

A
SECTION **EX** EX
EXHAUST SYSTEM C

D
E
CONTENTS

SERVICE INFORMATION	2	EXHAUST SYSTEM	3	F
PREPARATION	2	Checking Exhaust System	3	
Special Service Tool	2	Component	3	
Commercial Service Tool	2	Removal and Installation	4	G
		Component	5	
		Removal and Installation	6	H

I
J
K
L
M
N
O
P

PREPARATION

< SERVICE INFORMATION >

SERVICE INFORMATION

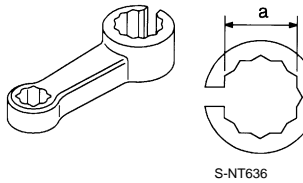
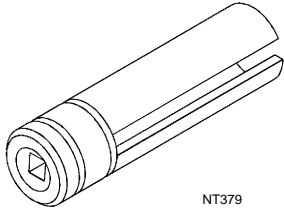
PREPARATION

Special Service Tool

INFOID:000000002955361

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

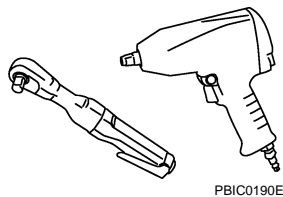
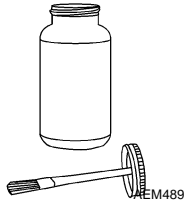
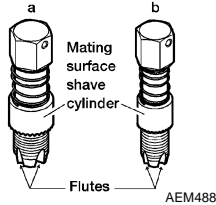
Tool number (Kent-Moore No.) Tool name	Description
KV10117100 (J3647-A) Heated oxygen sensor wrench	Loosening or tightening heated oxygen sensor 2 (VQ35DE) For 22 mm (0.87 in) width hexagon nut
KV10114400 (J38365) Heated oxygen sensor wrench	Loosening or tightening heated oxygen sensor 2 (VK45DE) For 22 mm (0.87 in) width hexagon nut



Commercial Service Tool

INFOID:000000002955362

(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.) a: J-43897-18 (18 mm dia.) for zirconia heated oxygen sensor b: J-43897-12 (12 mm dia.) for titania heated oxygen sensor
(—) 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



EXHAUST SYSTEM

< SERVICE INFORMATION >

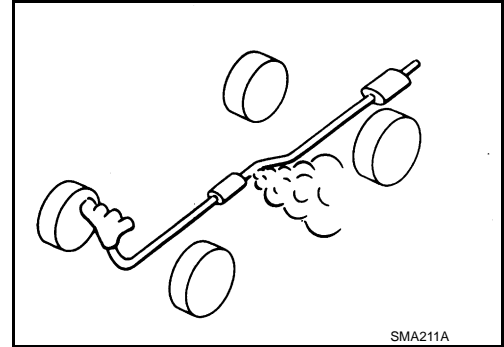
EXHAUST SYSTEM

Checking Exhaust System

INFOID:000000002955363

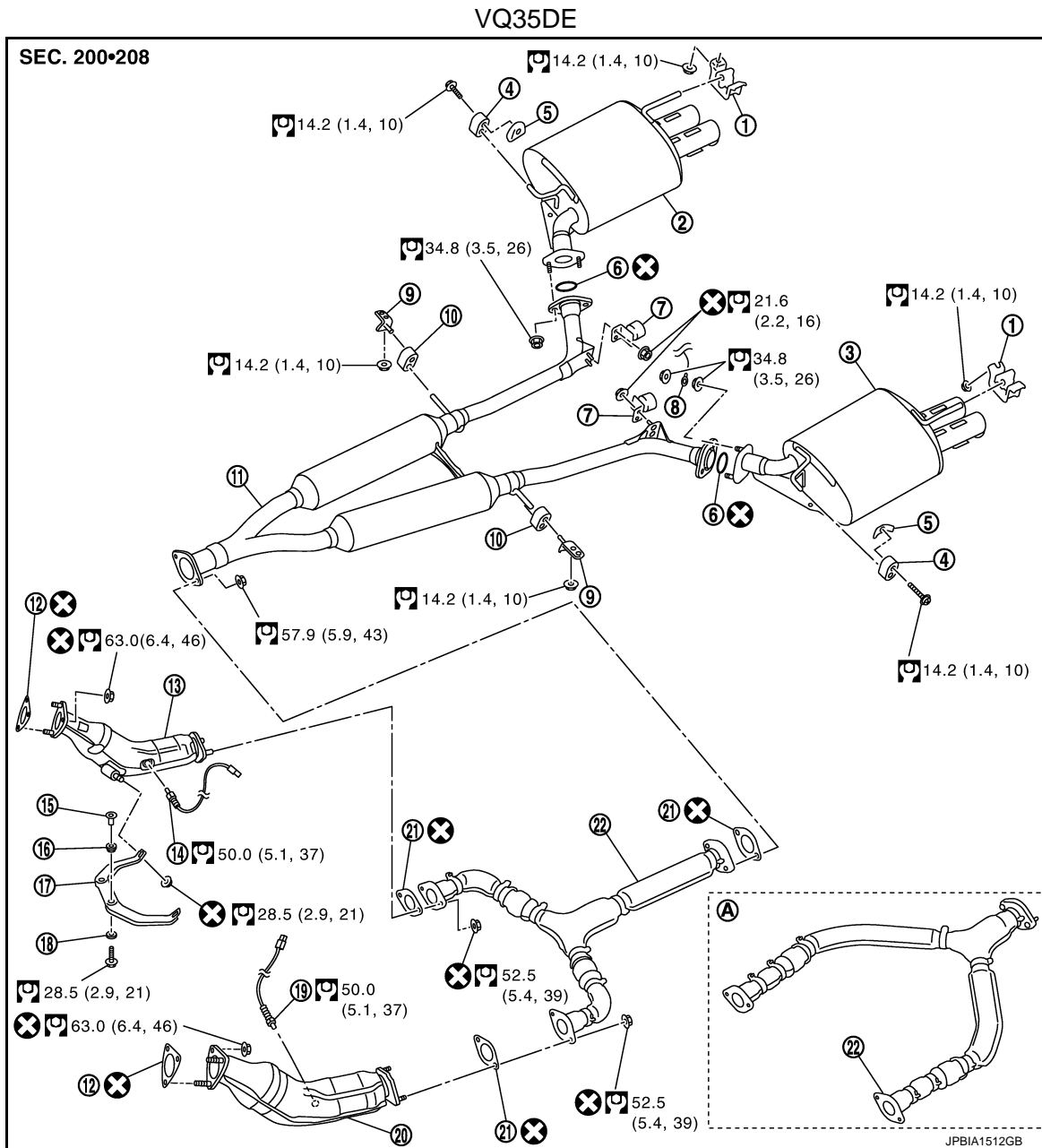
Check exhaust pipes, muffler and mounting for improper attachment, leaks, cracks, damage or deterioration.

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



Component

INFOID:000000002955364



EXHAUST SYSTEM

< SERVICE INFORMATION >

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

- Refer to [GI-9, "Component"](#) for symbols in the figure.

Removal and Installation

INFOID:000000002955365

CAUTION:

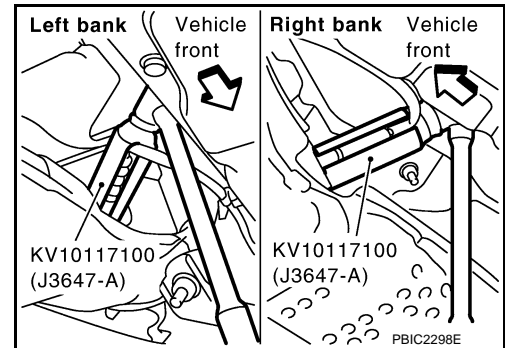
- **Be sure to use genuine exhaust system parts or equivalents which are specially designed for heat resistance, corrosion resistance, and shape.**
- **Perform the operation with the exhaust system fully cooled down because the system will be hot just after engine stops.**
- **Be careful not to cut your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

REMOVAL

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

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 (16 and 18 of Components).
- Insert the collar (15 of Components) vertically.
- Install the collar (5 of Components) with its lower surface horizontal.
- 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.**

EXHAUST SYSTEM

< SERVICE INFORMATION >

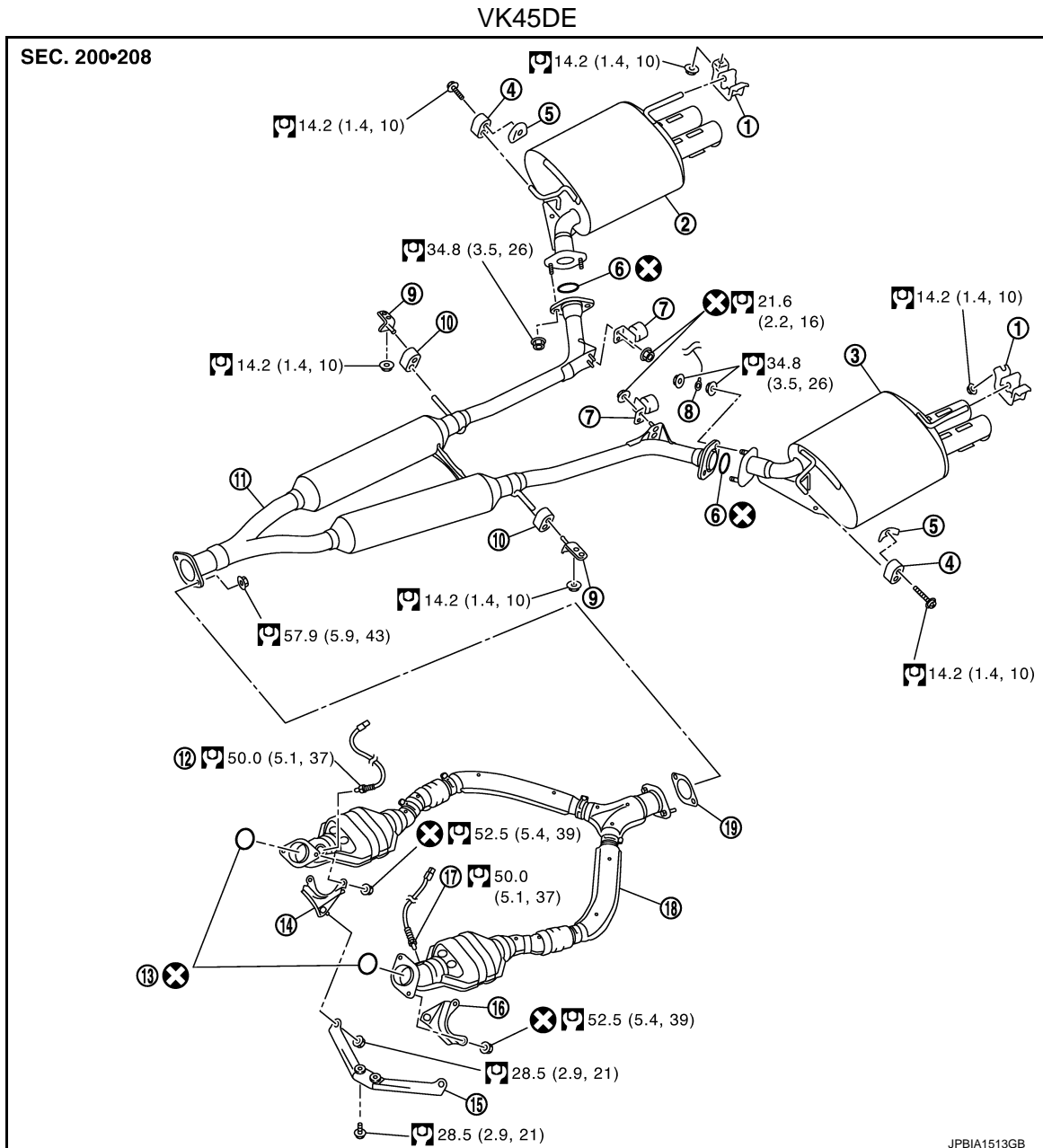
- When installing each mounting rubber, avoid twisting or unusual extension in up/down and right/left directions.

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.

Component

INFOID:000000002955366



- | | | |
|----------------------|-------------------------------------|-------------------------------------|
| 1. Mounting bracket | 2. Main muffler (RH) | 3. Main muffler (LH) |
| 4. Mounting rubber | 5. Collar | 6. Ring gasket |
| 7. Dynamic damper | 8. Wire bonding | 9. Mounting bracket |
| 10. Mounting rubber | 11. Center muffler | 12. Heated oxygen sensor 2 (bank 2) |
| 13. Ring gasket | 14. Mounting bracket | 15. Exhaust mounting bracket |
| 16. Mounting bracket | 17. Heated oxygen sensor 2 (bank 1) | 18. Exhaust front tube |
| 19. Gasket | | |

EXHAUST SYSTEM

< SERVICE INFORMATION >

- Refer to [GI-9, "Component"](#) for symbols in the figure.

Removal and Installation

INFOID:000000002955367

CAUTION:

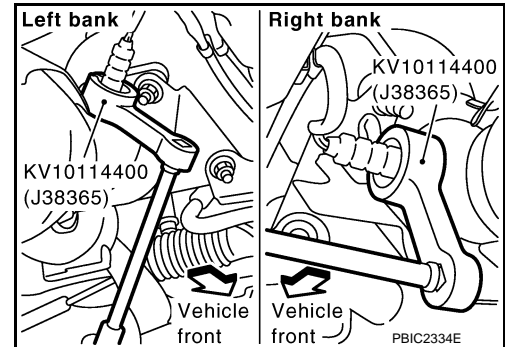
- Be sure to use genuine exhaust system parts or equivalents which are specially designed for heat resistance, corrosion resistance, and shape.
- Perform the operation with the exhaust system fully cooled down because the system will be hot just after engine stops.
- Be careful not to cut your hand on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

REMOVAL

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

CAUTION:

Be careful not to damage heated oxygen sensor 2.



INSTALLATION

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

- Install the collar (5 of Components) with its lower surface horizontal.
- 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.
- 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 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.