INSTRUCTION TO SERVICE

ITS: 61756	DATE 06/08/2026
SECTION:	231 – Cooling System
SUBJECT:	Hybrid System Cooling Pump Replacement
ISSUE:	Pump shuts off for a brief 9-10 seconds due to an internal firmware issue.
SUMMARY:	Instructions to remove OEM pump and replace with a pump with updated firmware

ITS61756

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.

PROCEDURE:

1. Ensure to apply parking brake.
2. Turn the main battery disconnect switch to the “OFF” position.
3. Gain access to the electronic cooling package on the roof of the bus.As required, open the rooftop ECP cover.

WARNING: Working on the roof of the bus requires appropriate scaffolding and/or fall protection harnesses. When the roof side panels are open, take care to step over the panels from the scaffold to the roof of the bus. Do not step on the open side panel, they will not support your weight and a fall could result.

4. Place a suitable container beneath coolant pump hoses to be disconnected.
5. Disconnect coolant supply and return hoses from the coolant pump.
6. Clamp off the coolant hoses.

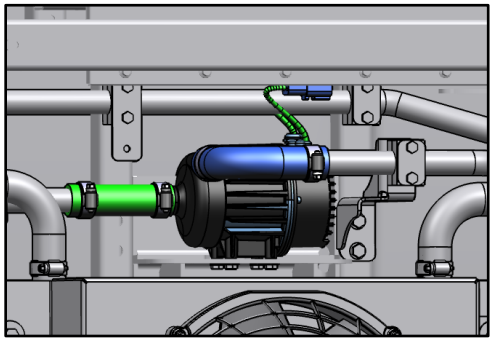

Figure 1: Remove Coolant Pump

7. Disconnect the low voltage connectors from the pump.
8. Remove the hardware mounting the coolant pump.

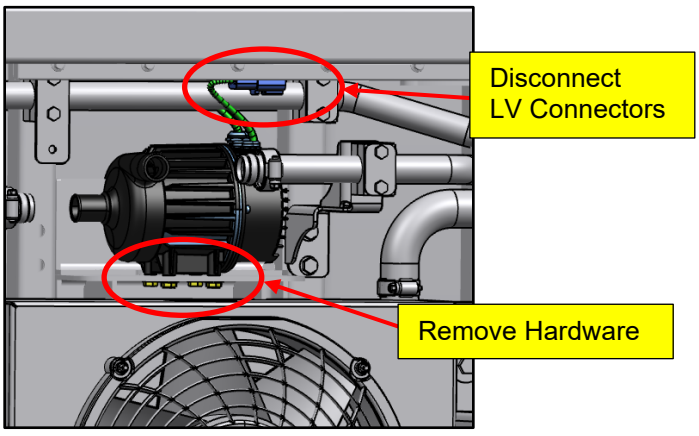

Figure 2: Remove Coolant Pump

9. Replace the existing pump with the new coolant pump.
10. Set the removed coolant pumps aside and send them back to supplier. Reach out to RPSM for shipping instructions and details.
11. Reuse hardware, apply loctite-243 and torque to 9-10 ft-lbs.
12. Connect low voltage connectors of the pump to HRNS-INV ROOF RACK connectors, VEPI/DTI CLNT PUMP-XCCCAN and VEPI/DTI CLNT PUMP-TWR.

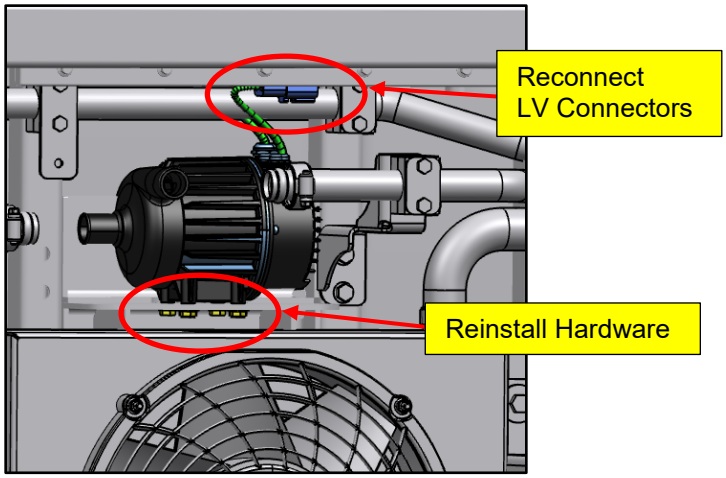

Figure 3: Install New Coolant Pump

13. Reconnect coolant supply and return coolant hoses to the new pump.
14. Torque ideal waveseal clamps (NF PN: 553153) to 80 in-lbs, dry. Tighten at 75 rpm or less, re-torque to 80 in-lbs at 75 rpm or less after 30 minutes.

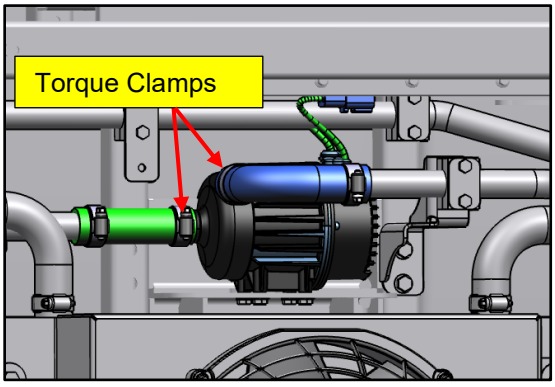

Figure 4: Reconnect Coolant Hoses

15. Top up the cooling system with proper coolant until full. Opening of the drain valve may be required to get coolant flowing. Close drain valve immediately after coolant starts flowing.

16. Using the pump switch, located near the inverter cooler, start the cooling system water pump running at its lowest allowable speed while continuing to fill the coolant tank. During this process, the coolant level will drop. Continue to add coolant trying to maintain the coolant level at cold max until constant fluid level is achieved in the expansion tank. Caution should be taken to ensure that you do not over fill the tank beyond hot max.
17. Allow the system to sit for 10 minutes to allow any entrapped air to collect.
18. Repeat steps 15 and 16 until a constant fluid level is achieved in the expansion tank.
19. Remove all tools and debris from work area to return coach to service.
20. Please ensure the latest PLC and IP programs are loaded into the vehicle.
21. Remove the lock out tag and turn the Hight Voltage Interlock Switch to the “ON” position.
22. Turn the main battery disconnect switch to the “ON” position.

LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Remove and replace hybrid system coolant pump	1	2	2

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	553153	CLAMP-IDEAL WAVESEAL 1.13 - 1.56	2	EA	As Required

SPECIAL TOOLS REQUIRED					
Item	Part Number	Description	Qty.	Units	Notes