

Component Procedures: Coolant

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Component Procedures: Coolant

Specifications Quick Reference (itype_439)

Quick Specifications

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Coolant - Repair Procedures (Article 45361)

- Refilling and Bleeding

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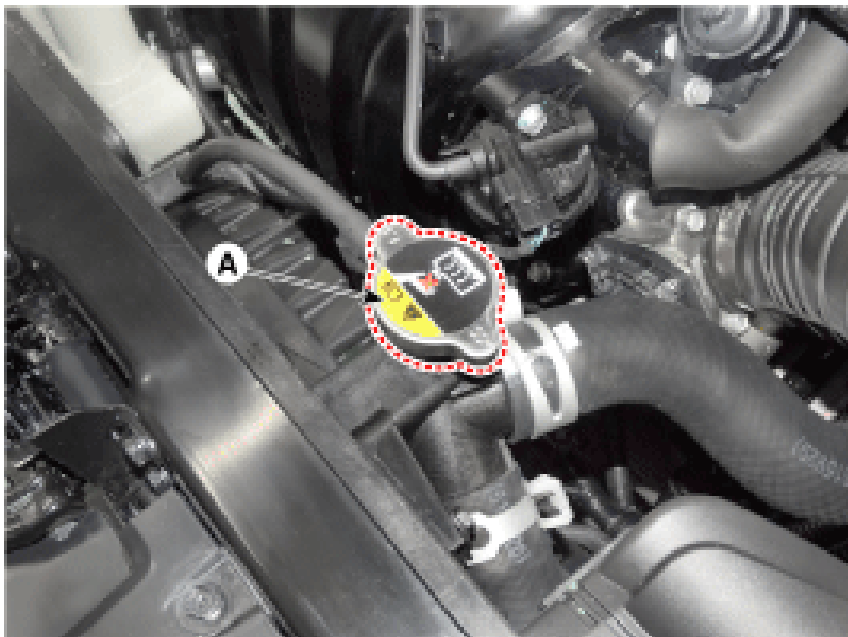
When pouring engine coolant, be sure to shut the relay box lid and not to let coolant spill on the electrical parts or the paint. If any coolant spills, rinse it off immediately.



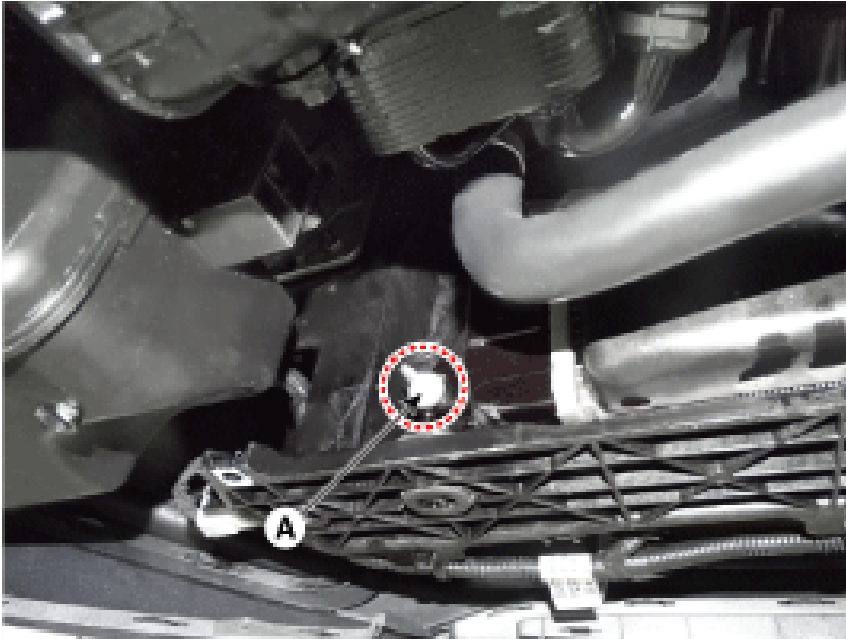
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- Make sure the engine and radiator are cool to the touch.

- Remove the radiator cap (A).



- Remove the engine room under cover . (Refer to Engine and Transaxle Assembly - "Engine Room Under Cover")
- Loosen the drain plug (A) and drain the coolant.



- Tighten the radiator drain plug securely.
- After draining engine coolant in the reservoir tank, clean the tank.
- Fill fluid mixture with coolant and water (55-60%) (except for North America, Europe and China: 45-50%) slowly through the radiator cap. Use only genuine antifreeze/coolant. For best corrosion protection, the coolant concentration must be maintained year-round at 55% (except for North America, Europe and China: 45%) minimum. Coolant concentrations less than 55% (except for North America, Europe and China: 45%) may not provide sufficient protection against corrosion or freezing. Coolant concentrations greater than 60% will impair cooling efficiency and are not recommended. Always use new coolant. Do not mix different brands of antifreeze/coolants. Do not use additional rust inhibitors or antirust products; they may not be compatible with the coolant.

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- Do not use additional rust inhibitors or antirust products; they may not be compatible with the coolant.
- Perform the engine coolant filling mode on GDS to bleed air out of the cooling system . As an electric thermostat (opening temperature 100°C) is applied in the engine, fill up the coolant and use the GDS to enter the coolant filling mode and let out the air. [Engine Coolant Filling Mode] Guide Text on GDS: In an engine equipped with an electric thermostat (ECT), the current is applied to the electric thermostat while filling the coolant to help let out the air sufficiently. 1. Turn the ignition switch OFF. 2. Connect the GDS to Data Link Connector (DLC). 3. Turn the ignition switch ON. 4. Select "Vehicle, Model Year, Engine, System". 5. Select "Vehicle S/W Management". ■ Conditions for Entering the Filling Mode 1. The shift lever is at the P position and the parkingbrake is applied. 2. The engine is idle. 3. The coolant temperature is 75°C or above. 4. The vehicle speed is 0 km/h. 5. The heater is turned off. 6. Perform the work indoors to help raise the coolant temperature. [Check the coolant temperature] ■ Conditions for Deactivating the Filling Mode 1. The coolant temperature is 90°C (194°F) or above. 2. The filling mode stop option is selected in the diagnostic device. 3. The conditions for entering the filling mode are not satisfied. 4. A filling mode abort condition

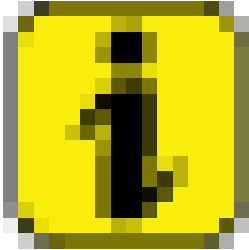
occurs such as an ECT heater failure or a WTS failure. Don't accelerate the engine.

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[Engine Coolant Filling Mode]

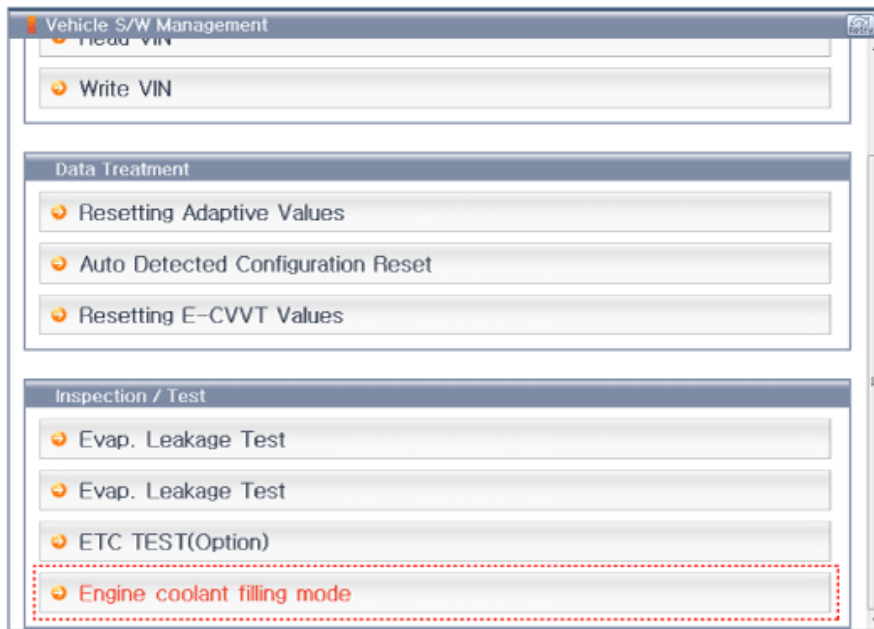
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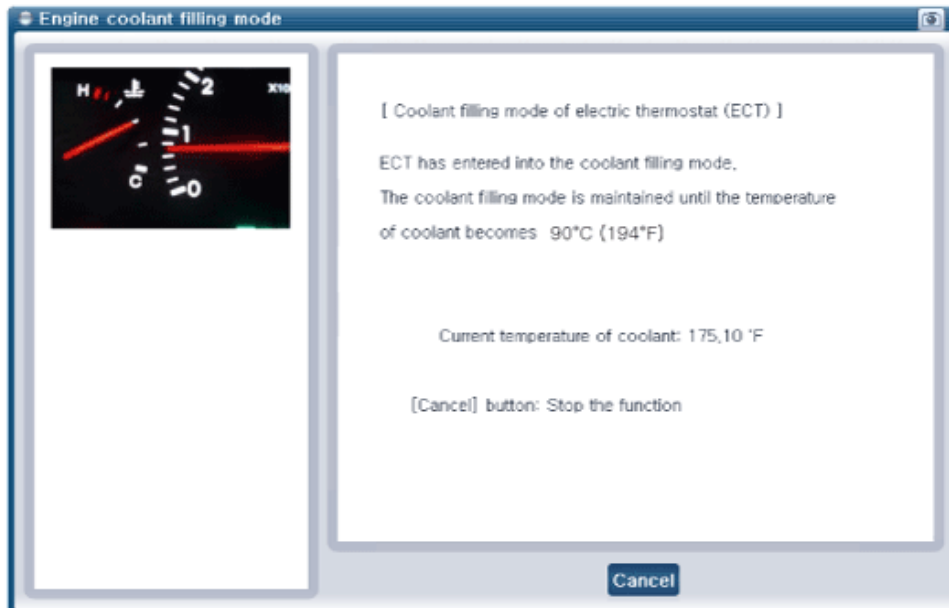
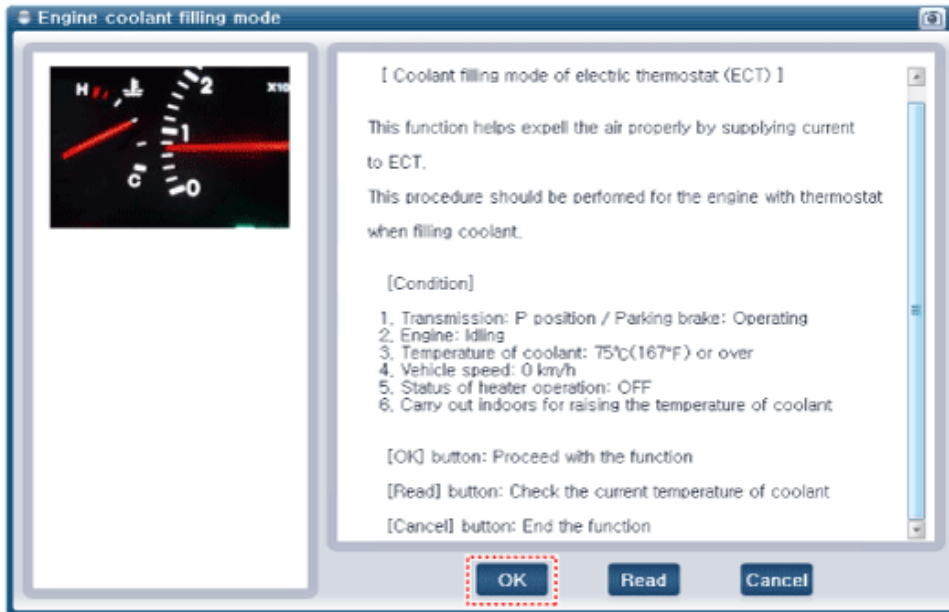


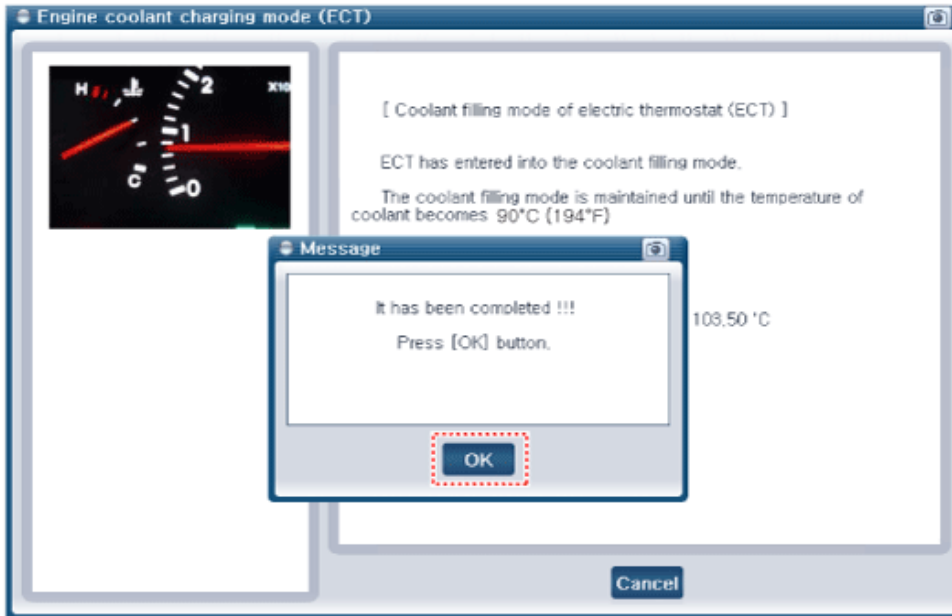
Information

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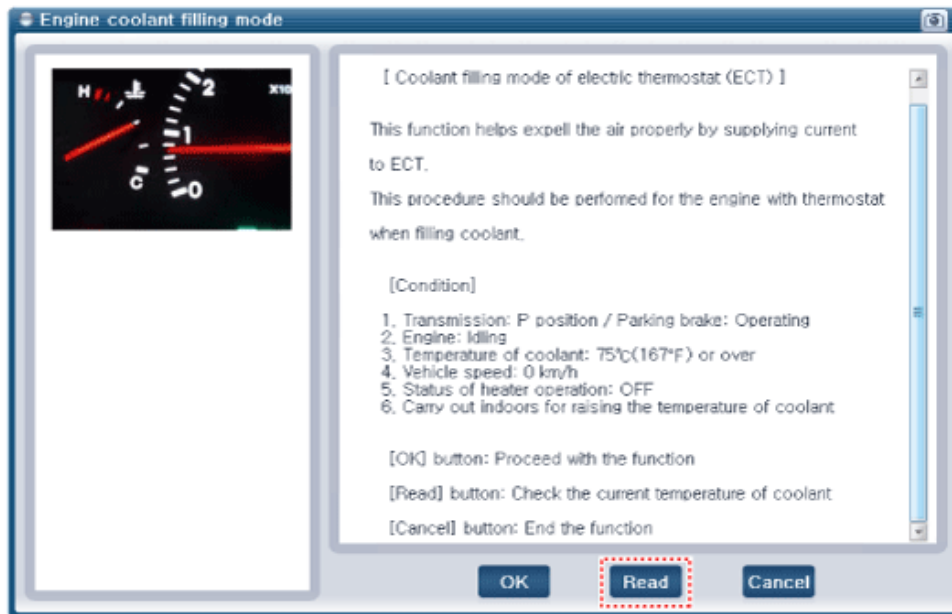
■ Conditions for Entering the Filling Mode

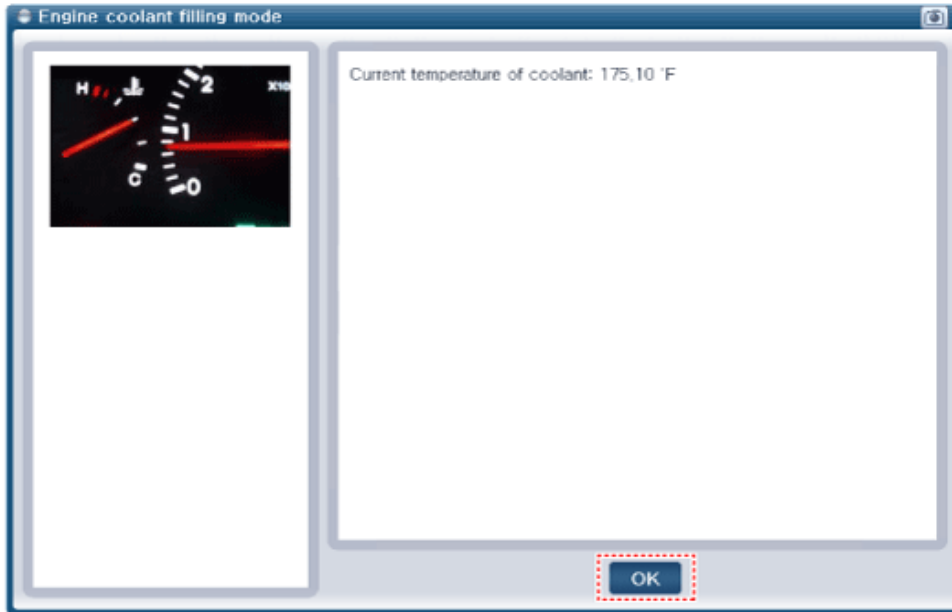






[Check the coolant temperature]





■ Conditions for Deactivating the Filling Mode

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- Install the radiator cap and fill the reservoir tank to the "MAX"+0.4L (or "FULL"+0.4L) line with coolant.
- Stop the engine and wait coolant gets cool.
- Repeat 8 to 10 until the coolant level doesn't fall any more, bleed air out of the cooling system. It takes time to bleed out all the air in the cooling system. Refill coolant when coolant gets cool completely, then recheck the coolant level in the reservoir tank for 2-3 days after replacing coolant. Coolant capacity :
Approx. 6.6 L (1.66 U.S.gal., 6.97 U.S.qt., 5.81 Imp.qt.)

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