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# 1 SAFETY

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- ⚠ **Danger of electric shock.**
- ⚠ **Danger of fire or explosion from gas.**
- ⚠ **WARNING** Modern appliances are very powerful and use high technology devices to safely control that power. Failure to use the correct procedures and the approved parts can create serious hazards for the person servicing the appliance and for the user of an appliance with a bad repair. If you do not know how to service the appliance, do not attempt to do so!

To avoid the risk of serious injury or death while servicing these appliances:

- ⚠ Be certain that all power is removed from the appliance before beginning service.
- ⚠ Carefully follow all servicing instructions. Verify the instructions if there are any that you don't fully understand.
- ⚠ Read and heed all Cautions and Warnings on the appliance and those with the replacement parts.
- ⚠ Use caution and proper protective gear when handling chassis panels. Some of the edges that are not normally exposed may be very sharp.

To avoid risk of serious injury or death to the users of the appliances:

- ⚠ Carefully follow all service instructions.
- ⚠ Use only parts authorized for the application.
- ⚠ Know the testing requirements needed to verify the safety of the service action.
- ⚠ Use proper, calibrated test equipment.
- ⚠ Do all indicated safety tests and record results.

## 2 INSTALLATION

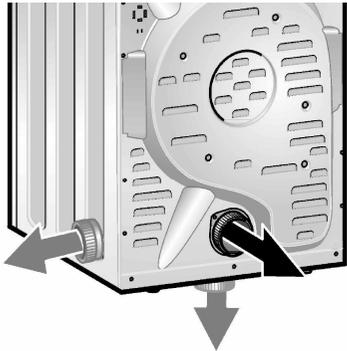
### 2.1 Basic installation

Dryers shall be installed according to national and local codes.

### 2.2 Exhaust vents

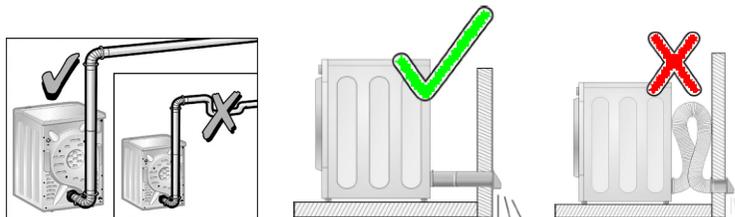
#### 2.2.1 Locating exhaust vent

Vent is factory installed to the rear of dryers. Rear factory vent can be changed to the bottom or right side using kits (sales accessories).



#### 2.2.2 Installing vent ducts

For best drying, use shortest possible duct length and fewest # of elbows.



Use the table below when selecting ducting.

# 90° Turns / Elbows	Maximum Length	
	Rigid Duct	Flexible Duct
0	20 m	14 m
1	17 m	11 m
2	14.5 m	9 m
3	12 m	7 m
4	9 m	5 m

### 2.3 Feet (leveling legs)

Using a level front to back and side to side, adjust feet (leveling legs) until dryer is level. When moving dryers, screw in feet completely before moving dryers to avoid damage.



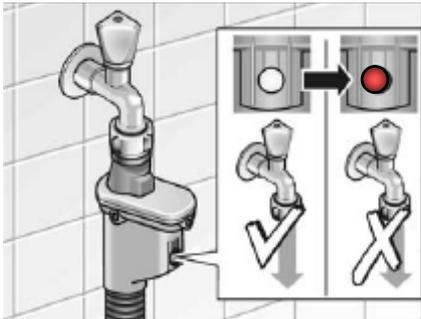
To adjust feet (leveling legs), rotate left to right to lower dryer.

#### NOTICE

Do not slide dryer across the floor if height-adjustable feet have been extended. Feet and/or dryer base may be damaged if dryer is slid across floor with height-adjustable feet extended.

## 2.4 AQUASTOP® (aqua secure)

AQUASTOP® water inlet hoses prevent water from leaking. They connect like standard hoses with no special installation needed. If an inner hose ever should leak, the hose shuts off and its indicator shows **red**. Hoses are one-time and must be replaced when indicators are **red**.



## 2.5 General installation warnings

### NOTICE

DO NOT push against the dryer door glass. Risk of breakage!



### ⚠ WARNING

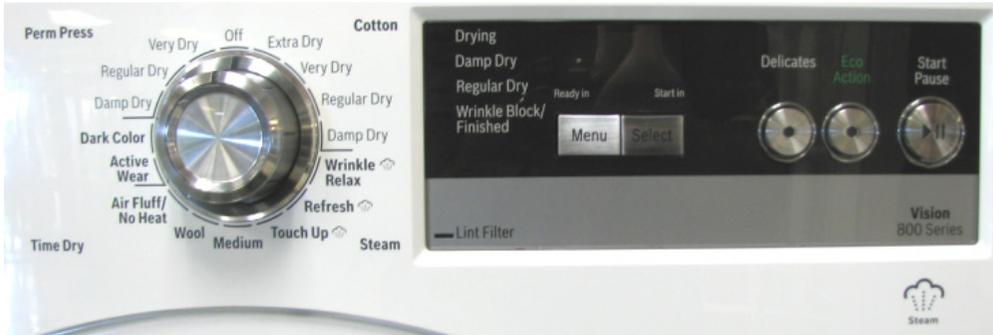
Appliance must not be mounted on a pedestal for stacked installations.

The washer must not be stacked on top of the dryer. Serious injury and damage may result.

### 3 OPERATION

#### 3.1 Controls

Controls are shown below. Rotate the knob to the desired drying program and push the *Start/Pause* button.



There are option buttons for delicate fabrics and saving energy. Dryer status is shown in LED's at the left of the display.



#### LED Indicators Vary by Model

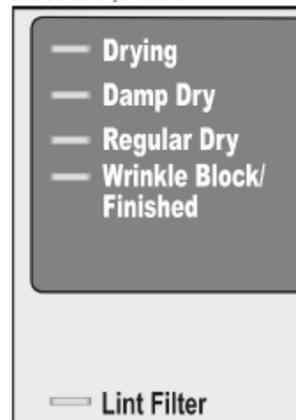
300 Series Dryer LED's



500 Series Dryer LED's



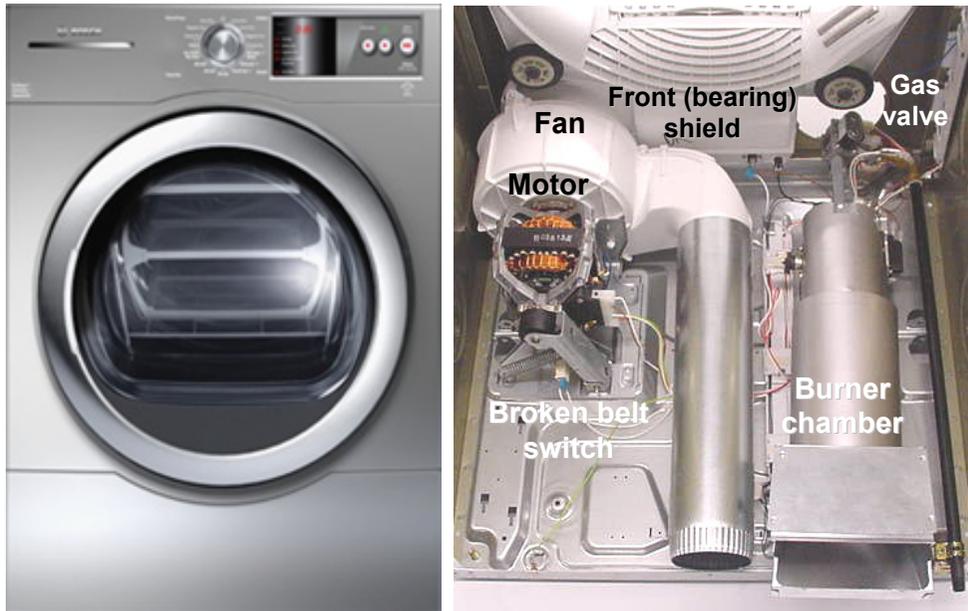
800 Series Dryer LED's



## 4 COMPONENTS

### 4.1 WTVC Gas Dryer Components

Basic components are control module, gas burner, gas igniter, flame sensor, drive motor with fan, two NTC temperature sensors, two hi-limit temperature protectors, moisture sensor and broken belt switch.

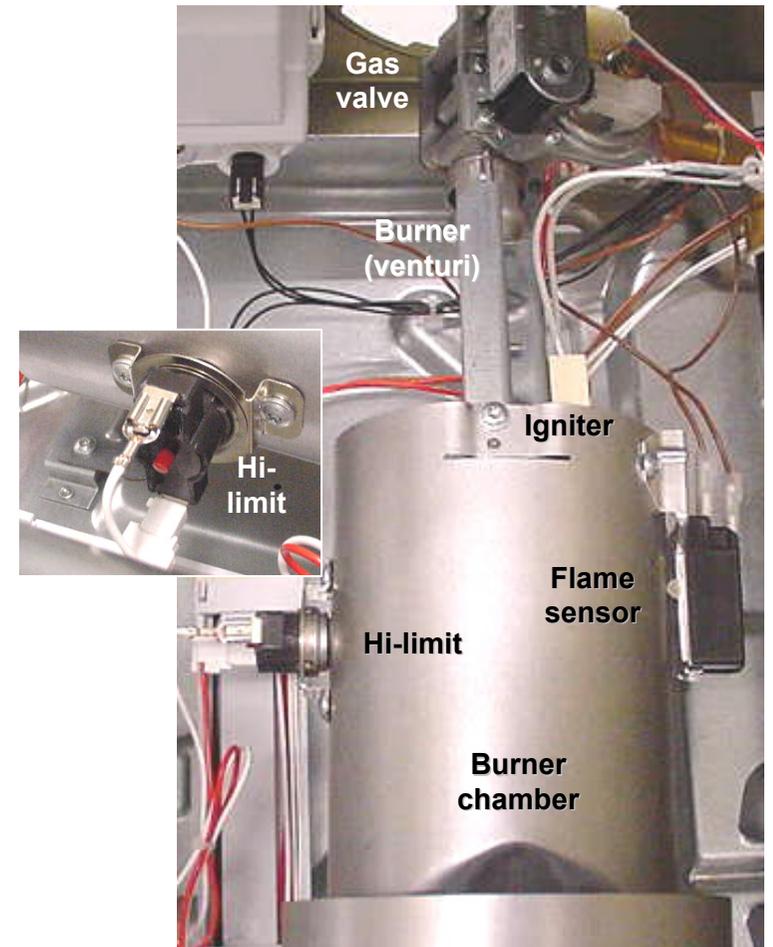


Gas dryers are set up for natural gas and can be converted to LP using a kit (WTZ1280).

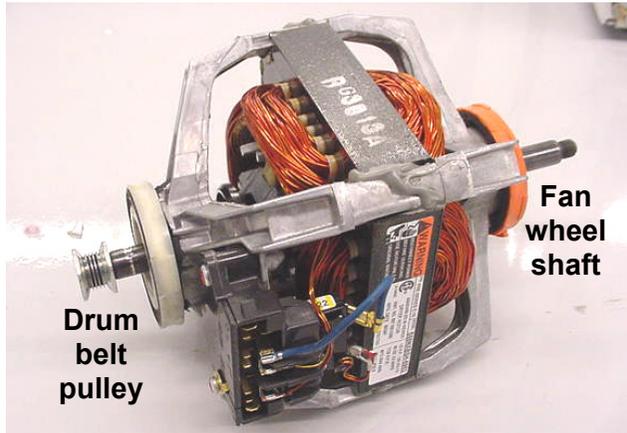
#### 4.1.1 Gas burner assembly

Burner assemblies include an NTC temperature sensor and a manually resettable hi-limit temperature protector. The NTC is mounted at the rear of the assembly near where it attaches to the vent.

Push **red** button to reset Hi-limit protector.



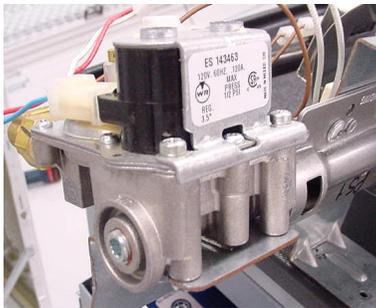
#### 4.1.2 Drive motor



Motor is rated 120 VAC, 60 Hz, 1/3 HP (248.5 W), 5.0 A, 1725 RPM, 40°C ambient, class B insulation. It drives the fan (in front) and drum (in rear, using pulley shown).

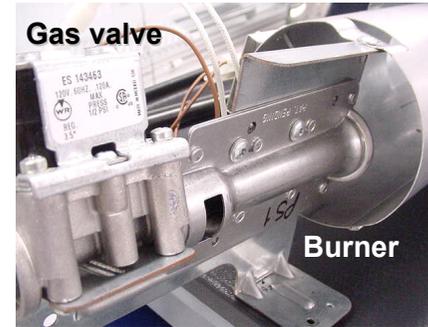
#### 4.1.3 Gas valve

The gas valve, whether natural gas or LP, includes the appropriate regulator and jet (orifice).



#### 4.1.4 Burner

The burner mounts next to the gas valve jet (orifice). A burner ring is used for natural gas dryers to optimize performance.



The gas dryer burner circuit runs through the motor & Hi-limit. The connection through the motor cuts out the burner if the motor isn't running.

#### 4.1.5 Gas leak testing (using soapy water)

Whenever gas connections are changed or disturbed, they should be checked for leaks using a soapy water solution.

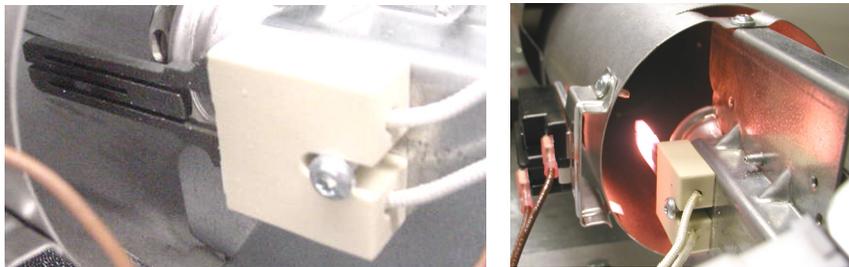
1. Reconnect all gas connections and turn on the gas supply to the dryer, using household gas inlet pressure.
2. Apply soapy water solution with a spray bottle. Spray union and brass connections completely.
3. Watch connections carefully for about two minutes. If there is a leak, bubbles will form in the area of the leak. Soapy water will not stay on connections long, so spray more solution on them when soapy water isn't visible.
4. If bubbles form around the union, tighten the connection and repeat steps 3 and 4 until no bubbles form.

5. If bubbles form around the brass connector or on the gas valve itself, replace the leaking valve with a new one and repeat steps 3, 4 and 6.
6. Clean all soapy water solution with a rag or paper towel.
7. **Never** use a flame to check for gas leaks!



#### 4.1.6 Igniter

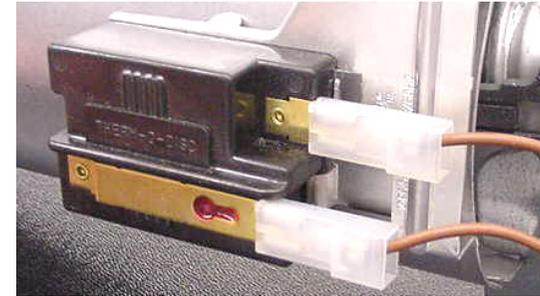
Igniters glow after 30 seconds, reliably igniting gas flames.



Igniters can be damaged if not handled with care.

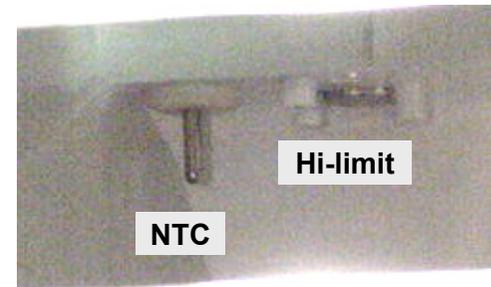
#### 4.1.7 Flame sensor

Flame sensors detect flame out in 30 – 60 seconds and direct the igniter to reignite flames.



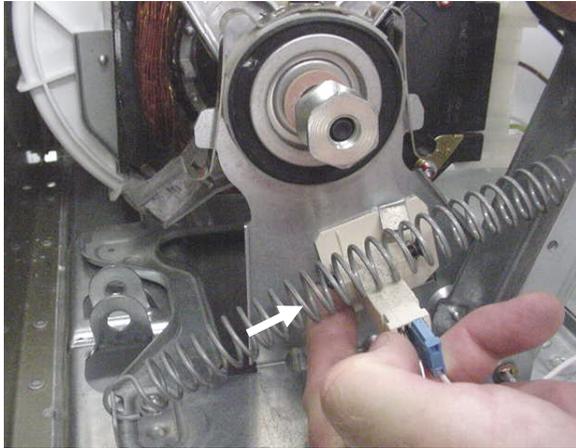
#### 4.1.8 Lint screen sensors

The front (bearing) shield contains two sensors – accessible after the lint screen is removed. Along with the heater NTC and hi-limit protector, the lint screen NTC and hi-limit protector provide temperature regulation and safety.

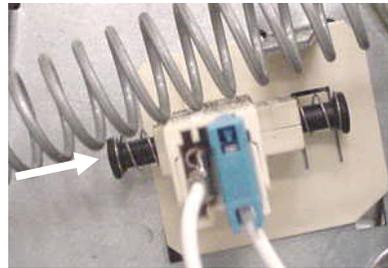


#### 4.1.9 Broken belt switch

The broken belt switch prevents the dryer from running if the belt has broken or been left disconnected. It must be manually reset (by pushing the **left** plunger in (viewing rear of dryer) – the dryer will not run if the switch hasn't been reset.

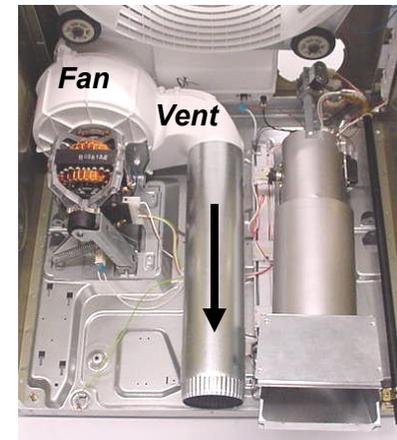


Push **left** plunger (toward right) to reset broken belt switch whenever drum or belt has been removed for **any** repair.



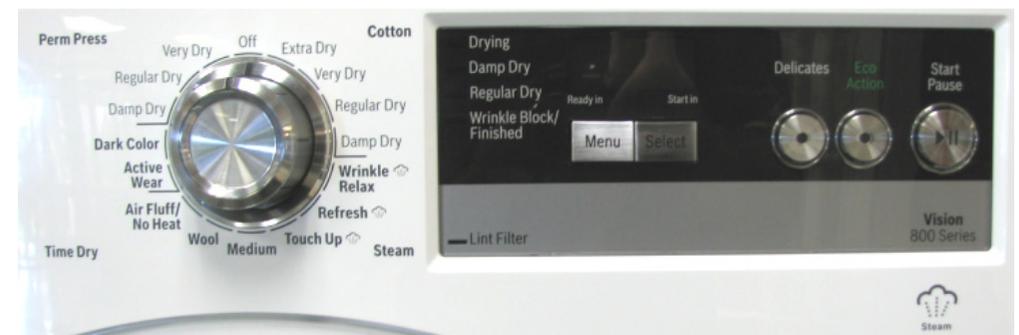
#### 4.1.10 Air exhaust duct

Air exhaust duct connects to the fan and allows exhausting through the rear of dryers. Using kits (sales accessories), dryers can be vented out the bottom or right side.



#### 4.1.11 Fascia (control) panel

Fascia panel includes the knob, which is factory built into the panel and cannot be obtained separately. Buttons can be obtained separately.



#### 4.1.12 Moisture sensor

Moisture sensor consists of two electrodes (located just left of the lint screen on the front bearing shield). Moisture from clothes completes the circuit between the two sensors, showing clothes aren't dry. Placing the moisture sensor on the front shield eliminates sensors inside drums and conductance brushes outside drums.



#### 4.1.13 Door switch

Door switch engages the door, turning the light on and off and notifying the dryer the door is closed for drying. To remove it, push the two latches inward and slide the switch toward the front of the dryer.



#### 4.1.14 Fan wheel replacement

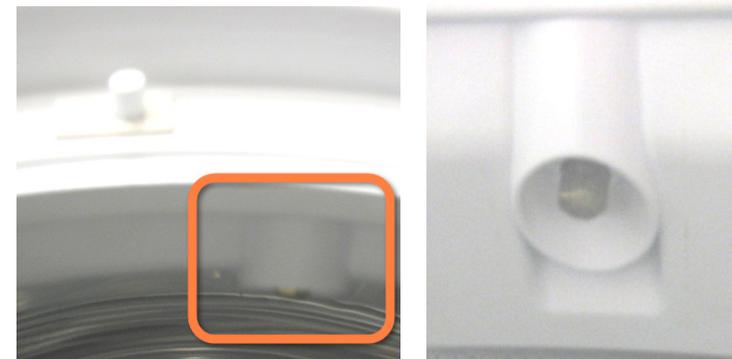
Even though WTVC and WTMC dryers use the same fan motor, they do **not** use the same fan. Due to differing front bearing shield and lint screen dimensions, air flows differently through the two dryers. Dryer control software for each dryer is *carefully matched* to each fan to provide the same drying results.



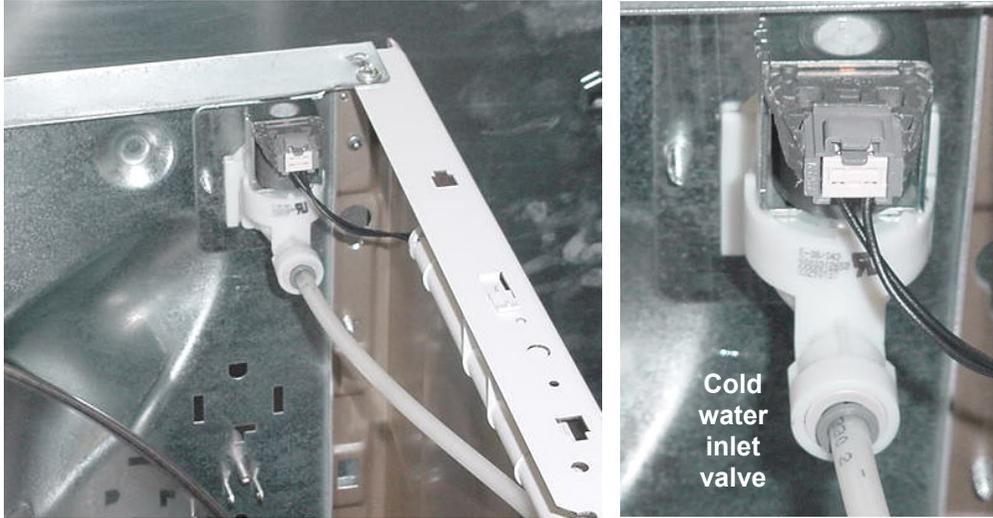
WTMC fan **491640** hasn't been tested in WTVC dryers and WTVC fan **648683** hasn't been tested in WTMC dryers. Fans must **not** be interchanged because it will void the warranty, will affect the UL certification, will affect drying and may generate error codes.

#### 4.1.15 Mist care (on selected dryers)

Mist care (on selected dryers) sprays a mist of water into dryers to refresh clothing and relax any wrinkles. Water sprays occasionally as needed, determined by the control.



A cold water inlet valve similar to washers is used.



A 90° elbow connects the hose to the nozzle (through a hex adapter). It can be accessed by removing the front panel.



Dryers come with a “Y” adapter, allowing the cold water line to be split and connected to both washer and dryer.

#### 4.1.16 AQUASTOP® (aqua secure) inlet hoses

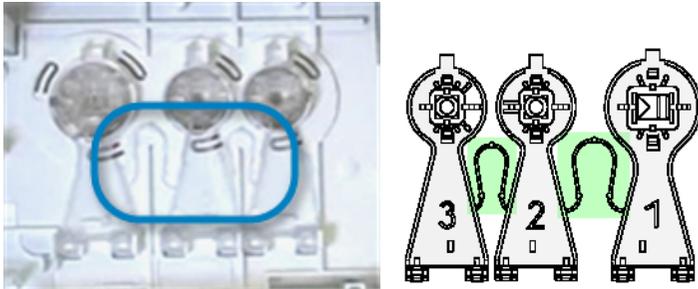
Hot and cold water **AQUASTOP®** inlet hoses eliminate leaking. The **AQUASTOP®** hose consists of an inner hose (~ inlet water tubing) and an outer hose (corrugated, ~ to drain hoses). If the inner hose leaks, a small indicator window will show **red**, meaning the hose must be replaced (hoses cannot be reused once a leak occurs).



**AQUASTOP®** hoses can be used with any washer (or misting dryer) with standard US threads (3/4” NH, 11.5 threads/inch). They protect homes and provide peace of mind for people on vacation and those asleep, busy or who don’t shut off water valves when washers (and misting dryers) aren’t in use.

#### 4.1.17 Round button assembly

The three (3) round buttons are joined by delicate plastic rods. Be careful installing or removing buttons so button joining rods aren't broken.



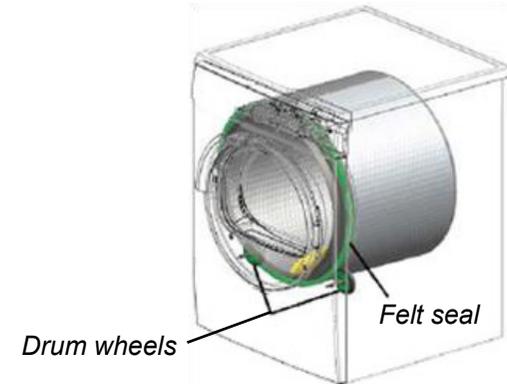
#### 4.1.18 Door glass cover

Complete door assemblies are not available. However, all door components can be readily disassembled and replaced, including the outer door glass cover and inner glass bowl.



#### 4.1.19 Front felt drum seal

Dryers have a self-adhesive, Teflon coated, felt front seal which can be replaced. When replacing the seal, make sure all old adhesive is removed and no new adhesive gets onto the drum. Any excess adhesive or residue may cause squeaking.



If the seal doesn't fit snugly against the drum, it can be reshaped. After the seal is attached to the drum, wet the seal thoroughly using a spray bottle. Shape the seal toward the drum and run the dryer 20 minutes on a heated timed dry setting. Since felt shrinks when dried rapidly, the seal will shrink to the drum and fit it snugly.

#### 4.1.20 Empty drum detection

Dryers shut down after 11 minutes if no moisture is detected. Dryers can be immediately restarted.

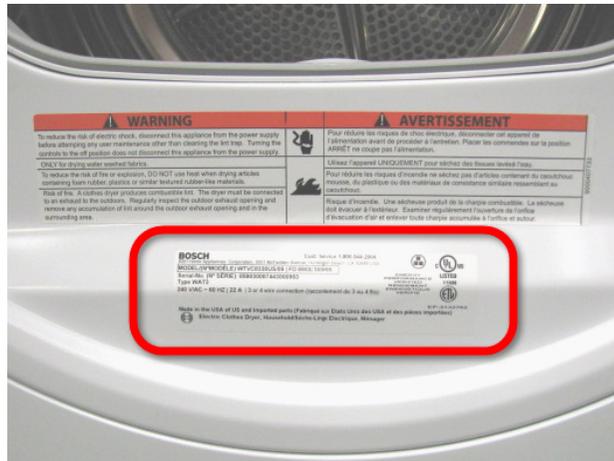
#### 4.1.21 Wrinkle Block/Finished light

If the *Wrinkle Block/Finished* light is on while the display is off, an internal switch (**S3**) on the control board has been damaged and the entire control module has to be replaced.



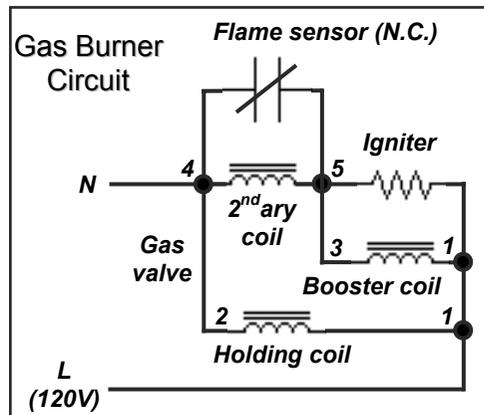
#### 4.1.22 Serial # label

The serial # label is located below the door and shows the model (E-Nr) and serial # of the dryer.



## 4.2 Operation

### 4.2.1 Gas burner operation

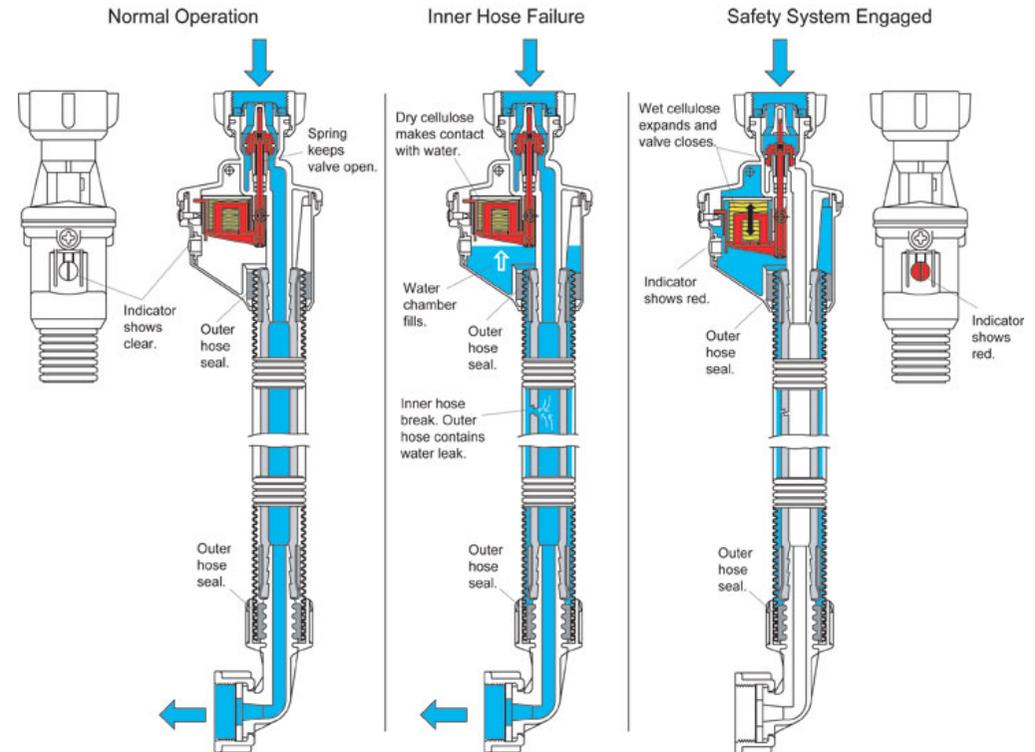


- **Starting (& flame out)** – Cool flame sensor is closed, which bypasses secondary coil & turns on igniter & holding/booster coils (to open dual valve). Secondary coil is off (so no gas flows to burner). Igniter current is ~ 4 A.
- **Running** – Igniter heats up & opens flame sensor, which turns off igniter & turns on secondary coil (so gas flows to burner). Hot igniter ignites gas – flames keep flame sensor open. Booster coil turns off since current flows thru secondary coil & igniter (~ .1 A) – holding coil stays energized to keep gas flowing.

### 4.2.2 AQUASTOP® (aqua secure) hose operation

The **AQUASTOP®** hose consists of a sealed inner and outer hose and a leak detection / shut-off assembly. A spring holds a plunger open allowing the inner hose to carry water. If an inner hose ever should leak, water fills the outer hose where a sponge in the hose end

(connected to the water line) absorbs water, pulling a plunger down to stop water flow and show **red** in the indicator window. The outer hose is sealed and won't leak.



Any remaining water pressure won't re-open the hose, but will help keep the hose closed.

The hose has a one-time failure duty. If an inner hose should ever leak where the indicator shows **red**, the hose must be replaced.

**AQUASTOP®** hoses stop hose leaks, whether appliances are on or not. They're superior to braided hoses, whether nylon or ss, and can be used with any washer (or misting dryer) with standard US threads (3/4" NH, 11.5 threads/inch).

## 5 REPAIR

### 5.1 Disassembly / Reassembly

#### 5.1.1 Top panel (worktop)

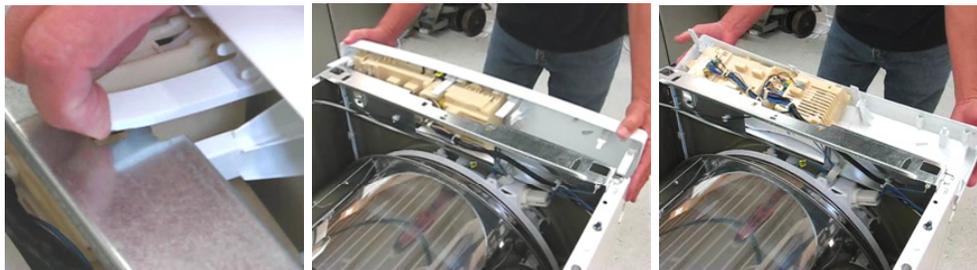
Remove two T-20 Torx screws (with washers) from top rear corners of dryer, slide panel toward rear of dryer (~ ½ cm) and lift up panel. When reassembling, slide panel forward and replace two screws.



#### 5.1.2 Fascia (control) panel

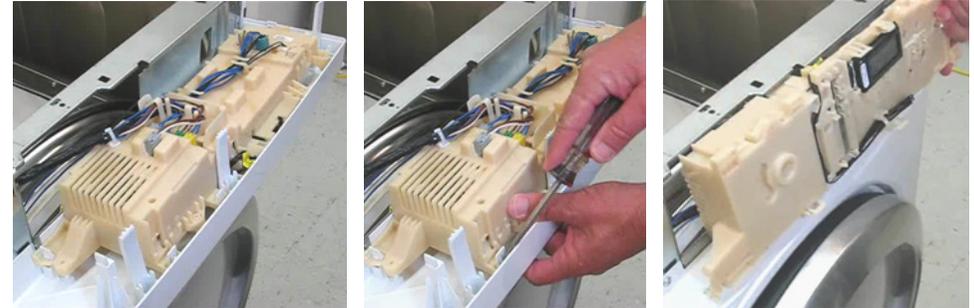
Panels are held in place by plastic latches – no screws need to be removed.

Remove top panel (5.1.1), then gently pry up top plastic latches. When top latches are released, gently pull the panel straight out until the bottom tabs release. Don't tilt the panel to avoid breaking the bottom tabs.



#### 5.1.3 Control module

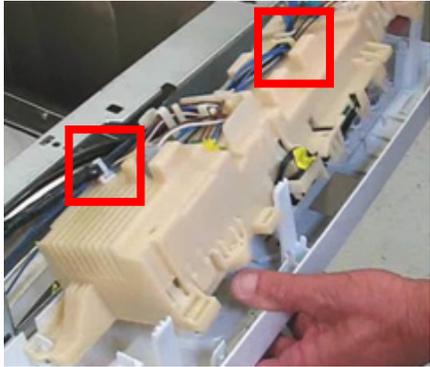
Remove control module from fascia panel progressively from left to right, carefully releasing all plastic latches (so latches don't break). Gently pry up left side of control so latches don't re-close. Control will release from fascia panel and knob.



There are other latches, joining the control module housing together, which don't need to be released to remove the control module.

Don't remove the knob to remove the control module. The control lifts off completely from the panel, knob & buttons.

Don't force controls out from fascia panels to avoid breaking plastic parts. If modules don't come out easily, the procedure hasn't been followed and plastic parts will break.



Don't cut cable mounts – cut cable ties holding cables to mounts. When reassembling, use new cable ties.

Some controls have been wrongly replaced since fault codes stored in washer or motor controls can't be cleared. Controls are operating properly and shouldn't be replaced to clear fault codes.

**⚠ CAUTION** – 75% of all controls returned for analysis check out OK. Most control issues are due to loose connections.

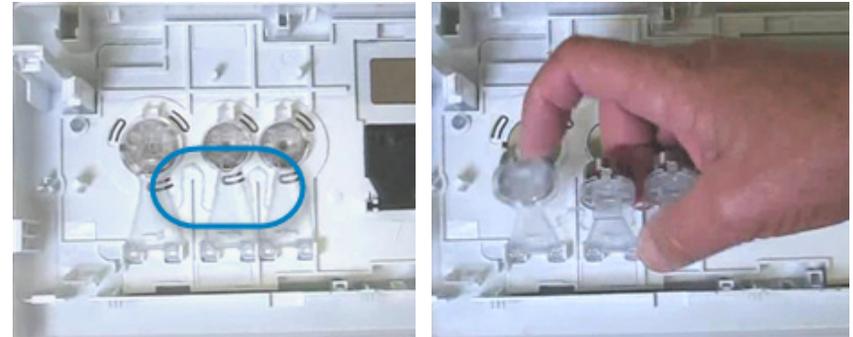
### 5.1.4 Button caps (round / rectangular)

All button caps don't snap onto buttons, but fit loosely – held in place by the control after reassembly. When reassembling fascia (control) panels, set panels face down so button caps don't fall out.



### 5.1.5 Round button assembly

The (clear) round button assembly is connected by delicate plastic rods. When removing buttons, gently pry out and remove them as a group, not individually.



### 5.1.6 Bottom front panel ("toe kick")

Removing the bottom front panel provides access to the maintenance cover and is necessary for removing the front panel.

Carefully lift and block (up) front of dryer (to provide access to screws). Remove three (3) screws, then carefully slide panel down and away from dryer.



### 5.1.7 Door removal

To remove the door from the front panel, open the door, remove four (4) M4.2x19 T-20 Torx hinge cover screws, remove the hinge cover and lift the door up and away from the panel.



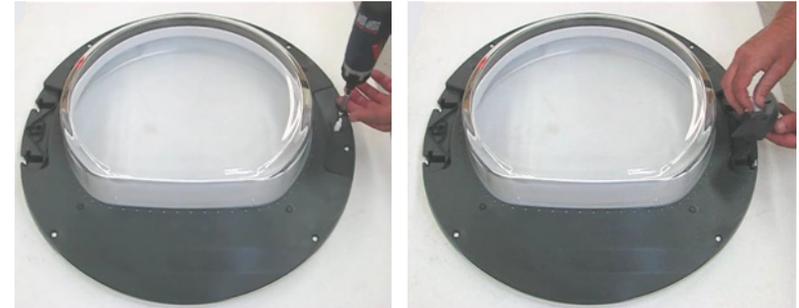
### 5.1.8 Door disassembly

The door isn't available as a complete assembly, but is easily disassembled and reassembled. It's assembled using screws – no plastic latches are used.



Turn the door inside-out (i.e. with inner door glass facing up).

Remove two (2) M4.2x19 T-20 Torx latch cover screws and remove the latch cover and latch out from the door.



Once latch has been removed, remove the remaining four (4) M4.2x19 and five (5) countersunk T-20 Torx screws from the inner door frame. Lift the inner frame from the door.



The door glass bowl is shown here in the standard hinge right position. Note the door glass and inner ring positions before removing them as they change depending on the hinge position (right or left).



Lift the door glass and the inner ring from the door.

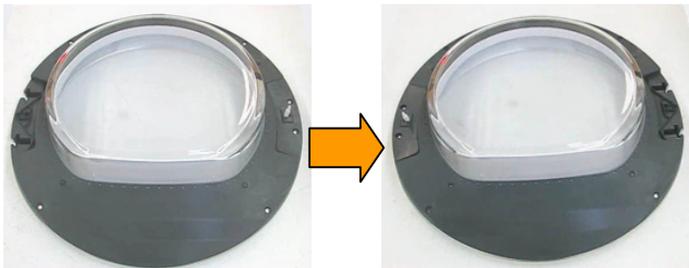


Lift the outer door glass cover from the outer door frame.

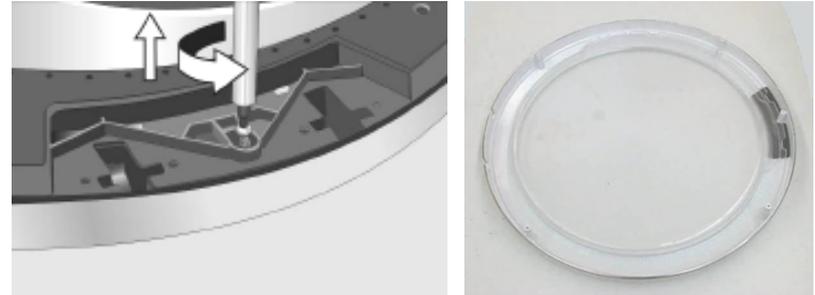


### 5.1.9 Reversing door hinge

The door hinge can easily be reversed from factory right hinge to left hinge position without any parts or kit. Complete instructions are available separately – a shortened summary of those instructions are copied here.



- 1) Remove door (5.1.7) and place it (front side down) on a protected surface to avoid scratching the outer door frame and door glass. Make sure hinge plastic bushings remain on the hinge.
- 2) Disassemble door (5.1.8) until only outer door frame and outer door glass cover remain, including removing single screws under the hinge and latch covers.



- 3) Rotate outer door frame and outer door glass cover 180°. All parts will be reassembled in the same position and order they were disassembled – when reassembly is completed, the hinge will be rotated 180°.



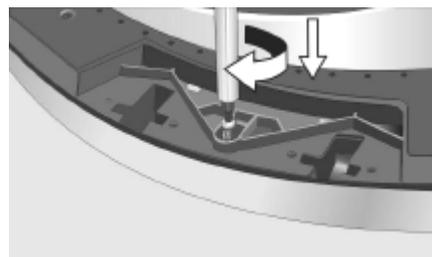
- 4) Lift up the outer door glass and rotate it 90° clockwise. Don't rotate the outer door frame.



- 5) Reassemble all parts in the same position and order they were disassembled (inner ring, glass bowl, inner frame) – when reassembly is completed, the hinge will be rotated 180°.



Be sure to reinstall the single screws under the latch and hinge cover plates.



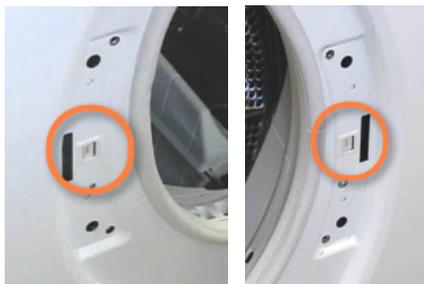
- 6) Move latch (to left side) and reassemble door latch cover.



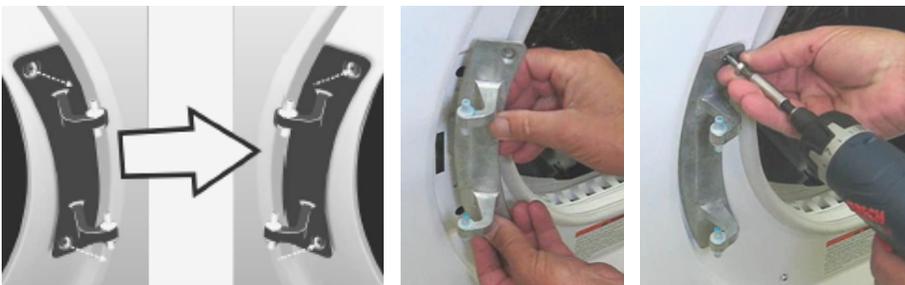
- 7) Remove (left side) front panel latch cover by removing two (2) screws.



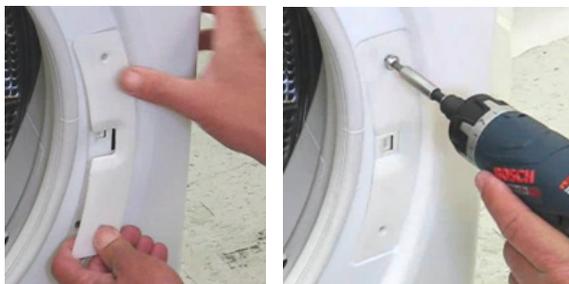
There is a retainer latch (“catch”) in both the left and right sides so there’s no need to move them.



8) Remove hinge from right side of dryer by removing two (2) screws and lifting the hinge up and away from the dryer. Move hinge to left side of dryer and attach with two (2) screws. Make sure plastic hinge bushings don’t fall off.



9) Reinstall front panel latch cover on the right side of the dryer with (2) screws.



10) Place door onto hinge and reinstall door hinge cover with four (4) screws to secure door to dryer.



### 5.1.10 Rear panel

Remove top panel (5.1.1) for better access to parts. Remove two T-10 Torx screws holding rear panel to rear exhaust vent. Remove T-20 Torx screws holding rear panel to frame and to power connection sheet. Lift panel out.

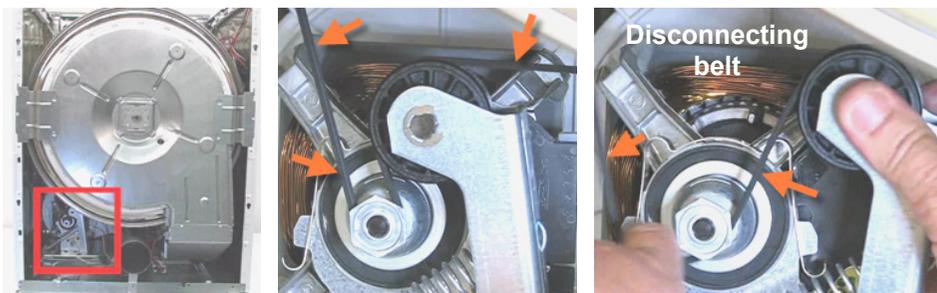


Two power connection sheet screws.

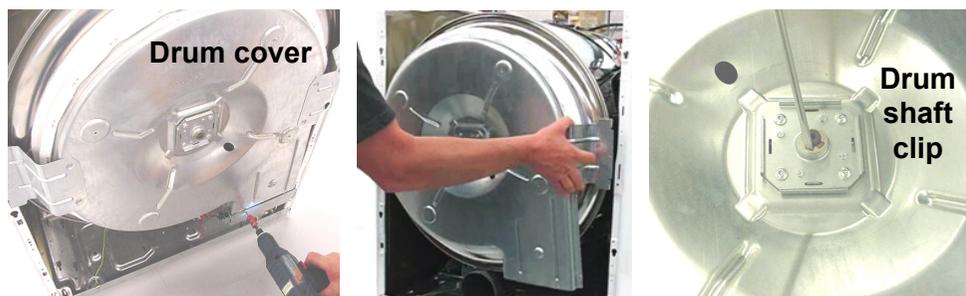
**Rear panel access is best for most repairs.**

### 5.1.11 Drum and drum cover (with drum bearing)

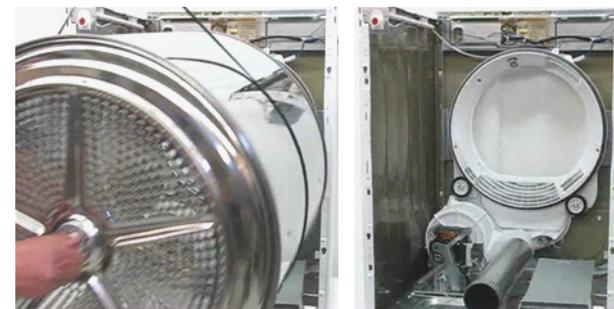
- 1) Remove rear panel (5.1.10).
- 2) Disconnect belt (from motor pulley) to remove belt tension.



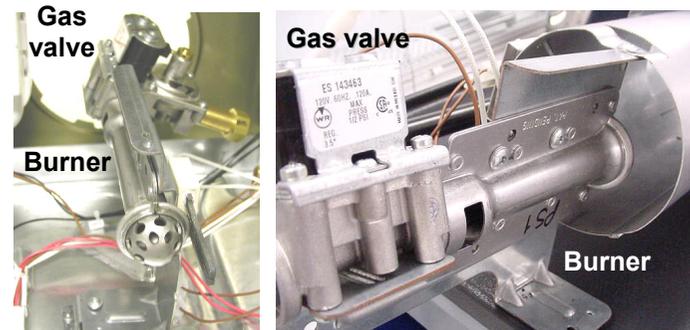
- 3) Remove dryer shaft clip and two T-20 Torx drum cover screws, then lift cover from dryer. Drum cover holds drum rear bearing, so drum isn't supported once drum cover has been removed.
- 4) If necessary, drum sleeve bearing can be removed from drum cover by removing four T-20 Torx screws.



- 5) Pull drum backward (toward you) to clear front drum support wheels, then lift drum from dryer.



### 5.1.12 Gas valve and burner



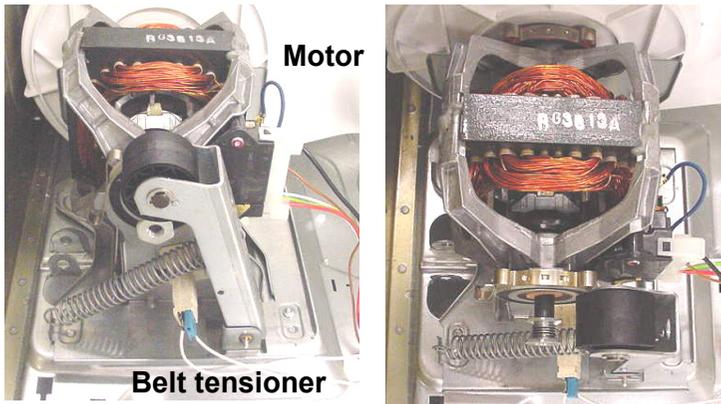
The gas valve and burner are attached as an assembly, so the same instruction applies.

- 1) Turn off gas supply & unplug power cord.
- 2) Remove rear panel (5.1.10) and drum cover (5.1.11).
- 3) If needed for better access, remove drum.
- 4) Disconnect gas pipe & 90° elbow fitting from gas valve using a 1" open-end wrench.
- 5) After noting connections, disconnect wires to all parts, including gas valve, igniter, flame sensor, Hi-limit & NTC. Be careful to not damage igniter.

- 6) Remove burner screws, including screws holding burner bracket to base and combustion chamber and screws holding burner to bracket.

### 5.1.13 Motor, belt tensioner and broken belt switch

All three are mounted on motor cradle, located behind air duct (viewing rear of dryer), and can be accessed from front or rear of dryer. Motor must be disconnected from fan (5.1.17) and belt from motor pulley before motor can be removed. Once disconnected, motor cradle with motor, belt tensioner and broken belt switch can be unscrewed and slid out from dryer. To remove motor from cradle, remove two spring clips and lift up from cradle.



### 5.1.14 Front panel

- 1) Remove fascia panel (5.1.2). If necessary for access, remove top panel (5.1.1).
- 2) Remove door (5.1.7) and door hinge (5.1.9.8).
- 3) Remove lint screen and door seal.
- 4) Remove toe kick panel (5.1.6).
- 5) Remove T-20 Torx screws from top / bottom of panel and around door, then lift panel up (from four plastic mounting tabs).



- 6) Remove door switch from panel by disconnecting wire harness, squeezing two tabs on switch and pushing switch through front of panel.



- 7) To remove belt tension (so drum doesn't shift when front bearing shield is removed), remove rear panel (5.1.10) and disconnect belt (from motor pulley).

### 5.1.15 Front bearing shield

- 1) Remove front panel screws, but don't remove panel itself (5.1.14). If necessary for access, remove top panel (5.1.1).
- 2) Remove door (5.1.7), door hinge (5.1.9.8) and front panel latch cover (5.1.9.7) to expose all front bearing shield screws.
- 3) Remove lint screen and door seal.
- 4) Remove drum (5.1.11).
- 5) Remove motor (5.1.13). Slide out complete motor cradle with motor and fan to save time.
- 6) Remove NTC and Hi-Limit from bottom of front bearing shield and lamp from top of front bearing shield. Remove mist water hose for misting dryers.



- 7) Remove front bearing shield from rear of dryer.



- 8) If needed, remove drum support wheels.



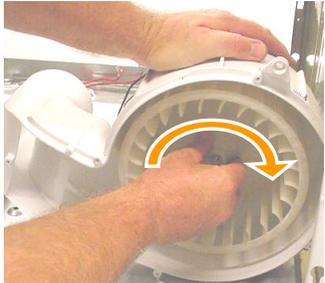
### 5.1.16 Moisture sensor

The moisture sensor can be accessed from the front of the dryer by opening the door. Carefully pry the sensor from the front bearing shield (to avoid damaging plastic parts) and disconnect the wire harness.



### 5.1.17 Fan

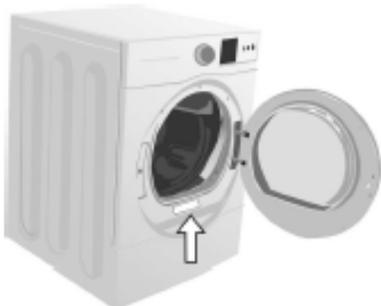
Remove front panel (5.1.14) and bearing shield (5.1.15). Remove fan front cover to access fan. Fan is located on front of motor shaft, which has left-handed thread. To remove fan from motor shaft, use a 1" wrench and rotate fan (clockwise) from left to right.



Turn fan clockwise (cw) to loosen (i.e. left-handed thread).

When removing fan, hold motor shaft, not motor rotor fins, to avoid damaging fins.

### 5.1.18 Serial # (E-Nr) label



The serial # label, located on the front panel under the door, shows the model (E-Nr) and serial # of the dryer.



## 5.2 Kit Installation

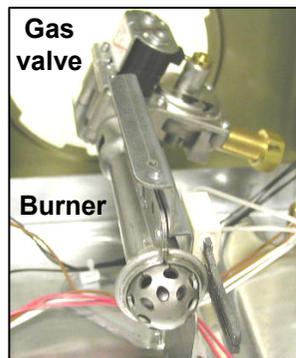
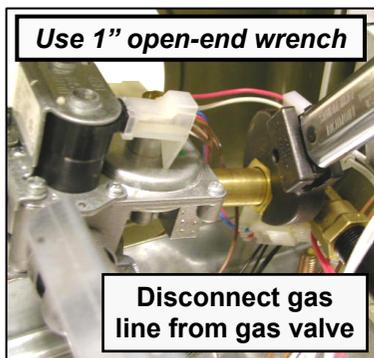
### 5.2.1 LP valve conversion kit

#### 5.2.1.1 Using WTZ1280 LP kit

Follow kit instructions carefully. These general guidelines don't include the entire kit instructions.

LP manifold pressure will be 11" wc after the kit is installed. Inlet pressure should be ~ 11" – 14" wc. LP rating (up to 7700' elevation) will be 18,000 BTU/hour after the kit has been installed.

#### 5.2.1.2 Installation instructions



5. Remove burner chamber & burner, then remove burner ring from burner (as its not needed for LP).
6. Remove natural gas valve and replace with LP gas valve. Install LP rating plate and conversion labels.
7. Reinstall all other parts. Check gas pressure at gas valve and check for leaks, then check flame quality.
8. Keep natural gas valve & burner ring (with screws) in case dryer is converted back to natural gas.



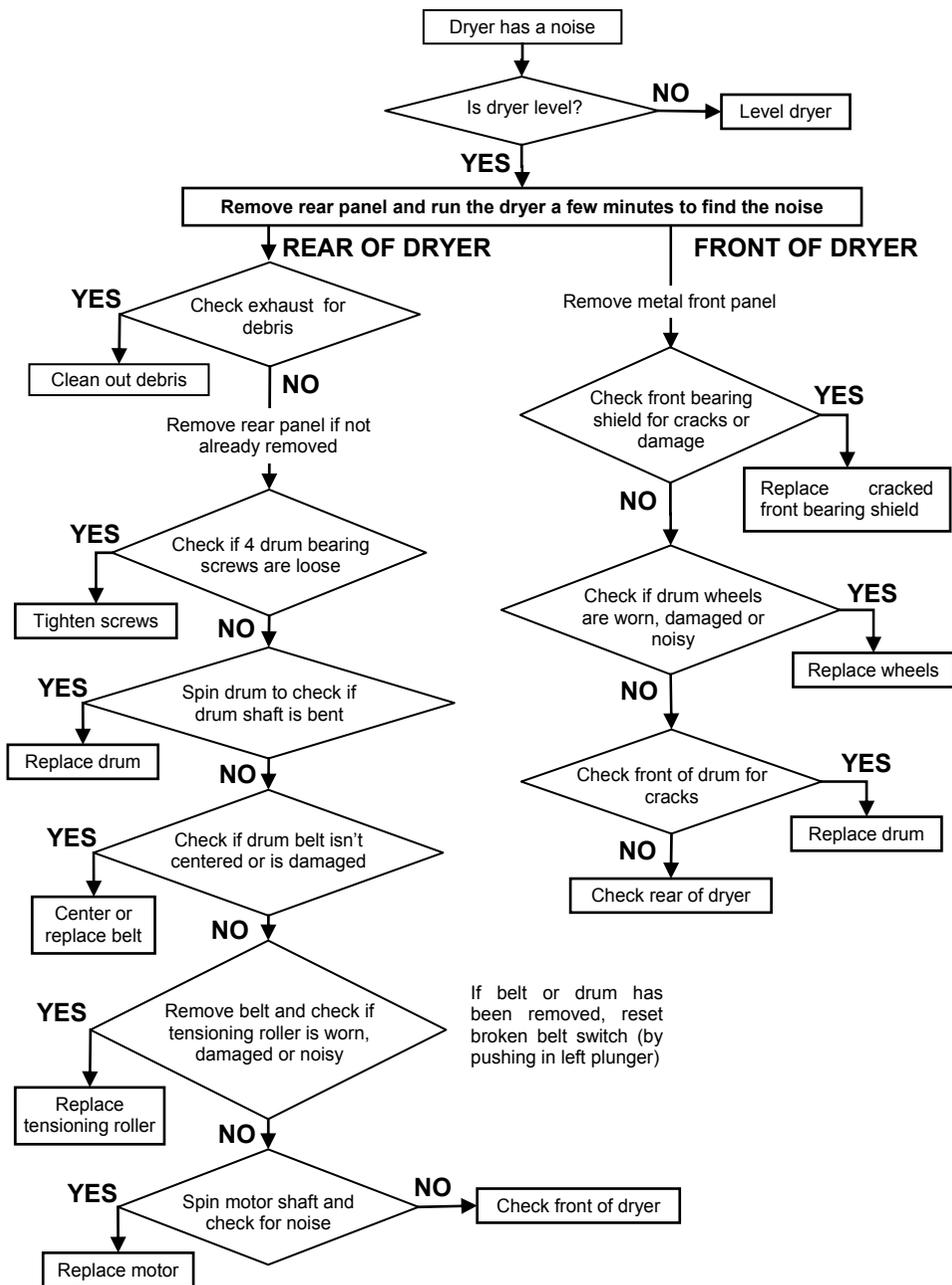
Remove the burner ring since it's not needed for LP.

1. **Turn off gas supply & unplug power cord.**
2. Remove rear panel & rear drum cover. Remove drum (for better access).
3. Disconnect wire harness, gas pipe & 90° elbow fitting from gas valve.
4. After noting connections, disconnect wires to all parts, including gas valve, igniter, flame sensor, Hi-limit & NTC. **Be careful to not damage igniter.**

### 5.3 Diagnosing (troubleshooting)

Problem	Possible Causes	Suggested Repairs
Dryer won't run	Power not on or has been disconnected. Door switch misaligned & doesn't get activated by door pin. Door pin broken, so door switch doesn't get activated. Control module failed. Door switch or wire harness failed.	Reconnect and turn on power. Tighten screw (where door pin engages door switch) to realign front shield with door. Do not overtighten screw. Replace entire door. Check control module output voltages. Replace module if faulty. Check door switch & wire harness resistances. Replace faulty part.
Burner won't work	Motor overheated. Broken belt switch tripped. Motor control or motor failed. Lint screen hi-limit (thermal cutout) tripped. Gas valve failed. Heater hi-limit (thermal cutout) tripped. Wire harness failed.	Wait for motor to cool down and thermal protector to reset. Reset broken belt switch. Check motor control voltage & motor resistance. Replace faulty part. Clean lint screen and clean lint and other debris from front shield, then replace hi-limit. Also check exhaust duct length & # of elbows. Check voltages to and resistances of parts. Replace faulty parts. Correct what caused overheating, then reset hi-limit. Run resistance or continuity checks to track down broken wire or connector. Replace failed wire harness.
Motor won't work	Motor overheated. Broken belt switch tripped. Motor control or motor failed. Lint screen hi-limit (thermal cutout) tripped. Wire harness failed.	Wait for motor to cool down and thermal protector to reset. Reset broken belt switch. Check motor control voltage & motor resistance. Replace faulty part. Clean lint screen and clean lint and other debris from front shield, then replace hi-limit. Also check exhaust duct length & # of elbows. Run resistance or continuity checks to track down broken wire or connector. Replace failed wire harness.

## 5.4 Dryer noise



## 5.5 Customer diagnosing

Problem	Possible cause	Remedial action
Dryer doesn't start.	Main plug not inserted or not inserted correctly.	Insert main plug correctly.
<b>Start/Pause</b> indicator light doesn't illuminate.	A power supply fuse has blown or circuit breaker has tripped.	Replace fuse/turn on breaker.
	<b>Start/Pause</b> button not pressed.	Press <b>Start/Pause</b> button.
	No program selected.	Select program.
	Door not closed.	Close door.
	In Time-Programs duration not chosen.	Chose time via <b>Select</b> button.
	Ambient temperature below 5 °C.	Increase room temperature.
Program has been interrupted. A warning signal sounded and the display shows <b>E:01</b> and/or the <b>Filter</b> indicator light flashes.	Filter dirty.	Clean filter, then turn dryer off and on again.
	Exhaust air duct is blocked or is too long.	Clean or shorten exhaust air duct then turn dryer off and on again.
	Fault in program sequence or malfunction.	Turn off dryer, leave to cool for 30 min. and then turn on again. Restart program.
Drum light doesn't function.	The room/cabinet is not adequately ventilated.	Provide an adequate supply of fresh air and then turn dryer off and on again.
	No program selected.	Select program.
	Light bulb defective, light bulb burned out.	Change light bulb.
	No power supply.	Guarantee power supply.
	Light bulb is loose.	Tighten light bulb.

<b>Start/Pause</b> indicator light doesn't illuminate. <b>Anti Crease/end</b> indicator lights. The display shows <b>0:00</b> .	Fault in program sequence or malfunction.	Turn off dryer, leave to cool for 30 min. and then turn on again. Restart program.
Degree of drying has not been reached or the drying time is too long. Display may indicate <b>E:03</b> .	Moisture sensor dirty.	Clean moisture sensor, then turn dryer off and on again.
	Exhaust air duct is blocked or too long.	Clean exhaust air duct or shorten it below maximum length allowed. Turn dryer off and on again.
	Filter dirty.	Clean filter and then turn dryer off and on again
	Laundry was too wet.	Spin laundry at higher speed in the washing machine. Turn dryer off and on again
	Unsuitable program selected.	Select suitable program and then turn dryer off and on again
	Maximum drying time exceeded.	Clean filter and exhaust air duct. Spin laundry at a higher speed in your washer (to remove more water).
	Motor limit temperature was exceeded.	Turn off dryer, leave to cool for 30 min. and then turn dryer off and on again.
	Degree of dryness not set correctly.	Change settings for degree of dryness.

## 5.6 Maintenance

### 5.6.1 Cleaning lint filter

The lint filter should be cleaned after each use. The *Filter* light comes on after each cycle and when the door is open (while the dryer is running) to remind customers to clean the filter. An **E:01** error code occurs when dryer runs too hot due to clogged lint filter or exhaust vent duct. When **E:01** error code occurs:

1. Immediately stop dryer by rotating cycle selector knob to *Off* position, then open door.
2. Remove and clean filter.
3. Replace filter and let dryer cool down.
4. Close door, then rotate cycle selector knob to desired cycle and press *Start/Pause* button to restart dryer.



If the *Filter* light won't turn off, clean the lint filter (by hand) with dish soap and water. The lint filter is very fine and can be clogged over time when fabric softener or softener sheets are used.

# 6 FAULT DIAGNOSTICS

## 2. Selecting the test program

Observe correct method for setting program selector!

		Display				Display	
		Button LED	Drying	LEDs(Indicator) Iron dry	Cupboard dry		End
Activate test menu:	Program selector switch to OFF position	Off					
	Turn the appliance on by pressing the Start and Delicates button simultaneously and turning the selector switch (either direction).	Start is flashing quick					One time last error
Activate test program:	In test menu set program selector switch to a test program:	Start is flashing quick				is flashing quick	
	1st position to the right	Start is flashing quick				is flashing quick	
	Read out error storage	Start is flashing quick				is flashing quick	
	2nd position to the right	Start is flashing quick				is flashing quick	
	Test program for safety test	Start is flashing quick				is flashing quick	
	3rd position to the right	Start is flashing quick				is flashing quick	
	Display test (LED/LCD)	Start is flashing quick				is flashing quick	
	4th position to the right	Start is flashing quick				is flashing quick	
	Control elements test	Start is flashing quick				is flashing quick	
	5th position to the right	Start is flashing quick				is flashing quick	
	Consumer test	Start is flashing quick				is flashing quick	
	6th position to the right	Start is flashing quick				is flashing quick	
	Laundry resistance measurement test	Start is flashing quick				is flashing quick	
	7th position to the right	Start is flashing quick				is flashing quick	
	Demo program	Start is flashing quick				is flashing quick	
	8th position to the right	Start is flashing quick				is flashing quick	
	Changeover 10A/16A (208V/240V) operation	Start is flashing quick				is flashing quick	
	1st position to the left	Start is flashing quick				is flashing quick	
	Automatic end-of-line program	Start is flashing quick				is flashing quick	
Start test program:	Press START button	LED Start is illuminating					
Abort test program:	Adjust program selector switch or press START button	LED Start is flashing					
	Switch off appliance						
Leave test program:	Switch off appliance						

## 1. Safety test

For the safety test must Heater Element (at least on one side with the phase ) switch on. The test must be done using different current method.

For this propose the following Inspection Process is adaptive

1. Connect appliance with tester and power line
2. Choose program with Heater; example Cotton Extra dry
3. Program start
4. The current consumption on tester (Motor and Heater Elements must be switch on)

The Maximal Different Current must be under allowable limit while checking procedures is running.

### Annotation:

Depending on used tester (for example Meratester 5-f) can be necessary inspection process with 180° twisted power connector ones again do.

Inspection Process must be done with cold Appliance to prevent that Heater Element is switch on.

## 2.1 Fault display

Test:	Sequence:	Display	
		Standard Indicator	Display
			E: failure number C: numbers of failure
Last fault	- the last fault is displayed at first	Start and finished LED's are flashing	E:XX is displayed
Fault history	- after further operation the START button, the content of the error register (of the last 8 cycles) is indicated	LED Start is illuminating Status-LED's: failure code	E:XX is displayed C:XX is displayed Or blank if no failure
Last fault	- if all register were indicated, the first fault is displayed again by operation the START button	Filter- outflow hose LEDs are flashing	E:XX is displayed C:XX is displayed Or blank if no failure

Drying	LEDs (Indicator)		Display	Fault / fault description	Remarks, possible cause	Results
	Iron dry	Cupboard dry				
				No fault		
is flashing			E:11	Fluffing level 1	- Fluff filter, container or air routes blocked	- Clean components and air routes
	is flashing		E:12	Fluffing level 2	- Fluff filter, container or air routes blocked	- Clean components and air routes
is flashing	is flashing		E:13	Maximum drying time exceeded	- Heater or heater control damaged - Bimetal switch was triggered - Laundry load (to heavy or to wet)	- Check heating circuit and bimetal switch, replace damaged parts - Reduce laundry load or select adequate program
is flashing		is flashing	E:15	Fault in heating circuit	- Excess temperature of the heater is detected	- Check air routes, heater function and heater control; replace damaged parts
is flashing	is flashing	is flashing	E:17	Door-NTC fault (TD)	- Damaged sensor - Short circuit in sensor wire - Open sensor circuit - Control interpretation fault	- Check wires and connectors, replace damaged parts - Short circuits and breaks are detected by control after switch-on

Drying	LEDs (Indicator)			Display	Fault / fault description	Remarks, possible cause	Results
	Iron dry	Cupboard dry	End				
			is flashing	E:18	Heater-NTC fault (TH)	- No temperature rise after starting a program, break in heater circuit, - Damaged sensor - Short circuit in sensor wire - Open sensor circuit - Control interpretation fault	- Check heater circuit and bimetal switch, replace damaged parts - Check sensor wire, check connectors; replace damaged parts - Short circuits and breaks of the sensor wires are detected by control after switch-on
is flashing			is flashing	E:20	Control fault 1 (Update invalid)	- Process software set is incorrect programed	- Update software or replace control
	is flashing		is flashing	E:21			
is flashing	is flashing		is flashing	E:22			
is flashing		is flashing	is flashing	E:24			
	is flashing	is flashing	is flashing	E:25			
is flashing	is flashing	is flashing	is flashing	E:26	Control fault 2	- Control fault is detected	- Replace control

## 2.2 Test Program for Safety Test

Test:	Sequence:	Display:
START button	Starts the motor, the heater will with the centrifugal switch single sided connected to mains voltage	LED Start is illuminating
START button	- Do Safety Test - Program ends with pushing the start button	LED Start is flashing

Depending on used tester can be necessary inspection process with 180° twisted power connector ones again do.

## 2.3 Indicator Test (LEDs and LCD)

Test:	Sequence:	Display:
START button	- All LEDs and/or LCD segments are illuminating continuously for 4 sec. - All LEDs and/or LCD segments are activated successive in 0.5 sec steps - Sequence starts again	All LEDs and/or LCD segments are illuminating All LEDs and/or LCD segments are illuminating successive in 0.5 sec steps

## 2.4 Operating Elements

Test:	Sequence:	Display:
START button	- Press a START button	LED Start is illuminating
OPTION buttons	- Press OPTION buttons successive	LED of the pressed button is illuminating
CHANGE button	- Press a CHANGE button	All segments of the seven segment display inclusive the colon and the dot are illuminating.
MENU button	- Press a MENU button	Another existing segments (excepting the colon, the dot) of the LC display are illuminating.
Program selector	- Select each position with the program selector	Illuminating elements see the table below
buzzer	- Keep pressed the MENU button	Continuous output of the acoustic signal sound level steps inclusive "0"

LEDs or display symbol	Position																
	Off	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Off
Drying		X		X		X		X		X		X		X		X	
Iron Dry			X	X			X	X			X	X			X	X	
Cupboard Dry					X	X	X	X					X	X	X	X	
Anticrease/End									X	X	X	X	X	X	X	X	

## 2.5 Consumer test

Prüfung:	Ablauf:	Anzeige:
Motor u. Heizung	- Motor u. Heizung werden mit einem zeitlichen Ablauf angesteuert	Siehe Tabelle

Time/s absolute	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	
Duration/s	5	10						60										30						
LED Drying	X								X															
LED Iron dry		X							X															
LED Cupboard Dry																		X						
Display	:01	:02						:03										:04						
Motor	On																							
Heating	On																							

## 2.6 Laundry resistance measurement test

Test:	Sequence:	Display:
	- Open the dryer door - The function of the inductance input can be tested by making a short circuit between the conductance electrodes and the drum	

Test description:	LED or display symbol	LED or Display symbol	Remarks:
- Drum empty, no connection between conductance electrode and drum	Off	Off	Fault! There is a bypass in measuring circuit.
	On	Off	No fault
- Bypass on the conductance electrode with the hand or with define resistance of 100kOhm...1MOhm	Off	On	Fault! There is a bypass or short- circuit in measuring circuit.
	On	Off	No fault
- electrical connection between conductance electrode and drum	Off	Off	Fault! There is a open circuit or resistance in measuring circuit is too high
	On	On	No fault

## 2.7 Demo program

Prüfung:	Sequence:	Display:
START button	The demonstration program simulates a program sequence on the display and uses the status LED's accordingly. Consumers are not activated during the demo program.	Siehe Tabelle

Step	Time	LED for Delicates/ Reduced Ironing	All Status LEDs	LC Display
1	1 s	On	Off	blank
2	1 s	Off	On	blank
3	1 s	On	Off	blank
4	1 s	Off	On	blank
5	1 s	On	Off	blank
6	1 s	Off	On	blank
7	30 s	Off	only drying -LED ON	Counts from 0:30 to 0:00 descending
8	5 s	Off	only Anticrease / End -LED ON	0:00
9	1 s	On	Off	blank
10	1 s	Off	On	blank
11	1 s	On	Off	blank
12	1 s	Off	On	blank
13	1 s	On	Off	blank
14	1 s	Off	On	blank
15	10 s	Off	only drying -LED ON	Counts from 0:30 to 0:20 descending
16	10 s	Off	only "Damp Dry" -LED ON	Counts from 0:20 to 0:10 descending
17	10 s	Off	only "Regular Dry" -LED ON	Counts from 0:10 to 0:00 descending
18	5 s	Off	only Anticrease / End -LED ON	0:00
19	back to step 1			

## 2.8 Changeover 10A/16A (208V/240V) operation (EU: not used, function without any effects)

Test:	Sequence:	Display:
START button	State with delicates button changeable	LED Start is illuminating Selection low (10A) - Delicates LED: Off - Display: „lo“ Selection high (16A) - Delicates LED: On - Display: „hi“
START button	Abort program for storage	LED Start is flashing

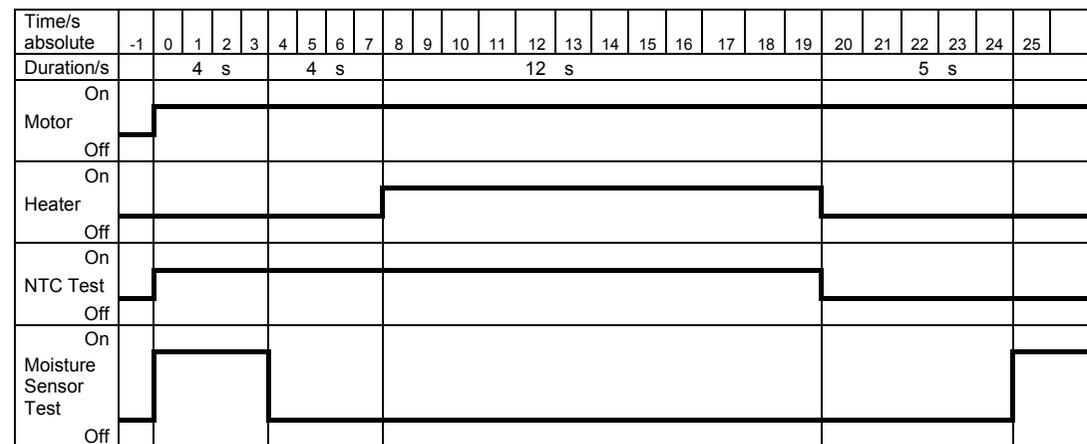
## 2.9 Automatic end-of-line program

Test:	Sequence:	Display:
Taste START	This test program is used to test automatically the control functions during appliance production. The moisture sensor input must connected with a 2MOhm resistor (+/-5%) , while the test is running.	LED Start is illuminating

## 2.9 Automatic end-of-line program

Test:	Sequence:	Display:
Taste START	This test program is used to test automatically the control functions during appliance production. The moisture sensor input must connected with a 2MOhm resistor (+/-5%) , while the test is running.	LED Start is illuminating

## Sequence Electrical Dryer



#### Failure Code for the line test program

LED->		drying	damp dry	regular dry	extra dry	lint filter
NTC in the exhaust channel	E:17	X				
NTC above the heater	E:18		X			
Overheating	E:11 und E:12			X		
Conductance error(*)					X	

## 6.1 Overheating fault codes

If burner or lint screen NTC's detect overheating (e.g. from clogged vent ducts), an **E:01** fault code will appear during drying. Running customer service test program (6.0) and checking fault codes can show any of the following codes:

1. **E:11** – Overheating (fluffing) level 1. Burner temperature rose more than 8°C in 5 seconds once.
2. **E:12** – Overheating (fluffing) level 2. Burner temperature rose more than 5°C in 5 seconds 25 times.
3. **E:15** – Burner failure. Burner temperature rose more than 115°C or lint screen temperature rose more than 85°C. Motor and burner shut off.

#### Notes:

- Don't reset control after fault codes occurred. Fault codes are automatically cleared after 8 drying cycles without failures. If fault codes "must" be cleared, turn dryer on and off 8 times successively.
- Gas valve is connected to motor centrifugal switch, so burner runs only when motor is running. When motor shuts off, burner shuts off.

## 7 TECHNICAL SPECIFICATIONS

### 7.1 Dryer ratings

#### 7.1.1 WTVC gas dryer ratings

120VAC, 15A, 60 Hz, 1500W (12A max.). 3/8" NPT (female) gas connection. Dryers rated up to 7700' (so no high altitude kit is provided).

##### 7.1.1.1 Natural gas (standard)

5-14 " WC inlet / 3.5" WC to burner. 18,500 BTU.

##### 7.1.1.2 LP (optional using kit)

11-14 " WC inlet / 11" WC to burner. 18,000 BTU.

#### 7.1.2 Drive motor ratings

120 VAC, 60 Hz, 1/3 HP (248.5 W), 5.0 A, 1725 RPM, 40°C ambient, class B insulation, thermally protected.

#### 7.1.3 Bulb ratings

127 VAC, 10 W, type T22, C7 base.

#### 7.1.4 Drum volume

6.25 ft<sup>3</sup> (U.S. DOE rating) / 6.78 ft<sup>3</sup> (IEC rating).

#### 7.1.5 Energy factor

EF ≥ 2.67 lbs./kwh.

#### 7.1.6 Duct length (max.)

66' (20 m) of 4" rigid metal duct.

#### 7.1.7 Gas igniter ratings

Igniters glow and reach ~ 2100°F after 30 seconds. Igniter resistance ≤ 76Ω @ room temperature.

#### 7.1.8 Flame sensor ratings

Sensors react to flame out in 30 - 60 seconds.

#### 7.1.9 Air flow

