

SECTION 303-03: Engine Cooling
GENERAL PROCEDURES

2014 F-150 Workshop Manual
Procedure revision date: 10/25/2013

Cooling System Draining, Filling and Bleeding

Special Tool(s)

 ST2B1B-A	Air Lift Cooling System Tester UUV550000 or equivalent
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Material

Item	Specification
Motorcraft® Orange Antifreeze/Coolant Concentrated VC-3-B (US); CVC-3-B2 (Canada)	WSS-M97B44-D
Motorcraft® Orange Antifreeze/Coolant Prediluted VC-3DIL-B (US); CVC-3DIL-B (Canada)	WSS-M97B44-D2

Draining



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.

NOTICE: The coolant must be recovered in a suitable, clean container for reuse. If the coolant is contaminated it must be recycled or disposed of correctly. Failure to follow these instructions may result in engine or cooling system damage.

NOTE: Less than 80% of the coolant capacity can be recovered with the engine in the vehicle. Dirty, rusty or contaminated coolant requires replacement.

NOTE: During normal vehicle operation, Motorcraft Orange Antifreeze/Coolant may change color from orange to pink or light red. As long as the engine coolant is clear and uncontaminated, this color change does not indicate the engine coolant has degraded nor does it require the engine coolant to be drained, the system to be flushed, or the engine coolant to be replaced.

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to [Section 100-02](#).
2. Make sure the engine is cool.
3. Wrap a thick cloth around the pressure relief cap. Slowly turn the cap counterclockwise until the