

SECTION **RAX**  
REAR AXLE

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# PRECAUTIONS

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## PRECAUTION

### PRECAUTIONS

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

INFOID:000000012523977

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 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

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When installing rubber parts, 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.

# PREPARATION


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## PREPARATION

### PREPARATION

#### Commercial Service Tool

INFOID:000000012523979

Tool name	Description
Power tool  PIIB1407E	Loosening nuts, screws and bolts

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# NOISE, VIBRATION, AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

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

#### 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		DLN-5, "NVH Troubleshooting Chart" (3S1355), DLN-18, "NVH Troubleshooting Chart" (3S1415)		DLN-34, "NVH Troubleshooting Chart"		RSU-4, "NVH Troubleshooting Chart"		WT-60, "NVH Troubleshooting Chart"		WT-60, "NVH Troubleshooting Chart"		BR-7, "NVH Troubleshooting Chart"	
		RAX-6		RAX-5		RAX-5		DLN-5, "NVH Troubleshooting Chart" (3S1355), DLN-18, "NVH Troubleshooting Chart" (3S1415)		DLN-34, "NVH Troubleshooting Chart"		RSU-4, "NVH Troubleshooting Chart"		WT-60, "NVH Troubleshooting Chart"		WT-60, "NVH Troubleshooting Chart"		BR-7, "NVH Troubleshooting Chart"	
Possible cause and SUSPECTED PARTS		Improper installation, looseness		Parts interference		Wheel bearing damage		PROPELLER SHAFT		REAR FINAL DRIVE		SUSPENSION		TIRES		ROAD WHEEL		BRAKES	
Symptom	Noise	x	x					x	x	x	x	x	x	x	x	x	x	x	x
	Shake	x	x					x				x	x	x	x	x	x	x	x
	Vibration	x	x					x				x	x						
	Shimmy	x	x									x	x	x	x	x	x	x	x
	Shudder	x										x	x	x	x	x	x	x	x
	Poor quality ride or handling	x	x	x									x	x	x	x	x	x	

x: Applicable

# AXLE SHAFT

< BASIC INSPECTION >

## BASIC INSPECTION

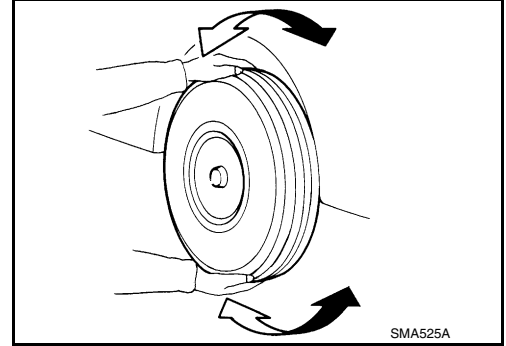
### AXLE SHAFT

#### On-Vehicle Inspection

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#### REAR AXLE

- Check the axle parts for excessive play, wear, and damage. Replace as necessary.
- Shake each rear wheel to check for excessive play. Repair as necessary.
- Retighten all nuts and bolts to specification. Refer to [RAX-6](#), "[Removal and Installation](#)".



#### WHEEL BEARING INSPECTION

Check the axial end play, replace as necessary.

- Check that the axle shaft bearing operates smoothly. Replace as necessary.

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# AXLE SHAFT

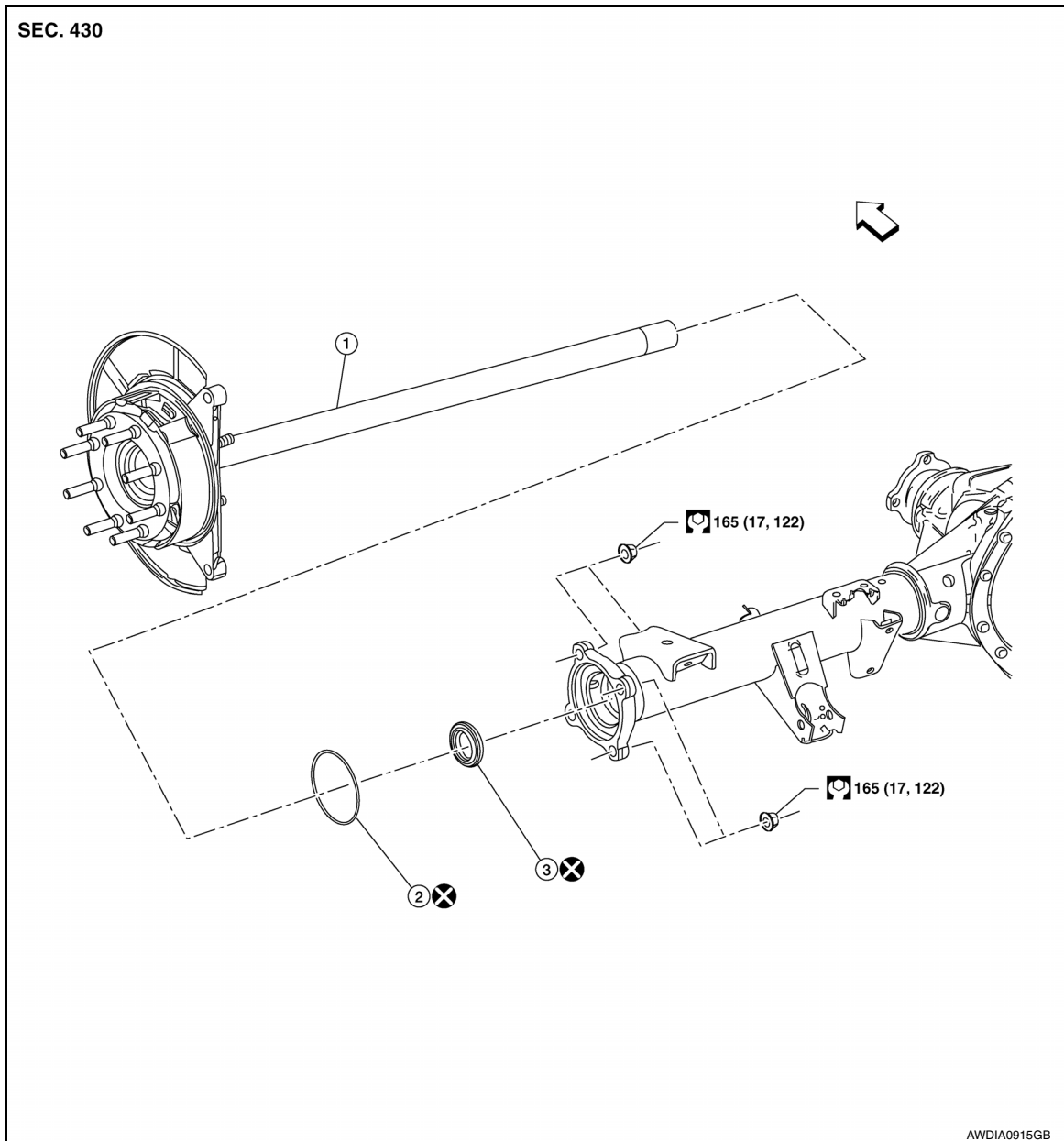
< UNIT REMOVAL AND INSTALLATION >

## UNIT REMOVAL AND INSTALLATION

### AXLE SHAFT

Exploded View

INFOID:000000012523982



1. Axle shaft assembly

2. O-ring

3. Seal

⇐ Front

### Removal and Installation

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#### **CAUTION:**

Before removing the axle shaft, remove the wheel sensor to reposition the wheel sensor out of the way. Failure to do so may result in damage to the wheel sensor and cause the wheel sensor to become inoperative.

#### REMOVAL

1. Remove the wheel and tire assembly using power tool. Refer to [WT-62. "Adjustment"](#).
2. Remove the wheel sensor from the axle housing. Refer to [BRC-141. "REAR WHEEL SENSOR : Exploded View"](#).

# AXLE SHAFT

## < UNIT REMOVAL AND INSTALLATION >

3. Remove the caliper torque member bolts using power tool, leaving brake hose attached, reposition the caliper with wire. Refer to [BR-39, "BRAKE CALIPER ASSEMBLY : Removal and Installation of Brake Caliper Assembly and Rotor"](#). A
4. Put alignment marks on disc rotor and wheel hub and bearing assembly, then remove the disc rotor.  
**CAUTION:**
  - Put alignment marks on wheel hub and bearing assembly and disc rotor before removing disc rotor. B
  - Do not drop the disc rotor. C
5. Disconnect the park brake cable from the lever. Refer to [PB-6, "Exploded View"](#).
6. Remove the axle nuts.
7. Remove the axle shaft assembly. Discard the O-ring and seal.  
**CAUTION:**
  - Do not reuse O-ring.
  - Do not reuse seal.

RAX

## INSTALLATION

Installation is in the reverse order of removal.

- CAUTION:**
- Do not reuse O-ring. E
  - Do not reuse seal. F
  - Check and adjust the rear differential gear oil level as necessary. Refer to [DLN-58, "General Specification"](#). G

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