



# Service Manual

## Auto Washer

**Model: DWF-200HBTC**

**DWF-240HBTC**

### ✓ **Caution**

: In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center

**DAEWOO ELECTRONICS CORP.**

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# 1. SPECIFICATIONS

NO.	ITEM		DWF-200HBTC	DWF-240HBTC
1	POWER SOURCE		110V / 60HZ	
2	POWER CONSUMPTION		430 W	490 W
3	WEIGHT		47KG	49KG
4	DIMENSION (WXHXD)		630 X 1015 X 700 MM	630 X 1039 X 700 MM
5	WASHING COURSE		FULL AUTOMATIC 5 COURSE (FUZZY, BLANKET, ECO., WOOL, SOAK)	
6	WATER CONSUMPTION		245l	255l
7	WATER LEVEL SELECTOR	HIGH	90l	95l
		MID	70l	75l
		LOW	59l	64l
		SMALL	49l	54l
8	OPERATING WATER PRESSURE		0.3kgf/cm <sup>2</sup> ~ 8kgf/cm <sup>2</sup>	
9	REVOLUTION	WASH	130~150	
	PER MINUTE	SPIN	710~740	
10	PULSATOR		6 WINGS	
11	WATER LEVEL CONTROL		ELECTRONIC SENSING	
12	AUTOMATIC WATER SUPPLY		O	
13	GEAR MECHANISM ASS'Y		HELICAL GEAR	
14	LINT FILTER		2	3
15	AUTOMATIC SOFTENER INPUT		O	
16	FUNCTION FOR TIME DELAY (RESERVATION)		O	
17	DISPLAY OF RESIDUAL TIME		O	
18	FUNCTION FOR BUBBLE		O	
19	DRAIN TYPE		NON PUMP	
20	AUTOMATIC POWER OFF		O	



## NOTES

In case of moving Washing Machine, please follow the following picture.

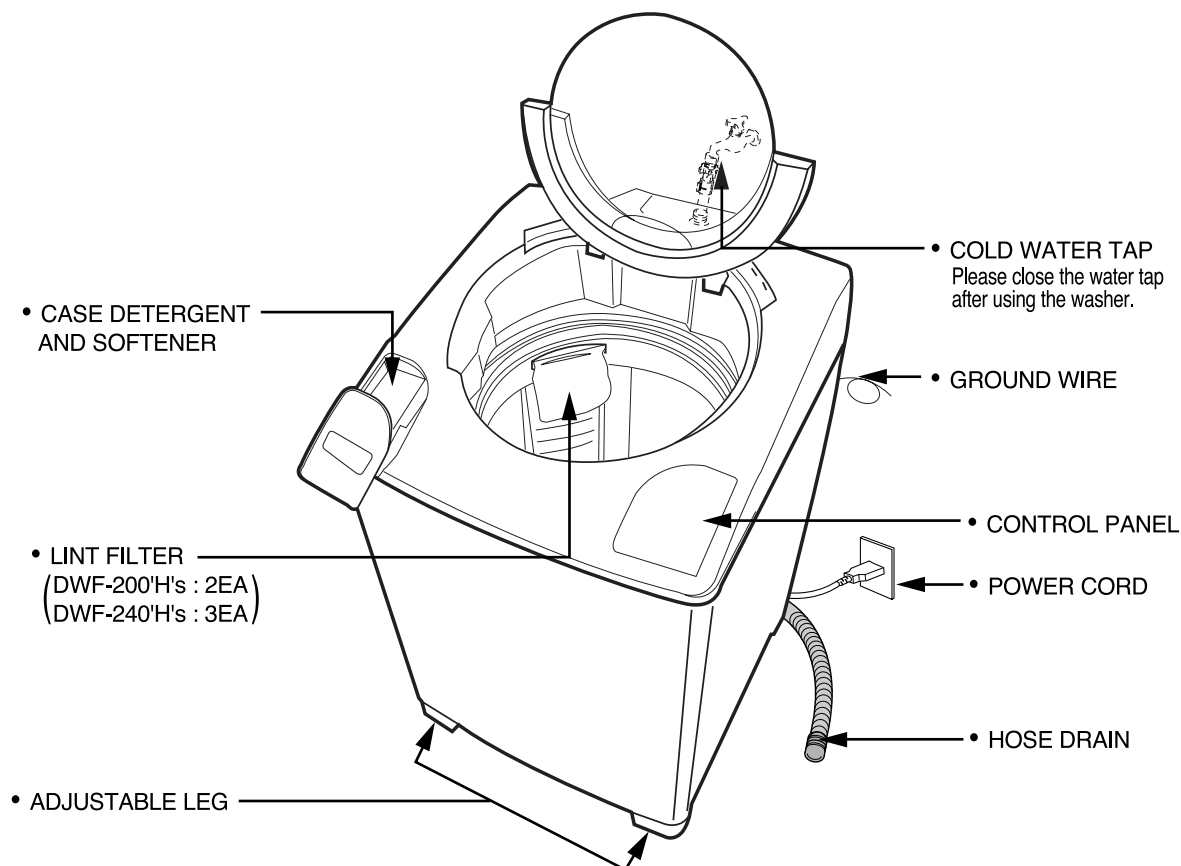


## 2. STRUCTURE OF THE WASHING MACHINE


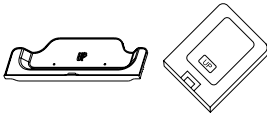
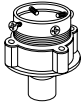
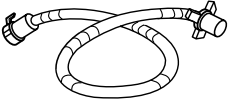
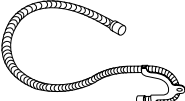



The parts and features of your washer are illustrated on this page.  
Become familiar with all parts and features before using your washer.

### NOTE

- The drawings 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.



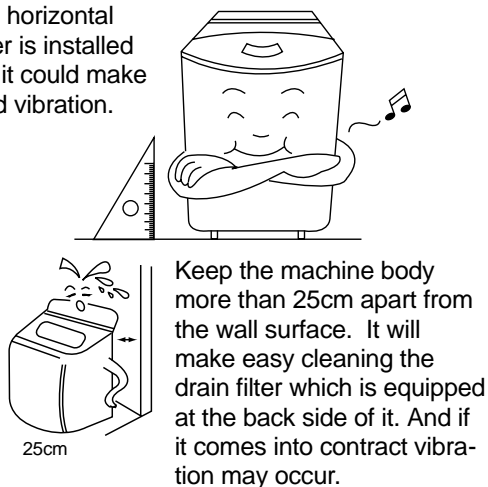
### ACCESSORIES (FULL OPTION)

DRYTEN (OPTION)	COVER UNDER	WATER TAP ADAPTER	INLET HOSE
	 DWF-200H's    DWF-240H's		
HOSE DRAIN (FOR PUMP)	HOSE DRAIN CLAMP (FOR PUMP)	HOSE DRAIN (FOR NON-PUMP)	CONNECTOR INLET(OPTION)
			

### 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.

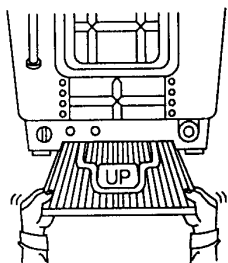
The place nearby a heater or heat appliance.

The place where it would be supposed to be frozen in winter.

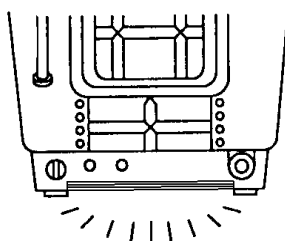
The kitchen with coal gas and a damp place like a bathroom.

#### Installation Of the COVER UNDER (Noise Insulation Plate)

- 1** In the packing box or the tub of the washer, there is the COVER UNDER. Put the COVER UNDER at the bottom of the back.



- 2** Push the COVER UNDER to the end. This reduces the noise from the washing machine.

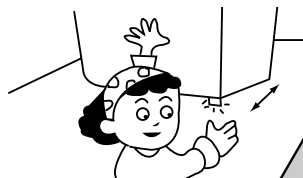


\* The drawing of the COVER UNDER is variant from your model

#### 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 the 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

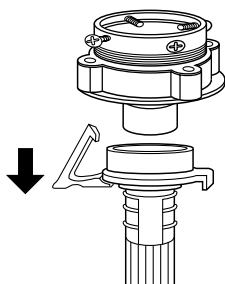
Be careful not to mistake in supplying between the hot(maximum : 50°C) and cold water.

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.

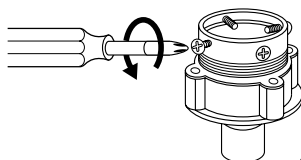
Do not over tighten : this could cause damage to couplings.

### • • • • FOR ORDINARY TAP

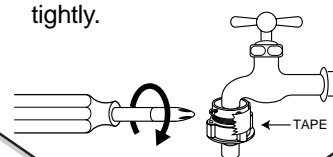
- 1 Pull down the collar of the inlet hose to separate it from the water tap adapter.



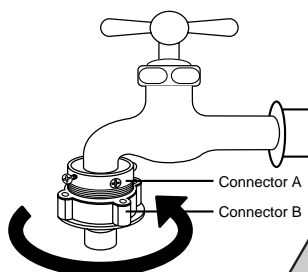
- 2 Loosen the four screws at the water tap adapter, but don't loosen the screws until they are separated from the water tap adapter.



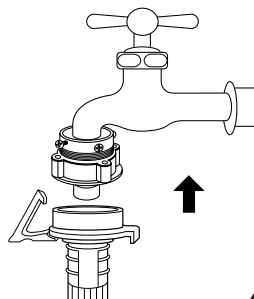
- 3 Connect the water tap adapter to the water tap tightly while pushing up the adapter so that the rubber packing can stick to the water tap tightly.



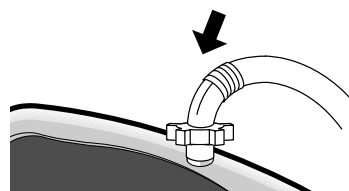
- 4 Remove the tape, and screw connector B into connect A tightly.



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



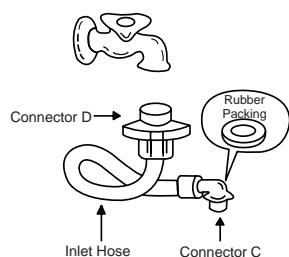
- 6 Connect the inlet hose adapter of the hose to the water inlet of the washer by turning it clockwise to be fixed tightly.



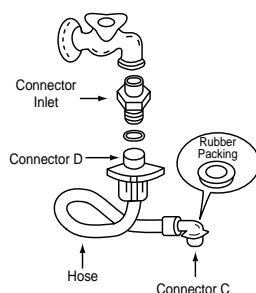
- Please check the rubber packing inside the inlet hose adapter of the hose.

### • • • • 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.



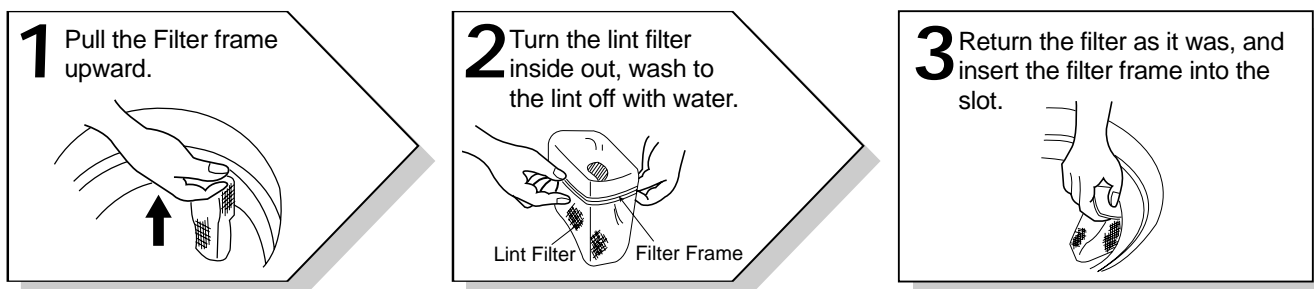
- 3 Insert the inlet hose adapter into the water inlet of a washer and turn it to be fixed.



- Check the packing in the inlet

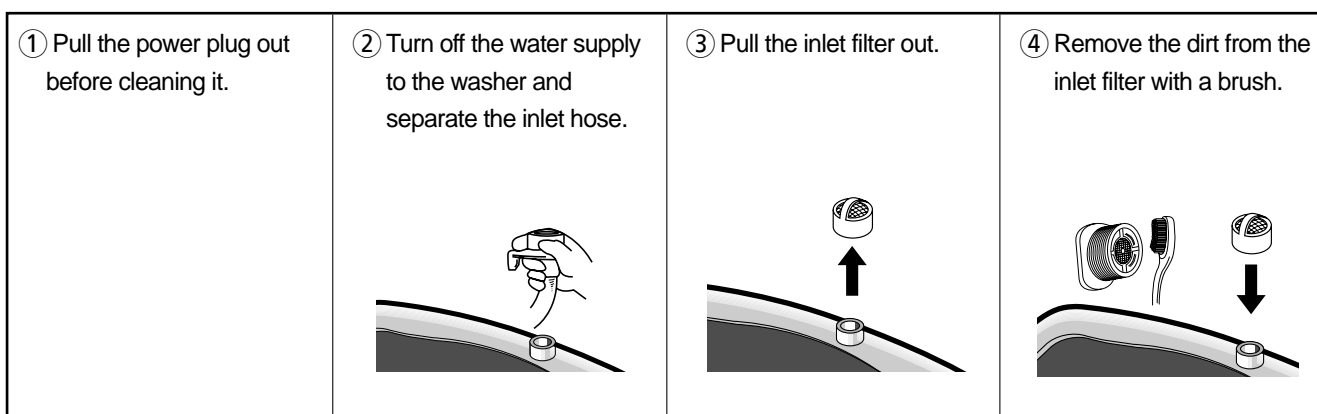
#### • • • • CLEANING THE LINT FILTER

- This washer has two or three Lint Filters in the top TUB in order to filter off lint and fuzz.



#### • • • • CLEANING THE WATER INLET FILTER

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



## 4. FEATURE AND TECHNICAL EXPLANATION

### Feature of the Washing Machine

- 1 First applying the Radical Technology in the world ... go beyond washing, sterilize your clothes and deodorize a bad smell.
- 2 The first air bubble washing system in the world.
- 3 Quiet washing through the innovational low-noise design.
- 4 Improving washing performance by more than 35%, while reducing power consumption by 40%.
- 5 The laundry detergent dissolves well in water because of the air bubble washing system.
- 6 The adoption of the water currents to adjust the unbalanced load.
- 7 One-touch operation system.

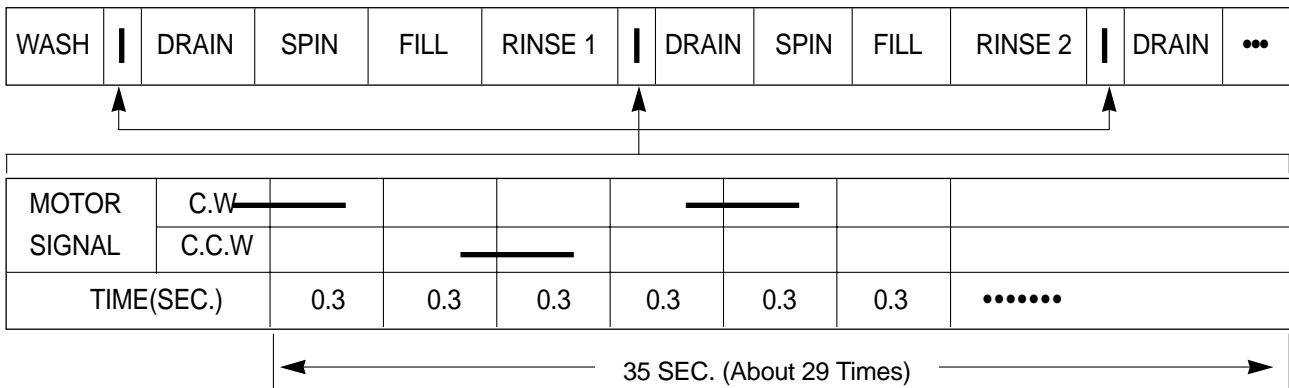
### Water Current to Adjust the Unbalanced Load

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



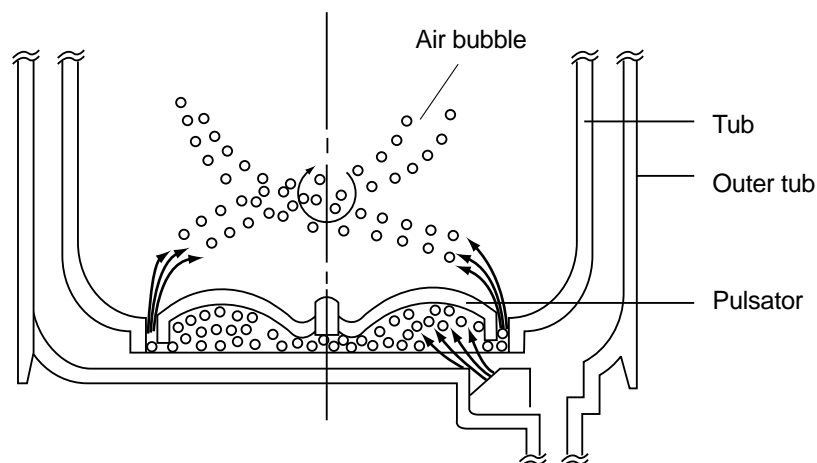
### Automatic Water Supply System For Blanket Wash

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 <b>DE</b> blinked on display lamp.

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

Draining time as a whole = D + 90

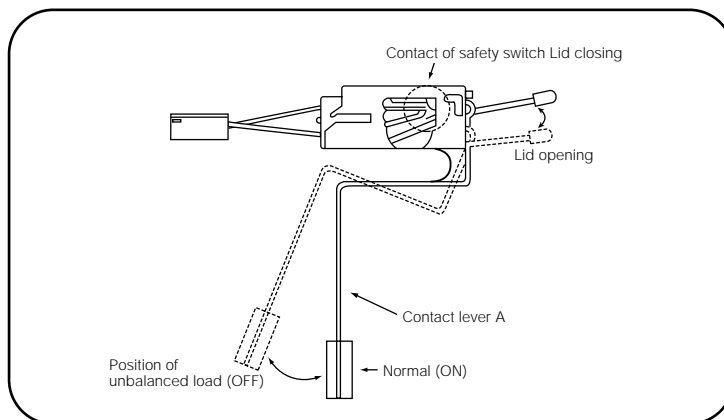
90 Residual drain time.  
 The time remembered by micom.

## 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.

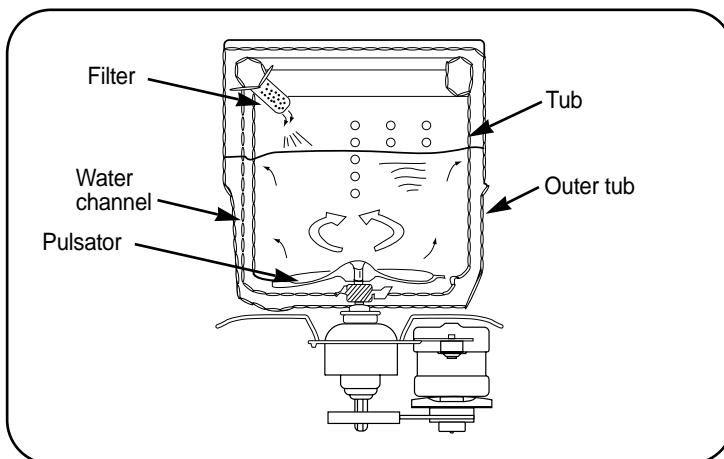
## Circulating-Water Course and Lint Filter

### 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.

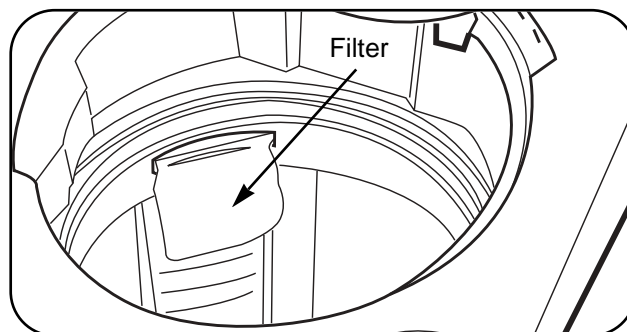
The water is then discharged from the upper part of the tub through the water channel. About 40 L/min. water is circulated at the 'high' water level, standard wash load and standard water currents.



## 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.

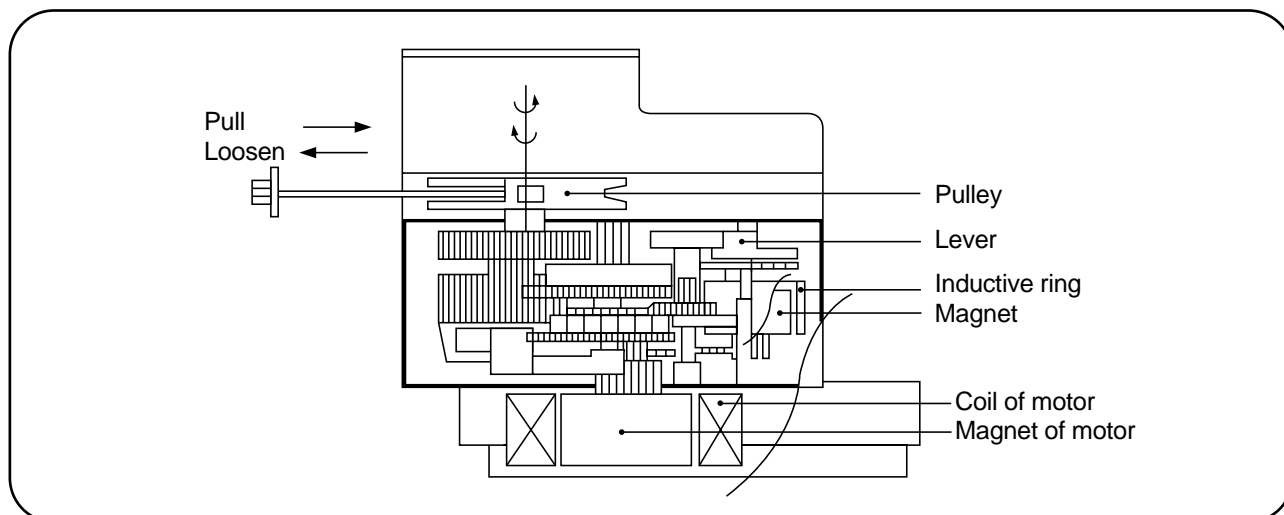
## Residual Time Display

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

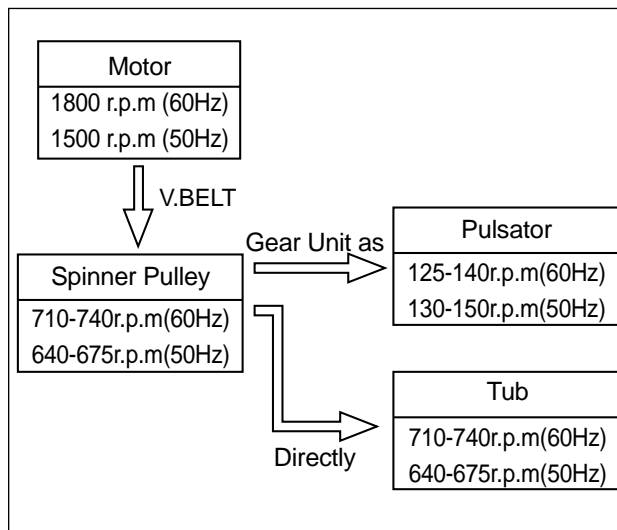
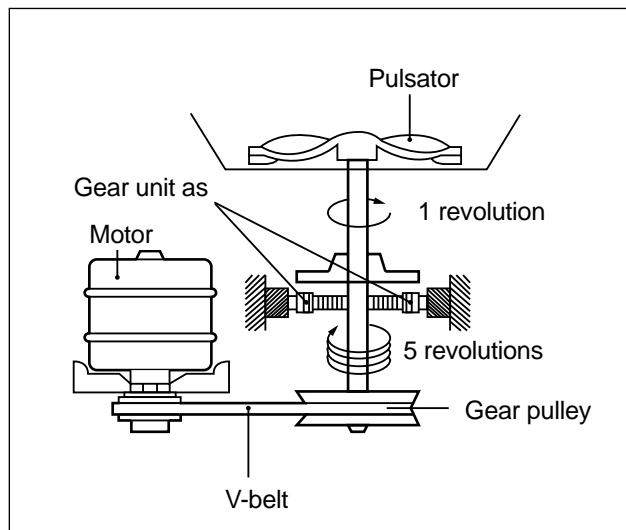
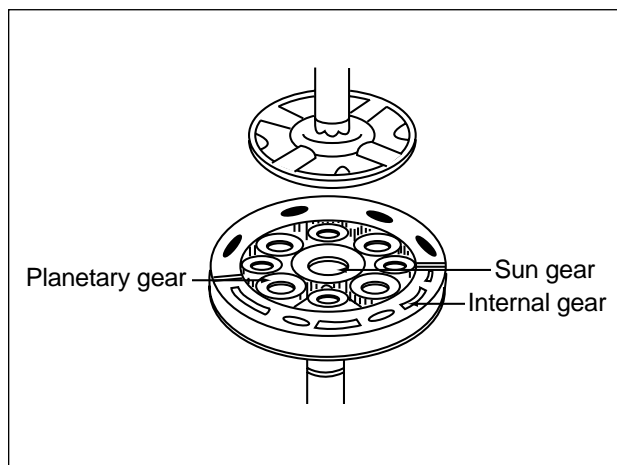
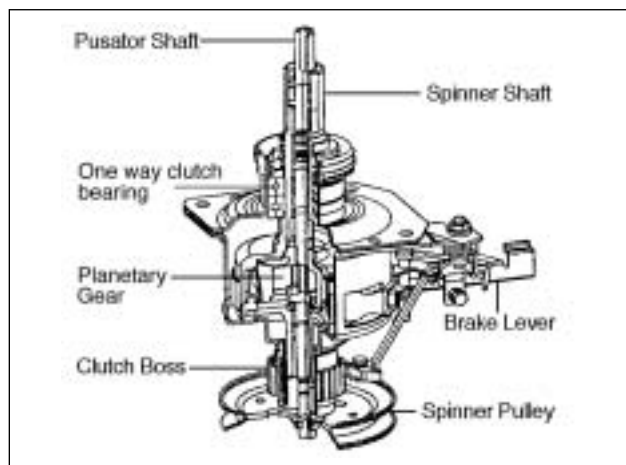


### FUNCTIONAL PRINCIPLE

- 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.



## 5. 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

#### GEAR MECHANISM ASSY REPLACEMENT

- ① Remove CASE DETERGENT and bolt.
- ② Separate PANEL F by pushing PANEL F to the left.



- ③ Remove 4 bolts and separate PLATE T from washing machine.



- ④ Unscrew 4 bolts and separates COVER TUB from TUB ass'y.



- ⑤ Remove CAP PULSATOR from PULSATOR using screw driver.



- ⑥ Unscrew PULSATOR mounting screw and separates PULSATOR form TUB ass'y.



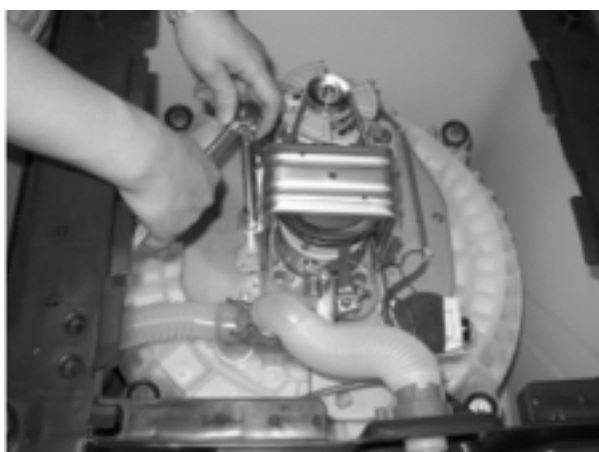
- ⑦ Unscrew special nut using 'T' type box wrench.



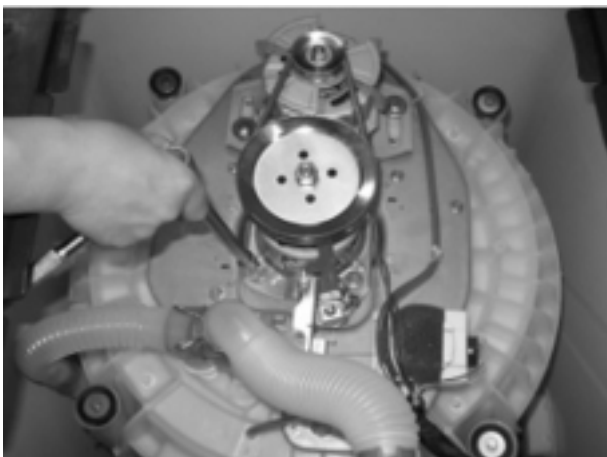
- ⑧ Separate TUB I from TUB ass'y.



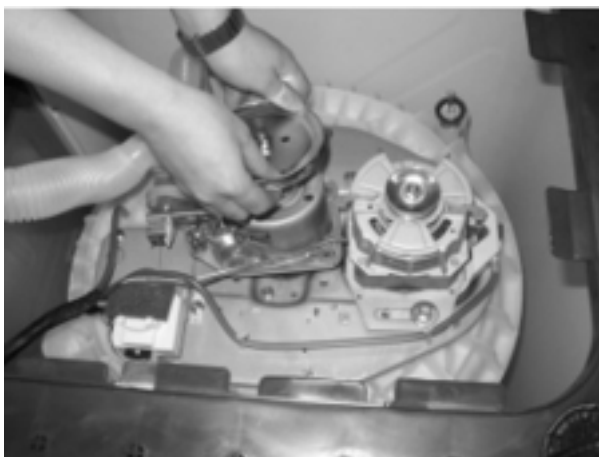
- ⑨ Lay the top of the washing machine on the floor.  
⑩ Unscrew 4 special bolts of GEAR PROTECT using a box wrench and separate GEAR PROTECT .



- ⑪ Unscrew 4 special bolts of GEAR MECHANISM using a box wrench.



- ⑫ Separate GEAR MECHANISM and BELT V.

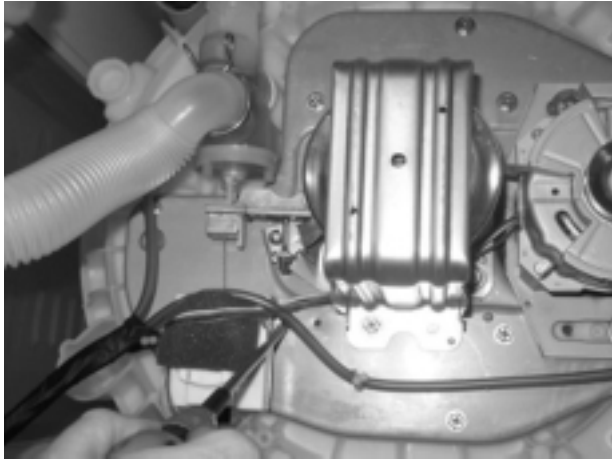


#### NOTES

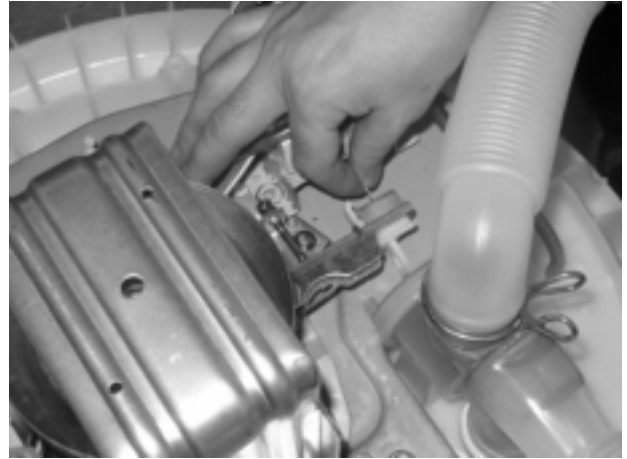
To assemble the gear mechanism ass'y, reverse the disassembly procedure.

## MOTOR DRAIN AND VALVE REPLACEMENT (NON PUMP MODEL)

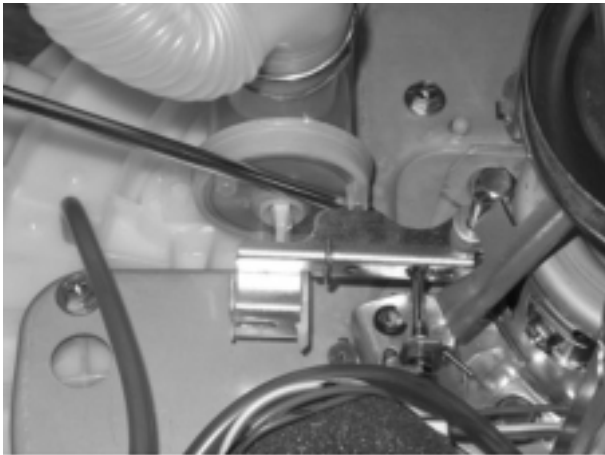
- ① Lay the top of the washing machine on the floor.
- ② Unscrew 2 special bolts mounting MOTOR DRAIN.



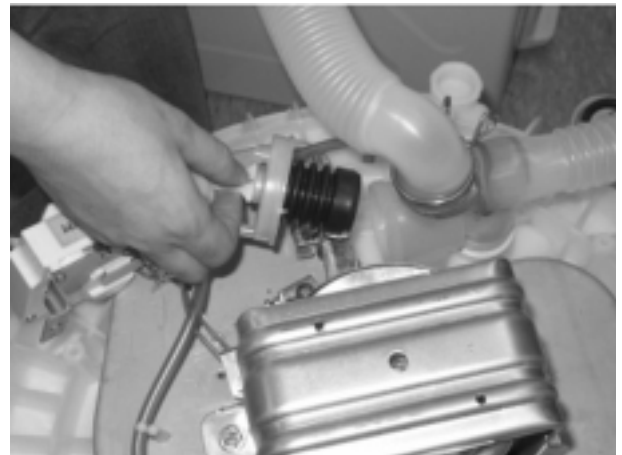
- ③ Take out the wire of MOTOR DRAIN.
- ④ Separate MOTOR DRAIN from BASE.



- ⑤ Turn the valve using screw driver as shown picture.

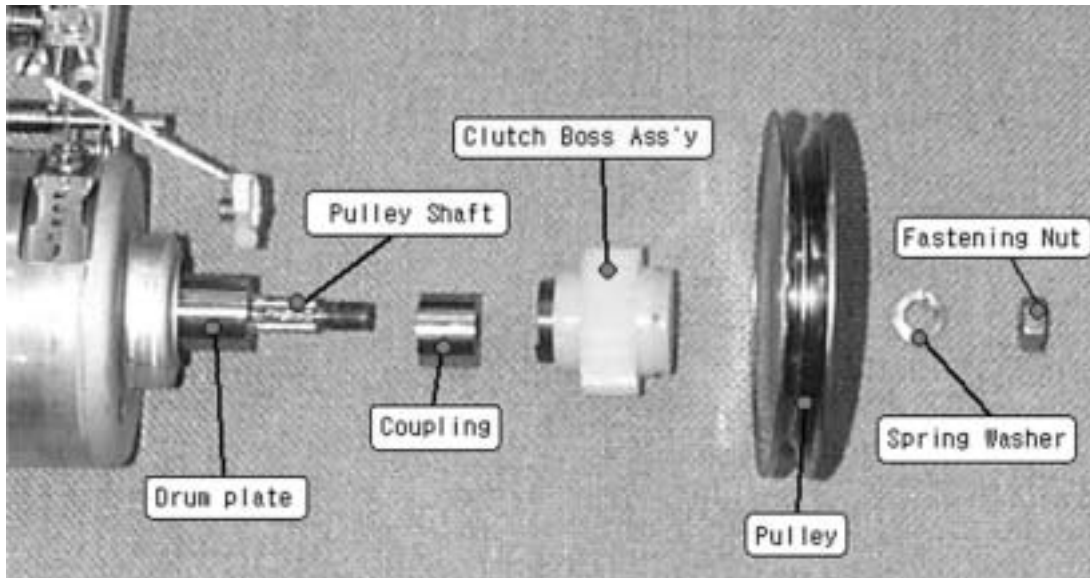
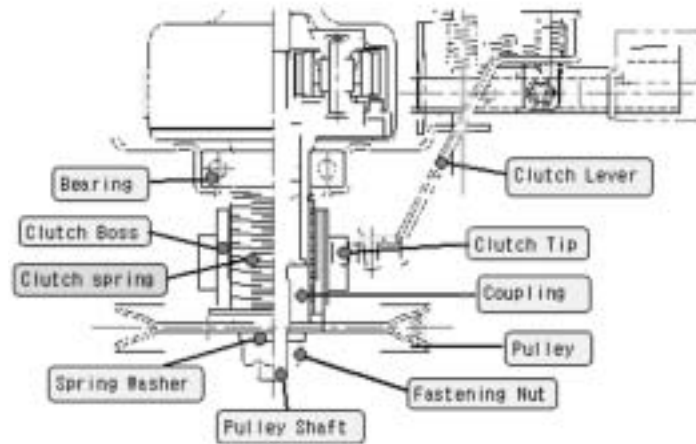


- ⑥ Separate the valve lid from VALVE DRAIN assay.

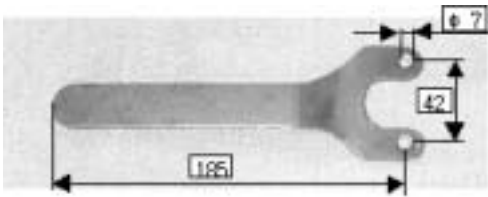


## 6. THE REPAIR METHOD OF GEAR MECHANISM FOR CLUTCH SPRING PROBLEM

### The structure of gear mechanism



#### ● TOOL FOR REPLACING THE CLUTCH BOSS ASSEMBLE ●

Tool name	Specification	Q'ty
Fixing jig		1
Ratchet handle		1
Socket and extension bar	socket : 10mm, 17mm	per each
Some cotton yarn		some



## how to check the clutch spring Problem

### PROBLEM

- 1) THE LAUNDARY IS IN THE SPIN TUB UNEVENLY WHEN JUST STARTING SPIN PROCESS.
- 2) THEREFORE, IT CAUSE THE SERIOUS NOISE AND VIBRATION WHEN WASHING AND SPINNING PROCESS OR SUPPLING WATER IRREGULARY WHEN SPINNING PROCESS AND CAUSE SHORT OF SPIN PERFORMANCE.

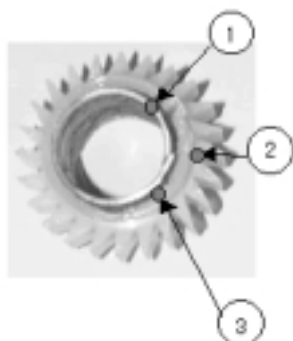
### CHECKING METHOD

IN THIS CASE, YOU MUST EMPTY THE SPIN TUB FIRST.

- 1) TO CHECK THE REVOLUTION OF SPIN TUB.  
IF THE SPIN TUB DOES NOT REVOLVE AND ONLY THE PULSATOR IS TURNING, THAT IS CLUTCH SPRING DEFECT.
- 2) TO CHECK THE SPIN SPEED(RPM) BETWEEN SPIN TUB AND PULSATOR.  
IF YOU FIND THE DIFFERENT SPIN SPEED BETWEEN SPIN TUB AND PUSATOR, THIS IS ALSO CLUTCH SPRING DEFECT.

IN THIS CASE, WE ARE GOING TO SUPPLY THE CLUTCH BOSS ASSEMBLY INSTEAD OF GEAR MECHANISM ASSEMBLY. PLEASE REFER TO FOLLOWING FIG.

### THE CLUTCH BOSS ASSEMBLY

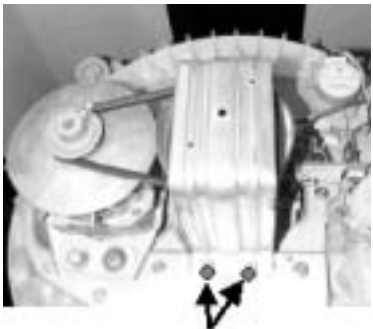
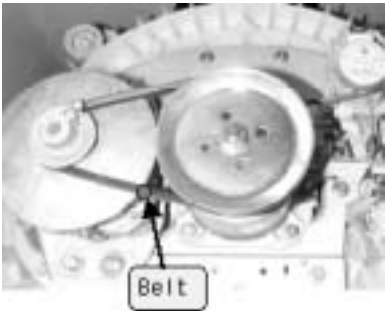
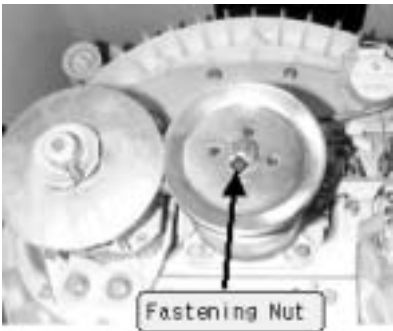



NO.	PARTS NAME	SPECIFICATION	CODE	Q'TY
1	CLUTCH SPRING	1.5*1.5	3615110000	1
2	CLUTCH BOSS	PP	3619301300	1
3	GREASE	beacon#325 3g		
PACKING METHOD	PACKING THE CLUTCH BOSS ASS'Y BY USING VINYL PACK			1

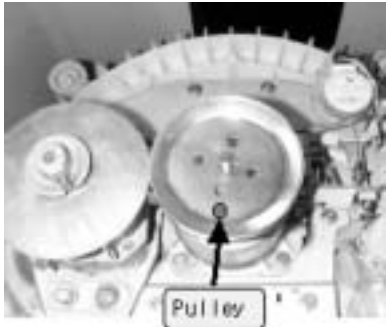

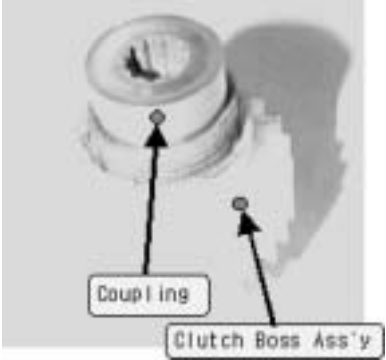
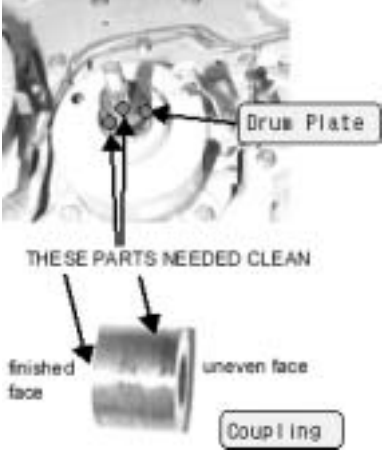
CLUTCH BOSS ASS'Y PART CORD : 3619301400

## The Process Of Disassemble

### Disassemble 1

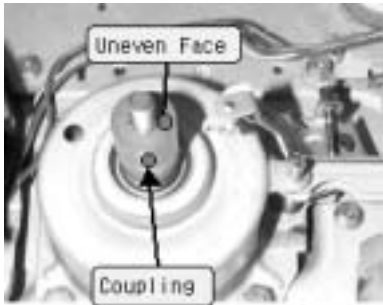
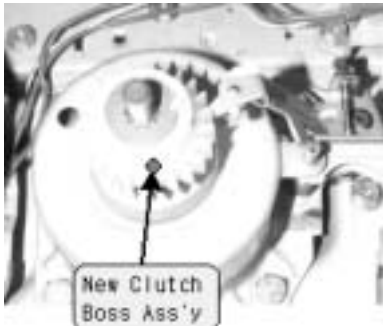

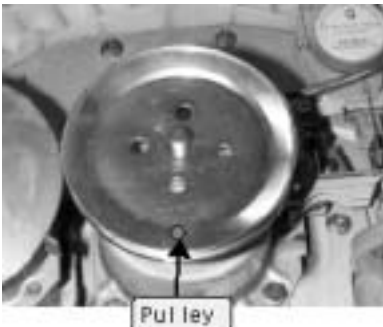

No.	Process	Notice
1	 <p>Release screws marked 4-point</p>	<p>Remove the protector</p> <p>Use wrench or driver - ratchet handle - extension bar - socket : 10mm</p>
2		<p>Remove the v-belt</p>
3		<p>Loosen the fastening nut</p> <p>Use fixing jig for pulley as to see fig 1. and 17mm-socket for nut</p>
4		<p>Disassemble the spring washer</p> <p>Take out plain washer if it has</p>

## Disassemble 2



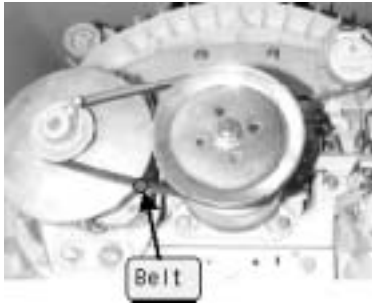
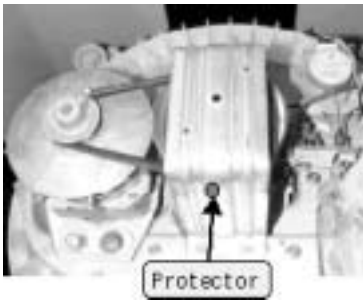
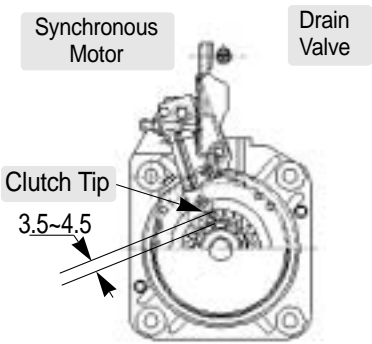
No.	Process	Notice
5	 <p>Disassemble the pulley</p>	
6	 <p>Disassemble the clutch boss assembly</p>	Catch the boss and pull upward with spiral rotate in the clockwise direction
7	 <p>Separate coupling from clutch boss ass'y</p>	
8	 <p>Cleaning</p>	<p>Clean the drum plate, coupling surface and contact face between drum plate and coupling</p> <p>It is necessary to keep cotton piece goods being dry and clean</p>

## The Process Of Assemble

### Assemble 1

No.	Process	Notice
1	 <p>Assemble the coupling</p>	Check the uneven face of coupling is assembled upward
2	 <p>Assemble the new clutch boss ass'y</p>	<ul style="list-style-type: none"> <li>- Push in the clutch boss ass'y with rotating on the clockwise direction.</li> <li>- After assembling, rotate on the clockwise more 2~3 teeth and pull out the pulley shaft upward</li> </ul> 
3	 <p>Assemble the pulley</p>	
4	 <p>Assemble the spring washer</p>	If there was plain washer, you have to assemble plain washer the first and then assemble spring washer

## Assemble 2

No.	Process	Notice
5	 <p>Fastening Nut</p> <p>Assemble the fastening nut</p>	<p>- Use fixing jig and 17mm socket wrench as if disassembling, as fastening torque about 100~200kgf-cm.</p> <p>- Check the end-play, up and downward and check the binding force, too much or not on bi-direct of rotation.</p> 
6	 <p>Belt</p> <p>Assemble the Belt</p>	
7	 <p>Protector</p> <p>Assemble the protector</p>	
8	 <p>Synchronous Motor</p> <p>Drain Valve</p> <p>Clutch Tip</p> <p>3.5~4.5</p> <p>Final checking</p>	<p>Finally, check the interference depth both clutch tip and clutch boss(3.5~4.5mm)</p>

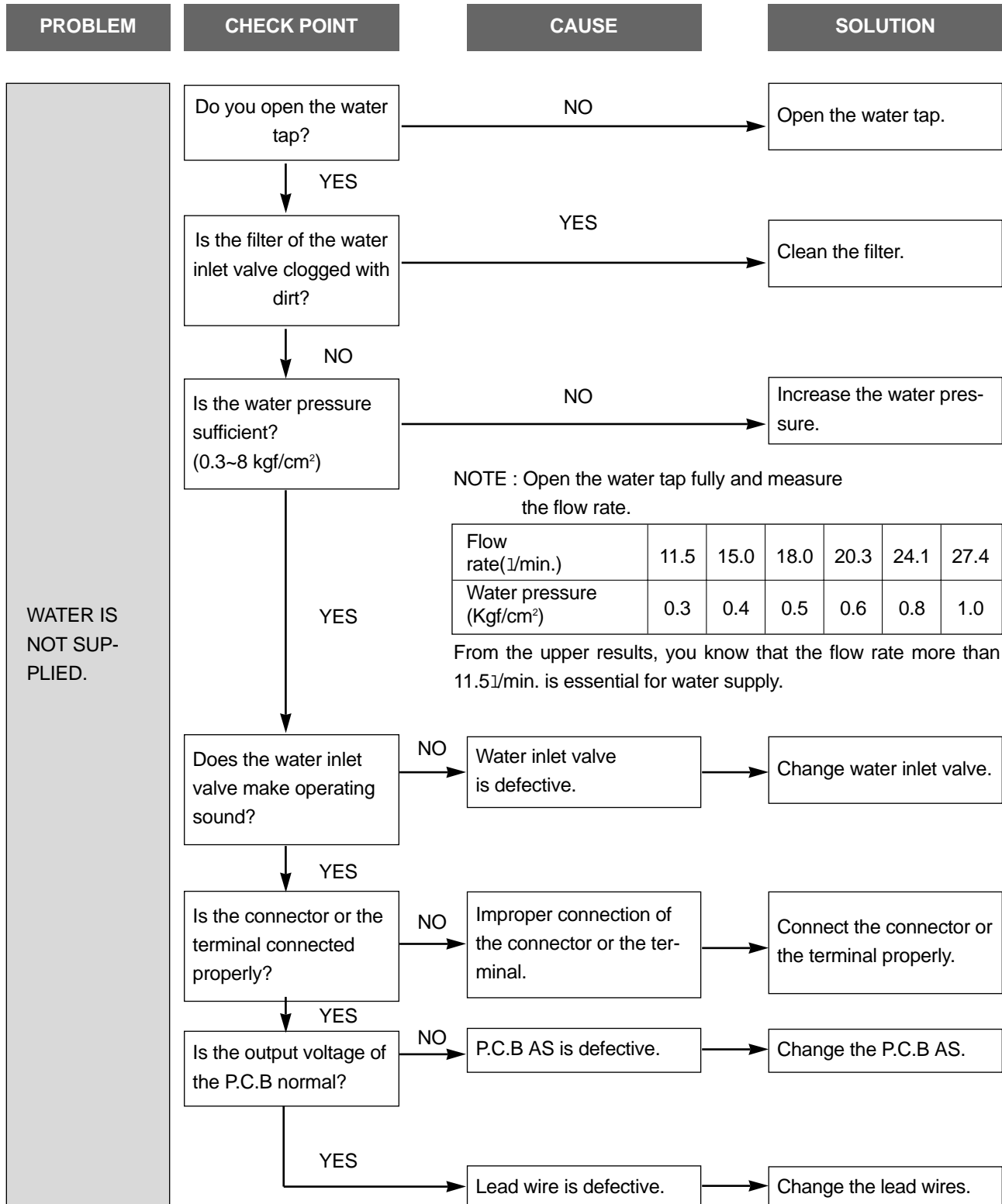
## 7. TROUBLE SHOOTING GUIDE



### NOTES

1. When replace the P.C.B. ASS'Y do not scratch the surface of the P.C.B. ASS'Y.
2. Disconnect the power cord from the electric outlet.

### Concerning Water Supply



PROBLEM	CHECK POINT	CAUSE	SOLUTION
WATER SUPPLY IS NOT STOPPED.	Does the water supply continue while the power is turned off?	YES The water inlet valve is defective.	Change the water inlet valve.
	NO Does the water supply start as soon as you press the power switch?	YES The triac of P.C.B is defective.	Change the P.C.B ASS'Y.
	NO Operate the washer after setting the water level to "HIGH"		
	Does the water supply continue after the water reaches to the "HIGH" level?	NO	Normal operation.
	YES Is the air tube of water level switch kinked or deformed?	YES Air tube is defective.	Change the air tube.
	NO Pressure switch is defective.		Change the pressure switch.

## Concerning Washing

PROBLEM	CHECK POINT	CAUSE	SOLUTION
THE PUL-SATOR DOES NOT ROTATE EVEN IF THE WATER IS SUPPLIED.	Does the motor operate after finishing water supply?		
	NO Does pulsator rotate in only one direction?	YES The triac of P.C.B is defective.	Change the P.C.B ASS'Y.
	YES Does the motor make operating sound?	NO	Normal
	NO Is the motor coil disconnected?	YES Motor is defective.	Change the motor.
	YES Is the connection condition of capacitor terminal good?	NO Improper connection	Connect the terminal properly.
	YES Is the V-belt worn out?	NO V-belt is defective.	Change the V-belt.
	NO		Change the motor.

## Concerning Draining

PROBLEM	CHECK POINT	CAUSE	SOLUTION
THE WASHER DOES NOT DRAIN.	Do you install the drain hose properly?	NO Improper installation	Install the drain hose properly.
	YES Is the accumulated foreign substance inside the drain housing?	YES Malfunction of drainage by the foreign substance	Remove the foreign substance from the drain housing
	NO Is the output voltage of the drain motor normal?	YES The drain motor is defective.	Change the drain motor.
	NO	P.C.B ASS'Y is defective.	Change the P.C.B ASS'Y.



## Concerning Spinning







PROBLEM	CHECK POINT	CAUSE	SOLUTION
THE WASHER DOES NOT SPIN.	Is the lid open?	YES	Close the lid.
	NO		
	Does the door switch operate normally?	Door switch is defective.	Change the door switch.
	Does the safety switch operate normally?	NO Safety switch is defective.	Change the safety switch.
	YES		
	Is the connector of P.C.B ASS'Y connected properly?	NO Improper connection of the connector.	Connect the connector properly.
	YES	P.C.B. ASS'Y is defective.	Change P.C.B ASS'Y.
	Does the pulsator rotate while the tub does not rotate?		
	NO		
	YES		
	Is the input voltage of the drain motor normal?	YES Drain motor is defective.	Change the drain motor.
	NO	P.C.B ASS'Y is defective.	Change the P.C.B ASS'Y.
	Is the V-belt worn out?	YES V-belt is defective.	Change the V-belt.
	NO		
	Is the input voltage of motor normal?	YES Motor is defective.	Change the motor.
	NO		
	Is the connection condition of capacitor terminal good?	NO Improper connection.	Connect the terminal correctly.
	YES	P.C.B ASS'Y is defective.	Change the P.C.B ASS'Y.

## Concerning Operating

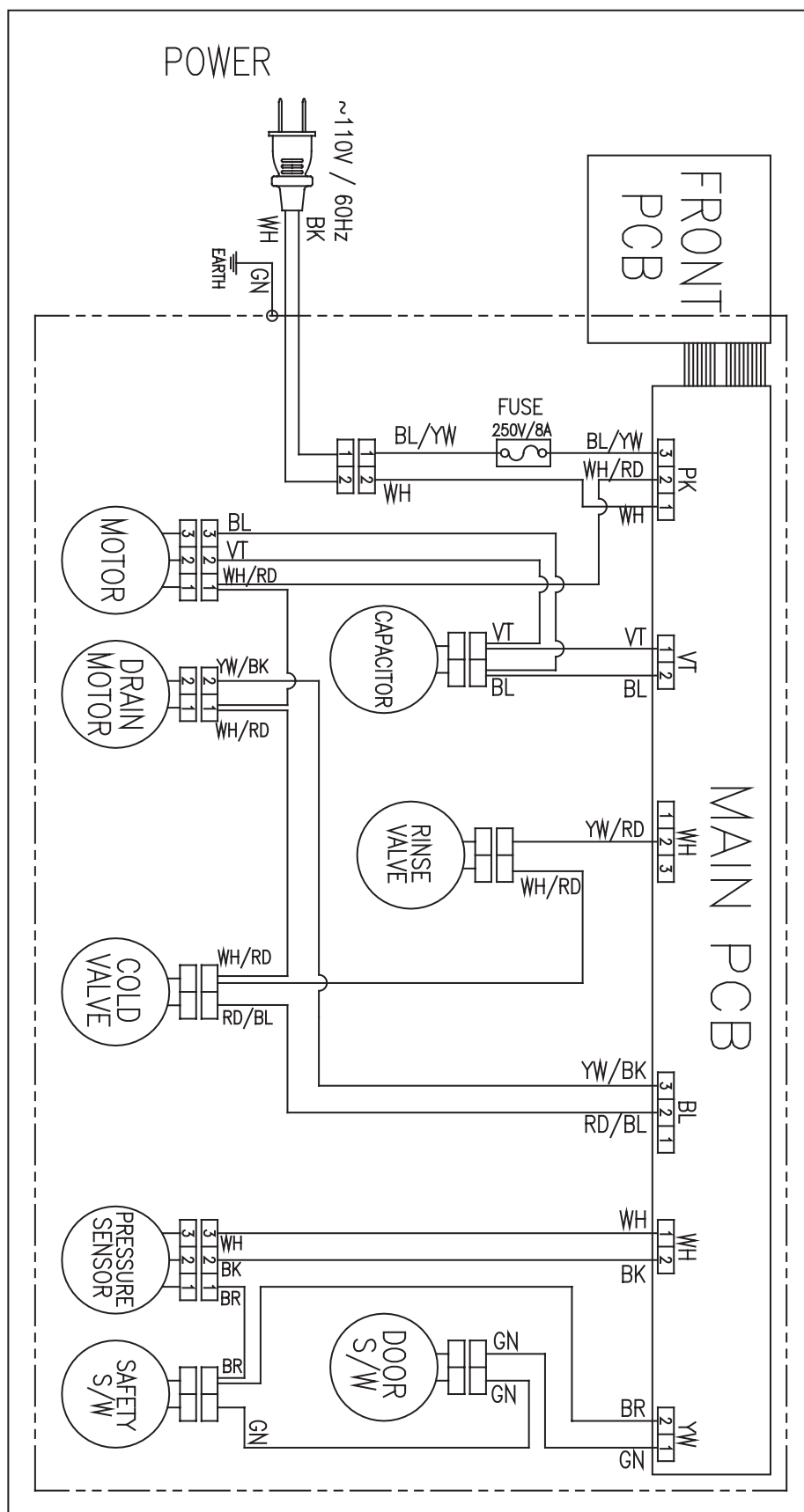
PROBLEM	CHECK POINT	CAUSE	SOLUTION
THE INDICATOR LAMPS(L.E.D) DO NOT LIGHT UP WHEN THE POWER BUTTON IS PRESSED.	Is the plug connect-ed to electric outlet?	NO	Connect the plug.
	↓ YES	YES	Change Fuse
	↓ NO	NO	Power button is defective
	↓ YES	NO	Improper connection of the connector.
	↓ YES	NO	Transformer is defective
	↓ YES	NO	P.C.B. ASS'Y is defective.
PROGRESS LAMPS(LED) DO NOT LIGHT UP.	Do you press START/HOLD button?	NO	Press START/HOLD button.
	↓ YES	P.C.B ASS'Y is defective.	Replace P.C.B ASS'Y.
MOTOR ROTATES WHEN START/HOLD BUTTON IS NOT PRESSED.	Does the pressure switch operate normally?	NO	Pressure switch is defective.
	↓ YES	Abnormal	P.C.B ASS'Y is defective
ABNORMAL NOISE DURING WASH PROCESS.	Is the strange noise generated when the pulsator rotates in TEST MODE of P.C.B ASS'Y?	YES	There is foreign matter between pulsator and tub.
	↓ NO	YES	V-belt is defective.

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

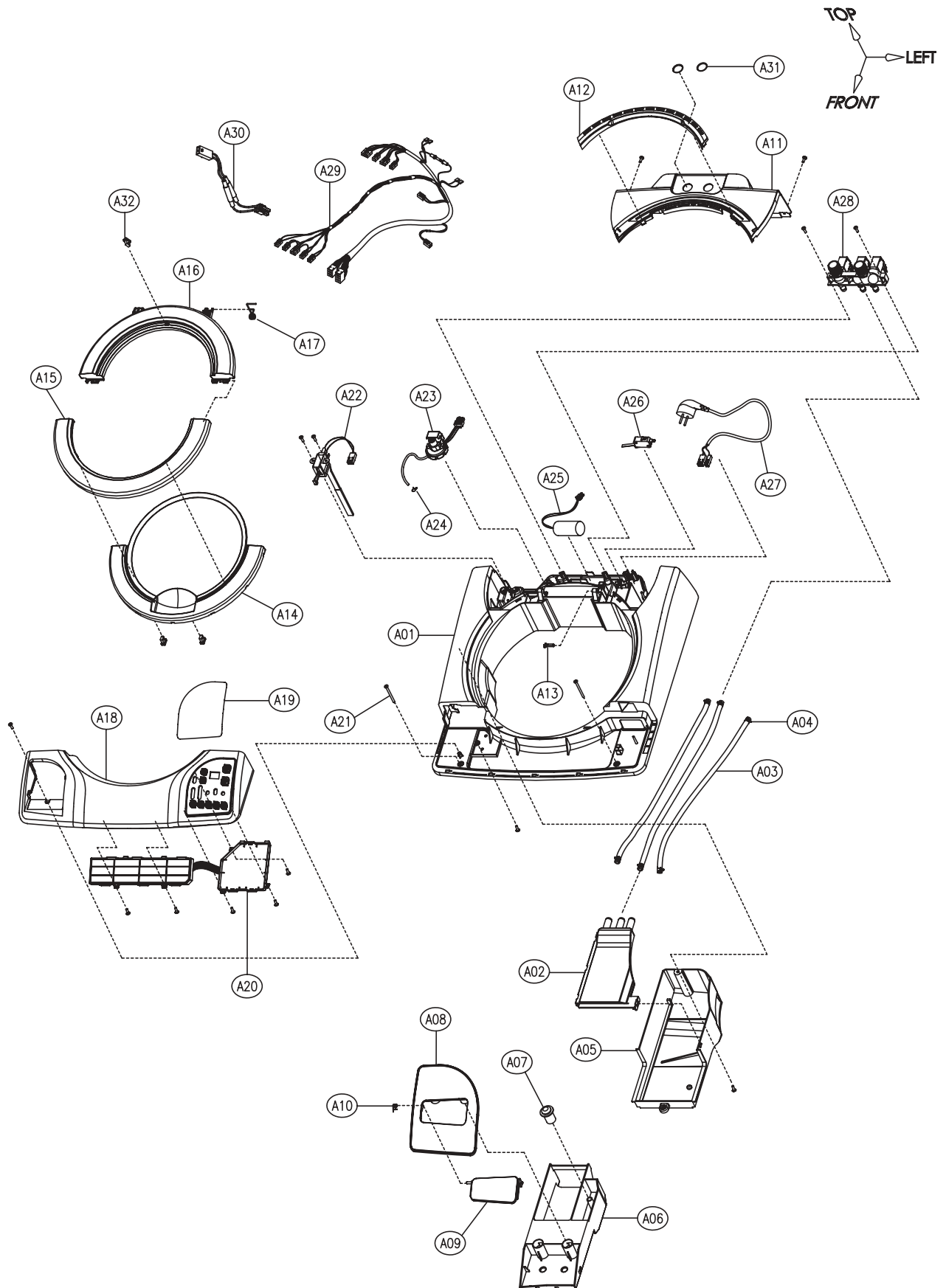
### Concerning Error Message

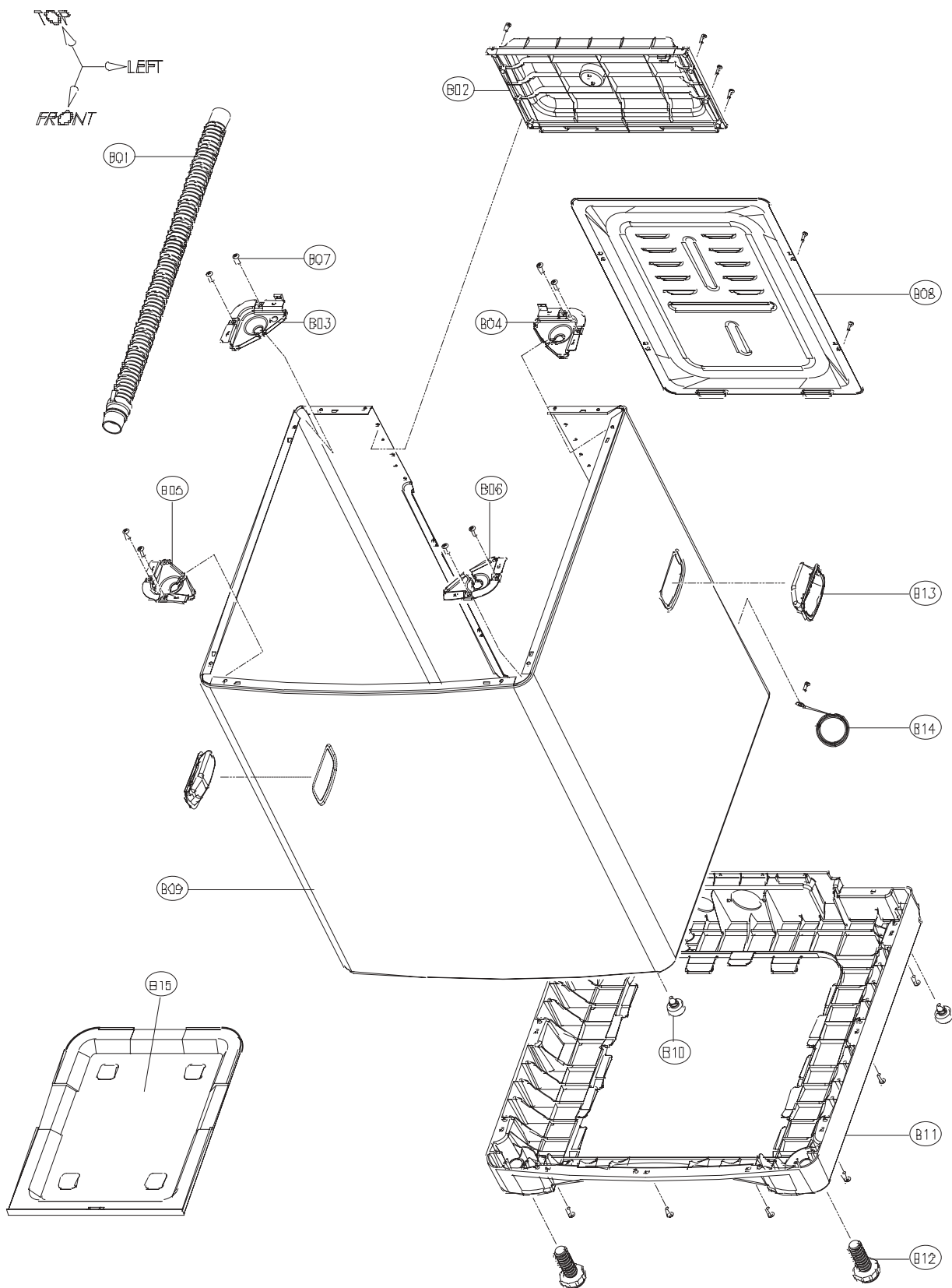
MESSAGE	CAUSE	SOLUTION
	Improper installation of drain hose.	Install drain hose properly.
	The drain hose is blocked up by foreign matter.	Remove foreign matter from drain hose.
	Drain motor is inferior.	Change drain motor.
	The water tap is closed.	Open the water tap.
	The water inlet filter clogged.	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.

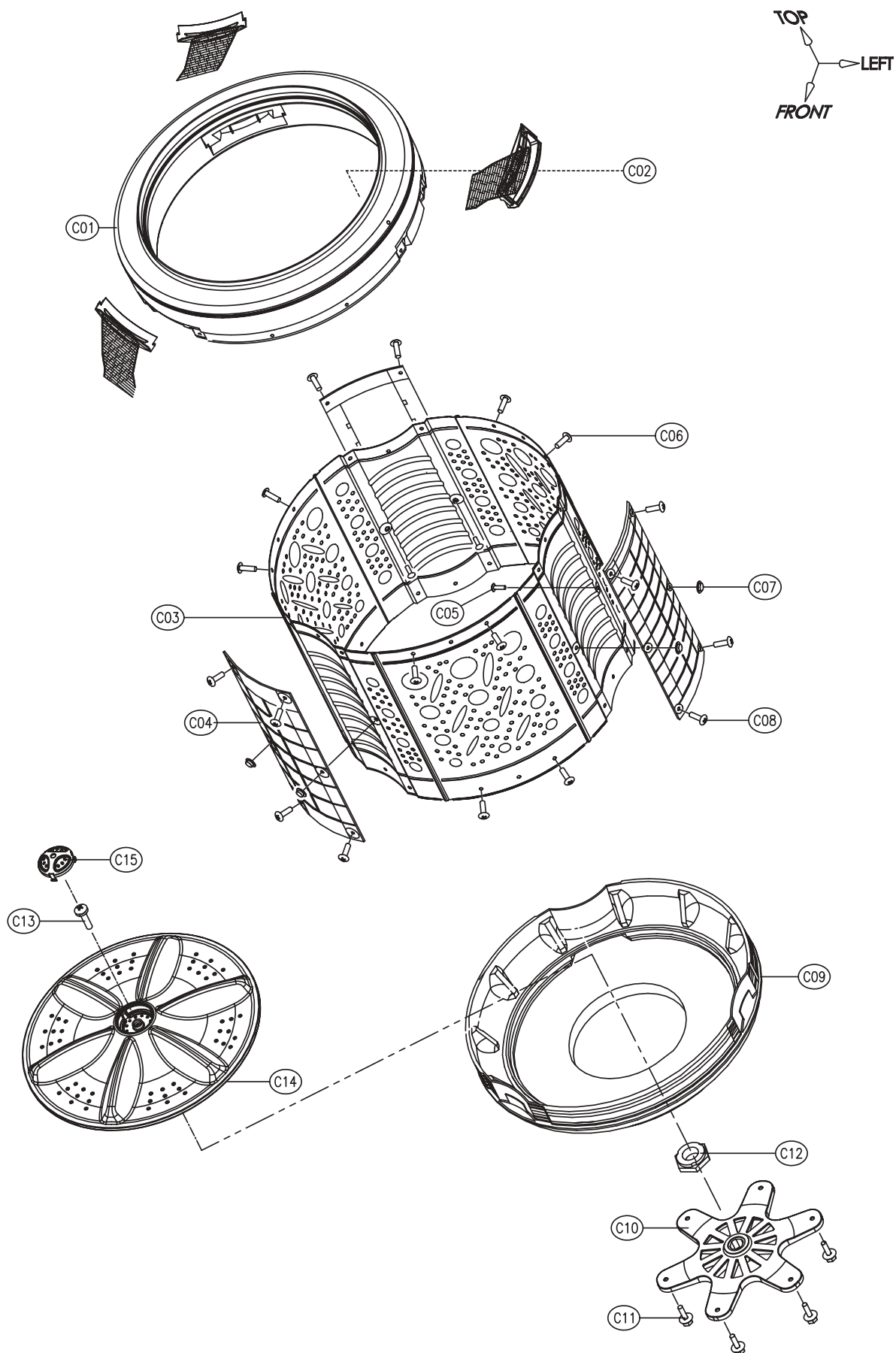
## ■ Wiring Diagram

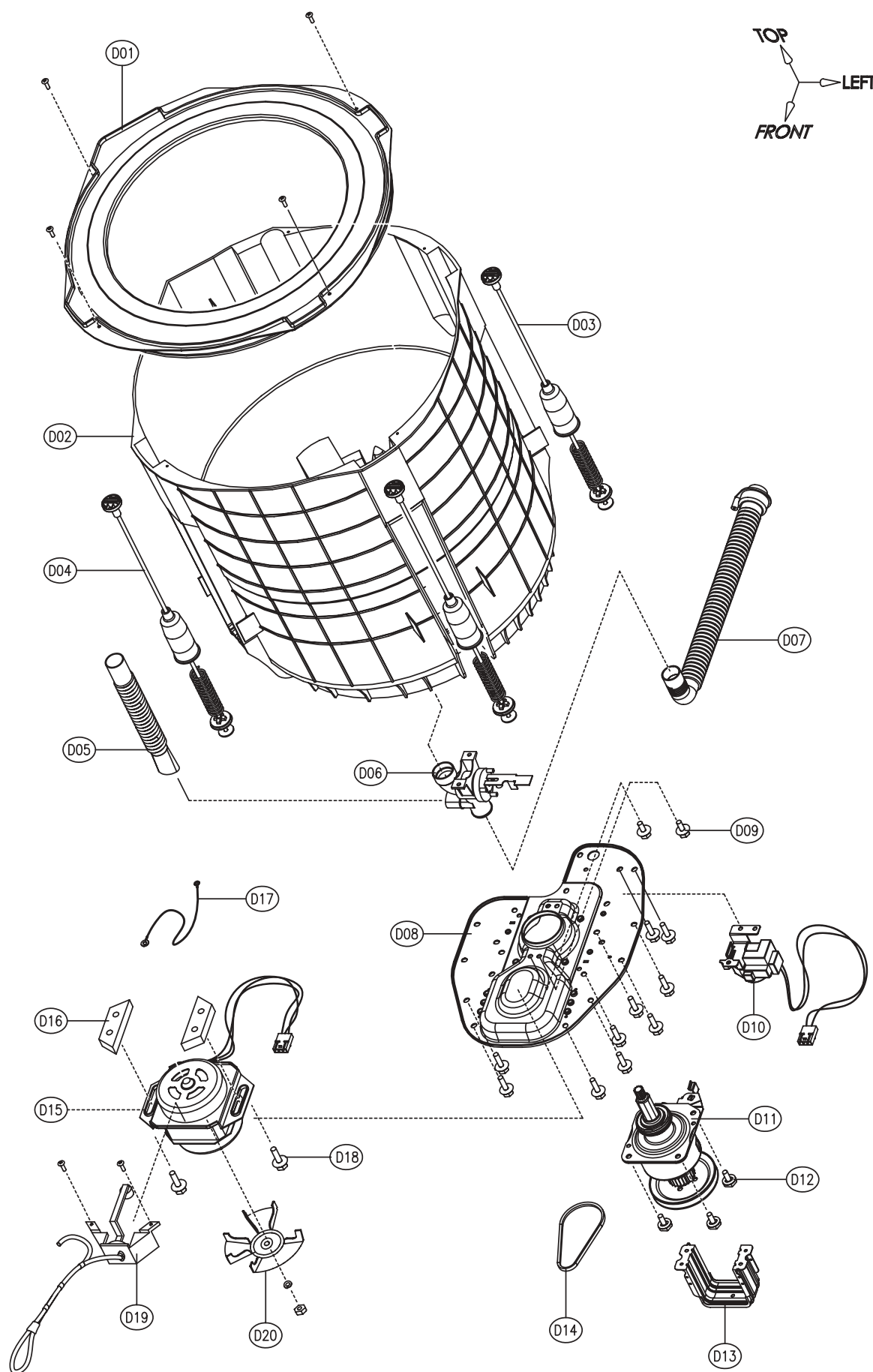


## Parts Diagram











## Parts List

No.	PARTS CODE	PARTS NAME	DESCRIPTION	Q'TY	REMARK
A01	3614538Z00	PLATE T	ABS	1	
A02	3618104700	NOZZLE AS	PP	1	ONLY COLD+RINSE
A03	3613270830	HOSE INLET HOT	EPDM ID9.5 OD14.5 L467.5±2.5 HARDNESS 60	-	
	3613270840	HOSE INLET COLD	EPDM ID9.5 OD14.5 L512.5±2.5 HARDNESS 60	1	
	3613270850	HOSE INLET RINSE	EPDM ID9.5 OD14.5 L522.5±2.5 HARDNESS 60	1	
A04	3611205800	CLAMP HOSE	ID=13.8, W=10.0, 0.9T	4	
A05	3610527200	BOX INLET	PP	1	
A06	3611142200	CASE DETERGENT	PP, RINSE	1	
A07	3610907800	CAP SOFTENER	PP	1	
A08	3612609400	HANDLE DETERGENT	ABS	1	
A09	3612609500	HANDLE COVER	ABS	1	
A10	3615115100	SPRING HANDLE	SUS304, D0.6	1	
A11	3614285200	PANEL B	ABS	1	
A12	3611426900	COVER WIND TUNNEL	ABS	1	
A13	3612902400	HINGE DOOR	POLYACETAL	1	
A14	3615503900	WINDOW DOOR	ABS-TR	1	
A15	36117ABD00	DOOR F	ABS	1	
A16	36117ABC00	DOOR B	ABS	1	
A17	3615115200	SPRING DOOR	100H	1	
A18	3614285100	PANEL F	ABS	1	
A19	3611684600	DECORATOR	PC FILM	1	
A20	PRPSSW200H	PCB AS	DWF-200HBTC	1	
	PRPSSW201H		DWF-240HBTC		
A21	7112503011	SCREW TAPPING	T1 TRS 5x30 MFZN	2	
A22	3619047000	SWITCH SAFETY	SF-030A19.CH14T.NON ARM	1	
A23	3614801630	SENSOR PRESSURE AS	CDN-15N,180 DEGREE, 3PIN, L1=740, L2=90	1	
A24	4507D08150	CLMAP	MFZN HOSE ID=7PIE	1	
A25	3618912400	UNIT CAPACITOR AS	54μF 200VAC, CAN TYPE	1	
A26	3619045400	SWITCH COVER	GSM-V16183A4, 250V, 16A	1	
A27	3611341110	CORD POWER	7A 125V 0.75SQ VCTFK TAIWAN LP-70 2.3M	1	
A28	3615416330	VALVE INLET AS	DR-12AS:C-R 110-130V 50/60HZ NON-O PACKING	1	
A29	3612796B40	HARNESS AS	100H, NON-BUBBLE, C+R	1	
A30	3618956750	UNIT FILTER(K8-5)	7A, 12MH, VR471, 0.1μF KET	1	
A31	3612300110	GASKET VALVE	PVC-S(INLET)	1	
A32	3611559900	CUSHION DOOR	NR	3	

No.	PARTS CODE	PARTS NAME	DESCRIPTION	Q'TY	REMARK
B01	3613226700	HOSE DRAIN O AS	L=1250mm, HANGER	1	
B02	3614538Y00	PLATE UPPER	PP	1	
B03	7122501211	SCREW TAPPING	T2S TRS 5x12 MFZN	8	
B04	3615302220	SUPPORTER TUB BL	SPG 1.6T(R-01)	1	
B05	3615302320	SUPPORTER TUB BR	SPG 1.6T(R-01)	1	
B06	3615302420	SUPPORTER TUB FL	SPG 1.6T(R-01)	1	240HBTC
	3615302430		SPG 1.6T(R-00, PCM)		200HBTC
B07	3615302520	SUPPORTER TUB FR	SPG 1.6T(R-01)	1	240HBTC
	3615302530		SPG 1.6T(R-00, PCM)		200HBTC
B08	3611413605	COVER BACK	0.35T	1	
B09	3610808011	CABINET AS	PAINTING (0.6T)	1	200HBTC
	3610808012		PAINTING (0.7T,13KG)		240HBTC
B10	3612100330	FOOT	BUTYL VE	2	200HBTC
	3617702300	LEG FIX	THERMAL PLASTIC ELASTOMER		240HBTC
B11	3610310205	BASE U	PP	1	200HBTC
	3610312200				240HBTC
B12	3617702122	LEG ADJUST AS	VE	2	
B13	3612603300	HANDLE CABINET	PP	2	
B14	3610068700	HARNESS OUTER	50/0.18GREEN,ST710489-2	1	
B15	3611425701	SAFTY COVER	NATURAL,1094 VE,PP	1	200HBTC
	3611402711	COVER UNDER	PP,1094		240HBTC
C01	3616106000	BALANCER AS	PP, 100M'S, VE TYPE	1	200HBTC
	3616105400		100'S HIDDEN		240HBTC
C02	3611904700	FILTER AS	100M, LINT FILTER AS	2	200HBTC
				3	240HBTC
C03	3618815400	TUB	SUS, HIDDEN-2	1	200HBTC
	3618815300		SUS, HIDDEN-3		240HBTC
C04	3612507210	GUIDE FILTER AS	HIDDEN FILTER(SUS 0.6T)	2	200HBTC
				3	240HBTC
C05	3616008600	SPECIAL BOLT	SUS	4	200HBTC
				6	240HBTC
C06	3616003700	SPECIAL SCREW	SUS 5.5x16	12	
C07	3616008700	SPECIAL NUT	SUS	4	200HBTC
				6	240HBTC
C08	3616003700	SPECIAL SCREW	SUS 5.5x16	12	
C09	3618819902	TUB U	98'S, VE TYPE(2-H/G), +M/B	1	200HBTC
	3618815502		13KG,+M/B,+RIB		240HBTC
C10	3617201200	FLANGE TUB	10KG,3-FOOT	1	200HBTC
	3617200200		ADC 12,12-POINT		240HBTC
C11	3616007000	SPECIAL SCREW	SCM24H,6.5*24	3	200HBTC
				12	240HBTC
C12	4507D83080	SPECIAL NUT	SUS 304	1	
C13	3616003720	SPECIAL SCREW	SUS 6X26.5	1	
C14	3619705510	PULSATOR AS	100M	1	
C15	3610911200	CAP PULSATOR	PP, 100M	1	

No.	PARTS CODE	PARTS NAME	DESCRIPTION	Q'TY	REMARK
D01	3611417700	COVER TUB	PP	1	200HBTC
	3611413900				240HBTC
D02	3618807100	TUB O	1098	1	
D03	3619805400	SUSPENSION AS(B)	ROD=592 SPR=102(BLACK),100C,S	2	200HBTC
	3619803900		1398, BLACK, BACK		240HBTC
D04	3619805500	SUSPENSION AS(A)	ROD=592 SPR=112(YELLOW),100C,S	2	200HBTC
	3619803800	SUSPENSION AS(F)	1398, YELLOW, FRONT		240HBTC
D05	3613208901	HOSE OVERFLOW	PELD, L=280MM	1	
D06	3615408400	VALVE DRAIN AS	VE TYPE	1	
D07	3613218500	HOSE DRAIN I AS	LDPE+EVA, L=219.5	1	
D08	3610387400	BASE	SECEN 2.0T	1	
D09	3616007000	SPECIAL SCREW	SCM24H, 6.5x24	14	
D10	36196TAN30	DRAIN MOTOR	SV-HJ7T22D, 100-110V, 50/60HZ		
D11	3617310300	GEAR MECHANISM	GM-1300-YS6P0	1	200HBTC
	3617310200		GM-1300-KS6P2(SPUR)		240HBTC
D12	7341801511	BOLT HEX	6B-1 8x15 MFZN	4	
D13	3618301300	PROTECTOR GEAR	SBHG 1.6T	1	
D14	3616590220	BELT V	M20.5, AGING	1	
D15	3964221290	MOTOR CONDENSER	W1D50CA015, 110-127V/60Hz, 1490 KET 3P	1	200HBTC
D16	3611502700	CUSHION DOWN	POM(8MM)	2	
D17	3612757030	HARNESS EARTH INNER	L ID=4.3, R ID=8.3, L=810	1	
D18	7650802528	BOLT HEX	6B-1 8x25 PW(3x28) MFZN	2	
D19	3610402931	BODY BUBBLE AS	104KR, 2700MM	1	
D20	3618432000	PULLEY MOTOR AS	M-TYPE, DS=10, DP=48.5, 60HZ	1	

## Sequence Chart

Division		Progress Time	FUZZY			SOAK		HEAVY		ECO		WOOL
			High	Mid	Low/Small	High/Mid	Low/Small	High/Mid	Low/Small	High/Mid	Low/Small	High/Mid
pre wash	Sensing	7 sec.	■	■	■							
	Water inlet	4 min.	■	■		■		■		■		■
		2 min.	■	■	■	■	■	■	■	■	■	■
	Pre-wash	60 min.				■	■					
	Wash	18 min.	■			■	■	■	■			
		15 min.	■	■		■	■	■	■			
		14 min.	■	■		■	■	■	■			
		10 min.	■	■	■	■	■	■	■	■	■	■
		6 min.	■	■	■	■	■	■	■	■	■	■
	Balance control	35 sec.	■	■	■	■	■			■	■	
Rinse	Drain	3 min.	■	■	■	■	■	■	■			■
		1 min.	■	■	■	■	■	■	■	■	■	■
	Balance Spin	1 min.	■	■	■	■	■	■	■	■	■	■
	Mid. Spin	90 sec.				■	■	■	■	■	■	
		60 sec.	■	■	■	■	■	■	■	■	■	
		20 sec.	■	■	■	■	■	■	■	■	■	■
	Natural stop	2 min.	■	■	■	■	■	■	■			
		1 min.	■	■	■	■	■	■	■	■	■	
		40 sec.	■	■	■	■	■	■	■	■	■	■
	Water inlet	4 min.	■	■		■		■		■		■
		2 min.	■	■	■	■	■	■	■	■	■	■
	Rinse 1	3 min.				■	■	■	■			
		2 min.	■	■	■	■	■	■	■	■	■	■
	Balance control	35 sec.	■	■	■	■	■	■	■	■	■	
	Drain	3 min.	■	■	■	■	■	■	■			■
		1 min.	■	■	■	■	■	■	■			■
	Balance Spin	1 min.	■	■	■	■	■	■	■			■
	Mid. Spin	90 sec.				■	■	■	■			
		60 sec.	■	■	■	■	■	■	■			
		20 sec.	■	■	■	■	■	■	■			■
	Natural stop	2 min.	■	■	■	■	■	■	■			
		1 min.	■	■	■	■	■	■	■			
		40 sec.	■	■	■	■	■	■	■			■
	Water inlet	4 min.	■	■		■		■				■
		2 min.	■	■	■	■	■	■	■			■
	Rinse 2	3 min.				■	■	■	■			
		2 min.	■	■	■	■	■	■	■			■
	Balance control	35 sec.	■	■	■	■	■	■	■			
spin	Drain	3 min.	■	■	■	■	■	■	■			■
		1 min.	■	■	■	■	■	■	■	■	■	■
	Balance Spin	1 min.	■	■	■	■	■	■	■	■	■	
	Main spin	9 min.										
		7 min.										
		5 min.	■	■		■	■	■	■			
		4 min.	■	■		■	■	■	■			
		3 min.	■	■	■	■	■	■	■	■	■	
		1 min.	■	■	■	■	■	■	■	■	■	■
	Natural stop	2 min.	■	■	■	■	■	■	■	■	■	■
		1 min.	■	■	■	■	■	■	■	■	■	■
	Buzzer	10 sec.	■	■	■	■	■	■	■	■	■	■
Over Time Indication			56	55	44	2H	2H	61	61	26	22	36

S/M No. : WF200HB001

**DAEWOO**

**DAEWOO ELECTRONICS CORP.**  
686, AHYEON-DONG MAPO-GU SEOUL, KOREA  
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