

SECTION **FAX**
FRONT AXLE

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FAX

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PREPARATION

PREPARATION

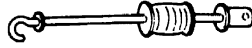
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Special Service Tools

EDS000WC

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 | Removing wheel hub and bearing assembly |

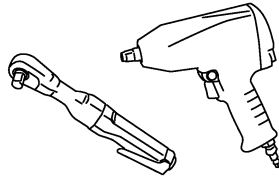


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Commercial Service Tools

EDS000WD

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



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NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

PFP:00003

NVH Troubleshooting Chart

EDS000WE

Use 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 | x |
| | | Shake | x | x | | x | x | x |
| | | Vibration | x | x | | x | | x |
| | | Shimmy | x | x | | x | x | x |
| | | Judder | x | | | 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

EDS000WF

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.

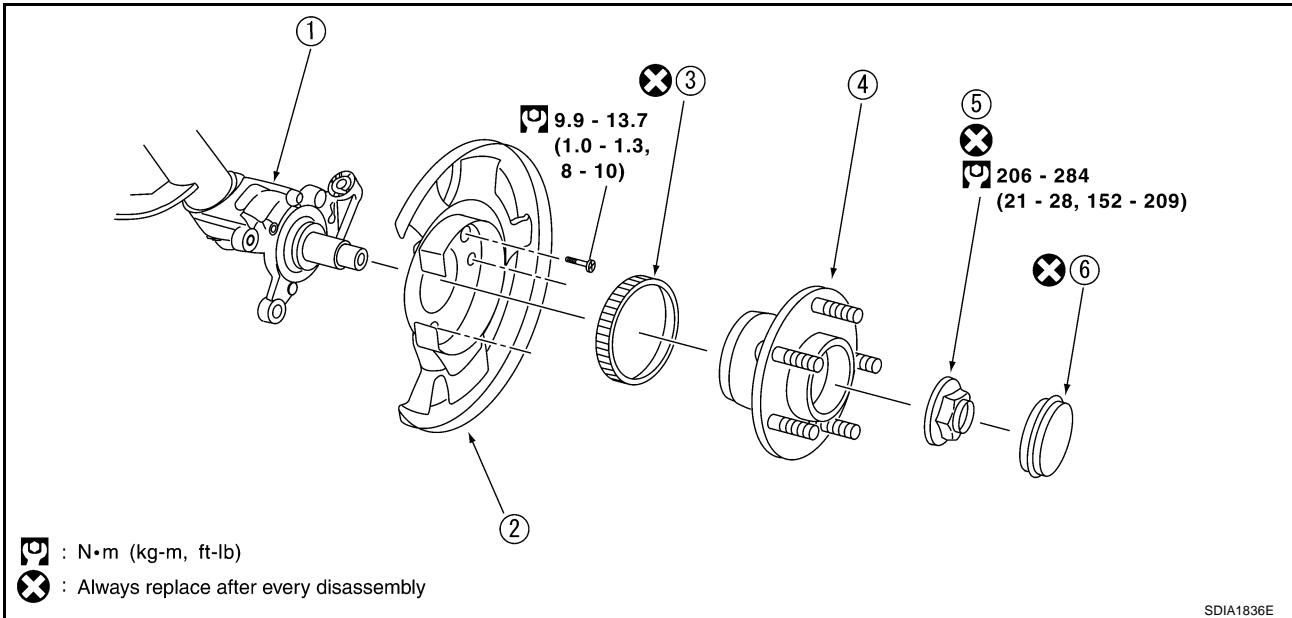
Standard value

Axial end play limit : 0.05 mm (0.002 in) or less

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

Removal and Installation

EDS000WG



1. Strut assembly
2. Splash guard
3. Sensor rotor
4. Wheel hub and bearing assembly
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. Refer to [BR-23, "FRONT DISC BRAKE"](#).

CAUTION:

Avoid depressing brake pedal while brake caliper is removed.

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

NOTE:

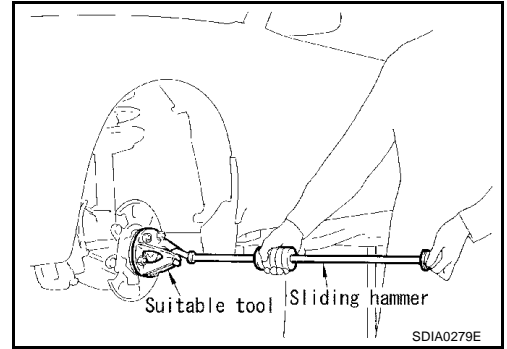
If it is difficult to remove disc rotor, remove it by tapping with rubber hammer.

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

FRONT WHEEL HUB AND KNUCKLE

- When it is hard to remove wheel hub and bearing assembly from strut assembly 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 hub 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 [FAX-4, "Removal and Installation"](#) for tightening torque. Tighten in the reverse order of removal.

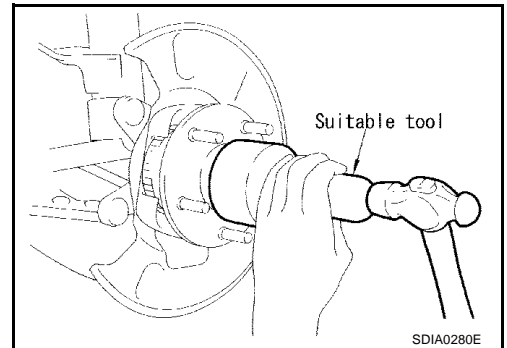
CAUTION:

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

- Install hub cap using a suitable tool.

CAUTION:

Discard old hub cap; replace with new one.



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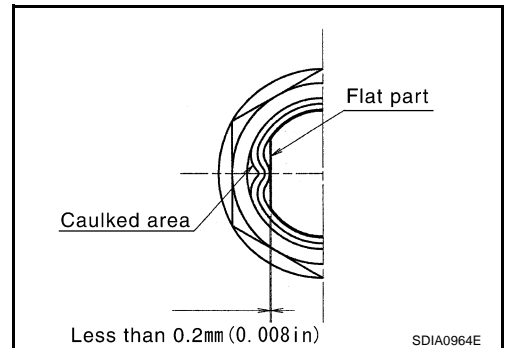
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- After installation of lock nut, be sure to perform caulking. Refer to figure for caulking procedure.



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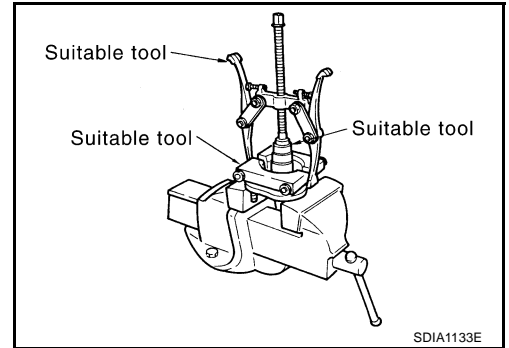
FRONT WHEEL HUB AND KNUCKLE

EDS000WH

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 and bearing assembly from ABS sensor rotor.

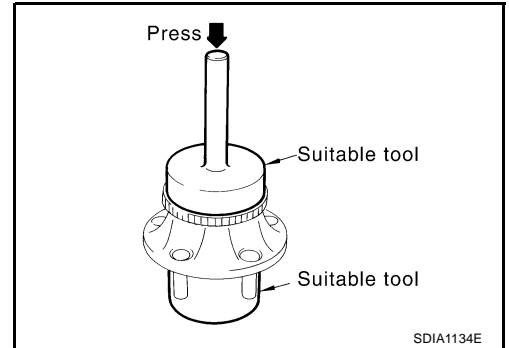


ASSEMBLY

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

CAUTION:

- Discard old ABS sensor rotor; replace with 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.

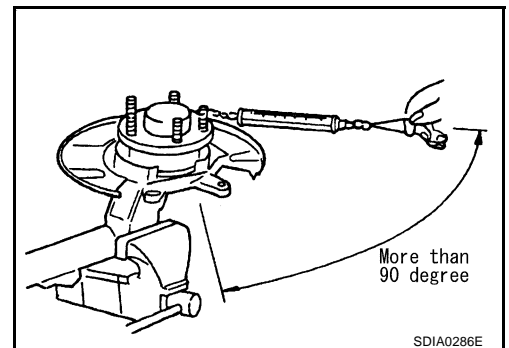
Standard value

Rotation torque:

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

Spring balance indication:

Less than 26.1 N (2.66 kg, 5.87 lb)



SERVICE DATA

SERVICE DATA

PFP:00030

Wheel Bearing

EDS000WI

| | |
|---|--|
| Axial end play limit | 0.05 mm (0.002 in) or less |
| 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 26.1 N (2.66 kg, 5.87 lb) |

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SERVICE DATA
