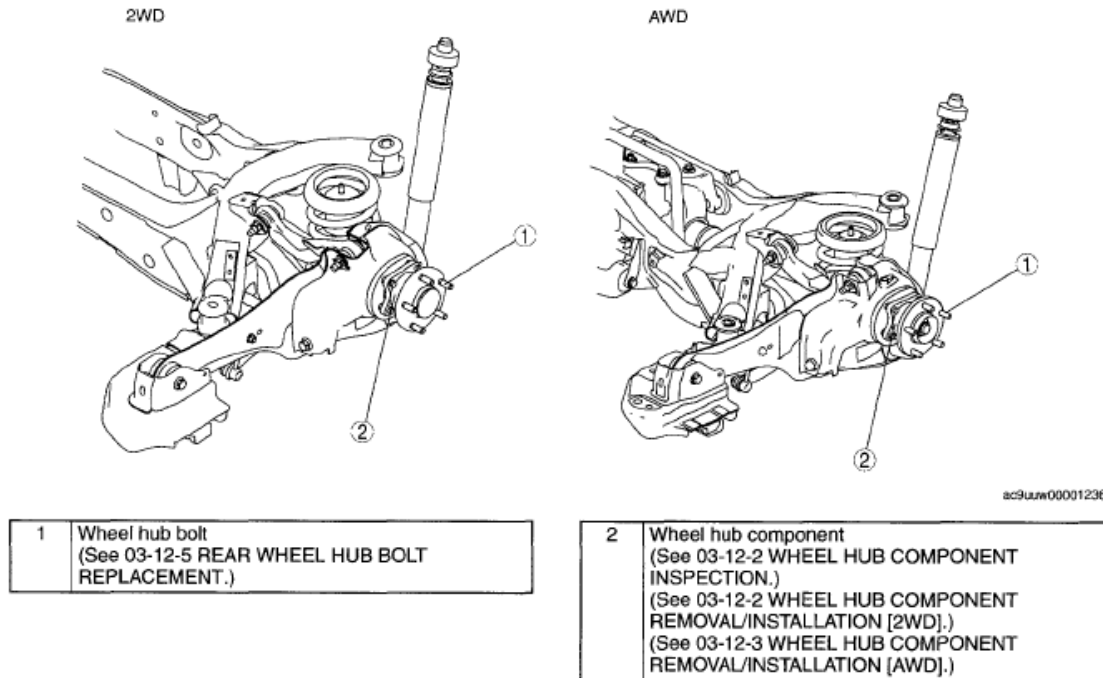


2008 DRIVELINE/AXLE

Rear Axle - Mazda CX-9

REAR AXLE LOCATION INDEX



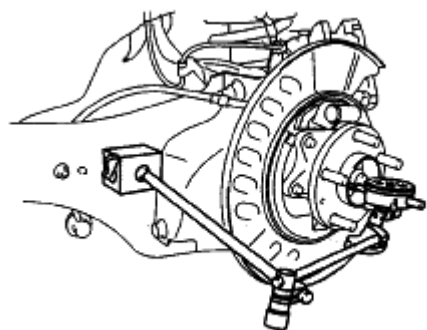
**Fig. 1: Identifying Rear Axle Components Location**  
Courtesy of MAZDA MOTORS CORP.

**WHEEL HUB COMPONENT INSPECTION**

**WHEEL BEARING EXCESSIVE PLAY INSPECTION**

1. Install the magnetic base and dial gauge as shown in the figure and measure the wheel bearing axial excessive play.
  - If it exceeds the maximum specification, replace the wheel hub component.

**Rear wheel bearing maximum play 0.05 mm {0.002 in}**



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**Fig. 2: Measuring Wheel Bearing Axial Excessive Play**  
Courtesy of MAZDA MOTORS CORP.

## WHEEL HUB COMPONENT REMOVAL/INSTALLATION [2WD]

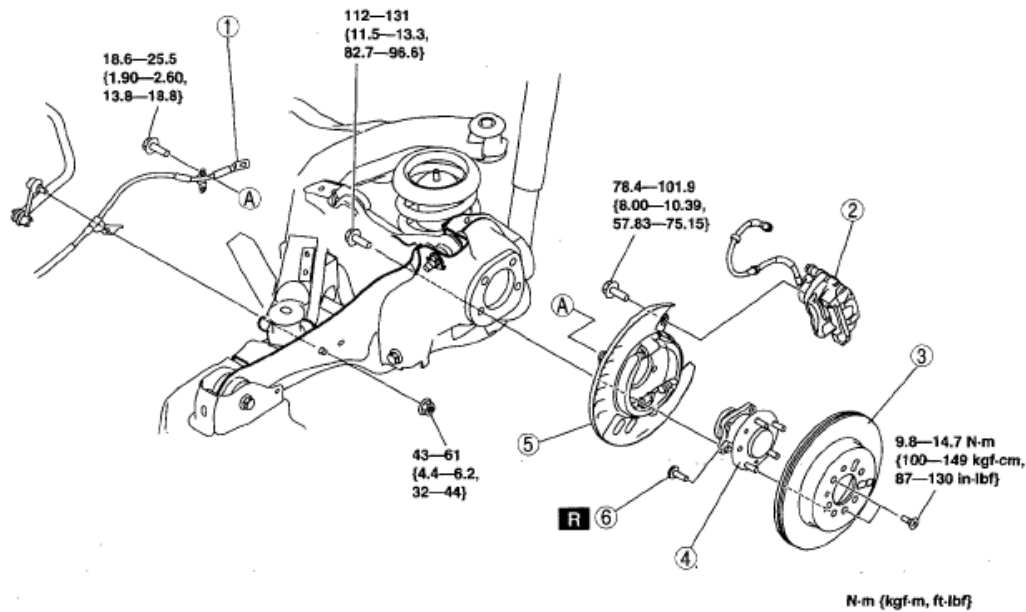
**CAUTION:**

- Performing the following procedures without first removing the ABS wheel-speed sensor may possibly cause an open circuit in the wiring harness if it is pulled by mistake. Before performing the following procedures, disconnect the ABS wheel-speed sensor connector (body side) and fix the wiring harness to an appropriate place where it will not be pulled by mistake while servicing the vehicle.

1. Remove the rear ABS wheel-speed sensor. (See **REAR ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION [2WD]** .)
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.

# 2008 Mazda CX-9 Grand Touring

## 2008 DRIVELINE/AXLE Rear Axle - Mazda CX-9



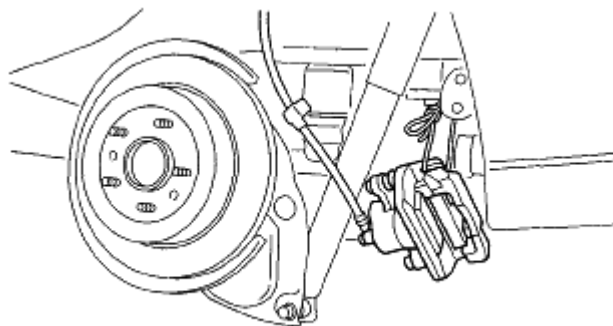
1	Parking brake end cable (See 04-12-3 PARKING BRAKE REMOVAL/ INSTALLATION [2WD].)
2	Brake caliper component (See 03-12-3 Brake Caliper Component Removal Note.)

3	Disc plate (See 04-11-24 REAR BRAKE (DISC) REMOVAL/ INSTALLATION)
4	Wheel hub component
5	Parking brake component
6	Wheel hub bolt (See 03-12-3 Wheel Hub Bolt Removal Note.) (See 03-12-3 Wheel Hub Bolt Installation Note.)

**Fig. 3: Exploded View Of Wheel Hub (2WD) & Torque Specifications**  
Courtesy of MAZDA MOTORS CORP.

### BRAKE CALIPER COMPONENT REMOVAL NOTE

1. Remove the brake caliper component from the trailing link and suspend it out of the way using a cable.



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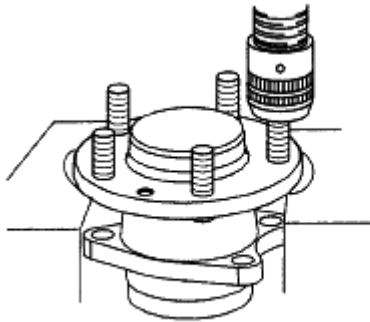
**Fig. 4: Identifying Brake Caliper**  
Courtesy of MAZDA MOTORS CORP.

### WHEEL HUB BOLT REMOVAL NOTE

**NOTE:**

- The wheel hub bolts do not need to be removed unless they are being replaced.

1. Remove the wheel hub bolt using a press.

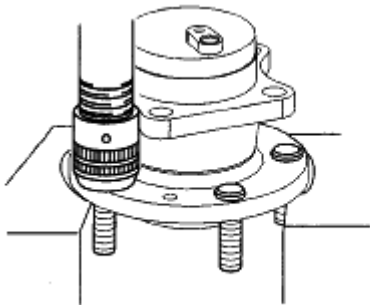


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**Fig. 5: Removing Wheel Hub Bolts**  
Courtesy of MAZDA MOTORS CORP.

**WHEEL HUB BOLT INSTALLATION NOTE**

1. Install the new wheel hub bolt using a press.



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**Fig. 6: Installing Wheel Hub Bolts**  
Courtesy of MAZDA MOTORS CORP.

**WHEEL HUB COMPONENT REMOVAL/INSTALLATION [AWD]**

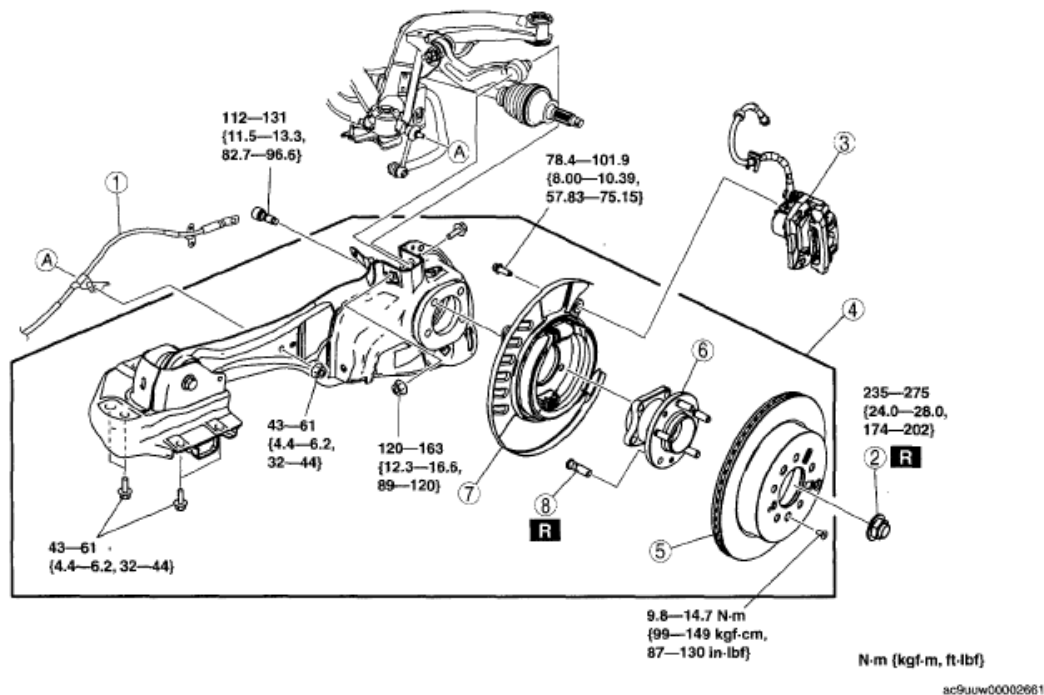
**CAUTION:**

- Performing the following procedures without first removing the ABS wheel-speed sensor may possibly cause an open circuit in the wiring harness if it is pulled by mistake. Before performing the following procedures, disconnect the ABS wheel-speed sensor connector (body side) and fix the wiring harness to an appropriate place where it will not be pulled by mistake while servicing the vehicle.

## 2008 Mazda CX-9 Grand Touring

2008 DRIVELINE/AXLE Rear Axle - Mazda CX-9

1. Remove the rear ABS wheel-speed sensor. (See **REAR ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION [AWD]** .)
2. Remove the rear lateral link. (See **REAR LATERAL LINK REMOVAL/INSTALLATION** .)
3. Remove the rear coil spring. (See **REAR COIL SPRING REMOVAL/INSTALLATION** .)
4. Remove the rear lower arm. (See **REAR LOWER ARM REMOVAL/INSTALLATION** .)
5. Remove in the order indicated in the table.
6. Install in the reverse order of removal.
7. Inspect for rear wheel alignment, and adjust it as necessary. (See **REAR WHEEL ALIGNMENT [AWD]** .)



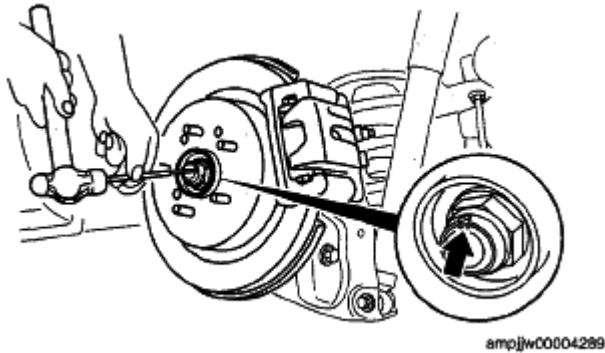
1	Rear parking brake cable
2	Locknut (See 03-12-4 Locknut Removal Note.) (See 03-12-5 Locknut Installation Note.)
3	Caliper component (See 03-12-2 WHEEL HUB COMPONENT REMOVAL/INSTALLATION [2WD].)

4	Rear trailing link and rear wheel hub component (See 03-12-5 Rear Trailing Link and Rear Wheel Hub Component Removal Note.)
5	Disc plate
6	Wheel hub component
7	Parking brake shoe component
8	Wheel hub bolt (See 03-12-2 WHEEL HUB COMPONENT REMOVAL/INSTALLATION [2WD].)

**Fig. 7: Exploded View Of Wheel Hub (AWD) & Torque Specifications**  
Courtesy of MAZDA MOTORS CORP.

### LOCKNUT REMOVAL NOTE

1. Lock the hub by applying the brakes.
2. Knock the crimped portion of the locknut outward using a small chisel and a hammer.
3. Remove the locknut.

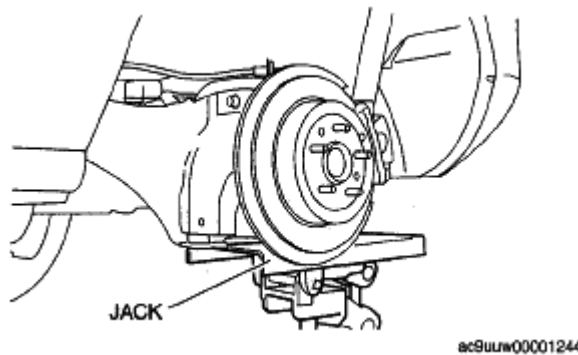


**Fig. 8: Tapping Locknut**  
Courtesy of MAZDA MOTORS CORP.

### REAR TRAILING LINK AND REAR WHEEL HUB COMPONENT REMOVAL NOTE

1. Support the rear trailing link and rear wheel hub component using a jack.

- CAUTION:**
- Removing the rear trailing link and rear wheel hub component is dangerous. The rear trailing link and rear wheel hub component could fall and cause serious injury or death. Verify that the jack securely supports the trailing link.

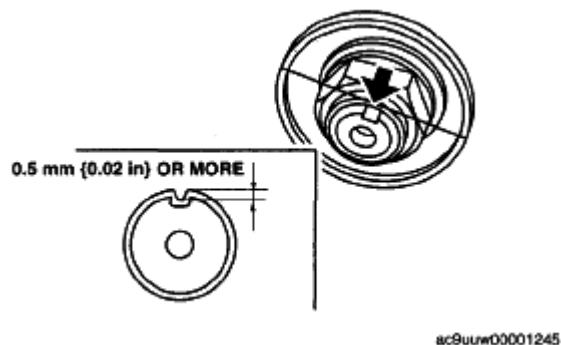


**Fig. 9: Supporting Rear Trailing Link And Rear Wheel Hub**  
Courtesy of MAZDA MOTORS CORP.

2. Separate the rear drive shaft (rear axle side) from the wheel hub.
3. Remove the trailing link and rear wheel hub component.

### LOCKNUT INSTALLATION NOTE

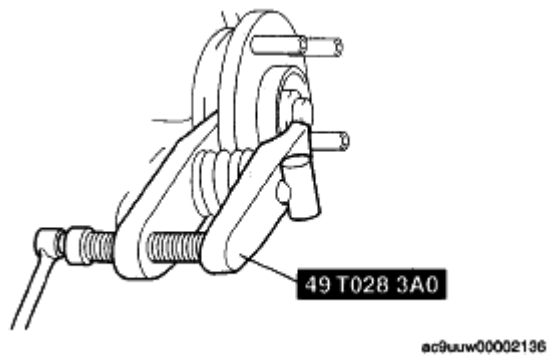
1. Install a new locknut and stake it as shown.



**Fig. 10: Locating Locknut**  
Courtesy of MAZDA MOTORS CORP.

## REAR WHEEL HUB BOLT REPLACEMENT

1. Remove the brake calliper component and suspend it out of the way using a cable.
2. Remove the disc plate.
3. Remove the parking brake shoe.
4. Remove the wheel hub bolt using the SST as shown in the figure.
5. Place a new wheel hub bolt in the wheel hub.

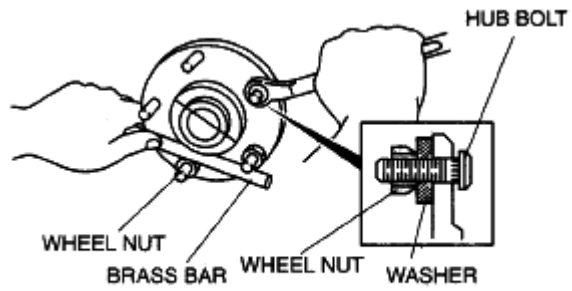


**Fig. 11: Removing Wheel Hub Bolt**  
Courtesy of MAZDA MOTORS CORP.

6. Install the wheel hub by placing a proper sized washer on the hub, and tightening the nut as shown in the figure.

## 2008 Mazda CX-9 Grand Touring

2008 DRIVELINE/AXLE Rear Axle - Mazda CX-9



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**Fig. 12: Tightening Nut**  
Courtesy of MAZDA MOTORS CORP.