

SECTION **RAX**
REAR AXLE

A
B
C

RAX

CONTENTS

E

PRECAUTION	2	PERIODIC MAINTENANCE	5	F
PRECAUTIONS	2	WHEEL HUB	5	G
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	2	On-vehicle Service	5	
General Precautions	2	REMOVAL AND INSTALLATION	6	H
PREPARATION	3	WHEEL HUB	6	I
PREPARATION	3	Exploded View	6	
Commercial Service Tool	3	Removal and Installation	6	J
SYMPTOM DIAGNOSIS	4	SERVICE DATA AND SPECIFICATIONS (SDS)	8	K
NOISE, VIBRATION, AND HARSHNESS(NVH) TROUBLESHOOTING	4	SERVICE DATA AND SPECIFICATIONS (SDS)	8	L
NVH Troubleshooting Chart	4	Wheel Hub Bearing	8	M
				N
				O
				P

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000009951702

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery and wait at least three minutes before performing any service.

General Precautions

INFOID:000000009460673

- When installing each rubber part, final tightening must be carried out under unladen condition* with tires on ground.
*: Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.
- After installing removed suspension parts, check wheel alignment.
- Do not jack up at the trailing arm and lateral link.

PREPARATION


< PREPARATION >

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:000000009460675

Tool name	Description
<p data-bbox="164 415 272 443">Power tool</p>  <p data-bbox="829 632 894 653">PIIB1407E</p>	<p data-bbox="1013 415 1349 443">Loosening nuts, screws and bolts</p>

A

B

C

RAX

E

F

G

H

I

J

K

L

M

N

O

P

NOISE, VIBRATION, AND HARSHNESS(NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NOISE, VIBRATION, AND HARSHNESS(NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:000000009460674

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

Reference page		RAX-6, "Removal and Installation"	RAX-6, "Removal and Installation"	RAX-6, "Removal and Installation"	WT-52, "NVH Troubleshooting Chart"	WT-52, "NVH Troubleshooting Chart"	
Possible cause and SUSPECTED PARTS		Improper installation, looseness	Parts interference	Wheel bearing damage	TIRES	ROAD WHEEL	
Symptom	REAR AXLE	Noise	x	x		x	x
		Shake	x	x		x	x
		Vibration	x	x		x	
		Shimmy	x	x		x	x
		Shudder	x			x	x
		Poor quality ride or handling	x	x	x	x	x

x: Applicable

WHEEL HUB

< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

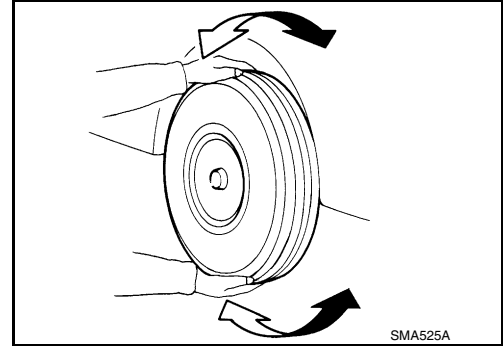
WHEEL HUB

On-vehicle Service

INFOID:000000009460676

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

- Shake each rear wheel to check for excessive play.



Wheel Hub Bearing

If the following conditions are not met or not within specification, replace the wheel hub and bearing.

- Check that wheel hub and bearing rotates smoothly.
- Check wheel hub and bearing axial end play.

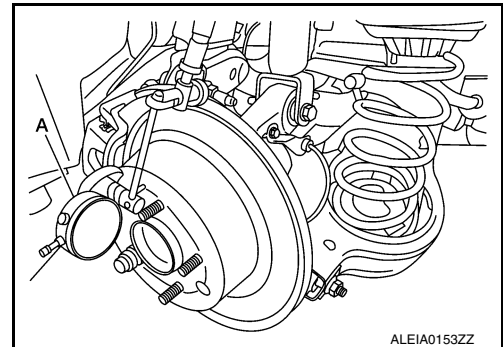
Axial end play : Refer to [RAX-8, "Wheel Hub Bearing"](#).

- Check wheel hub and bearing runout.

Runout : Refer to [RAX-8, "Wheel Hub Bearing"](#).

NOTE:

- Make sure the area between the disc brake rotor and wheel hub and bearing are free from dirt or debris.
- Place the dial gauge on smooth surface, free from scratches or dents.
- Make sure the disc brake rotor is securely fastened to the wheel hub and bearing.



WHEEL HUB

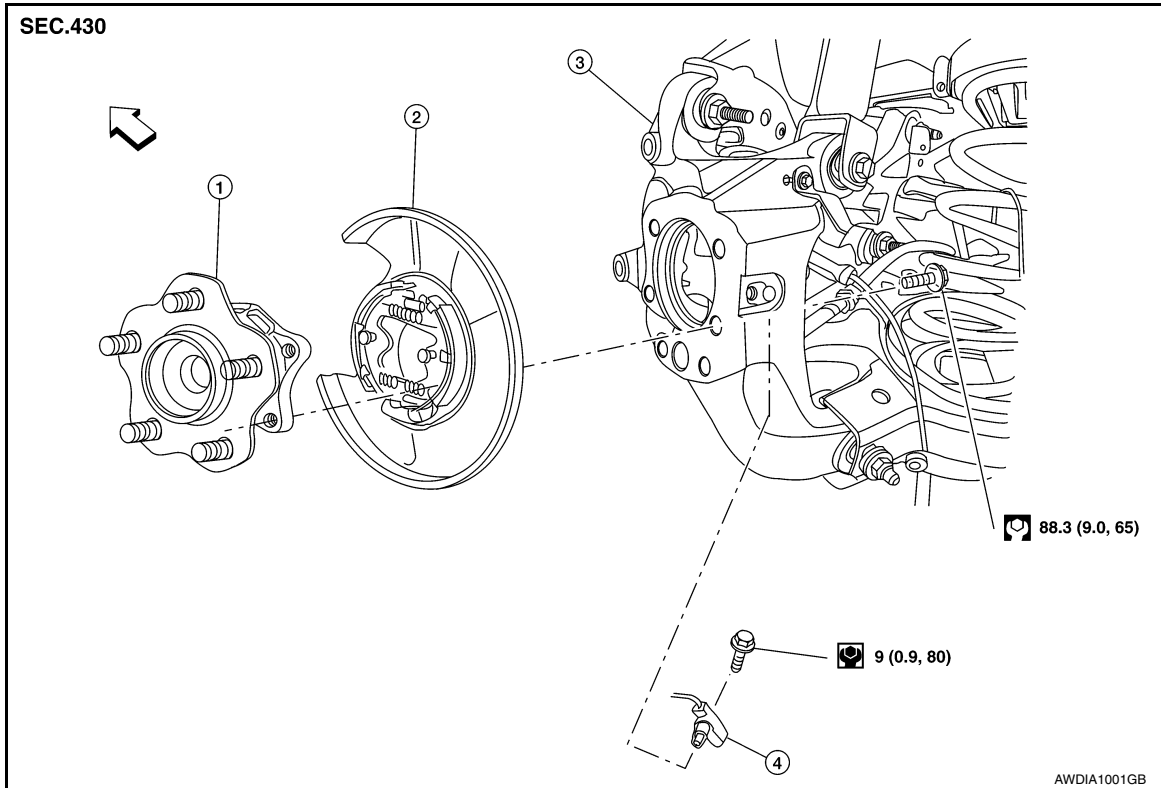
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

WHEEL HUB

Exploded View

INFOID:000000009460677



1. Wheel hub and bearing assembly 2. Baffle plate 3. Knuckle
4. Rear wheel sensor ↵ Front

Removal and Installation

INFOID:000000009460678

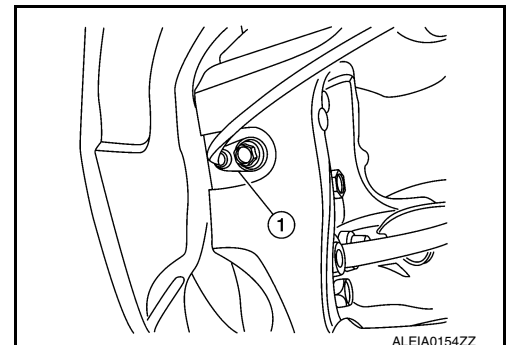
REMOVAL

1. Remove the rear wheel and tire using power tool. Refer to [WT-55, "Adjustment"](#).
2. Remove brake caliper torque member bolts, leaving brake hose attached, reposition the caliper aside with wire. Refer to [BR-39, "BRAKE CALIPER ASSEMBLY : Exploded View"](#).

CAUTION:

Do not depress brake pedal while caliper assembly is removed.

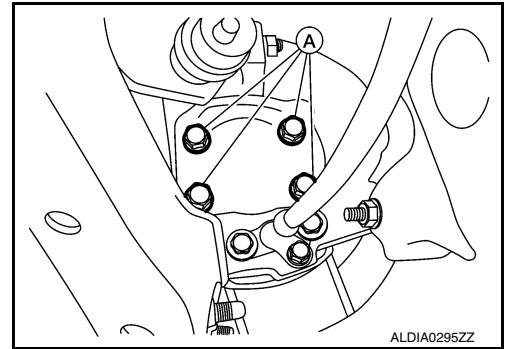
3. Put alignment marks on the disc brake rotor and rear wheel hub and bearing, then remove the disc rotor.
4. Remove the rear wheel sensor (1) from the knuckle and position it aside.



WHEEL HUB

< REMOVAL AND INSTALLATION >

5. Remove the bolts (A) from the wheel hub and bearing assembly.



6. Remove the wheel hub and bearing assembly from knuckle.
7. Remove the wheel hub and bearing assembly dust cap.

INSTALLATION

Installation is in the reverse order of removal.

- Check that the wheel hub and bearing assembly operates smoothly.
- Align the marks made on the rotor and wheel hub and bearing assembly.

A
B
C

RAX

E
F
G
H
I
J
K
L
M
N
O
P

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel Hub Bearing

INFOID:000000009460679

Axial end play	0.1 mm (0.004 in) or less
Runout	0.05 (0.002 in) or less