

SECTION **RAX**
REAR AXLE

A
B
C

RAX

CONTENTS

E

| | | | | |
|--|---|--|---|---|
| SYMPTOM DIAGNOSIS | 2 | Commercial Service Tool | 4 | F |
| NOISE, VIBRATION, AND HARSH- NESS(NVH) TROUBLESHOOTING | 2 | ON-VEHICLE MAINTENANCE | 5 | |
| NVH Troubleshooting Chart | 2 | WHEEL HUB | 5 | G |
| PRECAUTION | 3 | On-vehicle Service | 5 | |
| PRECAUTIONS | 3 | ON-VEHICLE REPAIR | 6 | H |
| Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER" | 3 | WHEEL HUB | 6 | I |
| Precaution | 3 | Removal and Installation | 6 | |
| PREPARATION | 4 | SERVICE DATA AND SPECIFICATIONS (SDS) | 8 | J |
| PREPARATION | 4 | SERVICE DATA AND SPECIFICATIONS (SDS) | 8 | K |
| Special Service Tool | 4 | Wheel Bearing (Rear) | 8 | |

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:000000001503236

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-6 | RAX-6 | WT-29, "NVH Troubleshooting Chart" | WT-29, "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

PRECAUTIONS

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PRECAUTION

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. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

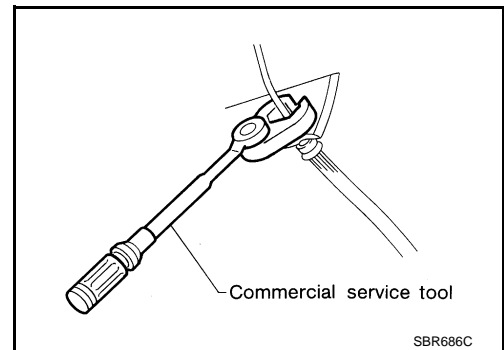
WARNING:

- 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.

Precaution

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- 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.
- Use flare nut wrench when removing or installing brake tubes.
- After installing removed suspension parts, check wheel alignment.
- Do not jack up at the trailing arm and lateral link.
- Always torque brake lines when installing.



PREPARATION

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PREPARATION

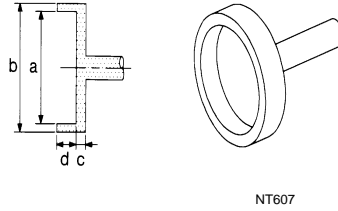
PREPARATION

Special Service Tool

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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

| Tool number (Kent-Moore No.) Tool name | Description |
|--|---|
| ST15310000 (—) Drift | Install ABS sensor rotor a: 84 mm (3.31 in) dia. b: 96 mm (3.78 in) dia. c: 8 mm (0.31 in) d: 20 mm (0.79 in) |

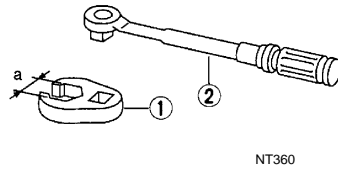


NT607

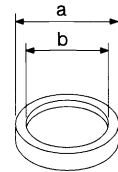
Commercial Service Tool

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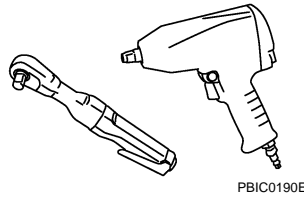
| Tool name | Description |
|---|--|
| GG94310000 1 Flare nut crowfoot 2 Torque wrench | Removing and installing brake piping a: 10 mm (0.39 in) |
| Drift | Install ABS sensor rotor a: 75 mm (2.95 in) dia. b: 62 mm (2.44 in) dia. |
| Power tool | Loosening bolts and nuts |



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WHEEL HUB

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

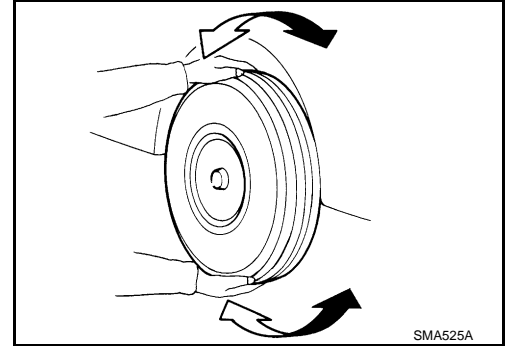
WHEEL HUB

On-vehicle Service

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

- Shake each rear wheel to check for excessive play.

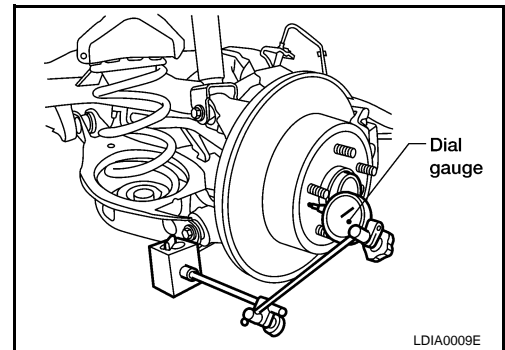


Rear Wheel Bearing

- Check axial end play.

Axial end play : 0.1 mm (0.0040 in) or less

- Check that wheel hub bearings operate smoothly.
- Replace wheel bearing assembly if there is axial end play or wheel bearing does not turn smoothly. Refer to [RAX-5, "On-vehicle Service"](#).



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RAX

E

F

G

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WHEEL HUB

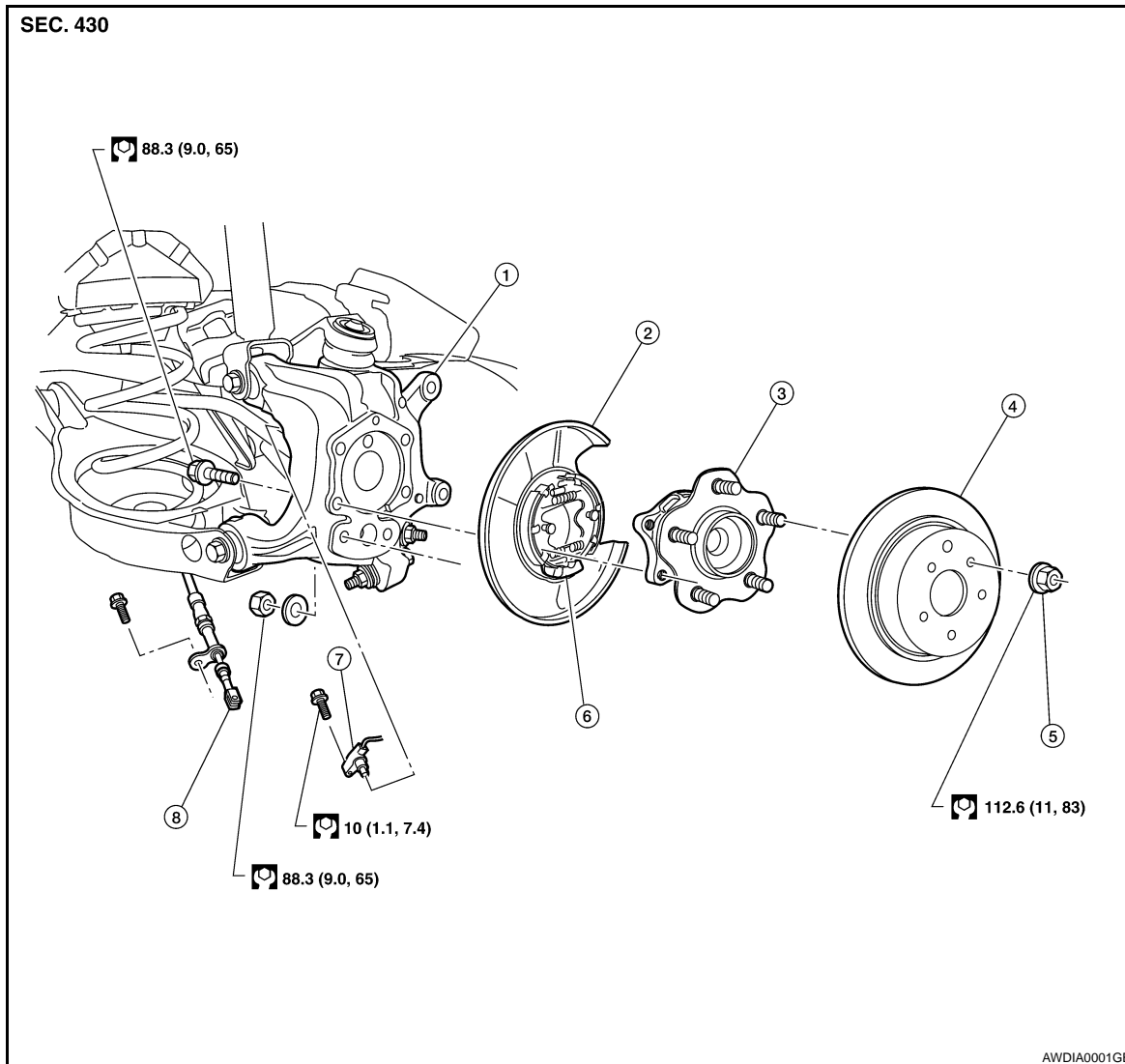
< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

WHEEL HUB

Removal and Installation

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- | | | |
|----------------|------------------------|-----------------------|
| 1. Knuckle | 2. Baffle plate | 3. Wheel hub assembly |
| 4. Brake rotor | 5. Wheel nut | 6. Anchor block |
| 7. ABS sensor | 8. Parking brake cable | |

REMOVAL

CAUTION:

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

- A growling noise is emitted from the wheel hub assembly while driving.
- The wheel hub assembly drags or turns roughly.

1. Remove the rear wheel and tire using power tool.
2. Remove the brake caliper assembly using power tool.
 - The brake hose does not need to be disconnected from the brake caliper.
 - Suspend the brake caliper assembly using wire, do not stretch the brake hose.
 - Do not depress the brake pedal, or the caliper piston will pop out.
 - Do not twist the brake hose.

WHEEL HUB

< ON-VEHICLE REPAIR >

3. Remove the brake rotor.
4. Remove the rear ABS sensor, then move it away from the wheel hub assembly.

CAUTION:

Failure to remove the ABS sensor may result in damage to the sensor wires and the sensor being inoperative.

5. Remove the wheel hub assembly from knuckle.

INSPECTION AFTER REMOVAL

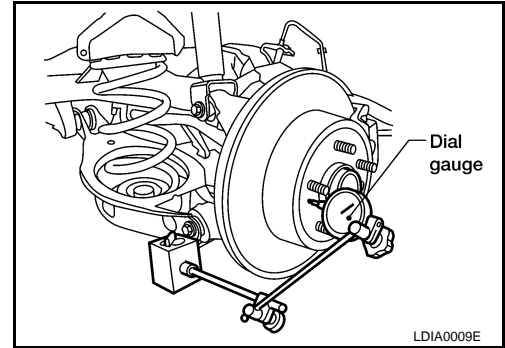
Check for any deformity, cracks, or damage on the wheel hub assembly, replace if necessary.

INSTALLATION

Installation is in the reverse order of removal.

- Check that the wheel bearings operate smoothly.
- Check that the wheel hub bearing axial end play is within specification.

Axial end play : 0.1 mm (0.004 in) or less



A

B

C

RAX

E

F

G

H

I

J

K

L

M

N

O

P

SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel Bearing (Rear)

INFOID:000000001503243

| | |
|------------------------------|----------------------------|
| Wheel bearing axial end play | 0.1 mm (0.0040 in) or less |
|------------------------------|----------------------------|