

# **TECHNICAL INFORMATION T1500 Series Clothes Dryers**

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# 1.0 Construction and Design

# 1.1 Appliance Overview – Vented

(Typical 5 Kilogram Vented Model Shown)

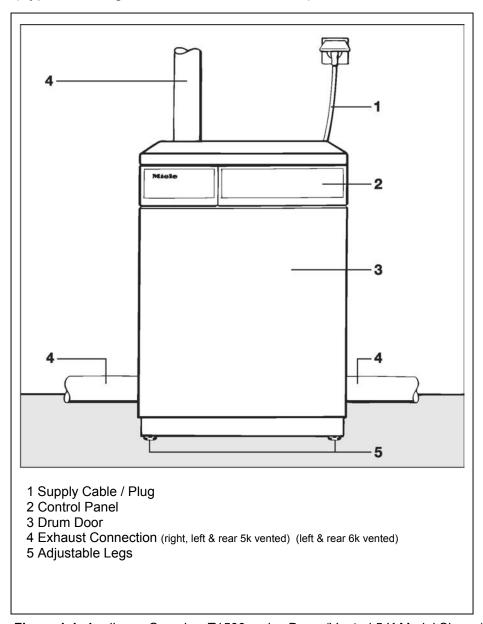
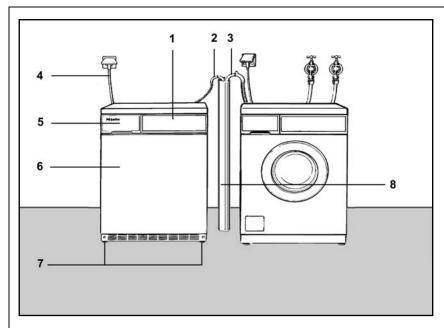


Figure 1-1: Appliance Overview T1500 series Dryer (Vented 5 K Model Shown)



# 1.2 Appliance Overview – Condenser Models (Shown Installed Along Side a Washer)



- 1. Control Panel
- 2. Condenser Drain Hose
- 3. Washer Drain Hose (for clarification only not part of Dryer)
- 4. Electrical Cord and Plug
- 5. Condensed Water Drawer
- 6. Drum Door
- 7. Adjustable Legs
- 8. Stand Pipe

Figure 1-2: Typical installation with Miele Clothes Washer.

Note: Condenser hose is placed into the same stand pipe the washer drain hose uses.

# 1.3 Controls Overview

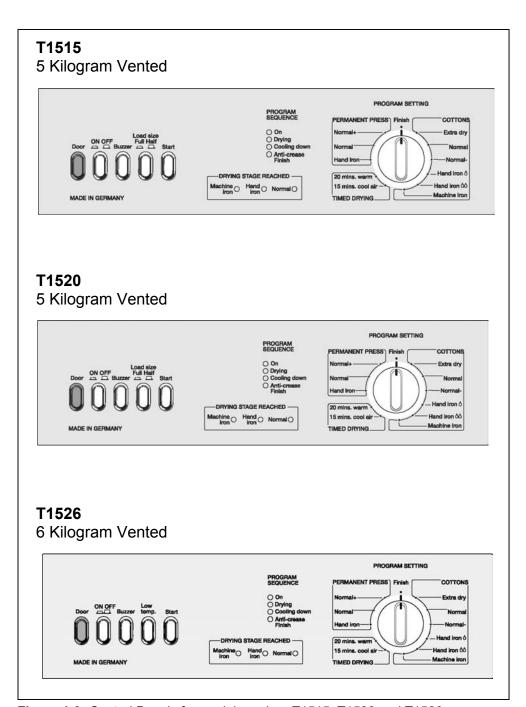


Figure 1-3: Control Panels for model numbersT1515, T1520 and T1526.



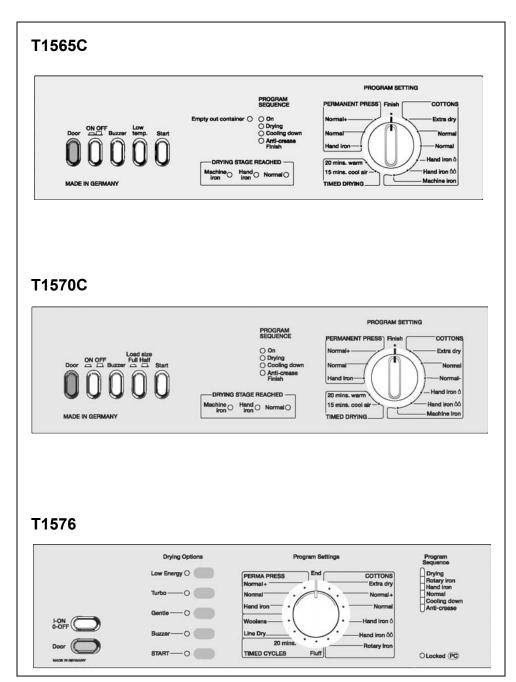
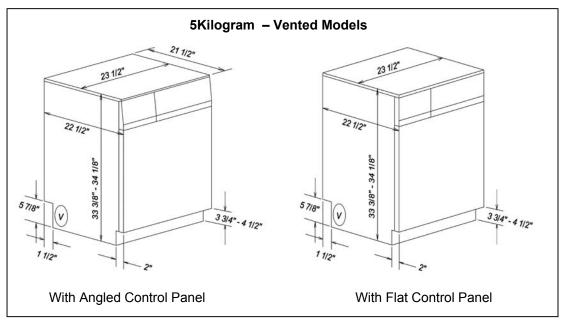


Figure 1-4: Control Panels for model numbersT1565C, T1570C and T1576.



# 1.4 Appliance Dimensions



**Figure 1-5:** Dimensions – 5 kilogram vented models

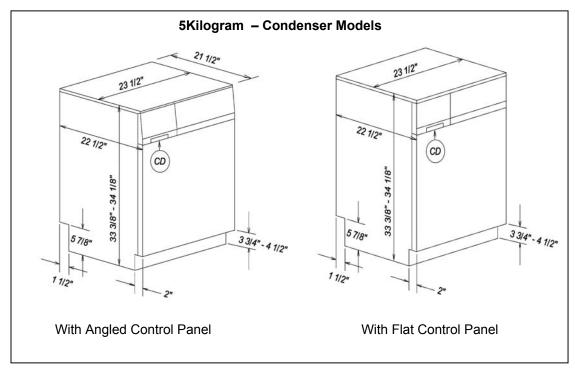


Figure 1-6: Dimensions – 5 kilogram condenser models



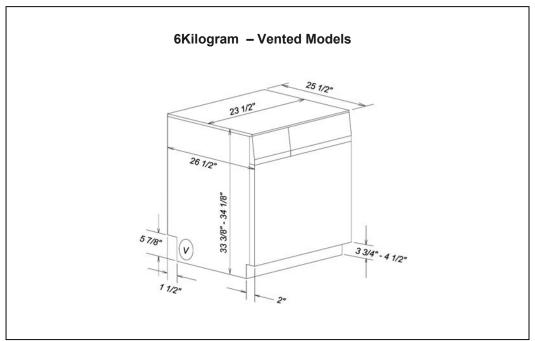


Figure 1-7: Dimensions 6 kilogram – Vented Models

## Note

At the present time, a 6 kilogram condenser model does NOT exist.



# 1.5 Layout of Components T1515, T1520, T1526, T1565C & T1570C

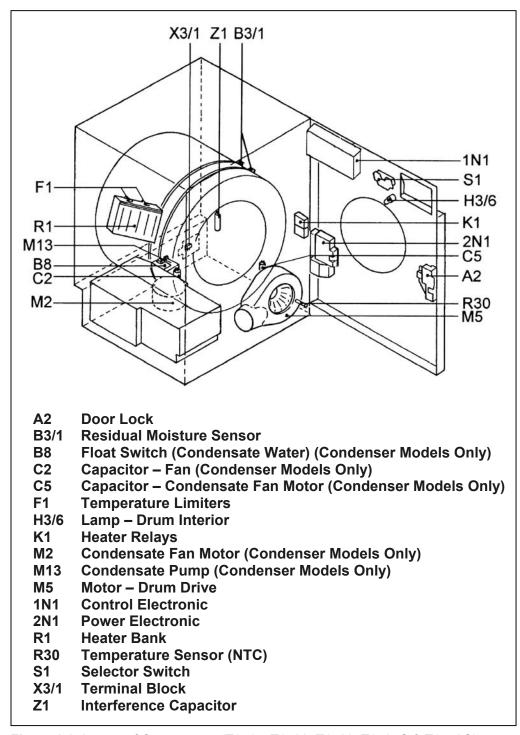


Figure 1-8: Layout of Components (T1515, T1520, T1526, T1565C & T1570C).



# 1.6 Layout of Components – T1576

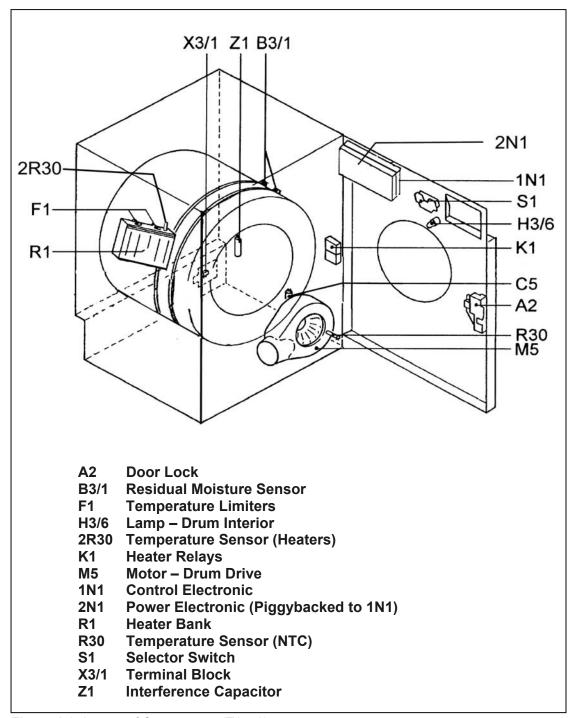


Figure 1-9: Layout of Components (T1576)

8



## 2.0 Installation

- Do not drink the condensed water.
- Keep the area around the air intake (Toekick) and surrounding areas free from lint, dust and dirt. This area should not be blocked (i.e. Toekick) this will prevent sufficient intake of air and effect appliance operation.
- Do not reach into the Dryer if the Drum is moving.
- The appliance should be level to ensure proper operation.
- A Dryer can be placed on top of a Miele Washer; for a stacked installation. An approved Miele stacking kit must be used.

## 2.1 Electrical Requirements

- 120/240 (208) Volt, 60Hz., 15 Amp breaker
- Dryer is equipped with a 4 wire power cord equipped with a NEMA 14-30 plug, for connection to a NEMA 14-30 receptacle.

## Note

If you do not have a dedicated 15 Amp circuit for this appliance, but have a NEMA 14-20 or NEMA 14-30, 240V, 30 Amp outlet, you may be able to use a Miele "Easy Installation Kit" to simplify the electrical connection. For further information refer to Electrical Information pages in the Installation Manual.

Do not cutoff / remove the Plug from the Power Cord.



## 2.2 Plumbing Information - Condenser Models

On Condenser Model Dryers the option exist to have the condensed water exit the appliance via a Drain Line. A suitable drain system (i.e. standpipe) is required for this option.

Maximum Drain Hose length: 10 ft Maximum Drain height: 4 ft.

All Condenser Model Dryers come supplied with the following accessories to add the Drain Line option. Please do not discard the parts during an installation as they may be utilized at a later date.

- 6 ft Drain Hose
- Hose Clamp
- Hose Elbow

## 2.3 Installation Procedure

- Position Dryer at install location and level using the legs on the bottom of the appliance. The metal frame of the appliance provides the ideal location to place a level. Ensure appliance is as level.
- 2. Connect Power and perform operational check.

### **Note**

If Dryer is to be installed in combination with a Stacking Kit and Clothes Washer, the Washer must be positioned and installed first.

If an optional Laundry Stand is being installed - refer to the Accessories section of the Installation Manual for the procedure on installing the stand.

Refer to the Miele Installation Manual for further installation information and procedures.

# 3.0 Commission and Operation

# 3.1 General Operation – T1515, T1520, T1526, T1565C and T1570C

- 1. Turn on the Dryer.
- 2. Press the Door Button to open the Door.
- 3. Place laundry into the appliance
- 4. Select a program
- 5. Select option(s) as desired.
- 6. Press the Start Button.

# 3.2 Additional Function PushButtons – T1515, T1520, T1526, T1565C and T1570C

#### Door

Opens the Door or can be used to cancel a program (does not stay pushed in).

### ON / OFF

Turns the appliance On/Off, and can be used to cancel a program.

### Buzzer

Enables the buzzer, when the anti-crease stage of the program is reached.

## Load size - Full / Half

To dry a standard size load or more at peak efficiency, select press this option before starting a program.

## Low Temperature.

Utilizes lower drying temperatures for delicate fabrics.

### Start

Starts the selected program (does not stay pushed in).



## 3.3 General Operation – T1576

- 1. Turn on the Dryer.
- 2. Press the Door Button to open the Door.
- 3. Place laundry into the appliance
- 4. Select a program
- 5. Select option(s) as desired.
- 6. Press the Start Button.

## **Service Tip**

The Heaters are not powered during the initial start of a program. The Heater are powered, after the drum reverses direction.

## 3.4 Program Option Buttons – T1576

## **Low Energy (with Cottons Program)**

Normal heater operation with a lower temperature

## **Turbo (with Cottons Program)**

Normal heater operation with a higher temperature

### Gentle

Uses a lower temperature and extended program time for care of delicate fabrics.

### **Buzzer**

Enables the buzzer, when the anti-crease stage of the program is reached.

# 3.5 Condenser Drawer (Condenser Models Only)

## **General Information**

Depending on the installation, condensed water is either pumped to an on-site drain, or collected in the Condensed Water Drawer.

The Condensed Water Drawer holds approximately one (1) gallon of water. The water should be emptied from the drawer after each program completes. Should the container be full (or become filled during operation) the following occurs:

- The "Empty out container" indicator illuminates
- The buzzer sounds
- The drying program stops and enters the cooling down cycle

## To empty the Condensed Water Drawer:

- 1. Hold the cap open while emptying the Water Drawer.
- 2. Drain all water
- 3. Install the Water Drawer back into the appliance. Ensure the locks into place.

## Warning

The condensed water is not suitable for consumption.



# 3.6 Heat Exchanger (Condenser Models Only)

## Note

The heat exchanger should be cleaned at least twice a year.

- 1. Open the Door. Locate the Heat Exchanger Cover near the bottom / left of the appliance.
- 2. Turn the lever so that it is in a vertical position (as shown in figure 3-1).

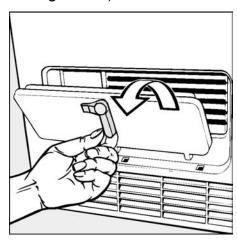


Figure 3-1: Opening the cover to the Heat Exchanger

- 3. Remove the cover.
- 4. Turn both levers on the heat exchanger so that they are vertical (as shown in figure 3-2).

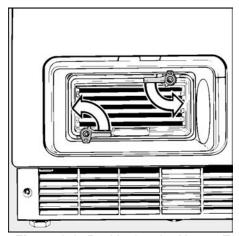


Figure 3-2: Positioning the Heater Exchanger Levers

5. Pull out the heat exchanger.

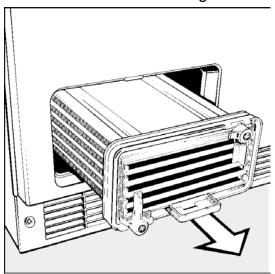


Figure 3-3: Removing the Heat Exchanger

6. Clean the Heat Exchanger, by running water through the louvers to clean the assembly of lint and dust.

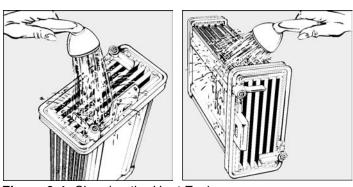


Figure 3-4: Cleaning the Heat Exchanger

- Stand the Heat Exchanger lengthwise on a towel until it dries.
- Replace the Heat Exchanger by reversing the steps above.
- Ensure the Heat Exchanger is fully seated into position and the cover is closed and locked.



# 4.0 Description of Function

## 4.1 Vented Dryer – Principle of Operation

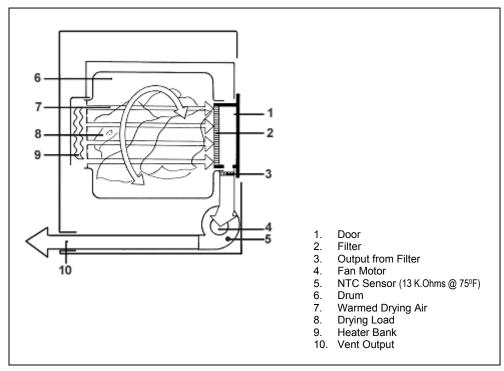


Figure 4-1: Vented Dryer Airflow

## Refer to figure 4-1.

The Fan Motor (Item 4) is responsible for drawing heated air from the Heater Bank (Item 6). The heated air passes through the Drum (Item 9), where moisture from the Drying Load (7) is absorbed. The air is filtered as it passes through the Filter (Item2) located in the Front Door (Item 1). The flow continues through the Fan Motor (Item 4) and exits via the Vent Output (Item 5).



# 4.2 Condenser Dryer – Principle of Operation

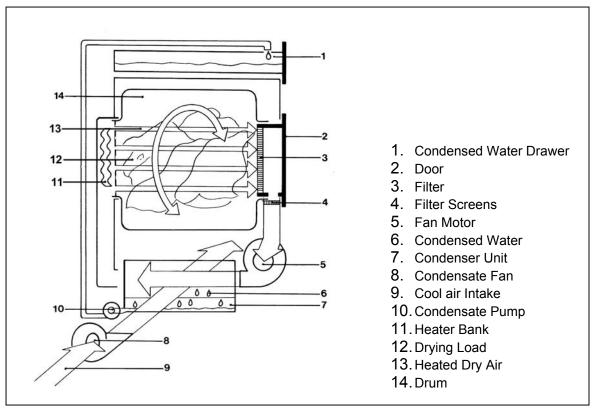


Figure 4-2: Condenser Dryer Airflow

## Refer to figure 4-2.

The Fan Motor (Item 5) is responsible for drawing heated air from the Heater Bank (Item 11). The heated air passes through the Drum (Item14), where moisture from the Drying Load (12) is absorbed. The air is filtered as it passes through Filters (Items 3 & 4). Air continues through the Fan Motor (Item 5) and through the Heat Exchanger, where the moisture content (in the air) condenses into water.

The Condenser System draws air from outside the appliance via the Condensate Fan (Item 8). The outside air passes through the Heat Exchanger in a 90° direction from the drying air. The temperature difference between the two allows moisture (condensation) to form on the Heat Exchanger. As the moisture level increases, water droplets collect in a trough.



When the condensed water accumulates to a specific value the Condensate Float Switch actuates. The Electronic energizes the Condensate Pump (Item 10) and the water is pumped to the Condenser Drawer (Item 1). Should the Condenser Drawer (Item 1) become full prior to the end of a cycle the "Empty Out Container" LED is illuminated and the program stops.

## Note

Condenser model Dryers can be configured with an optional drainline. With this configuration the condensed water is pumped directly into the drain, therefore emptying the Condenser Drawer is not necessary.



# 4.3 Fan Motor (M5) Assembly

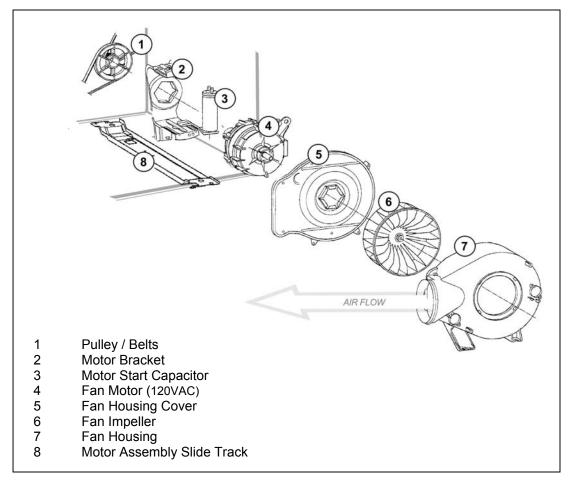


Figure 4-3: Motor Assembly

## Refer to Figure 4-3.

The Fan Motor (Item 4) is a bi-directional 120VAC motor. Directional switching for the motor is performed within the Power Electronic. Assistance to the motor during start-up; is provided by the Motor Start Capacitor (Item 3).

The Fan Motor (Item 4) provides drive to the Drum via a Drive Belt and Reduction Pulley (Item 1) mounted on the Motor Bracket (Item 2).



The Fan Motor also provides direct drive to the Fan Impeller (Item 6) within the Fan Housing (Item 7). As the Fan Impeller rotates, airflow is created and draws heated air from the Heater Bank, across the drum and through the Filter(s). The air exiting the Fan Housing (Item 7), is routed to the vent system; or through the Heat Exchanger on Condenser Model Dryers.

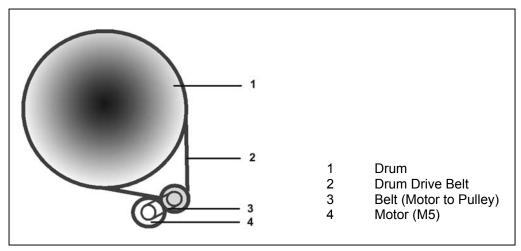


Figure 4-4: Drum Drive Belts and Reduction Pulley



## 4.4 Residual Moisture Sensing

There are two variables that determine the Dryer run time; initial moisture content in the laundry and the program selected.

At the beginning of the cycle, the moisture content within the laundry is measured by the Residual Moisture Sensor. This value is used by the electronic to calculate the approximate program duration.

During drying, the level of moisture within the laundry decreases. And is reflected by the status of the Drying Stage Reached LED's. When the moisture within the laundry reaches the selected program value the Dryer enters the cooling down stage, followed by the Anti-Crease mode.

## **Important**

The electronic limits all moisture sensing programs to a maximum duration of 240 minutes. Should 240 minutes be reached, the cooling down stage is initiated; however the Anti-Crease feature is skipped when this occurs.

The **Cooling Down** LED remains illuminated until the appliance is shut off - via the On/Off Button.

## 4.5 Temperature Monitoring

# Temperature Monitoring – T1515, T1520, T1526, T1565C & T1570C

Drum temperature is monitored by the NTC (Negative Thermal Coefficient) Temperature Sensor; mounted in the front of the Fan Housing.

As the temperature within the drum area increases, the resistance of the sensor decreases. The sensor resistance is monitored by the microprocessor and is used to calculate the drum temperature. The temperature is regulated by the electronic via the two (2) Heater Relays. When the Electronic energizes the Heater Relay(s), higher voltage contacts within the relay(s) close and allow power to the Heater Element(s).

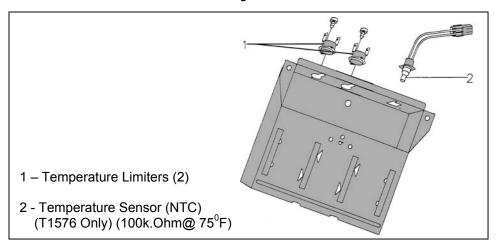
# Temperature Monitoring – T1576 Only

Drum temperature is monitored by two NTC (Negative Thermal Coefficient ) Temperature Sensors. One Sensor is mounted in the Heater Bank Assembly, the second Sensor is mounted in the Fan Housing. Both sensors are monitored by the microprocessor; and are used to calculate the drum temperature.

The temperature is regulated by the electronic via the two (2) Heater Relays. When the Electronic energizes the Heater Relay(s), higher voltage contacts within the relay(s) close and allow power to the Heater Element(s).

Should the Main Motor fail to operate, airflow does not occur; resulting in increased temperatures in the Heater Bank and drum area. Two (2) Temperature Limiters (Figure 4-5, Item 1) are affixed to the Heater Bank and electrically interrupt the heating circuit should the temperature exceed a preset threshold. The appliance can no longer produce heat; as the Temperature Limiters are non-resettable SOD (Single Operation Device) devices in accordance with product approvals.

## 4.6 Heater Bank Assembly



**Figure 4-5:** Heater Bank Assembly (T1576 shown; all other T1500 series dryers do not have a Temperature Sensor in the Heater Bank)

The Heater Bank Assembly is comprised of two (2) electrically isolated Heater Elements. Temperature Limiters are secured to the top of the assembly and are electrically in series to the Heater Elements. The Temperature Limiters are non-resettable SOD ( $\underline{\mathbf{S}}$ ingle  $\underline{\mathbf{O}}$ peration  $\underline{\mathbf{D}}$ evice) devices in accordance with product approvals.

### Note

The T1576 Dryer has an additional NTC sensor installed at the top of the Heater Bank Assembly, next to the Thermostats (Figure 5).

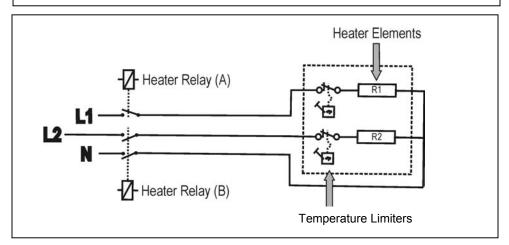


Figure 4-6: Heater Circuit



# 4.7 Control (Upper) Electronic

The Electronic Control performs the following functions:

- Program sequence monitoring
- Residual Moisture Sensing System monitoring
- Air temperature monitoring and control
- Power Electronic switching (relay) control

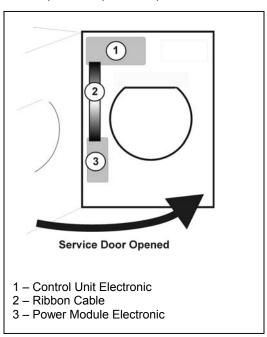
## 4.8 Power (Lower) Electronic

The Power Electronic supplies power for:

- The relays on the power module
- Residual Moisture Sensor Circuit
- The CPU / Microprocessor

# 4.9 Electronic Locations by Model Number

## T1515, T1520, T1526, T1565C & T1570C



**Figure 4-7**: Electronic Locations (T1515, T1520, T1526, T1565C & T1570C)



## T1576

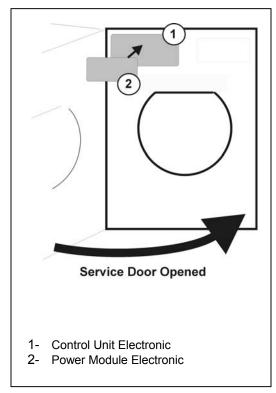


Figure 4-8: Electronic Locations on T1576

# 5.0 Service and Maintenance

## Note

Service and repair work should only be performed by qualified personnel; in accordance with applicable codes.

## Warning

The appliance should be unplugged from the power source before any service and /or maintenance procedures are performed.

## 5.1 Lid - Removal

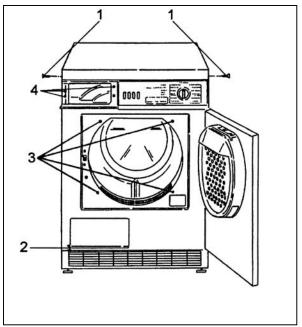


Figure 5-1: Lid Removal and Front Panel Access

## Refer to figure 5-1.

- 1. Remove the screws from the side edges of the lid (Item 1).
- 2. Lift the lid at the front, slide it towards the rear and lift to remove.



# 5.2 Front Panel – Opening, Condenser Models

Refer to figure 5-1.

- 1. Remove the four (4 )screws (Item 3).
- 2. Remove the Condenser Drawer and unscrew the three (3) screws (Item 4).
- 3. Press the spring clip (Item 2) down with the lid opener and open the front panel.

# 5.3 Front Panel – Opening, Vented Models

- 1. Remove the left section of the fascia panel using a lid opener (Figure 5-2 Item 1).
- 2. Remove the four (4) screws (Figure 5-1 Item3).
- 3. Remove the two (2) screws (Figure 5-1 Item 4)
- 4. Press the spring clip (Figure 5-1 Item 2) down with the lid opener and open the front panel.

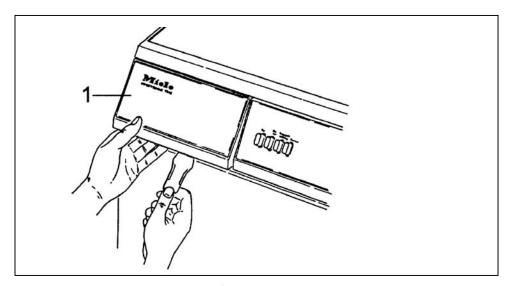
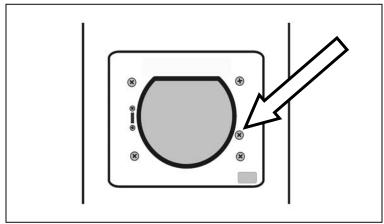


Figure 5-2: Removing the left section of the fascia panel.

# 5.4 Power Electronic – Removal T1515, T1520, T1526, T1565C and T1570C

- 1. Open the front Door and remove the screw near the 4 o'clock position (Figure 5-3).
- 2. Open the Front Panel (5.2 or 5.3)
- 3. Slide the Power Module Electronic upward to release from the frame
- 4. Disconnect the electrical connections and remove the electronic.



**Figure 5-3:** Securing screw for Power Electronic on the T1515, T1520, T1526, T1565C and T1570C model Dryers.

# 5.5 Power Electronic – Removal (T1576)

## Note

The Power Electronic is fitted to the rear of the Control Electronic. Should replacement of either electronic be necessary, each Electronic is replaced individually.

## Refer to figure 5-4.

- 1. Open the front panel (5.2 or 5.3).
- 2. Disconnect the electrical connections to the Power Electronic (Item 1).
- 3. Remove the fixing screw (Item 8).
- 4. Press the retainer (Item 2) and slide the Power Electronic to remove it from the holder (Item 5).

## **Service Tip**

Screw (Figure 5-4, Item 8) is shorter and should only be used to secure the power module.

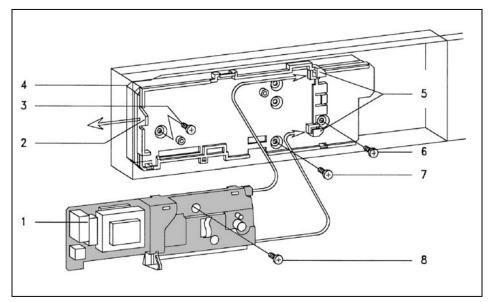
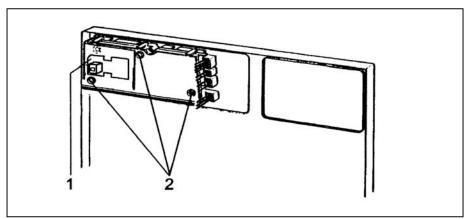


Figure 5-4: Removing the Power Electronic on the T1576 Dryer.

# 5.6 Control Electronic – Removal T1515, T1520, T1526, T1565C & T1570C



**Figure 5-5:** Control Electronic removal on T1515, T1520, T1526, T1565C and T1570C Dryers.

### Refer to figure 5-5.

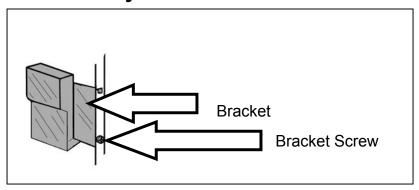
- 1. Remove the Program Selector Knob.
- 2. Open the front panel (5.2 or 5.3)
- 3. Remove the three (3) screws (Item 2).
- 4. Disconnect the electrical connections
- 5. Remove the Control Electronic.

# 5.7 Control Electronic – Removal

- 1. Remove the Program Selector Knob.
- 2. Open the front panel (5.2 or 5.3)
- 3. Remove the Power Electronic (5.4 or 5.5)
- 4. Remove the three (3) screws that hold the Electronic.
- 5. Disconnect the electrical connections; remove the electronic.



# 5.8 Heater Relays - Access



**Figure 5-6:** The Heater Relay Bracket is attached to the right side vertical section of the frame, and can be easily be accessed with the Service Panel Opened.

## Warning

Ensure the appliance is disconnected from the main power, before attempting to remove the bracket.

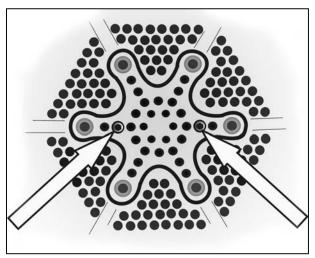
- 1. Open the Front Panel (5.2 or 5.3).
- 2. Locate the Heater Relay Bracket on the right side vertical section of the frame.
- 3. Remove the securing screw; lift bracket from frame.
- 4. Position bracket to allow access to the Relay(s).
- 5. Slide each Relay from the bracket to release.

## 5.9 Rear Drum Panel - Removal

- 1. Open the front Door of the Dryer.
- 2. Turn the drum by hand so that the two larger holes are horizontally across from each other; as shown in Figure 5-7.
- 3. Place a 5mm. Allen Wrench through each hole and completely loosen both bolts by turning them counterclockwise, until you feel them release from the threads.

#### **Service Tip**

The bolts will not fall out even when completely loosened.



**Figure 5-7:** Drum positioned with the two largest holes horizontal; this permits access to the Drum Bearing Bolts.

- 4. Remove the six (6) Allen Head Bolts from the perimeter of the rear panel.
- 5. From inside the drum, push the drum upward and pull the rear panel outward to remove.

#### Service Tip

If the panel does not release when the drum is lifted in step 5; ensure the two bolts in step 3 (Figure 5-7) 8 are completely loosened.

#### Note

The Rear Drum Panel will not fit through the front Door. Reposition the panel within the drum area – as needed, during servicing. Do not place unnecessary weight or pressure on the panel.



# 5.10 Heater Bank - Access

- 1. Remove the Rear Drum Panel (5.9)
- 2. Remove the three (3) bolts from the Heater Bank Cover (Figure 5-8).
- 3. Lift the Heater Bank Cover to remove.

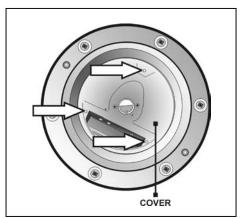


Figure 5-8: Heater Bank Cover retaining bolts.

### Refer to figure 5-9.

- 4. Unscrew the heater bank retainers (Items 1 and 2).
- 5. Disconnect the electrical connections (Item 3).
- 6. Pull the Heater Bank upwards out of its duct.

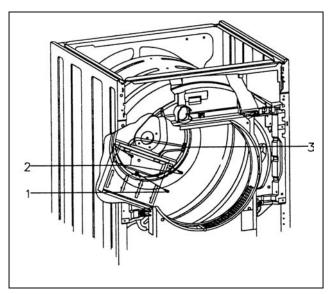


Figure 5-9: Heater Bank removal.

## 5.11 Fan Motor – Removal

- 1. Open the Front Service Panel (5.2 or 5.3).
- 2. Remove the Vent-Ring Assembly (Figure 5-10) and the Air Duct (on vented models) or Coupler (on Condenser) models.

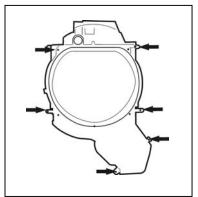


Figure 5-10: Vent Ring Assembly

3. Remove the two (2) Fan Motor Bolts (Figure 5-11).

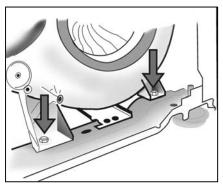


Figure 5-11: Fan Motor Bolts.

- 4. Slide the Fan Motor toward the front of the appliance, out if the locking track.
- 5. Lift the Fan Motor; tilting it slightly upward toward the back to release it from the belt.
- 6. Position the Fan Motor toward the front of the appliance; disconnect the electrical connection.

### Warning:

Before handling the Fan Motor Assembly, ensure the capacitor is fully discharged of stored energy.

7. Lift the motor from the appliance to remove.



# 5.12 Condenser Assembly – Removal

## **Service Tip**

To access to The Condenser Pump and/or Float Switch; the Condenser Assembly must be removed from the appliance.

- 1. Remove the Coupler between the Fan Motor Housing and the Condenser Assembly.
- 2. Remove the Fan Motor (5.11)
- 3. Remove the Heat Exchanger form the Condenser (3.6).
- 4. Disconnect the electrical connections.
- 5. Slide the Condenser Assembly toward the front of the appliance and lift to remove.

# 5.13 Condenser Fan – Removal

- 1. Lay the appliance on it's back
- 2. Remove the four (4) screws that secure the Bottom Cover (Figure 5-12) and lift the cover to remove it from the appliance.

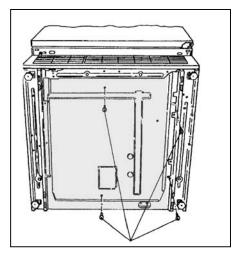


Figure 5-12: Bottom Cover Screws.

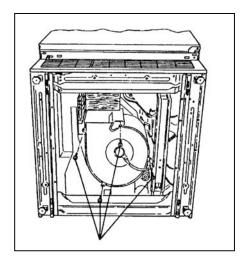


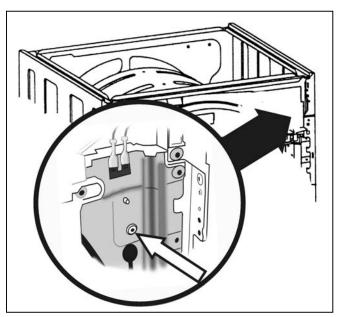
Figure 5-13: Condenser Fan Screws.

- 3. Remove the four (4) screws that secure the Condenser Fan to the Condenser Assembly (Figure 5-13).
- 4. Disconnect the electrical connection.
- 5. Lift the Condenser Fan to remove it from the Condenser Assembly.



# 5.14 Residual Moisture Sensor - Removal

- 1. Open the Front Service Panel (5.2 or 5.3).
- 2. Locate the Residual Moisture Sensor (Figure 14)
- 3. Remove the single retaining screw.

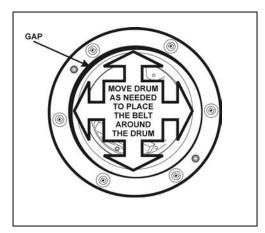


**Figure 5-14:** The Residual Moisture Sensor is attached to the frame near the 2 o'clock position with a single retaining screw.

- 4. Lift the Sensor Assembly (with the bracket) from the appliance.
- 5. Note / mark wire positions for re-assembly.
- 6. Disconnect the electrical connections.

## 5.15 Drum Drive Belt

- 1. Remove the lid (5.1)
- 2. Open the Front Panel (5.2 or 5.3).
- 3. Remove the Rear Panel of the drum (5.9).
- 4. Remove the Heater Bank Cover (5.10 step 2)
- 5. Lift upward on the Drum, so a small gap exist between the edge of the Drum and the Heater Duct (Figure 15).



**Figure 5-15:** Positioning the drum to form a gap. This is necessary to routing the Drum Drive Belt around the drum.

- 6. Route the belt through the gap and onto the Drum.
- 7. From the top of the appliance, ensure the Drum Belt is positioned and aligned correctly.
- 8. Access the rear of Fan Motor through the space below the Drum. Lift upward on the Fan Motor Tensioning Pulley, place the drive belt onto the pulley. The Tensioner Pulley should be holding the Dum Belt in position.
- 9. Ensure Drum Belt is aligned between the motor and the drum.
- 10. Hand spin the Drum <u>slowly</u> (this allows any minor alignment discrepancies to be corrected).

#### Service Tip

Due to the limited space beneath the drum, access to the rear area of the Fan Motor is via the space along the inner section of the right side panel (above the fan motor housing).

#### Note

Belt installation can be simplified by using the Miele "Fitting Lever" (Part #05057330).



# 6 Fault Diagnosis

# 6.1 Service Mode – T1515, T1520, T1526, T1565C & T1570C

#### **Access**

- 1. Switch Off the appliance.
- 2. Release all Push-Buttons.
- 3. Turn the Program Selector Switch to the Finish/Start (12 o'clock) position.
- 4. Switch the appliance On.
- 5. Press and release the Low Temperature Button (or Load Size Button depending on the model number) 3 times in quick succession within 10 seconds.

## Acknowledgement Indicator

The Drying LED flashes to show the Service Mode is activate.

## **Navigation**

Refer to Table 6-1. Turn the Program Selector Knob to the desired position, then press START.

To exit the Service Mode, Switch **Off** the appliance.

Selector Switch Position	Function
Finish / Start	Buzzer pushButton test
Cotton Extra Dry	Heater on
Cottons Normal +	Drum drives left (vented models only)
Cottons Normal	Buzzer Activated
Cottons Hand Iron	Drum drives right (vented models only)
Cottons Hand Iron &	Condenser Fan
	(Condenser models only
Cotton Appliance Iro 66	Condensate Pump
	(Condenser models only)
15 minutes Cool Air	See Residual Moisture Sensor Test
20 minutes Warm Air	See Residual Moisture Sensor Test
Permanent Press Hand Iron	LED test (LED's illuminated)
Permanent Press Normal +	Dryer type: Continuous Tone = Vented,
	Intermittent Tone = Condenser

Table 6-1: Service Mode Functions (T1515, T1520, T1526, T1565C and T1570C).



# **6.2** Service Mode – T1576

#### Access

- 1. Switch Off the appliance.
- 2. Turn the Program Selector Switch to 12 o'clock.
- 3. Press and hold the Gentle and Start Buttons.
- 4. Switch the appliance On.
- 5. Release the Buttons

## **Acknowledgement Indicator**

The Drying LED flashes to show the Service Mode is activate.

### **Navigation**

- Refer to the Table 6-2. Turn the Program Selector Knob to the desired position; press START to activate the function.
- To exit the Service Mode, Switch Off the appliance.

Selector switch position	Press Start to activ	vate
Extra Dry	Main motor operated direction	es 10 seconds in each
Normal +	Vacant	
Normal	One heater and Ma	ain motor operates
Hand iron <b></b>	Main motor operat	es
Hand iron ♦ ♦	Both heater and m	ain motor operates
Rotary iron	Residual moisture	sensor Test.
		Cooling down lights up = OK
		Cooling down flashes = fault
Fluff	Residual moisture sensor Test.	
		Cooling down lights up = OK
		Cooling down flashes = fault
20 mins.	LED test	
Line Dry	Button test.	
Woolens	Fault Codes – Refer to 6.3	
Perma Press Hand iron	Vacant	
Perma Press Normal	Vacant	
Perma Press Normal+	Vacant	

Table 6-2: Service Mode Functions

## 6.3 Fault Codes - T1576

#### **Initial Requirements**

- 1. Switch the appliance On.
- 2. Turn the Selector Knob to the Cotton Extra Dry position.
- 3. Press the Start Button to begin the program.
- 4. Note the status of the Anti-Crease LED.

The Anti-Crease LED is lit STEADY	No Fault Stored
The Anti-Crease LED is	Fault Stored – Proceed to Access
FLASHING	steps below

## Access (Retrieval)

- 1. Access the Service Mode (6.2)
- 2. Turn the Selector Knob to Woolens position.
- 3. Press the Start Button
- 4. Note the illuminated LED's.
- 5. Refer to Table 6-3 to determine the stored Fault.
- 6. Switch the appliance Off.
- 7. Perform the necessary service steps to rectify the cause of the fault; proceed to the "Delete a Stored Fault Code" below.

LED <u>Lit Steady</u>	Component
Rotary Iron	Fan NTC open circuit
Hand Iron	NTC at heater bank open circuit.
Normal	NTC at heater bank short circuit
Rotary Iron & Hand Iron	Fan NTC short circuit
Normal and Rotary Iron	Max drying time exceeded, (180 minutes)

**Table 6-3:** Fault Code Storage (T1576)

#### **Delete a Stored Fault Code**

- 1. Access the Service Mode (6.2)
- 2. Turn the Selector Knob to Woolens position.
- 3. Press the Start Button.
- 4. Press and hold the Gentle Button.
- 5. Press the Start button.
- 6. Release the Gentle button the appropriate LED turns off.
- 7. Switch the appliance Off.

# 6.4 Programming Mode – T1576 Only

#### Access

- 1. Switch Off the appliance.
- 2. Turn the Program Selector Switch to 12 o'clock.
- 3. Press and hold the Gentle and Buzzer Buttons.
- 4. Switch the appliance On.
- 5. Release the Buttons

## **Acknowledgement Indicator**

The Drying & Cooling Down LED's flash to show the Service Mode is activate.

## **Navigation**

- Refer to the Table 6-4. Turn the Program Selector Knob to the desired position; press START to activate the function.
- The programmed value is indicated by the status of the Rotary Iron LED. Press Start to toggle between the options.
- To store the selected setting, switch Off the appliance while the Program Selector Knob is in the desired position and the Rotary Appliance Iron is displaying the desired setting.

Selector Switch Position	Function	Option(s)	Status of Rotary LED
Cottons Extra Dry	Residual	Standard*	Off
	Moisture Level	Reduced	On
Cottons Normal	Memory	No*	Off
	Function	Yes	On
Cottons Hand Iron	Anti-Crease	No*	Off
	Action	Yes	On

<sup>\*</sup> Factory Setting (Do Not Adjust)

**Table 6-4:** Program Mode Values (T1576)

# 6.5 Residual Moisture Sensor Circuit Test T1515, T1520, T1526, T1565C and T1570C

## **Purpose**

This serves as a test of the complete moisture sensing circuit between the control module and the moisture sensor.

#### **Procedure**

- 1. Electrically connect one lifter bar and the drum body using clip leads or a wire to simulate wet laundry and high conductivity.
- 2. Select "15 Minutes Cool Air" In the service mode and wait for approximately 60 seconds.

The "Cooling down" LED Illuminates	Circuit Is In proper working order
The "Cooling down" and "Drying" LEDs	(Resistance of connection between
flash alternately	controls and sensors Is too high or
	open circuited).

- 3. Disconnect the wires to the drum and lifter bar at the pickup connection plug.
- 4. Jump the wires leading to the electronic unit (short circuiting the moisture sensing circuit).
- 5. Select "15 minutes cool air" In the service mode and wait for approximately 60 seconds.

The "Cooling down" LED Illuminates	Check circuit outside of the Control
	Electronic. (e.g.~ slip rings, wiring, lifter
	bars, sensor contacts etc).
The "Cooling down" and "Drying" LEDs	Replace the Control Electronic.
flash alternately	·

Proceed to step 6.



- 6. Remove the wire jumper from inside the drum.
- 7. Select "20 Minutes Warm Air" in the service mode and wait for approximately 60 seconds.

The "Cooling down" LED Illuminates	Circuit is In proper working order
The "Cooling down" and "Drying" LEDs flash alternately	Circuit defective (Lifter bars drum partially short-circuited. Resistance is < 50 M.Ohms

- 8. Disconnect the wires to the drum and lifter bars at the pickup connection plug.
- 9. Select "20 Minutes Warm Air" in the service mode and wait for approximately 60 seconds.

The "Cooling down" LED Illuminates	Check circuit outside of the Control Electronic. (e.g.~ slip rings, wiring, lifter bars, sensor contacts etc).
The "Cooling down" and "Drying" LEDs flash alternately	Replace the Control Electronic.

# 6.6 Residual Moisture Sensor Circuit Test T1576

#### Purpose

This serves as a test of the complete moisture sensing circuit between the control module and the moisture sensor.

#### **Procedure**

- 1. Electrically connect one lifter bar and the drum body using clip leads or a wire to simulate wet laundry and high conductivity.
- 2. Select "Rotary Iron" In the service mode. Press Start and wait for approximately 30 seconds.

The "Cooling down" LED Illuminates	Circuit Is In proper working order
The "Cooling down" and "Drying" LEDs	(Resistance of connection between
flash alternately	controls and sensors Is too high or
	open circuited).

- 3. Disconnect the wires to the drum and lifter bar at the pickup connection plug.
- 4. Jump the wires leading to the electronic unit (short circuiting the moisture sensing circuit).
- 5. Select "Fluff" position in the service mode, pres Start. Wait approximately 30 seconds.

The "Cooling down" LED Illuminates	Check circuit outside of the Control Electronic. (e.g.~ slip rings, wiring, lifter bars, sensor contacts etc).
The "Cooling down" and "Drying" LEDs flash alternately	Replace the Control Electronic.

Proceed to step 6.



- 6. Remove the wire jumper from inside the drum.
- 7. Select "Timed Cycles Fluff" in the service mode and wait for approximately 60 seconds.

The "Cooling down" LED Illuminates	Circuit is In proper working order
The "Cooling down" and "Drying" LEDs flash alternately	Circuit defective (Lifter bars drum partially short-circuited. Resistance is < 50 M.Ohms

- 8. Disconnect the wires to the drum and lifter bars at the pickup connection plug.
- 9. Select "Timed Cycles Fluff" in the service mode and wait for approximately 30 seconds.

The "Cooling down" LED Illuminates	Check circuit outside of the Control Electronic. (e.g.~ slip rings, wiring, lifter bars, sensor contacts etc).
The "Cooling down" and "Drying" LEDs flash alternately	Replace the Control Electronic.

# 6.7 Dryer Takes too Long to Dry Clothes

- Fluff Filter clogged
  - Remove and Clean Filter
- Condenser Air Path Clogged (Condenser Models Only)
  - Remove and Clean Heat Exchanger
- Vent Clogged (Vented Models Only)
  - Remove Vent if appliance operates OK, vent needs to be inspected / cleaned
- One Heater Element is Not Operating
  - Ensure both Live (120V) lines are present & both elements are operating
- Clothes are not spun out enough from washer
  - Increase spin speed on the washer.

# 6.8 Residual Moisture Sensing Inoperative

- The circuit is not operating normally
  - Perform the Residual Moisture Sensor Test (6.4 or 6.5)
  - Isolate and Repair Fault

# 6.9 Dryer Door Keeps Popping Open (all models except T1576)

- The temperature monitor (high temp cut-out) in the heater bank has switched state
  - Check / Clean Fluff Filter
  - Check / Clean Vent (Vented Models)
  - Check / Clean Heater Exchanger (Condenser Models)
  - Check Operational Temperature
  - Check Heater Relay Switching Circuit
  - Replace the Temperature Monitor



# 6.10 Water Leaks - Condenser Dryer

- The Condenser Water is leaking from the appliance
  - Ensure drawer is being emptied when needed
  - If appliance is configured with a Drain Hose connection...Check: the hose is free from sharp bend, kinks, clogs or other abnormalities and the stopper is fitted at the water port above the condenser drawer.
  - Remove and Clean the heat exchanger
  - Ensure the condenser water path is not clogged
  - Check for proper operation of the Condenser Water Level
     Switch and Condenser Water Pump

# 6.11 Noise – Light Repetitive Clicking (about every second while drum is turning)

- Inspect the Residual Moisture Sensor Pickup / Drum Path
  - Check the for worn pickup brushes
  - Clean the pickup path around the drum
  - Ensure the sensor is mounted correctly
  - Check that the sensor assembly has adequate spring tension

# 6.12 T1576 Dryer shuts down after less than 1 minute of operation

- If the drum does not contain clothes (or only contains dry clothes) the appliance will shut down. This is normal operation.
  - Operate the appliance with a damp load of laundry

# 6.13 Rumbling Sound While in Operation

- Excessive lint build-up or foreign object in the fan housing / impeller area
  - Clean / Inspect Motor, Fan Housing and Fan Impeller