

SECTION **RAX**  
REAR AXLE

A  
B  
C

RAX

CONTENTS

E

<b>SERVICE INFORMATION</b> .....	2	<b>NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING</b> .....	5	F
<b>PRECAUTIONS</b> .....	2	NVH Troubleshooting Chart .....	5	G
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	2	<b>WHEEL HUB</b> .....	6	H
Precaution Necessary for Steering Wheel Rotation After Battery Disconnect .....	2	On-Vehicle Inspection and Service .....	6	I
<b>PREPARATION</b> .....	4	Removal and Installation .....	6	J
Commercial Service Tool .....	4	<b>SERVICE DATA AND SPECIFICATIONS (SDS)</b> .....	8	K
		Wheel Bearing .....	8	L
				M
				N
				O
				P

# PRECAUTIONS

< SERVICE INFORMATION >

## SERVICE INFORMATION

### PRECAUTIONS

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

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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. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS 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 SRS 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 3 minutes before performing any service.

#### Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

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#### **NOTE:**

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

#### OPERATION PROCEDURE

1. Connect both battery cables.

#### **NOTE:**

Supply power using jumper cables if battery is discharged.

2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.

## PRECAUTIONS

### < SERVICE INFORMATION >

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5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT.

A

B

C

**RAX**

E

F

G

H

I

J

K

L

M

N

O

P

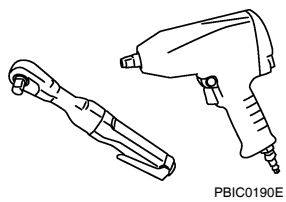
# PREPARATION

< SERVICE INFORMATION >

## PREPARATION

### Commercial Service Tool

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Tool name	Description
Power tool 	Removing wheel nuts

# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SERVICE INFORMATION >

## NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

### NVH Troubleshooting Chart

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

Symptom		Possible cause and SUSPECTED PARTS		Reference page						
		Improper installation, looseness	Parts interference	Wheel bearing damage	REAR SUSPENSION	TIRES	ROAD WHEEL	BRAKES	STEERING	
Symptom	REAR AXLE	Noise	x	x		x	x	x	x	x
		Shake	x	x		x	x	x	x	x
		Vibration	x	x		x	x			x
		Shimmy	x	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

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

# WHEEL HUB

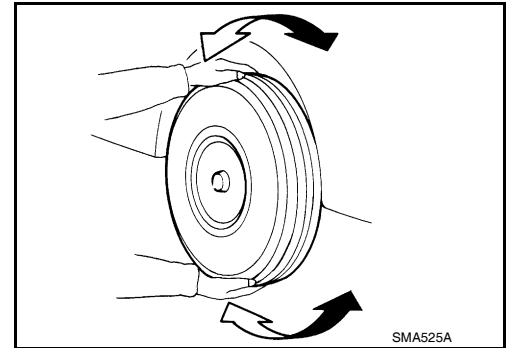
< SERVICE INFORMATION >

## WHEEL HUB

### On-Vehicle Inspection and Service

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- Check the axle and suspension parts for excessive play, wear, or damage.
- Shake each rear wheel to check for excessive play as shown.



### REAR WHEEL BEARING INSPECTION

- Move wheel hub and bearing assembly in the axial direction by hand. Make sure the axial end play is within specification.

**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:**

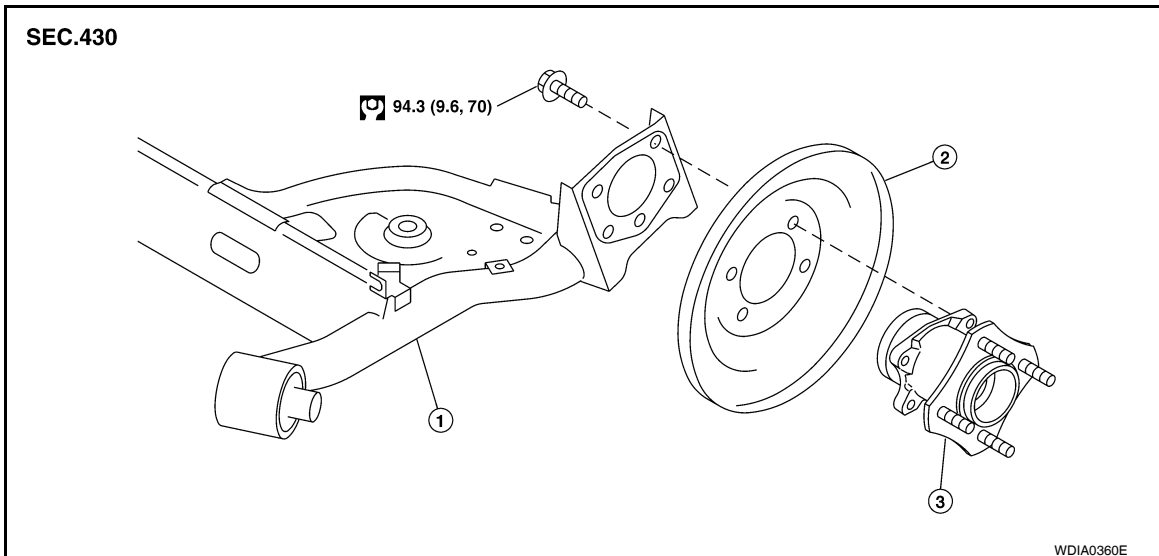
**The wheel hub assembly does not require maintenance. If any of the following symptoms are noted, replace the wheel hub assembly.**

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

### Removal and Installation

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### COMPONENTS



1. Rear suspension beam

2. Back plate

3. Wheel hub and bearing assembly

### REMOVAL

1. Remove wheel and tire using power tool.
2. Remove wheel sensor from wheel hub and bearing assembly.

#### **CAUTION:**

# WHEEL HUB

## < SERVICE INFORMATION >

### **Do not pull on wheel sensor harness.**

3. Remove the brake drum only. Refer to [BR-33, "Removal and Installation of Drum Brake Assembly"](#).
4. Remove wheel hub and bearing assembly bolts, and then remove wheel hub and bearing assembly from vehicle.
5. Suspend back plate with suitable wire, or if necessary, remove back plate using the following procedure.
  1. Remove parking brake rear cable from back plate. Refer to [PB-6, "Removal and Installation"](#).
  2. Separate brake tube from wheel cylinder. Refer to [BR-12, "Rear Brake Tube and Hose"](#).

### INSPECTION AFTER REMOVAL

Check for any deformity, cracks, or other 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.

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

# SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE INFORMATION >

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## SERVICE DATA AND SPECIFICATIONS (SDS)

### Wheel Bearing

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Axial end play	0.05 mm (0.002 in) or less
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