

SECTION **RAX**
REAR AXLE

A
B
C

RAX

CONTENTS

E

PRECAUTIONS	2	REAR WHEEL BEARING	5	F
Precautions	2	Removal and Installation	6	
PREPARATION	3	REMOVAL	6	
Commercial Service Tools	3	INSPECTION AFTER REMOVAL	7	G
NOISE, VIBRATION, AND HARSHNESS (NVH)		INSTALLATION	7	
TROUBLESHOOTING	4	INSPECTION AFTER INSTALLATION	7	H
NVH Troubleshooting Chart	4	SERVICE DATA AND SPECIFICATIONS (SDS)	8	
WHEEL HUB	5	Wheel Bearing (Rear)	8	
On-Vehicle Inspection and Service	5			

I

J

K

L

M

PRECAUTIONS

PRECAUTIONS

PF0:00001

Precautions

EDS00357

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.

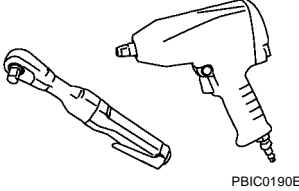
PREPARATION

PREPARATION

PF0:00002

Commercial Service Tools

EDS00358

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>

A

B

C

RAX

E

F

G

H

I

J

K

L

M

NOISE, VIBRATION, AND HARSHNESS (NVH) TROUBLESHOOTING

NOISE, VIBRATION, AND HARSHNESS (NVH) TROUBLESHOOTING

PF0:00003

NVH Troubleshooting Chart

EDS00359

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-4, "NVH Troubleshooting Chart"	BR-5, "NVH Troubleshooting Chart" (brakes) PB-4, "On-Vehicle Service" (parking brake)	RSU-4, "NVH Troubleshooting Chart"	WT-4, "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
	Shake	x	x		x		x	x
	Vibration	x	x		x	x	x	
	Shimmy	x	x		x		x	x
	Shudder	x			x	x	x	x
	Poor quality ride or handling	x	x	x	x		x	x

x: Applicable

WHEEL HUB

PF:43202

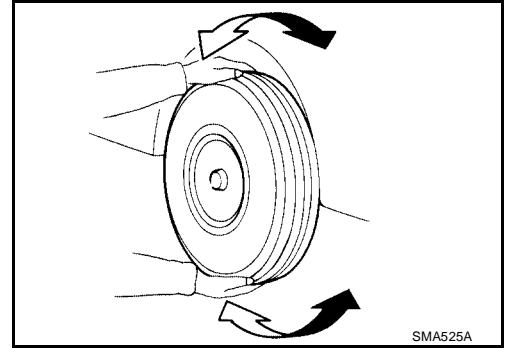
EDS0035A

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.

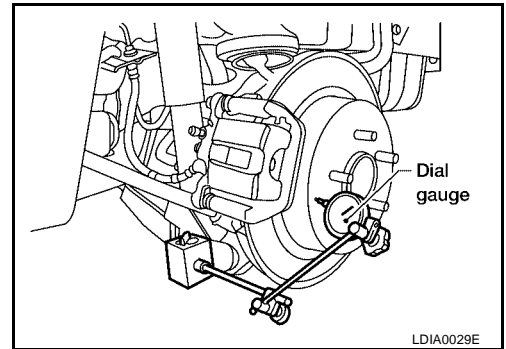
Axial end play : 0.05 mm (0.002 in) or less

- 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.



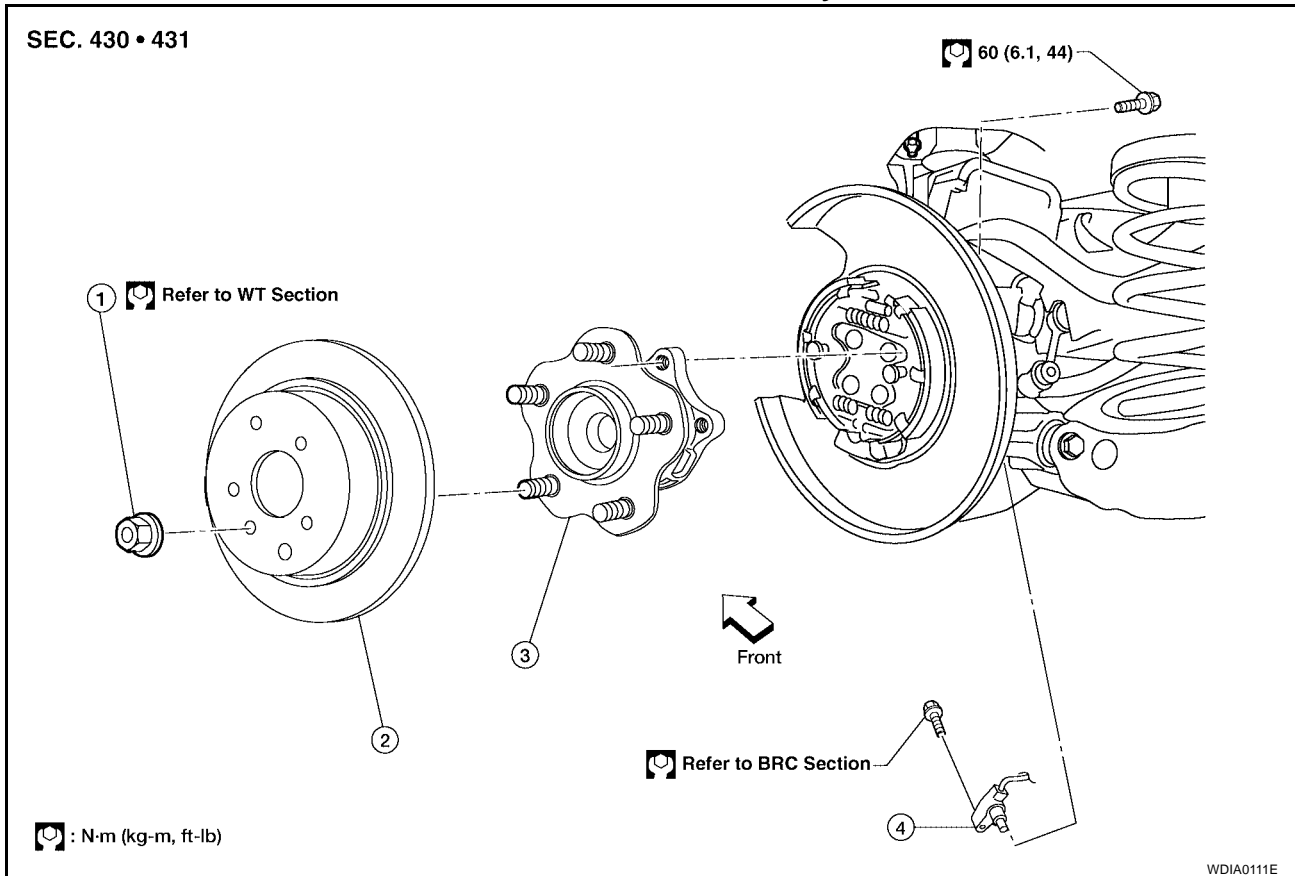
A
B
C
RAX
E
F
G
H
I
J
K
L
M

WHEEL HUB

EDS0035B

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 cylinder body assembly out of the way using a suitable wire without disconnecting the hydraulic hose. Refer to [BR-35, "Removal and Installation of Caliper Assembly and Disc Rotor"](#).
 - The brake hose should not be disconnected from the cylinder body.
 - Suspend the cylinder body assembly using a suitable wire so that the brake hose is not stretched.

CAUTION:

- Do not depress brake pedal, piston will pop out with cylinder body removed.
- 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-43, "WHEEL SENSORS"](#) (TCS/ABS), [BRC-96, "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.

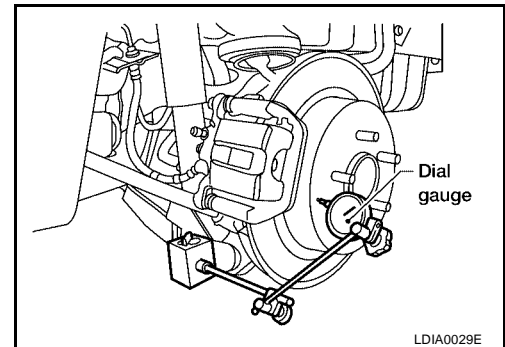
INSTALLATION

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



A
B
C

RAX

E
F
G
H
I
J
K
L
M

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

PF0:00030

Wheel Bearing (Rear)

EDS0035C

Axial end play	0.05 mm (0.002 in) or less
----------------	----------------------------
