

SECTION 6F

EXHAUST SYSTEM

CONTENTS

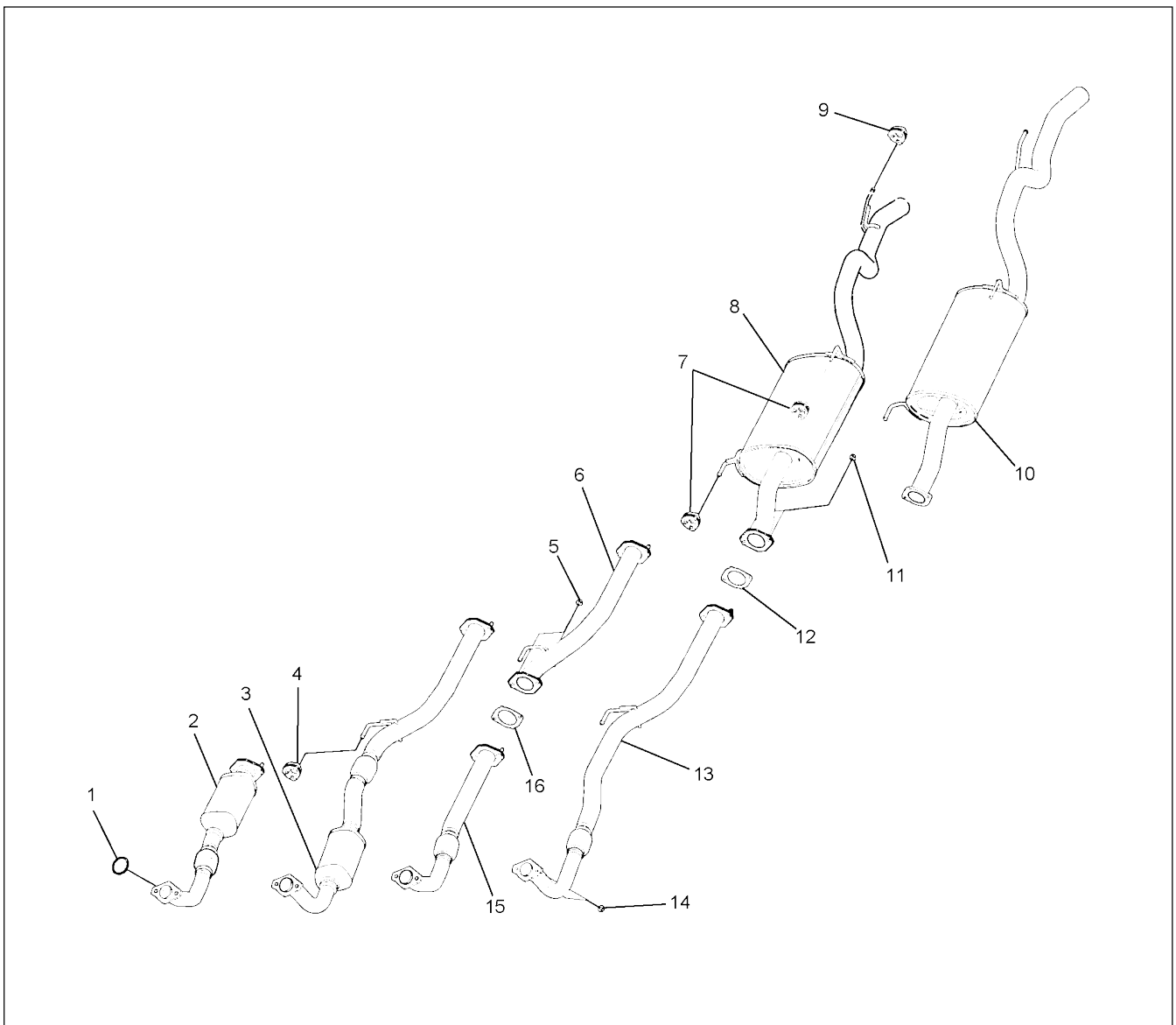
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Exhaust Silencer and Exhaust Pipe

Main Data and Specifications

Front pipe		
Pipe outside diameter × thickness	mm (in)	50.8 × 1.5 (2.0 × 0.059) and 60.5 × 1.5 (2.38 × 0.059)
Middle pipe		
Pipe outside diameter × thickness	mm (in)	60.5 × 1.5 (2.38 × 0.059)
Silencer & tail pipe		
Type		Circular section-shell construction of double skin and end plates, internal construction of baffles and perforated tubes.
Tail pipe outside diameter × thickness	mm (in)	Standard output: 60.5 × 1.6 (2.38 × 0.063) High output: 63.5 × 1.6 (2.5 × 0.063)
Length	mm (in)	Approximately 1335 (52.6)
Mounting		
Number of suspension points		4
Type		Rubber

Components



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Legend

- | | |
|--|--|
| 1. Exhaust Pipe Gasket | 10. Exhaust Silencer |
| 2. Front Pipe (4×2 High Ride Suspension, 4×4) | 11. Silencer Front Nut |
| 3. Front Pipe (4×2 Except High Ride Suspension) | 12. Exhaust Pipe Gasket |
| 4. Front Hanger Rubber | 13. Front Pipe (4×2 Except High Ride Suspension) |
| 5. Middle Pipe Nut (4×2 High Ride Suspension, 4×4) | 14. Front Pipe Nut |
| 6. Middle Pipe (4×2 High Ride Suspension, 4×4) | 15. Front Pipe (4×2 High Ride Suspension, 4×4) |
| 7. Silencer Hanger Rubber | 16. Front Pipe Gasket |
| 8. Exhaust Silencer | (4×2 High Ride Suspension, 4×4) |
| 9. Rear Hanger Rubber | |

Removal

1. Rear hanger rubber
2. Silencer front nut
3. Exhaust silencer
4. Silencer hanger rubber
5. Front hanger rubber
6. Middle pipe nut (4×2 High Ride Suspension, 4×4)
7. Middle pipe (4×2 High Ride Suspension, 4×4)
8. Front pipe nut
9. Exhaust pipe gasket

Installation

Follow the removal procedure in the reverse order to perform the installation procedure. Pay careful attention to the important points during the installation procedure.

1. Front Pipe Nut
Connect the exhaust pipe to the catalytic converter.

Torque: 67 N·m (6.8 kg·m / 49 lb ft)

2. Middle pipe Nut (4×2 High Ride Suspension, 4×4)
Connect the middle pipe to the front pipe.

Torque: 43 N·m (4.4 kg·m / 32 lb ft)

3. Silencer Front Nut
Connect the silencer to the front or middle pipe.

Torque: 43 N·m (4.4 kg·m / 32 lb ft)

Inspection and Repair

Make the necessary adjustments, repairs, and part replacements if excessive wear or damage is discovered during inspection.

Front Exhaust Pipe

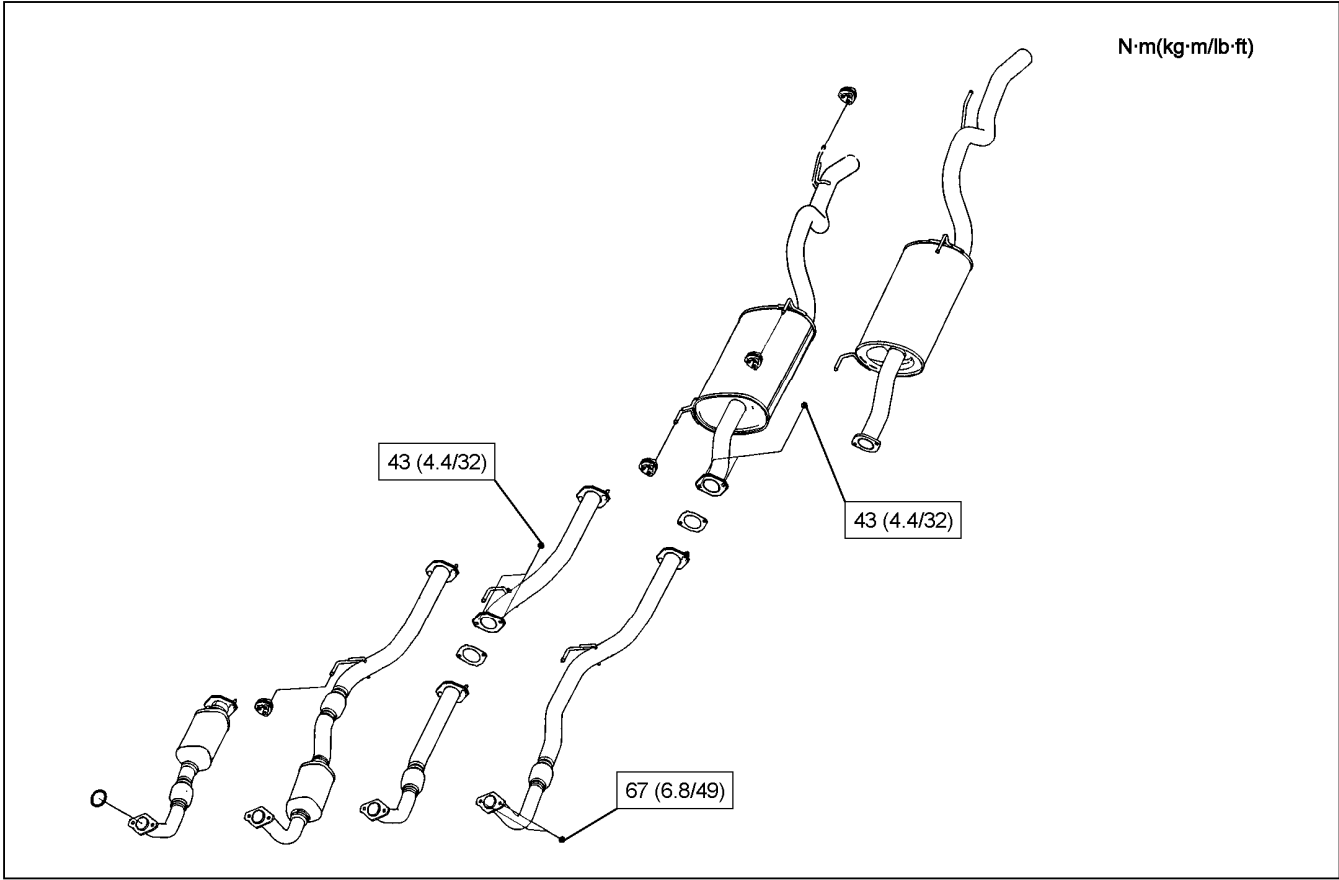
Exhaust Silencer

Check the pipes for corrosion, cracking, damage or misalignment and repair as required.

Check the rubber rings for deterioration or damage and repair as required.



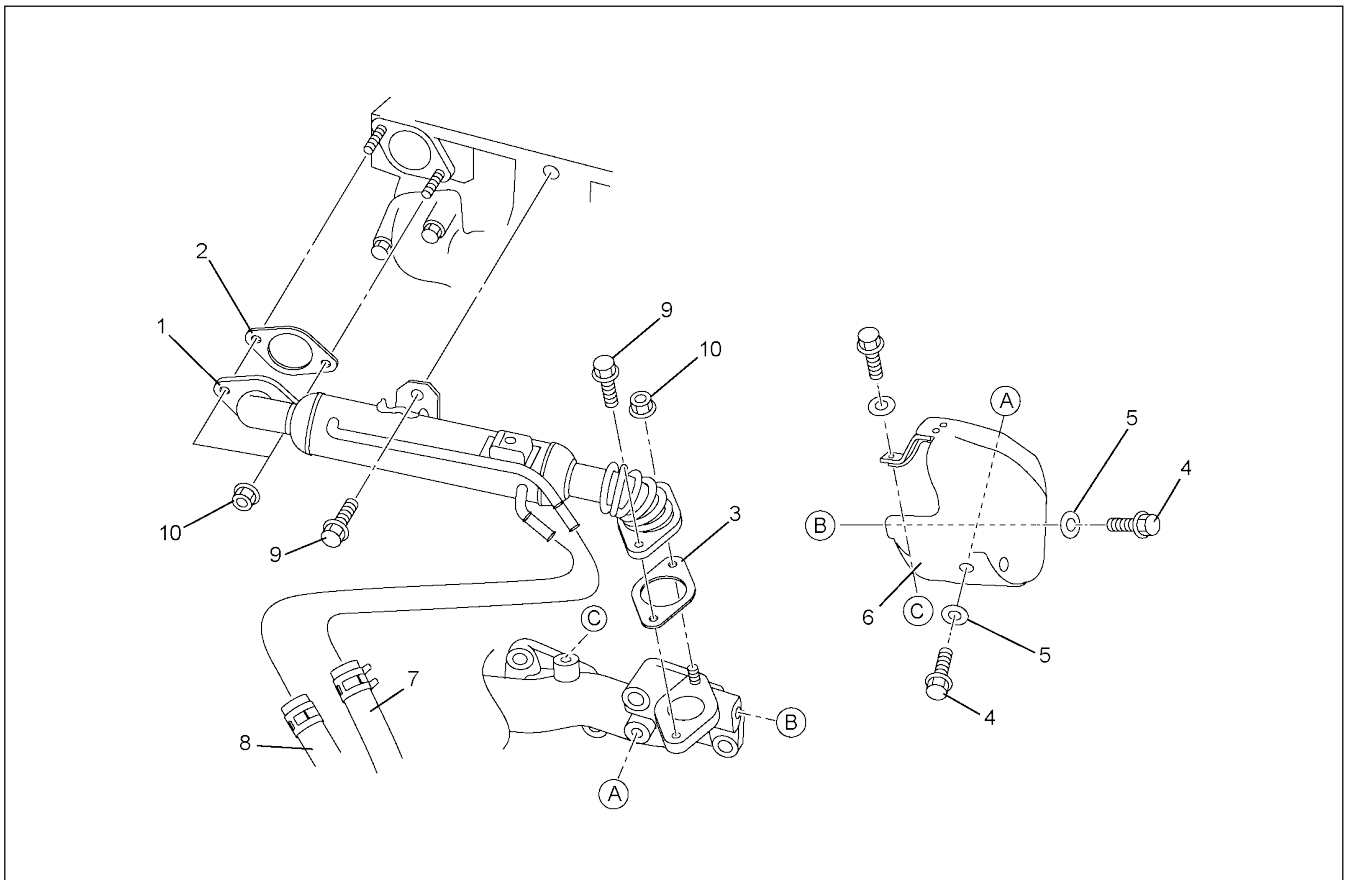
Torque Specifications



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EGR Cooler

Components (Standard Output)

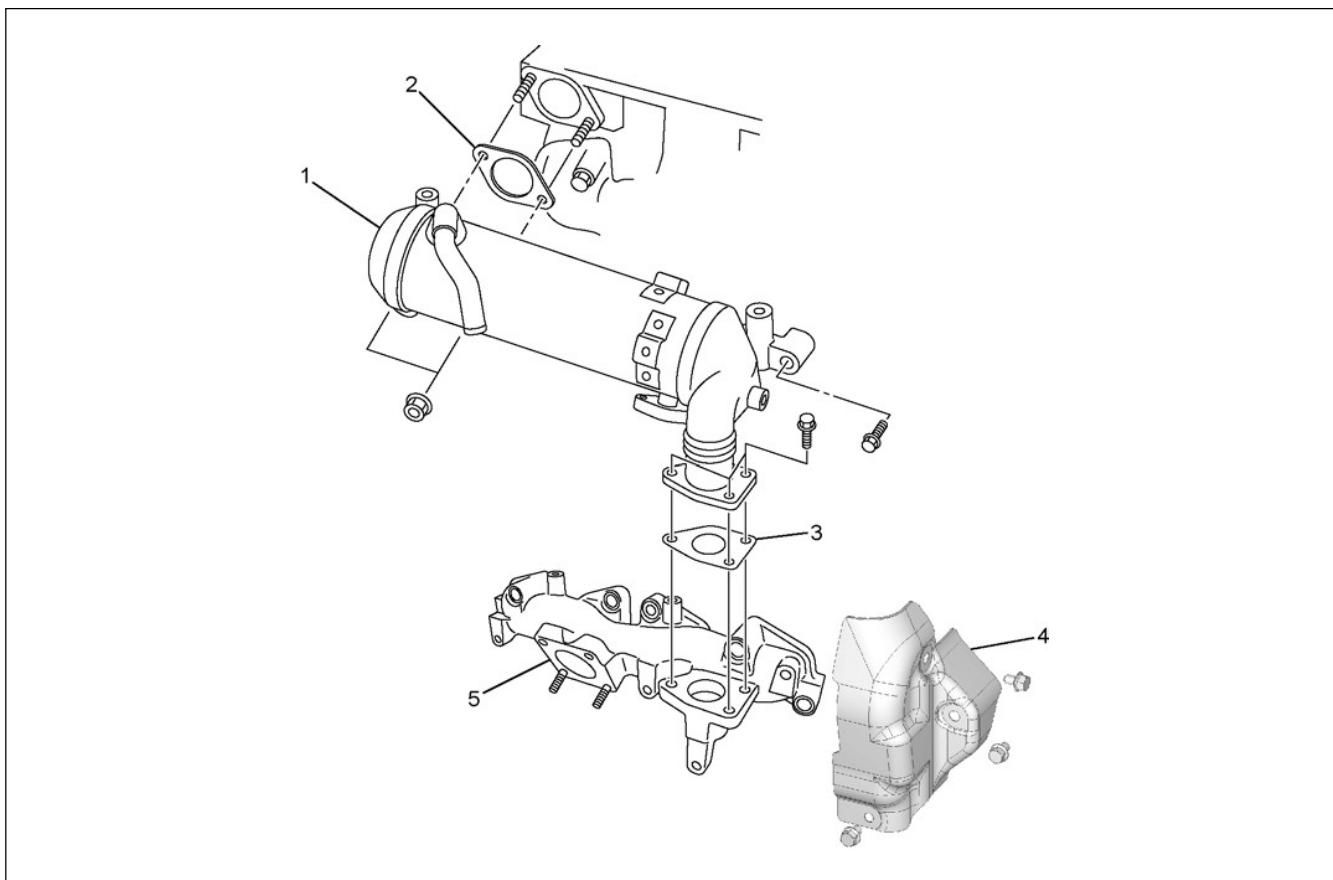


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Legend

- | | |
|---------------|----------------------|
| 1. EGR Cooler | 6. Heat Protector |
| 2. Gasket | 7. Water Hose Intake |
| 3. Gasket | 8. Water Hose Return |
| 4. Bolt | 9. Bolt |
| 5. Washer | 10. Nut |

Components (High Output)



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Legend

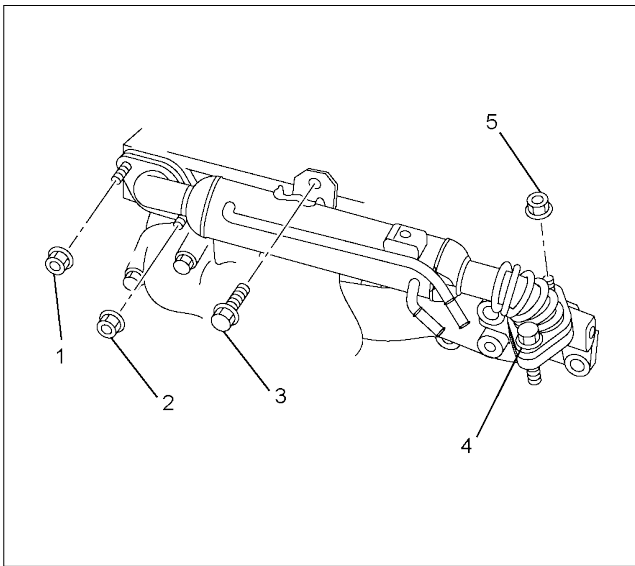
- | | |
|----------------------|---------------------|
| 1. EGR Cooler | 4. Heat Protector |
| 2. EGR Cooler Gasket | 5. Exhaust Manifold |
| 3. EGR Cooler Gasket | |

Removal

1. Drain the coolant.
2. Remove the intercooler.
3. Remove the heat protector.
4. Disconnect the water hoses from the EGR cooler water pipes.
5. Remove the EGR cooler.

Installation (Standard Output)

1. Gasket
2. EGR Cooler
3. Nuts and Bolts



- Temporary tightening order
1 – 2 – 4 – 5 - 3
- Fully tightening order
4 – 5 – 1 – 2 - 3

Tighten the nuts and bolts to the specified torque.

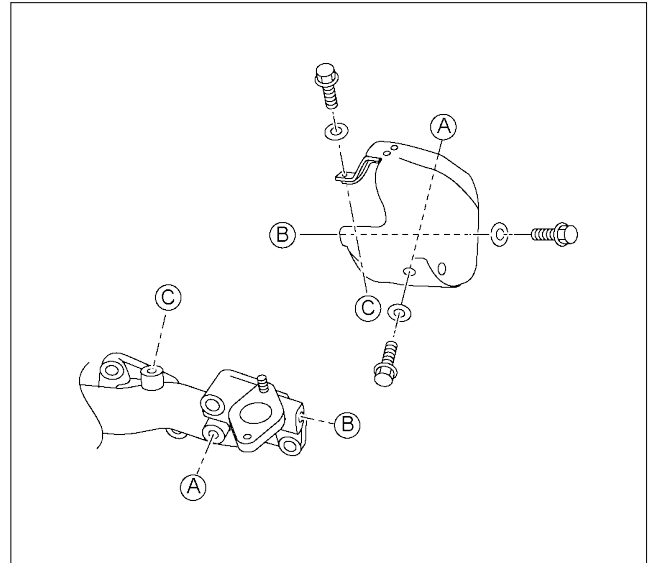
Tightening torque:

27 N·m (2.8 kg·m / 20 lb ft)

4. Water hose
5. Heat protector
 - Tighten the bolts to the specified torque.

Tightening torque:

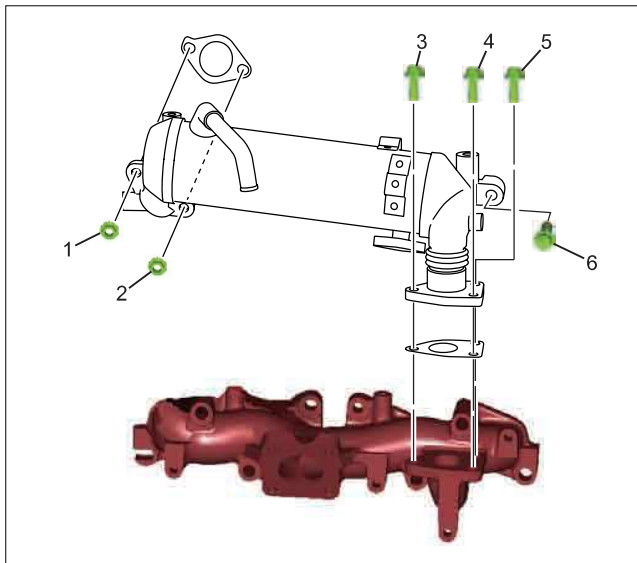
10 N·m (1.0 kg·m / 87 lb in)



6. Replenish the engine coolant.

Installation (High Output)

1. Gasket
2. EGR Cooler
3. Nuts and Bolts



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- Temporary tightening order
1→2→3→4→5→6
- Fully tightening order
3→4→5→1→2→6

Tighten the nuts and bolts to the specified torque.

Tightening torque:

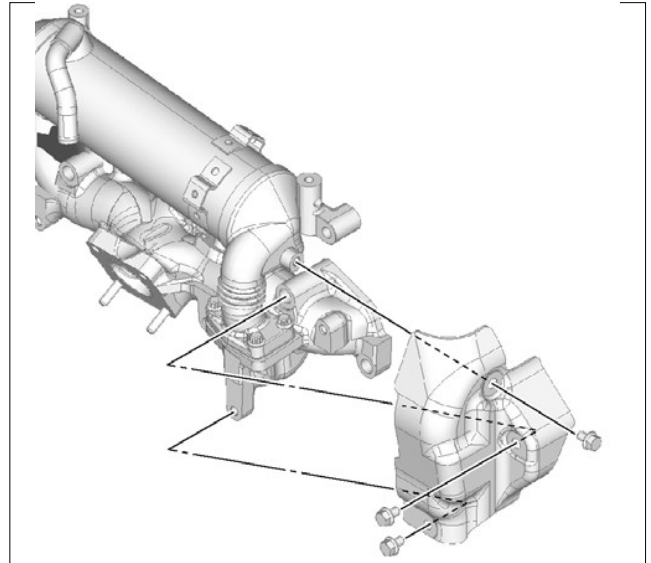
Nuts and bolts 1-5: 27 N·m (2.8 kg·m / 20 lb ft)

Bolt 6: 52 N·m (5.3 kg·m / 38 lb ft)

4. Water hose
 5. Heat protector
- Tighten the bolts to the specified torque.

Tightening torque:

25 N·m (2.5 kg·m / 18 lb ft)

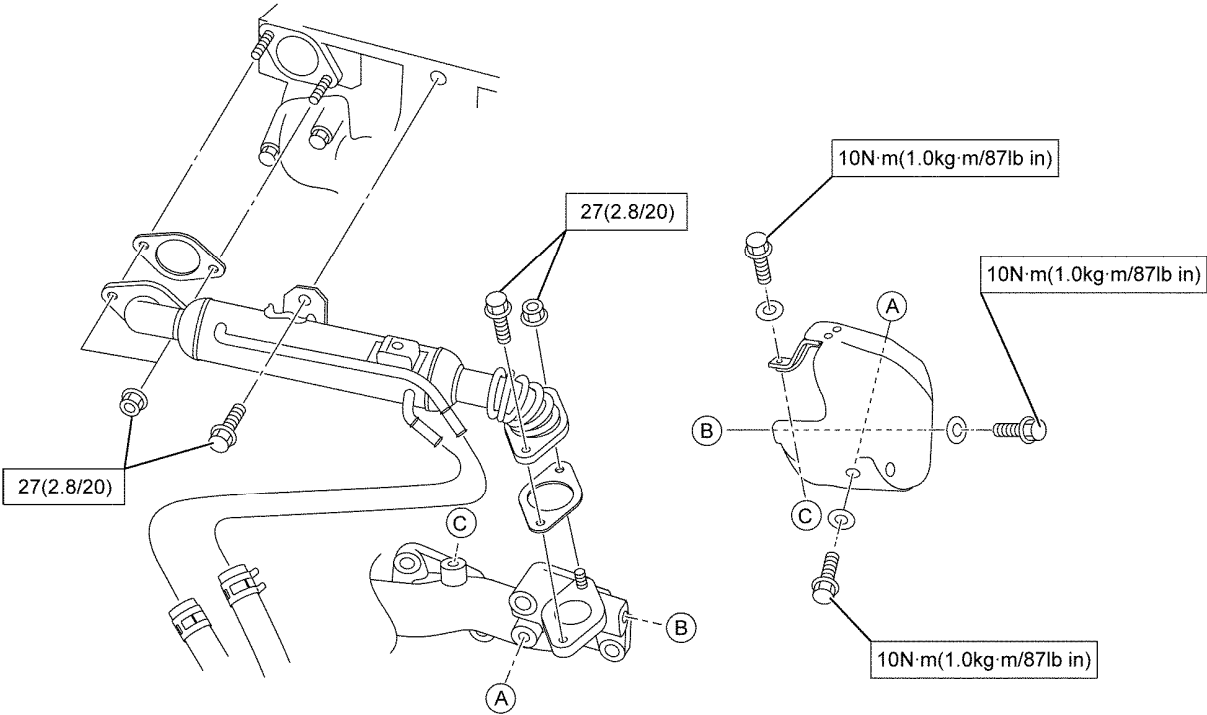


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6. Replenish the engine coolant.

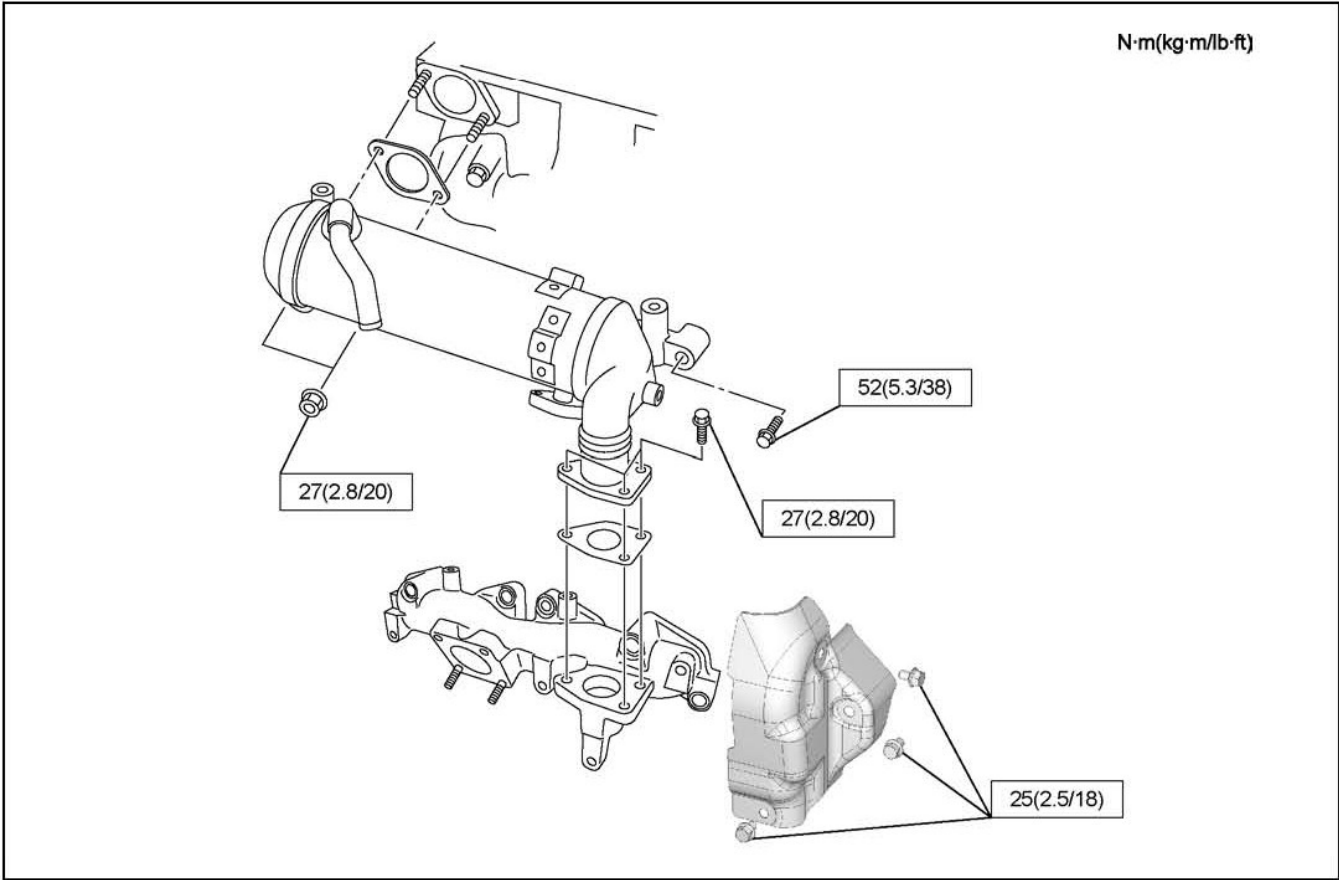
Torque Specifications (Standard Output)

N·m(kg·m/lb ft)



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Torque Specifications (High Output)



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