Nordson

Instruction Sheet

P/N 1067125_02

Circuit Board Replacement

for Econo-Coat® Manual Powder Spray Gun Control Units

Replacing the Circuit Board

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

CAUTION: Electrostatic sensitive device. To avoid damaging the circuit board, wear a grounding wrist strap and use proper grounding techniques.

1. Turn off the control unit and disconnect it from its input power source.
2. Relieve supply air pressure and disconnect the control unit from its input air supply.
3. Remove the control unit's cover.
4. See Figure 2. Disconnect all wiring harness from the printed circuit board.
5. Remove the four screws and washers securing the circuit board to the control unit, then remove the circuit board.
6. Secure the new circuit board to the control unit using the screws and washers you removed in step 5.
7. Connect the wiring harnesses to the circuit board as shown in Figure 2.
8. See Figure 2. Make sure there is a jumper in position JP1.
9. Follow steps 1–3 in reverse to return the control unit to service.
10. Specify the maximum kV output for the gun, if desired. Refer to *Gun Type Configuration.*

    NOTE: The default maximum kV output setting is 95 kV.

Limiting kV Output

The new circuit board may be set to limit the spray gun's kV output to either 80 or 95 kV. Limiting the voltage output to 80 kV may significantly increase the life of the gun's voltage multiplier, with virtually no effect on coating performance.

AFC is the recommended operating mode for best overall coating performance and finish quality. When you use AFC mode, you set a maximum current limit and the control unit automatically and continuously adjusts the voltage output based on the gun-to-part distance. When using AFC, the actual voltage output is typically 80 kV or less.

1. See Figure 1. Make sure the power switch (1) is in the off position.
2. While holding down the mode key (4), turn the power switch to the on position. A code will appear on the digital display (2), identifying the currently selected kV limit.
3. Release the mode key, then use the +/– keys (3) to select the appropriate kV limit:

   C1: 95 kV maximum

   C2: 80 kV maximum
4. Press the mode key to apply the voltage limit and begin operation.

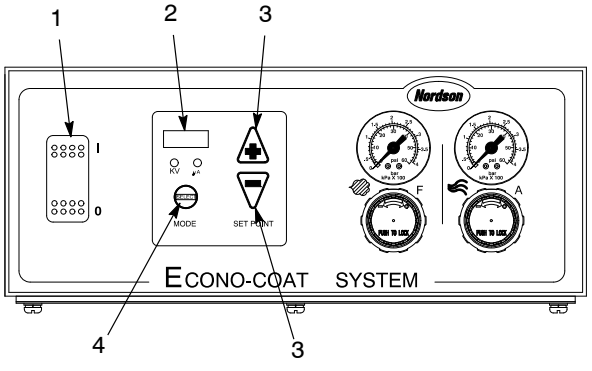

Figure 1 Limiting the kV Output

Electrical Schematic

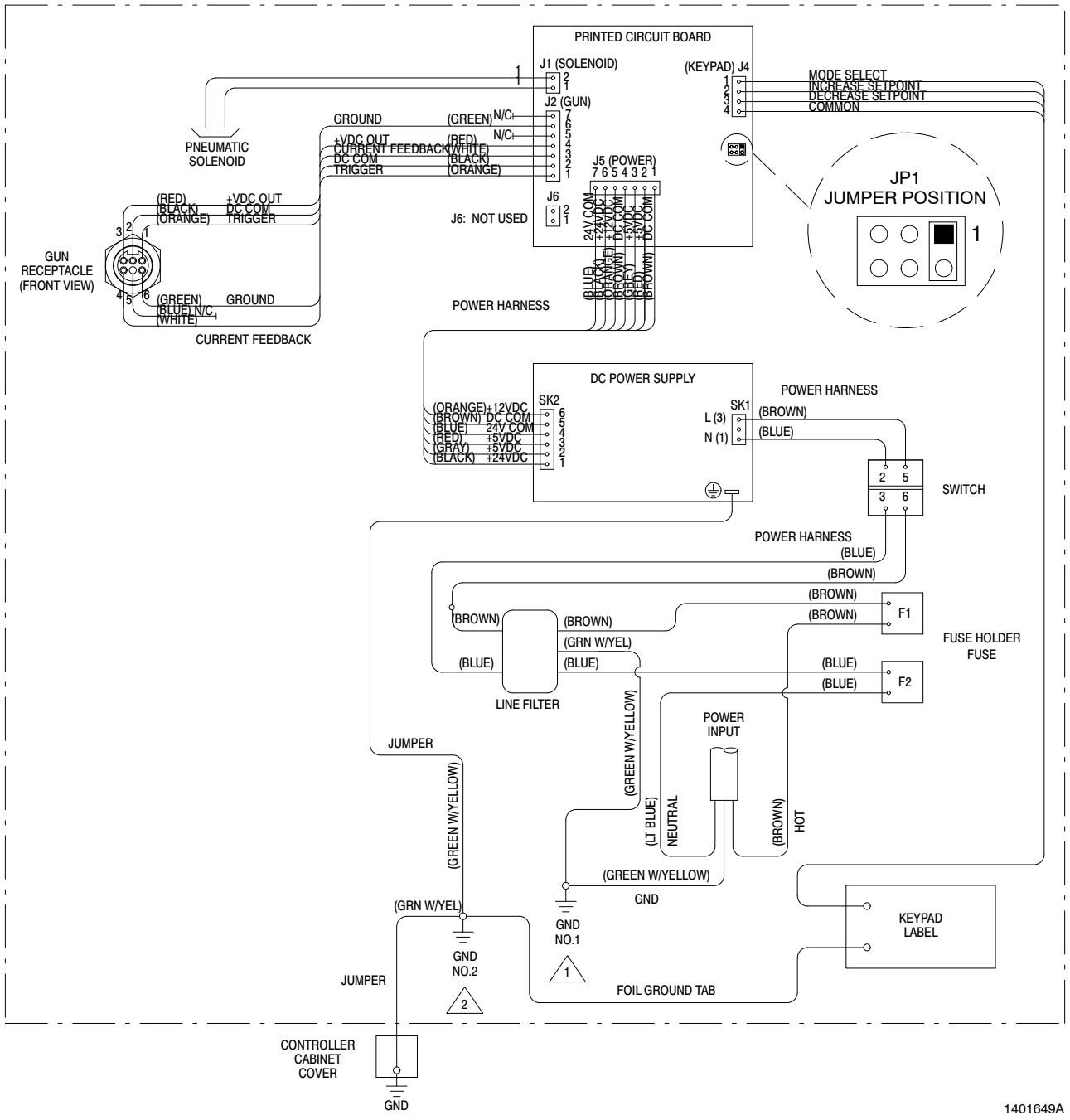

Figure 2 Electrical Schematic

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