

# TROUBLESHOOTING

## Most Common PowerPro Control Panel Error Messages

### ***“SRM Not Rotate”***

***Definition: The Controller has experienced a ‘failure-to-start’.***

#### **Possible reasons:**

- a. Workpiece is jammed in a cutter, stalling the machine.
- b. Wire connection between the control board and motor is loose.
- c. Electronics sensor or components damaged on the control board.

#### **Possible solutions:**

- a. Turn off the Main Power Switch. Clear whatever caused the machine to stall.
- b. Check connection of the large, white plug between Power Supply and Motor. If these wires are cut, this must be repaired or replaced at the Factory only. Call Customer Service for shipping information.
- c. Electronics are repaired or replaced at the Factory only. Call Customer Service for shipping information.

### ***“RPS State Error 0”***

***Definition: None of the receivers are sensing infrared light from emitters.***

#### **Possible reasons:**

- a. Light path is blocked by dust or dirt.
- b. Signal cable is broken or has a poor connection.
- c. Sensors or electronic components are damaged.

#### **Possible solutions:**

- a. Remove Belt Cover and Motor Pan. Used compressed air to blow dust out from under Cowling where 5-wire connection is made.

- b. Check connection of the small, white, 5-pin plug between Power Supply and Motor. If these wires are cut, they must be repaired or replaced at the Factory only. Call Customer Service for shipping information.
- c. Electronics are repaired or replaced at the Factory only. Call Customer Service for shipping information.

### **“RPS State Error 1”**

**Definition: All receivers are sensing infrared light from the emitters simultaneously.**

#### **Possible reasons:**

- a. The Motor Fan with Position Disc inside has slid out of position and no longer is engaged with sensor.
- b. Signal cable is broken or there is a poor connection.
- c. Sensors or other electronic components are damaged.

#### **Possible solutions:**

- a. Position the Mark 7 in Drill Press Position. .Reposition the Motor Fan with Position Disc.
  1. Remove Belt Cover and Motor Pan from Headstock.
  2. Use a 5/32” Allen Wrench to remove 4 of 6 motor mounting screws, leaving one screw on each side of the Motor, closest to the Pulley.
  3. Pivot motor to gain access to the back of the Motor and Motor Cowling.
  4. Use a medium Phillips screwdriver to remove the 3-screws that hold the black-plastic Cowling to the motor.
  5. Slide the Fan with Reader Plate toward the motor. Position the Fan’s edge 1/32” from the components on the green circuit board.
  6. Use a 2.5mm Allen wrench to securely tighten the setscrew on the Fan and Reader Plate.
  7. Reassemble your machine in the reverse order of disassembly.
- b. Check connection of the small, white, 5-pin plug between Power Supply and Motor. If these wires are cut, they must be repaired or replaced at the Factory only. Call Customer Service for shipping information.
- c. Electronics are repaired or replaced at the Factory only. Call Customer Service for shipping information.

**“Low Voltage”**

**Definition: Voltage is less than the minimum voltage required.**

**Possible reasons:**

- a. Electrolytic capacitor failure or PFC components failure.
- b. Control Board or Motor are overheated
- c. Line voltage has dropped below minimum required.

**Possible solutions:**

- a. Electronics are repaired or replaced at the Factory only. Call Customer Service for shipping information.
- b. Remove Belt Cover and Motor Pan. Allow machine to cool for 30-minutes to cool either Motor or Control Board.
- c. This machine should be plugged into a dedicated electrical circuit. Consult a qualified electrician for an inspection of your house wiring.

**“PFC Fault”**

**Definition: PFC fault signal is activated for a minimum of 5-seconds.**

**Possible reasons:**

- a. PFC module overheated.
- b. PFC module damaged.

**Possible solutions:**

- a. Remove Belt Cover and Motor Pan. Allow machine to cool for 30-minutes to cool the PFC module.
- b. Electronics are repaired or replaced at the Factory only. Call Customer Service for shipping information.

**“Hardware Fault”**

**Definition: Faulty signal from IGBT driver or over voltage on the DC bus capacitors was detected.**

**Possible reasons:**

- a. IGBT driver damaged.
- b. Power inverter damaged.
- c. Electrolytic capacitor failure.

**Possible solutions:**

- a. IGBT Driver is replaced at the Factory only.  
Call Customer Service for shipping information.
- b. Power inverter is replaced at the Factory only.  
Call Customer Service for shipping information.
- c. Electrolytic capacitor is replaced at the Factory only.  
Call Customer Service for shipping information.

**“Not Connected”**

**Definition: Communication between the control board and interface board is lost.**

**Possible reasons:**

- a. 10-pin ribbon cable is loose or broken down.
- b. Component failure on the control board.

**Possible solutions:**

- a. Check connection of the 10-pin cable. Unplug then re-plug cable, turn off main power switch and wait 1-minute, and then restart.
- b. Electronics are repaired or replaced at the Factory only.  
Call Customer Service for shipping information.