



WASHING MACHINE DRUM TYPE

Basic Model : WF316LAW

Model Name : <FRONTIER 1 PROJECT>

WF326***

WF306***

WF316***

WF317***

<MARS 1 PROJECT>

WF206***

Model Code : WF317AAW/XAA (FRONTIER1)

WF206BNW/XAA (MARS1)

SERVICE Manual

WASHING MACHINE

| | |
|----------|----------|
| WF316LAS | WF316BAC |
| | |
| WF306LAW | WF206LNW |
| | |

THE FEATURE OF PRODUCT

- 1. SilverCare**
- 2. SuperSize Capacity**
- 3. Direct Drive Motor**
- 4. Child Lock**
- 5. My Cycle**

Refer to the service manual in the GSPN (see the rear cover) for the more information.

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1. PRECAUTIONS

1-1. SAFETY PRECAUTIONS

1. Do not allow the customer to repair the product.

☞ It may cause personal injury or product damage when the unit is serviced by unqualified personnel.

2. Disconnect power to the appliance before servicing.

☞ Be aware of the possibilities of an electric shock.

3. Do not use multi-plug.

☞ Power outlet may be overloaded causing the socket to overheat.

4. Check for any damage on power plug or power outlet.

☞ Replace it immediately if it has problem. (It may cause an electric shock or fire)

5. Make sure to earth the product.

☞ May cause electric shock.

6. Do not clean the product with water.

☞ May cause electric shock / fire or shorten product life.

7. The wiring harness should be free from moisture and connected properly during serving.

☞ It should be proof against any external force.

8. Remove any dust or dirt in the product, wiring section and connections during servicing.

☞ Protect against possibilities of fire due to tracking etc.

9. Check for any water trace on electrical parts, harness, etc.

☞ Replace the parts and /or wipe dry the water.

10. Check the assembled status of the parts after servicing.

☞ Check if the product is assembled in the same status as before servicing.

11. Be sure not to pull on the power cord but to unplug it by holding the plug.

☞ Beware of possibility of electric shock or fire when the power cord is damaged.

12. Unplug the power plug from the outlet when the washing machine is not used.

☞ Beware of possibility of electric shock or fire while lightening.

13. Do not use or put flammable materials (including gasoline, alcohol, thinner etc) around the washing machine.

☞ Flammable materials may spark an explosion or fire.

14. Do not put a water containing bowl or wet laundry on the washing machine.

☞ It may cause an electric shock or fire, or shorten the product life when its water penetrates into the washing machine.

15. Do not install the washing machine in a place where it is exposed to snow or rain etc.

☞ It may cause an electric shock or fire and shorten the product life.

16. Do not press control buttons with pointed objects such as pins, needles, etc.

☞ It may cause an electric shock or other problems.

17. Check the washing machine is leveled horizontally on the floor and is installed properly.

☞ Vibration may shorten the product life.

18. Make sure to use connectors when connecting wires.

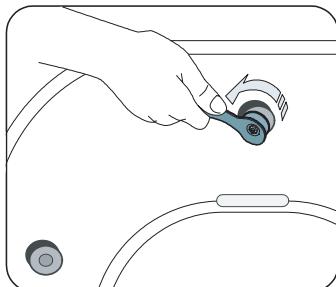
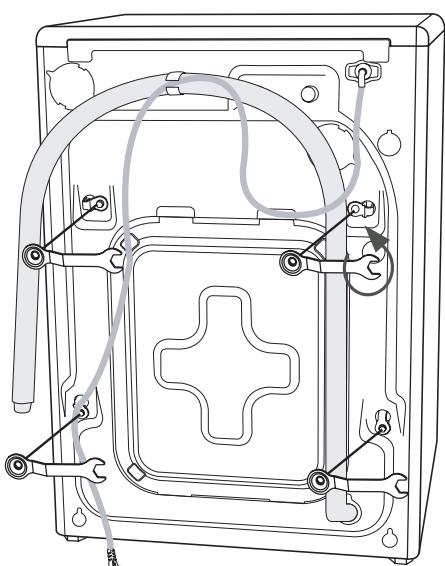
☞ If wires are connected without connectors, it may cause a tracking fire.

19. When the washing machine is to be laid down for servicing, put a pad on the floor and lay the product on its side slowly.

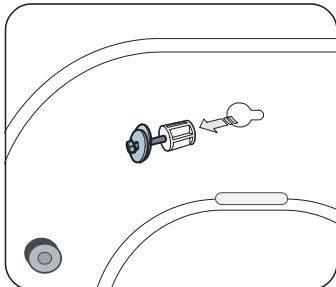
☞ If the wash machine is laid on its front, internal components may be damaged by the tub.

1-2. PRECAUTIONS UPON INSTALLATION

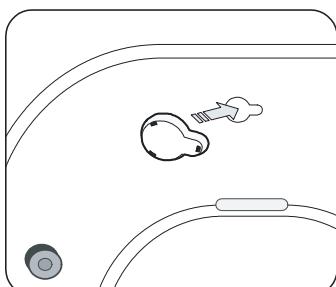
■ How to Remove Shipping Bolts



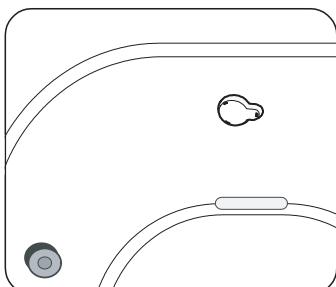
1. Remove the screws by using the supplied spanner.



2. Remove the shipping bolts from the back of the unit.

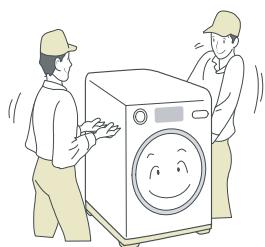


3. Fill the holes with the supplied plastic caps.

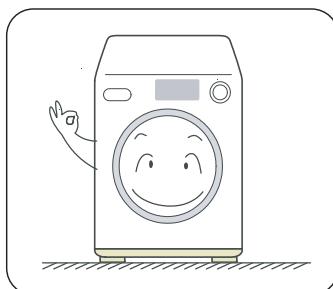


4. Keep the shipping bolts and screws for future use.

■ Precautions before Installation



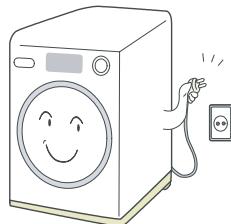
The unit is quite heavy.
So, make sure to have 2 or
more personnel move it.



Make sure that the unit stands
on a firm and leveled floor.



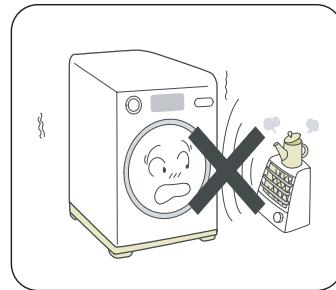
Keep it away from direct sunlight
or high humidity, and install it in
a place with good ventilation.



Install the unit at a place with
a wall outlet easily accessible.



Keep the unit away from places in
which it is freezing, especially in
winter.



Keep the unit away from heat
appliances such as a heater.

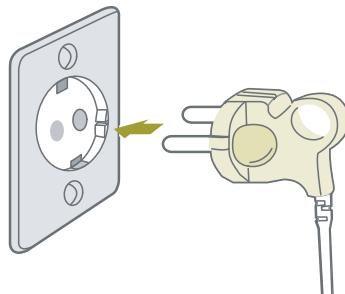
1-2. PRECAUTIONS UPON INSTALLATION

■ Grounding

- Make sure to ground the unit to prevent electric leakage or shock.

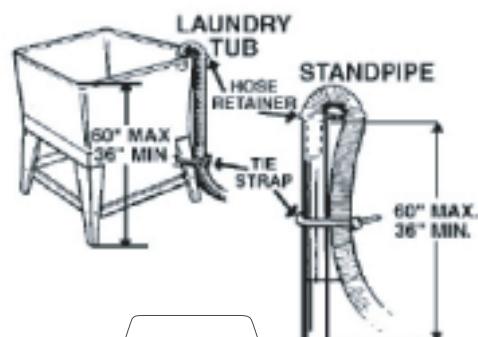
With a grounded receptacle

- It does not need an additional grounding.



■ Water Drainage

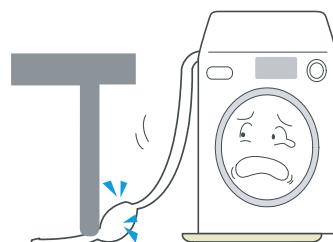
- Hook the drain hose over the Wash Basin or Laundry Tub or plug the end of the drain hose into the Standpipe
- Hook the drain hose over the Wash Basin or Laundry Tub or plug the end of the drain hose into the Standpipe
- The outlet end of the drain hose must be at least 60-90 cm above the base of the machine.



- Seal the drain pipe connections
- If not, it may cause water leakage.

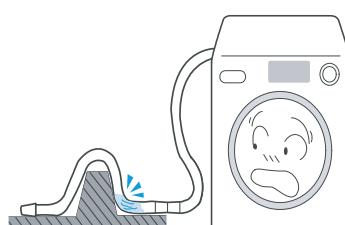


- Prevent water from siphoning away
- If the end of the drain hose is put in water, it could siphon away water during washing.
- So, make sure that the end of the drain hose is not put in water.



Note: Caution must always be exercised to avoid collapsing or damaging the drain hose.

For best performance the drain hose should not be restricted in any way, through elbows, couplings or excessive lengths.

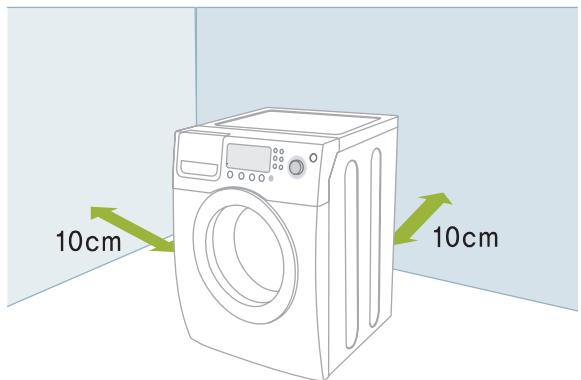


1-2. PRECAUTIONS UPON INSTALLATION

■ How to Level the Unit

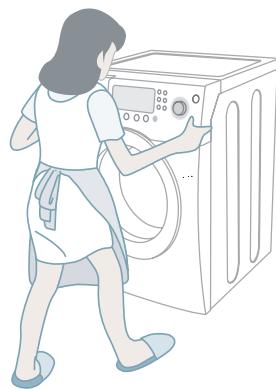
1. Select an installation place.

- ▶ Install the unit with 10cm or more clearance from its surrounding walls.

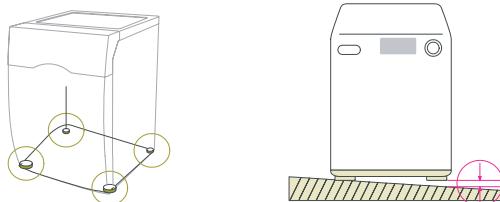


2. Check if the unit is leveled.

- ▶ If the unit wobbles, adjust the leveling legs.



3. Adjust the leveling legs.

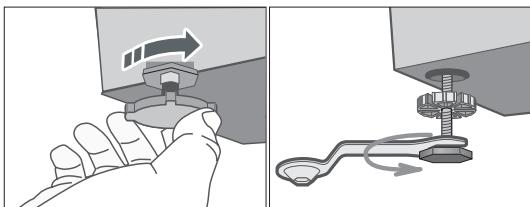


- ▶ The 4 leveling legs should touch the floor all together.

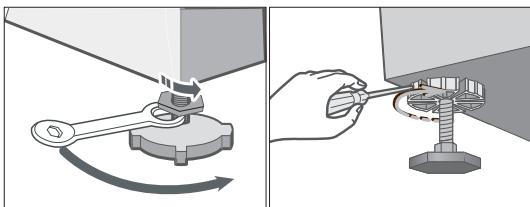
When the unit is not leveled

- ▶ Lift up the unit a little bit and adjust the shortest.
- ▶ Turn the leveling bolt counter clockwise as shown in the picture above (The leveling leg gets longer.)

1-2. PRECAUTIONS UPON INSTALLATION

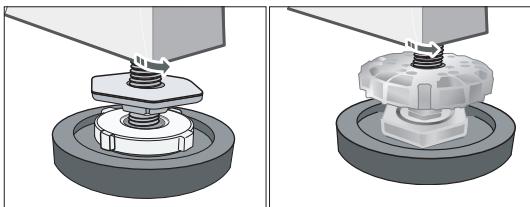


- ▶ Slide your Washer into position.



- ▶ Level your Washer by turning the leveling legs in or out as necessary by hand or wrench included with your Washer.
When your Washer is level, tighten the nuts using the wrench or (-)driver.

NOTE: Your Washer must be leveled on all four sides. A carpenter's level should be used on all four corners of your Washer. It's a good idea after the first dozen washes to recheck your Washer's levelness.



- ▶ If you install your washer on softfloor, you should place the rubber cup under adjustable leg. Before put rubber cup, please remove film for double-side tape attached on rubber cup.

NOTE: If washer is installed on riser, you should put rubber cup under leg for riser.

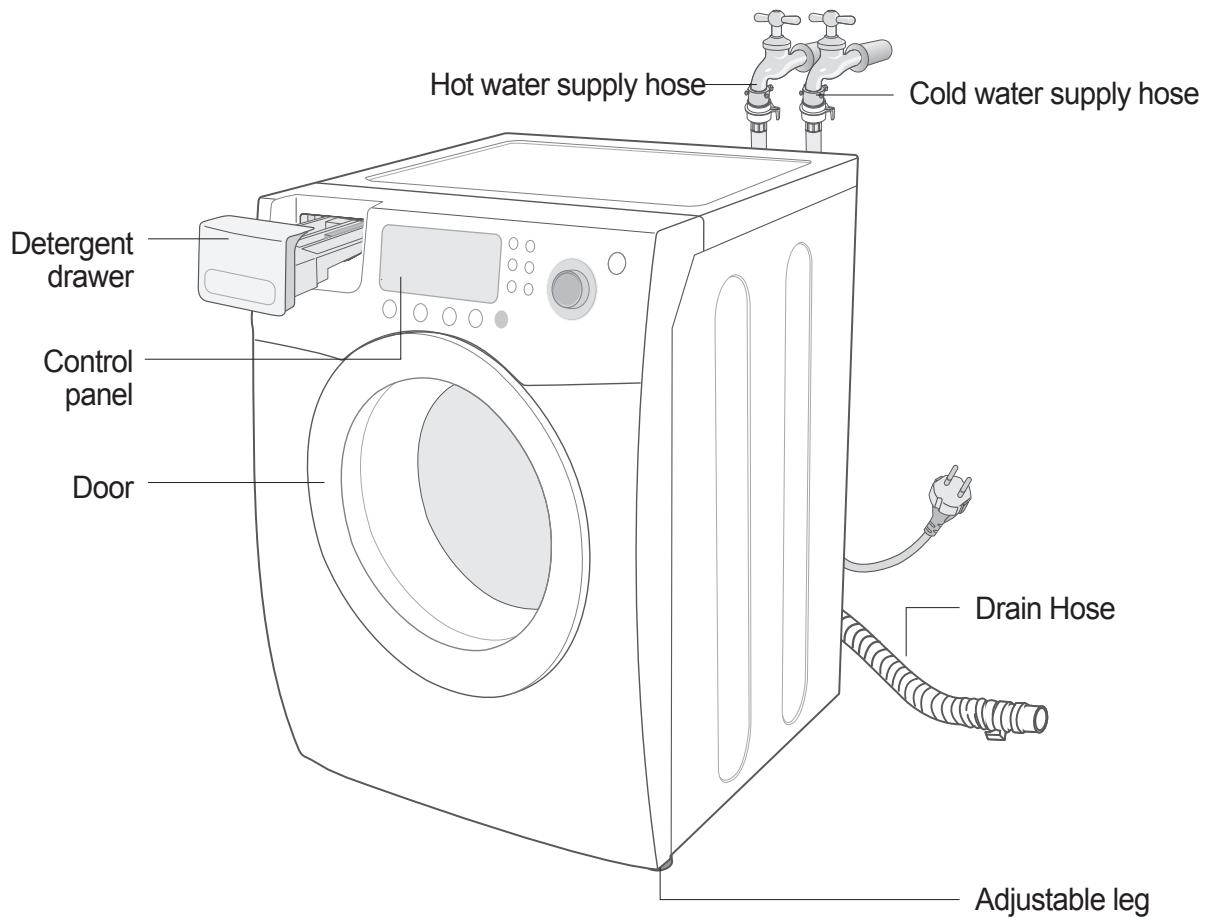
Memo

2. PRODUCT SPECIFICATIONS

2-1. SPECIFICATIONS OF PRODUCT

| TYPE | FRONT LOADING WASHER | | | |
|-------------------|----------------------|------------------|-----------------------------|--------------|
| DIMENSION | Div | Inches (cm) | Div | Inches (cm) |
| | A. Height-Overall | 38 (96.5) | C. Depth With Door Open 90° | 49 (124.5) |
| | B. Width | 27 (68.6) | D. Depth | 30.25 (77.0) |
| WATER PRESSURE | | 50 kPa ~ 800 kPa | | |
| WEIGHT | | 89.9 kg | | |
| CAPACITY | | 3.29 Cu.ft | | |
| POWER CONSUMPTION | WASHING | | 120V | 226W |
| | WASHING AND HEATING | | 120V | 997W |
| | SPIN | | 120V | 379W |
| | DRAIN | | 120V | 41W |
| SPIN REVOLUTION | WF326*** | | 1200rpm | |
| | WF316*** / WF317*** | | 1100rpm | |
| | WF306*** | | 1000rpm | |
| | WF206*** | | 1000rpm | |

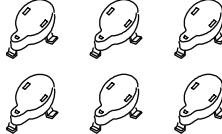
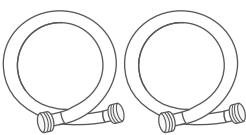
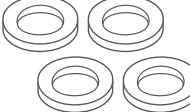
2-2. OVERVIEW OF THE WASHING MACHINE



2-3. THE COMPARATIVE SPECIFICATIONS OF PRODUCT

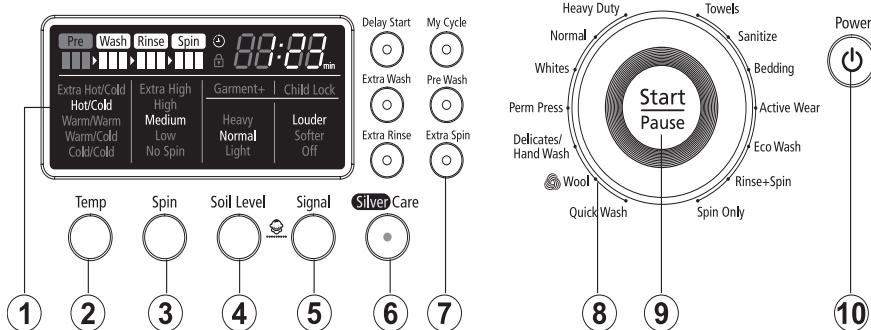
| Item | Samsung (WF316LAW) | Whirlpool (GHW9250M) | LG (WM2432HW) | Bosch (WFMC6400) |
|---|-----------------------|-------------------------|------------------|---------------------|
| Capacity (Cu.ft) | 3.29 (DOE) | 3.21 (DOE) | 3.22 (3.72) | 2.93 (DOE) |
| Volume of Spinner (ℓ) | 93.4 | 90 | 91 | 83 |
| Motor | Direct Drive | 3-Phase | Direct Drive | 3-Phase |
| User Interface | LED | LED | LED | LCD (red) |
| Cycle Time | 57 | 52 | 59 | 66 |
| Wash Performance | 1.01 | 1.00 | 0.99 | 1.02 |
| Water Consumption/Cycle | 48 Liter | 56 Liter | 49 Liter | 61 Liter |
| Energy Consumption (W/O Heater Wh/Cycle) | 128 | 105 | 114 | 189 |
| RPM | 1,100 | 1,100 | 1,200 | 1,200 |
| Noise | 57 dB | 59 dB | 66 dB | 62 dB |

2-4. OPTION SPECIFICATIONS

| Item | Item Name | Code No. | Remark |
|---|---------------|-------------|--------|
|  | BOLT-SPANER | DC60-40146A | |
|  | CAP-FIXER | DC61-10688A | |
|  | HOSE-WATER(H) | DC62-00075A | |
| | HOSE-WATER(C) | DC62-00075B | |
|  | SEAL-WATER | DC62-40178A | |
|  | MANUAL-BOOK | DC68-02291A | |

3. OPERATING INSTALLATION

3-1. OVERVIEW OF THE CONTROL PANEL



1. Digital graphic display

Displays the remaining wash time, all wash information, and error messages.

2. Temperature selection button

Press the button repeatedly to cycle through the different water temperature options.

Extra Hot/Cold - Heavily soiled, colorfast items. Only available with the Sanitize cycle.

Hot/Cold - Whites and heavily soiled, colorfast items.

Warm/Warm - Colorfast items. When warm rinse is selected, only the final rinse will be warm. The other rinses will be cold to conserve energy.

Warm/Cold - Moderately soiled, colorfast items; most wrinkle-free items.

Cold/Cold - Brightly colored, very lightly soiled items; washable woolens.

3. Spin selection button

Press the button repeatedly to cycle through the different spin speed options.

Extra High - Removes more water from loads during spin.

NOTE: To minimize wrinkling of wrinkle-free and no-iron fabrics, DO NOT use the Extra High spin option for these loads, nor overload your Washer.

High - Use for underwear, t-shirts, jeans and sturdy cottons.

Medium - Use for jeans, wrinkle-free or wash-and-wear items and synthetics.

Low - Use for delicate items needing a slow spin speed because of fabric and construction.

No Spin - Drains your Washer without spinning. Use for extremely delicate items that cannot tolerate any spin.

4. Soil Level selection button

Press the button to select the Soil Level/washing time.

Heavy - For heavily soiled loads.

Normal - For moderately soiled loads. This setting will be appropriate for most loads.

Light - For lightly soiled loads.

5. Signal selection button

Press the button to increase or decrease the end of cycle signal volume or turn off the signal.

6. SilverCare™ button

Silver ions are added during the wash and rinse cycles to maximize the sanitizing and antibiotic

effects. Harnesses pure silver's sanitizing power and the state-of-the-art technological competency of SAMSUNG.

Two plates of 99.9% pure silver are converted into silver ions through electrolysis and penetrate into the laundry blended with water.

Even in cold water, silver particles sanitize and kill 99.9% of odor-causing bacteria.

Washing garments with SilverCare™ can save about 92% of energy compared to hot water sanitization. Also, SilverCare™ Technology significantly reduces damage to delicate clothes compared to sanitizing in hot water.

3-1. OVERVIEW OF THE CONTROL PANEL

7. Select Cycle Option

Delay Start - Any cycle can be delayed for up to 12, 19 or 24 hours (select models) in one-hour increments. Displayed hour indicates the time at which the wash will be finished.

Extra Wash - Add additional time to the wash for better stain removal.

Extra Rinse - Add an additional rinse at the end of the cycle to more thoroughly remove laundry additives and perfumes.

Extra Spin - Add additional time to remove more water from loads

My Cycle - Choose your favorite cycle including temperature, spin, soil level, option, etc.

Pre Wash - Add detergent to the Pre Wash selection of the detergent compartment. Washer fills with cold water and detergent, tumbles, then drains and advances to the selected wash cycle. Some cycles cannot be selected with this option.*

* You can't select PreWash option in Delicate/Hand Wash, Wool, Quick Wash and Active Wear cycles.

8. Cycle Selector

Select the appropriate cycle for the type of load.

This will determine the tumble pattern and spin speed for the cycle.

NOTE: To minimize wrinkling of loads, select the Perm Press cycle.

Heavy Duty - For sturdy, colorfast fabrics and heavily soiled garments.

Normal - For most fabrics including cottons, linens, and normally soiled garments.

Whites - For white fabrics with or without bleach.

Perm Press - For wash-and-wear, synthetic fabrics, and lightly to normally soiled garments.

Delicates/Hand Wash - For sheer fabrics, bras, lingerie silk, and other handwash-only fabrics. For best results, use liquid detergent.

Wool - For machine-washable wool. Loads should be under 8 pounds.



The wool wash cycle of this machine has been approved by Woolmark for the washing of machine washable Woolmark products provided that the products are washed according to the instructions on the garment label and those issued by the manufacturer of this washing machine, M0509.

Quick Wash - For lightly soiled or wrinkled garments needed quickly.

Towels - For bath towels and washcloths. Do not load too many towels because they absorb lots of water.

Sanitize - For heavily soiled, colorfast garments. This cycle heats the water to 150°F to eliminate bacteria.

NOTE: If Pause is selected during the heating portion of the Sanitize Cycle, your Washer door will remain locked for your safety.

Bedding - For bulky items such as blankets and sheets.

Active Wear - For washable sportswear.

Eco Wash - For geographic areas where energy and water conservation is needed.

Rinse + Spin - Use for loads that need rinsing only or to add rinse-added fabric softener to a load.

Spin Only - Provides a spin to remove more water from the load.

9. Start/Pause selection button

Press to pause and restart programs.

10. Power button

Press once to turn your Washer on, press again to turn your Washer off. If your Washer is left on for more than 10 minutes without any buttons being touched, the power automatically turns off.

NOTE : Cycles and options vary by model. See next pages.

326LAS

| | Functions | | | | | | | | | | | | Options | | | | | | | Time | |
|-----------------------------|-----------|-----|-----|-----|-----|------|---|---|---|------------|---|---|-------------|------------|-------------|----------|----------|------------|--------------|------|--|
| | Temp | | | | | Spin | | | | Soil Level | | | Delay Start | Extra Wash | Extra Rinse | My Cycle | Pre Wash | Extra Spin | Silver Care™ | | |
| | EH/C | H/C | W/W | W/C | C/C | EH | H | M | L | NS | H | N | L | | | | | | | | |
| Heavy Duty | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 92 | | |
| Normal | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 53 | | |
| Whites | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 62 | | |
| Perm Press | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | | |
| Delicates/ Hand Wash | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 41 | | |
| Wool ☚ | | | | | | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | 57 | | |
| Quick Wash | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 35 | | |
| Towels | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 66 | | |
| Sanitize | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 112 | | |
| Bedding | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 71 | | |
| Active Wear | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 51 | | |
| Eco Wash | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | | |
| Rinse + Spin | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | ✓ | ✓ | 20 | | |
| Spin Only | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | ✓ | | 11 | | |

306LAW

| | Functions | | | | | | | | | | | | Options | | | | Time | |
|-----------------------------|-----------|-----|-----|-----|---|------|---|----|---|------------|---|---|-------------|------------|-------------|--------------|------|--|
| | Temp | | | | | Spin | | | | Soil Level | | | Delay Start | Extra Wash | Extra Rinse | Silver Care™ | | |
| | H/C | W/W | W/C | C/C | H | M | L | NS | H | N | L | | | | | | | |
| Heavy Duty | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 67 | |
| Normal | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 53 | |
| Whites | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 62 | |
| Perm Press | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | |
| Delicates/ Hand Wash | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 41 | |
| Wool ☚ | | | | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | 57 | |
| Quick Wash | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 35 | |
| Towels | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 66 | |
| Rinse + Spin | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | 20 | |
| Spin Only | | | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | 11 | |

3-2. PROGRAMME CHART

316LAW, 316LAS, 316BAW, 316BAC

| | Functions | | | | | | | | | | | | Options | | | | | | Time | |
|-----------------------------|-----------|-----|-----|-----|-----|------|---|---|---|------------|---|---|-------------|------------|-------------|----------|----------|--------------|------|--|
| | Temp | | | | | Spin | | | | Soil Level | | | Delay Start | Extra Wash | Extra Rinse | My Cycle | Pre Wash | Silver Care™ | | |
| | EH/C | H/C | W/W | W/C | C/C | EH | H | M | L | NS | H | N | L | | | | | | | |
| Heavy Duty | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 92 | | |
| Normal | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 53 | | |
| Whites | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 62 | | |
| Perm Press | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | | |
| Delicates/ Hand Wash | | | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 41 | | |
| Wool | | | | | ✓ | | | | ✓ | ✓ | | ✓ | | ✓ | | ✓ | | 57 | | |
| Quick Wash | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 35 | | |
| Towels | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 66 | | |
| Sanitize | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 112 | | |
| Bedding | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 71 | | |
| Rinse + Spin | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | | ✓ | ✓ | 20 | | |
| Spin Only | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | | 11 | | |

306BHW

| | Functions | | | | | | | | | | | | Options | | | | Time | |
|-----------------------------|-----------|-----|-----|-----|-----|------|---|---|----|------------|---|---|-------------|------------|-------------|--------------|------|--|
| | Temp | | | | | Spin | | | | Soil Level | | | Delay Start | Extra Wash | Extra Rinse | Silver Care™ | | |
| | EH/C | H/C | W/W | W/C | C/C | H | M | L | NS | H | N | L | | | | | | |
| Heavy Duty | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 67 | |
| Normal | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 53 | |
| Whites | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 62 | |
| Perm Press | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | |
| Delicates/ Hand Wash | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 41 | |
| Wool | | | | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | 57 | |
| Quick Wash | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 35 | |
| Towels | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 66 | |
| Sanitize | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 112 | |
| Bedding | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 71 | |
| Rinse + Spin | | | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | ✓ | 20 | |
| Spin Only | | | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | | 11 | |

3-2. PROGRAMME CHART

206LNW, 206BNW

| | Functions | | | | | | | | | | | | Options | | | Time | | | |
|---------------------|-----------|-----|-----|-----|------|---|---|------------|---|---|-------------|------------|-------------|---|---|------|--|--|--|
| | Temp | | | | Spin | | | Soil Level | | | Delay Start | Extra Wash | Extra Rinse | | | | | | |
| | H/C | W/W | W/C | C/C | H | M | L | NS | H | N | L | | | | | | | | |
| Heavy Duty | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 67 | | | |
| Normal | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 53 | | | |
| Whites | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 62 | | | |
| Perm Press | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 47 | | | |
| Towels | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 66 | | | |
| Rinse + Spin | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | ✓ | 20 | | | |
| Spin Only | | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | 11 | | | |

3-3. MAIN FUNCTION

CHILD LOCK

A function that prevents children from playing with your Washer.

ACTIVATING/DEACTIVATING

If you want to activate/deactivate the Child Lock function, press the Soil Level and Signal buttons at the same time for 3 seconds.

How It Works:

1. Child Lock can be activated while your Washer is running.
2. Once you activate Child Lock, all controls (except for the Power button) will be locked until you deactivate Child Lock.
3. The Child Lock button will be lit while it is in effect.

Note:

When buttons, other than the Power button, do not respond, please check if the Child Lock button is on.

GARMENT +

You can add or take out laundry items even after the wash has started, as long as the Garment+ light is on. Pushing the Start/Pause button unlocks the door, unless the water is too hot or if there is too much water in your Washer. If you are able to unlock the door and wish to continue the wash cycle, close the door and press the Start/Pause button.

MY CYCLE

Allows you to activate your custom wash (temperature, spin, soil level, etc.) with one-button convenience.

By pushing the My Cycle button, you activate the settings used during the last My Cycle mode. The My Cycle light will indicate activation.

You can select all options as follows in My Cycle mode.

1. Select cycle using Cycle Selector dial.
2. After cycle selection, set each option.

Note: At this time, the option will follow as per each cycle's default option selection.

3. Then, you can start My Cycle by pushing the Start/Pause button in My Cycle mode.

The cycle and options you select will be displayed next time you choose My Cycle.

Note: You can change My Cycle setting by repeating same process above.

The last used setting will be displayed at next time you choose My Cycle.

3-3. MAIN FUNCTION

FOR SilverCare™ WASHING

An increased consumer demand for energy-saving products prompted Samsung to develop a system to use silver, widely known for its antibacterial properties, in your washing machine. Pure silver atoms have an electron stripped away by electrolysis during the wash and rinse cycles, which releases up to 400 billion silver ions that then penetrate deep into the fabric to sanitize clothing (according to U.S. EPA Test Guideline DIS/TSS-13) without the need for hot water or bleach.

Here's how it works: A grapefruit-sized device alongside the tub uses two pure silver plates the size of large chewing gum sticks. The resulting positively charged silver atoms - Silver ions (Ag^+) -- are sprayed into the tub during the wash cycle. The ionic solution penetrates laundry and coats the individual fibers with the ions. According to NSF tests, this process removed or killed greater than 99.9% of tested bacteria (specified test bacteria in U.S. EPA Test Guideline DIS/TSS-13)

Samsung's SilverCare™ Technology provides a 92% energy savings over hot water sanitization. Extra delicate blouses, shirts, or even lingerie that can't be washed in hot water can now be sanitized effectively without the adverse effects of hot water washing that is normally a concern with those types of articles. The silver plates carry a warranty of ten years, and can easily be replaced by a Service Technician if so needed.

1. Open the door, put in the clothes and close the door again.
2. Press the Power button.
3. Select a Cycle by turning the Cycle Selection dial.
4. Press SilverCare™ button.
5. Add detergent in the dispenser tray for main washing, and add fabric softener up to the marked line.
: For Pre Wash, put a supplementary detergent in the dispenser.
SilverCare™ : If it is used together with fabric softener, its effect may be decreased.
6. Press Start/Pause button.
: Automatically selects optimal washing conditions by sensing the laundry's weight.

Note :

FOR HOME USE ONLY– COMMERCIAL USERS SHOULD NOTIFY THEIR LOCAL WASTE TREATMENT AUTHORITIES BEFORE USE

You can find # of times you used SilverCare™ option by pushing signal and SilverCare™ button.

- LU3 : less than 1000 times
- LU2 : between 1000 to 2000 times
- LU1 : between 2000 to 2999 times
- LU0 : over 2999 times

You should replace the SilverCare™ kit when it displays "LU0". Contact 1-800-SAMSUNG.

Note :

For some model which has no heater if you choose SilverCare™, Temp will be fixed to Cold/Cold.

If you change Temp selection, the SilverCare™ option will be canceled.

You can't choose SilverCareTM option with Wool cycle.

3-4. TECHNICAL POINT

1) Motor on/off time at each course

unit:sec

| Course | Washing | | | | Motor r.p.m |
|---------------------------|---------|-----|-----|-----|-------------|
| | Cw | Off | Ccw | Off | |
| Heavy Duty | 14 | 6 | 14 | 6 | 45 |
| Normal | 14 | 6 | 14 | 6 | 45 |
| Whites | 12 | 8 | 12 | 8 | 45 |
| Perm Press | 5 | 5 | 5 | 5 | 45 |
| Delicate/Hand wash | 2 | 13 | 2 | 13 | 45 |
| Wool | 1 | 59 | 1 | 59 | 40 |
| Quick Wash | 12 | 8 | 12 | 8 | 45 |
| Towels | 10 | 10 | 10 | 10 | 45 |
| Sanitary | 10 | 10 | 10 | 10 | 45 |
| Bedding | 12 | 8 | 12 | 8 | 45 |
| Active Wear | 10 | 10 | 10 | 10 | 45 |
| Eco Wash | 12 | 8 | 12 | 8 | 45 |
| Rinse + Spin | 10 | 10 | 10 | 10 | 45 |
| Spin Only | — | — | — | — | — |

2) Final dehydrating r.p.m at each course

unit:rpm

| Model Course | WF326L | | WF316L | | WF306L | | WF206L | |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Default | MAX RPM |
| Heavy Duty | 1200 | 1200 | 1100 | 1100 | 1000 | 1000 | 1000 | 1000 |
| Normal | 1200 | 1000 | 1000 | 1100 | 1000 | 1000 | 1000 | 1000 |
| Whites | 1200 | 1200 | 1100 | 1100 | 1000 | 1000 | 1000 | 1000 |
| Perm Press | 800 | 1000 | 600 | 1000 | 600 | 600 | 600 | 600 |
| Delicate/Hand wash | 800 | 400 | 400 | 400 | 400 | 400 | — | — |
| Wool | 400 | 600 | 600 | 600 | 600 | 600 | — | — |
| Quick Wash | 1200 | 1200 | 1000 | 1100 | 1000 | 1000 | — | — |
| Towels | 400 | 1200 | 1000 | 1100 | 1000 | 1000 | 1000 | 1000 |
| Sanitary | 1200 | 1200 | 1100 | 1100 | — | — | — | — |
| Bedding | 600 | 800 | 600 | 800 | — | — | — | — |
| Active Wear | 600 | 1000 | — | — | — | — | — | — |
| Eco Wash | 1000 | 1200 | — | — | — | — | — | — |
| Rinse + Spin | 1000 | 1200 | 1000 | 1100 | 1000 | 1000 | 1000 | 1000 |
| Spin Only | 1000 | 1200 | 1000 | 1100 | 1000 | 1000 | 1000 | 1000 |

3-4. TECHNICAL POINT

3) The water supply control at each process cycle

| Process cycle | Model | WF316, WF306 |
|---------------|--|--------------|
| Pre Washing | Cold water 5L/min | |
| Washing | Cold water 10L/min + (Hot water 10L/min) | |
| Rinse | Cold water 10L/min | |
| Final rinse | Cold water 10L/min + Cold water 5L/min | |

4) The water level data at each course

unit:Khz

| Course | Model | Water Level | | |
|---------------------------|---------|------------------------------|------------------------------------|----------------------------------|
| | | Default water level (kHz) | Supplementary water START (kHz) | Supplementary water End (kHz) |
| Heavy Duty | Washing | 24.5 | 24.85 | 24.6 |
| | Rinse | 24.6 | 24.95 | 24.7 |
| Normal | Washing | 24.4 | 24.75 | 24.5 |
| | Rinse | 24.6 | 24.6 | 24.95 |
| Whites | Washing | 24.4 | 24.75 | 24.5 |
| | Rinse | 24.3 | 24.65 | 24.4 |
| Perm Press | Washing | 24.3 | 24.65 | 24.4 |
| | Rinse | 24.2 | 24.55 | 24.3 |
| Delicate/Hand wash | Washing | 23.7 | 24.05 | 23.8 |
| | Rinse | 23.6 | 23.95 | 23.7 |
| Wool | Washing | 23.7 | - | - |
| | Rinse | 23.2 | - | - |
| Quick Wash | Washing | 24.4 | 24.75 | 24.5 |
| | Rinse | 24.3 | 24.65 | 24.4 |
| Towels | Washing | 24.3 | 24.65 | 24.4 |
| | Rinse | 24.2 | 24.55 | 23.3 |
| Sanitary | Washing | 24.7 | 25.05 | 24.8 |
| | Rinse | 24.6 | 24.95 | 24.7 |
| Bedding | Washing | 24.2 | 24.55 | 24.3 |
| | Rinse | 24.1 | 24.45 | 24.8 |
| Active Wear | Washing | 24.4 | 24.75 | 24.7 |
| | Rinse | 24.3 | 24.65 | 24.4 |
| Bedding | Washing | 24.5 | 24.85 | 24.6 |
| | Rinse | 24.4 | 24.75 | 24.5 |
| Rinse + Spin | Washing | - | - | - |
| | Rinse | 24.3 | 24.65 | 24.4 |

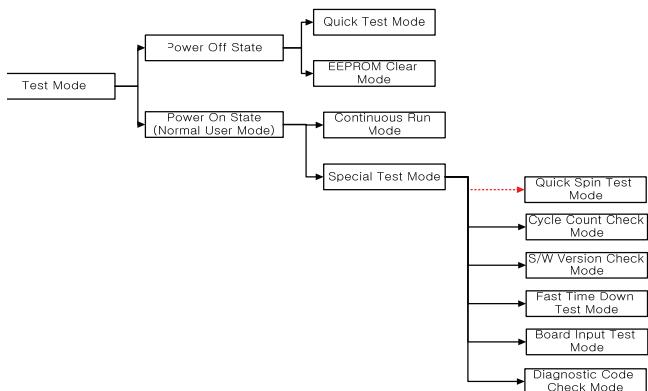
Memo

4. ALIGNMENT AND ADJUSTMENTS

4-1. GENERAL ERROR FUNCTION

| NO | LED Display | Diagnostic Code | Description | Corrective Action |
|-----------|--------------------|------------------------|--|---|
| 1 | nd | 1 | The water level fails to drop below the Reset Water Level within 15 minutes. | Go to " Will Not Drain" Troubleshooting Section. |
| 2 | LO | 2 | Door fails to unlock after 3 attempts. | Go to " Will Not Unlock" Troubleshooting Section. |
| 3 | nF | 3 | When the filling continues for more than 16 minutes or there is no change of water level for 3 minutes | Go to " No Water Fill" Troubleshooting Section. |
| 4 | FL | 4 | Door fails to lock after 3 attempts. | Go to " Will Not Lock" Troubleshooting Section. |
| 5 | LE | 8 | Water Level Sensor Trouble. (When the input signal from the water level sensor is out of range, the unit will send out beeping sounds and halts the cycle.) | Go to "No Water Fill" Troubleshooting Section. |
| 6 | OE | E | A fault is detected in the water level sensor. Data (frequency) shows the water level is at or above the overflow water level. (When this condition is detected, the machine will automatically starts draining water until the water level falls below the overflow water level) | First check to see that all of water valves are not stuck. If water valves are OK, check water level sensor. |
| 7 | dc | 10 | Unbalance or cabinet bump is detected during final spin, which prevents the drum from spinning over 400 rpm. (Never exceeds 400 RPM due to unbalanced load) | Go to "Wet Clothes" Troubleshooting Section. |
| 8 | - | 11 | EEPROM Fault. (Program settings are being reset.) | Go to "EEPROM Clear Mode" If display shows "FAiL", Replace Machine Control Board. |
| 9 | E2 | 15 | Jammed Key.(When key input signals are coming out for more than 30 seconds, it is regarded as a jam.) | Check all of keys. If A key is sensed to be pressed, all keys will do not respond. |
| 10 | dL | 18 | Door is detected as open when the motor is operating. | Check for loose wire connections. Go to "Quick Test Mode" and then do Door lock/Unlock Test and Motor Test. |
| 11 | dS | 22 | Door is detected as open while it is trying to lock the door. | Go to "Quick Test Mode" and then do Door Lock/Unlock Test |
| 12 | bE | 25 | Motor hall sensor signals come out without motor operation. | Replace Machine Control Board. |
| 13 | tE | 29 | Abnormal high/low temperature or resistance (Thermal sensor or PBA) resistance. | Go to " Board Input Test" and check Water Temperature. Check loose or pinched wires. Replace PCB or thermistor. |
| 14 | E3 | 2E | MICOM is attempting to drive the motor but is not getting any response signals from the hall sensor. Visual check shows motor is not running. (Locked, Defective Hall Sensor or Overload) | Evaluate wire harness for loose or unhooked connections. Go to " Quick Test Mode" and test Motor. |
| 15 | Sr | 34 | System Relay (Main Relay) Failure. (PCB does not notice the relay operation when there should be.) | Replace PCB. |
| 16 | Hr | 36 | Heater Relay Failure (No Heater Relay Check Signal) | Replace PCB |
| 17 | 3E | 3E | Over-current is detected. Motor won't turn. (IPM detects over-current.) | Evaluate wire harness for loose or unhooked connections. Go to " Quick Test Mode" to test Motor. |
| 18 | 2E | 91 | Voltage for motor control bus is over specified limit. | Replace PCB |
| 19 | 2E | 92 | Voltage for motor control bus is under specified limit. | Replace PCB |
| 20 | 8E | 8E | MEMS Sensor Failure. (No MEMS Sensor Check Signal) | Check MEMS PCB ,Main PCB & Wire-harness |
| 21 | 7E | 7E | Silver Care Kit (Silver Care PCB) Failure. | Check Silver Care PCB ,Main PCB & Wire-harness |
| 22 | PF | - | It occurs when there is power failure during the washing."PF" is not an error. It is to inform the user of power failure.) | - |
| 23 | SUDS | - | Suds is detected during the washing session. ("SUDS" is not an error. If the washer is in suds period, "SUDS" will light up instead of remaining time.) | Guide a user to reduce amount of detergent usage. |

4-2. TEST MODE



Test Mode:

Each Test Mode for the Frontier Washer is as follows in the coming pages. The test modes indicated by the red arrows are the modes unable to get an access once the washing cycle has started due to safety reasons.

4-2-1. Quick Test Mode

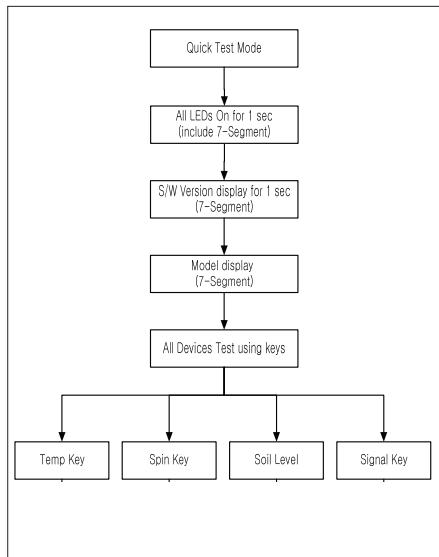


Definition of Quick Test Mode:

- Check operation of all LED's (Verify faulty LED).
- Check model and software version.
- Check different operating modes (e.g. water valve, motor, door, drain pump, etc.).

How to Enter:

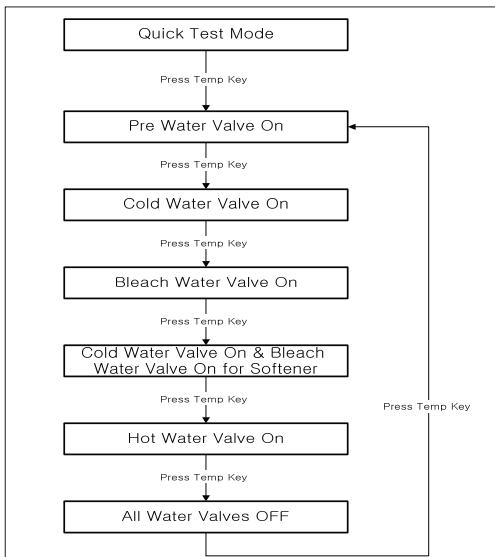
- Plug in and turn on the unit.
- Press Spin Key, Soil Level Key and Power Key at the same time.
(Same for all Frontier models.)



Quick Test Mode:

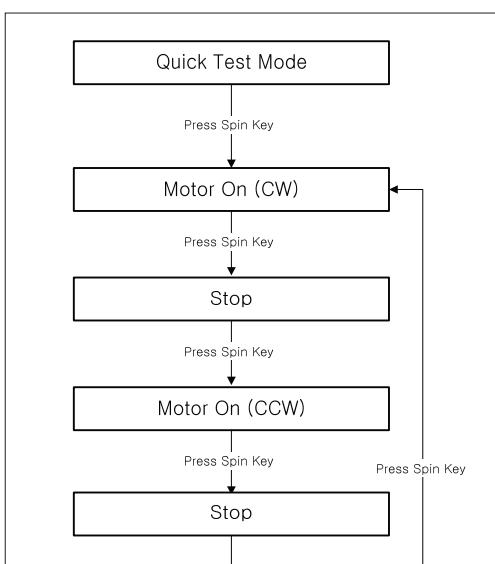
1. All LED's light up and it sends out Beep Sound when it enters into the Quick Test Mode. (Including 7-Segment)
2. Displays software version for a sec.
(Ex. If S/W Version is 60, 7-Segment will display U060)
3. After displaying the software version, 7-Segment will display the following information for each model.
 - F1 : WF326LAW, WF326LAS
 - F2 : WF316LAW
 - F2b: WF316BAC, WF316BAW
 - F3 : WF306LAW
 - F8b: WF306BHW
 - EEEE : Model option Error (Need to replace PCB Assy.)
4. When model information is being displayed, press the following keys to test various components.
 - Temp Key : Water Valve Test
 - Spin Key : Motor Test
 - Soil Level Key : Door Lock/Unlock Test
 - Signal Key : Drain Pump Test.

4-2-1. Quick Test Mode



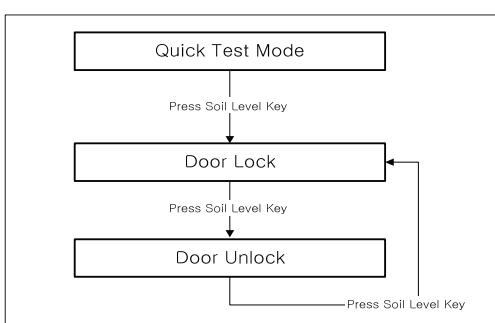
Water Valve Test:

1. To enter the Water Valve Test, press the Temp Key while model information is being displayed during the Quick Test Mode.
2. Each time the Temp Key is pressed, it will cycle through the operations on the left flow chart. But, WF306LAW(F3) and WF306BHW(F8b) do not have the pre water valve. So, it will skip Pre Water Valve On and jump to Cold Water Valve On.
3. If the Temp Key is pressed during All Water Valve OFF, the machine will return to the beginning as shown in the flow chart.
4. The door needs to be secured for the Water Valve to operate. Therefore, the door lock will be on during the water valve operation.
5. If there is any problem with Water Valve, PCB Assy. or Wire Harness, the water valves could not operate. So, to make sure for the water valves to operate, check visually if water comes out with each Water Valve On mode.



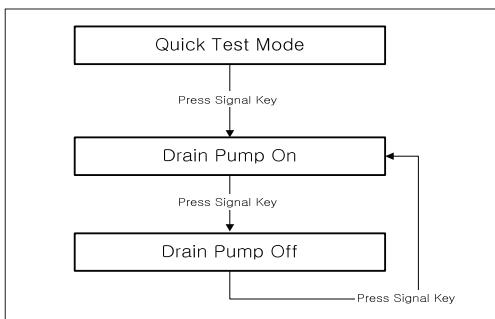
Motor Test:

1. To enter the Motor Test, press the Spin Key while model information is being displayed during the Quick Test Mode.
2. Each time the Spin Key is pressed, it will cycle through the operations on the left flow chart.
4. The Door Lock will be on during the motor operation.
5. If there is any problem with Motor, PCB Assy. or Wire Harness, related error codes will be displayed.



Door Lock/Unlock Test:

1. To check the Door Lock/Unlock operation, press the Soil Level Key while model information is being displayed during the Quick Test Mode.
2. Each time the Soil Level Key is pressed, it will cycle through the Door Lock/Unlock operations on the left flow chart.
3. If the Soil Level Key is pressed during Door Lock and Water Valve, Motor or Drain Pump operation, all of the operations will stop. And, when the Soil Level Key is pressed again, the door will be released.
4. If there is any problem with Door Switch, PCB Assy. or Wire Harness, related error codes will be displayed.



Drain Pump Test:

1. To check the Drain Pump operation, press the Signal Key while model information is being displayed during the Quick Test Mode.
2. Each time the Signal Key is pressed, it will cycle through the operations on the left flow chart.
3. The Drain Pump operation is independent. Therefore, it will operate regardless of Door Lock/Unlock.
4. If there is any problem with Drain Pump, PCB Assy. or Wire Harness, the Drain Pump will not operate. So, its operation needs a visual inspection.

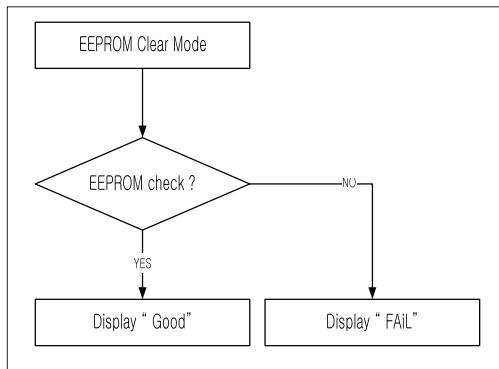
4-2-2. EEPROM Reset Mode

Definition of EEPROM Reset Mode:

- EEPROM initialization.
- All course/option settings are to be reset to default values after EEPROM initialization.
- When Service arises and it needs PCB replacement, EEPROM should be reset.

How to Enter:

- The unit needs to be on.
- Press Delay Start Key, Signal Key and Power Key at the same time.
(Same for all Frontier models.)



EEPROM Reset Mode:

1. EEPROM can be reset once the user enters the EEPROM Clear Mode.
2. If there is any problem with EEPROM, 7-Segment will display "FAiL". "Good" will be displayed if everything is OK.
3. PCB assy. needs replacing if "FAiL" is displayed during EEPROM reset.
4. If PCB assy. is replaced for some reason, EEPROM needs resetting.
5. If problem occurs with Sticky Function, My Cycle and Power Failure Compensation, it may be due to EEPROM. Check EEPROM's condition at EEPROM Clear Mode.

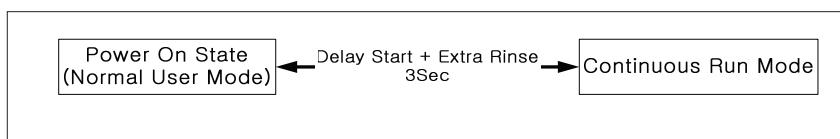
4-2-3. Continuous Run Mode

Definition of Continuous Run Mode:

- Will continuously repeat the current cycle until the Continuous Run Mode is cancelled.

How to Enter:

- Press Delay Start Key and Extra Rinse Key together for 3 sec.
(Same for all Frontier models.)



Continuous Run Mode:

1. Press Delay Start + Extra Rinse Key for 3 sec during Power On State (Normal User Mode).
2. Once in Continuous Run Mode, 7-Segment will blink "cc" and the remaining time in turns.
3. The Continuous Run Mode will repeat the previous cycle until continuous run mode is cancelled.
4. During Continuous Run Mode, press Delay Start + Extra Rinse Key for 3 seconds to return to normal user mode. 7-segment will no longer display "cc", but only display the remaining time.

4-2-4. Special Test Mode

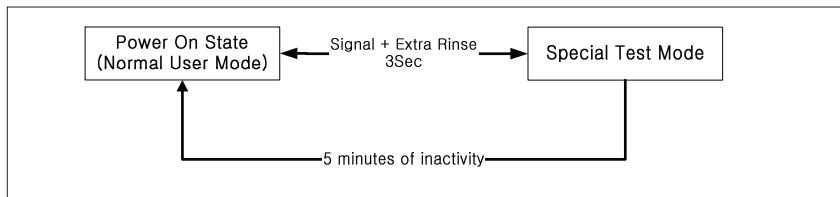
Definition of Special Test Mode:

- Special Test Mode enables service technicians to verify the operation of the washing machine and do troubleshooting.
- Special Test Mode can be entered during all washing cycle without interrupting the cycle except some of test modes.
- Various tests can be done with Special Test Mode. So, troubleshooting can be done based on the resulting diagnostic codes.

How to Enter:

- To enter the Special Test Mode, press the Signal and Extra Rinse Keys for 3 seconds or until the unit sends out beeping sounds. (same for all Frontier models.)

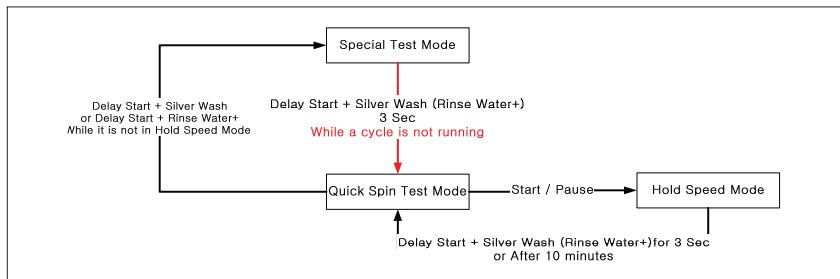
4-2-4. Special Test Mode



Special Test Mode:

1. The washer must be on to go into the Special Test Mode.
2. The motor speed will be displayed when started (It displays 0 when the motor does not spin).
3. The present state of the machine will not be changed.
(i.e., the current cycle in progress will not be interrupted and only the display will change)
4. All LED's will be turned off except the "Door Lock" LED. It will continue to display the condition of the door lock.
5. To exit Special Test Mode, press Signal and Extra Rinse Keys for 3 second again, or Power Key.
If no key is operated during Special Test Mode for 5 minutes, the machine will return to normal user mode.

4-2-5. Quick Spin Test Mode



Definition of Quick Spin Test Mode:

- Quick Spin Test Mode is to do Spin Check. (High RPM)

How to Enter:

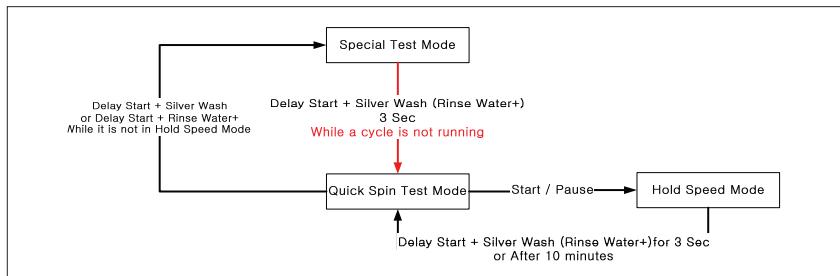
- During Special Test Mode, press the Delay Start and Silver Wash Keys (Rinse Water + Key) for 3 seconds to enter Quick Spin Test Mode. (same for all Frontier models.)
- Cannot enter once the washing cycle has started.

Quick Spin Test Mode:

As it enters into the Quick Spin Test Mode, it starts spinning and reaches to its maximum RPM. And then, it stays at its maximum speed for 2 minutes before it exits the Quick Spin Test Mode.

To hold Quick Spin Test Mode (entering Speed Hold Mode), press the Start/Pause button. If the Start/Pause button is pressed during Quick Spin Test Mode, it will stop accelerating and hold its spinning speed for 10 minutes before going back to Quick Spin Test Mode. Also, to cancel the hold and allow Quick Spin Test Mode to continue, press the Delay Start and Silver Wash Keys together for 3 seconds.

4-2-6. Cycle Count Check Mode



Definition of Cycle Count Check Mode:

- Cycle Count Check Mode is to tally up the number of washings.

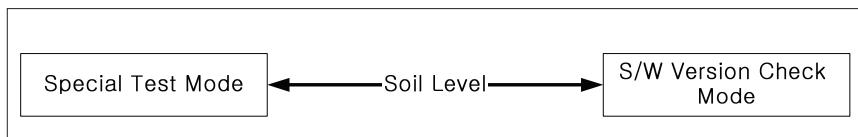
How to Enter:

- To enter the Cycle Count Check Mode, press the Signal Key during Special Test Mode.
(same for all Frontier models.)

Cycle Count Check Mode:

1. Activate the Special Test Mode in advance.
2. When the Signal key is pressed, the total number of washings will light up and a signal LED will glow (Louder, Softer, Off LED).
3. The maximum number of cycles will be 2999.
The counter will roll over to 0 and start counting again after 2999.
4. The counting will be carried out at the end of the normal cycle.
(During Continuous Run Mode, it does not Do not count any cycle in Continuous Run Mode)
5. To exit the Cycle Count Check Mode, press the "Signal" key again.
Then, it returns to the Special Test Mode with motor RPM illuminating.

4-2-7. S/W Version Check Mode



Definition of S/W Version Check Mode:

- S/W Version Check Mode is to bring up S/W Version information.

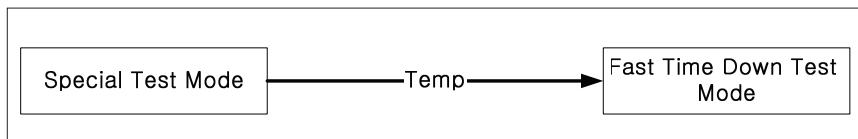
How to Enter:

- To enter the S/W Version Check Mode, press the Soil Level Key during Special Test Mode.
(same for all Frontier models.)

S/W Version Check Mode:

1. Activate the Special Test Mode in advance.
2. Press the Soil Level Key to bring up its software Version
EX) Generate F005 at Version 05 (F0 is model code, 05 is it's software version)
3. To exit the S/W Version Check Mode, press the Soil Level S/W once again.
Then, it returns to the Special Test Mode with motor RPM illuminating.

4-2-8. Fast Time Down Test Mode



Definition of Fast Time Down Test Mode:

- Fast Time Down Test Mode is to forward the program to the next cycle stage.

How to Enter:

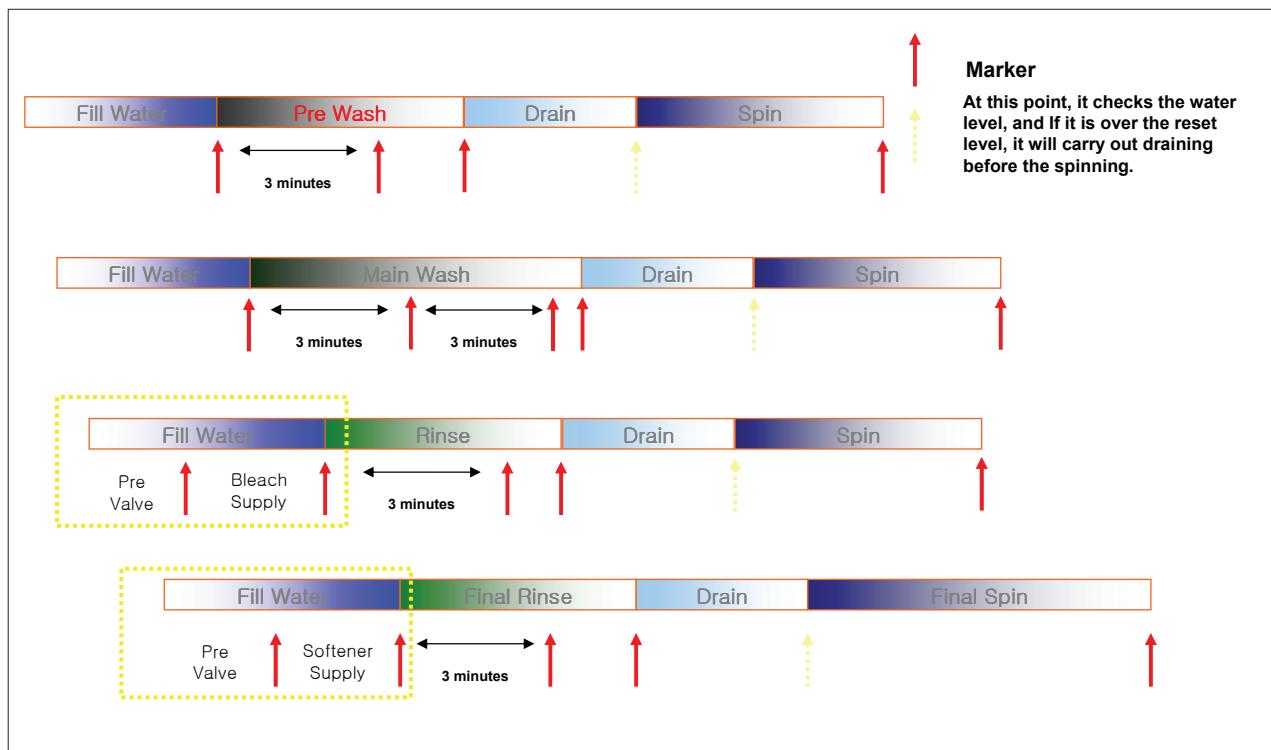
- To enter the Fast Time Down Test Mode, press the Temp key during Special Test Mode.
(same for all Frontier models.)

Fast Time Down Test Mode:

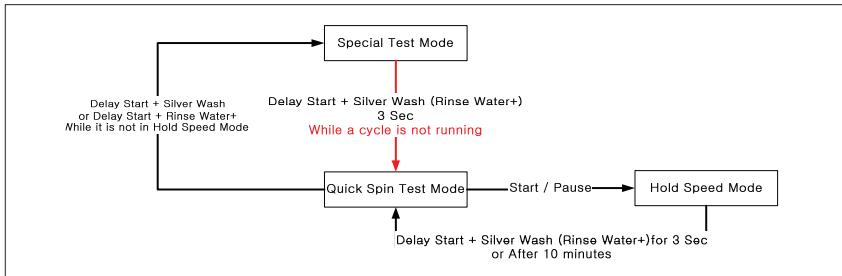
1. Activate the Special Test Mode in advance.
2. To forward the program to the next cycle stage,
press the Temp key.

Each stage is located at key points of a complete cycle as follows:

- End of Each Fill (Beginning of Wash or Rinse Tumble Session)
- Beginning of Drain Session
- Beginning of Spin Session (Here, it checks the water level. So, if it is over the reset level, it carries out draining before the spinning.)
- Beginning of Fill Session
- Beginning of Bleach Fill
- Beginning of Fabric Softener Fill
- Every 3 minutes during Wash and Rinse Tumble Session



4-2-9. Board Input Test Mode



Definition of Board Input Test Mode:

- Board Input Test Mode is to displays a specified input after a key press.

How to Enter:

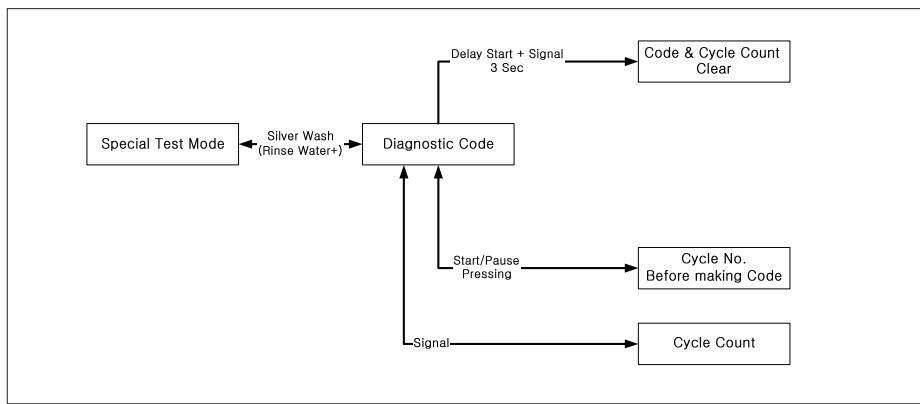
- To enter the Board Input Test Mode, press the Extra Wash key during Special Test Mode.
(same for all Frontier models.)

Board Input Test Mode:

1. Activate the Special Test Mode first.
2. Press the Extra Wash key to start Board Input Test.
3. Water Temperature Display in Celsius Dial the Rotary Cycle Selector to "Heavy Duty" and press the Start/Pause dial.
4. Water Temperature Display in Fahrenheit Dial the Rotary Cycle Selector to "Normal" and press the Start/Pause dial.
5. Door Position (Open/Close) Display Dial the Rotary Cycle Selector to "Whites" and press the Start/Pause dial: "OP" will illuminate if open, "CL" if closed.
6. Door Status (Lock/Unlock) Display Dial the Rotary Cycle Selector to "Perm Press" and press the Start/Pause dial: "UL" will illuminate if unlocked, "LO" if locked.
7. Overflow Water Level Display Dial the Rotary Cycle Selector to "Delicate/Hand Wash" and press the Start/Pause dial: "-0" will illuminate if below level, "-1" if above level (Overflow).
The above water level is defined as the overflow water level.
8. Heater-On Water Level Display Dial the Rotary Cycle Selector to "Wool" and press the Start/Pause dial: "-0" will illuminate if below level, "-1" if above level (Heater-On).
The Medium water level is defined as the level needed for the heater to turn on.
9. Reset Water Level Display Dial the Rotary Cycle Selector to "Quick Wash" and press the Start/Pause dial: "-0" will illuminate if below level (Reset), "-1" if above level.
10. Water Level Display (Frequency) Dial the Rotary Cycle Selector to "Towels" and press the Start/Pause dial:
If it illuminates "2435", it indicates 24.35 kHz.
11. AG Kit Status Dial the Rotary Cycle Selector to "Rinse+Spin" and press the Start/Pause dial.
Then, it will display the Ag Kit Status in 3 seconds: "--" if AG kit is operated properly.
"7E" if AG kit is out of order (check wire harness & PCB)
12. MEMS Sensor Kit Status. Dial the Rotary Cycle Selector to "Spin Only" and press the Start/Pause dial. Then, it will display the MEMS Sensor Kit status after displaying "00" for 3 seconds: "--" if MEMS Sensor kit is operated properly.
"8E" if MEMS Sensor kit is out of order (check wire harness & PCB)



4-2-10. Diagnostic Code Check Mode



Definition of Diagnostic Code Check Mode:

- Diagnostic Code Check Mode is to bring up the stored diagnostic codes (reference codes for service technicians).

How to Enter:

- To enter the Diagnostic Code Check Mode with code "d" flashing, press the Silver Wash (Rinse Water +) during Special Test Mode. (same for all Frontier models.)

Board Input Test Mode:

1. Activate the Special Test Mode first.
2. Press the "Silver Wash (Rinse Water +)" key to start Diagnostic Code Check Mode with Code "d" flashing.
3. To cycle through the diagnostic codes (d1,d2,d3~d9), turn the Rotary Cycle Selector in one direction (either Clockwise or Counterclockwise).
4. Now, when turning the Rotary Selector Key in the same direction, it shows diagnostic codes from the latest (d1).
5. When turning it in the opposite direction, it shows the diagnostic codes in the reverse order.
Ex) When it stops at d5 and turns backward, it shows from d4 down to "d".
6. EEPROM holds the codes up to 9 of them. So, when it goes beyond it, “- -” and “d” will light up.
Ex) “d” – d1~d9 – “- -”
7. When there are only 6 codes stored in EEPROM, it will display “- -” after them.

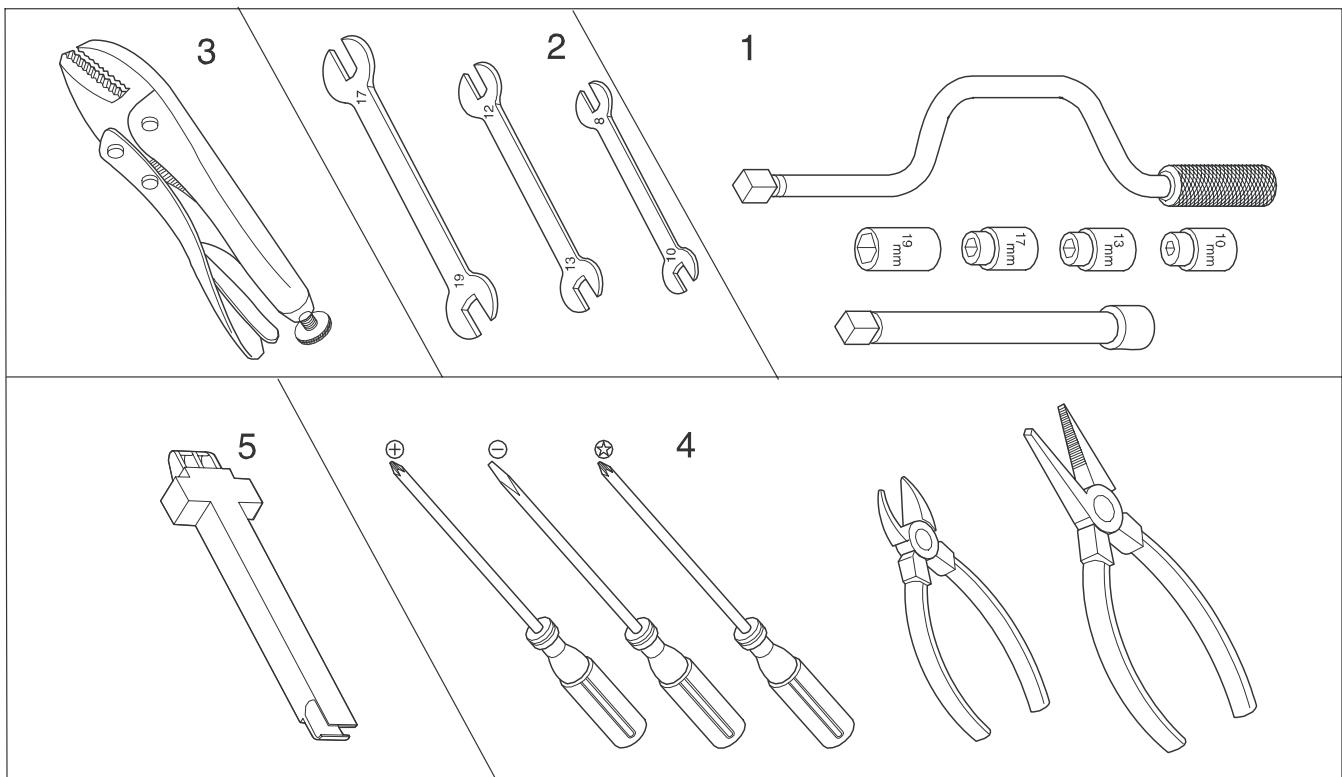
Refer to Diagnostic Code.

Memo

5. ASSEMBLY AND DISASSEMBLY

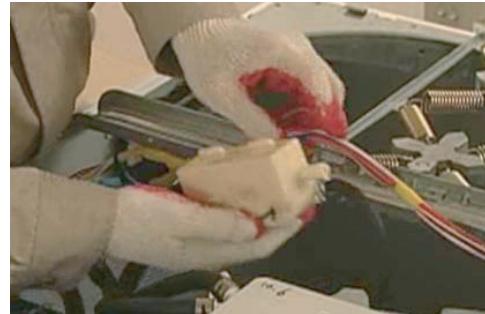
5-1. TOOLS FOR DISASSEMBLY AND ASSEMBLY

| NO. | TOOL | | |
|-----|----------------------------------|----------------------|---|
| 1 | Box driver | 10mm 13mm 19mm | Heater (1) Motor (1), Balance (5), 2 holes of each left and right of the shock absorber 1 Pulley hole |
| 2 | Double-ended spanner | 10, 13, 19mm | Replaceable for the box driver. Since the bolt runs idle when the box driver is used, use the box driver 17mm. |
| 3 | Vice pliers | | Tool to protect the idle and abrasion of the bolt for the box driver. |
| 4 | Other(Driver, Nipper, Long nose) | | General tools for the after service. |
| 5 | JIG for the Tub | | 1 (Disassemble and Assemble) |



5-2. DISASSEMBLY

Warning! To avoid risk of electrical shock, personal injury or death, disconnect the power to the washing machine.

| Part Name | Descriptive Picture | How To Do |
|--------------------|---|---|
| Top Cover |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove screws(2ea) at the back. 3. Slide Top Cover back and lift it up. |
| MEMS Sensor |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Disconnect the wire harness. 4. Remove the screws(2ea) |
| Water Level Sensor |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove the screw(1ea). 4. Disconnect the wire harness. 5. Take out Pressure Hose. |
| Ag Kit |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove screws(2ea) from the rail. 4. Disconnect the wire harness. 4. Remove clamps and hoses. |

5-2. DISASSEMBLY

| Part Name | Descriptive Picture | How To Do |
|-------------|---------------------|---|
| Ag PCB | | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Flip open the PCB cover. 4. Disconnect the wire harness. 5. Remove screws (2ea) on the frame. |
| EMI Filter | | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove the earth screw. 3. Remove the acorn nut (13mm) and disconnect the wire harness. |
| Water Valve | | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove two screws for each Single Hot and 3-Combo Cold Valve. 4. Remove clamps and hoses. |
| Dispenser | | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove Dispenser Drawer. 4. Remove screws(3ea) on the top. 5. Plug out all the connectors. 6. Unscrew(6ea) PCB and separate it from Console. |

5-2. DISASSEMBLY

| Part Name | Descriptive Picture | How To Do |
|-------------|---|--|
| Console |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover. 3. Remove Dispenser Drawer. 4. Remove screws(3ea) on the top. 5. Plug out all the connectors. 6. Unscrew(6ea) PCB and separate it from Console. |
| Door |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove screws(2ea) and takeout Door Assy from Front Panel. 3. Remove screws along the perimeter of Glass Retainer. 4. Remove Glass Retainer. 5. Remove Door Glass. 6. Remove Hinge. 7. Remove Outer Window Panel. |
| Front Panel |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Top Cover, Dispenser, Console and Door. 4. Snap up the boot at 6 o'clock and pull out the clamp spring. 5. Pull the boot from the lip formed into the front opening. 6. Remove screws(2ea) on the bottom. 7. Remove screws(4ea) on the top. 8. Plug out the connectors to Door Lock. 9. Lift out Front Panel. |
| Boot |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Knock the unit down to Front Panel (included). 3. Unscrew the boot clamp at 12 o'clock. 4. Pull out the boot. |

5-2. DISASSEMBLY

| Part Name | Descriptive Picture | How To Do |
|------------|---|---|
| Heater |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Knock the unit down to Front Panel (included). 3. Remove the wire connectors. 4. Remove the nut (10mm) in the center and take out Heater. |
| Motor |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. After removing screws(2ea) on Back Cover, take out Back Cover by sliding it up. 4. Rotate Motor Cover to locate a slot in Stator. Insert a Phillips screwdriver into the slot to lock Stator. 5. Remove the nut (19mm). 6. Grab Motor Cover at 3 and 9 o'clock and pull it out. 7. Remove the bolts (6ea, 10mm) securing Stator Coil to Tub. 8. Remove the wire connectors. |
| Drain Pump |  | <ol style="list-style-type: none"> 1. Unplug the unit. 2. Remove Back Cover. 3. Remove the wire connector. 4. Remove Clamp and Drain Hose. 5. Remove Clamp and Pump Hose. 6. Remove the bolts (3ea, 13mm) securing Drain Pump to Cabinet Bottom. 7. Remove the screw securing Drain Pump to the support bracket. Twist Drain Pump clockwise to remove. <p>* Make sure to put an empty container under Drain Pump to hold water inside.</p> |

5-2. DISASSEMBLY

| Part Name | Descriptive Picture | How To Do |
|---------------------------------|--|--|
| Outer Tub and Spinner(1) |  | <ol style="list-style-type: none"> 1. After the above knock-down to Drain Pump, do the following. 2. Remove screws holding the wire harness. 3. Remove the bolts (2ea, 13mm) securing Rear Struts to Cabinet Bottom. 4. Swing Struts up against Tub to make it easy to remove Tub Assy. 5. Remove bolts (2ea each side, 13mm) securing Counter Weights. 6. Remove the screw holding the wire harness. 7. Remove bolts (2ea each side, 13mm) securing Front Struts to Cabinet Bottom and swing Struts up against Tub.. 8. Loop the wire harness and Water Pressure Hose out of its retaining holders. 9. Remove screws (7ea) securing Rail Frame and take it off. 10. Remove Clamp and Vent Hose. 11. Loop out Suspension Spring by lifting it up (each side). 12. Take out Tub and put it on block supports (4" wood blocks or their equivalents) to prevent shaft damage. 13. Remove screws (10mm) around the perimeter of the tub. 14. Separate Front and Back Tubs from each other. 15. Take out Spinner Drum. 16. Remove screws to disassemble Baffles. <p>* When assembling, make sure that Front and Back Tubs are fastened up tightly. If not, it will cause water leakage.</p> |

6. TROUBLE SHOOTING

6-1. TROUBLE DIAGNOSIS

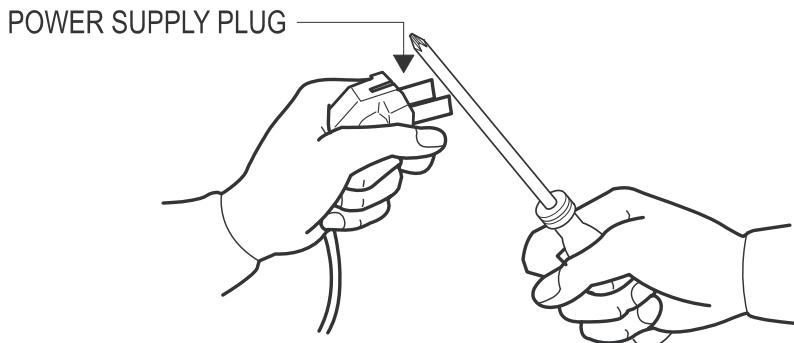
- As the micom wash machine is configured of the complicate structure, there might be the service call.

Below information is prepared for exact trouble diagnosis and suitable repair guide.

Caution for the Repair and Replacement

Please follow below instruction for the trouble diagnosis and parts replacement.

- 1) As some electronic components are damaged by the charged static electricity from the resin part of wash machine or the human body, prepare the human body earth or remove the potential difference of the human body and wash machine by contacting the power supply plug when the work contacting to PCB is executed.

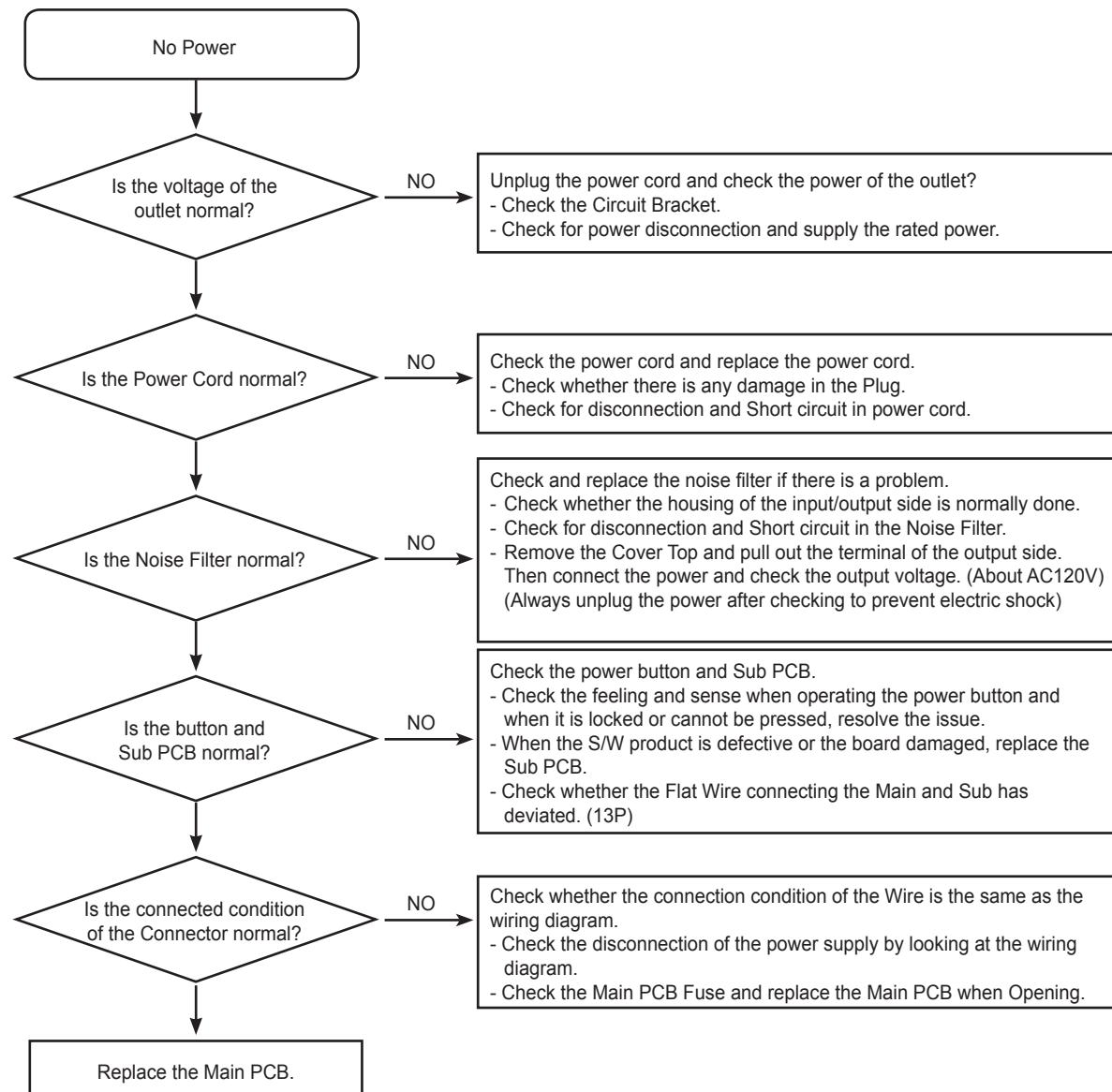


- 2) Since AC220~240V is applied to the triac T1 and T2 on P.C.B, the electric shock may occur by touching and be careful that the strong and weak electricity are mixed.
- 3) As the P.C.B assembly is designed for no trouble, do not replace the P.C.B assembly by the wrong diagnosis and follow the procedure of the trouble diagnosis when the micom is not operated normally.

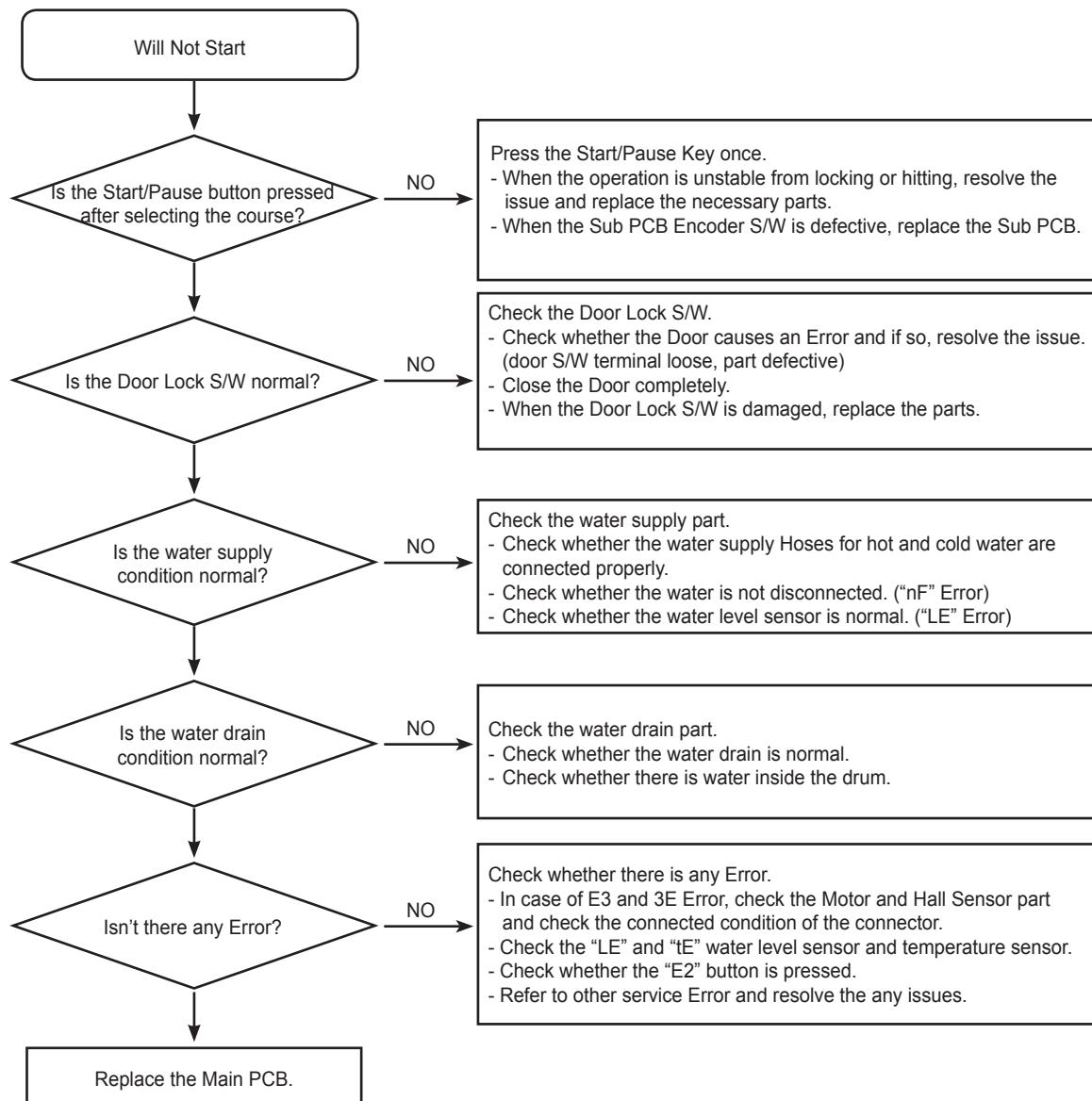
6-1. TROUBLE DIAGNOSIS

WARNING

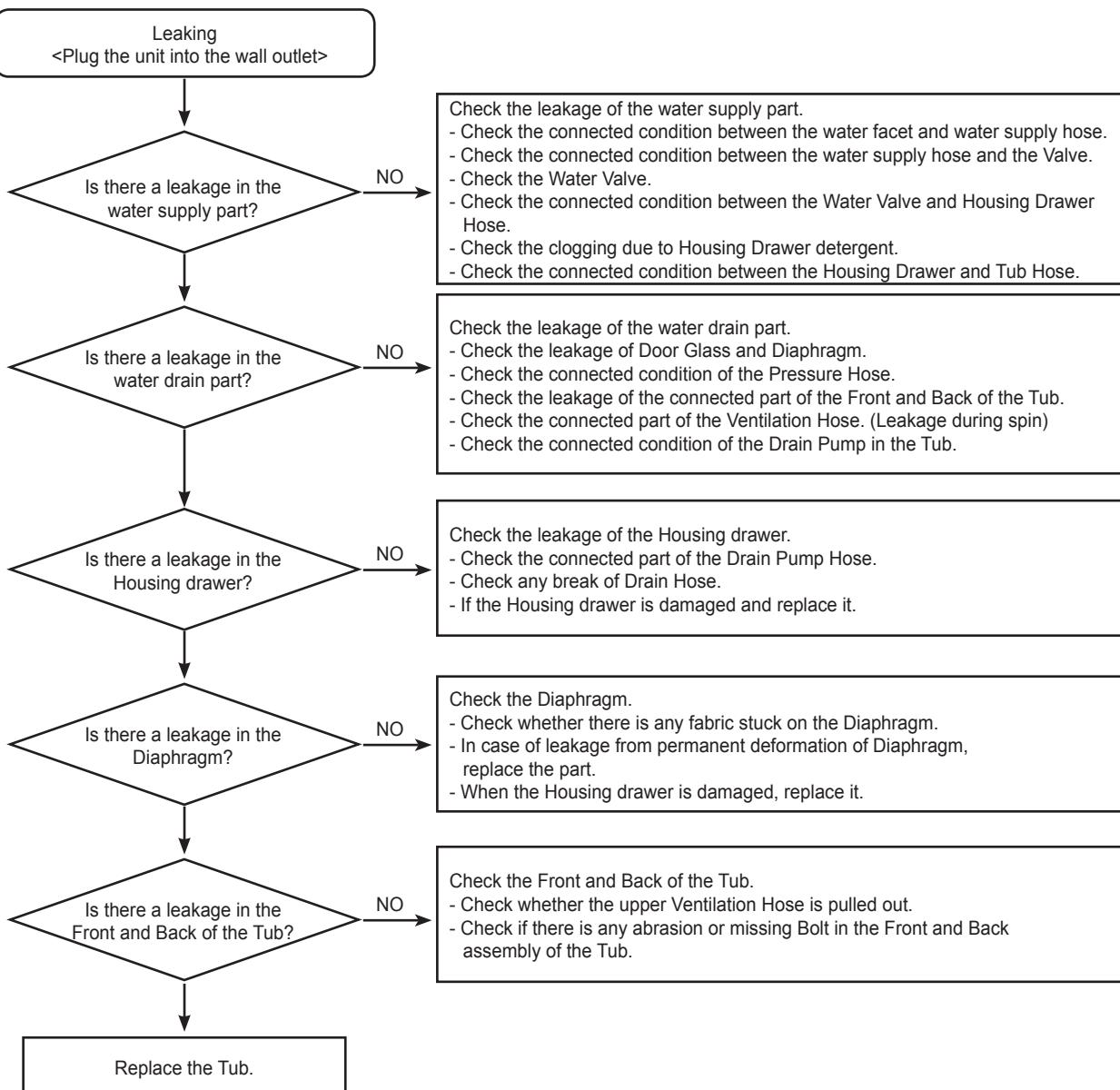
To avoid risk of electrical shock, personal injury or death, disconnect power to unit before servicing, unless testing requires power.



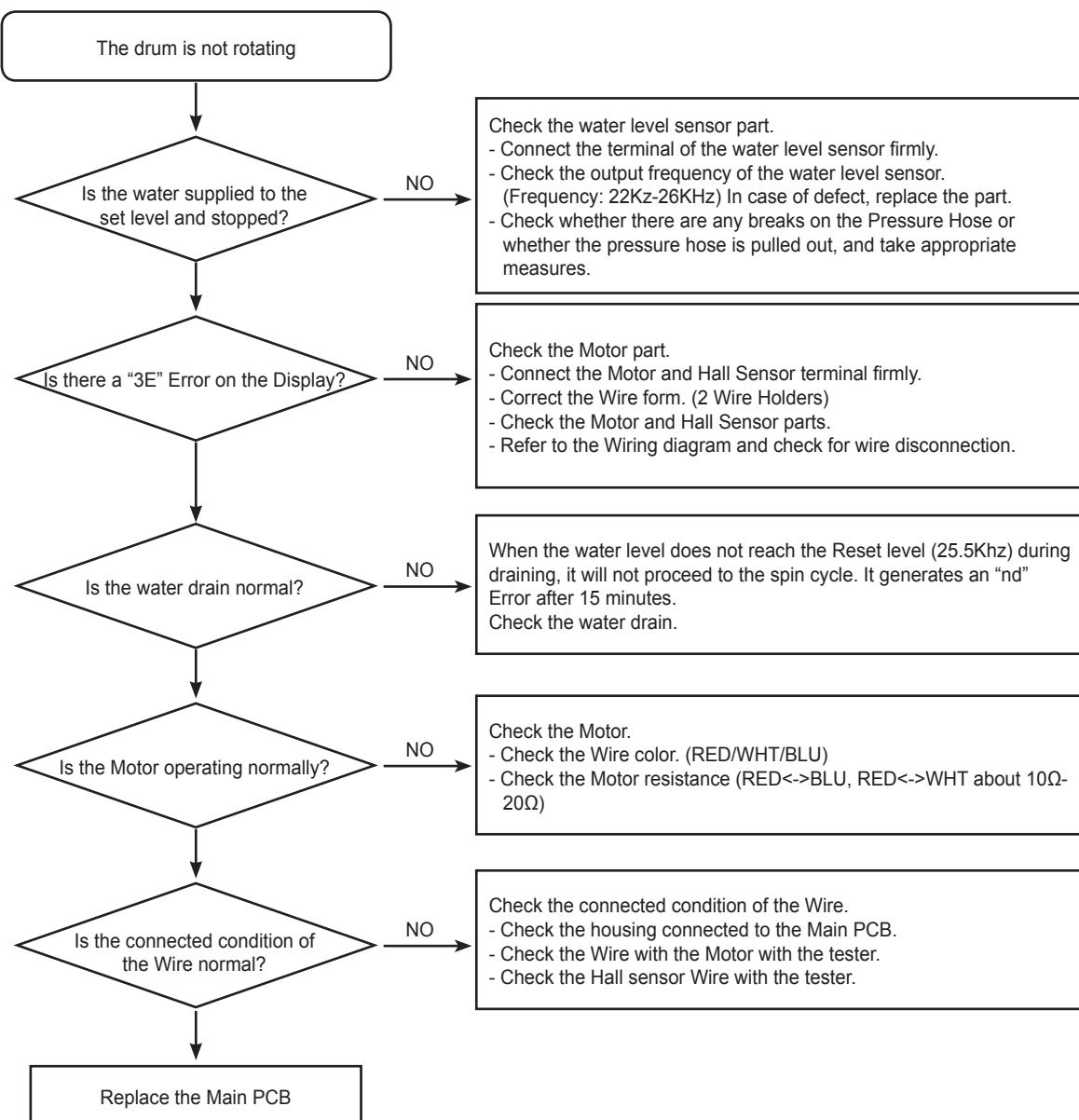
6-1. TROUBLE DIAGNOSIS



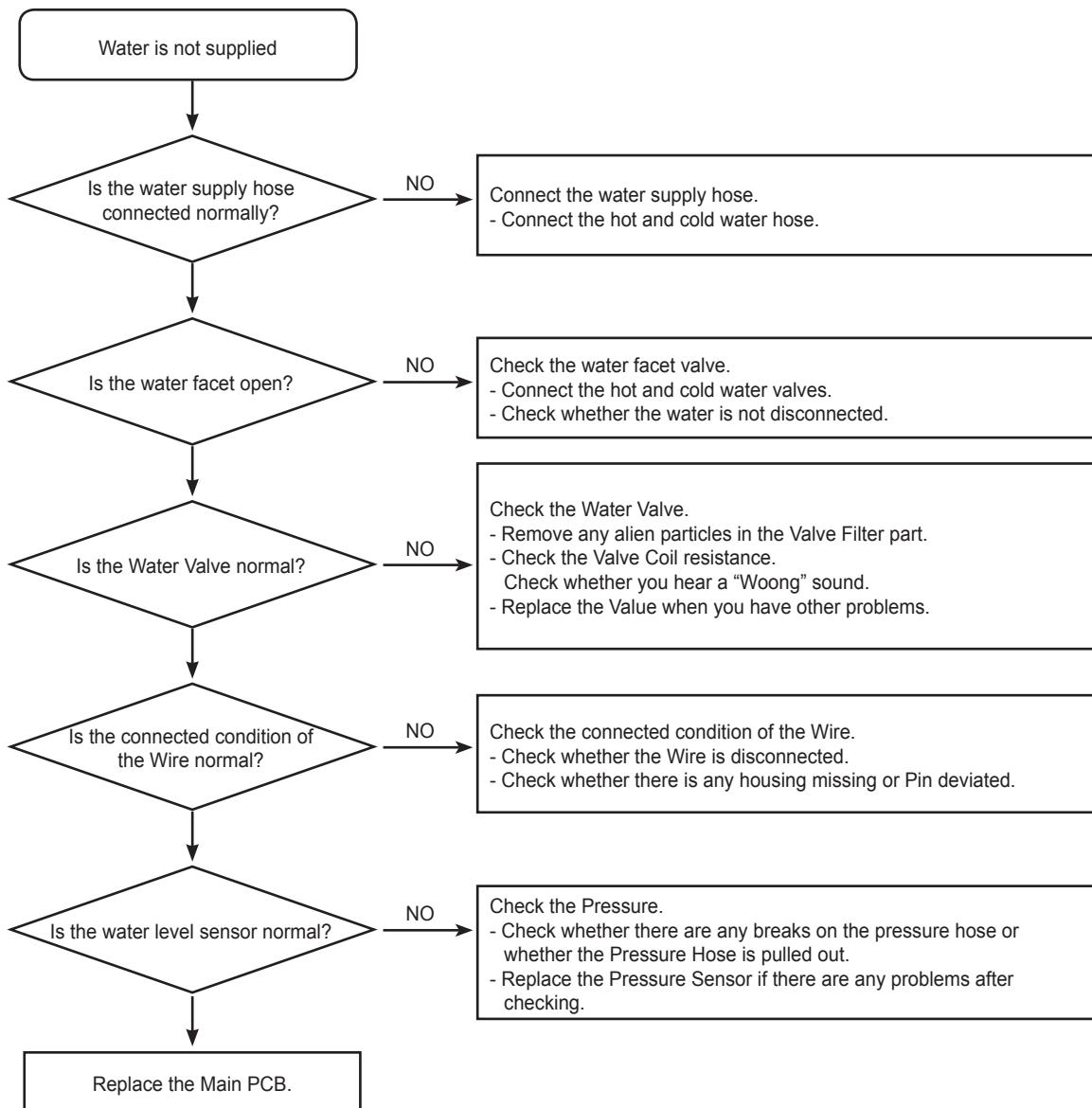
6-1. TROUBLE DIAGNOSIS



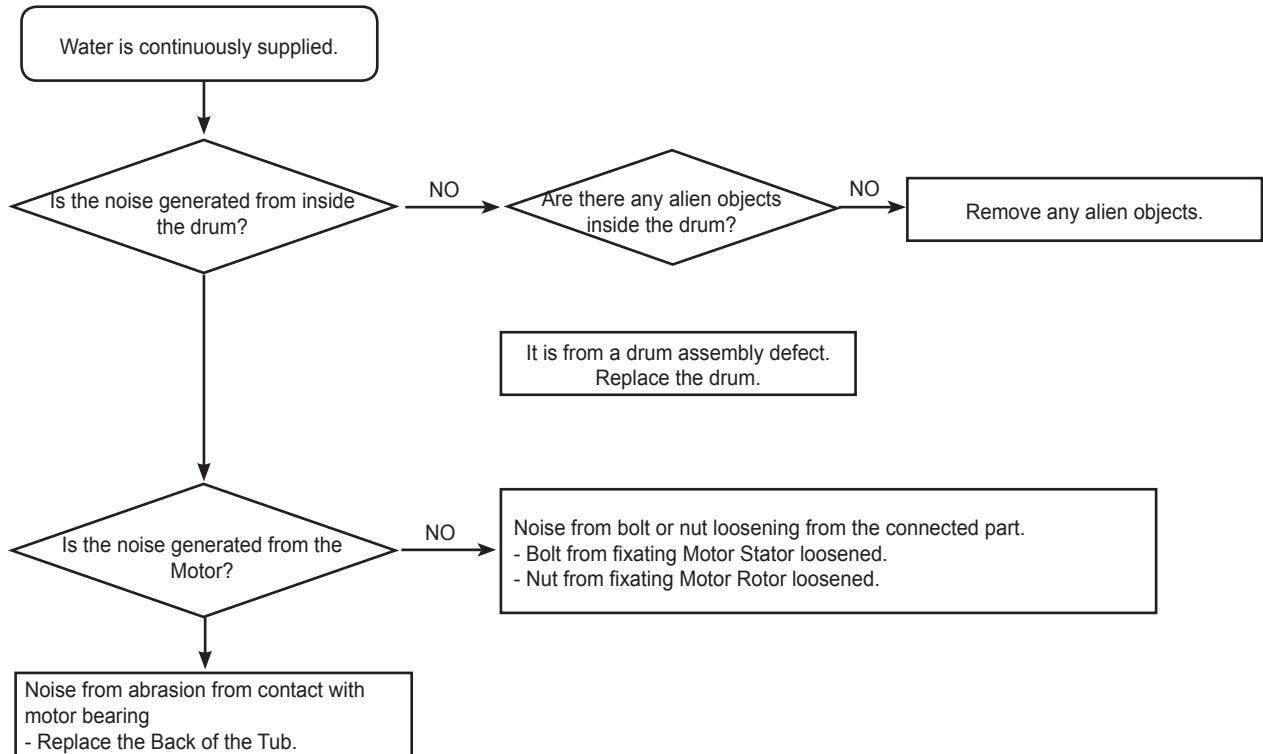
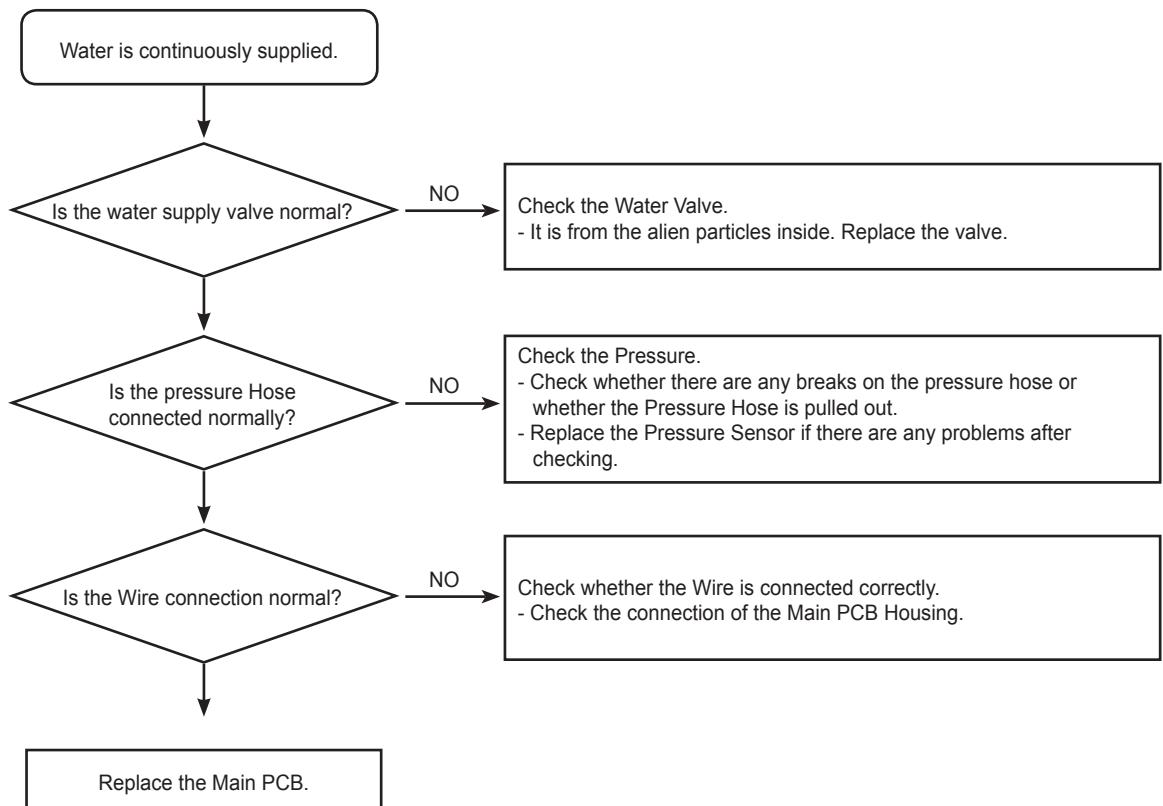
6-1. TROUBLE DIAGNOSIS



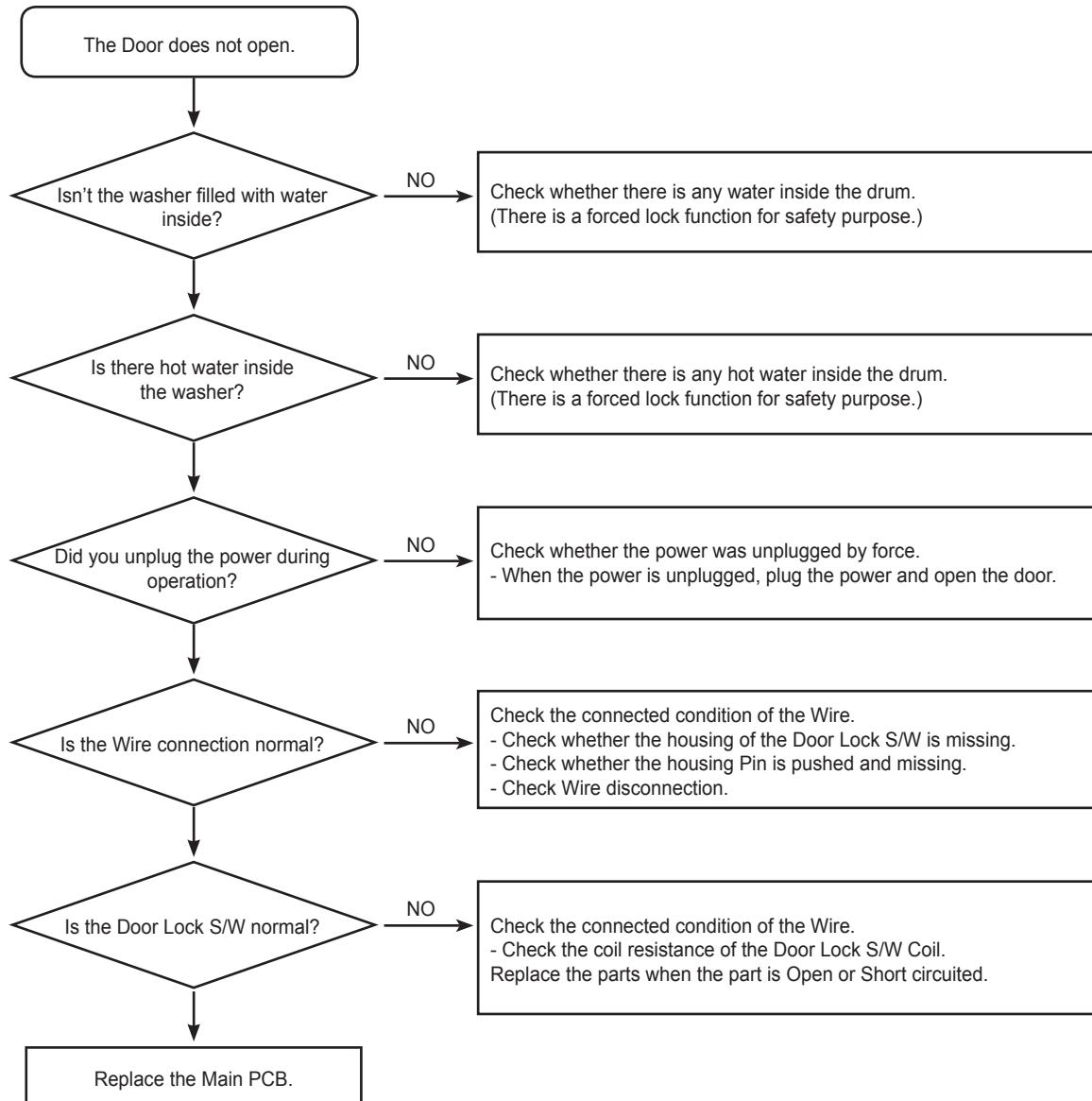
6-1. TROUBLE DIAGNOSIS



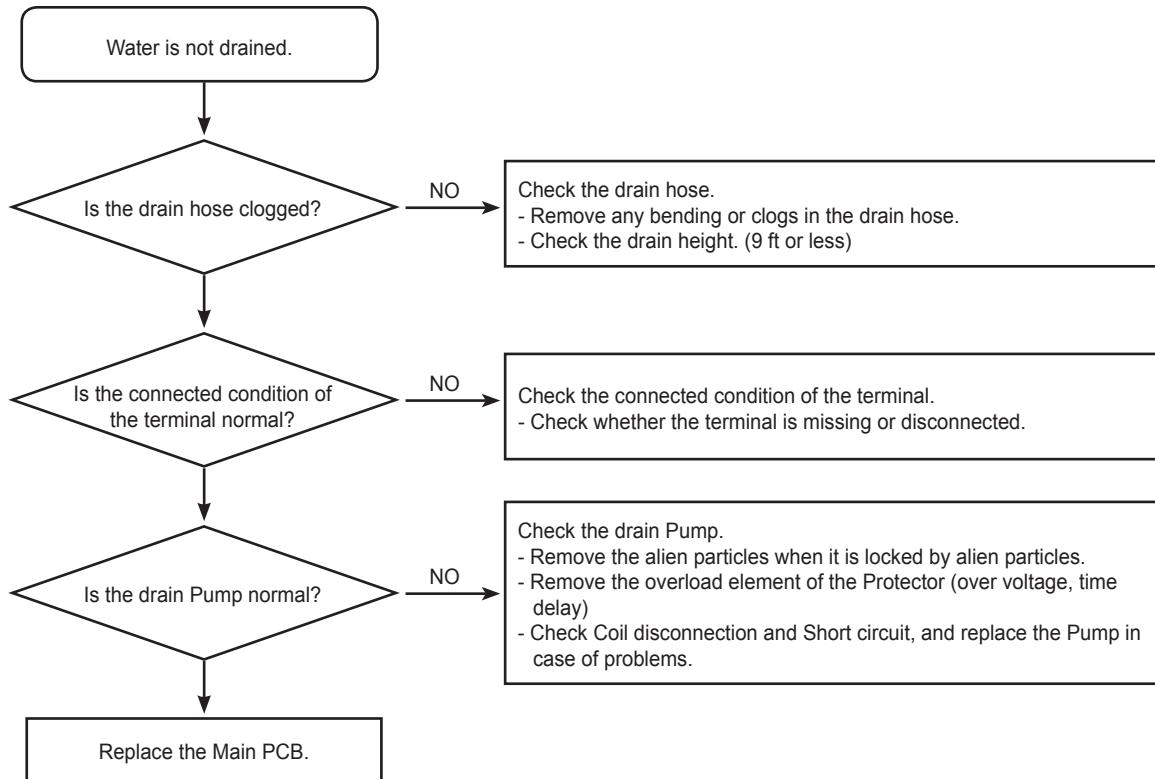
6-1. TROUBLE DIAGNOSIS



6-1. TROUBLE DIAGNOSIS

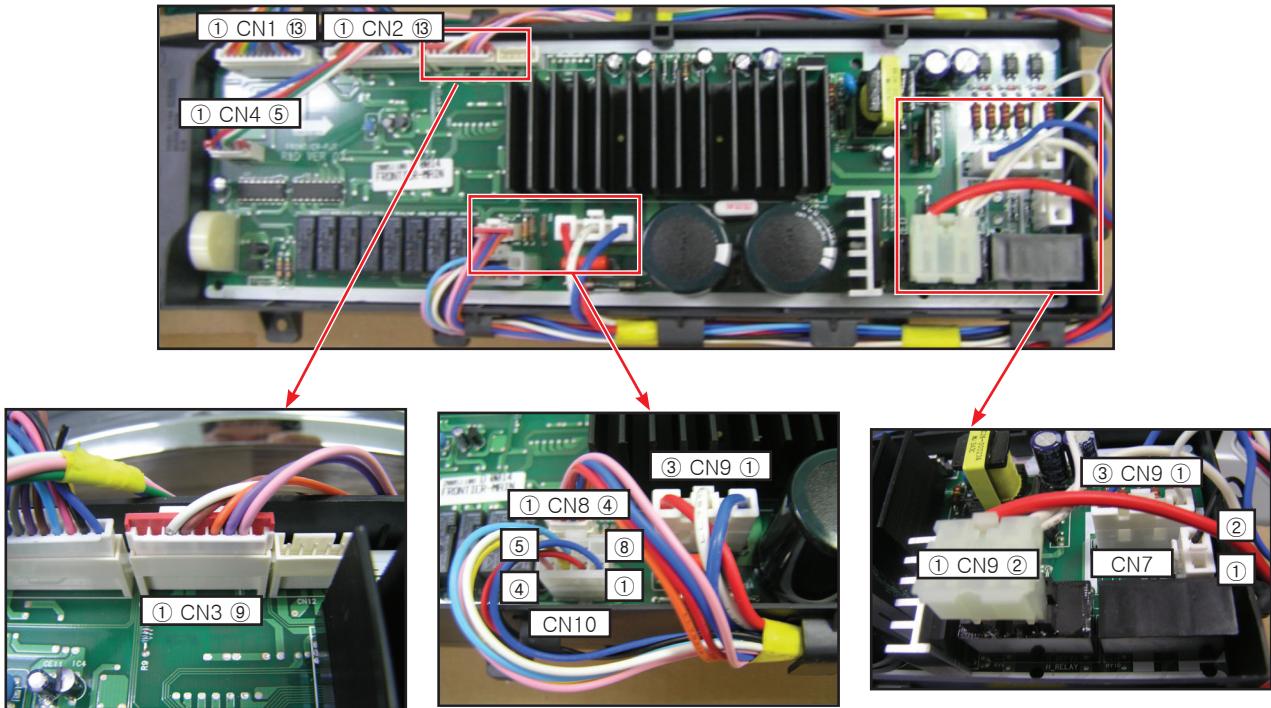


6-1. TROUBLE DIAGNOSIS



6-2. PROBLEM CHECKING AND METHOD OF PCB

-If you plug in the power cord and turn Power S/W on, memorized data is displayed.
If any data is not displayed, check the followings.



Thermistor Check

Check Voltage at Pin #6 and #3 of CN3

Tester Check = DC2.5V

If it reads 5V, check if its connector is engaged properly.

Door Switch Check

Check Voltage at Pin #6 and #4 of CN3

When Door Open = DC5V

When Door Close = DC0V

Water Sensor Check

Check Voltage and Frequency at Pin #6 and #7 of CN3

Reset water level = DC2.5V, 25.8KHz

Check Voltage and Frequency at Pin #6 and #8 of CN3

Reset water level = DC2.5V, 25.8KHz

Sump Sensor Check

Check Voltage at Pin #4 and #2 of CN8

Tester Check = DC0V or 3.75V

Check Voltage at Pin #4 and #3 of CN8

Tester Check = DC0V or 3.75V

Motor Check

Resistance at Pin #1 and #2 of CN9 = 11.6Ω

Resistance at Pin #1 and #3 of CN9 = 11.6Ω

Resistance at Pin #2 and #3 of CN9 = 11.6Ω

Door Lock Check

Check Voltage at Pin #1 of CN5 and Pin #7 of CN10

When Door Lock = AC120V

Check Voltage at Pin #1 of CN5 and Pin #2 of CN7

When Door Lock = AC120V

Door Unlock Check

Check Voltage at Pin #1 of CN5 and Pin #8 of CN10

When Door Unlock = AC120V

Drain Motor Check

Check Voltage at Pin #1 of CN5 and Pin #6 of CN10

When Drain Pump operates = AC120V

Water Valve Check

Check Voltage at Pin #1 of CN5 and Pin #1,2,3,4 of CN10

When each Valve operates = AC120V

AC Power Check

Check Voltage at Pin #1 and #3 of CN5

Check Voltage at Pin #1 of CN5 and Pin #1 of CN6

Tester Check = AC120V

Heater Relay Check

Check Voltage at Pin #1 of CN5 and Pin #2 of RY9

When Heater Relay operates = AC120V

7. EXPLODED VIEW AND PARTS LIST

7-1. MATERIAL CODE STANDARDS

Material codes and names and their respective naming rules are managed in accordance with the prescribed standards.

Please refer to these standards when requesting a material.

1. Material Code Type

(●: Number, ■: Letter (Alphabet))

Type 1: ●●●●-●●●●●● ex) 0204-000418 FREON

Type 2: ■■●●-●●●●■ ex) DC96-01390A ASSY-CONTROL

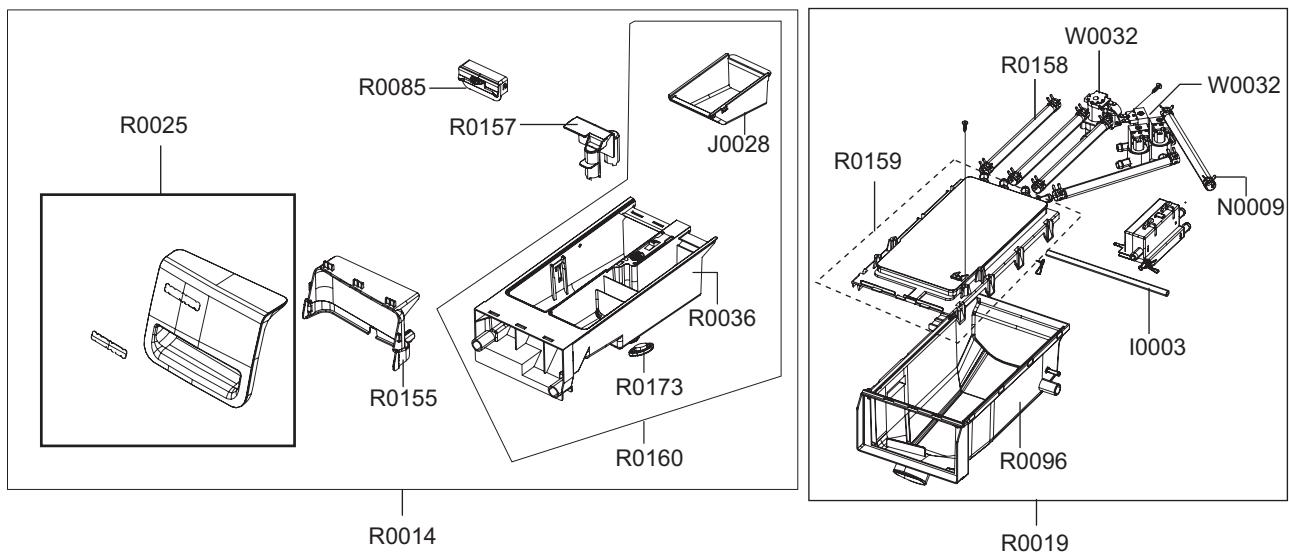
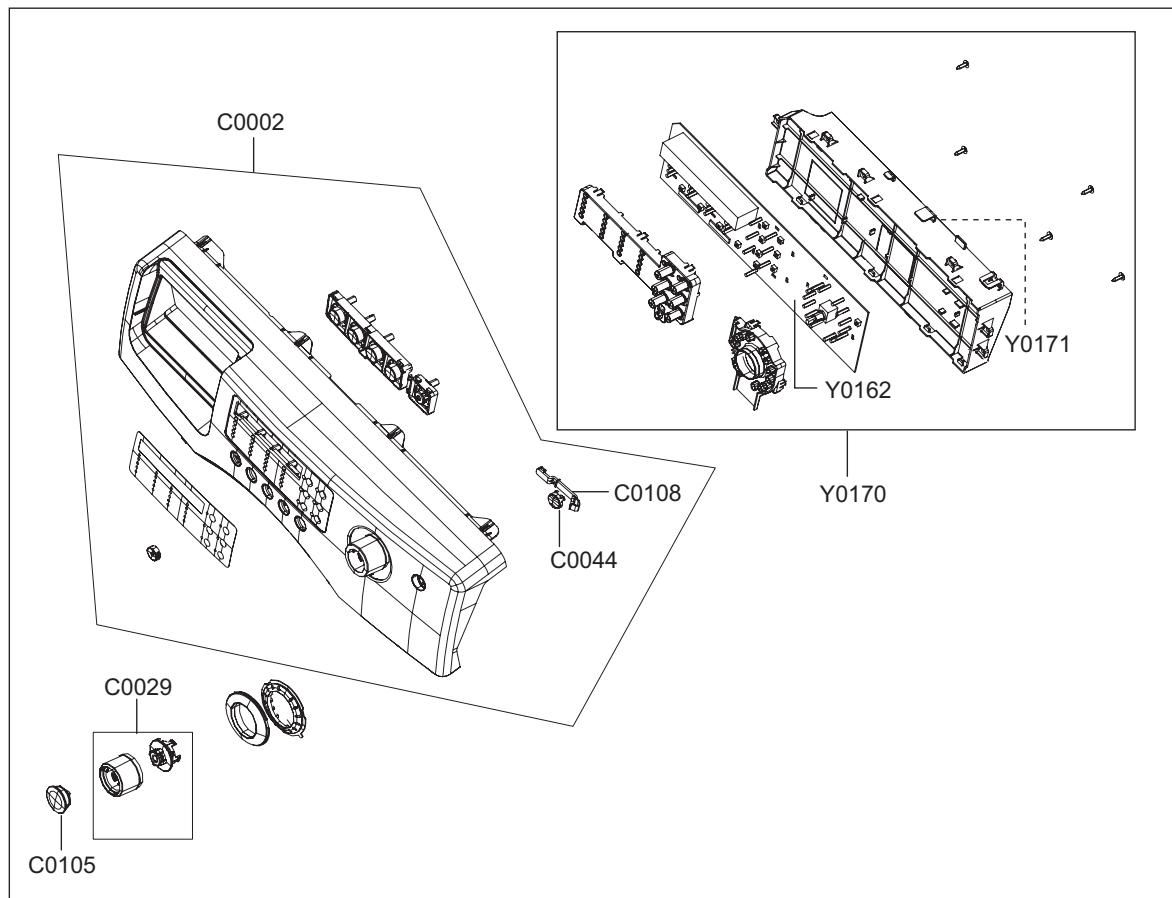
- ▶ Type 1: Enterprise-wide parts
Type 1 materials can be used for all Samsung Electronics products.
(Most electrical parts belong to this type.)
- ▶ Type 2: Division-wide parts (DC** - Washing machine)
Type 2 materials can be used for specific products.
(Most instruments and tools belong to this type.)

2. Ass'y Materials

: All ass'y material codes start with DC9*.

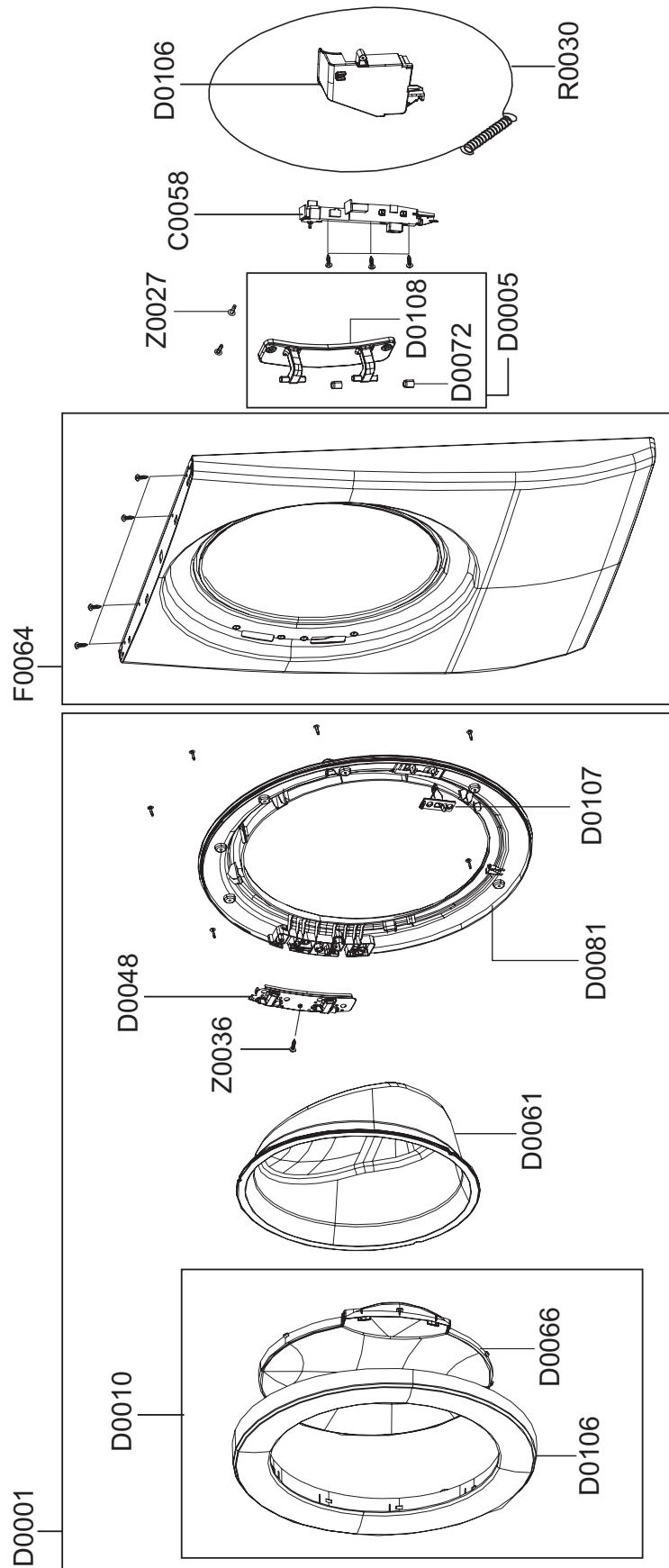
An ass'y material is created by combining more than two materials. If a requested material cannot be provided, you can request an ass'y material that contains that material.

7-2. THE CONTROL PARTS (WF317AAW/XAA)



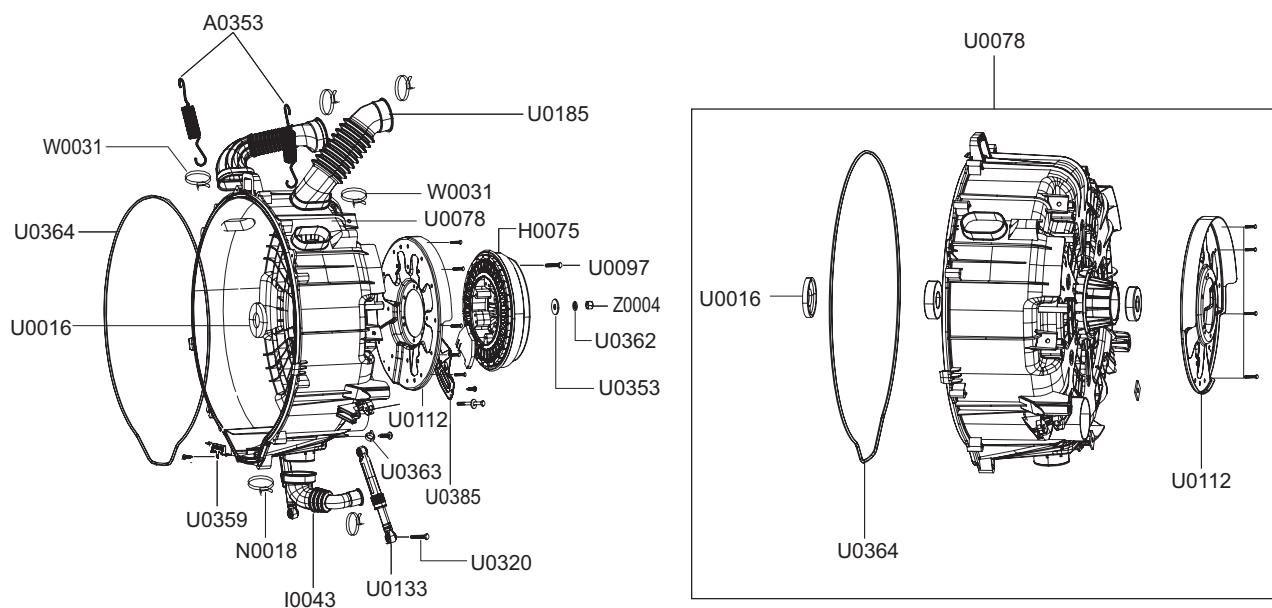
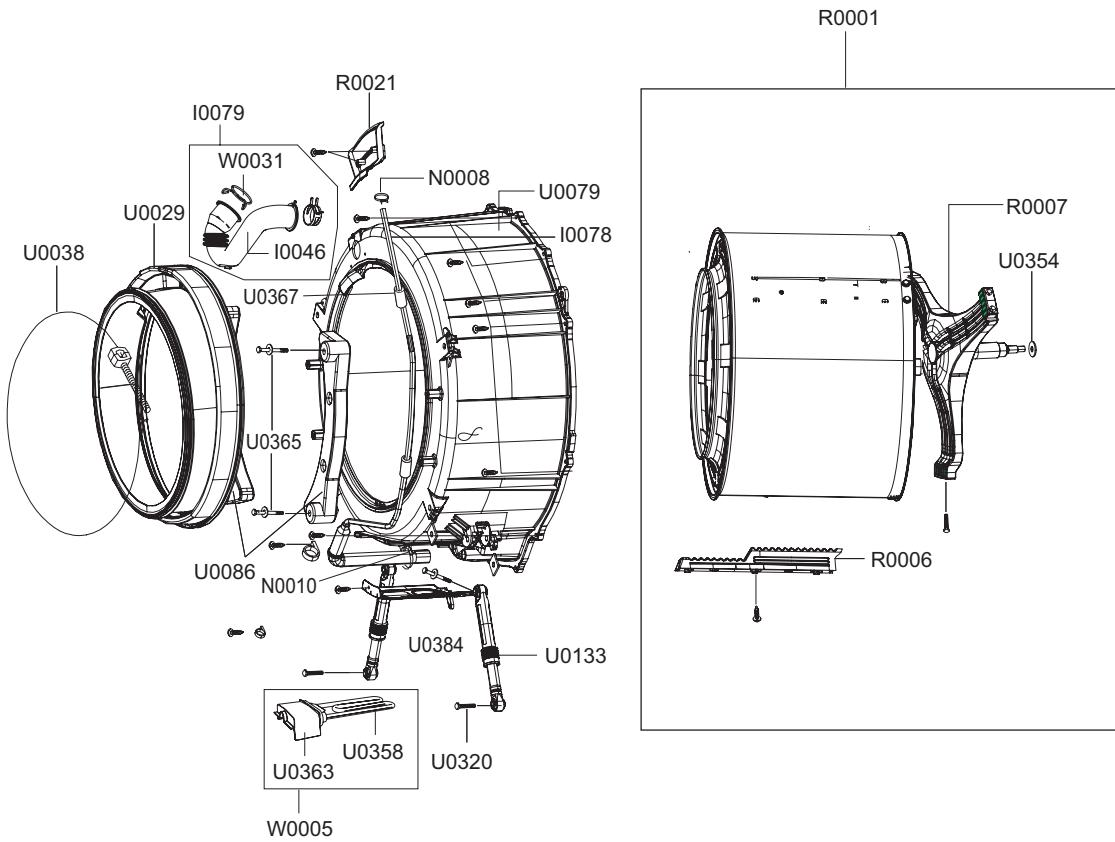
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|---------------|-----------------------|--------------------------------|----|------|--------|
| C0002 | DC97-10513R | ASSY-S.PANEL CONTROL | WF317AAW/XAA,NEAT-W | PC | 1 | SNA |
| C0029 | DC97-10511A | ASSY-KNOB ENCODER | FRONTIER,LOWES | PC | 1 | SA |
| C0044 | DC64-01105A | BUTTON-PUSH(P) | WF326LAW,ABS,-,-,WHT,FRON | PC | 1 | SA |
| C0105 | DC64-01108A | BUTTON-ENCODER | WF326LAW,ABS,-,-,WHT,FRON | PC | 1 | SA |
| C0108 | DC66-00413A | LEVER-POWER | GW-PJT,POM,-,-,-,NTR,ENTRY | PC | 1 | SA |
| I0003 | DC67-00089F | HOSE-WATER | WF326LAW,EPDM,ID5,OD9,T2,L190 | PC | 1 | SA |
| J0028 | DC61-01267A | CASE-PRE WASH | WINGS-PJT,PP(TB53),-,-,W | PC | 1 | SC |
| N0009 | DC65-00008A | CLAMPER HOSE | SEW-DR605,SK5,-,-,YEL,ID14. | PC | 10 | SA |
| R0014 | DC97-10336A | ASSY-DRAWER | WF316LAW,NEAT-WHT | PC | 1 | SA |
| R0019 | DC97-07125M | ASSY-HOUSING DRAWER | WF337AAW,MAIN/HOT/BL | PC | 1 | SA |
| R0025 | DC97-10960A | ASSY-PANEL DRAWER | WF316LAW,FRONTIER | PC | 1 | SA |
| R0036 | DC61-01170A | BODY-DRAWER | GW-PJT,PP(TB-53),-,-,-,WHT | PC | 1 | SNA |
| R0085 | DC61-01171A | GUIDE-LIQUID | GW-PJT,ABS,-,-,-,WHT,- | PC | 1 | SA |
| R0096 | DC61-01167D | HOUSING-DRAWER(L) | WF337AAW,PP(TB-53),-,- | PC | 1 | SA |
| R0155 | DC64-01113A | HANDLE-DRAWER | WF326LAW,ABS,-,-,-,WHT,F | PC | 1 | SNA |
| R0157 | DC67-00121B | CAP-RINSE | MAH9700,PP(TB53),-,-,-,MUNSELL | PC | 1 | SA |
| R0158 | DC67-00051B | HOSE-DRAWER | Q1636GW/XEU,EPDM,ID9.0,OD14. | M | 1.48 | SA |
| R0159 | DC97-08800A | ASSY-S.HOUSING DRAWER | MAH9700AWW,- | PC | 1 | SA |
| R0160 | DC97-08774A | ASSY-S.DRAWER | MAH9700AWW,- | PC | 1 | SA |
| R0173 | DC63-00516A | COVER-DETERGENT | GW-PJT,PP(TB-53),-,-,- | PC | 1 | SNA |
| W0032 | DC62-00142G | VALVE-WATER | V-0119, NYLON #6,123x55x55,1~ | PC | 1 | SA |
| W0032 | DC62-30314K | VALVE-WATER | V-0117, NYLON #6,83x45,1~8(10) | PC | 1 | SA |
| Y0162 | MFS-F2WLHA-S0 | ASSY PCB PARTS(S) | MFS-F2WLHA-S0 | PC | 1 | SA |
| Y0170 | MFS-WF317-T0 | ASSY-PCB PARTS | FRONTIER PJT | PC | 1 | SA |
| Y0171 | MFS-WF317-00 | ASSY-PCB PARTS(M) | FRONTIER PJT | PC | 1 | SA |

7-3. THE DOOR PARTS (WF317AAW/XAA)



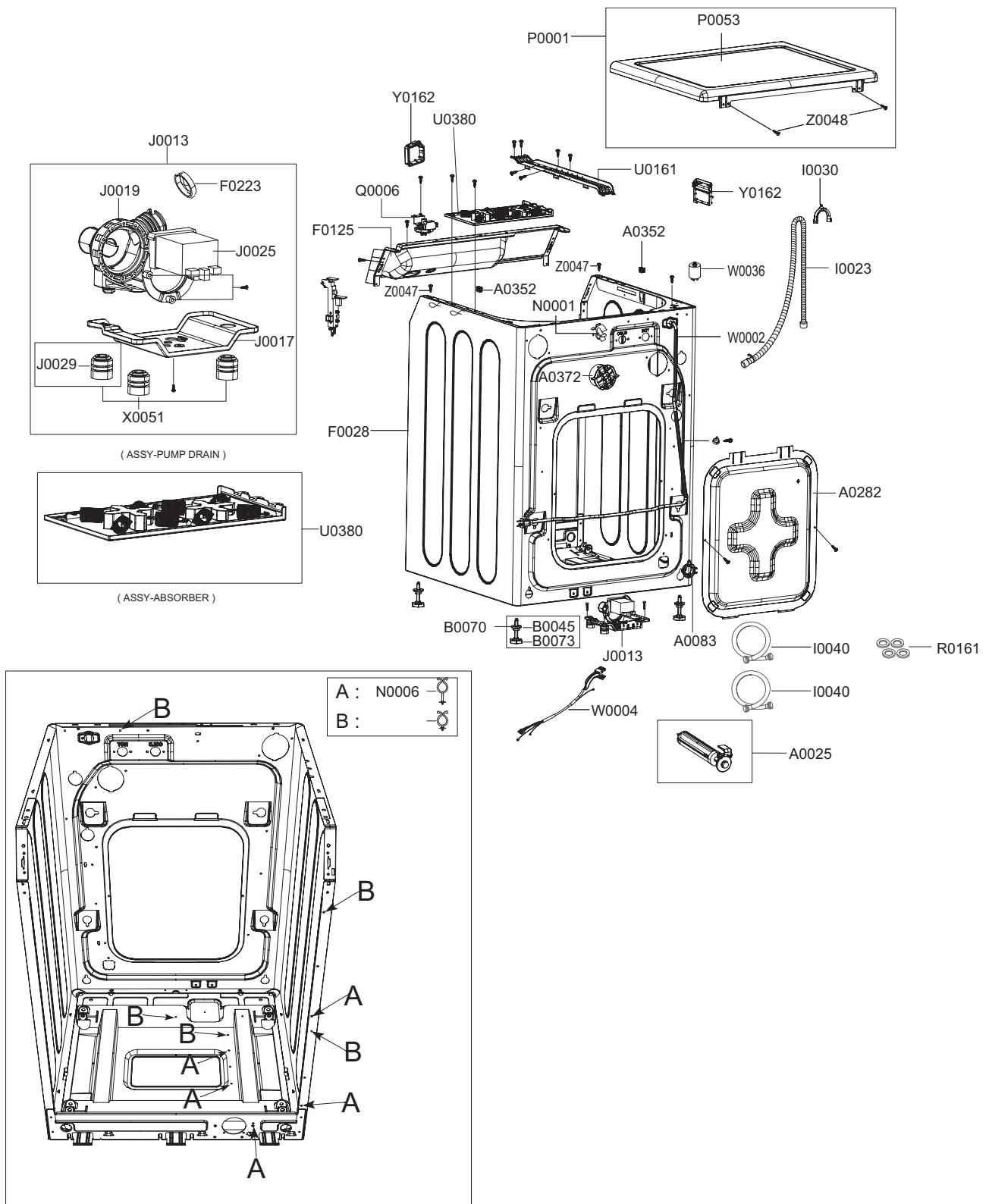
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|---------------------|-------------------------------|----|------|--------|
| C0058 | DC64-00519B | DOOR-LOCK S/W | GW-PJT,PP-GF,-,-,-,-,BLK,1 | PC | 1 | SA |
| D0001 | DC97-10671D | ASSY-DOOR | WF317AAW,AG+ PRINT/POM LEVER | PC | 1 | SA |
| D0005 | DC97-10718A | ASSY-HINGE DOOR | FRONTIER-PJT,SINGLE | PC | 1 | SA |
| D0010 | DC97-10338C | ASSY-COVER DOOR | WF317AAG/XAA,SILVER CARE | PC | 1 | SA |
| D0048 | DC61-01222A | BRACKET-HINGE | 27-DRYER,HGI,T2.0,-,-,- | PC | 1 | SA |
| D0061 | DC64-00504B | DOOR-GLASS | SEW-HW125,SODALIME,-,-,-,-, | PC | 1 | SC |
| D0066 | DC64-01120A | DOOR-SAFETY | WF326LAW,PET,T2.8,-,-,-,NTR, | PC | 1 | SA |
| D0072 | DC61-00891A | GUIDE-HINGE | HAUZEN(DOM),POM,-,-,-,WHT,HI | PC | 4 | SA |
| D0081 | DC61-01520A | HOLDER-GLASS | WF326LAW,PP(TB53),T2.8,-,-, | PC | 1 | SA |
| D0106 | DC63-00673A | COVER-DOOR | WF316LAW,ABS,T2.8,-,-,-,CR- | PC | 1 | SNA |
| D0106 | DC63-00693A | COVER-DOOR SWITCH | FRONTIER,PP(V0),-,-,- | PC | 1 | SA |
| D0107 | DC66-00326A | LEVER-DOOR | TS85-PJT,POM,-,W24,L54,-,WHT, | PC | 1 | SA |
| D0108 | DC61-01532A | HINGE-DOOR | WF326LAW,ZNDC,T3.8,-,-,-,FR | PC | 1 | SA |
| F0064 | DC97-10340A | ASSY-FRAME FRONT | WF316LAW,NEAT-WHT/FRONT | PC | 1 | SA |
| R0030 | DC97-04973B | ASSY-WIRE DIAPHRAGM | SEW-HFR1637AR,STS304 | PC | 1 | SNA |
| Z0027 | 6001-001773 | SCREW-MACHINE | TH,+, -, M5,L12,PASS,STS430, | PC | 2 | SA |
| Z0036 | 6001-001668 | SCREW-MACHINE | TH,+, M5,L16,PASS,STS430,FP | PC | 1 | SA |

7-4. THE TUB PARTS (WF317AAW/XAA)



| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|-------------------------|---------------------------------|----|------|--------|
| A0353 | DC61-01257B | SPRING ETC-HANGER | Frontier,SWC,4.2,21.6, | PC | 2 | SA |
| H0075 | DC31-00049A | MOTOR BLDC-DRUM | POM1300,0~1200,-,DC310V, | PC | 1 | SA |
| I0043 | DC67-00126A | HOSE-DRAIN | GW-PJT,EPDM,OD 68,-,T2.0,-,BL | PC | 1 | SA |
| I0046 | DC67-00265A | HOSE-DRAWER TUB | MACH,EPDM,-,-,-,BLK,- | PC | 1 | SA |
| I0078 | DC67-00124A | HOSE-PRESSURE | GW-PJT,EPDM,-,-,-,BLK,- | PC | 1 | SA |
| I0079 | DC97-12748A | ASSY-HOSE DRAWER TUB | SEW-HFR167AR,MACH-P | PC | 1 | SA |
| N0008 | DC61-70029C | SPRING-CLIP | SEW-HW125,HSWR67,CD1.2, ID8.5 | PC | 1 | SA |
| N0010 | DC65-00009A | CLAMPER HOSE | TS85-PJT,HSWR,-,-,YEL,OD24/ | PC | 1 | SA |
| N0018 | DC65-00014A | CLAMPER HOSE | GW-PJT,HSWR,-,ID82,ZPC2,HOS | PC | 1 | SA |
| R0001 | DC97-10337A | ASSY-DRUM | WF326LAW,FRONTIER | PC | 1 | SA |
| R0006 | DC66-00434A | DRUM-LIFTER | WF326LAW,PP(TI42),-,L314,G | PC | 3 | SA |
| R0007 | DC97-06986A | ASSY-FLANGE SHAFT | GW-PJT,ALDC+SM45C/DD-T | PC | 1 | SA |
| R0021 | DC97-12747A | ASSY-GUIDE WATER | WF337LAW,FRONTIER II | PC | 1 | SNA |
| U0016 | DC62-00156A | SEAL-OIL | TS85-PJT,NBR(SD45.5),BLK,-,- | PC | 1 | SA |
| U0029 | DC64-00802A | DOOR-DIAPHRAGM | GW-PJT,EPDM,T1.5,-,-,-,GR | PC | 1 | SA |
| U0038 | DC97-04981D | ASSY-CLAMP DIAPHGRAM | WINGS-PJT,HSWR/ZPC4 | PC | 1 | SA |
| U0078 | DC97-08649D | ASSY-SEMI TUB BACK | WF-G126AW,FRONTIER/VE | PC | 1 | SNA |
| U0079 | DC97-08650F | ASSY-SEMI TUB FRONT | WF337AAW,15%/HEATER/ | PC | 1 | SA |
| U0086 | DC67-00139A | WEIGHT-BALANCER(F) | GW-PJT,GC,-,-,-,RED,F | PC | 2 | SA |
| U0097 | 6011-001548 | BOLT-ETC | M7.5,L30,ZPC(YEL),SWRCH18A,HEX | PC | 20 | SA |
| U0112 | DC61-01338B | BRACKET-HOUSING BEARING | DR130,SBHG1-A(GI | PC | 1 | SA |
| U0133 | DC66-00343E | DAMPER-SHOCK | GW-PJT,STEEL+PP+RUBBER,40N, | PC | 2 | SA |
| U0133 | DC66-00343C | DAMPER-SHOCK | GW-PJT,-,-,-,-,60N | PC | 2 | SA |
| U0185 | DC67-00155A | HOSE-O.F(I) | WINGS-PJT,EPDM,-,-,T2.0,-,BL | PC | 1 | SA |
| U0320 | DC60-40141A | BOLT-HEX | SM10C/DAMPER,HEX,M8,L66,-,ZPC2 | PC | 2 | SA |
| U0320 | DC60-40141A | BOLT-HEX | SM10C/DAMPER,HEX,M8,L66,-,ZPC2 | PC | 2 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 1 | SA |
| U0354 | 6031-001523 | WASHER-WAVE | SK5,-,ID35,OD45,T0.6,ZPC2,- | PC | 1 | SA |
| U0358 | DC47-00006G | HEATER | -,GW-PJT,STS316L,900W,7.18~7.8 | PC | 1 | SA |
| U0359 | DC61-01482A | BRACKET-HEATER | GW-PJT,STS430/304,T0.5,W9 | PC | 1 | SA |
| U0362 | DC60-60049A | WASHER-SPRING | -,ID10.5,OD18,T2.5,-,SIR | PC | 1 | SA |
| U0363 | DC65-20008C | CABLE CLAMP | DA-8N,NYLON#66,-,-,NTR, ID13. | PC | 2 | SA |
| U0363 | DC65-20008C | CABLE CLAMP | DA-8N,NYLON#66,-,-,NTR, ID13. | PC | 1 | SA |
| U0363 | DC63-00820A | COVER-HEATER | WF337AAW,PP(V0),-,-,-,- | PC | 1 | SA |
| U0364 | DC69-00804A | PACKING-TUB | GW-PJT,EPDM-FORM,-,PI8,W624, | PC | 1 | SA |
| U0365 | DC97-02412A | ASSY-BOLT | SWF-P12,MOTOR, M8*L62 | PC | 4 | SA |
| U0367 | DC63-10003E | SPONGE-HOSE AIR | GW-PJT,HB22-GREY,-,T130, | PC | 1 | SA |
| U0367 | DC63-10003C | SPONGE-HOSE AIR | POL,GRY,SWF-P12,HB22-GRE | PC | 1 | SA |
| U0384 | DC61-01414A | BRACKET-TUB(F) | WINGS-PJT,SBHG1-A,T0.4,-, | PC | 1 | SA |
| U0385 | DC61-01431B | BRACKET-TUB(B) | WINGS-PJT,SBHG1-A,T0.4,-, | PC | 1 | SA |
| W0005 | DC96-01417A | ASSY-HEATER | WF337AAW,COVER-HEATER +HEATE | PC | 1 | SA |
| W0031 | DC72-00001D | BAND-RING | WINGS-PJT,HSWR,T2.4,-,-,YEL, ID | PC | 1 | SA |
| W0031 | DC72-00055A | BAND-RING | 27" Washer,HSWR,#2/ M4x35,-,- | PC | 1 | SA |
| W0031 | DC72-00001E | BAND-RING | SEW-HTR122L,HSWR,#3.5,-,ID #49 | PC | 1 | SNA |
| Z0004 | DC60-50148B | NUT-HEX | SM20C(NYLON),M12,-,-,ZPC3(YEL) | PC | 1 | SA |

7-5. THE FRAME PARTS (WF317AAW/XAA)



| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|---------------|----------------------|-----------------------------------|----|------|--------|
| A0025 | DC97-07448B | ASSY-FIXER TUB | WF337AAW,YELLOW | PC | 4 | SNA |
| A0083 | DC61-00274A | GUIDE-HOSE | P/PV/M,PP,-,-,-,WHT,FRAME/DRA | PC | 1 | SA |
| A0282 | DC63-00522A | COVER-BACK | GW-PJT,GI,T0.4,W426,L507,-,-, | PC | 1 | SA |
| A0352 | DC61-01548A | GUIDE-SPRING | GW-PJT,POM,-,-,-,NTR,- | PC | 2 | SA |
| A0372 | DC97-08740D | ASSY-CAP O.F | WF337AAW,FRONTIER2 | PC | 1 | SA |
| B0045 | DC61-01652A | LEG-RING | K4-PJT,Nylon66+GF30,NON,SIL,L1 | PC | 1 | SNA |
| B0070 | DC97-12560A | ASSY-LEG | WF206LNW,MARS-PJT | PC | 4 | SA |
| B0073 | DC61-01747A | LEG-RUBBER | MARS,BUTYL+SWRCH10A,-,GRY+YEL | PC | 1 | SA |
| F0028 | DC97-06995J | ASSY-FRAME | WF327LAW,FRONTIER II | PC | 1 | SNA |
| F0125 | DC61-01166A | FRAME-PLATE(U) | GW-PJT,EGI,-,-,-,T1.6,-,- | PC | 1 | SA |
| F0223 | DC62-00202A | VALVE-CHECK | WINGS,EPDM,PO30,1~10BAR,BLK, | PC | 1 | SA |
| I0023 | DC97-12534B | ASSY-HOSE DRAIN(I) | WF337AAW,L1920/BLOW-S | PC | 1 | SA |
| I0030 | DC62-10278A | HOSE-HANGER | -,PP(JS20),-, -, -, -, NTR, - | PC | 1 | SA |
| I0040 | DC62-00075A | HOSE-WATER(H) | -,NBR+NYLON, ID10.2,OD16.5, | PC | 1 | SA |
| I0040 | DC62-00075B | HOSE-WATER(C) | -,NBR+NYLON, ID10.2,OD16.5, | PC | 1 | SC |
| J0013 | DC96-01414A | ASSY-PUMP DRAIN | WF337AAW,FRONTIER II | PC | 1 | SA |
| J0017 | DC61-01853A | BRACKET-PUMP | WF337AAW,SGCC(GI),T1.2,-,- | PC | 1 | SA |
| J0019 | DC61-01871A | CASE-PUMP | WF337AAW,PP(5113MF6),-, -, -, WHT | PC | 1 | SNA |
| J0025 | DC31-00054A | PUMP-DRAIN | -,120V,60Hz,40mm,80W/3600RPM | PC | 1 | SNA |
| J0029 | DC63-00766A | CUSHION-PUMP | WF206LNW,EPDM,-, -, -, -, MARS- | PC | 1 | SA |
| N0001 | DC61-00133A | CLAMPER HOSE | P1291,PP(BJ-730),ID24.5,OD2 | PC | 1 | SNA |
| N0006 | DC61-40081A | HOLDER-WIRE | DAWH-2NC, NYLON66,-, -, -, -, NTR | PC | 4 | SA |
| N0006 | DC61-40081A | HOLDER-WIRE | DAWH-2NC, NYLON66,-, -, -, -, NTR | PC | 4 | SA |
| P0001 | DC97-12878B | ASSY-COVER TOP | WF317,NEAT-WHT | PC | 1 | SNA |
| P0053 | DC63-00523G | COVER-TOP | WF206LNW,SECC(EGI),T0.8,-, -, | PC | 1 | SNA |
| Q0006 | DC97-03716C | ASSY-SENSOR PRESSURE | SEW-3HW123,DN-S14T/ | PC | 1 | SA |
| R0161 | DC62-40178A | SEAL-WATER | -,NR,BLK,-, -, -, ID12XOD25XT3 | PC | 4 | SA |
| U0161 | DC61-01200B | GUIDE-WIRE | WF206LNW,SGCC(GI),T0.8,-, -, | PC | 1 | SA |
| U0380 | DC97-08635H | ASSY-ABSORBER | WF316,WEIGHT 390g+305g(SCP | PC | 1 | SA |
| W0002 | DC96-00757A | ASSY POWER CORD | GW-PJT, GW, UL/CSA, 3/16AWG | PC | 1 | SA |
| W0004 | DC96-01043F | ASSY-M.WIRE HARNESS | FRONTIER MC,AG KIT/ | PC | 1 | SA |
| W0036 | DC29-00013A | FILTER-EMI | LFT-215G,WINGS_PJT,250VAC,15A | PC | 1 | SA |
| X0051 | DC99-00815A | ASSY-CUSHION PUMP | WF206LNW,MARS-PJT | PC | 3 | SA |
| Y0162 | MES-AG3MOD-S2 | ASSY PCB PARTS(S) | MES-AG3MOD-S2 | PC | 1 | SA |
| Y0162 | MFS-MEMS-00 | ASSY PCB PARTS(S) | MES-MEMS-00 | PC | 1 | SA |
| Z0047 | 6009-001458 | SCREW-SPECIAL | CH,+, -, M4,L10,ZPC3(BLK),SW | PC | 2 | SA |
| Z0048 | 6009-001476 | SCREW-HEX | HEX,+, -, M5,L10,ZPC3(BLK),SWRCH | PC | 2 | SA |

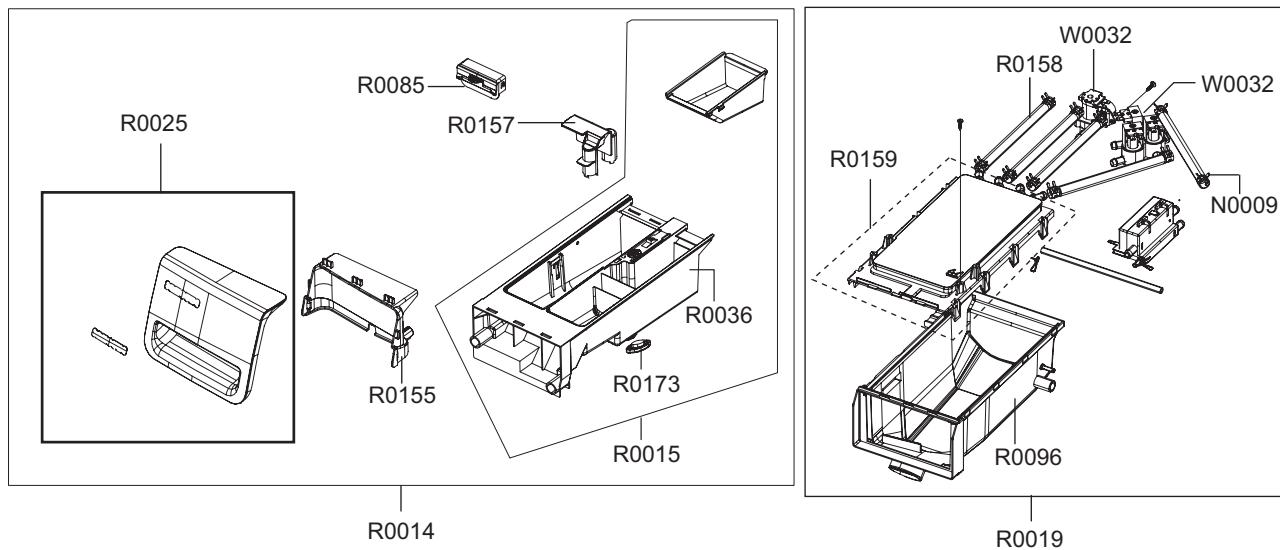
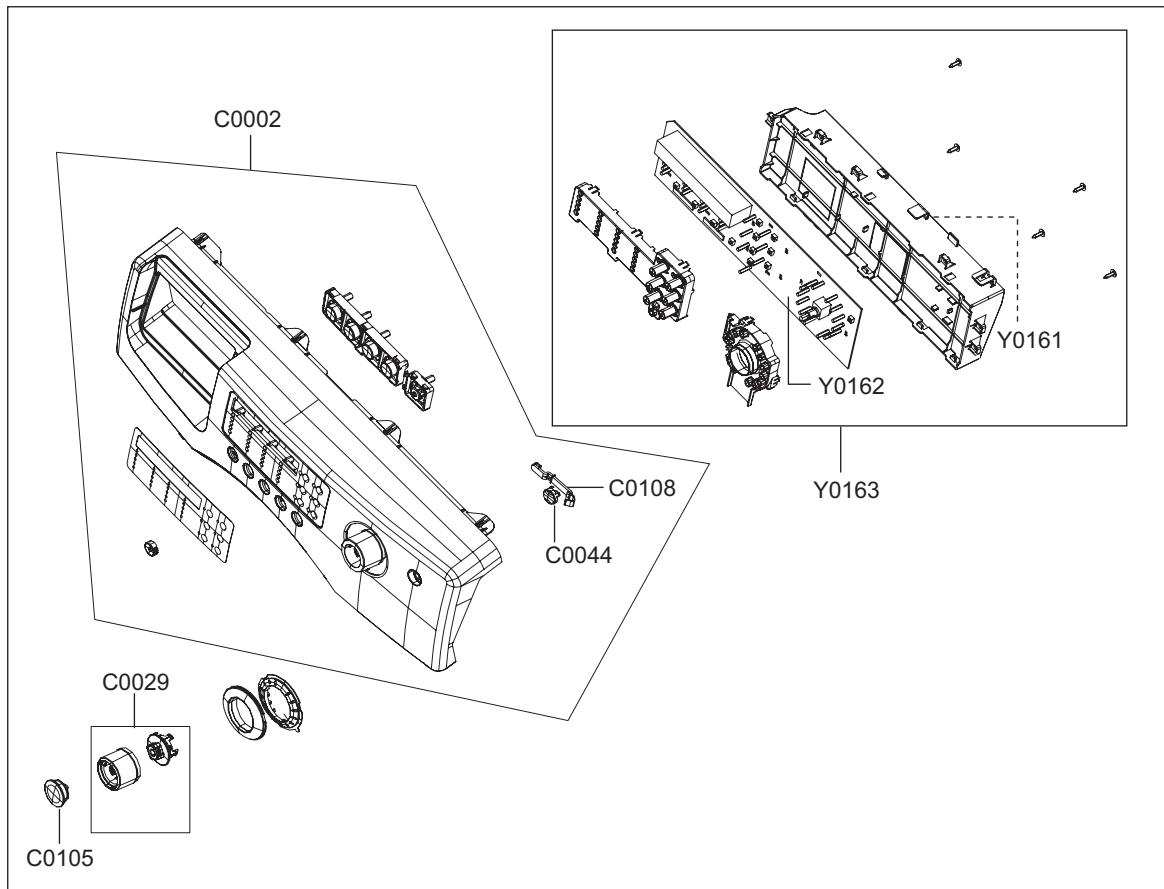
7-6. PARTS LIST (SA/SC others) (WF317AAW/XAA)

| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|------------------------|-----------------------------------|----|------|--------|
| A0028 | DC61-01586B | BRACKET-FIXER(L) | WF206LNW,SGCC(GI),T1.0, | PC | 1 | SA |
| A0028 | DC61-01723A | BRACKET-FIXER(O/L) | WF206LNW,SGCC(GI),T2. | PC | 2 | SA |
| A0029 | DC61-01587B | BRACKET-FIXER(R) | WF206LNW,SGCC(GI),T1.0, | PC | 1 | SA |
| A0034 | DC60-40146A | BOLT-SPANNER | -,HR,-,T2.3,OD36,-,BLK,-,- | PC | 1 | SA |
| A0043 | DC61-10688A | CAP-FIXER | SWF-P12,PP(TB53),-, -,WHT,-, | PC | 4 | SA |
| A0043 | DC61-10688B | CAP-FIXER | SEW-HFR167AR,PP(TB53),T1.5,-,- | PC | 2 | SA |
| A0055 | DC61-01679A | CLIP-HOSE | SEW-HFR177AR,SK5,T1.6,NTR,ID37 | PC | 1 | SA |
| A0125 | 6046-000310 | STAND OFF | ID11.5,L2,NTR,NYLON66,DAWH-3NA | PC | 4 | SA |
| A0363 | DC61-70029D | SPRING ETC-CLIP | WF337,HSWR67,CD1.6,ID8.5 | PC | 1 | SA |
| B0027 | DC97-12492A | ASSY-WEIGHT | WF316,WEIGHT 390g(SCP1) | PC | 1 | SA |
| B0027 | DC97-12493A | ASSY-WEIGHT | WF316,WEIGHT 305g(SCP1) | PC | 1 | SA |
| D0105 | DC61-01576A | SUPPORT-HINGE | FRONTIER-PJT,STS430,T1.2,- | PC | 1 | SA |
| D0111 | DC72-00034B | SPONGE-EPDM | MAH2400,EPDM,-,T1,W15,L500,W | PC | 3 | SA |
| I0044 | DC97-08633D | ASSY-HOSE PRESSURE | WF316LAW,HEATER/FRONT | PC | 1 | SA |
| I0045 | DC67-00057A | HOSE-AIR | TS85-PJT,EPDM,-, -, -,BLK,- | PC | 1 | SA |
| J0020 | DC63-00810A | COVER-PUMP | WF337AAW,PP(FH-44N),-, -, -, - | PC | 1 | SA |
| M0047 | DC61-01736B | HOLDER-WIRE | WF337AAW,NYLON66,OD31,H15,L1 | PC | 1 | SA |
| N0008 | DC61-70029C | SPRING-CLIP | SEW-HW125,HSWR67,CD1.2,ID8.5 | PC | 1 | SA |
| P0025 | DC61-01839A | BRACKET-COVER TOP | WF337AAW,SGCC(GI),T1.6 | PC | 1 | SA |
| P0025 | DC61-01839A | BRACKET-COVER TOP | WF337AAW,SGCC(GI),T1.6 | PC | 1 | SA |
| R0021 | DC97-10417A | ASSY-GUIDE WATER | WF326LAW,FRONTIER | PC | 1 | SA |
| U0069 | DC97-08632C | ASSY-GUIDE WIRE | WF206LNW,MARS-PJT/T0.8 | PC | 1 | SA |
| U0320 | DC60-40137A | BOLT-HEX | MARS-PJT,STS304,M8,-,P1.25,L30 | PC | 6 | SA |
| U0320 | 6011-001565 | BOLT-HEX | M6,L35.1,ZPC(YEL),SWCH25K,TAPP | PC | 3 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 2 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 2 | SA |
| U0353 | 6031-001531 | WASHER-PLAIN | SCP1,-,ID7,OD14,T0.8,ZPC2(Y | PC | 1 | SA |
| U0363 | 6502-000127 | CABLE CLAMP | DAWH-18NB, ID15,-, NYLON66, NTR | PC | 3 | SA |
| U0363 | 6502-000127 | CABLE CLAMP | DAWH-18NB, ID15,-, NYLON66, NTR | PC | 5 | SA |
| U0379 | DC67-00252A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 1 | SA |
| U0379 | DC67-00253A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 4 | SA |
| U0379 | DC67-00255A | WEIGHT-ABSORBER | WF316,SHP1(PO##),1mm,#70 | PC | 2 | SA |
| U0379 | DC67-00252A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 1 | SA |
| U0379 | DC67-00253A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 2 | SA |
| U0379 | DC67-00255A | WEIGHT-ABSORBER | WF316,SHP1(PO##),1mm,#70 | PC | 5 | SA |
| U0382 | DC61-01820A | FIXER-WEIGHT ABSORBER | WF316,SM10C,L25/D6 | PC | 5 | SA |
| U0382 | DC61-01821A | FIXER-WEIGHT ABSORBER | WF316,SM10C,L20/ D | PC | 5 | SA |
| U0395 | DC97-12814A | ASSY-BRACKET SPRING(R) | WF337AAW,FRONTIER | PC | 1 | SA |
| U0396 | DC97-12813A | ASSY-BRACKET SPRING(L) | WF337AAW,FRONTIER | PC | 1 | SA |
| W0030 | DC62-10022X | HOSE-PUMP | FRONTIER,PP, ID20.6, OD27,-, L192 | PC | 1 | SA |
| W0059 | DC63-10002D | SPONGE-HARNESS | -,PU-FOAM,-,T10,W100,L80, | PC | 4 | SA |
| X0050 | DC61-01445A | GUIDE-CUSHION | MAH98700AWW,PP,T2.8,-, -, - | PC | 1 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 3 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 12 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 1 | SA |

7-6. PARTS LIST (SA/SC others) (WF317AAW/XAA)

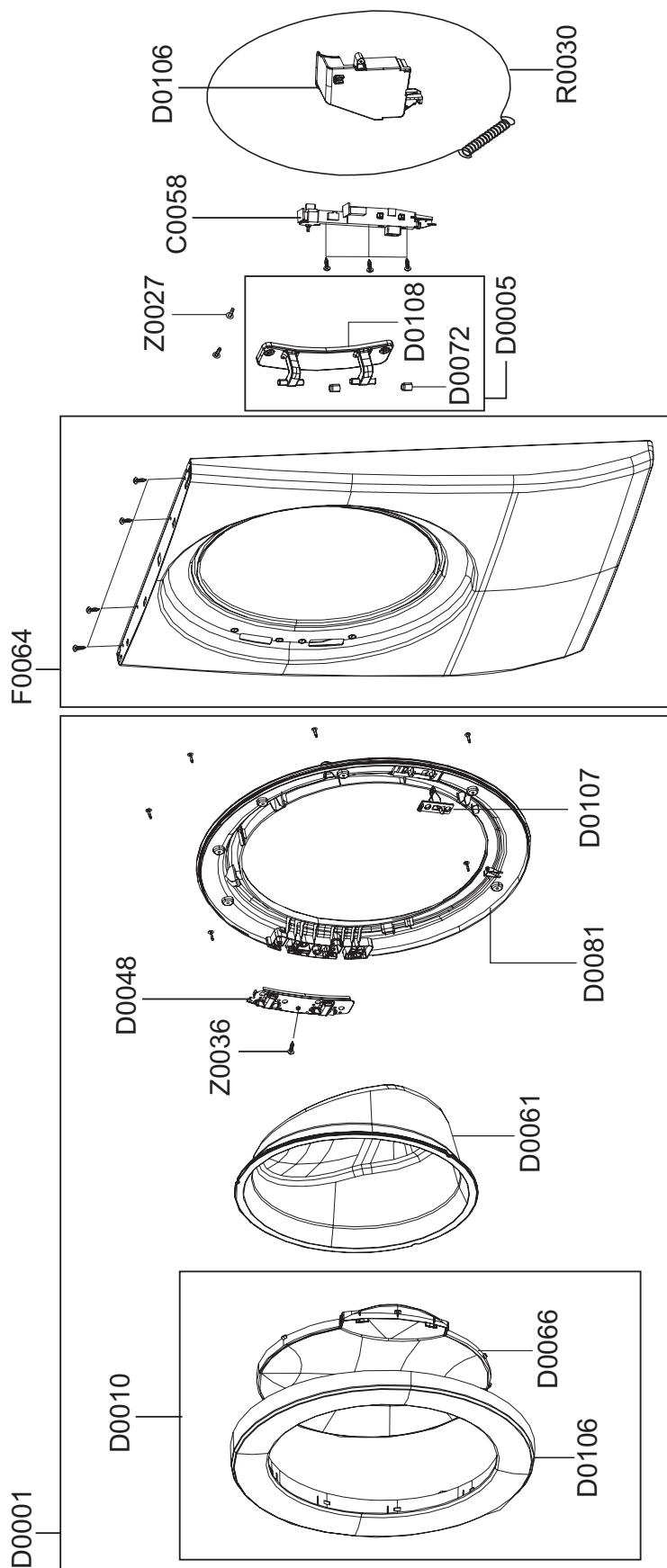
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|---------------|-------------------------------|----|------|--------|
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 3 | SA |
| Z0011 | 6002-001277 | SCREW-TAPPING | HEX,+, -,2,M6.5,L40,ZPC(WHT) | PC | 12 | SA |
| Z0013 | 6002-001279 | SCREW-TAPPING | PWH,+, -,1,M4,L12,PASS,STS4 | PC | 2 | SA |
| Z0038 | 6002-000241 | SCREW-TAPPING | TH,+, -,2S,M5,L12,ZPC(WHT), | PC | 1 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT) | PC | 6 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT) | PC | 1 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT) | PC | 2 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT) | PC | 2 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT) | PC | 15 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+, -,1,M4,L12,ZPC3 (WHT) | PC | 4 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+, -,1,M4,L12,ZPC3 (WHT) | PC | 4 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+, -,1,M4,L12,ZPC3 (WHT) | PC | 3 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+, -,1,M4,L12,ZPC3 (WHT) | PC | 1 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+, -,1,M4,L12,ZPC3 (WHT) | PC | 7 | SA |
| Z0062 | 6002-000630 | SCREW-TAPPING | PH,+, -,2S,M3,L8,ZPC(WHT),S | PC | 1 | SA |
| Z0064 | DC97-14006A | ASSY-SCREW | WF203,SCREW-TAPPING(M4+L16,TH | PC | 2 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+, -,S,M4,L8,ZPC3(BLK),S | PC | 2 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+, -,S,M4,L8,ZPC3(BLK),S | PC | 1 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+, -,S,M4,L8,ZPC3(BLK),S | PC | 4 | SA |

7-7. THE CONTROL PARTS (WF206BNW/XAA)



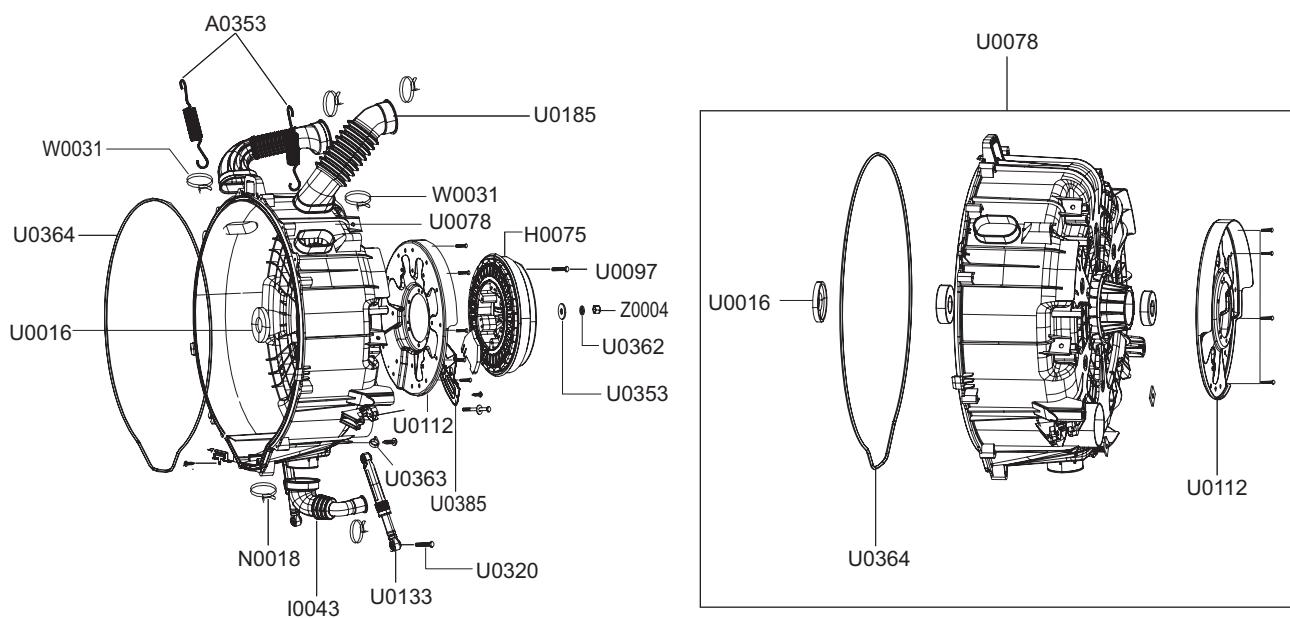
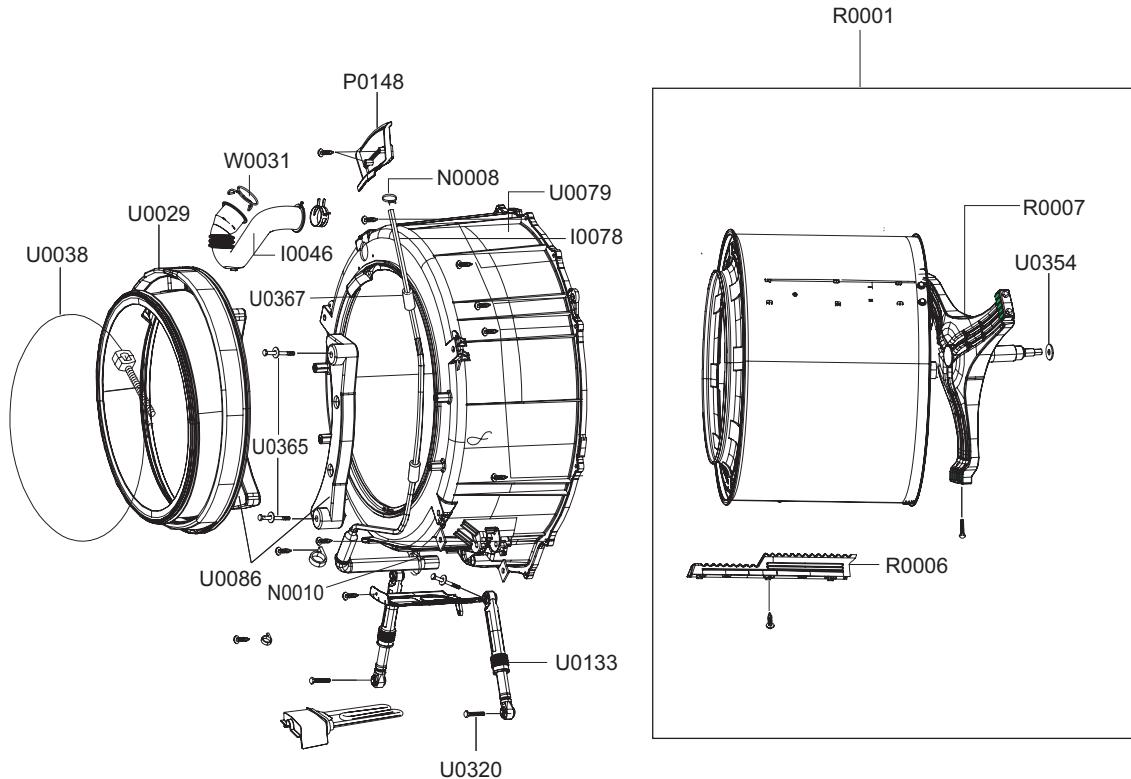
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|---------------|-----------------------|--------------------------------|----|------|--------|
| C0002 | DC97-12075B | ASSY-S.PANEL CONTROL | WF206BNW,MARS-PJT | PC | 1 | SA |
| C0029 | DC97-10526A | ASSY-KNOB ENCODER | WF316BAW,BBY/CR-COATIN | PC | 1 | SA |
| C0044 | DC64-01105A | BUTTON-PUSH(P) | WF326LAW,ABS,-,-,WHT,FRON | PC | 1 | SA |
| C0105 | DC64-01132B | BUTTON-ENCODER | DV306BEW(SECA),ABS,-,-,WH | PC | 1 | SA |
| C0108 | DC66-00413A | LEVER-POWER | GW-PJT,POM,-,-,-,NTR,ENTRY | PC | 1 | SA |
| N0009 | DC65-00008A | CLAMPER HOSE | SEW-DR605,SK5,-,-,YEL,ID14. | PC | 6 | SA |
| R0014 | DC97-10335D | ASSY-DRAWER | WF306BHW,NEAT-WHT/3-TRAY | PC | 1 | SA |
| R0015 | DC97-08774B | ASSY-S. DRAWER | WF306LAW,NO-PRE WASH | PC | 1 | SA |
| R0019 | DC97-07125L | ASSY-HOUSING DRAWER | WF206LNW,MAIN/HOT/BL | PC | 1 | SA |
| R0025 | DC97-10961A | ASSY-PANEL DRAWER | WF316BAW,FRONTIER | PC | 1 | SNA |
| R0036 | DC61-01170A | BODY-DRAWER | GW-PJT,PP(TB-53),-,-,-,WHT | PC | 1 | SNA |
| R0085 | DC61-01171A | GUIDE-LIQUID | GW-PJT,ABS,-,-,-,WHT,- | PC | 1 | SA |
| R0096 | DC61-01167A | HOUSING-DRAWER(L) | GW-PJT,PP(FH44N),-,-,- | PC | 1 | SA |
| R0155 | DC64-01113A | HANDLE-DRAWER | WF326LAW,ABS,-,-,-,WHT,F | PC | 1 | SNA |
| R0157 | DC67-00121B | CAP-RINSE | MAH9700,PP(TB53),-,-,-,MUNSELL | PC | 1 | SA |
| R0158 | DC67-00051B | HOSE-DRAWER | Q1636GW/XEU,EPDM,OD9.0,OD14. | M | 0.92 | SA |
| R0159 | DC97-08800A | ASSY-S.HOUSING DRAWER | MAH9700AWW,- | PC | 1 | SA |
| R0173 | DC63-00516A | COVER-DETERGENT | GW-PJT,PP(TB-53),-,-,- | PC | 1 | SNA |
| W0032 | DC62-30312J | VALVE-WATER | V-1245,NYLON #6,83x45,1~8(V1 | PC | 1 | SA |
| W0032 | DC62-30314K | VALVE-WATER | V-0117,NYLON #6,83x45,1~8(10 | PC | 1 | SA |
| Y0161 | MFS-WF206L-00 | ASSY PCB PARTS(M) | MFS-WF206L-00 | PC | 1 | SA |
| Y0162 | MFS-WF206L-S0 | ASSY PCB PARTS(S) | MFS-WF206L-S0 | PC | 1 | SA |
| Y0163 | MFS-WF206L-T0 | ASSY-PCB PARTS | MFS-WF206L-T0 | PC | 1 | SA |

7-8. THE DOOR PARTS (WF206BNW/XAA)



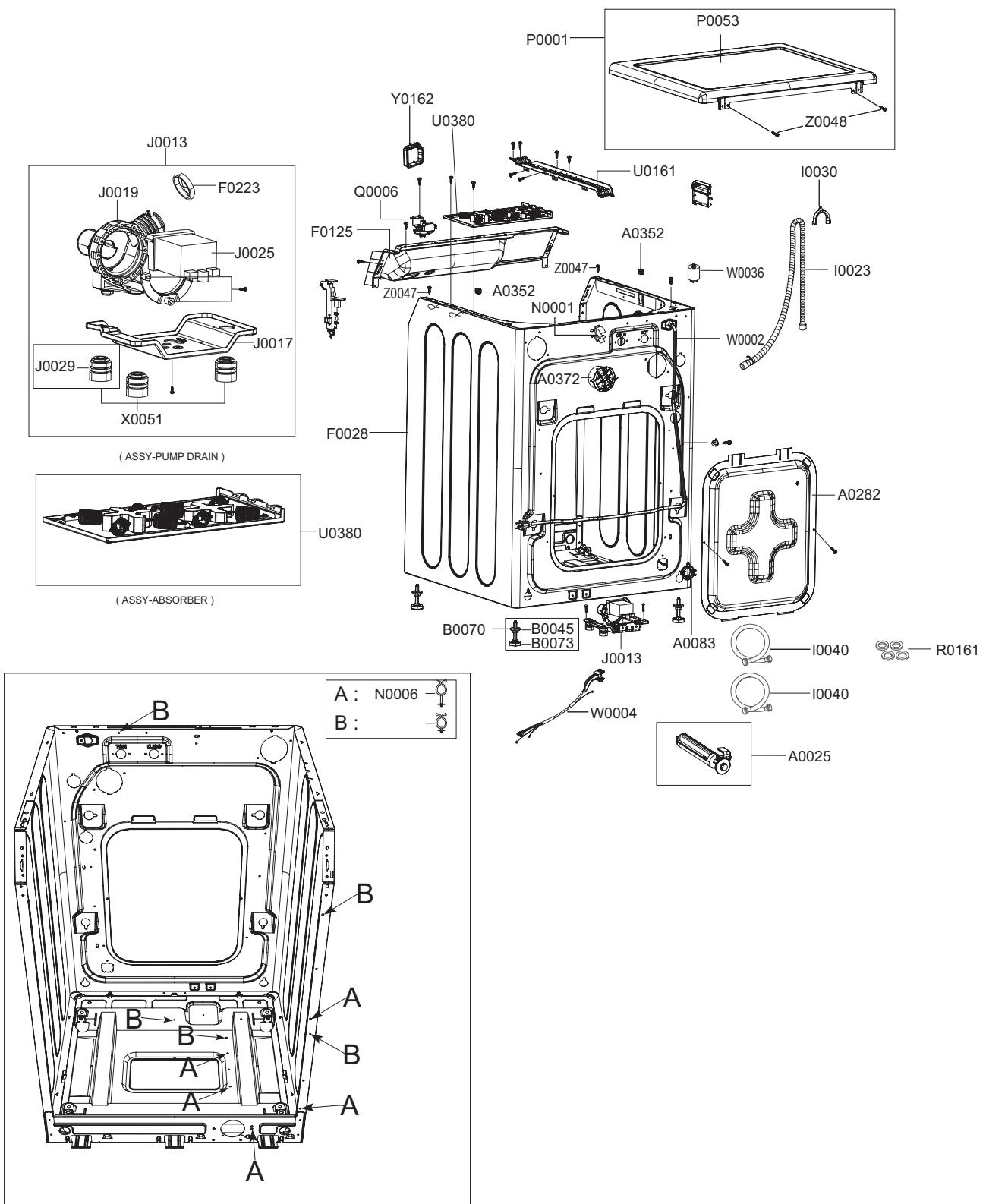
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|---------------------|-------------------------------|----|------|--------|
| C0058 | DC64-00519B | DOOR-LOCK S/W | GW-PJT,PP-GF,-,-,-,-,BLK,1 | PC | 1 | SA |
| D0001 | DC97-10792G | ASSY-DOOR | WF206,- | PC | 1 | SA |
| D0005 | DC97-10718A | ASSY-HINGE DOOR | FRONTIER-PJT,SINGLE | PC | 1 | SA |
| D0010 | DC97-10342D | ASSY-COVER DOOR | DV2C6BEW/XAA,MARS-PJT/Cr | PC | 1 | SA |
| D0048 | DC61-01222A | BRACKET-HINGE | 27-DRYER,HGI,T2.0,-,-,- | PC | 1 | SA |
| D0061 | DC64-00504B | DOOR-GLASS | SEW-HW125,SODALIME,-,-,-,-, | PC | 1 | SC |
| D0066 | DC64-01120A | DOOR-SAFETY | WF326LAW,PET,T2.8,-,-,-,NTR, | PC | 1 | SA |
| D0072 | DC61-00891A | GUIDE-HINGE | HAUZEN(DOM),POM,-,-,-,WHT,HI | PC | 4 | SA |
| D0081 | DC61-01520A | HOLDER-GLASS | WF326LAW,PP(TB53),T2.8,-,-, | PC | 1 | SA |
| D0106 | DC63-00674C | COVER-DOOR | DV2C6BEW/XAA,ABS,T2.8,-,-,-,B | PC | 1 | SNA |
| D0106 | DC63-00693A | COVER-DOOR SWITCH | FRONTIER,PP(V0),-,-,- | PC | 1 | SA |
| D0107 | DC66-00326A | LEVER-DOOR | TS85-PJT,POM,-,W24,L54,-,WHT, | PC | 1 | SA |
| D0108 | DC61-01532A | HINGE-DOOR | WF326LAW,ZNDC,T3.8,-,-,-,FR | PC | 1 | SA |
| F0064 | DC97-10340A | ASSY-FRAME FRONT | WF316LAW,NEAT-WHT/FRONT | PC | 1 | SA |
| R0030 | DC97-04973A | ASSY-WIRE DIAPHRAGM | TS85-PJT,FRAME-FRONT | PC | 1 | SA |
| Z0027 | 6001-001773 | SCREW-MACHINE | TH,+, -,M5,L12,PASS,STS430, | PC | 2 | SA |
| Z0036 | 6001-001668 | SCREW-MACHINE | TH,+,M5,L16,PASS,STS430,FP | PC | 1 | SA |

7-9. THE TUB PARTS (WF206BNW/XAA)



| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|-------------------------|---------------------------------|----|------|--------|
| A0353 | DC61-01257B | SPRING ETC-HANGER | Frontier,SWC,4.2,21.6, | PC | 2 | SA |
| H0075 | DC31-00049A | MOTOR BLDC-DRUM | POM1300,0~1200,-,DC310V, | PC | 1 | SA |
| I0043 | DC67-00126A | HOSE-DRAIN | GW-PJT,EPDM,OD 68,-,T2.0,-,BL | PC | 1 | SA |
| I0046 | DC67-00122A | HOSE-DRAWER TUB | GW-PJT,EPDM,-,-,-,BLK, | PC | 1 | SA |
| I0078 | DC67-00124A | HOSE-PRESSURE | GW-PJT,EPDM,-,-,-,BLK,- | PC | 1 | SA |
| N0008 | DC61-70029C | SPRING-CLIP | SEW-HW125,HSWR67,CD1.2,ID8.5 | PC | 1 | SA |
| N0010 | DC65-00009A | CLAMPER HOSE | TS85-PJT,HSWR,-,-,YEL,OD24/ | PC | 1 | SA |
| N0018 | DC65-00014A | CLAMPER HOSE | GW-PJT,HSWR,-,ID82,ZPC2,HOS | PC | 1 | SA |
| P0148 | DC61-01172A | GUIDE-WATER | GW-PJT,FRPP(GF15%),T2.5,-,- | PC | 1 | SA |
| R0001 | DC97-12224A | ASSY-DRUM | WF206LNW,MARS-PJT | PC | 1 | SA |
| R0006 | DC66-00434A | DRUM-LIFTER | WF326LAW,PP(TI42),-,L314,G | PC | 3 | SA |
| R0007 | DC97-12222A | ASSY-FLANGE SHAFT | WF206LNW,MARS-PJT | PC | 1 | SA |
| U0016 | DC62-00223A | SEAL-OIL | GW-PJT,EPDM,BLK,-,W77.55,L12,6 | PC | 1 | SA |
| U0029 | DC64-00802A | DOOR-DIAPHRAGM | GW-PJT,EPDM,T1.5,-,-,GR | PC | 1 | SA |
| U0038 | DC97-04981D | ASSY-CLAMP DIAPHGRAM | WINGS-PJT,HSWR/ZPC4 | PC | 1 | SA |
| U0078 | DC97-11526C | ASSY-SEMI TUB BACK | WF206LNW,NO-HEATER/VE | PC | 1 | SNA |
| U0079 | DC97-08650D | ASSY-SEMI TUB FRONT | WF206LNW,12%/NO-HEAT | PC | 1 | SA |
| U0086 | DC67-00139A | WEIGHT-BALANCER(F) | GW-PJT,GC,-,-,-,RED,F | PC | 2 | SA |
| U0097 | 6011-001548 | BOLT-ETC | M7.5,L30,ZPC(YEL),SWRCH18A,HEX | PC | 20 | SA |
| U0112 | DC61-01338B | BRACKET-HOUSING BEARING | DR130,SBHG1-A(GI | PC | 1 | SA |
| U0133 | DC66-00343C | DAMPER-SHOCK | GW-PJT,-,-,-,-,-,60N | PC | 2 | SA |
| U0133 | DC66-00343E | DAMPER-SHOCK | GW-PJT,STEEL+PP+RUBBER,40N, | PC | 2 | SA |
| U0185 | DC67-00155A | HOSE-O.F(I) | WINGS-PJT,EPDM,-,-,T2.0,-,BL | PC | 1 | SA |
| U0320 | DC60-40141A | BOLT-HEX | SM10C/DAMPER,HEX,M8,L66,-,ZPC2 | PC | 2 | SA |
| U0320 | DC60-40141A | BOLT-HEX | SM10C/DAMPER,HEX,M8,L66,-,ZPC2 | PC | 2 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 1 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 2 | SA |
| U0354 | 6031-001519 | WASHER-WAVE | SK5,-,ID30,OD36,T0.5,ZPC2,3P | PC | 1 | SA |
| U0362 | DC60-60049A | WASHER-SPRING | -,ID10.5,OD18,T2.5,-,SIR | PC | 1 | SA |
| U0363 | DC65-20008C | CABLE CLAMP | DA-8N,NYLON#66,-,-,NTR, ID13. | PC | 1 | SA |
| U0364 | DC69-00804A | PACKING-TUB | GW-PJT,EPDM-FORM,-,PI8,W624, | PC | 1 | SA |
| U0365 | DC97-02412A | ASSY-BOLT | SWF-P12,MOTOR, M8*L62 | PC | 4 | SA |
| U0367 | DC63-10003C | SPONGE-HOSE AIR | POL,GRY,SWF-P12,HB22-GRE | PC | 1 | SA |
| U0385 | DC61-01431B | BRACKET-TUB(B) | WINGS-PJT,SBHG1-A,T0.4,- | PC | 1 | SA |
| W0031 | DC72-00001A | BAND-RING | DRUM-MODEL,HSWR,-,-,-,YEL, ID6 | PC | 1 | SA |
| W0031 | DC72-00001D | BAND-RING | WINGS-PJT,HSWR,T2.4,-,-,YEL, ID | PC | 1 | SA |
| W0031 | DC72-00055A | BAND-RING | 27" Washer,HSWR,#2/ M4x35,-,-, | PC | 1 | SA |
| Z0004 | DC60-50148B | NUT-HEX | SM20C(NYLON),M12,-,-,ZPC3(YEL) | PC | 1 | SA |

7-10. THE FRAME PARTS (WF206BNW/XAA)



| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|----------------------|--------------------------------|----|------|--------|
| A0025 | DC97-07448B | ASSY-FIXER TUB | WF337AAW,YELLOW | PC | 4 | SNA |
| A0083 | DC61-00274A | GUIDE-HOSE | P/PV/M,PP,-,-,-,WHT,FRAME/DRA | PC | 1 | SA |
| A0282 | DC63-00522A | COVER-BACK | GW-PJT,GI,T0.4,W426,L507,-,-, | PC | 1 | SA |
| A0352 | DC61-01548A | GUIDE-SPRING | GW-PJT,POM,-,-,-,NTR,- | PC | 2 | SA |
| A0372 | DC97-08740D | ASSY-CAP O.F | WF337AAW,FRONTIER2 | PC | 1 | SA |
| B0045 | DC61-01652A | LEG-RING | K4-PJT,Nylon66+GF30,NON,SIL,L1 | PC | 1 | SNA |
| B0070 | DC97-12560A | ASSY-LEG | WF206LNW,MARS-PJT | PC | 4 | SA |
| B0073 | DC61-01747A | LEG-RUBBER | MARS,BUTYL+SWRCH10A,-,GRY+YEL | PC | 1 | SA |
| F0028 | DC97-06995G | ASSY-FRAME | WF206LNW,NEAT-WHT/T0.8/VENT-1 | PC | 1 | SA |
| F0125 | DC61-01166A | FRAME-PLATE(U) | GW-PJT,EGI,-,-,-,T1.6,-,- | PC | 1 | SA |
| F0223 | DC62-00202A | VALVE-CHECK | WINGS,EPDM,PO30,1~10BAR,BLK, | PC | 1 | SA |
| I0023 | DC97-12534B | ASSY-HOSE DRAIN(I) | WF337AAW,L1920/BLOW-S | PC | 1 | SA |
| I0030 | DC62-10278A | HOSE-HANGER | -,PP(JS20),-,-,-,-,NTR,- | PC | 1 | SA |
| I0040 | DC62-00075A | HOSE-WATER(H) | -,NBR+NYLON,ID10.2,OD16.5, | PC | 1 | SA |
| I0040 | DC62-00075B | HOSE-WATER(C) | -,NBR+NYLON,ID10.2,OD16.5, | PC | 1 | SC |
| J0013 | DC96-01414A | ASSY-PUMP DRAIN | WF337AAW,FRONTIER II | PC | 1 | SA |
| J0017 | DC61-01853A | BRACKET-PUMP | WF337AAW,SGCC(GI),T1.2,-,-, | PC | 1 | SA |
| J0019 | DC61-01871A | CASE-PUMP | WF337AAW,PP(5113MF6),-,-,-,WHT | PC | 1 | SNA |
| J0025 | DC31-00054A | PUMP-DRAIN | -,120V,60Hz,40mm,80W/3600RPM | PC | 1 | SNA |
| J0029 | DC63-00766A | CUSHION-PUMP | WF206LNW,EPDM,-,-,-,-,MARS- | PC | 1 | SA |
| N0001 | DC61-00133A | CLAMPER HOSE | P1291,PP(BJ-730),ID24.5,OD2 | PC | 1 | SNA |
| N0006 | DC61-40081A | HOLDER-WIRE | DAWH-2NC, NYLON66,-,-,-,-,NTR | PC | 4 | SA |
| N0006 | DC61-40081A | HOLDER-WIRE | DAWH-2NC, NYLON66,-,-,-,-,NTR | PC | 5 | SA |
| P0001 | DC97-08634J | ASSY-COVER TOP | WF206LNW,NEAT-WHT | PC | 1 | SA |
| P0053 | DC63-00523G | COVER-TOP | WF206LNW,SECC(EGI),T0.8,-,-,- | PC | 1 | SNA |
| Q0006 | DC97-03716C | ASSY-SENSOR PRESSURE | SEW-3HW123,DN-S14T/ | PC | 1 | SA |
| R0161 | DC62-40178A | SEAL-WATER | -,NR,BLK,-,-,-,ID12XOD25XT3 | PC | 4 | SA |
| U0161 | DC61-01200B | GUIDE-WIRE | WF206LNW,SGCC(GI),T0.8,-,-,- | PC | 1 | SA |
| U0380 | DC97-08635G | ASSY-ABSORBER | WF306,WEIGHT 390g(SCP1) | PC | 1 | SA |
| W0002 | DC96-00757A | ASSY POWER CORD | GW-PJT,GW,UL/CSA,3/16AWG | PC | 1 | SA |
| W0004 | DC96-01043D | ASSY-M.WIRE HARNESS | WF206ANW,MARS WASHER | PC | 1 | SA |
| W0036 | DC29-00013A | FILTER-EMI | LFT-215G,WINGS_PJT,250VAC,15A | PC | 1 | SA |
| X0051 | DC99-00815A | ASSY-CUSHION PUMP | WF206LNW,MARS-PJT | PC | 3 | SA |
| Y0162 | MFS-MEMS-00 | ASSY PCB PARTS(S) | MES-MEMS-00 | PC | 1 | SA |
| Z0047 | 6009-001458 | SCREW-SPECIAL | CH,+,-,M4,L10,ZPC3(BLK),SW | PC | 2 | SA |
| Z0048 | 6009-001476 | SCREW-HEX | HEX,+,-,M5,L10,ZPC3(BLK),SWRCH | PC | 2 | SA |

7-11. PARTS LIST (SA/SC others) (WF206BNW/XAA)

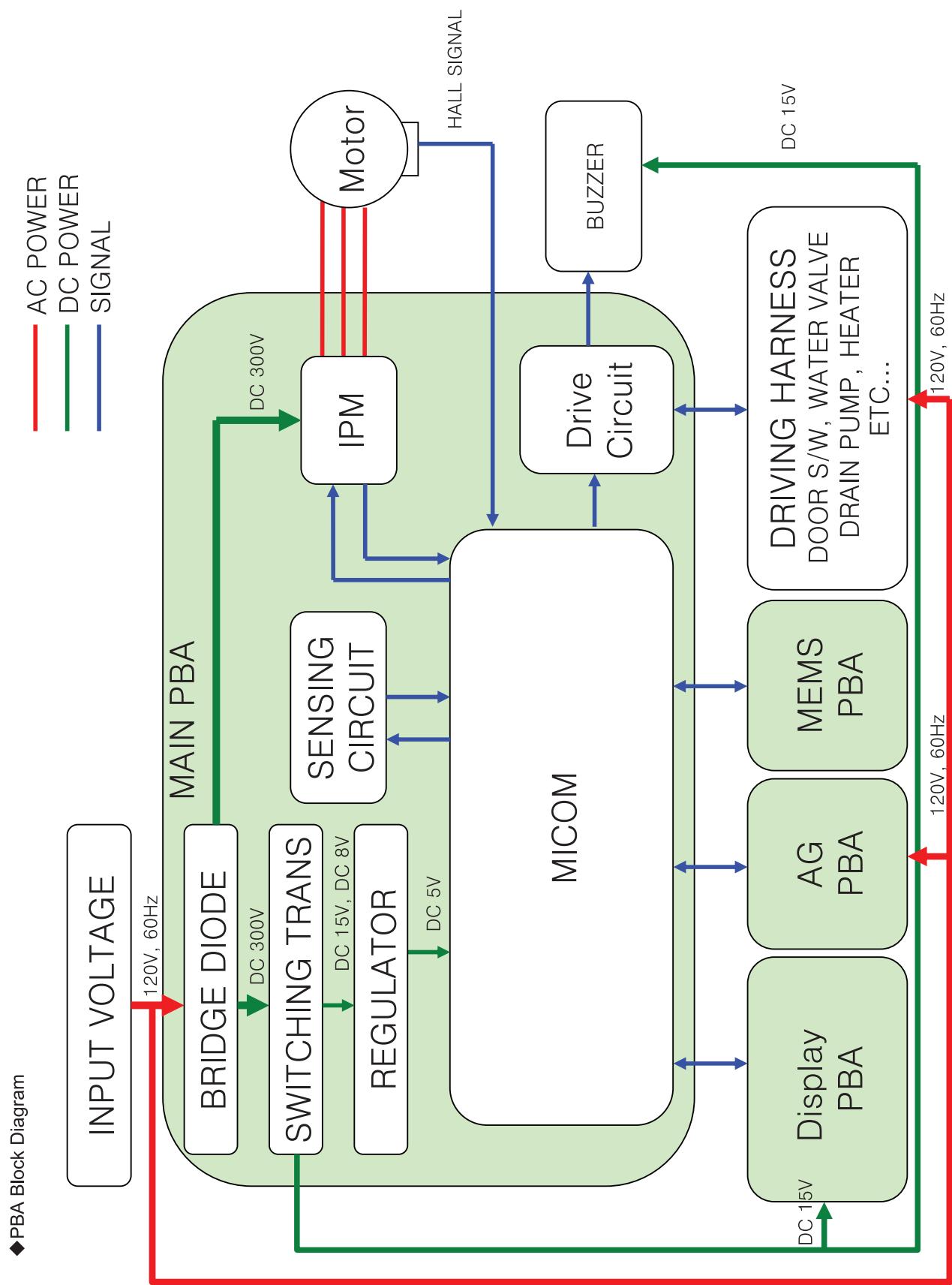
| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|-------------------------|---------------------------------|----|------|--------|
| A0028 | DC61-01723A | BRACKET-FIXER(O/L) | WF206LNW,SGCC(GI),T2. | PC | 1 | SA |
| A0028 | DC61-01723A | BRACKET-FIXER(O/L) | WF206LNW,SGCC(GI),T2. | PC | 1 | SA |
| A0028 | DC61-01586B | BRACKET-FIXER(L) | WF206LNW,SGCC(GI),T1.0, | PC | 1 | SA |
| A0029 | DC61-01587B | BRACKET-FIXER(R) | WF206LNW,SGCC(GI),T1.0, | PC | 1 | SA |
| A0032 | DC97-12305A | ASSY-BRACKET FIXER(O/L) | WF206LNW,BRACKET | PC | 1 | SA |
| A0033 | DC97-12306A | ASSY-BRACKET FIXER(O/R) | WF206LNW,Bracket | PC | 1 | SA |
| A0034 | DC60-40146A | BOLT-SPANNER | -,HR,-,T2.3,OD36,-,BLK,-,- | PC | 1 | SA |
| A0043 | DC61-10688A | CAP-FIXER | SWF-P12,PP(TB53),-,-,WHT,-, | PC | 6 | SA |
| A0055 | DC61-01679A | CLIP-HOSE | SEW-HFR177AR,SK5,T1.6,NTR,ID37 | PC | 1 | SA |
| A0125 | 6046-000310 | STAND OFF | ID11.5,L2,NTR,NYLON66,DAWH-3NA | PC | 4 | SA |
| B0027 | DC97-12492A | ASSY-WEIGHT | WF316,WEIGHT 390g(SCP1) | PC | 1 | SA |
| D0105 | DC61-01576A | SUPPORT-HINGE | FRONTIER-PJT,STS430,T1.2,- | PC | 1 | SA |
| D0111 | DC72-00034H | SPONGE-EPDM | WF316LAW,YOUNGBOARD,-,T1.0,W | PC | 1 | SA |
| D0111 | DC72-00034B | SPONGE-EPDM | MAH2400,EPDM,-,T1,W15,L500,W | PC | 3 | SA |
| J0020 | DC63-00810A | COVER-PUMP | WF337AAW,PP(FH-44N),-,-,-,- | PC | 1 | SA |
| M0047 | DC61-01736B | HOLDER-WIRE | WF337AAW,NYLON66,OD31,H15,L1 | PC | 1 | SA |
| U0069 | DC97-08632C | ASSY-GUIDE WIRE | WF206LNW,MARS-PJT/T0.8 | PC | 1 | SA |
| U0113 | DC61-01817A | BUSH-BEARING | Frontier,STS304,ID30,OD62,L | PC | 1 | SA |
| U0320 | DC60-40137A | BOLT-HEX | MARS-PJT,STS304,M8,-,P1.25,L30 | PC | 6 | SA |
| U0320 | 6011-001565 | BOLT-HEX | M6,L35.1,ZPC(YEL),SWCH25K,TAPP | PC | 3 | SA |
| U0353 | DC60-60044A | WASHER-PLAIN | -,ID10.5,OD30,T3,-,STS304 | PC | 2 | SA |
| U0353 | 6031-001531 | WASHER-PLAIN | SCP1,-,ID7,OD14,T0.8,ZPC2(Y | PC | 1 | SA |
| U0363 | DC65-20008C | CABLE CLAMP | DA-8N,NYLON#66,-,-,NTR,ID13. | PC | 2 | SA |
| U0363 | 6502-000127 | CABLE CLAMP | DAWH-18NB,ID15,-,NYLON66,NTR | PC | 3 | SA |
| U0363 | 6502-000127 | CABLE CLAMP | DAWH-18NB,ID15,-,NYLON66,NTR | PC | 4 | SA |
| U0367 | DC63-10003E | SPONGE-HOSE AIR | GW-PJT,HB22-GREY,-,T130, | PC | 1 | SA |
| U0379 | DC67-00252A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 1 | SA |
| U0379 | DC67-00253A | WEIGHT-ABSORBER | WF316,SHP1(PO##),4mm,#70 | PC | 4 | SA |
| U0379 | DC67-00255A | WEIGHT-ABSORBER | WF316,SHP1(PO##),1mm,#70 | PC | 2 | SA |
| U0382 | DC61-01820A | FIXER-WEIGHT ABSORBER | WF316,SM10C,L25/D6 | PC | 5 | SA |
| W0030 | DC62-10022X | HOSE-PUMP | FRONTIER,PP, ID20.6,OD27,-,L192 | PC | 1 | SA |
| W0035 | DC32-00010A | THERMISTOR | -,11982OHM AT 25#,-,55~155,- | PC | 1 | SA |
| W0059 | DC63-10002D | SPONGE-HARNESS | -,PU-FOAM,-,T10,W100,L80, | PC | 4 | SA |
| W0063 | DC69-00824A | PACKING-THERMISTOR | GW-PJT,EPDM,-,-,W17,- | PC | 1 | SA |
| X0050 | DC61-01445A | GUIDE-CUSHION | MAH98700AWW,PP,T2.8,-,-,- | PC | 1 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 3 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 12 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 1 | SA |
| Z0008 | 6002-000444 | SCREW-TAPPING | TH,+, -,2S,M4,L14,PASS,STS4 | PC | 3 | SA |
| Z0011 | 6002-001277 | SCREW-TAPPING | HEX,+, -,2,M6.5,L40,ZPC(WHT | PC | 12 | SA |
| Z0013 | 6002-001279 | SCREW-TAPPING | PWH,+, -,1,M4,L12,PASS,STS4 | PC | 2 | SA |
| Z0038 | 6002-000241 | SCREW-TAPPING | TH,+, -,2S,M5,L12,ZPC(WHT), | PC | 1 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT | PC | 6 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT | PC | 15 | SA |
| Z0055 | 6002-001374 | SCREW-TAPPING | TH,+,WE, -,M4,L12,ZPC3 (WHT | PC | 1 | SA |

7-11. PARTS LIST (SA/SC others) (WF206BNW/XAA)

| Location.No | CODE-NO | DESCRIPTION | SPECIFICATION | Un | Q'TY | SA/SNA |
|-------------|-------------|---------------|-------------------------------|----|------|--------|
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+,1,M4,L12,ZPC3 (WHT) | PC | 4 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+,1,M4,L12,ZPC3 (WHT) | PC | 3 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+,1,M4,L12,ZPC3 (WHT) | PC | 2 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+,1,M4,L12,ZPC3 (WHT) | PC | 2 | SA |
| Z0056 | 6002-001376 | SCREW-TAPPING | TH,+,1,M4,L12,ZPC3 (WHT) | PC | 1 | SA |
| Z0062 | 6002-000630 | SCREW-TAPPING | PH,+,2S,M3,L8,ZPC(WHT),S | PC | 1 | SA |
| Z0064 | DC97-14006A | ASSY-SCREW | WF203,SCREW-TAPPING(M4+L16,TH | PC | 2 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+,S,M4,L8,ZPC3(BLK),S | PC | 2 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+,S,M4,L8,ZPC3(BLK),S | PC | 1 | SA |
| Z0065 | 6003-001563 | SCREW-TAPTITE | TH,+,S,M4,L8,ZPC3(BLK),S | PC | 4 | SA |

Memo

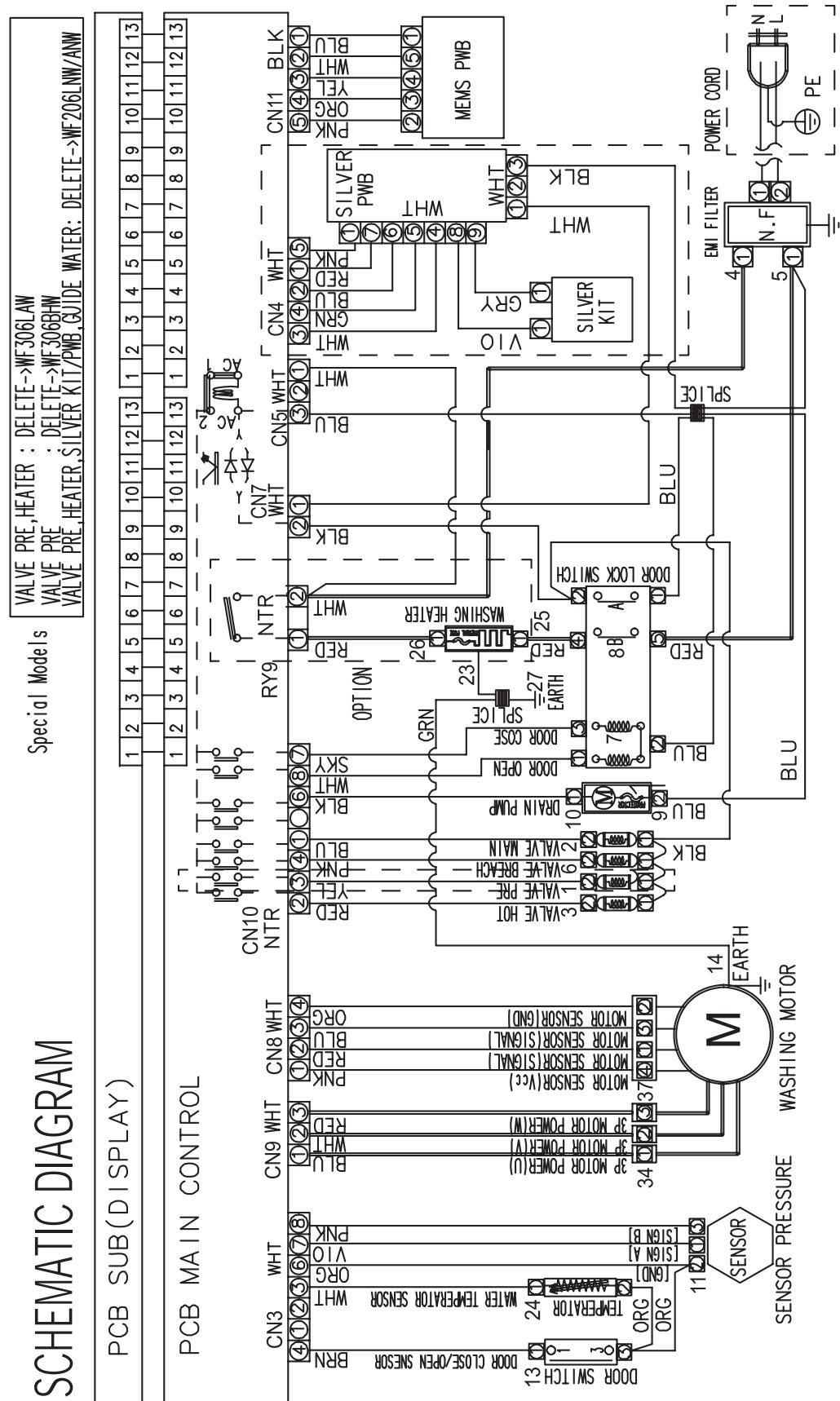
8. BLOCK DIAGRAM



Memo

9. WIRING DIAGRAM

9-1. WIRING DIAGRAM

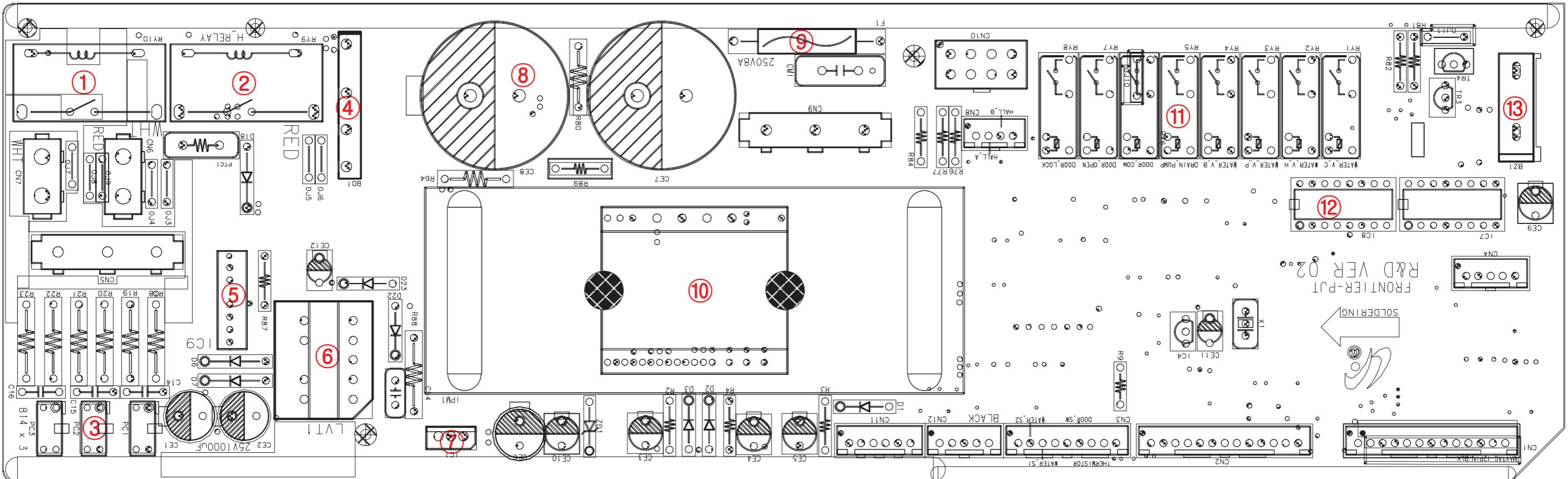


9-2. REFERENCE INFORMATION

| | |
|--------------------|---------|
| BLK | BLACK |
| BLU | BLUE |
| GRN | GREEN |
| GRY | GRAY |
| NTR | NEUTRAL |
| ORG | ORANGE |
| PNK | PINK |
| RED | RED |
| SKYBLU | SKYBLUE |
| VIO | VIOLET |
| WHT | WHITE |
| YEL | YELLOW |
| | |
| N.F (Noise Filter) | |
| SENSOR PRESSURE | |
| SILVER NANO | |
| DRY CONDENSOR | |
| DRY MOTOR | |
| THERMOSTAT | |
| DOOR LOCK | |
| DOOR OPEN | |
| DOOR S/W | |
| HOT VALVE | |
| MAIN VALVE | |
| PRE VALVE | |
| DRY VALVE | |
| DRAIN MOTOR | |
| WATER HEATER | |
| STEAM HEATER | |
| DRY HEATER | |
| SPLICE | |

10. PCB DIAGRAM

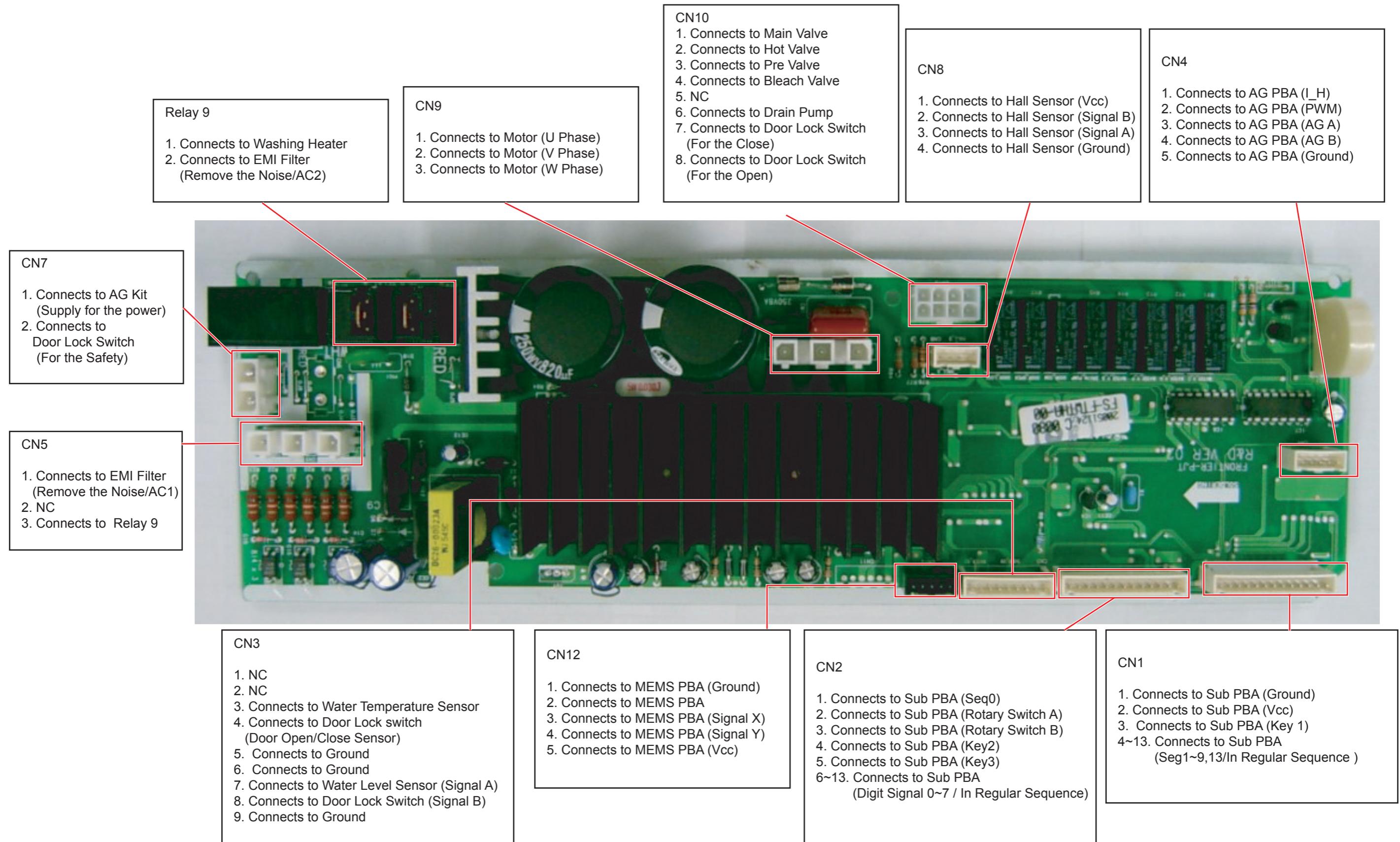
10-1. MAIN PCB LAYOUT



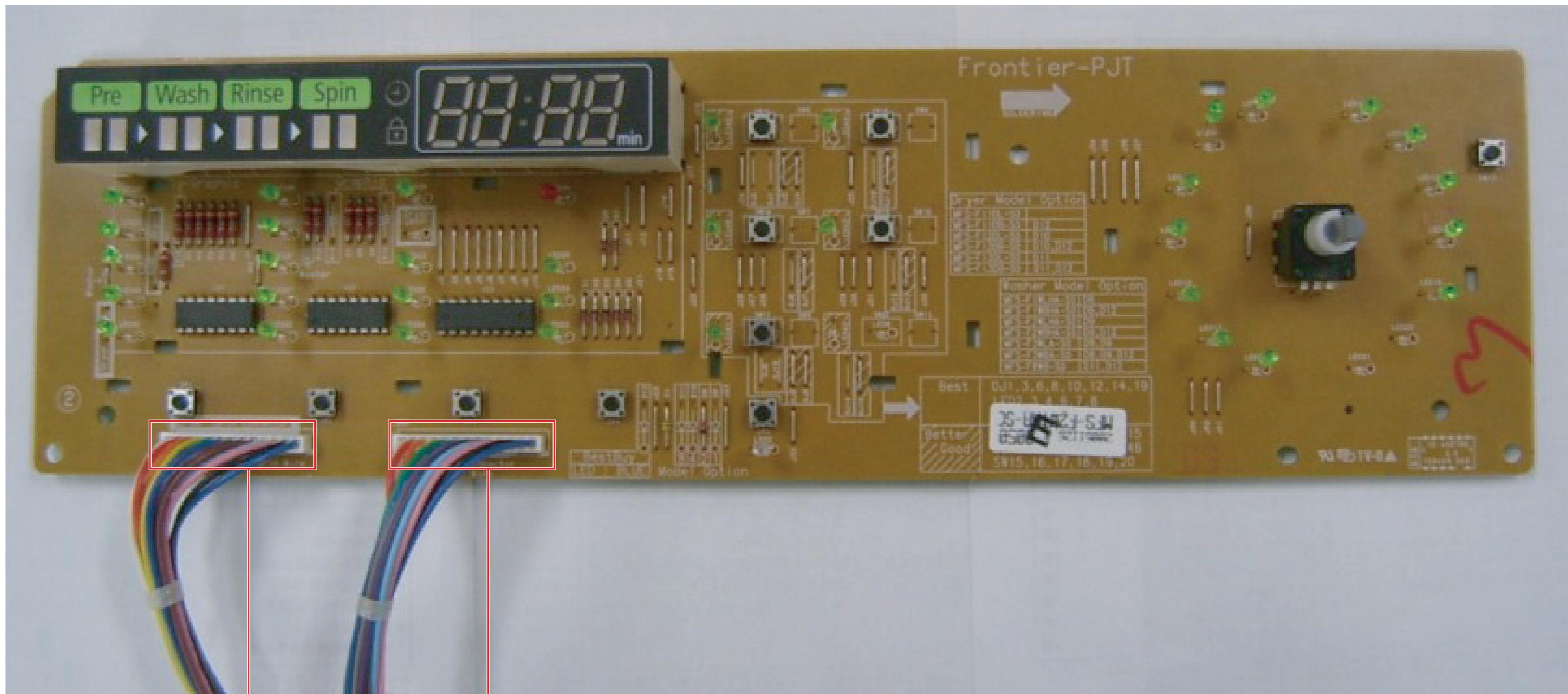
| Item | Part Number | Description |
|------|-------------|--|
| 1 | Ry10 | Main Power Relay |
| 2 | Ry9 | Heater Relay |
| 3 | PC1~3 | Check for the Frequency Make the Zerocross Door Lock Check |
| 4 | BD1 | It Work to Change the AC to the DC |
| 5 | IC9 | Making a stable DC |
| 6 | LVT1 | Chopping the DC Link |
| 7 | IC1 | Regulation for the 5V |

| Item | Part Number | Description |
|------|-------------|---|
| 8 | CE7,8 | Charge the DC LINK (300V) |
| 9 | Fuse1 | Limit the Over-Current |
| 10 | IPM1 | Control to Motor |
| 11 | Ry1~8 | Turn On/Off the Load (Valve etc.) |
| 12 | IC7,8 | Drive the Relay Supply the Current to the Acting Current |
| 13 | BZ1 | Making a Sound |

10-2. CONNECTOR & RELAY TERMINALS DESCRIPTION (MAIN PBA)



10-3. CONNECTOR & RELAY TERMINALS DESCRIPTION (SUB PBA)



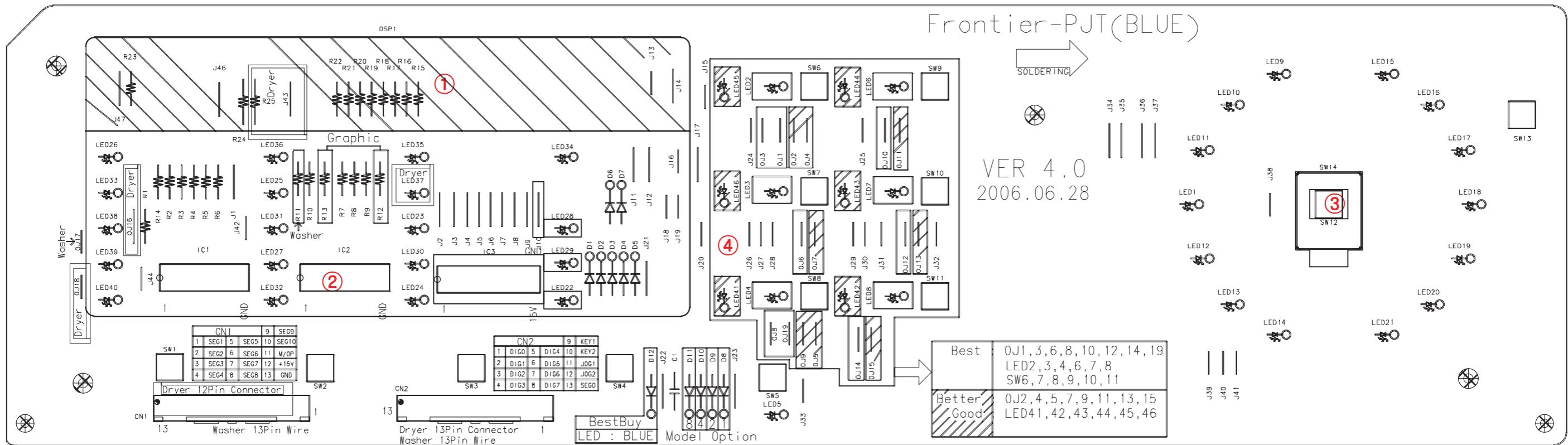
CN1

1. Connects to Main PBA (Ground)
2. Connects to Main PBA (Vcc)
3. Connects to Main PBA (Key 1)
- 4~13. Connects to Main PBA
(Seg1~9,13/In Regular Sequence)

CN2

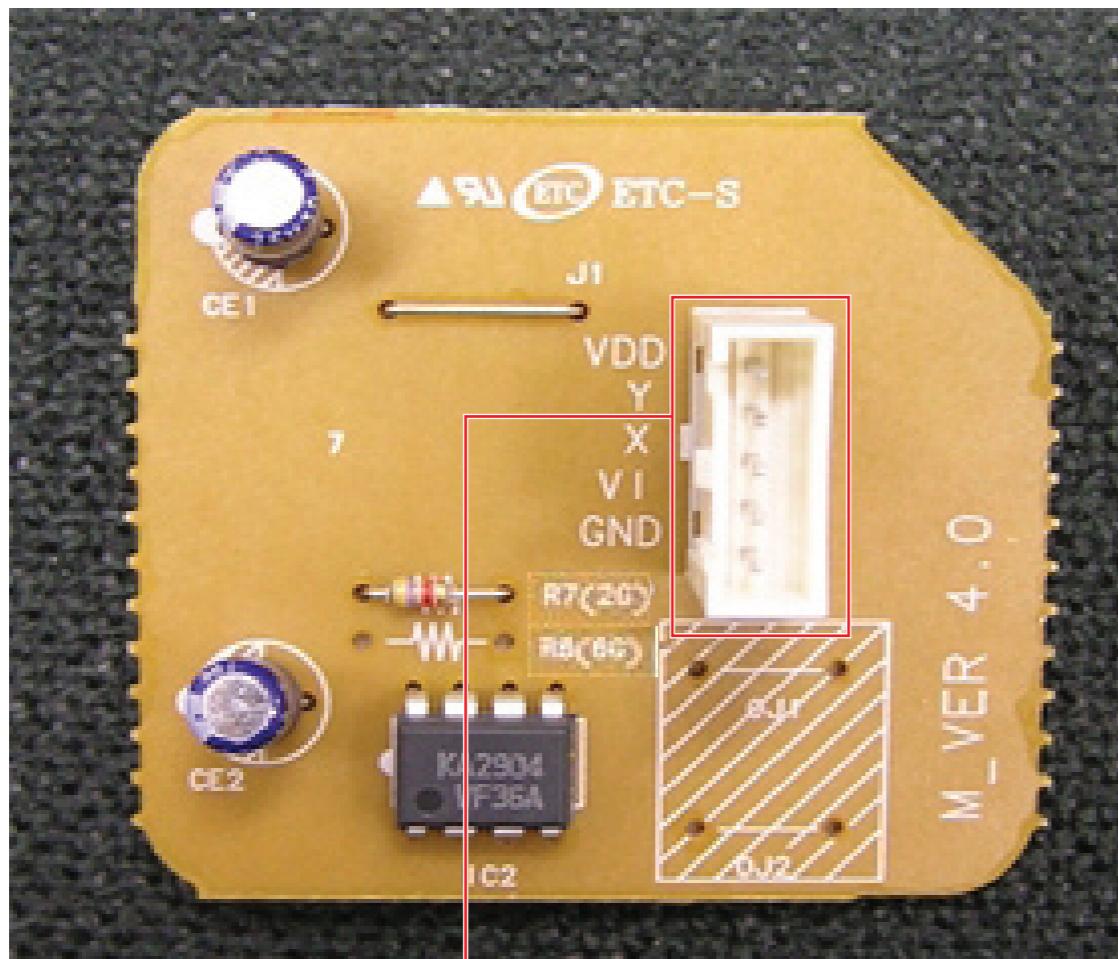
1. Connects to Main PBA (Seq0)
2. Connects to Main PBA (Rotary Switch A)
3. Connects to Main PBA (Rotary Switch B)
4. Connects to Main PBA (Key2)
5. Connects to Main PBA (Key3)
- 6~13. Connects to Main PBA
(Digit Signal 0~7 / In Regular Sequence)

10-4. SUB PCB LAYOUT (THE PRINCIPLE PART)



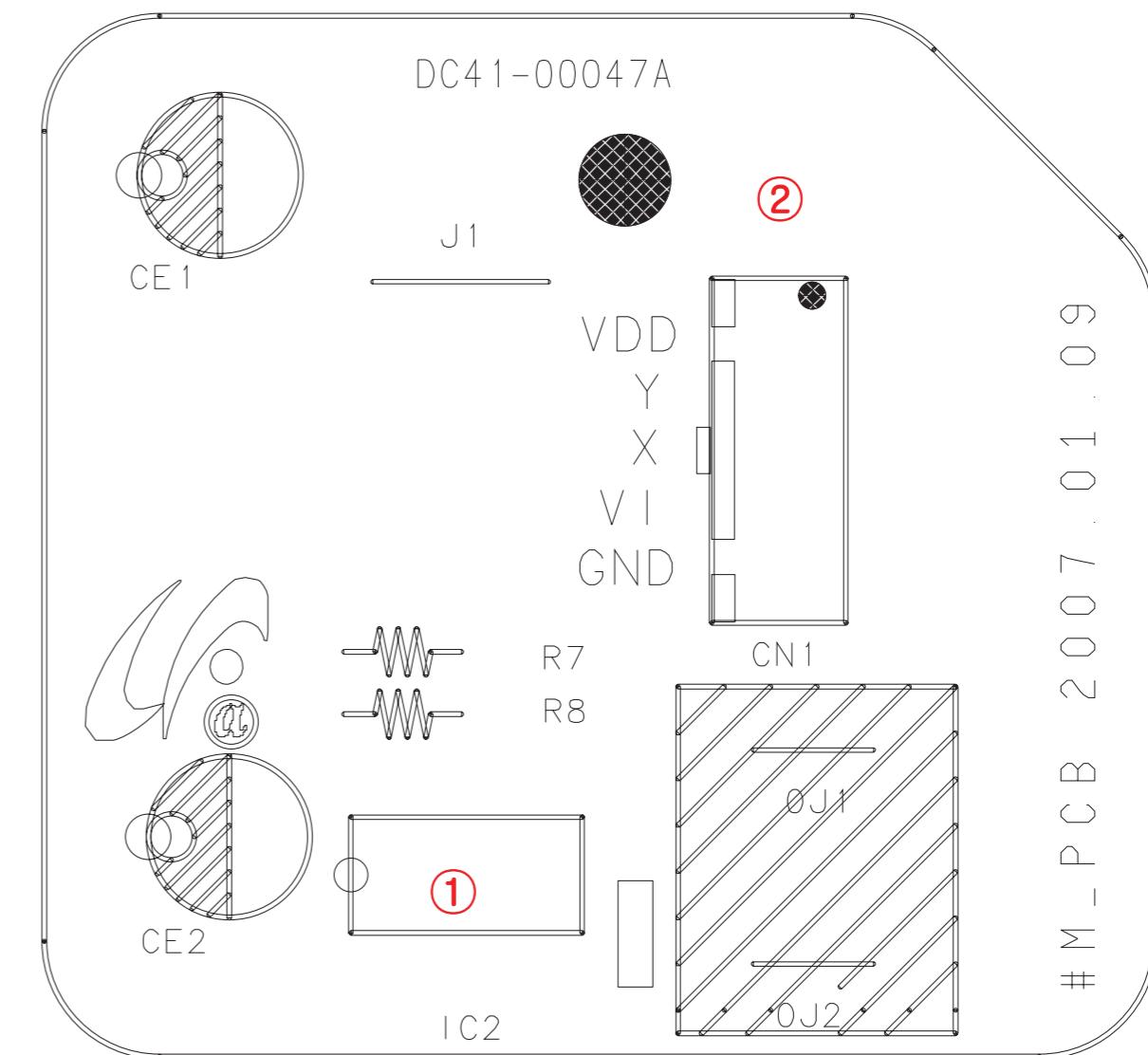
| Item | Part Number | Description |
|------|-------------|---|
| 1 | DSP1 | Display the Course |
| 2 | Ry9 | Drive the LED & Display Supply the Current to the Acting Current |
| 3 | IC1~3 | Rotary Switch (For the Selecting a Course) Start & Pause Key |
| 4 | SW12,14 | Input the Detail Course Display the Resent Course |

10-5. MEMS PBA CONNECTOR TERMINAL DESCRIPTION & LAYOUT (THE PRINCIPLE PART)



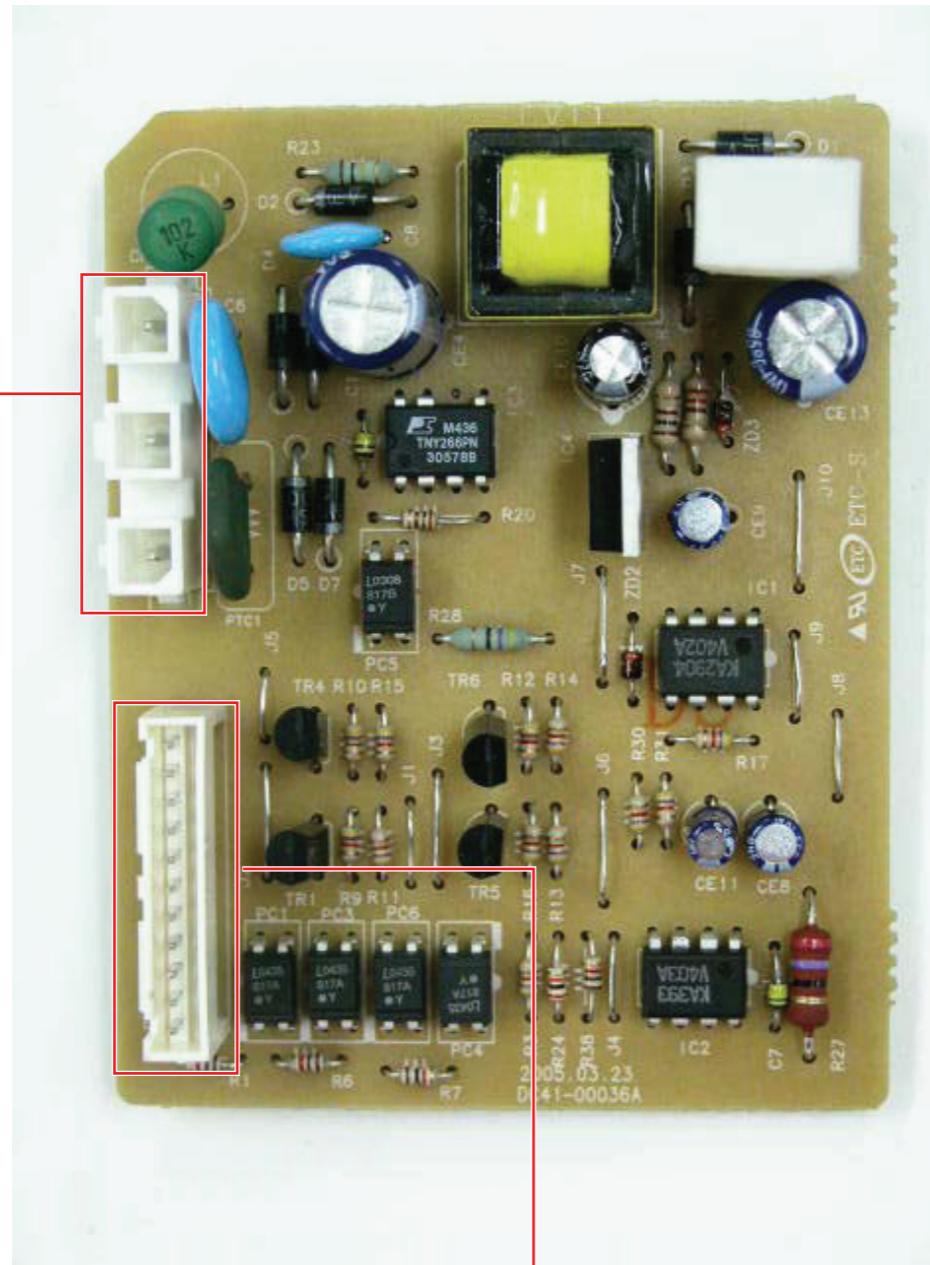
CN1

1. Connects to Main PBA (Ground)
2. Connects to Main PBA
3. Connects to Main PBA (Signal X)
4. Connects to Main PBA (Signal Y)
5. Connects to Main PBA (Vcc)



| Item | Part Number | Description |
|------|------------------|--|
| 1 | IC1 | Matching for the Impedance |
| 2 | IC2 (MEMS IC) | Sensing for the Washing Machine Vibration *This Part Is located at Bottom. (SMT Type) |

10-6. AG PBA CONNECTOR TERMINAL DESCRIPTION & LAYOUT (THE PRINCIPLE PART)

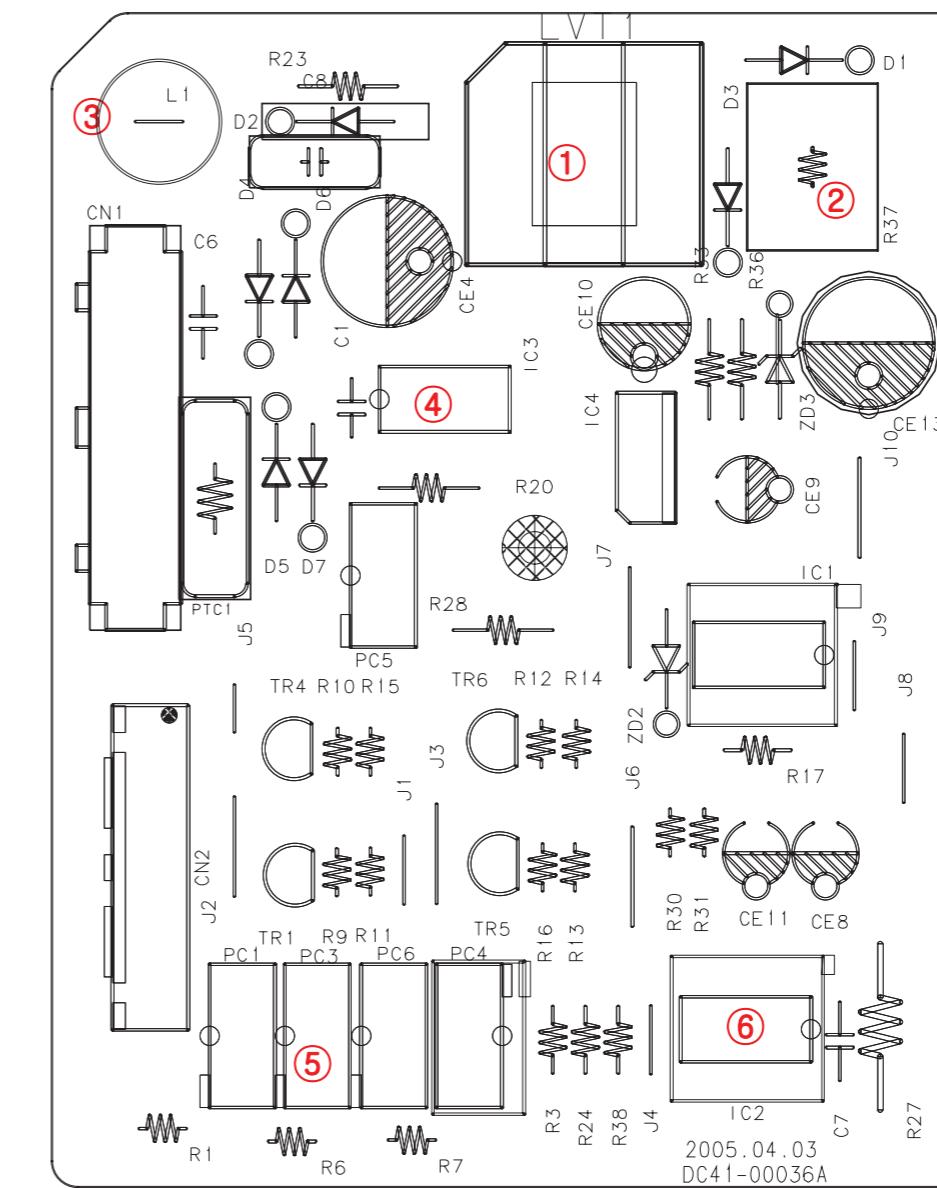


CN1

1. Connects to Main PBA CN7 (AC2)
2. NC
3. Connects to EMI Filter (AC1)

CN2

1. Connects to AG PBA (Ground)
2. Connects to AG PBA (I_H)
3. Connects to AG PBA (PWM)
4. Connects to AG PBA (Signal A)
5. Connects to AG PBA (Signal B)
6. NC
7. NC
8. Connects to AG PBA (Ag_A)
9. Connects to AG PBA (Ag_B)

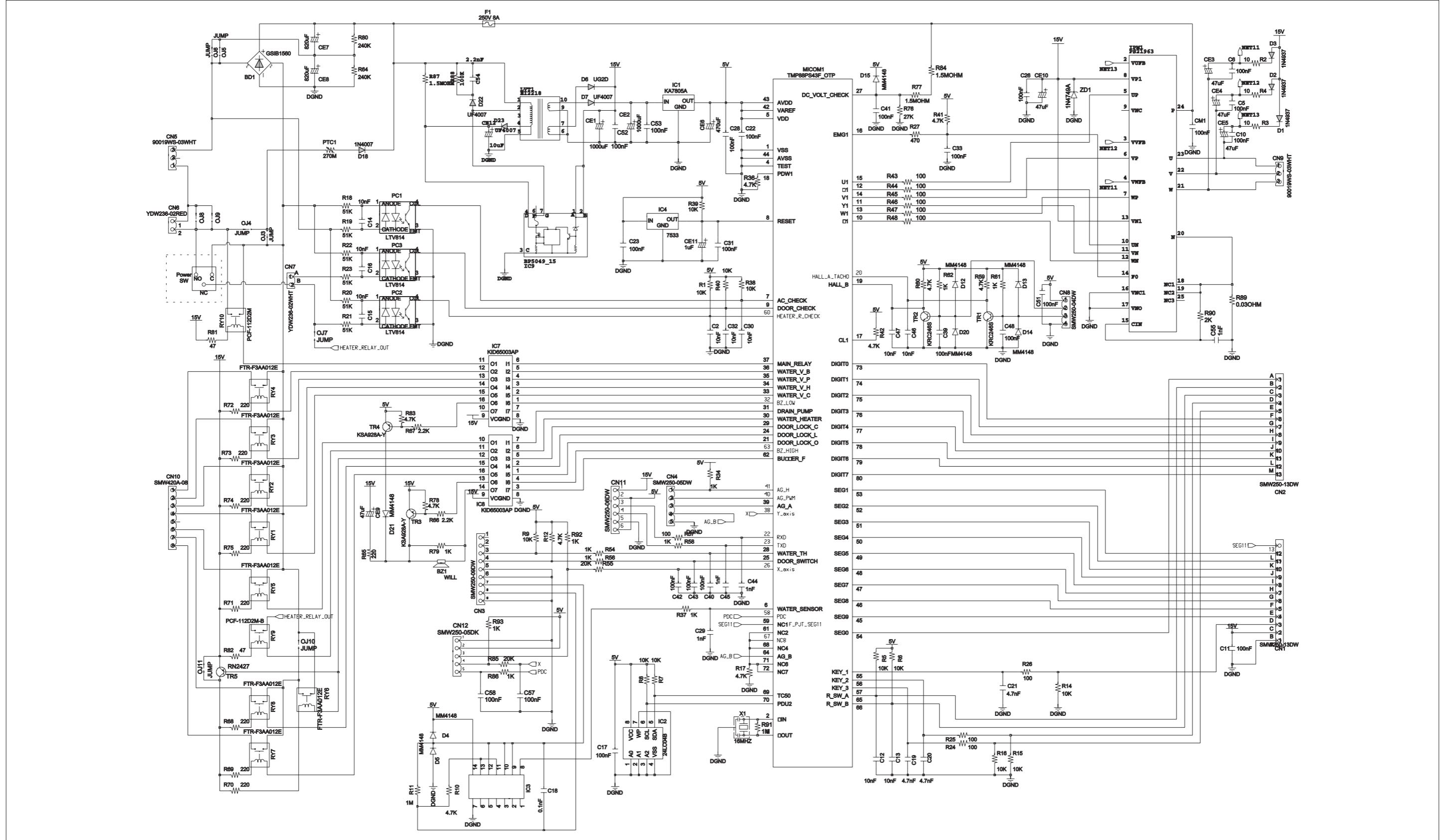


| Item | Part Number | Description |
|------|-------------|---|
| 1 | LVT1 | Chopping the DC Link |
| 2 | R37 | Dummy Load (For Making the Operation Voltage) |
| 3 | L1 | Help for the EMI, EMC |
| 4 | IC3 | Making a stable DC |
| 5 | PC | Isolation for the water |
| 6 | IC2 | Comparator |
| 7 | TR1~4 | Change the water flow |

11. SCHEMATIC DIAGRAMS

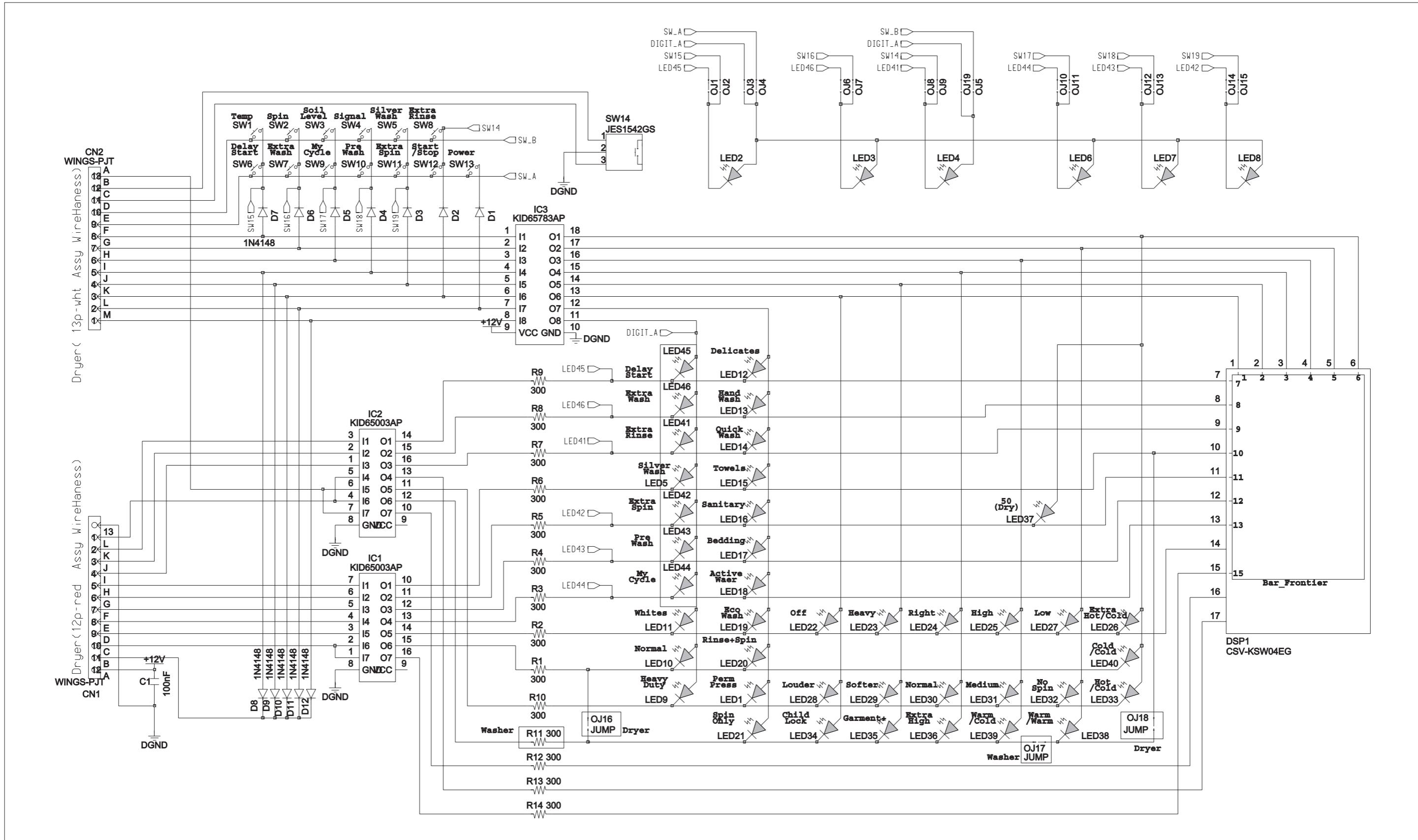
11-1. MAIN PCB

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11-2. SUB PCB

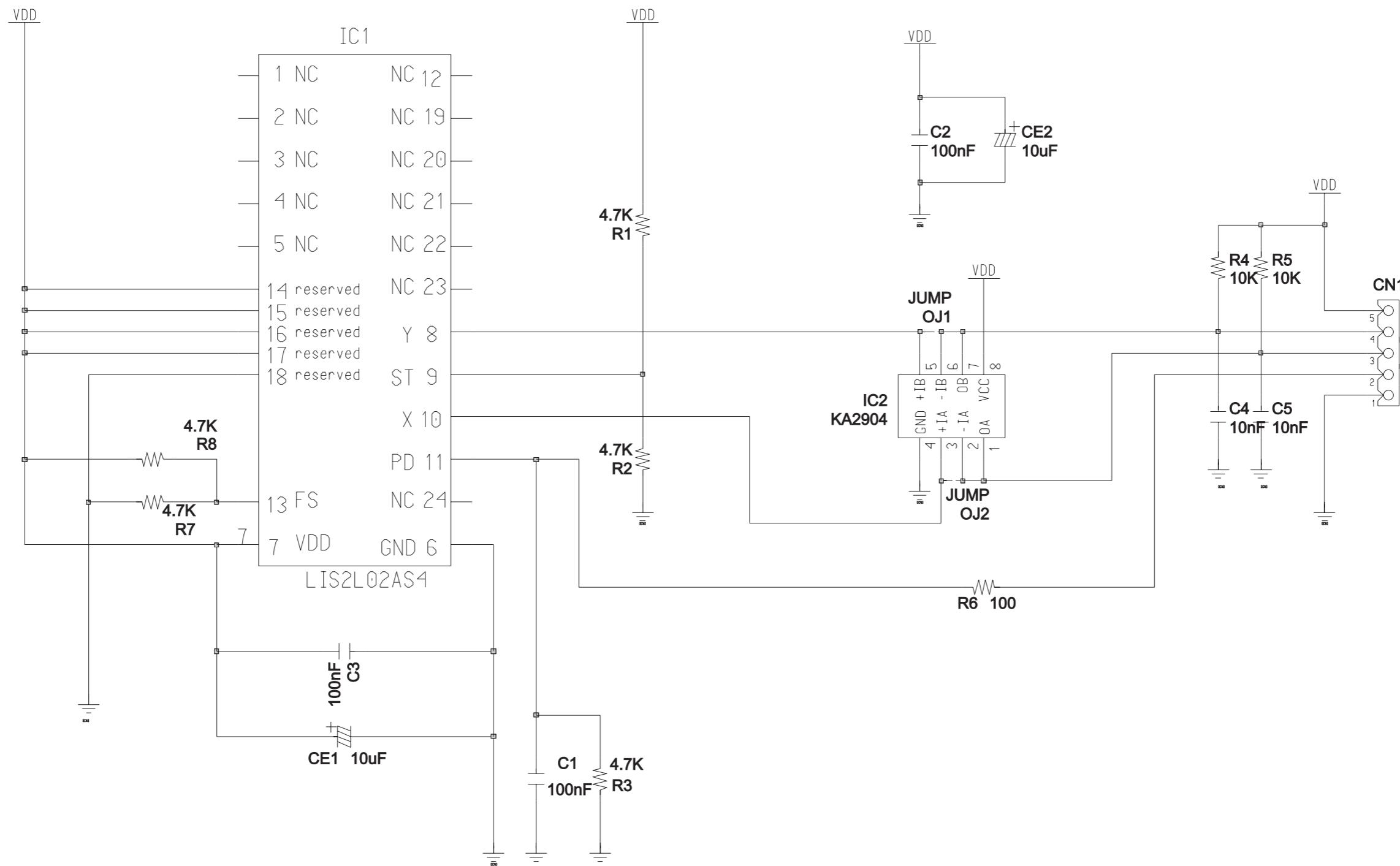
* This Document can not be used without Samsung's authorization.



11-3. MEMS PCB

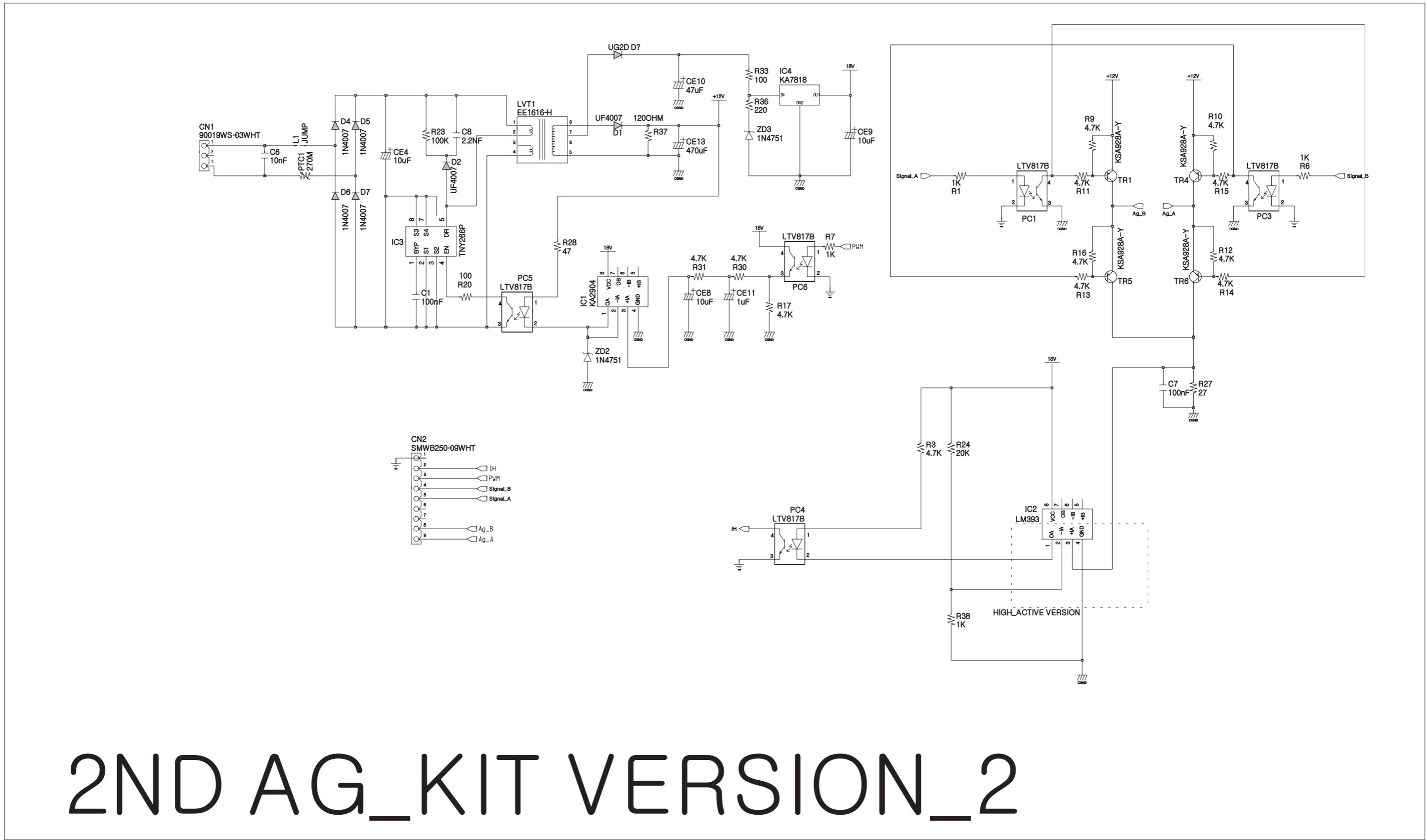
* This Document can not be used without Samsung's authorization.

| No. | PIN | FUNCTION |
|-----|-----|--|
| 9 | ST | Self Test (0: normal mode; 1: Self test) |
| 11 | PD | Power Down(0: normal mode; 1: Power-down mode) |
| 13 | FS | Full Scale (0:2g ; 1: 6g Full scale) |



11-4. AG PCB

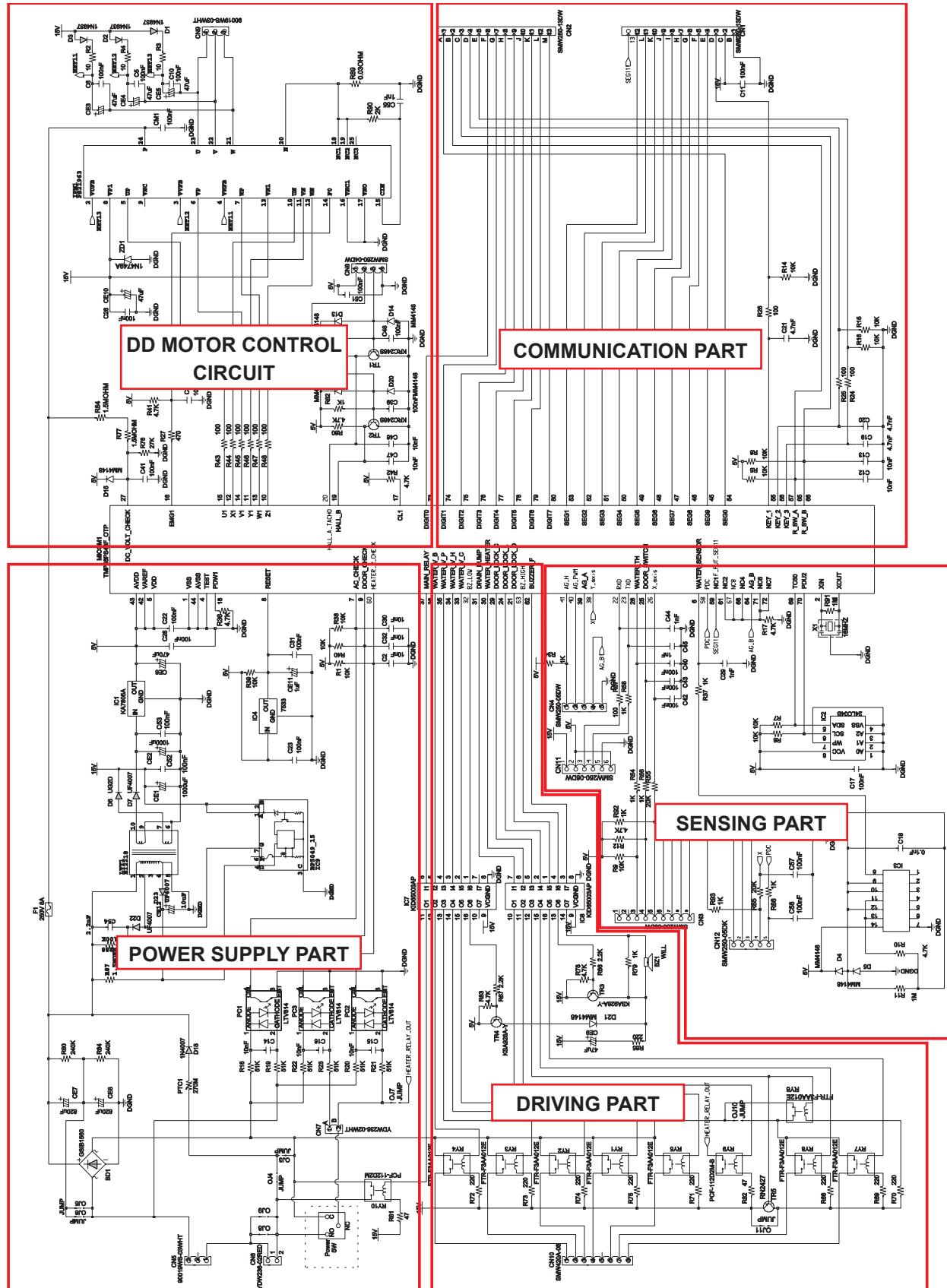
* This Document can not be used without Samsung's authorization.



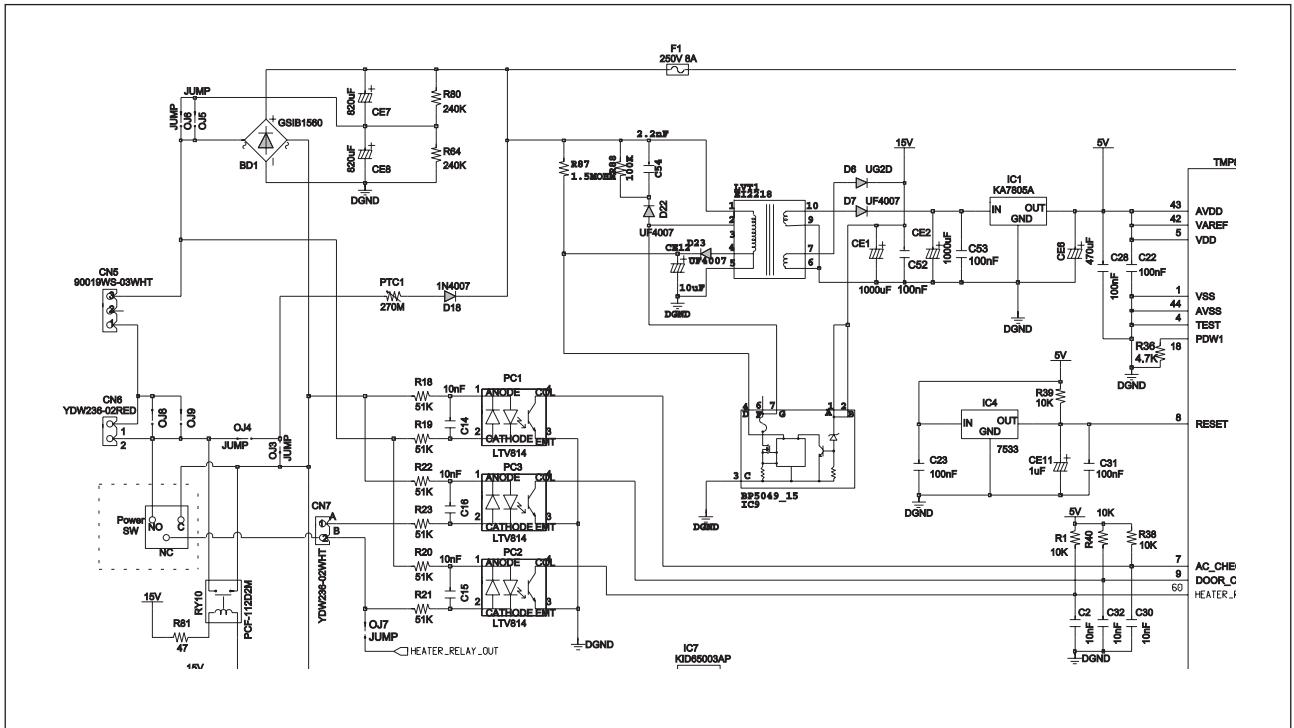
2ND AG_KIT VERSION_2

12. CIRCUIT DESCRIPTIONS

12-1. OVERALL SYSTEM



12-2. POWER SUPPLY PART



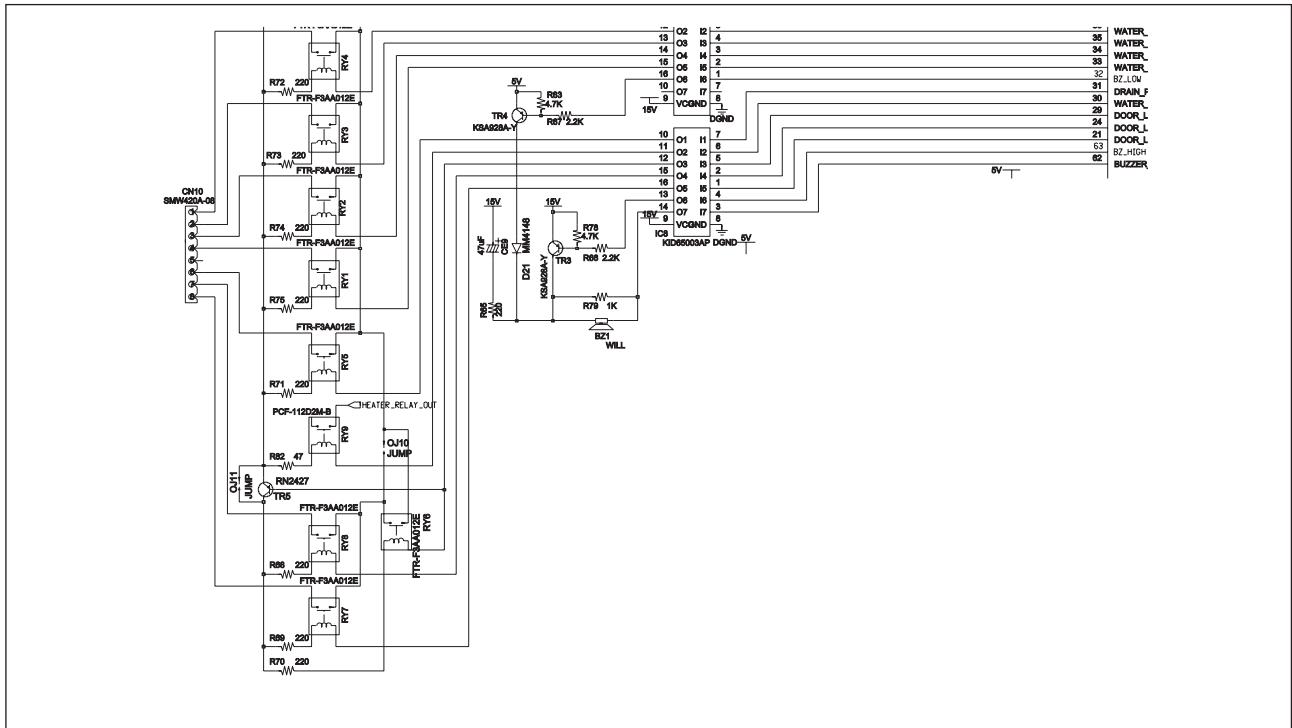
► Role

- Generates consistent voltage necessary to control the circuit such as 15V and 5V from the high AC voltage.
- This circuit uses switching transformer.

► Operation

- Generates DV voltage from AC input through diode (bridge).
- Generates 15V and 8V voltage from switching transformer.
- Static voltage of 5V output from IC1 output terminal.

12-3. DRIVING PART



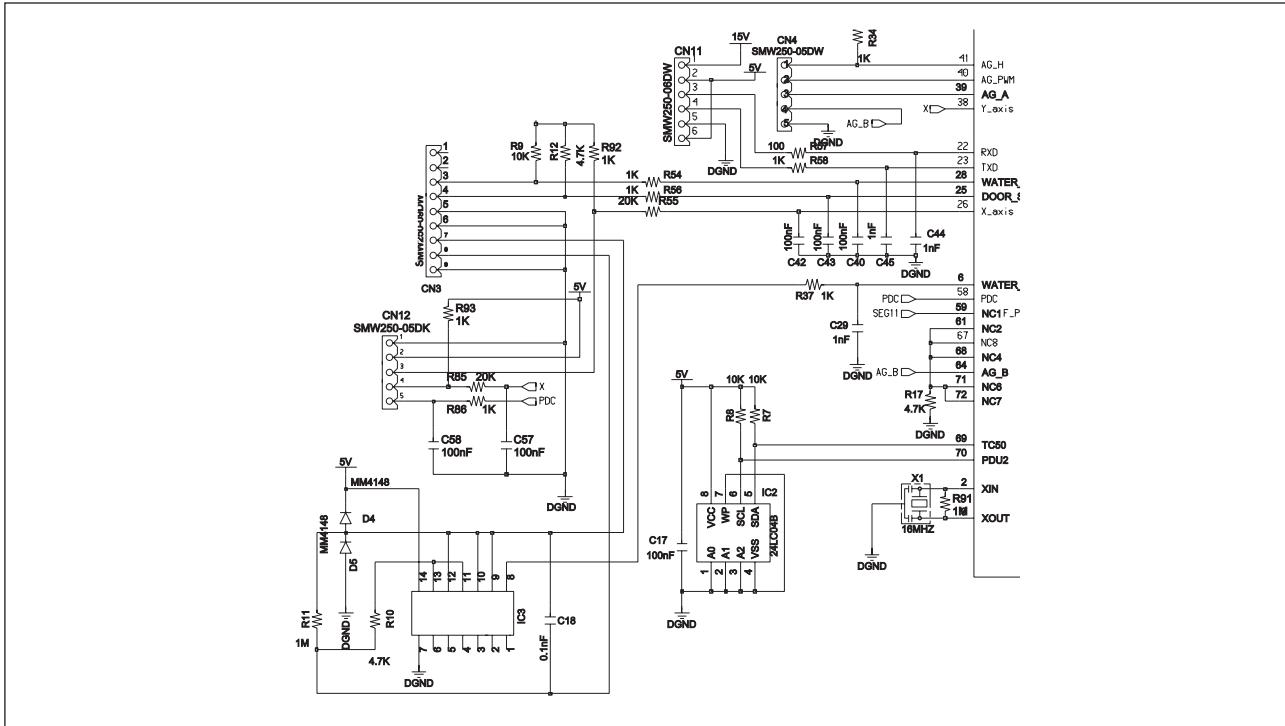
► Role

- Controls the electricity connection of electronic parts of the set.

► Operation

- Sends HIGH signal through electronics port to operate MICOM.
- When HIGH signal is received in IC7 and IC8 input, the output becomes LOW.
- At this time, the relay operates to supply power to the electronic parts.

12-4. SENSING PART



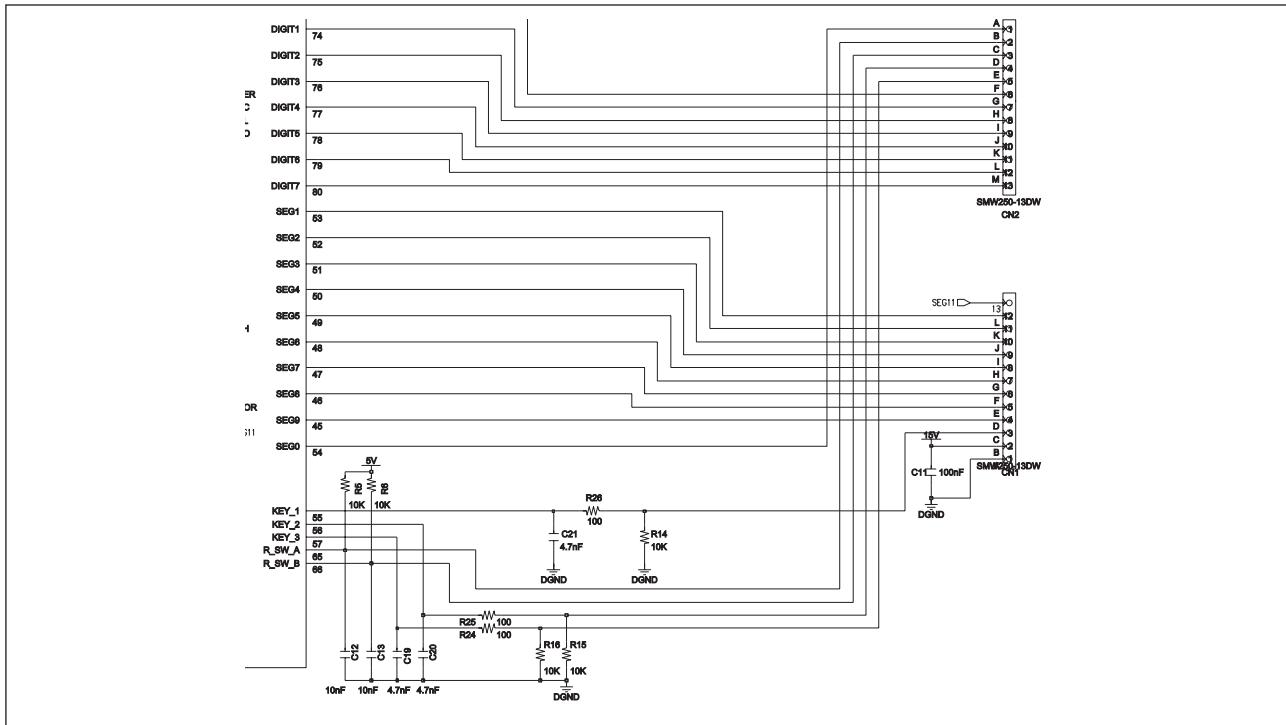
► Role

- Detects temperature of each part though THERMISTOR output.
- Measures the frequency of water level sensor and detects the quantity.
- Judges whether the door is closed or not.

► Operation

- Detects the output of IC3 (MICOM PIN 6) to judge current quantity.
- Controls water supply temperature though THERMISTOR.
- Detects the contact point of Door Switch to judge whether the door is closed or not.

12-5. COMMUNICATION PART



► Role

- Communication circuit for display control of SUB PCB
- Encode of SUB PCB and circuit for switch control

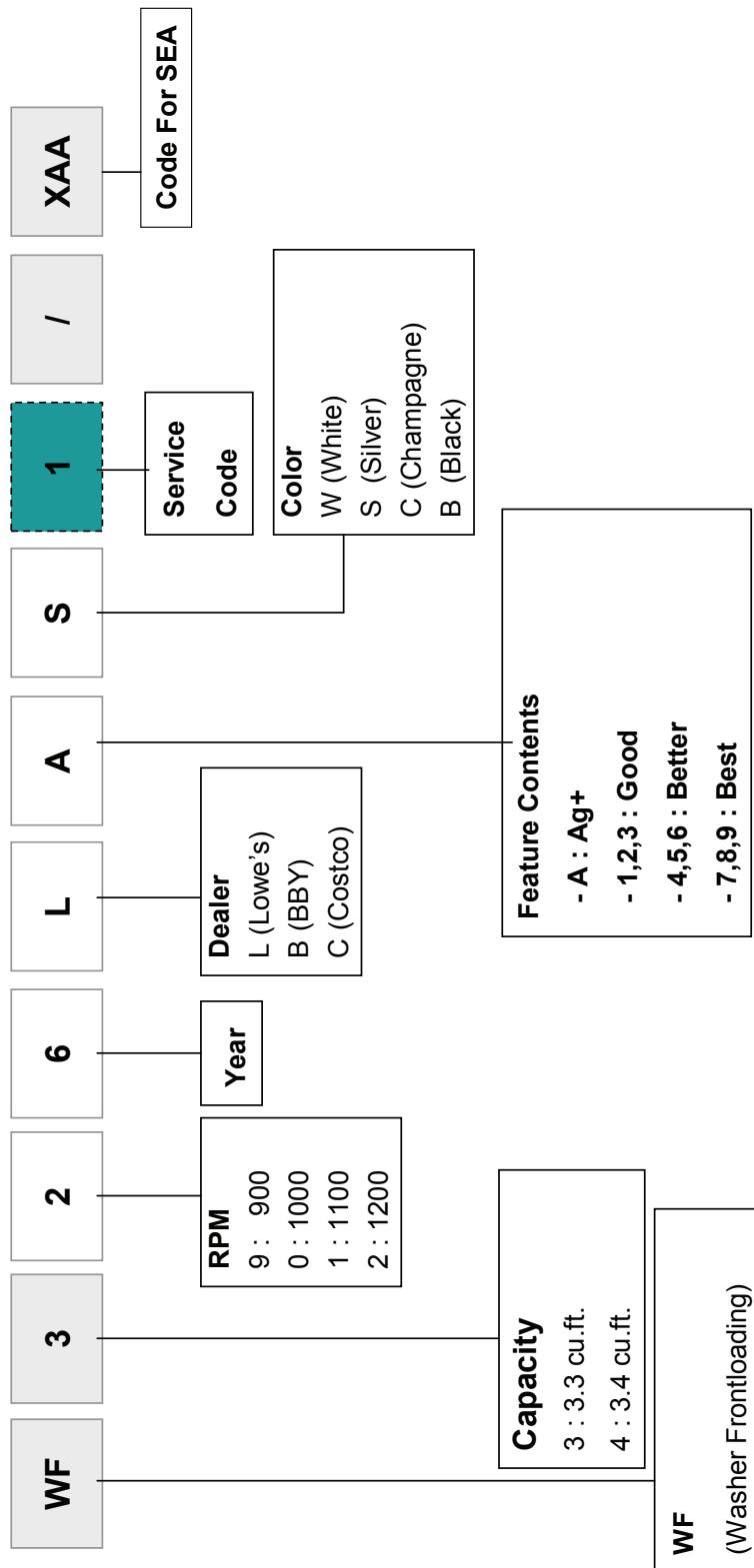
► Operation

- Input/Output port of MICOM to control LED, display and switch of SUB PBA

Memo

13. REFERENCE INFORMATION

13-1. MODEL NAME



13-2. TERMINOLOGY

- 1) ASSY-MAIN PCB (Imbalance Sensor)
→ To prevent the laundry from gathering on one side of the tube causing noise and vibration, the washing machine uses an imbalance detection device that evenly disentangles the laundry before the hydrating cycle starts.
- 2) DOOR-LOCK S/W
→ Prevents the door from being opened while a cycle is in progress. For safety purposes, it keeps the door locked even in pause mode or after the washing cycle unless the water level frequency is greater than 24.8Khz (anti-overflow level) or the inside-tube temperature is less than 65°C in the hydrating cycle, and 55°C in the washing cycle.
- 3) SENSOR-PRESSURE (Anti Over-Flow)
→ When the water supplied is more than 2/3 of the tube capacity due to a malfunction of the water supply valve, this device automatically starts water-draining and displays "OVER-FLOW ERROR(E3)" on the LED.
- 4) THERMISTOR
→ Keeps sensoring and controlling the temperature inside the tube to keep it below your settings.
- 5) ASSY-THERMAL FUSE (Anti Over-Heat)
→ When the washing heater is overheated due to an error in the thermistor or any other malfunction, the assy-thermal fuse (built in the heater) is automatically activated to disconnect the power for your and the product's safety.
- 6) ASSY-MAIN PCB (Sensitive Laundry Protection)
→ To avoid any damage to sensitive laundry, the tube temperature is detected and "ERROR(E8)" is displayed on the LED for Wool or Lingerie courses when the temperature is over 50°C.
- 7) THERMOSTAT (Anti Over-Heat)
→ When the heater (drier) overheats from an error in the thermistor or any other malfunction, the thermostat (installed on the drying duct) is automatically activated to disconnect the power for your or product's safety
- 8) CHILD LOCK
→ Prevents children from playing with the washing machine.
- 9) PRE-WASH
→ The machine does a preliminary wash of about 10 minutes prior to the main wash. This is particularly effective for cleaning badly stained laundry.

13-3. FABRIC CARE CHART

The following symbols provide garment care directions without words.

The care label will include, in order, four symbols: washing, bleaching, drying and ironing, or dry cleaning when necessary. The use of symbols ensures consistency among garment manufacturers of domestic and imported items. Follow care label directions to maximize garment life and reduce laundering problems.

| Wash Cycle | | Special Instructions | | Warning symbols for laundering | |
|---------------------|---|--------------------------------|-----------------------|--------------------------------|--------------------------|
| | Normal | | Line Dry/ Hang to Dry | | Do Not Wash |
| | Permanent Press/Wrinkle Resistant/Wrinkle Control | | Drip Dry | | Do Not Wring |
| | Gentle/Delicates | | Dry Flat | | Do Not Bleach |
| | Hand Wash | Heat Setting | | | Do Not Tumble Dry |
| Water Temperature** | | | High | | No Steam (added to iron) |
| | Hot | | Medium | | Do Not Iron |
| | Warm | | Low | | |
| | Cold | | Any Heat | | |
| Bleach | | | No Heat/Air | | |
| | Any Bleach (when needed) | Iron-Dry or Steam Temperatures | | | Line Dry/ Hang to Dry |
| | Only Non-Chlorine (color-safe) Bleach (when needed) | | High | | Drip Dry |
| Tumble Dry Cycle | | | Medium | | Dry Flat |
| | Normal | | Low | | |
| | Permanent Press/ Wrinkle Resistant/Wrinkle Control | Dryclean | | | |
| | Gentle/ Delicates | | Dry clean | | |
| | | | Do Not Dry clean | | |

**The dot symbols represent appropriate wash water temperatures for various items. The temperature range for Hot is 105° - 125° F/ 41° - 52°C, for Warm 85° - 105° F/29° - 41° C and for Cold 60° - 85° F/16° - 29° C.
(Wash water temperature must be a minimum of 60° F/16°C for detergent activation and effective cleaning.)

The clothes Washer may not ensure these temperatures because the actual water temperatures entering your Washer are dependent on water heater settings and regional water supply temperatures. For example, cold water entering the home in the northern states during winter may be 40° F/4° C which is too cold for effective cleaning. The water temperature in this situation will need to be adjusted by selecting a warm setting, adding some hot water to the MAX FILL line or using your Washer's heating option, if available.

13-4. ELECTRICAL WARNINGS

To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind:

- Operate the appliance only from the type of power source indicated on the marking label.
If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this appliance is equipped with a polarized alternating current line plug having one blade wider than the other.
This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still doesn't fit, contact your electrician to replace your outlet.
- Protect the power cord. Power supply cords should be routed so that they are unlikely to be walked on or pinched by items placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.

14-5. Models

| Dealer | Models | Remark |
|--------|----------|---|
| Lowe's | WF326LAS | 2(1200rpm), 6('06), L(Lowe's), A(Ag+), S(Silver) |
| | WF326LAW | 2(1200rpm), 6('06), L(Lowe's), A(Ag+), W(white) |
| | WF316LAW | 1(1100rpm), 6('06), L(Lowe's), A(Ag+), W(white) |
| | WF306LAW | 0(1000rpm), 6('06), L(Lowe's), A(Ag+), W(white) |
| | WF206LNW | 0(1000rpm), 6('06), L(Lowe's) N(No Ag+), W(White) |
| BBY | WF316BAC | 1(1100rpm), 6('06), B(BBY), A(Ag+), C(Champagne) |
| | WF316BAW | 1(1100rpm), 6('06), B(BBY), A(Ag+), W(white) |
| | WF306BAW | 0(1000rpm), 6('06), B(BBY), A(Ag+), W(white) |
| | WF306BHW | 0(1000rpm), 6('06), B(BBY), H(Ag+,Heater), W(white) |
| Costco | WF316CAW | 1(1100rpm), 6('06), C(costco), A(Ag+), W(white) |
| | WF306C1W | 0(1000rpm), 6('06), C(costco), 1(grade), W(white) |

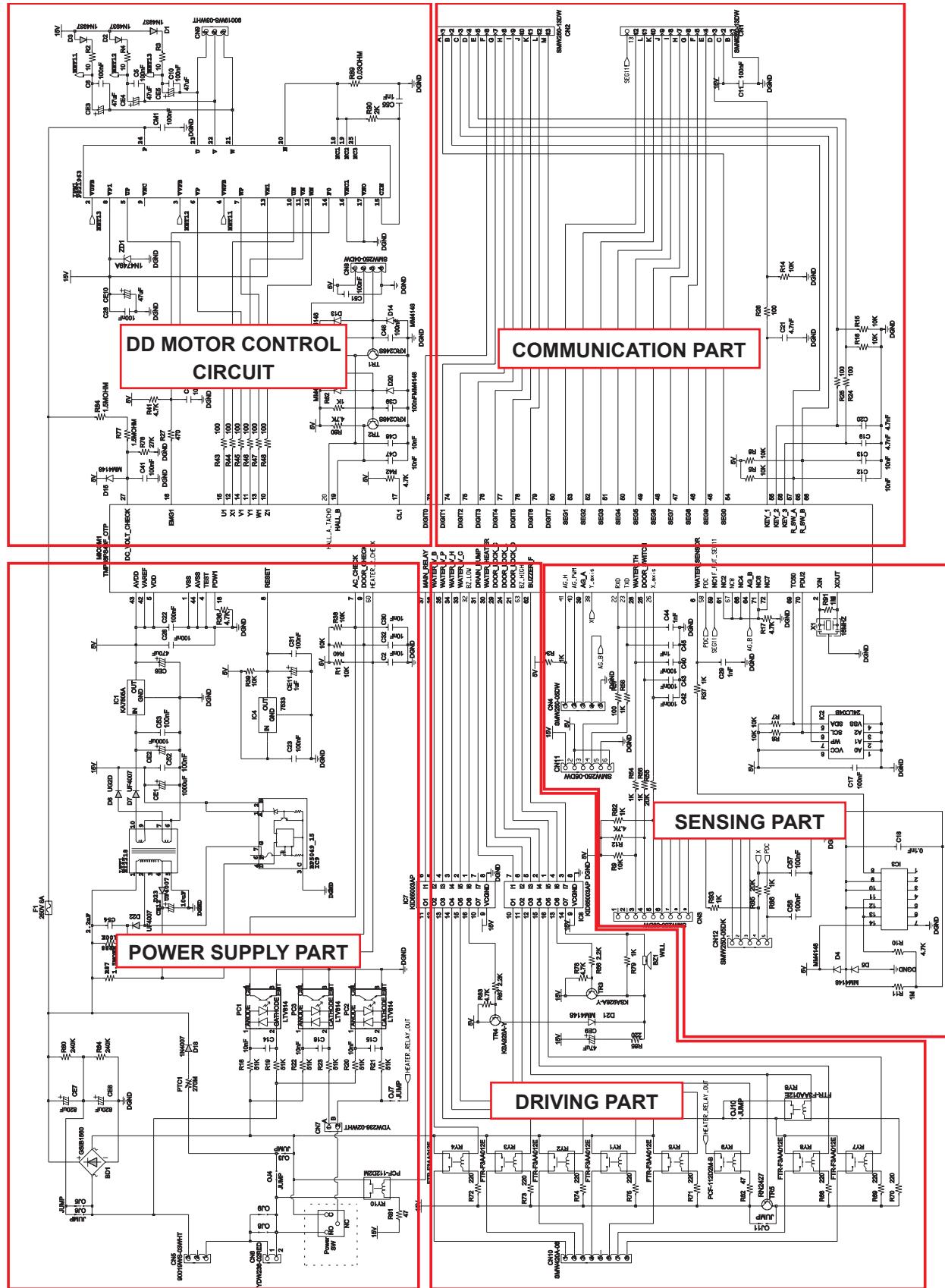
13-5. Q & A

| NO. | Question | Answer |
|-----|---|--|
| 1 | How long does it take for the door to unlock? | It takes approximately 2-3 seconds for the door to unlock. |
| 2 | The cycle is complete and "End" is displayed. How do I set another cycle? | When "End" is displayed, the Power button should be pressed or door should be opened before selecting another cycle. The display will show "End" until washer is turned off. To turn off washer, the Power button should be pressed or the door should be opened |
| 3 | What should I do when Information Code ("dc") lights up? | When the Information Code is displayed, press the Start/Pause dial and then restart the cycle. For more information, refer to the Owner's Manual |
| 4 | There is a small amount of water left in Detergent Drawer after the load is complete. Is this normal? | It is normal for a small amount of water remaining in Detergent Drawer after it completes washing. Bleach is usually flushed out into the tub at the beginning of the washing. Also, its compartment is washed again during the following rinse cycle, removing any remnants. |
| 5 | When I went back to my washer, it was turned off. What happened? | Power button may have been accidentally bumped or pushed. Reset the cycle and start the washer. Make sure the unit is plugged into a live electrical outlet. Check house fuse or circuit breaker. |
| 6 | The washer door gets locked after a power failure. How can I open it? | If the power fails while the door is locked, the door will remain locked until the power comes back on. If the power comes back on while the door is still locked, the cycle will resume where it left off. If the door is unlocked, "PF" will display and the washer will pause. Press Power Off and restart the cycle. |
| 7 | The washer door does not unlock when there is water in the tub. How can I open it? | The water must be drained from the tub for the door to be opened. Set the rotary dial to Spin Only and press the Start/Pause dial. The door will open 2-3 seconds after the Spin or Drain cycle is completed. |

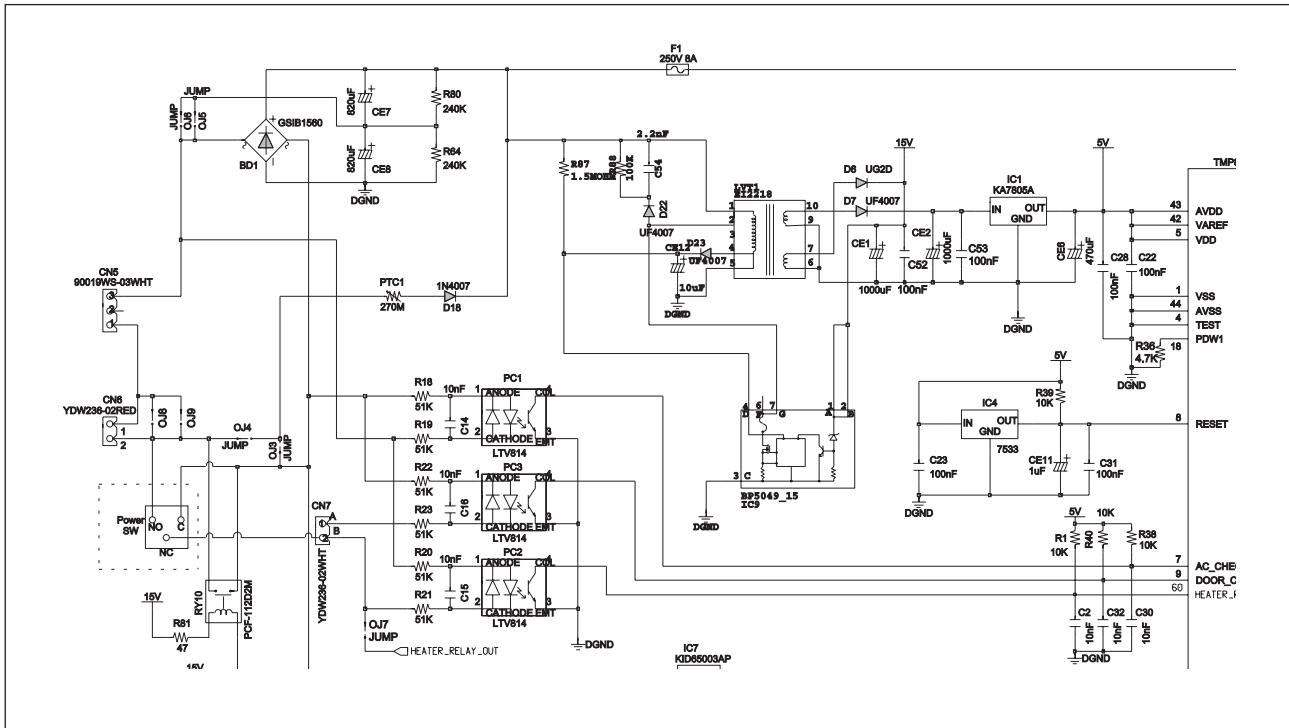
Memo

12. CIRCUIT DESCRIPTIONS

12-1. OVERALL SYSTEM



12-2. POWER SUPPLY PART



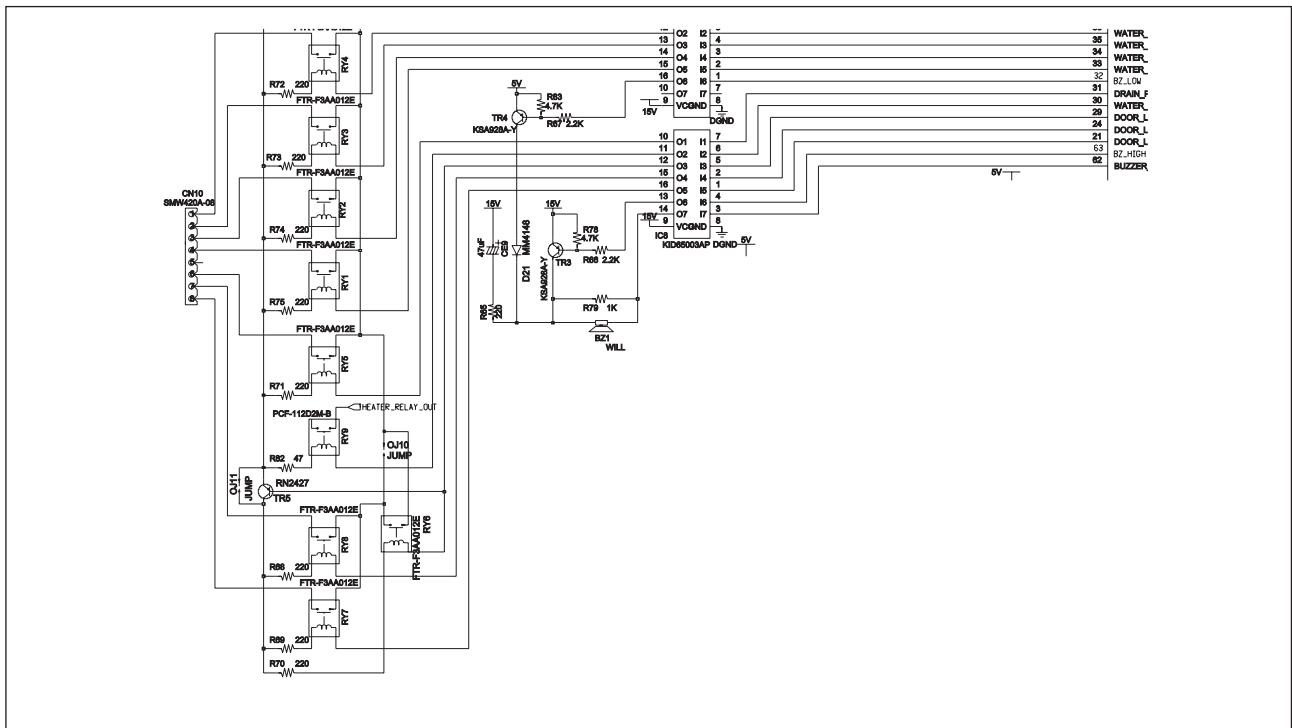
► Role

- Generates consistent voltage necessary to control the circuit such as 15V and 5V from the high AC voltage.
- This circuit uses switching transformer.

► Operation

- Generates DV voltage from AC input through diode (bridge).
- Generates 15V and 8V voltage from switching transformer.
- Static voltage of 5V output from IC1 output terminal.

12-3. DRIVING PART



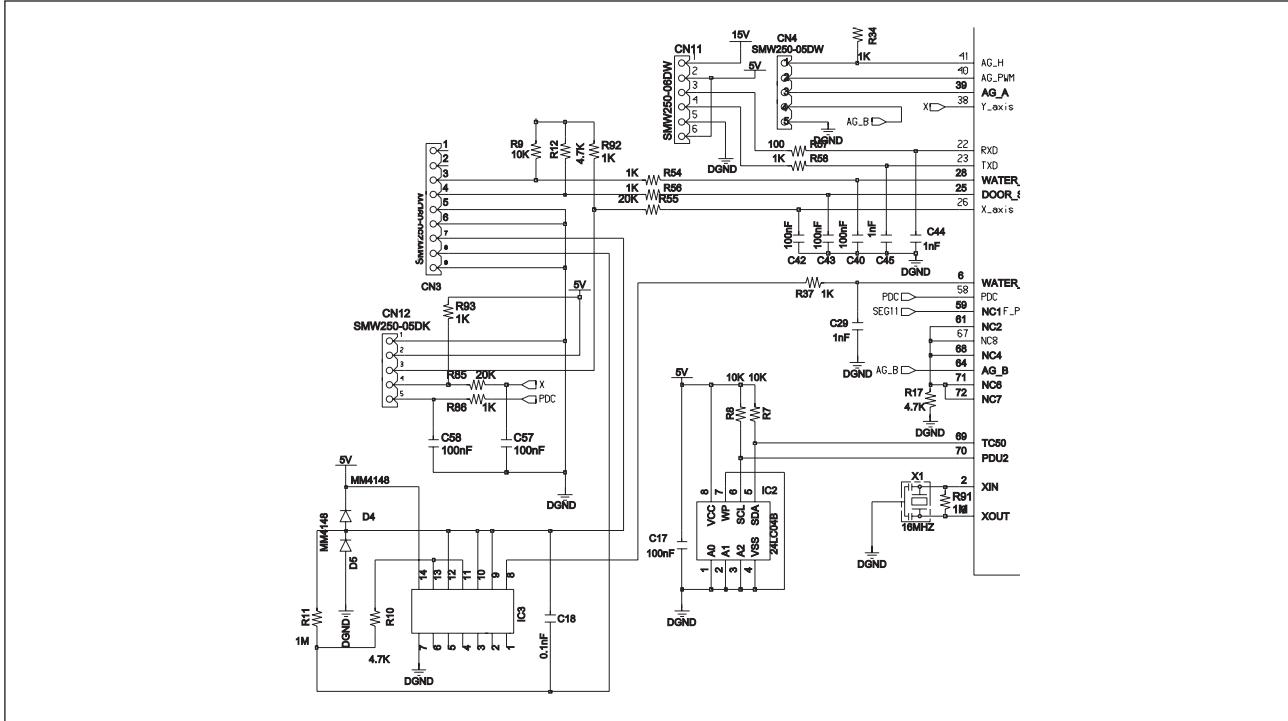
► Role

- Controls the electricity connection of electronic parts of the set.

► Operation

- Sends HIGH signal through electronics port to operate MICOM.
 - When HIGH signal is received in IC7 and IC8 input, the output becomes LOW.
 - At this time, the relay operates to supply power to the electronic parts.

12-4. SENSING PART



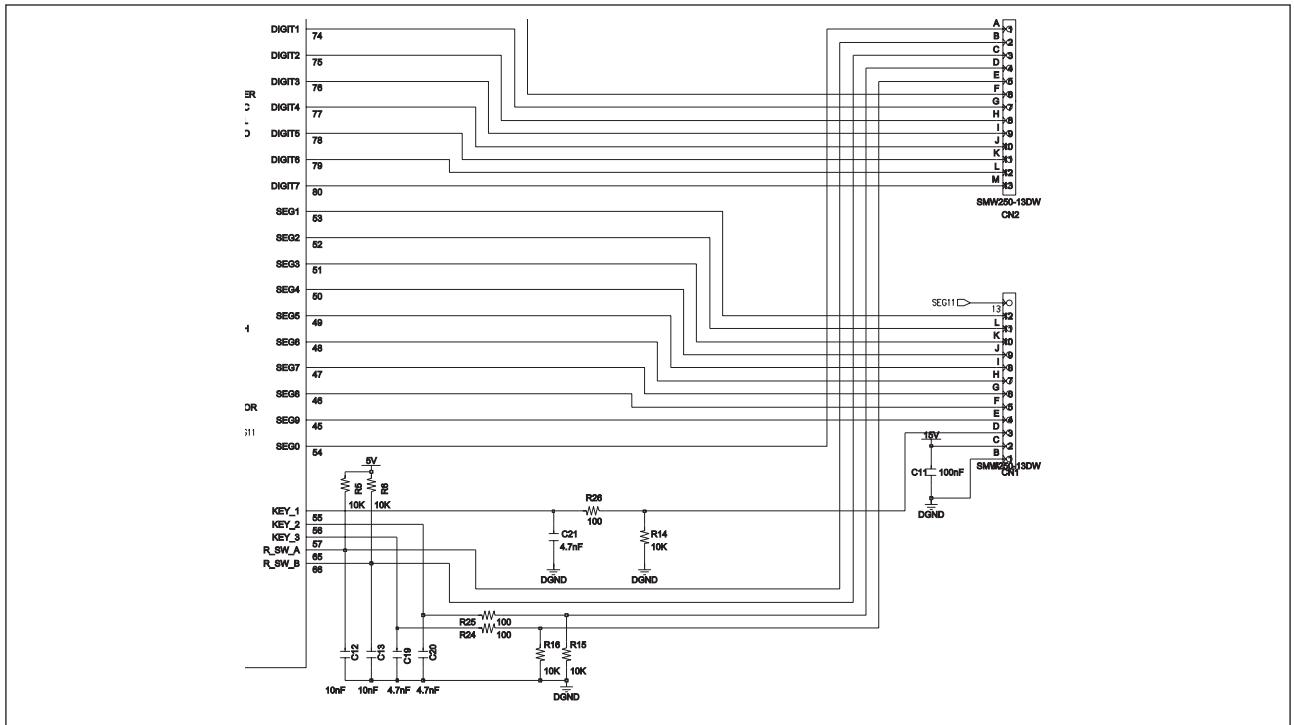
► Role

- Detects temperature of each part though THERMISTOR output.
- Measures the frequency of water level sensor and detects the quantity.
- Judges whether the door is closed or not.

► Operation

- Detects the output of IC3 (MICOM PIN 6) to judge current quantity.
- Controls water supply temperature though THERMISTOR.
- Detects the contact point of Door Switch to judge whether the door is closed or not.

12-5. COMMUNICATION PART



► Role

- Communication circuit for display control of SUB PCB
- Encode of SUB PCB and circuit for switch control

► Operation

- Input/Output port of MICOM to control LED, display and switch of SUB PBA

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GSPN (Global Service Partner Network)

| Area | Web Site |
|------------------|---|
| North America | http://service.samsungportal.com |
| Latin America | http://latin.samsungportal.com |
| CIS | http://cis.samsungportal.com |
| Europe | http://europe.samsungportal.com |
| China | http://china.samsungportal.com |
| Asia | http://asia.samsungportal.com |
| Mideast & Africa | http://mea.samsungportal.com |

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