# Fast Track Troubleshooting

**Models:**
- DV350AEW
- DV350AGW
- DV350AER
- DV350AGR

**NOTICE: All Dryers Parts**
Change 6/2010: Motor Pulley, page 5; Blower Housing, page 4

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**IMPORTANT SAFETY NOTICE – “For Technicians Only”**
This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

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### Samsung 'Dryer' Diagnostic Code Quick Guide

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
<th>Trigger</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>Dryer Thermistor Short Sensed</td>
<td>The Thermistor resistance is very low.</td>
<td>Check for: Clogged lint screen, Restricted vent system, Thermistor resistance.</td>
</tr>
<tr>
<td>80</td>
<td>Dryer Thermistor Open Sensed</td>
<td>The Thermistor resistance is very high.</td>
<td>Check for: Clogged lint screen, Restricted vent system, Thermistor resistance.</td>
</tr>
<tr>
<td>dO</td>
<td>Door Open Running the dryer with door open</td>
<td>Check for: Loose or open wire terminals in Door Sense circuit.</td>
<td></td>
</tr>
<tr>
<td>FE</td>
<td>Power source frequency Error</td>
<td>Invalid power source Frequency</td>
<td>Check for: Non Utility power supply</td>
</tr>
<tr>
<td>dF</td>
<td>Door Circuit Failure Invalid state for more than 256 milliseconds</td>
<td>Check for: Loose or open wire terminals in Door Sense circuit.</td>
<td></td>
</tr>
<tr>
<td>hE or HE</td>
<td>Heater Error Invalid heating Temp in running the dryer</td>
<td>Check for: Restricted vent system, Thermistor resistance.</td>
<td></td>
</tr>
<tr>
<td>bE</td>
<td>Button Error PCB key closed for 75 sec.</td>
<td>Check Display PCB for stuck button</td>
<td></td>
</tr>
<tr>
<td>od</td>
<td>Over Dry Invalid Dry Time Excessive Dry Time</td>
<td>Inspect sensor bars</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>EEprom Fail Invalid state of Eeprom communication</td>
<td>Replace Main PCB</td>
<td></td>
</tr>
</tbody>
</table>

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**SUPPORT INFORMATION**

- **Training — Plus One**
  - [http://my.plus1solutions.net/clientPortals/samsung/](http://my.plus1solutions.net/clientPortals/samsung/)
- **Help — GSPN**
  - [http://service.samsungportal.com/](http://service.samsungportal.com/)
- **Samsung Product Support TV**
  - [http://support-us.samsung.com/spstv/howto.jsp](http://support-us.samsung.com/spstv/howto.jsp)
- Customer information videos and chat programs
- Programs for Fridges, Laundry, Ranges & D/W

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**Location consideration In the USA:**
- All Dryers Must be vented to the outside.
- Only rigid or flexible metal duct should be used for venting.

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**Electrical Dryers** 240 VAC, 60 Hz, 30 Amps, 3-wire or 4-wire installations

**Gas Dryers** 120 VAC, 60 Hz, 15 Amps, 3-wire installations
New Version of Blower Housing, it may be necessary to separate the harness wrap on replacement housing. Please maintain shielding on the low voltage wires.
Gas Valve Testing

Unplug connectors and test valve terminals (its numbering is from the front terminal.)

<table>
<thead>
<tr>
<th>Check across terminals</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 and #3 (Booster Coil)</td>
<td>550 Ω</td>
</tr>
<tr>
<td>#1 and #2 (Holding Coil)</td>
<td>1350 Ω</td>
</tr>
<tr>
<td>#2 and #3 (Both coils in series)</td>
<td>1900 Ω</td>
</tr>
<tr>
<td>#4 and #5 (Secondary Coil)</td>
<td>1300 Ω</td>
</tr>
</tbody>
</table>

Special Test Mode:

While in Power Off, pressing the Dry Level + Power keys simultaneously will put the dryer into the System Check mode. “t2” will display.

System Check Mode Progress

- t2 mode Function Performed
- Start/Pause Motor (CW) Relay On → Heater Relay On → Heater Relay Off → Motor (CW) Relay Off (Circulation)

Cycle Count Test Mode

How to Enter:

- Press Temp + Signal Keys for 3 sec during Power On State.
- Press Signal for 3 seconds (until beep)

Note: Test mode subject to change without notice

Temperature Test Diagnostic Mode

How to Enter:

- Press Adjust Time Up + Down Keys for 3 sec during Power On State.
- Press Adjust Time Up and it will display the temperature in Celsius.
- Compare vent temp to drum temp to see air flow.

This can be with just power on or dryer running.

Sensor Bar Touch Data Mode

How to Enter:

- Power on dryer, open door and press in door switch.
- Start dryer tumbling, Press Temp + Signal for 3 sec.
- Touch both sensor bars with wet cloth, sensor hit numbers show in display.

Note: Test mode subject to change without notice

Software Version Test Mode

How to Enter:

- Press Temp key for 3 seconds (until beep)

Note: Test mode subject to change without notice

Dryer continues to run after cycle completed

Wrinkle Prevent option provides approximately 90 minutes (20 continuous and 70 intermittent) of tumbling in unheated air at the end of the cycle to reduce wrinkling. Press the Wrinkle Prevent button to activate or deactivate this feature. The indicator light above the pad will illuminate when Wrinkle Prevent is selected. Chasing lights appear in the display when the Wrinkle Prevent option is selected. The load is dry, and can be removed at any time during the Wrinkle Prevent cycle.
Testing Electric Heater circuit.

Disconnect Blue wire from RY6, turn power on, start dryer read voltage between RY6 Blue wire and CN6 Green wire.

Reading of 120VAC means a proper operating heater circuit. 0VAC means open in circuit.

To test thermostats use ohm meter on lowest scale, any resistance replace component

See page 4 for Main PCB layout for testing.
**Testing Main PCB power** output to Heating & Motor circuit.

With motor running in the heating mode, read AC voltage across RY6 and RY5.

Any voltage reading means Main PCB is defective.

See page 4 for Main PCB layout for testing.

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**Testing Motor circuit.**

With power off read resistance between RY5 Brown and CN7 Blue.

Resistance reading of good motor circuit is about 1.9Ω. To test thermostat and switch use ohm meter on lowest scale, any resistance replace component.

See page 4 for Main PCB layout for testing.