Haier SERVICE MANUAL

Order No. Ref 1507S002V1

REFRIGERATOR

MODEL: HRF328W2 HRF328S2 HRF368W2 HRF368S2



This service information is designed for experienced repair technicians only and is not designed for use by the general public. It dose not contain warnings and cautions to advice non-technical individuals of potential dangers in attempting to service a product. Product powered by electricity should by 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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Version: V1 Date: 20150718

Model: HRF328\368

2015-7-18 Issue Rev. Ref 1507S002V1

Contents

Table of Contents 2
1. General Information 3
1-1. General guideline ····································
1-2. Insurance Test····································
1-3. How to read this Service Manual 4
2. Product Feature 5
2-1. Specifications5
2-2. External views ······ 9
3. Installation, adjustments and maintenance
3-1. Unpacking 9
3-2. Adjusting ······ 9
3-3. Electrical Requirement ······9
3-4. Operating 10
3-5. Cleaning ······11
4. Disassembly 12
4-1. Door assembly (Door, hinge, hinge cover) 12
4-2. Control panel assembly (Panel, cover board, knob, indicator light) 12
5. Control and display system 13
5-1. Control and display panel 13
5-2. Start-up 13
5-3. Error code display and sensor positions
5-4 Self Test 16
5-5. Control principle of electronic component 16
6. System flow principle 17
6-1. Refrigeration flow chart ······ 17
6-2. Refrigeration flow scenograph
7. Circuit diagram 19
7-1. Brief principle diagram 19
7-2. Wiring diagram ······ 19
7-3. Power Board PCB connections21
8. Trouble shooting22
8-1. Common problems and solutions 22
8-2.Examination and Solutions for Other Problems22
8-3. Abnormal phenomena ······24

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

Chapter 1 General Information

1-1. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been 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. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

- 1) Leakage Current Cold Check
- 2) Leakage Current Hot Check
- 3) Prevention of Electro Static Discharge (ESD) to Electrostatic Sensitive

1-2. Insurance Test

- 1. Check if there is any leak of current.
- 2. Cut out the power supply before the repair to avoid an electrical shock hazard.
- 3. In the case of a live-line test, insulating gloves should be worn to avoid potential electrical shock.
- 4. Confirm the rated current, voltage and capacity before testing with any kinds of instruments.
- 5. Watch if the upper door is open when you check something at a lower position.
- 6. Take out every part in the cabinet before moving the machine, especially things like panels (e.g. glass shelf).
- 7. Please wear intact cotton gloves when repair any parts of the evaporator, so that scratches by the sharp fins can be avoided.
- 8. If there is a breakdown with the refrigeration system, please surrender the machine to the service center, else the leaked refrigerant may pollute the atmosphere.
- 9. The refrigerator use AC of 220V with a frequency of 50Hz.
- A big fluctuation of voltage (exceed the range 187~242V) may cause a start failure of the refrigerator, a burn-out of the control panel and compressor, or an abnormal sound from the compressor in operation.
- 11. Take care not to damage the supply line. Don't yank at the line; pull the plug out gently from the receptacle. Don't press the line under the cabinet or step on it. Take care not to roll on or damage the

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

supply line when moves the machine from the wall.

- 12. In the case of leakage of inflammable gases like carbon monoxide, open the door and windows. Don't pull out or insert the plugs of the appliance.
- 13. Don't touch the refrigeration surface of the freezing compartment when the refrigerator is in operation, especially when your hand is wet, else you may be glued to the surface.
- 14. Pull out the plug of power supply during clearance or power outage. Wait at least five minutes to resume the power supply in order to prevent damage to the compressor caused by continuous restart.



The illustration and photos used in this Manual may not base on the final design of products, which may differ from your products in some way.

1-3. How to read this Service Manual

1-3-1. Using Icons

The meaning of each icon is described in the table below:





A "note" provides information that is not indispensable.



A "caution" is used when there is danger, that through incorrect manipulation, may damage equipment, loose data, get an unexpected result or has to restart (part of) a procedure.



A "warning" is used when there is danger of personal injury.



A "reference" guides us to other places in this binder or in this manual, where we will find additional information on a specific topic.

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

Chapter 2 Product Feature

2-1. SPECIFICATIONS

	Type Model		HR-335WSAA	HR-385WSAA
	Sell points			
1.	Product identification			
	Description of appliance		Fridge	Fridge
	Family type		HRF328W2	HRF368W2
	Type of appliance (FS = free standing, BI = built-in)		FS	FS
	Supplier own brand		Haier	Haier
	Suppliers bar code	EAN	6930265351613	6930265351620
2.	Basic features			
	Energy efficiency class		A++	A++
	Climate class (SN=10~32°C, N=16~32°C, ST=18~38°C, T=18~43°C)		SN-T	SN-T
	Freezer compartment star rating		1	1
	Gross capacity	I	331	361
	Total net capacity	I	328	358
	Net capacity refrigerator compartment	I	328	358
	Net capacity freezer compartment (total)	I	0	0
	Net capacity adjustable temperature drawer	I	0	0
	Freezing capacity / 24 hours	kg/24 h	1	1
	Energy consumption/year	kWh/ye ar	111	130
	Energy consumption (EN153) per 24 h	kWh/24 h	0.30	0.357
	Max noise level	dB(A)	42	42
	Max storage time by power failure Freezer	h	1	I
	Foaming components (R141b / R134a / C-P)	PU/	C-P	C-P
	Approvals (VDE / TÜV / IMQ / NF / ÖVE / DEMKO etc.)		ΤÜV	ΤÜV
	Certifications (CE / ISO 9001/2 / LGA)		GS/CE	GS/CE
3.	Key features			

Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1

_						
		Cooling system: Compressor / $A = Absorption$)	(K =		К	К
		Number of compressor(s)		n°	1	1
		Defrosting Fridge / Freezer (M=manual A=automatic)			-	-
		Control system	(F =		F	F
		Electronic / M = Mechanical)	(Ľ		_	_
		Fuzzy logic			-	-
		NO FROST			-	-
		(Fridge/Freezer)				
		Ventilated			-	-
		(Fridge only)				
		Antibacteria system			-	-
	4.	Control panel				
		External control display			●(on the	●(on the
					door,electrical)	door,electrical)
		Temperature range (from>to)		°C	2~8	2~8
		Super Cooling (Fridge)			•	•
		Super Freezing			1	1
		(Freezer)				
		Stand-by function			•	•
		(Holidays)				
		ECO function			-	-
		Over temperature alarm lamp / LCD-LED / Acoustic)	Red		Acoustic	Acoustic
		Adjustable thermostat			•	•
		Control lamps			-	-
		(Green / yellow / red)			(with set lock	(with set lock
					function,with	function,with
					power on/off	power on/off
					function)	function)
	5.	Basics datas				
		Unit dimensions with-out handle (<i>H</i> / <i>W</i> / <i>D</i>)		cm	167.5/59.5/66	187/59.5/66
		Depth with open door		cm	118	118
		Net weight		kg	64.0	74.0
		Voltage / frequency		V/Hz	220-240~/50	220-240~/50
		Input power / mains fuse (intensity)		W /A	80/0.6	80/0.6
	6.	Aesthetics				
		Door profile			R	R
		(F=flat/R=rounded/S=streamline)				

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

	Handle		External(assisst	External(assisst
	(External/Metal/Integrated)		ant)	ant)
	Available colours		White	White
7.	Interior description			
	Fridge compartment:			
	Shelves:			
	Number (Total / adjustable)	n° / n°	4/4	4/4
	Type (gr=grill / g=glass / p=plastic)		g	g
	Colour (w=white / lb=light blue /		t	t
	g=green / t=transpar.)			
	Bottle holder / bottle(s)	n° / n°	1/5	1/5
	Chiller compartment / drawer		0	1
	Crisper(s):			
	Number / colour t = transparent, w = white	n° / -	1/t	1/t
	Shelf (on salad crisper)		р	р
	(g-glass / p-plastic)			
	Storago rack(c)	n° / n°	Λ	1
	(Total)		-	-
	Butter and cheese compartment		0	0
	Type of rack(s) g=glass /		р	р
	p=plastic			
	Inside colour		White	White
	Reversible door		•	•
	Lock		-	-
	Self closure mechanism		-	-
	Freezer compartment:			
	Drawer(s)	n°	1	1
	Basket(s)	n°	1	Ι
	Flap(s)	n°	1	Ι
	Ice tray	n°	1	Ι
	Adjustable temperature drawer	n°	1	Ι
	Colour of drawer (w=white, t=transp., g=green, gr=gray)		1	1
	Shelf number / p=plastic, g=glass ,W=wire	n° / n°	1	1
	Door rack(s) number / p=plastic, g=glass		1	1

Model: HRF328\368

 Issue
 2015-7-18

 Rev.
 Ref 1507S002V1

8.	Accessories			
	Defrost water outlet		•	•
	Interior light		•	•
	Special ice maker		1	1
	Ice cube tray(s)	n°	1	1
	Eggs tray(s) / Total number of eggs		0	0
	Adjustable feet	n° / n°	2/0	2/0
	(front / rear)			
	Castors	n° / n°	0/2	0/2
	(front / rear)			
	Wall spacer grid or distance holder		-	-
	Flush back		-	-
	Lenght of cable/incl. plug	cm	175/180	175/180
	Condenser		External	External
9.	Packing dimensions & loadability			
	Packing dimensions	cm	172.6/65/73.5	192/65/73.5
	(H/W/D)			
	Gross weight	kg	71.0	82.0
	40 ' Container load	pcs	54	54
	40 ' HC Container load	pcs	72	72
10	Logistic / recycling information			
	Packing weight	kg	71.0	82.0
	Kind of coolant (R134a/R600a)		R600a/40g	R600a/41g
	Packing materials / Recycling symbols	RS	RS	RS
	(RS)			
	Carton	gr	1	2
	Polystyrene (06)	gr	0	0
	Polyethylene foil (04)	gr	0	0
	Wood	kg	0	0
11	Service			
	Users instruction (languages)		9 language including italian	9 language including italian

Model: HRF328\368

2. External views



- 1 fruit and vegetable box
- 2 chiller (only available for model 385WSAA)
- 3 shelf
- 4 shelf with folding bottle rack
- 5 folding shelf
- 6 bottle balcony
- 7 rack

Issue	2015-7-18
Rev.	Ref 1507S002V1

Chapter 3 Installation, adjustments and maintenance

3-1. Unpacking

1. Remove all packaging material; this includes the foam base and all adhesive tape holding the refrigerator accessories inside and outside.

2. Inspect and remove any remains of packing, tape or printed materials before powering on the refrigerator.

3-2. Adjusting

1. The refrigerator is designed for freestanding installation only. It should not be recessed or built-in.

2. Place the refrigerator on a floor strong enough to support it fully loaded.

3. When moving refrigerator, never tilt it more than a 45-degree angle. This could damage the compressor and the sealed system.

4. If refrigerator is tilted let it stand in an upright position for at least 24 hours prior to plugging. This is to allow the refrigerant to settle.

5. Proper Air Circulation

To assure the refrigerator works at the maximum efficiency it was designed for, you should install it in a location where there is proper air circulation, Plumbing and electrical connections.

The following are recommended clearances around the refrigerator:

Sides.....2"(50mm)

Top.2"(50mm)

Back.....2"(50mm)

Do not over fill refrigerator for proper internal air circulation.

3-3. Electrical Requirement

Make sure there is a suitable power Outlet with proper grounding to power the refrigerator.

Avoid the use of cutting off the third grounding, this is a dangerous practice since it provides no effective grounding for the refrigerator and may result in shock hazard.

3-4. Operating

See 4-1. Control and display panel

 Issue
 2015-7-18

 Rev.
 Ref 1507S002V1

3-5. Cleaning

Outside. Protect the paint finish. The finish on the outside of the refrigerator is a high quality baked-on paint finish. With proper care, it will stay new-looking and rust-free for years. Apply a coat of appliance polish wax when the refrigerator is new and then at least twice a year. Appliance polish wax also works well to remove tape residue from refrigerator surfaces.

Keep the finish clean. Wipe with a clean cloth lightly dampened with appliance polish wax or mild liquid dishwashing detergent. Dry and polish with a clean, soft cloth. Do not wipe the refrigerator with a soiled dishwashing cloth or wet towel. Do not use scouring pads, powdered cleaners, bleach, or cleaners containing bleach.

Inside. Clean the inside of the refrigerator at least once a year. We recommend that the refrigerator be unplugged before cleaning. If this is not practical, wring excess moisture out of sponge or cloth when cleaning in the vicinity of switches, lights or controls.

An open box of baking soda in the refrigerator will absorb stale refrigerator odors. Change the box ever y three months.

Care should be taken in moving the refrigerator away from the wall. All types of floor coverings can be damaged particularly cushioned coverings and those with embossed surfaces.

Model: HRF328\368

Chapter 4 Disassembly

4-1. Door assembly (Door, hinge, hinge cover)







Remove plastic cover of the upper hinge.

Remove upper door hinge (you need screwdriver) and disconnect cables.

Open the door and remove it carefully from the lower hinge.

4-2. Control panel assembly





2015-7-18 Issue Rev. Ref 1507S002V1

Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1

5. Control and display system

5-1. Control and display panel



- a Digital display of temperature
- b Holiday function icon
- c Alarm indicator icon
- d Super Cooling icon
- e Child lock icon
- A Touch key for temperature setting
- B Touch key for function selection(holiday/super cooling/alarm/child lock)
- C OK button/Power button

5-2. Start-up

Start-up

1. Insert the plug in the socket to switch on the refrigerator.

2. Display will show you the actual temperature. When Display show "H", it means that the ambient temperature is too high; When Display show "L", it means that the ambient temperature is too low.

Model: HRF328\368

 Issue
 2015-7-18

 Rev.
 Ref 1507S002V1

3. The alarm LED **c** and acoustic signal will indicate that the temperature inside refrigerator is not sufficiently cold for storage of foodstuffs. Pressing the key **B** to choose the "Alarm" function then press the key **C**, you can disable acoustic signal, but warning light will be on till refrigerator will reach the suitful temperature.

When alarm stops and refrigerator will be ready for food storage

4. Check the Control Panel:

Touch any button on the display screen and check whether the temperature area and the selected icon can be lightened.

5. Set temperature:

When the screen is unlocked, to set temperature, push the key **A**. During temperature setting, two numbers on display show the point set in flashing mode. Again pressing on this button modify the set-point in cycling and decreasing mode from 08° C to 02° C.

If no action is done on the OK button within 5 sec or push the key **C**, the set point will be stored automatically.

After the temperature is set, the two numbers on display come back to the refrigerator temperature visualization.

Manufacturer setting of temperature is 05°C.

6. Power function:

Press the key **C** for 5s to turn off the power of the refrigerator; do it again for 5s the power will be turned on.

Refrigerator functions

Super Cool: Switch on the Super cooling function if larger quantity of food should be stored (for example after the purchase) or if you want to cool drinks quickly. The Super cooling function accelerates the cooling of fresh food and protects the goods already stored from undesirable warming. The factory setting temperature is + 2 °C.

For activating the Super Cooling function, press key **B** repeatedly until Super cooling function icon **d** illuminates, Press key **C** to confirm.

You can deactivate the super cooling function pressing once again the key **B** and the green light **d** on, then press Key **C** to switch off, otherwise the function will disengage automatically when the temperature in the appliance achieves the one set for switch off. When the temperature in the appliance storage compartment is too low, the super-cooling function may not work. That means the temperature in the appliance storage compartment is too low and the super-cooling function doesn't need to be activated.

Holiday: This function sets the refrigerator tem-perature permanently to 17°C.

So you have the possibility to let the empty appliance closed without causing a smell or mold during a long absence (E.g. holiday).

Caution! While the holiday function is used no goods may be stored. The temperature from + 17 $^{\circ}$ C is too warm for food.

For activating the Holiday function ,press key **B** repeatedly until Holiday function icon **b** illuminates Press key **C** to confirm. You can deactivate the Holiday function pressing once again the key **B**, the green light **b** on and then press key **C** to confirm..

Please note that Holiday function can't be activated when Super Cooling function is ON, and it can be deactivated activating Super Cooling function.

Model: HRF328\368

Child Lock: When the screen is unlocked, press the key **B** to select the Child Lock, and then press the key **C**, the function will be on.

Unlock: Touch any key on the screen, the display screen and the child lock button will be lightened; press the key **B**, the child lock icon will flicker; press the key **C**, the screen will be unlocked. When the screen is locked, the key **A** is not effective; function selection is not available when pressing the key **B**.

Alarm signals

Temperature Alarm: If temperature inside refrigerator is over 15°C than the setting temperature, an intermittent buzzer and the flashing alarm led **c** will indicate the temperature alarm. Display will show you code "**HH**". If temperature inside refrigerator is lower than -2°C, an intermittent buzzer and the flashing alarm led **c** will indicate the temperature alarm. Display will show you code "**LL**". After the screen is unlocked, press the key **B** to choose the "Alarm" function, then press the key **C**, it's possible to stop acoustic sign, but alarm condition will continue till refrigerator will reach the suitful temperature.

Door Alarm: If the door is left open for 120 seconds, the anomalous condition will be notified by intermittent buzzer. The alarm condition will stop by closing the door or by pressing key **B** to select Alarm function and pressing the key **C**, but in this second case alarm condition will restart after 120 seconds if door is still open. If the door is open for consecutive 7 minutes, the inner light will be off and there will be continuous alarm.

5-3 Error code display and sensor positions

Malfunction Description	Display	Display position	Malfunction analysis or Sensor location
Malfunction of the refrigerator temperature sensor	F3	Display panel	The refrigerator temperature sensor is located in the right-side of the storage space
Malfunction of the defrosting temperature sensor	F1	Display panel	The defrosting temperature sensor is located on the evaporator, foamed in the refrigerator box
Malfunction of communication between the display panel and the power board	E0	Display panel	1

5-3-1 Error code display and description

Preference: E0>F3>F1>HH>LL>temperature display

5-3-2 Sensor location

the refrigerator temperature sensor

5-3-3.Test step of error code

Show of error code: In the screen lock state, hold down the key **C**, press key **A** four times, the display panel will show error code(**F3\F1**),after 20 seconds,the display panel will show the former temperature again. If the display panel shows "00" (harf of 0), it indicated there is no malfunction.

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

Test method of error code F3 (R SNR defective)

1. Check whether the connector CN1 of power board PCB is installed in position.

2. Disconnect connector, test the resistance between the white and white wires of CN1 connector, the normal resistance should be 1-6K ohm. If the resistance is infinite or 0, it means the internal circuit is open or short circuit.

3.If above test is abnormal, open the sensor cover, disconnect the sensor, test if sensor is failure, replace the sensor if the sensor is defective, re-wiring, sealed and then put it back.

Test method of error code F1 (Defrost SNR defective)

1. Check whether the connector CN1 of power board PCB is installed in position;

2. Disconnect connector, test the resistance between black and black wires of CN1 connector, normal resistance should be about 1 ~ 6K ohms, if the resistance is infinite or 0, it indicates sensor failure.

Note: Although the defrost sensor is fault, but it will not affect the performance of refrigerator. Only the defrosting effect is a bit poor.

Test method of error code E0 (Communications defective)

- 1. Demount the top hinge cover of refrigerator, check if the connector is in good condition.
- 2. Demount display board, check if display panel connector is in good condition
- 3. Check whether the connector CN2 of main control PCB is installed position
- 4. Test if each wires of CN2 connecting to display panel are conduction.

5-4. Self Test

Test mode T1:

When the display panel is locked, Press the key "A" \sim "B" and "C" at the same time for 3 seconds, the refrigerator enter to TEST mode and display "T1" on display panel.

Under the T1 mode, the compressor and fan will be working forcibly until manual exiting. Manual exiting:

Under T1 mode, press the key "A" 、 "B" and "C" at the same time for 3 seconds (the display panel is locked), the refrigerator will exit TEST mode, the former temperature will resume on the display panel.

5-5.Control principle of electronic component

5-5-1 Control Principle of the Fan

The cooling fan is controlled by the control PCB according to the following conditions.

1. When the compressor begins to run, the refrigerator fan will run after 60s . When the compressor stops,

the fan will stop after 60s

2. When the door is opened, the refrigerator fan will stop working and when the door closed, the fan will run.

3. When the refrigerator is defrosting, the fan will stop working.

4. When the refrigerator is powered at first time, the compressor and fan will run at the same time.

5-5-2 Defrosting Control Principle

1. A defrosting cycle will be started when the compressor is working for 12 hours continuously. It will stop defrosting when the defrosting sensor detects the temperature is over 6°C or the

Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1

defrosting time is more thant 30 mins.

2. The compressor and fan motor stop working during defrosting. There are no heater.

3. If the defrosting sensor is malfunction (short-circuit or open-circuit), the display panel will display error code"F1" after "**Show of error code**" operation.

Chapter 6 System flow principle

6-1. Refrigeration flow chart



The refrigeration system of direct cooling single-system cooler belongs to the category of a single-temperature and single-control refrigerating system with one evaporators and is controlled by a single temperature control.

Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1

6-2. Refrigeration flow scenograph





Model: HRF328\368

Chapter 7 Circuit diagram

7-1. Brief principle diagram



A. POWER PLUG B. COOL FAN MOTOR C. DISPLAY PANEL D. POWER PANEL E. REFRIGERATOR DOOR SWITCH SNR1. REFRIGERATOR SENSOR SNR2. DEFROST SENSOR F. REFRIGERATOR LAMP G. COMPRESSOR H. OVERLOAD I. PTC J. RUNNING CAP

7-2. Wiring diagram and main control board assembly



19

Model: HRF328\368

2015-7-18 Issue

Rev. Ref 1507S002V1

REFERENCE							
Compatibility Code Change Reason Co							nange Reason Code
Parts Set Explanation					1	To improve productivity	
	Original		Early	Original or new parts	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts		New part supplier
Α	New		Late	Use original parts un			Change dimension or material
Р	Original	\rightarrow	Early	Original parts may be	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible. Then stock new parts.		Parts added
Р	New	$ \land $	Late	Use original parts wh			Parts deleted
c	Original		Early	New parts only may be used in early or late production sets. Stock new parts		6	Performance improvement
Ŭ	New		Late			7	Epidemic fault solution
	Original		Early	Original parts only may be used in early production sets New parts may be used in late production sets only. Stock original and new parts		8	Comply whit ROHS
U	New		Late				
Se	rvice Bull	letin No				No	otice
(e.c 1AS no date bull	(e.g.: ASSBCDW06072401B): 1AS:prefix after sales 2,SB: service bulletin. 3.C: release no4.DW: product code dish washer. 5. 60724:issue date: 2006-July-24 th . 6.01: intraday S/N. 7.B: with service bulletin procedure; A: without service bulletin procedure.				Product Code: (RF: refrigerator; FZ: freezer; AC: air conditioner; CC: commercial air conditioner; TV: television; TL: top load washing machine; FL: front load washing machine; MW: microwave oven; DW: dish washer);	1. F rela	Please file this sheet with ative technical documents

7-2-2 Main control board assembly

1.1 0071800082-Main control board	
Installation:	
The power supply board installation direction as	
shown above, the connector at the bottom.	
1.2. 0070205852-Main control board box cover	
Installation: The box bottom is installed first, then fix with 2 screws upside	

20

Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1

1.3 Location of main control board The board is moved to the upside of the body. As show in the red circle.

7-3. Power Board PCB connections

CN1 is the connector for the two sensors and the door switch. Its pins from the right to left are: 1-2: Null

3-4: Connected to defrosting temperature sensor. We can test the sensor with these two black wires. Its resistance in normal operation is between 10.9 and 25.19k Ω (correspond to -10°C \sim -25°C). The resistance at normal temperature is between 2.49 and 1.61k Ω (correspond to 20°C \sim 30°C) 5-6: Connected to the refrigerator temperature sensor. We can test the sensor with these two white wires. Resistance test is the same as the defrosting temperature sensor.

7-9:Null

10:Door switch signal. When the door is closed, GND and the signal wires are transform to conduction. When the door is open, the wires are disconnected.

11: +12V

12: GND

CN2 is the connector for the LED lamp and display panel. Its pins from the left to right are

1-2: Connected to LED lamp.1 connects cathode and 2 connects anode

3-4: Null

5: OUT

6: IN

7: +5V

8: GND

CN3 is the connector for fan motor. Its pins from low to high are

1-8: Null

9: GND of the fan

10: +12V of the fan

CN4 is the connector for the power cables. Its pins from low to high are

1: Neutral line

- 3: Live line
- 5: Compressor

7-11: Null

Model: HRF328\368

Chapter 8 Trouble shooting

8-1. Common problems and solutions

8-1-1 Symptom: the buzzer beeps to alarm

1) Test across pin 10 and pin 12 of CN1 on the main control panel. The 2 pins should be switched to conduction when the door is closed and disconnected when the door is open.

2) If pin 10 and pin 12 of CN1 are disconnected in both cases, please remove the front decoration strip to see if the door switch is still in the slot and direction of installation.

8-1-2 Symptom: neither displaying nor starting when powering on Check:

1) Check if the power supply is connected properly.

2) Remove the main control panel and examine its back side carefully to see if there are solder skips or open soldering;

3) Check if the connector of the refrigerator hinge is connected properly.

4) Verify the display panel to see if it is in OFF state. If so, please press key C on the display panel for 5 seconds to turn it on.

Solutions:

1) If there is dry soldering or open soldering on the control panel, change it with an electrical iron.

2) If any connector is not connected properly, replug it firmly.

3) Press and hold the button on the display panel for 5s to turn the refrigerator on.

8-1-4 Symptom: poor cooling effect accompanied by loud noise

Check:

1) Check if there is obvious abnormal sound.

Set the control panel on "T1" mode (refrer 4-3), and check if the cooling fan is operating normally. 2) If the cooling fan does not run, remove it and check if its connector and the cabinet connector are connected properly. Test if there is approximately 12VDC voltage across pin 9 and pin10 of CN3. If there is no 12VDC voltage, the main control panel can generally be determined to be malfunctioning. If there is 12VDC voltage, the refrigerator fan can generally be determined to be malfunctioning.

3) If the fan rotates abnormally, the fan is malfunctioning.

Solutions:

- (1) If there is apparent abnormal sound in the compartment, check if the fan is firmly fixed.
 - If any of these problems is found, please remove the fan and reinstall it properly.
- (2) If the fan connector is not installed properly, disconnect the terminals and reinstall the connector.
- (3) If the main control panel or the fan is malfunctioning, replace it

8-2 Examination and Solutions for Other Problems

Problems	Causes	Solutions	
Water/moisture/frost in the freezer			
Moisture accumulates on the freezer inner walls	 Hot and moist climate. The door is not closed tightly The door is opened too frequently or for too long time 	 Accumulation of frost and moisture accelerate in such climate. Make sure the freezer is level and there is no food or container interfering with the door Do not open the door so frequently 	
Water/moisture/frost on outside surface of the freezer			



Issue 2015-7-18 Rev. Ref 1507S002V1

Model: HRF328\368

 Issue
 2015-7-18

 Rev.
 Ref 1507S002V1

Moisture accumulates on the freezer's outside surface or between two doors Freezer operation	 Damp climate The freezer door is not closed tightly. This causes mixing of the cold air in the freezer with the warm air outside it 	 It is normal in damp climate. The moisture will decrease when the humidity drops. Make sure the freezer is level and there is no food or container interfering with the door
The compressor does not work The freezer runs frequently or runs for too long period	 The freezer is in defrosting cycle. The freezer is not plugged into a power outlet. The freezer is in OFF state. The indoor or outdoor temperature is high The freezer has been powered off for a period of time. The door is opened too frequently or for long periods. The temperature setting for the freezer storage compartment is too low The door gasket is dirty, worn, cracked or mismatched. The condenser is dirty. 	 It is normal for an automatic defrosting freezer. Verify the plug is plugged in the socket firmly. Press the "Power" button for 3 second or more to restart the freezer or turn the knob from OFF to temperature selection position. In this case, it is normal for the freezer to run longer. Normally, it takes 8 to 12 hours for the freezer to totally cool down. Warm air enters the freezer and causes it to start frequently. Please do not open the door so frequently. Make sure the freezer is level place and there is no food or container interfering with the door. Set the temperature higher until satisfactory freezer temperature is obtained. It takes 24 hours for the freezer to become stable. Clean or replace the door gasket. Leakage gap of door gasket can cause longer running time of the freezer in order to meint in designation.
		Clean the condenser.
Too high temperature		1
Too high temperature in freezer	 The door is opened too frequently or for too long periods of time Temperature is set too high The door is not closed tightly The condenser is dirty 	 Warm air will enter the freezer whenever the door is opened. Try to open the door as infrequently as possible. Reset the temperature. Make sure the freezer is on a level surface and there is no food or container interfering with the door. Clean the condenser.
Bad odors in the freezer		
The inside of the freezer is dirty	 The inside of the freezer needs cleaning Food with strong odor is stored in the freezer 	Clean the internal of the freezerWrap the food tightly.
If you hear		
Beeps	The temperature in the freezer storage compartment is too high	 Close the door or silence the alarm manually The alarm is normal when it is first started due to relatively higher temperature.
ADHOITHAI SOUND		Aujust the leet to level thereezen.

Model: HRF328\368

Issue 2015-7-18 Rev. Ref 1507S002V1

	 on a level surface The freezer touches some object around it 	 Remove objects around it. 	2
Slight sound similar to that of flowing water	 It is the sound of the refrigerating system 	 Normal. 	-
Heating of cabinet	 The de-dew tube is de-dewing 	 It is a process to prevent dewing. It is a normal phenomenon. 	

8-3. Checking flow chart



Model: HRF328\368

Issue	2015-7-18
Rev.	Ref 1507S002V1



25

Model: HRF328\368



26



Model: HRF328\368

 Issue
 2015-7-18

 Rev.
 Ref 1507S002V1



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