

MODEL: HMS1000TVE FRONT LOADING WASHING MACHINE Service Manual



Features:

● 300mm diameter porthole, door may be open at a 180 degrees.

Multi-gear speed controller

•Unique gasket design featuring no residual water hidden inside

- Selecting washing temperature according to the type of fabrics
- Delay time adjustive
- Washing Programs-11

Haier Group

MANUAL CODE:



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Model code rule description

Model identification:

<u>HMS 1000 T V E</u>

A B C D E

- A: Serial code
- B: Max spin speed
- C: Temprature adjustive
- D: Spin speed adjustive
- E: Computer control

Examples:

HMS1000TVE

It represents HK series appearance, with big window, 180° opening window, 800rpm spin speed.Spin speed is adjustive from 0 to 1000rpm, temprature is also adjustive. it's controlled by computer.

● 300mm diameter porthole, door may be open at a 180 degrees.

Facilitate view of wash process, facilitate unloading and easy to use with large port.

Multi-gear speed controller

According to different costuming, you can slect corresponding spin speed, from 0 to 1000 rpm.

Unique gasket design featuring no residual water hidden inside.

By the unique gasket, washing machine can left no residual water hidden between outer drum and board.

• Delay time adjustive.

According to different costuming, you can slect delay time, from 0.5h to 24h.



	Proposal	2004	New Sensor
	Front loaders washing machines		HMS1000TVE
	Brand position center upper frame of door / chromed sticker		
	Model number serigraphy right top corner control panel		
	On white: silver / On silver : black or dark grey		
1.	Product identification		
	Description of appliance		Washing machine
	Type of appliance (FS = standing, BI = built-in)		FS
	Supplier own brand		Haier
	Supplier bar code	EAN	TBC
	Mares computer code		
	Commercial Brand / Model		
	Commercial bar code	EAN	
2.	Key-Features		
	Energy efficiency class		Α
	Washing performance class		С
	Spin efficiency class		С
	Programs	n°	11
	Capacity	Kg	Max. 5
	Spin speed (max. / optional)	rpm	1000-0
	Noise level	dB(A)	72
	Energy consumption per wash circle *	kWh	0.95
	Water consumption*	I	<65
	Residual dampness (spin result)	%	56%
	Spin speed selector switch (steps)	rpm	1000/800/600/400/0
	Spin speed variator (stepless)	rpm	,
	Adjustable thermostat (water temp. adjust from -	°C	80 - 0
	to)	C	
	Drum capacity dry laundry / water	kg / l	6 / 49
	Auto water level adjust (depending on volume of filled in laundry)	AWL	
	Washing time (max.)	min	124(TBC)
	Washing temperatures (program-controlled)	°C	40 / 60 / 90
	Certification's (CE / ISO 9001 / ISO 9002)		CE / ISO 9001
	Approvals (VDE/GS / TÜV/GS / IMQ)		TÜV/GS (Rhl.)
	* EN 60456 (60°C cycle, full load without pre-wash) =		
_	COLD		
3.	Basics data		
	Unit dimensions (H x W x D)	cm	86 x 48.5 x 59.5
	Net weight	kg	63
	Voltage/frequency	V/Hz	220-230V~50Hz
	Input power / main fuse (intensity)	W/A	1800/10
	Work top / removable		1
	Control M = electromechanical, E = electronic,		F
	F = fuzzy Drum S = stainless steel / Z = zinc coated		S
			P
	21 1		F
	Door: aesthetic (R = round, Y = big eye, Q =		
	square)		R
	Diameter	cm	30
	Outer door frame S= stainless steel / M		
	= metal / \mathbf{P} = plastic		Р
	Inner door G= glass / P=		C
	Inner door G= glass / P= plastic Detergent compartments	n°	G 4

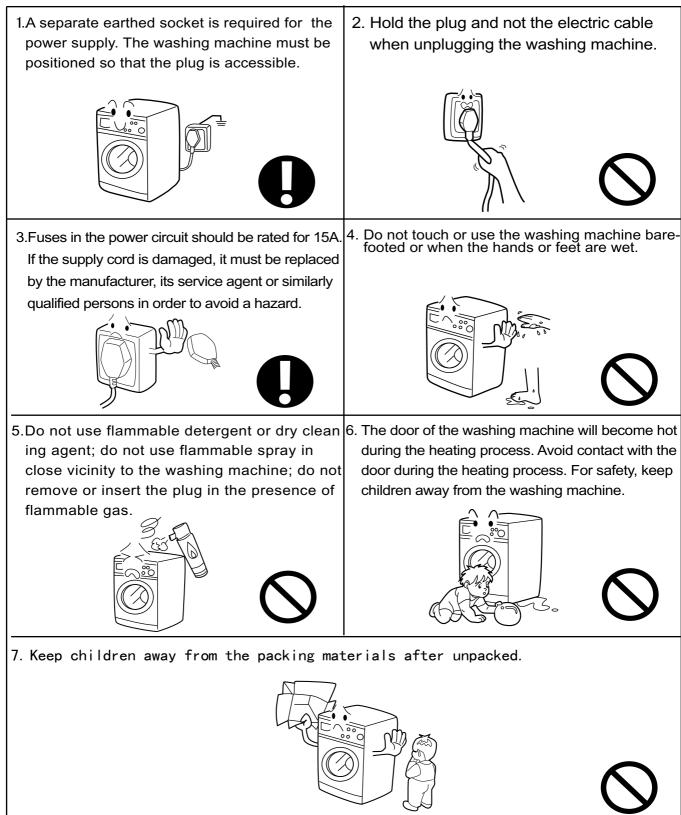


	Delay timer <i>(from - to)</i>	h	0.5-24
	Self cleaning suds pump		0.0 2 1
	Water inlet hose cold water / hot water		
	Water drain hose / -support		1
	Adjustable feet	n°	4
4.	Safety systems		
	Auto door lock	ADL	
	Motor overheating protection	MOP	
	No heating without water	NHW	
	Auto water cool-down (before drain 90°C boiled water)	AWC	
	Water return protection	WRP	
	Acqua Stop kit		-
	Child protection		
5.	Programs		
	1) Strong action /cotton cycles	n°	•
	2) Normal action / synthetics	n°	•
	3) Delicate action / wooll cycles	n°	•
	Pre-wash / wash		•
	Quick wash / super quick wash		•/-
	Rinse / soften		•/•
	Delicate / hand wash		•/-
	Wool / cashmere		•/•
	Soak / spin		• / •
	Drain		•
	Easy ironing		•
	Optional function keys (additional program settings)		
	ON/OFF button		•
	Half load		-
	Fussy		-
	Spin exclusion		-
	Spin reduction	rpm	•
	High water level		-
	No Soak		•
	Rinse stop		-
	Delicate		-
	Cold wash		•
	Delay Timer		•
	Extre Rinse		-
	Load Select		-
	Easy Ironning		-
	Temperature reduction		•
	6kg wash Prewash		-
	Fiewasii		-



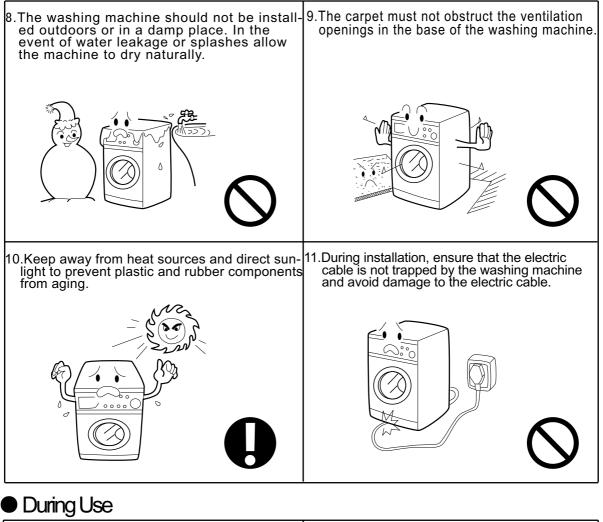
Matters Needing Attention

Safety





Matters Needing Attention



1. Before use, check the joints of the filling hose, the tap and the drainage hose for possible problems from water pressure fluctuations. If joints are loose or there is leakage, turn off the tap and repair. Do not use the washing machine until the hoses are properly fixed.
2. Keep the door slightly open when the washing machine is not in use to prevent formation of odors; do not cover the washing machine with plastic cover so that inside dampness cannot be kept in.



Matters Needing Attention

3. Do not place heavy, heating source or wet 4. Do not hot wash foam rubber or sponge-like materials. articles on the top of the washing machine. 5. Before washing, do up zippers, buttons and 6. Do not open the detergent distribution drawer during the wash cycle... clothes straps and put small articles, such as socks, laces or bras, into a washing bag or a pillow. Steel wires in bras will pop out during washing; never wash bras containing steel wires. 8.After each wash program, turn off the tap to prevent leakage; and unplug the washing machine and wipe clean the lower part of the porthole. 7. The door is fitted with a self-lock device and will not open until 2~3 minutes after the washing machine stops. Do not force the door open. Do not open the door if water level can reach the porthole.



Installation

Remove all the packing materials (including the foam base) to prevent vibration during use, as shown in Fig. 1. Upon opening of the package, water drops may be seen on the plastic bag and the porthole. This is normal phenomenon resulting from water test in the factory.

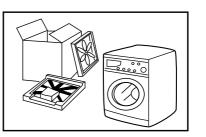


Fig. 1

• Check attachments and materials with reference to the following

Quty Name Model	Operation	Quality certificate		Drainage holder	Plastic plugs	
HMS1000TVE	1	1	1	1	3	

• Dismantle the packing bolts as shown in Fig. 2.

The packing bolts are designed for clamping anti-vibration components inside of the washing machine during the transportation process. Beforeuse:

1. Remove the back plate;

2. Remove the three packing bolts on the back plate and take out the rubber hose;

3. Replace the back plate;

4. Fill the holes left by the packing bolts with plastic plugs.

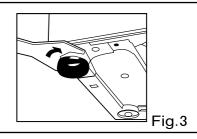
(Attention: The packing bolts and rubber hose should be kept in a safe

place for later use)

Fig. 2

• Adjusting the washing machine

There are adjustable feet under the bottom of the washing machine. Before use, the washing machine should be adjusted, as shown in Fig. 3, so that it is level.





Installation

Joining the Inlet Hose to the Washing Machine

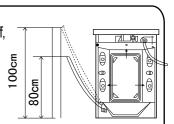
- 1. Connect the nut on the inlet hose to the connector on the water valve.
- 2. Tighten the nut to secure the hose

Connect of water inlet valve

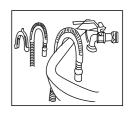
Drainage Hose

The height of the drainage outlet must be 80-100cm. To prevent the drainage hose from dropping off, fix it to the drainage hose clip at the back of the washing machine.

Use the drainage holder to keep the end of the drainage hose retained and to prevent the outflow of water. It is recommended that drainage hose extensions not be used; if an extension is needed, please consult a serviceman. The additional hose should be no more than 250cm (overextended hoses could lead to siphonage). Note: The drainage hose should not be submerged in water and should be securely fixed and leak-free. The appliance is to be connected to the waster mains using



Water inlet hose out



Connecting to the Power Supply

new hose-sets and that old hose-sets should not be reused.

Before connecting to the power supply, check:

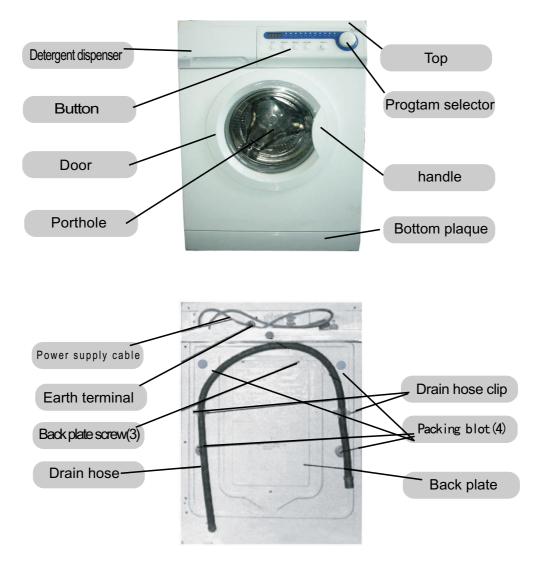
- The socket is adequate for the maximum power of the washing machine (For safety, fuses in the power circuit should be rated for no less than 15A).
- The voltage should meet the requirement.
- The power outlet should be capable of accepting the washing machine plug. The washing machine must be earthed before use.
- Supplementary earth cable should not be necessary if the socket is connected to the earth
- Supplementary earth cable should be installed on the upper back of the washing machine and connected to an earth if the power supply socket has no earth connection





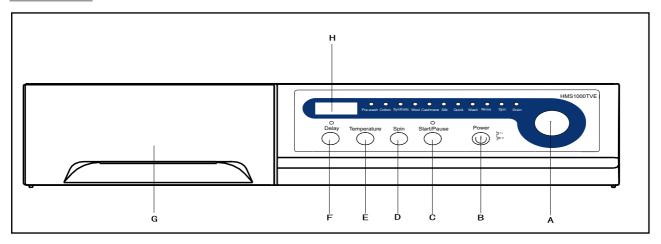
height: 860mm / width: 595mm / depth: 485mm







Control Panel



A: Wash programming knob

By turning the knob clockwise/counterclockwise, the required program can be selected. There are 11 programs available. After a program is selected, the corresponding light will go on. (Refer to Guide to Operational Program Selection).

B: Power Switch

Press this button to switch on the washing machine. Press it again to switch it off.

C: Start / Pause Button

When the washing machine is connected to the power socket and a program is selected, washing operation will start. Lightly touch this button during a wash cycle, operation will stop and the digits on the screen start blinking. Touch it again to resume operation. To cancel a wash program during a wash cycle, touch this button, when the digits on the screen start blinking, press the Power switch, the program will be cancelled.

D: Spinning Speed Setting Button

Touch this button lightly to select the desired speed. When a speed is set, it will be displayed on the screen.

Note: Different water temperatures and spinning speeds can be set for different laundries. Refer to the operation instructions on pages 11 and 14. Wash using the default settings if there is no special requirement.

E: Washing temperature button

Touch this button lightly, the washing temperature will be displayed on the screen. Select a temperature according to the type of laundry.



F: Delay Button

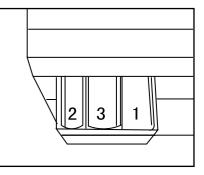
Touch this button lightly, the washing machine will start operation after a period of time and the corresponding indicator will go on. The range is 0.5-24 hours; each touch of this button increases a half hour. After the button is set, press the Start/Pause button to start countdown of the set time (the time is displayed on the screen until the program ends).

E+F Key Combination

Press these two keys simultaneously, the sign "LOCK" and the remaining washing time are displayed on the LED alternately. Now all the function keys except the Power switch can be locked. Press the key combination again to cancel this function.

G: Detergent distribution drawer Open the drawer, three compartments can be seen:

Compartment 1: Pre-wash detergent Compartment 2: Normal - Quick wash detergent Compartment 3: Softener, conditioning agent, perfume, etc.



H: DisplayPress

Such information as remaining wash time, temperature and speed setting and error messages will be shown.

Note: After power is switched on, the display will go on and the remaining wash time decreases. As the water pressure and temperature may differ, the remaining time may be adjusted accordingly. When the laundry is not balanced during spinning, the time may be automatically prolonged. These are normal phenomena.



Guide to Operational Program Selection

Due en en	Recommended	d Defau	It Setting		T	Ironing-free	Delevi	Detergent Compartment		
Program	Laundry	Temperature	Speed			(Working in Washing Cycle)	Delay	1	2	3
Pre-wash	Heavy-soil laundry	60	800	2:46	Cold-40- 50-60-80	Yes	Yes	*	*	0
Cotton	Cotton fabrics	60	800	2:28	Cold-40- 50-60-80	Yes	Yes	×	*	0
Synthetic	Fast-color synth- etic	40	600	1 : 30	Cold-40- 50-60	Yes	Yes	×	*	0
Wool	Woolen fabrics	40	600	0:58	Cold-40	No	Yes	×	*	0
Cashmere	Cashmere fabrics	40	400	0:58	Cold-40	No	Yes	×	*	0
Silk	Silk fabrics	40	400	0:55	Cold-40	Yes	Yes	×	*	×
Quick	Medium-soil laundry	40	800	0:29	Cold-40	No	Yes	×	*	×
Wash	Medium-soil Iaundry	50	0	0:53	Cold-40- 50-60	No	Yes	×	*	×
Rinse	Medium-soil laundry	/	800	0:27	/	Yes	Yes	×	×	0
Spin	/	/	800	0:13	/	Yes	Yes	×	×	×
Drain	/	/	/	0:03	/	No	Yes	×	×	×

Note: \bigcirc indicates that softener can be added if needed; \star indicates that detergent must be added; X indicates that detergent must not be added. LED display "--" indicates cold water; "0" indicates no spinning.

The wash temperature refers to the max temperature. The required time differs according to different laundries, temperatures and functions. The total time is for reference only (it may vary slightly for different water temperatures).



1. Control panel lock function: To prevent children from accidentally starting the machine, the control panel can be locked by pressing the "Temp" and "Delay" buttons at the same time. After the panel is locked, the sign "LOCK" and the wash time are displayed alternately and all the keys are inactivated. Press the two buttons again to cancel.

2. Power-off memory function: This machine has a power-off memory function. In case of abrupt power failure or the power must be cut off during a program cycle, the present settings will be saved, and operation will resume when the power is switched on again.

3. Display messages:

Errl	Cause: Door not properly shut.
	Correction: Shut the door properly.
Err2	Cause: Drainage error, water not emptied within 4 minutes. Correction: Clean the filter and check the drain hose for blockage. If error still exists, please contact the maintenance personnel.
Err 3	Cause: Temperature sensor not properly connected or damaged Correction: Contact the maintenance personnel.
Err4	Cause: Heating coil damage or overload of laundry that leads to a failure to reach the set temperature within the specified time. (this message is displayed at the end of a program). Correction: Reduce load and then start washing again or contact the maintenance personnel.
ErrS	Cause: Water level not met in 8 minutes. Correction: Make sure that tap is turned on, and water pressure is normal. If problem still exists, please contact the maintenance personnel.
Err 1	Cause: Motor overheat protection or damage. Correction: Contact the maintenance personnel.
Err8 End	Cause: Higher water level protection. Correction: Contact the maintenance personnel. A program ends.
1:25	The remaining time is 1hour 25 minutes.
19;25	The machine will start in 19 hours 25 minutes. The time is renewed every minute. After the program starts, the remaining time will be displayed.



Front Load Washer

I .The appliance does not work.

Possible causes

1. The socket is not the required one or the connection is loose.

- 2. The door is not properly closed or the switch of micro delay is in poor contact.
- 3. The plug wire of motor is in poor contact or the motor is broken.

4.Malfunction of PCB

Troubleshooting

1. Check the socket and plug to make sure that they are properly connected.

2.Check whether the micro delay switch is in good contact in on-position. If yes, insert the terminal firmly to provide a good connection.

3. The PCB controls the washing machine operation. In case of the failure, check the wiring or replace the PCB.

II .Filling failur

Possible causes

1. The switch of water supply is not opened or the water pressure is too low.

2. The door is not properly closed or the micro delay switch is in poor contact

3. The water electromagnetic valve is broken.

4. The plug wire of drainage pump is in poor contact.

5. The pressure switch is broken.

Troubleshooting

1.Repeat the following steps.

- 1).Open the switch of water supply
- 2).Check whether the filling hose is twisted or blocked.
- 3).Check whether the water eletromagnetic valve is blocked.

4). Check whether program is properly selected.

5). Check whether the water supply pressure is too low.

2.Check the door catch and the door lock are in good contact. If not, make necessary adjustment. Check whether the micro delay switch is in good contact in on-position.

3. Check whether the electromagnetic is good in on-position. Fasten it if necessary.

4.Blow on the pressure switch and "click, click" can be heard. Otherwise, replace the pressure switch with a new one.

III .No drainage

Possible causes

1.Improper installation

2. The drainage pump is broken.

Troubleshooting

1.Repeat the following steps.

1).Check whether the drainage pipe is twisted or blocked. The appropriate height of the



water drainage outlet should be from 80 to100cm.

2).Check whether the program is properly selected.

3).Connect the power cable to the drainage pump to check whether the operation is normal. If not, make necessary replacement.

IV .Unusual noise

Possible causes

1. The packing screws should be disassembled.

2. The washer is placed too near a wall.

3. The washer is loaded over the standard capacity (5Kg).

4. There is foreign object other than fabrics in the washer.

5. The washer does not stand level.

6.Bolts or screws are loose.

7.The belt is loose.

Troubleshooting

1.Disassemble the packing screws.

2. Move the washer away from the wall.

3.Do not load the appliance more than the standard capacity.

4. Remove the foreign object.

5.Adjust the washer until it is level.

6.Tighten the bolts and screws.

1) .Fastening bolts of vibration damper

2) .Fastening bolts of balances

3) .Screws of water heating pipe

7.Increase the tension of belt.

V.The drum doesn't rotate; the spin speed is too high or too low.

Possible causes

1. The belt tension is too low or the fastening bolts are loose.

2. The plug wire of motor is loose or the motor is broken.

3. The capacitor is broken.

4. The PCB is broken or is not properly plugged.

Troubleshooting

1. Adjust the tension of belt and tighten the screws.

2.Check whether the plug wire of motor is loose or whether the motor works normally. If not, make necessary replacement.

3.Check whether the capacitor is good with a universal meter. If not, make necessary replacement.

4.Replace the PCB with a new one.

VI .The water level is too high.



Possible causes

- 1.Gas leakage at pressure system of water supply.
- 2.The pressure switch is broken.

Troubleshooting

1.Check whether the pipeline of pressure system is blocked or there is gas leakage. The pressure system includes:

- (1) Gas-collecting valve
- (2) Rubber pipe
- (3) Pipe clip2.Blow on the pressure switch and "click, click" can be heard. Otherwise, replace the pressure switch with a new one.

VII .No heating or automatic heating

Possible causes

1.NTC is breaken.

- 2.Effect of ambient temperature
- 3. The water-heating pipe is broken.

Troubleshooting

1.Check whether the setting of temperature at no heating(Diplay "--").If not, make necessary replacement.

2.Check the water-heating pipe to see whether the resistance wire is normal. If not, make necessary replacement.

VIII .Water leakage

Possible causes

1.Leakage at joints

- 2. The front flange of outer cylinder is poorly close.
- 3. There is foreign object on the cushion of sight window.

Troubleshooting

1. Check whether the joints are damaged or loose.

- 1).Filling pipe
- 2). Hose connecting electromagnetic valve to dispenser
- 3). Hose connecting dispenser to outer cylinder
- 4).Cushion of sight window
- 5). Hose connecting outer cylinder to pump
- 6).Drainage pump
- 7).Gas-collecting valve



8).Dispenser
9)Condenser
10) Hose connecting condenser to hose of outer cylinder

2.Fasting the U-bolt.

3. Wipe off the foreign object from the cushion of sight window.

IX .Improper distribution of dispenser

Possible causes

1. The plug wire of the water eletromagnetic valve is mistaked.

- 2.The PCB is broken.
- 3. Fault of assemblage of dispenser.

Troubleshooting

1.Reassemble the plug wire.

- 2.Replace the PCB with a new one.
- 3.Reassemble the assemblage of dispenser.

X.The door lock indicator does not light

Possible causes

The door lock indicator is broken.
 The wiring of micro delay switch is loose.
 The indicator loses.

Troubleshooting

- 1.Replace the broken indicator.
- 2. Tighten the stub of micro delay switch.
- 3.Refasten the indicator.

XI.No function or malfunction of program controller

Possible causes

1. The motor of program controller loses or the stub is sealing-off.

2. The knob of program controller is stuck.

3.Poor contact of wiring of program controller.

4.Poor contact at inner contacts of program controller (even after the all the plug wires are tightened.)

Troubleshooting

1.Reassemble the motor of program controller and make spot welding of the stubs (the operation of program controller and motor can be heard after the appliance is turned on.)

2.Adjust the position of knob of program controller.3.Tighten the stubs of program controller one by one.

4.Replace the program controller with a new one.

XII.Control panel display Err message

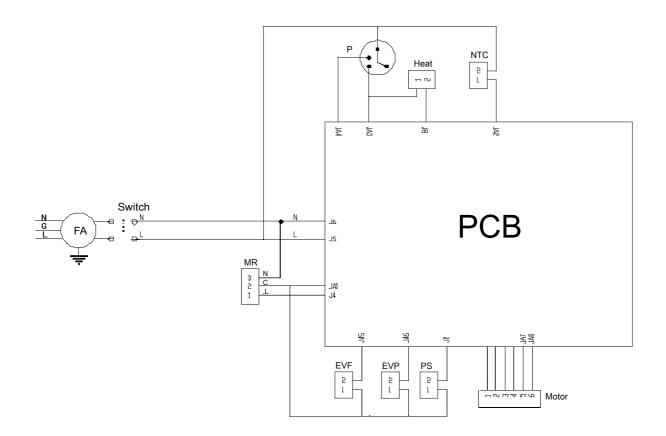
Troubleshooting

1.Reference user manual, finding the cause of Err message.

2.Following the instructions of the user manual, chenk the washing machine .if not , replace relating element.



Wiring Circuit

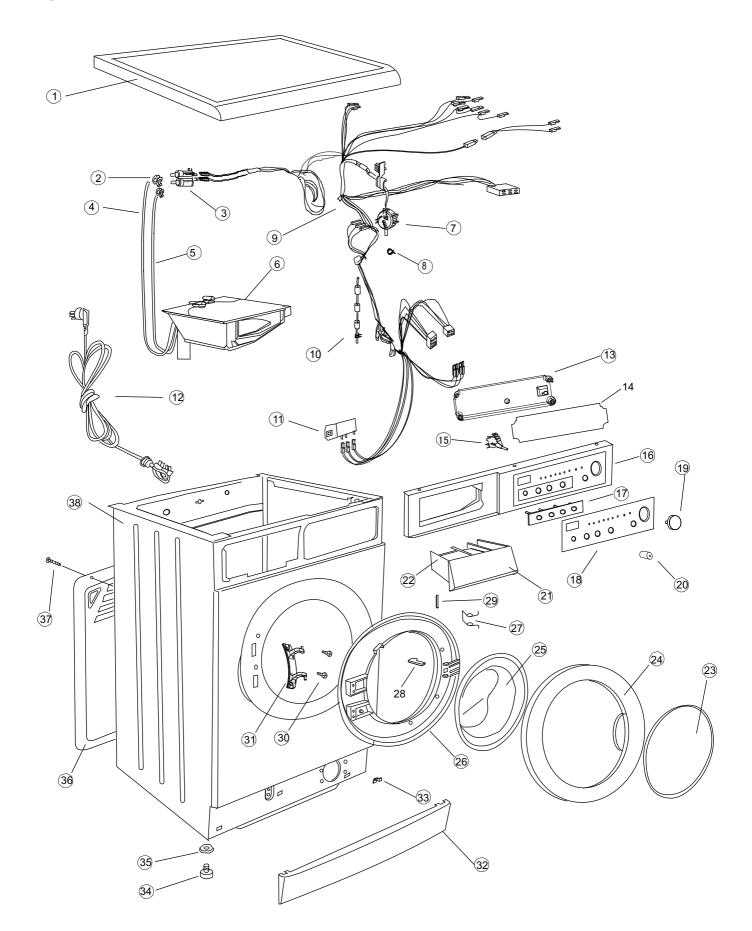


PCB-Printed Circuit Board FA-Interference Suppresser Switch-Power Switch P-Pressure Switch Heat-Heating element NTC-Temperature Sensor MR-Door Lock EVP,EVF-Water Inlet Magnetic Valve PS-Drainage Pump Motor-Motor



Front Load Washer

Exploded view





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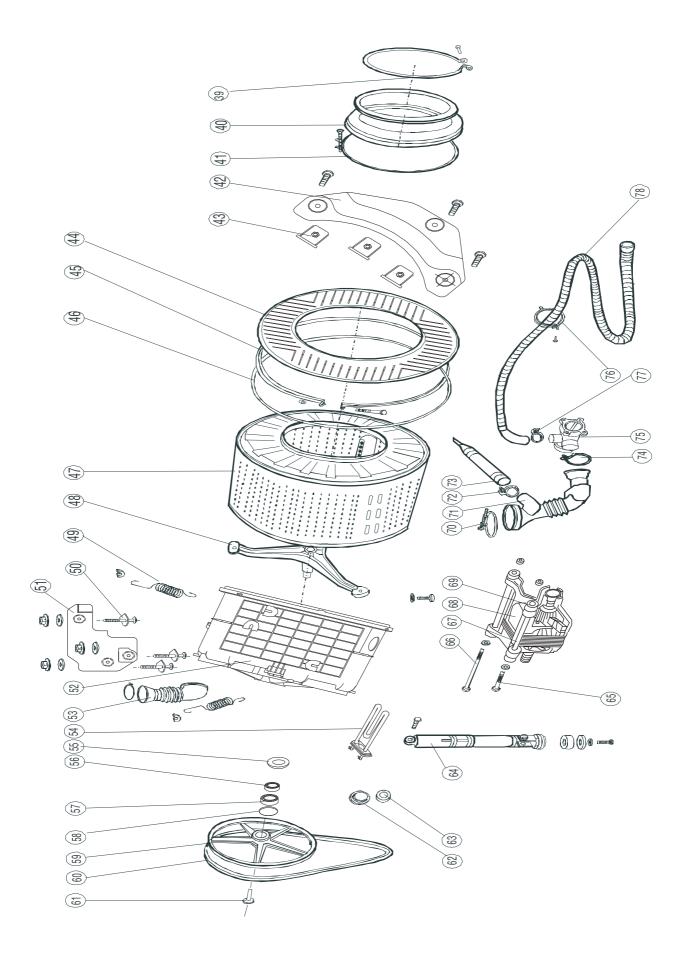
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Number	Special code	Name of part	QTY	Unit	Remark
1	0020202058	Top cover	1	EA	
2	00218230700611	Able clamp	4	EA	
3	00216000486102	Water electromagnetic	1	EA	
4	0020300414	Filling pipe (Main-wash)	1	EA	
5	0020300415	Filling pipe (Pre-wash)	1	EA	
6	0020802101	Water storage sink	1	EA	
7	00216000049404	Water level pressure switch	1	EA	
8	00211320011300	Pipe clip of gas-collecting valve	1	EA	
9	0020400549	Cable assembly	1	EA	
10	00214400028702	Hose of gas-collecting valve	1	EA	
11	0020400505	Doorlock	1	EA	
12	0020400162	Power cable	1	EA	
13	0020202063	Box of PCB	1	EA	
14	0020400542	РСВ	1	EA	
15	00216001231806	Key switch	1	EA	
16	0020202056	Control panel	1	EA	
17	0020202059	Buttons	1	EA	
18	0020202060	Ornamental bar	1	EA	
19	0020202152	Knob of program controller	1	EA	
20	0020202065	Button	1	EA	
21	0020202057	Handle of dispenser	1	EA	
22	0020801303	Dispenser	1	EA	
23	0020200717	Door glass cover	1	EA	
24	0020202222	Outer frame of sight window	1	EA	
25	0021400009	Glass of sight window	1	EA	
26	0020202020	Inner frame of sight window	1	EA	
27	0020102723	Torsion of door catch	1	EA	
28	0020102508	Door catch	1	EA	
29	00215200024102	Axle of door catch	1	EA	
30	0020600029	Bolt of flap	2	EA	
31	0020102735	Flap of sight window	1	EA	
32	00214800777304	Lower plaque	1	EA	
33	00215200021504	clamp	5	EA	
34	00221120300212	Foot	4	EA	
35	00215000519000	Foot nut	4	EA	
36	0020102491	Back cover	1	EA	
37	00216910320111	Self-tapping screw	3	EA	
38	0020802174	Case	1	EA	







Front Load Washer

No.	Special code	Name of part	QTY	Unit	Remark
39	0020600062	Front tightening ring of cushion of			
		sight window	1	EA	
40	0020300393	Cushion of sight window	1	EA	
41	0020600063	Back tightening ring of cushion of sight window	1	EA	
42	0020300422	Front balance	1	EA	
42	0020100071	Bracket of front balance	3	EA	
	002020202025	Front flange of outer cylinder		EA	
44	0020202023	U-lock	1	EA	
45			1		
46	0020300071	Seal ring of front flange	1	EA	-
47	0020802173	Inner cy linder	1	EA	
48	0020102727	Triangle of inner cylinder	1	EA	
49	0020102351	Spring	2	EA	
50	00215100001300	Screw	3	EA	
51	0020300147	Upper balance	1	EA	
52	0020201753	Outer cylinder	1	EA	
53	00214500000600	Filling pipe	1	EA	
54	0020400524	Heater	1	EA	
55	00214500001000	Oil seal	1	EA	
56	00218910510119	Bearing (6204)	1	EA	
57	00218910610119	Bearing (6205)	1	EA	
58	0020600106	Liner of belt pulley	1	EA	
59	0020100326	Belt pulley	1	EA	
60	00214400002200	Belt	1	EA	
61	00215000008800	Screw	1	EA	
64	0020700365	Vibration damper	2	EA	
65	0020600036	Fastening bolt of motor	1	EA	
66	0020600048	Fastening long-bolt of motor	1	EA	
67	00211500013800	Fastening bushing of motor	1	EA	
68	0020400514	motor	1	EA	
69	00214400042900	Fastening liner of motor	4	EA	
70	00215200004402	Clip	1	EA	
10	00010000001100	Hose connecting outer cylinder to	*	Dir	
71	0020300070	pump	1	EA	
72	00211320015200	Clip	1	EA	
73	00217400046900	gas-collecting valve	1	EA	
74	00215200294400	Clip	1	EA	
75	0022150033660401	Pump	1	EA	
76	0020600050	Clip	1	EA	
77	00221120363014	Bracket of drain pipe	1	EA	
78	0020300148	Drain pipe	1	EA	



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