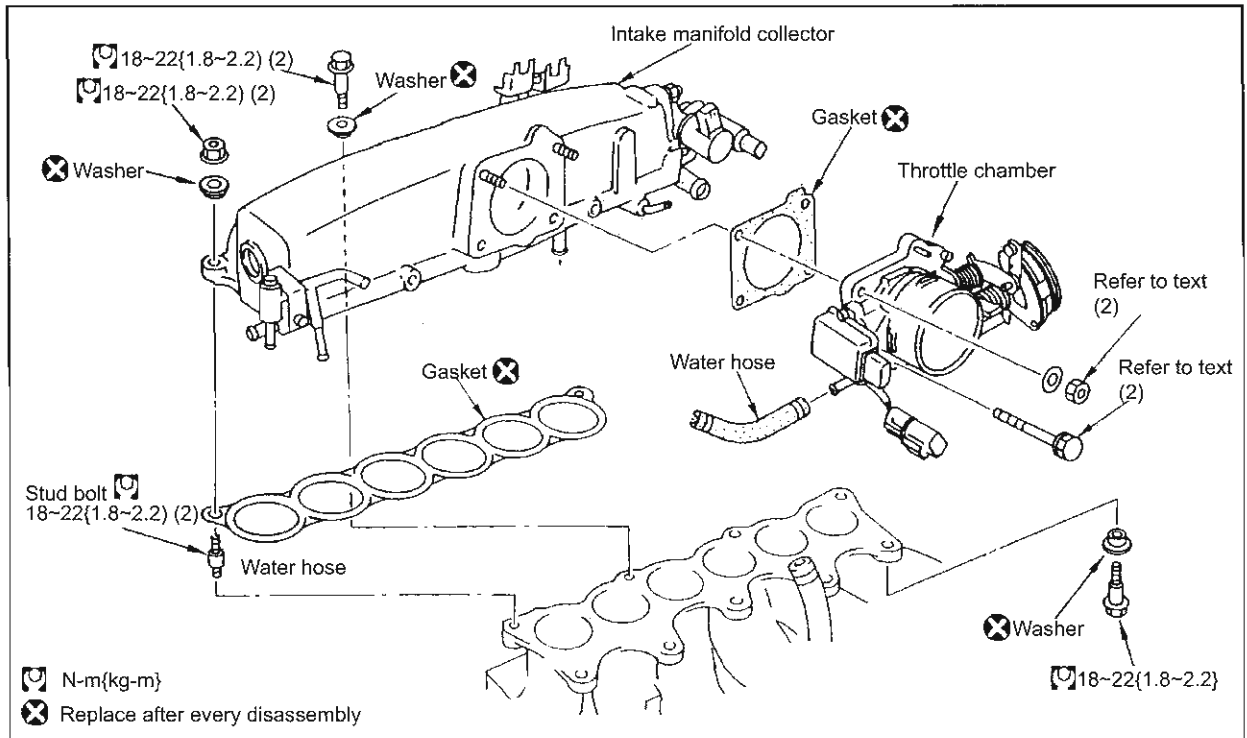
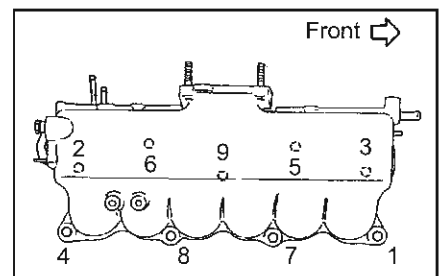
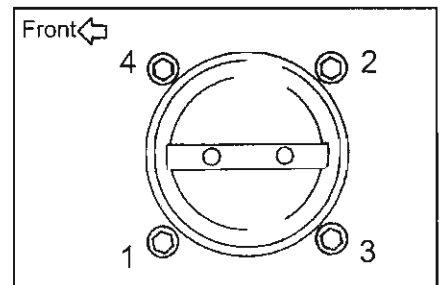


2. INTAKE MANIFOLD COLLECTOR



Removal

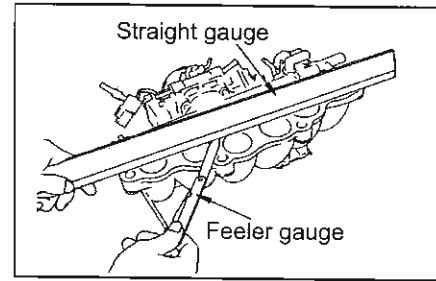
1. Remove the negative battery terminal.
 - (1) Open the boot lid.
 - (2) Remove the boot front finisher and remove the negative battery terminal.
2. Drain coolant from the radiator drain plug.
3. Remove the air duct and the resonator ASSY.
4. Remove the air inlet pipe.
5. Disconnect the accelerator wire and the ASCD wire.
6. Remove the throttle sensor, throttle valve switch, AAC valve and FICD connector.
7. Disconnect the water vacuum, blow-by and air hoses on the intake manifold collector.
8. Remove the throttle chamber ASSY.
 - Remove the installation bolts in the order shown.
 - Remove the gasket.
9. Remove the intake manifold collector ASSY.
 - Remove the installation nuts and bolts in the order shown in the figure to the right.
 - Check if you have removed all hoses and wires.
10. Remove the gasket.



Inspection

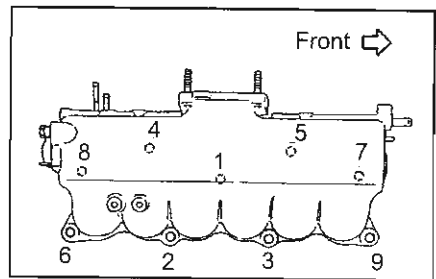
Distortion of the intake manifold collector

- Use the straight gauge and the feeler gauge to measure the distortion in six directions.
Limit value (mm) 0.1
- If the distortion is over the limit use the surface grinder to repair distortion. Replace the intake manifold collector if the distortion is too excessive to fix.



Installation

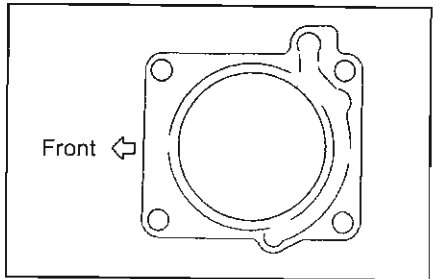
1. Install the gasket.
 - Replace the gasket with a new one.
 - Remove any fluid, grease, rubbish etc. adhered to installation surface.
2. Install the intake manifold collector ASSY.
 - Tighten installation nuts and bolts in several stages in order shown.
Tightening torque (N-m{kg-m}) 18~22{1.8~2.2}



Caution:

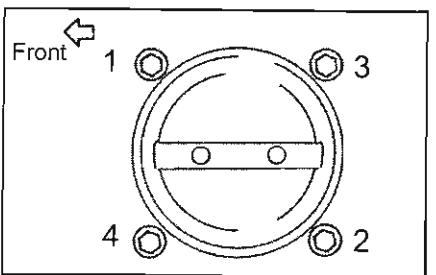
Install 1, 4, 5, and 7 installation bolts from below intake manifold.

No. 6 and 9 is a stud bolt and nut.



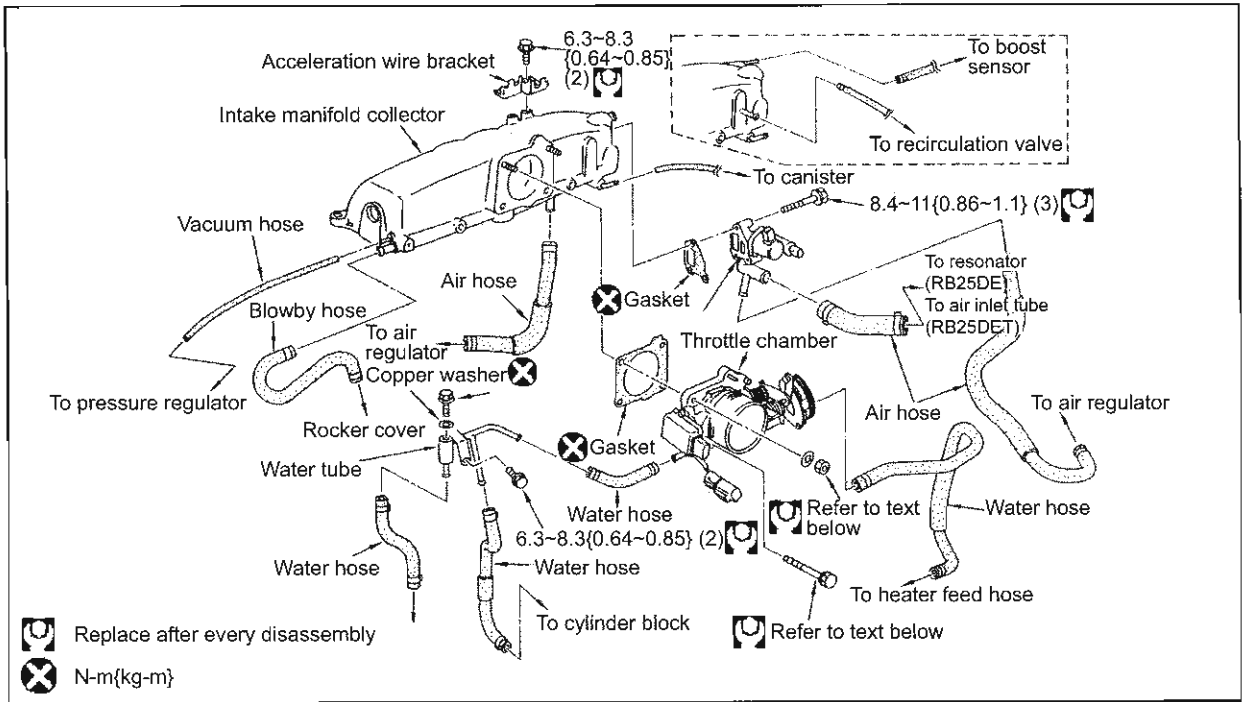
3. Install intake manifold collector hoses.
4. Install the throttle chamber.
 - (1) Make sure there are no grease or rubbish on the gasket and installation surface.
 - (2) Install the gasket.
 - Replace the gasket with a new one.
 - (3) Install the bolts in the order shown in two stages.
Tightening torque (N-m{kg-m})

1 st	8.8~11{0.9~1.1}
2 nd	18~21{1.8~2.1}



5. Install each pipes according to the diagram on the following page.
 - The diagram shows the reverse side of the intake manifold collector.
6. Install the rest in reverse order to the removal procedure.

RB25DE / RB25DET ENGINE

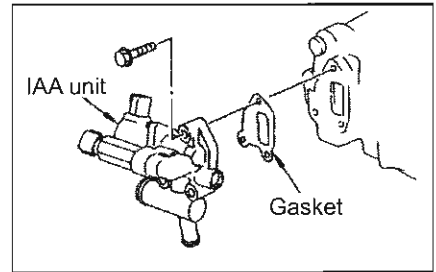


Disassembly

1. Remove the IAA unit.

Caution:

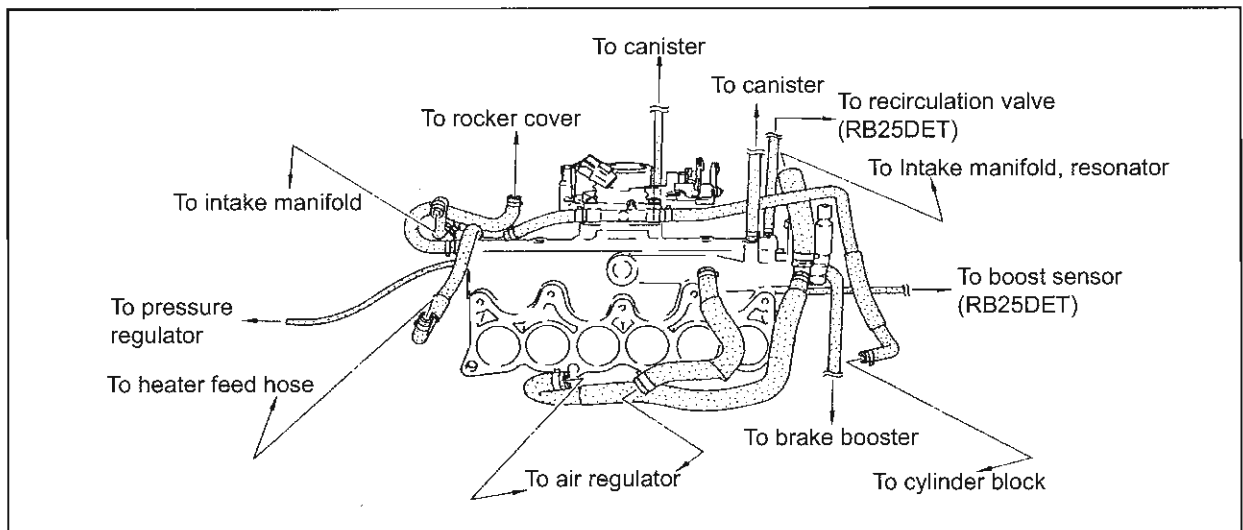
Do not disassemble IAA unit.



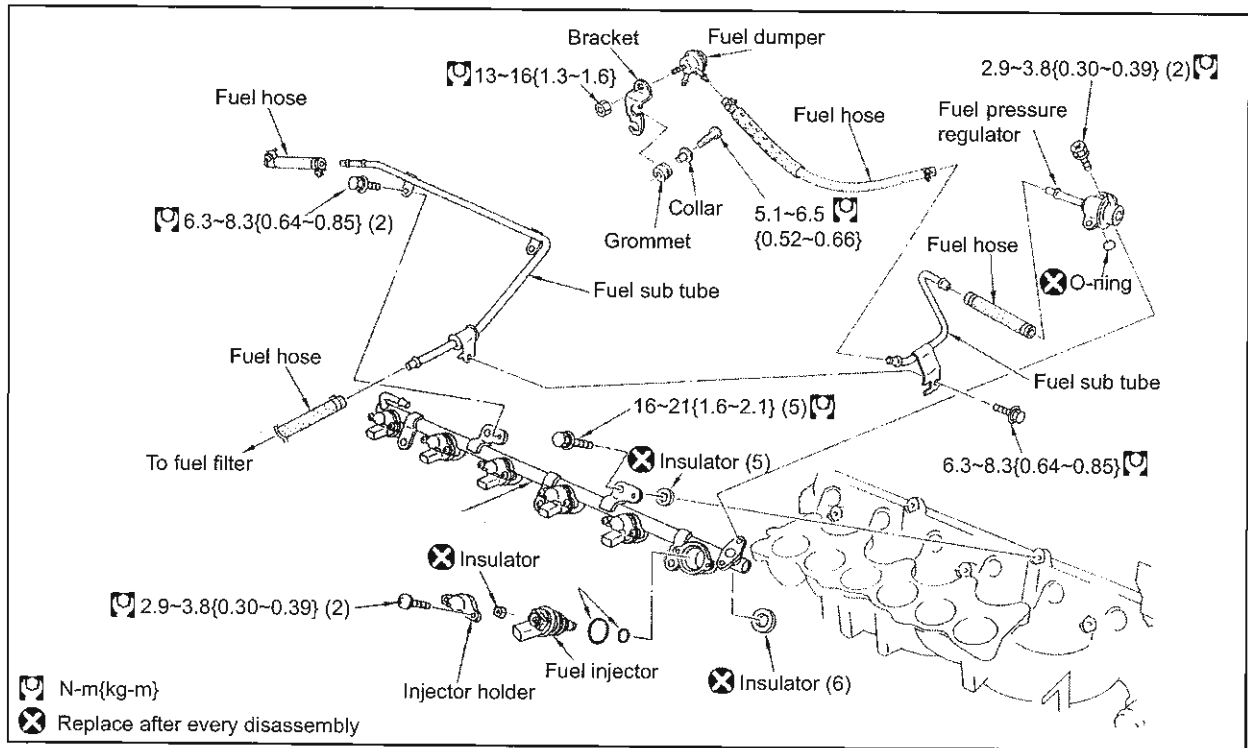
Assembly

1. Install the IAA unit.
 - Replace the gasket with a new one.
 - Make sure there are no grease or rubbish on the gasket and installation surface.

Tightening torque (N-m{kg-m}) 8.4~11{0.86~1.11}

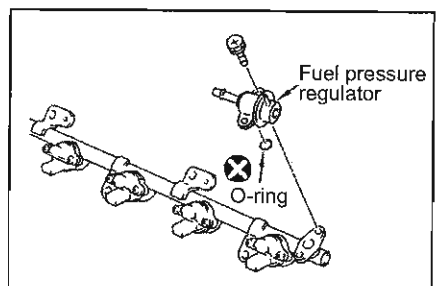
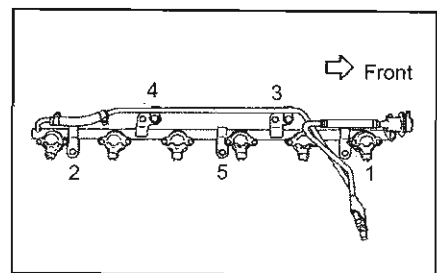


3. FUEL INJECTOR



Removal

1. Release the fuel pressure.
2. Remove the battery negative terminal.
 - (1) Open the boot lid.
 - (2) Remove the boot front finisher and remove the negative battery terminal.
3. Drain coolant from the radiator drain plug.
4. Remove air duct and resonator ASSY.
5. Remove air inlet pipe.
6. Remove intake manifold collector ASSY.
7. Remove fuel tube and fuel injector ASSY.
 - (1) Remove fuel feed and the return hose.
 - Place a hole cap immediately after removing the fuel hose to avoid fuel leak.
 - (2) Disconnect the fuel injector harness connector.
 - (3) Remove fuel tube installation bolts.
 - (4) Remove fuel tube installation bolts in order shown in the diagram on right.



8. Remove the fuel pressure regulator.
- Caution:**
Fuel remaining in the fuel tube may leak.

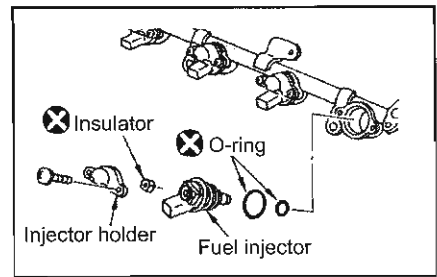
RB25DE / RB25DET ENGINE

9. Remove fuel injector from the fuel tube.

- (1) Remove the injector hose.
 - (2) Remove the fuel injector by pushing from nozzle side.
- Do not hold the connector parts.
 - Care must be taken not to drop them.

Caution:

Do not disassemble the fuel injector.

**Inspection**

Fuel tube & fuel hose

- Check to make sure the fuel is not leaking from the fuel tube and the fuel hose.
- Replace the parts if there are any abnormalities.

Installation

1. Install fuel injector to the fuel tube.

- (1) Install o-ring to fuel injector.
- Replace o-ring with a new one.
 - Read the handling note before carrying out the operation.

Handling note

- Always handle the O-ring with bare hands (no gloves).
- Only apply engine oil (7.5W-30 or similar viscosity) and never clean or soak the o-ring in solvent solution.
- Avoid using dirty o-ring and devices with dust or other foreign objects adhered to it.
- When installing the o-ring care must be taken not to scratch the o-ring with tools or nails. Also do not twist or stretch them.
- When inserting the fuel injector, pressure regulator or fuel dumper into the fuel tube, do not twist or turn the parts.

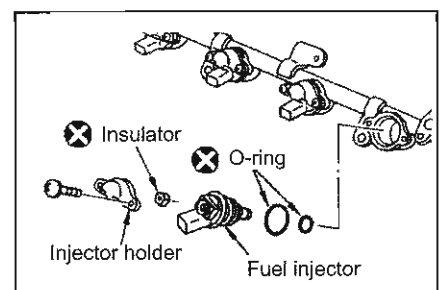
(2) Install the fuel injector to fuel tube.

- Care must be taken not to damage the nozzle tip.

Note:

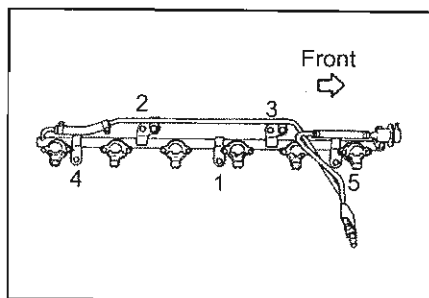
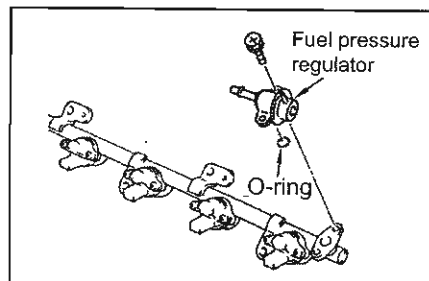
If it is difficult to install the fuel injector due to o-ring resistance, first install the injector holder and use a screw with under head approx. 30mm to tighten up alternately to insert the fuel injector.

Tightening torque (N-m{kg-m}) 2.9~3.8{0.30~0.39}

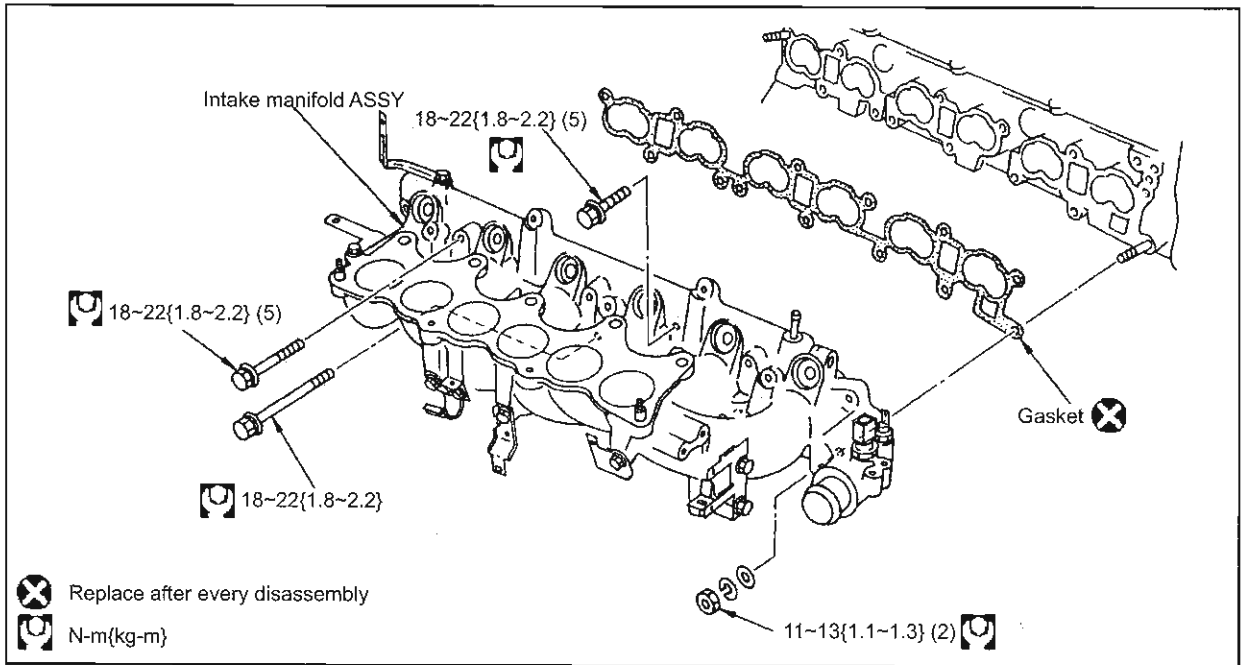


RB25DE / RB25DET ENGINE

2. Install the fuel pressure regulator.
 - Replace the o-ring with a new one.
Tightening torque (N-m{kg-m}) 2.9~3.8{0.30~0.39}
3. Install fuel tube and fuel injector ASSY.
 - (1) Install fuel sub tube to the fuel tube.
Tightening torque (N-m{kg-m}) 6.3~8.3{0.64~0.85}
 - (2) Tighten the fuel tube installation bolts in the order shown in two stages.
Tightening torque (N-m{kg-m}) 16~21{1.6~2.1}
 - Replace the insulator with a new one.
4. Install the fuel injector connectors.
5. Install the fuel feed and return hose.
 - Insert the hose tip up to the second bulged part of the fuel tube and make sure to securely tighten the clamp.
6. Install the rest in reverse order to the removal procedure.
7. Place the ignition switch to the ON position to place fuel pressure to fuel pipings to check for any fuel leak.

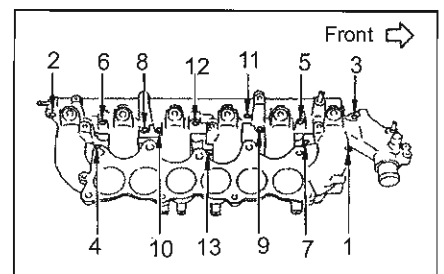
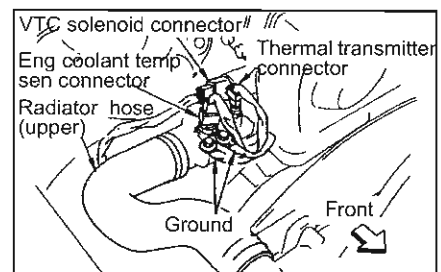


4. INTAKE MANIFOLD



Removal

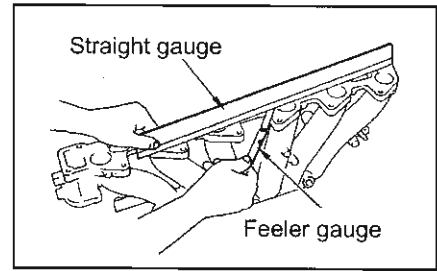
1. Release the fuel pressure.
2. Remove the battery negative terminal.
 - (1) Open the boot lid.
 - (2) Remove the boot front finisher and remove the negative battery terminal.
3. Drain coolant from the radiator drain plug.
4. Drain coolant from the cylinder block drain plug.
5. Remove air duct and resonator ASSY.
6. Remove the air inlet pipe.
7. Remove the intake manifold collector ASSY.
8. Remove the fuel injector ASSY.
9. Remove the radiator hose (upper).
10. Disconnect thermal transmitter connector.
11. Disconnect engine coolant temperature sensor connector.
12. Disconnect VTC solenoid connector.
13. Remove ground terminals (2).
14. Disconnect air regulator connector.
15. Remove the oil level gauge guide installation bolt.
16. Remove the intake manifold ASSY.
 - (1) Remove installation bolts and nuts in order shown in the figure on the right.
 - (2) Remove each water hose below intake manifold. (RB25DET).
17. Remove the gasket.



Inspection

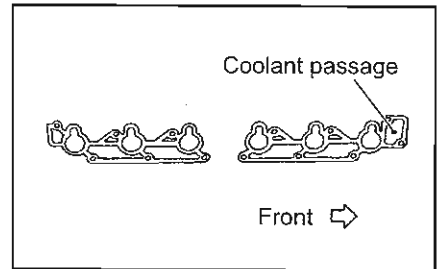
Distortion of the intake manifold

- Use the straight gauge and the feeler gauge to measure the distortion of the front and reverse surface in six directions.
Limit value (mm) 0.1
- If the distortion is over the limit use the surface grinder to repair distortion. Replace the intake manifold if the distortion is too excessive to fix.



Installation

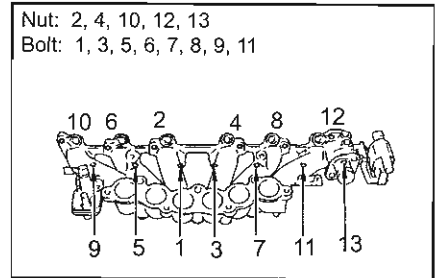
1. Install the gasket.
 - Use a scraper to remove any gasket or foreign objects etc. adhered to intake manifold and cylinder head installation surface.
 - Replace the gasket with a new one.
2. Install intake manifold ASSY.
 - (1) Install each water hoses below intake manifold (RB25DET).
 - (2) Install the bolts and nuts in the order shown in figure on the right.



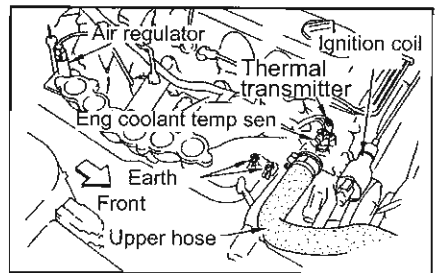
Tightening torque (N-m{kg-m})

Bolt 18~22{1.8~2.2}
Nut 11~13{1.1~1.3}

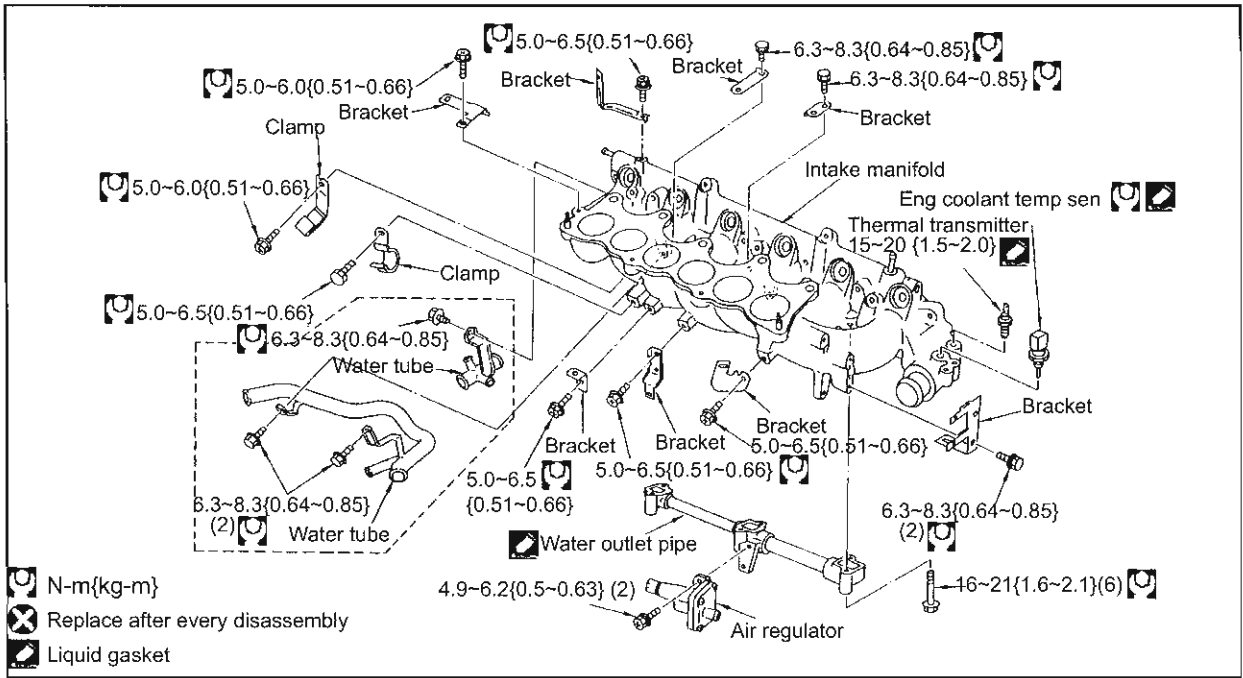
Installation position	Bolt			Nut
	3, 4, 5, 6, 11	2, 7, 8, 9, 10	1	12, 13
Bolt under head length (mm)	40	65	95	-



3. Install the oil level gauge guide installation bolt.
Tightening torque (N-m{kg-m}) 3.9~4.9{0.4~0.5}
4. Install the air regulator connector.
5. Install the radiator hose (upper).
6. Connect the earth terminal.
7. Install the VTC solenoid connector.
8. Install the engine coolant temperature sensor connector.
9. Install the thermal transmitter connector.
10. Install the rest in reverse order to the removal procedure.

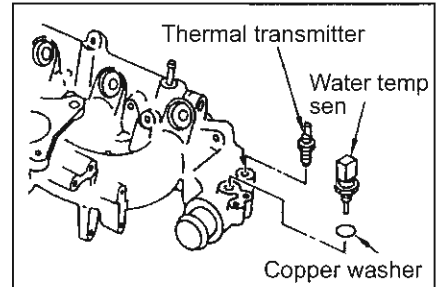


RB25DE / RB25DET ENGINE



Disassembly

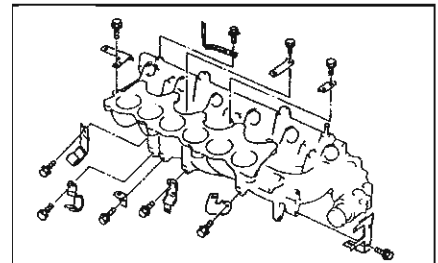
1. Remove the engine coolant temperature sensor and thermal transmitter.



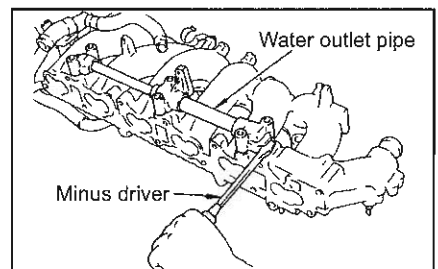
2. Remove each bracket and the clamps.
3. Remove the air regulator.

Caution:

- Do not disassemble and adjust the air regulator.
- Care must be taken not to damage parts by dropping tools.

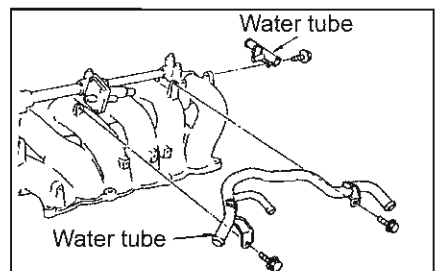


4. Remove water outlet pipe.
 - Place a screwdriver etc. between right and left water outlet pipe. Move it up and down gently to remove.
5. Remove the water tube. (RB25DET)



Assembly

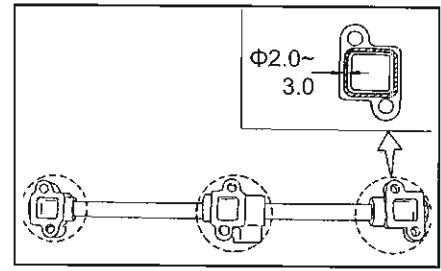
1. Install the water tube (RB25DET)
 Tightening torque (N-m{kg-m}) 6.3-8.3{0.64-0.85}



RB25DE / RB25DET ENGINE

2. Install water outlet pipe.

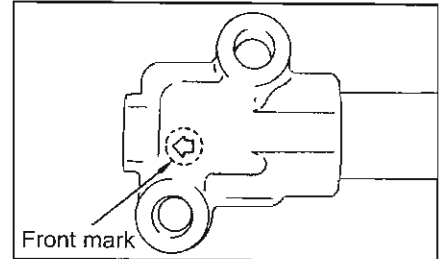
- (1) Use the scraper to remove gasket on water pipe installation surface and intake manifold side installation surface.
- (2) Apply sealing agent (KP510 00150) as shown in the figure on the right at approx. $\Phi 2.0 \sim 3.0$ mm.



(3) Install the water outlet pipe to intake manifold.

- Make sure the front mark is facing the front when installing.

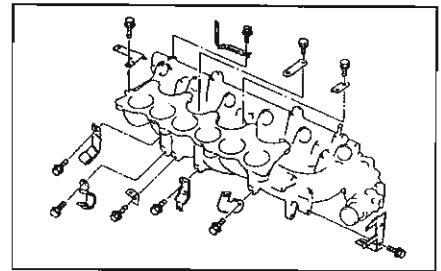
Tightening torque (N-m{kg-m}) 16~21{1.6~2.1}



3. Install the air regulator.

Tightening torque (N-m{kg-m}) 4.9~6.2{0.5~0.63}

4. Install each bracket and the clamps as shown.



5. Install the engine coolant temperature sensor and thermal transmitter.

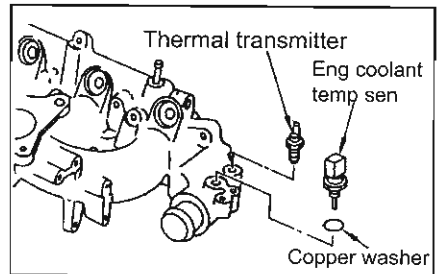
- Apply the sealing agent to thread part.

Tightening torque (N-m{kg-m})

Engine coolant temperature sensor 20~29{2.0~3.0}

Thermal transmitter 15~20{1.5~2.0}

- Replace the engine coolant temperature sensor copper washer with a new one.



6. Install each pipings following the diagram below.

