



FIELD SERVICE CAMPAIGN – 24109

04 November 2024

SUBJECT:

Bus Drive Motor Replacement

MODELS INVOLVED:

IC Bus® Electric CE Series buses.

DEFECT DESCRIPTION:

Certain IC Bus® Electric CE Series buses may have drive motors that do not operate to their full potential.

ELIGIBILITY:

This procedure applies ONLY to vehicles marked in the International® Service PortalSM with FSC 24109. Also complete any other open campaigns listed on the Service Portal at this time.

PARTS REQUIRED:

Part Number	Part Description	Quantity
2524431C91	Motor, Electric Drive	1

Table 1 Parts Information

WORK INSTRUCTIONS

GOVERNMENT REGULATION: Engine fluid (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluid and other contaminated materials (such as filters and rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to applicable regulations.

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 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.

WARNING! To prevent personal injury and / or death, or damage to property, remove the ground cable from the negative terminal of the battery before disconnecting any electrical components. Always connect the ground cable last.

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

1. Open a case file with tech support to add the CAN trace as requested in Step 3.
2. Perform road test and allow bus to warm up to operating temperature.

Note: Some units may not exceed 20 mph (32 km/h). If this happens, continue to record as much as you can and submit the CAN trace to the case file.

3. During the test drive, record a CAN trace over 45–55 mph (72–88 km/h).
4. Try to accelerate unit under hard acceleration during road test. Will the bus accelerate over 50 mph (80 km/h)?
 - a. Yes: testing is complete and no further action is required.
 - b. No: proceed to next step to replace the drive motor.
5. Park vehicle on a dry, level surface.
6. Put drive mode selector in Neutral and set parking brake.

7. Turn ignition to Key OFF position.
8. Install wheel chocks.
9. Turn 12V disconnect switch OFF. Refer to appropriate technician manual for detailed instructions.
10. Perform High-Voltage Isolation Level 2. Refer to appropriate technician manual for detailed instructions.
11. To remove the drive motor, refer to Drive Motor Removal in the appropriate technician manual for the detailed instructions.
12. To install the new drive motor, refer to Drive Motor Installation in the appropriate technician manual for detailed instructions.
13. Install all appropriate Manual Service Disconnects (MSD) that were removed in Step 10. Refer to appropriate technician manual for detailed instructions.
14. Turn ON 12V disconnect switch. Refer to appropriate technician manual for detailed instructions.
15. Turn ON high-voltage disconnect switch. Refer to appropriate technician manual for detailed instructions.
16. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Operation Number	Description	Time
A40-24109-1	Test drive and collect SDS CAN trace over 45–55 mph (72–88 km/h).	0.5 hrs
A40-24109-2	Case file creation	0.2 hrs
A40-24109-3	High-voltage isolation level 2 / zone 2	0.9 hrs
A40-24109-4	Power electronics coolant system drain and fill	0.3 hrs
A40-24109-5	Drive motor, replace	1.8 hrs

Table 2 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 24109.

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 24109 activity must be submitted by 04 November 2025 or within the normal warranty period for the component repaired, if after 04 November 2025.

	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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