

Fisher & Paykel
appliances



Service Manual



Models

DE62T27CW1
DG62T27CW1
DE62T27DW1
DG62T27DW1



Supplementary to 517760B

517760C

The specifications and servicing procedures outlined in this manual are subject to change without notice.

The latest version is indicated by the reprint date and replaces any earlier editions.

Note: This supplementary manual is only to be used in conjunction with service manual 517760B. It is not intended to be used on its own.

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1 SERVICING REQUIREMENTS

1.1 Health & Safety

Note: *When servicing the AeroSmart™ electronic dryer, health and safety issues must be considered at all times. Specific safety issues are listed below to remind service people of the health and safety issues.*

1.2 Electrical Safety

WARNING! TO AVOID ELECTRIC SHOCK!

Do not attempt to service this dryer without suitable training and qualifications.

Ensure the mains power has been disconnected before servicing any part of the dryer. If the power is required to be on for electrical fault finding, or checking the operation, then **extreme** care should be taken not to make contact with electrical components other than with testing probes. Ensure the dryer is turned off when removing any electrical component or connection.

1.3 Electrostatic Discharge

Electronic components are prone to damage from electrostatic discharges. The electronic modules in this product contain no user serviceable components and breaking seals to access internal components of an electronic module may void the product warranty. Avoid contact with PCB edge connectors when handling electronic modules.

1.4 Good Working Practices

Ensure the work areas are kept tidy and free of hazards while servicing the dryer. On completion of the servicing, ensure the dryer and work areas are left clean and tidy.

1.5 Safety Test

On completion of any service carried out to the dryer, all safety tests as required by law must be carried out.

1.6 Sheet Metal Edges

When working around cut sheet metal edges use appropriate gloves or protection to eliminate the chance of receiving a laceration.

2 MODELS INFORMATION

The product serial plate is located on the upper rear of the cabinet and contains the following information:

2.1 Models Number

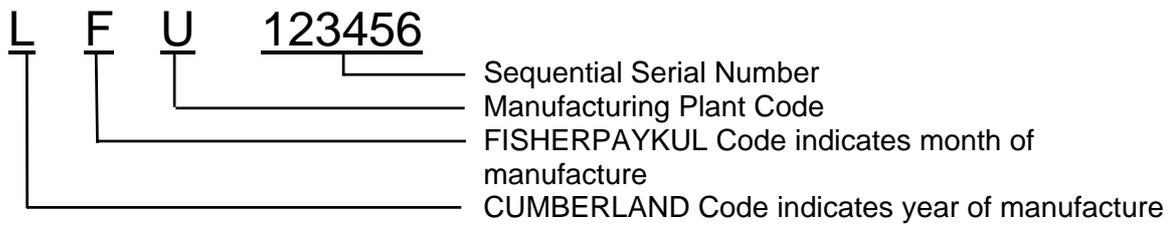
The models number contains the following information:

D	Product Type (Dryer)
E	Heating Type (E = Electric / G = Gas)
62	Capacity cu/ft (6.2) IEC
T	Top Loading
27	Size (27 inches wide)
C	Console (C = LCD / D = LED)
W	Color (White)
1	Series (1)

2.2 Serial Number

The serial number consists of three letters and six digits and contains the following information:

Example:



Cumberland Code

Letter	C	U	M	B	E	R	L	A	N	D
Year	1	2	3	4	5	6	7	8	9	0

Fisherpaykul Code

Letter	F	I	S	H	E	R	P	A	Y	K	U	L
Month	1	2	3	4	5	6	7	8	9	10	11	12

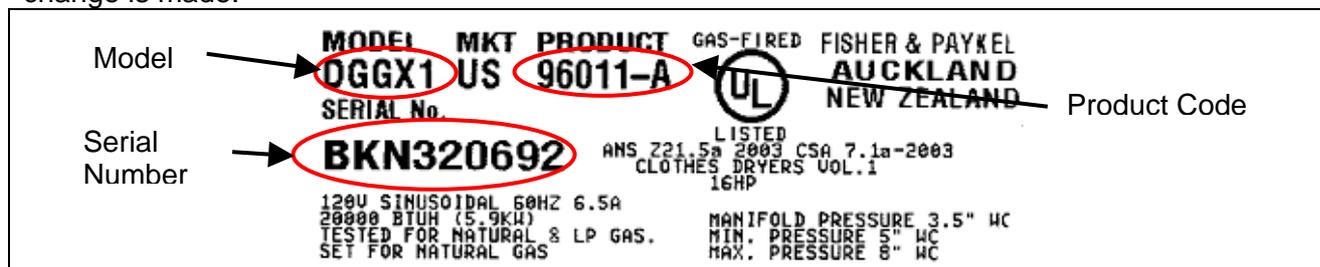
Manufacturing Plant Code

F	Refrigeration – New Zealand
M	Range & Dishwasher
N	Laundry – New Zealand
Q	Refrigeration – Australia
U	Laundry – U.S.A.

In the example above, the appliance was manufactured in the first month of the seventh year (2007) at the Laundry plant in Ohio (U.S.A.).

2.3 Product Code

A suffix letter has been added to the Product Code. This suffix letter will change whenever a part is changed that is not completely retro-fittable without the need for a kit, or whenever a cosmetic change is made.



At the same time, separate parts manuals will be produced for each product code, making it easier for the service technician to obtain the correct part for the appliance they are servicing. The part number of the manual will be the same as the Product Code.

It is now important that the service technician obtains the Product Code from the serial plate of the appliance before ordering parts, then refers to the appropriate parts manual to ensure that the correct part numbers are obtained.

3 TECHNICAL OVERVIEW

3.1 Finish

Cabinet:	Pre-paint (Polyester)
Touch-Up Paint:	White #503086
Lid:	ABS Co-injected, one piece
Console:	ABS plastic
Facia (LCD Models):	IMD (In-mould decorative) Polycarbonate/PET
Facia (LED Models):	PC/PBT Printed film + clear ABS.
Drum:	Stainless steel grade 430T
Top Deck:	Polypropylene

3.2 Electrical Supply

	Operating Voltage	Maximum Current
USA Electric	220/240V AC 60Hz	24 Amps
USA Gas	110/120V AC 60Hz	6 Amps

3.3 Dimensions

Height to lid		
Open	55 ½ in – 56 ¾ in	1410mm – 1440mm
Closed	36 ½ in – 37 ½ in	925mm – 955mm
Height to console	40 ¼ in – 41 ½ in	1020mm – 1050mm
Width	27	685mm
Depth	27 ½ in	700mm

Note: Exact height of the AeroSmart™ dryer is dependent on how far the feet are inserted into the base of the dryer.

Weight Packed	152lbs (69kg)
Unpacked	134 lbs (61kg)

3.4 Maximum Capacity (Full Load)

Drum Volume	6.2 cubic feet (.184 cubic meters)
-------------	------------------------------------

4 COMPONENTS

The only visual change of major components between the G (General), I (Intuitive™) and the AeroSmart™ dryer is with the console assembly.

The Aerosmart™ LCD models incorporates an IMD (In-mould decorative display), which uses capacitive touch buttons that sense the user's fingers over the buttons. It has a large LCD Display allowing us to show graphics on the screen. The new screen allows us to present information simply while providing a lot more detail, such as graphic icons, pop up explanations and confirmation.

The AeroSmart™ LED models incorporates backlit buttons, with the selected button illuminated more brightly than the others. Words indicating selections made are also illuminated.

4.1 Control Panel Assembly

The three core components of the control panel assembly are the console, the fascia, and the PCB and housing.

Console

The console, which is made from ABS is the housing to which the fascia and PCB housing attaches. Lugs at the base of the console locate into the top deck. The console is secured to the rear of the top deck by two screws.



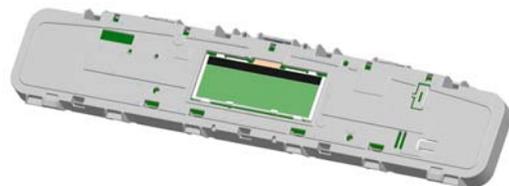
Fascia

The fascia will be one of either the IMD fascia for LCD models or the touch panel for LED models.



PCB and Housing

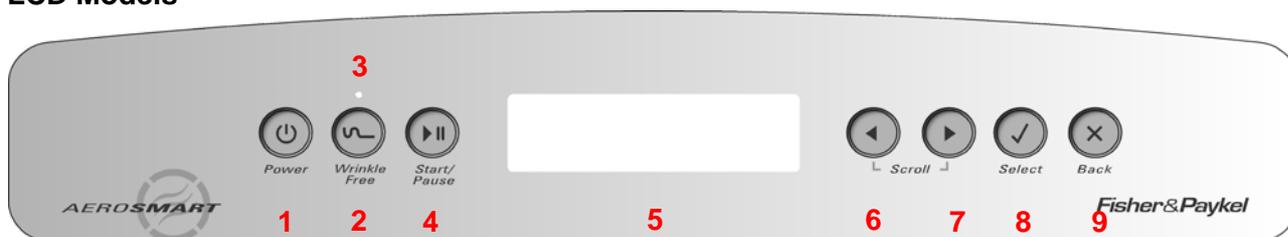
The PCB, which contains the electronics, is mounted within a plastic housing. The PCB housing is clipped into the console at the bottom, and secured with four screws along the top.



SMPLD REF COMPONENTS

4.2 Fascia

LCD Models



1. Power On/Off button.
2. Wrinkle Free On/Off. When the LED is on the wrinkle free option is turned on.
3. Wrinkle Free LED used also for data download (Refer to Section 7.4).
4. Start/Pause button.
5. LCD Screen.
6. Left arrow (used when scrolling through options on the LCD screen).
7. Right arrow (used when scrolling through options on the LCD screen).
8. Select button – Use to confirm setting.
9. Back button – Use to cancel setting.

LED Models



- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Power button. 2. Auto Sensing button. 3. Time Dry button. 4. Dryness Level button. 5. Temperature. 6. Progress. 7. Start/Pause button. 8. Wrinkle Free button. 9. Easy Iron button. | <ol style="list-style-type: none"> 10. Bulky button. 11. Air Dry button. 12. Sheets button. 13. Delicate button. 14. Heavy button. 15. Regular button. 16. Lid Lock icon. 17. Service Spanner icon. |
|--|---|

5 SERVICE PROCEDURES

Note: These instructions refer to the removal of the display module only. Refer to Service Manual 517760B for full servicing instructions.

Note: Prior to carrying out any service procedures ensure that the machine has been isolated from the power supply.

To remove the display module, follow the procedures as detailed below.

5.1 Removal of Lid

- (a) Open the lid fully, then lift off vertically.

Reassembly

Refit in reverse manner, ensuring that the hinge lugs on the lid are vertical.



5.2 Removal of Console

- (a) Disconnect the unit from the power supply.
- (b) Remove the lid.
- (c) Remove the two screws at the rear of the console securing the console to the top deck.
- (d) Tilt the console forward.

Reassembly:

Refit in reverse manner.



Screws

5.3 Removal of Display Module

- (a) Follow procedures for removal of console (refer to Section 5.2).
- (b) Disconnect the wiring harness from the sensor module.
- (c) Remove the 4 screws securing the display module to the console
- (d) Remove the display module from the housing by pivoting the display away from the console.

Reassembly:

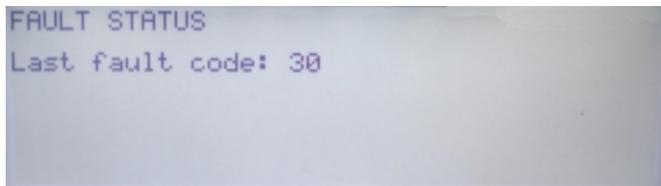
Refit in the reverse manner.



6 DIAGNOSTICS

6.1 Overview – LCD Models

If a fault occurs that prevents correct operation of the dryer, and is detected by the controllers, the dryer is stopped, the LCD shows a fault code and the beeper is continuously turned on and off.



FAULT STATUS
Last fault code: 30

Pressing any button once will disable the beeping. The fault code information will remain on the LCD screen until the power supply to the dryer is turned off.

If the Dryer has been either turned off or isolated from the power supply, the fault code can be recalled from memory by entering diagnostic mode. (Refer to Section 7.1).

If **START/PAUSE** is pressed while the fault code is displayed, the beeping will stop and the optical download is activated. (Refer to Section 7.4).

User Warnings

In the case of User Warnings, the LCD screen will display the User Warning and the beep tone will change from a continuous tone to a musical series of beeps, which are repeated every 5 seconds.

Depending on the nature of the User Warning, the operation of the dryer may cease or continue to 'limp on' until the cycle finishes or the user intervenes.

Pressing the **POWER** button when a User Warning is displayed will immediately turn the dryer off. User Warnings are saved to memory as Fault Codes, and the last Fault Code will be permanently stored.

The warning will also be recorded in the Warning Status screen (refer to Section 7.2.3), however the information on this screen will only be stored for as long as power is supplied to the dryer. When the dryer is isolated from the supply, the information in this screen will be erased.

6.2 Overview – LED Models

If a fault occurs that prevents correct operation of the dryer, and is detected by the controllers, the dryer is stopped, the LEDs flash showing a fault code and the beeper is continuously turned on and off.

Pressing any button once will disable the beeping. The fault code information will remain in memory.

If the Dryer has been either turned off or isolated from the power supply, the fault code can be recalled from memory by entering diagnostic mode. (Refer to Section 8.1).

If **START/PAUSE** is pressed while the fault code is displayed, the beeping will stop and the optical download is activated. (Refer to Section 8.4).

User Warnings

There are two possible user warnings.

1. The machine is beeping and the lidlock light is flashing:
Close the lid and press Start/Pause.
If the lid is already closed, open and close it again, then press Start/Pause.
Disconnect from the power (either by unplugging the dryer or turning off at the power supply). Wait 10 seconds. Reconnect and try turning the dryer on again.

2. The machine is beeping and the Time Dry 20 min is flashing:
The machine is unable to close the drum due to clothes interfering with the closing mechanism. Remove any articles that are interfering with the drum door and dry these in the next load.
Is the load higher than the lint bucket? Remove some articles and dry these in the next load.

6.3 Fault Code Summary

The following are the fault codes that may be displayed. The remedy section of each fault is the suggested sequence of repair or replacement. If the first suggestion does not remedy the fault, check the next on the list.

Fault Code 1 Communications Error.

Communications failure between the sensor module and motor control module.

- Remedy:
- (1) Check the continuity of the module interconnecting harness.
 - (2) Replace the sensor module.
 - (3) Replace the motor control module.

Fault Code 2 Drum Gap Cannot be Located.

- Remedy:
- (1) Ensure the sensor module is correctly located and clipped into place.
 - (2) Replace the sensor module.
 - (3) Remove the top deck and clean the drum sensing "bumps" on the outside of the drum end.
 - (4) Replace the drum.

Fault Code 3 Drum Stalled.

- Remedy:
- (1) If there is mechanical movement of the drum, but this fault code is appearing, follow the procedures for fault code 2.
 - (2) If there is no mechanical movement of the drum, check drum movement mechanisms: belt, motor and motor harness.
 - (3) Replace the motor control module.
 - (4) Replace the motor.

Fault Code 4 Invalid Option Link Read.

The motor control module heat source option link read is invalid.

- Remedy: Replace the motor control module.

Fault Code 6 Door Jammed – (User Warning).

The door is unable to close due to either clothes catching or an excessive closing load.

- Remedy:
- (1) Remove the obstruction.
 - (2) Reposition or remove some of the load.
 - (3) Fix the cause of binding in the door closing mechanism.
 - (4) Replace the motor.

Fault Code 7 Motor Current Excessive.

- Remedy:
- (1) Free up the dryer. Remove overload or cause of jamming.
 - (2) Replace the motor control module.
 - (3) Replace the motor.

Fault Code 7b Display Module RAM Check Error (LCD Models only)

On power up, the display has checked its memory against a known reference and found differences.

Remedy: Replace the display module.

Fault Code 8 Exhaust Sensor Over Temperature.

The exhaust sensor measures over temperature (element short circuit or low resistance).

- Remedy:
- (1) Check the integrity of the sensor circuit, checking particularly for short circuits. Approximate resistances ($\pm 10\%$) at various temperatures are; 32°F = 33 kOhms, 72°F = 11 kOhms, 104°F = 5 kOhms. Replace thermistor and harness if out of range.
 - (2) Check the element integrity, in that it switches off when the dryer is stopped.
 - (3) Replace the motor control module.
 - (4) Replace the sensor module.

Fault Code 9 Exhaust Sensor Under Temperature.

The exhaust sensor measures under temperature (open circuit or not plugged in).

Remedy: Refer to steps for over temperature fault (fault code 8) above, but open circuit likely.

Fault Code 10 24 Volt Supply Measurement Error.

The sensor module measures low voltage on actuator power supply.

Remedy: Replace the sensor module.

Fault Code 11 Lid Lock Open Circuit.

Remedy: Check the lid lock harness and coil. If there is continuity through these, replace the sensor module.

Fault Code 12 Lid Lock Switching Device Failure.

Remedy: Check that there are no short circuits in the lid lock circuit which may have caused the failure in the sensor module. The resistance of the lid lock should be between 50 and 100 ohms. If the circuit is correct, replace the sensor module.

Fault Code 14 Sensor Module Fault.

Remedy: Replace the sensor module.

Fault Code 15 Sensor Module Fault.

Remedy: Replace the sensor module.

Fault Code 16 Airflow Restriction – (User Warning).

Airflow restriction.

- Remedy:
- (1) Check that the lint bucket is empty and the filter is clear.
 - (2) Ensure that the exhaust duct is not restricted, blocked or kinked, preventing good airflow.
 - (3) Ensure that there is nothing inhibiting unrestricted airflow through the heater housing, through the drum, lint filter, lint collector and through the exhaust duct, and that the element has not shorted. If the dryer is located in a closet, ensure there is adequate ventilation for air intake.
 - (4) Check that the voltage is not too high.
 - (5) Check for element shorts or low resistance.
 - (6) Replace the automatic thermostat.
 - (7) Replace the motor control module.

Fault Code 20 Door Actuator Stalled.

Remedy: As per fault code 21.

Fault Code 21 Door Actuator Required Excess Voltage.

- Remedy:
- (1) Ensure there is no weight placed on the lid of the product (e.g. clothes basket). If so, remove the weight and retest.
 - (2) Inspect the installation, making sure that the cabinet sits evenly on the floor. If excess load is placed on the cabinet, it can cause the sub-deck assembly to twist.
 - (3) Inspect the front inside edge of the top deck for any signs of excessive inwards bowing, as this can cause it to catch on the door grabber, resulting in excess current draw on activation. The bowing can be caused by a bowed top deck or by incorrect assembly of the top deck to the cabinet front.
 - (4) Ensure the user intervention tab is not inhibiting door grabber movement.
 - (5) Check that the actuator linkage is located correctly. There must be no gap between the linkage and the plastic moulding.
 - (6) Check that the actuator housing is in place, and that the four retaining lugs are correctly located. Early models may have aluminium tape holding the housing in place. If so, ensure that the tape is replaced when the housing is refitted.
 - (7) Remove the actuator housing and look for obvious signs of things that are out of position (can the worm drive be rotated freely both backwards and forwards by hand, is the actuator motor in place?)
 - (8) Replace the faulty door actuator mechanism.
 - (9) Replace the door grabber, linkage and housings.
 - (10) Replace the sensor module.

Fault Code 22 Door Actuator Open Circuit.

- Remedy:
- (1) Check that the actuator wiring is plugged into the sensor module and is not open circuit. If faulty, replace.
 - (2) Replace the sensor module.

Fault Code 23 Door Actuator Movement Interrupted By Low Voltage.

The door actuator movement was interrupted by low voltage (brown out).

- Remedy:
- (1) Ensure mains voltage is within +10% and –15% of nominal.
 - (2) Replace the sensor module, as voltage measurement circuit may be reading incorrectly.
 - (3) Replace the motor control module, as it may not be supplying sufficient power to the sensor module. When the display is off, approximately 24V DC is supplied.

Fault Code 24 Door Actuator Movement Took Too Long.

Remedy: As per fault code 21.

Fault Code 28 Data Retrieval Error Following Loss of Power

- Remedy:
- (1) Switch off the mains power supply to the dryer for at least 10 seconds and confirm the error.
 - (2) Replace the motor control module.

Fault Code 29 Brown-Out Data Retrieval Error.

- Remedy:
- (1) If the fault occurs every time the dryer is turned on, replace the sensor module.
 - (2) Replace the motor control module.

Fault Code 30 Lid Lock unable to Lock – (User Warning).

Reason: The lid lock failed to lock. (Not user displayed.)

Remedy: (1) Ensure the lid is closed and the tongue engaged.
(2) Replace the lid lock harness.
(3) Replace the lid lock.
(4) Replace the sensor module.

Fault Code 45 Display Module ROM Check Error

On power up, the display has checked its memory against a known reference and found differences.

Remedy: Replace the display module.

Fault Code 105 Comms Error Time Out

Communications failure between the sensor module and display module.

Remedy: (1) Visually check the contacts on the RAST (edge) connector at each end on the harness between the sensor module and display module.
(2) Using a multimeter, check for continuity of the wires in this harness.
(3) Replace the display module.
(4) Replace the sensor module.

Fault Code 233 EEPROM Read Error (LCD models only)

The sensor module has problems reading the EEPROM data in the display module.

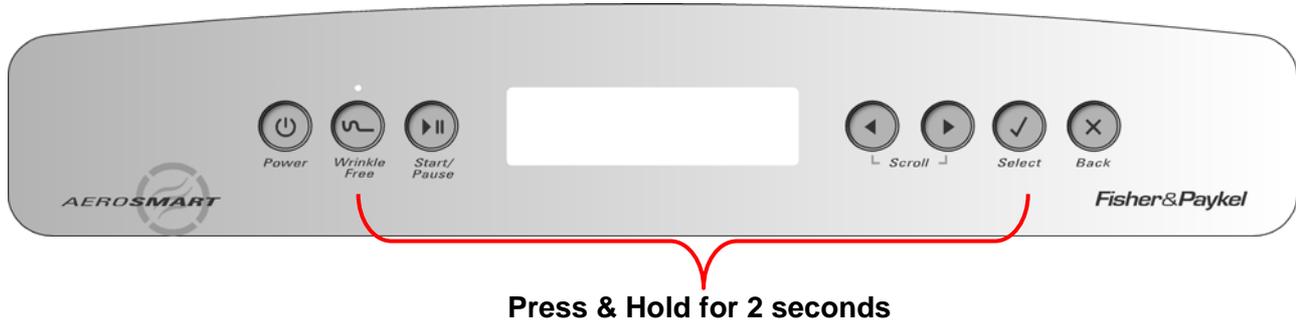
Remedy: Replace the display module.

Notes:

- 1. If the dryer has stopped mid cycle with the Wrinkle Free LED illuminated, the LCD screen (LCD models) or display LEDs (LED models) blank, and no fault "beeps", the dryer may be experiencing a low voltage supply. At such a level the dryer cannot function. Once the line voltage returns to normal, the dryer will recommence the interrupted cycle.***
- 2. If the power supply has been turned off, the dryer may momentarily display the state described in Note 1 prior to fully shutting down.***

7 DIAGNOSTIC MODE – LCD MODELS

7.1 Entering the Diagnostic Mode



To enter the **DIAGNOSTIC MODE**, turn the power on for a few minutes and then turn it off at the console.



Press and hold the **WRINKLE FREE** button and then press the **SELECT** button. Keep the buttons pressed for at least 2 seconds, after which time two beeps will sound and the screen above will appear. Press the **SELECT** button again to enter the service screen.

Note: *Provided the power supply to the machine is switched on, diagnostic mode may be entered at any time. To exit from the Diagnostic Mode at any time, press POWER*

7.2 Service Screen

Upon entering the service screen, one of the following screens will appear:

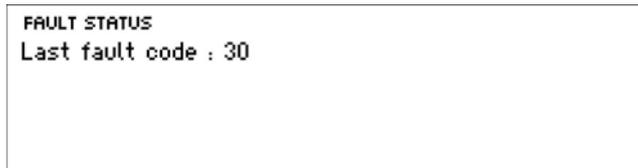
- Fault Status
- Machine Status
- Warning Status

To scroll between the screens, use the left and right arrows.

7.2.1 Fault Status Screen

Fault Status Screen

This screen will indicate the last fault code that occurred. If a fault is registered, the fault code is saved to EEPROM, which retains its memory even when the power is switched off. The fault code will remain visible until another fault code overwrites it.



Note: *Fault codes 7b, 45, and 105 will be reset if the power is switched off.*

7.2.2 Machine Status Screen

Machine Status Screen

Tacho: This displays the position of the drum. The displayed figure is updated every five seconds and will change as the drum revolves.

MACHINE STATUS	
Tacho : 340	Tacho err : 0
Exht Tmp : 22 °C	Touch : 0
Actuator : 0	LED cnt : 12

Exht tmp: This displays the temperature in °C of the exhaust sensor.

Actuator: This displays the count of the current draw of the actuator motor.

Tacho Err: During reversals of the drum there will often be a transient error because of uncertainty of direction during the reversing process, but this should be corrected on the next revolution.

Touch: This displays the impedance of the conductivity contacts (refer to Section 7.3).

LED Cnt: This is a measure of the infra-red light intensity required to sense the drum position. It is normally about 14 but can range from 5 to 53.

7.2.3 Warning Status Screen

The last User Warning will be displayed on this screen and will be displayed until another User Warning overwrites it or the power is switched off.

WARNING STATUS
Last warning code : 30 i.e. I cant LOCK THE LID

7.3 Testing the Conductivity Contacts

Impedance Testing

It is possible to check the integrity of the conductivity contacts through diagnostics. Firstly enter the Machine Status Screen as described in Section 7.2.2, and when in this mode, by touching damp clothes or fingers across the conductivity contacts, the value adjacent to the word **Touch** will increase. The minimum value is zero. This indicates an open circuit. The maximum value is 255. No change in this value when touching the contacts, or conversely a high value when not touching the contacts, would indicate a fault in this circuit.

Resistance Test

An alternative, but slightly less reliable, method of testing the conductivity contacts is to test the circuit with a multimeter. When using this method, the power to the dryer must be switched off. Place one probe of the multimeter on each conductivity contact. The resistance should be 6.4Mohms \pm 2%.

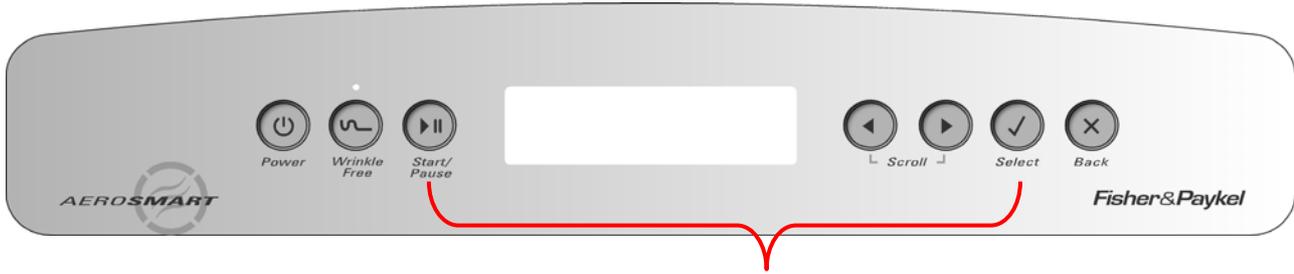
7.4 Data Download Mode

Encoded data is transmitted out of the white Wrinkle Free LED, and can be captured by an optical download pen attached to a PC or hand held palm PC, where "Smart Tool" software interprets the data to aid servicing.

1. Enter diagnostic mode as described in Section 7.1.
2. Push the **START/PAUSE** button and the Wrinkle Free LED will flash. The machine is now in data download mode.

To exit from the data download mode, press the **POWER** button.

7.5 Showroom Mode



Press and Hold **START/PAUSE**, then press the **SELECT** button

Showroom mode will play the introduction and repeat it continuously, until the dryer has been isolated from the power supply.

To access the showroom mode follow the steps below.

1. Turn the power supply to the dryer on.
2. During the introduction sequence on the LCD display (which lasts for approx. 1 minute) press and hold the **START/PAUSE** button, then press the **SELECT** button and hold these buttons for at least two seconds.

To exit, turn off the power supply to the dryer at the wall.

8 DIAGNOSTIC MODE – LED MODELS

8.1 Entering the Diagnostic Mode

To enter the Diagnostic Mode, turn the power on at the power point and off at the console.

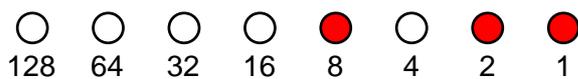
1. Press and hold the **WRINKLE FREE** button, then press the **POWER** button until the machine beeps and all eight LEDs across the top of the machine illuminate. The dryer is now in Diagnostic Mode.
2. Press the **TIME DRY** button three times to read the last fault.

The fault code is displayed in the row of eight cycle LEDs using a binary code. Each LED has a value as follows:

LED	VALUE
Regular	= 128
Heavy	= 64
Delicate	= 32
Sheets	= 16
Air Dry	= 8
Bulky	= 4
Easy Iron	= 2
Wrinkle Free	= 1

The fault code is determined by adding up the value of the illuminated LEDs.

For Example:



In this example, the LEDs with value “8” “2” and “1” are on. Therefore 8+2+1=11. Fault code 11 is displayed.

Investigate corrective action in sequence as listed in the fault code summary in Section 6.3. To exit the diagnostic mode, press the **POWER** button.

8.2 Testing the Conductivity Contacts

Impedance Test

To enter the conductivity impedance test mode, enter the diagnostic mode then press the **TIME DRY** button five times. In this mode, touching damp clothes or fingers across the conductivity contacts will cause the LED display to change. If the contacts, or harness to them, have gone open circuit, no change will occur in the LED display. This is a useful method of checking the integrity of the sensor cells. To exit the diagnostic mode, press the **POWER** button.

Resistance Test

An alternative, but slightly less reliable, method of testing the conductivity contacts is to test the circuit with a multimeter. When using this method, the power to the dryer must be switched off. Place one probe of the multimeter on each conductivity contact. The resistance should be 6.4Mohms \pm 2%.

8.3 Show Room Mode

To enter Show room mode, ensure the dryer is on at the power supply but off at the console. Push and hold the **DRYNESS LEVEL** button, then press the **POWER** button.

To exit show room mode, disconnect the machine from the power supply.

8.4 Data Download Mode

Encoded data is transmitted out of the Lid Lock LED, and can be captured by an optical download pen attached to a PC or hand held palm PC, where "Smart Tool" software interprets the data to aid servicing. To enter the data down load mode.

1. Enter diagnostic mode as described in Section 8.1.
2. Push the **START/PAUSE** button and the Lid Lock LED will flash. The machine is now in down load mode

To exit the Data Download mode, press the **POWER** button.

9 AUTOSENSING

When wet or damp clothes are loaded into a dryer they are partially saturated with water, which is a relatively good conductor of electricity. In the AeroSmart™ dryer, sensor bars (located beneath the lint bucket) are used to measure the conductivity. When moisture in the clothes touches across the sensor bars, their conductivity is measured. As the clothes dry they become less conductive and it is this measurement that is used to calculate the dryness of the clothes load. Large loads will brush against these sensor bars more frequently than small loads, and this strike count is used to help determine the dryness of different sized loads.

Different fabrics retain moisture differently. A thick towel containing a lot of moisture will often conduct the same as a light synthetic garment containing very little. It is this difference in fabric characteristics plus the initial unknown moisture content that makes the calculation of dryness reasonably complex. To test the sensor bars, refer to Section 7.3 (LCD models) or Section 8.2 (LED models).

10 TEMPERATURE CONTROL

Autosensing is automatically selected when the AeroSmart™ dryer is turned on. The user can select a time dry option of 20, 40 or 80 minutes through the Options menu. Autosensing of the clothes load dryness level is achieved by touch sensors that sense the moisture content of the load. An exhaust temperature sensor is used to monitor the exhaust temperature. The controller limits the temperature to what is required for the various cycles and determines what elements are used.

11 COOL DOWN

The dryer enters a cool down period at the end of the cycle. During this period the dryer continues to run with the heating elements/burner turned off, blowing ambient air through the load to help prevent creasing.

Autosensing: If any AutoSensing cycle has been selected, the cool down period will continue until the exhaust temperature drops to 95°F (35°C). However, if this temperature is not achieved after 10 minutes, the cycle will stop. This would occur if the ambient temperature was above 95°F (35°C).

Timed Dry: If an 80 minute or 40 minute Timed Dry cycle has been selected, the cool down period will run for the last 10 minutes of that cycle. If a 20 minutes Timed Dry cycle has been selected, the cool down period will run for the last 5 minutes.

Cycle	Cool Down
Autosensing	Cool down will last until the exhaust temperature drops to 95°F (35°C) or 10 minutes, whichever occurs first.
Timed Dry 80 Minutes	10 Minutes
Timed Dry 40 Minutes	10 Minutes
Timed Dry 20 Minutes	5 Minutes

12 CYCLE CHARTS – LCD MODELS

12.1 Electric

This chart lists the available cycles that can be selected on the electric models, and provides information regarding these cycles.

Main Cycles

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²	
							3.6kW (2/3)	1.4kW (1/3)	3.6kW (2/3)	1.4kW (1/3)
Regular	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	-	On	On	Off	On
Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	On	On	Off	On
Delicate	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Sheets	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	On	On	Off	On
Air Dry	No Heat	Ambient	40 Minutes	Nil	-	-	Off	Off	Off	Off
Bulky	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Easy Iron	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On

Bulky Cycles.

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²	
							3.6kW (2/3)	1.4kW (1/3)	3.6kW (2/3)	1.4kW (1/3)
Comforter -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	Off	Off	Off	Off
Pillows -Feather	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On
Pillows -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	Off	Off	Off	Off
Blanket	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On
Throw	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On
Jacket	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On
Sleeping Bag -Feather	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Damp/Dry	-	On	Off	Off	On
Sleeping Bag -Synthetic	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Damp/Dry	-	On	Off	Off	On

1. Refer Section 11

Life Cycles

Special Care	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²	
							3.6kW (2/3)	1.4kW (1/3)	3.6kW (2/3)	1.4kW (1/3)
Handwash	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Jeans (Work & Fashion)	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	On	Off	On
Freshen Up	No Heat	Ambient	20 Minutes	Nil	-	-	Off	Off	Off	Off
Warm Up	Medium	140°F (60°C)	20 Minutes	5 Minutes	-	-	On	Off	Off	On
Dry Clean	Medium	140°F (60°C)	40 Minutes	10 Minutes	-	Wrinkle Free	On	Off	Off	On

Family										
Comforter -Feather	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	On	Off	Off	On
Comforter -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	Off	Off	Off	Off
Pillows -Feather	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On
Pillows -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	Off	Off	Off	Off
Allergy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	On	On	Off	On
Shirts	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Towels	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	On	On	Off	On
Soft Toys	Low	127°F (53°C)	20 Minutes	5 Minutes	-	-	On	Off	Off	On

Sport										
Sportswear Light	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Sportswear Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	On	On	Off	On
Outdoor Wear	No Heat	Ambient	40 Minutes	10 Minutes	-	-	Off	Off	Off	Off
Protection Equip.	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	On	Off	Off	On

1. Refer Section 11

12.2 Gas

This chart lists the available cycles that can be selected on the gas models, and provides information regarding these cycles.

Main Cycles

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²
							Ignition Delay	Gas Heating	
Regular	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	-	30s	3m 30s	No Heat
Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	30s	3m 30s	No Heat
Delicate	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Sheets	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	30s	3m 30s	No Heat
Air Dry	No Heat	Ambient	40 Minutes	Nil	-	-	No Heat	No Heat	No Heat
Bulky	Low	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Easy Iron	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat

Bulky Cycles.

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²
							Ignition Delay	Gas Heating	
Comforter -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	No Heat	No Heat	No Heat
Pillows -Feather	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat
Pillows -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	No Heat	No Heat	No Heat
Blanket	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat
Throw	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat
Jacket	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat
Sleeping Bag -Feather	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Damp/Dry	-	30s	2m 20s	No Heat
Sleeping Bag -Synthetic	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Damp/Dry	-	30s	2m 20s	No Heat

1. Refer Section 11

Life Cycles

Special Care	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²
							Ignition Delay	Gas Heating	
Handwash	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Jeans (Work & Fashion)	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	3m 30s	No Heat
Freshen Up	No Heat	Ambient	20 Minutes	Nil	-	-	No Heat	No Heat	No Heat
Warm Up	Medium	140°F (60°C)	20 Minutes	5 Minutes	-	-	30s	2m 20s	No Heat
Dry Clean	Medium	140°F (60°C)	40 Minutes	10 Minutes	-	Wrinkle Free	30s	2m 20s	No Heat

Family									
Comforter -Feather	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	30s	2m 20s	No Heat
Comforter -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	No Heat	No Heat	No Heat
Pillows -Feather	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat
Pillows -Synthetic	No Heat	Ambient	80 Minutes	10 Minutes	-	-	No Heat	No Heat	No Heat
Allergy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	30s	3m 30s	No Heat
Shirts	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Towels	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	30s	3m 30s	No Heat
Soft Toys	Low	127°F (53°C)	20 Minutes	5 Minutes	-	-	30s	2m 20s	No Heat

Sport									
Sportswear Light	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Sportswear Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	30s	3m 30s	No Heat
Outdoor Wear	No Heat	Ambient	40 Minutes	10 Minutes	-	-	No Heat	No Heat	No Heat
Protection Equip.	Low	127°F (53°C)	40 Minutes	10 Minutes	-	-	30s	2m 20s	No Heat

1. Refer Section 11

13 CYCLE CHARTS – LED MODELS

13.1 Electric

This chart lists the available cycles that can be selected on the electric models, and provides information regarding these cycles.

Main Cycles

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²	
							3.6kW (2/3)	1.4kW (1/3)	3.6kW (2/3)	1.4kW (1/3)
Regular	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	-	On	On	Off	On
Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	On	On	Off	On
Delicate	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Sheets	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	On	On	Off	On
Air Dry	No Heat	Ambient	40 Minutes	Nil	-	-	Off	Off	Off	Off
Bulky	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On
Easy Iron	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	On	Off	Off	On

1. Refer Section 11

13.2 Gas

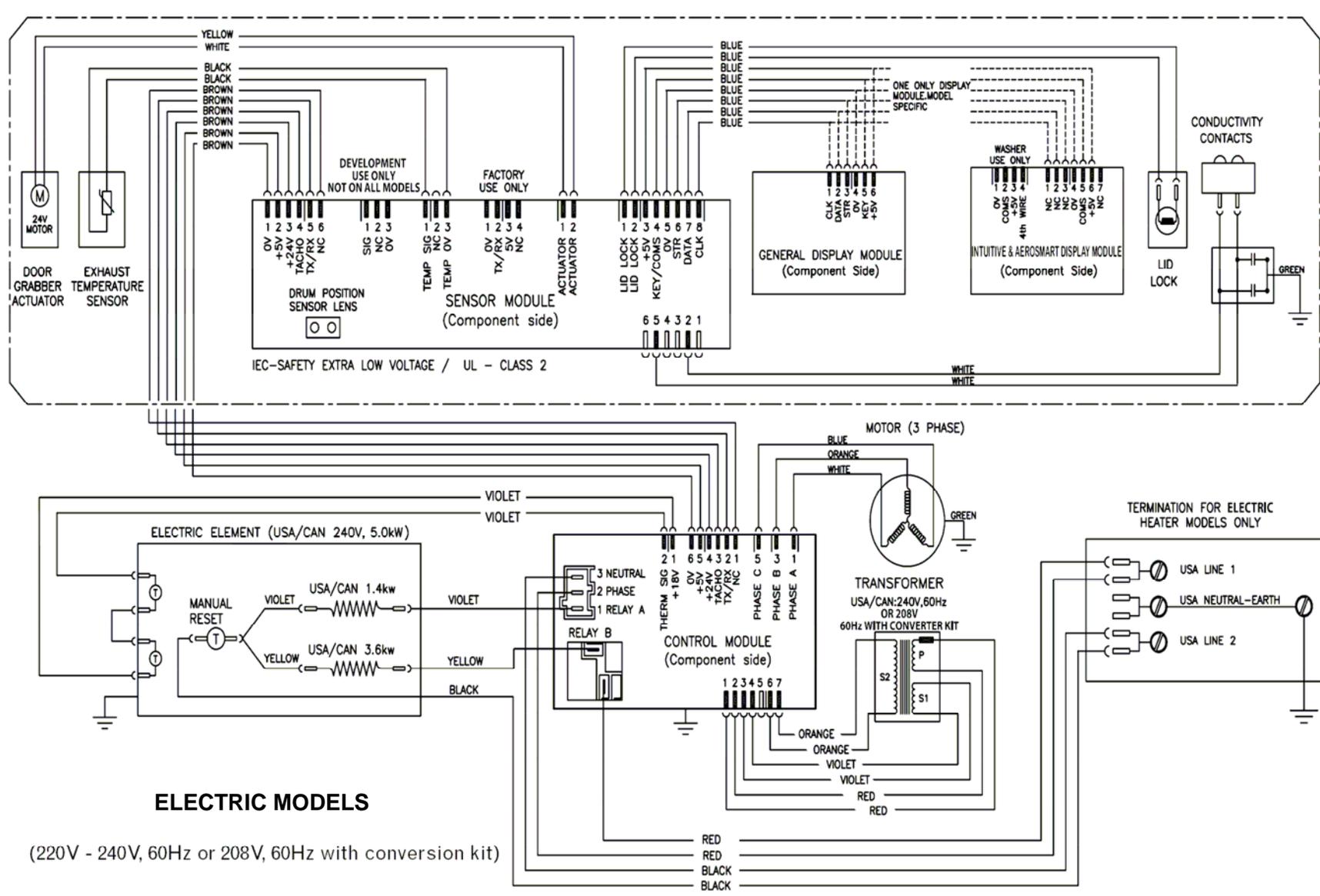
This chart lists the available cycles that can be selected on the gas models, and provides information regarding these cycles.

Main Cycles

Cycle	Heat	Temperature	Autosensing/ Timed Dry ¹	Cooldown ¹	Dryness Level	Additional comments	Door Closed Direction		Door open Direction ²
							Ignition Delay	Gas Heating	
Regular	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	-	30s	3m 30s	No Heat
Heavy	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	-	30s	3m 30s	No Heat
Delicate	Low	127°F (53°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Sheets	High	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry/Extra dry	Wrinkle Free	30s	3m 30s	No Heat
Air Dry	No Heat	Ambient	40 Minutes	Nil	-	-	No Heat	No Heat	No Heat
Bulky	Low	149°F (65°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat
Easy Iron	Medium	140°F (60°C)	Autosensing	95°F (35°C) or 10 Mins	Dry	Wrinkle Free	30s	2m 20s	No Heat

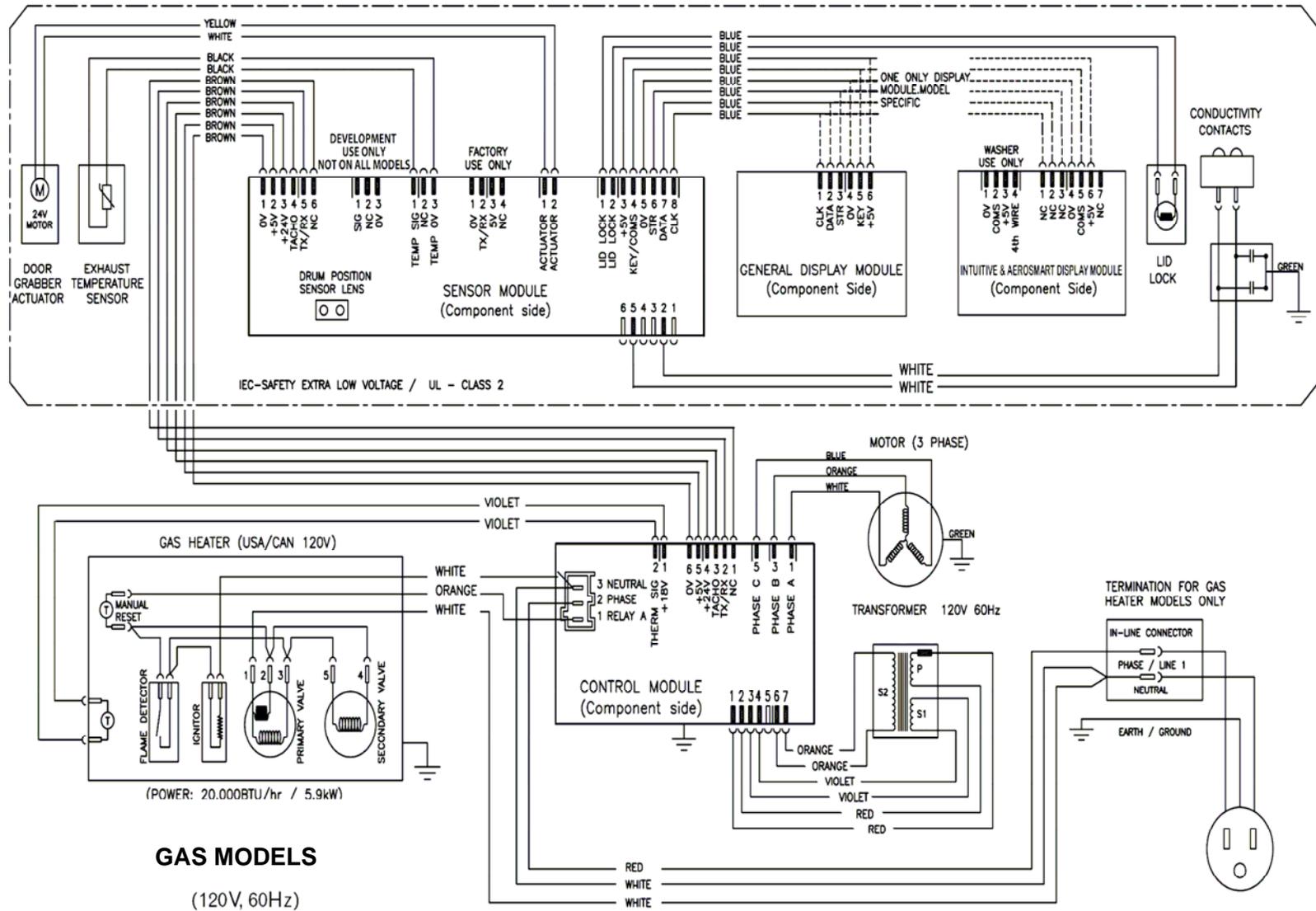
1. Refer Section 11

14 WIRING DIAGRAM – ELECTRIC MODELS



ELECTRIC MODELS
(220V - 240V, 60Hz or 208V, 60Hz with conversion kit)

15 WIRING DIAGRAM – GAS MODELS



GAS MODELS
(120V, 60Hz)

Notes