

SECTION **EX**  
EXHAUST SYSTEM

A  
EX

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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

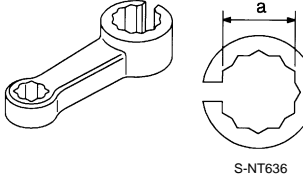
#### Special Service Tool

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

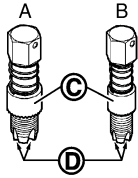

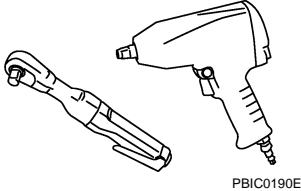
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#### Commercial Service Tool

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(Kent-Moore No.) Tool name	Description
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 dia.) for zirconia heated oxygen sensor</b> <b>B: J-43897-12 (12 mm 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
Power tool  	Loosening bolts and nuts

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# EXHAUST SYSTEM

< ON-VEHICLE MAINTENANCE >

## ON-VEHICLE MAINTENANCE

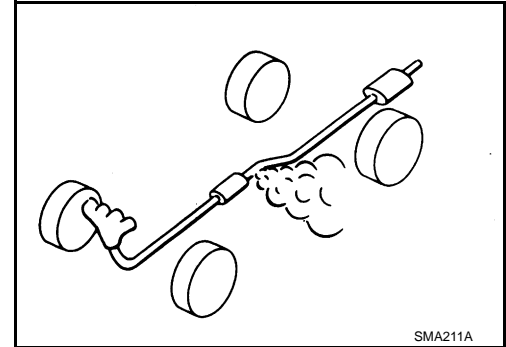
### EXHAUST SYSTEM

#### Inspection

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

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



# EXHAUST SYSTEM

< ON-VEHICLE REPAIR >

## ON-VEHICLE REPAIR

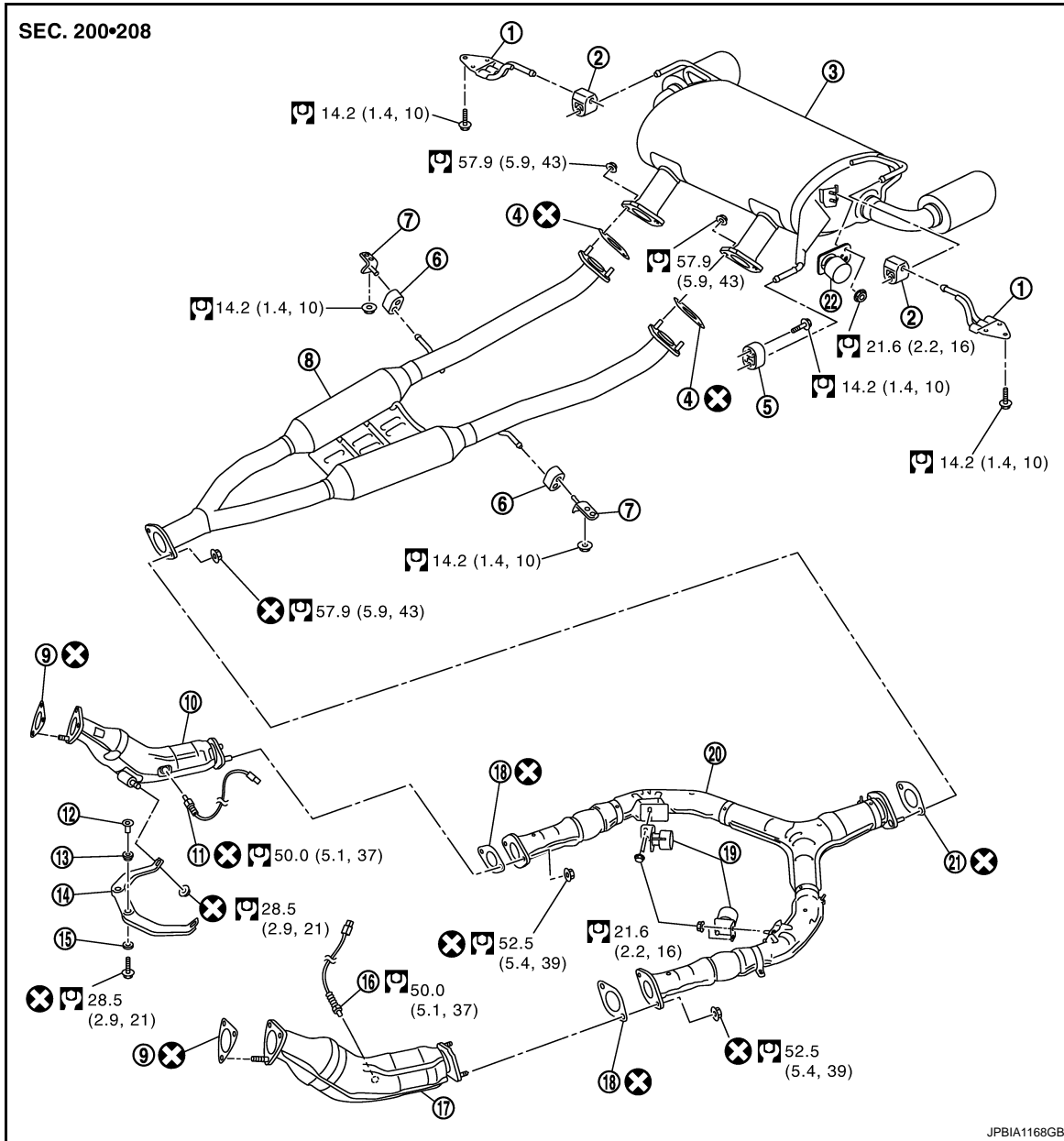
### EXHAUST SYSTEM

#### Exploded View

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|-------------------------------------|-------------------------------------|--------------------|
| 1. Mounting bracket                 | 2. Mounting rubber                  | 3. Main muffler    |
| 4. Gasket                           | 5. Mounting rubber                  | 6. Mounting rubber |
| 7. Mounting bracket                 | 8. Center muffler                   | 9. Gasket          |
| 10. Three way catalyst (bank 1)     | 11. Heated oxygen sensor 2 (bank 1) | 12. Collar         |
| 13. Grommet                         | 14. Exhaust mounting bracket        | 15. Grommet        |
| 16. Heated oxygen sensor 2 (bank 2) | 17. Three way catalyst (bank 2)     | 18. Gasket         |
| 19. Dynamic damper                  | 20. Exhaust front tube              | 21. Gasket         |
| 22. Dynamic damper                  |                                     |                    |

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

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# EXHAUST SYSTEM

< ON-VEHICLE REPAIR >

## Removal and Installation

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### REMOVAL

- Disconnect each joint and mounting using power tool.
- Remove heated oxygen sensor 2 as follows:
  - Using heated oxygen sensor wrench [SST: KV10114400 (J-38365)] (C), removal heated oxygen sensor 2.

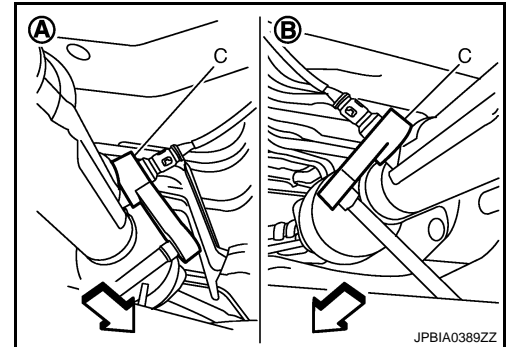
A : Bank 2

B : Bank 1

⇐ : Vehicle front

### CAUTION:

Be careful not to damage heated oxygen sensor 2.



### INSTALLATION

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

- Check for deformation of the grommets (13 and 15 of Components).
- Insert the collar (12 of Components) vertically.
- Temporarily tighten nuts and bolts when installing exhaust pipe assembly. Tighten them to the specified torque when connecting the vehicle rear to the vehicle front.

### CAUTION:

- Always replace exhaust tube gaskets with new ones when reassembling.
- Discard any heated oxygen sensor which has been dropped onto a hard surface such as a concrete floor. Use a new one.
- Before installing a new heated oxygen sensor, clean exhaust system threads using the heated oxygen sensor thread cleaner [commercial service tool: J-43897-18 or J-43897-12], and apply the anti-seize lubricant (commercial service tool).
- Never over torque heated oxygen sensor. Doing so may cause damage to heated oxygen sensor, resulting in the "MIL" coming on.
- 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 gases leakage.
- Temporarily tighten mounting nuts on the exhaust manifold side and mounting bolts on the vehicle side. Check each part for unusual interference, and then tighten them to the specified torque.
- When installing each mounting rubber, avoid twisting or unusual extension in up/down and right/left directions.

### 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.