# Service Guide Tumble dryer

Asko TL751 / G / CA / XXL



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#### 1. What is a Dryer?

A lifter, operated by a rotating drum, rolls laundry in the drum, and hot air heated by electricity (or gas) dries the laundry through time or sensor dry system (a temperature control system) under various conditions.

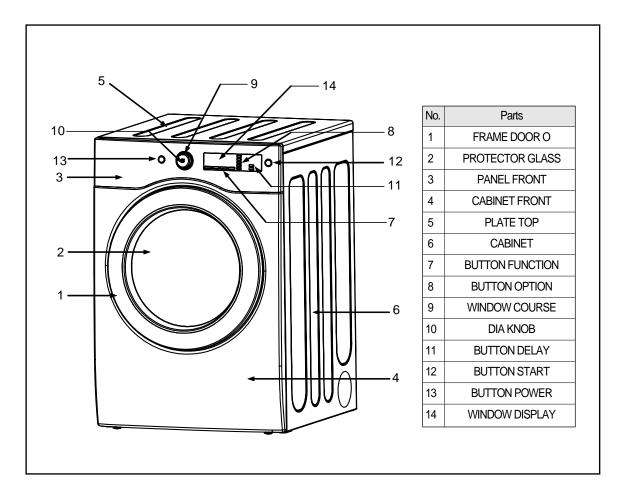
#### 2. Key Features

- Large Capacity/Time-Saving
  - A large quantity of laundry can be dried at a time, saving energy as well as time.
- ♦ Automatic Digital Dry
  - The digital sensor measures the humidity of laundry for optimum drying.
- ◆ Large Door and Automatic Dry
  - The dryer has a large transparent door for convenient laundry dropping and checking.
- Dust Filter
  - Fluff and dust are filtered during the drying process.
- Sterilizing Dry
  - The high-temperature air dries laundry with sterilizing effects.
- Drying Shoes
  - The dryer rack provided with the unit helps drying shoes as well as sensitive fabric.
- Child Lock
  - This is the function that protects children from harm during the drying process.

#### 3. Key Functions

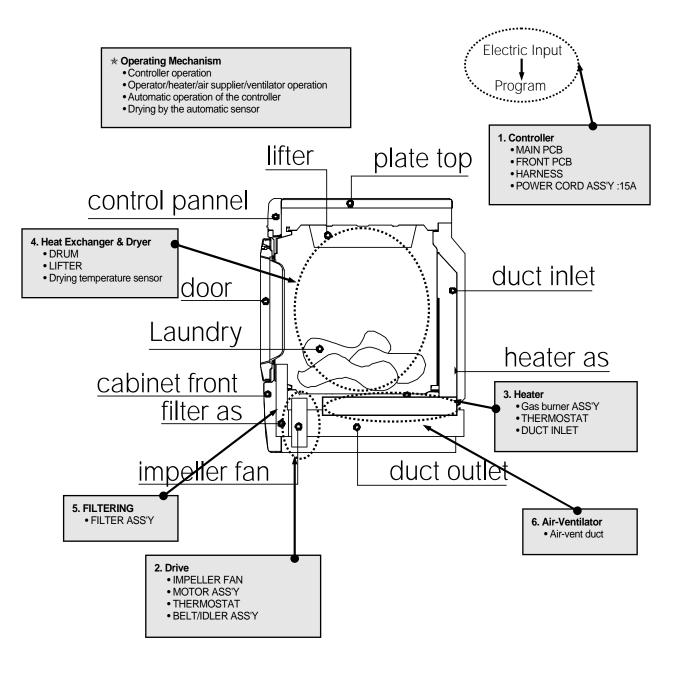
- ♦ Dry Time
  - Adjust the length of time for drying.
- ♦ Sensor Dry
  - Automatically dry according to the types of laundry.
- Rack Dry
  - Dry sensitive shoes and fabric(e.g. sweaters, silk, lingerie) on the rack.
- ♦ Anti-crease
  - Prevent wrinkles in case laundry stays in the drum after the drying process.
- ♦ Damp Signal
  - Signals when laundry is damp enough to be ironed.
- Delay Start
  - Preset time indicates staring time of the cycle.

#### 1. Product Look

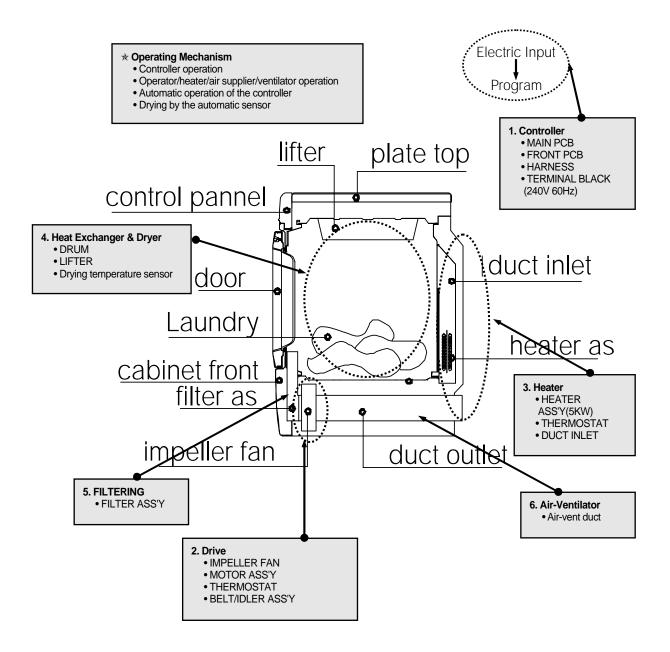


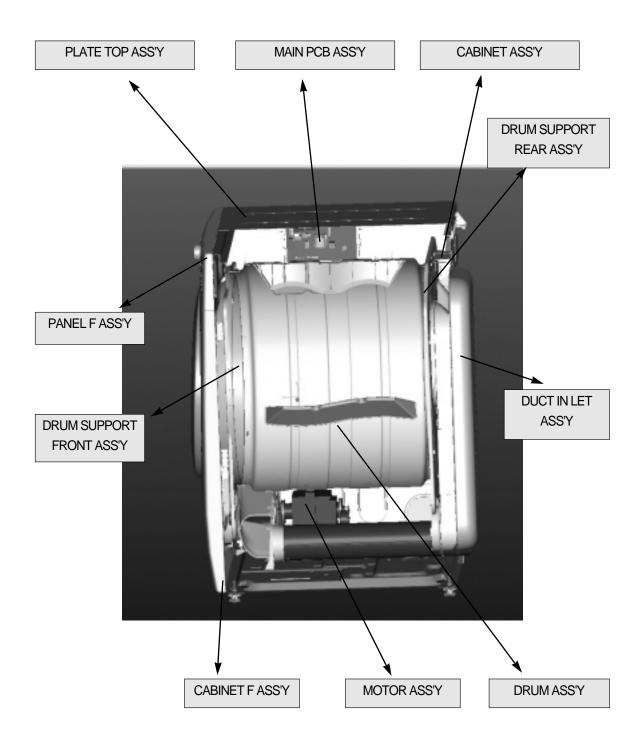
Dimensions	27" (68.6 cm) x 32" (81.2 cm) x 40 3/8" (102.5 cm) x 52" (132 cm)		
	W x D x H x Depth with door open		
Weight	129 lb. (58.5 kg)		
Capacity	IEC 7.3 cu.ft (22.9lb)		
Rated Power	Power source : Electric		
Rating	120/240V 60Hz		
	23.5A 5300w		

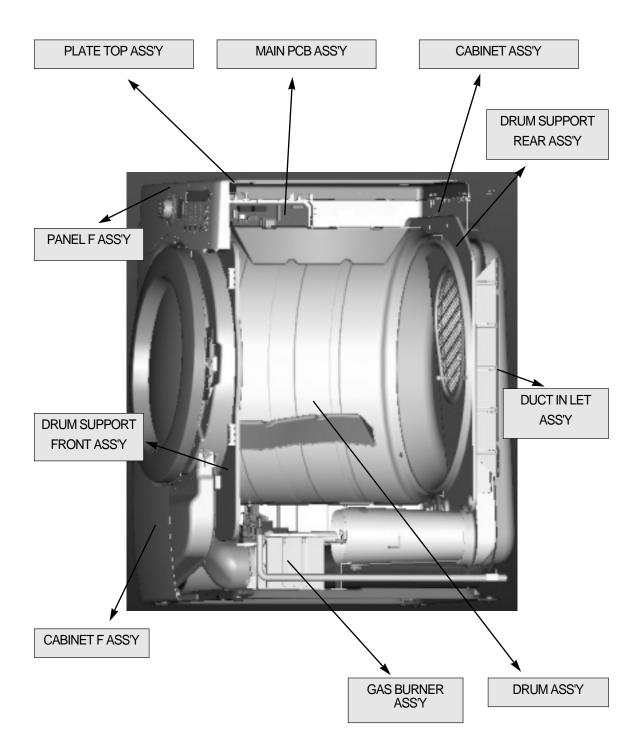
# Operating Mechanism Diagram (Gas Type)



# Operating Mechanism Diagram (Electric Type)

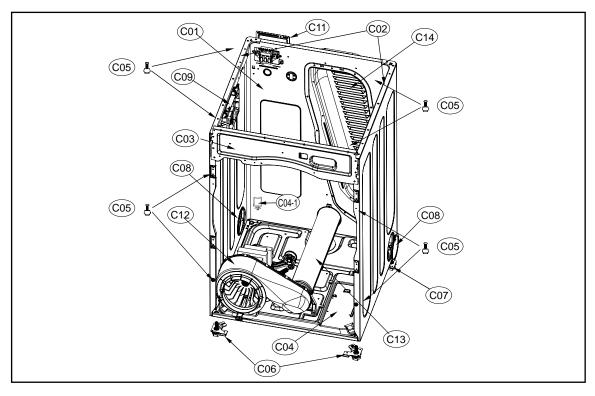






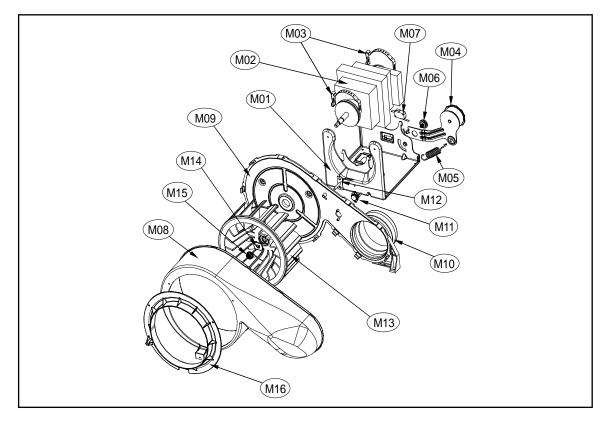
# Parts List by Ass'y

# 1. DRYER CBINET ASS'Y



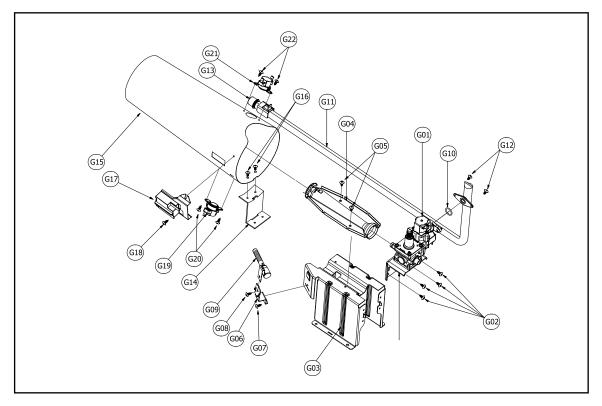
No.	Part Name	Part Code	Description	Qtt'y	Remark
C01	CABINET	3610812350	SGCC 0.8T	1	Electric Type
		3610812360	SGCC 0.8T	1	Gas Type
C02	FRAME TOP L	3612206500	SGCC 1.6T	1	Caulking
	FRAME TOP R	3612206600	SGCC 1.6T	1	
C03	FRAME UPPER	3612207900	SGCC 1.2T	1	
C04	BASE UNDER	3610392900	SGCD 0.8T	1	
C04-1	LOCK HARNESS M	3613802300	NYLON	12	
C05	FIXTURE PLATE	3612008000	POM	8	
-	SCREW TAPPING	7121401211	T2S PAN 4x12	8	For fixing fixture plate
C06	LEG ADJUST F AS	3617703900	DWR-WE31	2	
C07	LEG ADJUST R AS	3617704000	DWR-WE31	2	
C08	COVER DUCT	3611428010	ABS	2	
C09	MAIN PCB AS	PRPSSWAD40	DWR-WE31	1	Electric Type
003		PRPSSWAD60	DWR-WG31	1	Gas Type
C10	HARNESS AS	3612797000	DWR-WE31	1	Electric Type
		3612797300	DWR-WG31	1	Gas Type
C11	COVER TERMINAL	3611428100	SGCC 0.8T	1	
-	SCREW TAPPING	7112401411	T1 TRS 4x14	1	For fixing cover terminal
C12	UNIT MOTOR AS	36189L5A00	DWR-WE31	1	Refer to page 10
-	SCREW TAPPING	7112401411	T1 TRS 4x14	4	For fixing motor Ass'y
C13	PIPE EXHAUST AS	3614413600	SGCC 0.5T	1	
-	SCREW TAPPING	7112401008	T2S TRS 4 10 SUS	1	For fixing duct exhaust Ass'y
C14	COVER BACK	3611427900	SGCC 0.8T	1	
-	SCREW TAPPING	7112401411	T1 TRS 4x14	12	For fixing cover back

# 2. DRYER MOTOR ASS'Y



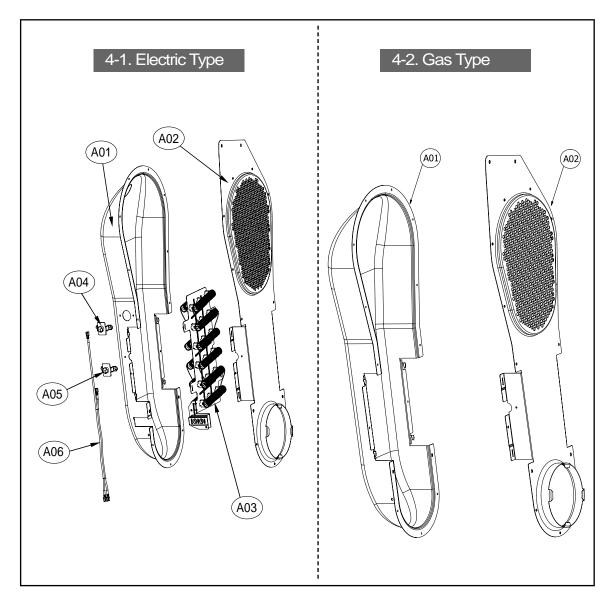
No.	Part Name	Part Code	Description	Qtt'y	Remark
M01	BRACKET MOTOR	3610608500	SGCC 2.0T	1	
M02	MOTOR DRYER	36189L5D00	AC 120V 60Hz	1	
M03	CLAMP MOTOR	3611206000	SK5 0.7T	2	
M04	BRACKET IDLER AS	3610609100	DWR-WE31	1	
M05	SPRING IDLER	3615115500	HSW3	1	
M06	SPECIAL BOLT	3616039000	S18A M6x10(FLANGE)	1	
M07	SWITCH MICRO	3619047500	UL. 16A 250AC HINGE LEVER. N-C 200G	1	
-	SCREW TAPPING	7121301611	T2S PAN 3x16	2	For fixing micrd s/w
M08	CASE FAN F	3611144900	PP(Heat resisting)	1	
M09	CASE FAN R	3611145000	PP(Heat resisting)	1	
M10	GASKET PIPE	3612323200	EPDM(320*15*2.0t)	1	
-	SCREW TAPPING	7112401411	T1 TRS 4x14	3	For fixing case fanr to bracket motor
M11	THERMOSTAT FAN	3619047900	UL.70ON.85OFF.125V/15A,250V/7.5A	1	
-	SCREW TAPPING	7121300811	T2S PAN 3x8	2	For fixing thermostat fan
M12	THERMISTOR FAN	361AAAAC20	UL-DRYER.R40=26.065K.R90=4.4278K	1	
-	SCREW TAPPING	7122401411	T2 TRS 4x14	1	For fixing thermistor fan
M13	IMPELLER FAN AS	3611886200	PP(Heat resisting)+BUSHING	1	
M14	SPECIAL WASHER	3616039100	SPC	1	
M15	SPECIAL NUT	3616039200	NUT HEX 3/8-24 UNF LH	1	
M16	COVER FAN	3611428200	PP(Heat resisting)	1	
-	SCREW TAPPING	7122401411	T2 TRS 4x14	2	For fixing cover fan

# 3. Gas Type



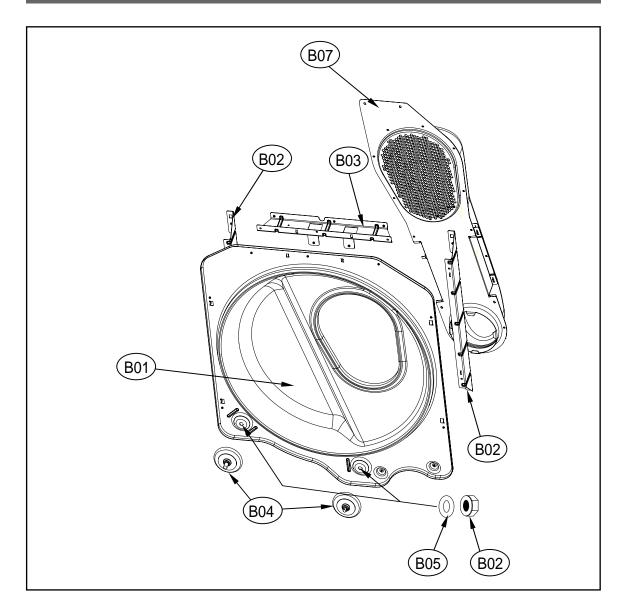
No.	Part Name	Part Code	Description	Qtt'y	Remark
G01	VALVE AS	3615417200	DC12V,130mA 0.5Psi	1	LPG
		3615417300	DC12V,130mA 0.5Psi	1	LNG
G02	SCREW TAPPING		T1 M4*8	4	For fixing G01 & G03
G03	GUIDE BUNNER	3612511100	SGCC 1.0T	1	
G04	MIXING VENTURI AS	3612209200	VENTURI AS+ FLAME DAMPER	1	WELDING(SPOT)
G05	SCREW TAPPING		M4*8, T1	2	
G06	BRACKET IGNITER	3610609400	SGCC 1.6T	1	
G07	SCREW TAPPING		T1 M4°ø8	1	For fixing G03 & G06
G08	SCREW TAPPING		T1 M4°ø8	1	For fixing G09 & G06
G09	IGNITER AS	36189L5800	Ceramic type 120V 60Hz 4A	1	
G10	O-RING	3614604100	HNBR	1	
G11	PIPE AS	3614413800	Pipe+Fixture+connector	1	WELDING
G12	SCREW TAPPING		PS/W 4°ø12	2	For fixing G01 & G11
G13	CAP PIPE	3610918200	PP	1	
G14	FIXTURE FUNNEL	3612009200	SGCC 2.0T	1	
G15	FUNNEL	3612511300	ALCOST 0.7T	1	
G16	SCREW TAPPING		T1 M4*8	2	For fixing G14 & G15
G17	FLAME SENSOR AS	3614825700	CSA, 5.75A 120V 60Hz 10RS	1	
G18	SCREW TAPPING		T1 M4*8	1	
G19	THERMOSTAT CUT-OUT	3619047810	110°C OFF / - 35°C ON	1	
G20	SCREW TAPPING		T1 M4*8	2	
G21	THERMOSTAT HI-LIMIT	3619047610	95°C OFF / 70°C ON 125V 25A	1	
G22	SCREW TAPPING		T1 M4*8	2	

# 4. INLETDUCT ASS'Y



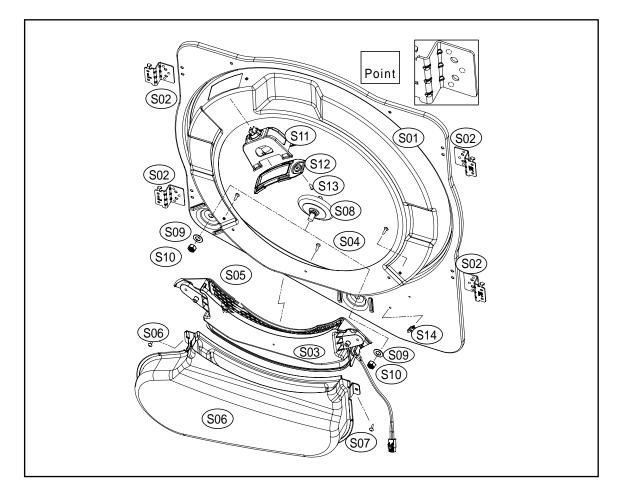
No.	Part Name	Part Code	Description	Qtt'y	Remark
A01	DUCT INLET REAR	3617510200	ALCOSTAR 0.6t	1	ELECTRIC TYPE
		3617510210	ALCOSTAR 0.6t	1	GAS TYPE
A02	DUCT INLET FRONT	3617510300	ALCOSTAR 0.6t	1	ELECTRIC TYPE
		3617510310	ALCOSTAR 0.6t	1	GAS TYPE
A03	HEATER AS	3612802500	240V 5,400W	1	ELECTRIC TYPE
A04	THERMOSTAT HI-LIMIT	3619047600	125°C OFF / 94°C ON 250V 25A	1	ELECTRIC TYPE
A05	THERMOSTAT CUT-OUT	3619047800	140°C OFF / -35°C ON 250V 25A	1	ELECTRIC TYPE
A06	HARNES HEATER(DRYER)	3612797100	UL1015 AWG12	1	ELECTRIC TYPE
-	SCREW TAPPING	7122400811	T2S TRS 4x8 MFZN	12	FOR FIXING DUCT INLET F & R
-	SCREW TAPPING	7122400811	T2S TRS 4x8 MFZN	4	FOR FIXING SENSOR

# 5. SUPPORT DRUM REAR ASS'Y



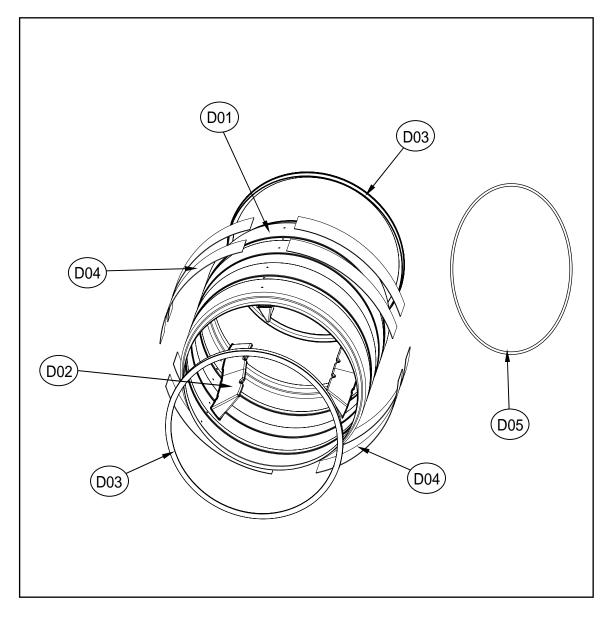
No.	Part Name	Part Code	Description	Qtt'y	Remark
B01	SUPPORT DRUM REAR	3615304500	SUS304 0.8t	1	
B02	BRACKET SUP.R-SIDE	3610608810	SGCC 1.0t	2	
B03	BRACKET SUP.R-UPPER	3610608910	SGCC 1.0t	1	
-	SCREW TAPPING	7122401411	T2 TRS 4x14 MFZN	7	For fixing bracket supp.up & side
B04	ROLLER AS	3614714400	ASSY	2	
B05	WASHER SHAFT	3616039400	T=1.0 ID=10.5 OD=21	2	For fixing roller as
B06	NUT HEX	3616039300	M10 P1.5	2	For fixing roller as
B07	DUCT INLET AS	3617510110	ALCOSTA 0.6T	1	GAS TYPE
		3617510100			ELECTRIC TYPE

## 6. SUPPORT DRUM FRONT ASS'Y



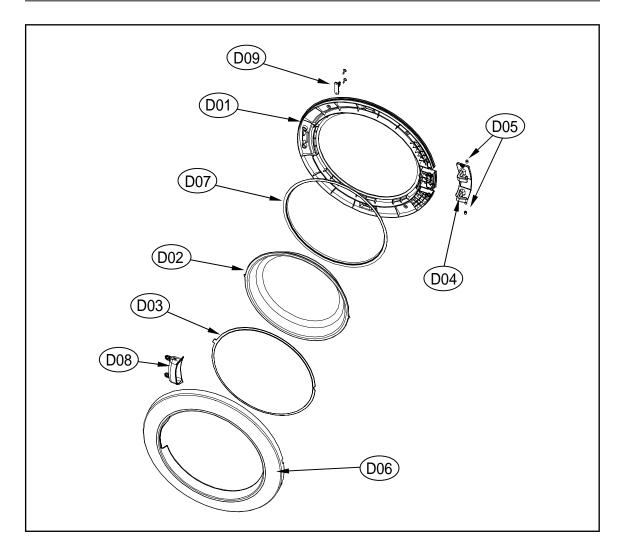
No.	Part Name	Part Code	Description	Qtt'y	Remark
S01	SUP. DRUM-F	3615304600	SECD 0.8t	1	
S02	BRACKET SUPF-R	3610609000	SECC 1.6t	2	
	BRACKET SUPF-L	3610609000	SECC 1.6t	2	
S03	FILTER DUST AS	3611909500	SGCC 1.2T	1	
S04	SCREW TAPPING		T2 TRS 4x10 SUS	1	For fixing body filter r
S05	SCREW TAPPING		T1 TRS 4x14 SUS	2	For fixing body filter r
S06	DUCT OUTLET AS	3617510400	DWR-WE31	1	
S07	SCREW TAPPING		T1 TRS 4x10 MFZN	2	For fixing duct outlet as
S08	ROLLER AS	3614714400	T2S PAN 4x12	2	
S09	WASHER SHAFT	3616039400	T=1.0 ID=10.5 OD=21	2	
S10	NUT HEX	3616039300	M10 P1.5	2	
S11	LAMP AS	3613625300	AC 125V, 15W	1	
S12	WINDOW LAMP	3615505100	ABS	1	
S13	SCREW TAPPING		T1 TRS 4x10 SUS	1	For fixing window lamp
S14	LOCK HARNESS	3613802400	M TYPE 15x19x5.6T NYLON66	1	For fixing harness sensor

# 7. DRUM ASS'Y



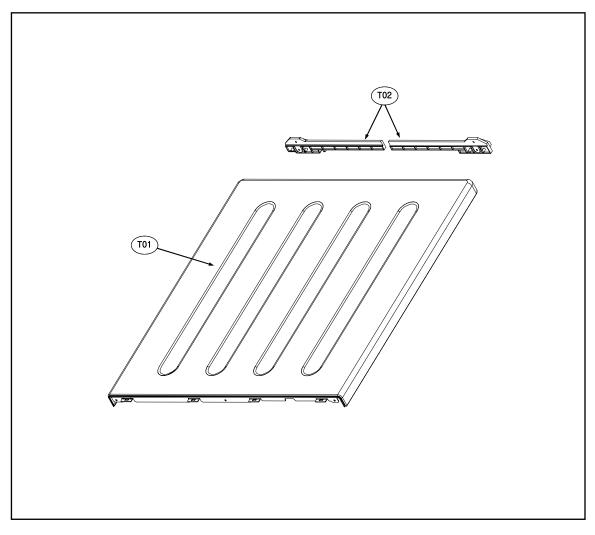
No.	Part Name	Part Code	Description	Qtt'y	Remark
D01	DRUM	3617010000	SUS 0.5t ø660 x 570	1	
D02	LIFTER	361A401000	Heat resisting PP	3	
-	SCREW TAPPING	7122502008	T2 TRS 5x20 SUS	12	For fixing lifter
D03	SEAL DRUM AS	3614010600	Pelt+ Synthetic leather	2	
D04	PAD DRUM	3614111110	BUTYL	4	
D05	V-BELT	3616591200	POLY TYPE 2,340mm	1	

# 8. DOOR ASS'Y



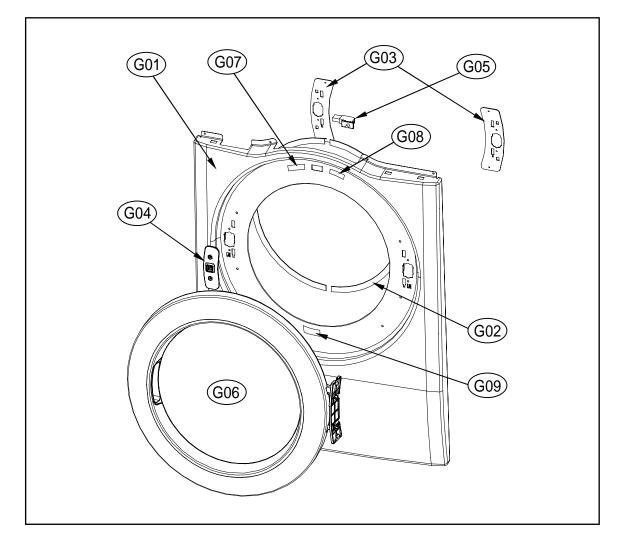
No.	Part Name	Part Code	Description	Qtt'y	Remark
D01	FRAME DOOR I	3612208000	Heat resisting PP	1	
D02	GLASS DOOR	36117ABR00	Glass or	1	
D03	PROTECTOR GLASS	3618304300	Transparent ABS	1	
D04	HINGE DOOR	3612903600	Zn-Dc Zn Plated	1	
D05	CAP HINGE DOOR	3610916500	POM	2	
D06	FRAME DOOR O	3612208110	ABS	1	
D07	GASKET DOOR	3612323000	TPE	1	
D08	COVER HANDLE	3611428310	ABS	1	
D09	HOOK DOOR	3613101100	POM	1	
	SCREW TAPPING	7115401608	FLT 4x14 SUS	1	For fixing hook door
-	SCREW TAPPING	7115402008	T1S FLT 4x20 SUS430 NATURAL	15	For fixing the attachment with door o&I

# 9. PLATE T AS



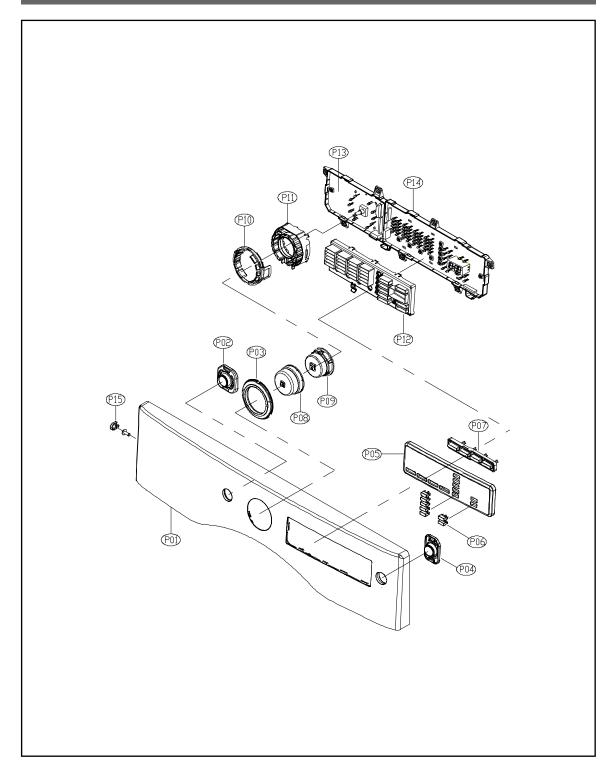
No	Part Name	Part Code	Description	Qtt'y	Remarks
T01	PLATE TOP	3614533010	SECD 1.2T	1	
T02	PLATE SUPPORTER AS	3615304100	ABS + EPDM	2	
-	SCREW TAPPING	7122401411	T2S TRS 4x14 MFZN	4	

# 10. CABINET FRONT ASS'Y



No.	Part Name	Part Code	Description	Qtt'y	Remark
G01	CABINET-F	3610812500	SGCD 0.8t	1	
G02	GASKET CABINET F	3612323300	EPDM 460x15x4.0T	4	
G03	SUPPORTER HINGE	3615304400	SGCC 2.0t	2	
G04	DOOR LOCK AS	3613802500		1	
-	SCREW TAPPING	7122401409	T2S TRS 4x14 SUS430	2	For fixing door lock as
G05	SWITCH DOOR	3619047700	125V/5A	1	
G06	DOOR AS	36117ABQ00	DWD-WE31	1	
-	SCREW MACHINE	3616051229	STS430 F/L BOLT(SE) 5x12	1	For fixing hinge & cabinet f
G07	LABEL WARNING F	3613558800	PVC	1	
G08	LABEL CAUTION F	3613557600	PVC	1	
G09	LABEL RATING	3613558900	PVC	1	

# 11. PANEL F ASS'Y



No.	Part Name	Part Code	Qťy	Specifications	Color	Cost in USD(\$)	Remarks	
P01	PANEL F	3614288900	1	ABS + SILK PRINT	White			
			1	ABS + SILK PRINT	Titanium			
P02	BUTTON POWER	3616637800	1	ABS + SILK PRINT	White			
			1	ABS + SILK PRINT	Titanium			
P03	WINDOW COURSE	3615506300	1	ABS(Transparent) + Film	White		ADO - Electronic and distinction	
			1	ABS(Transparent) + Film	Titanium		ABS + Film in-mold injection	
P04	BUTTON START	3616637900	1	ABS + SILK PRINT	White			
			1	ABS + SILK PRINT	Titanium			
P05	WINDOW DISPLAY	3615506400	1	ABS(Transparent) + Film	White			
			1	ABS(Transparent) + Film	Titanium		ABS + Film in-mold injection	
P06	BUTTON OPTION	3616638100	7	ABS	White			
			7	ABS	Titanium			
P07	<b>BUTTON FUNCTION</b>	3616638000	1	ABS	White			
			1	ABS	Titanium			
P08	DIAL KNOB OUTER	3616638200	1	ABS	White			
			1	ABS	Titanium		1 Piece SVC Part	
P09	DIAL KNOB INNER	3616638300	1	ABS	White		T Piece SVC Part	
			1	ABS	Titanium			
P10	LED COURSE	3613054700	1	ABS(Transparent)	NA			
P11	HOLDER COURSE	3613054500	1	ABS	NA			
P12	HOLDER FUNCTION	3613054600	1	ABS	NA		1 Piece SVC Part	
P13	PCB F AS	PRPSSWAD55	1	ASKO Elec Front PCB As	NA		T Piece SVC Part	
P14	CASE PCB FRONT	3611147600	1	ABS	NA			
P15	CAP SCREW	3610917700	1	ABS	White			
			1	ABS	Titanium			
-	SCREW TAPPING	71224012411	1	T2S TRS 4x12 MFZN	NA		Fix Panel F to Frame Upper	
-	SCREW TAPPING	71224012411	7	T2S TRS 4x12 MFZN	NA		Fix Case PCB F to Panel F	
-	LABEL WIRING	3613557800	1	WE31'S WIRING	NA		Panel F Back	

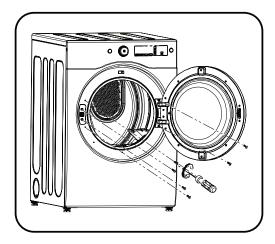
#### 12. Procedure for Reversing the Door

#### **Door hanging**

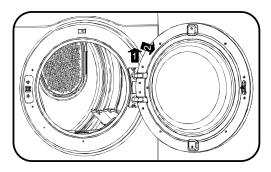
The tumble dryer come with the door hinged on the right. However, it is possible to change the door to be hinged on the left.

#### Following these instructions:

1. Open the door and remove the two bolts holding the hinge.

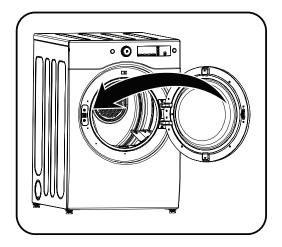


2. Then remove the door out of the front cabinet as indicated by the arrows.

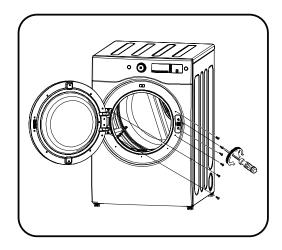


- 3. Unscrew the four screws on the door lock on the left side of the front cabinet and move to the right side.
- 4. Replace the screws you removed in step 3.

5. Next insert the hinge of the door securely in place of the left side of the front cabinet.



6. Secure the hinge using the bolts you removed in step 1.



## 1. Front PCB Function Specification

Comprehensive function specification of the unit including operation of a 27-inch dryer by drying courses and drying functions, control of electronic devices by PCB, operation by S/W, test function, error mode, and so on.

No.	Index	Descriptions	Miscellaneous
1	Features of the dryer	<ol> <li>Applied model: dryer for use in U.S. &amp; CANADA.</li> <li>Power source: ELECTRIC / LNG / LPG</li> <li>Heating type: HEATER / GAS</li> <li>Voltage: PCB &amp; MOTOR 120V 60Hz / HEATER 240V 60Hz</li> <li>PCB type: Front PCB (shared with other models) Main PCB (3 types) : ELECTRIC, GAS ON/OFF CONTROL, GAS PROPORTIONAL CONTROL</li> </ol>	
2	Course and Operation	Gentle Symbulics Swerdely Wear Deverdely Deverdely Dever	
3	Adopted sensors	<ol> <li>Humidity sensor</li> <li>Temperature sensor: at the duct outlet</li> </ol>	
4	Load control	1. Motor 2. ELECTRIC HEATING : HEATER 2.5KW 2UNIT 3. GAS VALVE : ON/OFF CONTROL / PROPORTIONAL CONTROL	
5	Display	1. Course and operation display : Lamp LED + 18:88	

#### 2. Detailed Descriptions

#### 2-1. Setting by Courses

#### 1) Sensor Dry Course

		COURSE - SENSOR DRY				
		Synthetics	Everyday Wear	Towels	Bulky Items	
	Very Dry	1:01	1:05	1:05	1:10	
	More Dry	54	1:02	55	1:00	
DRY LEVEL	Normal	47	59	50	55	
	Less Dry	40	56	45	50	
	Damp Dry	33	53	40	45	
Dry Level Default		Normal	Normal	Normal	Normal	
TEMP CONTROL		Medium	Mid High	High	High	

		COURSE - SENSOR DRY				
		Gentle Ultra Gentle		Iron Dry		
	Very Dry	1:00	55	-		
	More Dry	50	45	-		
DRY LEVEL	Normal	40	35	-		
	Less Dry	30	25	-		
	Damp Dry	20	20	25		
Dry Level Default		Normal	Normal	Damp Dry		
Temp	Control	Low	Low	Ultra Low		

- A. Temperatures are not changed in Sensor Dry Course so the initial setting is not altered.
- B. Temp Level is set to "High" while Dry Level is set to "Very Dry".
- C. All options of Dry Level can be selected in Sensor Course.
- D. The course can not be changed when the unit stops operating temporarily in Sensor Dry and Manual Dry Course.

#### 2) Manual Dry Course

		COURSE - MANUAL DRY			
		Quick Dry	FRESHEN UP	AIR DRY	
TEMP	TEMP Time		30	35	
CONTROL	Temp Default	High	Mid high	-	
DRYLEVEL		-	-	-	
TE	MP	Ultra Low ~ High	Ultra Low ~ High	-	

- A. Only Temp is selected in Manual Dry Course.
- B. Dry Level is not selected in Manual Dry Course and Iron Dry.
- C. Operation time does not change even if Temp is changed.
- D. Dry Level and Course LED are off (not selected) if Dry Time is set while only Temp is on (the default set is High).
- E. Time can be changed by using More Time and Less Time buttons when Manual Dry Course and Dry Time are selected.
- F. Pushing More Time or Less Time button increases or decreases time by a minute. The maximum drying time is 1:50 (minutes) and minimum 0:10 (minutes). This includes 5 minutes of cooling time.

#### 2-2. Operation

1) Overview

- → Different operation processes are applied to Sensor Dry Course and Manual Dry Course.
- Sensor Dry Course judges the condition of laundry with humidity/temperature sensors so as to decide appropriate dry level.
- → Manual Dry Course dries laundry as per temperature conditions set by an operator.
- 2) Process of Sensor Dry Course
  - A. Power Button On
  - $\rightarrow$  "\_\_\_" is displayed at 18:88 LED.
  - → Press Start Button to automatically select Normal Course.
  - → "High" of initial Beeper goes on and the previous Beeper value is displayed when you switch on the power.
  - B. Operation Selection
  - → Select operation with Course Switch/Button.
  - → Buttons operate as per 2-1.
  - → The selected Course/Dry Sensor/Temp./Dry Time/Signal goes on.
  - → Option LED may go on and off according to your selection.

3) Process of Manual Dry Course

- A. Power Button On
- $\rightarrow$  "\_\_\_" is displayed at 18:88 LED.
- → "Check Filter" of Custom LED goes on and off before you press Start Button.
- → "High" of initial Beeper goes on and the previous Beeper value is displayed when you switch on the power.
- B. Operation Selection
- → Select operation with Course Switch/Button.
- → "Check Filter" of Custom LED goes on and off before you press Start Button. Once the unit starts operating, "Check Filter" goes off.
- → Buttons operate as per 2-1.
- → The selected Course/Dry Level/Temp Control/Time Dry/Beeper goes on and Custom LED displays Dry/Cooling.
- → Option LED may go on and off according to your selection.
- C. Operation Process
- → Once operation starts, LED of Custom LED goes off.
- → Humidity data are not produced and Heater is controlled by the temperature set by Temp Control.
- → Time is not changed but drying/cooling continues during the time set initially.

#### 4) Process of Time Dry Course

- A. Selection of Time Dry
- → Course Selection foes off.
- → Dry Level can not be selected (Default: "High") but only Temp Control.
- → Buttons operate as per 2-1 (Same as Manual Dry).
- B. Operation Process
- → The process is the same as Manual Dry.
- → "Check Filter" of Custom LED goes off if you press Start Button.

#### 2-3. Operation of Load and Sensor

- 1) Operation of Heater Electric Type
  - ➔ On/Off goes on according to temperatures set or measured by the sensor. Regardless of the control by the microcomputer, however, the heater may go off if a temperature reaches Thermostat Off Temperature as per outlet conditions.
  - → As regards temperature setting, refer to 2-4 (button operation and temp control).
  - → If you stop the unit temporarily, the machine stops operating until it resumes the function.
  - ➔ If Sensor Course is selected and Temp Control is set to Low or Ultra Low, only the outer heater operates. Two heaters function if other temperatures are selected.
  - ➔ If Manual Course is selected and Temp Control is set to Low or Ultra Low, only the outer heater operates. Two heaters function if other temperatures are selected.
  - ➔ If Time Dry Course is selected and Temp Control is set to Ultra Low, only the outer heater operates. Two heaters function if the temperature is set to Low.
  - → The heater goes off if Cooling or Wrinkle Care is selected.
  - → The heater goes off if Air-Dry of Manual Course is selected, for Temp Control is not available.
- 2) Operation of Gas Valve On/Off Type
  - Gas valve is continuously turned on/ off according to the temperature measured by temperature sensor to reach the set temperature. However, when reaching the temperature for thermostat off by exhaust conditions, gas valve can be turned off regardless of MICOM control.
  - → For temperature set values, refer to 4) Temp Control of Section 2-4.
  - → At temporary suspension, operation is stopped. Then, it starts again as the cycle begins.
  - → Gas valve is not turned off in cooling and winkle care cycle.
  - → In manual course, gas valve for air dry of which temp control is not selected does not operate.
- 3) Operation of the Motor
  - → The motor continues its function once operation starts.
  - → The motor stops if you stop the unit temporarily.
  - → The motor continues to operate during Cooling.

→ If Cooling or Wrinkle Care is selected, the motor turns on for 10 seconds and off for 5 minutes and 50 seconds.

- 4) Door Control
  - → The heater and motor operate only the door is closed.
  - → If the door is opened during the operation, the heater and motor turn off. If you press Start Button while the door is opened, LED goes on for a second.
  - → The unit operates only after the door is closed.

#### 2-4. Operation of Buttons

#### 1) Power

- A. The electric power switch turns on/off the display.
- B. Automatic switch off function
  - 1 Power is immediately switched off after an operation is done.
  - (2) Power is switched off after 10 minutes if no button is selected while power is on.
- C. Initial display when power goes on
  - 1) LED of all courses goes on in order.
  - (2) "\_\_\_" is displayed at 18:88 LED.

#### 2) Start/Pause

- A. Normal Course is operated if you press the button after switching on the power.
- B. Operation starts after you select one of 11 automatic and program courses.
- C. If you press this button while the unit is in operation, the on-and-off indicator goes on and the machine stops. If you press the button again, the operation is resumed.
- D. If you press Pause Button, other buttons or the encoder switch does not function. That is, you can not change the operation once it starts unless switching off the power.
  - 1 Power is immediately switched off after an operation is done.
  - (2) Power is switched off after 10 minutes if no button is selected while power is on.

#### 3) Dry Level

- A. If you press this button, the following is displayed in order.
  - Normal-More Dry-Very Dry-Damp Dry-Less Dry-Normal
- B. Each level targets humidity as follows.

Dry Level	Target Humidity
Damp Dry	80%~92%
Less Dry	88% ~ 96%
Normal	92% ~ 100% or higher
More Dry	94% ~ 100% or higher
Very Dry	96% ~ 100% or higher

C. You can select all levels in Sensor Dry Course but none in Manual Dry Course.

#### 4) Temp

- A. If you press this button, the following is displayed in order.
  - Medium Mid High High Ultra Low Low Medium
- B. Each level targets temperatures as follows. (Target temperatures : Thermostat fan)

Level	Target Temperatures			
Level	Heater-Off(°C)	Heater-On(°C)		
High	63	56		
Mid High	59	52		
Medium	52	45		
Low	48	41		
Ultra Low	40	33		

C. This is available only in Manual Dry Course not Sensor Dry Course.

#### 5) Dry Time

- A. If you press this button, the following is displayed in order. 40 - 50 - 60 - 20 - 30 - 40
- B. Pushing More Time or Less Time button increases or decreases time by a minute. The maximum drying time is 1 hour and 50 minutes and minimum 10 minutes (the indicated time includes 5 minutes of cooling).
- C.If you select Dry Time, Dry Sensor and Course LED go off. That is, you can not choose Dry Sensor and Course but only temperatures (default is High).
- D. 5 levels of temperatures are av ailable.

#### 6) Signal

- A. Then, the volume of the beeper changes.
- B. You can not change the beeper while the unit is in operation or stops temporarily.

#### 7) More Time

- A. Pressing this button increases time by a minute.
- B. The time increases up to 1:55 (minutes)
- C. You can change time in Manual Dry Course and Time Selection. Also Anti-crease can be selected/cancelled.

8) Less Time

- A. Pressing this button decreases time by a minute.
- B. The time decreases up to 00:15 (minutes)
- C. You can change time in Manual Dry Course and Time Selection. Also Anti-crease can be selected/cancelled.

#### 9) Delay Start

- A. Preset time indicates starting time of the cycle.
- B. When pressing Delay Start button, time changes in the order of 1 2 3 4 ... 12 1.
- C.After selecting preset time, cycle change is possible before entering preset mode by pressing Start/Stop button. However, cycle cannot be changed after entering preset mode.
- D. To preset operation, select cycle select preset time press Start/ Stop button.
- E. The selected cycle is displayed for 3 seconds when pressing Start/Stop button after entering preset mode to check the selected cycle.

#### 10) Rack Dry

- A. If you press Rack Dry button, time is set to 55 minutes without default temperature.
- B. Only Low or Ultra Low is selected with the operation of Heater 1.
- C. You can adjust time with More/Less button.
- D. Once Rack Dry is chosen, you can not select Anti-crease, Damp Signal.

#### 11) Anti-crease

- A. Selecting Wrinkle Care does not change course time.
- B. In order to prevent wrinkle, the motor continues to run for 10 seconds and stops for 5 minutes and 50 seconds while the heater is off after all the operation (including cooling) finishes.
- C. The course stops only you press Start/Stop or Power button.
- D. You can select/cancel this course during operation or pause.
- 12) Child Lock
  - A. Child lock mode begins by pressing and holding Child Lock for 3 seconds.
  - B. In child lock mode, all the buttons, with the exception of power button are not operated.
  - C. Child lock mode is cleared by pressing and holding Child Lock for 3 seconds again.
- 13) Damp Signal
  - A. This button works only in Sensor Dry Course without changing time.
  - B. The unit beeps every 3 seconds after the target humidity is achieved until the operation is finished.
  - C. The beep stops if the door is opened or operation stops. When the operation is resumed, the beeper is off.

## 2-5. Option

Programs		Dry Sensor	Temperature	More Time Less Time	Rack Dry Anti-crease Delay Start	Damp Signal
Bulky Items	Default	Normal	High	Х	0	0
Duiky items	Select	All	Х	~	0	
Towels	Default	Normal	High	Х		Ο
TOwers	Select	All	Х	~	0	U
Everyday	Default	Normal	Mid.High	Х	0	0
Wear	Select	All	Х	^	0	0
Synthetice	Default	Normal	Medium	Х	0	0
Synthetics	Select	All	Х	^		
Gentle	Default	Normal	Low	x	О	0
Gentie	Select	All	Х	^		
Ultra	Default	Normal	Low	Х	0	0
Gentle	Select	All	Х	^	0	
Iron Dry	Default	Damp dry	Ultra low	Х	0	0
	Select	Х	Х	~	0	
Quick Dry	Default	-	High	0		Х
	Select	Х	Ultralow~high	0	0	
Freshen	Default	-	Mid High	0		Х
	Select	Х	Ultralow~high	0	0	^
	Default	-	-	0		Х
Air Dry	Select	Х	Х	0	0	

A. If you select Rack Dry, the previous course and operation goes off.

B. If you select Rack Dry, Anti-crease or Damp Signal is not available.

#### 2-6. Error Mode

1) H1 error - Humidity sensor error

- (1) This occurs when there is a short defect in the humidity sensor (the indicated value is lower than 24)
- (2) The unit buzzes, indicating the error, every 10 minutes for 10 seconds.
- (3) The error display goes off when the power is switched on/off.

2) H2 error - Drying temperature sensor open/short error

- (1) This occurs when there is a defect in the drying temp sensor or disconnection.
- (2) The unit buzzes, indicating the error, every 10 minutes for 10 seconds.
- (3) The error display goes off when the power is switched on/off.
- 3) H5 error Heater overheated (ELECTRIC TYPE)
  - 1 This occurs when the temp sensor indicates 85° or higher.
- 4) Heater disconnection check and H4/H6 error (ELECTRIC TYPE)
  - (1) No error is indicated in case of actual consumer use, for this mode checks heater defects through customer service.
  - (2) The defect must be checked without any load.
  - (3) How to enter the mode: Push the power button while Dry Beep and More buttons are pressed at the same time.
  - (4) Then, Heater 1, Heater 2, and the motor are turned on.
  - (5) Check the temp initially and 2 minutes later. Measure the difference.
    If the difference is 20°C or greater, "OK" is indicated.
    If between 5°C~19°C, "H6" is displayed, indicating disconnection of one heater.
    If 5°C or below, "H4" is displayed, indicating disconnection of two heaters.
- 5) H3 Error Flame Detector Open Defect (Gas Type)
  - (1) Prior to igniter operation, it is checked whether flame detector is attached. H3 error occurs when flame detector is still open after 80 seconds.
- 6) H7 Error Gas Valve Defect or Gas Blocked-off (Gas Type)
  - (1) H7 error occurs if flame detector maintains short state when operating gas valve after normal operation of flame detector and igniter (error displayed after 5 repetitions).
- 7) H8 Error Igniter Defect or Flame Detector Short (Gas Type)
  - (1) Flame detector must open within 25 seconds after igniter operation. H8 error occurs when the initial state of short is maintained after the 25 seconds (error displayed after 5 repetitions).

#### 2-7. TEST Mode

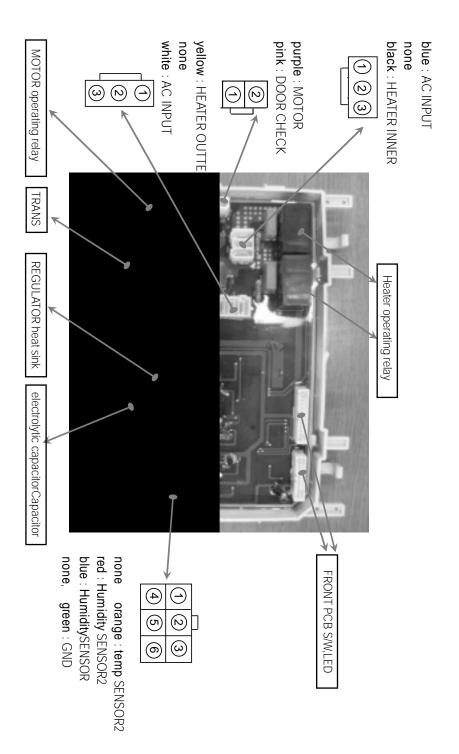
#### 1) PCB TEST MODE

A. How to enter the mode: switch the power on while pressing Dry Level and Temp Control buttons. B. Operation order: check load by pressing Time Dry Button continually.

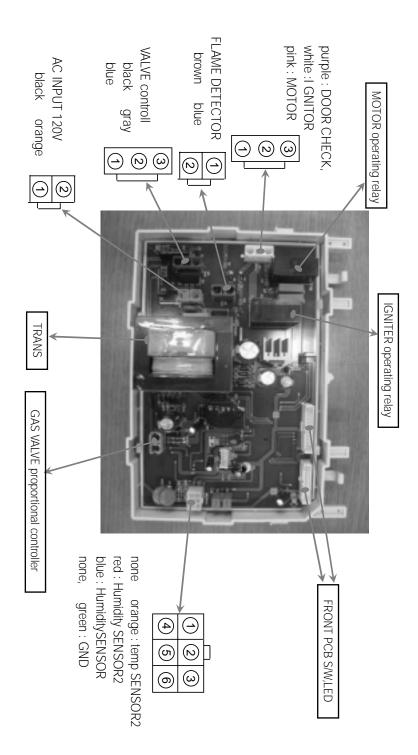
No.	Operation Load	Time (Sec)	DISPLAY	Miscellaneous
1	F PCB LED ALL On	0.5	ALL LED	Shared by electric type and gas type.
2	Humidity sensor check	0.5	1:xx	Shared by electric type and gas type.
3	Temperature sensor check	0.5	2:xx	Shared by electric type and gas type.
4	Door S/W check	0.5	dc> do	Shared by electric type and gas type.
5	Motor check	0.5	4 : nr	Shared by electric type and gas type.
6	Heater-Outer check / Ignitor check	0.5	5:H1	Electric type / Gas type
7	Heater-Inner check / Valve 1 check	0.5	6:H2	Electric type / Gas type
8	Valve 2 check	0.5	7 : H3	Gas type
9	Power off	0.3	Fc>Fo	Shared by electric type and gas type.
	Total time		18 seconds	

Fixed resistance of the temp sensor : 1.7  $\mbox{K}\Omega$ 

## 3. ELECTRIC DRYER PCB PIN LAYOUT



#### 4. GAS DRYER PCB PIN

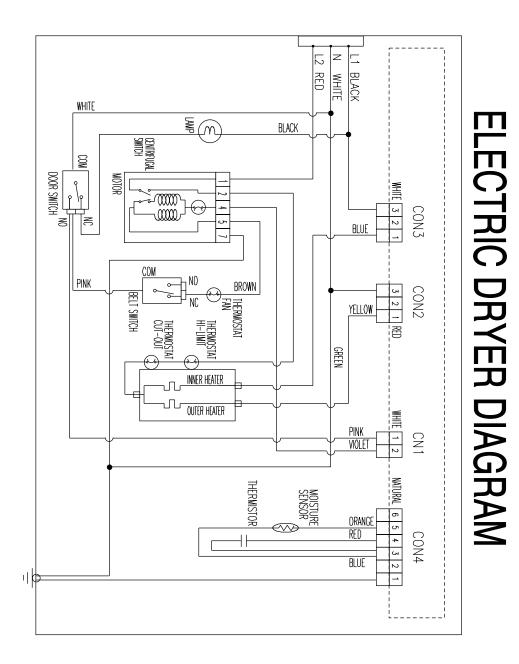


# Drum Dryer Troubleshooter

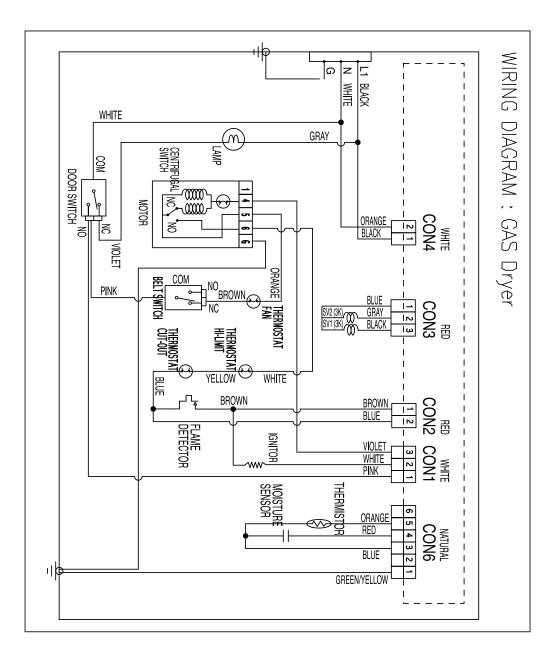
### POWER/NOISE

Trouble	Symptom	Cause	Solution
	Service wire	A fault of Lead-in wire power	Call the electricity provider
	problem	Fuse disconnection of service wire	or an expert
		Disconnection of the power cable	Replace the power cable
		(Connection fault)	
	Dryer wire problem	Disconnection of a controller terminal pin and	Plug in the connector
	Electric parts	connector	
		Connection/terminal contact fault of a terminal	Connect the wire
		block	
Power	problem Voltage problem	Fuse disconnection	Replace the fuse
	DCD problem	Rating for gas type: 120V	Check the rating
	PCB problem	Rating for electric type: 120V/240V	Check the rating
		Pin connect contact fault	Check the rating
		Circuit fault	Replace PCB
	Noise at the initial	S/W fault of Panel F	Replace Panel F PCB
		Microcomputer error	Replace PCB
		Broken plate	Replace PCB
		Harness disconnection	Replace/Connect Harness
	operation		Place the unit on the flat
	Noise during the	Installation	ground
	Noise during the	Impurities in the drum	Remove the impurities
		Impurities on the fee	Disassemble the unit and
Noise		Impurities on the fan	remove the impurities
	operation	Loosened fan	Tighten the fan
		Excessive laundry	Reduce the laundry
		Impurities between the drum and SUP F,R	Remove the impurities
		Friction of the belt	Replace the belt

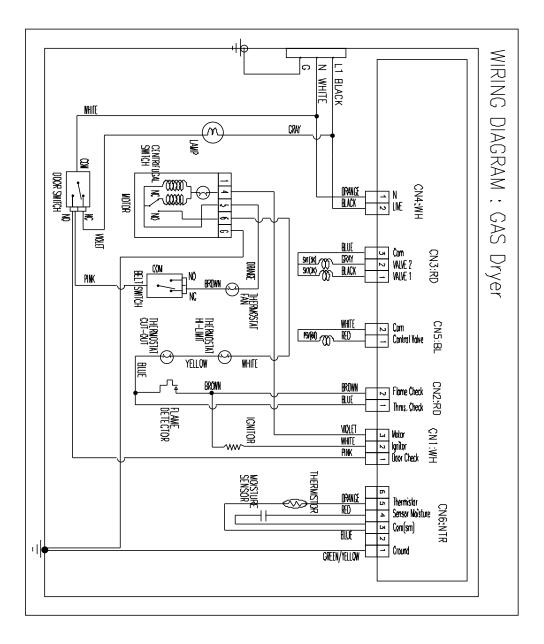
### **1. ELECTRIC DRYER WIRING DIAGRAMS**



### 2. GAS DRYER(ON/OFF CONTROL) WIRING DIAGRAMS

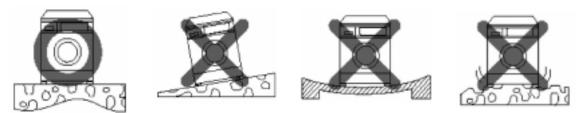


### 3. GAS DRYER(PROPOTIONAL CONTROL) WIRING DIAGRAM



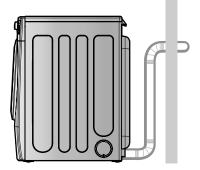
### 1. Installation Order

1 Place the dryer on the flat ground. Keep the unit at least 12 inch away from the wall.

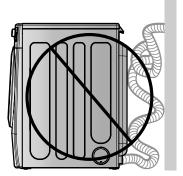


- (2) Check the 4 legs and the gap between the unit and floor. The dryer should stand stably when you try to move the unit to the left or right.
- ► Balance the unit on the floor with the leg adjust as so that the inclination is not greater than 1 inch.

### 2. Outlet Duct Connection



- ► Never use a plastic or aluminum foil duct.
- ➤ Use a durable 4-inch metal duct (the duct outlet is provided with the dryer. Ask local shops for an additional duct).
- ► Make the duct outlet the shortest possible length.
- ► Clean the duct before installation.
- ► Do not use a bent duct.
- Use aluminum tape for connection and rub for close adhesion.



The following are additional instructions regarding electrical connections and requirements for electric dryers.

#### Almportant Warning

To help prevent fire, electric shock, serious injury or death, the wiring and grounding must conform to the latest edition of the National Electrical Code, ANSI/NFPA 70 and all applicable local regulations.

Please contact a qualified electrician to check your home's wiring and fuses to ensure that your home has adequate electrical power to operate the dryer.

### 120V/ 240V, 60 Hertz, 3-Wire Installation

### Instructions for Grounding of your Electric Dryer:

- a) This dryer must be connected to a grounded metal, permanent wiring system or an equipmentgrounding conductor must be run with the circuit conductors and connected to the equipmentgrounding terminal or lead on the dryer.
- b) The dryer has its own terminal block that must be connected to a separate 60 Hertz single phase AC circuit, fused at 30 Amperes
   (the circuit must be fused on both sides of the line).

ELECTRICAL SERVICE FOR THE DRYER SHOULD BE OF MAXIMUM RATE VOLTAGE LISTED ON THE NAMEPLATE.

DO NOT CONNECT DRYER TO 110, 115, OR 120 VOLT CIRCUIT.

- c) If branch circuit to dryer is fifteen feet (4.50 m) or less in length, use U.L. (Underwriters Laboratories) listed No. 10 A.W.G. wire (copper wire only), or as required by local codes.
  If over fifteen feet (4.50 m), use U.L. (Underwriters Laboratories) listed No. 8 A.W.G. wire (copper wire only), or as required by local codes.
  Allow sufficient slack in wiring so dryer can be moved from its normal location when necessary.
- d) The power cord (pigtail) connection between wall receptacle and dryer terminal block IS NOT supplied with dryer.

Type of pigtail and gauge of wire must conform to local codes and with instructions mentioned on the following pages.

- e) The method of wiring the dryer is optional and subject to local code requirements. Refer to examples on next page.
- f) You must select the method by which to wire your dryer according to local code and ordinance requirements.

Sample methods are included in the following pages.

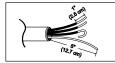
#### Review the following options to determine the appropriate electrical connection for your home:

Use the instructions in this section if your home has a 4-wire receptacle (NEMA type 14-30R) and you will be using a UL listed, 120/240 volt minimum, 30 amp, dryer power supply cord.

|--|

### 4-wire receptacle (NEMA type14-30R)

If this type is available at your home. you will be connecting to a fused disconnect or circuit breaker box.



4-wire direct

Use the instructions in this section if your home has a 3-wire receptacle (NEMA type 10-30R) and you will be using a UL listed, 120/240 volt minimum, 30 amp, dryer power supply cord.

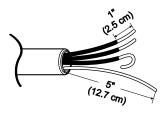


If this type is available at your home. you will be connecting to a fused disconnect or circuit breaker box.



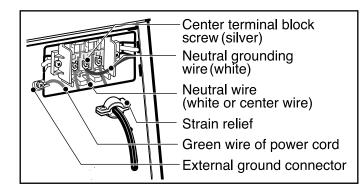
### 4-wire connection : Direct wire

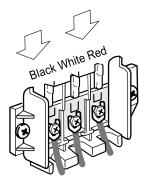
Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor. Prepare minimum 5 ft (1.52 m) of length in order for dryer to be replaced. First, peel 5 inches (12.7 cm) of covering material from end. Strip 5 inches of ground wire insulation. After cutting 11/2 inch (3.8 cm) from 3 other wires peel insulation back 1 inch (2.5 cm). Make ends of 3 wires a hook shape.



Then, put the hooked shape end of the wire under the screw of the terminal block (hooked end facing to the right) and pinch the hook together and screw tightly.

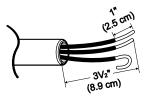
- 1. Connect neutral wire (white) of power cord to center terminal block screw.
- 2. Connect red and black wires to the left and right terminal block screws.
- 3. Connect ground wire (green) of power cord to external ground screw and move neutral ground wire of appliance and connect it to center screw.
- 4. Make sure that the strain relief screw is tightened. Be sure that all terminal block nuts are on tight and power cord is in right position.





### 3-wire connection : Direct wire

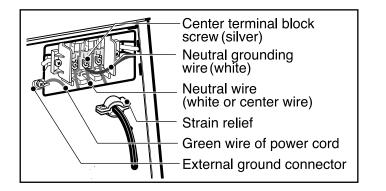
Important : Grounding through the neutral conductor is prohibited for (1) new branch-circuit installations, (2) mobile homes, (3) recreational vehicles, and (4) areas where local codes prohibit grounding through the neutral conductor. Prepare minimum 5 ft (1.52 m) of length in order for dryer to be replaced. First, strip 3 1/2 inches (8.9 cm) of outer sheath from end and strip 1 inch of insulation from each conductor.

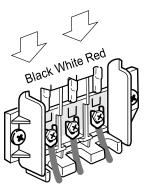


Then, put the hooked shape end of the wire under the screw of the terminal block (hooked end facing rightward) and pinch the hook together and tighten the screw securely.

- 1. Connect neutral wire (white) of power cord to center terminal block screw.
- 2. Connect red and black wires to the left and right terminal block screws.
- 3. Make sure that the strain relief screw is tightened.

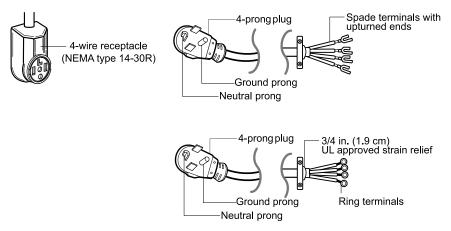
Be sure that all terminal block nuts are on tight and power cord is in right position.





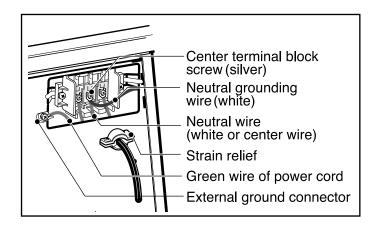
### **Option 1: 4-wire connection with a power supply cord.**

• If your local codes or ordinances do not allow the use of a 3-wire connection, or you are installing your dryer in a mobile home, you must use a 4-wire connection.



- 1. Connect neutral wire (white) of power cord to center terminal block screw.
- 2. Connect red and black wires to the left and right terminal block screws.
- 3. Connect ground wire (green) of power cord to external ground screw and move neutral ground wire of appliance and connect it to center screw.
- 4. Make sure that the strain relief screw is tightened.

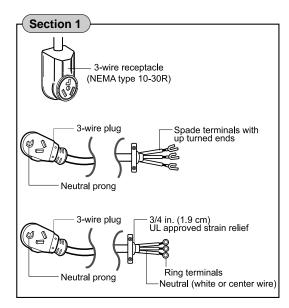
Be sure that all terminal block nuts are on tight and power cord is in right position.

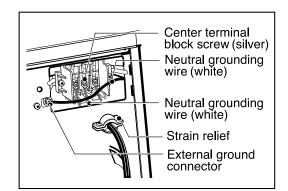


### Option 2: 3-Wire connection with a power supply cord.

If your local codes or ordinances permit the connection of a frame-grounding conductor to the neutral wire, use these instructions.

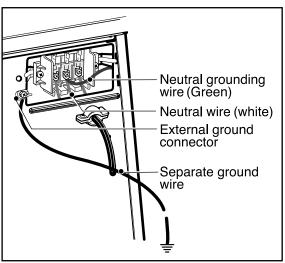
If your local codes or ordinances do not allow the connection of a frame-grounding conductor to the neutral wire, use the instructions under Section 1: Optional 3- wire connection.

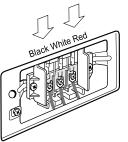




### Option 3: Optional 3-wire connection.

- If your local codes or ordinances do not allow the connection of a framegrounding conductor to the neutral wire, use the instructions under this section.
  - 1. Connect neutral wire (white) of power cord to center terminal block screw.
  - 2. Connect ground wire of appliance and neutral wire of power cord to center terminal block screw.
  - 3. Connect red and black wires to the left and right terminal block screws.
  - 4. Make sure the strain relief screw is tightened. Be sure that all terminal block nuts are on tight and power cord is in right position.
  - 5. Connect independent ground wire from external ground connector to proper ground.





No.	Service	Parts	Notices
1	Replacing the	Humidity sensor	Be careful of the terminal connection
	humidity sensor		Be careful of loose attachment
2	Replacing/fixing panel f assy	PCB/BUTTON/HARNESS	Be sure that the panel f assy does not interfere in the
			drum after the service
3	Replacing the lifter	LIFTER	Remove only the plate top to replace the part
4	Replacing roller assy	ROLLER	Be cautious of the direction of the roller/insertion of
			the washer
5	Replacing the terminal block	TERMINAL BLOCK	Be careful of wiring connection
6	Replacing the heater	Drying heater	Do not use oversized screws.
	Replacing the burner	GAS BUNNER	Be sure of the proper assembly.
			(Loosening should be little)
			Be careful that no object (e.g. screws) is dropped
			into the heater when assembling.
			Be careful of the direction / insertion of the
			connector. Use only standard screws.
7	Replacing the sensor	Temp and safety sensor	Be careful of the direction / insertion of the connector.
			Use only standard screws.
8	Door assembly	Door hinge	Be careful not to scratch chromium plating when
			fastening the screws to fix the door as. A claim is
			expected.
9	Disassembly/assembly	Door as	Be careful about the up/downward direction of door
	of the door as		glass and insertion of a gasket. Use only standard
			screws.
10	Disassembly/assembly	MOTOR AS	Be careful not to nip the finger when assembling the
	of the motor as	BELT	motor (hold the edge of the motor).
	Replacing the belt		Be careful about the direction of the belt and insertion of
			a fan/case fan (incorrect assembly may cause noise) as
			well as the connector.
11	Disassembling the drum	DRUM	Do not drop the motor.
		roller of sup r sup f. before fastening.	Be sure that he drum is accurately put into the

# Electric Parts List - Electric Clothes Dryer

Part Name	Part Code	Type No	Rating	Major Functions
Lamp AS	3612625300	Lamp Holder: 4000 series	75W, 125V	Power is applied to the lamp to turn up the light in the drum when the door is
		Lamp Base: E12	15W, 125V	opened.
Switch Door	3619047700	SPE110F-1D3	7.5A 125V / 5A 250V AC	
Thermistor Fan	361AAAAC20	CWT-DEW-1C18-A	5V R40=26.065KΩ R90=4.4278KΩ	Thermistor fan senses the temperature of exhaust air and turns on/off the heater if the temperature is higher/lower than the set temp.
Switch Micro	3619047500	GSM-V1622A2	125V/250V 16A N-C	Switch micro detects a loosened or broken belt so as to block power to the motor.
Heater	3612802500	TGE-24050H	120V/2500W, 240V/5000W, Ni/Cr	2 2500-W heaters, consisting of Ni/Cr coils, are connected in a parallel circuit.
Motor Dryer	36189L5D00	S58NXSDD-6989	120V 60Hz 5.9A CL.B	The motor rotates the drum to dry laundry evenly and the fan to expel wet air.
Thermostat Fan	3619047900	PW3N	85off 75on 125V/15A 250V/7.5A	The fan detects excessively hot temperatures and turns off the motor as well as the heater in order to prevent clothes from discoloration.
Thermostat Hi-Limit	3619047600	60T11	125 Off 94 On 125V/25A 250V/25A	The control turns off the heater if the temperature achieves 125 to prevent overheating and on again if 94.
Thermostat cut-out	3619047800	PW3V	140Off -30On 125V/25A 250V/25A	This part is a non-resettable safety device that prevents overheating in case of unusual conditions such as a clogged lint filter or outlet duct.

# Electric Parts List - Gas Clothes Dryer

Part Name	Part Code	Type No	Rating	Main function
Lamp AS	3612625300	Lamp Holder: 4000 series	75W, 125V	Power is applied to the lamp to turn up the
Lamp / C	0012020000	Lamp Base: E12	15W, 125V	light in the drum when the door is opened.
Switch Door	3619047700	SPE110F-1D3	7.5A 125V/5A 250V AC	
Thermistor Fan	361AAAAC20	CWT-DEW-1C18-A	5V R40=26.065KΩ	Themistor fan senses the temperature of
			R90=4.4278KΩ	exhaust air and turns on/off the heater if
				the temperature is higher/lower than the
				set temp.
Switch Micro	3619047500	GSM-V1622A2	125V/250V 16A N-C	Switch micro detects a loosened or broken
				belt so as to block power to the motor.
Motor Dryer	36189L5D00	S58NXSDD-6989	120V 60Hz 5.9A CL.B	The motor rotates the drum to dry laundry
				evenly and the fan to expel wet air.
Igniter AS	36189L5800	DC033	120V 60Hz 4.0A	When power is supplied, igniter is heated
				to 980°C (1800 °F) within 30 seconds to
				ignite gas.
Flame Sensor	3614825700	10RS 43828	120V 60Hz 5.75A	When heat source is detected, contact
				point is opened within 12 ~ 20 seconds to
				turn off igniter before gas ignition. When
				heat source is extinguished, contact point
				is closed within 26 ~ 40 seconds.
Thermostat	3619047610	60T21	95°C Off, 70°C On	To prevent overheating around burner
Hi-Limit			125V/25A 250V/25A	during normal operation, power line of
				flame sensor is cut off when the
				temperature detected reaches 95°C and
				is restored when the temperature falls
				below 70°C.
Thermostat	3619047810	PBR-380 N110	110°C Off, -35°C On	Overheating around burner is prevented
Cut-Out			125V/15A 250V/7.5A	under abnormal conditions, such as
				of lint filter or exhaust pipe blocking
				(manual restoration possible by pressing
				knob after operation commences).
Valve Gas AS	3615417200	"DEGB-1011, LPG"	2.0~3.5 kPa, 120V 0.07A	LPG gas is supplied or blocked off.
Valve Gas AS	3615417300	"DEGB-1011, LNG"	1.0~3.5 kPa, 120V 0.07A	LNG gas is supplied or blocked off.

\* Parts surrounded by dotted line are exclusively for gas dryer. Other parts are common parts for electric/ gas dryer.

### Thermostat Fan

#### Part Code : 3619047900

#### 1. Function

- This is a bimetal-type switch which protects the clothes from damage by overheating.
- If the exaust air is too hot, this thermostat stops the motor and after the air is cooled down, it restarts the motor.

#### 2. Specification

- A bimetal thermostat with the terminals normally connected
- Electric rating : 15A at 125V
- Opening temperature : 85±5°C, Closing temperature : 70±5°C
- Type name : PW-3N

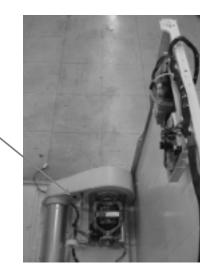
#### 3. Checking method of mal-function

- If temperatures are normal, the terminals of this part are connected to each other.
- Put the round metal part into boiling water and check if the resistance between the terminals drops to 0.3 or below.

Thermostat Fan

- Put the same part into cold water and check if the terminals are opened.
- If the terminals do not react as mentioned above, replace them.

- 1 Plate Top remove
- 2 Panel F Ass'y remove
- 3 Cabinet Front Ass'y remove
- (4) Frame Upper remove
- 5 Drum Ass'y remove
- 6 check the position of the part
- (7) Remove the wires and screws to disassemble the part.
- (8) Assemble the parts in reverse order.





### Thermostat Cut-Out

#### Part Code : 3619047800

#### 1. Function

- This is a bimetal-type switch which protects the heater from overheating.
- If the heater is overheated abnormally, this thermostat cuts off the heater PERMANENTLY.
- Note that this thermostat is NON-RESETTABLE; if it is opened, it should be replaced by new one.

#### 2. Specification

- A bimetal thermostat with the terminals normally connected
- Electric rating : 25A at 125V
- Opening temperature : 140±5°C, Closing temperature : -35°C
- Type name : PW-3N

#### 3. Checking method of mal-function

- If temperatures are normal, the switch is not opened.
- If the switch is opened (the resistance between the terminals is 100M or higher), replace it.
- Note) The switch is resettable under -35°C but the temperature can not be achieved in a household refrigerator.

#### 4. Procedure of replacement

- 1 Remove the back cover.
- (2) Check the position of the part.

Thermostat Cut-out



- (3) Remove the wires and screws to disassemble the part.
- (4) Assemble the parts in reverse order.



### Thermostat Hi-Limit

#### Part Code : 3619047600

#### 1. Function

- This is a bimetal-type switch which controls the heater operation.
- If the heater is too hot, this thermostat stops the heater and after the heater is cooled down, it restarts the heater.

#### 2. Specification

- A bimetal thermostat with the terminals normally connected
- Electric rating : 25A at 125V
- Opening temperature : 125±4°C, Closing temperature : 94±5.5°C
- Type name : 60T

#### 3. Checking method of mal-function

- After 3 minutes of the air dry program, the terminals of this part are connected to each other.
- Press the power and start buttons while you push the door switch after opening the door.
- Check if the heater operates after the drum starts rotating.
  - (To do this, check if the heater turns red or feel warm air in the drum with your hands).
- If the heater operates, run the air dry program for more than 3 minutes after closing the door.
- Switch off the power and measure the resistance between the terminals. If the value is greater than 1, replace the switch.

#### 4. Procedure of replacement

- (1) Remove the back cover.
- (2) Check the position of the part



Thermostat Control

(3) Remove the wires and screws to disassemble the part.

(4) Assemble the parts in reverse order.



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### Lamp Assembly

#### Part Code : 3612625300

#### 1. Function

- This is a lamp assembled with its bracket and window.
- If the user opens the door, the door switch gives electric power to this lamp and it turns on.

#### 2. Specification

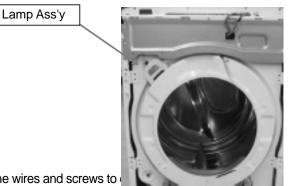
- An assembly of an electric lamp, bracket and window.
- Power consumption : 15W at 120V
- Type name : TGE-12015L



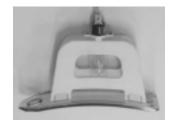
- The lamp is turned on when the door is opened.
- Run the dryer by pressing the power and start buttons.
- As the drum begins rotating, check if the lamp is turned on after opening the door. Cf) If the drum does not rotate, check the door switch, belt switch, and thermostat fan.
- If the lamp is still off, remove panel f ass'y and check if 120v voltage is applied to the lamp.
- $\bullet$  If the lamp is off even though the 120v voltage is being applied, replace the lamp.
  - Cf) If 120v voltage is not applied to the lamp, replace the door switch.

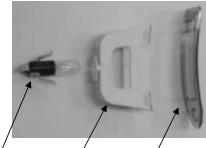
#### 4. Procedure of replacement

- 1 Plate Top remove
- 2 Panel F Ass'y remove
- (3) Cabinet Front Ass'y remove
- (4) Remove the wires and screws to disassemble the part.
- (5) Assemble the parts in reverse order.



- Remove the wires and screws to
- (8) Assemble the parts in reverse order.





Braket

Lamp

Window

Loosen the screws from the inside of the drum.



### Switch Door

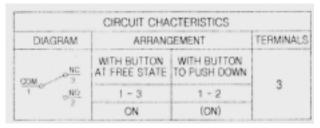
#### Part Code : 3619047700

#### 1. Function

- This is a switch that checks whether the door is open or closed.
- If the user opens the door, this switch disconnects power supply to the motor and turns the lamp on.
- If the user closes the door, this switch connects power supply to the motor and turns the lamp off.

#### 2. Specification

- A push switch stroke 70mm, tree terminals pushed-down : COM and NO are connected (NO are connected to motor) free state : COM and NC are connected (NC are connected to door lamp)
- Electric rating : 7.5A 125V
- Type name : SPE110F



#### 3. Checking method of mal-function

- This switch applies power to the motor when the door is closed and to the lamp when the door is opened.
- Run the dryer by pressing the power and start buttons.
- As the drum begins rotating, check if the lamp is turned on after opening the door.
- If the drum does not rotate, check the door switch contact.
- Cf) Check a belt switch and thermostat fan also for the problem.
- If the lamp is still off while the drum is running, remove panel f ass'y and check if 120v voltage is applied to the lamp.
- If 120v voltage is not applied to the lamp, replace the door switch.
  - Cf) If the lamp is off even though the 120v voltage is being applied, replace the lamp.

#### 4. Procedure of replacement

- (1) Plate Top remove
- 2 Panel F Ass'y remove
- (3) Cabinet Front Ass'y remove



- (4) Remove the wires. Press both ends of the switch and pull.
- (5) Assemble the parts in reverse order.

Door Switch



### Heater Assembly

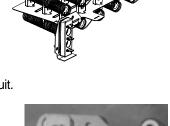
#### Part Code : 3612802500

#### 1. Function

- This is an assembly that heats air in the drum.
- Two 2500-W upper/lower heaters are connected in a parallel circuit, producing 5,000W
- According to the program set, either one or two heaters operate.

#### 2. Specification

- Two heaters with the same specification are connected in a parallel circuit.
- Single heater: Ni/Cr wire 0.8mm, 6 coil turns, 2500W rated output based on 240V
- Electric rating : 240V 5000W (2500W x 2)
- Type name : TGE-24050H



Heater B (lower)

Heater A (upper)

#### 3. Checking method of mal-function

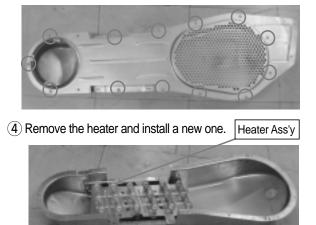
- Check if the resistance of both ends is 17.3~25.9.
   (For your safety and accurate measurement, check the resistance after running 'Dry Air' program for more than 5 minutes).
- If the resistance is beyond the range, replace the heater.
- Do not use a heater of which the coils have too narrow width or drooped excessively.

#### 4. Procedure of replacement

- 1 Remove the cover back.
- (2) Remove the wires of duct inlet ass'y and screws to disassemble the part.
- C Loosen the 4 screws as indicated with a circle.



(3) Remove all screws of duct inlet ass'y and detach the duct inlet front.



(5) Assemble the parts in reverse order.

### Belt Switch (Switch Micro)

#### Part Code : 3619047500

#### 1. Function

• The switch cuts the power supply to the motor when a belt is broken.

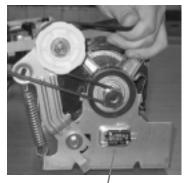
• The switch is on when the belt has adequate tension but off when the belt gets loosened or broken, blocking the power supply to the motor.

#### 2. Specification

- Micro switch with two terminals, NC (normally closed) type free state : COM and NO are connected pushed down : COM and NC are disconnected
- Electric rating : 250V 16A 1/2HP
- Type name : GSM-V1622A2

#### 3. Checking method of mal-function

- The switch is in normal operation if the drum rotates.
- Start the unit and check if the drum operates.
- If the drum fails to rotate, press the power button to stop the dryer and then again to check if the motor runs.
- If you can not hear the running of the motor, disassemble the dryer and check the belt switch contact.
- Press the lid of the belt switch. If the resistance between contacts is greater than 1, replace the belt.



Normal belt - switch lid free

Damaged belt - switch lid pressed by the spring

- 1 Plate Top remove
- 2 Panel F Ass'y remove
- (3) Cabinet Front Ass'y remove
- (4) Frame Upper remove
- 5 Drum Ass'y remove
- (6) Check the position of the part.





Belt Switch



- $(\overline{\textbf{7}})$  Remove wires and 2 screws that fix the switch.
- $(\bar{8})$  Assemble the parts in reverse order.

### Thermistor Fan

#### Part Code : 361AAAAC20

#### 1. Function

- The fan senses the temperature of exhaust air.
- The higher the temperature is, the smaller the resistance is.

#### 2. Specification

- Thermistor with following temperature-resistance characteristic. at 90°C : R = 4.43 kΩ at 40°C : R = 26.07 kΩ
- Type name : CWT-DWE-1C18-A

#### 3. Checking method of mal-function

- If the resistance between terminals is within the adequate range, the fan is in normal operation.
- You can test the resistance of the thermistor as follows.
  - Put the metal rod into cold water (10~20°C): 40 within 30 seconds
  - Put the metal rod into boiling water (95~100°C): 4 within 30 seconds
- If 'H2' error is displayed when you press the power and start button, the thermistor is not connected so replace it.

#### 4. Procedure of replacement

- 1 Plate Top remove
- (2) Panel F Ass'y remove
- (3) Cabinet Front Ass'y remove
- (4) Frame Upper remove
- 5 Drum Ass'y remove
- (6) Check the position of the part.

Thermistor Fan



- (7) Remove wires and 1 screw to detach the part.
- (8) Assemble the parts in reverse order.



### Motor Dryer

#### Part Code : 36189L5D00

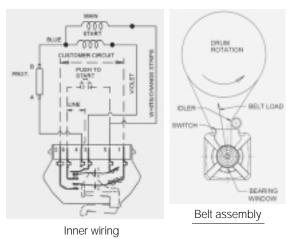
#### 1. Function

- The motor rotates the drum using the belt as well as the fan to expel wet air.
- This is a shunt AC motor. When the motor begins to run, a centrifugal switch shorts out the operation coil.
- The centrifugal switch also supplies power to the heater. Thus, if the motor stops, the heater goes off also.



Fan connection axis

Belt operation axis



#### 2. Specification

- Shunt type 1/3 HP AC motor with centrifugal switch
- Rotational speed : more than 1600 rpm with load
- No load : 190W, 4.9A at 120V
- Full load : 555W, 6.1A at 120V
- Type name : S58NXSDD-6989

#### 3. Checking method of mal-function

- If the drum rotates and exhaust air is expelled as soon as you start the unit, the motor is in normal operation.
- If the drum fails to rotate;
  - (1) Remove Plate T and check if the belt is damaged.
  - (2) Check if the door switch is in normal operation.
  - 3 Remove the drum and check the thermostat fan.
  - (4) Check the belt switch.
  - (5) Run the unit while you press the lid of the belt switch and see if the motor starts operating.
- If a fault is found in any part mentioned above, replace it and check the operation of the motor (5).
- If no fault is found but the motor still fails to operate(5), replace the motor.

- (1) Plate Top Remove
- 2 Panel F Ass'y Remove
- (3) Cabinet Front Ass'y Remove
- (4) Frame Upper Remove
- 5 Drum Ass'y Remove
- 6 Cover Fan Remove

(5) Drum Ass'y remove (6) Cover Fan remove



(7) Remove the cover fan and 3 screws.



Loosen the 3 screws as indicated with a circle.



 $(\underline{8})$  Remove the 4 screws and the motor ass'y.

O Loosen the 3 screws as indicated with a circle.



(9) Remove wires and 2 clamps that fix the motor bearing to detach the motor.
 (10) Assemble the parts in reverse order.

### Igniter As

#### Part Code : 36189L5800

Laniter As

#### 1. Function

- Igniter for fuel gas ignition.
- Igniter heats up quickly when power is supplied. If fuel gas is injected to the surrounding area of igniter, gas is ignited by the heat of igniter.

#### 2. Specification

- A heating element made by Silicon Carbide
- Electric rating : 120V 4.0A (steady-state current)
- Temperature rating : reaches 1800 within 30 seconds
- Type name : DC033

#### 3. Checking method of mal-function



- Igniter is heated up to very high temperature. Therefore, extreme caution is required in handling to prevent burn.
- At room temperature, resistance between two terminals of this part is generally between  $300 \sim 400\Omega$
- Part is defective if resistance between terminals measured after separating cable connected to igniter is  $250\Omega$  or less.
- Part is defective if cracks are found when separating igniter and closely observing the surface.
- In two of the above conditions, igniter is defective, therefore needs to be replaced.

- (1) Plate Top Remove
- (2) Panel F Ass'y Remove
- (3) Cabinet Front Ass'y Remove
- (4) Frame Upper Remove
- 5 Drum Ass'y Remove
- (6) Cover Fan Remove
- ⑦ Separate the connected cable and unfasten 1 screw to separate parts.
- (8) Assemble part in reverse order of the above procedures.



### Flame Sensor

#### Part Code : 3614825700

#### 1. Function

- Sensor flame is the switch that operates by detecting fuel gas ignition or heating of igniter.
- Contact point is opened when sufficient radiant heat is detected through the transparent window at the bottom of sensor.
- When igniter is sufficiently heated, this is detected to turn off igniter. Then, state of internal contact point is continuously maintained to be off by combustion heat of the ignited gas.
- When gas supply is cut off, state of internal contact point becomes 'on' again so that to enable re-ignition by igniter.

#### 2. Specification

- A bi-metal switch that is operated by radiation heat
- Electric rating : 120V 5.75A
- Operation : opened within 12~20 seconds after suitable radiation starts heating it. closed within 26~30 seconds after radiation heat disappears.
- Type name : 10RS

#### 3. Checking method of mal-function

- At room temperature, there is the state of short between two terminals of this part.
- Part is defective if resistance between terminals measured after separating cables connected to sensor flame is  $1\Omega$  or more.
- · Part is defective if the area between terminals is not opened 30 seconds after separating sensor flame and holding flame of lighter near transparent window at the bottom (less than 1cm).
  - Flame of lighter must be as long as the length of transparent window and the flame must not be in direct contact with transparent window.
  - Transparent window of sensor flame must be kept clean at all times to enable normal operation.
- Part is detective if resistance between terminals is not  $0.3\Omega$  or less within 50 seconds after removing the flame of lighter.
- In three of the above conditions, sensor flame is detective, therefore needs to be replaced.

Sensor Flame

#### 4. Procedure of replacement

- (1) Remove plate top.
- (2) Remove panel F ass'y.
- (3) Remove cabinet front ass'y.
- (4) Remove frame upper.
- (5) Remove drum ass'y.
- (6) Check attachment position.
- (7) Separate the connected cable and unfasten 1 screw to separate parts.
- (8) Assemble part in reverse order of the above procedures.





Laniter As



### Thermostat Hi-Limit

#### Part Code : 3619047610

#### 1. Function

- This is a bimetal-type switch which stops the burner overheating.
- If the burner is too hot, this thermostat shuts off the gas valves and after the burner is cooled down, it allows the gas valves to operate.

#### 2. Specification

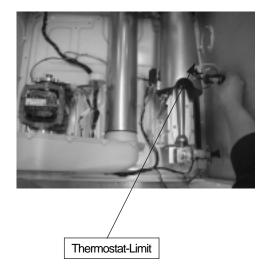
- A bimetal thermostat with the terminals normally connected
- Electric rating : 25A at 125V
- Opening temperature : 95°C, Closing temperature : 70°C
- Type name : 60T21

#### 3. Checking method of mal-function

- After operating air dry program for 5 minutes or longer, the terminal status of this part must be short.
- Part is defective and to be replaced if resistance between terminals measured after separating cables connected to sensor flame is 1Ω or more.

- (1) Remove plate top.
- (2) Remove panel F ass'y.
- (3) Remove cabinet front ass'y.
- (4) Remove frame upper.
- (5) Remove drum ass'y.
- (6) Check attachment position.
- ⑦ Separate the connected cable and unfasten 2 screws to separate parts.
- (8) Assemble part in reverse order of the above procedures.





### Thermostat Cut-Out

#### Part Code : 3619047810

#### 1. Function

- This is a bimetal-type switch which protects the burner from overheating.
- If the burner is overheated abnormally, this thermostat cuts off the gas valves PERMANENTLY.
- Note that this thermostat is MANUALLY-RESETTABLE; by pressing the knob on the top, this part is returned to reusable state.

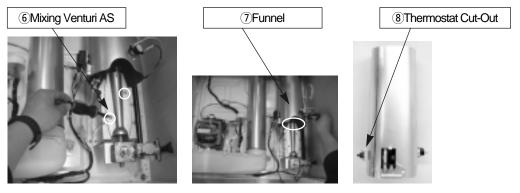
#### 2. Specification

- A bimetal thermostat with the terminals normally connected
- Electric rating : 15A at 125V
- Opening temperature : 110°æ5°C, Closing temperature : -35°C
- Type name : PBR-380

#### 3. Checking method of mal-function

- In normal operation status, the area between terminals must not be opened.
- If it is opened (resistance between terminals 100M ߟ or more), press knob at the top two or three times to restore.
- If resistance between terminals is 1ߟ or more after manual restoration, replace part as it is defective. (This part is restored to be reused if placed at temperature of -35°C or lower. However, this is an extremely low temperature that cannot be reached with general refrigerator for household use. Therefore, it is effective to press knob for restoration.)

- (1) Remove plate top.
- (2) Remove panel F ass'y.
- (3) Remove cabinet front ass'y.
- $\overline{(4)}$  Remove frame upper.
- (5) Remove drum ass'y.
- (6) Remove mixing venturi AS.



- ⑦ Unfasten 2 screws fixing funnel in position and separate all of the connected cables. Then, carefully take out funnel.
- (8) Remove 2 screws and separate thermostat cut-out.
- (9) Assemble part in reverse order of the above procedures.

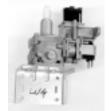


### Valve Gas As

#### Part Code : 3615417200, -7300

#### 1. Function

- Valve gas AS supplies or blocks off fuel gas.
- 2 valves are horizontally connected to safely block off gas leakage.
- Each valve is solenoid value. Gas passed through this valve is injected after being stabilized to the prescribed output pressure in regulator.
- Therefore, even if input pressure of supplied gas changes, the prescribed amount of gas is stably supplied.



#### 2. Specification

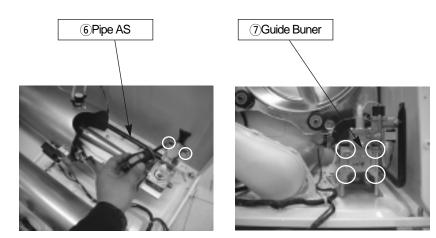
	Part Code	Type Name	Electric Rating	Input pressure	Output pressure
LPG	3615417200			2.0~3.5 kPa	2.24 kPa
LNG	3615417300	DEGB-1011	120V 60Hz 0.07A	1.0~3.5 kPa	0.87 kPa

power input - rectified 120Vdc

#### 3. Checking method of mal-function

- To check or replace valve gas AS, gas pipe must be locked in advance for safety.
- At room temperature, resistance between two terminals of each value is 2.4~2.7 k $\Omega$ .
- Part is defective if resistance between terminal measured after separating cables connected to valve gas AS is  $2.0\Omega$  or less or  $3.0 \text{ k}\Omega$  or more.

- (1) Remove plate top.
- (2) Remove panel F ass'y.
- (3) Remove cabinet front ass'y.
- (4) Remove frame upper.
- (5) Remove drum ass'y.
- (6) Remove 2 screws fixing pipe AS in position.
- (7) Remove 4 screws fixing pipe AS on to guide bunner.
- (8) Separate the connected cable and unfasten 1 screw to separate parts.
- (9) Assemble part in reverse order of the above procedures..



# DISMANTLING METHOD PER DRYER ASS'Y

### PANEL FRONT ASS'Y

1.Remove left cap and unfasten screw.



2. Separate panel front. (CAUTION : Internal hook damage attention)



### PLATE TOP ASS'Y

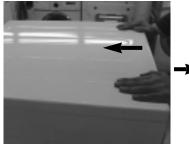
1. Remove 3 screws at the front.



2. Remove 4 screws at the back.



3. Separate plate top by pushing it at the front part in the direction of arrow.





### CABINET FRONT ASS'Y

1. Remove 4 screws at the top.



2. Remove filter.

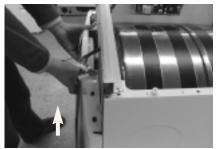


3. Remove 3 screws.





4. Lift cabinet front in the direction of arrow and pull it forward.

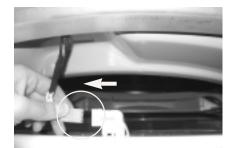






5. Remove door switch connector.





### FRAME UPPER

1. Remove 2 screws from left and right in front part.



2. Remove 2 screws from left and right at the top.



3. Separate frame upper after removing harness at the back.



# SEPARATION OF LAMP, PCB MAIN CONNECTOR

1. Separate lamp connector.



3. Separate humidity sensor connector.



2. Separate main PCB connector.





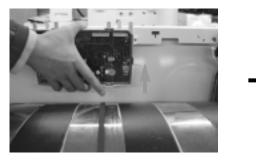
### PCB MAIN

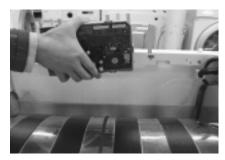
1. Remove 2 screws.





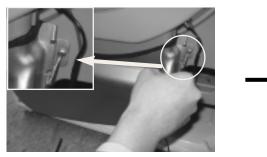
3. Separate frame upper after removing harness at the back.



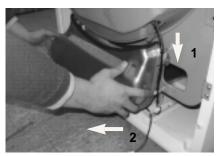


# DUCT OUTLET ASS'Y

1. Remove 2 left and right screws.



3. Remove duct outlet F in the direction of  $\rightarrow$ 

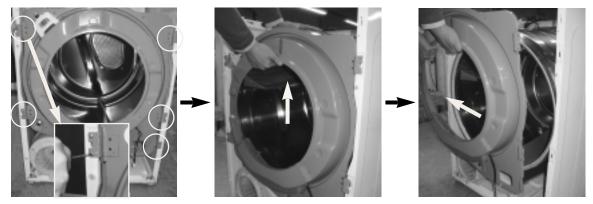


2.Remove 1 screw.



### SUPPORT DRUM FRONT ASS'Y

1. Push up idler in the direction of arrow to remove belt. Then, separate belt and remove drum.



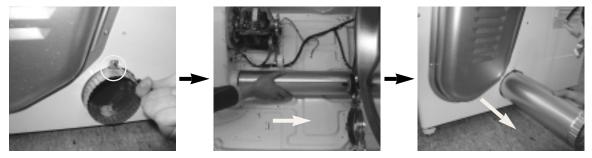
DRUM ASS'Y

1. Remove 1 rear screw and separate pipe exhaust in the direction of arrow.



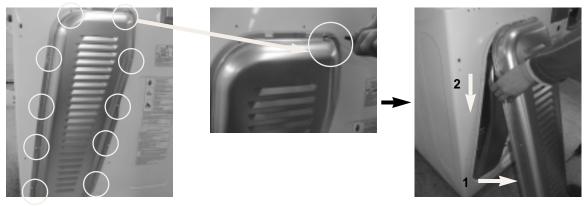
### PIPE EXHAUST

1. Remove 1 rear screw and separate pipe exhaust in the direction of arrow.



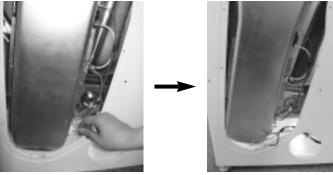
### COVER BACK

#### 1. Remove 10 screws.



### SUPPORT DRUM REAR ASS'Y

1. Remove heater terminal connection cable.



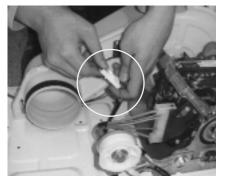
2. Remove 7 screws.

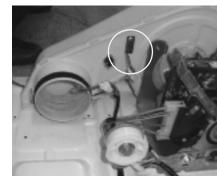




### MOTOR CONNECTOR

1. Separation of temperature sensor: Separate connector. → Remove 1 screw.

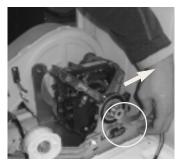




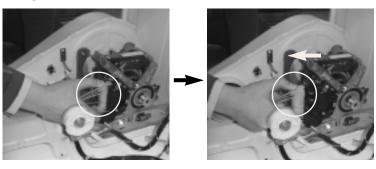
2. Separation of thermostat fan: Separate connector. → Remove 2 screws.



3. Separation of micro switch:



4. Separation of motor connector.





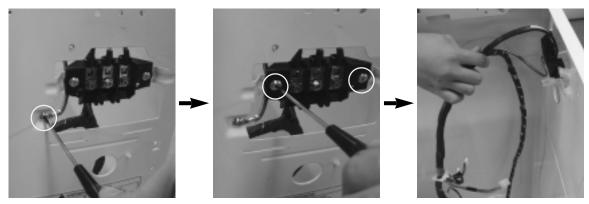
# TERMINAL BLOCK

1. Remove cover terminal.



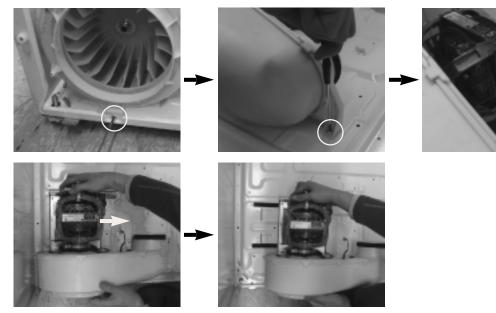


2. Remove 3 screws.



# MOTOR ASS'Y

1. Remove 6 screws and separate motor ass'y.



2. Separation of cover fan: Remove 2 screws.

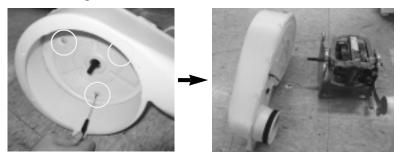




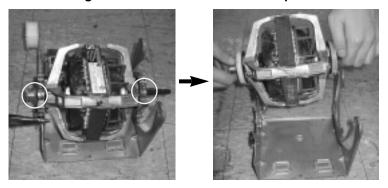
3. Separation of impeller fan: Fix motor axis and separate fan.



4. Dismantling of case fan: Remove 3 screws.

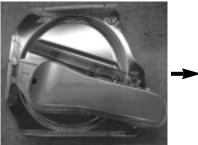


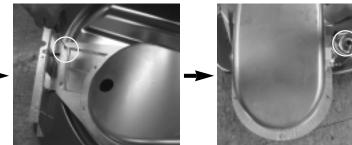
5. Dismantling of bracket motor: Remove 2 clamp motors each.



# HEATER ASS'Y

#### 1. Remove 4 screws.







- 2. Unfold 4 side fixing parts.
- 3.Remove thermostat 2 screws.



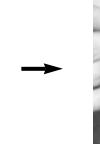
4.Remove 13 screws.



# LAMP ASS'Y

1. Remove 1 screw.







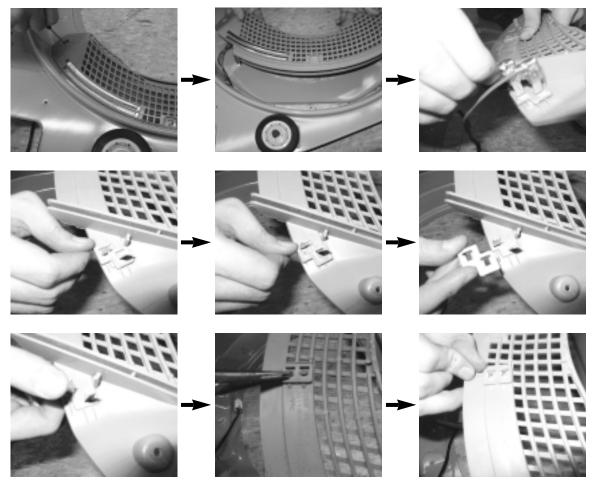




# FILTER DUST ASS'Y / HUMIDTY SENSOR

1. Filter dust ass'y: Remove 2 screws.

2. H/S: Remove connector.



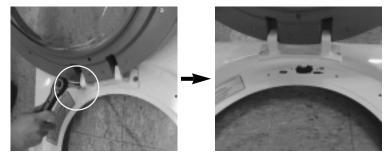
3. Remove H/S.



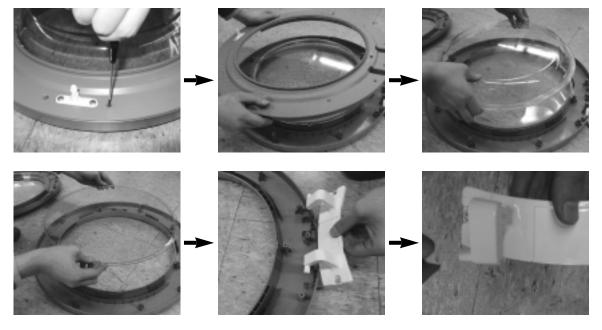


# DOOR ASS'Y

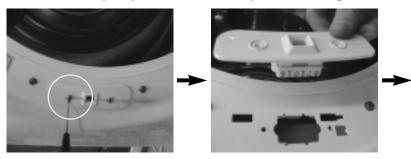
1. Separation of hinge and support drum front: Remove 2 screws.



2. Remove 13 screws.



3. Door lock ass'y: Separate door lock ass'y after removing 2 screws.



#### 4. Door switch





# **ABOUT THIS MANUAL**

VISION CREATIVE, INC.

서울 종로구 통의동 6번지 이름빌딩 4층

	당	이주동 과장님	TEL 032-510-7282	
Model		DWR-WE32/DWR-WG32(S/G)		
접	수	asko_(S/G) 영문		
		1 차	6차	
		2차	7차	
일	정	3차	8차	
		4 차	9차	
		5차	10차	
제	판		인쇄	
규	격			
MEN	10			
08.04.	30_신규2(	),21,23,24,25,26,27,28,31,32	,33,68~82, <b>⊞_(26</b> p)	
08.05	07 표1 모	차,3,4,19,22,24,35,50,51,54,	56 64 H2 (12p)	
00.00.	∪/_≖।,≒	^[.3.4.19.22.24.33.30.30.31.34.		
		······································	50,04,±2_(12p)	
		······································	50,04, ± 2_(12)/	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50,04,≖2_(12D)	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50,04,π2_(12μ)	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50,04,π2_(I2D)	
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			50,04, π2_(I2β)	
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			50,04, ±2_(12D)	
			50,04, ±2_(12D)	

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