

## SE & ME Air Dryer "Preventive Shutdown" Troubleshooting

For troubleshooting a dryer that appears to function normally but is plagued by randomly shutting down due to preventive shutdown alarm, typically accompanied by low system pressure and low line pressure alarm, perform the following steps to troubleshoot and repair the issue.

- If possible, observe the sequence of events when the dryer shuts down. If the first alarm light to illuminate is the preventive shutdown, followed by other alarm lights proceed to the next step. If a different alarm appears first and is followed by preventive shutdown this troubleshooting guide may not apply.
- The most common issue is 3 of the ice cube relays which the preventive shutdown circuit runs through in series. Over time these relay contacts can get dirty and cause a loss of signal after going through several sets of contacts.
- To test if the relays are the root cause, you can bypass the relays in the circuit by removing black wire from terminal 1 on the K5 relay and removing white/violet wire from terminal 5 on K3 relay and creating a jumper to connect these two wires together. Connecting these wires together will eliminate the K3, K4 and K5 relays from the circuit temporarily. If the dryer now runs normally, you have proven the relays are the cause of errant preventive shutdown alarms. These are 24VAC relays, Dielectric part number 58160. It is recommended to always use brand new replacement parts as using relays pulled from another machine will generally yield the same results.



*P/N 58160 Relay* 

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- The second most common cause of the preventive shutdown issue is the main alarm board in the dryer. The alarm board is now discontinued and no longer available for purchase. If you suspect the alarm board may be at fault there is a backup bypass harness that was originally included with the dryer that may be used to bypass the alarm board in the machine. The backup harness looks like small bundle of wires with plugs attached. To install the harness, disconnect the electrical plugs from the alarm board and match them up to the corresponding plugs on the bypass harness (SH1 to PH1 etc). Note that not all the plugs on the wire harness will have a matching plug on the bypass harness.
- If the dryer runs normally on the backup harness with the alarm board bypassed the only option is to continue running the dryer on the backup harness until a replacement dryer can be ordered and installed.

