Supercharger Cooling

NOTICE: The Supercharger (SC) cooling system is filled with Motorcraft Premium Gold Engine Coolant. Mixing coolant types degrades the corrosion protection of Motorcraft Premium Gold Engine Coolant.

NOTE: The air charge that exits the Supercharger (SC) is cooled by the SC cooling system.

The <u>SC</u> cooling system components include the:

- Charge Air Cooler (CAC).
- · radiator.
- pressure relief cap.
- · degas bottle.
- · electric coolant pump.

The degas bottle:

- provides a location for system fill.
- contains coolant expansion and system pressurization.
- provides air separation during operation.
- · replenishes the coolant to the system.

The coolant flows:

- from the CAC to the degas bottle.
- from the degas bottle to the coolant pump.
- from the coolant pump to the radiator.
- from the radiator to the CAC.

Coolant provides freeze protection, boil protection, cooling efficiency and corrosion protection to the <u>SC</u> cooling system components. In order to obtain these protections, the coolant must be maintained at the correct concentration and fluid level in the degas bottle.

When adding coolant, use a 50/50 mixture of coolant and clean, drinkable water.

To maintain the integrity of the coolant and the cooling system:

- Add Motorcraft Premium Gold Engine Coolant or equivalent meeting Ford specification WSS-M97B51-A1 (yellow color). Use the same coolant that was drained from the cooling system. Do not mix coolant types.
- Do not add/mix orange-colored Motorcraft Speciality Orange Engine Coolant or equivalent meeting Ford specification WSS-M97B44-D. Mixing coolants may degrade the coolant's corrosion protection.
- Do not add alcohol, methanol, brine or any engine coolants mixed with alcohol or methanol antifreeze. These can cause engine damage from overheating or freezing.
- Do not mix with recycled coolant unless it meets the requirements of Ford specification or WSS-M97B51-A1. Not all coolant recycling processes meet these Ford specifications. Use of such coolants can harm the engine and cooling system components.