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Model Year Start: 2013	Model: RAV4 EV	Prod Date Range: [12/2012 -]
Title: HEATING / AIR CONDITIONING: COOLANT: REPLACEMENT; 2013 MY RAV4 EV [12/2012 -]		

REPLACEMENT

1. REMOVE NO. 1 MOTOR UNDER COVER ASSEMBLY

INFO

2. DRAIN COOLANT

NOTICE:

Collect the drained coolant and measure its volume to establish a benchmark. When adding coolant, make sure to add more coolant than the measured amount.

- (a) Remove the reserve tank cap.

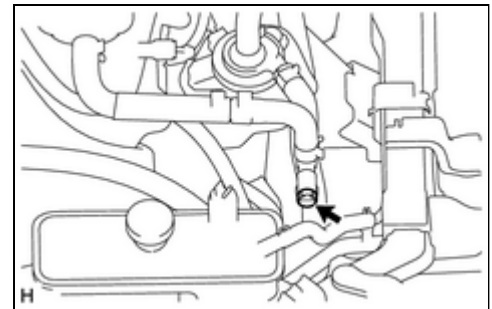
CAUTION:

To avoid the danger of being burned, do not remove the reserve tank cap while the coolant for the heater assembly is still hot.

- (b) Loosen the drain cock plug and drain the coolant.

HINT:

Collect the coolant in a container and dispose of it according to the local regulations.



- (c) Install the drain cock plug with a new O-ring.

3. ADD COOLANT

NOTICE:

Do not reuse the drained coolant because it may contain foreign matter.

- (a) Slowly pour coolant into the reserve tank until it reaches the full line.

Coolant quantity:

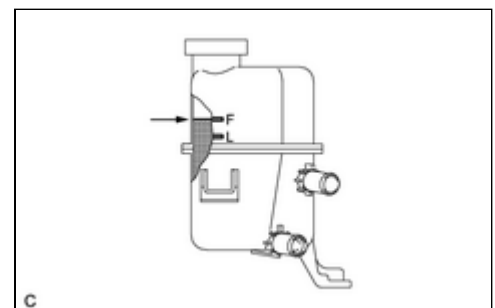
1.5 liters (1.6 US qts, 1.3 Imp. qts.)

NOTICE:

- To prevent foreign matter such as dust or dirt from entering the cooling system, make sure to confirm that the container used to add coolant is clean and free of foreign matter such as dust or dirt.
- Do not use Zerex G48.

HINT:

- Use coolant that is diluted by 50%.
- Only use TOYOTA Super Long Life Coolant (SLLC) or similar high quality ethylene glycol based non-silicate, nonamine, nonnitrite, and non-borate coolant.



- (b) When using the Techstream:

- (1) Connect the Techstream to the DLC3.

- (2) Turn the power switch on (IG).
- (3) Enter the following menus: Powertrain / Hybrid Control / Active Test / Activate the Water Pump.
- (4) Keep the coolant at the full line in the reserve tank to compensate for the drop in coolant level when the air bleeds.

Standard:

Air bleeding from the cooling system is completed when the noise made by the heater water pump assembly becomes smaller and the circulation of coolant in the reserve tank improves.

HINT:

- If free spinning of the heater water pump is detected for approximately 5 seconds, fail-safe control will be activated to suspend the operation of the pump for approximately 15 seconds and resume operation for approximately 4 seconds repeatedly. Operation of the heater water pump will return to normal if coolant is added.
- Loud noise made by the heater water pump assembly and poor circulation of coolant in the reserve tank indicate that there is air in the cooling system.

(c) When not using the Techstream:

- (1) Turn the power switch on (READY). [*1]
- (2) Turn the power switch off and add coolant to the full line because the coolant level drops as the air bleeds. [*2]
- (3) Repeat steps [*1] and [*2] until air bleeding from the cooling system is completed.

Standard:

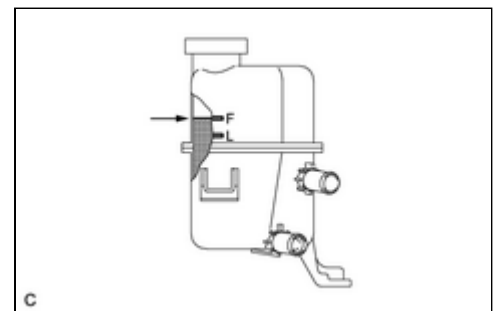
Air bleeding from the cooling system is completed when the noise made by the heater water pump assembly becomes smaller and the circulation of coolant in the reserve tank improves.

HINT:

Loud noise made by the heater water pump assembly and poor circulation of coolant in the reserve tank indicate that there is air in the cooling system.

- (d) After the air is completely bled from the cooling system, tighten the reserve tank cap.
- (e) Wait until the coolant cools down.

- (f) Add coolant to the full line of the reserve tank.



4. INSPECT FOR COOLANT LEAK INFO

5. INSTALL NO. 1 MOTOR UNDER COVER ASSEMBLY INFO

