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Model Year Start: 2013	Model: Prius C	Prod Date Range: [12/2012 -]
Title: HYBRID / BATTERY CONTROL: COOLANT (for Inverter): REPLACEMENT; 2013 MY Prius C [12/2012 -]		

REPLACEMENT

1. DRAIN COOLANT (for Inverter)

NOTICE:

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

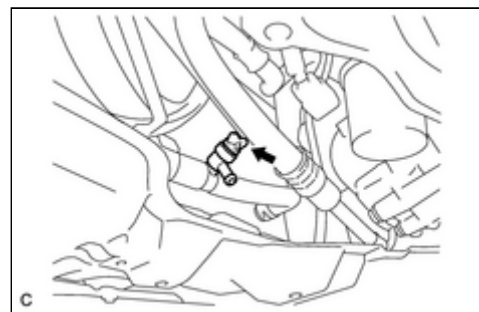
CAUTION:

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

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

CAUTION:

Use caution when handling coolant immediately after driving or in summer because it may be hot.



(c) Tighten the radiator drain cock plug.

2. ADD COOLANT (for Inverter)

NOTICE:

- Do not reuse the drained coolant because it may contain foreign matter.
- If the vehicle is driven with air in the inverter cooling system, damage may occur and the following DTCs may be stored.

DTC CODE	DETECTION ITEM
P0A01-726	Motor Electronics Coolant Temperature Sensor Circuit Range / Performance
P0A04-725	Motor Electronics Coolant Temperature Sensor Circuit Intermittent
P0A08-264	DC / DC Converter Status Circuit
P0A78-284	Drive Motor "A" Inverter Performance
P0A78-286	Drive Motor "A" Inverter Performance
P0A7A-322	Generator Inverter Performance
P0A7A-324	Generator Inverter Performance
P0A93-346	Inverter Cooling System Performance
P0A94-553	DC / DC Converter Performance
P0A94-557	DC / DC Converter Performance
P0AEE-277	Motor Inverter Temperature Sensor "A" Circuit Range / Performance
P0AF1-276	Drive Motor Inverter Temperature Sensor "A" Circuit Intermittent / Erratic

DTC CODE	DETECTION ITEM
P0BCD-315	Generator Inverter Temperature Sensor Circuit Range / Performance
P0BD0-314	Generator Inverter Temperature Sensor Circuit Intermittent / Erratic
P0C39-626	DC / DC Converter Temperature Sensor "A" Range / Performance
P0C3C-625	DC / DC Converter Temperature Sensor "A" Intermittent / Erratic
P0C3E-628	DC / DC Converter Temperature Sensor "B" Range / Performance
P0C41-627	DC / DC Converter Temperature Sensor "B" Intermittent / Erratic
P0C73-776	Motor Electronics Coolant Pump "A" Control Performance

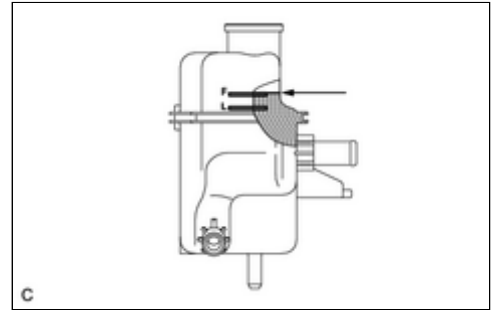
- (a) Slowly pour coolant into the reserve tank until it reaches the full line.

Coolant quantity:

1.6 liters (1.7 US qts, 1.4 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.



- (b) When using the Techstream:

- (1) Connect the Techstream to the DLC3.
- (2) Turn the ignition 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 inverter cooling system is completed when the noise made by the inverter water pump assembly becomes smaller and the circulation of coolant in the reserve tank improves.

HINT:

- If free spinning of the inverter 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 inverter water pump will return to normal if coolant is added.
- A loud noise made by the inverter water pump assembly and poor circulation of coolant in the reserve tank indicates that there is air in the cooling system.

- (c) When not using the Techstream:

- (1) Turn the ignition switch to ON (READY). [*1]
- (2) Turn the ignition switch off and add coolant to the full line because the coolant level drops as the air bleeds. [*2]

NOTICE:

- Be sure to turn the ignition switch off before adding SLLC.
- Do not work on the components in the engine compartment while the vehicle is in the READY-on state because the engine is in intermittent operation.

- (3) Repeat steps [*1] and [*2] until air bleeding from the cooling system is completed.

Standard:

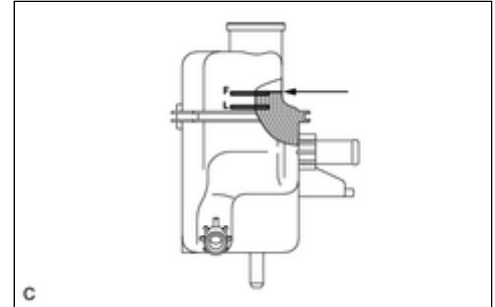
Air bleeding from the inverter cooling system is completed when the noise made by the inverter water pump assembly becomes smaller and the circulation of coolant in the reserve tank improves.

HINT:

A loud noise made by the inverter water pump assembly and poor circulation of coolant in the reserve tank indicates 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) Add coolant to the full line of the reserve tank.

**3. INSPECT FOR COOLANT LEAK (for Inverter)**

INFO

