

SECTION **EX**  
EXHAUST SYSTEM



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## PRECAUTIONS

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### PRECAUTION

#### PRECAUTIONS

##### Removal and Installation

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**CAUTION:**

- Be sure to use genuine exhaust system parts or equivalents which are specially designed for heat resistance, corrosion resistance, and shape.
- Perform the operation with the exhaust system fully cooled down because the system will be hot just after engine stops.
- Be careful not to cut your hand on the heat insulator edge.

# PREPARATION

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## PREPARATION

### PREPARATION

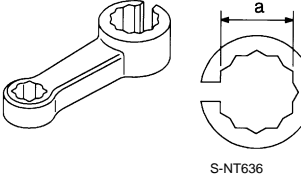
#### Special Service Tools

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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
KV10114400 (J-38365) Heated oxygen sensor wrench  	Loosening or tightening heated oxygen sensor 2 <b>a: For 22 mm (0.87 in) width hexagon nut</b>

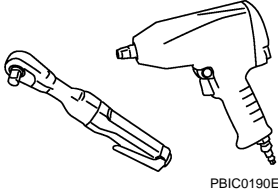
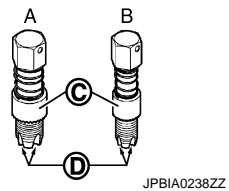

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#### Commercial Service Tools

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(Kent-Moore No.) Tool name	Description
( — ) Power tool  	Loosening nuts and bolts
A: (J-43897-18) B: (J-43897-12) Heated oxygen sensor thread cleaner  	Reconditioning the exhaust system threads before installing a new heated oxygen sensor (Use with anti-seize lubricant shown below.) <b>A: J-43897-18 [18 mm (0.71 in) dia.] for zirconia heated oxygen sensor</b> <b>B: J-43897-12 [12 mm (0.47 in) dia.] for titania heated oxygen sensor</b> <b>C: Mating surface shave cylinder</b> <b>D: Flutes</b>
( — ) Anti-seize lubricant (Permatex 133AR or equivalent meeting MIL specification MIL-A-907)  	Lubricating heated oxygen sensor thread cleaner when reconditioning exhaust system threads

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# EXHAUST SYSTEM

< PERIODIC MAINTENANCE >

## PERIODIC MAINTENANCE

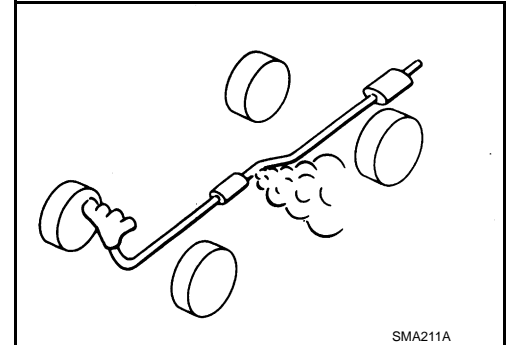
### EXHAUST SYSTEM

#### Inspection

INFOID:000000006504810

Check exhaust pipes, muffler, and mounting for improper attachment, leakage, cracks, damage or deterioration.

- If anything is found, repair or replace damaged parts.



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# EXHAUST SYSTEM

< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### EXHAUST SYSTEM

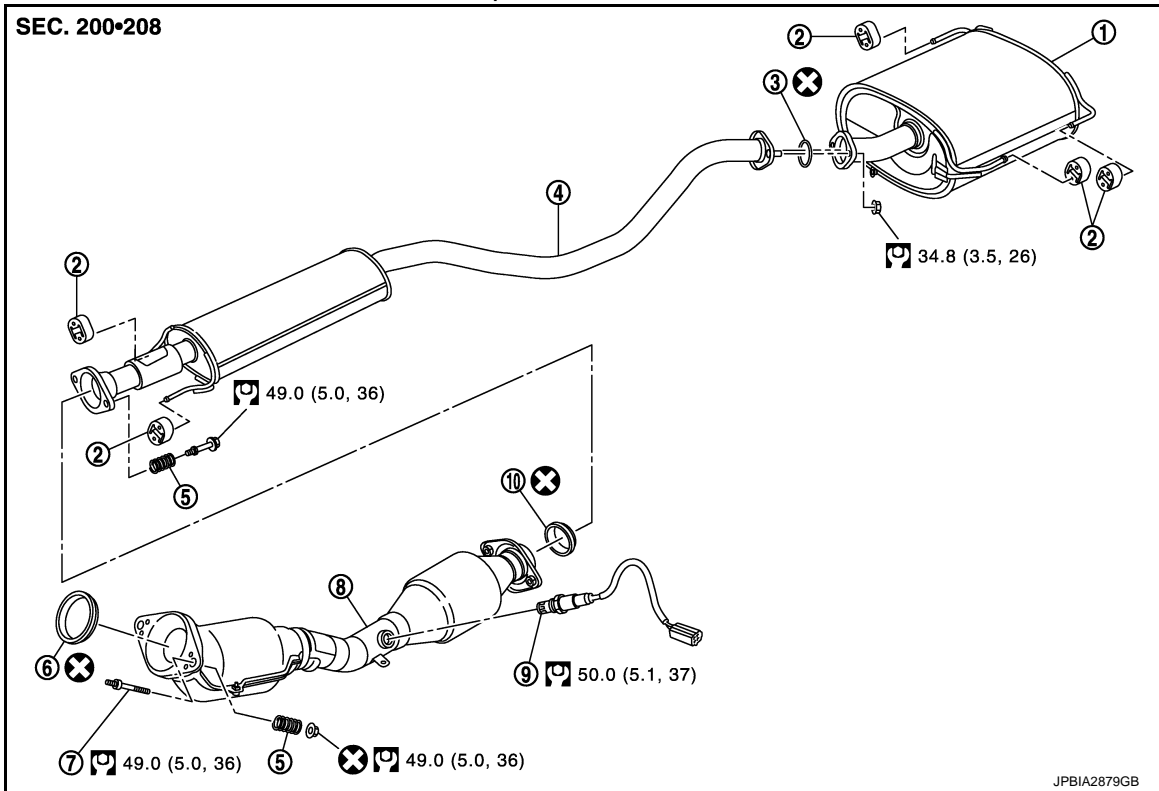
Exploded View

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Except for CALIFORNIA



- |                   |                       |                           |
|-------------------|-----------------------|---------------------------|
| 1. Main muffler   | 2. Mounting rubber    | 3. Ring gasket            |
| 4. Center muffler | 5. Spring             | 6. Seal bearing           |
| 7. Stud bolt      | 8. Exhaust front tube | 9. Heated oxygen sensor 2 |
| 10. Seal bearing  |                       |                           |

Refer to [GI-4, "Components"](#) for symbols in the figure.

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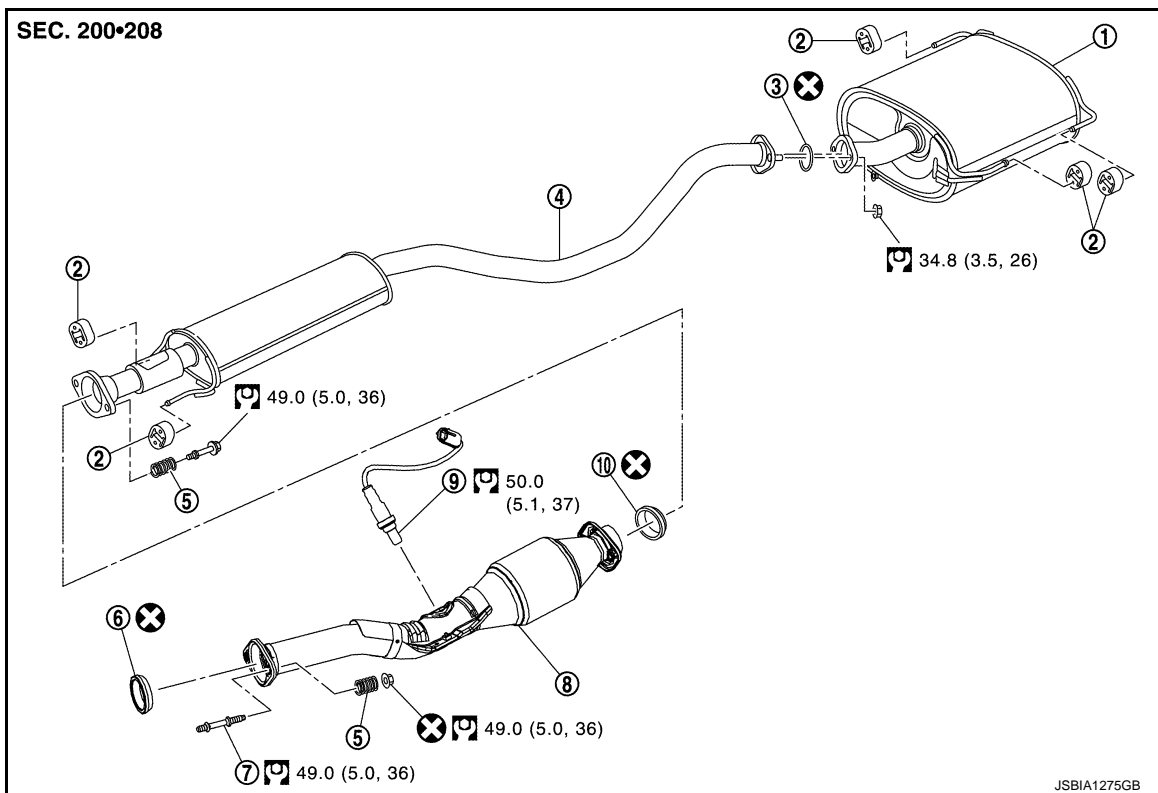
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# EXHAUST SYSTEM

< REMOVAL AND INSTALLATION >

For CALIFORNIA



- |                   |                       |                           |
|-------------------|-----------------------|---------------------------|
| 1. Main muffler   | 2. Mounting rubber    | 3. Ring gasket            |
| 4. Center muffler | 5. Spring             | 6. Seal bearing           |
| 7. Stud bolt      | 8. Exhaust front tube | 9. Heated oxygen sensor 2 |
| 10. Seal bearing  |                       |                           |

Refer to [GI-4, "Components"](#) for symbols in the figure.

## Removal and Installation

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### REMOVAL

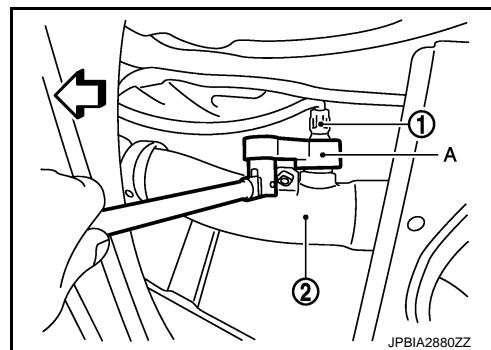
- Disconnect each joint and mounting.
- Remove heated oxygen sensor 2 with following procedure:
- Using heated oxygen sensor wrench [SST: KV10114400 (J-38365)] (A), removal heated oxygen sensor 2 (1).

2 : Exhaust front tube

↔ : Vehicle front

### CAUTION:

Be careful not to damage heated oxygen sensor 2.



### INSTALLATION

Note the following, and install in the reverse order of removal.

### CAUTION:

- Always replace seal bearings with new ones when reassembling.
- Discard any heated oxygen sensor 2 which has been dropped onto a hard surface such as a concrete floor. Use a new one.
- Before installing a new heated oxygen sensor 2, clean exhaust system threads using the heated oxygen sensor thread cleaner [commercial service tool: J-43897-18 or J-43897-12] and apply anti-seize lubricant (commercial service tool).

# EXHAUST SYSTEM

## < REMOVAL AND INSTALLATION >

- Never over torque heated oxygen sensor 2. Doing so may cause damage to the heated oxygen sensor 2, resulting in the "MIL" coming on.
- Prevent rust preventives from adhering to the sensor body.
- If heat insulator is badly deformed, repair or replace it. If deposits such as mud pile up on the heat insulator, remove them.
- When installing heat insulator avoid large gaps or interference between heat insulator and each exhaust pipe.
- Remove deposits from the sealing surface of each connection. Connect them securely to avoid gas leakage.
- When installing each mounting rubber, use silicon oil to avoid twisting.
- Temporarily tighten mounting nuts and bolts. Check each part for unusual interference and mounting rubber interference, and then tighten them to the specified torque.
- When installing each mounting rubber, avoid twisting or unusual extension in up/down, front/rear and right/left directions.

### Exhaust Manifold to Exhaust Front Tube

1. Securely insert seal bearing (2) into exhaust manifold (1) side in the direction shown in the figure.

- 3 : Spring
- 4 : Nut
- 5 : Stud bolt
- 6 : Exhaust front tube

#### CAUTION:

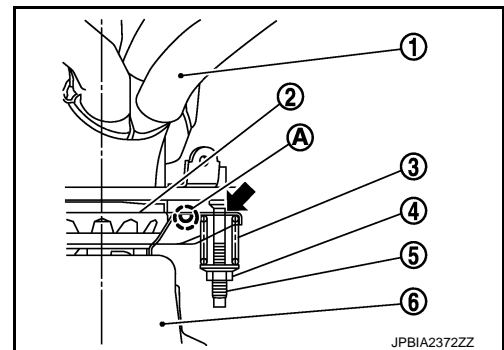
Be careful not to damage seal bearing surface when installing.

2. With spring, tighten nut.

#### CAUTION:

- Fasten stud bolts to the flange of exhaust manifold side to the specified torque before fastening mounting nuts.
- Ensure springs are seated correctly on the flange and not sitting on (A).
- Be careful that stud bolt does not interfere with mounting hole of exhaust front tube (←).

3. After installing, check that stud bolt does not interfere with mounting hole of exhaust front tube.



### Exhaust Front Tube to Center Muffler

1. Securely insert seal bearing (2) into exhaust front tube (1) side in the direction shown in the figure.

- 3 : Spring
- 4 : Bolt
- 5 : Center muffler

#### CAUTION:

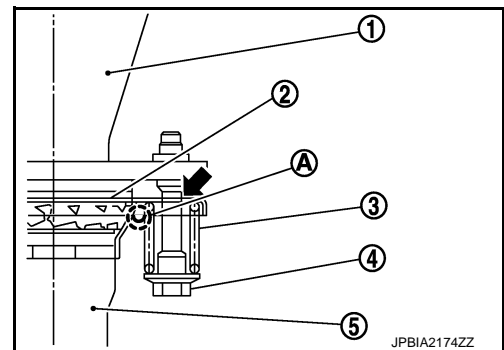
Be careful not to damage seal bearing surface when installing.

2. With spring, tighten bolt.

#### CAUTION:

- Ensure springs are seated correctly on the flange and not sitting on (A).
- Be careful that bolt does not interfere with mounting hole of center muffler (←).

3. After installing, check that bolt does not interfere with mounting hole of center muffler.



## Inspection

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### INSPECTION AFTER INSTALLATION

- Check clearance between tail tube and rear bumper is even.
- With engine running, check exhaust tube joints for gas leakage and unusual noises.
- Check to ensure that mounting brackets and mounting rubbers are installed properly and free from undue stress. Improper installation could result in excessive noise and vibration.