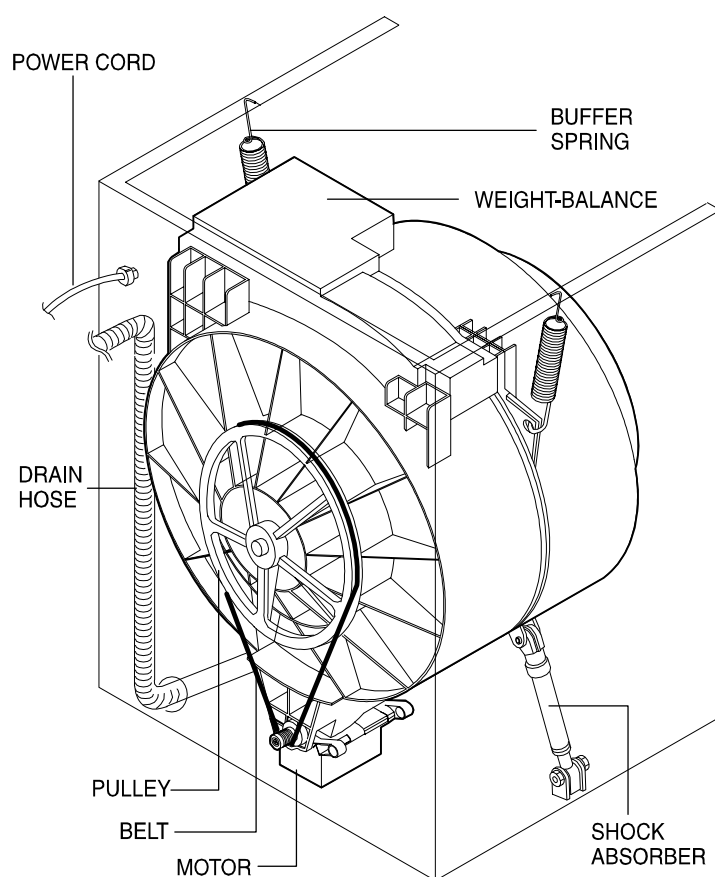
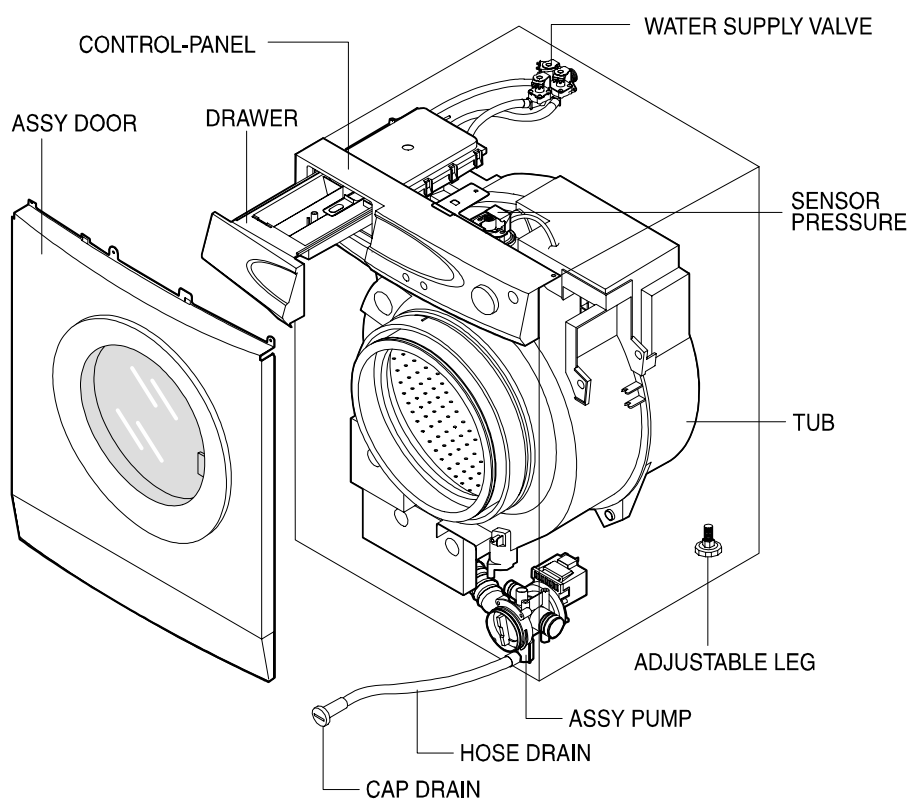
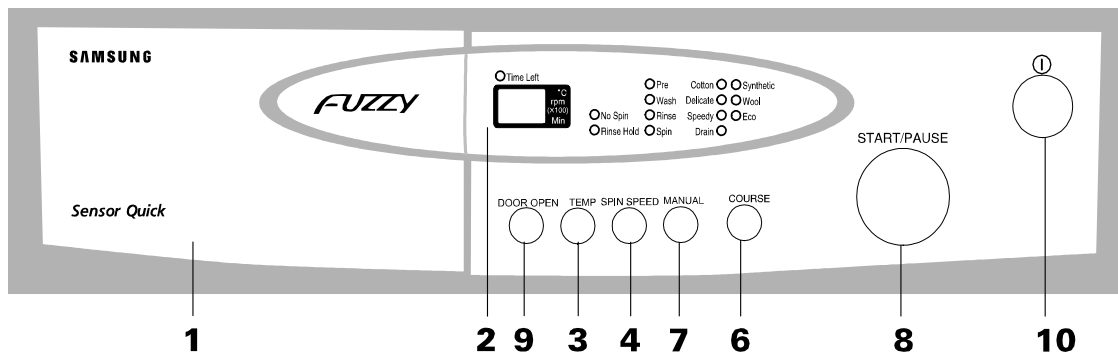

2. Overview of the Washing Machine



3. Overview of the control panel



1. Detergent dispenser

2. Display panel

Displays the remaining wash cycle time, error messages and cancel -.

3. Temperature selection button

Press the button repeatedly to cycle through the available water temperature options.
(cold water, 30°C, 40°C, 60°C and 95°C).

4. Spin selection button

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

P1293G	No spin, Rinse hold, 400, 600, and 800 rpms
--------	---

5. Delay Start button

Press the button repeatedly to cycle through the available delayed start options
(from 1 hour to 24 hours in one hour increments).

6. Course button

Press the button repeatedly to select available wash programs

7. Manual button

Press the button repeatedly to cycle through the available partial wash options
[Wash+Rinse+Spin → Prewash+Wash+Spin → Spin → Rinse(1 time)+Spin →
Rinse(2 times)+Spin → Rinse(3 times)+Spin]

Note : Prewash is only available when washing cotton, synthetic or delicate.

8. Start/Pause button

Press to pause and restart programs.

9. Door Open button

Press to open the washing machine door.

10. Ⓚ (On/Off) button

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

11. No Spin button

Press to no spin program.

12. Rinse Hold button

Press to rinse hold program.

4. General Error Function

- When an error occurs, this function starts to keep generating error melody sounds and displays error indicators as shown in the followings per corresponding error by blinking in 0.5sec intervals until the error status is completely cleared out. In this case, all the driving devices are turned off until the error is cleared out.

1. WATER SUPPLY ERROR

- Water Supply Error occurs when water level frequency does not show changes more than 50Hz or water is not supplied up to the water level presetting for 20 min or more at the time of initial water supply, the error status can be cleared by turning POWER S/W OFF and resuming the POWER ON initial status.
- Display shows 'E1'.

2. WATER DRAIN ERROR

- Display shows 'E2'.
- In case the water level frequency is 25.5KHz or less in the initial phase of UNB-detecting cycle.
- Water Drain error can be cleared by turning POWER S/W OFF and resuming the POWER ON initial status.

3. OVER-FLOW ERROR

- Display shows 'E3'.
- Over-Flow error occurs when the water level is in abnormal operation. It can be cleared by turning POWER S/W OFF. Water is drained prior to POWER S/W OFF and it is forced to be drained for 2 min if a frequency of more than 25.24 KHz is detected.

4. DOOR OPEN ERROR

- Display shows 'dE'.
- Door Open error can be cleared by closing the door.

5. UNBALANCE ERROR

- Display shows 'E4'.
- Unbalance error is cleared by POWER S/W OFF and by resuming the POWER ON initial status.

6. WATER HEATER ERROR

- Display shows 'E5,E6'.
- In case the water temperature rises by 40°C or more in 5 min. or by 2°C less in 10 min after heating is started.
- It can be cleared by turning POWER S/W OFF.

7. ASS'Y PRESSURE S/W ERROR

* Generated Frequency Signal of WATER LEVEL(W/L) S/W (KHz)

Level	Low Level	High Level
Abnormal W/L Frequency	30.00 KHz	15.00 KHz

- If the same signal as the above table is detected for more than 5 seconds, it is a PRESSURE S/W Error.
- When the error occurs, water drain pump will operate for 3 min. and then turn off the water drain pump. Then the display shows 'E7' indicating a pressure s/w error indicator.

8. ABNORMAL WATER TEMPERATURE ERROR

Course	Water Temp
Synthetic	60°C or more
Delicate	45°C or more
Wool	45°C or more

- In case the water temperature is 60°C or more in the synthetic course, 50 °C or more in the delicate
 - At the time of initial water supply, if the water temperature is not appropriate, water starts to be drained and it is forced to be drained for 2 min when the abnormal frequency of 25.24KHz is detected.
 - Display shows 'E8'.
 - This error can be cleared by POWER S/W OFF.
-

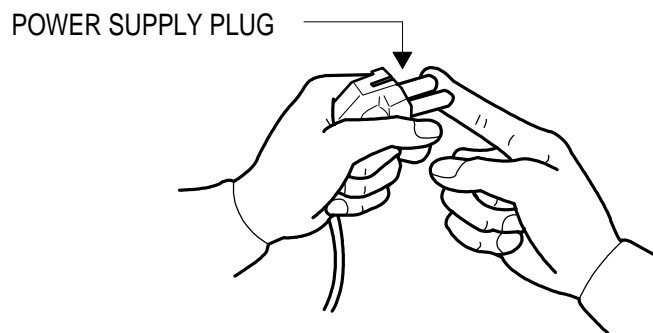
5. Trouble Diagnosis

- ◆ As the micom washing machine is configured of a complicated structure, there might be a need for a service call. The information below is prepared for exact trouble diagnosis and suitable repair guide.

Caution for the Repair and Replacement

Please follow instructions below for 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.

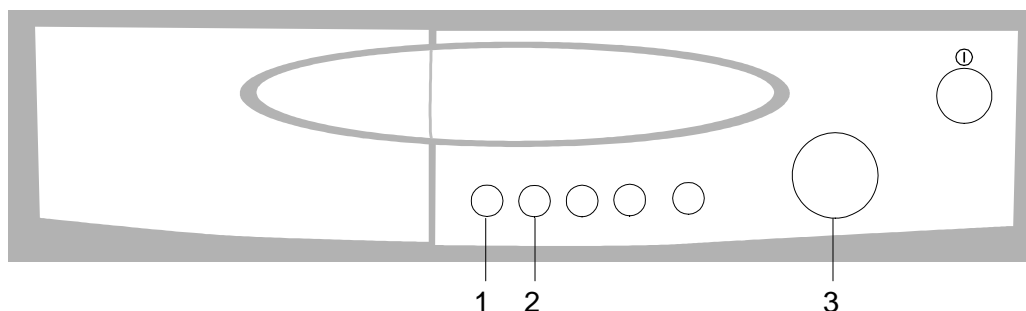


- 2) Since AC220~240V is applied to the triac T1 and T2 on P.C.B, the electric shock may occur by touching and be careful that the strong and weak electricity are not mixed.
 - 3) If the P.C.B assembly is out of order, do not replace the component on P.C.B except TACT switch since the component is coated by the urethane.
 - 4) As the P.C.B assembly is designed for easy handling, do not replace the P.C.B assembly by the wrong diagnosis and follow the procedure of trouble diagnosis when the micom is not operated normally.
 - 5) As the parts on P.C.B are coated by the urethane, they can not be tested by the test bar of the meter. Check the trouble by the test mode method according to the procedure.
-

5-1. Trouble Diagnosis

No	Item	Cause and treatment
1	The power is not supplied	<ul style="list-style-type: none">- Is the PCB connector connected well?- Is the voltage normal?- Is the power supply plug connected well?- Is the noise filter connected well?- Is the secondary output of the power supply transformation normal?- Is the fuse disconnected? (option)• If above points are not found, the PCB assembly is out of order. Replace it.
2	The water is not supplied.	<ul style="list-style-type: none">- Is the knob open?- Did you push START/PAUSE button after selecting the course?- Is the water supply valve connected well?- Is the winding of the water supply valve continuous?- Is the connection and operation of the pressure switch normal?• If above points are not found, the PCB assembly is out of order. Replace it.
3	The wash does not start though the water supply is stopped.	<ul style="list-style-type: none">- Is the connection and operation of the pressure switch normal?- Is the pressure switch hose damaged so that the air is leaked?- Is the pressure switch hose bent?- Check the operation of the water level switch.• If above points are not found, the PCB assembly is out of order. Replace it.
4	The drum does not rotate during washing.	<ul style="list-style-type: none">- Is the belt connected well?- Is the winding of the motor continuous? (Rotor winding, stator winding, generator)- Is the motor protector normal?• If above points are not found, the PCB assembly is out of order. Replace it.
5	The wash is executed while the water is supplied.	<ul style="list-style-type: none">- The PCB assembly is out of order. Replace it.
6	The drum rotates in one direction during washing. (The drum rotates in one direction for SPIN.)	<ul style="list-style-type: none">- The PCB assembly is out of order. Replace it. (Inversion relay open trouble)
7	Drainage problem.	<ul style="list-style-type: none">- Is the drainage hose bent?- Is the winding of the drainage pump continuous?- Is the drain filter clogged by waste?- If above points are not found, the PCB assembly is out of order. Replace it.
8	Dehydration problem.	<ul style="list-style-type: none">- Unbalance is detected.- Put in the laundry uniformly and start again.
9	Abnormal noise during SPIN.	<ul style="list-style-type: none">- Is the pulley nut loose?- Is the transport safety device removed?- Is the product installed on a level and stable surface? (Little noise may be generated during the high-speed SPIN.)
10	Leak breaker or current/leak breaker is down during washing.	<p><When the leak breaker and current breaker is installed separately></p> <ul style="list-style-type: none">- When the leak breaker is down, check and sure it is grounded.- When the current is down, the current is leaked. <p><Is the breaker down when the leak/current breaker is combined?></p> <ul style="list-style-type: none">- Check the rated capacity of the current and leak breaker. <p>The current breaker may be down due to the lack of the current when the washing machine and other apparatus are used.</p> <p>In this case, execute the cold water wash to check whether the current capacity is lacking.</p>
11	The heating is not executed.	<ul style="list-style-type: none">- Is the wash heater terminal unplugged?- Is the wash heater normal?- If above points are not found, the PCB assembly is out of order. Replace it.

6. Test Mode



1. Driving Compartment Test Mode

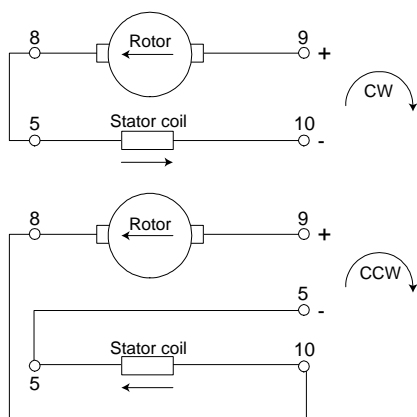
- A. Hold down "2" and "1" keys simultaneously and then press ① (POWER S/W) on. (Display shows 'tE')
Hold down "1" and "2" keys simultaneously (each processing for 0.3sec) and then press ① (POWER S/W) on.
- B. The driving compartment can be tested when you press "3" key right after entering into the initial stage of the TEST MODE.

• Driving Compartment Test

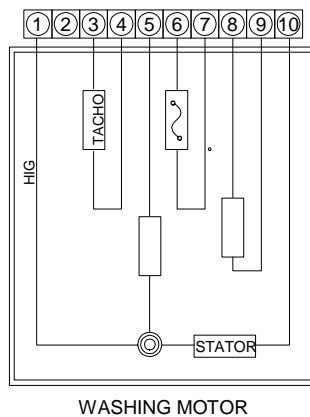
Pre-wash VALVE ON(0.3sec) → OFF(0.3sec) → Main wash(0.3sec) → OFF(0.3sec) →
Rinse VALVE ON(0.3sec) → OFF(0.3sec) → Pump MOTOR ON(0.3sec) → OFF(0.3sec) →
MOTOR RELAY1 ON(0.3sec) → OFF(0.3sec) → MOTOR RELAY2(0.3sec) → OFF(0.3sec) →
MOTOR RELAY2 ON(0.3sec) → OFF(0.3sec) → HEATER RELAY ON(0.3sec) → OFF(0.3sec) →
DOOR OPEN (Function continues when door is closed)

7. Designation of Main Components

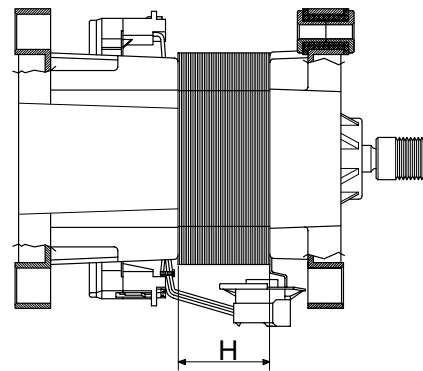
7-1 Normal / Reverse Revolution of Motor and R. P. M. Control



<Figure1>



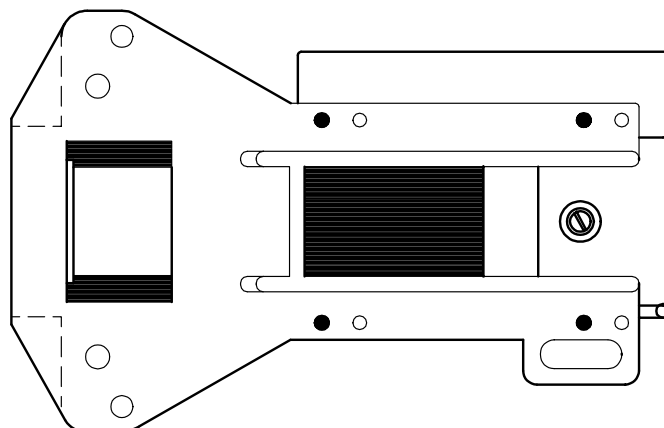
<Figure2>



<Figure3>

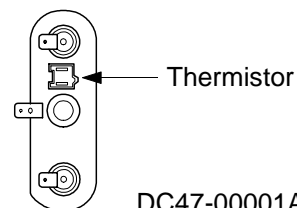
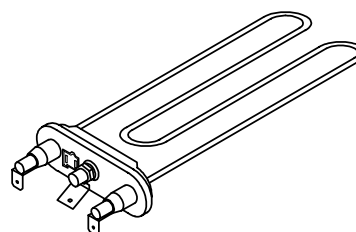
	STATOR(5.1)	STATOR(5.1)	ROTOR(8.9)	TACHO(3.4)	PROTECTOR (6.7)	"H" (mm)	Code-No.	Remarks
Resistancevalue	-	1.592Ω	2.094Ω	38.8Ω	0	39	DC31-00002C	
Rated value	220~240V/50Hz							

7-2 Door safety Device



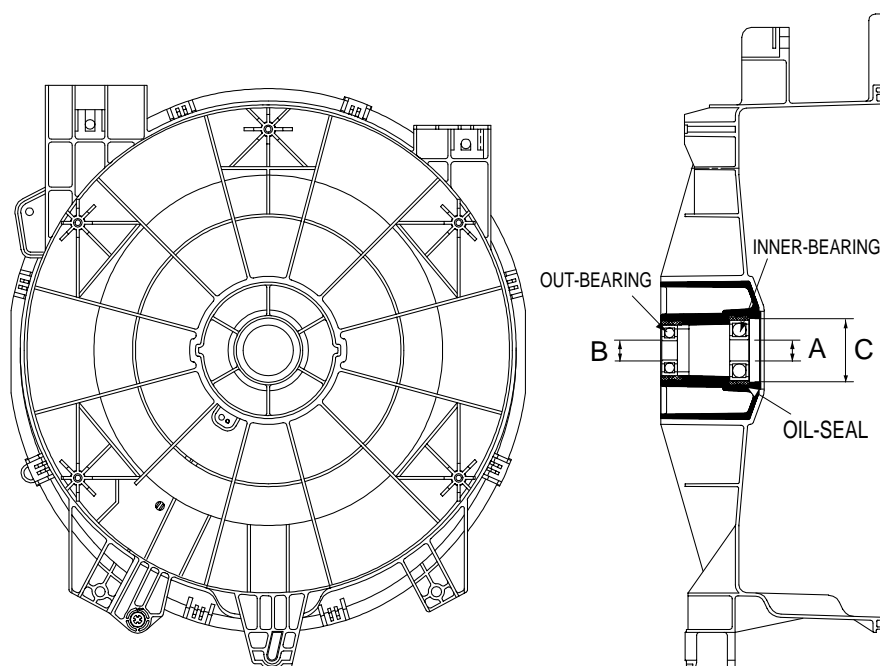
7-3 Heater

- 1) Capacity : AC 230V/2000W
- 2) Location : Bottom of TUB
- 3) Function : Raise the water temperature supplied at the wash process.
- 4) Resistance value : 23~29Ω
- 5) Thermal Fuse : 128°C



DC47-00001A

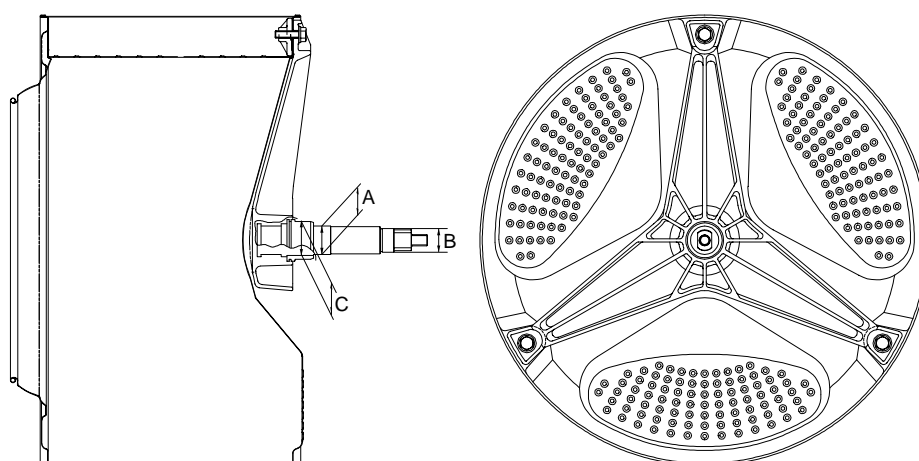
7-4 ASSY-TUB BACK



(unit : mm)

TYPE	INNER-BEARING(A)	OUT-BEARING(B)	OIL-SEAL(C)	Assy-Housing Bearing(D)	REMARKS
I	ø 20	ø 17	ø 24.3	DC97-00214B	

7-5 ASSY- DRUM



(unit : mm)

TYPE	(A)	(B)	(C)	CODE-NO.	REMARKS
I	ø 20	ø 17	ø 25	DC97-01463A	Lifter type