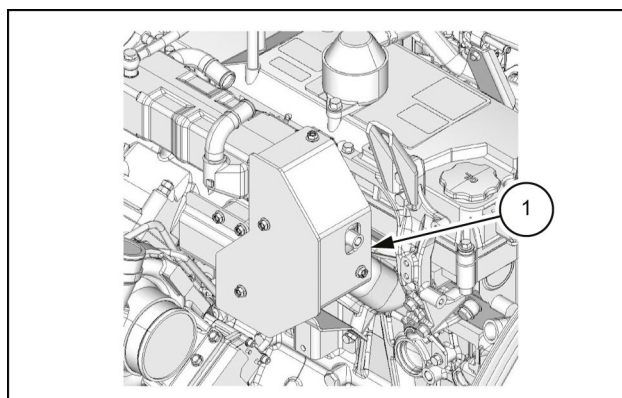
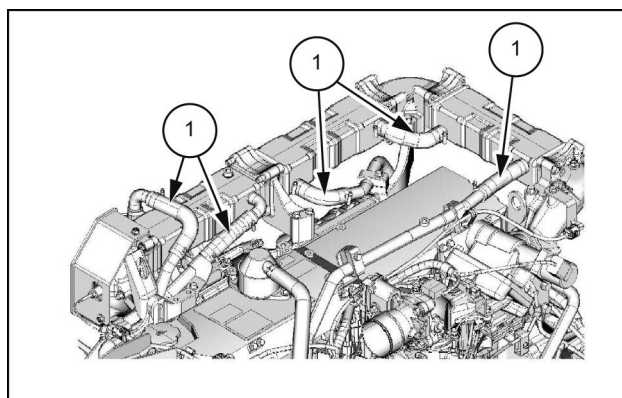


13. Securely tighten the EGR pipe B to the EGR cooler C.
Tightening torque: **25 N·m (18 lb ft)**
14. Securely tighten the EGR pipe B to the EGR valve.
Tightening torque: **46 N·m (34 lb ft)**
15. Securely tighten the EGR cooler bracket A to the EGR cooler bracket C.
Tightening torque: **24 N·m (17 lb ft)**
16. Securely tighten the EGR cooler bracket C to the EGR cooler bracket B.
Tightening torque: **46 N·m (34 lb ft)**
17. Securely tighten the EGR pipe B to the rear engine hanger bracket.
Tightening torque: **46 N·m (34 lb ft)**
18. Install the EGR heat protector (1) to the EGR pipe.
Tightening torque: **31 N·m (23 lb ft)**



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19. Connect the water rubber hose (1) to the EGR cooler.



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EGR gas temperature sensor 2 installation

 CAUTION:

- Check the EGR gas temperature sensor 2 connector color, and take care not to assemble incorrectly.
- Because the connector color cannot be identified using the outer surface if the exterior is painted, remove the connector and identify it using the connector interior color.
- If it is difficult to determine the color, remove the connectors of EGR gas temperature sensor 2 and the IMT sensor, and determine the color using the connector interior color.

Sensor name	Connector color
EGR gas temperature sensor 2	Light gray
IMT Sensor	Gray

 CAUTION:

- Do not subject the tip of the sensor to impact when installing the EGR gas temperature sensor.
- Do not reuse an EGR gas temperature sensor that has been subjected to impact due to being dropped, etc.

1. Apply anti-seize lubricant to EGR gas temperature sensor 2.

NOTE: Apply High Temperature Stainless Never- Seez: 5-87411-039-0, manufactured by Bostik in the U.S., etc. to the threaded portion of EGR gas temperature sensor 2.

2. Install EGR gas temperature sensor 2 to EGR pipe B.
Tightening torque: **19.6 N·m (14 lb ft)**
3. Install the harness bracket to EGR pipe B.
Tightening torque: **23.5 N·m (17 lb ft)**
4. Connect the harness connector to EGR gas temperature sensor 2.

EGR gas temperature sensor 1 installation

 CAUTION:

- Do not subject the tip of the sensor to impact when installing the EGR gas temperature sensor.
- Do not reuse an EGR gas temperature sensor that has been subjected to impact due to being dropped, etc.

1. Apply anti-seize lubricant to EGR gas temperature sensor 1.

NOTE: Apply High Temperature Stainless Never- Seez: 5-87411-039-0, manufactured by Bostik in the U.S., etc. to the threaded portion of EGR gas temperature sensor 1.

2. Install EGR gas temperature sensor 1 to EGR pipe A.
Tightening torque: **44 N·m (32 lb ft)**
3. Install the harness bracket to the fan guide stay.
Tightening torque: **23.5 N·m (17 lb ft)**
4. Connect the harness connector to EGR gas temperature sensor 1.

Oil level gauge guide tube installation

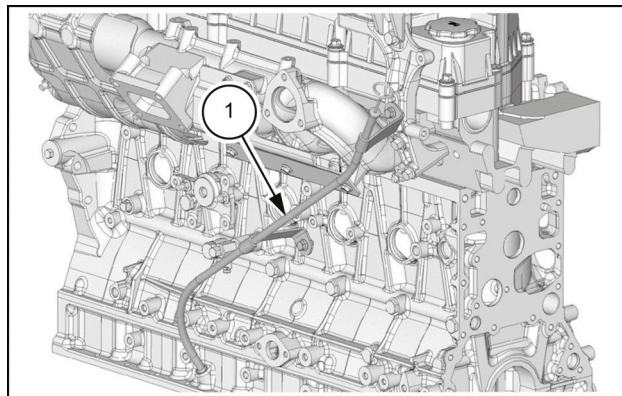
1. Install the oil level gauge guide tube (1) to the cylinder block.

Tightening torque: **24 N·m (17 lb ft)**

2. Connect the oil level gauge guide tube (1) to the cylinder head assembly.

Tightening torque: **23.5 N·m (17 lb ft)**

3. Install the oil level gauge to the oil level gauge guide tube (1).




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Turbocharger assembly installation

1. Replenish the turbocharger assembly with the engine oil.

NOTE: Pour engine oil from the oil feed port and manually rotate the shaft slightly.

 **CAUTION:** Do not apply force to the turbine blade and compressor.

2. Align the gasket to the turbocharger assembly.
3. Install the turbocharger assembly to the exhaust manifold.

Tightening torque: **52 N·m (38 lb ft)**

4. Install the water feed pipe (4) to the cylinder block.

Tightening torque: **41 N·m (30 lb ft)**

Tightening torque: **24 N·m (17 lb ft)**

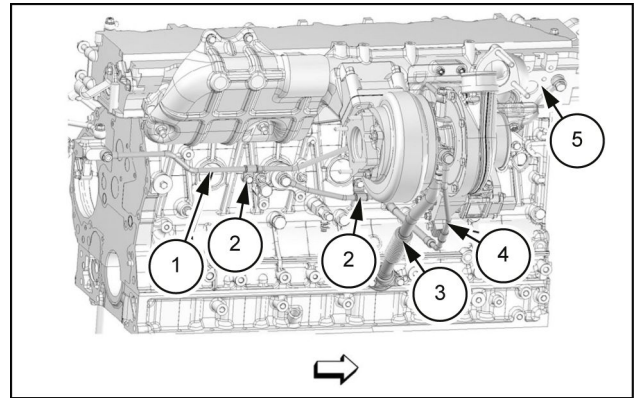
Clip (2)

 CAUTION: Use a new gasket.

5. Connect the water feed pipe (4) to the turbocharger assembly.

Tightening torque: **41 N·m (30 lb ft)**

 CAUTION: Use a new gasket.



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6. Install the water return pipe (5) to the cylinder block.

Tightening torque: **41 N·m (30 lb ft)**

 CAUTION: Use a new gasket.

7. Connect the water return pipe (5) to the turbocharger assembly.

Tightening torque: **41 N·m (30 lb ft)**

 CAUTION: Use a new gasket.


8. Install the oil return pipe (3) to the cylinder block.

Tightening torque: **24 N·m (17 lb ft)**

 CAUTION: Use a new gasket.

9. Connect the oil return pipe (3) to the turbocharger assembly.


Tightening torque: **24 N·m (17 lb ft)**

 CAUTION: Use a new gasket.

10. Install the oil feed pipe (1) to the pipe bracket.

Tightening torque: **34 N·m (25 lb ft)**


Tightening torque: **24 N·m (17 lb ft)**

 CAUTION: Use a new gasket.

11. Connect the oil feed pipe (1) to the turbocharger assembly.

Tightening torque: **34 N·m (25 lb ft)**

Tightening torque: **24 N·m (17 lb ft)**

 CAUTION: Use a new gasket.

12. Install the exhaust pipe to the turbocharger assembly.

13. Install the air intake hose to the turbocharger assembly and the intercooler.

14. Install the air cleaner duct to the air cleaner assembly and the turbocharger assembly.