

## **Smart Tech Dryer Power Loss Troubleshooting**

**Issue:** Smart Tech dryer does not run and shows POWER LOSS on the display.

**Operation:** When power loss is displayed on the screen this means that the dryer is not detecting the 24VAC control power provided from the transformer to the ATS interface board. Typically, this means the dryer is not getting power from the supply or a fuse has blown. If the dryer is being used on an ATS300 be advised that the ATS also supplies 24VAC power to the dryer which is why even though the dryer itself may not be getting power, the display still lights up to show the alarm.

## **<u>USE CAUTION:</u>** Troubleshooting may require working on energized equipment. If you are unfamiliar with working on live equipment do not proceed. Refer to your employers safety guidelines when working on energized equipment.

### **Troubleshooting Steps:**

Check that the dryer is getting power from the supply. Voltage measurements at the incoming power block or a quick visual inspection of the front ON/OFF switch should confirm the presence of supply power for the purpose required here. If the orange light in the ON/OFF switch **IS illuminated** in the ON position, then the dryer is getting power and you can move to the next step. If the ON/OFF switch **IS NOT illuminated**, then the dryer is not receiving power from the supply or the F2/F3 or CB2/CB3 (depending on age) fuses or circuit breakers are blown or tripped.

If the dryer ON/OFF switch is illuminated, then the dryer is getting power and F2/F3 or CB2/CB3 are good. The next step is to look at the F5/F6 or CB5/CB6 which supply 208-230V power to the primary side of the 24v transformer. If these also test good move onto the next step.





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Once you have verified the incoming power supply to the dryer tests good and there are no blown fuses or tripped circuit breakers the next step is to check the internal fusing on the ATS interface board. The 24V power from the transformer is fed into the ATS interface board where it is fused and distributed to the display and sensor board in the dryer.

There are 4 fuses on the board. Each fuse has a green LED next to it that will illuminate when power is present, and the fuse is functional. F1 and F2 fuse are for the external power supplied from the ATS300 and will only be active when an ATS is plugged into the dryer.



F3 and F4 fuse (green arrows below) are the internal 24V power from the transformer. Check to see that both fuses are good and both green LED lights next to the fuses illuminate when power is applied. After first disconnecting power, check that the fuse holder is making a tight connection to the fuse ends. If the connection is loose, remove the fuse and squeeze the two "fingers" of the fuse holder together to increase contact pressure on the connection to the fuse once reinstalled. If F3 and F4 fuses test good also check that the larger of the two wire harness connectors plugged into the board is fully seated and the black/red/white wires going into the plug are all securely terminated into the plug by gently pulling on the wires.



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**NOTE:** Older dryers which have the small square toggle circuit breakers will often trip and will be unable to be reset. In this situation the circuit breaker must be replaced with a fuse holder and a fuse.

Fuse holder P/N 105096

500mA fuse (F5 & F6) P/N 0005354006

3A fuse (F2, F3, F4) P/N 0005354019

1..5A fuse (F1, F2, F3, F4 on ATS interface board) P/N 0005385013

If all circuit protection tests good, you have verified power supply to the dryer is good an, have verified the LED lights for F3 and F4 on the ATS interface board are illuminated but the power loss error persists, then the next step is to replace the ATS interface board. ATS Interface board P/N 100530

The ATS Interface board is programmed according to each individual dryer model for accurate flow readings however any board will function in all the smart tech dryer models. It is recommended to test that replacing board solves the issue with a spare board or a board from another dryer before ordering a new replacement.

