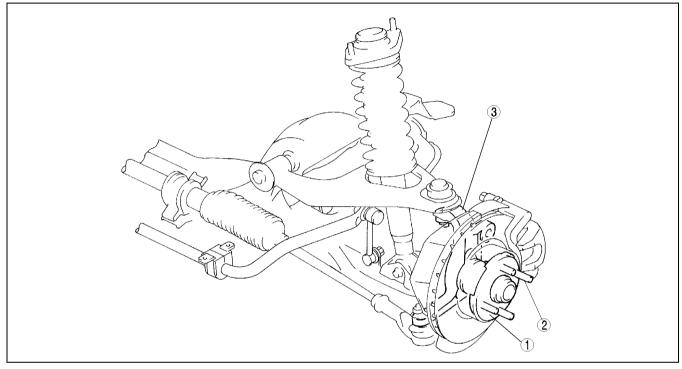
## 03-11

# 03-11 FRONT AXLE

ABS Sensor Rotor Removal Note03-11-
Wheel Hub Bolt Removal Note 03–11–4
Wheel Hub Bolt Installation Note03–11–
ABS Sensor Rotor Installation Note 03–11–
Locknut Installation Note03–11–

## FRONT AXLE LOCATION INDEX

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Z5U0311W104

A5U031104016W02

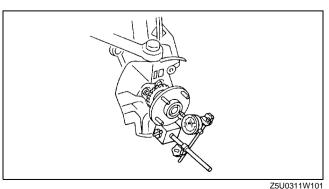
- Wheel hub (See 03-11-1 WHEEL HUB, STEERING KNUCKLE PRE-INSPECTION) (See03-11-2 WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION)
- 2 Wheel hub bolt (See 03-11-2 WHEEL HUB BOLT REPLACEMENT) Steering knuckle (See 03-11-2 WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION)

# WHEEL HUB, STEERING KNUCKLE PRE-INSPECTION

# Wheel Bearing Play

- 1. Remove the brake caliper component and disc plate.
- 2. Position a dial indicator against the wheel hub.
- 3. Push and pull the wheel hub by hand in the axial direction and measure the wheel bearing play.
- 4. If the bearing play exceeds the specification, inspect and tighten the locknut to the specified torque and retest.
  - Replace the wheel bearing as necessary.

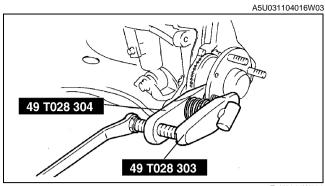
Maximum wheel bearing play 0.05 mm {0.002 in}



## **FRONT AXLE**

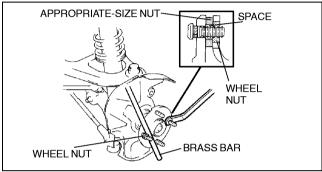
#### WHEEL HUB BOLT REPLACEMENT

- 1. Remove the hub bolt using the **SSTs**.
- Install the hub bolt into the wheel hub and install a washer and hub nut on the hub bolt using a brass bar.



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3. Tighten the hub nut while holding the wheel hub using a brass bar.



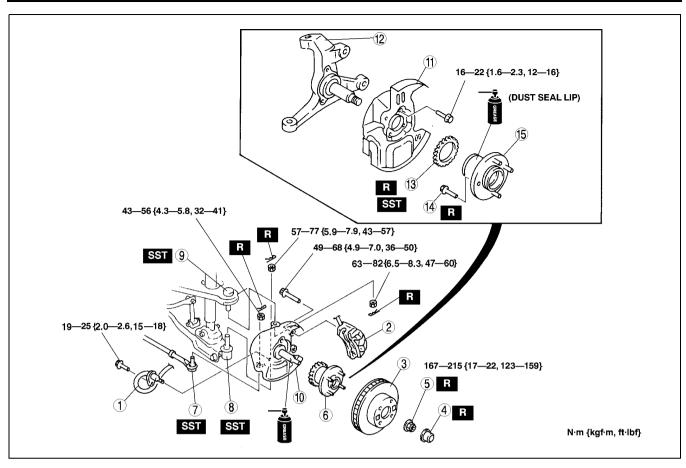
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#### WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION

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#### Caution

- Performing the following procedures without first removing the ABS wheel-speed sensor may possibly cause an open circuit in the harness if it is pulled by mistake. Before performing the following procedures, remove the ABS wheel-speed sensor (axle side) and fix it to an appropriate place where the sensor will not be pulled by mistake while servicing the vehicle.
- 1. Remove in the order indicated in the table.
- 2. Install in the reverse order of removal.
- 3. After installation, adjust the total toe-in. (See 02–11–4 Total Toe-in Adjustment.)



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1	ABS wheel-speed sensor (if equipped)
2	Brake caliper component
3	Disc plate (See 04–11–17 Disc Plate Removal Note) (See 04–11–17 Disc Plate Installation Note)
4	Hub cap
5	Locknut (See 03–11–4 Locknut Installation Note)
6	Front wheel hub component
7	Tie-rod end ball joint (See 06–11–6 Tie-rod End Ball Joint Removal Note)
8	Front lower arm ball joint (See 02–13–8 Lower Arm Ball Joint Removal Note)

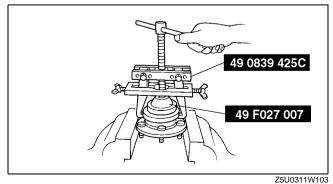
9	Front upper arm ball joint (See 02–13–10 Upper Arm Ball Joint Removal Note)
10	Dust cover and knuckle spindle
11	Dust cover
12	Knuckle spindle
13	ABS sensor rotor (See 03–11–3 ABS Sensor Rotor Removal Note) (See 03–11–4 ABS Sensor Rotor Installation Note)
14	Wheel hub bolt (See 03–11–4 Wheel Hub Bolt Removal Note) (See 03–11–4 Wheel Hub Bolt Installation Note)
15	Front wheel hub

#### **ABS Sensor Rotor Removal Note**

1. Secure the front wheel hub in a vise and remove the sensor rotor using the **SSTs**.

#### Note

• The sensor rotor does not need to be removed unless replacing it.

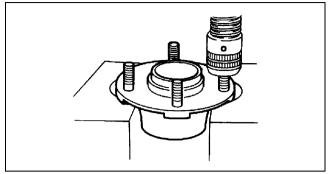


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### **Wheel Hub Bolt Removal Note**

#### Note

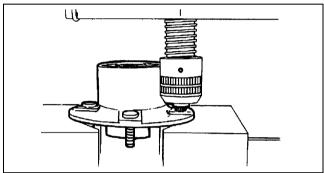
- The hub bolts do not need to be removed unless they are being replaced.
- 1. Remove the hub bolts using a press.



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### **Wheel Hub Bolt Installation Note**

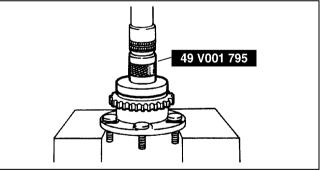
1. Install the new hub bolts using a press.



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#### **ABS Sensor Rotor Installation Note**

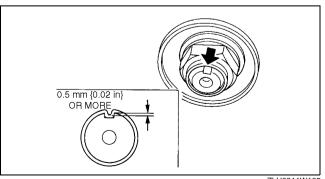
1. Install a new sensor rotor using the SST and a press.



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## **Locknut Installation Note**

1. Install a new locknut and stake it as shown.



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