

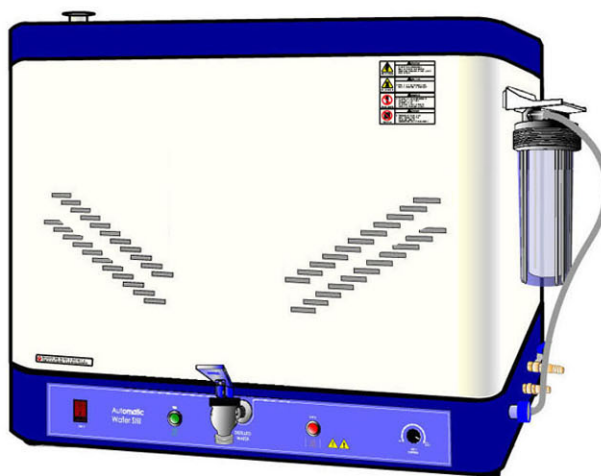
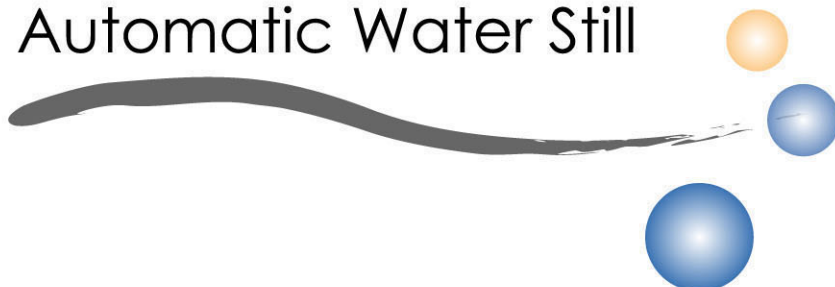
Covered Model

WD-3004, WD-3004D

WD-3008, WD-3008D

Edited date : January 2005

Automatic Water Still



Before operating this unit,
please read and underst
and this manual completely
and keep it for future
reference.

1

Features

Automatic Water Still produces and reserves distilled water automatically. With its fine design and jumbo size reservoir, this unit offers exceptional value for the user. It is very easy and safe to operate with indicators such as reservoir full indicator, distilling indicator, and with safety device such as overheat safety sensor.

2

Preparation Setup

setup

- 1) Make sure that the power voltage is connected to 220VAC, 50/60Hz single phase.
- 2) Install the unit on a firm area avoiding heat, humidity, dust, and vibration.
- 3) Install the unit on the place of good supply and drainage of water.
- 4) Install the unit horizontally on a firm and stable surface.



Warning!

All hoses should be connected properly without bending or clogging.
Use power supply with a ground wire connected.
Electric shock may occur without a ground wire.

3

Setup

setup

- 1) Connect the water supply hose to "INLET" mark to the filter and tighten the connection with the hose band.
- 2) Connect an ordinary hose or a silicone hose to the drain valve(8) and connect it to drainage. Make sure drainage is properly fulfilled. The drainage way should be lower than the valve and the drain hose should not be bended for proper drainage.
- 3) Connect an ordinary hose or a silicone hose to the boiler drain valve(9) and connect it to drainage. Make sure drainage is properly fulfilled. The drainage way should be lower than the valve and the drain hose should not be bended.



Caution!

At the first running of the unit, too much or too little water pressure may cause malfunction of the unit. Be sure to maintain proper water pressure(10 Liters/ Min)

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Safety

! Warning!


- Do not touch the power cord with wet hands. Electric shock may occur .
- Do not plug too many equipment into the same electric outlet. Overload may cause a fire.
- Make sure to connect a ground wire. Electric shock may occur without a ground wire.


! Caution!


- Before plugging into the electric outlet, make sure that the power voltage is 220VAC, 50/60Hz.
- Avoid using other electric equipment with high voltage current near this equipment.
- Do not pour water on this equipment directly. A short circuit may occur.
- Do not use acid solution, benzene, and sharp objects, to clean the equipment. It may cause changes of color or damage. Rubber and plastic parts are likely to change easily. Do not use any volatile material.
If you use any detergent, clean it with water thoroughly
- Unplug from an outlet by holding the plug. Do not unplug it by pulling on the power cord.
- The top of this unit and the steam port are very hot. Extra careful for burns.
- Be sure to clean up the water chamber every 6 months for long life use.
Using bad quality water ,for example, underground water for water supply may cause extra scales in boiler and heater. Be sure to clean up the boiler regularly. Do not scrub the boiler or heater with sharp object.
If this unit is not going to be used for a long period of time, remove the plug from an outlet.
- Damaged power cord can cause a short circuit or a fire.
- Tap water is preferable to underground water for water supply.
In case of not using tap water, please use preprocessing device.

! Caution!

Make sure the electric panel is not wet during the cleaning of the unit.

	! Caution
	<ul style="list-style-type: none"> A risk of electric shock exists. Make sure to install a ground wire. Electric shock may occur without a ground wire installation.

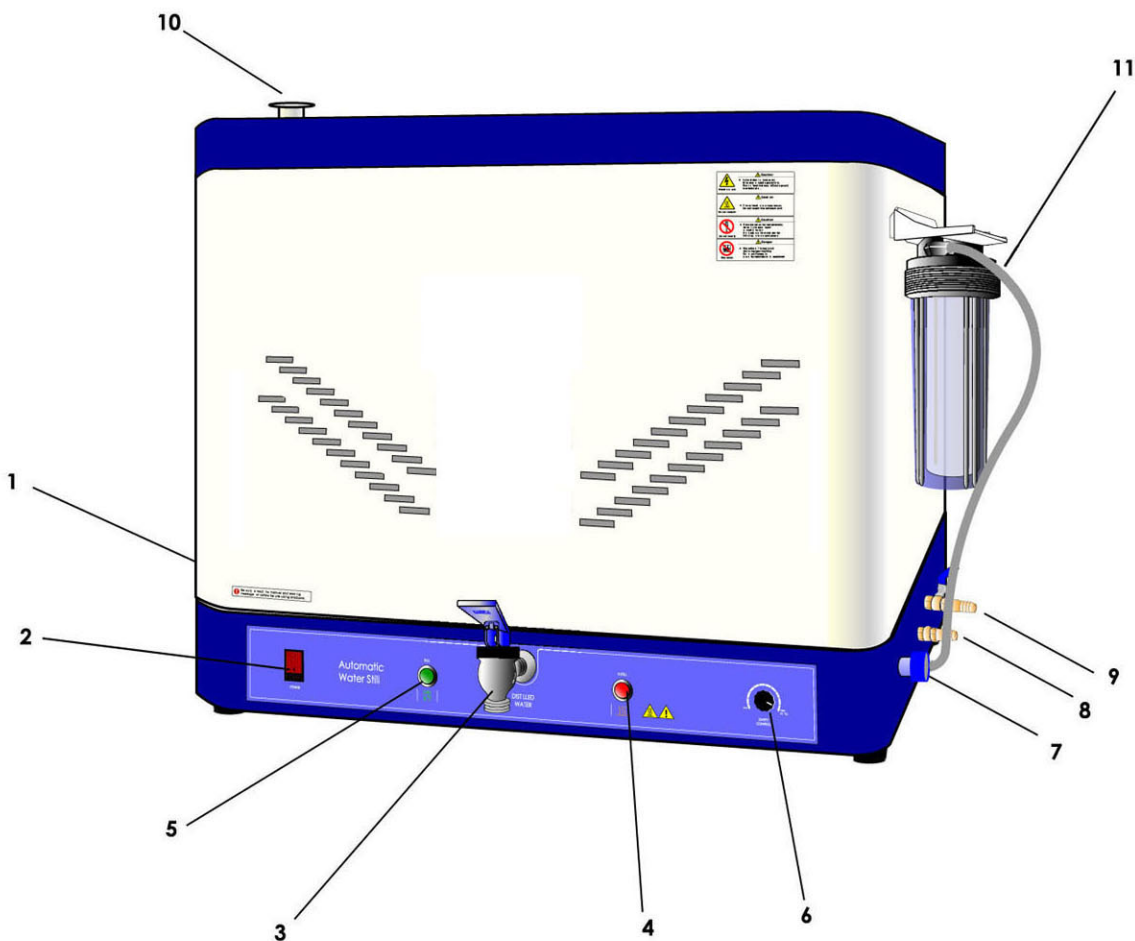
	! Caution
	<ul style="list-style-type: none"> If you are not authorized personnel, do not try to open, repair, or modify the unit. It can cause a fire or malfunction inflicting an injury upon people.

	! Caution
	<ul style="list-style-type: none"> Eye injury and Fire may occur. Do not work close to the U.V. lamp.

	! Danger
	<ul style="list-style-type: none"> Explosion or fire may occur due to improper handling. Do not put flammable, explosive materials in the unit.

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Description of the unit



- 1. CIRCUIT BREAKER
- 2. POWER SWITCH
- 3. DISTILLED WATER DISPENSER COCK
- 4. DISTILL INDICATOR LAMP
- 5. RESERVOIR FULL INDICATOR LAMP
- 6. OVERHEAT SAFETY CONTROL KNOB
- 7. WATER SUPPLY INLET
- 8. COOLING WATER DRAIN VALVE
- 9. BOILER WATER DRAIN VALVE
- 10. STEAM VENT
- 11. Filter

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Description and functions of each parts

1. CIRCUIT BREAKER

Main power supply circuit breaker

2. POWER SWITCH

Power switch for main power.

3. DISTILLED WATER DISPENSER COCK

Water dispenser of the distilled water reservoir.

4. DISTILL INDICATOR LAMP

This lamp turns on when the distilling is on running.

It turns off when the water supply cuts off Or, water reservoir is full.

5. RESERVOIR FULL INDICATOR LAMP

This lamp turns on when reservoir is full of the distilled water.

After this lamp turns on, the heater stops working and cuts off the water supply.

6.OVERHEAT SAFETY CONTROL KNOB

This is for the safety device for overheating.

Make sure of Max. position during the distilling.

7.WATER SUPPLY INLET

This inlet is for water supply.

8.COOLING WATER DRAIN VALVE

This is cooling water drain valve.

The hose should be connected to this valve.

9.BOILER WATER DRAIN VALVE

This valve is for draining of the water in the boiler.

Make sure this valve is closed during the operation.

10.STEAM VENT

This is outlet for the extra steam which is produced during the operation.

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Operation of the unit.

- 1) After all hose connections has been made, turn on the water supply.
Adjust water pressure properly(Minimum 10 Liters/Minute).
Make sure there is no water leak.



Caution!

Too low pressure of water may cause low production of distilled water.
Make sure the water supply pressure is more than 10 Liters/minute.

- 2) Turn the circuit breaker (1) ON, and the power switch(2) ON.
Then, the water supply begins automatically.
After the enough water supply has been reached in the boiler chamber,
the water level sensor turns on the heater automatically.
- 3) Turn the overheat SAFETY control knob (6) all the way to "Max" position
for continuous running of the heater.
The distill indicator lamp(4) on during the heater running.
- 4) The water in the boiler begins boiling and the steam is producing.
The steam condenses into water through the cooling coils of the reservoir
and the distilled water is reserved in the reservoir.



Caution!

In case of not positioning of the overheat safety control knob
to "Max" the boiler may not reach to boiling temperature
and not produce enough steam for proper working.
Make sure the boiler is working with enough temperature.

- 5) Distilled water

The reservoir full lamp turns on when reservoir is full of the distilled water,
and the heater stops working and the solenoid valve cuts off the water supply.

- 6) Use of the dispenser cock

By keep pressing the valve down, the reservoir keeps open, and it closes
when it is not pressed. To keep the valve open, lift the valve all the way up.

- 7) When the distilled water is used, the reservoir level gets lowered,
then the water level sensor turns on the water supply, and the heater works,
and distilling process starts.

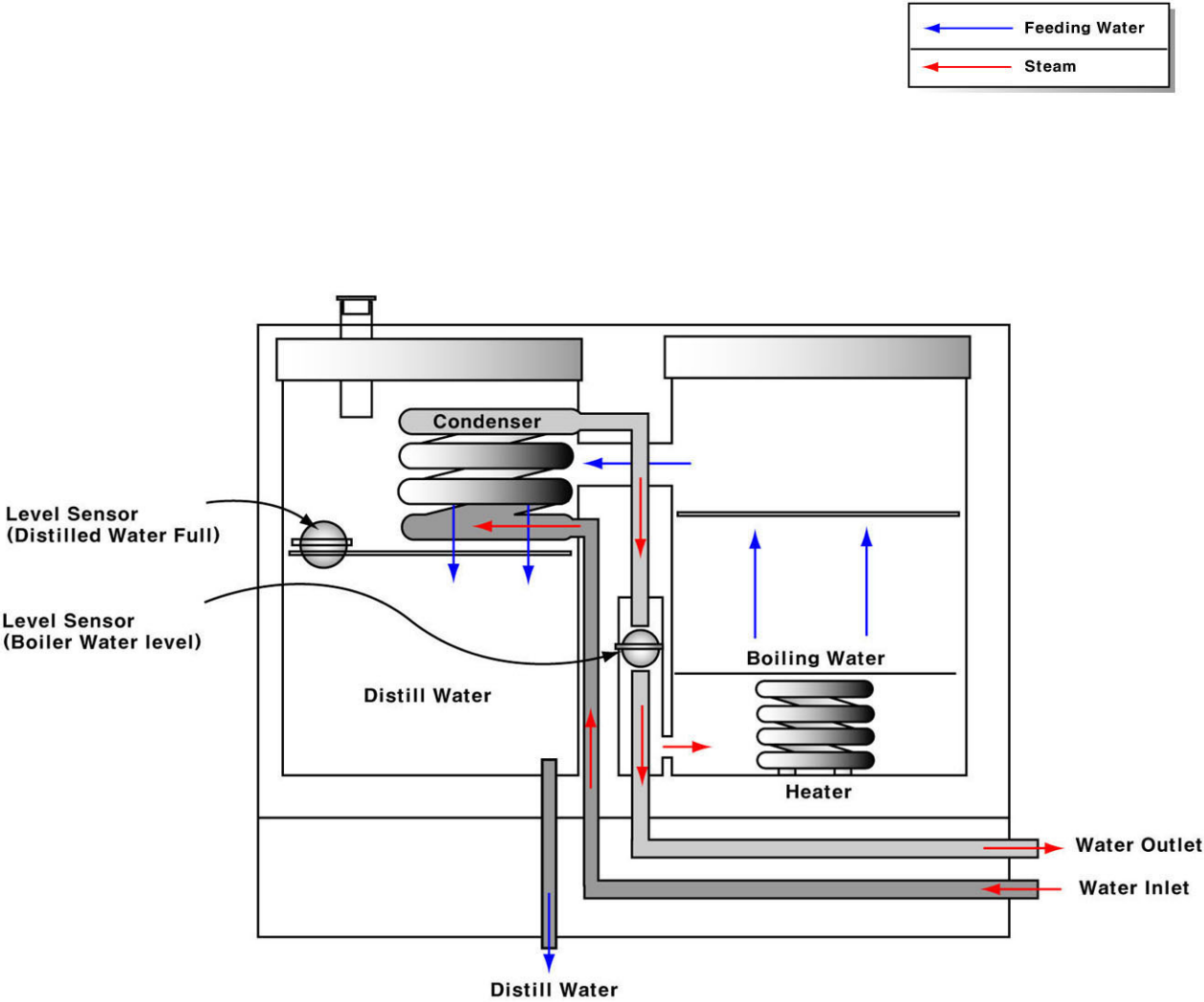


Caution!

When the operation of this unit stops for long period of time, then make sure
the power switch OFF and the water supply cut off.

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Water Flow Diagram



Water Flow Diagram

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Maintenance and Storage

**Warning!**

Make sure to unplug the unit from an outlet before cleaning the unit to avoid an electric shock.

**Caution!**

Pull the plug when disconnecting from an outlet. Do not pull the power cord. Do not use acid solution, benzene, and sharp objects to clean the equipment. It may cause changes of color or damage of the equipment.

1) To clean the inside of the chamber.

- Remove the plug from an outlet.
- Remove the shelves and shelf hangers from the chamber.
- Wipe the inside with a soft cloth using a neutral detergent.
- Clean the inside once more with a soft towel.

2) To clean the surface of the equipment.

- Use a sponge or a soft cloth with a neutral detergent
- Wipe the unit with a dry cloth.
- Do not use organic solvent.

3) To clean the electric parts.

- Always use a dry cloth.

4) If this system is not going to be used for a long period of time.

- Remove the plug from an outlet.
- Clean the unit with a soft towel.
- Wrap and store it.

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Troubleshooting



⚠ Warring!

- Switch off the unit before any maintenance and make sure to disconnect the power.
- If you are not authorized personnel, do not try to open, repair, or modify the unit.
- It can cause a fire or malfunction inflicting an injury upon people.

Symptoms	Checks	Actions
The main power lamp is not ON.	Check the power cord.	Make sure the power cord is plugged.
	Check the circuit breaker(1)	Make sure the circuit breaker(1) is turned on.
The main power lamp is ON. But, the distill lamp is OFF.	Check the water supply.	The main power is cut off until enough water supply is made.
The main power lamp is ON. The distill lamp is OFF.	Check the heater.	Replace the broken heater with new one.
The distill lamp is ON. But, the water is not boiling enough.	Check the overheat safety control knob(6).	Turn the knob to "MAX" position.
The distill lamp is ON. The water is boiling well. But, distilled water is not producing.	Check the water is supplying well.	The water is supplied for the boiler and for the cooling water. So, at least 10Liters/ Minute of water supply must be maintained.
Full lamp of reservoir is ON, and the water is boiling continuously.	Check the Full level switch.	Check the Full level switch with hands. Lowering the level switch down will make the Full lamp turn OFF, and raising the level switch up will make the Full lamp switch turn OFF. If the level switch does not work correctly, replace the switch.

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Specifications

Model		WD-3004	WD-3005D	WD-3008	WD-3008D
Capacity		4 ℓ / hour		8 ℓ / hour	
Cooling water		30 ℓ	45ℓ	60 ℓ	90 ℓ
Heater		3 Kw	9 Kw	6 Kw	12 Kw
Material	Interior	Stainless steel			
	Exterior	Steel plate with powder coating			
Reservoir		11 liter		20 liter	
Safety Device		Water level float switch			
		Over temp. thermostat			
		Water supply cut-off valve			
Electric Power		220VAC, 50/60Hz			
Overall (WxDxH)		650x300x600mm		700x400x650mm	
		600x600x600mm		700x750x650mm	

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Warranty

☐ **Product Name** : Automatic Water Still

☐ **Model** :

☐ **Serial No.** :

☐ **Warranty period** : 1 year after purchase

☐ **The date of purchase** :

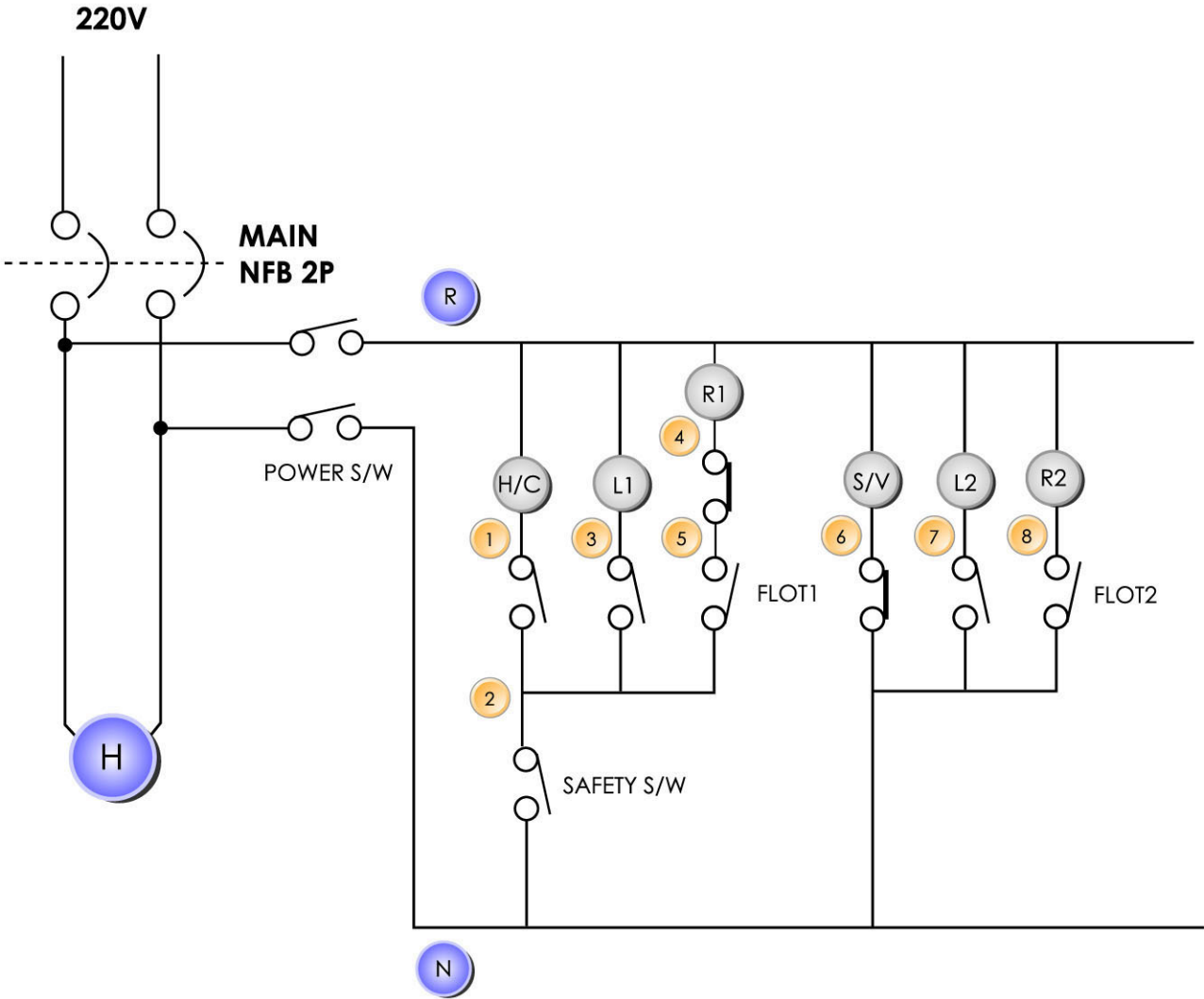
☐ **Purchased from** :

- 1) Contact your dealer for the services against defects in material or workmanship, when it is used under appropriate conditions.
- 2) In case of followings, the repair service will be charged.
 - Damage due to improper operation, modification, or unauthorized attempt to repair
 - Damage due to acts of God such as fire, flood, and improper voltage supply.
 - Damage due to not following operating instructions.
- 3) This warranty does not cover consequential damages caused by the product .
- 4) Contact authorized service center or your dealer for additional information.

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CIRCUIT DIAGRAM

H/C	HEATER COIL	L2	FULL LAMP
S/V	SOLENOID VALVE	R1	RELAY 1
H	HEATER	R2	RELAY 2
L1	STIL LAMP		



CIRCUIT DIAGRAM



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