

Service Manual Auto Washer

Model : DWF-6010

DAEWOO ELECTRONICS CO., LTD. OVERSEAS SERVICE DEPT.

1. SPECIFICATIONS

NO.	ITEM		DWF-6010							
1	POWER SOURCE				AVAILA	ABLE IN ALL L	OCAL AC VO	LTAGE		
	POWER	50Hz					50W			
2	CONSUMPTION	60Hz				270	270W			
3	MACHINE	NET	32,5							
3	WEIGHT	GROSS	36							
4	DIMENSION (W)	XHXD)	532X855X542							
5	MATERIAL OF INTER	RNAL TUB		STA	INLESS STEE	L				
6	WASHING COURS	S⊏			F	ULL AUTOMA	TIC 4 COURC	E		
					(FUZ	'ZY, LIGHT, HE	avy, wool/s	SUIT)		
7	WATER LEVEL SEL	ECTOR			Н	IGH(551), MID	(451), LOW(31	11)		
8	OPERATING WATER F	PRESSURE			0.3kgf/cr	m²~8kgf/cm² (2	2.94 N/cm ² ~78	3.4N/cm ²)		
9	MAXIMUM MASS OF	TEXTILE		6.0Kg						
	REVOLUTION	WASH			12	25~145(50Hz),	z), 130~150(60Hz)			
10	PER MINUTE	SPIN		710~725(50Hz), 760~785(60Hz)						
		SUIT			1	50(50Hz),	60(60Hz)		1	
11	DIRECTION INLE	T VALVE	BACK	WARD	UPW	/ARD				
12	WATER CONSUM	/IPTION		APPROX. 1	301/CYCLE					
13	PULSATOR		PF		TH 6 SPOUTIN	G HOLES FOI	DR POWERFUL UPWARD WATER STREAM			M
14	WATER LEVEL CO	ONTROL				ELECTRONIC	IICAL SENSOR			
15	ANTI NOISE PLA	λΤΕ				OPT	PTION			
16	GEAR MECHANISM ASS'Y			SPUR GEAR						
17	LINT FILTER			(0					
18	SOFTENER INLET			0						
19	ALARM SIGNAL		0							
20	AUTO. WATER SUPPLY		0							
21	1 FUNCTION FOR BUBBLE			OPTION						
22	AUTO RE-FEED	WATER				()			
23	AUTO POWER	DFF				()			

3. FUNCTIONS OF THE CONTROL PANEL

Control panel has micom sensor.

As the buttons are pressed, the lamps indicating the selection of your desired washing program will light up.



POWER	Power SwitchPress this button to turn the power ON or OFF.
WATER	Water Level Selector This button is used to select the water level you want.
RES.	 Reservation Button If you want to reserve the finishing time of washing, use this button. As this button is pressed, digit in display increases by 1 hour at one press. If current time is 8:00 am and you expect washing will be completed around 5:00 pm, press this nine times in order to display '9'.
COURSE	 Course Selector This button is used to select the washing course according to the type of wash loads. Either WOOL or SUIT course is adopted to your washing machine.
PROCESS	Program ButtonWith this button, you can create new programs by combinations of process.
ТЕМР	 Temperature Selector (Optional) If your washer is connected to two water taps for cold water and hot water, you can select them. Without operation, cold water would be selected automatically.
START /HOLD	 Start/Hold With this button, you can make your washer proceed your program, or stop temporarilly. And you can also release the temporary stop by pressing this.

Reserved Washing

- 1 Set your program as the above procedure, remaining last step.
- Press the course selection button.
- Press the procedure selection button.
- But WOOL/SUIT course can not reservation.
- 2 Press reservation button until the digital monitor displays the finishing time you want.



3 Press Start/Hold to start.



S Partial Selection Among Wash, Rinse or Spin

step 1. Press power switch.

step 2. Press program button until the indicating lamps make the combinations you want. If only spin lamp is turned on, that means you will operate your washer for spin only. If rinse and spin lamp are turned on, that means you will operate your washer for rinse and spin. If add lamp is turned on with other porcess lamps, that means the time of the corresponding porcess will increase by 1~2 minutes, that is, if add is on with wash, rinse and spin, the time of each precess will increase by 1~2 minutes. (Wash: add 2 min., Rinse: add 1 min., Spin: add 1 min.)

- step 3. Press water level selector as your decision.
- step 4. Press Start/Hold to start.

1 Processing the Power Switch	2 Selecting Water level	3	Selecting Cours	se	4 Pressing the Start/Hold Switch	
			Wash & Rinse & Spin	s ADD s WASH s RINSE s SPIN		
			Only Spin	§ ADD § WASH § RINSE § SPIN		
	s HIGH s MID	s ADD s WASH s RINSE	Add & Wash	s ADD s WASH s RINSE s SPIN	-	End of Washing
POWER	s MID s LOW	§ RINSE § SPIN	Add & RInse & Spin	S ADD S WASH S RINSE S SPIN	START / HOLD	
E.	Left.	E.	Add & Spin	S ADD S WASH S RINSE S SPIN		lt is Informed by buzzer.
			Add & Wash & Rinse & Spin	S ADD S WASH S RINSE S SPIN		
			Only Wash	S ADD S WASH S RINSE S SPIN		
			Rinse & Spin	S ADD S WASH S RINSE S SPIN		

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5. DIRECTIONS FOR INSTALLATION AND USE

Instal I ing Pl ace

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



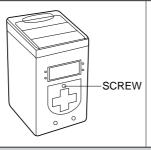
Keep the machine body more than 25cm apart from the wall surface. It will make easy cleaning the drain filter which is equipped at the back side of it. And if it comes into contract vibration may occur.

Never install in these places.

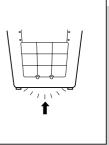
- The place where it would be exposed to direct sunlight.
- ; The place nearby a heater or heat appliance.
- ; The place where it would be supposed to be frozen in winter.
- ; The kitchen with coal gas and a damp place like a bathroom.
- Instal lation Of The Under Base Cover [Option] 8 -DWF-5510/5511/5010/6011

10Cm

1 Before installing your washer, remove the pad from the bottom of the cabinet. Then, separate under cover from rear side of cabinet by unscrewing and insert it into the base



2 Push the under-base cover into the end, which decrease the noise made by this washer.

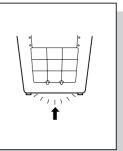


-DWF-5520/5521/6020/6021

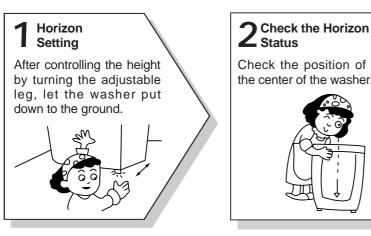
1 There is under-base cover in the tub of the washer. Put out and draw it in its proper site. (See picture)

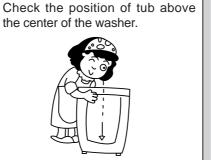


2 Push the under-base cover into the end, which decrease the noise made by this washer.



How To Instal I On An Incl ined Place 8







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

DIRECTIONS

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.

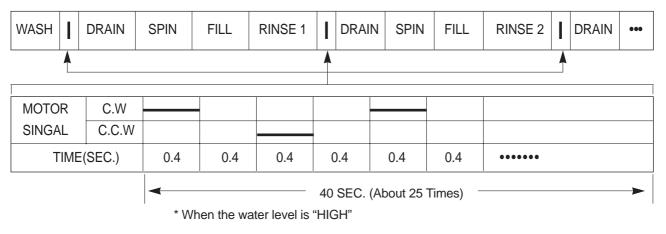
Water Current to Adjust the Unbal anced Load

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 unbalneed load.)

EFFECT

It reduces vibration and noise effectively while spinning.

WATER FLOW

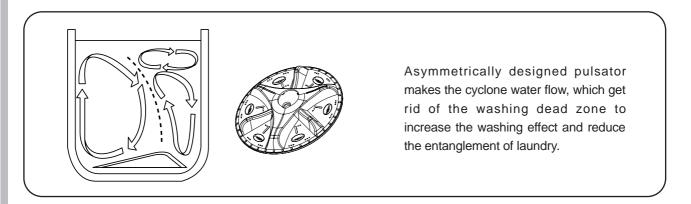


Automatic Water Supply System For Blanket Wash

The water level would be lowered because the blanket absorbs water at the beginning of washing. Therefore, after 60 seconds, the operation is interrupted to check the water level, and then the water is supplied again until the selected water level is reached.

Pul sator System

When the pulsator is rotated C.W or C.C.W at a high speed, it makes the cyclone water flow from the asymmetrically designed pulsator as shown below.



Automatic Drainning time Adjustment

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

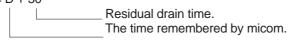
Draining	Good draining	The washer begins spin process after drainage.		
condition	Bad draining	Draininig time is prolonged.		
Condition	No draining	Program is stopped and gives the alarm.		

FUNCTIONAL PRINCIPLE

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

Drain Time	Movement of the Program
Less than	Continue draining
10 minutes	Continue draining
More than	Program stops and gives the alarm with \mathbf{IE} blinked on display lamp.
10 minutes	

2 In case of continuous draining, residual drain time is determined by micom. Draining time as a whole = D + 30



Softener Dispenser

This is the device to dispense the softener automatically by centrifugal force. This is installed inside the auto-balancer.

FUNCTIONAL PRINCIPLE

- 1 Softener stays in room (A) when poured into softener inlet.
- 2 Softener moves from (A) to (B) by centrifugal force during intermittent spin process.
- 3 Softener flows from (B) to (C) during rinse process next to intermittent spin.
- 4 Softener moves from (C) to (D) by centrigfugal force during second intermittent spin.

After spin process is finished, the softener is added into the tub through softener outlet.

FLOW OF THE SOFTENER

	Wash	Intermittent Spin	Hold	Intermittent Spin	Rinse	Spin
Normal	Centri foi	fugal ce	Flow in	Centrifugal force	Flow in	
Course	(A) ——	→ (B) —	→ (C) —	→ (D)		

FLOW OF THE SOFTENER INSIDE OF THE BALANCER

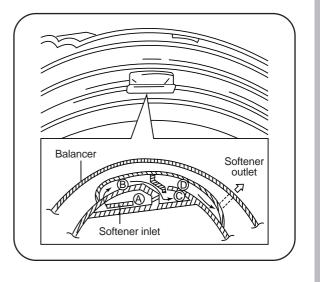
Room inside the balancer	\bigotimes	B	©	D
Centrifugal force		*		



Softener moves into the next room when r.p.m of the tub is more than 100 r.p.m.

HOW TO CHECK MOVEMENT

Pour a reasonable amount of "MILK" into softener dispenser and operate the washer with no load. In final rinse cycle, make sure that the milk is added into the tub through softener outlet.

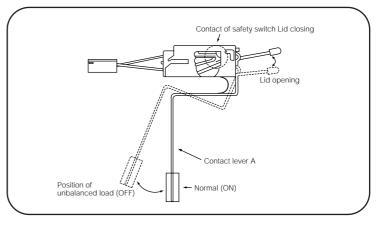


Automatic Unbal ance Adjustment

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

FUNCTIONAL PRINCIPLE

- When the lid is closed, the safety switch 1 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.

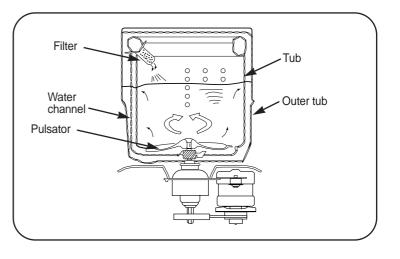
Circul ating-Water Course and Lint Fil ter

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 vanes 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 Fil ter

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.

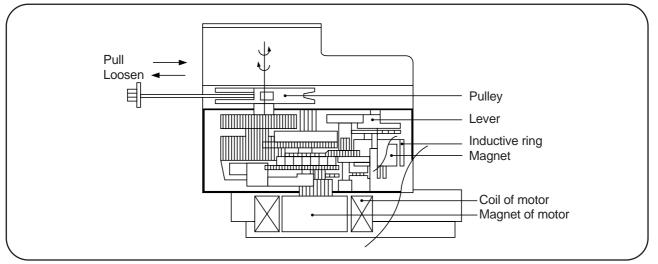
Residual Time Display

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

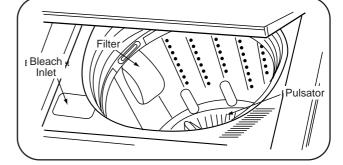
Drain Motor

STRUCTURE



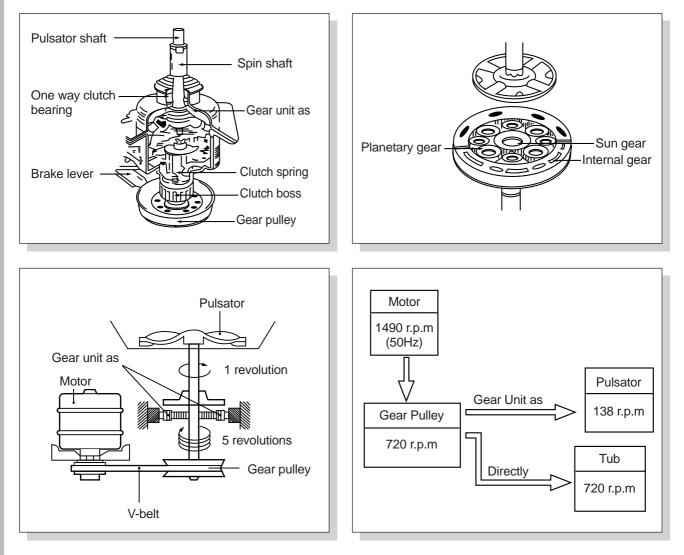
FUNCTIONAL PRINCIPLE

- 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.



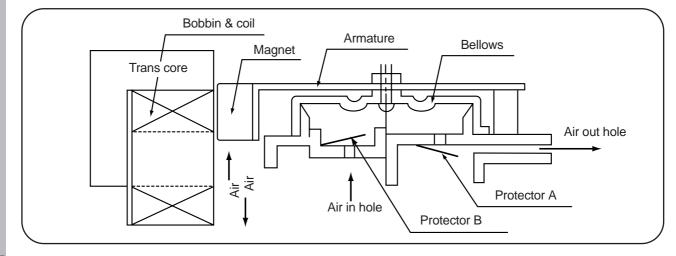
Gear Mechanism Ass'y

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



Principl e of Bubbl e Generator

STRUCTURE

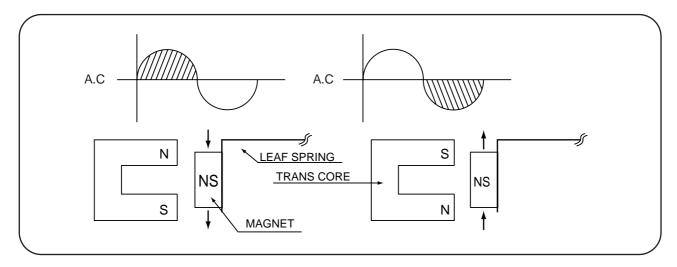


PRINCIPLE OF INTAKE & OUTLET OF THE AIR

- INTAKE : ARMATURE moves up, and BELLOWS inhales the air. At the same time, protector B is open and A is close.
- OUTLET : ARMATURE moves down, and BELLOWS exhausts the air. At the same time, protector B is close and A is opend.

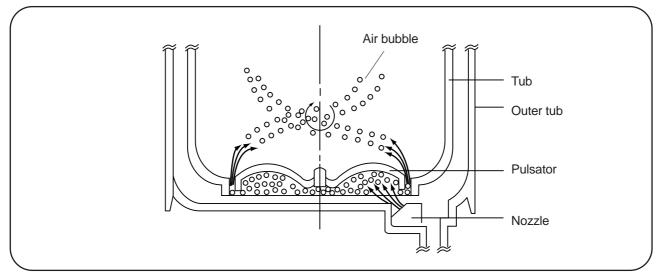
FUNCTIONAL PRINCIPLE OF TRANS & MAGNET

- i The phase of A.C electric power changes to 60 cycle/second.
- The magnetic pole of trans core is changed by the change of the phase of A.C electric power.
- ; The core repeats push and pull (3600 times/min.) of the at mature magnet.



Functional Principle of Bubble Washing Machine

ACROSS SECTION



FUNCTIONAL PRINCIPLE

Bubble generator 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.

7. DIRECTIONS FOR DISASSEMBLY AND ADJUSTMENT

_ Warning _

BEFORE ATTEMPTING TO SERVICE OR ADJUST ANY PART OF THE WASHING MACHINE, DISCONNECT THE POWER CORD FROM THE ELECTRIC OUTLET.

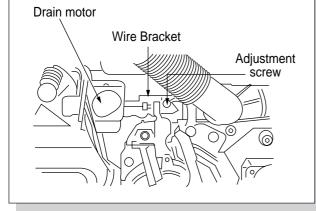
Gear Mechanism Ass'y Replacement

Raise the top plate on the outer cabinet. Loosen the pulsator mounting screw and remove ÷ Remove outer tub cover from the tub ass'y. the pulsator. Pulsator Mounting screw **Outer tub cover** ; Remove the spinner shaft flange nut by using 'T' ; Remove the tub ass'y. type box wrench. "T" type box wrench pulsator Washer Nut-spin shaft fixing Nut-spin shaft fixing Washer-spin-Shaft fixing Tub ass'y ; Lay the front of the washer on the floor. Remove four bolts mounting the gear mechanism i Remove four bolts mounting the plate-gear protect ass'y by using a box wrench. by using a box wrench and remove plate-gear pro-; Pull out the gear mechanism ass'y. tect. ; Remove the V-belt. 0 0 C Gear mechanism ass'y 0 0 0 Mounting bolt Mounting bolt NOTES

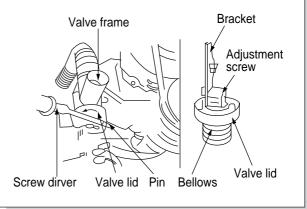
To assemble the gear mechanism ass'y, reverse the disassembly procedure.

Drain Motor and Val ve

- i Lay the front of the washer on the floor.
- $_{\rm i}$ Loosen the adjustment screw and two bolts
- mounting the drain motor.
- i Take out the wire of drain motor from the bracket.

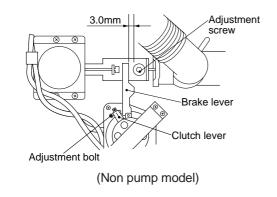


 Separate the drain motor from the bracket.
 Turn the valve lid by using screw driver as shown in figure and remove the valve lid from the valve frame.

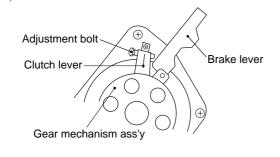


Brake Adjustment

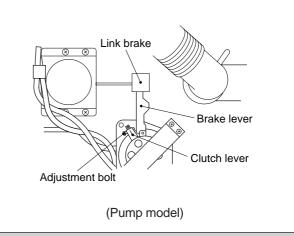
- i Loosen the adjustment screw fastening the bracket and place the adjustment screw to the brake lever as shown in figure.
- ; Tighten the adjustment screw completely.



- i Loosen the adjustment bolt and turn the adjustment bolt until the end of the bolt touches to the brake lever.
- ; Tighten the lock nut and apply a small amount of paint-lock.



i Tighten the link brake screw completely.



NOTES:

- The brake adjustment has been made at the factory, so that it is not re-adjust.
 However, in case of insufficient brake operation, problem the upper procedure.
- 2. Overtightening of the adjustment bolt will cause poor brake performance.
- 3. Undertightening of the adjustment bolt will cause continuous braking and thereby. cause the problems of the motor during the spingcycle.

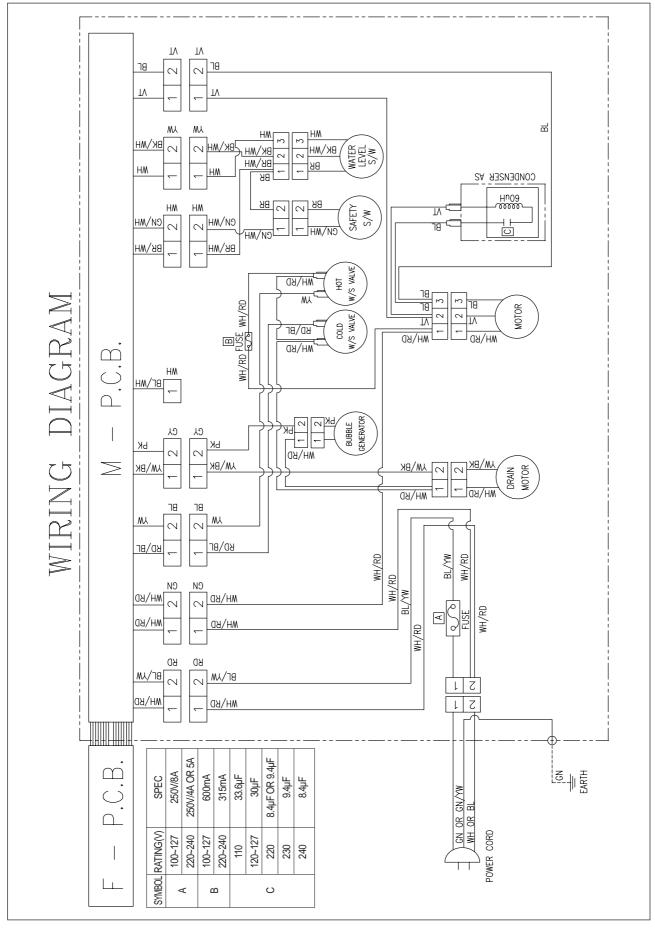
9. PRESENTATION OF THE P.C.B ASS'Y

Concerning Error Message

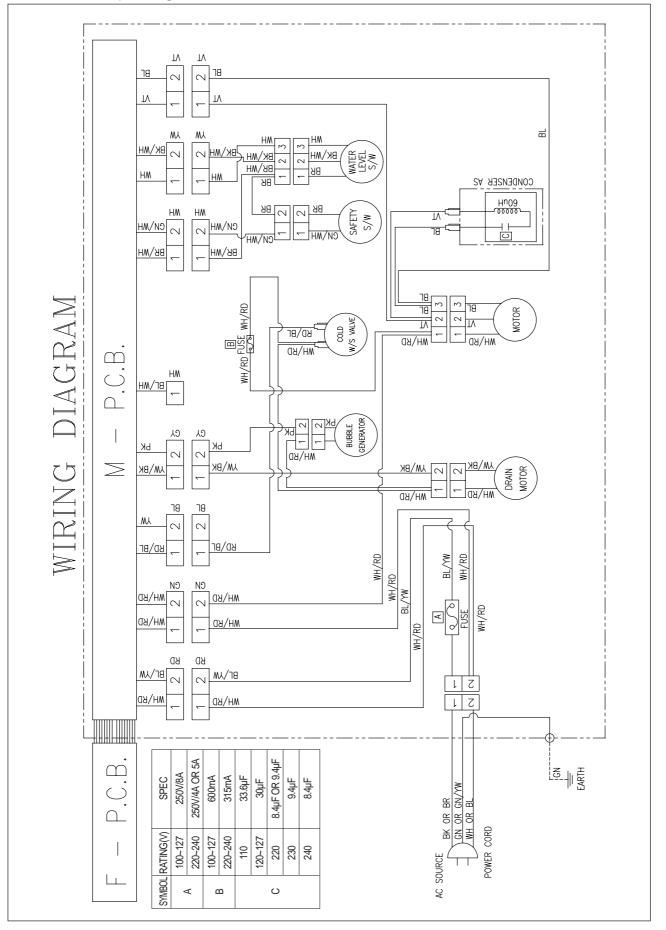
MESSAGE	CAUSE	SOLUTION
	Improper installation of drain hose.	Install drain hose properly.
<u>15</u>	The drain hose is blocked up by foreign matter.	Remove foreign matter from drain hose.
	Drain motor is inferior.	Change drain motor.
	The water tap is closed.	Open the water tap.
;E	The water inlet filter clogged.	Clean the water inlet filter.
	It passes over the 30 minutes, yet it doesn't come to assigned water level.	Check whether or not is comes to the assigned water level.
	Wash loads get uneven during spin.	Re-set wash loads evenly.
LE	Poor installation of the unit.	Proper installation.
LE	The lid is opened.	Close the lid.
	The safety switch is inferior.	Change the safety switch.
<u> </u>	The load sensing is inferior. After the load sensing operates about 7 seconds, the message is displayed during 1 second and water level is always fixed 'high'.	Change the P.C.B. ASS'Y.
<u> </u>	The water level sensing is inferior.	Check the water level sensor and the contact part of the connector.

PCB ASS'Y 25

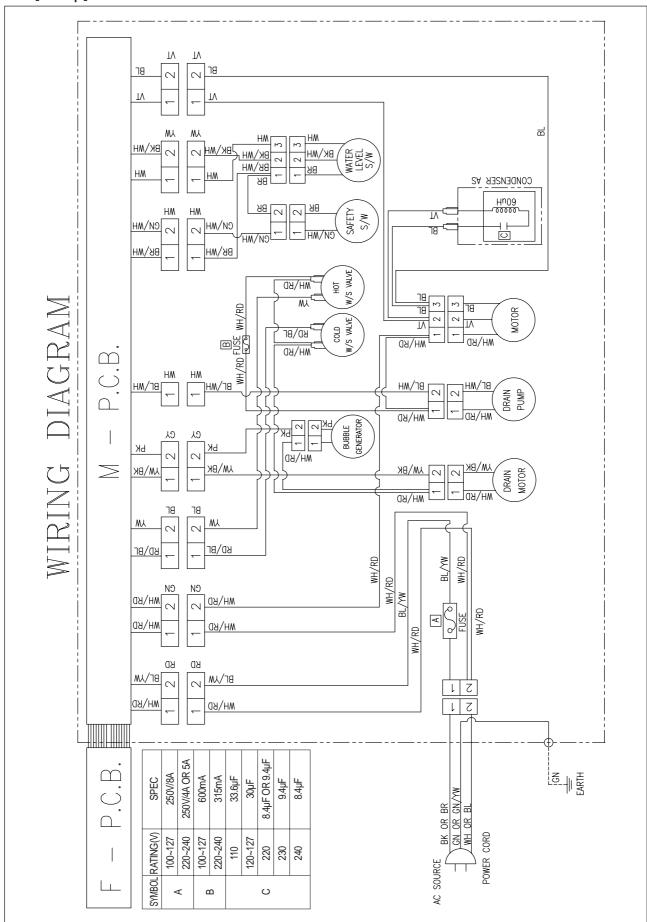
S Wiring Diagram [non-pump]



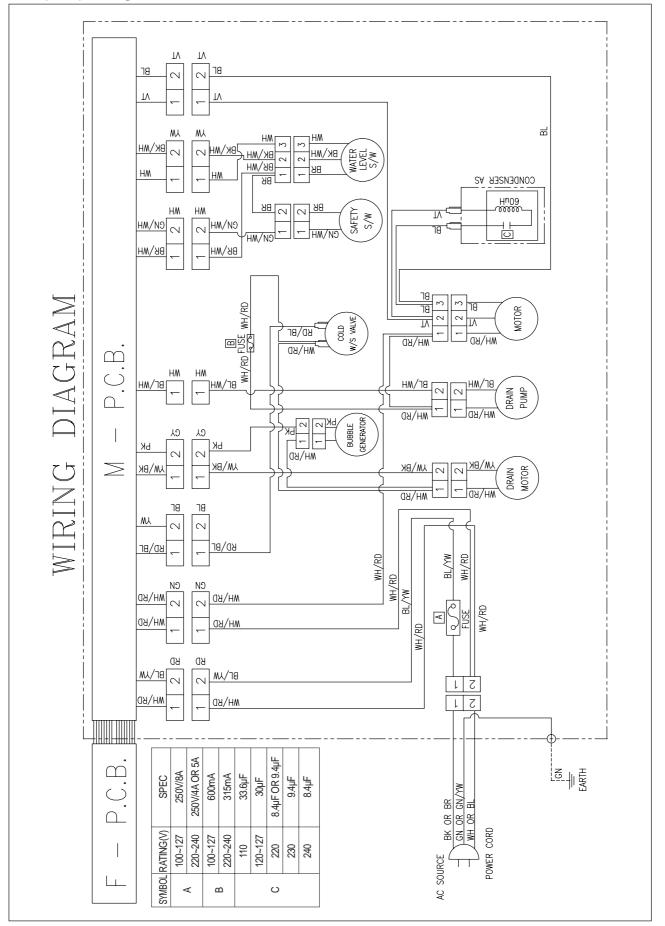
S [Non-Pump, Singl e Val ve]





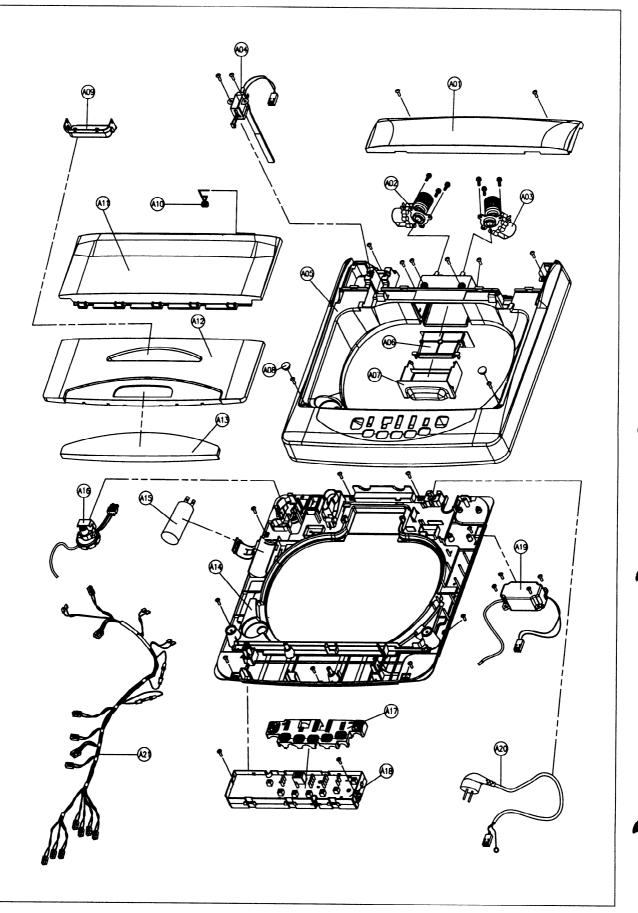


[pump, singl e val ve]



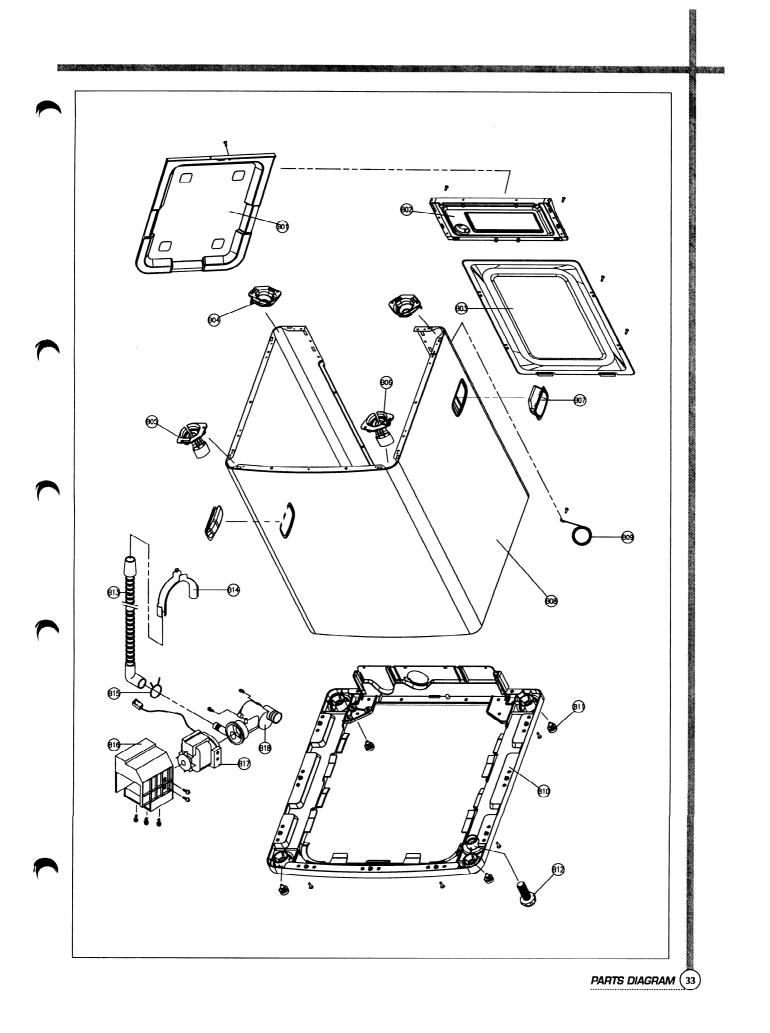
WIRING DIAGRAM (29)

PARTS DIAGRAM

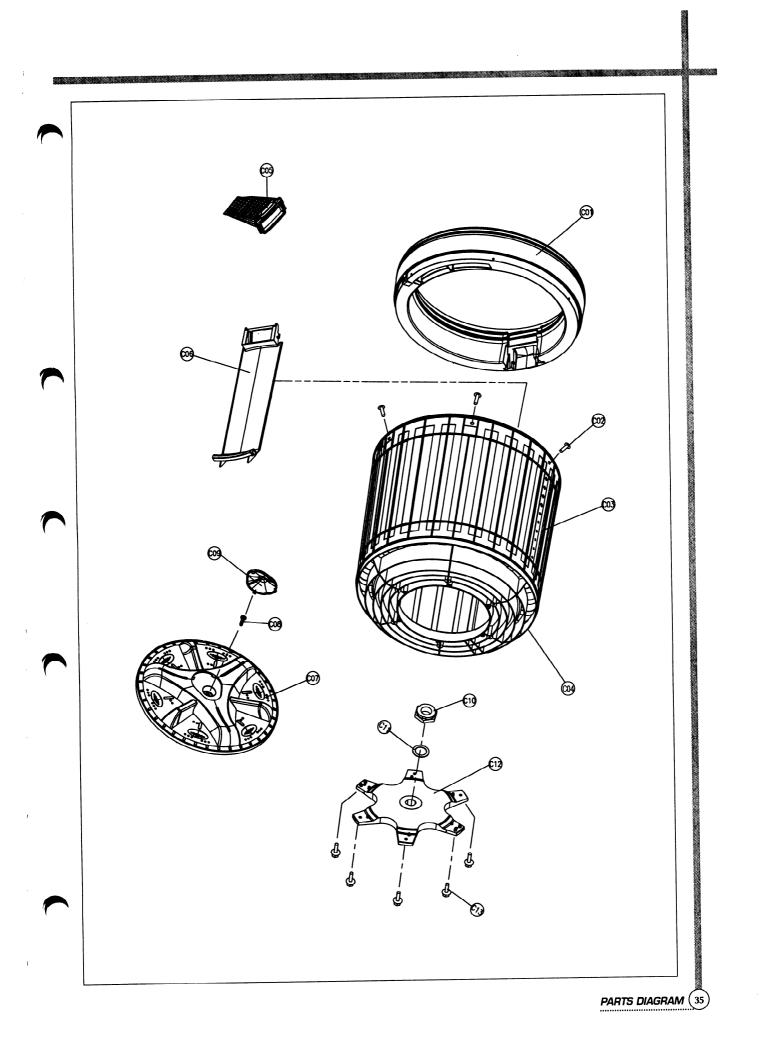


LOC.	PART NAME	PART CODE	SPECIFICATION	REMARK
101		3614219200	ABS	6010
A01	PANEL B			
		3615403830	AC 220~240V/50Hz	6010
A02	VALVE INLET(HOT)	3615402130	AC 220V~60Hz	6010
AUZ				
		3615403630	AC 110~127V/60Hz	6010
		3615403710	AC 220~240V/50Hz	6010
		3615402010	AC 220V60Hz	6010
A03	VALVE INLET(COLD)			
		3615403510	AC 110~127V/60Hz	6010
		0045400040		0010
		3615403310	AC 110V/50, 60Hz	6010
		3619006360	DC 15V 10A	6010
A04	SWITCH SAFETY AS	3019000300		0010
		3614515000	ABS	6010
A05	PLATE T	3014313000		0010
		3618102000	PP	6010
A06	NOZZLE DETERGENT			
		3611116500	ABS	6010
A07	CASE DETERGENT			
A08	CAP REAR	3610902600	CR	
		3612603600	ABS	6010
A09	HANDLE DOOR			
		3615107700	SUS304	6010
A10	DOOR SPRING			
		3611718400	ABS	6010
A11	DOOR B			
A12	DOOR F	3611718300	ABS	6010
AIZ	DOOK F			
A13	WINDOW DISPLAY	3615501700	ABS	6010
A14	BRACKET	3610602900	PP	
		3618911700	9.4µF, CAN TYPE	AC 220~230V/50HZ
A15	UNIT CAPACITOR AS	3618911600	8.4µF, CAN TYPE	AC 240V/50Hz, AC 220V/60Hz
		3618912000	33.6µF, CAN TYPE	AC 110V/60Hz
•		3618911900	30µF, CAN TYPE	AC 127V/60Hz
A16	SENSER PRESSURE	3614800960	DC 5V CDN-D7	
A17	PANEL F	3614219100	ABS	6010

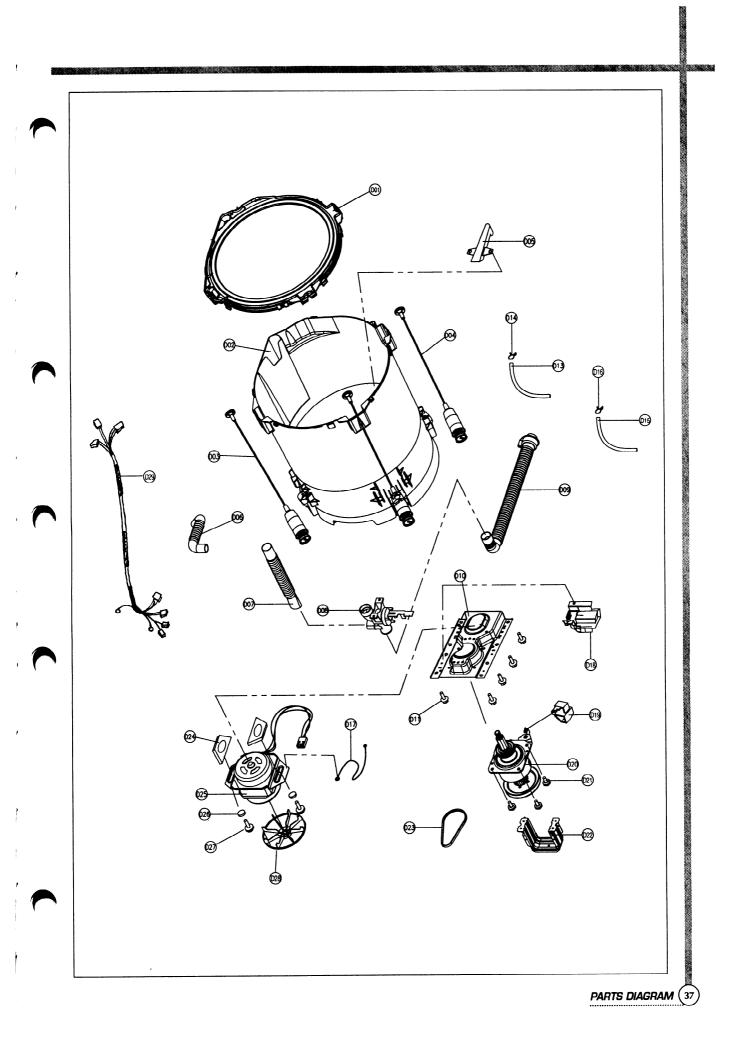
LOC.	PART NAME	PART CODE	SPECIFICATION	REMARK
		PRPSSW8100	AC 220~230V/50Hz PUMP	0010
		PRPSSW8200	AC 220~230V/50Hz N-PUMP	6010
		PRPSSW8101	AC 240V/50Hz PUMP	004.0
		PRPSSW8201	AC 240V/50Hz N-PUMP	6010
		PRPSSW8102	AC 220V/60Hz PUMP	6010
		PRPSSW8202	AC 220V/60Hz N-PUMP	6010
		PRPSSW8103	AC 110V/60Hz PUMP	6010
		PRPSSW8203	AC 110V/60Hz N-PUMP	6010
		PRPSSW8104	AC 127V/60Hz PUMP	6010
		PRPSSW8204	AC 127V/60Hz N-PUMP	6010
A18	PCB AS	PRPSSW8205	AC 100V/50,60Hz	6010
440		3618946300	AC 220~240V/50,60Hz	
A19	ASSY BUBBLE	3918946400	AC 110~127V/50,60Hz	
		3611304600	LFC-3R 3X0.75 2.3M GY	AUSTRALIA, ARGENTINA
		3611304700	F H05W 3X0.75 2.3M WH	CHILE
		3611304800	RW-300/500 3X0.75 2.3M	PR. CHINA
		3611304900	- VCTF 3X0.75 2.3M	INDIA
		3611305000	R VCTFK 2X1.25 2.3M GY	JAPAN
		3611305100	U VCTF 3X0.75 2.3M GY	KOREA
A20	CORD POWER AS	3611305200	P VCTF 3X0.75 2.3M GY	KUWAIT
		3611305300	- VCTF 3X0.75 2.3M WH	MALAYSIA
		3611305400	- H05W-F 3X0.75 2.3M BK	SINGAPORE
		3611305500	A - VCTFK 2X0.75 2.3M GY	TAIWAN
		3611305600	F H05W 3X0.75 2.3M BK	USSR, HUNGARY
		3611305700	C SJT 3X18AWG 2.2M GY	PANAMA, USA
		3611305800	H05W-F 3X0.75 2.3M GY	SOUTH AFRICA
		3611305900	P VCTF 3.0.75 2.3M WH	OMAN
		3612754500	NON OPTION	
		3612754510	NON-BUBBLE PUMP	PUMP
		3612754520	NON-HOT INLET VALVE	
A21	HARNESS ASSY	3612754530	FULL OPTION	
		3612754600	NON OPTION	
		3612754610	NON-BUBBLE PUMP	
		3612754620	NON-HOT INLET VALVE	N-PUMP
		3612754630	FULL OPTION	



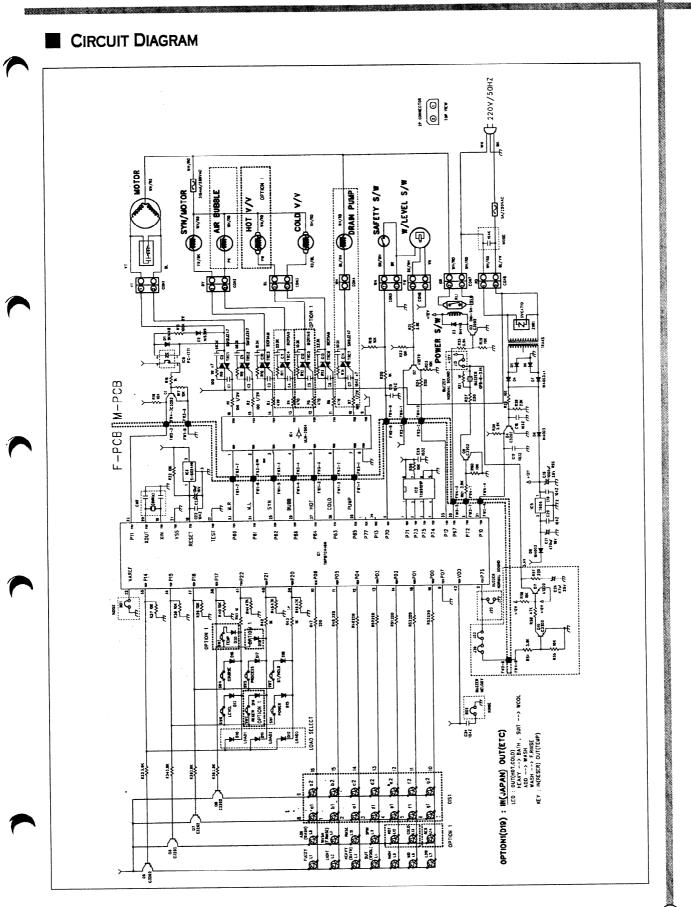
LOC.	PART NAME	PART CODE	SPECIFICATION	REMARK
B01	COVER UNDER	3611402700	PP	
B02	PLATE UPPER	3614514900	PP	
B03	COVER B	3611414010	372x508x0.4t, SGCC	
B04	HOLDER SUPPORT	3613010300	FRPP, B	
B05	HOLDER SUPPORT	3613010200	FRPP, FL	
B06	HOLDER SUPPORT	3613010100	FRPP, FR	
B07	HANDLE CABINET	3612603300	PP	
B08	CABINET	3610808100	1740.2x767.4x0.6t	
B09	SARNESS OUTER	3610068700	50/0.18 GREEN ST710480-2	EARTH
DIO		3610311000	PP	6010
B10	BASE U			
B11	FOOT	4509D10020	BUTYL RUBBER	
B12	LEG ADJUST AS	3617702200	DWF-5591DPN	
Dic	HOSE DRAIN O	3613217800	PE-LD	PUMP
B13	HOSE DRAIN O AS	3613213500	EVA L=950	N-PUMP
B14	GUIDE DRAIN HOSE	3612502300	PP	PUMP
5.15	CLAMP HOSE O	3611202200	HSW-3	PUMP
B15	CLAMP	3611201000	HSW-3, MFZN D36	N-PUMP
B16	COVER PUMP	3611405320	PP	PUMP
		3963514000	AC 220~240V/50Hz	
	MOTOR SHADED	3963514010	AC 220V/60Hz	
B17	POLE	3963514020	AC 110V/60Hz	– PUMP
		3963514030	AC 127V/60Hz	_
B18	FILTER AS	3611901530	DWF-5590DPNF, E-TYPE	PUMP



LOC.	PART NAME	PART CODE	SPECIFICATION	REMARK
C01	BALANCER AS	3616104700	DWF-6010PN	6010
C02	SPECIAL SCREW	4505E05050	5.2x18	
C03	TUBI			
		3618808500	SUS	6010
C04	TUB U	3618808600	PP	6010
C05	FILTER AS	4505E82002	PE(90*120) INSERT	
C06	GUIDE FILTER			
		3612506700	PP	6010
C07	PULSATOR AS			
007		3619704600	DWF-6010PN	6010
C08	SC. PULSATOR FIX AS	4505E3203A	6x26.5, O-RING+SILICON	
C09	CAP PULSATOR	3610909300	PP	
C10	SPECIAL NUT	4507D83080	SUS 304	
C11	SPECIAL WASHER	3616006500	SUS 304	
C12	FLANGE TUB	4505E05021	ADC-10	
C13	SPECIAL SCREW	4505E05040	5x24	
L	I	1	I	I



LOC.	PART NAME	PART CODE	SPECIFICATION	REMARK
D01	COVER TUB O	3611414600	PP	
D02	TUB O	3618807600	PP	
D03	SUSPENSION AS F	3619802300	DWF-5510NP	
D04	SUSPENSION AS B	3619802400	DWF-5510NP	
D05	NOZZLE BODY	3618101400	PP	
D06	HOSE DRAIN I	3613220600	TPE	PUMP
D07	HOSE OVERFLOW	3613220700	L=245	N-PUMP
D08	VALVE DRAIN AS	3615404020	5591D, VE	N-PUMP
D09	HOSE DRAIN I AS	3613221800	DWF-5510N	N-PUMP
D10	BASE	3610302900	SECEN 1.6t	
D11	SPECIAL BOLT BASE	4505E83100	6.5x23	
D12	HARNESS SUB AS	3612754900	SUB HARNESS+EARTH	PUMP
		3612754910	SUB HARNESS+EARTH	N-PUMP
D13	HOSE	4500D08220	ID=8, L=20	CAVITATION HOSE
D14	CLAMP	4500D08180	SWC BUBB PIE=8	
D15	HOSE	4500D08220	ID=8, L=30	BUBBLE HOSE
D16	CLAMP	4500D08180	SWC BUBB PIE=8	
D17	HARNESS EARTH INNER	3612755700	L=180	CHILE
	SYNCRONOUS MOTOR	3966010270	AC 220~240V/50Hz	PUMP
D18		3966010260	AC 220~240V/50Hz	N-PUMP
		3966320370	AC 220V/60Hz	PUMP
		3966320360	AC 220V/60Hz	N-PUMP
		450ED45170	AC 110~127V/60Hz	PUMP
		450ED45176	AC 110~127V/60Hz	N-PUMP
		3966130260	AC 100V/50,60Hz	N-PUMP
D19	LINK BRAKE	3617801010	PP	PUMP
D20	GEAR MECHANISM	3617306000	GM-4900-KJ4XO	N-PUMP
		3617306010	GM-4900-KJ4PO	PUMP
D21	BOLT HEX	7640802011	6B-1 8x20 SW MFZN	
D22	PROTECTOR GEAR	3618301300	SBHG 1.6t	
D23	BELT V	4507D34020	M 20	50Hz
		4507B34020	M19.5	60Hz
D24	SPECIAL WASHER	4505E34030	PP	
D25	MOTOR CONDENSER	3964340100	AC 220~240V/50Hz	NP, N, MP, M
		3964340200	AC 220V/60Hz	LP, L
		3964340300	AC 10~127V/60Hz	TP, T, SP, S
D26	SPECIAL WASHER	4505E34040	PP	
D27	BOLT HEX	7650802511	6B-1 8X25 HS MFZN	
D28	PULLY MOTOR AS	3618401420	M-TYPE DS=10 DP=53.0	50Hz
		3618402800	M-TYPE DS=10 DP=48.5	60Hz
D29	HARNESS SUB AS	3612754900	SUB HARNESS + EARTH + PUMP	PUMP
		3612754910	SUB HARNESS + EARTH	N-PUMP



CIRCUIT DIAGRAM (39)