

Service Manual

Model No: ES15V-Q1(R)

Issue	Nov. 2014
Rev.	A

Haier SERVICE MANUAL

Electrical Water Heater



Model No.

ES15V-Q1(R)

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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Haier Group

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GENERAL SAFETY

Your safety and the safety of others is extremely important.

We have provided many important safety messages in this manual and on the appliance. Always read and obey all safety messages.



This is the safety alert symbol. !
It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



You can be killed or seriously injured if you don't immediately follow instructions.



You can be killed or seriously injured if you don't follow instructions.



ELECTRICAL SHOCK HAZARD

Disconnect power before servicing.

Replace all panels before operating.

Failure to do so can result in death or electrical shock.



ELECTRICAL SHOCK HAZARD

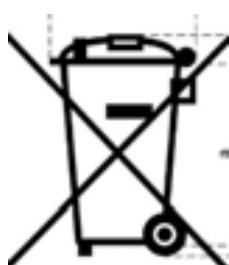
Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.



Correct Disposal of this product :

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased.

1. Product Information

1.1 Features

- Safety :
High-quality heat proof stainless steel electric heating element, over-temperature protection; overpressure protection of tank; safe and reliable.
“Safe Care” patented design together with the function of monitoring and displaying of live ground wire has become a real safeguard for family safety.
- Durability : All plastic shell, beautiful. Enamel tank, more reliable quality, long service life
- Multi points water supply
- Over-temperature protector automatically cuts off power in excess temperature situations
- Over-pressure protection

1.2 Model Identification

E S 15 V- Q1 (R)

1 2 3 4 5 6

1: E-Electrical water heater
4: V-Vertical installation

2: S-Storage water heater.
5: Q1- Product series

3: 15-Rated capacity
6:R-The code for special area

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1.3 Dimension



Model	Product dimensions W * H * D(mm)	Packing dimensions W * H * D(mm)	Net weight (Kg)	Gross weight (Kg)
ES10V-Q2(R)	327*402*331	389*465*394	9	10

Note: the dimension allowance is $\pm 10\%$.

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1.4 Specifications

Model No.	ES15V-Q1(R)
Rated voltage (V)	AC 220-240
Rated frequency (Hz)	50
Rated temperature ()	75
Rated Power (W)	2000
Capacity (L)	15
Rated pressure (MPa)	0.80
Installation method	Vertical
Control method	Mechanical
Tap water pressure	0.05MPa ~ 0.75MPa
Waterproof grade	IPX4

Component	Illustration
HEATING ELEMENT	
Rated voltage (V)	230
Rated frequency (Hz)	50
Resistance (Ω)	24.2
Rated Power (W)	2000
HIGH TEMPERATURE LIMITER	
Rated voltage (V)	250
Rated current (A)	15/16
Rated frequency (Hz)	50/60
Thermal protection ()	75

2. Installation

2.1 General requirements

CAUTION

if not avoided, could result in property damage

The wall for installation shall be solid and reliable which can bear more 4 times of weight of the heater with full of water.

The installation position shall be with a floor drain and can facilitate for use and maintenance. And the facilities will not be damaged nearby or downstairs even leakage of tank or conduit has been taken place.

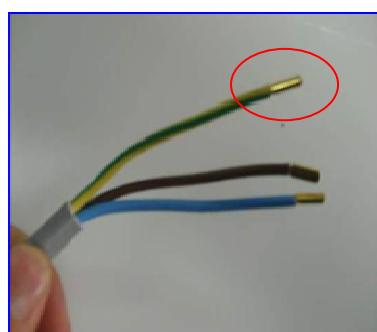
The electric water heater should be installed indoors with ambient temperature above 0°C.

Power supply

To ensure safety, please use a separate socket which is reliably grounded and complies with the national standard. Never use the water heater when it is not reliably grounded. Check with an electro-probe to ensure that the live wire and the neutral wire are not connected reversely.



Check that the electric wire diameter is no less than 1.5mm, the power socket is earthed well, and the voltage of power is between 220V to 240V.



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Cold water supply

It is important to ensure that the cold water main is capable of supplying the increased demand. A minimum pressure of approximately 0.05MPa (0.5 bar) is required for satisfactory operation.



NOTE: THE MAINS WATER SUPPLY MUST NOT EXCEED 0.75MPa (7.5 BAR).

Installing Dimension

A certain space shall be reserved during installation of the water heater with no less than 250 mm at the top and bottom, no less than 700 mm at the forward and both sides, so as to be convenient to the future maintenance. If water heater is embedded in gusset plate during installation, the right gusset plate shall be movable so that the plastic cover can be removed for convenient maintenance.

Water Piping

The pipe layout shall be centralized. The distance between the outlet and use spot of hot water shall not be too far away. If it is more than 8 m, insulation measures shall be taken for hot water pipe to reduce heat losses.

⚠ WARNING

Never connect the inlet and outlet wrong. The safety valve shall be installed in the specified location which can't change it without authority; the discharge hole shall be kept connecting with the atmosphere and never blocked.

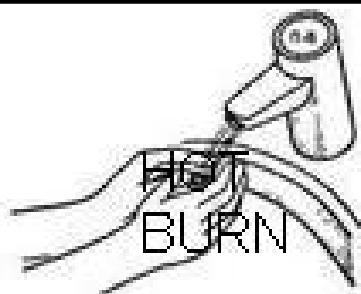
The water heater which is used for the first time must be filled up with water before you switch on the current!

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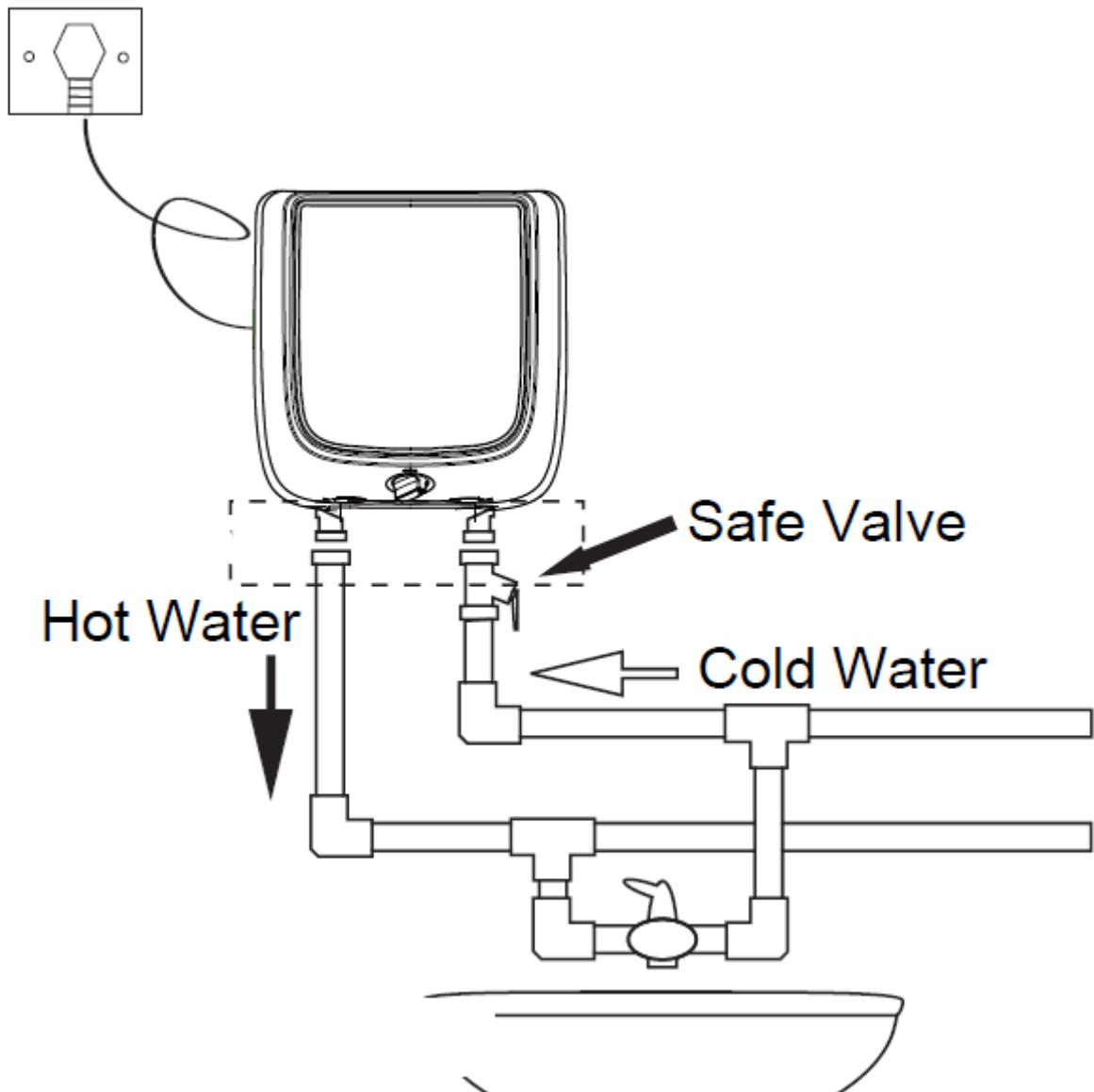
2.2 Installation Method

- The water heater must be installed by the installation professionals from our after-sale service department or its designated personnel.
- The wall-hung type installation shall be adopted for the water heater.
- As shown in Fig.1, drill four holes of 12 mm in diameter and 65 mm in depth in the wall by a percussion drill, insert and fix expansion hooks and expansion bolts into the corresponding holes, and then raise the water heater, put the wall-mount rack on the hooks and bolts; finally mount the accessories, such as relief valve, mixing valve, nozzle and hose with reference of section 2.3. It is noted that PTFE tape shall be used for sealing, so as to prevent from leakage.
- For convenient installation and disassembly of the water heater, it is recommended that G1/2 loose joint shall be respectively mounted at the proper position of inlet and outlet of water heater. Confirm the location where need to be supplied hot water, and connect the outlet, inlet and tap-water pipe of the water heater to such reserved locations. Hot water pipe shall not be kept too long so as to avoid heat loss.
- The hands could be left only after the wall-hung rack is surely hang on the hooks, so as to prevent from falling the water heater, which may cause personal injury or property damage.

! DANGER



2.3 Typical Installation



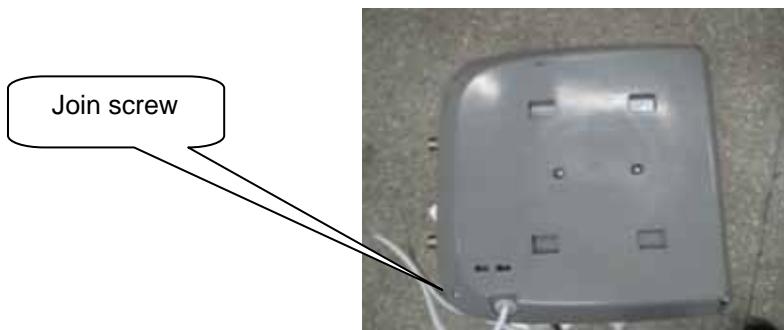
3. Servicing Procedures

3.1 Remove the shell.

Before maintenance, the shell should be removed.

Firstly, take off the red and blue rings; then remove four screws, after that the shell can be removed,

Attention to the snap joint, Don't break them.



Unfold the shell



Remove the foam cushion

3.2 Change Temperature Controller (thermostat)

Temperature control Knob



1. Remove the knob

Remove the screws

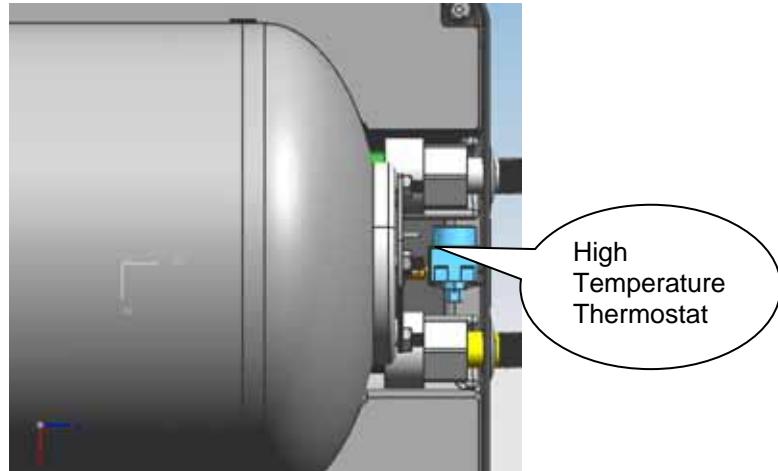


2. Remove two screws and remove temperature controller

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3. Label the wires and connections so that you can properly reconnect them later
Check and replace temperature controller

4. Remove the high temperature thermostat from the claw on back cover, and do the maintenance or replacement.

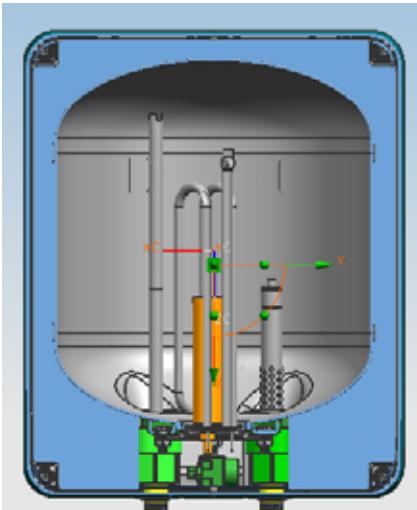


5. Put the foam cushion back and fold the shell

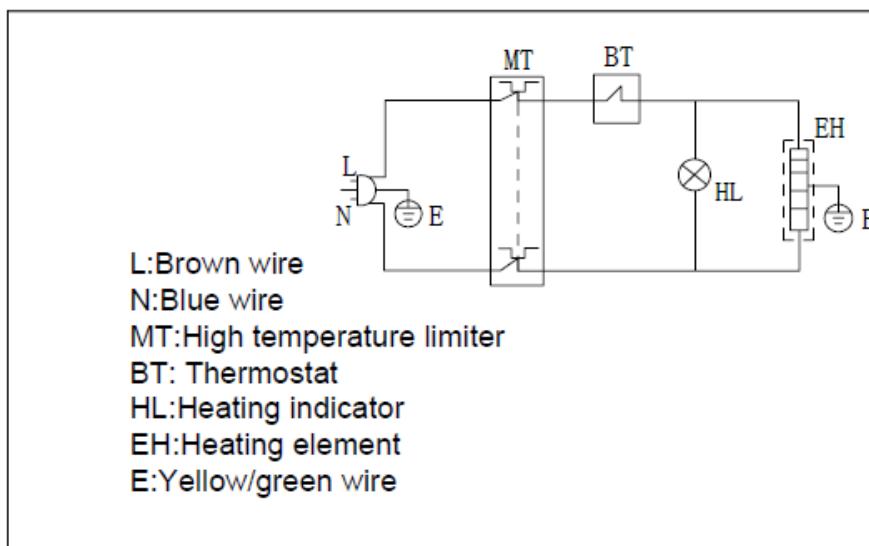
6. Put the foam cushion back and fold the shell

3.2 Change the Heating Assembly

Based on Oval water tank, please attention to the install direction of heating assembly.



4 Wiring diagram



5. Trouble shooting

Problems	Matters to be confirmed	Solutions
No flow	Whether there is no water or too low pressure in the water system?	Check it
	Whether water-use spot is blocked, or hot water valve is open or not?	Check and clean it
Outflow is	Whether hot water valve is open or	Check and open it

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cold water	not?	
	Whether water temperature is properly adjusted?	Adjust according to the instructions in the Manual.
	Whether the heating time is too short for setting temperature needed?	Adjust according to the instructions in the Manual.
	Whether components are damaged or not?	If it is confirmed that the problem is beyond above , or , please contact our maintenance department.
Temperature is lower than the setting value or outflow is hot water	Whether the present function is correctly set, and temperature is set too low or not	Adjust according to the instructions in the Manual.
	Whether tap water pressure is too large	Adjust flow rate of the mixing valve lower

Pagedown continue

Problems	Matters to be confirmed	Solutions
Outflow is not stable in amount and temperature	Whether tap water pressure is stable or not	Use it after flow rate of the mixing valve is adjusted lower or water pressure is stable
The heater can't be started or display doesn't work	Whether power supply contacts well or not	Check power socket
	Whether components are damaged or not?	If it is confirmed that the problem is beyond above, please contact our maintenance department.

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Sincere Forever

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