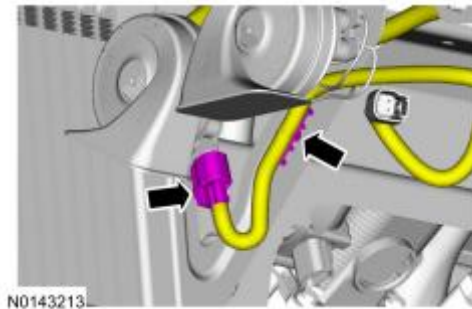


Oil Cooler — Body Mounted

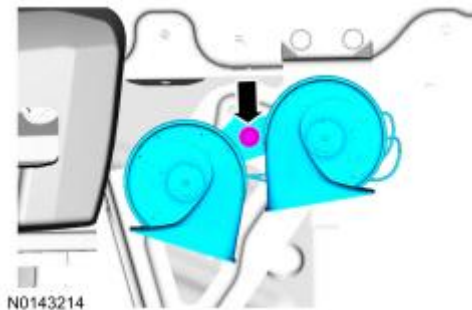
Removal and Installation

NOTE: Removal steps in this procedure may contain installation details.

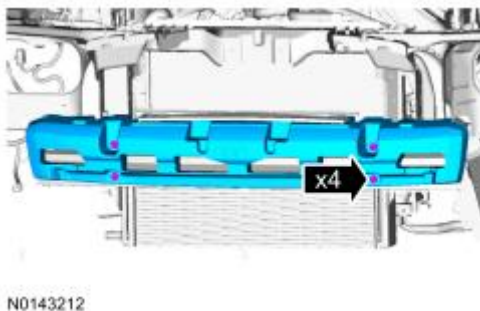
1. Remove the bumper cover. Refer to Section 501-19.
2. Disconnect the horn electrical connector and wire retainer.



3. Remove the bolt and the horns.
 - To install, tighten to 12 Nm (106 lb-in).

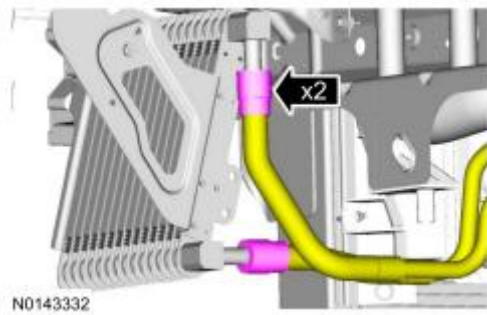


4. Remove the 4 retainers and the front bumper isolator.

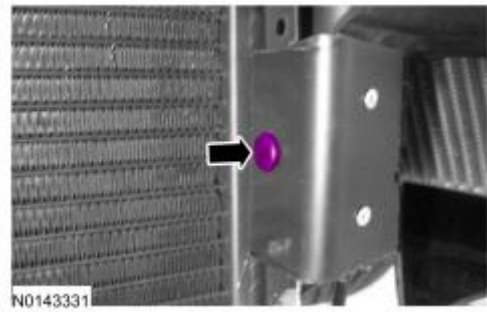


5. **NOTICE:** If metal or aluminum material is present in the oil cooler, mechanical concerns exist. Failure to correct these concerns may cause engine failure. To diagnose mechanical concerns, refer to Section 303-00.

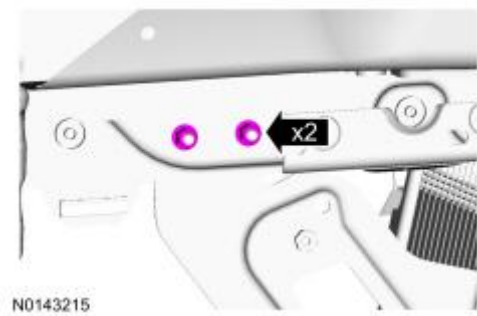
Disconnect the 2 oil cooler hoses.



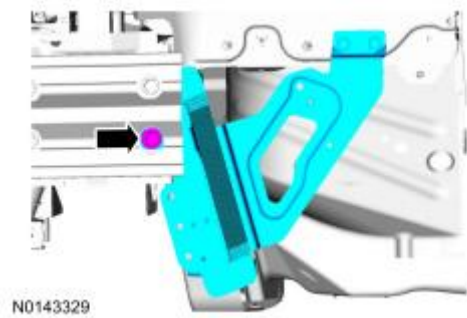
6. Remove the pin type retainer.



7. Remove the 2 nuts for the oil cooler bracket.
 - To install, tighten to 7 Nm (62 lb-in).



8. Remove the bolt and the oil cooler.
 - To install, tighten to 25 Nm (18 lb-ft).



9. To install, reverse the removal procedure.

Oil Cooler — Engine Mounted

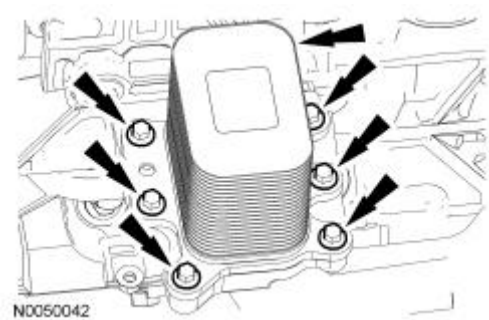
Material	
Item	Specification
Motorcraft® Metal Surface Prep ZC-31-A	—

Removal

1. With the vehicle in NEUTRAL, position it on a hoist. Refer to Section 100-02.
2. Drain the engine cooling system. Refer to Section 303-03A.
3. Remove the generator. Refer to Section 414-00.
4. **NOTICE:** If metal or aluminum material is present in the oil cooler, mechanical concerns exist. Failure to correct these concerns may cause engine failure. To diagnose mechanical concerns, refer to Section 303-00.

Remove the 6 bolts and the oil cooler.

- Discard the gaskets.
- Inspect the oil cooler.

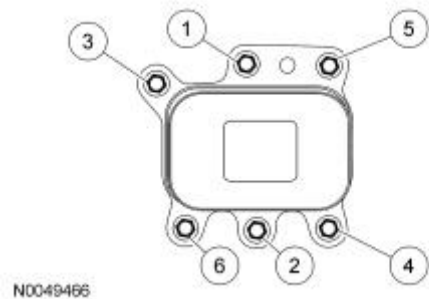


Installation

1. **NOTE:** Clean the sealing surfaces with Motorcraft® Metal Surface Prep. Follow the directions on the packaging. Inspect the mating surfaces.

Using new gaskets, install the oil cooler and the 6 bolts. Tighten in the sequence shown in 2 stages.

- Stage 1: Tighten to 9 Nm (80 lb-in).
- Stage 2: Tighten an additional 60 degrees.



2. Install the generator. Refer to Section 414-00.
3. Fill and bleed engine cooling system. Refer to Section 303-03A.

Oil Cooler Thermostat

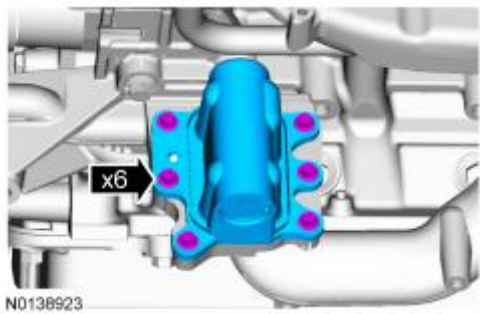
Material	
Item	Specification
Motorcraft® Metal Surface Prep ZC-31-A	—

Removal

1. Disconnect the battery ground cable. Refer to Section 414-01.
2. Remove the ACL assembly and the ACL outlet tube. Refer to Section 303-12.
3. **NOTICE:** If metal or aluminum material is present in the oil cooler thermostat, mechanical concerns exist. Failure to correct these concerns may cause engine failure. To diagnose mechanical concerns, refer to Section 303-00.

Remove the 6 bolts and the oil cooler thermostat.

- Discard the gaskets.
- Inspect the oil cooler thermostat.

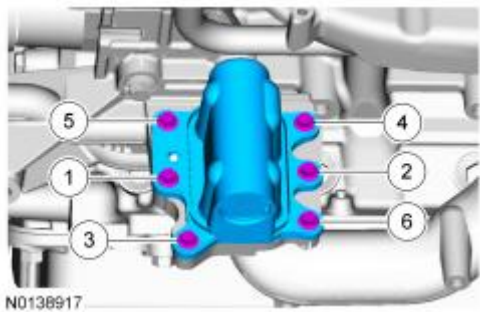


Installation

1. **NOTE:** Clean the mounting surfaces with Motorcraft® Metal Surface Prep. Follow the directions on the packaging. Inspect the mating surfaces.

Using new gaskets, install the oil cooler thermostat and the 6 bolts. Tighten in the sequence shown in 2 stages.

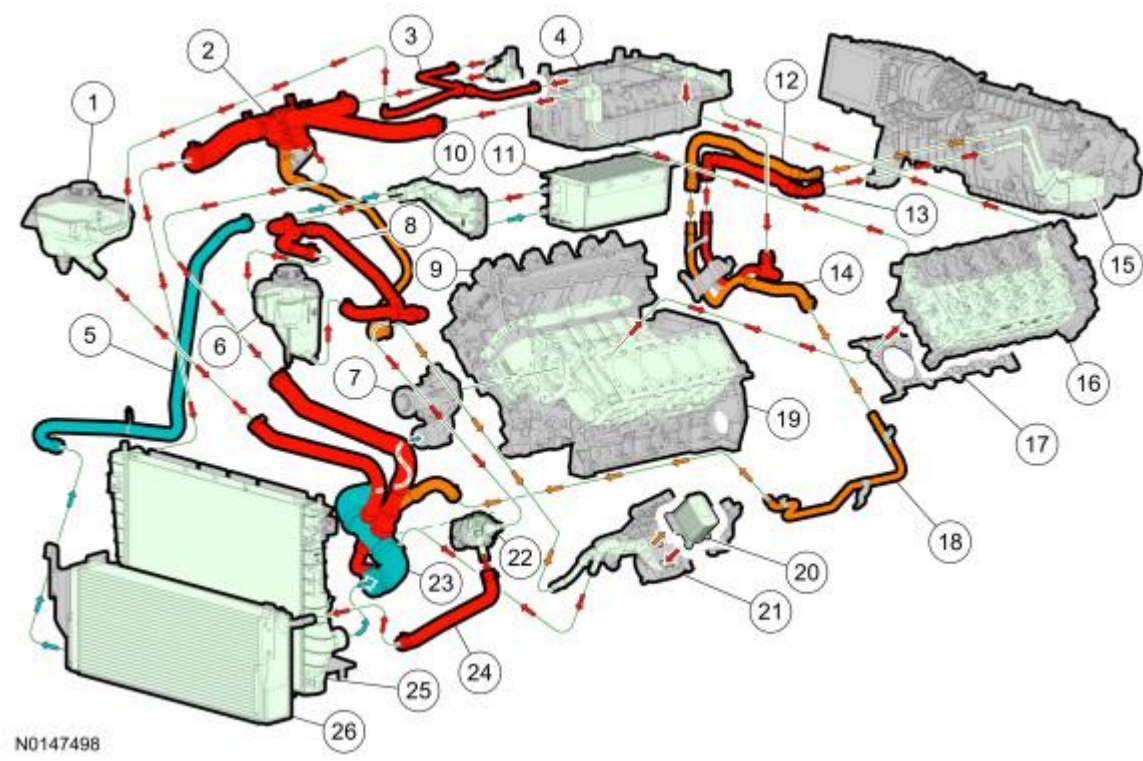
- Stage 1: Tighten to 9 Nm (80 lb-in).
- Stage 2: Tighten an additional 60 degrees.



2. Install the ACL assembly and the ACL outlet tube. Refer to Section 303-12.
3. Connect the battery ground cable. Refer to Section 414-01.

5.8L with Coolant-Cooled Oil Cooler

NOTE: At 38°C (100°F) ambient temperature, green arrows indicate coolant temperature below 90°C (194°F), amber arrows indicate coolant temperature approximately 90°C (194°F), red arrows indicate coolant temperature above 90°C (194°F),



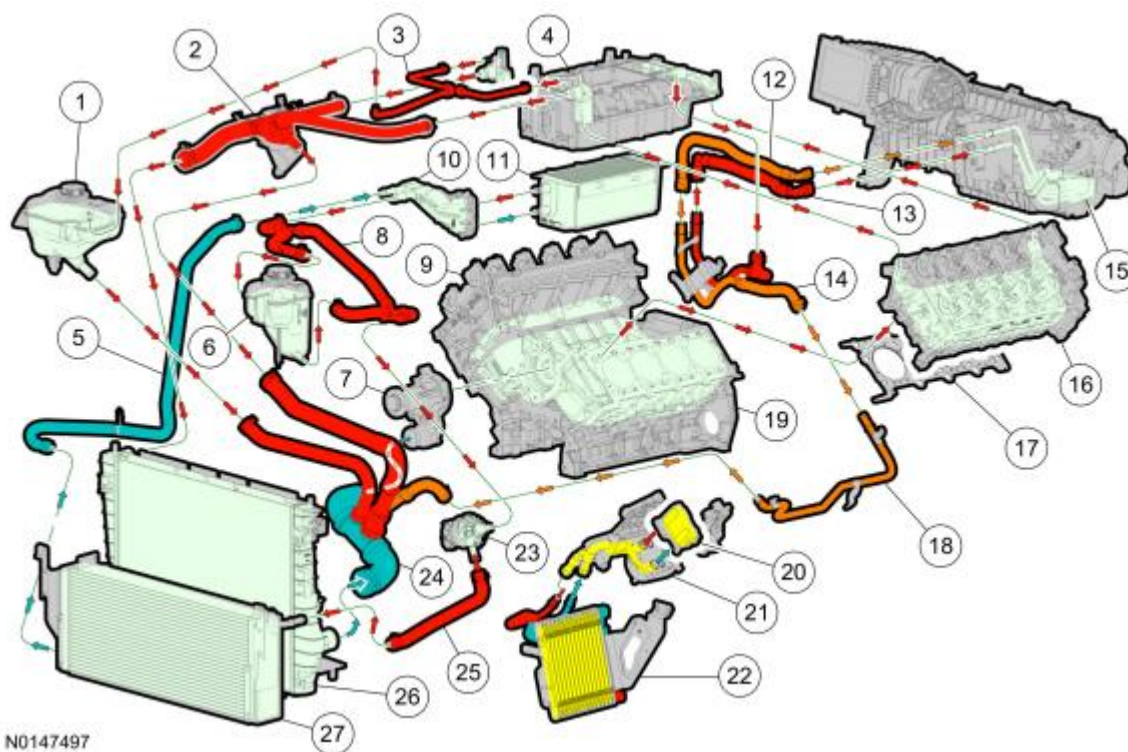
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Item	Part Number	Description
1	8A080	Engine cooling system degas bottle
2	8A586	Thermostat housing and hose assembly
3	8276	Upper intake manifold-to-engine system degas bottle hose
4	9424	Upper intake manifold
5	8D030	Supercharger cooling radiator-to-supercharger cooler hose
6	8D028	Supercharger cooling degas bottle
7	8501	Engine cooling system coolant pump
8	8D029	Supercharger cooling degas bottle-to-supercharger coolant pump hose
9	6049	RH cylinder head
10	9N491	Supercharger tube assembly
11	6K775	Supercharger cooler
12	18K580	Heater core outlet hose
13	18K579	Heater core inlet hose
14	18C553	Heater core hose and tube assembly
15	19B555	Heater core and evaporator housing
16	8050	LH cylinder head
17	6083	LH cylinder head gasket
18	18663	Heater outlet tube
19	6010	Engine block

20	6L635	Oil temperature control thermostat
21	6881	Oil filter adapter
22	6A642	Oil Cooler
23	8K232	Supercharger cooling system coolant pump
24	8B273	Lower radiator hose assembly
25	8K236	Supercharger cooling system coolant pump-to-radiator hose
26	8005	Engine cooling system radiator
27	8009	Supercharging cooling system radiator

5.8L with Air-Cooled Oil Cooler

NOTE: At 38°C (100°F) ambient temperature, green arrows indicate coolant temperature below 90°C (194°F), amber arrows indicate coolant temperature approximately 90°C (194°F), red arrows indicate coolant temperature above 90°C (194°F),



Item	Part Number	Description
1	8A080	Engine cooling system degas bottle
2	8A586	Thermostat housing and hose assembly
3	8276	Upper intake manifold-to-engine system degas bottle hose
4	9424	Upper intake manifold
5	8D030	Supercharger cooling radiator-to-supercharger cooler hose
6	8D028	Supercharger cooling degas bottle
7	8501	Engine cooling system coolant pump
8	8D029	Supercharger cooling degas bottle-to-supercharger coolant pump hose

9	6049	RH cylinder head
10	9N491	Supercharger tube assembly
11	6K775	Supercharger cooler
12	18K580	Heater core outlet hose
13	18K579	Heater core inlet hose
14	18C553	Heater core hose and tube assembly
15	19B555	Heater core and evaporator housing
16	8050	LH cylinder head
17	6083	LH cylinder head gasket
18	18663	Heater outlet tube
19	6010	Engine block
20	6A642	Engine oil cooler
21	6881	Oil filter adapter
22	8K232	Supercharger cooling system coolant pump
23	8B273	Lower radiator hose assembly
24	8K236	Supercharger cooling system coolant pump-to-radiator hose
25	8005	Engine cooling system radiator
26	8009	Supercharging cooling system radiator
