TB0057 Introduction of PCB to the Series 3A Electrical System

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For some territories the wiring of the Series 3A electrical system has been upgraded to a PCB Design. The circuit design and functionality remains unchanged.

Description:

The internals of junction boxes B, C and D have been replaced with Printed Circuit Boards (PCBs). All internal interconnects are now on the PCB. Wires leading out of the junction boxes are connected to junction blocks which are labeled as an aid to assembly and diagnosis.

Models and Markets:

All SE402 machines have the PCB design. All SB360 machines from SB8061 excluding those with the CE system will also have the PCB design.

Spare Parts:

The part number of the blank PCB is printed on the board itself. For the assembled board part number, refer below:

- SB360 B Box (Main Control Cabinet) Board Assembly = EL-37402
- SE402 B Box (Main Control Cabinet) Board Assembly = EL-37626
- SB360 and SE402 C & D Box (Module Junction Boxes) Board = EL-37403

Backward Compatibility:

The PCB design is backward compatible with the conventional series 3A designs. i.e. Any conventional 3A junction box can be swapped with the corresponding PCB junction box without problems.

Use Instructions:

This system uses Light Emitting Diodes (LEDs) to aid circuit diagnosis:

- Red LEDs are located adjacent to fuses. An illuminated red LED indicates a blown fuse.
- Green LEDs are located adjacent to relays. An illuminated green LED indicates an energized relay.

Benefits and Advantages to Change:

The PCB design decreases the possibility of incorrect wiring, and reduces the possibility of connections working loose in the field due to vibration.

The red and green LEDs help with system diagnostics.