

IMPORTANT SAFETY RECALL

02-May-2023

VIA US First Class Mail and email

ATTN:	

Subject: Motor Vehicle Safety Recall 23V-083 Energy Storage System (ESS) Liquid Accumulation

To whom it may concern:

This notice is sent to you in accordance with the requirements of the *National Traffic and Motor Vehicle Safety Act.* New Flyer of America Inc. (New Flyer) has decided that a defect which relates to motor vehicle safety exists in certain 2021-2022 XE35, 2021-2023 XE40, and 2021-2022 XE60 battery electric vehicles. These vehicles are outfitted with an Energy Storage System (ESS) that is a fiberglass enclosure. Note that previous ESS versions were a different design and metallic enclosures are not included in this recall.

If a leak occurs inside of an ESS and is undetected, liquid can accumulate, leading to an electrical short, increasing the risk of a fire.

Please note this is the "**second notification letter**" referenced in the interim notice, which was sent to you via email on or about 24-February-2023 and shortly thereafter via US First Class mail. No further notices are anticipated.

New Flyer has determined that the following vehicles, operated by the **second second second second** are affected by this recall action:

Make: New Flyer Heavy Duty Urban Transit Bus Model: 2022 XE40 VINs: 5FYB8FJ1XN

Proper Personal Protective Equipment (PPE) must be used, and all safety protocol must be followed when working with and near/around high voltage (HV) components. Please refer to your Service Manual for details.

What New Flyer will do, free of charge:

- Automatic drain valves will be installed (the Retrofit), after scheduling with customers. In the event liquid
 accumulates, these drain valves will allow the accumulation to freely exit the ESS without the need of
 electrical power. This will require New Flyer to:
 - o Provide 4 drainage holes in each ESS assembly and install a metallic port into the holes
 - Install an automatic drain valve system in each of the 4 ports (*per Figure 1*)
 - Please note this Retrofit may be performed in 2 phases your RPSM and/or CPM can provide details per customer
 - Phase 1: Installing the ports with a simple plug, material is available to complete this phase now, and
 - Phase 2: Removing the previously installed plug and installing the drain valve. Drain valves are expected to be available in June 2023
 - Once the drain valve is installed (Phase 2), the Retrofit is considered complete



What customers should do:

- Before the Retrofit is complete, continue performing the Interim Actions noted below in left column in Table I from the original Interim Notice
- After the Retrofit is complete, perform the Final Actions noted below in the right column in Table I
- If you have performed the Retrofit, you can submit a claim(s) through the normal warranty process

Table I		
Interim Actions, BEFORE the Retrofit is complete	Final Actions, AFTER the Retrofit is complete	
In the interim , in an abundance of caution, if buses will be inoperable for more than 3 days, New Flyer recommends either draining the coolant from the Battery Thermal Management System (BTMS) or inspecting for normal coolant levels through the remote fill LEDs every 3 days the bus is parked, or visually inspecting for liquid through the desiccant cap every 3 days. Desiccant caps should not be left off if ESS's are dry	No special actions if a bus is out-of-service; continue typical maintenance practices/procedures.	
Customers must ensure their drivers and technicians are aware of the risk associated with coolant leaks inside the ESS. If an operator reports a yellow "LOW COOLANT" or a red "CRITICALLY LOW COOLANT" warning on the dash, all ESS's must be inspected immediately to be sure a leak is not accumulating in the ESS. See NOTE below if liquid is noticed in an ESS. Contact your New Flyer Regional Product Support Manager (RPSM) to discuss next steps. If no liquid is seen, continue with normal procedures to address the cause of the dash warning per your Service Manual. After correction, the bus can then be operated as normal	If an operator reports a yellow "ESS LOW COOLANT" or a red "ESS CRIT LOW COOLANT" light on the dash, or if these lights illuminate at the maintenance panel (rear curbside access panel), customers should take appropriate actions to find the root-cause of the warning/indicator, such as look for evidence of an external leak, an automatic drain valve that has opened, etc., prior to adding coolant. Customers can contact their RPSM, CPM or refer to maintenance manuals for any questions related to these actions.	
Customers must ensure their technicians and anyone who fills / tops-up coolant understands that low levels of coolant in the BTMS must be leak tested, root caused, and repaired <u>prior</u> to any top-ups of coolant. BTMS coolant top-ups cannot be performed without positive repairs or accumulation in the ESS may occur	Customers must ensure their technicians and anyone who fills / tops-up coolant understands that low levels of coolant in the BTMS must be leak tested, root caused, and repaired, in accordance with maintenance manuals, <u>prior</u> to any top-ups of coolant. BTMS coolant top-ups cannot be performed without positive repairs or accumulation in the ESS may occur	
We recommend that customers refresh their personnel on the appropriate operating and maintenance procedures for battery-electric vehicles.	We recommend that customers routinely refresh the training of their personnel on the appropriate operating and maintenance procedures for battery-electric vehicles.	





If you are a lessor of vehicles which are affected, it is required that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days. If you no longer own this vehicle, or it has been removed from operation permanently, please inform the undersigned.

If you had this corrective action performed before you received this letter you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall. Additionally, if you plan to perform the Retrofit on your own, New Flyer will provide specific instructions, and this will be reimbursed through New Flyer's normal warranty process.

If you have any questions about this recall, please feel free to contact your RPSM, CPM or the undersigned. If New Flyer is unable to correct this defect within a reasonable time, you may submit a written complaint to the:

Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave. SE, Washington, DC, 20590, Or call 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov

We regret any inconvenience which this action may have caused. However, we are concerned about the safety of your passengers and employees.

Thank you for your attention to this important matter.

Sincerely, NEW FLYER OF AMERICA INC.

By: Jim Johnson Vehicle Safety & Regulatory Compliance Manager