




TECHNICAL SERVICE INFORMATION BULLETIN

TSIB 25-04 Rev A		May 14, 2025
TO:	All Operators	
TITLE:	ESS BTMS Fill Pressure Reminder	
APPLICABILITY:	All New Flyer Xcelsior Electric Buses	

This Technical Service Information Bulletin has been issued to remind customers that fill pressure must not exceed 25 psi to avoid injury or damage components during filling and deaeration of the ESS Battery Thermal Management System. Please note the pressure limit on the decal located by the fill port as shown below.



The fill pressure limit of 25 psi warning is also stated on the Service Manual.


Draining

4.4.6. Standby Mode

1. All components except master controller are off.
2. System may still be energized with high voltage.


4.5. Draining

1. Obtain a Coolant Transfer Tool.
2. Place the battery disconnect switch to the OFF position.
3. Place the High Voltage Interlock switch to the OFF position.
4. Connect the coolant quick connector from the coolant transfer tool.
5. Place a suitably sized container under the BTMS coolant overflow valve to catch coolant before turning the overflow valve to the OPEN position.
6. On the coolant transfer tool, turn the valve to the EMPTY position.
7. Open the Vent Valve at the BTMS module.
8. When the transfer tool starts pulling air through the system open the vent/drain valves at the front of the vehicle.
9. Drain the coolant until flow indicator on transfer tool stops spinning. Approximately 20 minutes.

NOTE:
There will be approximately 2L of coolant remaining in the coolant lines.

10. Disconnect coolant transfer tool.

4.6. Filling & Deaeration

 **WARNING**

Fill Pressure must not exceed 25 psi to avoid injury or damage to components.

NOTE:
The following procedure is designed to fill the ESS Battery Thermal Management System following major service of the system.

1. Perform a cooling system pressure test prior to filling the system. Refer to 4.7. "Cooling System Pressure Test" on page 30 in this section for procedure.
2. Locate the ESS Coolant level indicator and the ESS BTMS Fill Mode Switch on the low voltage fusebox. See "Fig. 6-18: ESS Coolant Level Indicator and Fill Mode Switch" on page 30.
3. Connect a battery charger to the 12/24V batteries for the duration of the fill procedure to prevent the batteries from the draining excessively.
4. Check High Voltage Interlock switch is OFF. If ON, set the Master run Switch to OFF, then High Voltage Interlock switch to OFF.
5. Ensure all drain cocks are closed and all drain plugs are installed.
6. Switch the 12/24V battery disconnect switch to ON.
7. On the Driver's Side Console, set the Master Run switch to Day Run.
8. Open the Fusebox Access Door.
9. Open the ¼ turn vent valve attached to the clear vent line, located in the propulsion compartment beside the pressure fill port.
10. Place a clean bucket under the ¼ turn vent valve near the pressure fill location.
11. Connect pressure fill hose to the coupler located at the bottom CS rear corner.
12. Fill the system until the coolant level is at the Full mark on display or a steady stream of coolant comes out the clear vent line into the bucket.
13. Turn ON the Battery Coolant Fill Mode on the Low Voltage Fusebox.
14. Maintain the coolant level at the Full mark.
15. The fill mode will run for 20 minutes after the last critical low coolant indication to deaerate the system. The fill mode will turn itself off once the time has been reached.
16. Verify the coolant level display is displaying Full level.
17. Close the 1/4 turn vent valve located near the pressure fill port.

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