



R24CX

FINAL NOTICE

DATE: January 23, 2025
TO: Blue Bird Owners
Subject: R24CX: Ametek MUX Firmware

According to our records, we have not received confirmation the above referenced recall, dated March 26, 2024, has been completed. A copy of Recall R24CX is attached. Your buses affected by Recall R24CX 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 R24CX, please read the enclosed notification carefully. Recall R24CX must be completed, as soon as possible.

Corrective Action:

Blue Bird will notify the affected dealers and owners and will provide repair instructions. All affected units need to have the multiplex software updated to the latest version to eliminate the risk of the failure mode. Updated software files have been uploaded to Vantage for all affected vehicles. Blue Bird will reimburse the labor cost of the repair related to this recall at no cost to the vehicle owner. Recall R24CX should be repaired, per R24CX Recall Repair Instructions.

Labor Reimbursement:

A software update is currently available. The expected out of service time necessary to accomplish the software update is 60 minutes (1 hour). Blue Bird will reimburse the labor cost of the repairs related to this recall at no cost to the vehicle owner. The standard repair time (SRT) to accomplish the repair in accordance with the R24CX remedy procedure is outlined below.

- **R24CX Repair**
1.0 hour (60 minutes)

Thank you for your prompt attention to this matter.



R24CX

IMPORTANT SAFETY RECALL

NHTSA Number: 24V-068 (School Bus)

DATE: March 26, 2024

SUBJECT: R24CX: Ametek MUX Firmware

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 a defect, which relates to motor vehicle safety, exists in certain

- Model year 2021-2024 Blue Bird Vision School Buses
 - Manufactured from October 28, 2021 through November 15, 2022
- vehicles. These vehicles may fail to have the multiplex software updated to the latest version.

This notice applies to your bus(es) identified by both Blue Bird Body Number and Vehicle Identification Number (VIN) on the attached 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.

On the subject buses, Blue Bird has determined certain Blue Bird Vision (BBCV) School Buses equipped with multiplex software should be updated to the latest version to eliminate the risk of the failure mode. The warning lights are activated by a momentary switch and will begin flashing the amber lights, as the vehicle prepares for a stop. When the driver opens the entrance door the red lights will begin flashing and the stop arm will extend to alert other vehicles. If the module reset were to occur within this sequence, the warning lights would be deactivated and the stop arm retracted without a warning to the driver, increasing the risk of a crash or injury. There is not an audible or visual warning which would precede or occur.

Blue Bird shall conduct a voluntary safety recall to correct the root cause of the module reset issue related to the firmware.

Corrective Action:

Blue Bird will notify the affected dealers and owners and will provide repair instructions. All affected units need to have the multiplex software updated to the latest version to eliminate the risk of the failure mode. Updated software files have been uploaded to Vantage for all affected vehicles. Blue Bird will reimburse the labor cost of the repair related to this recall at no cost to the vehicle owner. Recall R24CX should be repaired, per R24CX Recall Repair Instructions.

Labor Reimbursement:

A software update is currently available. The expected out of service time necessary to accomplish the software update is 60 minutes (1 hour). Blue Bird will reimburse the labor cost of the repairs related to this recall at no cost to the vehicle owner. The standard repair time (SRT) to accomplish the repair in accordance with the R24CX remedy procedure is outlined below.

- **R24CX Repair**
 - 1.0 hour (60 minutes)

BLUE BIRD BODY COMPANY

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



BLUE BIRD

Blue Bird Body Company

Page 2

R24CX

Administering the Recall:

All affected units in the field need to have the multiplex software updated to the latest version to eliminate the risk of the failure mode. Updated software files have been uploaded to Vantage for all affected vehicles.

Blue Bird recommends you contact your local or nearest Blue Bird Dealer to arrange for this recall to be performed.

To locate an authorized dealer, search online at www.blue-bird.com/find-a-dealer. 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

R24CX: Ametek MUX Firmware

Models Affected: Certain 2021-2024 Model Year Blue Bird Vision School Buses.

Issue: On identified buses there is a potential for certain discretely driven outputs to inadvertently de-activate. If de-activation occurs within the warning light sequence, the warning lights would be deactivated and stop arm retracted without a warning to the driver.

Corrective Action: Both software files (Application & Simulink) in the A-zone, C-zone, and D-zone MUX/PMM modules need to be updated.

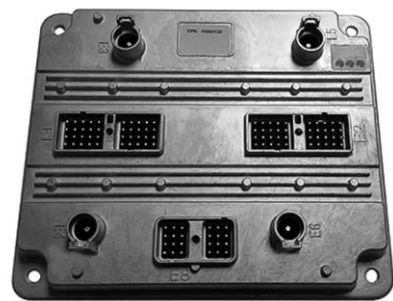
- Application version 1.4 or greater
- Simulink 2-3-3 or greater

Component Code: 50-200-205

SRT: 1.0 HR

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

Item# 10059122



Items Required:

Description	Where to get it
AmeFlash Tool Software (Free download. Requires Vantage Log-in)	Blue Bird Vantage>>Parts & Service>>Technical Reference>>Software Downloads>>Ametek Software
RP1210 Communication Adapter Supported by the AmeFlash Tool Software (Dearborn DPA-5 USB Recommended)	
Blue Bird Bench Program Harness #10074768.	Blue Bird Service Parts
Application file 1.4 or newer. Not vehicle or module specific. Same for all.	Blue Bird Vantage>>Parts & Service>>Technical Reference>>Software Downloads>>Ametek Software
C-Zone Simulink file version 2-3-3 or newer. Not vehicle specific. Only for front body controller. Front right header	Blue Bird Vantage>>Parts & Service>>Technical Reference>>Software Downloads>>Ametek Software
D-Zone Simulink file, version 2-3-3 or newer. Not vehicle specific. Only for the rear body controller. Rear left header	Blue Bird Vantage>>Parts & Service>>Technical Reference>>Software Downloads>>Ametek Software
A-Zone Simulink file, version 2-3-3 or newer. Vehicle specific. Only for the chassis controller (PDU)	Unit Dashboard>>Service>>VEPS>>Program MUX A-ZONE PROGRAM FILES>>BODY_NUMBER.ver

Optional Bench harness power leads:

Item #	Description	Part number	Link	Quantity
4	Alligator Clip	CTM-60	LINK	1
5	Positive Banana End	CT3134-2	LINK	1
6	Negative Banana End	CT3134-0	LINK	1
7	Female Power Connector housing	ATHD04-1-8P-E003	LINK	1
8	Male power connector pin	AT60-204-08141	LINK	1

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.

IMPORTANT:

- Application file v1.4 (All modules) and Simulink file 2-3-3 for the C & D modules are downloaded from [Blue Bird Vantage>>Parts & Service>>Technical Reference>>Software Downloads>>Ametek Software](#).
- The Simulink file for the A-zone/chassis controller **is vehicle specific** and is the **ONLY** file to be downloaded from VEPS.
 - Unit Dashboard>>Service>>VEPS>>Program MUX A-ZONE PROGRAM FILES>>BODY_NUMBER.ver

Instructions:

Step 1: Verify 12v battery is fully charged. Anything less than 12.50V, connect battery charger. Key off for entire procedure.

Step 2: Remove PDU cover (black plastic cover below dash) and front/C-zone & rear/D-zone PMM access plates.

Step 3: Disconnect the E8 connector off each PMM with 4mm Allen wrench. Figure 1

Step 4: Connect RP1210A compliant In-Line adapter to bench harness part # 10074768

Step 5: Connect bench harness to the E8 connector on the MUX/PMM to be programmed.

- Optional: Bench harness power/ground jumpers can be fabricated per FIG 2.

Step 6: Launch AmeFlash utility & Flash A-zone PMM application(app) file first, then Simulink/model file

- **Chassis Controller (A-zone) Simulink/model file is downloaded from VEPS. This will be the only file downloaded from the VEPS page on Vantage. All others will come from Ametek software download page.**

Step 7: Move Bench harness to C-zone, and flash app file, then Simulink file

Step 8: Move bench harness to D-zone, and flash app file, then Simulink file

Step 9: Re-install all E8 connectors starting with A zone first, then C, then D. Torque fastener to 25-28 IN-LB (2.82-3.13 Nm)

Note: Do not use power tools to install E8 connector. This securement bolt is sacrificial to prevent over torque and will snap off.

Step 10: Reference the production order & perform a full system check. If passes, re-install access plates and PDU cover. If not, contact Blue Bird Service

Description	Location	MUX address
A-Zone	Chassis PDU, below dash	0x21h
C-Zone	Front Body Controller. Front body header, RH side. Cover plate 6"x12"	0xF2h
D-Zone	Rear Body Controller. Rear body header, LH side. Cover plate 6"x12"	0xF4h

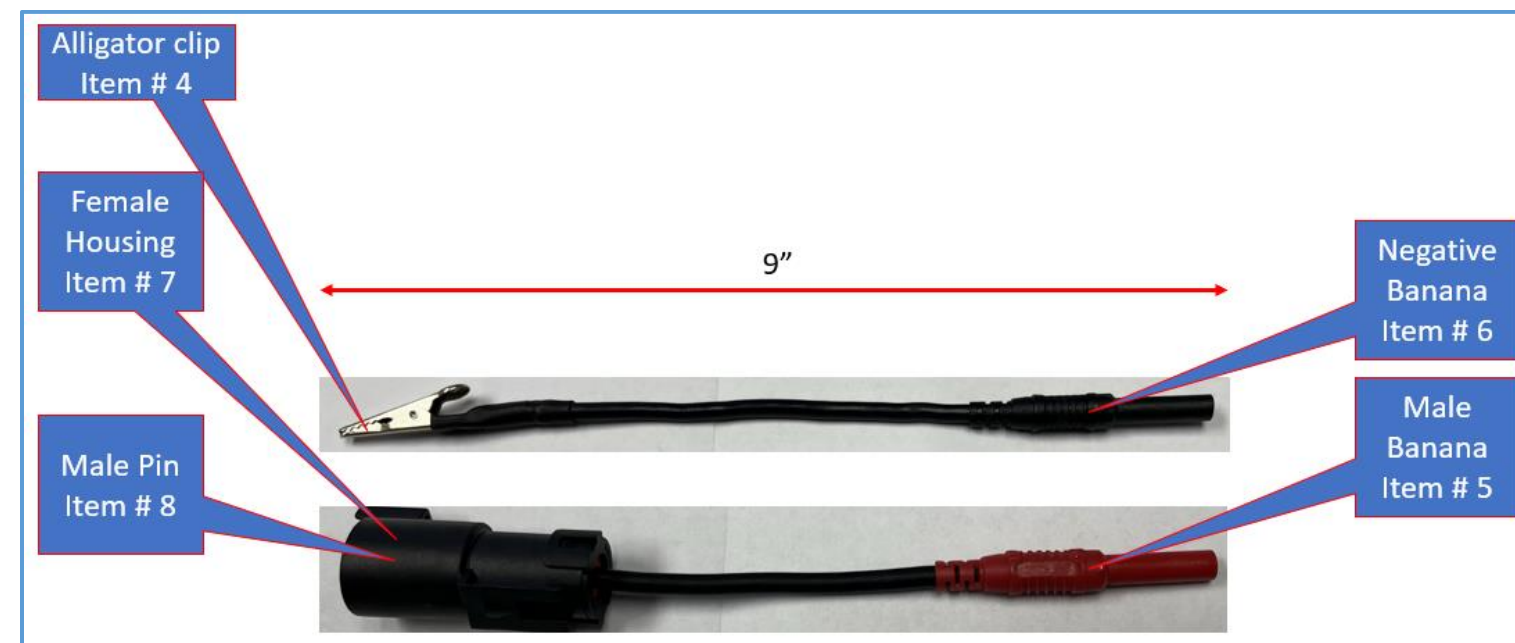


Figure 2

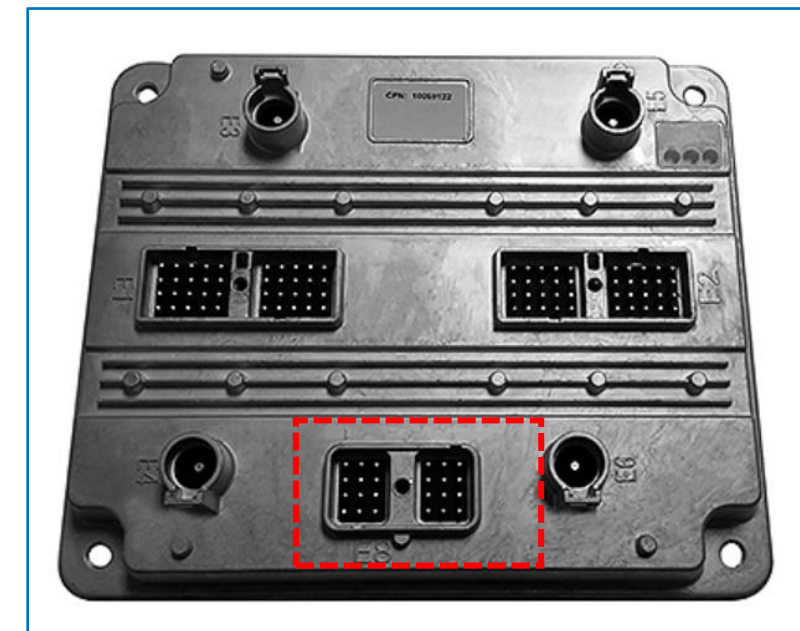


Figure 1