

SECTION **EX**
EXHAUST SYSTEM

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precautions for Removing Battery Terminal

INFOID:000000011564790

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

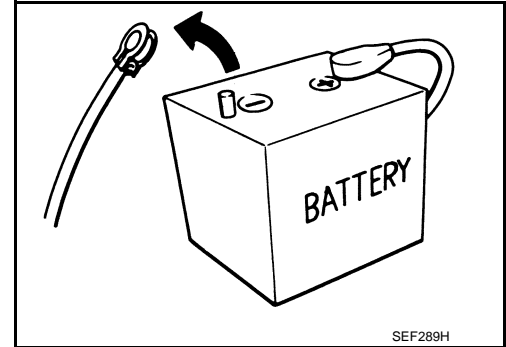
NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.



Removal and Installation

INFOID:000000011281050

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.
- Never use silicon-containing products (e.g. oil) to prevent malfunctions such as the interference with the conduction of electricity and the occurrence of noise in the radio.

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

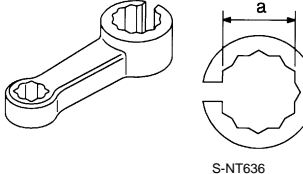
Special Service Tool

INFOID:0000000011281051

A

EX

The actual shapes of TechMate tools may differ from those of special service tools illustrated here.

Tool number (TechMate No.) Tool name	Description
KV10114400 (J-38365) Heated oxygen sensor wrench 	Loosening or tightening heated oxygen sensor 2 For 22 mm (0.87 in) (a) width hexagon nut

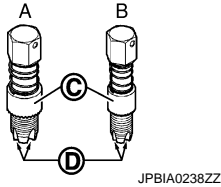
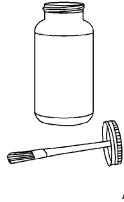
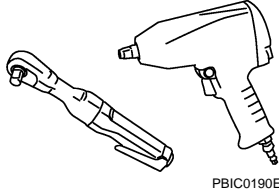
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Commercial Service Tool

INFOID:0000000011281052

(TechMate 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.) A: J-43897-18 [18 mm (0.71 in) dia.] for zirconia heated oxygen sensor B: J-43897-12 [12 mm (0.47 in) dia.] for titania heated oxygen sensor C: Mating surface shave cylinder D: Flutes
(—) 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

< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

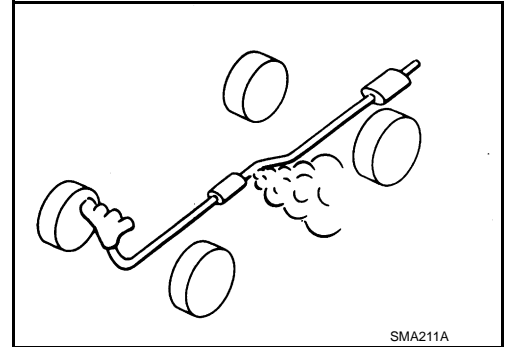
EXHAUST SYSTEM

Inspection

INFOID:000000011281053

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

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

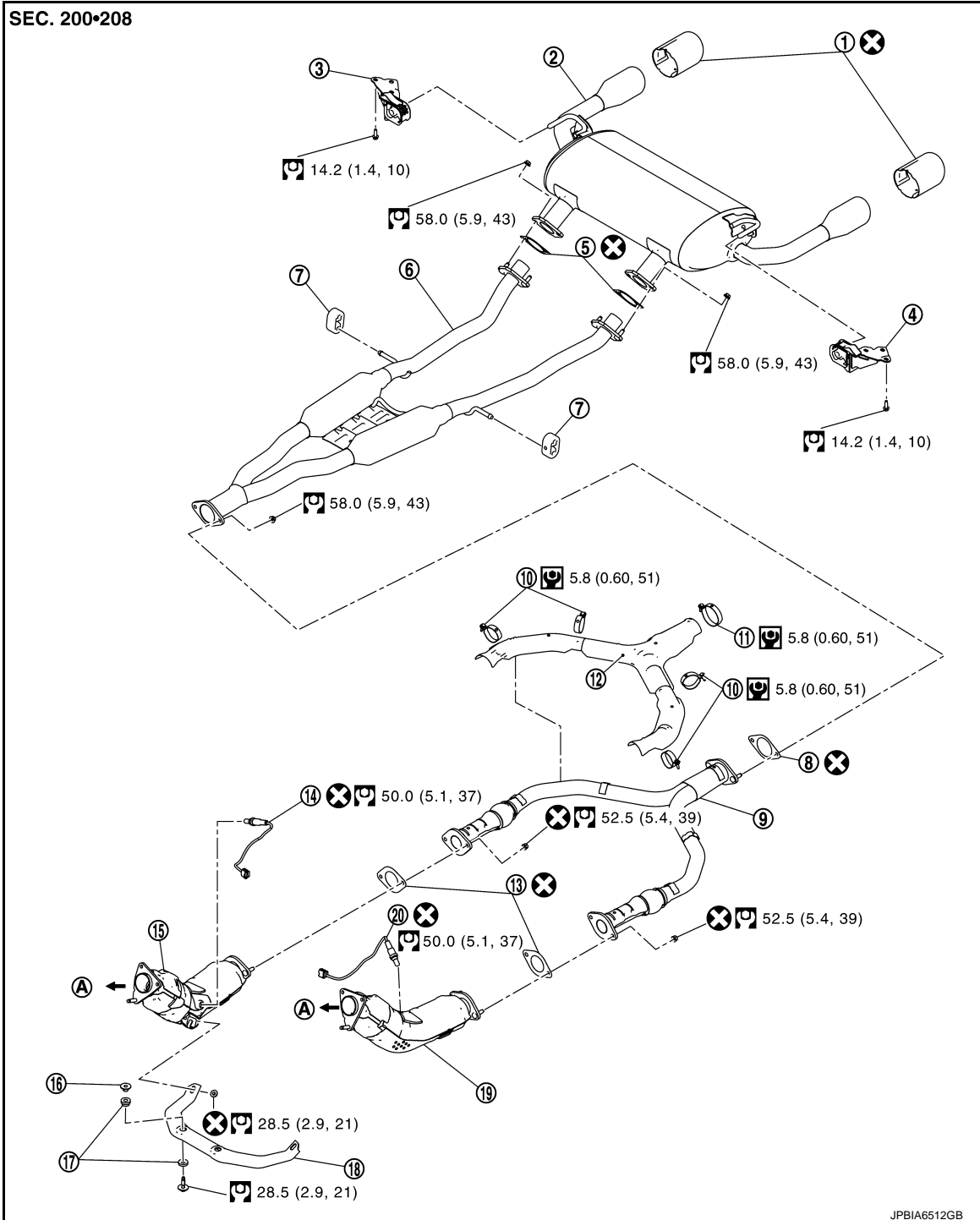
EXHAUST SYSTEM

Exploded View

INFOID:000000011281054

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EXHAUST SYSTEM

< REMOVAL AND INSTALLATION >

- | | | |
|-------------------------------|-----------------------------------|-------------------------------|
| ⑬ Gasket | ⑭ Heated oxygen sensor 2 (bank 1) | ⑮ Three way catalyst (bank 1) |
| ⑯ Collar | ⑰ Grommet | ⑱ Exhaust mounting bracket |
| ⑲ Three way catalyst (bank 2) | ⑳ Heated oxygen sensor 2 (bank 2) | |

 : N·m (kg·m, in·lb)

 : N·m (kg·m, ft·lb)

 : Always replace after every disassembly.

Removal and Installation

INFOID:000000011281055

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.

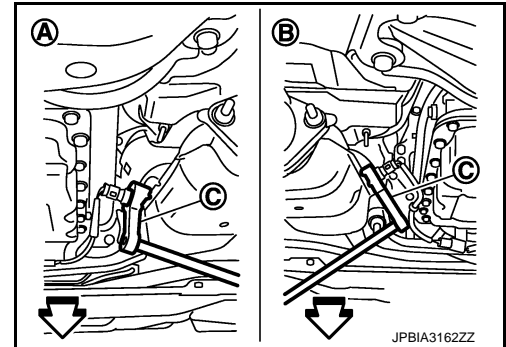
Ⓐ : Bank 1

Ⓑ : Bank 2

⇐ : Vehicle front

CAUTION:

- Discard any heated oxygen sensor which has been dropped from a height of more than 0.5 m (19.7 in) onto a hard surface such as a concrete floor; use a new one.
- Before installing new heated oxygen sensor, clean exhaust system threads using Oxygen Sensor Thread Cleaner (commercial service tool) and approved Anti-seize lubricant (commercial service tool).

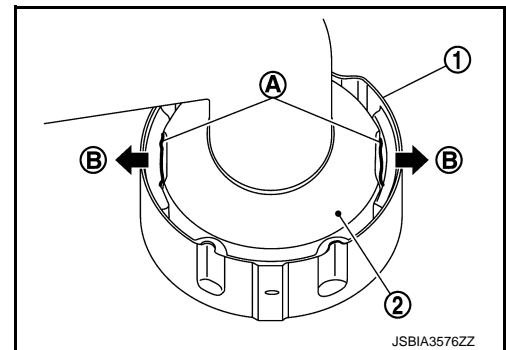


JPBIA3162ZZ

Diffuser

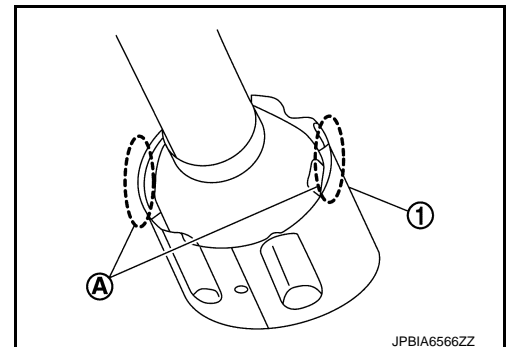
1. Expand the portion Ⓐ of inside diffuser ① in the direction Ⓑ with a flat blade screwdriver.

② : Main muffler



JSBIA3576ZZ

2. Hammer the portion Ⓐ of diffuser ① to remove it in the rearward direction of vehicle.



JPBIA6566ZZ

INSTALLATION

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

- Check for deformation of the grommets (17 of Components).
- Insert the collar (16 of Components) vertically.

EXHAUST SYSTEM

< REMOVAL AND INSTALLATION >

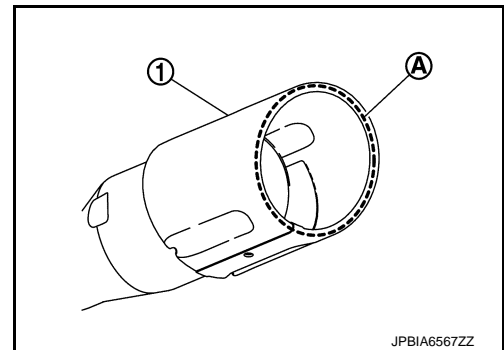
- Temporarily tighten nuts and bolts when installing exhaust pipe assembly. Tighten them to the specified torque when connecting the vehicle rear to the vehicle front.

Diffuser

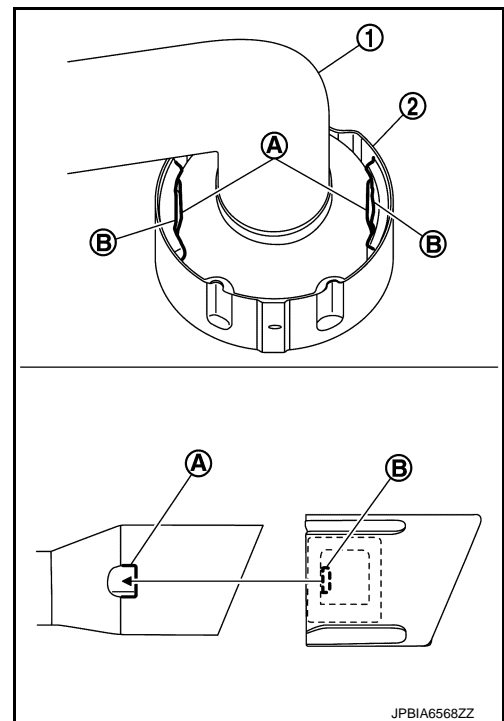
1. Insert diffuser ① by using a plastic hammer.

CAUTION:

Never damage the portion ① of the diffuser.



2. Check that the portion ② of diffuser ② is tightly fitted to the portion ① of main muffler ①.



CAUTION:

- Always replace exhaust tube gaskets 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 the anti-seize lubricant (commercial service tool).
- Never over torque heated oxygen sensor 2. Doing so may cause damage to 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 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.

EXHAUST SYSTEM

< REMOVAL AND INSTALLATION >

Inspection

INFOID:000000011281056

INSPECTION AFTER INSTALLATION

- Check clearance between tail tube and rear bumper is even.
- With engine running, check exhaust tube joints for gas leaks 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.