

DAEWOO

Service Manual

Auto Washer

Model : DWF-700M



DAEWOO ELECTRONICS CO., LTD.
OVERSEAS SERVICE DEPT.

1. SPECIFICATIONS

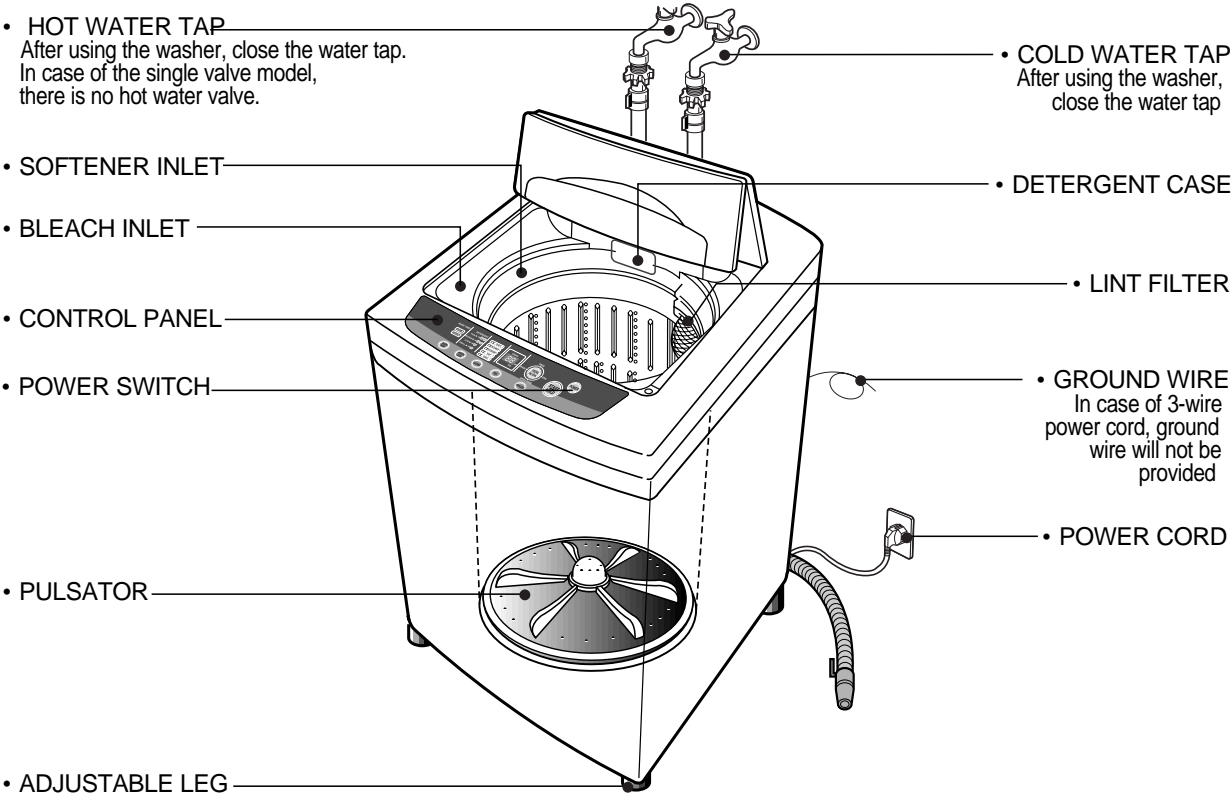
NO.	ITEM		DWF-700M				
1	POWER SOURCE		AVAILABLE IN ALL LOCAL AC VOLTAGE AND CYCLE				
2	POWER CONSUMPTION		50Hz	430W			
			60Hz	530W			
3	MACHINE WEIGHT		NON-PUMP	42Kg			
			PUMP	43Kg			
4	DIMENSION (WXHxD)		598 X 956 X 643				
5	WASHING COURSE		FULL AUTOMATIC 5 COURSE (NORMAL, BLANKET, ECONOMY, SUIT, SOAK)				
6	WATER CONSUMPTION		201 L				
7	WATER LEVEL SELECTOR		HIGH	86 L			
			MEDIUM	73 L			
			LOW	59L			
			SMALL	46 L			
8	OPERATING WATER PRESSURE		0.3kgf/cm ² ~8kgf/cm ² (2.94 N/cm ² ~78.4N/cm ²)				
9	REVOLUTION PER MINUTE	60Hz	WASH : 125 - 140 RPM, SPIN : 640 - 675 RPM				
		50Hz	WASH : 130 - 150 RPM, SPIN : 710 -140 RPM				
10	PULSATOR		6 WINGS (Ø376mm)				
11	WATER LEVEL CONTROL		ELECTRONICAL SENSOR				
12	GEAR MECHANISM ASS'Y		HELICAL GEAR				
13	LINT FILTER		O				
14	SOFTENER INLET		O				
15	FUNCTION FOR SOAK WASH		O				
16	ALARM SIGNAL		O				
17	RESIDUAL TIME DISPLAY		O				
18	AUTO. WATER SUPPLY		O				
19	FUNCTION FOR BUBBLE		O				
20	AUTO RE-FEED WATER		O				
21	AUTO POWER OFF		O				

2. STRUCTURE OF THE WASHING MACHINE


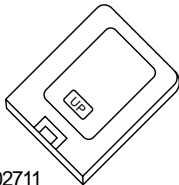
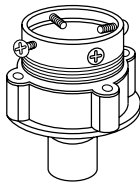
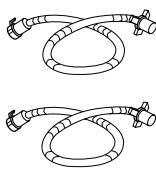
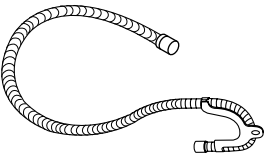
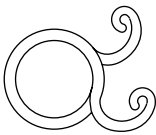
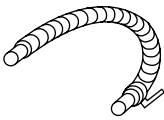
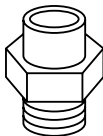
The parts and features of your washer are illustrated on this page.
Be come familiar with all parts and features before using your washer.

NOTE

- The drawing in this book may vary from, your washer model. They are designed to show the different features of all models covered by this book, Your model may not include all features.



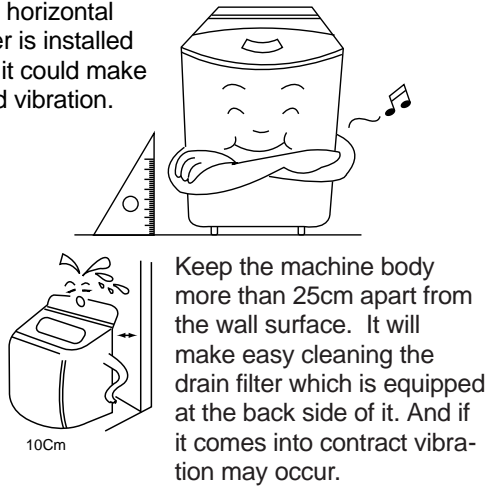
Accessories

DRYTEN	COVER UNDER [OPTION]	WATER TAP ADAPTER	INLET HOSE
	 3611402711		
HOSE DRAIN [FOR PUMP]	HOSE DRAIN CLAMP	HOSE DRAIN[FOR NONPUMP]	CONNECTOR INLET [OPTION]
 361321880		 3613213500	

3. DIRECTIONS FOR INSTALLATION AND USE

Installing Place

Install the washer on a horizontal solid floor. If the washer is installed on an unsuitable floor, it could make considerable noise and vibration.

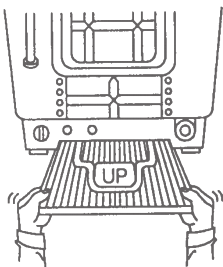


Never install in these places

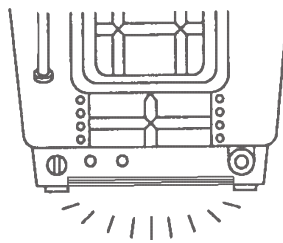
- The place where it would be exposed to direct sunlight.
- The place nearby a heater or heat appliance.
- The place where it would be supposed to be frozen in winter.
- The kitchen with coal gas and a damp place like a bathroom.

Installation Of The Under Base Cover [Option]

- 1** The packing box opened, there is a noise insulation plate at the bottom of the back



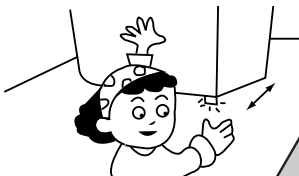
- 2** Push the noise insulation plate into the end, which decrease the noise made by this washer.



How To Install On An Inclined Place

1 Horizon Setting

After controlling the height by turning the adjustable leg, let the washer put down to the ground.



2 Check the Horizon Status

Check the position of tub above the center of the washer.



NOTES

The openings must not be obstructed by carpeting when the washing machine is installed on a carpeted floor.

■ How to Connect the Inlet Hose

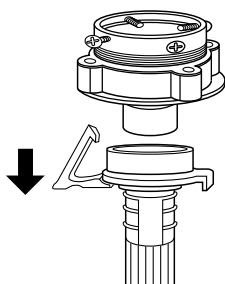
Be careful not to mistake in supplying between the hot(maximum : 50°C) and cold water.

In using only one water tap or in case of attached one water inlet valve, connect the inlet hose to the cold water inlet valve.

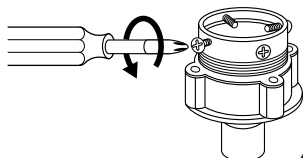
Do not over tighten : this could cause damage to couplings.

• • • • FOR ORDINARY TAP

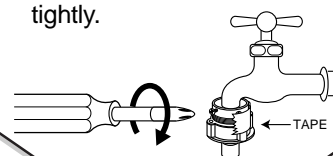
- 1 Pull down the collar of the inlet hose to separate it from the water tap adapter.



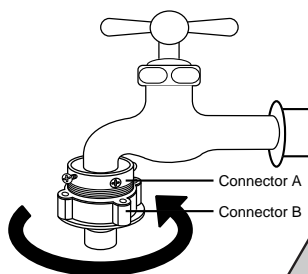
- 2 Loosen the four screws at the water tap adapter, but don't loosen the screws until they are separated from the water tap adapter.



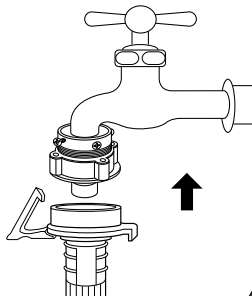
- 3 Connect the water tap adapter to the water tap tightly, while pushing up the adapter so that the rubber packing can stick to the water tap tightly.



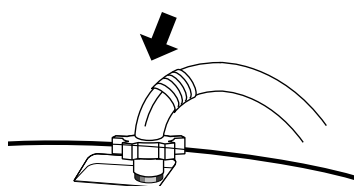
- 4 Remove the tape, and screw connector B into connect A tightly.



- 5 Connect the inlet hose to the water tap adapter by pulling down the collar of the hose end.



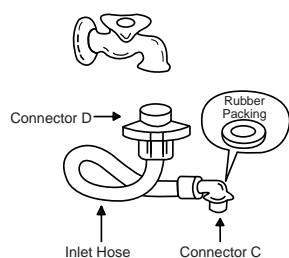
- 6 Connect the inlet hose adapter of the hose to the water inlet of the washer by turning it clockwise to be fixed tightly.



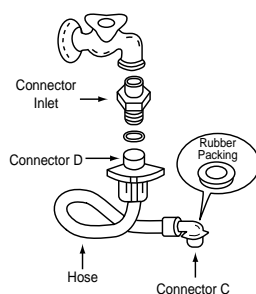
- Please check the rubber packing inside the inlet hose adapter of the hose.

• • • • FOR SCREW-SHAPED TAP

- 1 Connect the inlet hose to the water tap by screwing the connector D tightly.



- 2 Connect the connector-inlet supplied if necessary.



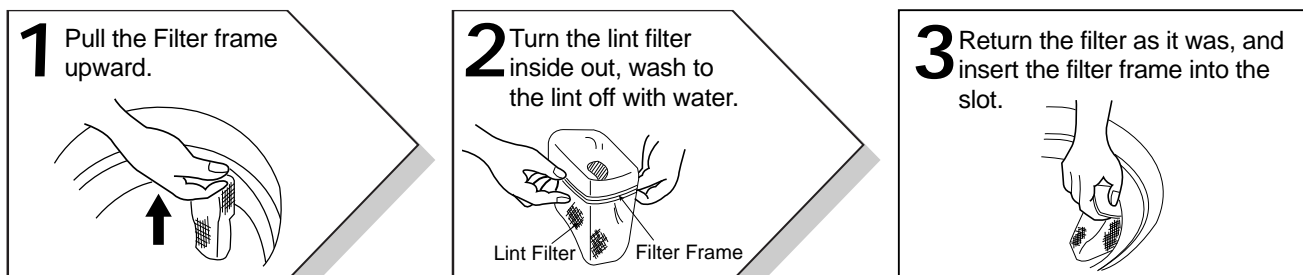
- 3 Insert the inlet hose adapter into the water inlet of a washer and turn it to be fixed.



- Assert the packing in the inlet

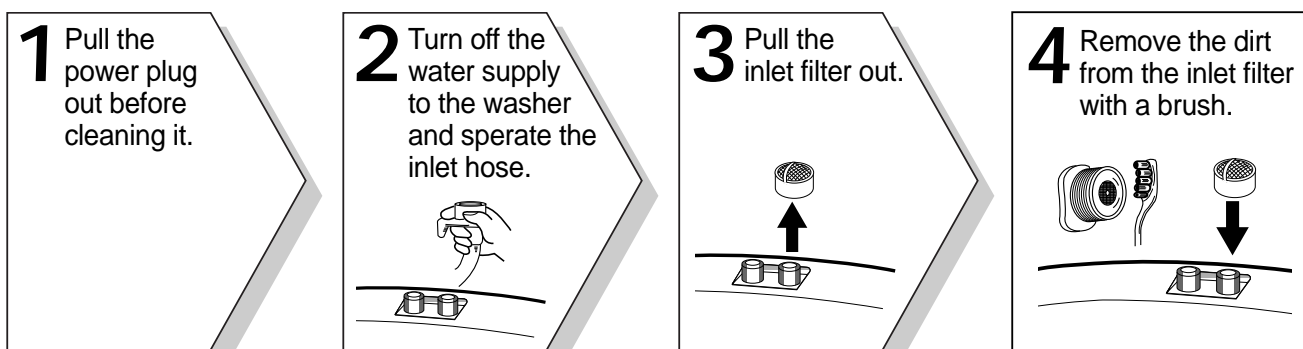
■ How To Clean The Filter

• • • • CLEANING THE LINT FILTER



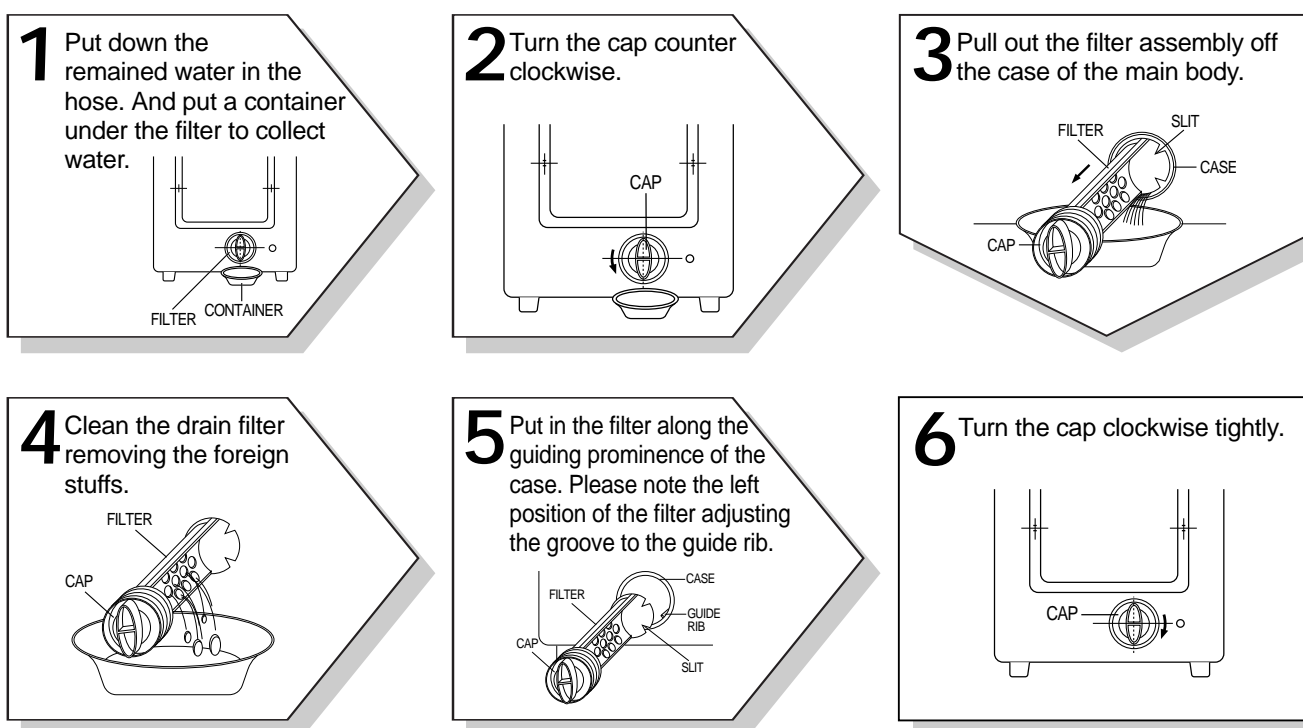
• • • • CLEANING THE WATER INLET FILTER

- Clean the filter when water leaks from, the water inlet.



• • • • CLEANING THE DRAIN FILTER

- In case "U" shape drain hose, this filter's equipped at the back side of washer.
- This drain filter is to screen the foreign stuffs such as threads, coins, pins, buttons etc ...
- If the drain filter is not cleaned at proper time (every 10 times of use), Drain problem could be caused.



4. FEATURE AND TECHNICAL EXPLANATION

Feature of the Washing Machine

- ① The first air bubble washing system in the world.
- ② Quiet washing through the innovational low-noise design.
- ③ The wash effectiveness is much more enhanced because of the air bubble washing system.
- ④ The laundry detergent dissolves well in water because of the air bubble washing system.
- ⑤ The adoption of the water currents to adjust the unbalanced load.
- ⑥ One-touch operation system.

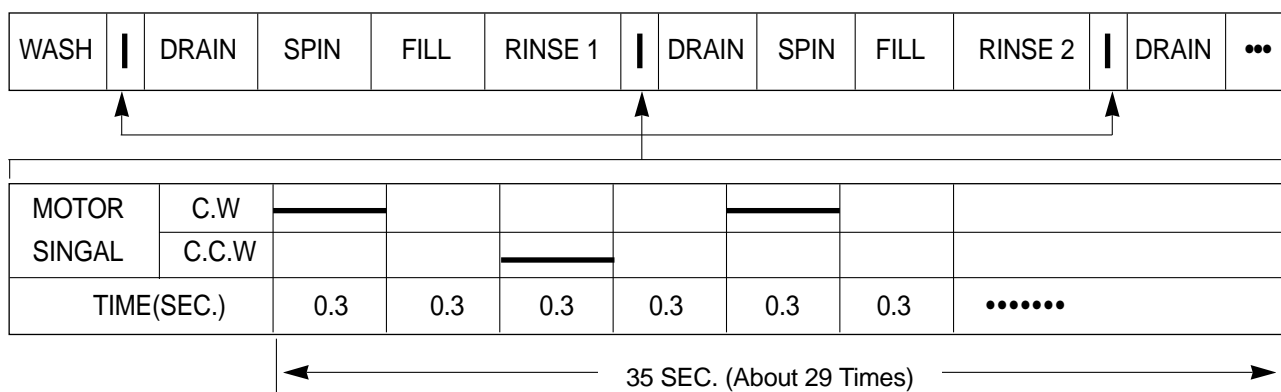
Water Current to Adjust the Unbalanced Load

It is a function to prevent eccentricity of the clothes after wash by rotating pulsator C.W and C.C.W for 35 seconds.(But, the SUIT course have no operation of the water currents to adjust the unbalanced load.)

EFFECT

It reduces vibration and noise effectively while spinning.

WATER FLOW

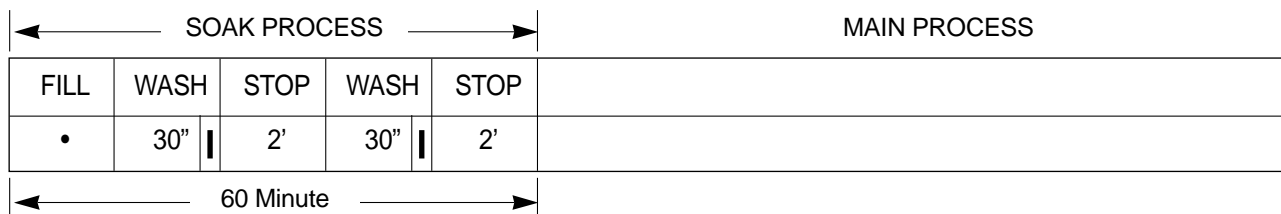


Function for Soak Wash

DISPLAY THE RESIDUAL TIME

When the SOAK WASH is selected, the total wash time increases because 60 minutes for soak process are added to the time of main process.

PROGRESS



NOTES

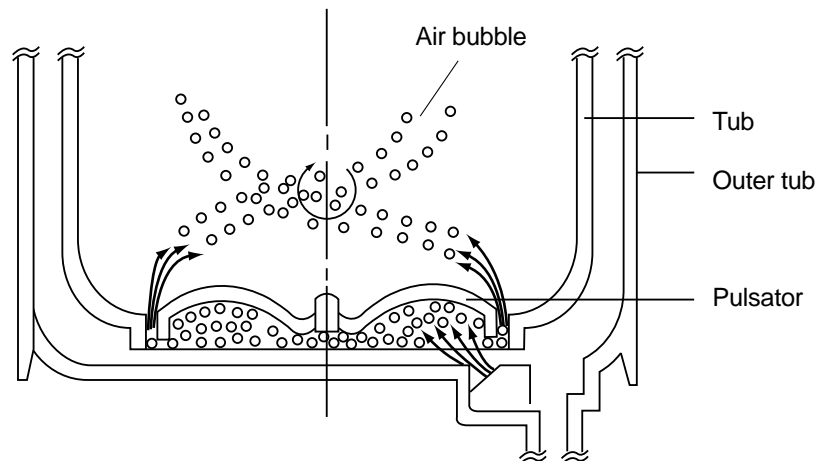
'|' mark indicates the operation of the water currents to adjust the unbalanced load.

Automatic Water Supply System For Blanket Wash

The water level would be lowered because the blanket absorbs water at the beginning of washing. Therefore, after 2 minutes, the operation is interrupted to check the water level, and then the water is supplied again until the selected water level is reached.

Functional Principle of Bubble Washing Machine

ACROSS SECTION



FUNCTIONAL PRINCIPLE

Bubble Motor supplies the air from the bottom of outer tub to the inner space of pulsator, the air is dispersed by the rotation of pulsator. Air-bubble is created by the centrifugal force, and rises up.

Automatic Draining time Adjustment

This system adjusts the draining time automatically according to the draining condition.

Draining condition	Good draining	The washer begins spin process after drainage.
	Bad draining	Draining time is prolonged.
	No draining	Program is stopped and gives the alarm.

FUNCTIONAL PRINCIPLE

- ① The micom can remember the time from the beginning of drain to reset point when the pressure switch reaches to "OFF" point

Drain Time	Movement of the Program
Less than 15 minutes	Continue draining
More than 15 minutes	Program stops and gives the alarm with DE blinked on display lamp.

- ② In case of continuous draining, residual drain time is determined by micom.

Draining time as a whole = D + 90

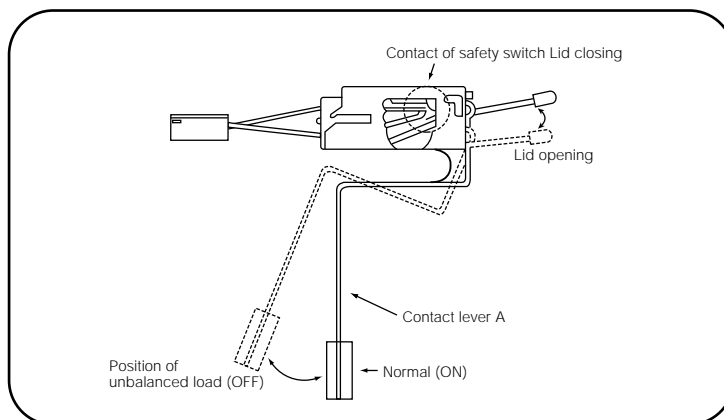
Residual drain time.
 The time remembered by micom.

Automatic Unbalance Adjustment

This system is to prevent abnormal vibration during intermittent spin and spin process.

FUNCTIONAL PRINCIPLE

- ① When the lid is closed, the safety switch contact is "ON" position.
- ② In case that wash loads get uneven during spin, the outer tub hits the safety switch due to the serious vibration, and the spin process is interrupted.
- ③ In case that P.C.B. ASS'Y gets "OFF" signal from the safety switch, spin process are stopped and rinse process is started automatically by P.C.B. ASS'Y.
- ④ If the safety switch is operated due to the unbalance of the tub, the program is stopped and the alarm is given.



NOTES

The alarm finished when you close the lid after opening it. Check the unbalance of the wash load and the installation condition.

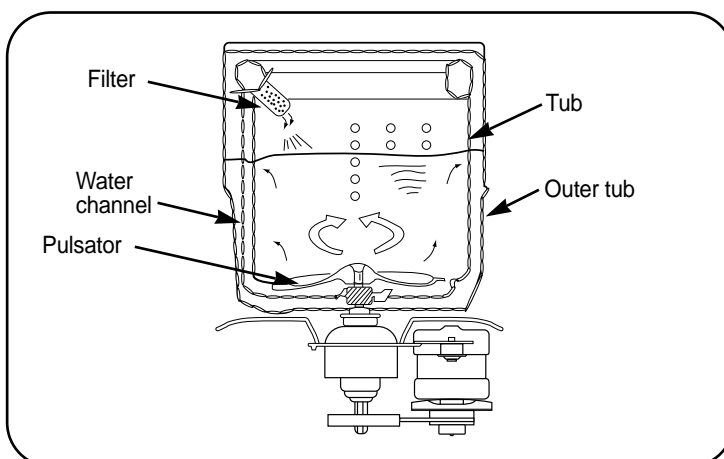
Circulating-Water Course and Lint Filter

CIRCULATING-WATER

The washing and rinsing effects have been improved by adopting the water system in which water in the tub is circulated in a designed pattern.

When the pulsator rotates during the washing or rinsing process, the water below the pulsator fans creates a water currents as shown in figure.

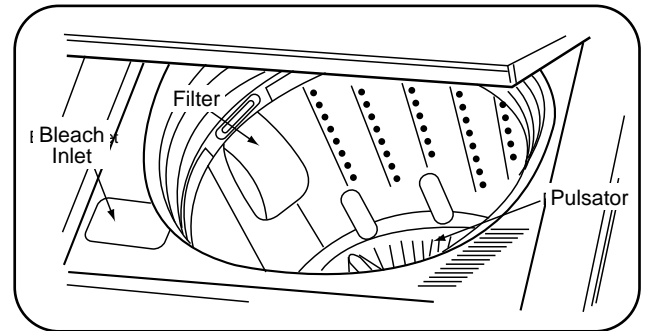
The water is then discharged from the upper part of the tub through the water channel. About 40 L/min. water is circulated at the 'high' water level, standard wash load and standard water currents.



Lint Filter

Much lint may be obtained according to the kind of clothes to be washed and some of the lint may also sticks to the clothes.

To minimize this possibility a lint filter is provided on the upper part of the tub to filter the wash water as it is discharged from the water channel. It is good to use the lint filter during washing.



HOW TO REPLACE LINT FILTER

- ① Pull the filter frame upward.
- ② Turn the lint filter inside out, and wash the lint off with water.
- ③ Return the filter as it was, and fix the filter frame to the slot.

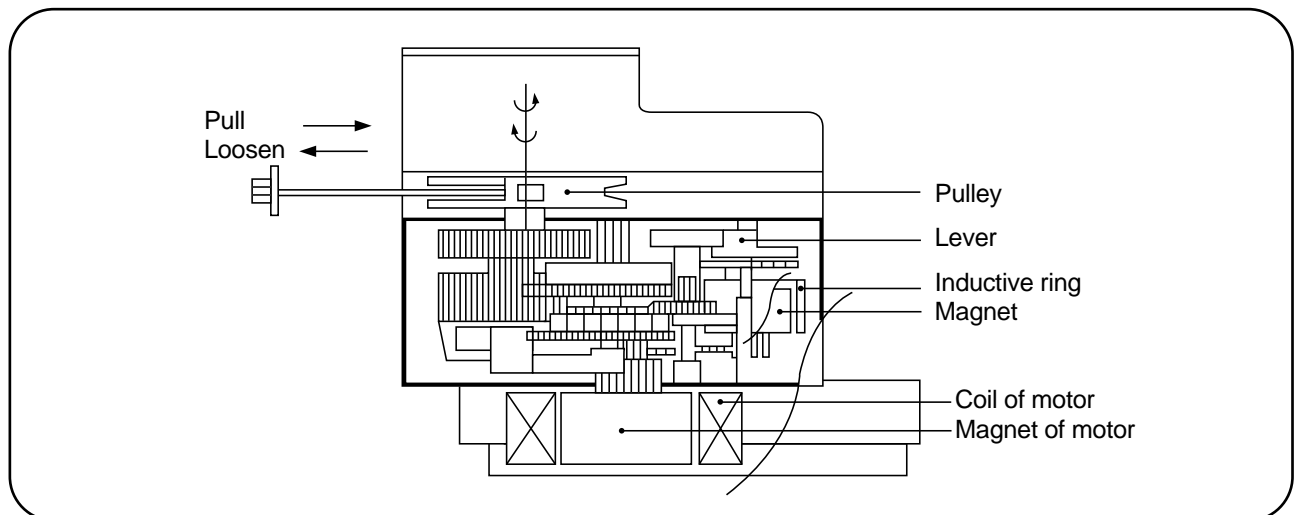
Residual Time Display

When the START/HOLD button is pressed, the residual time (min.) is displayed on the time indicator, and it will be counted down according to process.

When operation is finished, the TIME INDICATOR will light up .

Drain Motor

STRUCTURE

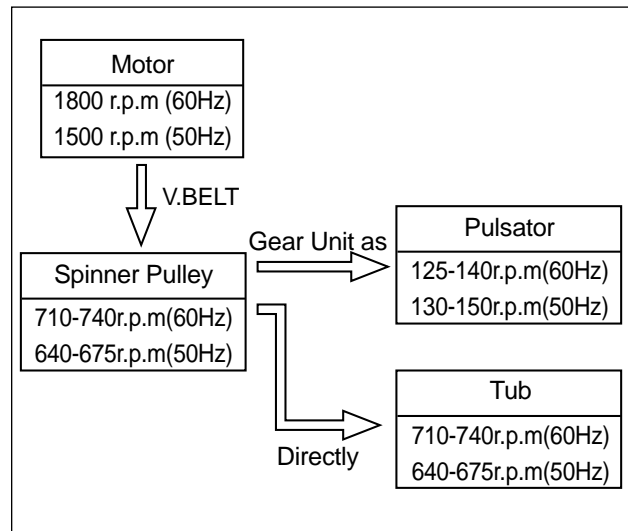
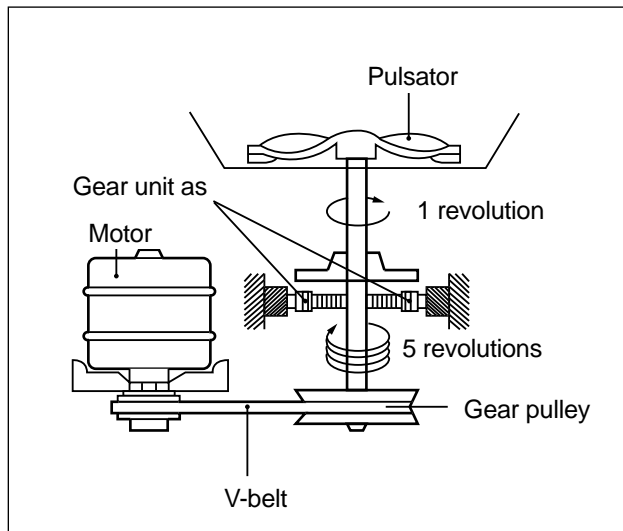
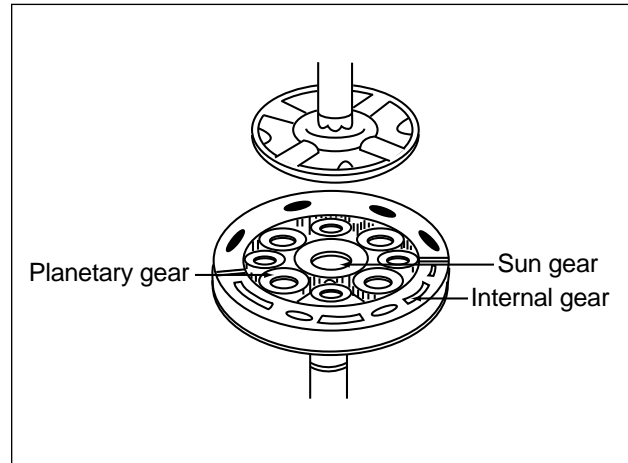
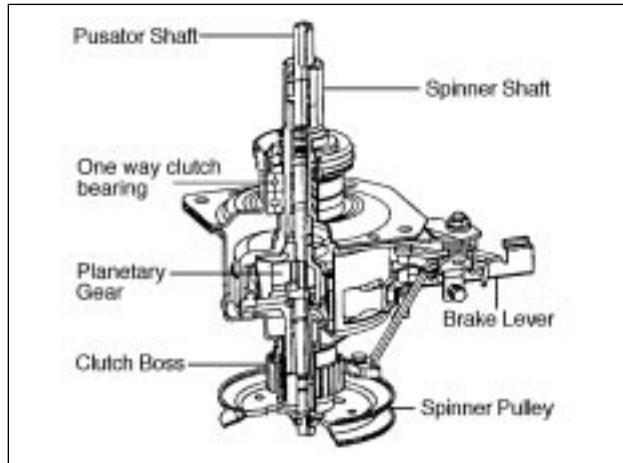


FUNCTIONAL PRINCIPLE

- ① When the DRAIN MOTOR connected to the power source, the DRAIN MOTOR rotates with 900 r.p.m and revolves the pulley by gear assembly for reducing.
- ② When the pulley is rotated, the pulley winds the wire to open the drain valve.
- ③ Therefore, rotation of pulley changed to the linear moving of wire.
- ④ The wire pulls the brake lever of Gear Mechanism Ass'y within 5 seconds.
- ⑤ After the wire pulled, gear assembly is separated from motor and condition of pulling is held by operation of the lever.
- ⑥ When the power is turned off, the drain valve is closed because the wire returns to original position.







Gear Mechanism Ass'y

The proper water currents is made by the rotation of pulsator at a low speed to prevent the damage to the small sized clothes.



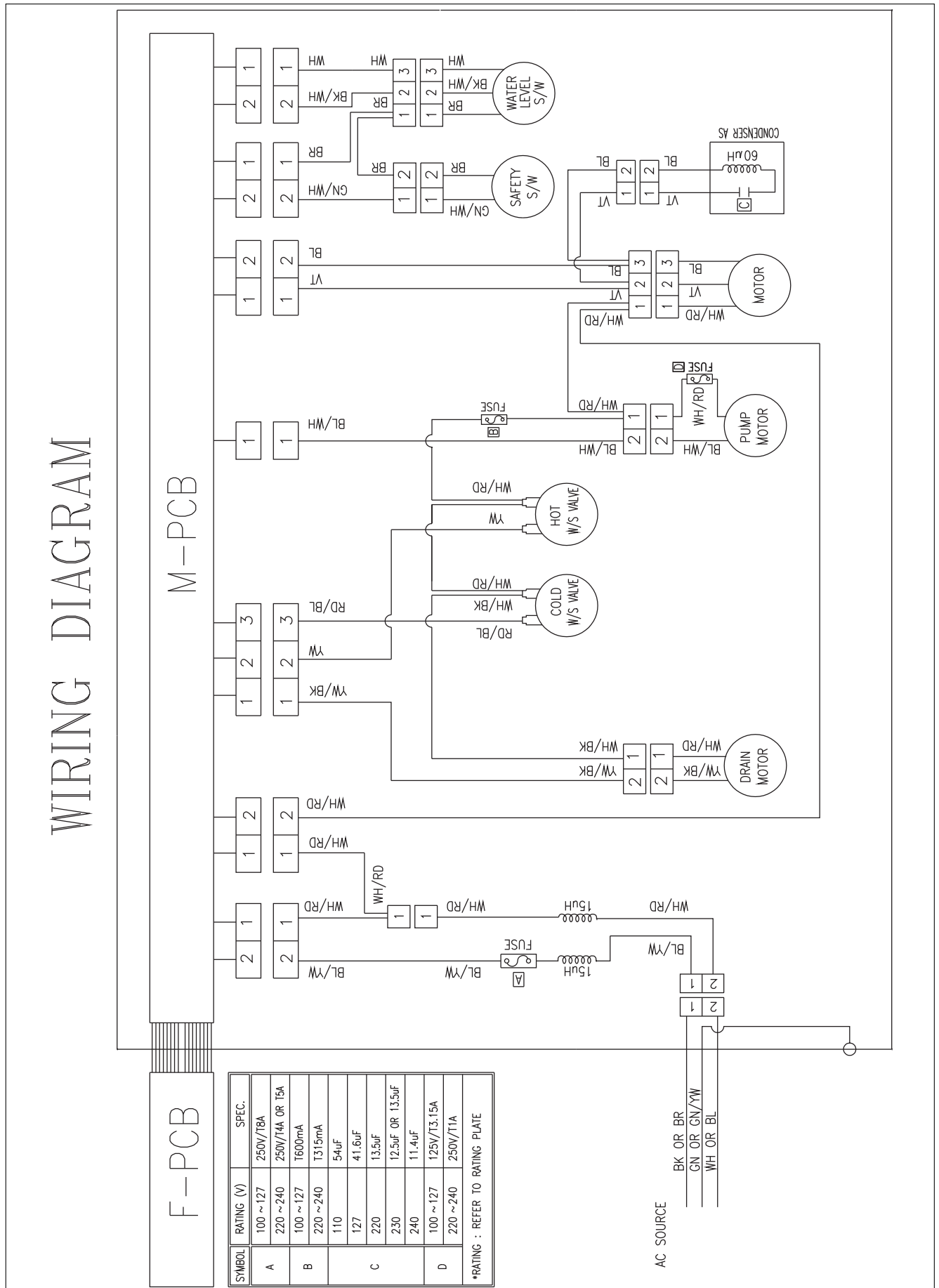
8. PRESENTATION OF THE P.C.B ASS'Y

Concerning Error Message

MESSAGE	CAUSE	SOLUTION
	Improper installation of drain hose.	Install drain hose properly.
	The drain hose is blocked up by foreign matter.	Remove foreign matter from drain hose.
	Drain motor is inferior.	Change drain motor.
	The water tap is closed.	Open the water tap.
	The water inlet filter clogged.	Clean the water inlet filter.
	It passes over the 60 minutes, yet it doesn't come to assigned water level.	Check whether or not it comes to the assigned water level.
	Wash loads get uneven during spin.	Re-set wash loads evenly.
	Poor installation of the unit.	Proper installation.
	The lid is opened.	Close the lid.
	The safety switch is inferior.	Change the safety switch.
	The load sensing is inferior. After the load sensing operates about 7 seconds, the message is displayed during 0.5 second and water level is always fixed 'high'.	Change the P.C.B. ASS'Y.
	The water level sensing is inferior.	Check the water level sensor and the contact part of the connector.

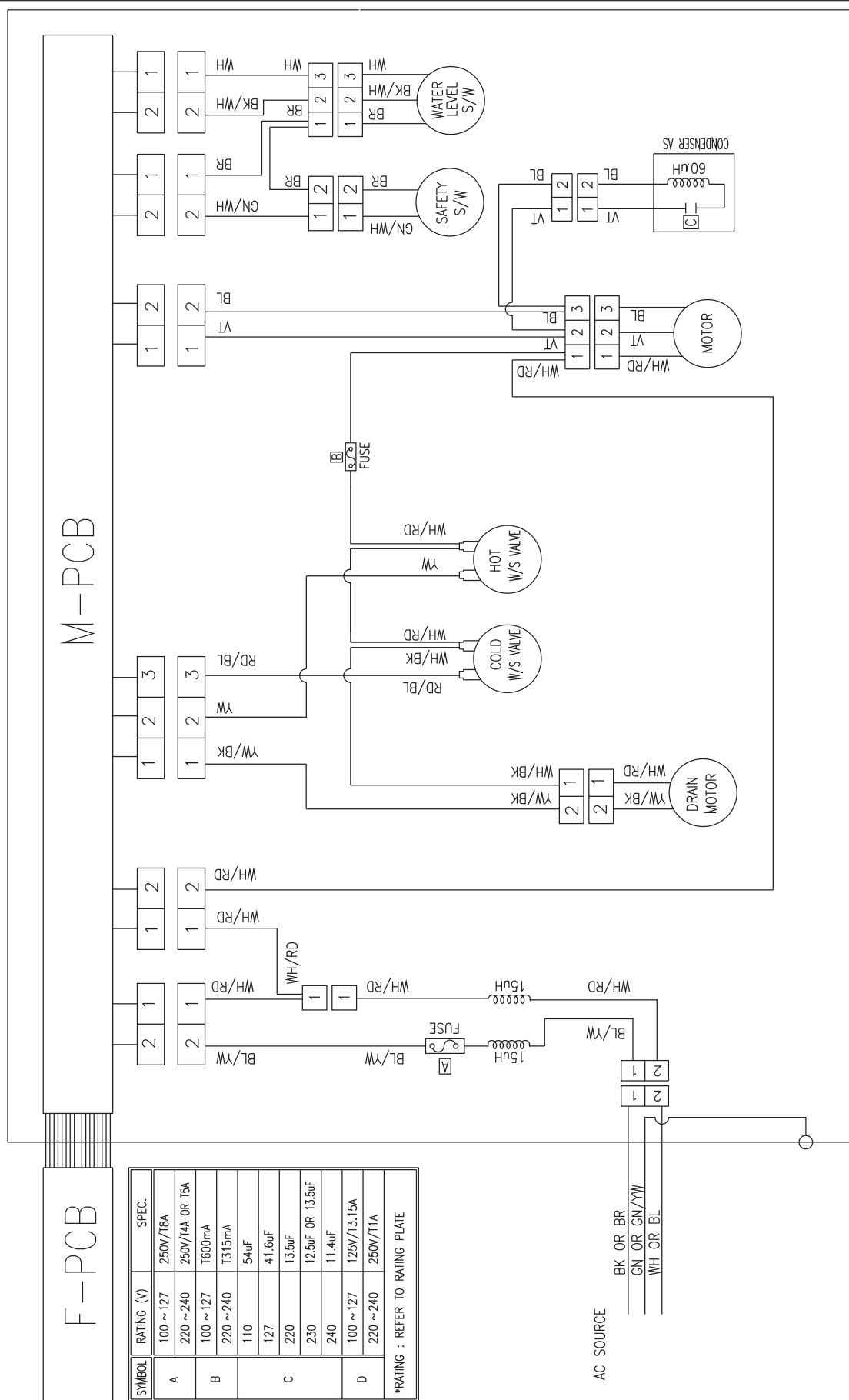
APPENDIX

■ Wiring Diagram [non pump]

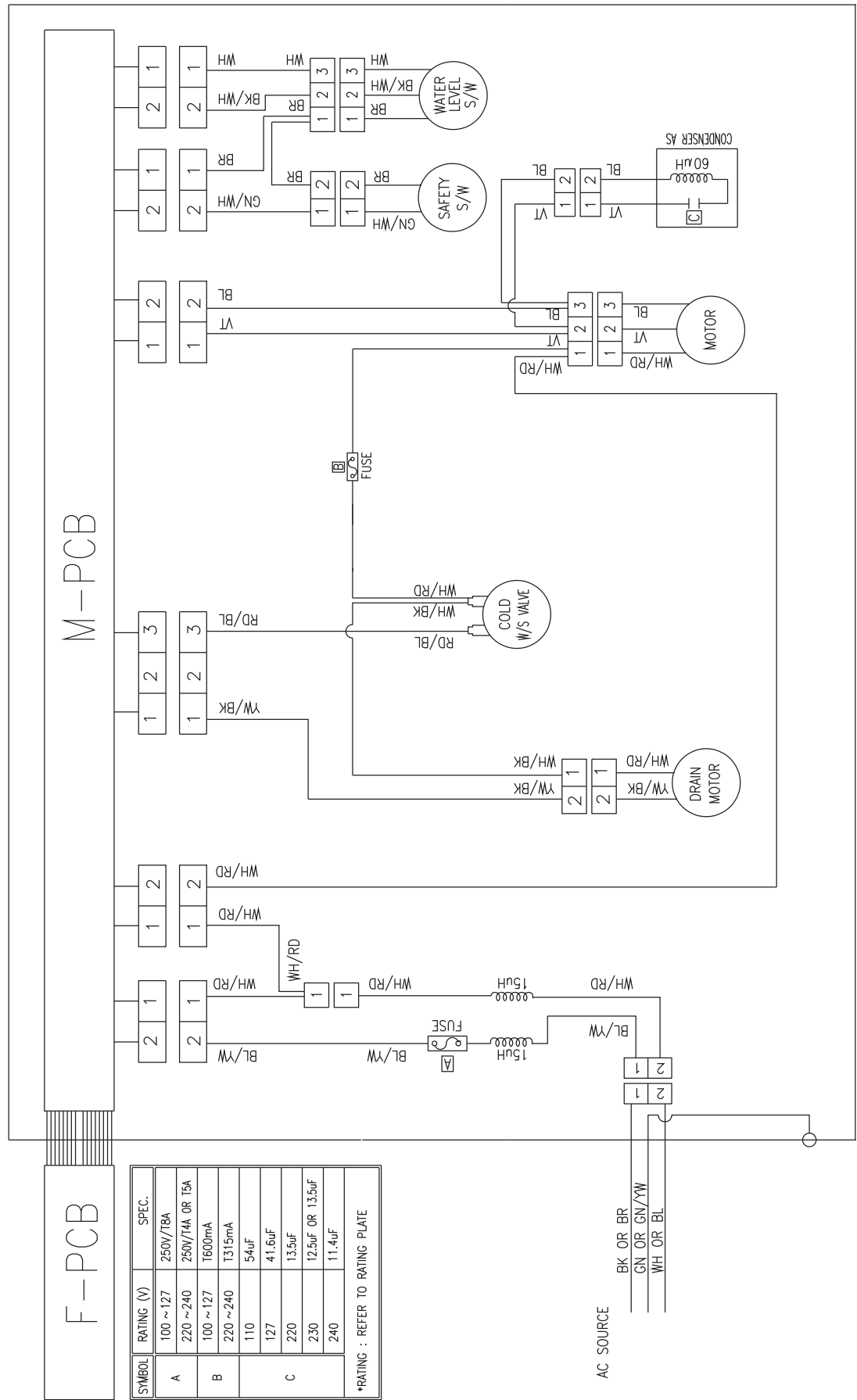


■ [Non-Pump, Single Valve]

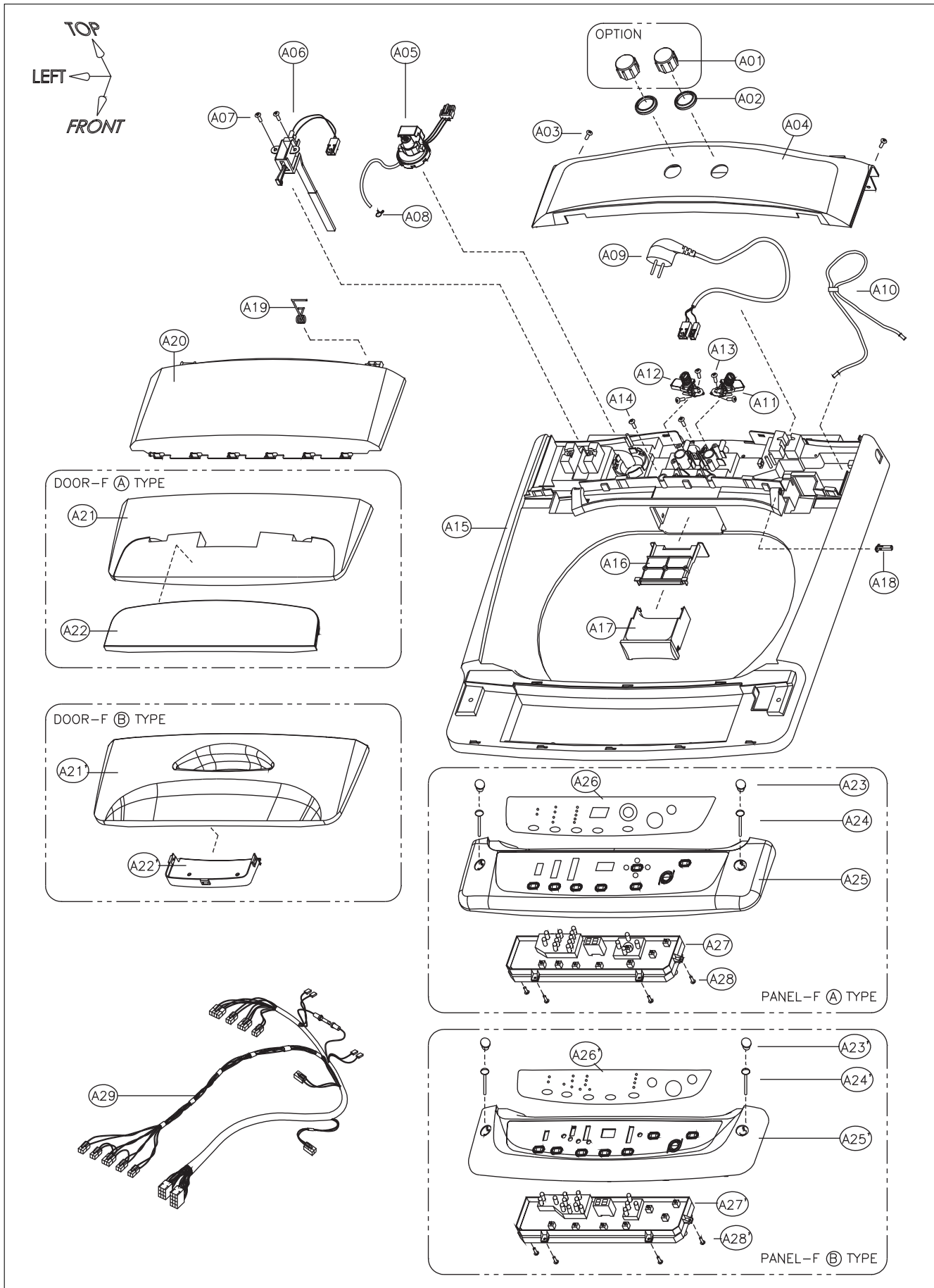
WIRING DIAGRAM

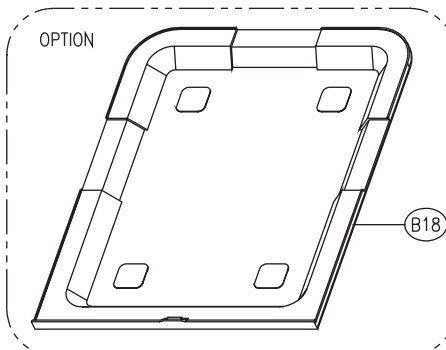
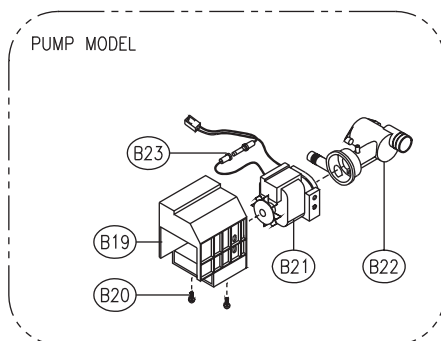
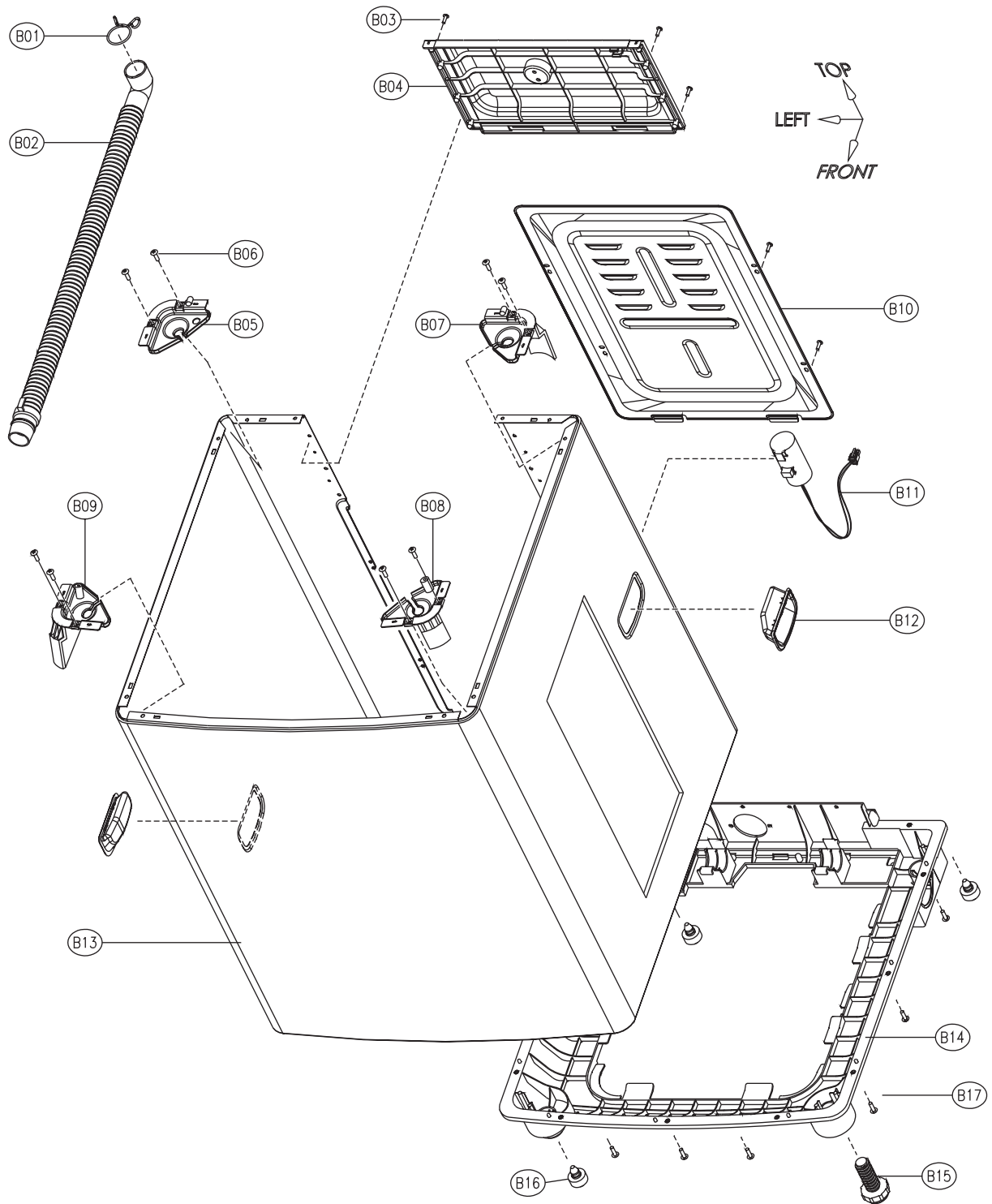


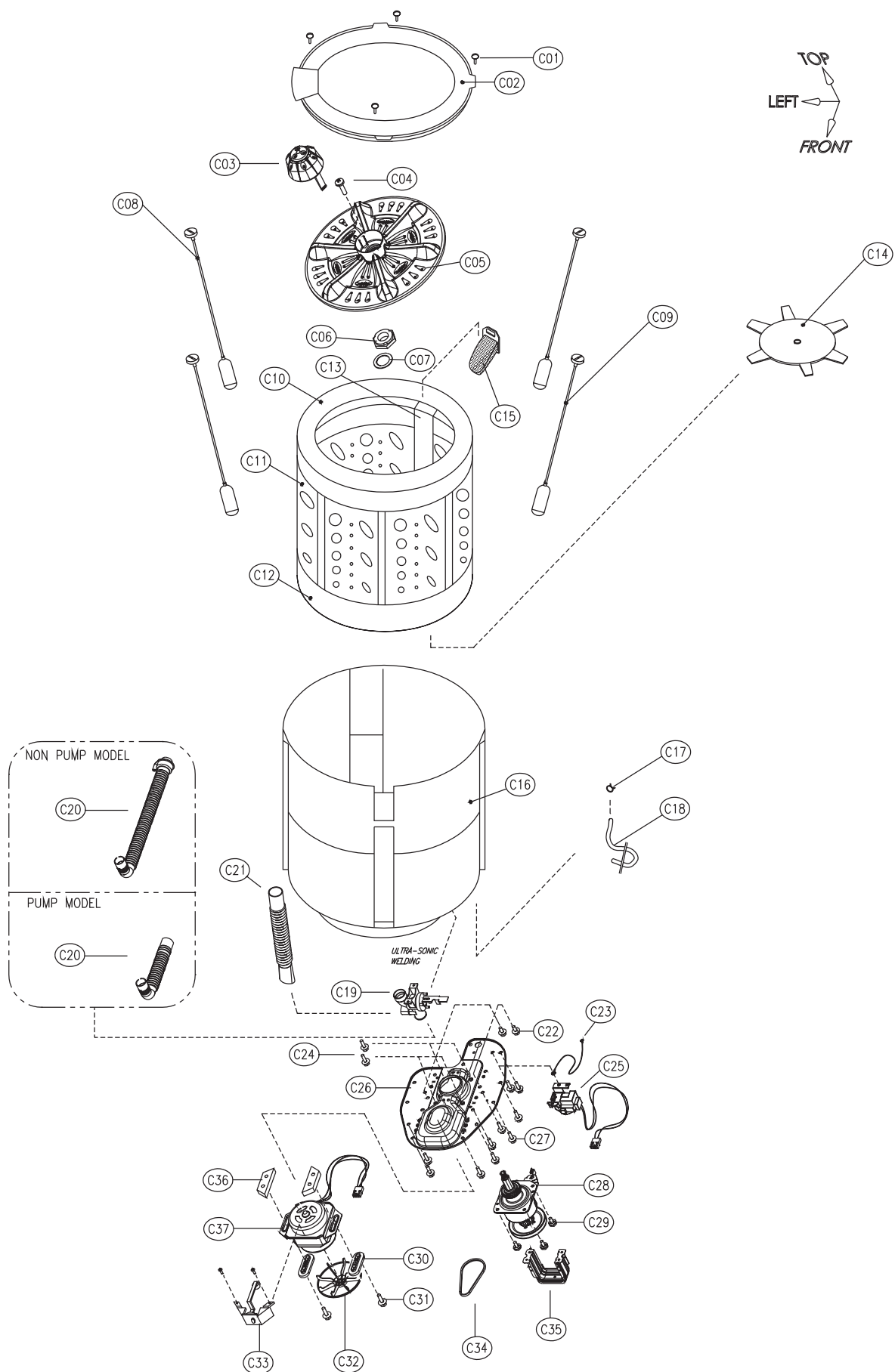
WIRING DIAGRAM



Parts Diagram







■ Parts List

NO.	PARTCORD	PART NAME	SPEC	Q' TY	UNIT	NOTE
A01	3610906800	CAP VALVE	PP(INLET)	2	EA	
	3610906800		PP(INLET)	1	EA	SINGLE VALVE
A02	3612300110	GASKET VALVE	PVC-S(INLET)	2	EA	
	3612300110		PVC-S(INLET)	1	EA	SINGLE VALVE
A03	7122402011	SCREW TAPPING	T2S TRS 4X20 MFZN	2	EA	
A04	3614231100	PANEL B	PP	1	EA	
A05	3614201300	SENSOR PRESSURE AS	0°C CDN-D6N CUS-D6N	1	EA	
A06	3619006380	SWITCH SAFETY	DC 15V 040P	1	EA	
	3619003170		DC 15V 5F-040A3 14mm			
A07	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	2	EA	
A08	4507D08150	CLAMP	MFZN HOSE ID=Ø7	1	EA	
A09	3611305500	POWER CORD AS	A-VCTFK 2X0.75 2.3M GY	1	EA	TAIWAN
	3611304600		N LFC-3R 3X0.75 2.3M GY			AUSTRLIA
	3611304700		F H05W 3X0.75 2.3M WH			CHILE
	3611304800		RW-300/500 3X0.75 2.3M			CHINA
	3611304900		VCTF 3X0.75 2.3M			INDIA
	3611305300		H05W-F 3X0.75 2.3M WH			MALAYSIA
	3611305400		H05W-F 3X0.75 2.3M BK			SINGAPOLE
	3611305800		H05W-F 3X0.75 2.3M GY			SOUTH AFRICA
	3611305600		F H05W 3X0.75 2.3M BK			USSR
	3611306020		H05W-F 3X0.75 2.3M GY			ARGENTINA
	3611305100		3X0.75 2.3M			KOREA
A10	3613225900	HOSE AS	ID=4.0, L=600, JOINT(2FA)	1	EA	
A11	3615403530	VALVE INLET(C)	AC110-130V/60Hz 90	1	EA	110-130V/60Hz
	3615403730		AC220-240V/50Hz 90			220-240V/50Hz
	3615402030		AC220V/60Hz 90			220V/60Hz
A12	3615403610	VALVE INLET(H)	AC110-130V/60Hz 270	1	EA	110-130V/60Hz
	3615403810		AC220-240V/50Hz 270			220-240V/50Hz
	3615402110		AC220V/60Hz 270			220V/60Hz
A13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	4	EA	
A14	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	2	EA	
A15	3614519300	PLATE T	PP	1	EA	
A16	3618102400	NOZZLE DETERGENT	PP	1	EA	
A17	3611119600	CASE DETERGENT	PP	1	EA	
A18	3612902400	HINGE DOOR	POLYACETAL	1	EA	
A19	3615111200	SPRING DOOR R	SUS 304	1	EA	
A20	3611796300	DOOR B	PP	1	EA	
A21	3611796400	DOOR F	PP	1	EA	
	3611796500					
A22	3615502100	WINDOW DISPLAY	ABS	1	EA	
	3612604400	HANDLE DOOR	PP	1	EA	
A23	3610906710	CAP	PP	2	EA	
A24	7112503011	SCREW TAPPING	T1S TRS 5X30 MFZN	2	EA	

NO.	PARTCORD	PART NAME	SPEC	Q' TY	UNIT	NOTE
A25	3614231200	PANEL F	ABS	1	EA	
A26	3611616400	DECORATOR PANEL F	PET	1	EA	
A27	PRPSSWX700	PCB AS	DWF-850M			220-240V(NON PUMP)
	PRPSSWX800		DWF-170MTC			110-130V(NON PUMP)
	PRPSSWX900		DWF-170MNP			220-240V(PUMP)
	PRPSSWXE00		DWF-170MSP			110-130V(PUMP)
	PRPSSWXB00		DWF-173MNE			220-240V(NON PUMP)
	PRPSSWXC00		DWF-173MTC			110-130V(NON PUMP)
	PRPSSWXD00		DWF-173MNP			220-240V(PUMP)
	PRPSSWXF00		DWF-173MSP			110-130V(PUMP)
A28	7121401211	SCREW TAPPING	T2S PAN 4X12 MFZN	4	EA	
A29	3612760400	HARNESS AS	DWF-850M	1	EA	NON PUMP
	3612760410		DWF-170MTC			COLD ONLY
	3612760420		DWF-170MNP			PUMP
*DWF-700M: DOOR A TYPE (A21) + PANEL A TYPE (A25)						

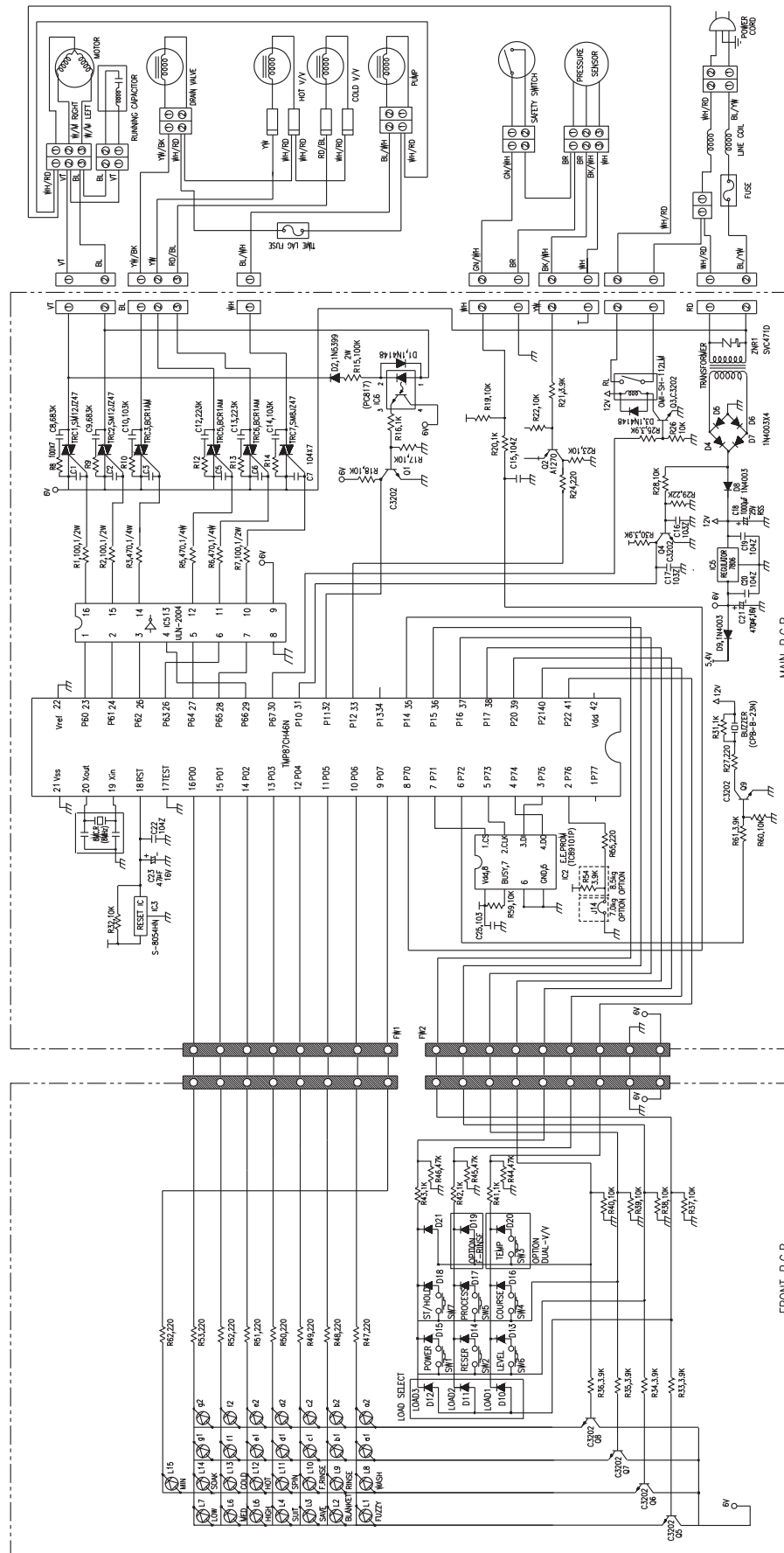
B01	3611201000	CLAMP	HSW3, D2.6, MFZN D36	1	EA	NON PUMP
	3611202200		HSW3 PE-LD			PUMP
B02	3613220200	HOSE DRAIN O AS	ASSY(PE-LD+EVA L=1250)	1	EA	NON PUMP
	3613217800	HOSE DRAIN O	PE-LD			PUMP
B03	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	4	EA	
B04	3614519400	PLATE UPPER	PP	1	EA	
B05	3615302930	SUPPORTER TUB BL	POM	1	EA	
B06	7112401211	SCREW TAPPING	T1 TRS 4X12 MFZN	1	EA	
B07	3615302920	SUPPORTER TUB BR	POM	1	EA	
B08	3515302900	SUPPORTER TUB FR	POM	1	EA	
B09	3615302910	SUPPORTER TUB FR	POM	1	EA	
B10	3611414010	COVER B	372X508X0.4T SGCC	1	EA	
B11	3618921500	ASSY CONDENSER	54.0μF+60μH L=470 #250	1	EA	110V/60Hz
	3618921900		41.6μF+60μH L=470 #250			127V/60Hz
	3618921000		13.5μF+60μH L=470 #250			220V/50Hz, 60Hz
	3618913740		11.4μF+60μH L=470 #250			240V/50Hz
B12	3612603300	HANDLE CABINET	PP	2	EA	
B13	3610809500	CABINET AS	SGCC	1	EA	
	3610388700	BASE U AS	850M	1	EA	ASSY(B14~B16)
B14	3610388300	BASE U	PP	1	EA	
B15	3617702100	LEG ADJUST AS	DWF-1089W2	1	EA	
B16	3617702300	LEG FIX	THERMAL PLASTIC ELASTOM	3	EA	
B17	7112401211	SCREW TAPPING	T1 TRS 4X12 MFZN	12	EA	
B18	3611403710	COVER UNDER	PP	1	EA	
B19	3611405320	COVER PUMP	PP(B360F)	1	EA	
	3611405301		UL/CSA(466FWU, HFH-400)			
B20	7112501611	SCREW TAPPING	T1 TRS 5X16 MFZN	2	EA	

NO.	PARTCORD	PART NAME	SPEC	Q' TY	UNIT	NOTE
B21	3963220330	MOTOR SHADED POLE	AC 110V/60Hz	1	EA	110v/60Hz
	3963821530		AC 120V/60Hz			127V/60Hz
	3963322730		AC 220V/60Hz			220V/60Hz
	3963513430		AC 220-240V/50Hz			220-240v/50Hz
B22	3611901530	FILTER AS	DWF-5591DPNF E-TYPE	1	EA	
B23	3618703770	THEMINAL PUMP	AC 125V/3.15A #250CONN	1	EA	110-130V/60Hz
	3618703760		AC 250V/1A #250CONN			220-240V/50Hz

C01	7122401611	SCREW TAPPING	T2S TRS 4X16 MFZN	4	EA	
C02	3611408500	COVER TUB O	PP	1	EA	DWF-700M
C03	3610910600	CAP PULSATOR	PP	1	EA	
C04	4505E3203A	SC. PULSATOR FIX AS	6X25 O-RING+SILOCK	1	EA	
C05	36169705800	PULSATOR AS	PP DWF-850M	1	EA	
C06	3616006200	SPECIAL NUT	ZDC2	1	EA	
C07	3616006500	SPRCIAL WASHER	SUS301 T-0.8	1	EA	
C08	3619704500	SUSPENSION AS (B)	850M	2	EA	
C09	3619804400	SUSPENSION AS (A) TUB I AS	850M	2	EA	
	3618816800		850M			ASSY(C10~C14)
	3618803010		DWF-8080R2			ASSY(C10~C14)
	3618803040		DWF7080			ASSY(C10~C14)
	3616105500		850M			DWF-700M
C10	3616101600	BALANCER AS	DWF-8080R2	1	EA	DWF-700M
C11	3618801700	TUB I	SUS	1	EA	DWF-700M
C12	3618802000	TUB U	PP	1	EA	DWF-700M
C13		GUIDE FILTER AS		1	EA	
	3612508400					
	3612802200		DWF-8080R2			DWF-700M
C14	3617200600	FLANGE TUB	ALDC12 VE1	1	EA	
C15		FILTER AS		1	EA	
	3610085520		PP 94'S (74X130X130)			DWF-700M
C16	3618802630	TUB O	PP	1	EA	DWF-700M
C17	4507D08150	CLAMP	MFZN HOSE ID-Ø7	1	EA	
C18	4500D08210	HOSE	ID=4.0	1	EA	
C19	3615404020	VALVE DRAIN AS	5591D VE	1	EA	ONLY NON PUMP
C20	3613218500	HOSE DRAIN I AS	LDPE+EVA L=219.5	1	EA	NON PUMP
	3613212100	HOSE DRAIN I	LDPE+EVA L=184			PUMP
C21	3613208900	HOSE OVERFLOW	PE-LD L=280mm	1	EA	ONLY NON PUMP

NO.	PARTCORD	PART NAME	SPEC	Q' TY	UNIT	NOTE
C22	7341601611	SPECIAL BOLT	6B-1-6X16 MFZN	2	EA	
C23	3612718200	INNER EARTH WIRE	GREEN VSF(30/0.18) L=350	1	EA	PHILIPPINES
	3612713100		AWG18 16/0.26 GN/YW			STANDARD AREA
C24	3616006900	SPECIAL SCREW	SCM24H 6.5X18	4	EA	
C25	450ED45100	MOTOR SYNCHR.	AC 110-120V/60Hz L=450 #250	1	EA	110-130V(NON PUMP)
	3966010200		AC 220-240V/50Hz L=450 #250			220-240V(NON PUMP)
	450ED45120		AC 110-120V/60Hz L=450 #250			110-130V(PUMP)
	3966010220		AC 220-240V/50Hz L=450 #250			220-240V/50Hz(PUMP)
C26	3610387400	BASE	SECEN 2.0T	1	EA	
C27	3616007000	SPECIAL SCREW	SCM24H 6.5X24	18	EA	
C28	3617305821	GEAR MECHANISM	GM-1300-KS6XO	1	EA	NON PUMP
	3617307610		GM-1300-KS6PO			PUMP
C29	7610802011	BOLT HEX	6B-1 8X20 HS MFZN	4	EA	
C30	3611502000	CUSHION UPPER	POM	2	EA	
C31	7650802811	BOLT HEX	6B-1 8X28 HS MFZN	2	EA	
C32	3618401400	PULLEY MOTOR AS	M-TYPE DS=10, DP=48.5 60Hz	1	EA	60Hz
	3618401420		M-TYPE DS=10, DP=53.0 50Hz			50Hz
C33	3610402901	BODY BUBBLE AS	10.8kg HOSE-780	1	EA	
C34	3616500500	BELT V	M20.5	1	EA	60Hz
	3616500100		M21			50Hz
C35	3618301300	PROTECTOR GEAR	SBHG 1.6T	1	EA	
C36	3611529400	CUSHION DOWN	POM 107X31X6.7	2	EA	
C37	3964221110	MOTOR CONDENSER	110-120V/60Hz W1D46CA012	1	EA	110V/60Hz
	3964821210		120-127V/60Hz W1D46JA012			120-127V/60Hz
	3964311310		220-240V/50Hz W1D46VA012			220-240V/50Hz
	3964321110		220V/60Hz W1D46CAUA012			220V/60Hz

Circuit Diagram[Non Pump]



Circuit Diagram[Non Pump, Single Valve]

