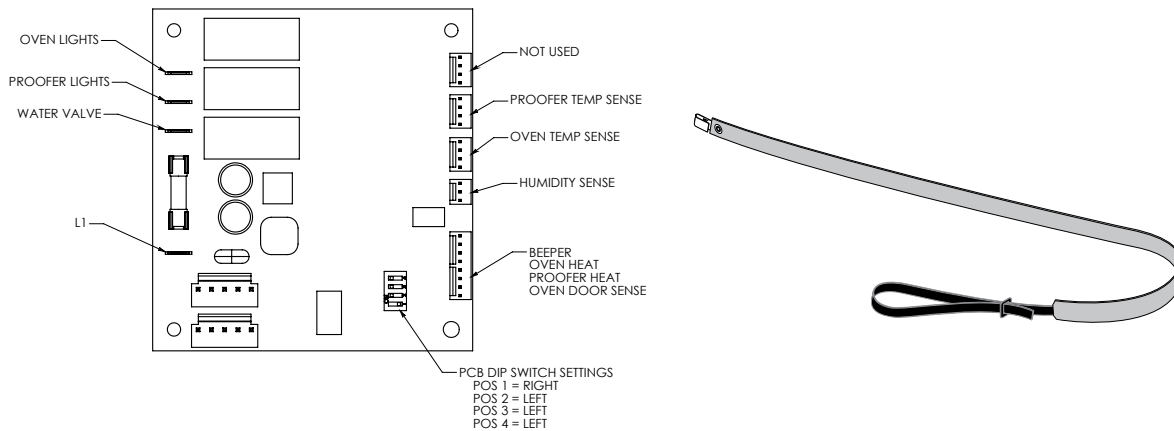




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# INSTALLATION INSTRUCTIONS

## TSC-6/18M PROOFER OVEN IO PCB REPLACEMENT INSTRUCTIONS FOR DUKE KIT# 600350



This kit contains:

- 169773 PCB, IO Module
- 512418 Strap, Disposable Wrist ESD
- 156218 USB Drive

Items required for this installation:

- #2 Phillips Screw Driver
- ESD Wrist Strap (included in kit)

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### Duke Manufacturing Co.

2305 N. Broadway  
St. Louis, MO 63102  
Phone: 314-231-1130  
Toll Free: 1-800-735-3853  
Fax: 314-231-5074  
[www.dukemfg.com](http://www.dukemfg.com)

TSC-6/18M Proofer Oven IO PCB  
Replacement Instructions

1. Verify the PCB IO Module Assembly requires replacement prior to proceeding. Reference Service Manual Troubleshooting Guide.

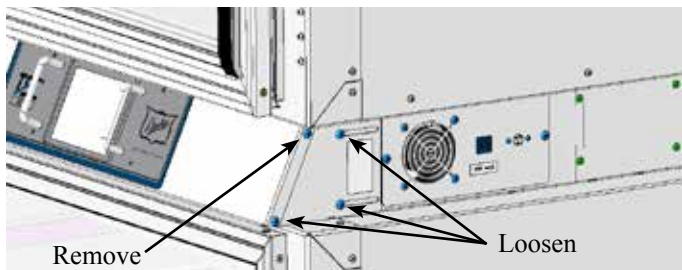
**WARNING: HAZARDOUS VOLTAGE**

**RISK OF ELECTRIC SHOCK**

2. Turn OFF the unit's Power Switch on the left side middle of the oven.
3. Disconnect unit from Mains Supply Voltage using lockout / tagout procedures.

**Reference: LOCKOUT / TAGOUT PROCEDURE**

- The worker shall check to be sure that no one is operating the machinery BEFORE turning -off the power. The machine operator shall be informed before the power is turned off. Sudden loss of power could cause an accident.
  - All energy sources that could activate the machine shall be locked out (blocked/tagged).
  - The main valve or main electrical disconnect shall be tested to be sure that the power to the machine is off.
  - Electrical circuits shall be checked with proper and calibrated electrical testing equipment. An electrical failure could energize the equipment even if the switch is in the off position.
4. Loosen, but do not remove the bottom and rear screws on the slide out. Remove top left and top right screws.

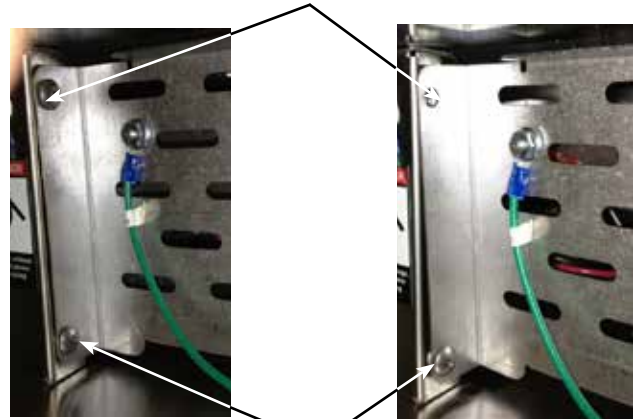


5. Slide the control panel forward and tilt down the control panel.



6. Loosen the bottom screw and remove the top screw on each side retaining the Voltage Shield for access to high voltage and high power components.

Remove Top Screws



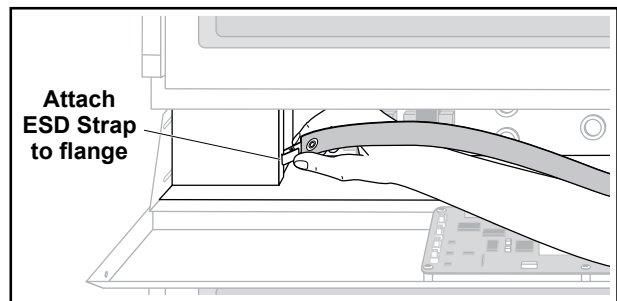
Loosen Bottom Screws

7. Tilt the Voltage Shield forward.

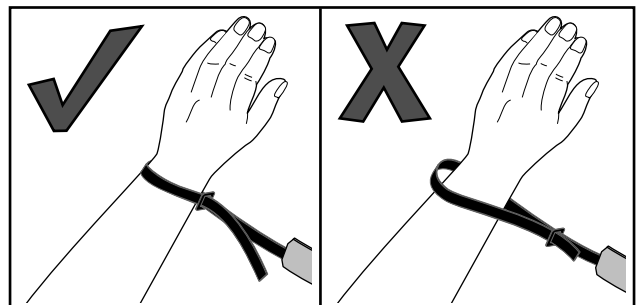
**NOTE:** Be careful to not damage Touchscreen Control Panel harnessing.



8. Connect ESD Wrist strap to Unit in location shown.



9. Place ESD strap on wrist and tighten. Strap must be tight around wrist to be effective.



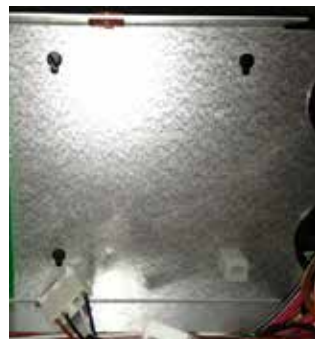
10. To ensure proper reconnection after replacing the PCB IO Module Assembly, note the left side Quick Connect terminals and the right side sensor and low level IO header connections on the PCB IO Module Assembly while referencing the Wire Diagram for the unit.



11. Disconnect all connections to the PCB IO Module Assembly.



12. The PCB IO Module Assembly is mounted vertically with 1 screw standoff and 3 keyhole standoffs. Remove the standoff screw and lift the PCB slightly vertical to free the remaining 3 keyhole standoffs to remove the PCB.



Standoff Screw removed

13. Using proper ESD procedures, remove the new PCB IO Module Assembly from the shipping packaging, align the keyhole standoffs on the new PCB IO Module Assembly with the vertical panel mounting holes, allow the keyhole standoffs to drop down and seat, and reinstall the screw in the remaining standoff.

**NOTE:** The PCB IO Module Assembly uses a PC mounted 4-position DIP switch setting specific for this application. Confirm the new PCB Assembly is set with Pos.1 = Right, Pos.2 = Left, Pos.3=Left, and Pos.4 = Left. The Main Controller will not recognize the PCB Assembly if the DIP switches are improperly set.



14. Reconnect the wiring which was removed in prior step. Confirm the connections with the reference Wire Diagram for the unit.
15. Re-install the *Voltage Shield* and Control Panel.
16. Reconnect line power to the unit (*Reference Tagout process*).
17. Using supplied USB load Firmware.
  - a. Insert USB into USB Port.
  - b. Turn On the power switch on the left side of the unit's control section. Load will take approx. 30 seconds, after load display will show Duke Logo. Remove USB drive.
18. Verify the unit functions.
  - a. Verify that an Oven icon or Oven Recipe selection activates the Oven lights.
  - b. Verify that a Proofer icon or Proofer Recipe selection activates the Proofer lights.
  - c. Verify the audio Beeper chirps with display touch.
  - d. Verify the temperature and RH sensor input levels are functioning
    - i. Upper right info ("!") button
    - ii. Select the "**USER**" icon on the PIN Code screen
    - iii. Select the "**SYSTEM STATUS**" button
    - iv. Review levels and status of inputs and outputs
  - e. Verify the Oven and Proofer heats until Preheat cycle are complete.



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