

SERVICE PROCEDURE

23516 July, 2023

SUBJECT: NONCOMPLIANCE RECALL

Anti-Lock Brake (ABS) Light on certain 2022 thru 2024 IC Bus[®] CE school buses built 10/05/2020 thru 05/09/2023, certain 2022 thru 2024 IC Bus[®] Electric CE Series school buses built 10/13/2020 thru 05/03/2020, and certain 2021 thru 2024 IC Bus[®] RE integrated school buses built 10/05/2020 thru 05/08/2023 with feature code 04AZS or 04AZY (Air Brake, Anti-Lock Brake system [ABS] with Electronic Stability Program [ESP] and Automatic Traction Control [ATC])

CUSTOMER LETTER

Print ready (PDF) copy of the IC Bus Customer Letter

DEFECT DESCRIPTION

These certain vehicles may not conform to Federal Motor Vehicle Safety Standard (FMVSS) 121 or Canada Motor Vehicle Safety Standard (CMVSS) 121. Specifically, the ABS indicator lamp does not remain activated when a malfunction exists, whenever the vehicle's ignition switch is in the ON (run) position, and the vehicle is in motion.

If a fault exists with the ABS components and the lamp does not stay illuminated when the vehicle is in motion, during an event that requires ABS, a vehicle operator may not realize there is a fault with the ABS system, which can increase the risk of a vehicle crash that can result in property damage or personal injury.

MODELS INVOLVED

This safety recall involves certain 2022 thru 2024 IC Bus[®] CE school buses built 10/05/2020 thru 05/09/2023, certain 2022 thru 2024 IC Bus[®] Electric CE Series school buses built 10/13/2020 thru 05/03/2020, and certain 2021 thru 2024 IC Bus[®] RE integrated school buses built 10/05/2020 thru 05/08/2023 with feature code 04AZS or 04AZY (Air Brake, Anti-Lock Brake system [ABS] with Electronic Stability Program [ESP] and Automatic Traction Control [ATC]).

<u>ELIGIBILITY</u>

This procedure applies ONLY to vehicles marked in the International[®] Service PortalSM with Noncompliance Recall 23516. Also complete any other open campaigns listed on the Service Portal at this time.

TOOL INFORMATION

NOTE: There are two versions of the Bendix[™] EC80 Update Tool, one for EZ-Tech[®] and one for other diagnostic PCs. Use the appropriate link below to download the Bendix[™] EC80 Update Tool to your device.

<u>EZ-Tech</u>

Other Diagnostic PCs

Description	Tool Number
EZ-Tech [®] or equivalent	N/A
Bendix [™] EC80 Update Tool	Bendix [™] 13551
NEXIQ USB-Link	NA
Battery Charger 55 Amp	PSC550CC

PARTS INFORMATION

No parts required.

SERVICE PROCEDURE

WARNING! To prevent personal injury and / or death, or damage to property, park vehicle on hard flat surface, turn the engine off, set the parking brake and install wheel chocks to prevent the vehicle from moving in either direction.

WARNING! To prevent personal injury and / or death, or damage to property, if the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent personal injury and / or death, or damage to property, allow engine / vehicle components to cool before servicing.

WARNING! To prevent personal injury and / or death, or damage to property, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

- 1. Park vehicle on flat surface.
- 2. Shift transmission to Park or Neutral and set parking brake.
- 3. Turn vehicle ignition to Key OFF position.
- 4. Install wheel chocks.

NOTE: Ensure vehicle batteries are fully and properly charged. If necessary, use a smart charger while programming.

- 5. Access vehicle batteries and connect battery charger / maintainer to batteries.
- 6. Using NEXIQ USB-Link, connect EZ-Tech[®] or equivalent to the vehicle.
- Follow the Bendix instructions by clicking on the link below or refer to the bulletin at the end of this letter to program the ABS ECU.
 <u>Bendix Instructions</u>
- 8. Once programming is successfully completed, turn ignition to Key OFF position.
- 9. Disconnect EZ-Tech[®] or equivalent from the vehicle.
- 10. Disconnect battery charger / maintainer from the vehicle batteries.
- 11. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-23516-1	Program ABS ECU	0.5 hrs

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Noncompliance Recall 23516.

Section 7 of the Warranty Policy and Procedures Manual contains further information related to the submission and processing of AFC / Recall claims.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

	GROUP	NOUN	С	WARR.	TP	PAD
GROUP — Enter number						
NOUN — Leave blank			Т		<u> </u>	<u> </u>
C (CAUSE) — Enter either 1, 2, 3. (See be	(wole					
O(OAOOE) = Enter enter 1, 2, 0. (Oee be						
 Inspected (No repair required). Inspected and repaired. Defective part from parts stock. 						
5. Delective part nom parts stock.						
WARRANTY (Warranty Code) Enter 40	0. ৰ					
TYPE PART — Enter P for type part cause	sing failure					
	ang lanaro.					
PAD — Enter 100 <						
						0000047910

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. Federal law prohibits a dealer from delivering under a sale or lease, a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by the notification of a recall until the defect or noncompliance is remedied.

.Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date. Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC.

Technical Bulletin



Bulletin No: TCH-27-005 Rev 000 Initial Release Date: 5/15/23 Revision: N/A

Page: 1 of 4

Subject: Bendix[®] EC-80[™] Antilock Braking System (ABS) Electronic Control Unit (ECU) Standalone Update Tool - ID 13351

DESCRIPTION

The Bendix[®] EC-80[™] Antilock Braking System (ABS) Electronic Control Unit (ECU) may require an update due to a malfunctioning ABS warning lamp. There are instances where the ABS warning lamp *does not illuminate* in situations where it *should* (i.e. when there is an active Diagnostic Trouble Code [DTC] and the vehicle is in motion). The Bendix EC-80 standalone update tool can be used to update the ECU and restore proper functionality.



In certain versions of the EC-80 ABS ECU, a malfunction may not be correctly indicated by the ABS warning lamp. While the ABS warning lamp will function as intended when the vehicle is stationary, it will turn off when the vehicle is in motion. Other dashboard lamps will illuminate to signal the driver to seek service. A malfunctioning warning lamp may potentially confuse the driver. A software update is available for impacted EC-80 ABS ECU versions to help eliminate these concerns.

Refer to Table 1 for a list of impacted and updated part numbers.

Bendix Pa	rt Number	Navistar Pa	art Number	Software	Z Number
Impacted PN	Updated PN	Impacted PN	Updated PN	Impacted PN	Updated PN
K210927R000	K210927R001	4045853C4	4045853C5	Z251843	Z286098
K210928R000	K210928R001	4055091C4	4055091C5	Z251843	Z286098
K210929R000	K210929R001	4104387C3	4104387C4	Z251843	Z286098
K212564SC000	K212564SC001	-	-	Z251843	Z286098
K212565SC000	K212565SC001	-	-	Z251843	Z286098
K212566SC000	K212566SC001	-	-	Z251843	Z286098
K219871R000	K219871R001	4288644C1	4288644C2	Z281032	Z285654
K219872R000	K219872R001	4288638C1	4288638C2	Z281032	Z285654
K219874R000	K219874R001	4288643C1	4288643C2	Z281032	Z285654
K219876SC000	K219876SC001	-	-	Z281032	Z285654
K219877SC000	K219877SC001	-	-	Z281032	Z285654
K219878SC000	K219878SC001	-	-	Z281032	Z285654
K227744T000	K227744T001	-	-	Z251843	Z286098
K227745T000	K227745T001	-	-	Z251843	Z286098

Table 1 – Impacted and Updated Part Numbers

ELECTRONIC CONTROL UNIT (ECU) UPDATE PROCEDURE

To perform the update, a Windows[®] laptop (Windows 10 or 11 is recommended) with the standalone update tool downloaded, a compatible RP1210C adapter (i.e. Noregon[®], Nexiq[™], etc.), and the manufacturer's Windows drivers for the RP1210C device are required.

- 1. Key on the vehicle with the engine off.
- 2. Select the *EC80 Update Tool-ID 13551* shortcut. Select the installed diagnostic interface and channel. *See Figure 1*.

ID	DLL	Name	Vendor	Description	
1	NXULNK32	USBLINK	NEXIQ TECHNOLOGIES USB-LINK	USB-LINK	
2	NXULNK32	BTUSBLINK	NEXIQ TECHNOLOGIES USB-LINK	BLUETOOTH USB-LINK	
146	NXULNK32	USBLINK	NEXIQ TECHNOLOGIES USB-LINK	USB-LINK ATEC-160 BAUD	
246	NXULNK32	BTUSBLINK	NEXIQ TECHNOLOGIES USB-LINK	BT USB-LINK ATEC-160 BAUD	
1	NULN2R32	USBLINK	NEXIQ TECHNOLOGIES USB-LINK 2	USB-LINK 2	
2	NULN2R32	BTUSBLINK	NEXIQ TECHNOLOGIES USB-LINK 2	BLUETOOTH USB-LINK 2	
3	NULN2R32	WIFIUSBLINK	NEXIQ TECHNOLOGIES USB-LINK 2	WIFI USB-LINK 2	
100	NORPLC32	DLA+PLC	NOREGON SYSTEMS INC., DLA+PLC ADAPTER	DLA+PLC, USB	
RP	210 Channe	:			
1	cito citatile		*		

Figure 1 – Interface and Channel Selection

3. Select Update. See Figure 2.



Figure 2 – Update Icon

4. *Figure 3* shows the update is in process. The update time is approximately two (2) minutes.



Figure 3 – Update in Process

5. Figure 4 shows the update completed successfully.

😁 EC80 Update Tool-ID 13551 - 10110	-	×
Settings		
	Dondiy	
	Bendix	
-		
A REAL PROPERTY AND A REAL		
	Update	
ECU	update completed successfully!	

Figure 4 – Update Completed Successfully

6. *Figure 5* shows the update failed. Power cycle and restart the update procedure from Step 1.

🔁 EC80 Update Tool-ID 13551 - 1.010		-	×
Settings			
	Bendix		
	O Update		
U	pdate failed! Cycle ignition power and try again.		

Figure 5 – Download Failed

7. *Figure* 6 shows the update has already been performed. No further action is required.

🔁 EC80 Update Tool-ID 13551 - 1.000		-	>
Settings			
	Bendix		
	Update		
	ECU already updated - K210928R001,2286098 Z249542		

Figure 6 – Update Already Performed

8. *Figure* 7 shows the Electronic Control Unit (ECU) is not eligible for the update. No further action is required.

🔁 EC80 Update Tool-ID 13551 - 10100	-	×
Settings		
Bendix		
Update		
ECU ineligible for update (K139006R000,Z091290 Z092892)		

Figure 7 – ECU Ineligible for Update

9. *Figure 8* shows the engine RPM has been detected. Power cycle to ignition only and restart the update procedure from Step 1.



Figure 8 – Engine RPM Detected

10. *Figure 9* shows the ECU is not detected. Verify the ignition power is ON and/or ensure the correct RP1210C channel is selected. Restart the update procedure from Step 1.

Figure 9 – ECU Not Detected

ADDITIONAL SUPPORT

Phone Bendix technical support at 1-800-AIR-BRAKE (1-800-247-2725), option 2, Monday through Thursday, 8:00 a.m. to 6:00 p.m., and Friday, 8:00 a.m. to 5:00 p.m. ET, or by email at techteam@bendix.com.



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