



FIELD SERVICE CAMPAIGN – 23102

09 May 2023

SUBJECT:

Replace Supervisory Control Unit (SCU), On-Board Charging Interface (OCI) Module, and program Vehicle Control Unit (VCU)

MODELS INVOLVED:

International® eMV™ Series trucks and IC Bus® Electric CE Series school buses.

DEFECT DESCRIPTION:

Certain International® eMV™ Series trucks and IC Bus® Electric CE Series school buses may have an outdated On-Board Charging Interface (OCI) module, Supervisory Control Unit (SCU) module and Vehicle Control Unit (VCU) module calibration that could result in several vehicle performance concerns.

ELIGIBILITY:

This procedure applies ONLY to vehicles marked in the International® Service PortalSM with FSC 23102. Also complete any other open campaigns listed on the Service Portal at this time.

TOOLS REQUIRED:

Description	Tool Number
Battery Charger 55 Amp	PSC550CC
EZ-Tech® or EST with Service Diagnostics Solutions (SDS) Software	N/A
EZ-Tech® or EST	N/A

Table 1 Tools Information

PARTS REQUIRED

Part Number	Description	Quantity
4365155C91	MODULE, VC, EVCC VECTOR, OCI	1
4364571C1	MODULE, SUPERVISORY CONTROL UNIT SCU	1

Table 2 Parts Information

WORK INSTRUCTIONS

WARNING! To prevent personal injury and / or death, or damage to property, **NEVER** service a high-voltage vehicle without completing high-voltage safety training. Before working on vehicle, read and obey High-Voltage Safety, and Lock-Out Tag-Out safety procedures and information.

WARNING! To prevent personal injury and / or death, wear and use approved high-voltage Personal Protective Equipment (PPE) when near a high-voltage electric vehicle. Inspect PPE before use. Do not use gloves or other PPE with expired dates, holes, cracks, or damage. **NEVER** touch energized **ORANGE** high-voltage cables or high-voltage components without wearing approved high-voltage PPE.

WARNING! To prevent personal injury and / or death, read all information in the Safety Information and High-Voltage Safety sections of the service manual.

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

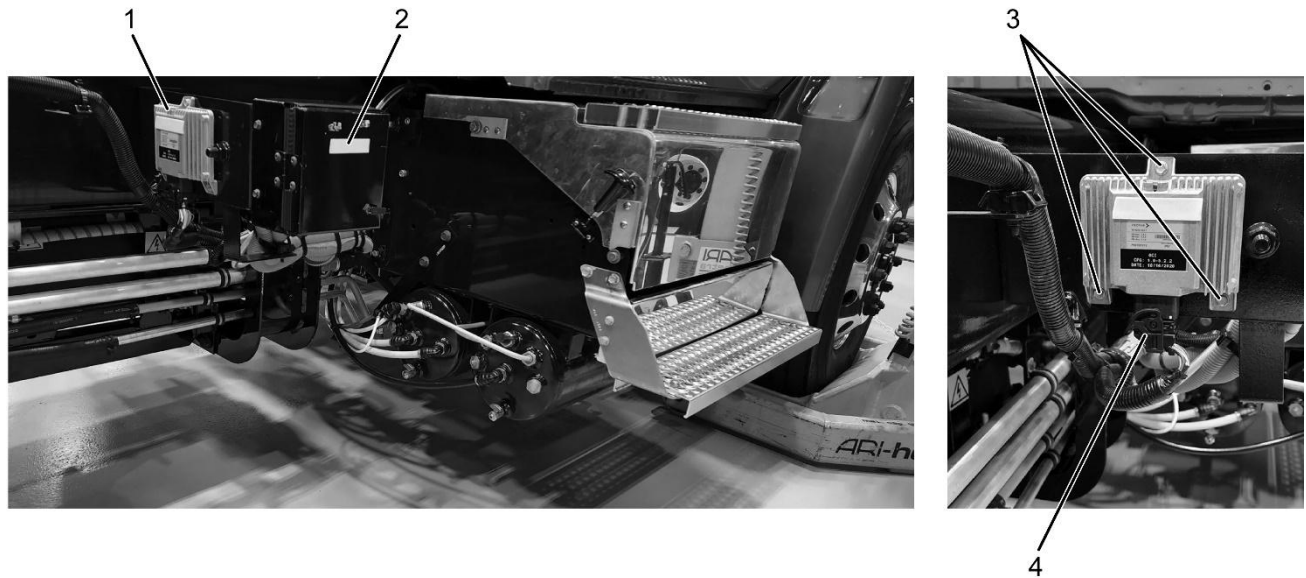
WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent personal injury and / or death, or damage to property, 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 a level surface.
2. Shift transmission into Park or Neutral and set parking brake.
3. Turn ignition to Key OFF position.
4. Install wheel chocks.
5. Unlatch and open hood.
6. Perform High-Voltage Isolation Level 1. Refer to appropriate technician manual for instructions.

NOTE: Refer to Steps 7-15 for International® eMV™ Series trucks and Steps 16-19 for IC Bus® Electric CE Series school buses.

7. Remove Supervisory Control Unit (SCU). Refer to appropriate technician manual for detailed instructions. Save unit for warranty return.
8. Install new SCU. Refer to appropriate technician manual for detailed instructions.



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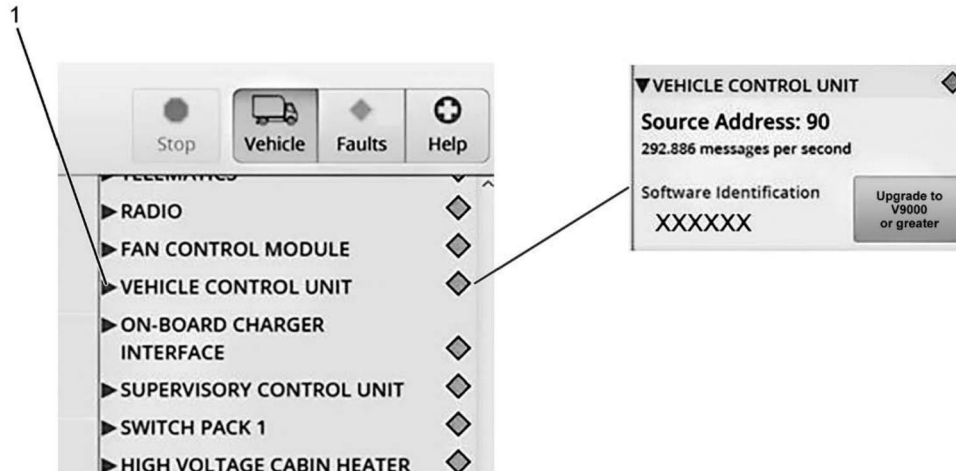
Figure 1. On-Board Charging Interface (OCI) Module Location (Passenger-Side)

1. OCI module
2. Charge port
3. Bolt (3)
4. OCI module harness connector

NOTE: The On-Board Charging Interface (OCI) module in International® eMV™ Series trucks is located on the outside of the frame rails behind the charge port.

9. Carefully unlatch and disconnect the OCI module harness connector (Figure 1, Item 4).
10. Remove three bolts (Figure 1, Item 3). Save for reuse.
11. Remove OCI module (Figure 1, Item 1). Save module for warranty return.
12. Position replacement OCI module onto bracket. Loosely install three bolts.
13. Using torque wrench, tighten bolts to 96 lb-in (11 N·m).

14. Connect and latch OCI module harness connector.
15. For International® eMV™ Series trucks, proceed to Step 18.
16. Remove Supervisory Control Unit (SCU). Save unit for warranty return. Refer to appropriate technician manual for instructions.
17. Install new SCU. Refer to appropriate technician manual for instructions.
18. Install Level 1 Manual Service Disconnects (MSD). Refer to appropriate technical manual for instructions.
19. Turn ON 12V disconnect switch.
20. Turn ON high-voltage switch.
21. Connect battery charger / maintainer to vehicle battery.
22. Update VCU using SDS:
23. Collect health report by selecting **ARRIVAL** in **HEALTH REPORT – SCAN CHECKPOINT** box.
24. Clear inactive / previously active fault codes by selecting **FAULTS** button in action bar.



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Figure 2. SDS Screen

1. Vehicle control unit.
25. Under **VEHICLE**, scroll down and locate **VEHICLE CONTROL UNIT** (Figure 2, Item 1).
 26. Select blue triangle to view additional options.
- NOTE: The correct software upgrade is automatically displayed. Verify the latest calibration is V9000 or greater.**
27. Select **Upgrade to** tab to upgrade software.
- NOTE: Once the software is upgraded, the SDS tool will automatically reset the system and reconnect with the vehicle.**
28. Disconnect interface connector from diagnostic port.
 29. Disconnect battery charger / maintainer to vehicle battery.
 30. Close and latch hood.
 31. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Operation Number	Description	Time
A40-23102-1	Replace Modules and Reprogram VCU	1.1 hrs

Table 3 Labor Information

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Field Service Campaign 23102.

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.

To make sure this important improvement is made in a timely manner, all claims for 23102 activity must be submitted by 09 May 2024 or within the normal warranty period for the component repaired, if after 09 May 2024.

GROUP	NOUN	C	WARR.	TP	PAD

GROUP — Enter number

NOUN — Leave blank

C (CAUSE) — Enter either 1, 2, 3. (See below)

- 1. Inspected (No repair required).
- 2. Inspected and repaired.
- 3. Defective part from parts stock.

WARRANTY — (Warranty Code) Enter 40.

TYPE PART — Enter P for type part causing failure.

PAD — Enter 100

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