

SECTION **FAX**
FRONT AXLE

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FAX

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PREPARATION

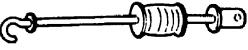
PREPARATION

PFP:00002

Special Service Tools

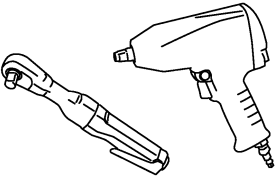
EDS000VT

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
ST3623 0000 (J25840-A) Sliding hammer  ZZA0803D	Removing wheel hub-wheel bearing

Commercial Service Tools

EDS000VU

Tool name	Description
Power tool  PBIC0190E	<ul style="list-style-type: none">● Removing wheel nuts● Removing brake caliper assembly

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

PFP:00003

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		FAX-4	—	FAX-4	NVH in WT section.	NVH in WT section.	NVH in PS section.
Possible cause and SUSPECTED PARTS		Improper installation, looseness	Parts interference	Wheel bearing damage	TIRES	ROAD WHEEL	STEERING
Symptom	FRONT AXLE	Noise	x	x		x	x
		Shake	x	x		x	x
		Vibration	x	x		x	
		Shimmy	x	x		x	x
		Judder	x			x	x
		Poor quality ride or handling	x	x	x	x	x

x: Applicable

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FRONT WHEEL HUB AND KNUCKLE

FRONT WHEEL HUB AND KNUCKLE

PFP:40202

On-Vehicle Inspection and Service

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Check that the mounting conditions (looseness, back lash) of each component and component status (wear, damage) are normal.

WHEEL BEARING INSPECTION

- Move wheel hub in the axial direction by hand. Check that there is no looseness of wheel bearing.

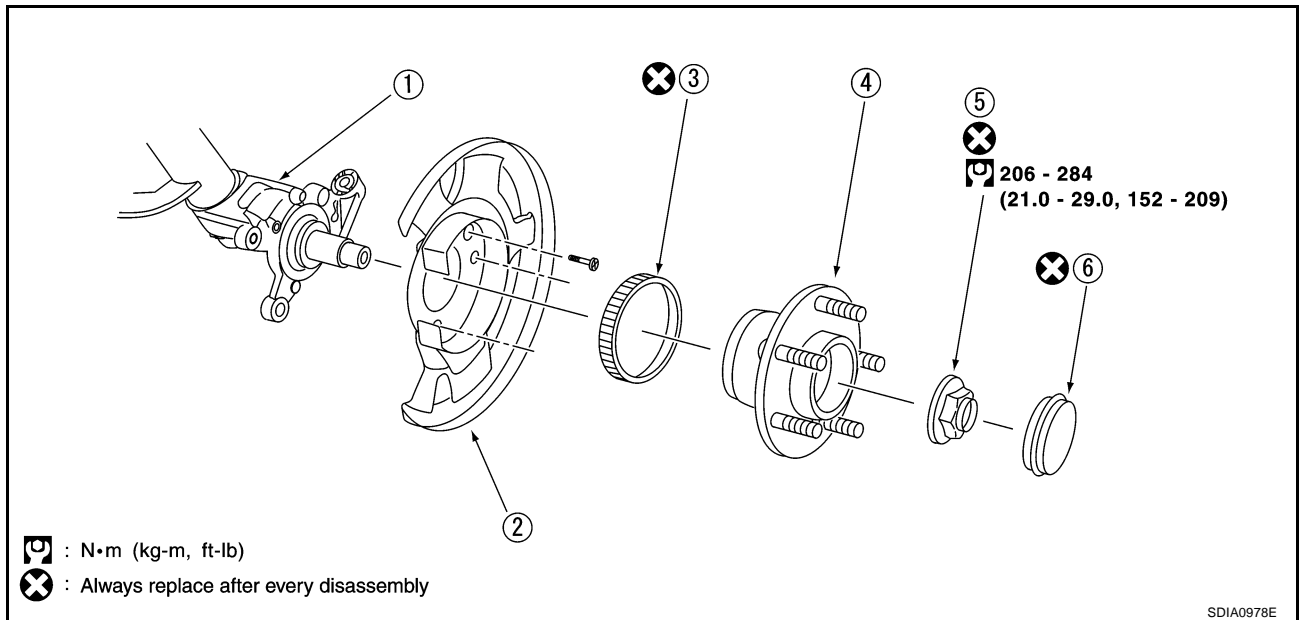
Standard value

Axial end play limit : 0 mm (0 in)

- Rotate wheel hub and check that there is no unusual noise or other irregular conditions. If there are any irregular conditions, replace wheel hub-wheel bearings.

Removal and Installation

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- | | | |
|----------------------------|-----------------|-----------------|
| 1. Strut assembly | 2. Splash guard | 3. Sensor rotor |
| 4. Wheel hub-Wheel bearing | 5. Lock nut | 6. Hub cap |

REMOVAL

1. Remove tire with power tool.
2. Remove brake caliper with power tool. Hang it in a place where it will not interfere with work.

CAUTION:

Avoid depressing brake pedal while brake caliper is removed.

3. Use a hub cap pliers to remove hub cap from wheel hub-wheel bearing.
4. Pull up caulked area of lock nut with flat-bladed head screwdriver.
5. Remove disc rotor.

NOTE:

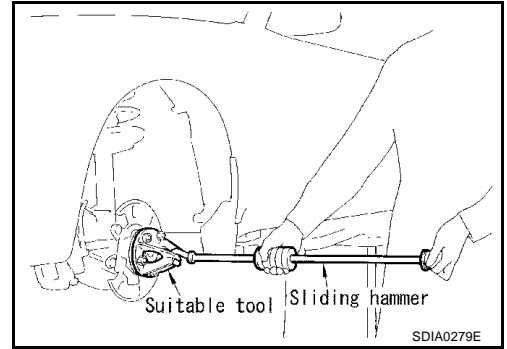
If it is difficult to remove disc rotor, remove it by tapping with rubber hammer.

6. Remove lock nut, then remove wheel hub-wheel bearing from strut assembly.

FRONT WHEEL HUB AND KNUCKLE

- When it is hard to remove wheel hub-wheel bearing from strut due to burnout, use a sliding hammer (special service tool) for removal.

Tool number : ST3623 0000 (J25840-A)



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7. Remove fixing screws of splash guard, then remove splash guard from strut assembly.

INSPECTION AFTER REMOVAL

Wheel hub

- Check wheel hubs for damage, seizure, and corrosion. Also check wheel hubs for cracks (using a die test or other method). Replace if any irregular conditions are found.

Knuckle Spindle

- Check knuckle spindle for damage and corrosion. If any irregular conditions are found, replace strut assembly.

INSTALLATION

- Refer to component parts drawing for tightening torque. For installation, follow removal procedure in reverse order.

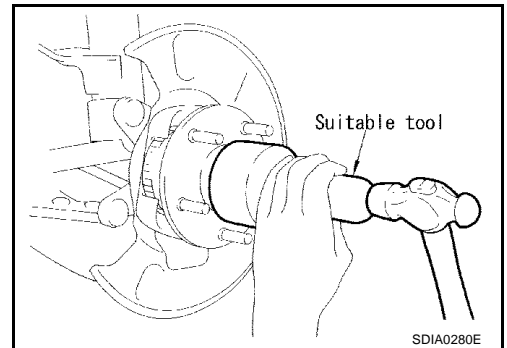
CAUTION:

Refer to component parts and do not reuse non-reusable parts.

- Install hub cap using a suitable tool.

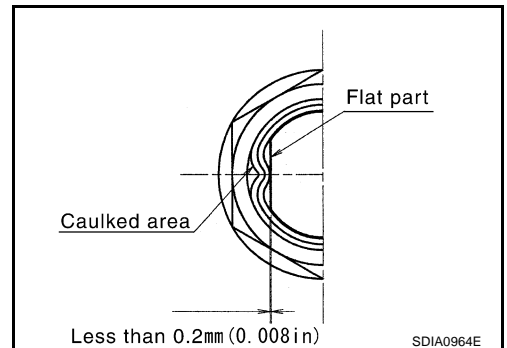
CAUTION:

Discard old hub cap; replace with a new one.



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- After installation of lock nut, be sure to perform caulking. Refer to figure for caulking procedure.



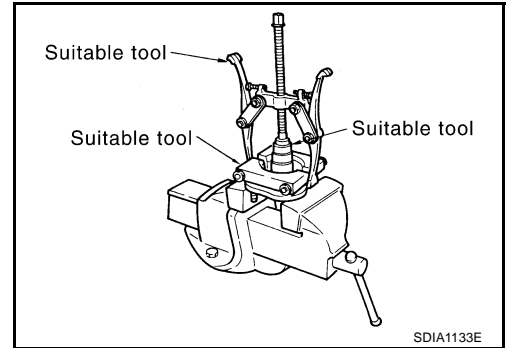
FRONT WHEEL HUB AND KNUCKLE

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Disassembly and Assembly

DISASSEMBLY

- As shown in the figure, use a puller (suitable tool), drift (suitable tool), and bearing replacer (suitable tool) to remove wheel hub-wheel bearing from ABS sensor rotor.

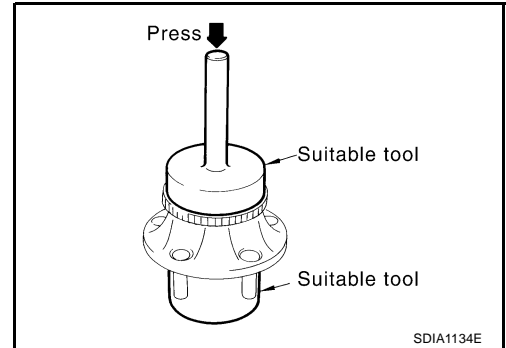


ASSEMBLY

- Press-fit ABS sensor rotor into wheel hub-wheel bearing using a drift (suitable tool).

CAUTION:

- Do not reuse ABS sensor rotor. When installing, replace it with a new one.
- ABS sensor rotor must be installed with its grooved side facing inboard.



- Turn wheel hub several times in both directions to seat wheel bearing correctly.
- Attach spring balance to wheel hub bolt as shown at figure and pull it at a speed of 10 ± 2 rpm to measure rotation torque.

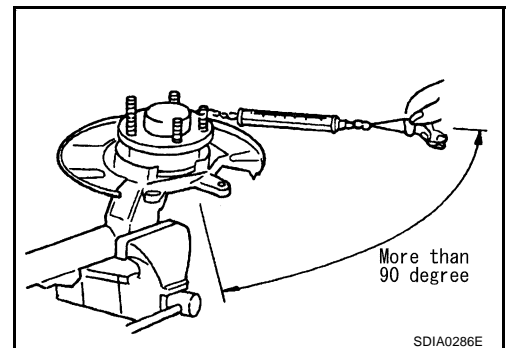
Standard value

Rotation torque:

Less than 1.49 N-m (0.15 kg-m, 13 in-lb)

Spring balance indication:

Less than 2.61 N (0.27 kg, 0.59 lb)



SERVICE DATA

SERVICE DATA

PFP:00030

Wheel Bearing

EDS000VZ

Axial end play limit	0 mm (0 in)
Rotational torque	Less than 1.49 N-m (0.15 kg-m, 13 in-lb)
Measurement of spring scale (Spring scale hooking position: wheel hub bolt)	Less than 2.61 N (0.27 kg, 0.59 lb)

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SERVICE DATA
