

## Service Manual

### Washing Machine

**Model: D-NT1021**

**D-NT1022**

**D-NT1023**

**D-NT1221**

**D-NT1222**

**D-NT1223**

#### ✓ **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>).



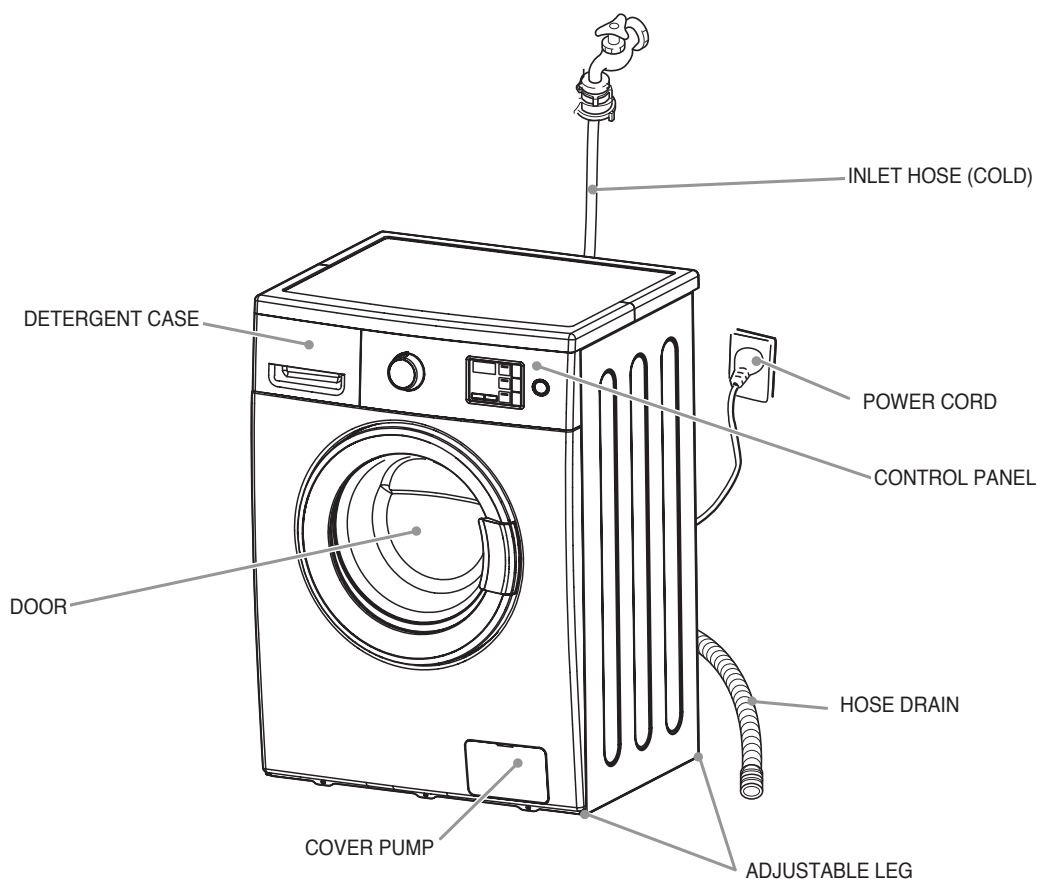
**Dongbu Daewoo Electronics**

Sep. 2014

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# 1. SPECIFICATIONS



| MODEL                          | D-NT102* / NT122*   |
|--------------------------------|---|
| Power Source                   | A.C 220-240V/50Hz   |
| Power Consumption              | 2000 W  |
| Dimension (mm)                 | NET : 595X465X850 (WXDXH)   |
| Maximum mass of textile (kg)   | 7 kg  |
| Unit Weight (kg)               | 55(NET) / 58(GROSS)   |
| Standard Water Consumption     | 45 ℓ  |
| Spin Speed(RPM)                | 400 / 600 / 800 / 1000 / 1200 (NT122*)                            |
| Operating Water Pressure       | 0.05MPa ~ 0.8MPa (0.5kgf/cm <sup>2</sup> ~ 8kgf/cm <sup>2</sup> ) |
| Off Mode Power Consumption     | 0.11 W  |
| Left-on Mode Power Consumption | 0.49 W  |

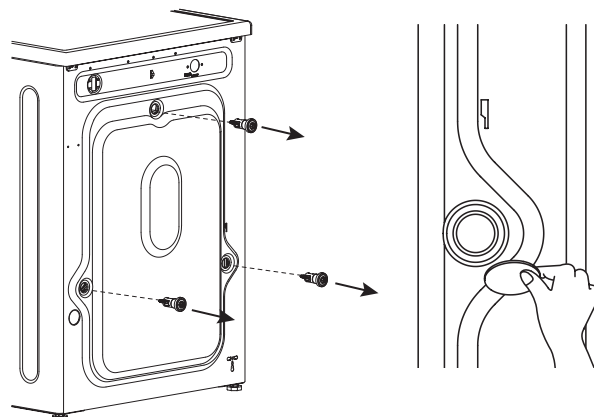
## ■ Accessories

| Inlet hose | Manual | Sticker holder (3EA) | Guide Hose Drain (Option) |
|------------|--------|----------------------|---------------------------|
|            |        |                      |                           |

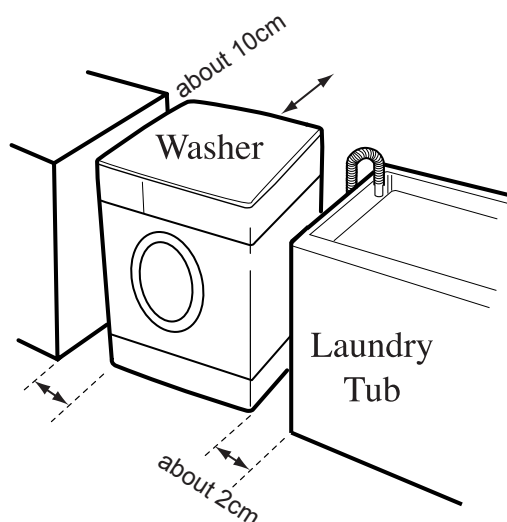
## 2. INSTALLATION

### ■ Removing transit bolts

1. Before operating the washer, remove the transit bolts(3ea) along with the rubber.
  - If the bolts are not removed, it may cause heavy vibration, noise and malfunction.
2. Unscrew the 3 bolts with the 10mm hex wrench or spanner or cross-tip screwdriver. Keep the 3 bolts for a later time.
  - When the appliance is transported, transit bolts will be re-used.
3. Close the holes with sticker holders supplied.



### ■ Installation place requirement



- Level floor :  
Allowable slope between the washer and floor is 1°.
- Electric outlet :  
Must be with 1meter of either side of the washer.  
Do not overload the outlet with more than one appliance.
- Additional clearance  
Clearance between the washer and the wall is required.  
(rear : about 10cm, left & right : about 2cm)  
In case of built-in installation, the clearance between the top of the washer and the under of the work-top is required.  
(top : about 2cm)

### ■ Location of washer

Make sure that you have to do everything necessary for correct installation.

Install the washer on a solid and flat floor, if possible, in a corner of the room and the easily accessible place for an engineer.

- Before placing the washer, if installed on tiles, apply a rubber mat under the adjustable leg.
- The washer must not be installed or stored in rooms below 0°C to avoid any damage from freezing.
- Do not insert pieces of wood, cardboard or similar materials under the adjustable leg to correct any unevenness.
- Do not place laundry products on top of the washer at all times.
- An air circulation around the washer must not be obstructed by carpets, rug etc.

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

### IMPORTANT

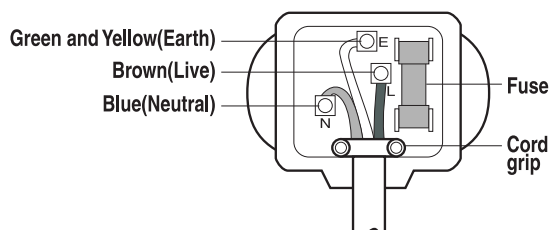
THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

**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.

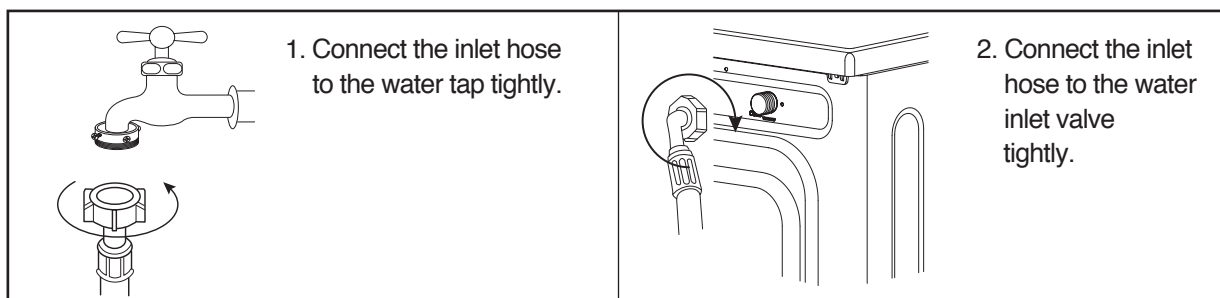
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black.

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

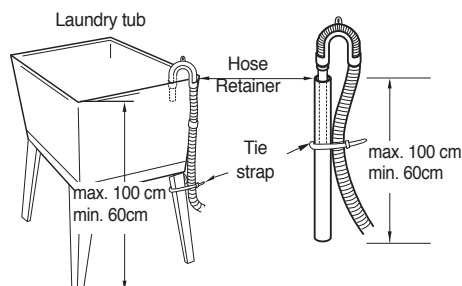
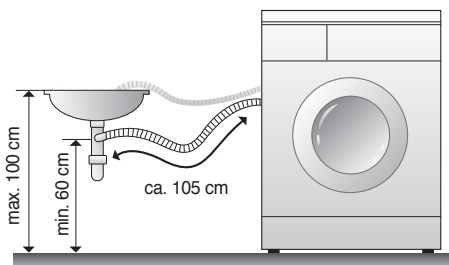
- The washer should be connected to the water mains using new hose set and old hose sets should not be reused.
- In case of only one water inlet valve, connect the inlet hose to the cold water tap.



- Periodically check the tightness of the inlet hose.
- Make sure that the inlet hose is not kinked or folded and that it is not crushed.

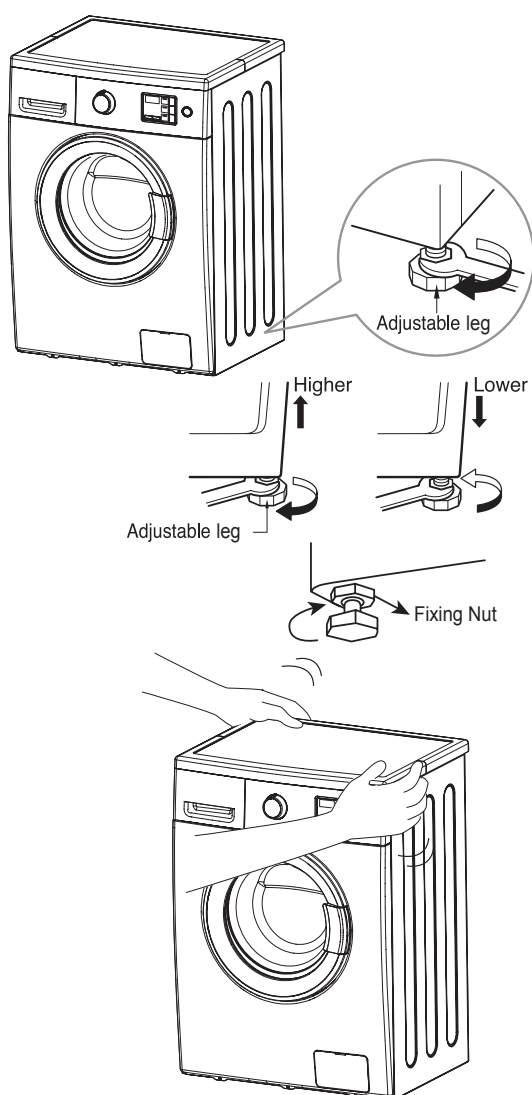
## ■ Installation of drain hose

- Never forget to install drain hose before operating your washer.
- Open the packing box, and the drain hose is tied at backside of washer.
- If you use the laundry tub, Top of laundry tub must be at least 60cm high and no higher than 100cm from bottom of washer.



- When installing the drain hose to tub(sink), secure it tightly with a string.
- 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 it back into the washer.  
This will cause abnormal noise.

## ■ Level adjustment



- The level adjustment of the washing machine prevents excessive noise and vibration.
- 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 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 or the diagonal check.)
- 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)


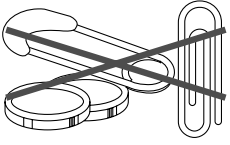
If machine rocks when pushing the machine top plate diagonally, adjust legs again.

### 3. MAINTENANCE

✱ Before cleaning the washer interior, unplug the electrical power cord to avoid electrical shock hazards.

Proper care of your washer can extend its life. This section explains how to care for your washer properly and safely.

#### ■ Cleaning your washer

| Exterior  | Interior  |
|---|---|
| <ul style="list-style-type: none"><li>• Clean with warm water and a neutral non abrasive household detergent.</li><li>• Immediately wipe off detergent, bleach and other spills with a soft and damp cloth or sponge.</li><li>• Occasionally wipe off the outside of the washer to keep its looking like new one.</li></ul>  | <ul style="list-style-type: none"><li>• Clean with 250ml of chlorine bleach mixed with 500ml of the detergent.</li><li>• Open the door of the washer and dry the gasket and door glass.</li><li>• Run the washer complete cycle with hot water.</li><li>• If necessary, repeat the process.</li></ul> |
| <p>Do not put sharp or metal object in your washer, or they can damage the finish.<br/>Check all pockets for pins, clips, money, bolts, nuts, etc.<br/>Do not lay these objects in your washer after emptying pockets.</p>   |   |

#### ■ Cold condition or Winter storage

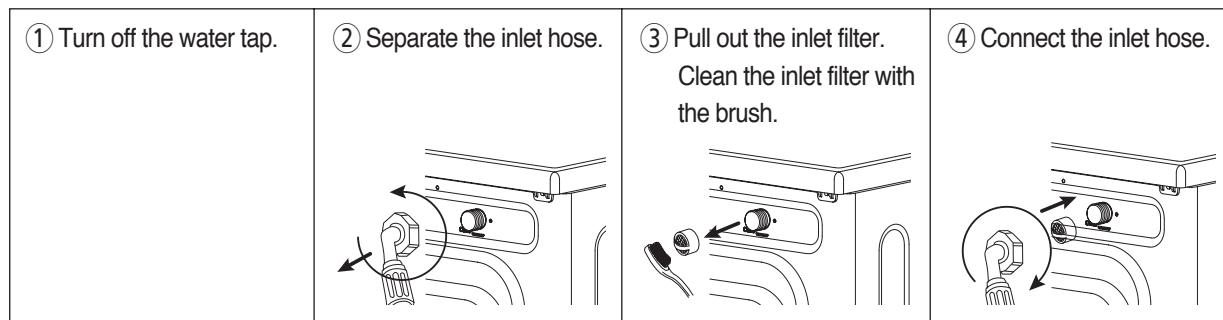
Install and store your washer where it will not freeze. Because some water may stay in the hoses, freezing can damage your washer.

If you store or move your washer during freezing weather, follow these instructions to prevent the damage to the washer.

1. Turn off the water tap.
2. Disconnect inlet hose(s) from water supply and drain the water from hose(s).
3. Plug the power cord and Open the door.
4. Add about 3 ℓ of nontoxic antifreeze into the drum. Close the door.
5. Run the washer on spin or drain cycle to drain out all water.
6. Unplug the power cord and open the door to dry the drum interior. Close the door.
7. Dry excessive water of the detergent case.
8. To remove the remaining antifreeze, run the washer on complete cycle using the detergent and without the laundry.

## ■ Cleaning the water inlet filter.

- “IE” error message (refer to troubleshooting guide) will display when the water does not enter the detergent case.
- If your water is very hard or contains traces of lime deposit, the water inlet filter may become clogged. And the water leaks from the water inlet.
- It is therefore a good idea to clean it from time to time.

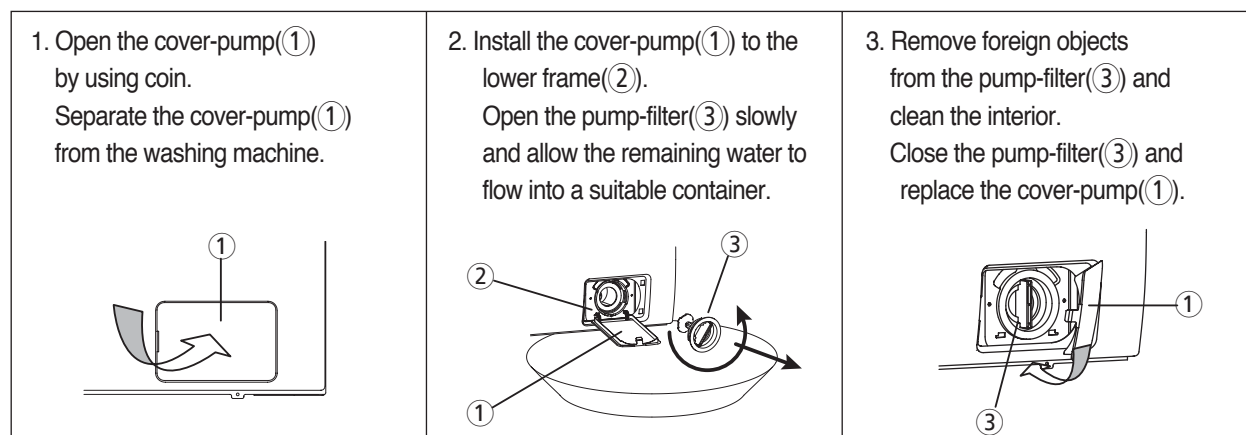


## ■ Cleaning the drain filter.

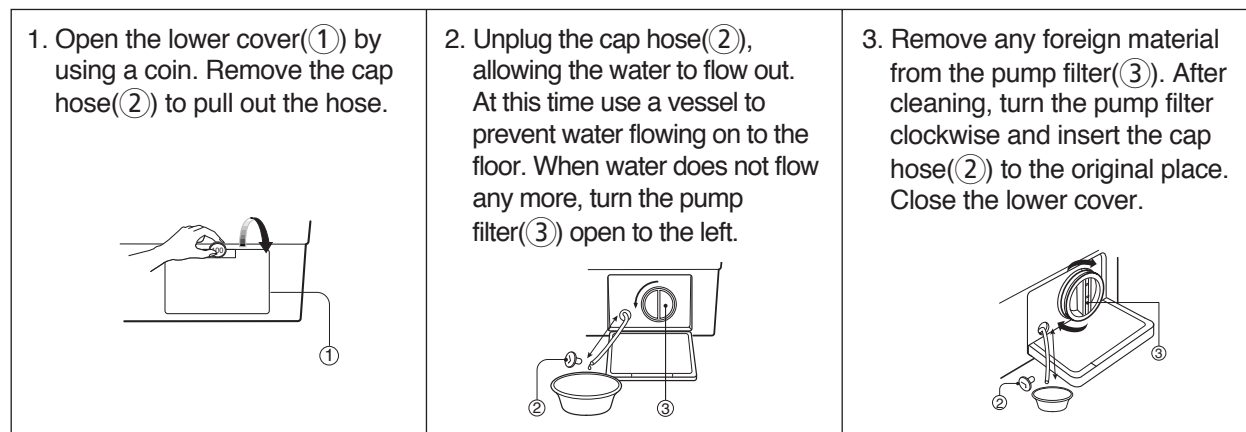
- This drain filter is used to screen the foreign stuffs such as threads, coins, pins, buttons etc..
- If the drain filter is not cleaned at proper time (every 10 times of use), drain problem could be caused.

**CAUTION :** Be careful when draining if the water is hot.

### ■ D-NT1021\*P / NT1022\*P / NT1023\*P SERIES



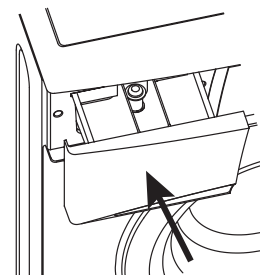
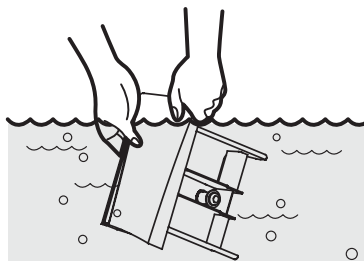
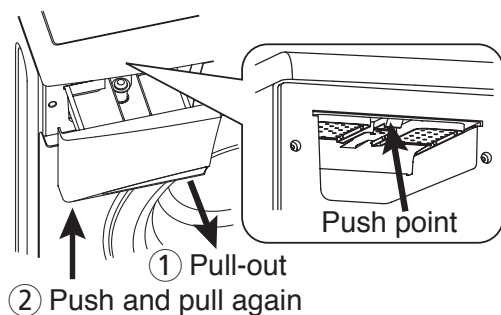
### ■ D-NT1021\*F / NT1022\*F SERIES



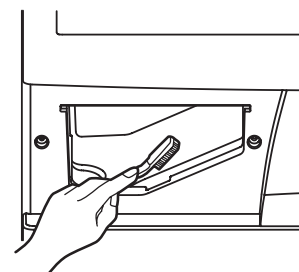


## ■ Cleaning the detergent case.

- In case of residual detergents or fabric softeners have accumulated ;
  - It should be cleaned with a jet of running water.
  - If necessary, it can be removed completely from the washing machine.



- Detergents can be also accumulate the inside cavity.  
In this case, the inside cavity should be cleaned with a brush.
- After cleaning, replace the detergent case and run Rinse cycle without laundry.



## ■ Cleaning the washing drum.

- If you live in a hard-water area, the limescale may be accumulated in the place where it cannot be seen.  
(So, it is not easily removed.)
- The successive accumulation of the scale clogs the washer.
- 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 chemical agents (dyes, bleaches and etc.), make sure they are suitable for washer. (They may contain chemicals that damages your washer.)
- \* Remove any spots with a stainless steel cleaning agents. (Do not use steel wool.)

## 4. DIRECTION FOR DISASSEMBLY

### DOOR LOCK SWITCH

1) Open the door and remove the gasket clamp.



2) Remove the gasket from the front cabinet.



3) Remove the door lock switch.



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



### DRAIN PUMP

■ D-NT1021\*P / NT1022\*P / NT1023\*P SERIES

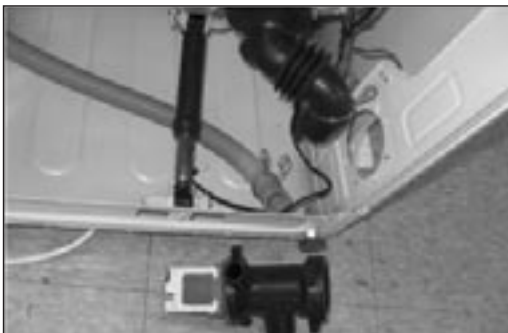
① Separate the cover pump from the cabinet front and remove screw.



② Lay the right-side of the washer on the floor. And separate connectors and hose drain from the pump.



③ Remove the hose drain o from the pump.



## DRAIN PUMP

### ■ D-NT1021\*F / NT1022\*F SERIES

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



2) Remove connectors.



3) Remove the screws.



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



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



## HEATER AND THERMISTOR

- ① Separate the plate t as from the washer.  
(Remove two screws at rear)



- ② Separate the case detergent as and remove two screws from panel f.



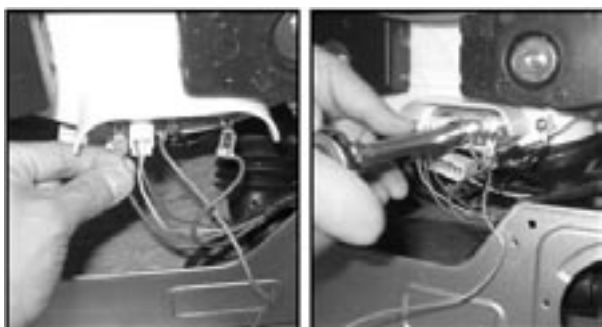
- ③ Separate the panel f as from the washer.



- ④ Separate the cabinet front from the washer.  
(Remove the clamp door as and 4 screws)



- ⑤ Separate connectors from the heater and remove the nut by using a box wrench.



- ⑥ Remove the earth terminal and loosen the nut by using a box wrench.



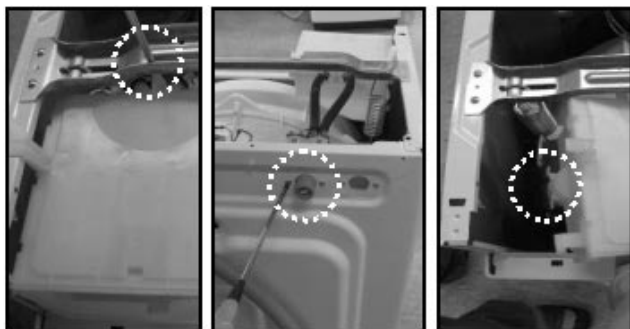
- ⑦ Pull out the heater from the tub.



## UNIVERSAL MOTOR

Firstly, you have to do from ① to ⑤ of HEATER AND THERMISTOR DISASSEMBLY.

- ① Separate the box inlet as from the washer.  
(Remove screws and hose inlet)



- ② Remove the screw of the motor connector.  
And separate the connector from the tub.



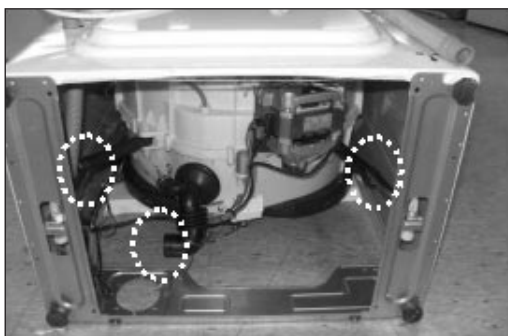
- ③ Separate the hose air from the sensor pressure.



- ④ Lay the front-side of washer on the floor.  
And remove four screws.



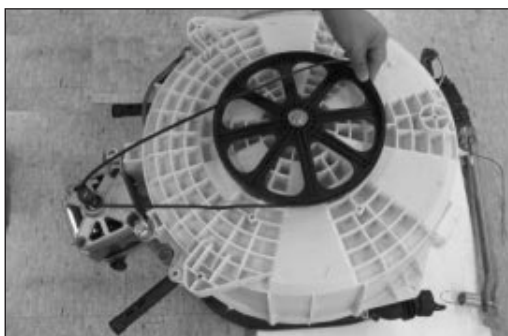
- ⑤ Separate two dampers and the hose drain.



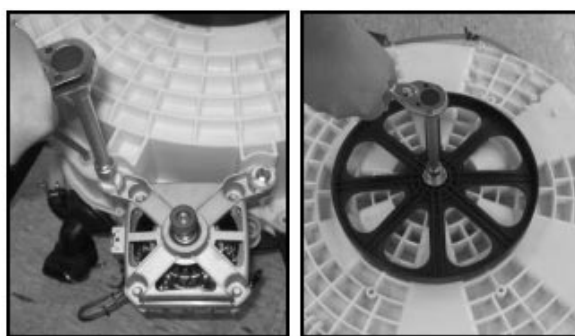
- ⑥ Lift up the cabinet as.



- ⑦ Separate the belt.



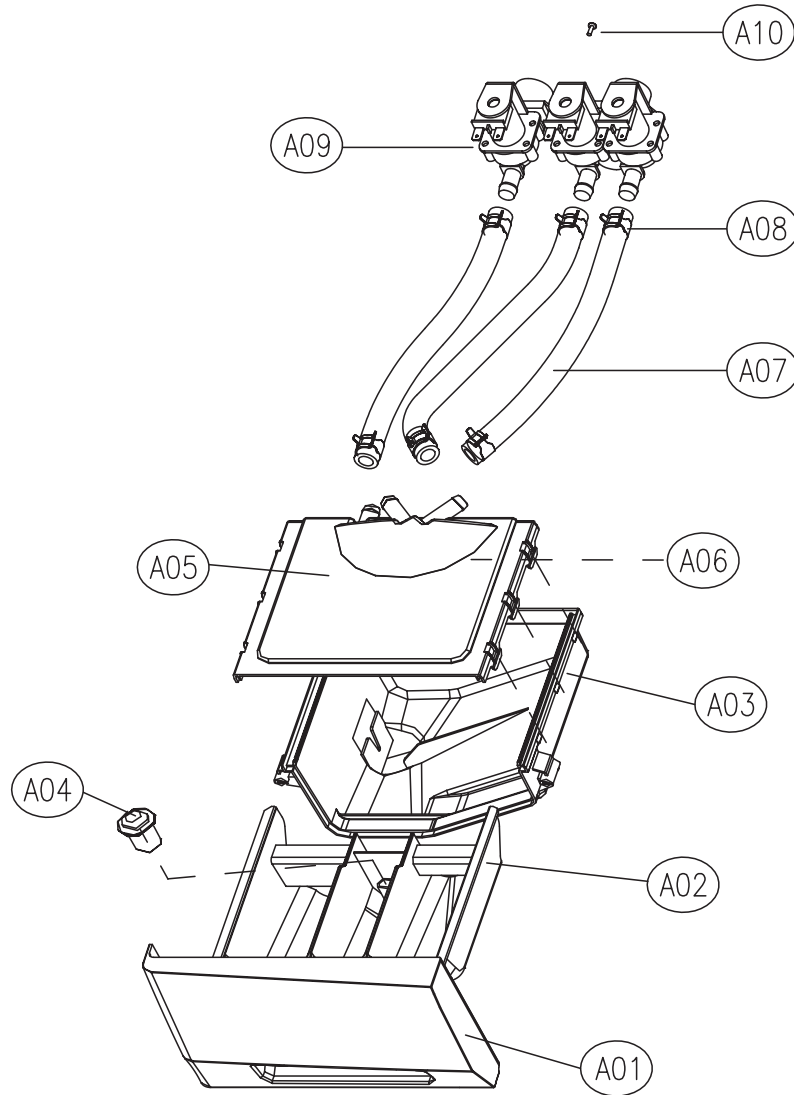
- ⑧ Remove two screws from the motor and remove the screw from the drum using a box wrench.





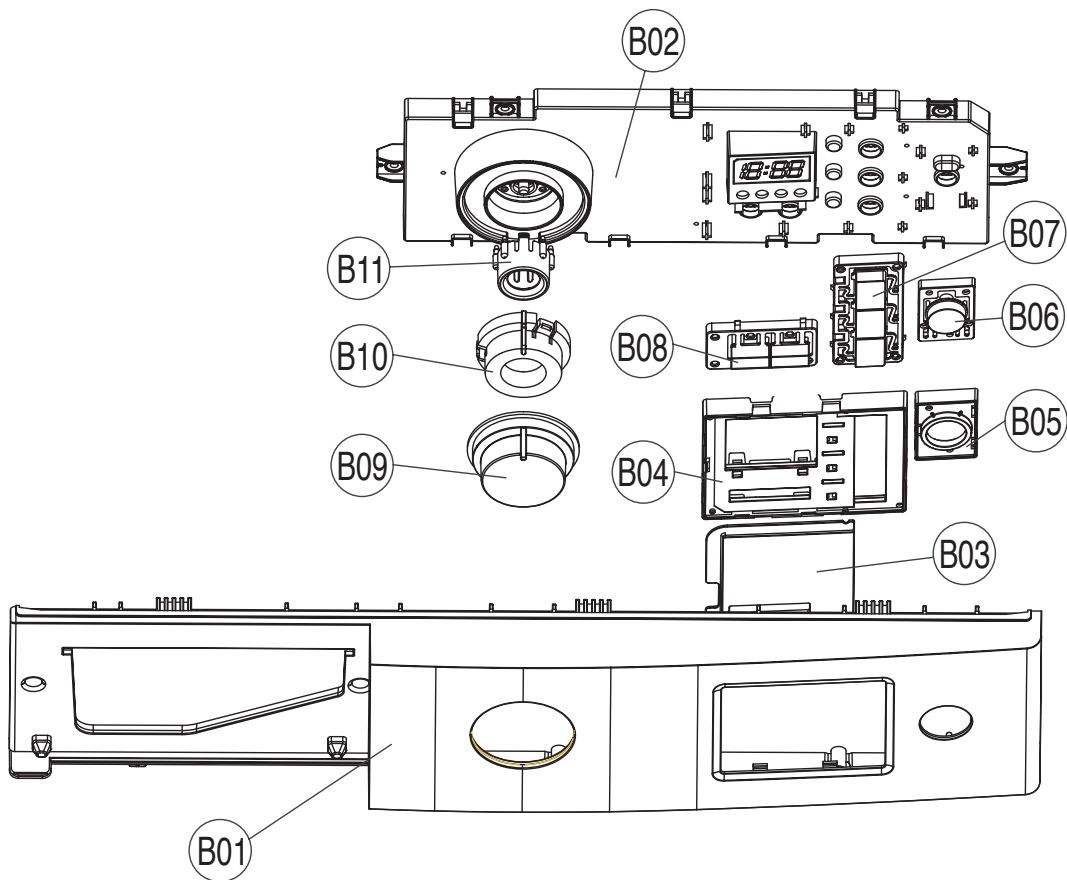
## 5. EXPLODE VIEW AND PARTS LIST

### ■ BOX INLET AS



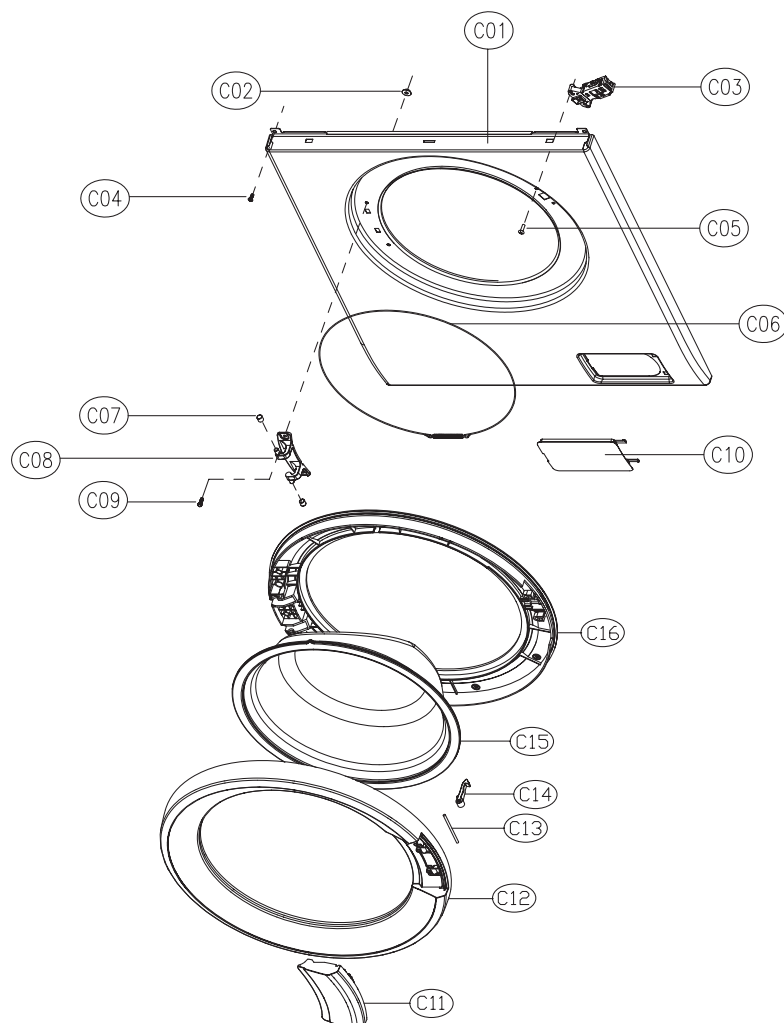
| No. | PART NAME         | PART CODE  | SPECIFICATION                    | Q'TY | REMARK      |
|-----|-------------------|------------|----------------------------------|------|-------------|
| A01 | CASE HANDLE       | 36111T3D00 | HIPS, D-NT                       | 1    |             |
| A02 | CASE HANDLE       | 36111T6A00 | HIPS, D-NT1021'S                 | 1    |             |
| A03 | BOX INLET         | 3617511700 | PP                               | 1    |             |
| A04 | CAP SOFTENER      | 3610907800 | PP                               | 1    |             |
| A05 | NOZZLE TOP        | 3618112000 | PP                               | 1    |             |
| A06 | NOZZLE UNDER      | 3618112100 | PP                               | 1    |             |
| A07 | HOSE WATER SUPPLY | 3613270900 | EPDM ID9.5 OD14.5                | 2(3) | 0.245       |
| A08 | CLAMP HOSE        | 3611205800 | 100H, ID=13.8 W=10.0 0.9T        | 4(6) |             |
| A09 | VALVE INLET       | 3615414900 | 220-240 2-WAY PP/BRACKET         | 1    | COLD        |
|     |                   | 3615416820 | 220-240V.VDE.BITRON.329/349 2WAY | 1    | COLD(EU)    |
|     |                   | 3615414800 | 220-240V 1-WAY HOT PP            | 1    | HOT(OPTION) |
| A10 | SCREW TAPPING     | 7272400811 | TT3 TRS 4x8 MFZN                 | 2(4) |             |

## ■ PANEL FRONT AS



| No. | PART NAME             | PART CODE  | SPECIFICATION              | Q'TY | REMARK            |
|-----|-----------------------|------------|----------------------------|------|-------------------|
| B01 | PANEL *F              | 36142T6R00 | HIPS D-NT1021'S            | 1    |                   |
| B02 | PCB AS                | PRPSSWP**0 | B H N-CP HV N-VDE          | 1    | 1000RPM<br>OPTION |
|     |                       | PRPSSWP**1 | NB C N-CP HV N-VDE         | 1    |                   |
|     |                       | PRPSSWP**2 | B C N-CP HV N-VDE          | 1    |                   |
|     |                       | PRPSSWP**3 | NB H N-CP HV N-VDE         | 1    |                   |
|     |                       | PRPSSWP**4 | B H CP HV N-VDE            | 1    |                   |
|     |                       | PRPSSWP**5 | NB C CP HV N-VDE           | 1    |                   |
|     |                       | PRPSSWP**6 | B C CP HV N-VDE            | 1    |                   |
|     |                       | PRPSSWP**7 | NB H CP HV N-VDE           | 1    | 1200RPM<br>OPTION |
|     |                       | PRPSSWP**A | B H N-CP N-HV VDE          | 1    |                   |
|     |                       | PRPSSWP**B | NB C N-CP N-HV VDE         | 1    |                   |
|     |                       | PRPSSWP**C | B C N-CP N-HV VDE          | 1    |                   |
|     |                       | PRPSSWP**D | NB H N-CP N-HV VDE         | 1    |                   |
|     |                       | PRPSSWP**E | B H CP N-HV VDE            | 1    |                   |
|     |                       | PRPSSWP**F | NB C CP N-HV VDE           | 1    |                   |
|     |                       | PRPSSWP**G | B C CP N-HV VDE            | 1    |                   |
|     |                       | PRPSSWP**H | NB H CP N-HV VDE           | 1    |                   |
| B03 | WINDOW DISPLAY        | 3615517100 | PC, D-NT1021'S             | 1    |                   |
| B04 | HOLDER WINDOW DISPLAY | 3613069500 | ABS, D-NT1021'S, BLACK     | 1    |                   |
| B05 | DECO BUTTON START     | 36116DY200 | TR-ABS, MILKY , D-NT1021'S | 1    |                   |
| B06 | BUTTON START          | 3616652300 | ABS , D-NT1021'S           | 1    |                   |
| B07 | BUTTON FUNCTION       | 3616652400 | ABS , D-NT1021'S           | 1    |                   |
| B08 | BUTTON OPTION         | 3616652500 | ABS, GRAY , D-NT1021'S     | 1    |                   |
| B09 | KNOB DIAL*O           | 3613411100 | ABS , D-NT1021'S           | 1    |                   |
| B10 | KNOB DIAL*I           | 3613411200 | ABS, RED , D-NT1021'S      | 1    |                   |
| B11 | HOLDER KNOB           | 3613069600 | POM,D-NT2ND,18PI           | 1    |                   |

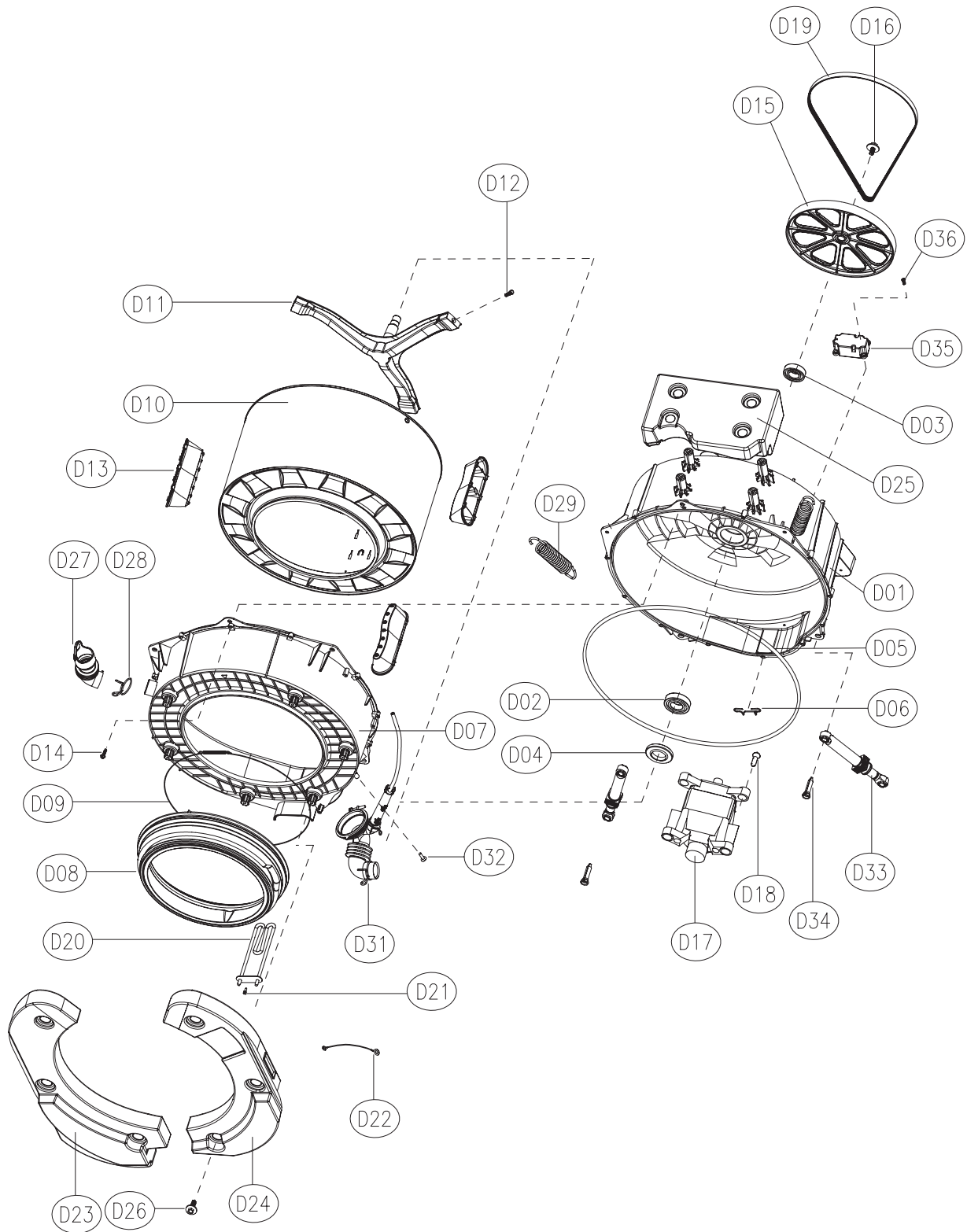
## ■ CABINET FRONT AS



| No. | PART NAME         | PART CODE  | SPECIFICATION                                   | Q'TY | REMARK |
|-----|-------------------|------------|---|------|--------|
| C01 | CABINET *F        | 361081WD00 | SECD T0.7 , D-NT1011'S                          | 1    |        |
| C02 | NUT HEX           | 7S627W50X1 | NUT FLANGE M5X0.8P MFZN                         | 2    |        |
| C03 | SWITCH DOOR LOCK  | 3619047100 | DL-LC.BITRON_3P/KM,DM CONCORE 250V 16A BI-METAL | 1    |        |
| C04 | SCREW TAPPING     | 3616029950 | TTS"S" HEX F/L 4*8                              | 5    |        |
| C05 | SCREW TAPPING     | 7122401408 | T2S TRS 4X14 SUS,STS                            | 2    |        |
| C06 | CLAMP DOOR AS     | 3611204810 | HSW3, D1.4, GS, M/F                             | 1    |        |
| C07 | CAP HINGE DOOR    | 3610916500 | POM   | 2    |        |
| C08 | HINGE DOOR        | 3612904600 | ALDC , D-NT1011'S                               | 1    |        |
| C09 | SCREW TAPPING     | 3616051229 | STS430 F/L BOLT(SE) 5*12                        | 2    |        |
| C10 | COVER PUMP FILTER | 3611433300 | HIPS, D-NT1011'S                                | 1    |        |
| C11 | HANDLE DOOR       | 3612614600 | ABS, D-NT1011'S                                 | 1    |        |
| C12 | FRAME DOOR *O     | 36122WD400 | ABS, D-NT1011'S                                 | 1    |        |
| C13 | PIN HANDLE        | 3618210600 | SUS304, D3, L60                                 | 1    |        |
| C14 | HOOK DOOR         | 3613101210 | ZNDC 5.5K                                       | 1    |        |
| C15 | DOOR GLASS        | 361A11070T | GLASS PI300, M,F                                | 1    |        |
| C16 | FRAME DOOR *I     | 36122WD300 | PP, D-NT1011'S                                  | 1    |        |

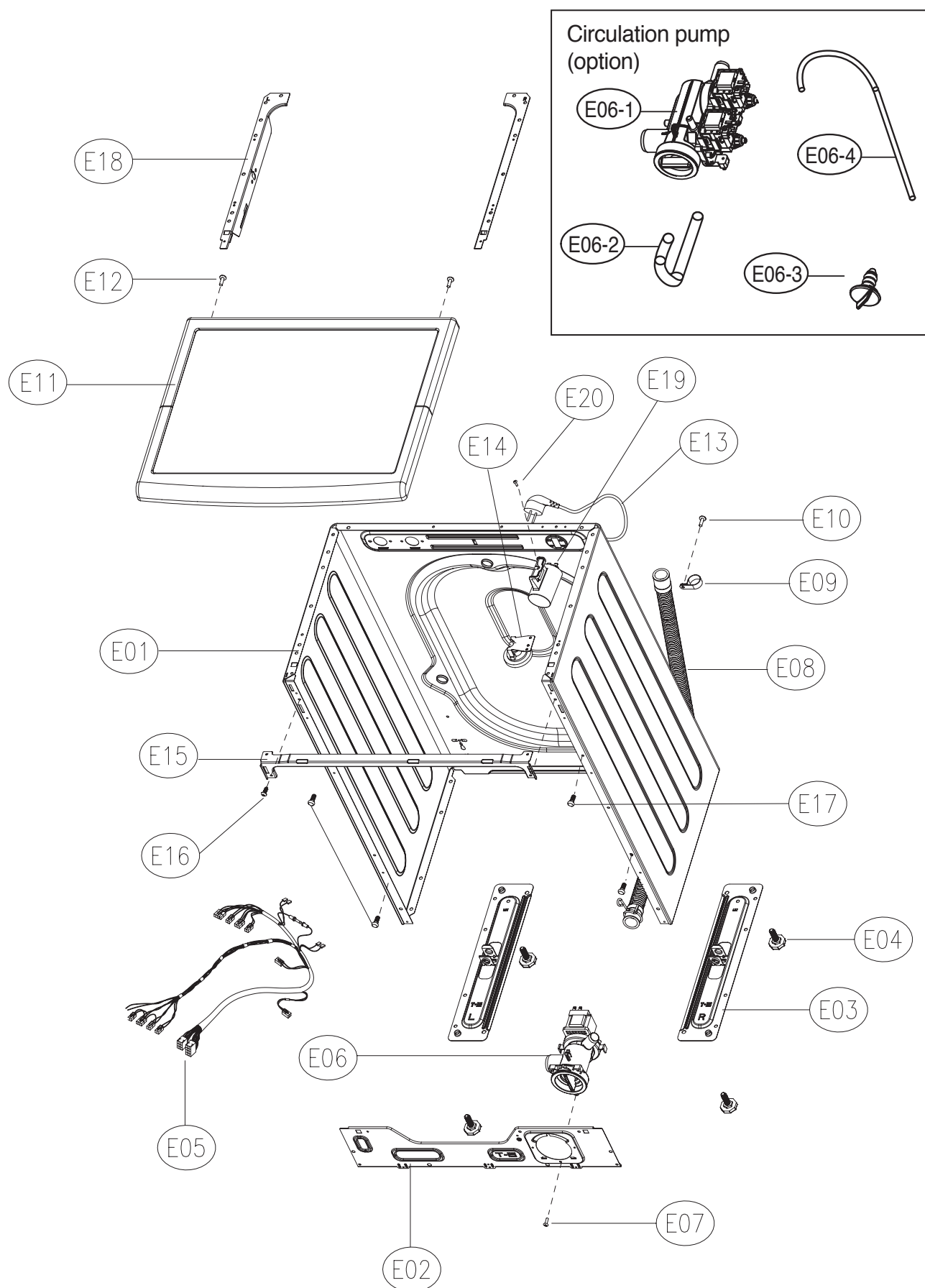


## ■ TUB AS



| No. | PART NAME               | PART CODE  | SPECIFICATION                               | Q'TY | REMARK                     |
|-----|-------------------------|------------|---|------|----------------------------|
| D01 | TUB REAR AS             | 3618829900 | TUB REAR(FRPP) + BEARING HOUSING(ALDC)      | 1    | FRPP D-MU103's change core |
|     |                         | 3618829901 | TUB REAR(FRPP) + BEARING HOUSING(ALDC)      | 1    |                            |
| D02 | BEARING INNER           | 3616304700 | 6205ZZ SHENS                                | 1    |                            |
| D03 | BEARING OUTER           | 3616304800 | 6204ZZ SHENS                                | 1    |                            |
| D04 | WATER SEAL              | 361A600300 | NBR   | 1    |                            |
| D05 | GASKET TUB              | 3612324100 | PI=4.5, L=1650, EPDM                        | 1    |                            |
| D06 | FIXTURE HEATER          | 3612009400 | SUS, PI=2                                   | 1    |                            |
| D07 | TUB FRONT               | 3618829600 | FRPP  | 1    |                            |
| D08 | GASKET                  | 3612323500 | EPDM  | 1    |                            |
| D09 | CLAMP GASKET AS         | 3611204520 | HSW3  | 1    |                            |
| D10 | DRUM SUB AS             | 3617010400 | SUS T=0.4                                   | 1    |                            |
| D11 | SPIDER AS               | 361A301000 | SPIDER(ALDC-8) + SHAFT(SM45C)               | 1    |                            |
| D12 | SPECIAL BOLT            | 3616063000 | STS430 M6*21 SI-LOCK                        | 3    |                            |
| D13 | LIFTER WASH             | 361A401110 | NANO  | 3    |                            |
| D14 | SPECIAL SCREW(TUB)      | 3616062700 | SWRCH18A 5.6*30                             | 12   |                            |
| D15 | PULLEY                  | 3618433210 | PA6+GF30%, SERRATION                        | 1    |                            |
|     |                         | 3618433201 | (ALDC12)                                    |      |                            |
| D16 | SPECIAL BOLT AS(PULLEY) | 3616063100 | SWRCH10A M8*22 PW SI-LOCK                   | 1    |                            |
| D17 | UNIT MOTOR UNIVERSAL    | 36189L5H00 | SOYEA 2POLES 38T                            | 1    |                            |
|     |                         | 36189L5H10 | G&J MU10 NEW-CORE 220V 2POLES 38T CL.B,AL   | 1    |                            |
| D18 | SPECIAL SCREW(MOTOR)    | 3616062800 | SWRCH18A 7.4*25.5                           | 2    |                            |
| D19 | BELT V                  | 3616591300 | GATES 3PJ1134 BUTADIENE RUBBER              | 1    |                            |
| D20 | HEATER WASH             | 3612802450 | VDE 220V 1.8KW IRCA & HEADWAY(TERMINAL)     | 1    |                            |
|     |                         | 3612802460 | VDE 230V 1.8KW IRCA & HEADWAY(TERMINAL)     | 1    |                            |
|     |                         | 3612802470 | VDE 240V 1.8KW IRCA & HEADWAY(TERMINAL)     | 1    |                            |
| D21 | THERMISTOR WASH         | 361AAAAB10 | R25=1.704KΩ, R80=11.981KΩ                   | 1    |                            |
| D22 | HARNESS EARTH           | 3612794450 | L=180                                       | 1    |                            |
| D23 | BALANCER WEIGHT L       | 3616109600 | PP, INSERT 6.5KG                            | 1    |                            |
| D24 | BALANCER WEIGHT R       | 3616109500 | PP, INSERT 5KG                              | 1    |                            |
| D25 | BALANCER WEIGHT *T      | 3616109410 | NT2'S 7.3Kg                                 | 1    |                            |
| D26 | SPECIAL SCREW(BALANCER) | 3616062900 | SWRCH18A 8*31 PW                            | 6    |                            |
| D27 | HOSE INLET              | 3613271600 | EPDM  | 1    |                            |
| D28 | CLAMP HOSE I            | 3611201400 | HSW3, D=2.6, MFZN D=38                      | 1    |                            |
|     |                         | 3611201401 | HSW3,YW,D=2.6,ID=36,W=44.5                  | 1    |                            |
| D29 | SPRING SUSPENSION       | 3615116100 | K=0.39, L=125                               | 2    |                            |
| D31 | HOSE DRAIN AS           | 3613272300 | HOSE DRAIN(EPDM) + AIR TRAP(PP)             | 1    |                            |
|     |                         |            | + HOSE AIR(ID=4.0, OD=8, L=560, EPDM)       |      |                            |
|     |                         |            | + CLAMP AS(ID=81, CIMA)                     |      |                            |
|     |                         |            | + CLAMP HOSE(D=26) + CLAMP HOSE I(D=38)     |      |                            |
| D31 | HOSE DRAIN AS           | 3613272330 | HOSE DRAIN (EPDM, NT 2ND)+ AIR TRAP(PP)     | 1    | Circulation pump (option)  |
|     |                         |            | + HOSE AIR (ID4.0,OD8, L560)                |      |                            |
|     |                         |            | + CLAMP AS (ID=81, CIMA)                    |      |                            |
|     |                         |            | + CLAMP HOSE (HSW3,YW,D2.6,ID36,W44.5, L35) |      |                            |
| D32 | SCREW TAPPING           | 7122401411 | T2S TRS 4X14 MFZN                           | 1    |                            |
|     |                         | 7122401408 | T2S TRS 4X14 SUS,STS                        | 1    |                            |
| D33 | DAMPER FRICTION         | 361A700110 | 70N AKS                                     | 2    |                            |
|     |                         | 361A700140 | 70N CIMA                                    |      |                            |
| D34 | DAMPER PIN              | 361A700200 | AKS D=14.5                                  | 2    |                            |
| D35 | UNIT BUBBLE PUMP AS     | 36189L4140 | 220-240V RP CHUSHION=760                    | 1    | (option)                   |
|     |                         | 36189L4160 | 220-240V DBK-240DF RP CUSHION L=510         | 1    |                            |
| D36 | SPECIAL SCREW(BUBBLE)   | 3616007400 | T2S TRS 4X10+24                             | 2    |                            |

## ■ CABINET AS



| No.   | PART NAME             | PART CODE  | SPECIFICATION                                      | Q'TY | REMARK      |
|-------|-----------------------|------------|--|------|-------------|
| E01   | CABINET               | 361081WA00 | D-MU80 SGCC(GI) 0.7T COLD                          | 1    | COLD        |
|       |                       | 361081WA01 | D-MU80 SGCC 0.7T COLD+HOT                          |      | COLD+HOT    |
| E02   | FRAME LOWER           | 36122WDT00 | NT1,2ND SGCC T0.8                                  | 1    |             |
| E03   | BASE UNDER *L         | 3610393401 | MU, SGCC 1.6T, G/S                                 | 1    |             |
|       | BASE UNDER *R         | 3610393501 | MU, SGCC 1.6T, G/S                                 | 1    |             |
| E04   | LEG ADJUST AS         | 3617703840 | DWD-800W,SILICA BUTYL                              | 4    |             |
|       |                       |            | + SPECIAL NUT(SCP1,LEG)                            |      |             |
|       |                       | 3612100900 | FOOT+SPECIAL BOLT,INSERT TYPE,BUTYL+SILICA+CACIUM  |      |             |
| E05   | HARNESS AS            | 3612799E01 | FULL OPTION  | 1    |             |
|       |                       | 3612799E02 | HOT/NON BUBBLE                                     |      |             |
|       |                       | 3612799E03 | NON HOT/BUBBLE                                     |      |             |
|       |                       | 3612799E04 | NON HOT/NON BUBBLE                                 |      |             |
|       |                       | 3612799E05 | NON EMI/FULL OPTION                                |      |             |
|       |                       | 3612799E06 | NON EMI/HOT/NON BUBBLE                             |      |             |
|       |                       | 3612799E07 | NON EMI/NON HOT/BUBBLE                             |      |             |
|       |                       | 3612799E08 | NON EMI/NON HOT/NON BUBBLE                         |      |             |
| E05   | HARNESS AS            | 3612799E90 | NON HOT,BB,EMI,CP                                  |      | Circulation |
|       |                       | 3612799E91 | HOT, BB, EMI,CP                                    |      | pump        |
|       |                       | 3612799E92 | HOT, NON BB, EMI,CP                                |      | (option)    |
|       |                       | 3612799E93 | NON HOT, BUBBLE, EMI,CP                            |      |             |
| E06   | UNIT DRAIN PUMP AS    | 36189L5K10 | 220-240V, 50Hz, 30W, AL, NO-HOLE                   | 1    |             |
| E06-1 | UNIT DRAIN PUMP AS    | 3618980400 | LELLI,220~240V/50HZ, D-N2(EUROPE), 30W ,DPH5 ,DUAL | 1    | EA          |
|       | UNIT DRAIN PUMP       | 3618980010 | LELLI,220~240V/50HZ, D-N2, H'S, 30W ,DPH5 ,DUAL    | 1    | EA          |
|       | BRACKET DRAIN HOUSING | 36196TAZ01 | D-HT,D-HD BRACKET DRAIN HOUSING                    | 1    | EA          |
|       | SCREW TAPPING         | 7122401411 | T2S TRS 4X14 MFZN                                  | 2    | EA          |
| E06-2 | HOSE WATER REMAIN     | 3613271430 | EPDM ID8.5 OD12.5 L=110 ROUND BENDING              | 1    | Circulation |
| E06-3 | CAP WATER REMAIN      | 3610916800 | PP   | 1    | pump        |
| E06-4 | HOSE WATER SUPPLY     | 3613281000 | EPDM ID9.5 OD14.5 , L=850                          | 1    | (option)    |
| E07   | SCREW TAPPING         | 7112401211 | T1 TRS 4*12 MFZN                                   | 1    |             |
| E08   | HOSE DRAIN O AS       | 361326852T | L=1800, STRAIGHT TYPE, CLAMP PI=27                 | 1    |             |
| E08   | HOSE DRAIN *O AS      | 3613280900 | L=1740, STRAIGHT TYPE, BUSHING                     | 1    |             |
| E09   | CLAMP HOSE            | 3611206410 | NYLON, DA-16N, ID21.9 D-MU80                       | 1    |             |
| E10   | SCREW TAPPING         | 7122401411 | T2S TRS 4X14 MFZN                                  | 1    |             |
| E11   | PLATE TOP AS          | 3614540710 | D-NT1011   | 1    |             |
| E12   | SCREW TAPPING         | 7122401411 | T2S TRS 4X14 MFZN                                  | 2    |             |
| E13   | CORD POWER AS         | 3611339630 | EU-2PIN H05VV-F 1.0SQ 250V 16A 1.4M                | 1    |             |
| E14   | SENSOR PRESSURE       | 3614825320 | DL-DW12-H AIR INLET 270 HOOK TYPE                  | 1    |             |
| E17   | SCREW TAPPING         | 7122401411 | T2S TRS 4x14 MFZN                                  | 1    |             |
| E15   | FRAME UPPER           | 36122UDT00 | SGCC 1.0T  | 1    |             |
| E16   | SCREW TAPPING         | 7122401411 | T2S TRS 4X14 MFZN                                  | 2    | TOP FIX     |
|       | (FRAME UPPER FIX)     | 3616029950 | TTSS" HEX F/L 4*8 "                                | 2    | FRONT FIX   |
| E18   | FRAME TOP L           | 36122UDP00 | SGCC T 1.4   | 1    |             |
|       | FRAME TOP R           | 36122UDQ00 | SGCC T 1.4   | 1    |             |
| E19   | EMI FILTER            | 3611910910 | EMI FILTER DPC DFC-2712D-14A44GW                   | 1    | option      |
| E20   | SCREW TAPPING         | 7122401411 | T2S TRS 4x14 MFZN                                  | 1    |             |


## 6. FUNCTIONS OF THE CONTROL PANEL

■ D-NT1021\*F / NT1022\*F SERIES

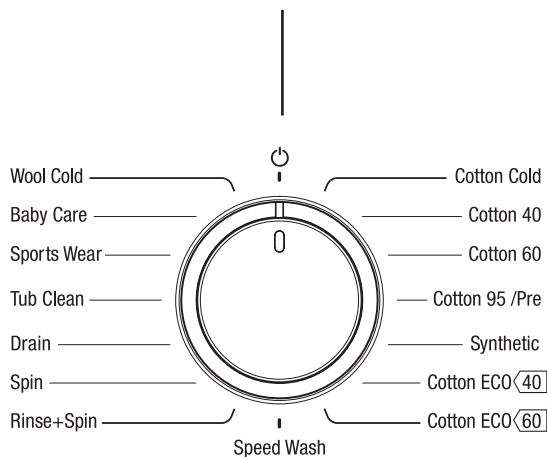
### Program selector

For switching the washing machine on and off and for selecting the program.

Can be rotated in both direction.

Even if the program selector rotates while the program is running, the program is not changed (except for off ).

(All program is electronically controlled by PCB)



### Spin selector

You can select the spin programs (Spin 400rpm, 600rpm, 800rpm, 1000rpm) by pressing the Program selector.

400rpm of spin velocity is selected automatically with WOOL / TUB CLEAN program in order to protect damage on laundry.

800rpm of spin velocity is selected automatically with COTTON / SYNTHETIC / Baby care / Speed Wash / Tub Clean / Sportswear / Spin / Rinse+Spin programs.

1000rpm of spin velocity is selected automatically with COTTON Eco 40 & 60°C.

\*Warning : If value of unbalance is extremely high, spin speed can't reached that r.p.m of selected by spin selector.

### Indicator light

The respective indicator lights up, when the required program segment runs.

### Time delay

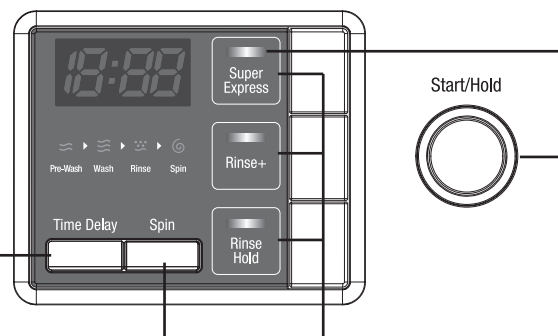
To pre-engage time for washing.

As the button is pressed, the delayed time is repeated as following;

2hours → 3hours → 4hours → ...

→ 10hours → 11hours → max 12hours

This option is enabled with COTTON, COTTON Eco, SYNTHETIC, Speed Wash, Super express, Sports wear, Rinse+Spin and Baby care programs.



### Button for options

(in addition to the program if required)

**Super Express** Use reduce the laundry time or wash the mild dirty.

**Rinse +** Extra rinse cycle.

**Rinse Hold** No final spin cycle

- The indicator lamp of the buttons lights up if options are active.
- Canceling options : Press button again.

### Start/Hold button

For starting the washing cycle.

(program must have been selected)

### Note


The washing time may vary by the amount of laundry, water pressure, water temperature and other washing conditions. If an unbalanced load is detected the washing time maybe extended. (Maximum increasing time is about 1 hour.)

In order to use another program, set the program dial to 'OFF MODE' position and check the window display to ensure the screen is turned off and then select another program by turning the dial.

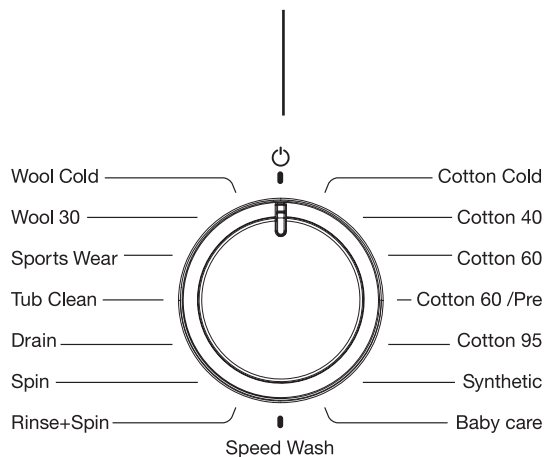
## Program selector

For switching the washing machine on and off and for selecting the program.

Can be rotated in both direction.

Even if the program selector rotates while the program is running, the program is not changed (except for off ).

(All program is electronically controlled by PCB)



## Spin selector

You can select the spin programs (Spin 400rpm, 600rpm, 800rpm, 1000rpm) by pressing the Program selector.

400rpm of spin velocity is selected automatically with WOOL / TUB CLEAN program in order to protect damage on laundry.

800rpm of spin velocity is selected automatically with COTTON / SYNTHETIC / Baby care / Speed Wash / Tub Clean / Sportswear / Spin / Rinse+Spin programs.

\*Warning : If value of unbalance is extremely high, spin speed can't reached that r.p.m of selected by spin selector.

## Indicator light

The respective indicator lights up, when the required program segment runs.

## Time delay

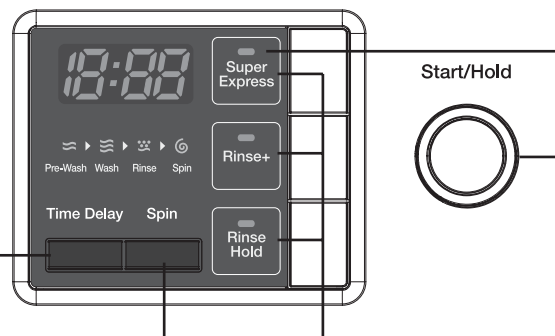
To pre-engage time for washing.

As the button is pressed, the delayed time is repeated as following;

2hours → 3hours → 4hours → ...

→ 10hours → 11hours → max 12hours

This option is enabled with COTTON, SYNTHETIC, Speed Wash, Super express, Sports wear, Rinse+Spin and Baby care programs.



## Button for options

(in addition to the program if required)

**Super Express** Use reduce the laundry time or wash the mild dirty.

**Rinse +** Extra rinse cycle.

**Rinse Hold** No final spin cycle

- The indicator lamp of the buttons lights up if options are active.
- Canceling options : Press button again.

## Start/Hold button

For starting the washing cycle.

(program must have been selected)

## Note

The washing time may vary by the amount of laundry, water pressure, water temperature and other washing conditions. If an unbalanced load is detected the washing time maybe extended. (Maximum increasing time is about 1 hour.)


In order to use another program, set the program dial to 'OFF MODE' position and check the window display to ensure the screen is turned off and then select another program by turning the dial.

## 7. 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 test the load movement

- ① Plug the power cord.
- ② Turn the program selector to arbitrary program (except for OFF  position).  
(The indicator light of the Start/Hold button is on but not twinkles. If the indicator is twinkles, press the Start/Hold button and turn the program selector to the off.)
- ③ Press the Rinse+ button 3times while press the Intensive button.
- ④ Whenever the Rinse Hold button is pressed, each load movement is occurred as follows;  
Door lock close → Hot valve on → Cold valve on → Pre wash valve on → Bubble pump on → Drain pump on



## 8. TROUBLESHOOTING GUIDE

This washer is equipped with automatic safety function which detects and diagnoses faults at an early stage and copes properly.

When the washer does not operate properly, check the following points.

### ■ Simply Check Guide

| Problem                                   | Cause  | Solution   |
|---|--|--|
| Program dose not start.                   | Plug is loose or not plugged in.                 | Insert plug tightly.   |
|   | Power failure.                                   | An interrupted program will be resumed when the power return.  |
|   | Loading door is not closed.                      | Check whether laundry is trapped in door.<br>Close the loading door. (a click should be heard)   |
|   | Program is not selected.                         | Select the desired program.  |
|   | Start/Hold button is not pressed.                | Press the Start/Hold button.   |
| Water dose not enter the washing machine. | Water tap is not turned on.                      | Turn the water tap on.   |
|   | Inlet hose is kinked or folded.                  | Straighten the inlet hose.   |
|   | Filters is blocked in water inlet filter.        | Clean the water inlet filter.  |
| Washing machine is not drain.             | Drain hose is kinked or clogged.                 | Straighten and clean the drain hose.   |
|   | Pump filter is clogged.                          | Clean the pump filter.   |
| Washing machine is not spin.              | The amount of laundry is too small.              | Add the laundry to balance. And repeat the Spin cycle.   |
|   | The laundry is unbalanced.                       | Rearrange the laundry. And repeat the Spin cycle.<br>If articles of heavy clothing (e.g. bath robe) are loaded, washing machine may skip or stop the spin cycle. |
| Spin result is unsatisfactory.            | Drain hose is placed over 1m above the floor.    | Place the drain hose under 1m above the floor.   |
| Foam come out of the detergent case.      | Too much detergent or unsuitable detergent used. | Repeat the Rinse cycle.  |
| Serious noise and vibration.              | Transit bolts are not removed.                   | Remove the transit bolts.  |
|   | Washing machine is installed on uneven floor.    | Reinstall washing machine on even floor.   |
|   | Washing machine is not leveled.                  | Adjust the level of washing machine using adjustable legs.   |



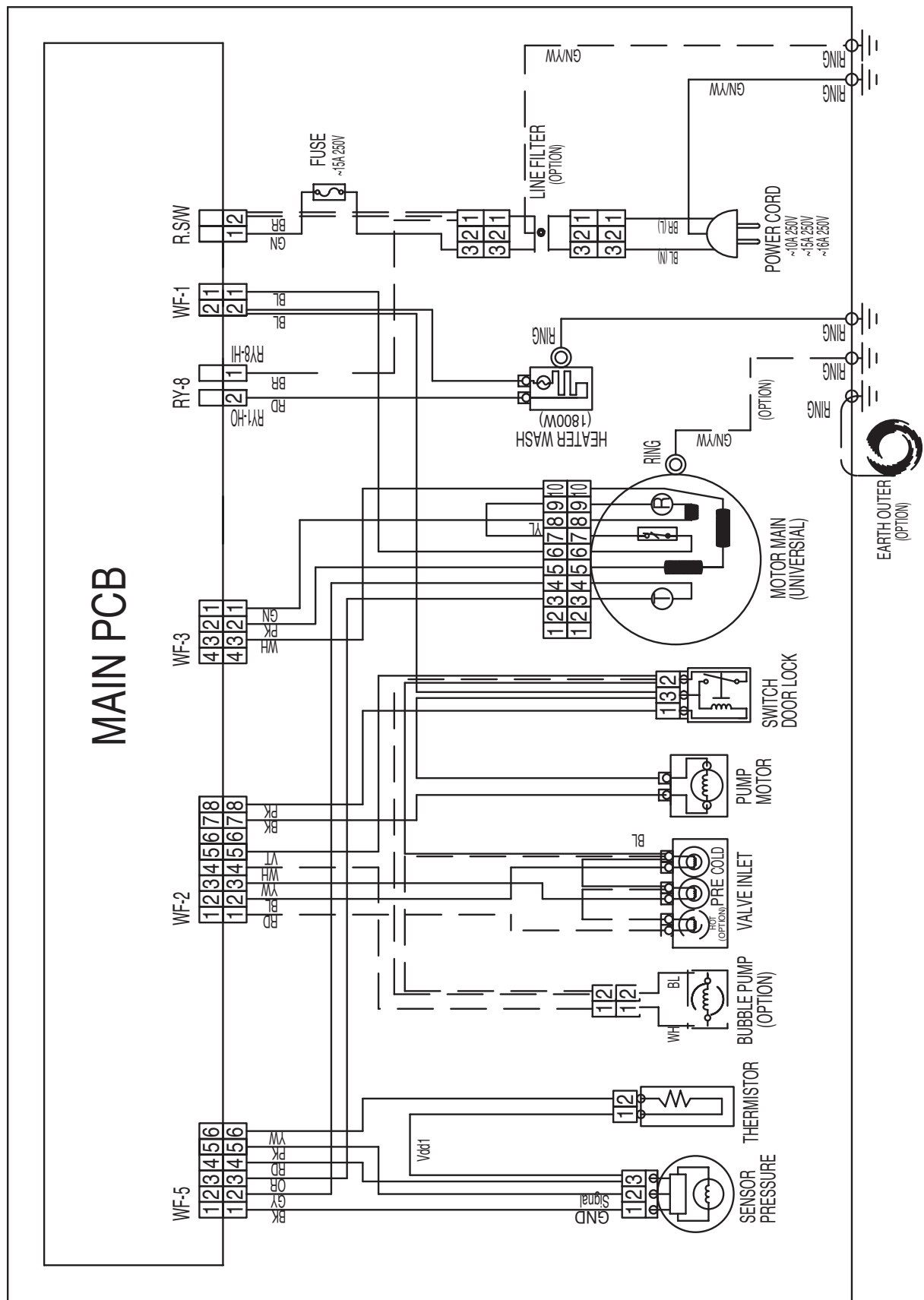
## ■ DISPLAY ERROR MESSAGE

| MESSAGE | ERROR             | CAUSE  | SOLUTION   |
|---------|-------------------|--|--|
| IE      | WATER INLET ERROR | The water tap is closed.   | Open the water tap.                              |
|         |                   | 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 or broke down. | Change the water level sensor (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.                            |
| OE      | DRAIN ERROR       | The drain hose is kinked or clogged.   | Clean and straighten the drain hose.             |
|         |                   | The drain motor is an inferior product.  | Change the drain motor.                          |
|         |                   | 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.                           |
| LE      | DOOR OPEN ERROR   | The Start/Hold button is pressed while the door is opened.                     | Close the door.                                  |
|         |                   | The switch door lock is an inferior product.                                   | Change the switch door lock.                     |
|         |                   | The PCB ASS'Y does not check the door lock.                                    | Change the PCB ASS'Y.                            |

| MESSAGE  | ERROR                             | CAUSE   | SOLUTION  |
|----------|-----------------------------------|---|---|
| E2       | 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 (sensor pressure) is inferior.                                | Change the water level sensor (sensor pressure).                                    |
|          |                                   | The drain motor dose not work. (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. |
| E7       | DIRECTION ERROR                   | The motor spins into an opposite direction.   | Change the PCB ASS'Y or the motor.  |
|          |                                   | The motor hall IC is an inferior product or broke down.   | Change the motor hall IC or the motor.  |
| E8       | MOTOR ERROR                       | The motor is not normally connected.  | Check the connector of the motor.   |
|          |                                   | The motor does not work. (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.  |
| H2       | THERMISTOR WASH ERROR             | The thermistor wash is an inferior product or broke down.   | Change the thermistor wash.   |
|          |                                   | 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.  |
|          |                                   | The thermistor wash is an inferior product or broke down.   | Change the thermistor wash.   |
| H5       | WATER TEMP. ERROR                 | The water temp. is over 45°C in delicate & wool course. (The thermistor wash is an inferior product or broke down.) | Change the thermistor wash.   |
| H6       | HEATER WASH ERROR                 | The heater wash dose not work. (The water temp. doesn't rise over 2°C during 10min.)                                | 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.  |
| PFE (E0) | PUMP FILTER ERROR                 | The drain pump filter is clogged.   | Clean the drain pump filter.  |
|          |                                   | 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.  |

# 9. WIRING DIAGRAM

■ D-NT1021\*P / NT1022\*P / NT1023\*P SERIES







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S/M NO. :



# ABOUT THIS MANUAL

VISION CREATIVE, INC.

서울 종로구 통의동  
6번지 이룸빌딩 4층

|   |                                      |            |
|---|--------------------------------------|------------|
| 담   | 당                                    | 구기준 님      |
| MODEL   | D-NT1021 / D-NT1022 / D-NT1023 (S/M) |            |
| 접   | 수                                    | 2014.09.01 |
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연락처

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