

Technical Bulletin

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Subject: Recall of Bendix® EC-80™ Electronic Control Units (ECUs) used in Towing Applications – Volvo®

Bendix Commercial Vehicle Systems LLC (Bendix) is conducting a voluntary safety recall campaign, **National Highway Traffic Safety Administration (NHTSA) Recall No.: 24E086**, involving the Bendix® Electronic Stability Control (ESC) and Automatic Traction Control (ATC) EC-80™ Electronic Control Units (ECUs). The ECUs are components of the Antilock Braking System (ABS).

PROBLEM DESCRIPTION

Bendix has determined that ESC and ATC EC-80 ECUs – when used in towing vehicle applications – may incorrectly process certain signals when high electrical interference (i.e., noise) on the tractor-to-trailer Power Line Carrier (PLC) communication system is present. The combination of high electrical interference and low PLC signal strength is more likely to occur on vehicles that tow more than one (1) trailer. Additionally, PLC signal strength may be substantially reduced when other optional devices are connected to the power line (e.g., trailer-based tracking systems).

The excessive noise may cause the EC-80 ECU to set a fault, stop operating, or malfunction. When the EC-80 ECU faults or stops operating, the ABS warning lamp will illuminate on the vehicle dash. One or all of the following scenarios may result:

- The functionality of the ATC or ESC may fault or stop operating.
- Other functions that interact with ABS – such as Active Cruise Control (ACC) and the Collision Mitigation System (CMS) – may also fault. For powertrains that communicate with the EC-80, the vehicle may also enter “limp home mode” with lower engine torque and lower speed if the EC-80 stops operating.
- In extremely rare situations before the vehicle faults or stops operating, if there is a stability event or an automated braking request, the system may respond incorrectly to the event. This may increase the likelihood of a crash.

IMPACTED VEHICLES

This voluntary safety recall includes Bendix ESC and ATC EC-80 ECUs produced between about September 2019 and about October 2024. Refer to *Table 1* for a list of affected part numbers.

This voluntary safety recall does not include:

- Bendix EC-80 ECU ABS-only variants.
- Non-towing applications of the ESC and ATC EC-80 ECUs.

Affected Bendix OE Part Number	Affected Volvo Part Number	Item Description	Sales Channel Limitation	ROM Version
K163400R001	23103632	ATC+ ECU	OEM only	3
K179860R000	23479912	ATC ECU	OEM only	3
K203871R000	23768806	ATC ECU	OEM only	3.E
K163402R001	23103633	ESC ECU	OEM only	3
K163400R000	23103632	ATC+ ECU	OEM only	3
K163402R000	23103633	ESC ECU	OEM only	3
K163401SC000	N/A	ATC ECU	Aftermarket only	3
K190048SC000	N/A	ATC ECU	Aftermarket only	3
K163499SC000	N/A	ESC ECU	Aftermarket only	3

Table 1 – Affected Part Numbers

CORRECTIVE ACTION

Bendix has developed a standalone software update utility (ID 9363) to remedy the defect.



Read and observe all warnings and caution/hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

NOTE: To download the software and perform the update, a Windows® PC (Windows 10 or 11 is recommended) with the standalone update utility downloaded, a compatible adapter, and the manufacturer's Windows drivers for the adapter are required.

1. Install the update utility that was distributed by Volvo®.
2. Plug an adapter to the diagnostic port located under the steering wheel.
3. Key on the vehicle.
4. Open the Bendix® EC-80™ update utility from the connected PC and click *Update*. **NOTE:** Audible alerts may sound and warning lamps may illuminate on the vehicle dash during the update process. See *Figure 1*.



Figure 1 – Update Icon

5. Once the update has started, the screen will show the progress.
 - If the update is successful, the screen will show that the software has been updated, and the procedure is complete. See *Figure 2*. Follow Volvo guidelines to document the software update.

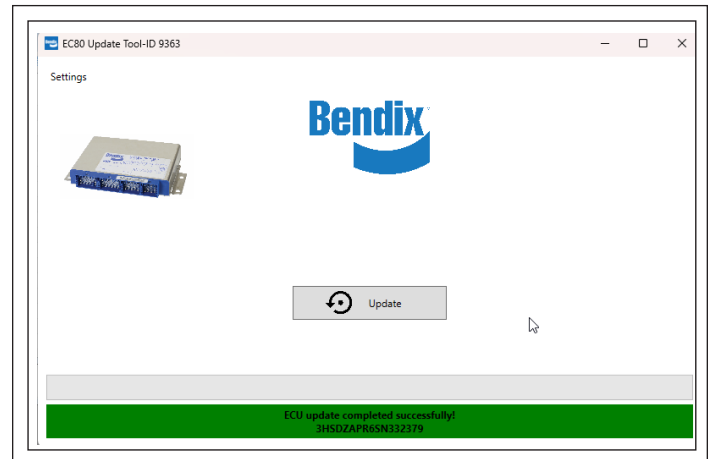


Figure 2 – Update Successful

- If the update fails, the screen will show that the software was unable to be updated. Power cycle the vehicle and restart the update procedure from Step 1. See *Figure 3*.

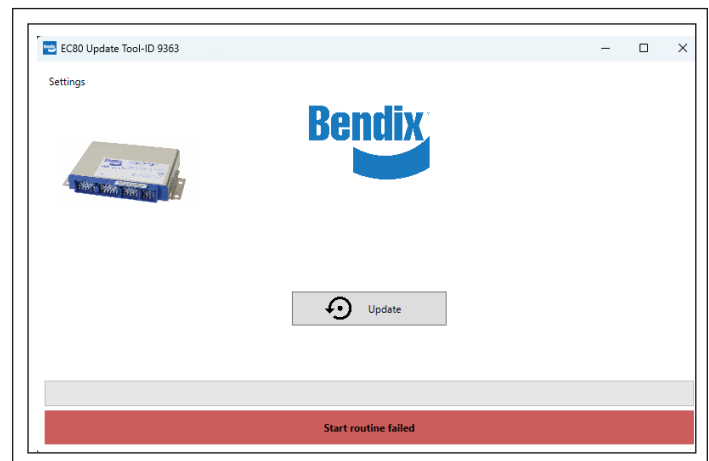


Figure 3 – Update Failed

- If the update has already been performed, a message will indicate that no further action is required. See Figure 4.



Figure 4 – Update Already Performed

- If engine RPM is detected during the procedure, power cycle to ignition only and restart the update procedure from Step 1. See Figure 6.



Figure 6 – Engine RPM Detected

- If the detected ECU is not eligible for an update, a message will indicate that no further action is required. See Figure 5.



Figure 5 – ECU Ineligible for Update

- If the ECU is not detected, verify the ignition power is ON and/or ensure that the correct adapter channel is selected. Then, restart the update procedure from Step 1. See Figure 7.

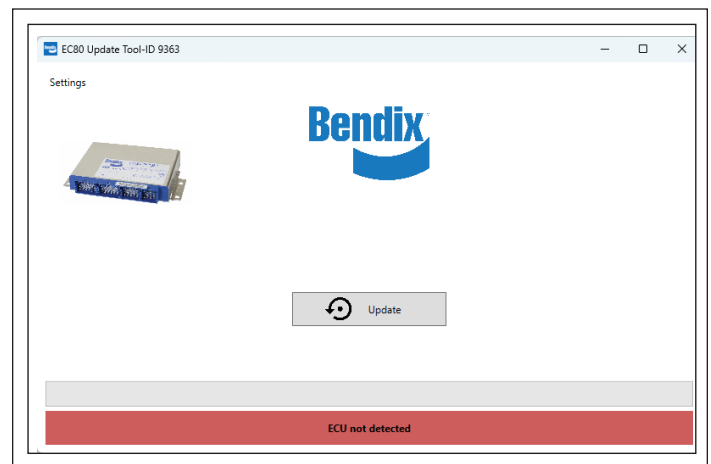


Figure 7 – ECU Not Detected

- If the ECU did not successfully update, contact Bendix Technical Support for assistance.

TECHNICAL SUPPORT

For support, first refer to the OEM instructions provided by Volvo®. Additional support is available from Bendix by phone at 1-800-755-6888. Bendix representatives are available Monday through Friday, 8:00 a.m. to 5:00 p.m. ET.

