

S/M No. :

Service Manual

Washing Machine

Model: DWD-F1011/1012/1013

DWD-F1211/1212/1213

✓ 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 (<http://svc.dwe.co.kr>).

DAEWOO ELECTRONICS CORP.

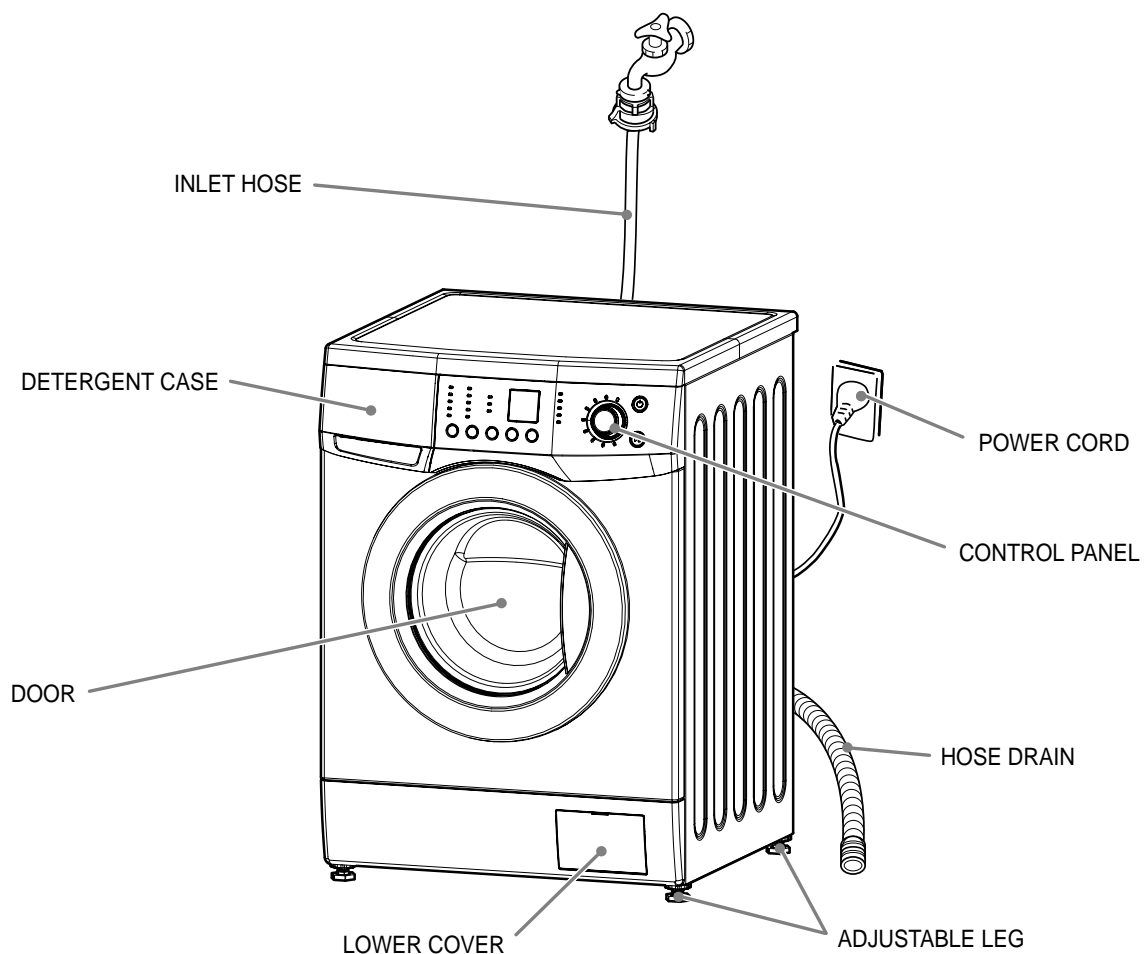
[http : //svc.dwe.co.kr](http://svc.dwe.co.kr)

Mar. 2005

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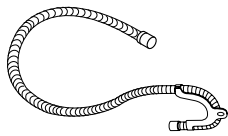
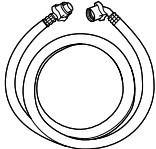
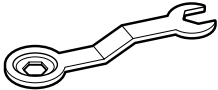


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1. SPECIFICATIONS



			DWD-F101(1~3) / F121(1~3)
POWER SOURCE			220-240V, 50Hz
DiMENSION (WXDXH)			595mm x 540mm x 850mm
WEIGHT			64kg
WATER CONSUMPTION			50ℓ
POWER CONSUMPTION			2000W
MAXIMUM MASS OF TEXTILE	WASH		6kg
	SPIN		6kg
WASHER TYPE			DRUM TYPE (FRONT LOADING WASHING MACHINE)
OPERATING WATER PRESSURE			0.3 ~ 8kgf/cm ² (29.4 ~ 784kPa)

■ Accessories

Hose drain	Inlet hose	Spanner	Manual	Cap holder(3EA)
				

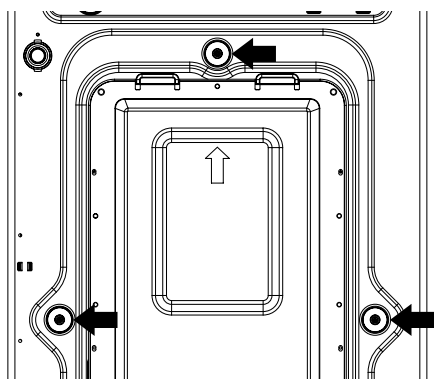
■ Transit bolts

The appliance is fitted with transit bolts to prevent internal damage during transport.

■ Removing transit bolts

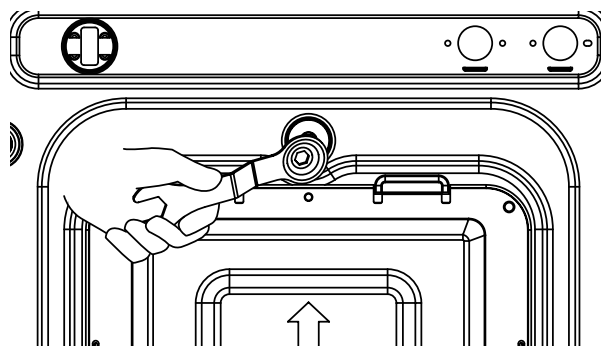
1. To prevent internal damage during transport, the special 3 bolts are locked. Before operating the washer, remove the bolts along with the rubber bungs.

- If they are not removed, it may cause heavy vibration, noise and malfunction.

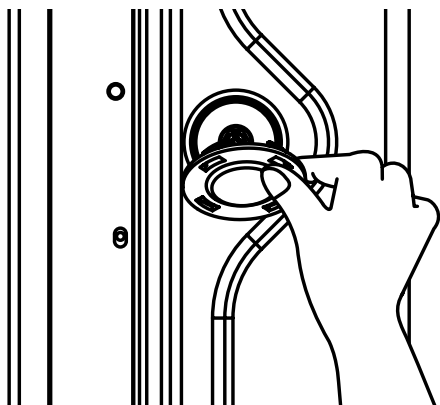


2. Unscrew the 3 bolts with the spanner supplied, and take out the 3 bolts with the rubber bungs. Keep the 3 bolts and the spanner for future use.

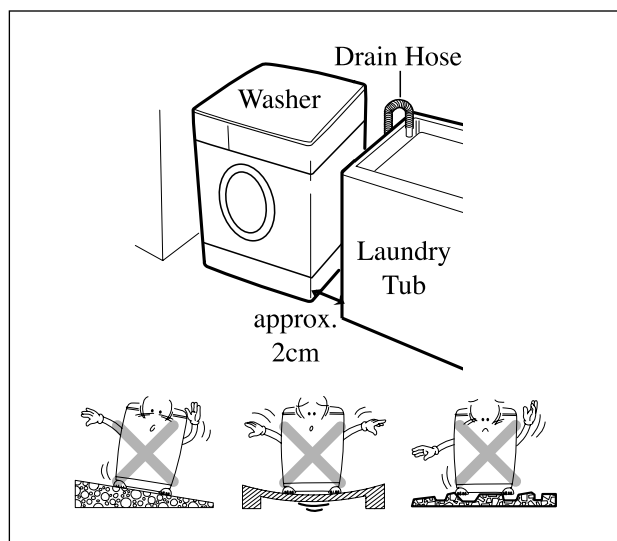
- Whenever the appliance is transported, the transit bolts must be refitted.



3. Close the holes with the caps supplied.



■ Installation place requirement



Level floor :

Allowable slope under entire washer is 1°

Power outlet :

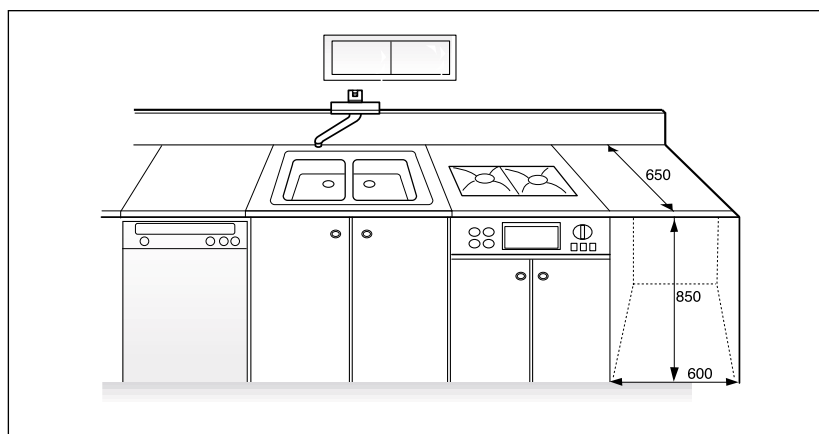
Must be with 1,5 meters of entire side of location of washer. Do not overload the outlet with more than one appliance.

Additional Clearance :

For wall, door and floor modeling is required.
(10cm : rear / 2cm : right & left side)

Do not place or store laundry products on top of washer at any times.

They can damage the finish or controls.



■ BS Plug Safety Details (For U.K. User)

IMPORTANT

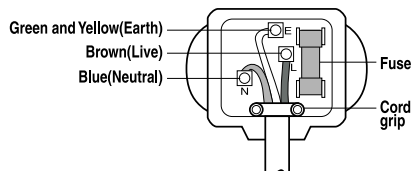
THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

GREEN AND YELLOW : EARTH

BLUE : NEUTRAL

BROWN : LIVE

This appliance must be earthed



As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol \oplus or coloured Green or Green and Yellow.

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

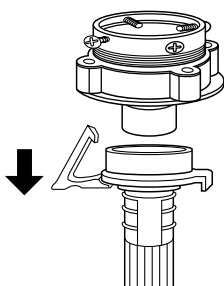
If a 13 amp (BS 1363) plug is used, fit a 13amp BS 1362 fuse.

■ Connecting inlet hose

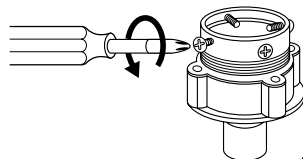
In using only one water tap or in case of only one water inlet valve, connect the inlet hose to the cold water inlet valve.
Option : Be careful not to confuse hot water inlet and cold water inlet.

• • • • FOR ORDINARY TAP

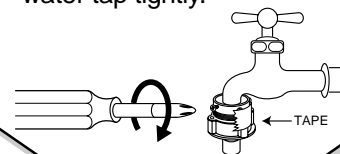
- ① Pull down the collar of the inlet hose to separate it from the water tap adapter.



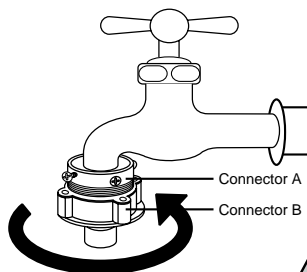
- ② Loosen the four screws properly in order to fit into water tap.



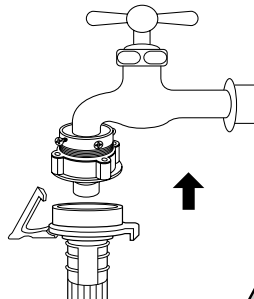
- ③ Fit the water tap adapter into the water tap and tighten the four screws evenly while pushing up the adapter so that the rubber packing can stick to the water tap tightly.



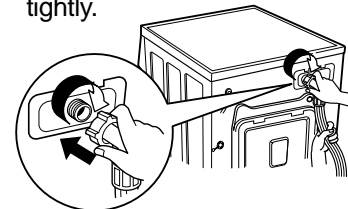
- ④ Remove the tape, and screw connector B into connect A tightly.



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



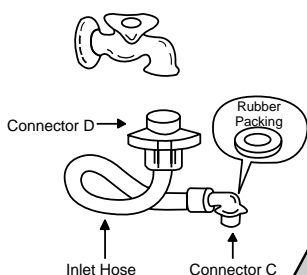
- ⑥ Connect the inlet hose adapter of the hose to the water inlet of the washer by turning it clockwise to be fixed tightly.



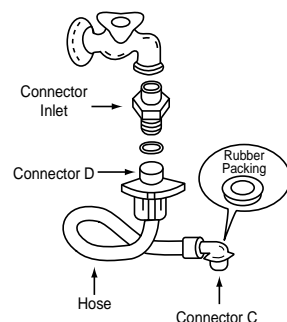
- Please check the rubber packing present inside the inlet hose adapter of the hose.

• • • • FOR SCREW-SHAPED TAP

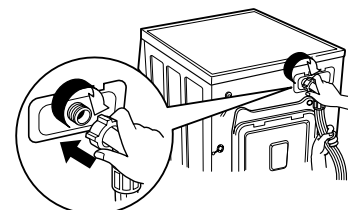
- ① Connect the inlet hose to the water tap adapter by pulling down the collar of the hose end.



- ② Connect the connector-inlet supplied if necessary.

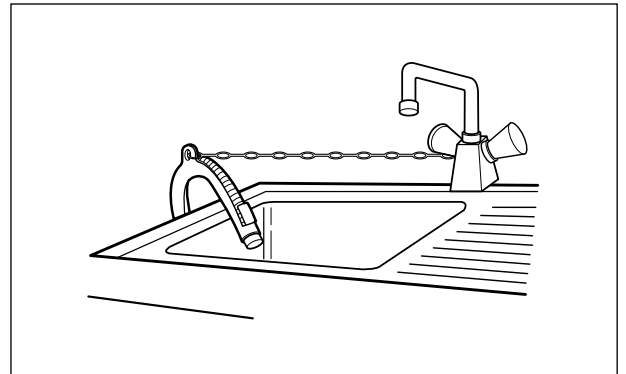
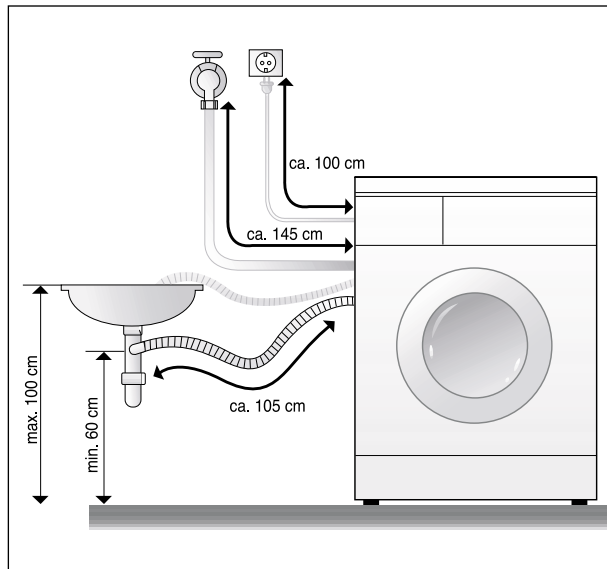


- ③ Connect the inlet hose adapter to the water inlet of the washer and turn it to be fixed.

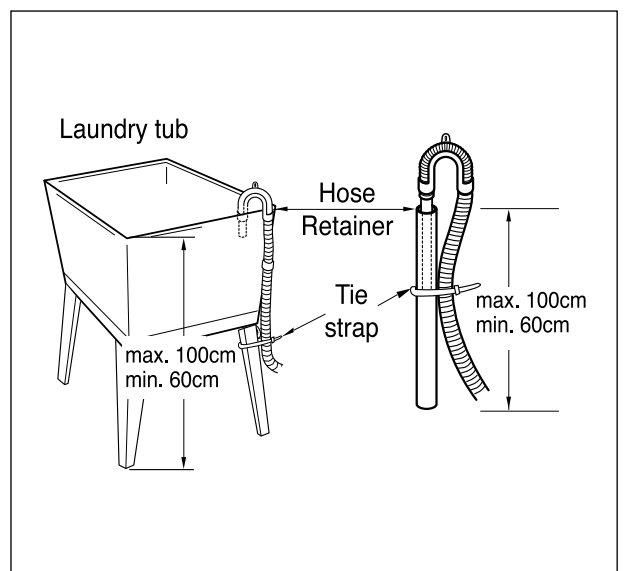
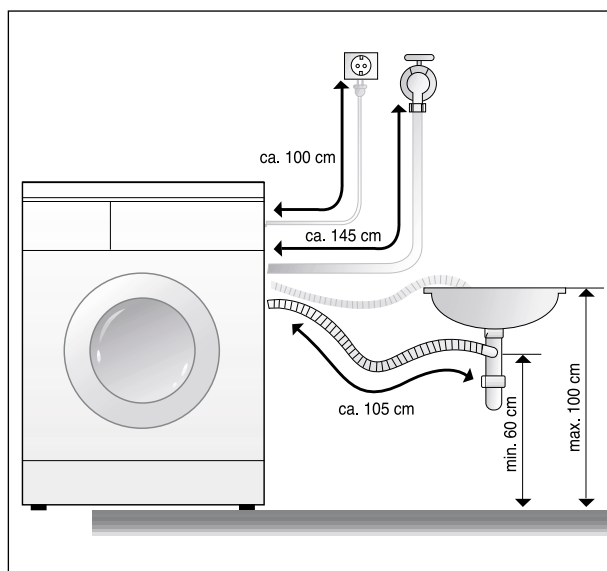


- Check the packing in the inlet.

■ Installation of drain hose



- When installing the drain hose in sink, secure it tightly with a string.
- Proper securing of the drain hose will **protect the floor from damage due to water leakage.**

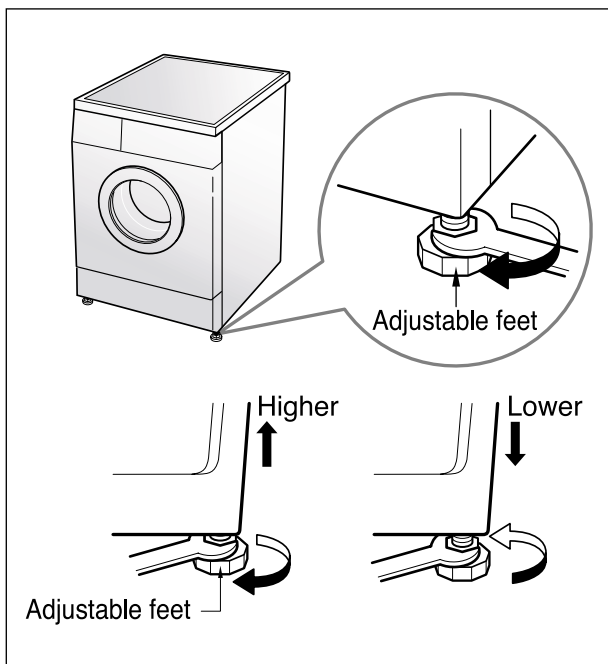


- The drain hose should not be placed **higher than 100cm above the floor.**
- Proper securing of the drain hose will **protect the floor from damage due to water leakage.**
- When the drain hose is too long, do **not force back in to the washer. This will cause abnormal noise.**

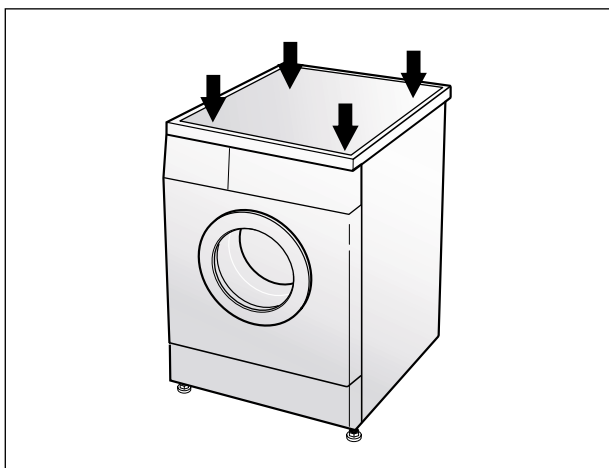
■ Level adjustment



1. Adjust the washing machine level properly prevents excessive noise and vibration. Install the appliance on a solid and level floor surface, preferably in a corner of the room.



2. If the floor is uneven, adjust the adjustable feet as required. (do not insert pieces of wood etc. under the feet)
Make sure that all four feet are stable and resting on the floor and then check that the appliance is perfectly level. (use a spirit level)



✱ Diagonal Check

When pushing down the edges of the washing machine top plate diagonally, the machine should not move up and down at all.

(Please, check both of two directions)

If machine rocks when pushing the machine top plate diagonally, adjust the feet again.

3. MAINTENANCE

✿ **Before cleaning the washer interior, unplug the electrical power cord avoid electrical shock hazards.**

■ Cleaning your washer

1. Exterior

Proper care of your washer can extend its life.

The outside of the machine can be cleaned with warm water and a neutral non abrasive household detergent.

Immediately wipe off any spills. Wipe with damp cloth.

Try not to hit surface with sharp objects.

- Do not use methyalted spirits, diluents or similar products.

2. Interior

Dry around the washer door opening, flexible gasket and door glass.

Run washer through a complete cycle using hot water.

Repeat process if necessary.

- Remove hard water deposits using only cleaners labeled as washer safe.

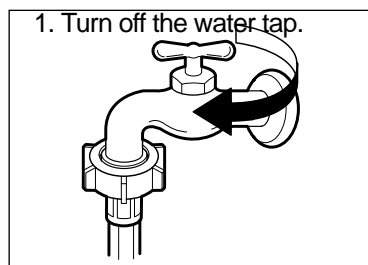
■ Cold condition

If the washer is stored in an area where freezing may occur or moved in freezing temperature, follow these instructions to prevent damage to the washer.

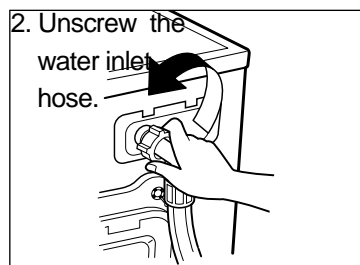
1. Turn off water supply tap.
2. Disconnect hoses from water supply and drain water from hoses.
3. Plug electrical cord into a properly grounded electrical outlet.
4. Add 1gallon(3.8L) of nontoxic recreational vehicle(RV) antifreeze into empty wash drum.
Close the door.
5. Set spin cycle and let washer spin for 1minute to drain out all water.
6. Unplug eletrical power cord, dry the drum interior, and close the door.
7. Remove detergent case and dry excessive water from the compartments.
8. Store washer in an upright position.
9. To remove antifreeze from washer after storage, run empty washer through a complete cycle using detergent. Do not add wash load.

■ Cleaning the water inlet filter

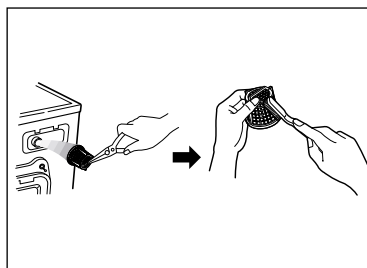
- "IE" error message will blink on the control panel when water does not enter the detergent drawer.
- If your water is very hard or contains traces of lime deposit, the water inlet filter may become clogged.
- It is therefore a good idea to clean it from time to time.



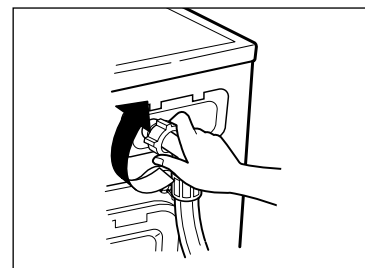
1. Turn off the water tap.



2. Unscrew the water inlet hose.



3. Clean the filter using a hard bristle brush.

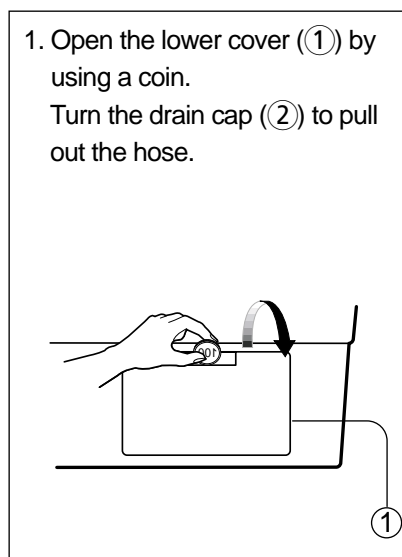


4. Tighten up the inlet hose.

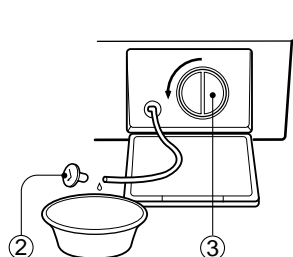
■ Cleaning the drain pump filter

- The drain filter collects threads and small objects left in the laundry.
- Check regularly that the filter is clean to ensure smooth running of your machine.

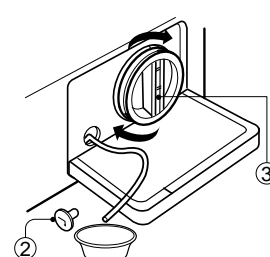
CAUTION Be careful when draining if the water is hot.



2. Unplug the drain cap (②), allowing the water to flow out.
At this time use a vessel to prevent water flowing on to the floor.
When water does not flow any more, turn the pump filter (③) open to the left.



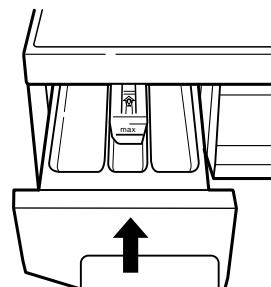
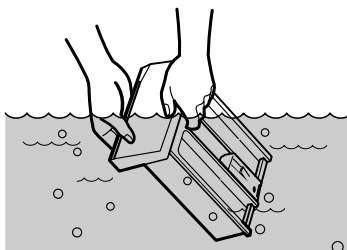
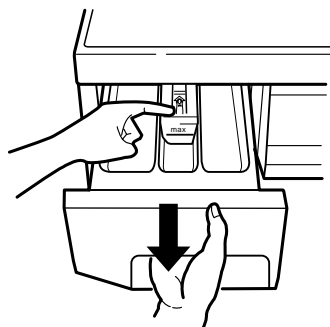
3. Remove any foreign material from the pump filter (③).
After cleaning, turn the pump filter (③) clockwise and insert the drain cap (②) to the original place. Close the lower cover.



■ Cleaning the detergent case

✱ After a while detergents and fabric softeners leave a deposit in the detergent case.

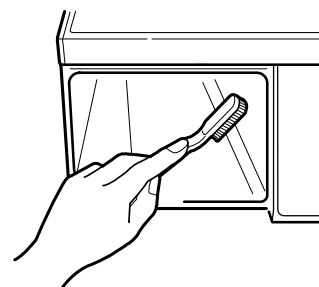
- It should be cleaned from time to time with a jet of running water.
- If necessary it can be removed completely from the machine by pressing the catch downwards and by pulling it out.
- To facilitate cleaning, the upper part of the fabric softener compartment can be removed.



Inlet box recess

✱ Detergent can also accumulate inside the recess which should be cleaned occasionally with an old toothbrush.

- Once you have finished cleaning, replace the detergent case and run a rinse cycle without laundry.



■ Cleaning the washing drum

- If you live in a hard water area, limescale may continuously build up in places where it cannot be seen and thus not easily removed.
- Over time the build up of scale clogs appliances, and if it is not kept in check these may have to be replaced.
- Although the washing drum is made of stainless steel, specks of rust can be caused by small metal articles (paper clips, safety pins) which have been left in the drum.
- The washing drum should be cleaned from time to time.
- If you use descaling agents, dyes or bleaches, make sure they are suitable for washing machine use.
- ✱ Descaler may contain chemicals that may damage part of your washing machine.
- ✱ Remove any spots with a stainless steel cleaning agent.
- ✱ Never use steel wool.

4. DIRECTION FOR DISASSEMBLY

DOOR LOCK SWITCH

1) Open the door and remove the gaske clamp.



2) Remove the gasket from the front cabinet.



3) Remove two screws, and remove the door lock switch.



HEATER AND THERMISTOR

1) Remove four screws on the back cover, and remove the back cover.



2) Remove connectors and the earth terminal.



3) Remove the nut by using a box wrench, and remove the earth terminal.



4) Loosen the nut by using a box wrench, and pull out the heater.

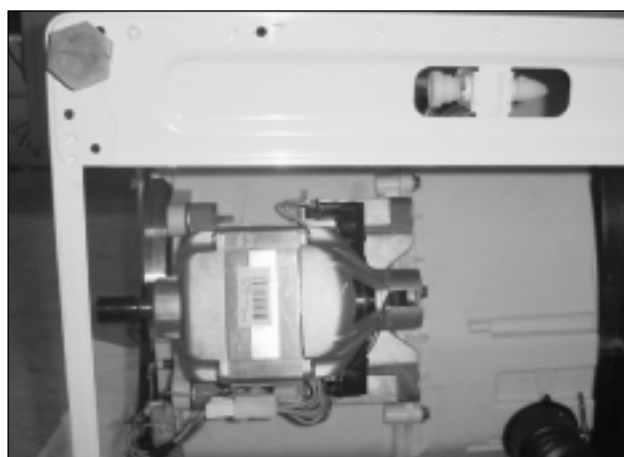


UNIVERSAL MOTOR

1) remove the belt from the pulley.



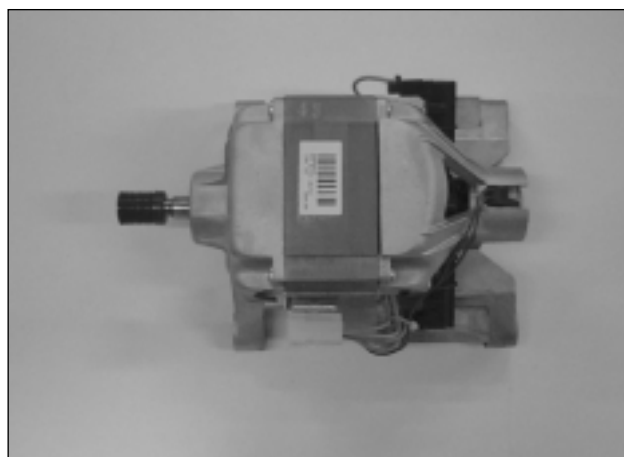
2) Lay the right side of the washer on the floor, and remove the connector.



3) Remove two bolts and two nuts mounting the motor by using a box wrench.



4) Remove the motor from the tub.



DRAIN PUMP

1) Lay the right side of the washer on the floor, and remove the lower panel by pressing six snap fits.



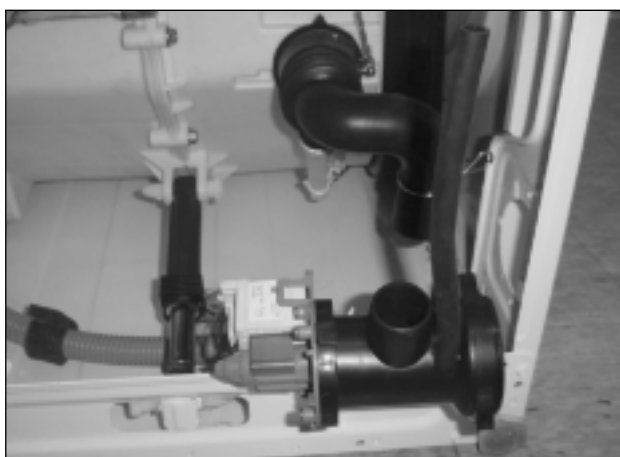
2) Remove connectors.



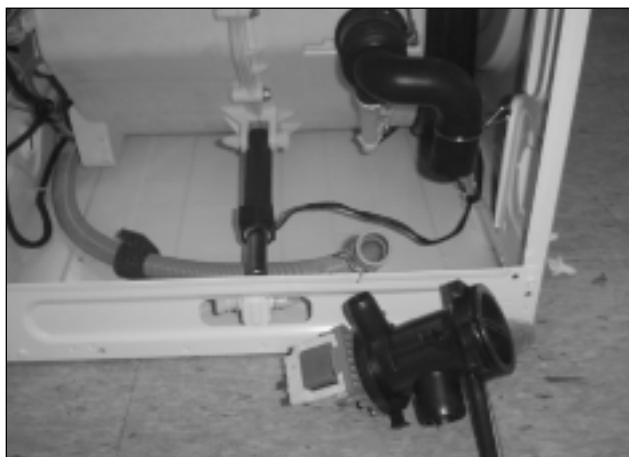
3) Remove the screw, and remove the drain pump from the lower frame.



4) Remove the drain hose.

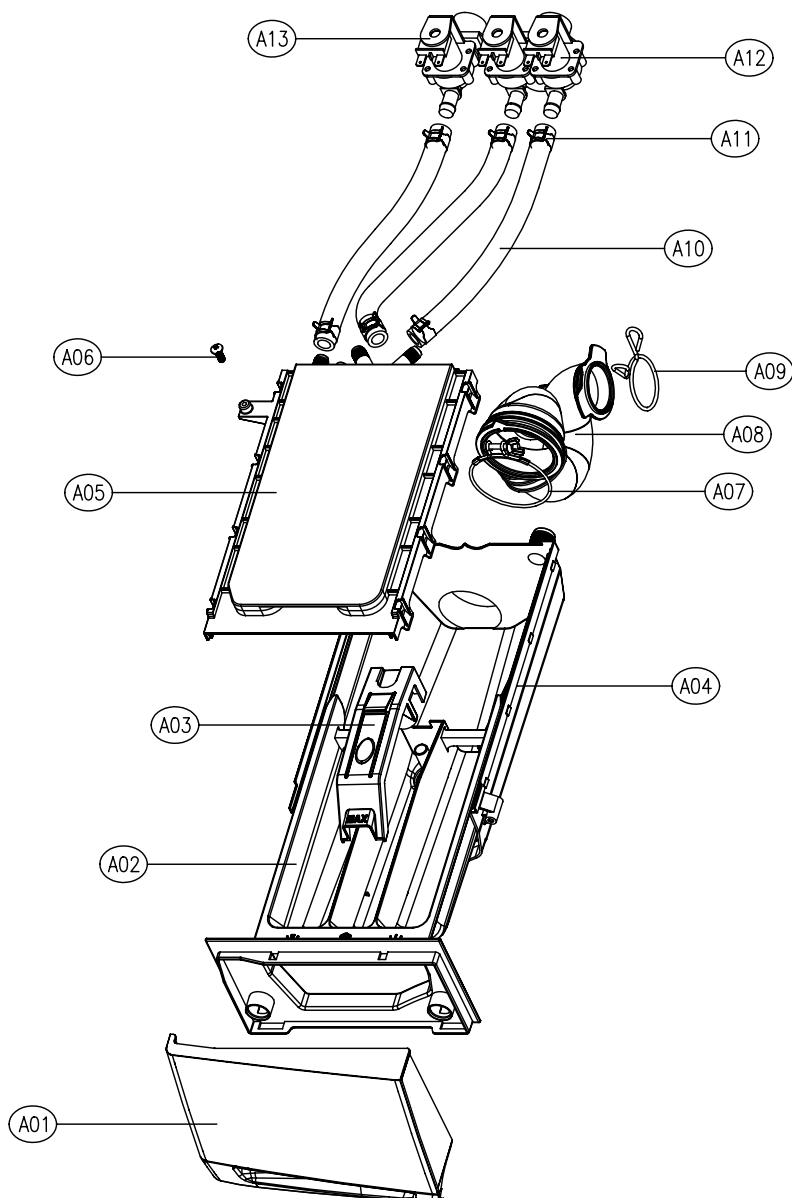


5) Remove the inner drain hose, and remove the drain pump.



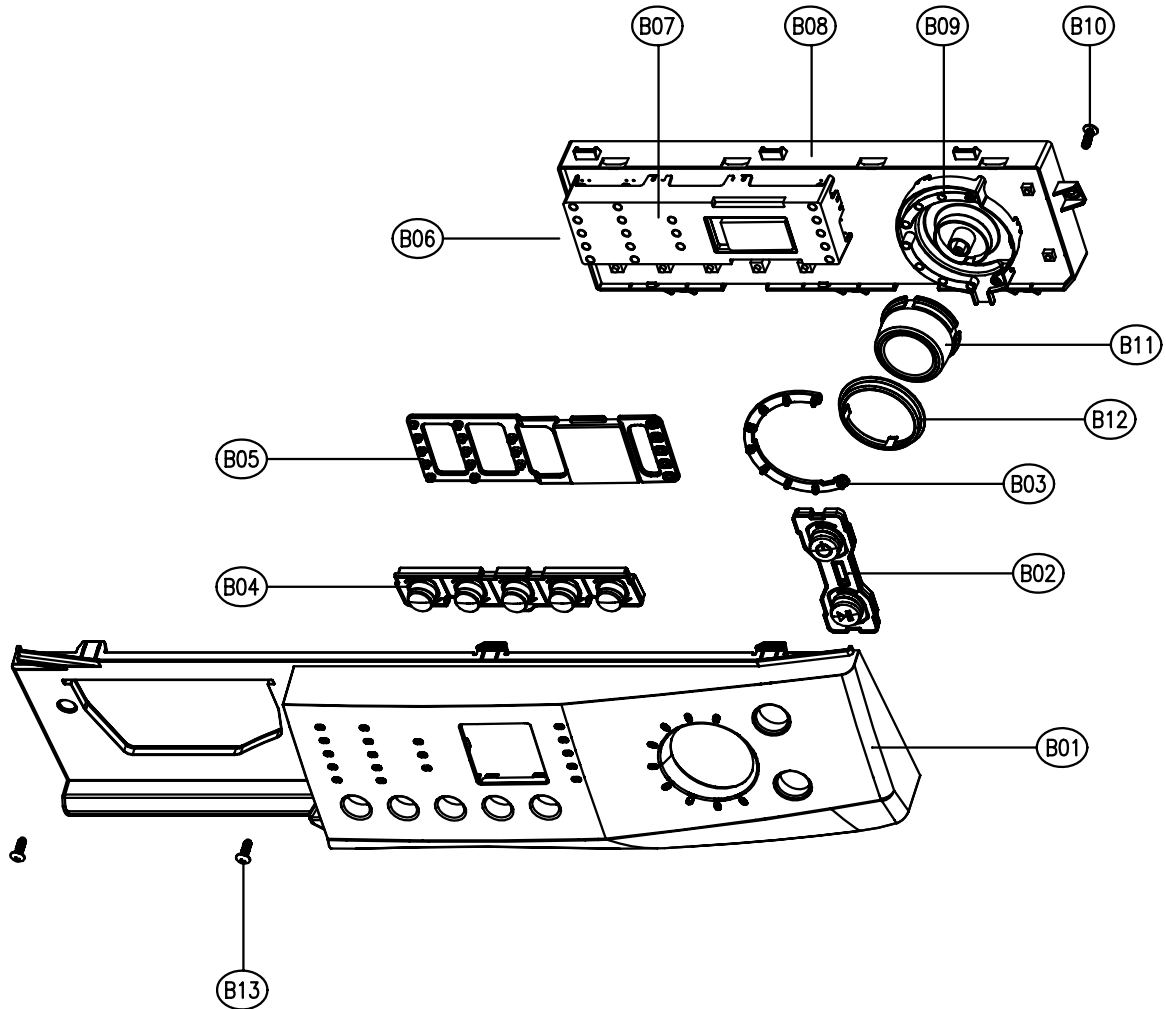
5. EXPLODE VIEW AND PARTS LIST

■ BOX INLET AS



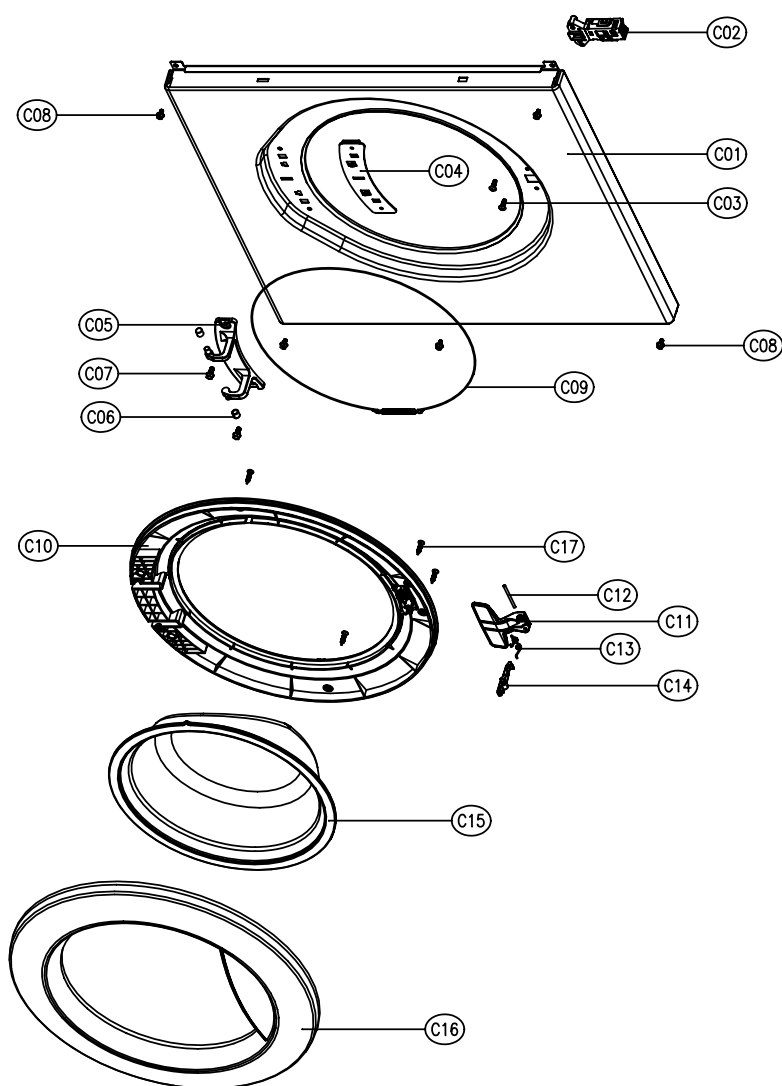
No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
A01	HANDLE CASE	3612608700	ABS	1	
A02	CASE DETERGENT	3611140300	PP	1	
A03	CAP SOFTENER	3610916600	PP	1	
A04	BOX INLET	3610526500	PP	1	
A05	NOZZLE AS	3618103500	NOZZLE TOP + UNDER	1	
A06	SCREW TAPPING	7122401411	T2S TRS 4X14 MFZN	1	
A07	CLAMP AS	3611203200	ID=60,WIRE+BOLT+NUT	1	
A08	HOSE INLET	3613267200	EPDM	1	
A09	CLAMP HOSE I	3611201400	HSW3, D2.6, MFZN, ID=38	1	
A10	HOSE INLET	3613268900	EPDM,ID=10,OD=16,L=225	2	
A11	CLAMP SPRING	3611203800	ID=15.5, T=0.6	4	
A12	VALVE INLET	3615414910	220~240V 2WAY NYLON VDE	1	COLD
A13	VALVE INLET	3615414800	220~240V,50/60Hz,1WAY		HOT

■ PANEL F ASS'Y



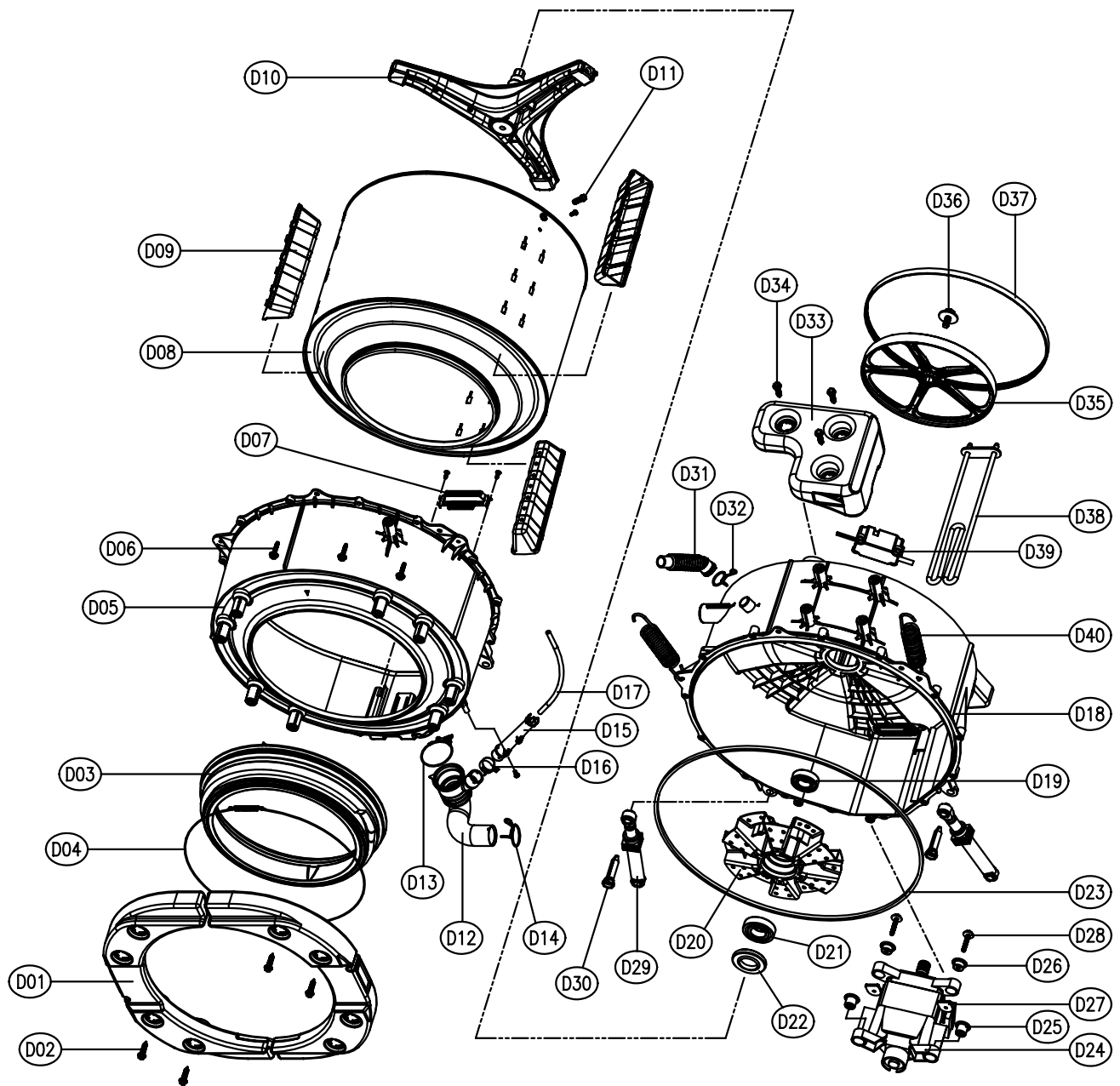
No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
B01	PANEL F	3614282700	ASB	1	
B02	BUTTON POWER	3616603600	ABS	1	
B03	WINDOW DIAL	3615503100	ABS-TR	1	
B04	BUTTON SELECT	3616603500	ABS	1	
B05	WINDOW LED	3615503000	ABS-TR	1	
B06	PCB ASS'Y	PRPSSW4D10	DWD-F1011~3N,M,L	1	1000RPM
		PRPSSW4D20	DWD-F1211~3N,M,L		1200RPM
B07	HOLDER LED	3613049700	ABS	1	
B08	CASE PCB	3611140200	HIPS	1	
B09	HOLDER DIAL	3613049700	ABS	1	
B10	SCREW TAPPING	7122401411	T2S TRS 4X14 MFZN	4	
B11	KNOB DIAL	3613404800	ABS	1	
B12	RING KNOB	3614603500	ABS	1	
B13	SCREW TAPPING	7122401608	T2S TRS 4X16 SUS	2	

■ CABINET FRONT ASS'Y



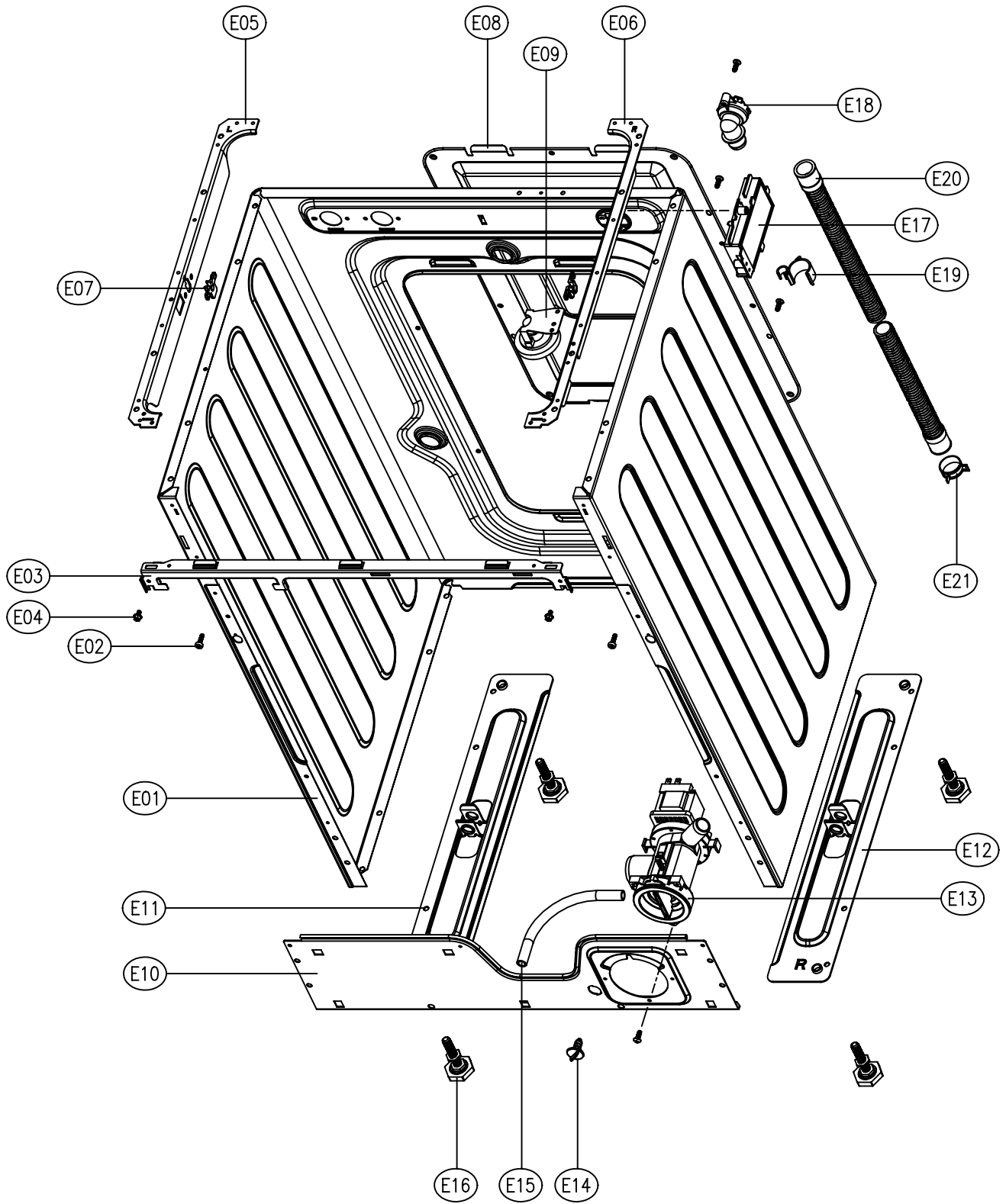
No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
C01	CABINET FRONT	3610811200	SECD(EGI)-2 0.8t	1	
		3610811210	PCM 0.8t		
C02	SWITCH DOOR LOCK	3619046800	BM(BI-METAL,ROLD,ITALY)	1	
C03	SCREW TAPPING	7122401608	T2S TRS 4X16 SUS	2	
C04	PLATE HINGE SUPPORT	3614531900	SGCC(GI) 1.6t	1	
C05	HINGE DOOR	3612902800	ZnDC, Zn COATING	1	
C06	CAP HINGE DOOR	3610916500	POM	2	
C07	SCREW TAPPING	3616030000	F/L BOLT(SE) 5X12 SUS	2	
C08	SCREW TAPPING	3616029950	TTS"S" HEX F/L 4X8	5	
C09	CLAMP DOOR AS	3611204800	HSW3 D=1.4 L=936	1	
C10	FRAME DOOR I	3612205200	PP,TB53	1	
C11	HANDLE DOOR	3612608600	ABS	1	
C12	PIN HANDLE	3618200200	SUS D3.0,L38	1	
C13	SPRING HOOK	3615114600	SUS D1.4	1	
C14	HOOK DOOR	3613100700	ZnDC, Zn COATING	1	
C15	DOOR GLASS	7115402008	GLASS	1	
C16	FRAME DOOR O	3612205100	ABS	1	
C17	SCREW TAPPING	7115402008	T1S FLT 4X20 SUS	6	

■ TUB ASS'Y



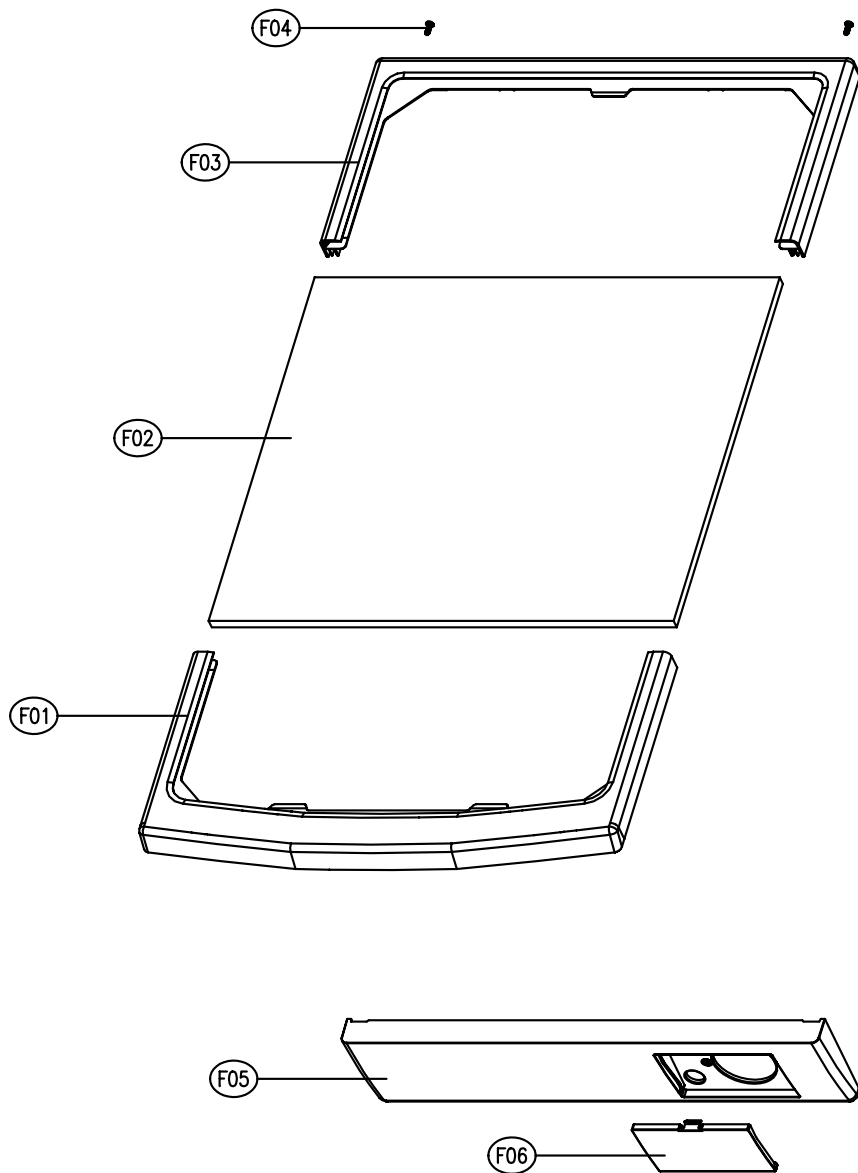
No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
D01	BALANCER WEIGHT AS-F	3616106300	FRONT, 6.0kg	2	
D02	SPECIAL SCREW	3616029400	SWCH 8.5X30	8	
D03	GASKET	3612321400	EPDM	1	
D04	CLAMP GASKET AS	3611204500	HSW3 D=1.8 L=1072	1	
D05	TUB FRONT	3618821000	FRPP	1	
D06	SPECIAL SCREW	3616029800	SWCH 6.5X30	14	
D07	FIXTURE HEATER	3612007300	SUS T0.7 45x110	1	
D08	DRUM SUS AS	3617004000	SUS T0.6	1	
D09	LIFTER WASH	361A400400	PP	3	
D10	SPIDER AS	361A300500	AL+SM45C	1	
D11	SPECIAL SCREW	3616029500	SUS430 8X25	3	
D12	HOSE DRAIN	3613267300	EPDM	1	
D13	CLAMP AS	3611203200	ID=60,WIRE+BOLT+NUT	1	
D14	CLAMP HOSE I	3611201400	HSW3, D2.6, MFZN, ID=38	1	
D15	AIR TRAP	361A500100	FRPP	1	
D16	CLAMP HOSE	3611203900	ID=26, T=1.2	1	
D17	HOSE AIR	3613268600	ID=4, OD=8	1	
D18	TUB REAR	3618821100	FRPP	1	
D19	BEARING O	3616303200	6205Z KBC	1	
D20	BEARING HOUSING	3616303300	ALDC	1	
D21	BEARING I	3616303100	6206Z KBC	1	
D22	WATER SEAL	361A600100	NBR	1	
D23	GASKET TUB	3612321600	EPDM L=1675	1	
D24	UNIT MOTOR UNIVERSAL	36189L4H00	220VDC50HZ 2POLES PI340	1	
D25	CUSHION MOTOR A	3611563900	BUTYLE	2	
D26	CUSHION MOTOR B	3611564000	BUTYLE	2	
D27	SPECIAL WASHER	3616030400	T=4.0 M6	2	
D28	SPECIAL BOLT	3616030900	M6X43	2	
D29	DAMPER FRICTION	361A700120	120N, AKS, DL=197.5	2	
D30	DAMPER PIN	361A700210	AKS, D=14.5 EASY FIXING	2	
D31	HOSE VENT	3613267100	EPDM	1	
D32	CLAMP HOSE	3611204700	ID=27	1	
D33	BALANCER WEIGHT AS-T	3616106500	TOP, 6.0kg	1	
D34	SPECIAL SCREW	3616029400	SWCH 8.5X30	3	
D35	PULLEY	3618433200	ALDC	1	
D36	SPECIAL BOLT AS	3616029600	SWCH 10X30,F/L BOLT	1	
D37	BELT	3616591100	MEGADTNE 5RIB	1	
D38	HEATER WASH	3612800800	220V 2KW 24.2Ω	1	
		3612801200	230V 2KW 26.45Ω		
		3612801500	240V 2KW 28.8Ω		
D39	UNIT BUBBLE PUMP	36189L4120	220-240V DBK-204DB	1	
D40	SPRING SUSPENSION	3615114500	D3.2, L155	2	

■ CABINET ASS'Y



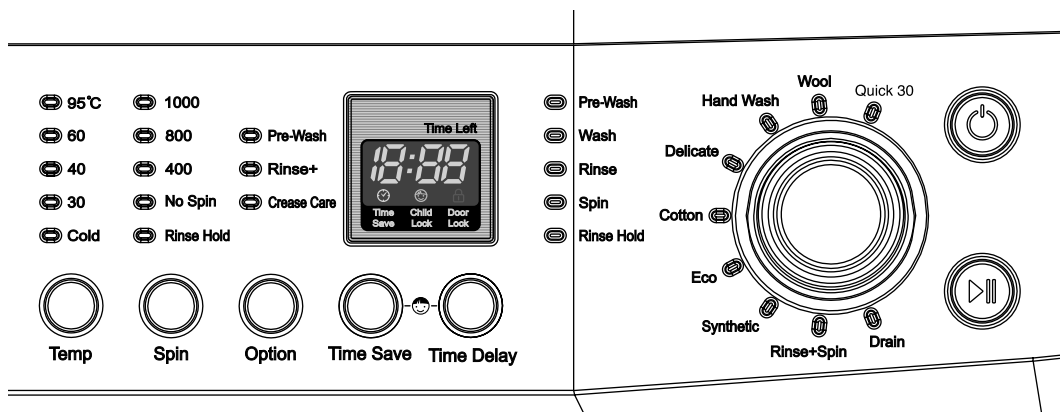
No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
E01	CABINET	3610811100	SGCC, T0.8, PAINTING	1	
E02	SPECIAL SCREW			2	
E03	FRAME UPPER	3612205800	SECC T1.2 55X580	1	
E04	SCREW TAPPING	3616029950	TTS"S" HEX F/L 4X8	4	
E05	FRAME TOP-L	3612205600	SECC T1.6 52x500	1	
E06	FRAME TOP-R	3612205700	SECC T1.6 52x500	1	
E07	STOPPER SPRING	3615202200	POM	2	
E08	COVER BACK	3611425500	0.4T, SGCC	1	
E09	SENSOR PRESSURE	3614825300	5V DRUM DL-DW11 INLET 90	1	
E10	FRAME LOWER	3612205500	SECC T1.2 160X580	1	
E11	BASE U L	3610392200	SECC T1.6 100x500	1	
E12	BASE U R	3610392300	SECC T1.6 100x500	1	
E13	UNIT DRAIN PUMP AS	36189L4F10	220-240V/50Hz B20-6 DRUM	1	
		36189L4E10	220V/60Hz B20-5 DRUM		
E14	CAP WATER REMAIN	3610916800	PP	1	
E15	HOSE WATER REMAIN	3613267800	EPDM, ID8.5, L200	1	
E16	LEG ADJUST AS	3617703800	MFZN M10x1 + BUTYLE	4	
E17	FILTER EMI	3611908300	NOISE FILTER	1	
E18	CUFF DRAIN HOSE	3616802500	PP	1	
E19	GUIDE DRAIN HOSE	3612510400	PP	1	
E20	HOSE DRAIN I AS	3613268400	L=870	1	
E21	CLAMP HOSE	3611204700	ID=27	1	








■ PLATE T AS + PANEL LOWER AS

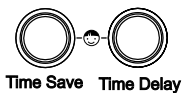


No.	PART NAME	PART CODE	SPECIFICATION	Q'TY	REMARK
F01	FRAME PLATE F	3612205300	ABS	1	
F02	PLATE T	3614532000	WOOD	1	
F03	FRAME PLATE R	3612205400	ABS	1	
F04	SCREW TAPPING	7122401411	T2S TRS 4X14 MFZN	2	
F05	PANEL LOWER	3614282800	ABS	1	
F06	COVER PUMP FILTER	3611425800	ABS	1	

6. FUNCTIONS OF THE CONTROL PANEL



 Power	Power Switch Press this button to turn the power ON or OFF.
 Start/Hold	Start/Hold This button is use to start wash cycle or stop temporarily. When you want to change program in operating, press this button.
 Temp	Temperature Button This button can be used to adjust temperature of water according to types of the load to be washed.
 Spin	Spin Speed Button By pressing this button, the spin speed can be chosen. No Spin If no spin is selected, the washer stops after draining water. Rinse Hold This function leaves clothes in the machine suspended in the water after a rinse without entering into spin.
 Option	Option Button By pressing this button, all option functions may be selected. Pre-Wash If the laundry is heavily soiled, Pre-Wash course is effective. Pre-Wash is available in Cotton and Synthetic. Rinse+ By selecting Rise+ function, the rinse time and the rinse water are increased. Crease Care If you want to prevent crease, select this button with spin speed.
 Time Save	Time Save Button By pressing this button, you can decrease pre-set washing time to 10 minutes. Time save is available in Cotton, Eco and Synthetic.
 Time Delay	Time Delay Button If you want to reserve the finishing time of washing, use this button. If the Time Delay button is pressed, "2:00" is displayed. The maximum delayed time is 12:00 hours and the minimum time is 2:00 hours. Each pressing of the button advances on time delay by one hour.



Child Lock Button

If you want to protect any accident occurring from handling of washer by a child, use this function.

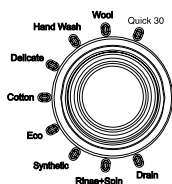
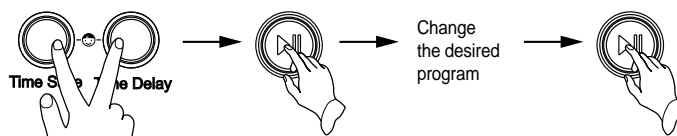
Child Lock can be set by pressing "Time Save" and "Time Delay" buttons simultaneously.

**When Child Lock is set, no button functions except Power button.*

To cancel Child Lock, press "Time Save" and "Time Delay" buttons simultaneously again.

To change to the desired program, while in child lock mode.

1. Press both "Time Save" and "Time Delay" buttons together once again.
2. Press the Start/Hold button.
3. Select the desired program and press the Start/Hold button again.



Program Dial

When Start/Hold button is pressed, the Cotton program is automatically selected.

By turning the Program Dial, the program is selected in order of "Cotton Delicate Hand Wash Wool Quick 30 Drain Rinse+Spin Synthetic Eco"

7. FUNCTIONS OF THE CONTROLLER

■ SEQUENCE CHART

Division		Progress Time	Cotton		Synthetic		Eco		
			S	L	S	L	S	L	
PRE WASH	Sensing	20sec.							
	Water Supply	2min.							
	Pre Wash	10min.							
		8min.							
	Drain	1min.							
	B-Spin	1min.							
	Middle Spin	3min.							
MAIN WASH	Sensing	20sec.	■	■	■	■	■	■	
	Water Supply	2min.	■	■	■	■	■	■	
	Wash 1 (Heating)	90min.							
		35min.							■
		30min.					■	■	
		20min.		■		■	■	■	
		15min.	■	■	■	■	■	■	
	Wash 2	65min.	■	■	■	■	■	■	
		20min.	■	■	■	■	■	■	
		15min.	■	■	■	■	■	■	
	Drain	1min.	■	■	■	■	■	■	
	B-Spin	1min.	■	■	■	■	■	■	
RINSE	Middle Spin	4min.	■	■	■	■	■	■	
	Water Supply	2min.	■	■	■	■	■	■	
	Rinse 1	3min.	■	■	■	■	■	■	
	Drain	1min.	■	■	■	■	■	■	
	B-Spin	1min.	■	■	■	■	■	■	
	Middle Spin	4min.	■	■	■	■	■	■	
	Water Supply	2min.	■	■	■	■	■	■	
	Rinse 2	3min.	■	■	■	■	■	■	
	Drain	1min.	■	■	■	■	■	■	
	B-Spin	1min.	■	■	■	■	■	■	
	Middle Spin	4min.	■	■	■	■	■	■	
	Water Supply	2min.	■	■	■	■	■	■	
	Rinse 3	3min.	■	■	■	■	■	■	
	Drain	1min.	■	■	■	■	■	■	
	B-Spin	1min.	■	■	■	■	■	■	
SPIN	Main Spin	7min.							
		5min.	■	■	■	■	■	■	
		3min.	■	■	■	■	■	■	
	Untangle	2min.	■	■	■	■	■	■	
END	End	10sec.	■	■	■	■	■	■	
Remained Time Display			2:05	2:10	2:05	2:10	2:20	2:25	
NOTE									

Division		Progress Time	Wool	Delicate	Hand Wash	Quick 30	Rinse+Spin	
			S	S	S	S	S	
PRE WASH	Soak	30min.						
	Water Supply	2min.		■	■	■	■	
	Wash 1 (Heating)	60min.						
		50min.						
		35min.						
		30min.						
		15min.					■	
	Wash 2	37min.				■		
		32min.	■	■	■			
		27min.	■	■	■	■		
RINSE	Drain	1min.		■	■	■	■	■
	B-Spin	1min.		■	■	■	■	■
	Middle Spin	4min.		■	■	■	■	■
	Water Supply	2min.		■	■	■	■	■
	Rinse 1	3min.		■	■	■	■	■
	Drain	1min.		■	■	■	■	
	B-Spin	1min.		■	■	■	■	
	Middle Spin	4min.		■	■	■	■	
	Water Supply	2min.		■	■	■	■	
	Rinse 2	3min.		■	■	■	■	
	Drain	1min.				■		
	B-Spin	1min.				■		
	Middle Spin	4min.				■		
	Water Supply	2min.				■		
	Rinse 3	3min.				■		
SPIN	Drain	1min.		■	■	■	■	■
	B-Spin	1min.		■	■	■	■	■
	Main Spin	7min.						
			5min.	■	■	■	■	■
			3min.	■	■	■	■	■
END	Untangle	2min.		■	■	■	■	■
	End	10sec.		■	■	■	■	■
Remained Time Display			1:06	1:06	1:22	1:16	23	
NOTE								

8. FUNCTION OF THE CONVENIENT SERVICE

■ The test mode of the load movement

You can check the PCB ASS'Y and the condition of each load movement simply.

• The method to enter

- ① Press the Power switch button.
- ② Press the Option button 3 times while press the Temp button.
At this time, the version is displayed on the Custom LED
- ③ Each load makes a movement as follows, whenever the Time Delay button is pressed a time.
1200(RPM) → C:H (Cold/Hot option)
→ L C (Lock Close) → H (Hot valve)
→ C (Cold valve) → P (Pre-Wash valve) → bb (bubble)
→ dr (drain pump) → L O (Lock switch Open)

■ The check mode of the water level frequency

You can check the beginning frequency and the frequency by the variation of the water level.

• The method to enter and operate

- ① Press the Power switch button.
- ② Press the Time Delay button 3 times while press the Temp button and the Spin button.
- ③ the beginning display on "18:88 LED" is the current frequency of the water level.

ex) **5 6 2** = 25.62kHz

: It display three number except the first number of 25.62kHz

- ④ When you press the Temp button a time → Cold valve On
2 times → Cold valve Off
3 times → Drain pump On
















9. TROUBLESHOOTING GUIDE

This washing machine is equipped with automatic safety function which detect and diagnose faults at an early stage and react appropriately.

When the machine does not function properly or does not function at all, check the following points.

SYMPTOM	CAUSE	SOLUTION
Rattling and clanking noise	Foreign objects such as coins or safety pins maybe in the drum or pump	Stop washer and check drum and filter.
Thumping sound	Heavy wash loads may produce a thumping sound. This is usually normal.	If sound continues, washer is probably out of balance. Stop and redistribute wash load.
Vibrating noise	Have all the transit bolts and packing been removed?	If not removed during installation. Refer to Installation guide for removing transit bolts.
	Are all the feet resting firmly on the ground?	Wash load may be unevenly distributed in drum. Stop washer and rearrange wash load.
Water leaks.	Inlet hoses or drain hose are loose at tap or washer.	Check and tighten hose connections.
	House drain pipes are clogged.	Unclog drain pipe. Contact plumber if necessary.
Oversudsing		Too much detergent or unsuitable detergent may cause excessive foaming which may result in water leaks.
Water does not enter washer or it enters slowly.	Water supply is not adequate in area.	Check another tap in the inlet house.
	Water supply tap is not completely open.	Fully open tap.
	Water inlet hose is kinked.	Straighten hose.
	The filter of the water inlet is clogged.	Check the filter of the water inlet.
Water in the washer does not drain or drains slowly.	Drain hose is kinked or clogged.	Clean and straighten drain hose.
	The drain filter is clogged.	Clean the drain filter.

SYMPTOM	CAUSE	SOLUTION
Washer does not start.	Electronical power cord may not be plugged in or connection may be loose.	Make sure plug fits tightly in wall outlet.
	House fuse blown, circuit breker tripped, or a power outage has occurred.	Reset circuit breaker or replace fuse. Do not increase fuse capacity. If problem is a circuit overload, have it corrected by a qualified electrician.
	Water supply tap is not turned on.	Turn on water supply tap.
Washer will not spin.	Check that the door is firmly shut.	Close the door and press the Start/Pause button. After pressing the Start/Pause button, it may take a few moments before the clothes washer begins to spin. The door must lock before spin can be achieved. "
Door does not open.		Once started, the door can not be opened for safety reasons. Wait two minutes before opening the door to give the electric locking mechanism time to release.
Wash cycle time delayed		The washing time may vary by the amount of laundry, water pressure, water temperature and other usage conditions. If the imbalance is detected, the wash time shall be increased.

MESSAGE	CAUSE	SOLUTION
	The water tap is closed.	Open the water tap
	The filter of the water inlet is clogged.	Clean the filter of the water inlet.
	The water inlet valve is normal, but the water level sensor is inferior.	Change the water level sensor.
	The drain hose is kinked or clogged.	Clean and straighten the drain hose.
	The drain motor is inferior.	Change the drain motor.
	Wash loads get uneven during spin.	Rearrange wash loads to allow proper spin.
	While the door is opened, the Start/Hold(▶) button is pressed.	Close the door.
	The lock switch is inferior.	Change the lock switch.
	Water overflow due to faulty water inlet valve.	Change the water inlet valve.
	The water inlet valve is normal, but the water level sensor is inferior.	Change the water level sensor.
	The water level sensor is inferior.	Change the water level sensor.
	The PCB ASS'Y is inferior. (the error of over electric current)	Change the PCB ASS'Y.
	The laundry inserted between the gasket and the drum.	Arrange the laundry.
	The motor is inferior.	Change the motor.
	The PCB ASS'Y is inferior. (the error of EMG)	Change the PCB ASS'Y.
	The PCB ASS'Y is inferior. (the error of IGBT)	Change the PCB ASS'Y.
	The drain filter is clogged.	Clean the drain filter.
	The wash thermistor is inferior.	Change the water thermistor.
	The contact part is disconnected.	Check the contact part of the connector.
	The heater works without water in the drum.	Check the water level.
	The wash thermistor is inferior.	Change the water thermistor.
	The water temperature is over 45°C in the wool course.	Change the water thermistor.
	The heater doesn't work.	Change the heater.
	The heater works without water in the drum.	Check the water level.

10. WIRING DIAGRAM

