SERVICE MANUAL

E114 (E25-40Z)



FORM 1552144 Rev. 03/14

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This section is for the following models:

All Electric Lift Trucks

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Status Code	Description	Memory Recall	Circuit
43	Traction motor temperature sensor out of range.	No	Traction

Symptom

Status code is displayed for 10 seconds after startup. Truck still operates, but traction motor overtemperature protection is inoperative.

Possible Causes and Test Procedures

- Wiring from motor temperature sensor to the motor controller is open or has shorted.
- Motor temperature sensor is faulty.
  Replace the motor, or operate without the temperature sensor.

Status Code	Description	Memory Recall	Circuit
44	Pump motor temperature sensor out of range.	No	Pump

Symptom

Status code is displayed for 10 seconds after startup. Truck still operates, but pump motor overtemperature protection is inoperative.

Possible Causes and Test Procedures

- Wiring from motor temperature sensor to the motor controller is open or has shorted.
- Motor temperature sensor is faulty.
  Replace the motor, or operate without the temperature sensor.

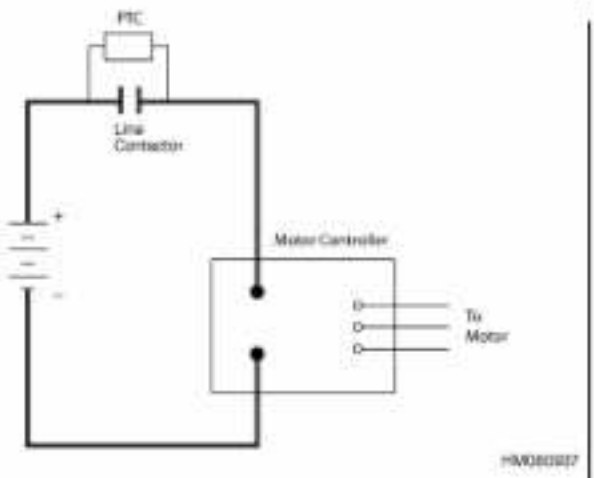
Status Code	Description	Memory Recall	Circuit
51	Capacitor volts are too low before line contactor closes.	No	Traction

Symptom

Lift truck does not move and line contactor does not close.

Possible Causes and Test Procedures

- A Positive Temperature Coefficient (PTC) is disconnected or malfunctioning, preventing the capacitors to charge when the battery is plugged in.
- An accessory or component other than the motor controllers is connected to load side of line contactor. This will cause the PTC to get hot and not charge the capacitors.
- Repeated *charging/discharging* the capacitors during troubleshooting may cause a **Status Code 51**. If the PTC is hot, allow it to cool.
- Status code will occur if the line contactor does not close properly and truck operation is attempted.
- Status code will occur if battery voltage drops below 50% nominal voltage.



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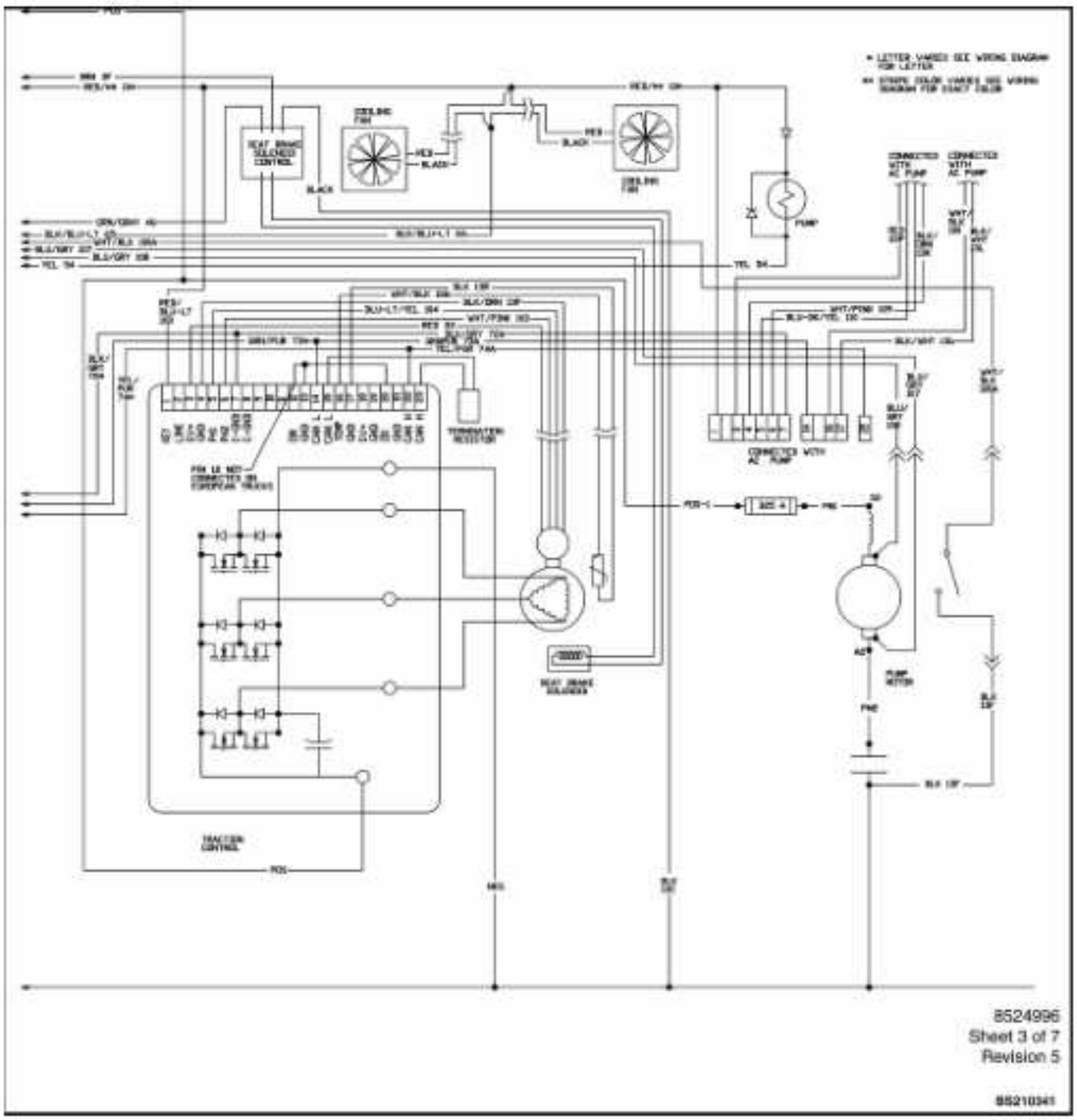


Figure 5. Wiring Schematic Diagram for E1.50-2.00XM (E25-35Z, E40ZS) (E114), 36v/48v Lift Trucks (Sheet 3 of 7)

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BATTERY HEIGHT SPECIFICATIONS (HOODS AND BATTERY TYPES)

Model	Battery Type	Maximum Height - Standard Hood			
		With Battery Tray*	With Cell Cap**	Cell Connectors and Terminals	
				Electrically Insulated***	Not Electrically Insulated**
E1.50-1.75XM (E25-35Z), E2.00XMS (E40ZS)	I	607 mm (23.9 in.)	594 mm (23.4 in.)	594 mm (23.4 in.)	574 mm (22.6 in.)
E1.50-1.75XM (E25-35Z)), E2.00XMS (E40ZS)	II, III		NA	NA	NA

NA = Not Applicable

BATTERY TYPES

TYPE I - Battery without a cover as part of the battery.

TYPE II - Battery with a cover that is flat and is fastened to case of battery. Cover opens from FRONT OR REAR when installed in lift truck.

TYPE III - Battery with a cover that is flat and is fastened to case of battery. Cover opens from SIDE when installed in lift truck.

*Battery Types II and III bottom of battery to highest point (top of cover or top of hinge).

**Minimum height below top of battery tray is 4 mm (0.16 in.).

***Minimum height below top of battery tray is 0.5 mm (0.02 in.).

WARNING

The battery must fit the battery compartment so that the battery restraint system will operate correctly. Use only batteries with the correct length shown in the table above. Adjust the spacer plate and side spacers to prevent the battery from moving more than 13 mm (0.5 in.) forward, backward, or to the side.

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