S/M No.:



Service Manual

Washing Machine

Model: DWD-HD94A2

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.

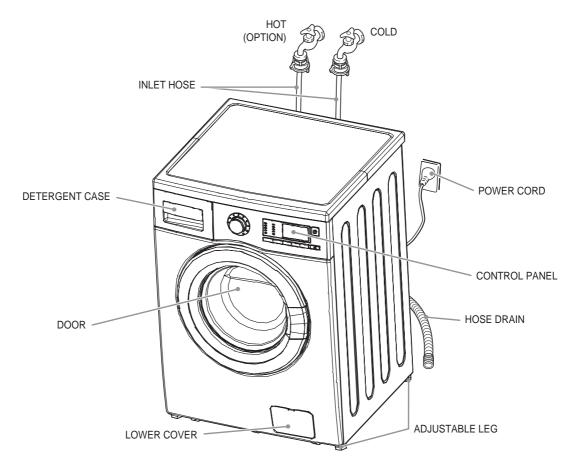
http://svc.dwe.co.kr Jun. 2012

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NASHING MACHINE

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1. SPECIFICATIONS



| MODEL | | DWD-HD94A2 | | |
|--------------------|--------|---|--|--|
| POWER SOURCE | | 220-240V, 50/60Hz | | |
| DiMENSION (WXDXH) | | 595 x 634 x 850 MM | | |
| WEIGHT | | 56kg(NET) / 59(GROSS) | | |
| WATER CONSUMPTION | | 55 l | | |
| POWER CONSUMPTION | | 2200W | | |
| MAXIMUM MASS | WASH | 9 Kg | | |
| OF TEXTILE | SPIN | 9 Kg | | |
| WASHER TYPE | | DRUM TYPE (FRONT LOADING WASHING MACHINE) | | |
| OPERATING WATER PR | ESSURE | 0.3 ~ 8kgf/cm² (29.4 ~ 784kPa) | | |

Accessories

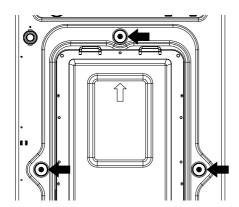
| Inlet hose | Manual | Cap holder(3EA) |
|------------|----------------|-----------------|
| | Morton Andrews | |

■ Transit bolts

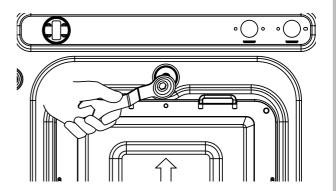
The appliance is fitted with transit bolts to prevent internal damage during transport.

■ Removing transit bolts

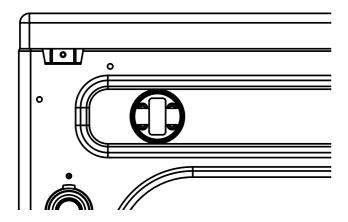
- To prevent internal damage during transport, the special 3 bolts are locked. Before operating the washer, remove the bolts along with the rubber bungs.
 - If they are not removed, it may cause heavy vibration, noise and malfunction.



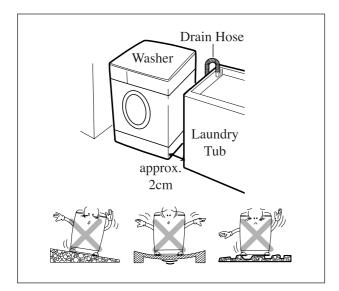
- 2. Unscrew the 3 bolts with the spanner supplied, and take out the 3 bolts with the rubber bungs. Keep the 3 bolts and the spanner for future use.
 - Whenever the appliance is transported, the transit bolts must be refitted.



3. Close the holes with the caps supplied.



■ Installation place requirement



Level floor:

Allowable slope under entire washer is 1°.

Power outlet:

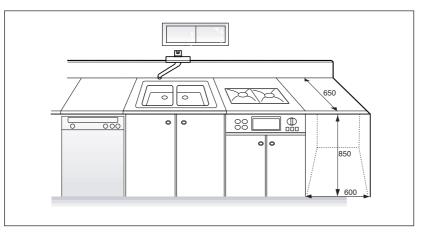
Must be with 1.5 meters of entire side of location of washer. Do not overload the outlet with more than one appliance.

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.



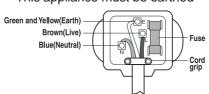
■ BS Plug Safety Details (For U.K. User)

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 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.

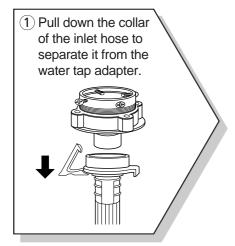
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

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

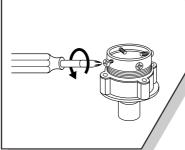
■ Connecting inlet hose

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.

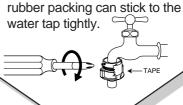
• • • • FOR ORDINARY TAP

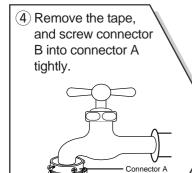


(2) Loosen the four screws properly in order to fit into water tap.

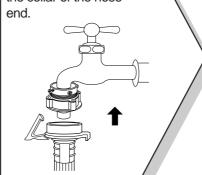


(3) Fit the water tap adapter into the water tap and tighten the four screws evenly while pushing up the adapter so that





(5) Connect the inlet hose to the water tap adapter by pulling down the collar of the hose



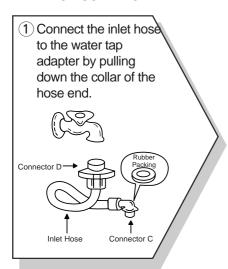
6 Connect the inlet hose adapter of the hose to the water inlet of the washer by turning it clockwise to be fixed tightly.



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

• • • • FOR SCREW-SHAPED TAP

Connector B



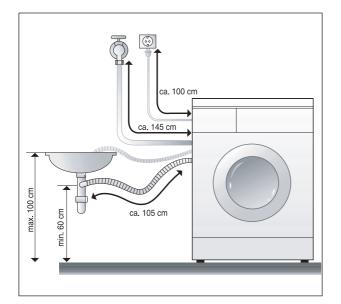
2 Connect the connector-inlet supplied if

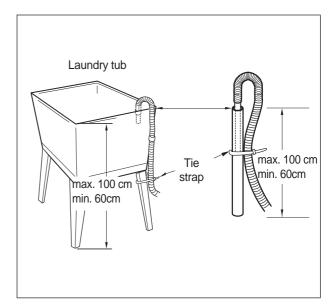
(3) Connect the inlet hose adapter to the water inlet of the washer and turn it to be fixed.



• Check the packing in the inlet.

■ Installation of drain hose





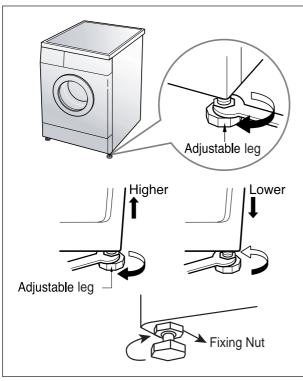
- The drain hose should not be placed higher than 100cm above the floor.
- Proper securing of the drain hose will protect the floor from damage due to water leakage.
- When the drain hose is too long, do not force back in to the washer. This cause abnormal noise.

■ Level adjustment



 The level adjustment of the washing machine prevents excessive noise and vibration.
 Install the washing machine on a solid and even floor surface, if possible, in a corner of the room.

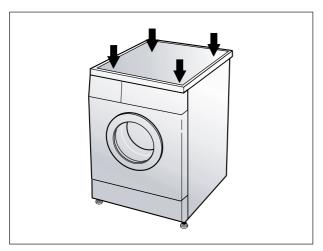
Note: The wooden floor may cause excessive vibration.



2. If the floor is uneven, adjust the adjustable leg as the following.

(Do not insert pieces of wood etc. under legs.)

- Please check whether there is any gap between four adjustable legs and the floor.
- Turn adjustable legs by the enclosed spanner in order to adjust the level of the washing machine.
- Make it sure that there is no swaying of the washing machine and check that the washing machine is even completely. (use a spirit level)
- After the level adjustment is finished, turn fixing nuts up tightly so that the washing machine maintains the adjustment.



* 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 legs 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 methylated 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.

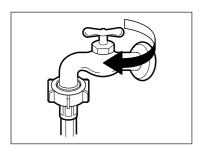
Cold condition

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.
- 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

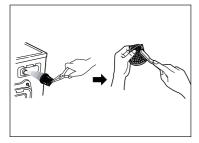
- "IE" error message will blink on the control panel when water does not enter the detergent drawer.
- If your water is very hard or contains traces of lime deposit, the water inlet filter may become clogged.
- It is therefore a good idea to clean it from time to time.



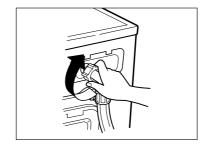
1. Turn off the water tap.



2. Unscrew the water inlet hose.



Clean the filter using a had bristle brush.



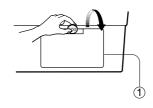
4. Tighten up the inlet hose.

■ Cleaning the drain pump filter

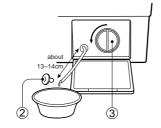
- The drain filter collects threads and small objects left in the laundry.
- Check regularly that the filter is clean to ensure smooth running of your machine.

CAUTION Be careful when draining if the water is hot.

Open the lower cover(1) by using a coin. Turn the cap hose(2) to pull out the hose.
 Pull out the hose maximally. (About 13~14cm.)



2. Unplug the cap hose(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.

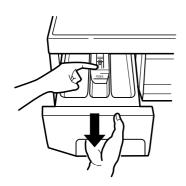


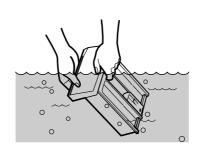
3. Remove any foreign material from the pump filter(3). After cleaning, turn the pump filter clockwise and insert the cap hose(2) to the original place. Close the lower cover.

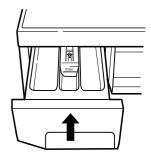


■ Cleaning the detergent case

- * 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 cleanling, 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 gasket clamp.



3) Remove the door lock switch.



2) Remove the gasket from the front cabinet.



4) Remove two screws, and push the door lock switch to the right direction.



HEATER AND THERMISTOR

1) Remove five screws on the COVER B and separate the COVER B from washing machine.



2) Remove the connectors of the HEATER.



3) Remove the nut using the 10mm hex wrench and remove the earth terminal from the HEATER.

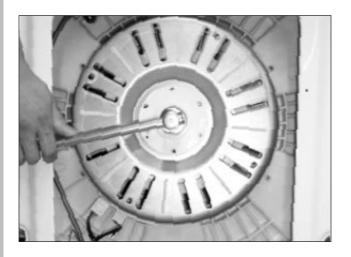


4) Loose the nut of the HEATER and pull out the HEATER.

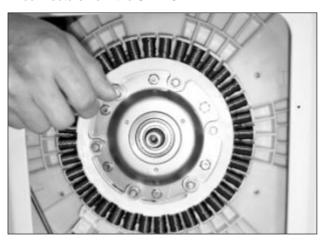


BLDC MOTOR

1) Remove the nut using the 17mm hex wrench.



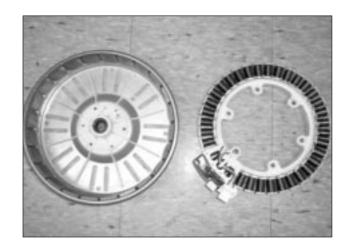
3) Remove six screws using the 10mm hex wrench and connectors from the STATOR.



2) Pull out the ROTOR.



4) Separate the STATOR from the TUB.

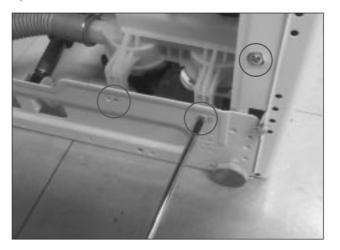


DRAIN PUMP

1) Lay the right side of the washer on the floor.



3) Remove the screws.





2) Remove connectors.

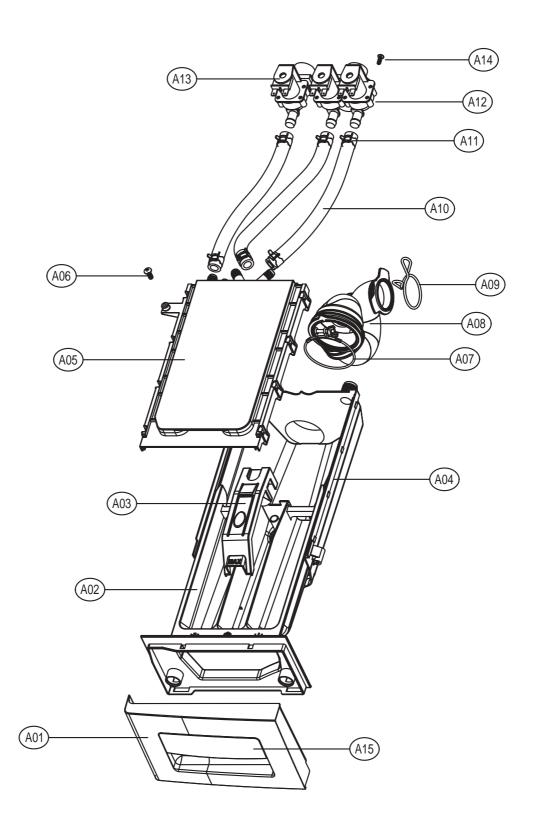


4) Remove the drain hose and the hose water supply.



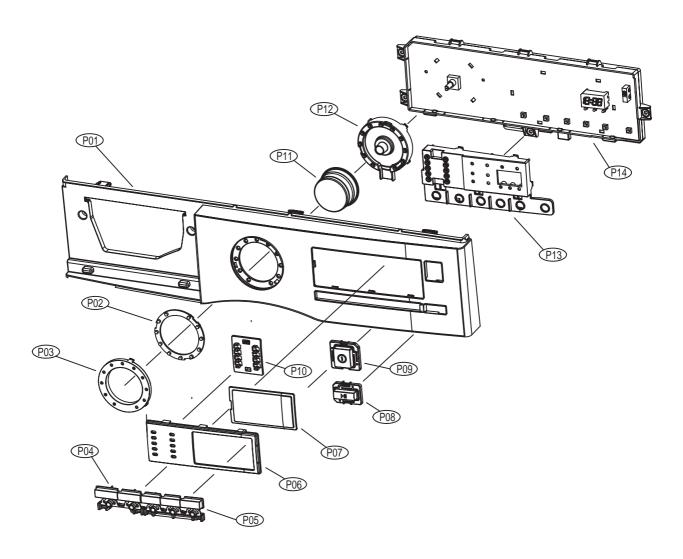
5. EXPLODE VIEW AND PARTS LIST

■ BOX INLET AS



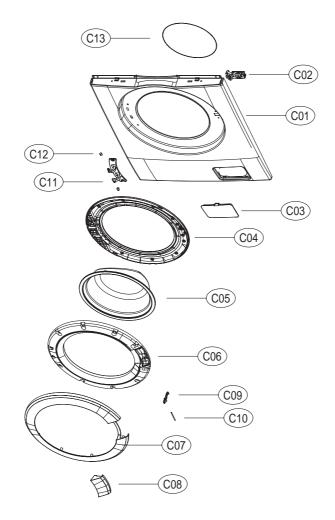
| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|------|---------------------------|------------|------------------------------------|------|----------------|
| A01 | HANDLE CASE (CASE HANDLE) | 36111T3F00 | ABS, D-H'S 1ST | 1 | DWD-HT1011 |
| A02 | CASE DETERGENT | 36111T3G00 | D-H'S 1ST, PP | 1 | D-HT1011 |
| A03 | CAP SOFTENER | 3617512000 | D-FT'S, F1-F7, PP | 1 | |
| A04 | BOX INLET | 3610526500 | PP | 1 | |
| A05 | NOZZLE AS | 3618103300 | PP , NOZZLE T | 1 | |
| 7.00 | NOZZZZ NO | 3618112400 | PP , NOZZLE U | • | |
| A06 | SCREW TAPPING | 7122402011 | T2S TRS 4x20 MFZN | 1 | |
| A08 | HOSE INLET | 3613276600 | EPDM U-TRAP | 1 | |
| A09 | CLAMP HOSE I | 3611201400 | HSW3, D2.6, MFZN, ID=38 | 1 | |
| A10 | HOSE WATER SUPPLY | 3613270900 | EPDM, ID9.5, OD14.5, L=225 | 2(3) | COLD(+HOT) |
| A11 | CLAMP HOSE | 3611205800 | 100H, ID=13.8 W=10.0 0.9T | 4(6) | COLD(+HOT) |
| | | 3615414900 | 220-240V 2-WAY PP/BRACKET | | COLD VALVE |
| A12 | VALVE INET | 3615414910 | 220-240V 2WAY NYLON VDE | 1 | |
| | | 3615416821 | 220-240V.VDE.BITRON.2WAY + DR TECH | | COLD VALVE(EU) |
| A13 | VALVE INLET | 3615414800 | 220-240V,50/60Hz,1WAY | 1 | HOT VALVE |
| A13 | VALVETIVEET | 3615416720 | 220-240 50/60-1WAY,HOT,BITRON,VDE | ' | HOT VALVE(EU) |
| A14 | SCREW TAPTITE | 7272400811 | TT3 TRS 4X8 MFZN | 2(4) | COLD(+HOT) |
| A15 | DECO CASE HANDLE | 36116DWL00 | ABS, D-H'S 1ST | 1 | D-HT1011 |

■ PANEL FRONT AS



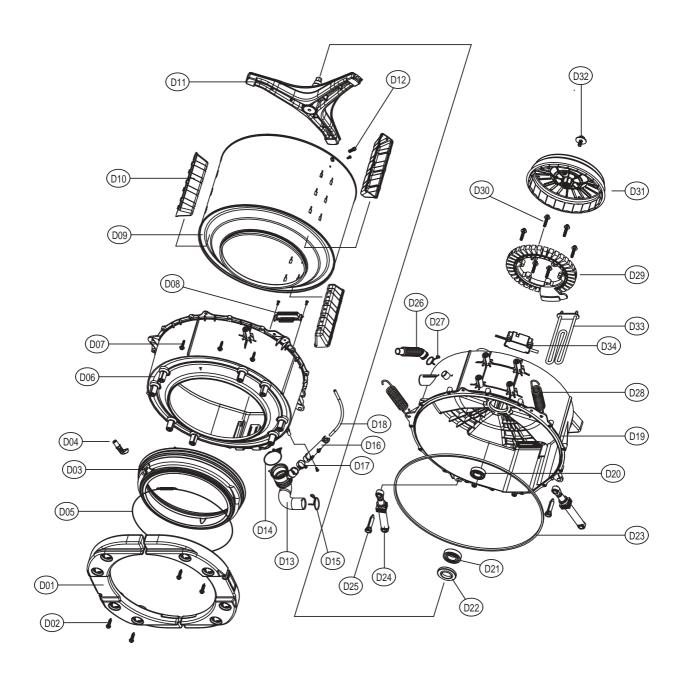
| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|-----|-----------------|------------|-----------------------|------|--------|
| P01 | PANEL F | 36142T4D00 | ABS, D-H'S 1ST | 1 | |
| P02 | DECO WINDOW | 36116DWM00 | ABS, D-H'S 1ST | 1 | |
| P03 | DECO COURSE | 36116DWN00 | ABS, D-H'S 1ST | 1 | |
| P04 | BUTTON OPTION | 3616650000 | ABS, D-H'S 1ST | 1 | |
| P05 | BUTTON FUNCTION | 3616650100 | ABS, D-H'S 1ST | 1 | |
| P06 | WINDOW COURSE | 3615512800 | ABS, D-H'S 1ST | 1 | |
| P07 | WINDOW DISPLAY | 3615512700 | ABS(TR558), D-H'S 1ST | 1 | |
| P08 | WINDOW FUNCTION | 3615512600 | ABS(TR558), D-H'S 1ST | 1 | |
| P09 | BUTTON START | 3616650200 | ABS, D-H'S 1ST | 1 | |
| P10 | BUTTON POWER | 3616650300 | ABS, D-H'S 1ST | 1 | |
| P11 | KNOB DIAL | 3613409700 | ABS, D-H'S 1ST | 1 | |
| | DECO KNOB DIAL | 36116DWP00 | ABS, D-H'S 1ST | 1 | |
| P12 | HOLDER COURSE | 3613065800 | HIPS, D-H'S 1ST | 1 | |
| P13 | HOLDER FUNCTION | 3613065700 | HIPS, D-H'S 1ST | 1 | |
| P14 | PCB AS | PRPSSWJ00V | HD94A2 | | 1 |

■ CABINET FRONT AS



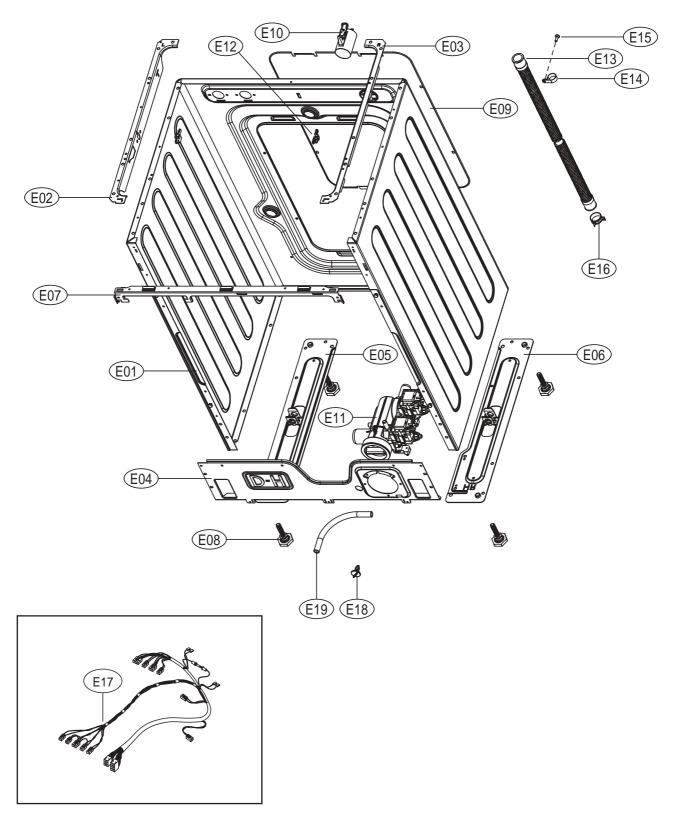
| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|-----|------------------|------------|----------------------|------|--------|
| C01 | CABINET F | - | D-HT's/HD's | 1 | |
| C02 | SWITCH DOOR LOCK | 3619047100 | | 1 | |
| | SCREW TAPPING | 7122401208 | T2S TR4*12 SUS | 2 | |
| C03 | COVER PUMP | 3611433400 | ABS, D-H'S | 1 | |
| C04 | FRAME DOOR I | 36122WD600 | PP, D-H'S | 1 | |
| | SCREW TAPPING | 7115402008 | T1S FLT4*20 SUS | 13 | |
| C05 | DOOR GLASS | 361A11070T | GLASS PI300 M,F | 1 | |
| C06 | FRAME DOOR O | 36122WD700 | ABS, D-H'S | 1 | |
| C07 | DECO FRAME DOOR | 36116DWK00 | ABS, D-H'S | 1 | |
| C08 | HANDLE DOOR | 3612614700 | ABS, D-H'S | 1 | |
| C09 | HOOK DOOR | 3613101900 | ZNDC, D-H'S | 1 | |
| C10 | PIN HANDLE | 3618200210 | SUS304, D3, L53 | 1 | |
| | SPRING HOOK | 3615119600 | SUS D1.4 | 1 | |
| C11 | HINGE DOOR | 3612904700 | ALDC, D-H'S | 1 | |
| C12 | CAP HINGE DOOR | 3610916500 | POM | 1 | |
| | SCREW TAPPING | 3616030000 | F/T BOLT(SE)5*12 SUS | 2 | |
| | NUT HEX | 7S627W50X1 | | 2 | |
| C13 | CLAMP DOOR AS | 3611204810 | HSW3, D=1.4 GS | 1 | |

■ TUB ASS'Y



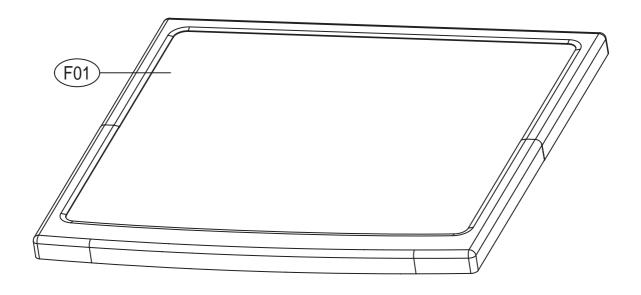
| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|-----|-------------------------|------------|---|------|--------|
| - | TUB AS | | D-F1D14XXEPB | 1 | |
| D01 | BALANCER WEIGHT F L/R | 3616106320 | D-FD14 5.5KG | 2 | |
| D02 | SPECIAL SCREW | 3616029400 | SWCH 8.5X30 | 8 | |
| D03 | GASKET | 3612327600 | EPDM | 1 | |
| D04 | NOZZLE SHOWER | 3618113200 | PP | 1 | |
| D05 | CLAMP GASKET AS | 3611204530 | HSW3, F'S WIRE L1060 | 1 | |
| D06 | TUB *F | 3618821010 | FRPP FH7304GM | 1 | |
| D07 | SPECIAL SCREW | 3616029800 | SWCH 6.5X30 | 14 | |
| D08 | FIXTURE HEATER | 3612007310 | SUS 304 0.7T 440X45 | 1 | |
| D09 | DRUM SUB AS | 3617004050 | D-H, F'S STAR DRUM | 1 | |
| D10 | LIFTER WASH | 361A400410 | PP D-F'S NANO | 3 | |
| D11 | SPIDER AS | 361A300510 | 1400RPM, SERRATION | 1 | |
| D12 | SPECIAL SCREW | 3616029500 | SUS430 8*25 | 3 | |
| D13 | HOSE DRAIN | 3613267300 | EPDM | 1 | |
| D14 | CLAMP AS | 3611203210 | ID=61, WIRE+GUIDE+BOLT, GS | 1 | |
| D15 | CLAMP HOSE | 3611201401 | HSW3,YW,D2.6,ID36,W44.5 | 1 | |
| D16 | AIR TRAP | 361A500101 | PP | 1 | |
| D17 | CLAMP HOSE | 3611204700 | D26 | 1 | |
| D18 | HOSE AIR | 3613268600 | ID=4,OD=8, L=580 | 1 | |
| D19 | TUB REAR AS | 36100E2U10 | D-FD14 | 1 | |
| D20 | BEARING INNER | 3616303100 | F,L,E,U,6206Z | 1 | |
| D21 | BEARING OUTER | 3616303200 | F,L,E,U,6205Z | 1 | |
| D22 | WATER SEAL | 361A600100 | NBR | 1 | |
| D23 | GASKET TUB | 3612321601 | EPDM L1600(-0~ +10) | 1 | |
| D24 | DAMPER FRICTION | 361A700121 | 120N CIMA ST=170-260 DL=197.5 LOW NOISE | 2 | |
| D25 | DAMPER PIN | 361A700200 | AKS D=14.5 | 2 | |
| D26 | HOSE VENT | 3613267100 | EPDM | 1 | |
| D27 | CLAMP HOSE | 3611204700 | D26 | 1 | |
| D28 | SPRING SUSPENSION(DD) | 3615115310 | D6K FD D=3.2,L=164,K=0.477 YELLOW | 2 | |
| D29 | UNIT STATOR BLDC | 36189L621A | AL,DON1000W 18T 36POLE,NMT,PBT | 1 | |
| D30 | SPECIAL BOLT AS(STATOR) | 3616029920 | SWCH M8+SILOCK,35MM,DONGSEO | 6 | |
| D31 | UNIT ROTOR BLDC | 36189L6310 | DON1000W SR-FERRITE12,18T,NMT | 1 | |
| D32 | SPECIAL BOLT AS(ROTOR) | 3616029620 | SWCH 10*30 S/W P/W NON-SEAL LOCK | 1 | |

■ CABINET AS



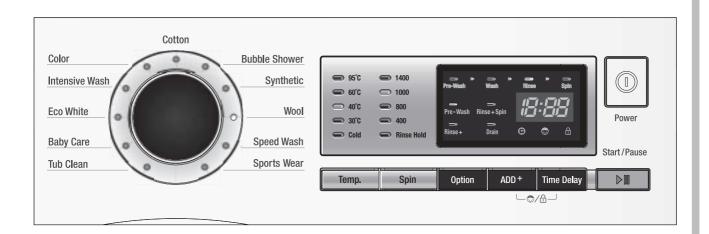
| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|-----|--------------------|------------|------------------------------|------|--------|
| E01 | CABINET | 3610811101 | D-F's | 1 | |
| E02 | FRAME TOP *L | 36122UDY00 | SGCC 1.2T, FT1081 | 1 | |
| E03 | FRAME TOP *R | 36122UDZ00 | SGCC 1.2T, FT1081 | 1 | |
| E04 | FRAME LOWER | 36122WD500 | SGCC T1.0 | 1 | |
| E05 | BASE UNDER *L | 3610395000 | SGCC T1.6 100X500 | 1 | |
| E06 | BASE UNDER *R | 3610395100 | SGCC T1.6 | 1 | |
| E07 | FRAME UPPER | 36122UE000 | SGCC 1.0T, FT1081 | 1 | |
| E08 | LEG ADJUST AS | 3617703811 | CHINA PARTS, DWD-900W | 4 | |
| E09 | COVER BACK AS | 361142552T | COVER BACK+CUSHION | 1 | |
| E10 | EMI FILTER | 3611908820 | DPC D-FT1081 2X0.47UP(X2), | 1 | |
| | | | 2X1500PF(Y2),BODY CHANGE | | |
| E11 | UNIT DRAIN PUMP AS | 3618980000 | D-H's PUMP,LELLI,220~240V, | 1 | |
| | | | 35W ,DPH5 ,WIRE TYPE | | |
| E12 | STOPPER SPRING | 3615202200 | POM, DWD-100DR | 2 | |
| E13 | HOSE DRAIN *O | 3613268210 | L=1800 HOSE+CUFF(ST) D-MU80 | 1 | |
| E14 | CLAMP HOSE | 3611206410 | NYLON, DA-16N, ID21.9 D-MU80 | 1 | |
| E15 | SCREW TAPPING | 7122401411 | T2S TRS 4X14 MFZN | 1 | |
| E16 | CLAMP HOSE | 3611204701 | DI=26 | 1 | |
| E17 | HARNESS AS | 3612796100 | D-HD'S,FULL OPTION(C.PUMP) | 1 | |
| E18 | CAP WATER REMAIN | 3610916800 | PP | 1 | |
| E19 | HOSE WATER REMAIN | 3613268700 | EPDM,ID=8.5, L200 | 1 | |

■ PLATE T AS



| No. | PART NAME | PART CODE | SPECIFICATION | Q'TY | REMARK |
|-----|---------------|------------|-------------------|------|--------|
| F01 | PLATE TOP AS | 3614543400 | D-H'S 1ST | 1 | |
| - | SCREW TAPPING | 7122401411 | T2S TRS 4*14 MFZN | 2 | |

6. FUNCTIONS OF THE CONTROL PANEL



| Power | Power Buttor Press this butt | n ton to turn the power ON or OFF. |
|-------------|--|--|
| Start/Pause | | Button use to start wash cycle or stop temporarily. nt to change program in operating, press this button. |
| Temp. | Temperature This button ca | n be used to adjust temperature of water according to types of the |
| Spin | Spin Speed E By pressing th Rinse Hold Spin only | Button is button, the spin speed can be chosen. This function leaves clothes in the machine suspended in the water after a rinse without entering into spin. If you want only spin, you can operate spin only. |
| Option | Pre-Wash Rinse+ | n is button, all option functions may be selected. If the laundry is heavily soiled, Pre-Wash course is effective. Pre-Wash is available in Cotton and Synthetic. By selecting Rinse+ function, the rinse time and the rinse water are increased. If you want to prevent crease, select this button with spin speed. |

| ADD+ | ADD+ 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. |
| ADD+ Time Delay | Child Lock Button If you want to protect any accident occuring from handling of washer by a child, use this function. Child Lock can be set by pressing 'Time Save' and 'Time Delay' buttons simultaneously during 2~3seconds. * When Child Lock is set, no button functions except Power button. To cancel Chid 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/Pause button. 3. Select the desired program and press the Start/Pause button again. Change the desired program and press the Start/Pause button again. |
| Color Intensive Weath Eco White Balty Care Tab Clean Color Symbetic Symbetic Speed Weath Sports Wear | Program Dial When Start/Pause button is pressed, the Cotton program is automatically selected. By turning right the Program Dial, the program is selected in order of 'Cotton ↔ Hand Wash ↔ Delicate ↔ Wool ↔ Quick 30 ↔ Drain ↔ Rinse+Spin ↔ Eco ↔ Synthetic'. |

7. FUNCTIONS OF THE CONTROLLER

■ Sequence Chart

| | Division | Progress Time | Synt | hetic | Intensive | Baby care | E | co |
|-------------------------|--------------|---------------|-------|-------|-----------|-----------|-------|-----|
| | DIVISION | Frogress rime | Small | Low | Low | High | Small | Low |
| Р | Sensing | 20sec. | | | | | | |
| R | Water Supply | 2min. | | | | | | |
| E | Pre Wash | 10min. | | | | | | |
| $_{\sf N}$ $lacksquare$ | | 8min. | | | | | | |
| Ä | Drain | 1min. | | | | | | |
| s 🗀 | B-Spin | 1min. | | | | | | |
| н 🗀 | Middle Spin | 3min. | | | | | | |
| | Sensing | 20sec. | | | | | | |
| | Water Supply | 2min. | | | | | | |
| M – A | Wash 1 | 70min. | | | | | | |
| ì | (Heating) | 35min. | | | | | | |
| N | | 30min. | | | | | | |
| W A S | | 20min. | | | | | | |
| | | 15min. | | | | | | |
| | Wash 2 | 123min. | | | | | | |
| H | | 83min. | | | | | | |
| | | 33min. | | | | (18 min) | | |
| | | 23min. | | | | | | |
| | Drain | 1min. | | | | | | |
| | B-Spin | 1min. | | | | | | |
| | Middle Spin | 4min. | | | | | | |
| - | Water Supply | 2min. | | | | | | |
| | Rinse 1-1 | 3min. | | | | | | |
| | Drain | 1min. | | | | | | |
| | B-Spin | 1min. | | | | | | |
| <u> </u> | Middle Spin | 4min. | | | | | | |
| R ⊨ I ⊨ | Water Supply | 2min. | | | | | | |
| N | Rinse 1-2 | 3min. | | | | | | |
| s L | Drain | 1min. | | | | | | |
| E L | B-Spin | 1min. | | | | | | |
| | Middle Spin | 4min. | | | | | | |
| | Water Supply | 2min. | | | | | | |
| | Rinse 2 | 3min. | | | | | | |
| | Drain | 1min. | | | | | | |
| | B-Spin | 1min. | | | | | | |
| | Middle Spin | 4min. | | | • | | | |
| L | Water Supply | 2min. | | | | | | |
| | Rinse 3 | 3min. | | | | | | |
| s | Drain | 1min. | | | | | | |
| о Р – | B-Spin | 1min. | | | | | | |
| i | Main Spin | 24min. | | | | | | |
| N | | 20min. | | | 1 | | | |
| | | 7min. | | | - | • | | |
| ND | Untangle | 2min. | | | - | - | | |
| - | End | 10sec. | | | | | | |

NOTE

1. ECO 코스는 기본적으로 물온도가 60도가 선택되지만 실제로 물온도가 50도가 되면 세탁히터를 OFF 한다.

| Division | | Progress Time | | Wool To | Tub Clean | Color | Sports wear | Bubble Shower | Speed Wash | Rinse + Spin |
|----------|-----------------------|----------------|--------|----------|-----------|-------|----------------|------------------|---------------|----------------------|
| | | | | Small | Low | Small | Low | Small | Small | Low |
| | Soak | 30min. | | | | | | | | |
| M | Water Supply | 2min. | | | | | | | ■ (1m | nin.) |
| A | Wash 1 | 60min. | | | | | | | | |
| I N | (Heating) | | 50min. | | | | | | | |
| IN | | | 30min. | | | | | | | |
| w | | | 20min. | | | | | | | |
| Α | | | 5min. | (20min.) | | | | | | |
| S | Wash 2 | | 23min. | | | | | | | |
| н | | | 13min. | | | | | | | |
| | | | 5min. | | | | | | | |
| | Drain | | 1min. | | | | | | | |
| | B-Spin | | 1min. | | | | | | | |
| | Middle Spin | 4min. | | | | | | | | |
| | Water Supply | 2min. | | | | | | | ■ (1m | nin.) \blacksquare |
| | Rinse 1 | 3min. | | | | | | | | |
| R | Drain | 1min. | | | | | | | | |
| l iì l | B-Spin | 1min. 4min. | | | | | | | | |
| N | Middle Spin | | | | | | | | | |
| S | Water Supply | 2min. | | | | | | | ■ (1m | nin.) |
| E | Rinse 2 | 3min. | | | | | | | | |
| | Drain | | 1min. | | | | | | | |
| | B-Spin | 1min. | | | | | | | | |
| | Middle Spin | | 4min. | | | | | | | |
| | Water Supply | 2min. | | | | | | | | |
| | Rinse 3 | 3min. | | | | | | | | |
| | Drain | 1min. | | | | | | | | |
| S | B-Spin | 1min. | | | | | | | | |
| P | Main Spin | | 7min. | | | | | | | |
| l 'n | | | 5min. | | | | | | | |
| ' | | | 3min. | | | | | | | |
| END | Untangle | | 2min. | | | | | | | |
| ובואט | End | | 10sec. | | | | | | | |
| | Remained Time Display | | | 56 | 59 | 59 | 49 | 1:30 | 33 | 23 |

NOTE

- 1. Speed wash 코스에서는 헹굼후 중간탈수를 하지 않고 배수행정만 진행한다.
- 2. 울, 란제리, 손세탁 코스의 본탈수 기본 RPM은 450RPM이다.

8. FUNCTION OF THE CONVENIENT SERVICE

■ The test mode of the operation

You can check the PCB AS and the operation of the washing machine simply.

• The method to test and operate

- 1 Press the Power 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) Whenever the Time Delay button is pressed, the washing machine is operated as following.
 - L C (Lock Switch Close) → run/OO (The number of running times)
 - \rightarrow E5/OO \rightarrow E6/OO \rightarrow E7/OO \rightarrow E8/OO (The number of the error occurrence)
 - → H (Hot Valve) → C (Cold Valve) → P (Pre-Wash Valve)
 - \rightarrow bb (Bubble) \rightarrow dr (Drain Pump)
 - → C:H or C:-- (Cold & Hot Option)
 - → nPC or PC or etc. (PCB Option) → L_O (Lock Switch Open)
 - \rightarrow L_C \rightarrow ··· (repetition)

■ The check mode of the water level frequency

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

The method to test and operate

- (1) Press the Power button.
- (2) Press the Time Delay button 3 times while press the Temp button and the Spin button.
- (3) The water level frequency of the current state displays on "18:88 LED".

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

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

- (4) Whenever the Temp button is pressed, the washing machine is operated as following. Cold Valve Off (Initial state)
 - → Cold Valve On
 - → Hot Valve On
 - → Pre-Wash Valve On
 - → Bubble Pump On
 - → Drain Pump On
 - → ... (repetition)

■ The spinning test mode

You can continually spin the washing machine with constant speed.

• The method to test and operate

- 1 Press the Power button.
- 2 Press the Time Save button 3 times while press Temp button.
- (3) '400' displays on '18:88 LED'. 400 means the spinning rpm. You can adjust the spinning rpm by pressing Spin button.

And this value increases by 50 up to 1400.

(4) When press Start button, the washing machine continually operates with given spinning rpm.

■ The durability test mode

You can repetitively operate the washing machine with one course.

• The method to test and operate

- 1 Press the Power button.
- (2) Press the Time Delay button 3 times while press Temp button.
- (3) 'd3' displays on '18:88 LED'. You can select the course by using Program Dial, Temp button, Spin button, Option and Time Save button.
- (4) When press Start button, the washing machine repetitively operates with selected course.

9. TROUBLESHOOTING GUIDE

This wahing 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 fuction at all, check the following points.

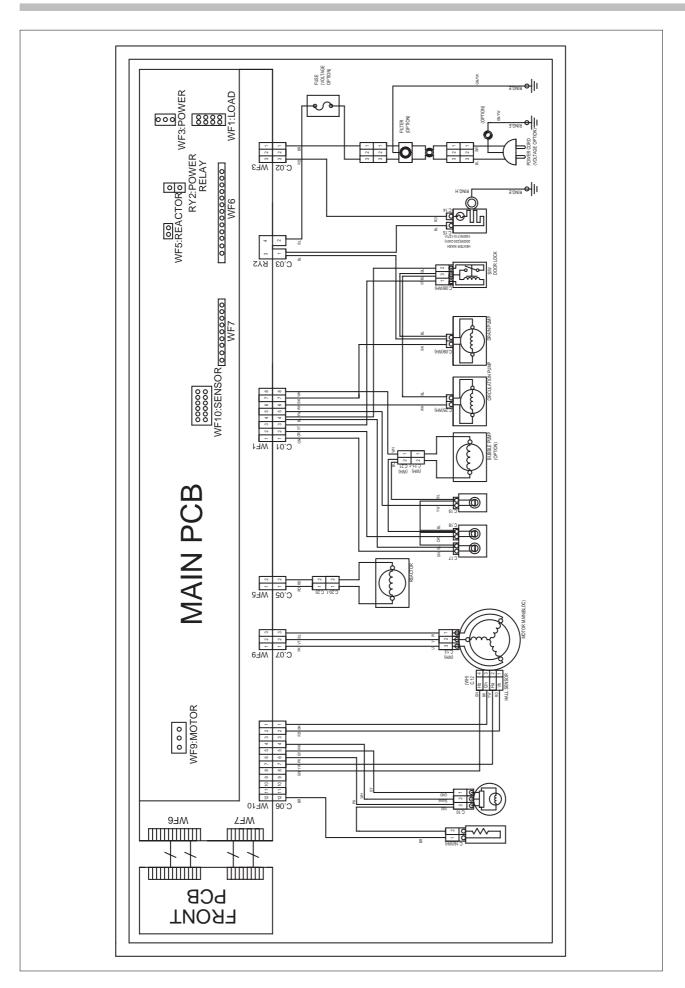
| SYMPTOM | CAUSE | SOLUTION |
|------------------------------|---|---|
| Rattling and clanking noise. | Foreign objects such as coins or safety pins maybe in the drum or pump. | Stop washer and check drum and filter. |
| Thumping sound. | Heavy wash loads may produce a thumping sound. This is usually 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 removes 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 | Water supply is not adequate in area. | Check another tap in the inlet house. |
| washer or it enters slowly. | 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 | Drain hose is kinked or clogged. | Clean and straighten drain hose. |
| not drain or drains slowly. | 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 breaker 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 begines 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. |
| The washer will stop during spinning . Spinning is insufficient. | PFE error due to much detergent and unsuitable detergent. | If PFE error mode was displayed on the control part, in order to solve this problem, first turn off the power of the washing machine, second turn on the power pressing Power button, third press SPIN button and last press Start/Pause button. |

| MESSAGE | ERROR | CAUSE | SOLUTION | |
|---------|--|--|--|-----------------------------------|
| IE | | The water tap is closed. | Open the water tap. | |
| | WATER INLET - ERROR | The filter of the valve inlet is clogged. | Clean the filter of the valve inlet. | |
| | | The valve inlet is an inferior product or broke down. | Change the valve inlet. | |
| | | The water level sensor (sensor pressure) is an inferior product | Change the water level sensor | |
| | LITTOIT | or broke down. | (sensor pressure). | |
| | | The drain motor works during water supply. | Change the drain motor. | |
| | | The PCB ASS'Y does not check the water level. | Change the PCB ASS'Y. | |
| | | The drain hose is kinked or clogged. | Clean and straighten the drain hose. | |
| | | The drain motor is an inferior product. | Change the drain motor. | |
| OE | DRAIN ERROR | The valve inlet works during drain. | Change the valve inlet. | |
| | | The water level sensor is an inferior product. | Change the water level sensor. | |
| | | The PCB ASS'Y does not check the water level. | Change the PCB ASS'Y. | |
| UE | UNBALANCE ERROR | The laundry is concentrated to one side of the drum during spin. | Rearrange the laundry. | |
| | | The Start/Pause button is pressed while the door is opened. | Close the door. | |
| LE | DOOR OPEN ERROR | The switch door lock is an inferior product. | Change the switch door lock. | |
| | LITTOIT | The PCB ASS'Y does not check the door lock. | Change the PCB ASS'Y. | |
| | OVERFLOW ERROR | The water is supplied continuously due to an inferior valve inlet. | Change the valve inlet. | |
| | | The valve inlet is normal, but the water level sensor | Change the water level sensor | |
| E2 | | (sensor pressure) is inferior. | (sensor pressure). | |
| | | The drain motor does not work. | Change the drain mater | |
| | | (The drain motor is an inferior product or broke down.) | Change the drain motor. | |
| E4 | LEAKAGE ERROR | Water leaks from the tub or the hose drain. | Check the leak of the tub or the hose drain. | |
| | | | Then change the tub or the hose drain. | |
| E5 | HIGH VOLTAGE ERROR | The laundry is jammed between the gasket and the drum. | Rearrange the laundry. | |
| _ E3 | | The PCB ASS'Y is an inferior product. | Change the PCB ASS'Y. | |
| | EMG ERROR | The laundry is jammed between the gasket and the drum. | Rearrange the laundry. | |
| E6 | | The motor is an inferior product. | Change the motor. | |
| | | The PCB ASS'Y is an inferior product. | Change the PCB ASS'Y. | |
| | MOTOR ERROR | | The motor is not normally connected. | Check the connector of the motor. |
| E8 | | | Change the motor. | |
| | | (The motor is an inferior product or broke down.) | Change the motor. | |
| E9 | SENSOR PRESSURE ERROR The water level sensor is an inferior product. | | Change the water level sensor. | |
| 110 | THERMISTOR WASH ERROR | The thermistor wash is an inferior product or broke down. | Change the thermistor wash. | |
| H2 | | The thermistor wash is not connected normally. | Check the connector of the thermistor wash. | |
| H4 | THERMISTOR WASH OVERHEATING ERROR | The heater worked without the water in the tub. | Check the water level. | |
| . i=f | | The thermistor wash is an inferior product or broke down. | Change the thermistor wash. | |

| MESSAGE | ERROR | CAUSE | SOLUTION | | |
|---------|--|---|--|--|--|
| H5 | WATER TEMP. ERROR | The water temp. is over 45°C in delicate & wool course. | Change the thermister week | | |
| ПЭ | | (The thermistor wash is an inferior product or broke down.) | Change the thermistor wash. | | |
| H6 | HEATER WASH ERROR | The heater wash dose not work. | Change the hasterwash | | |
| 110 | | (The water temp. doesn't rise over 2°C during 15min.) | Change the heater wash. | | |
| H8 | HEATER WASH OVERHEATING ERROR | The heater worked without the water in the tub. | Check the water level and the heater wash. | | |
| lb | IGBT ERROR | The PCB ASS'Y is an inferior product. | Change the PCB ASS'Y. | | |
| | PUMP FILTER ERROR | The drain pump filter is clogged. | Clean the drain pump filter. | | |
| PFE | | The drain pump does not work during spin. | Change the drain pump. | | |
| | | The large amount of detergent was used. | Use the proper amount of detergent. | | |
| | | The drain hose is placed higher than 1m above the floor. | Place the drain hose 1m below the floor. | | |

10. WIRING DIAGRAM





DAEWOO ELECTRONICS CORP.

1-2, Jeo-dong 1(iI)-ga, Jung-gu, Seoul, Korea C.P.O. BOX 8003 SEOUL, KOREA TELEX: DWELEC K28177-8 CABLE: □AEWOOELEC"

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ABOUT THIS MANUAL

VISION CREATIVE, INC.

서울 종로구 통의동 6번지 이룸빌딩 4층

| 담 당 | } | 이재우 님 |
|-------|--------------|------------------|
| MODEL | - | DWD-HD1411 (S/M) |
| 접 수 | _ | 2012.06.13 |

MEMO 총 35p

12.06.13-표지, 2p, 11p, 12p, 15p, 18p, 19p, 21p, 23p, 24p, 33p_ 신규 11p

연락처

VISION 담당

방 문 수

TEL: 730-0660 FAX: 730-3788