

**RACING**

Engine Cooling - 5.0L 32V Ti-VCT (Mustang Dark Horse R)

2025 Mustang Dark Horse R


General Procedures

Procedure revision date:
04/17/2026

Engine Cooling System Flushing**Special Tool(s) / General Equipment**

N/A

Flushing

 **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: To remove rust, sludge and other foreign material from the cooling system, use cooling system flush that is safe for use with aluminum radiators. This cleaning restores cooling system efficiency and helps prevent overheating. A pulsating or reversed direction of flushing water will loosen sediment more quickly than a steady flow in the normal coolant flow direction. In severe cases where cleaning solvents will not clean the cooling system efficiently, it will be necessary to use the pressure flushing method using cooling system flusher. Dispose of old coolant and flushing water contaminated with antifreeze and cleaning chemicals in accordance with local, state or federal laws.

1. Add Motorcraft® Premium Cooling System Flush to the cooling system and follow the directions on the package.
2. Drain the cooling system.
3. Remove the upper and lower radiator hoses from the radiator.
4. **NOTICE: Radiator internal pressure must not exceed 138 kPa (20 psi). Damage to the radiator can result.**
Using a high-pressure hose in the lower radiator hose opening, backflush the radiator.
5. Remove the thermostat.
6. Remove the coolant inlet connection.
7. Position the high-pressure water hose into the engine through the upper radiator hose and backflush the engine.
8. Install the coolant inlet connection without the thermostat.
Torque: 89 lb.in (10 Nm)
9. Install the thermostat.
10. Install the upper and lower radiator hoses to the radiator.
11. Fill and bleed the cooling system.
Refer to: [DHR Engine Coolant Drain Fill Bleed Procedure](#)
12. Adjust the coolant concentration to the desired mixture.

NOTICE: If your Mustang Dark Horse will be stored at ambient temperature below 32F (0C) it is recommended to fill the cooling system with 50/50 mix of antifreeze and water.

1. Allow the engine to idle for 5 minutes to mix the coolant and water for an accurate concentration measurement.
2. Add, top-off or adjust the coolant with concentrated coolant to the correct concentration.