

Order No.

Tumble Dryer

**Model No. HD80-01
HD70-01**



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Table of Contents

Document control.....	1
Chapter 1. General Information	2
1-1. Table of Contents	2
1-2. General Guidelines	3
1-3. Caution and Warning symbols	3
1-4. Function indication symbols	3
Chapter 2. Product Feature	4
2-1. Features	4
2-2. Specification	5
Chapter 3. Important Safety Instructions	7
3-1 Before switching the device on for the first time	7
3-2 During use of the device	7
Chapter 4. Operation instructions	8
4-1 Control panel	8
4-2 Using the tumble dryer	11
Chapter 5. Part Identification	12
Chapter 6. Disassembly Guide.....	15
6-1 Control panel	15
6-2 Heater and bearing	16
6-3 Motor and fans	17
6-4 Pump	20
6-5 Front air channel	21
6-6 Belt	24
Chapter 7. Schematic Diagram.....	25
Chapter 8. Circuit Interface Diagram	26
Chapter 9. Fault Detection	27
9-1 The dryer does not start	27
9-2 The drying result is not good and the drying time is too long	28
9-3 Code:F2	29
9-4 Code:F3	29
9-5 Code:F4	30
9-6 Code:F5	30
Chapter 10. Test Programme.....	31
Chapter 11. Electric Appliances Parameter	32

1-2. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which are overheated or damaged by the short circuit. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed. Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the service places serviced or not. And be sure safety of that.

1-3. Caution and Warning symbols

Most important thing is to list up the potential hazard or risk for the service personnel to open the units and disassemble the units. For example, we need to describe properly how to avoid the possibility to get electrical shock from the live power supply or charged electrical parts (even the power is off).



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying the appliance.

1-4. Function indication symbols

(You will see them in the specification table)



This symbol indicates that there are important operating and maintenance instructions

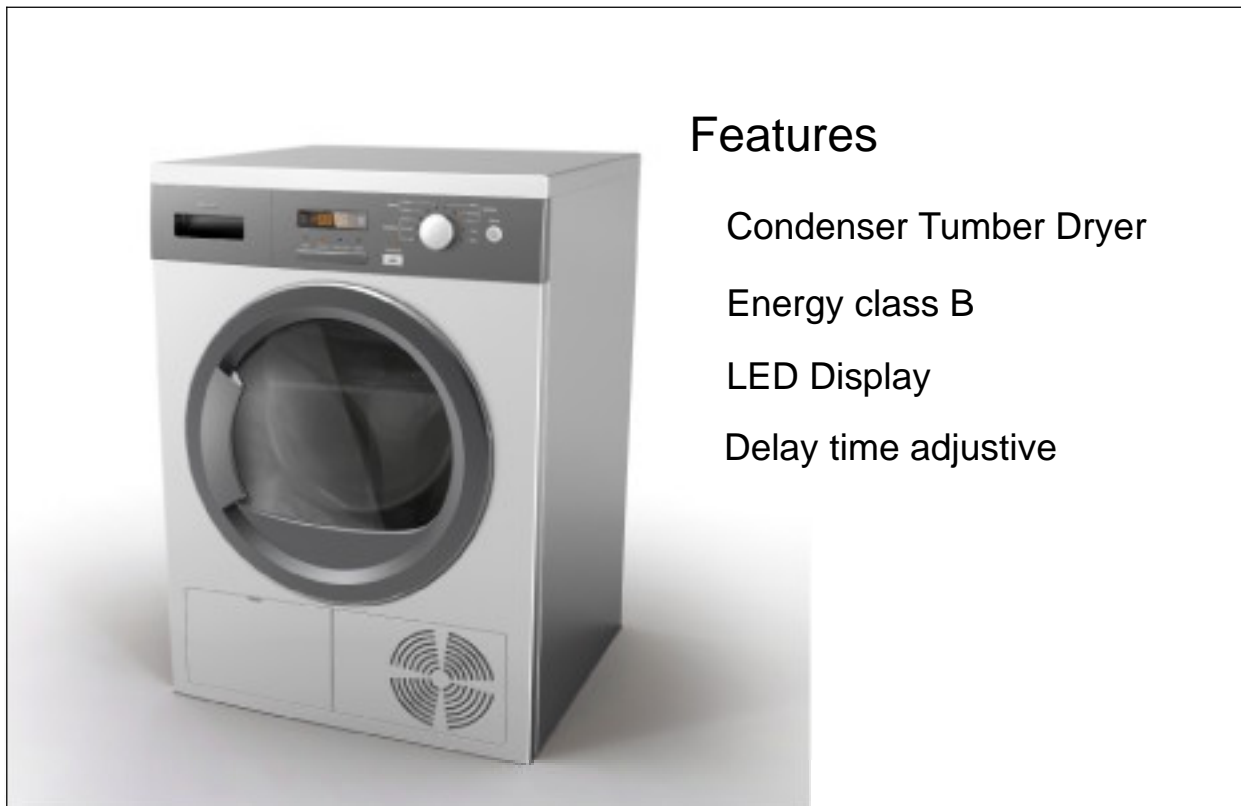


Signify the dryer doesn't have this function.

Chapter 2. Product Feature

2-1. Features

2



2-2. Specification

	Front loaders dryer		HD80-01	HD70-01
1.	Product identification			
	Description of appliance		Dryer	Dryer
	Type of appliance (FS = standing, BI = built-in)		FS	FS
	Supplier own brand		Haier	Haier
	Supplier bar code	EAN	(TBC)	(TBC)
	Commercial Brand / Model		Haier	Haier
2.	Key-Features			
	Energy class		B	B
	Programs	n _s	10	10
	Capacity	Kg	8	7
	Dry speed	rpm	45- 50	45- 50
	Condenser		√	√
	Ventend		—	—
	Noise level	dB(A)	68	68
	Residual dampness (Normal)	%	ø 3%	ø 3%
	Sensor drying		√	√
	LED display		√	√
	Dry time (max.)	min	150	130
	Dry temperatures (program-controlled)	øC	50~80	50~80
	Drum inter light		√	√
	Buzzer		√	√
	Delay timer		√	√
	Low heat		√	√
	Certification's (CE / ISO 9001 / ISO 9002)		√	√
	Approvals (VDE/GS / TöV/GS / IMQ)		VDE/GS	VDE/GS

3.	Basics data			
	Unit dimensions (H x W x D)	cm	84.5x 59.5 x64	84.5x 59.5 x64
	Net weight	kg	50	50
	Voltage/frequency	V/Hz	220~240V/50Hz	220~240V/50Hz
	Input power(Max)	W	2700W	2700W
	Control M = electromechanical, E=electronic,F=fuzzy		E	E
	Drum S = stainless steel / Z = zinc coated Door:		Z	Z
	aesthetic (R=round, Y=big eye, Q = square)		R	R
	Diameter	cm	44	44
	Door hinging left/right		right	right
	adjustable feet	n _s	4	4
4.	Safety systems			
	Motor overheating protection	MOP	√	√
	Non-self- resetting thermal cut- out		√	√
5.	Programs			
	1) Cotton	n _s	3	3
	2 synthetics	n _s	2	2
	3) Delicates wool(cold)	n _s	1	1
	4) Timer	n _s	2	2
	ON/OFF button		√	√

Chapter 3. Important Safety Instructions

3-1 Before switching the device on for the first time

- 1.Ensure that the device is installed and electrically grounded by a qualified service person in accordance to local codes to prevent shock hazard and assure stability during operation.
- 2.Install this tumble dryer properly in accordance with the installation instructions before use.
- 3.Keep surrounding areas free from accumulation of lint,dust and dirt.
- 4.Use a separate earthed socket for the power supply.
- 5.Ensure that the electrical system meets the requirements laid out in the installation part of this manual.
- 6.Avoid fire hazard or electrical shock.
- 7.Do not install or store this device outdoors in a damp place,or in an area which may be prone to water leaks such as under or near a sink unit.In the event of a water leak allow the device to dry naturally.
- 8.Do not operate the tumble dryer if any parts are missing or broken.
- 9.Do not store or use gasoline or other flammable vapours and liquids in the vicinity to the device.
- 10.Do not use an adaptor plug or extension cord.
- 11.Do not connect the device to the power supply until installation is complete.
- 12.Do not repair or replace any part of the appliance or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand have skills to carry out.

3-2 During use of the device

- 1.Wait until the tumble dryer has stopped completely before reaching into the drum to prevent injury.Never reach into the tumble dryer when the drum is moving.
- 2.Clean lint screen before or after each load.
- 3.Remove the tumble dryer door to prevent accidental entrapment before the device is removed from service.
- 4.Unplug the device before carrying out any maintenance or repair.Hold the plug and not the electric cable when unplugging the power supply.
- 5.Wash items that have been soiled with substances such as cooking oil,acetone,alcohol,petrol, kerosene,spot removers,turpentine,waxes and wax removers in hot water with an extra amount of detergent before being dried in the tumble dryer.
- 6.Ensure that the device is not used by persons with reduced physical,sensory or mental capabilities,lack of experience and knowledge without supervision or instruction by a person responsible for their safety.
- 7.Supervise children to ensure that they do not play with the device.
- 8.Do not sit on top of the tumble dryer.
- 9.Do not tamper with controls.
- 10.Do not dry unwashed items in the tumble dryer.
- 11.Do not dry items such as foam rubber(latex foam),showercaps,waterproof textiles,rubber backed articles and clothes or pillows filled with foam rubers pads.
- 12.Do not dry items that have been previously cleaned in,washed in,soaked in,or spotted with gasoline,cleaning solvents,kerosene,waxes,etc.Do not store these items spotted with gasoline,cleanings olvents,kerosene,waxes,etc. on or near the tumble dryer.These substances give off vapours that could ignite or explode.
- 13.Do not use heat to dry items containing plastic,foam,rubber or similarly textured rubber-like materials or items containing feathers or down to prevent fire.
- 14.Do not stop a tumble dryer before the end of the drying cycle unless all items are quickly removed and spread out so that the heat is dissipated.

Chapter 4. Operation instructions

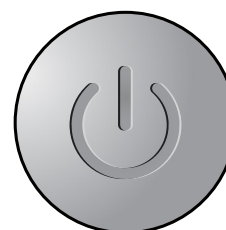
4-1 Control panel



4.1.1 Power button

Press this button to turn the tumble dryer on and off.

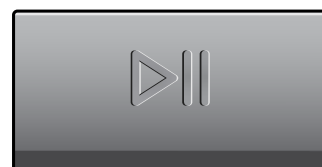
Power



4.1.2 Start/Pause button

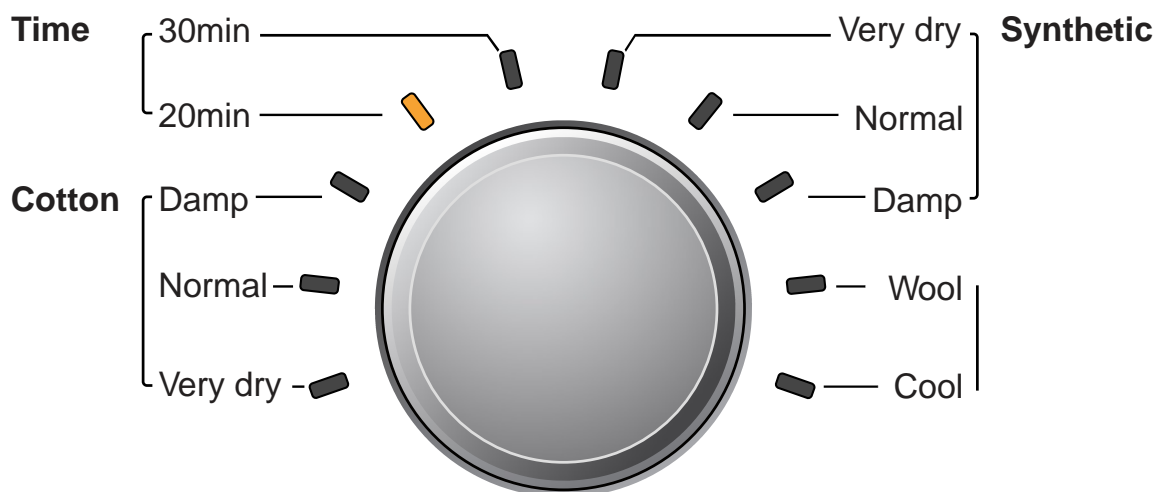
Press this button to start the tumble dryer. Press this button again during the operation of the tumble dryer. The indicator light and display screen will start flashing and the tumble dryer will pause. Press the button again and the program will continue.

Start/Pause



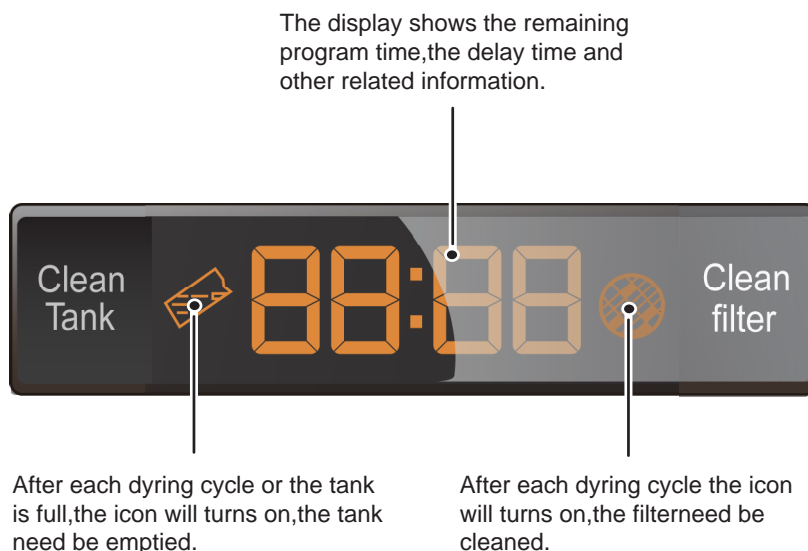
4.1.3 Programme

Turn the knob to choose the desired drying program. There have 10 programme options.

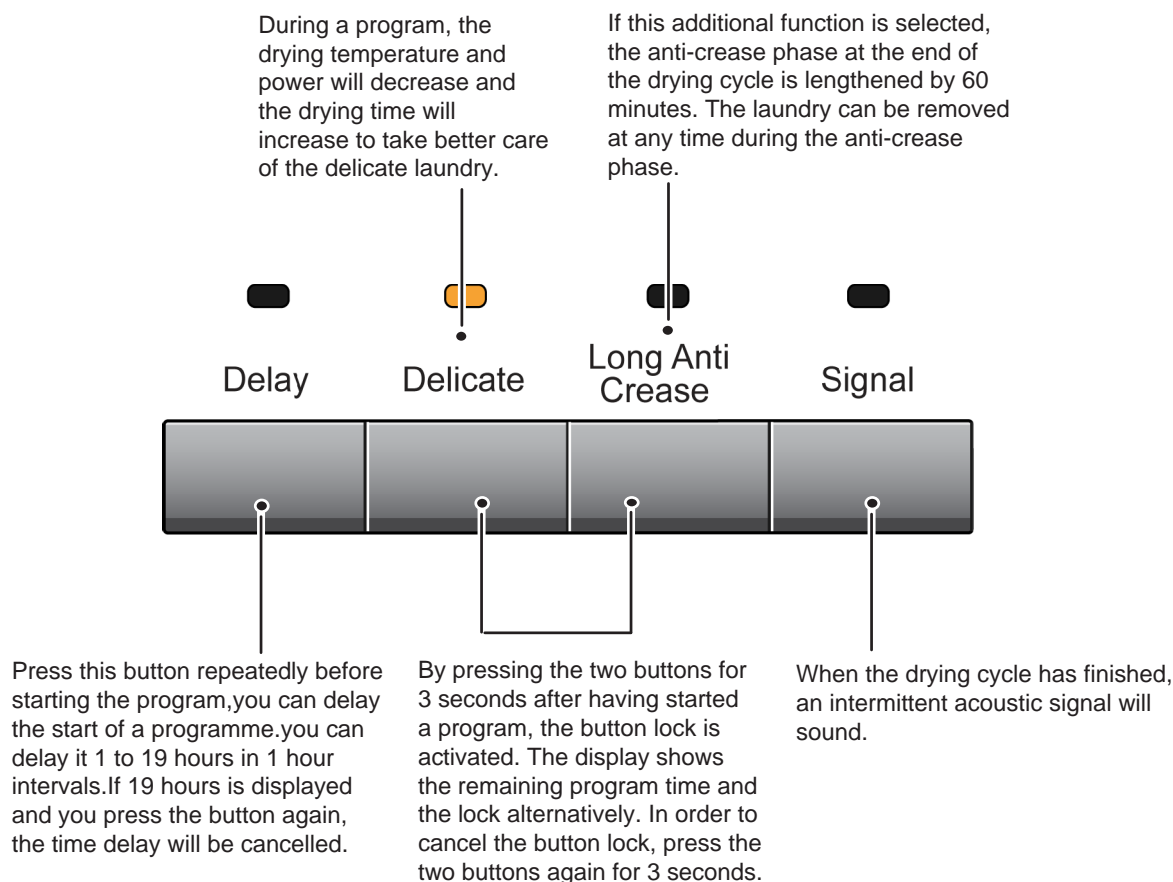


	PMARGMME	DEERGEDGNIYR	TIME	RDEDNEMMOCE YRDNUAL	MAX LOAD
Cotton	Extra dry	Extra dry	2:30	Heavy cotton fabrics,sheets,gowns	8 kg
	Cupboard dry	Ready to wear	2:20	Cotton fabrics,sheets,coats	8 kg
	Iron dry	Damp	2:10	Ordinary cotton fabrics	8 kg
Synthetics	Extra dry	Extra dry	2:00	Heavy synthetic fabrics	4 kg
	Cupboard dry	Ready to wear	2:10	Ordinary synthetic fabrics	4 kg
	Iron dry	Ready to iron	2:00	Ordinary synthetic fabrics	4 kg
Timer	30 min.	Timer 30min.	0:30	Heavy fabrics,needing further drying	8 kg
	20 min.	Timer 20min.	0:20	Heavy fabrics,needing further drying	8 kg
Special	Wool	Ready to wear	1:00	Ordinary synthetic fabrics	1 kg
	Cool	Refreshing/airing	0:30	/	8 kg

4.1.4 Display screen

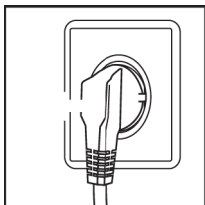


4.1.5 Function button



4-2 Using the tumble dryer

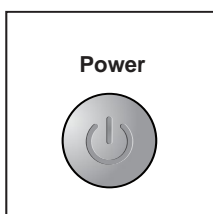
4.2.1 Connect the tumble dryer to the power supply (220V to 240V~/50Hz).



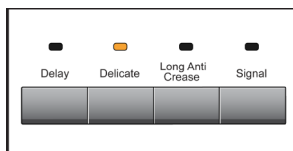
4.2.2 Loading the tumble dryer



4.2.3 Switch on the power supply



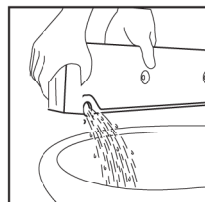
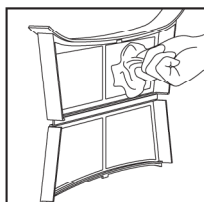
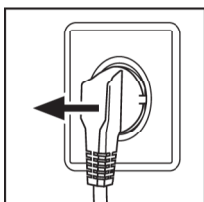
4.2.4 Selecting program,selecting functional



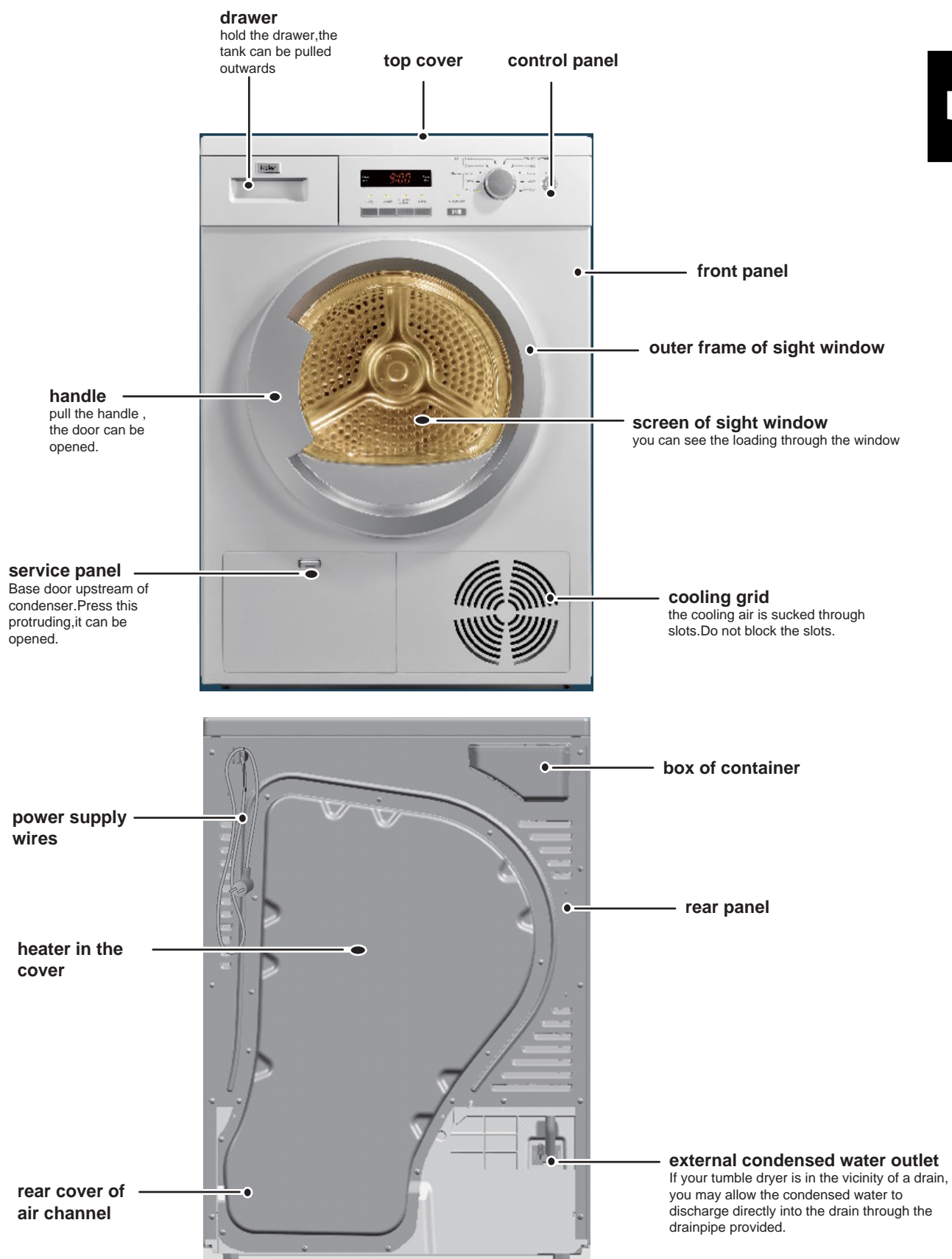
4.2.5 Drying

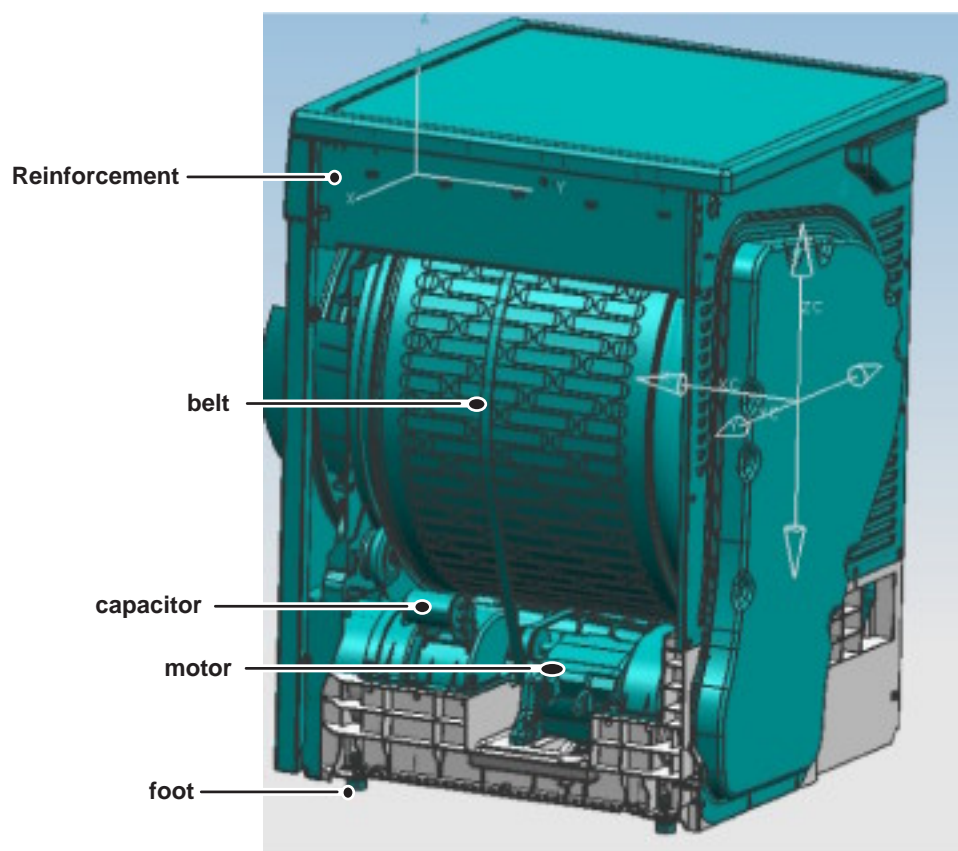
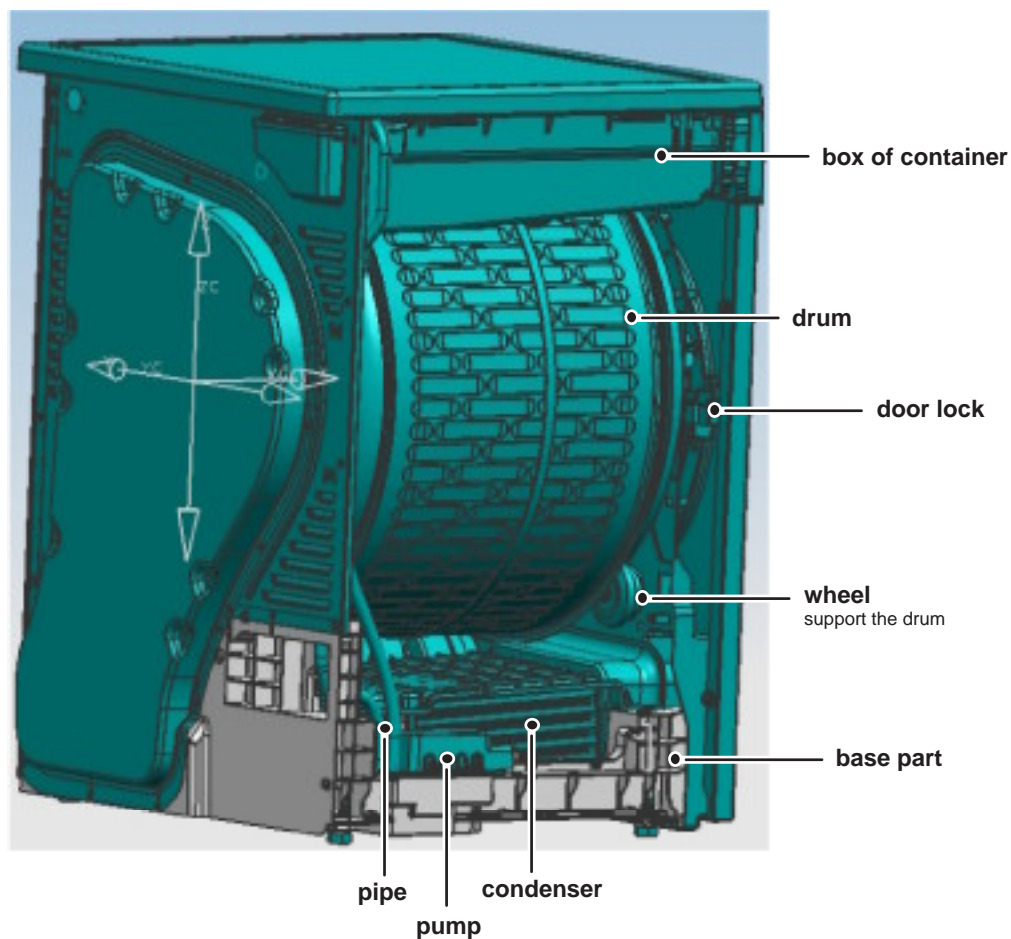


4.2.6 Turning off the tumble dryer,empty tank and clean filter.



Chapter 5. Part Identification





rubber support
fixing the heater wire

heater

cover of air channel

cover of fan

process fan

lamp cover

unscrew 2 screws from the cover,
it can be opened, the light can be replaced.

hook of basket

humidity sensor

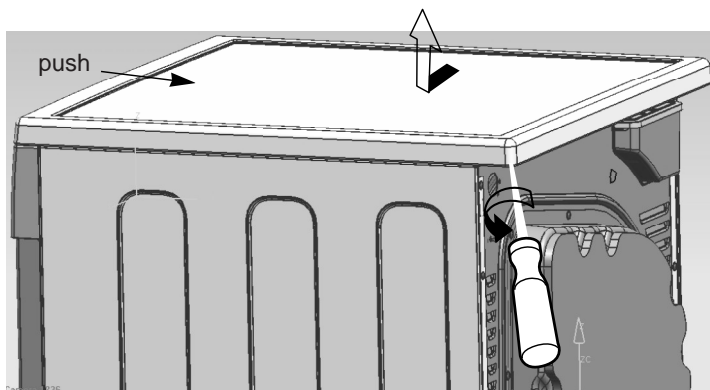
filter

wheel

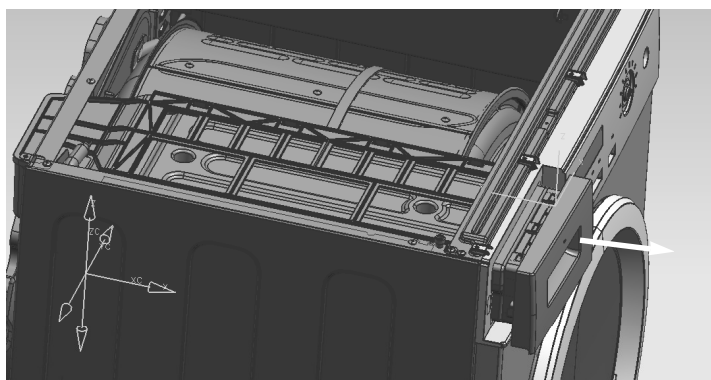
wheel

Chapter 6. Disassembly Guide

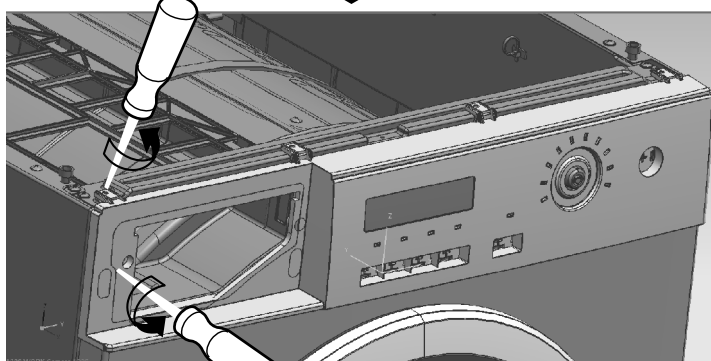
6-1 Control panel



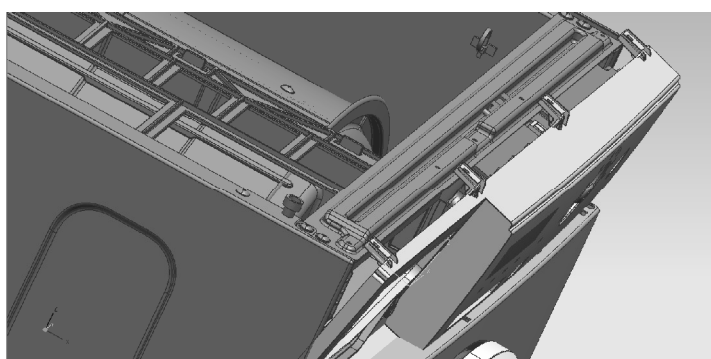
- 1) Unscrew 2 screws on the back of the top plate.
- 2) Pull the top plate backward and upward as shown.



Pull out the tank.

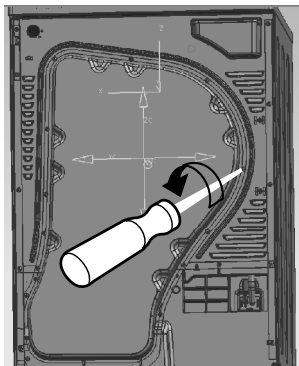


- 1) Unscrew 4 screws on the top of the control panel.
- 2) Unscrew 2 screws near the box of container.

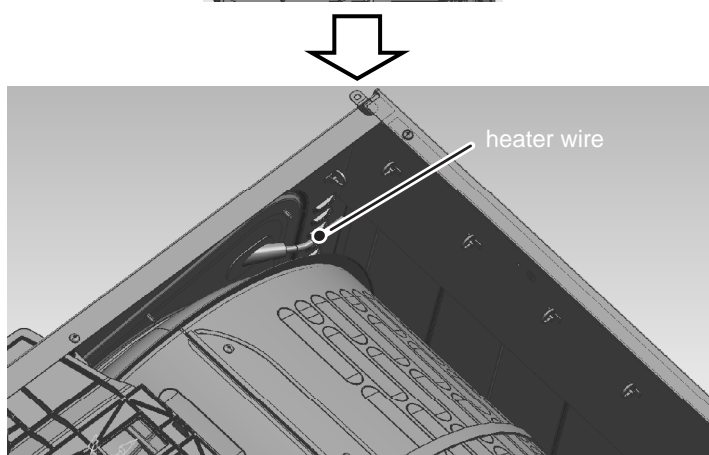


- 1) Pull the control panel.
- 2) Disconnect the wire from the control panel.

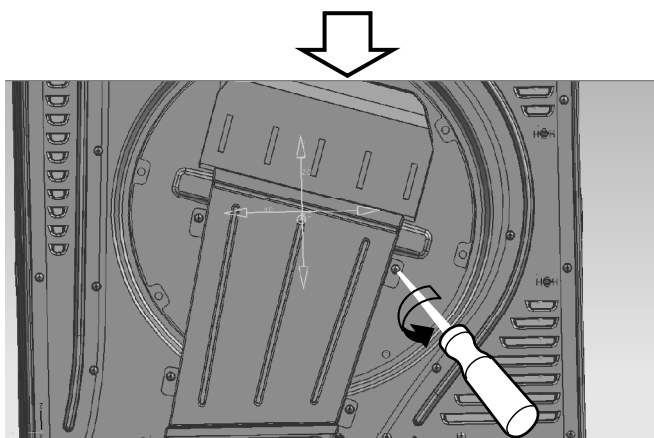
6-2 Heater and bearing



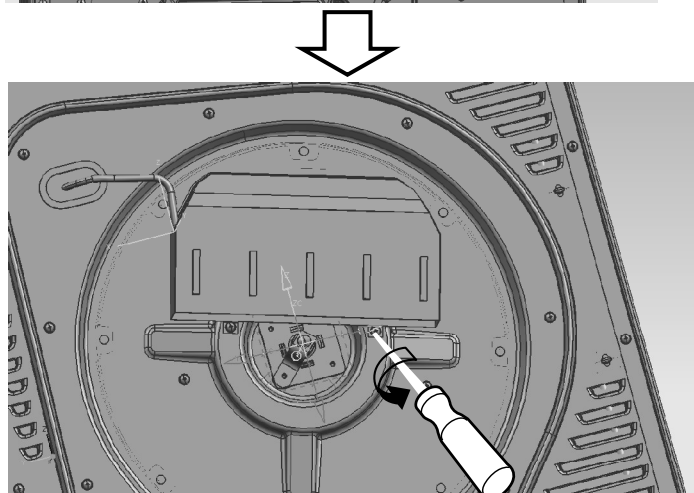
- 1) Unscrew 15 screws on the rear cover.
- 2) Take out the cover from the rear panel.



- 1) Disassemble the top cover;
- 2) Disconnect the wire of heter.

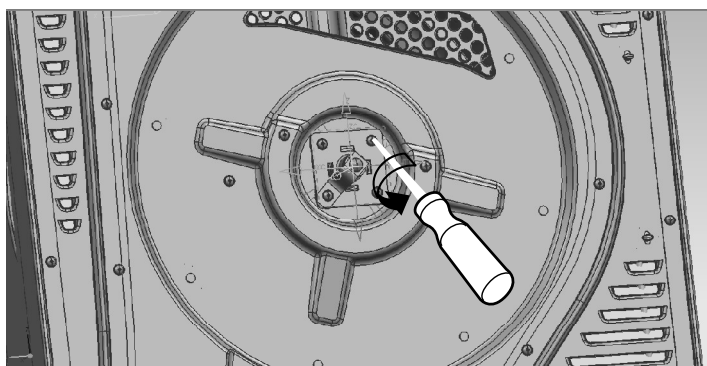


Unscrew 4 screws on the cover of air channel;

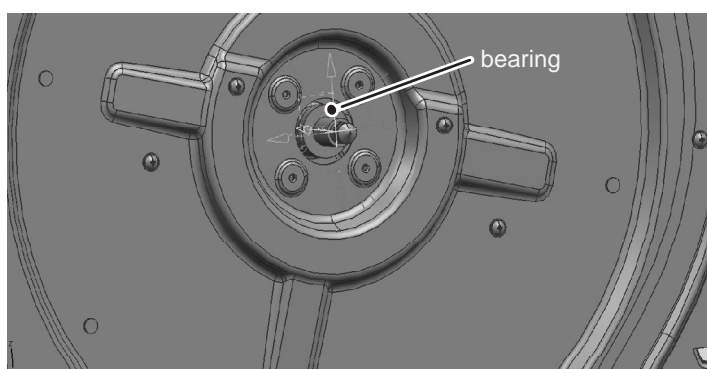


Unscrew 2 screws on the heater, it can be disassembled.

9

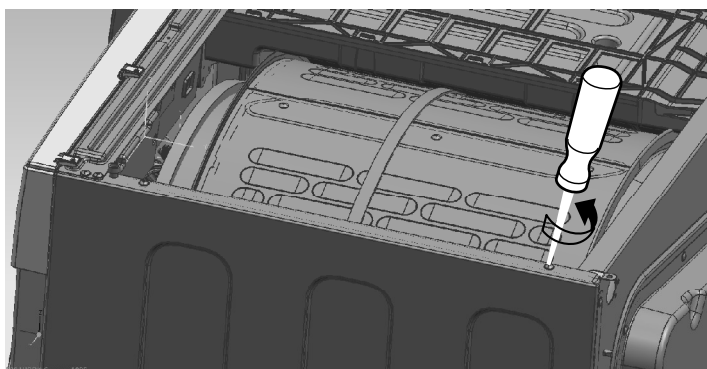


Unscrew 4 screws on the holder for bearing.

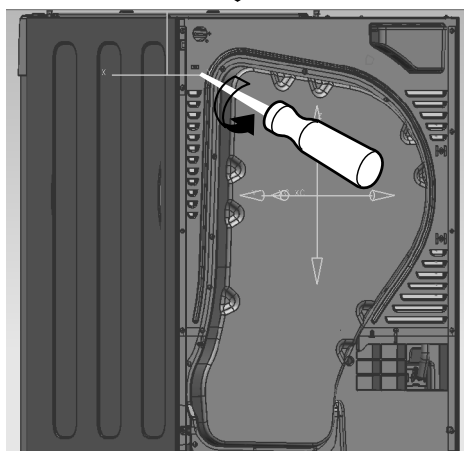


The bearing can be disassembled.

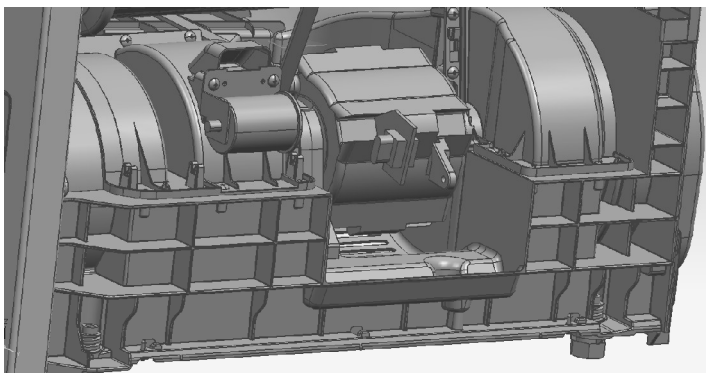
6-3 Motor and fans



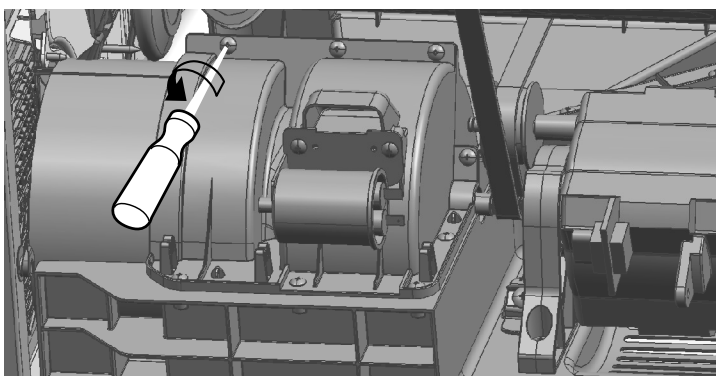
1) Disassemble the top cover;
2) Unscrew 2 screws on the right side panel.



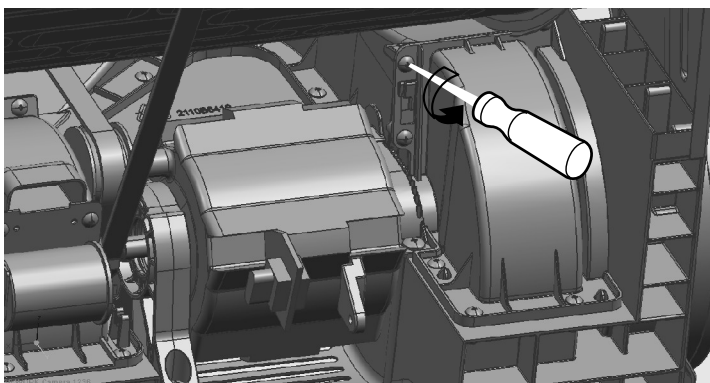
1) Unscrew 5 screws on the right side panel.
2) Pull the side panel upward and backward.



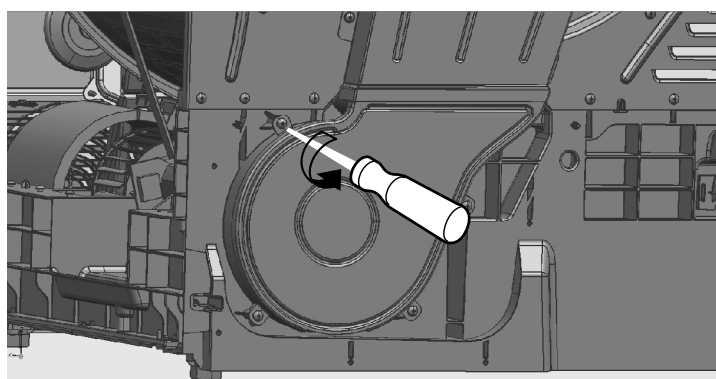
- 1) Disconnect the wire of motor and capacitor;
- 2) Disassemble the spring.



- 1) Unscrew 2 screws on the support of the capacitor;
- 2) Unscrew 8 screws on the cover of cooling fan.

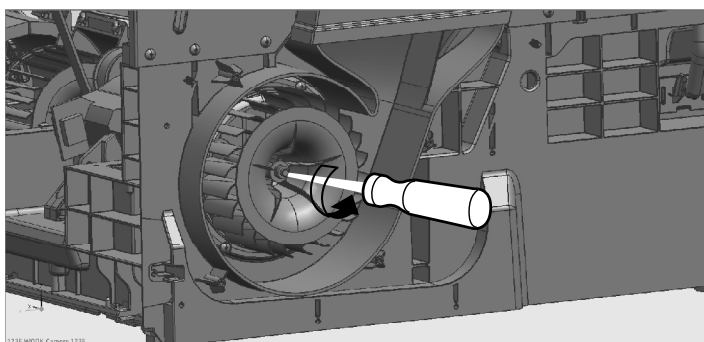


Unscrew 6 screws on the cover of process fan.

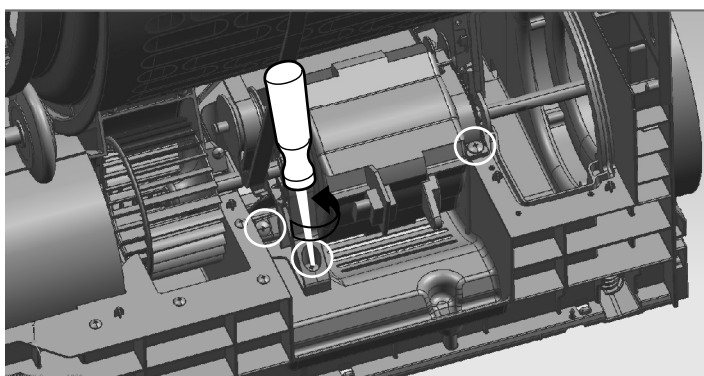


- 1) Disassemble rear cover of air channel;
- 2) Unscrew 4 screws on the cover of process fan.

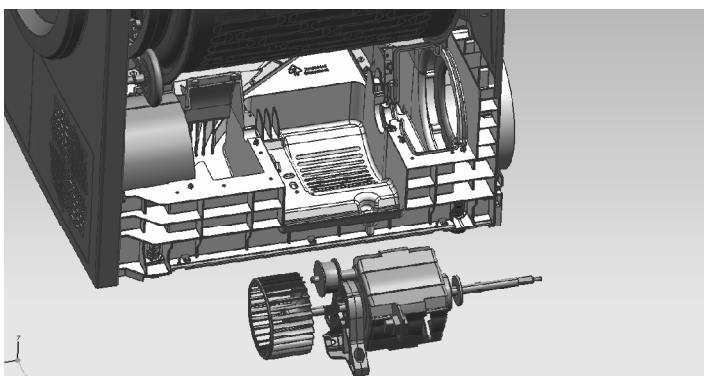
9



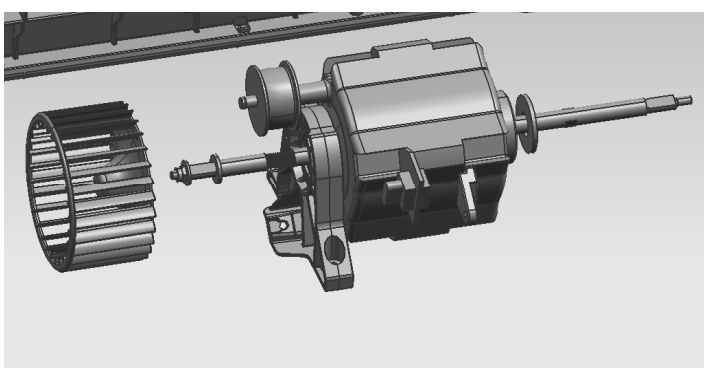
- 1) Fixing the shaft of motor;
- 2) Unscrew the nut, disassemble the fan.



Unscrew 3 screws on the support of motor;

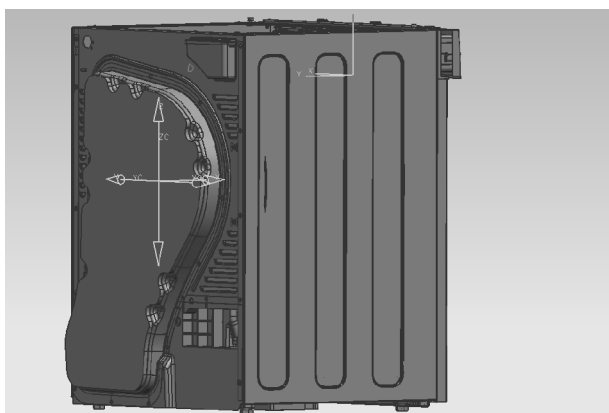


The motor can be disassembled.

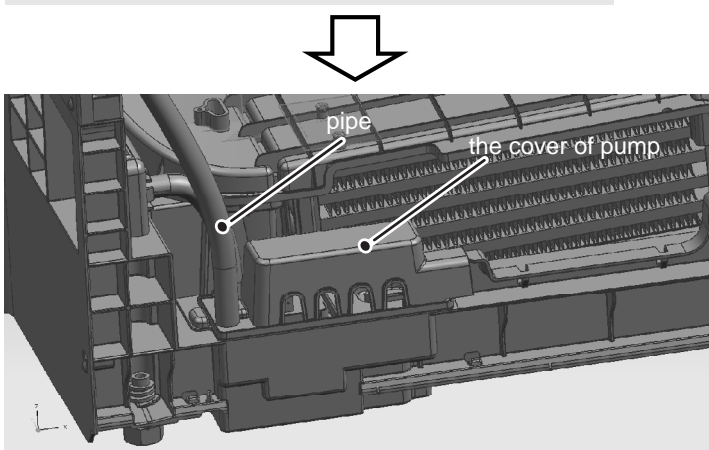


The cooling fan can be disassembled.

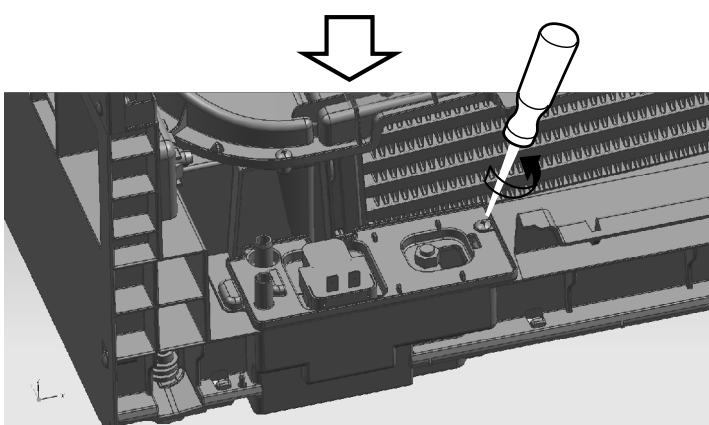
6-4 Pump



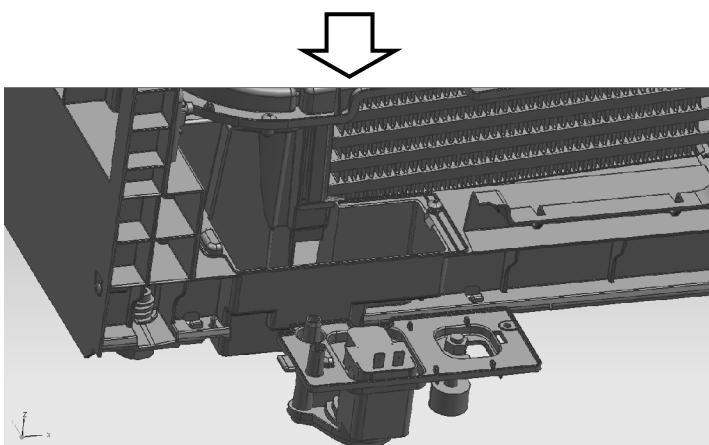
- 1) Disassemble the top panel;
- 2) Disassemble the left side panel.



- 1) Take out the cover of pump;
- 2) Pull out the pipes.

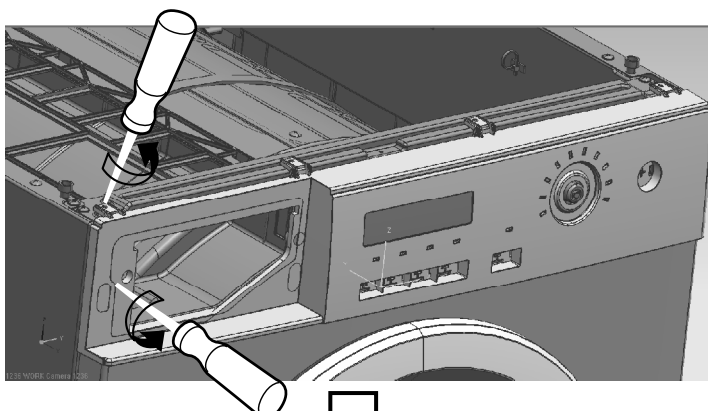


Unscrew 1 screw on the support of pump.

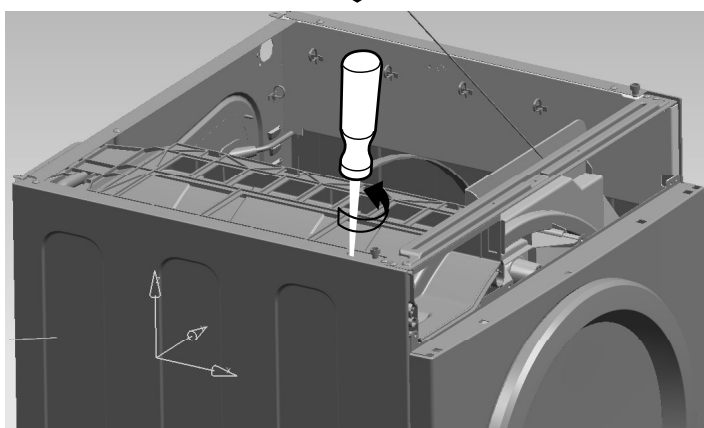


Pump can be disassembled.

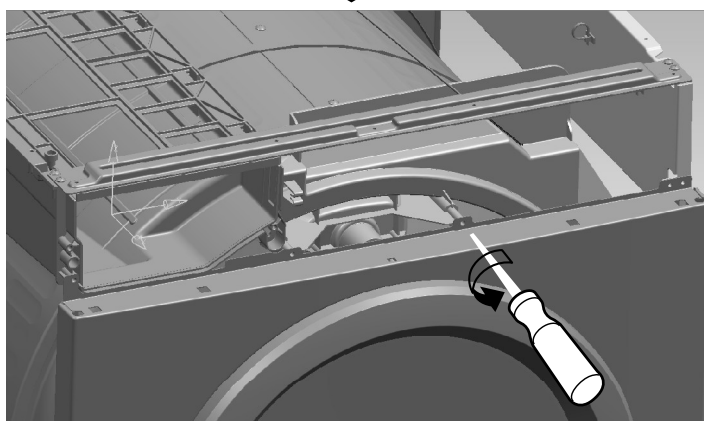
6-5 Front air channel



- 1) Disassemble the top panel;
- 2) Disassemble the control panel.



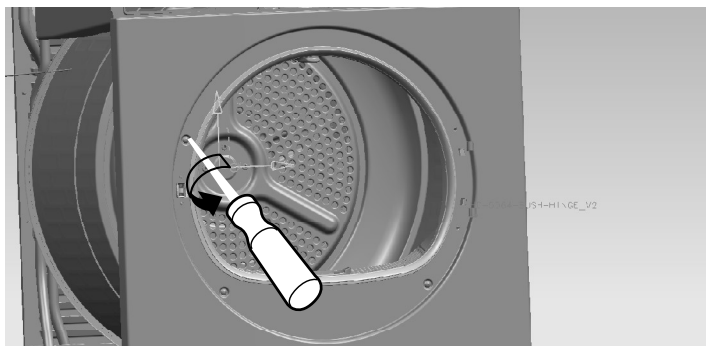
Disassemble the two side panel.



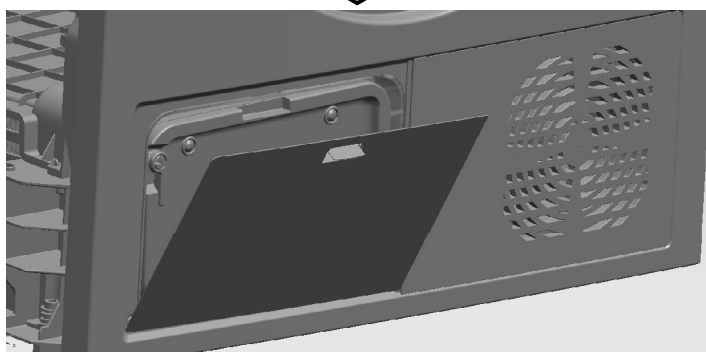
Unscrew 5 screws on the top of front panel.



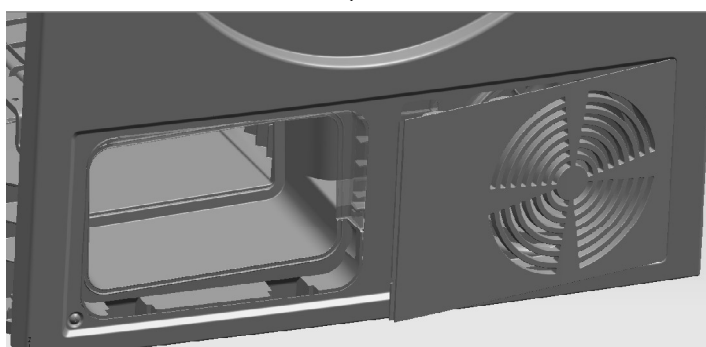
Unscrew 2 screws on the hinge, disassemble the door.



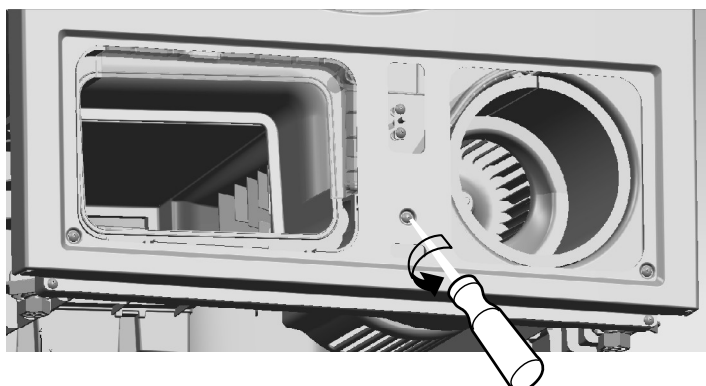
- 1) Unscrew 3 screws on the middle of front panel.
- 2) Disassemble the sealing bar of door.
- 3) Disconnect the wire of door lock.



Open the service panel, take out the condenser.

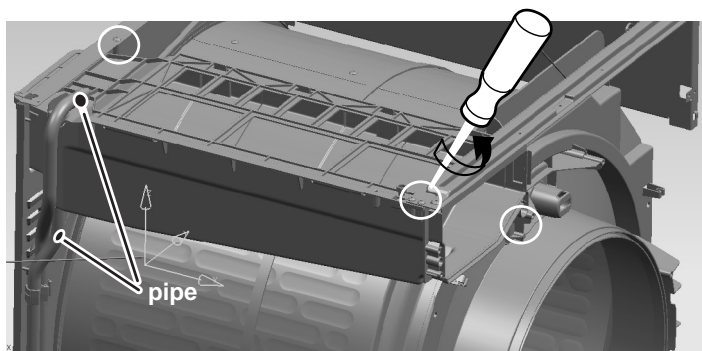


Disassemble the cooling grid.
Note: Do not damage the part.

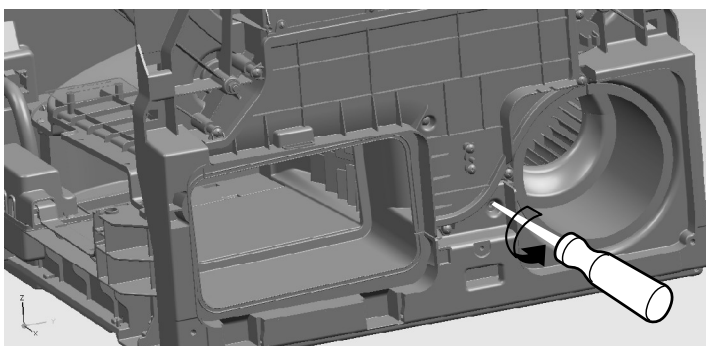


Unscrew 5 screws on the bottom of front panel.
The front panel can be disassembled.

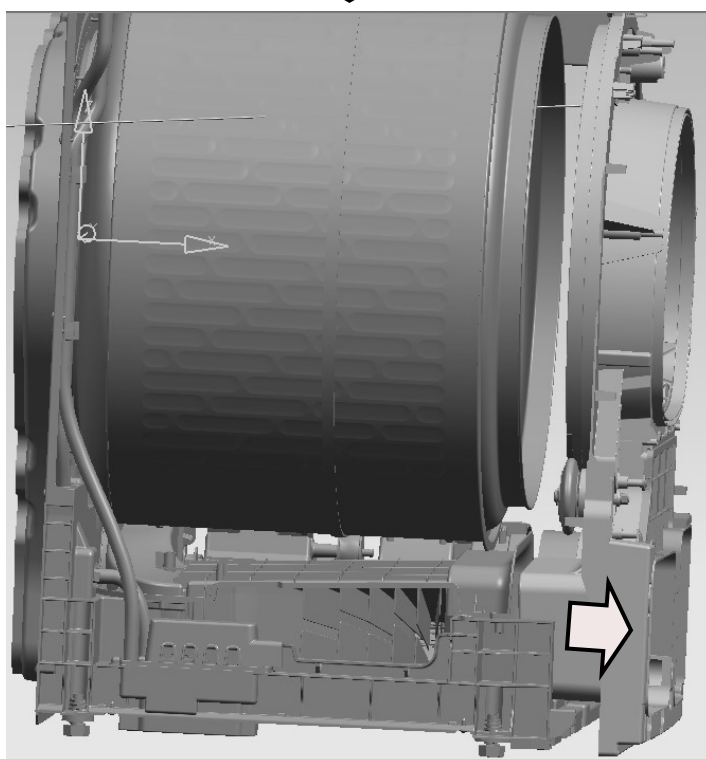
9



- 1) Unscrew 4 screws on the box of tank.
- 2) Pull out the pipe;
The box of tank can be disassembled.

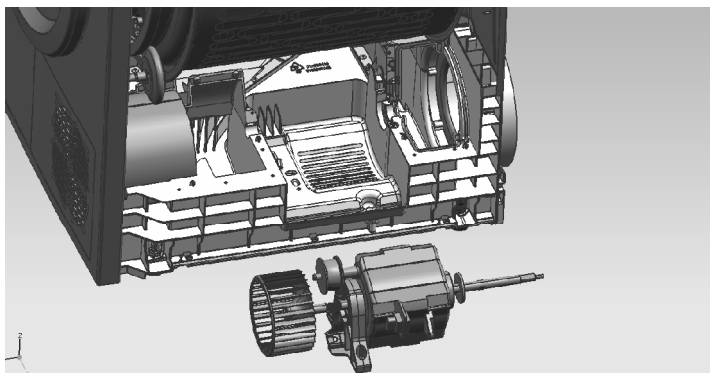


Unscrew 1 screw on the front air channel.

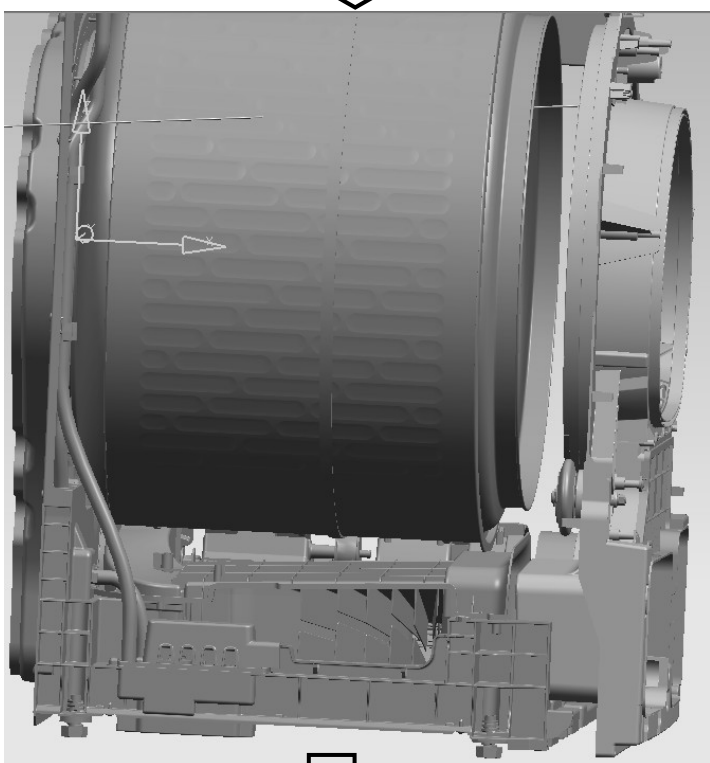


Pull the front air channel ahead, it can be disassembled.

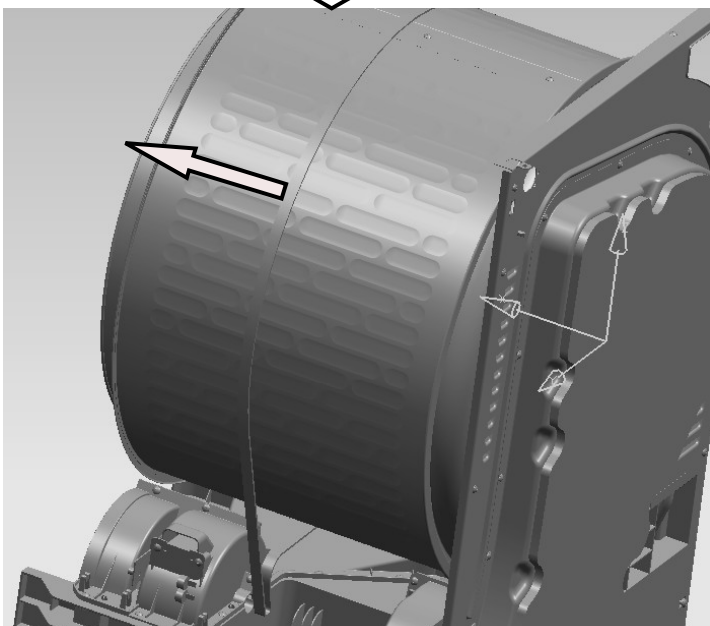
6-6 Belt



Disassemble the motor;

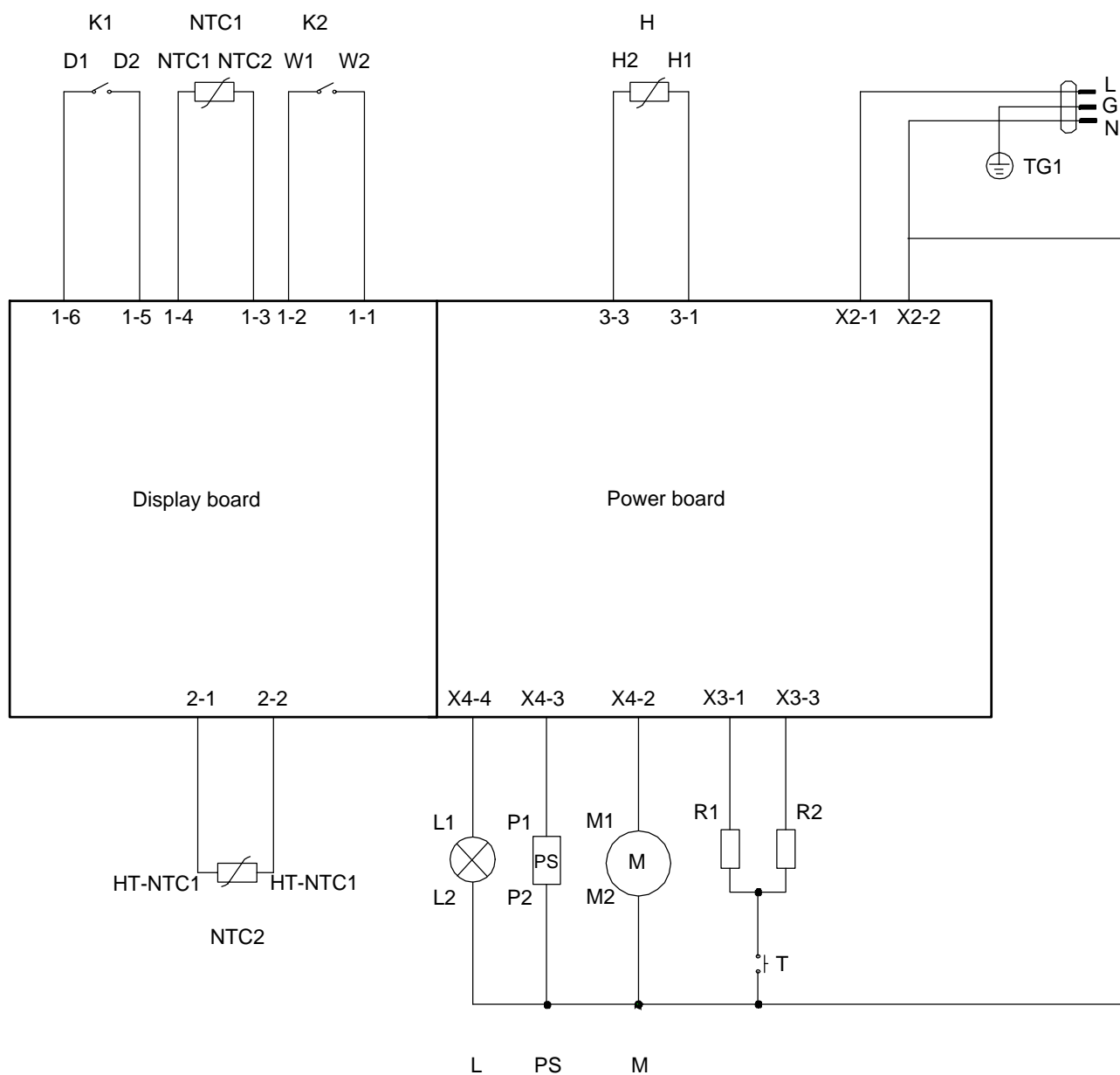


Disassemble the front air channel.



The belt can be disassembled.

Chapter 7. Schematic Diagram

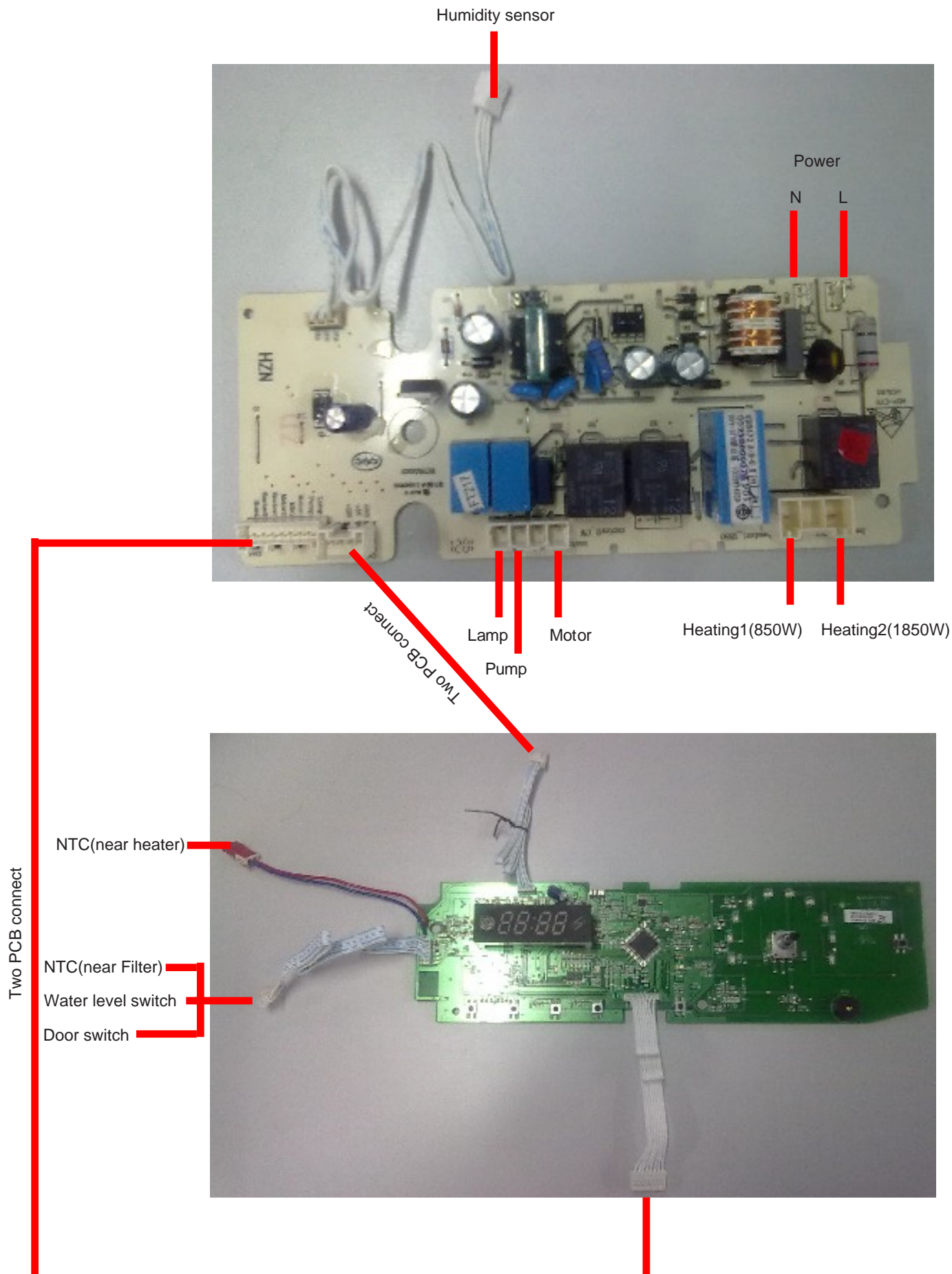


R1: Heating1
R2: Heating2
L: Lamp
PCB1, PCB2: Printed circuit board

T1: Thermal cut-out
NTC1: Temperature sensor (near filter)
NTC2: Temperature sensor (near heater)
PS: Drainage pump

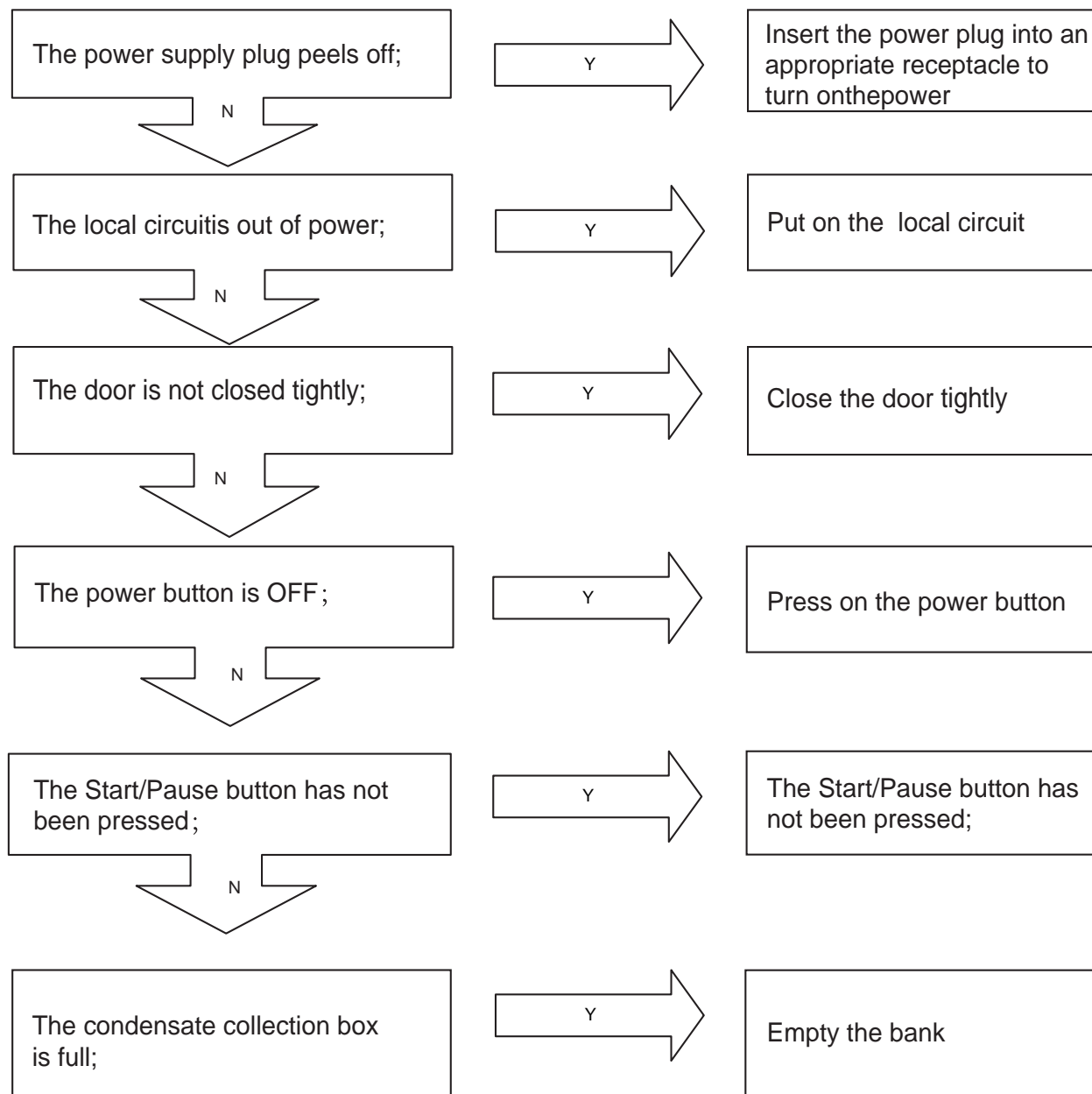
K1: Door switch
K2: Water level switch
H: Humidity sensor
M: Motor

Chapter 8. Circuit Interface Diagram

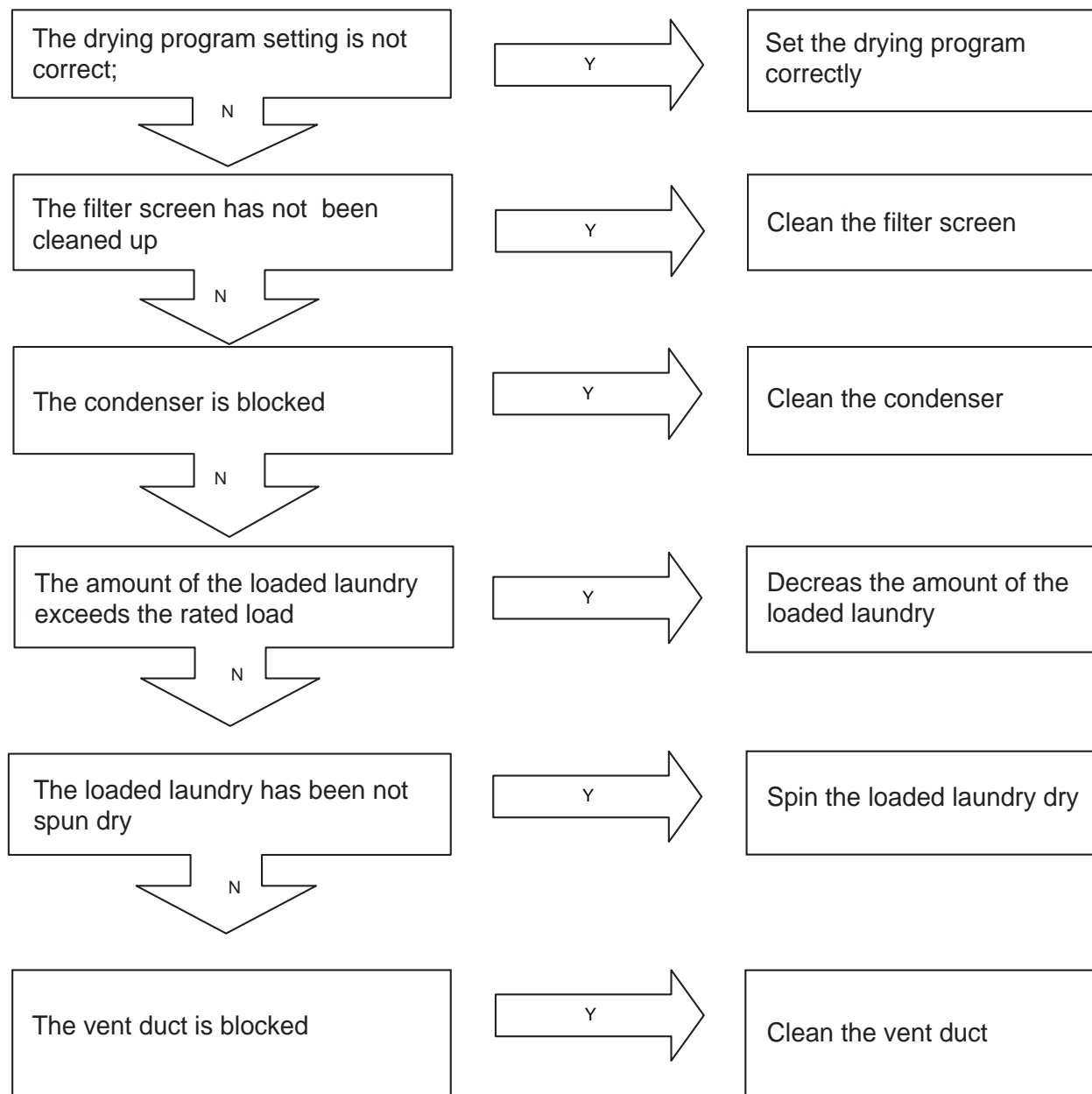


Chapter 9. Fault Detection

9-1 The dryer does not start



9-2 The drying result is not good and the drying time is too long.



9-3 Code:F2

Error message:The drain pump is failed.

Check if the tank is full with water;

N

Check if there are some lints around the floater ;

N

Check if the floater switch is failed ;

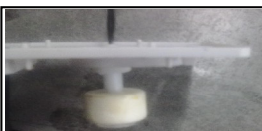
N

Check if the pump is failed ;



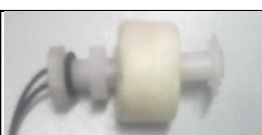
Y

Empty the tank and restart the dryer.



Y

Clear the lints;



Y

Replace a new floater switch.



Y

Replace a new pump.

9-4 Code:F3

Error message:The NTC(near the filter) is short or cut out;

Check if the connector are inserted properly;

N

Check if NTC is failed ;

N

Check if the PCB is failed ;



Y

Inserte the connector properly.



Y

Replace a new NTC;



Y

Replace a new PCB.

9-5 Code:F4

Error message:Temperature of the NTC(near the filter) does not change.

Check if the filter is full with lints;

N

Check if non-self-resetting thermal cut-out is cut;

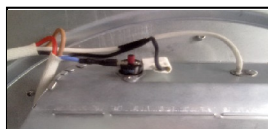
N

Check if the heater is failed ;



Y

Clean the filter.



Y

Manual operation for resetting,



Y

Replace a new heater

9-6 Code:F9

Error message:The NTC(near the heater) is short or cut out;

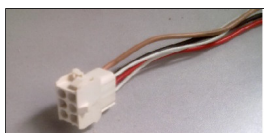
Check if the connector are inserted properly;

N

Check if NTC is failed ;

N

Check if the PCB is failed ;



Y

Inserte the connector properly.



Y

Replace a new NTC;



Y

Replace a new PCB.

9-7 Code:E6

Error message:When the filter is full,Clean filter LED will be on,the consumer need clean the filter.If the filter is not be cleaned 3 times continuous,E6 will be display.

Chapter 10. Test Programme

Order	Operation	Display and action
1	pressing the two buttons(Delay and Delicate),turn the power on;	The screen display "TEST", the test programme wil start,the LED lamp will light in turn;
2	Pressing "Delay" button	The third LED screen will dislay the state of water level switch:open is 0,close is 1; The fouth LED screen will dislay the state of door switch:open is 0,close is 1;
3	Pressing "Delicate" button	The dryer will run, the screen will display the value of the load humidity top 30 seconds; After 30 seconde,the screen wil display the value of drum temperature.
4	Pressing "Start/Pause" button	the screen will display in turn: A) "8888", only motor run ; B) "7777", no output; C) "6666", only the low heater will run 5 seconds (1800w) ; D) "5555", only the two heater will run 5 seconds (2600w) ; E) "4444", only the pump will 5 seconds F) "END"

Chapter 11. Electric Appliances Parameter

Order	Part name	Supplier	Model	Parameter	Remark
1	Motor 0024000289	Zhongshan Broad-Ocean	Y6S25 8C21	stator:29.34±8%Ω rotor: 22.15±8%Ω 2600rpm	
2	Motor Capacitor 00330506020	Various	CBB65 A-1	8μF, AC 450V, 50/60Hz, T85	
3	Heating Element 0024000291	TUTCO	/	230V/1800W/700W	
4	Door switch 0024000290	Rold	VRSR0 1AS6	16 (4) A ,250V AC, 1E4, T125	
5	Pump 0024000190	Jiangmen Hanyu	B13-6	220-240V,50Hz,13W, Cl.F	
6	Lamp 0024000213	Various	Various	240V,15W	
7	Lamp holder 0064000277	Various	E14	250V,2A,T180	
8	Water level switch 0184000001	Shanghai Junle	KSW-3	250V,2A,T180	
9	NTC (Near heater) 0024000291	EPCOS	B5751 4K	/	T= 10°C,R=96.6kΩ T= 15°C,R=76.3kΩ T= 20°C,R=60.6kΩ T= 25°C,R=48.5kΩ T= 30°C,R=39.1kΩ T= 35°C,R=31.7kΩ T= 40°C,R=25.9kΩ T= 45°C,R=21.2kΩ
10	NTC (Near filter) 0020400466	Welkin	NTSF0 103FG 005	/	T= 10°C,R=20.3kΩ T= 15°C,R=16.0kΩ T= 20°C,R=12.7kΩ T= 25°C,R=10.1kΩ T= 30°C,R= 8.2kΩ T= 35°C,R= 6.6kΩ T= 40°C,R= 5.4kΩ T= 45°C,R= 4.5kΩ

Note:These parameters and diagrams may be slightly different from the layout of dryer .

Sincere Forever

Haier Group

**Haier Industrial Park, No.1, Haier Road
266101, Qingdao, China
<http://www.haier.com>**

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