

303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS)
Removal and Installation


2019 Ranger
Procedure revision date: 01/7/2019

Thermostat

Materials

Name	Specification
Motorcraft® Orange Prediluted Antifreeze/Coolant VC-3DIL-B	WSS-M97B44-D2
Motorcraft® Yellow Concentrated Antifreeze/Coolant VC-13-G	WSS-M97B57-A1
Motorcraft® Yellow Prediluted Antifreeze/Coolant VC-13DL-G	WSS-M97B57-A2
Motorcraft® Orange Concentrated Antifreeze/Coolant VC-3-B	WSS-M97B44-D

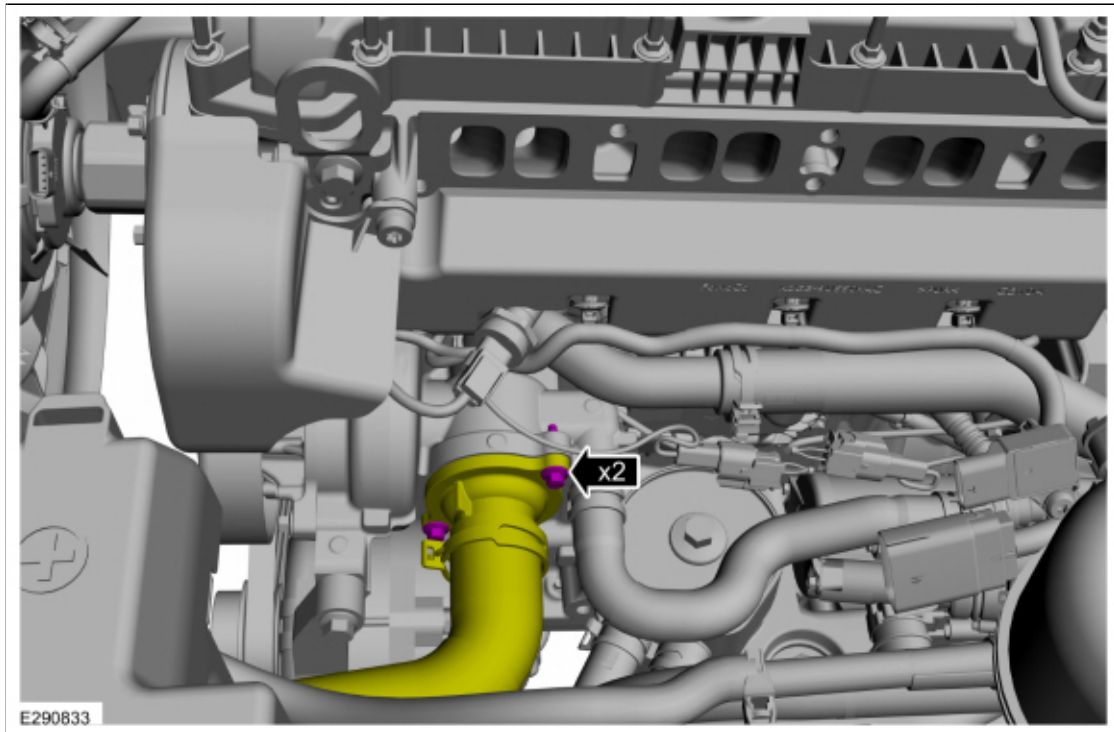
Removal

 **WARNING:** Always allow the engine to cool before opening the cooling system. Do not unscrew the coolant pressure relief cap when the engine is operating or the cooling system is hot. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly. Failure to follow these instructions may result in serious personal injury.

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

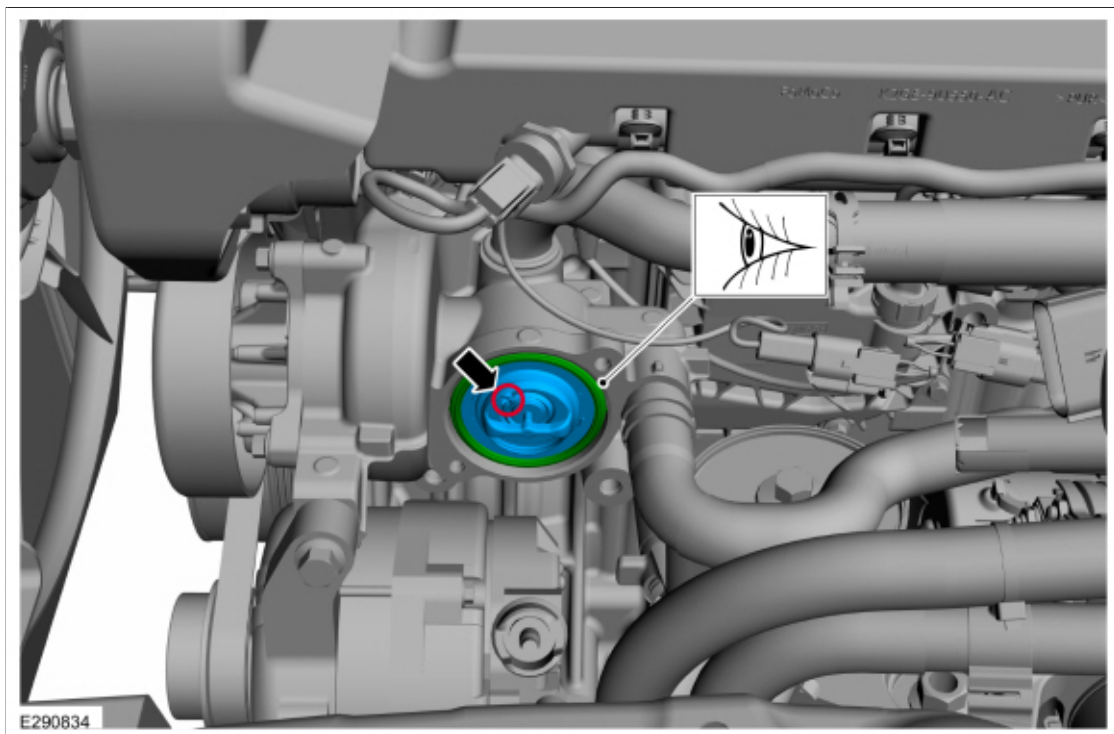
1. Drain the cooling system.
Refer to: [Cooling System Draining, Vacuum Filling and Bleeding](#) (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), General Procedures).
2. Remove the intake manifold.
Refer to: [Intake Manifold](#) (303-01 Engine - 2.3L EcoBoost (201kW/273PS), Removal and Installation).
3. Remove the bolts and position the coolant hose aside.
Torque: 93 lb.in (10.5 Nm)





4. **NOTE:** During installation verify the thermostat vent hole is at the 11 o'clock position

Remove the thermostat. Inspect the O-ring seal and replace if necessary.



Installation

1. Lubricate the O-ring seal with clean engine coolant.
Material: Motorcraft® Orange Concentrated Antifreeze/Coolant / VC-3-B (WSS-M97B44-D)
Material: Motorcraft® Orange Prediluted Antifreeze/Coolant / VC-3DIL-B (WSS-M97B44-D2)
Material: Motorcraft® Yellow Concentrated Antifreeze/Coolant / VC-13-G (WSS-M97B57-A1)
Material: Motorcraft® Yellow Prediluted Antifreeze/Coolant / VC-13DL-G (WSS-M97B57-A2)
2. To install, reverse the removal procedure.
3. Fill and bleed the cooling system.
Refer to: [Cooling System Draining, Vacuum Filling and Bleeding](#) (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), General Procedures).

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