

QUICK MANUAL

AIR CONDITIONER

Please read this installation manual completely before installing the product.
Installation work must be performed in accordance with the national wiring standards
by authorized personnel only.
Please retain this installation manual for future reference after reading it thoroughly.

Original instruction (R32)

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This manual is the simplified version of original manual.
You can obtain the original manual from www.lg.com.



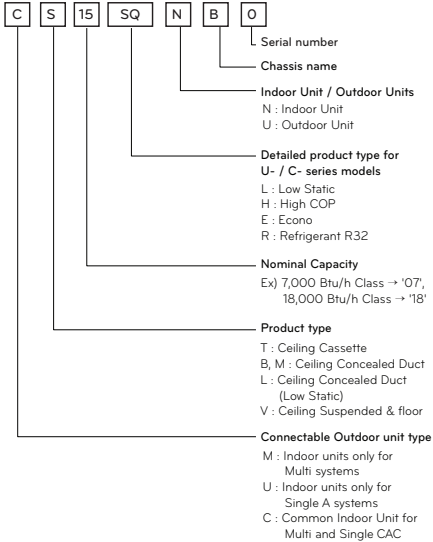
العربية	MALTI	SLOVENČINA	SLOVENŠČINA	LATVIŠU VALODA	LETTUVŲ KALBA	GAEILGE	МАКЕДОНСКИ	SHQIP	ISLENSKA	BOSANSKI	ENGLISH	ITALIANO	ESPAÑOL	FRANÇAIS	DEUTSCH	ΕΛΛΗΝΙΚΑ	ČEŠTINA	NEDERLANDS	POLSKI	LIEMBA ROMÂNĂ
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MODEL DESIGNATION

Product information

- Product Name : Air conditioner

- Model Name :



- Additional Information : serial number is refer to the barcode on the product.

- Max allowable pressure High side : 4.2 MPa / Low side : 2.4 MPa

- Refrigerant : R32

Airborne Noise Emission

The A-weighted sound pressure emitted by this product is below 70 dB.

** The noise level can vary depending on the site.





The figures quoted are emission level and are not necessarily safe working levels.

Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required.

Factor that influence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise, i.e. the number of equipment and other adjacent processes and the length of time for which an operator exposed to the noise. Also, the permissible exposure level can vary from country to country.

This information, however, will enable the user of the equipment to make a better evaluation of the hazard and risk.

IMPORTANT SAFETY INSTRUCTIONS

	Read the precautions in this manual carefully before operating the unit.		This appliance is filled with flammable refrigerant (R32)
	This symbol indicates that the Operation Manual should be read carefully.		This symbol indicates that a service personnel should be handling this equipment with reference to the Installation Manual.

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product

! WARNING

It can result in serious injury or death when the directions are ignored

! CAUTION

It can result in minor injury or product damage when the directions are ignored

! WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.
- Compliance with national gas regulations shall be observed.
- Ducts connected to an appliance shall not contain an ignition source.
- This equipment shall be provided with a supply conductor complying with the national regulation.

Installation

- Do not use a defective or underrated circuit breaker. Use the correctly rated breaker and fuse. There is risk of fire or electric shock.
- For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center. Do not disassemble or repair the product by yourself. There is risk of fire or electric shock.

- Always ground the product as per the wiring diagram. Do not connect the ground wire to gas or water pipes lightning rod or telephone ground wire. There is risk of fire or electric shock.
- Install the panel and the cover of control box securely. There is risk of fire or electric shock due to dust, water etc.
- Use the correctly rated breaker or fuse. There is risk of fire or electric shock.
- Do not modify or extend the power cable. If the power cable or cord has scratches or skin peeled off or deteriorated then it must be replaced. There is risk of fire or electric shock.
- For installation, removal or reinstall, always contact the dealer or an Authorized Service Center. There is risk of fire, electric shock, explosion, or injury.
- Do not install the product on a defective installation stand. Be sure that the installation area does not deteriorate with age. It may cause product to fall.
- Never install the outdoor unit on a moving base or a place from where it can fall down.
The falling outdoor unit can cause damage or injury or even death of a person.
- In outdoor unit the step-up capacitor supplies high voltage electricity to the electrical components. Be sure to discharge the capacitor completely before conducting the repair work.
An charged capacitor can cause electrical shock.
- When installing the unit, use the installation kit provided with the product. Otherwise the unit may fall and cause severe injury.
- Indoor/outdoor wiring connections must be secured tightly and the cable should be routed properly so that there is no force pulling the cable from the connection terminals. Improper or loose connections can cause heat generation or fire.
- Safely dispose off the packing materials. Like screws, nails, batteries, broken things etc after installation or svc and then tear away and throw away the plastic packaging bags. Children may play with them and cause injury.
- Be sure to check the refrigerant to be used. Please read the label on the product. Incorrect refrigerant used can prevent the normal operation of the unit.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater.)
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- Do not pierce or burn refrigerant cycle part.

- Be aware that refrigerants may not contain an odour.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Refrigerant tubing shall be protected or enclosed to avoid damage.
- Flexible refrigerant connectors (such as connecting lines between the indoor and outdoor unit) that may be displaced during normal operations shall be protected against mechanical damage.
- A brazed, welded, or mechanical connection shall be made before opening the valves to permit refrigerant to flow between the refrigerating system parts.
- For installation of the product, always contact the service center or a professional installation agency. Otherwise, it may cause a fire, electrical shock, explosion or injury.
- Mechanical connections shall be accessible for maintenance purposes.

Operation

- When the product is soaked (flooded or submerged) in water, contact an Authorized Service Center for repair before using it again. There is risk of fire or electric shock.
- Be sure to use only those parts which are listed in the svc parts list. Never attempt to modify the equipment. The use of inappropriate parts can cause an electrical shock, excessive heat generation or fire.
- Do not touch, operate, or repair the product with wet hands. Hold the plug by hand when taking out. There is risk of electric shock or fire.
- Do not place a heater or other heating appliances near the power cable. There is risk of fire and electric shock.
- Do not allow water to run into electric parts. Install the unit away from water sources. There is risk of fire, failure of the product, or electric shock.
- Do not store or use or even allow flammable gas or combustibles near the product. There is risk of fire.
- Do not use the product in a tightly closed space for a long time. Perform ventilation regularly. Oxygen deficiency could occur and hence harm your health.
- Do not open the front grille of the product during operation. (Do not touch the electrostatic filter, if the unit is so equipped.) There is risk of physical injury, electric shock, or product failure.
- If strange sound, smell or smoke comes from product. Immediately turn the breaker off or disconnect the power supply cable. There is risk of electric shock or fire.

- Ventilate the product room from time to time when operating it together with a stove, or heating element etc. Oxygen deficiency can occur and hence harm your health.
- When the product is not to be used for a long time, disconnect the power supply plug or turn off the breaker. There is risk of product damage or failure, or unintended operation.
- Take care to ensure that nobody especially kids could step on or fall onto the outdoor unit. This could result in personal injury and product damage.
- Take care to ensure that power cable could not be pulled out or damaged during operation. There is risk of fire or electric shock.
- Do not place ANYTHING on the power cable. There is risk of fire or electric shock.
- When flammable gas leaks, turn off the gas and open a window for ventilation before turning on the product. Do not use the telephone or turn switches on or off. There is risk of explosion or fire.
- Make sure to ventilate sufficiently when this air conditioner and a heating appliance such as a heater are used simultaneously. Failure to do so may result in fire, serious injury, or product failure.
- Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water.
- The installation of pipe-work shall be kept to a minimum.
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flare part shall be re-fabricated.

CAUTION

Installation

- Two or more people must lift and transport the product. Avoid personal injury.
- Do not install the product where it will be exposed to sea wind (salt spray) directly. It may cause corrosion on the product.
- Install the drain hose to ensure that the condensed water is drained away properly. A bad connection may cause water leakage.
- Keep level even when installing the product. To avoid vibration or noise.
- Do not install the product where the noise or hot air from the outdoor unit could damage or disturb the neighborhoods. It may cause a problem for your neighbors and hence dispute.
- Always check for gas (refrigerant) leakage after installation or repair of product. Low refrigerant levels may cause failure of product.

- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
- Wear adequate personal protection equipment (PPE) when installing, maintaining or servicing the product.

Operation

- Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer air conditioner, not a precision refrigeration system. There is risk of damage or loss of property.
- Do not block the inlet or outlet of air flow. It may cause product failure.
- Use a soft cloth to clean. Do not use harsh detergents, solvents or splashing water etc. There is risk of fire, electric shock, or damage to the plastic parts of the product.
- Do not touch the metal parts of the product when removing the air filter. There is risk of personal injury.
- Do not step on or put anything on the product. (outdoor units) There is risk of personal injury and failure of product.
- Always insert the filter securely after cleaning. Clean the filter every two weeks or more often if necessary. A dirty filter reduces the efficiency.
- Do not insert hands or other objects through the air inlet or outlet while the product is operating. There are sharp and moving parts that could cause personal injury.
- Be cautious when unpacking and installing the product. Sharp edges could cause injury.
- If the refrigerant gas leaks during the repair, do not touch the leaking refrigerant gas. The refrigerant gas can cause frostbite (cold burn).
- Do not tilt the unit when removing or uninstalling it. The condensed water inside can spill.
- Do not mix air or gas other than the specified refrigerant used in the system. If air enters the refrigerant system, an excessively high pressure results, causing equipment damage or injury.
- If the refrigerant gas leaks during the installation, ventilate the area immediately. Otherwise it can be harmful for your health.
- Dismantling the unit, treatment of the refrigerant oil and eventual parts should be done in accordance with local and national standards.
- Replace the all batteries in the remote control with new ones of the same type. Do not mix old and new batteries or different types of batteries. There is risk of fire or product failure.

- Do not recharge or disassemble the batteries. Do not dispose off batteries in a fire. They may burn or explode.
- If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked. The chemicals in batteries could cause burns or other health hazards.
- If you swallow the battery fluid from a leak, wash out the inside of your mouth thoroughly and then consult a doctor. Failure to do so may result in serious health complications.
- Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open. Moisture may condense and wet or damage furniture.
- Do not expose your skin or kids or plants to the cool or hot air draft. This could harm to your health.
- Do not drink the water drained from the product. It is not sanitary and could cause serious health issues.
- Use a firm stool or ladder when cleaning, maintaining or repairing the product at an height. Be careful and avoid personal injury.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

According to IEC 660335-1

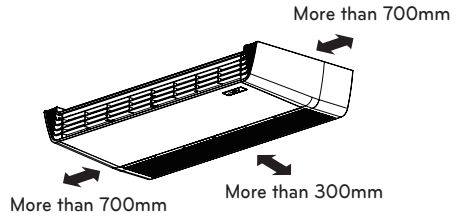
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

According to EN 660335-1

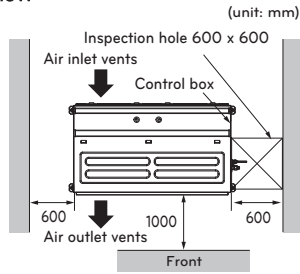
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

INSTALLATION PLACES

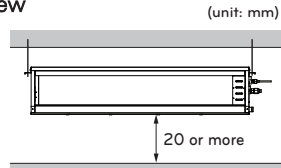
- There should not be any heat source or steam near the unit.
- There should not be any obstacles to prevent the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, or other obstacles.
- The indoor unit must keep the maintenance space.



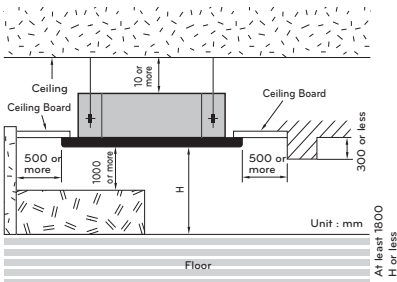
Top view



Side view



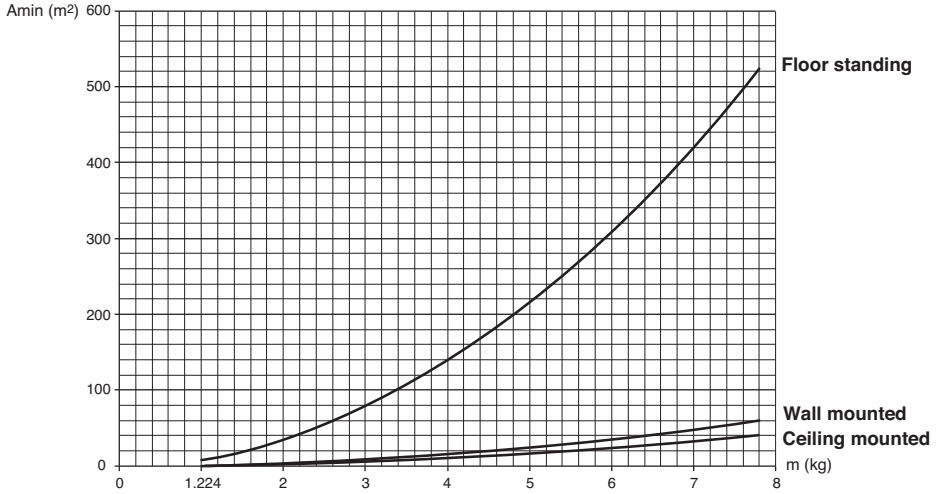
- Suitable dimension "H" is necessary to get a slope to drain as shown in the figure



Chassis	H
TQ/TR/TP	3,600
TN/TM	4,200

Minimum floor area

- The appliance shall be installed, operated and stored in a room with a floor area larger than the minimum area.
- Use the graph of table to determine the minimum area.



- m : Total refrigerant amount in the system
- Total refrigerant amount : factory refrigerant charge + additional refrigerant amount
- Amin : minimum area for installation

Floor location		Floor location	
m (kg)	Amin (m ²)	m (kg)	Amin (m ²)
< 1.224	-	4.6	181.56
1.224	12.9	4.8	197.70
1.4	16.82	5	214.51
1.6	21.97	5.2	232.02
1.8	27.80	5.4	250.21
2	34.32	5.6	269.09
2.2	41.53	5.8	288.65
2.4	49.42	6	308.90
2.6	58.00	6.2	329.84
2.8	67.27	6.4	351.46
3	77.22	6.6	373.77
3.2	87.86	6.8	396.76
3.4	99.19	7	420.45
3.6	111.20	7.2	444.81
3.8	123.90	7.4	469.87
4	137.29	7.6	495.61
4.2	151.36	7.8	522.04
4.4	166.12		

Wall mounted		Wall mounted	
m (kg)	Amin (m ²)	m (kg)	Amin (m ²)
< 1.224	-	4.6	20.17
1.224	1.43	4.8	21.97
1.4	1.87	5	23.83
1.6	2.44	5.2	25.78
1.8	3.09	5.4	27.80
2	3.81	5.6	29.90
2.2	4.61	5.8	32.07
2.4	5.49	6	34.32
2.6	6.44	6.2	36.65
2.8	7.47	6.4	39.05
3	8.58	6.6	41.53
3.2	9.76	6.8	44.08
3.4	11.02	7	46.72
3.6	12.36	7.2	49.42
3.8	13.77	7.4	52.21
4	15.25	7.6	55.07
4.2	16.82	7.8	58.00
4.4	18.46		

Ceiling Mounted		Ceiling Mounted	
m (kg)	Amin (m ²)	m (kg)	Amin (m ²)
< 1.224	-	4.6	13.50
1.224	0.956	4.8	14.70
1.4	1.25	5	15.96
1.6	1.63	5.2	17.26
1.8	2.07	5.4	18.61
2	2.55	5.6	20.01
2.2	3.09	5.8	21.47
2.4	3.68	6	22.98
2.6	4.31	6.2	24.53
2.8	5.00	6.4	26.14
3	5.74	6.6	27.80
3.2	6.54	6.8	29.51
3.4	7.38	7	31.27
3.6	8.27	7.2	33.09
3.8	9.22	7.4	34.95
4	10.21	7.6	36.86
4.2	11.26	7.8	38.83
4.4	12.36		

ELECTRIC WIRING WORK

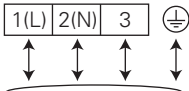
General instructions

- All field supplied parts and materials, electric works must conform to local codes. Use copper wire only.
- Follow the "WIRING DIAGRAM" attached to the unit body to wire the outdoor unit, indoor units and the remote controller.
- All wiring must be performed by an authorized electrician

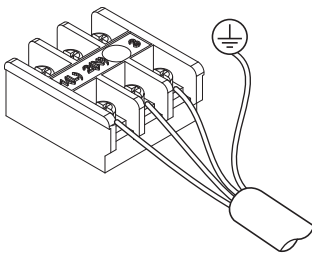
Wiring Connection

Connect the wires to the terminals on the control board individually according to the outdoor unit connection.

Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively

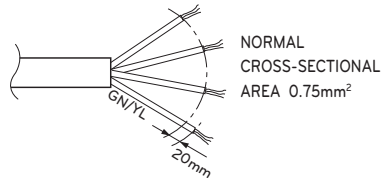


Connected to outdoor unit or B.D. unit.



! CAUTION

- The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (Rubber insulation, type H05RN-F approved by HAR or SAA).



- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer of its service agent.

Using the remote controller

You can operate the air conditioner more conveniently with the remote controller. You will find the buttons for the additional functions under the cover of the remote control.

MAINTENANCE

Clean the product regularly to maintain optimal performance and to prevent possible breakdown.

CAUTION

- Turn off the power and unplug the power cord before you perform any maintenance; otherwise it may cause electric shock.
- Never use water that is hotter than 40°C when you clean the filters. It may cause deformation or discoloration.
- Never use volatile substances when you clean the filters. They may damage the surface of the product.

Operation Tips!

- **Do not overcool the room.**
This is not good for the health and wastes electricity.
- **Keep blinds or curtains closed.**
Do not let direct sunshine enter the room when the air conditioner is in operation.
- **Keep the room temperature uniform.**
Adjust the vertical and horizontal airflow direction to ensure a uniform temperature in the room.
- **Make sure that the doors and windows are shut tight.**
Avoid opening doors and windows as much as possible to keep the cool air in the room.
- **Clean the air filter regularly.**
Blockages in the air filter reduce the airflow and lower cooling and dehumidifying effects. Clean at least once every two weeks.
- **Ventilate the room occasionally.**
Since windows are kept closed, it is a good idea to open them and ventilate the room now and then.

When the air conditioner is not going....

When air conditioner is not going to be used for a long time.

- 1 Operate the air conditioner at the following settings for 2 to 3 hours.
 - Type of operation: Fan operation mode.(Refer to page "Fan Mode")
 - This will dry out the internal mechanisms.
- 2 Turn off the breaker.

CAUTION

Turn off the breaker when the air conditioner is not going to be used for a long time. Dirt may collect and may cause a fire.

- 3 Remove the batteries from the Remote Controller.

Helpful information

The air filters and your electric bill.

If the air filters become clogged with dust, the cooling capacity will drop, and 6% of the electricity used to operate the air conditioner will be wasted.

When the air conditioner is to be used again.

- 1 Clean the air filter and install it in the indoor unit. (Refer to page "Maintenance and Service")
- 2 Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.
- 3 Check that the ground wire is connected correctly. It may be connect to the indoor unit side.

Troubleshooting Tips! Save time and money!

Check the following points before requesting repairs or service.... If the malfunction persist, please contact your dealer.

Case	Explanation
The air conditioner does not operate.	<ul style="list-style-type: none"> • Have you made a mistake in timer operation? • Has the fuse blown or has the circuit breaker been tripped?
The room has a peculiar odor.	<ul style="list-style-type: none"> • Check that this is not a damp smell exuded by the walls, carpet, furniture or cloth items in the room.
It seems that condensation is leaking from the air conditioner.	<ul style="list-style-type: none"> • Condensation occurs when the airflow from the air conditioner cools the warm room air.
Air conditioner does not operate for about 3 minutes when restart.	<ul style="list-style-type: none"> • This is the protector of the mechanism. • Wait about three minutes and operation will begin.
Does not cool or heat effectively.	<ul style="list-style-type: none"> • Is the air filter dirty? See air filter cleaning instructions. • The room may have been very hot when the room air conditioner was first turned on. Allow time for it to cool down. • Has the setting temperature been set incorrectly? • Are the indoor unit's air inlet or outlet vents obstructed?
The air conditioner operation is noisy.	<ul style="list-style-type: none"> • For a noise that sounds like water flowing. <ul style="list-style-type: none"> - This is the sound of freon flowing inside the air conditioner unit. • For a noise that sounds like the compressed air releasing into atmosphere. <ul style="list-style-type: none"> - This is the sound of the dehumidifying water being processed inside the air conditioning unit.
Crack sound is heard.	<ul style="list-style-type: none"> • This sound is generated by the expansion/contraction of the inlet grille, etc. due to changes of temperature.
Filter sign lamp (LED) is ON.	<ul style="list-style-type: none"> • Cleaning the filter, press the Timer button and ◀ button of wired remote controller at the same time for 3 seconds.
Remote control display is faint, or no display at all.	<ul style="list-style-type: none"> • Has the circuit breaker been tripped? • Are the batteries inserted in the opposite (+) and (-) directions?
The error code is occurred after lightning struck	<ul style="list-style-type: none"> • This product has been applied to the over current protection circuit. Error can occur, but it is normal behavior. After few minutes, It will operate normally.

Call the service immediately in the following situations

- 1 Anything abnormal such as burning smell, loud noise etc. happen. Stop the unit and turn the breaker off. Never try to repair by yourself or restart the system in such cases.
- 2 Main power cord is too hot or damaged.
- 3 Error code is generated by self diagnosis.
- 4 Water leaks from indoor unit even if the humidity is low.
- 5 Any switch, breaker (safety, earth) or fuse fails to work properly

User must carry routine checkup & cleaning to avoid unit's poor performance. In case of special situation, the job must be carried out by service person only.

