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## **PREPARATION**

# PREPARATION PFP:00002

# **Special Service Tool**

EBS00DTK

| The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here. |       |   |
|--|-------|---|
| Tool number<br>(Kent-Moore No.)<br>Tool name   |       | Description   |
| KV10114400<br>(J-38365-A)<br>Heated oxygen sensor wrench   | a a a | Loosening or tightening front and rear heated oxygen sensors a: 22 mm (0.87 in) |

S-NT636

## **Commercial Service Tools**

EBS00DTL

| (Kent-Moore No.)<br>Tool name   |                               | Description   |
|---|-------------------------------|---|
| (J-43897–18)<br>(J-43897–12)<br>Oxygen sensor thread cleaner                            | Mating surface shave cylinder | Reconditioning the exhaust system threads before installing a new oxygen sensor (Use with anti-seize lubricant shown below.) a: J-43897-18 (18 mm) for zirconia oxygen sensor b: J-43897-12 (12 mm) for titania oxygen sensor |
| Anti-seize lubricant (Permatex 133AR or equivalent meeting MIL specification MIL-A-907) | AEM489                        | Lubricating oxygen sensor thread cleaning tool when reconditioning exhaust system threads   |

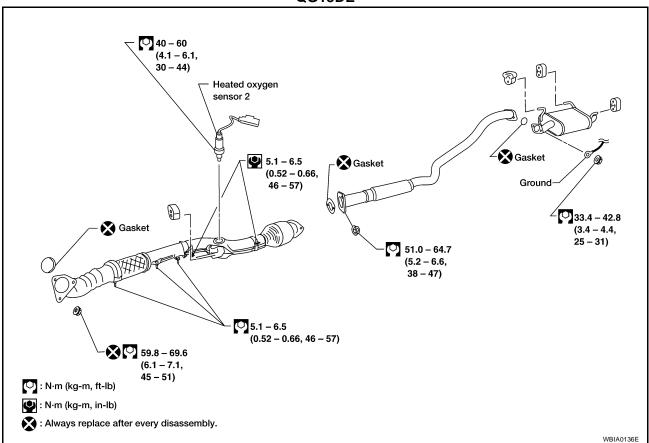
EXHAUST SYSTEM PFP:20100

## **Removal and Installation**

EBS00DTM

Refer to the following figures for removal and installation.

#### QG18DE



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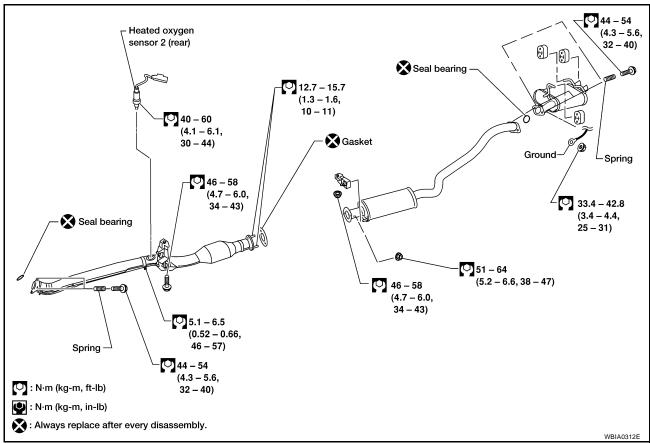
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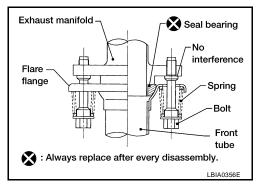
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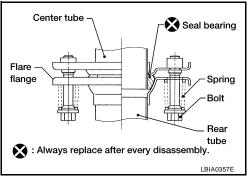
#### QR25DE



#### **CAUTION:**

- Always replace the exhaust gaskets and seal bearings with new ones when reassembling.
- For the QR25DE engine, install the two seal bearings as shown. Position the conical spring so that the wide end is against the flare flange as shown.





- With engine running, check all tube connections for exhaust gas leaks, and entire system for unusual noises.
- Check to ensure that mounting brackets and mounting insulators are installed properly and free from undue stress. Improper installation could result in excessive noise or vibration.

- 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; replace it with a new one.
- Before installing a new heated oxygen sensor, clean the exhaust tube sensor threads (using oxygen sensor thread cleaner) Tool, J-43897-18 or J-43897-12, and apply anti-seize lubricant.
- Do not over-tighten the heated oxygen sensor. Doing so may cause damage to the heated oxygen sensor, resulting in the MIL coming on.

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