

SECTION **RAX**  
REAR AXLE

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RAX

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# PRECAUTIONS

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## PRECAUTIONS

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### Precautions

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#### **CAUTION:**

- When installing each rear suspension rubber component, the final fastener tightening must be carried out with the vehicle under unladen condition\* with the tires on the ground.  
\*Fuel, engine coolant and engine oil full. Spare tire, jack, hand tools, and floor mats in designated positions.
- After installing suspension components, check the rear wheel alignment.
- Do not jack up the vehicle at the rear suspension components.

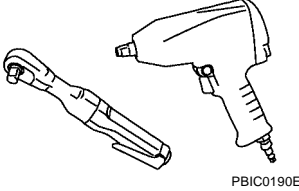
# PREPARATION

## PREPARATION

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### Commercial Service Tools

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Tool name	Description
<p data-bbox="162 298 272 323">Power tool</p>  <p data-bbox="852 499 922 514">PBIC0190E</p>	<p data-bbox="1015 298 1409 323">Loosening and removing bolts and nuts</p>

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# NOISE, VIBRATION, AND HARSHNESS(NVH) TROUBLESHOOTING

## NOISE, VIBRATION, AND HARSHNESS(NVH) TROUBLESHOOTING

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### NVH Troubleshooting Chart

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Use the chart below to help you find the cause of the symptom. If necessary, repair or replace these parts.

Reference page		RAX-6		RAX-5		RAX-5		WT-3. "NVH Troubleshooting Chart"		BR-5. "NVH Troubleshooting Chart" (brakes) PB-2. "On-Vehicle Service" (parking brake)		RSU-4. "NVH Troubleshooting Chart"		WT-3. "NVH Troubleshooting Chart"	
		RAX-6		RAX-5		RAX-5		WT-3. "NVH Troubleshooting Chart"		BR-5. "NVH Troubleshooting Chart" (brakes) PB-2. "On-Vehicle Service" (parking brake)		RSU-4. "NVH Troubleshooting Chart"		WT-3. "NVH Troubleshooting Chart"	
Possible cause and SUSPECTED PARTS		Improper installation, looseness		Parts interference		Wheel bearing damage		TIRES		BRAKES		REAR SUSPENSION		ROAD WHEEL	
Symptom	Noise	x	x			x		x		x		x		x	
	Shake	x	x			x						x		x	
	Vibration	x	x			x		x		x		x			
	Shimmy	x	x			x		x				x		x	
	Shudder	x				x		x		x		x		x	
	Poor quality ride or handling	x	x	x		x						x		x	

x: Applicable

# WHEEL HUB

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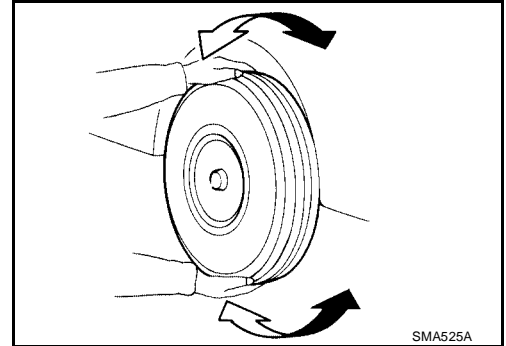
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## WHEEL HUB

### On-Vehicle Inspection and Service

Check the axle and suspension parts for excessive play, wear, or damage.

- Shake each rear wheel to check for excessive play.



### REAR WHEEL BEARING

- Check that the wheel hub bearing axial end play is within specification as shown.

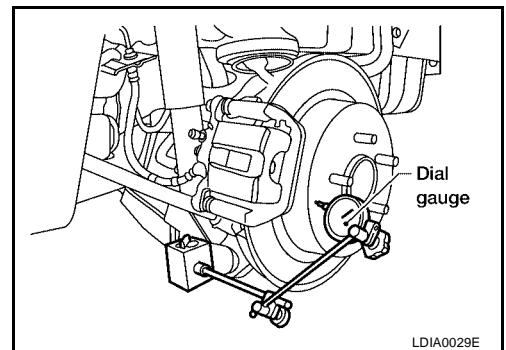
**Axial end play : 0.05 mm (0.002 in) or less**

- Check that the wheel hub bearing operates smoothly.
- Replace the wheel hub assembly if the axial end play exceeds specification, or if the wheel bearing does not turn smoothly. Refer to [RAX-6, "Removal and Installation"](#) .

#### **CAUTION:**

**The wheel hub assembly does not require maintenance. If any of the following symptoms are noted, replace the wheel hub assembly.**

- Growling noise is emitted from the wheel hub bearing during operation.
- Wheel hub bearing drags or turns roughly.



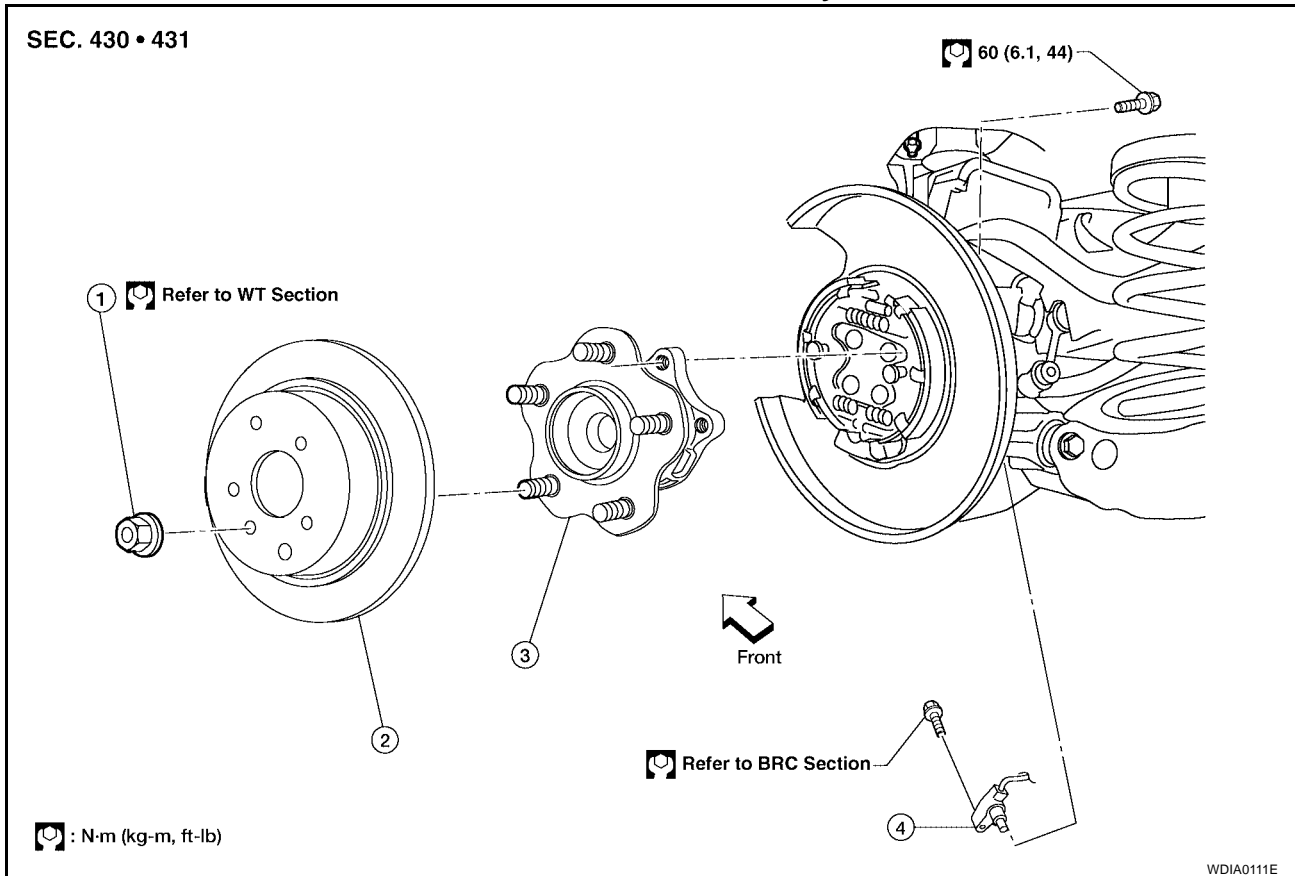
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# WHEEL HUB

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## Removal and Installation

### Rear Wheel Hub Assembly



1. Wheel nut
2. Brake rotor
3. Wheel hub assembly
4. Rear ABS sensor

## REMOVAL

1. Remove the rear wheel and tire using power tool.
2. Reposition the brake caliper assembly out of the way with a suitable wire without disconnecting the hydraulic hose, using power tool. Refer to [BR-33, "Removal and Installation of Caliper Assembly and Disc Rotor"](#).

- The brake hose should not be disconnected from the brake caliper.
- Suspend the caliper assembly using a suitable wire so that the brake hose is not stretched.

### CAUTION:

- Do not depress the brake pedal to prevent the caliper piston from popping out.
- Do not twist the brake hose.

3. Remove the brake rotor.

### NOTE:

The parking brake must be fully released.

4. Remove the rear ABS sensor, then position it away from the hub assembly using wire. Refer to [BRC-42, "WHEEL SENSORS"](#) (TCS/ABS), [BRC-94, "WHEEL SENSORS"](#) (VDC/TCS/ABS).

### CAUTION:

- Failure to remove the rear ABS sensor may result in damage to the sensor, causing the sensor to become inoperative.
- Do not stretch the rear ABS sensor wire harness.

5. Remove the wheel hub assembly from the knuckle using power tool.

# WHEEL HUB

## INSPECTION AFTER REMOVAL

Check for deformity, cracks, and damage on the wheel hub assembly, replace if necessary.

### CAUTION:

The wheel hub assembly does not require maintenance. If any of the following symptoms are noted, replace the wheel hub assembly.

- Growling noise is emitted from the wheel hub bearing during operation.
- Wheel hub bearing drags or turns roughly.

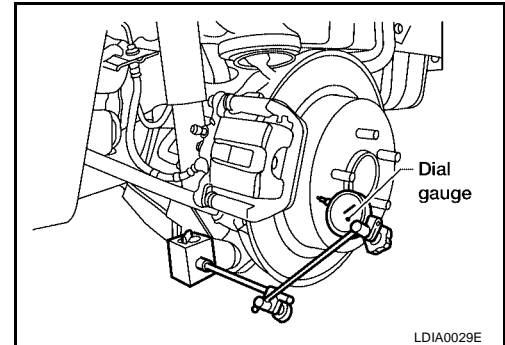
## INSTALLATION

Installation is in the reverse order of removal.

## INSPECTION AFTER INSTALLATION

- Check that the wheel bearing operates smoothly.
- Check that the wheel hub bearing axial end play is within specification as shown.

**Axial end play : 0.05 mm (0.002 in) or less**



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## SERVICE DATA AND SPECIFICATIONS (SDS)

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### SERVICE DATA AND SPECIFICATIONS (SDS)

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#### Wheel Bearing (Rear)

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Axial end play	0.05 mm (0.002 in) or less
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