



R22BW

FINAL NOTICE

DATE: January 6, 2023
TO: Blue Bird Owners
Subject: R22BW: FMVSS 102 Noncompliance – BBCV Starter Interlock with Allison Transmission

According to our records, we have not received confirmation that the above referenced recall, dated June 30, 2022, has been completed. A copy of Recall R22BW is attached. Your buses affected by Recall R22BW are identified by Blue Bird body number and VIN under Section 2 on the enclosed cover sheet.

If this is the first time you received notification of Recall R22BW, please read the enclosed notification carefully. Recall R22BW must be completed, as soon as possible.

Corrective Action:

To correct this noncompliance, Blue Bird will provide repair instructions. An updated vehicle software version has been created which will require the T-handle gear shifter physically be in the Neutral Position before the starter can be energized. All affected vehicles will need to have the A Zone multiplex reflashed with the updated S19 file.

Blue Bird will reimburse the labor cost of the repair related to this recall at no cost to the vehicle owner. Please contact your local Blue Bird dealer to arrange to have the Recall performed. To locate an authorized dealer, search online at www.blue-bird.com/find-a-dealer. The safety risk is if the clutch were to allow the automatic transmission to engage, the vehicle could move forward or backward unexpectedly while attempting to start the unit, thus increasing the risk of injury to those in close proximity to the exterior front or rear of the bus. The warning that may precede is if the unit has the incorrect software version, and is started while in gear, there will be a "range inhibit" message displayed on the instrument cluster. Buses with this non-compliance must be corrected immediately. A software update is currently available. The expected out of service time necessary to accomplish the software update is **.5 hours (30 minutes)**. Blue Bird Dealers will perform a software update to rectify the issue at no cost to the owner. **Parts are not required.**

Labor Reimbursement:

Blue Bird will reimburse the labor cost of potential repairs relating to this recall at no cost to you the vehicle owner. **The Standard Repair Time (SRT) to accomplish this repair is outlined below:**

- **R22BW: Repair**
 - 0.5 hours (30 minutes)

Thank you for your prompt attention to this matter.

BLUE BIRD BODY COMPANY
3920 Arkwright Road, Suite 200, Macon, GA 31210 – (478) 825-2021



R22BW

IMPORTANT SAFETY RECALL
NHTSA Campaign Number: 22V-321 (School Bus)
NHTSA Campaign Number: 22V-330 (Non-School Bus)

DATE: June 30, 2022

SUBJECT: R22BW: FMVSS 102 Noncompliance – BBCV Starter Interlock with Allison Transmission

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Blue Bird Body Company has decided that certain 2023 Vision School and Non-School Buses fail to conform to Federal Motor Vehicle Safety Standard Number 102, "Transmission Shift Lever Sequence/Starter Interlock/Transmission Braking Effect."

This notice applies to your bus(es) identified by both Blue Bird Body Number and Vehicle Identification Number (VIN) on the enclosed yellow cover sheet. If you no longer own the subject bus(es), please complete the appropriate section of the yellow cover sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

Blue Bird Body Company is voluntarily recalling the following:

- Certain model year 2023 Blue Bird Vision School Buses
 - manufactured from April 12, 2022 through May 3, 2022
- Certain model year 2023 Blue Bird Vision Non-School Buses
 - manufactured on May 7, 2022

The Allison transmission may have incorrect starter interlock settings in the vehicle software. Affected buses will allow the engine to crank while the T-handle gear shifter is in Reverse or Drive. When the vehicle is cranked while the T-handle shifter is in a drive gear, a 'Range Inhibit' error is displayed in the vehicle cluster. While the 'Range Inhibit' error is active, the transmission will not engage the clutch, which will prevent the vehicle from lurching forward or rearward. This issue was created when the vehicle software was changed on March 23, 2022, to accommodate vehicles with a park pawl feature.

Corrective Action:

To correct this noncompliance, Blue Bird will provide repair instructions. An updated vehicle software version has been created which will require the T-handle gear shifter physically be in the Neutral Position before the starter can be energized. All affected vehicles will need to have the A Zone multiplex reflashed with the updated S19 file.

Blue Bird will reimburse the labor cost of the repair related to this recall at no cost to the vehicle owner. Please contact your local Blue Bird dealer to arrange to have the Recall performed. To locate an authorized dealer, search online at www.blue-bird.com/find-a-dealer. The safety risk is if the clutch were to allow the automatic transmission to engage, the vehicle could move forward or backward unexpectedly while attempting to start the unit, thus increasing the risk of injury to those in close proximity to the exterior front or rear of the bus. The warning that may precede is if the unit has the incorrect software version, and is started while in gear, there will be a "range inhibit"



BLUE BIRD

Blue Bird Body Company

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Corrective Action: *(continued)*

message displayed on the instrument cluster. Buses with this non-compliance must be corrected immediately. A software update is currently available. The expected out of service time necessary to accomplish the software update is **.5 hours (30 minutes)**. Blue Bird Dealers will perform a software update to rectify the issue at no cost to the owner. **Parts are not required.**

Labor Reimbursement:

Blue Bird will reimburse the labor cost of potential repairs relating to this recall at no cost to you the vehicle owner.

The Standard Repair Time (SRT) to accomplish this repair is outlined below:

- **R22BW: Repair**
 - 0.5 hours (30 minutes)

Administering the Recall:

Parts are not required to complete Recall R22BW.

Blue Bird recommends that you contact your local or nearest Blue Bird Dealer to arrange for this recall to be performed. The Dealer can perform the repairs, or arrange for repairs to be performed by a service repair facility authorized by the Dealer. However, you may elect to perform this recall yourself or pay another independent repair facility to perform this recall. A qualified technician should perform this recall. If you elect to perform this recall yourself or pay another independent repair facility to perform this recall, complete and submit the Pink Owner's Recall Reply Sheet provided. The Recall Reply Sheet includes a section for the owner to request reimbursement of the owner's labor or to request reimbursement for a labor invoice paid by the owner to an independent repair facility.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If the modifications directed by this notification were performed on your bus prior to the receipt of this recall notification, attach a copy of the work order/invoice. Mail the documents in the pink self-addressed postage prepaid envelope included with the pink reply sheet to Blue Bird for warranty consideration. Reimbursements will be made in accordance with the requirements of the National Highway Transportation Safety Act, Title 49 Code of Federal Regulations, Parts 573 and 577.

Please contact your local Blue Bird Dealer with any questions regarding this recall campaign.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590**

Or, you may call The National Highway Traffic Safety Administration toll free at:
1-888-327-4236 TTY 1-800-424-9153 or go to: <http://www.safercar.gov>

BLUE BIRD BODY COMPANY
3920 Arkwright Road, Suite 200, Macon, GA 31210 – (478) 825-2021



RECALL

R22BW: FMVSS 102 Noncompliance, BBCV Starter Interlock with Allison Transmission

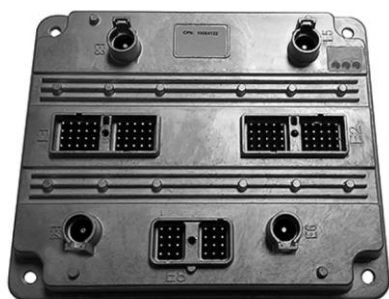
Models Affected: Certain 2023 Model Year Blue Bird Vision Buses Built With New Electrical Architecture (NEA), Cummins Engine, Allison Transmission, Without Shifter Park Position

Issue: On identified buses the engine will start without the transmission shifter in the neutral position.

Corrective Action: The Blue Bird A Zone Multiplex Module must be re-flashed with software, available on the Blue Bird Vantage Unit Dashboard Website.

Multiplex Module (Blue Bird Part # 10059122) Shown Below, As Reference Only

Item# 10059122



Items Needed:

Item Number	Quantity	Description
1	1	AmeFlash Tool Software (Available on Blue Bird Vantage, Ametek Software Website)
2	1	A Zone Multiplex Module Software (Available on Blue Bird Vantage, Unit Dashboard Website)
3	1	Laptop Computer (Windows Operating System)
4	1	RP1210 Communication Adapter Supported by the AmeFlash Tool Software (Dearborn DPA-5 USB Recommended)
5	1	Blue Bird Bench Program Harness #10074768. Optional: Only Required if Programming Multiplex Module on Workbench
6	1	12V Regulated Power Supply. Optional: Only Required if Programming Multiplex Module on Workbench

AmeFlash Tool Software and the A Zone Multiplex Module Software are both available on the Blue Bird Vantage Website (login required)

See Page 2 and 3 for Vantage Website illustrations depicting software locations

Click here to go to Vantage now: [Blue Bird Vantage | Portal](#)

WARNING: Always follow all Federal, State, Local, and Shop safety standards and use proper safety equipment. Thoroughly read and understand all instructions before performing these procedures. Park bus on level surface, apply parking brake, turn off ignition key, and **chock wheels**.



Instructions for Updating A Zone Multiplex Module Software On the Bus

Download and install the AmeFlash Tool Software on your laptop

On Vantage navigate to the [Ametek-Software](#) page, Click the “AmeFlash Tool Software” link shown below to download and install onto your laptop:
For instructions on how to install and use the AmeFlash Tool Software, Click the “Ametek Software Update Instructions” link shown below:

The screenshot shows the Blue Bird Vantage website interface. At the top, there is a navigation breadcrumb: [Blue Bird Vantage](#) » [Parts & Service](#) » [Technical Reference](#) » [Software](#). Below this is a search bar with the text "Search Vantage here..." and a magnifying glass icon. To the right of the search bar are icons for printing, zooming out, and zooming in. Below the search bar is a "Bus Lookup:" section with a yellow input field containing the text "Enter Body Number/VIN/etc..." and a magnifying glass icon. On the left side, there is a vertical menu with four items: "Ametek Software", "Actia Software", "I/O Controls Software", and "Stoneridge Software". The main content area is titled "Ametek Software/Document Reference". Below the title, there is a paragraph: "If using Internet Explorer right click software link and select 'Save target as', if using any other browser just left clicking the link will download the software." Below this is a link titled "AmeFlash" Tool Software "Loads Software Files In All Ametek Devices". Below the link, there is a paragraph: "Left click the link below to download the AmeFlash Tool software zip file." Below this paragraph is a red arrow pointing right to the text "AmeFlash Tool Software". Below that is another paragraph: "For instructions on how to update the AmeFlash Tool software, click here Ametek Software Update Instructions" with a red arrow pointing left to the text "Ametek Software Update Instructions".



Download and save VEPS “SIMULINK Software file on your laptop to install in the A Zone Multiplex Module

On Vantage navigate to the [Vantage-Unit Dashboard](#) and enter the body number of the bus being repaired.

From Unit Dashboard of the bus being repaired, Click “Service” tab, “VEPS” tab, A-Zone “.ver” tab, and then “Download” tab.

Download and save the VEPS “SIMULINK” software file to install in the A Zone Multiplex Module. (Example shown below):

The screenshot shows the Vantage Unit Dashboard interface. At the top, there are navigation tabs: Unit Details, Production Order, Service (highlighted with a red box), Reference, Service Campaign/Notices, and Warranty. Below these are secondary tabs: Service Parts List, SW Panel Data, Reference Diagrams, Wiring Schematics, ABS Results, IO Controls, Support Ticket, Troubleshooting Guides, and VEPS (highlighted with a red box). The main content area is titled "PROGRAM MUX C-ZONE PROGRAM FILES" and lists two files: F526181.par and F526181.ver. Below this is "PROGRAM MUX D-ZONE PROGRAM FILES" with two files: F526181.par and F526181.ver. The "PROGRAM MUX A-ZONE PROGRAM FILES" section is highlighted with a red box and contains two files: F526181.par and F526181.ver (the latter is also highlighted with a red box). Below the A-zone files is a table with two rows and two columns. The first row contains the text "ORIGINAL FILE PULLED" F526181.s19 and a "Download" button (highlighted with a red box). The second row contains the text "DATE/TIME OF PROGRAMMING" 20211104_075703. Below the table are four more files: F526181.pdf, F526181.csv, and F526181.s19.

Connecting RP1210 Communication Device Cables and Communicating With Ametek Devices Using AmeFlash Tool Software on your laptop

Connect Dearborn DPA-5 or supported RP1210 communication adapter to the laptop using the USB connection and then connect to the J1939 diagnostic port of the bus. Based on engine model the J1939 diagnostic port will be located underneath the steering column (lower left or right) or underneath right-hand switch panel (far right side). With AmeFlash Tool software open, RP1210 communication device cables, or bench programming harnesses connected, turn the bus ignition key ON, (Or 12 Volt Power Supply) and then Click “Find Devices” button (lower left). You will see a “Search Progress” screen appear and then disappear, when finished. At the next screen you may note several Ametek devices listed, (devices listed are based on what devices are connected to the J1939 data link). To load a software file into any Ametek device you must first select that device by clicking the line with the proper source address “SA” and then you will notice more selections appear. For this recall repair you will select the source address “PMM SA: 0x21” (A-Zone Multiplex Module - located on Chassis; inside above transmission cover).



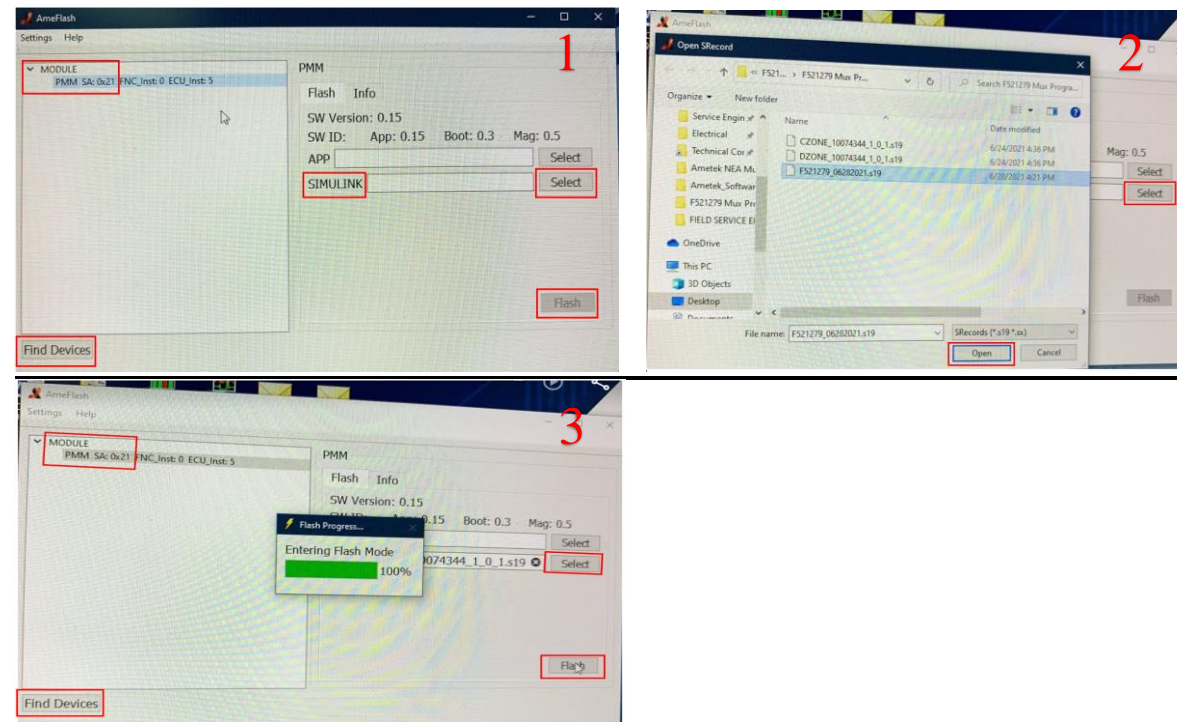
For “PMM” (Multiplex Module) “SIMULINK” or “VEPS” Software Loading:

- To load the VEPS “SIMULINK” software into the A Zone “PMM”, go to the “SA: 0x21” and highlight that specific line item.
- To the right, make sure the “APP” section does NOT have a file mapped, if it does close it by Clicking the “X” in the mapping window.
- To the right, you will notice a “SIMULINK” section with the word “SELECT” to the far right of that line.
- Click the “SELECT” button and it will let you select a location of the file you downloaded on the Vantage Unit Dashboard (A Zone Module “SIMULINK” files are Body Number Specific).
- Once you have the “SIMULINK” file mapped, turn the ignition switch to the “on” position (engine not running) and Click the “FLASH” button to load the “SIMULINK” software. Wait until 100% complete.
- Turn the ignition switch to the “off” position for approximately 10 seconds and close the Ametek AmeFlash Tool loader software.

Note:

When loading PMM “SIMULINK” files on the bus, it is recommended to first unplug the “E8” connector on all other PMM modules, except the PMM module being loaded. This is not requirement but can avoid software loading errors.

Example AmeFlash Tool A-Zone Multiplex Software “SIMULINK” Load Screen Shots:



Complete Functional Check to Verify Starter Engages “ONLY” When Transmission Shifter is in the Neutral Position:

Confirm Starter engages “ONLY” when the transmission shifter is in the “Neutral” position.

Contact your Blue Bird Field Service Representative, if you require assistance.

Instructions for Updating Multiplex Module Software On A Workbench

To update the A Zone Multiplex Module software version on a workbench, connect bench program harness #10074768 to Multiplex Module.

Connect black J1939 diagnostic port connector on bench program harness to a Dearborn DPA-5 or supported RP1210 communication adapter.

Then connect Dearborn DPA-5 or supported RP1210 communication adapter to the laptop using the USB connection.

Last connect bench program harness #10074768 to a 12V power supply. Turn 12V power supply on.

Note: All other instruction steps are the same, as listed above for updating the A Zone Multiplex Module software on the bus.

Example Workbench connections shown below:

(New “NEA” Ametek “PMM” Multiplex Modules)

