



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.

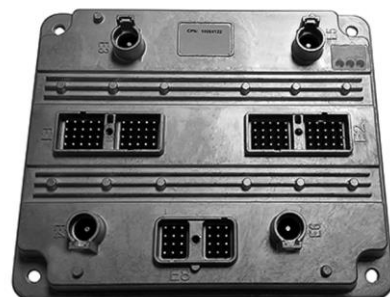
- Application version 1.4 or greater
- Simulink 2-3-3 or greater

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

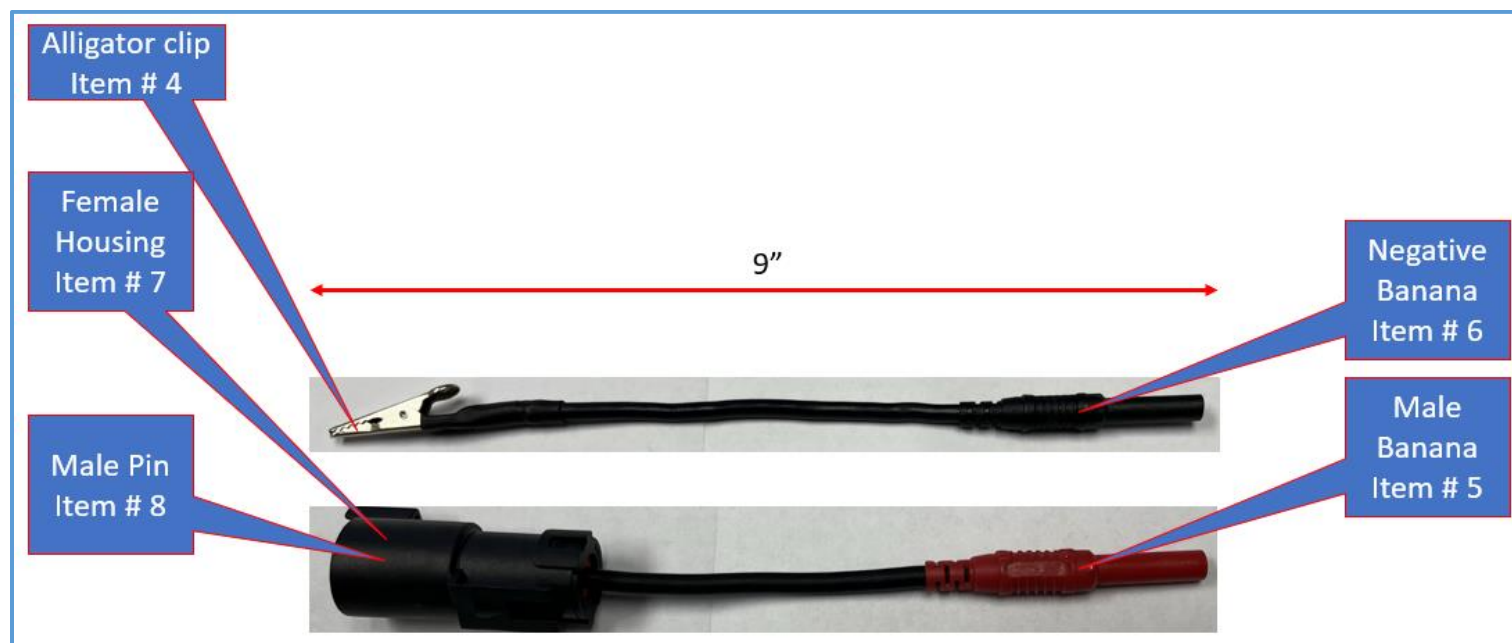


Figure 2

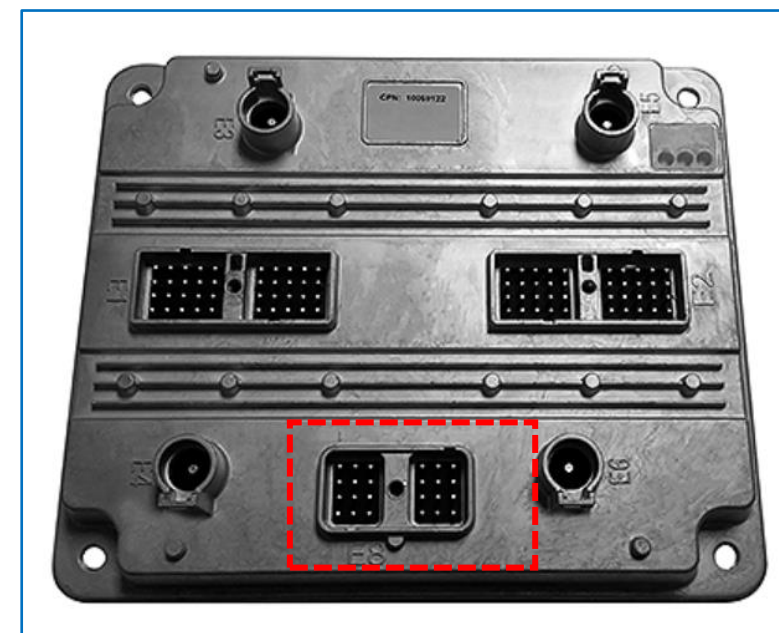


Figure 1