

NORSK BRUKSANVISNING EP-188

For ytterligere info, se den originale manual på engelsk.

VIKTIG

Bruk kun ren parafin. Ikke bruk bensin eller lignende.

Bruk varmeren kun i ventilerte rom. Plasser den på et jevn underlag.

Ikke plassere varmeren nærme brennbare materialer.

Denne varmeren har automatisk tenning styrt av 4 batterier.

BRUK

- 1) Fyll tanken med parafin. Ta tanken ut av varmeren (Fig. E) og fyll den utendørs.
- 2) Ved førstegang opptenning, sett inn 4 stk «C» batterier i batteriholder (Fig.A) før du trykker på tennerknappen (Fig. D) lukk batteriboksen og den er klar.
- 3) Vri vekejusteringsknotten til maks (med klokken), juster den så litt tilbake.
- 4) Trykk så på den røde tennerknappen (Fig.K) til det er fyr i ovnen
- 5) Juster så med vekejusteringsknotten opp og ned på varme, (med eller mot klokken)
- 6) Etter å ha tent varmeren er det viktig å sjekke den etter ca 5 minutter. Se da om flammen brenner greit. Hvis den brenner med for høy flamme juster ned veken sakte til flammen er normal (se fig s 10). Er flammen for lav justerer du den opp. Brenner den ikke normalt reduseres varmeeffekten og det kan forekomme litt lukt.
- 7) Hvis du ikke har batterier kan den tennes med en fyrstikk (Fig.M).
- 8) For å slukke ovnen, trykk på stop knapp (nr 10 i fig A). Hvis veken ikke automatisk går ned umiddelbart, vri vekejusteringsknotten (nr 9 i fig.A) så langt mot klokken som mulig. Sjekk etter 2-3 min. at den har slukket.

Det er viktig å vedlikeholde enheten.

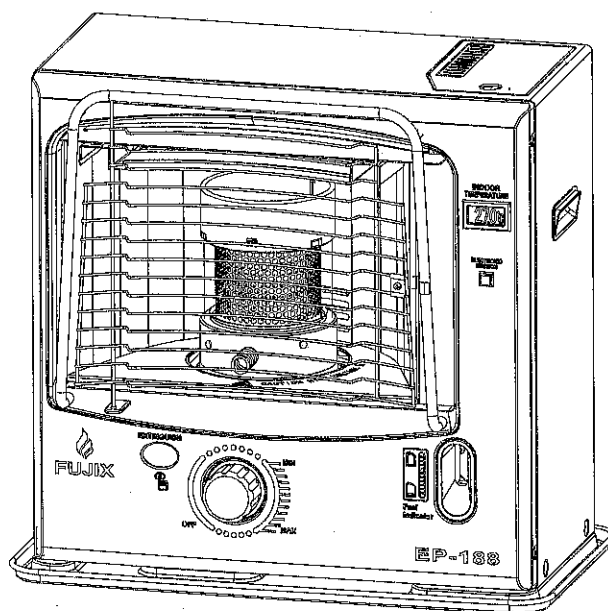
Spesielt viktig er det å ikke få vann eller brennbare stoffer som bensin etc i tanken.

PORTABLE
KEROSENE-HEATER
AUTOMATIC ELECTRONICS IGNITION
“OWNER’S MANUAL”

1852 | MAR
INE
QUALITY

MODEL: EP-188

CE



Before the first use of this heater, please read this OWNER'S MANUAL very carefully. This OWNER'S MANUAL has been designed to instruct you as to the proper manner in which to assemble the heater, maintain the heater, store the heater, and most importantly, how to operate the heater in a safe and efficient manner, please keep this manual for future reference.

Warnings

-“Use only paraffin . BS 2869;C1”

PARAFFIN

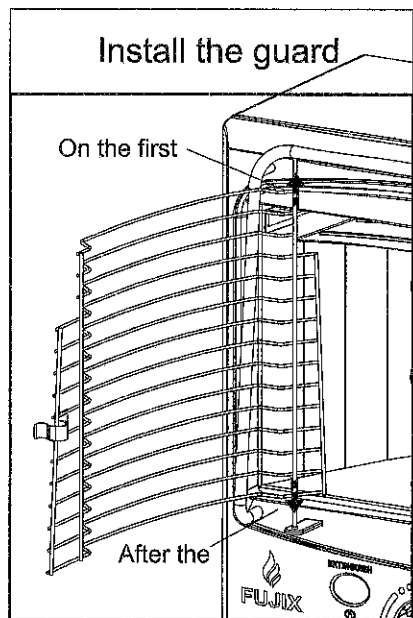
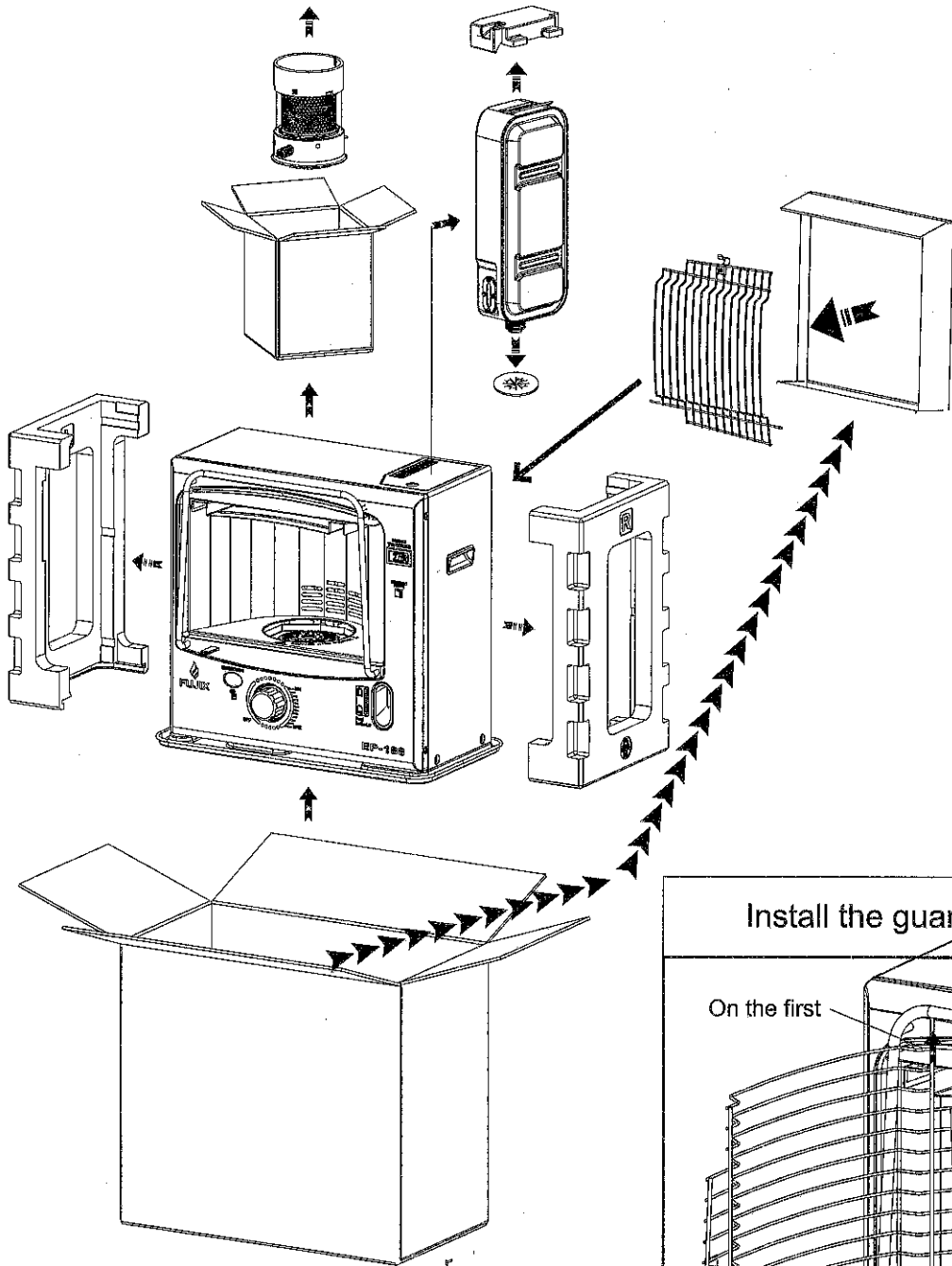


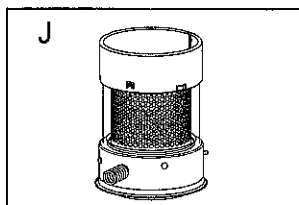
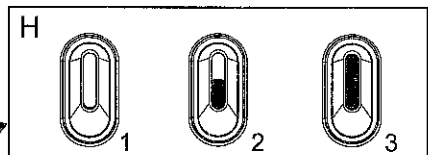
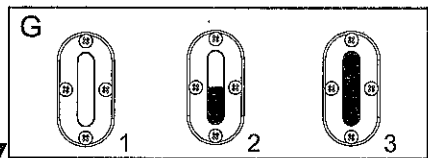
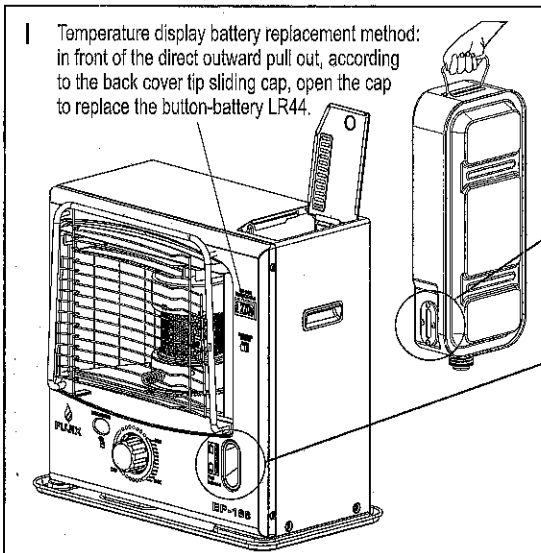
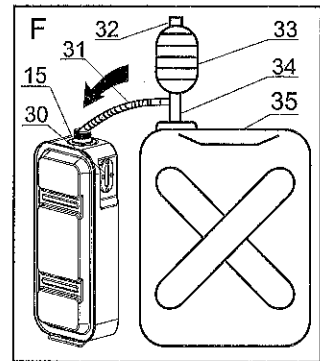
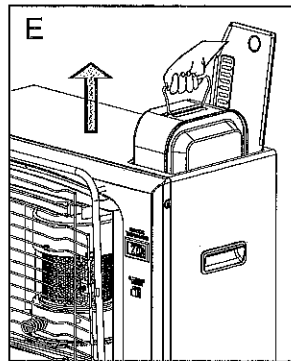
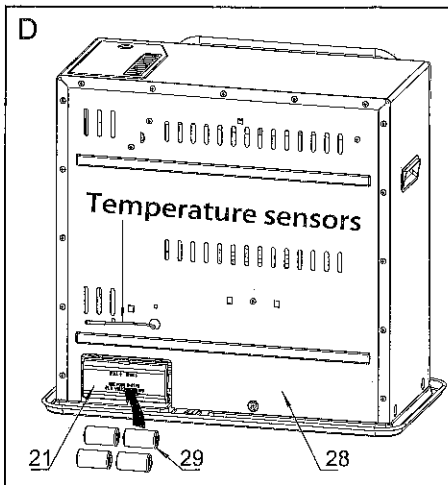
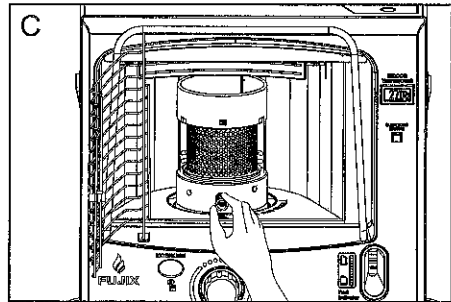
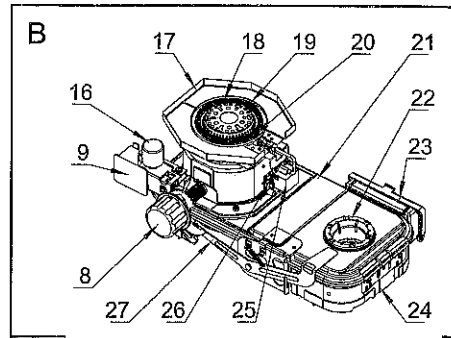
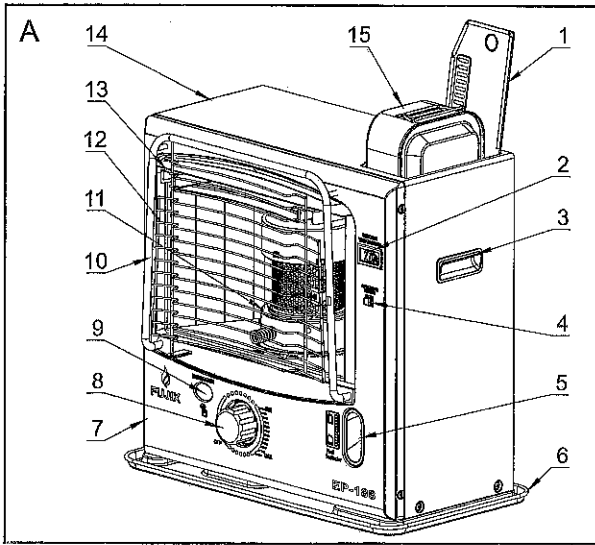
- Do not fill or carry when alight.
- When use the cooking appliance, do not use a space heater.
- When use the heating appliance, do not use a cooker.
- Do not place this appliance where it can be knocked over.
- The heater should be used on a horizontal level.
- The heater should not be subjected to drafts.
- The heater should not be used in inflammables.
- Do not use in an unventilated place or where exposed to draught. The room in which the heater is used should have sufficient ventilation. Do not use in a narrow space.
- Users are requested to pay special attention to children while the heater is being used.
- Do not put water or other fuels such as petroleum, methylated spirit into fuel container.
In case water or other fuels are inside fuel container, make fuel container empty and then clean by Kerosene (paraffin) .
- Do not use the appliance in inadequately ventilation areas which could not prevent satisfactory dispersal of the products of combustion.
- Adequate ventilation: open the window or door minimum 30cm every hour for 10 minutes to replace room air by fresh air.

NOTE: The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and carefulness are factors which cannot be built into this heater. These factors must be supplied by the person(s) installing, maintaining, or operating the kerosene heater.

Always contact your dealer, distributor, service agent, or the manufacturer on any problems or conditions you do not understand.

UNPACKING AND ASSEMBLY





FEATURES DESCRIPTION

Figure A、 Figure B、 Figure D、 Figure F

- | | | |
|-------------------------------|--------------------------|---|
| 1. Tank access door | 13. Insulator ass'y | 25. Electronic igniter |
| 2. Indoor temperature display | 14. Shell | 26. Power plug |
| 3. Handle | 15. Moving tank | 27. No moving tank extinguishing device |
| 4. Ignition button | 16. Extinguishing device | 28. Back cover plate |
| 5. Fuel gauge | 17. Furnace plate | 29. Batteries(1.5Volt Four C-SIZE) |
| 6. Bottom plate | 18. Wick | 30. Gauge |
| 7. Large panel | 19. Wick cover | 31. Ribbed tube |
| 8. Wick adjuster knob | 20. Ignition pin | 32. Air plug |
| 9. Stop button | 21. Fixed tank | 33. Pear |
| 10. Door frame | 22. Oil cup | 34. Straight tube |
| 11. Burner | 23. Battery box ass'y | 35. Oil storage barrel |
| 12. Guard | 24. Tank bracket | |

TECHNICAL CHARACTERISTICS

MODEL NUMBER	EP-188
Type of heater	Radiant convector
Heating power	2600W
Max. fuel consumption	210 g/h
Continuous combustion time	14~16 h approx
Fuel tank	Mobile cartridge
Tank capacity	5 litres
Ignition	Electronic ignition (Battery-C cell×4)
Air outlet test	Included
Size	54.3cm × 31.5cm × 50cm
Weight	Net Weight: 10.8 Kg Gross Weight:12.32Kg
Minimum volume to be heated/hour	40 m³
To extinguish	Manual operation or automatic
Environment temperature	LED real temperature display.
Top plate temperature	<35K

PRECAUTIONS OF USE

Read this manual with care before using your equipment and keep it safe. You will need it in the event of failure or malfunctioning.

You have just purchased a liquid fuel heating appliance that you are going to use as occasional backup heating. Before using it for the first time, remember these three important points:

The room in which you will be installing it must be sufficiently ventilated.

The liquid fuel you are going to use must be in conformity with the Ruling of 8 January 1988.

LOCATION

This is a mobile heater. It can be installed in different rooms of the house as long as the room is sufficiently well ventilated (it must have large enough air inlet and an efficient air outlet with a minimum section of 50 cm² for each orifice).

Caution: if the residential rooms, especially the bedrooms, do not have these grills, use your appliance while leaving the window ajar.

In all cases, ventilate regularly

- the room must not be below ground level.
- the surface on which the radiator stands must be flat and horizontal.
- a one-meter clearance must be preserved between the radiator and the nearest items (furniture, walls, curtains, etc.)

However, do not install it:

- in passages,
- in areas where there are drafts
- in places where flammable gas may be given off or where flames may be present
- under a chimney
- near curtains and flammable objects,
- in a room where the temperature is already higher than 30 °C.

It is prohibited to install it in caravans, boats and vehicle cabins.

USE

Remember that this heater is designed for occasional use and should never be left operating without proper monitoring.

You should always be present in the room during operation of the heater.

Turn the heater off, making sure that it is properly extinguished if you have to leave the room and before going to bed.

It is not designed for heating or cooking food or for drying clothing or any other objects.

Do not put anything on or in front of the appliance.

CAUTION: The upper plate and grill are very hot. Keep out of reach of children.

AVOID ALL CONTACT WITH THE GRILLE

UNPACKING AND PREPARATION

1. Open the carton, remove the pump.
2. Take the equipment out and remove the side wedges.
3. Open the protection grill (12 in figure A), grasping it on the right (lift and pull) and take out the burner, starting by sliding the upper carton that you will then remove downwards, and remove the lower wedge.

4. Put the burner back in place and make sure it is correctly positioned. To do this, grasp the metal spring attached to the base and move it until it is properly set (figure C).
5. Close the grill by working in the opposite direction.
6. Open the cover providing access to the tank (1 on figure A) and remove the wedge under the cover.
7. Stow away all the packing parts that you have just removed from the original carton, which should be kept dry during the heating season.
8. Open the cover of the rear housing (figure D) and install four C-SIZE (1.5VOLT) batteries, ensuring that the polarities (+) and (-) are as indicated, then close the cover.
Remove the batteries if the appliance is to be left unused for some time.
9. Test the stopping system as follows:
 - Bring the wick to the high position using the knob provided for the purpose (8 of figure A).
 - Press the stop button (9 of figure A) to lower the wick.

To make sure the wick has descended properly, try turning the knob (8 of figure A) in the counterclockwise direction; if you are unable to do so, it means that the stopping system is working correctly.

Otherwise, your stopping system is defective and you are not to start your appliance for work on the system. you must call in your after-sales service.

Remember that if you purchased this appliance during the off season period when the weather was not yet cold, you might have difficulties in performing this test.

It is strictly prohibited to work on this device. Only the after-sales service is qualified to do so.

If you fail to comply with this instruction, you will run the risk of carbon monoxide poisoning. **Think about your health and that of your family.**

CHOICE AND PRESERVATION OF FUEL

It is mandatory to use liquid fuel for petrol stoves complying with the Ruling of January 8, 1988.

Be sure that this indication appears on the package or, if you buy fuel on retail, have it confirmed by your retailer.

- Never use gasoline, domestic fuel, benzene, methylated spirit, solvents or any other derived liquids.
- Do not add water.

Do not run the risk of poisoning yourself, causing a fire or deteriorating your appliance. Remember all the other possible problems: fumes, odours, flames, problems of ignition and extinguishing, inadvertent stoppages, deterioration of the wick and shorter life duration.

- Your fuel should not be stored near a source of heat or in a sunny location.
- This fuel must not be kept for more than one heating season because it deteriorates in the course of time and will generate poor efficiency. Do not store excessively large quantities.

FILLING THE TANK

To provide safety against fire risks, the tank must be filled as follows:

- With the appliance switched off.
- In a location other than where the heating system is installed.
- In all cases, the user must check that the refilled tank is properly sealed, away from any heat source or naked flame.

1. Remove the tank from the appliance, grasping it by the handle (figure E).
2. Open the recipient containing the fuel, insert the rigid tube and the siphon pump (34 of figure F).
3. Remove the plug from the tank and remove the carton around the neck, then place it alongside the recipient, first folding the handle to ensure its stability.
4. Insert the ribbed flexible tube of the siphon pump (31 of figure F) in the tank.
5. Transfer the fuel from the recipient to the tank while pressing the peat of the pump (33 of figure F) with the air plug (32 of figure F) turned to the "ON" position.

6. Monitor the level in the tank by looking through the window in the upper part (30 in figure F). As soon as this window changes from yellow (1 in figure G) to black(2 in figure G), turn the plug to the "OFF" position and wait until the pump is empty before removing it. If the window is entirely black (3 in figure G), it is overfilled.

Caution: Do not allow overflowing; if the appliance overflows, wipe it clean before putting it back.

7. Plug and store the fuel recipient, then fit the plug on the tank but above all not the cardboard ring, securing it firmly and inserting it in the appliance. The tank window is now in the lower part of the appliance. You can see it through the housing. It is black (1 in figure H), and when it turns yellow (2 in figure H), it means there is little fuel left, and that you must fill it up. When it is entirely yellow (3 in figure H), the tank is empty.

CAUTION: Before filling again, make sure the appliance is turned off and is cold before taking out the tank to prevent any incident if drops of fuel should fall on the appliance.

STARTING UP THE APPLIANCE

For convenience and safety's sake, this appliance has an automatic ignition system powered by the four batteries that you have already installed.

CAUTION: If you are using this appliance for the very first time, you must wait two hours after installing the tank to ignite it because the wick must be impregnated with fuel.

We recommend that you carry out initial ignition outside because the materials used for manufacturing the appliance may be covered with a greasy film, which has to burn off.

Remember that if you purchased this equipment during the off-season period, or if the weather is not cold, but you want to try it even so, you may have some difficulties.

AUTOMATIC ELECTRONICS IGNITION SYSTEM

When using the Kerosene heater for the first time, please put four pieces 1.5 VOLT C-SIZE batteries into battery case before make ignition. please open the battery case following the tips on the battery case cover, open the case cover, then push the lug and pull it over (Fig.D). Please pay attention to install the battery (positive and negative) according to instruction on the battery case, do not reverse the positive and negative! Close the battery case when it's ok.

Clockwise turning the wick adjuster knob to the highest position while ignition, rotating back a little is the best ignition position. Then press the red button finally until the ignition is completed .(Fig.K)

At ignition, when its deep voice, then the wick is blocking the ignition pin. Don't let go of the hold down the button, let the wick to be a little bit raising or lowering, it can be ignited. (Fig.K) The normal ignition, using this method is easier to ignite wick.

When using Kerosene heater electron ignition for the afterwards, turn the wick adjuster knob, adjust the wick position, then press the red button. (Fig.K)

In the adjusted wick height position ok , if with his left hand lift the spring handle of burner, burner under the edge away from the wick a little bit; right hand press the ignition button, so also are more likely to light the wick. (Fig.L)

Can remove the burner, wick adjustment to the appropriate ignition height, to light the wick and then put it back into the burner. Note the wick do not adjust too high, otherwise the light the wick will black smoke.

Then begin following the steps outlined in "Adjusting the wick" (page 9).

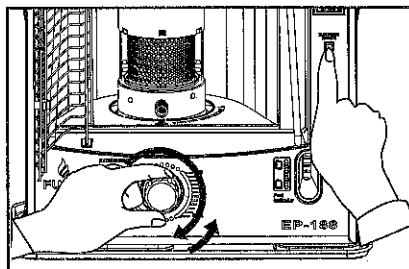


Fig. K

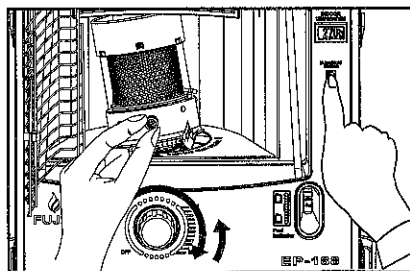


Fig. L

IMPORTANT:

1. Do not use the old battery together with the new one.
2. When the electron ignition fire turns small, it means the batteries are short of electricity, please change the battery.
3. Press after the ignition button, ignition needle did not send out the flame:
 - 1) To check whether there is electric batteries;
 - 2) Check the battery and wires are in whether or not good condition connect.
4. Do not use hand or hold conducting objects to touch the ignition pin electrode. while ignition (21 in figure B), or you will be burned and get an electric shock risk.
5. Remove the batteries if the appliance is to be left unused for some time.

IGNITION VIA MATCH

If you encounter a problem with the ignition mechanism, or if you have dead batteries, it is possible to light the heater with a match (Fig.M).

The procedure is as follows:

1. Turn the wick adjuster knob clockwise until the wick has been raised to its maximum height.
2. Open the door.
3. Lighting a match.
4. Lift the burn chamber by using the burner knob.
5. Touch a lighted match to the exposed top edge of the wick.
6. Once you see that the wick has been lit, lower the burn chamber back down over the wick.
7. Can remove the burner, wick adjustment to the appropriate ignition height, to light the wick and then put it back into the burner. Note the wick do not adjust too high, otherwise the light the wick will black smoke.
8. Rotate the burner knob from side to side a few times to make sure that the burner is positioned properly on the wick adjuster. If the burn chamber oppression wick can't correctly placed on the wick holder, the burning a while flame is very big and has the smog. At this time must pressure to the manual shut-off knob, emergency shut down the wick to a minimum to force was pinned wick away from the burn chamber; Loosens the manual shut-off knob, And immediately rapidly turn the wick adjuster knob clockwise until the wick has been raised to its maximum height, USES the heat of combustion chamber to automatically ignite the wick.
9. Then begin following the steps outlined in "Adjusting the wick flame"

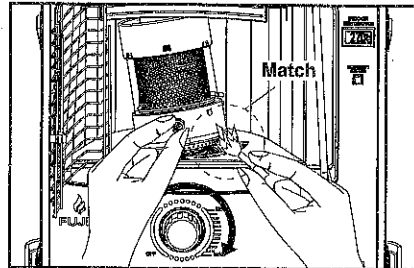


Fig. M

CAUTION : Make sure that you do not leave the match, or any portion of it (match head, etc.) in the burner area. Debris left from the match can cause an uneven alignment of the burner and may result in smoke, incomplete combustion, odor, or fire.

ADJUSTING THE WICK FLAME

After lighting the heater, it is important to check the heater flame within the first 6-8 minutes of operation. After 6-8 minutes of operation, you should use the wick adjuster knob to obtain the proper flame height. IF THE FLAME IS TOO HIGH, TURN THE WICK ADJUSTER KNOB DOWN SLIGHTLY UNTIL YOU GET THE NOMAL FLAME INDICATED IN. IF THERE IS NO FLAME, OR A VERY LOW FLAME, TURN THE WICK ADJUSTER KNOB UP SLIGHTLY UNTIL YOU GET THE NOMAL FLAME INDICATED IN. VERY FINE ADJUSTMENTS TO THE FLAME CAN BE MADE BY GRABBING THE BURNER KNOB AND MOVING THE BURNER FROM SIDE TO SIDE UNTIL THE BLUE FLAME IS EVENLY DISTRIBUTED.

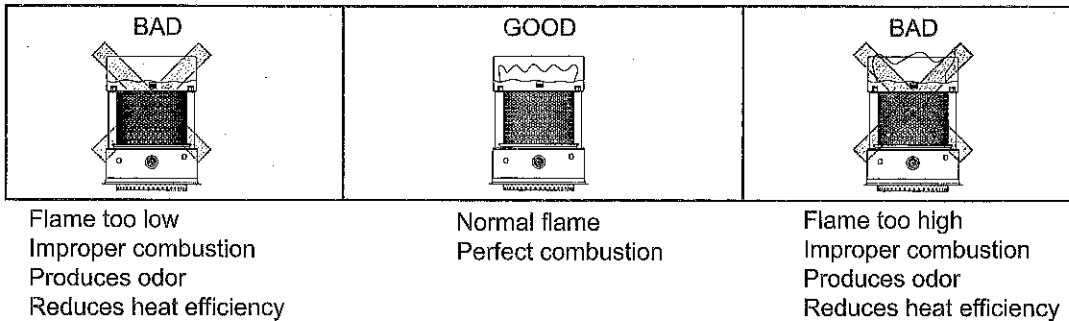
CAUTION: Do not grab the burner knob once the heater has reached normal operating temperature and the flame has stabilized. The burner knob is very hot during operation.

As you continue to operate the heater, the temperature of the heater and the temperature of the room

will continue to change. As the heater warms up, the kerosene in the tank will vaporize faster, and this could require adjusting the wick down in order to maintain the proper flame. **THE FLAME MAY NEED TO BE ADJUSTED DURING THE TIME THE HEATER IS BEING OPERATED.** Therefore, it is necessary to continue to monitor the flame, and to make adjustments using the wick adjuster knob to keep the proper flame height. It is recommended that the heater be checked every 30 minutes in order to keep the proper adjustment because periodic adjustment is required, **FAILURE TO KEEP THE WICK ADJUSTED PROPERLY WILL RESULT IN SMOKE, ODOR, IMPROPER COMBUSTION, CARBON BUILD-UP, AND A SHORTER WICK LIFE.**

NOTE: Occasionally during normal operation you will hear the sound of fuel draining from the cartridge tank to fill the fuel reservoir area. This is normal for a cartridge tank kerosene heater.

WARNING• NEVER turn the wick adjuster knob lower than the "LOW" setting of the wick adjustment. If you operate the heater below the position where the wick stop engages (the "LOW" setting), smoke, odor, excess emissions, CO (carbon monoxide), and flare-ups can result.



EXTINGUISHING THE APPLIANCE

1. Press the stop button (9 in figure A) to move the wick down. If the wick does not lower entirely, turn the wick positioning knob (8 in figure A) counterclockwise until it is as low as possible.
2. After two or three minutes, lift the burner by grasping the spring and checking that it is unlit.

To minimise the odour given off on extinguishing, you can hold the wick positioning button when you press on off, then turn it slowly to the bottom point and thus cause a slight slowing of the wick combustion speed. If you see that there is a blue flame at the wick, do not worry. It lasts approximately five minutes, the time needed to burn off the residual gases in the upper part of the wick housing.

CHECKING AND REGULARLY MAINTAINING YOUR APPLIANCE

CAUTION: It is absolutely prohibited to work on the following components:

- Safety system
- Fuel gauge

Maintain your heating appliance clean, wipe it regularly, check there are no signs of grease and clean any fuel runs that may have been deposited on the tank during filling, to prevent the emanation of unpleasant smells.

Check the condition of the fuel tank on each fill. If it is leaky, dented or shows signs of rusting, replace the tank immediately. You can obtain a new one from your dealer or your after-sales service.

Test the anti-shock device as follows:

1. turn the wick to the high position using the knob provided for the purpose (8 in figure A). NB: If the tank is not in position, you will be unable to carry out this operation, as this appliance was designed for intermittent use, and lack of a tank prevents it from functioning.
2. Shake the appliance. You should hear the tripping of a catch, releasing the wick and allowing it to descend into the appliance.

To ensure that the wick has descended properly try turning the knob (8 in figure A) counterclockwise; if you do not manage to do so, it means that the anti-shock system is operating correctly. Otherwise, it is defective and you may not start your appliance or work on the device. You must call in our after-sales service.

Make sure there is no soot, tar or carbon on the parts located by the side of the wick. If there are any, scrape them away gently with a flat-tip screwdriver, making sure that the particles do not fall into the cylinder around which the wick is located.

Check the condition of the wick before each use to make sure it is not fouled by carbon dust, which will render the upper part of the wick rigid or fragile, or by soot or tar, which will make it Very black. this can have several consequences:

- Difficulty in lifting the wick with the knob.
- Difficulty in ignition.
- Poor combustion.
- Poor extinguishing.

Problems may arise after having used two or three tanks of fuel, but we suggest that you carry out the cleaning operation described below systematically every week during the full heating season and regularly during the remainder of the year, depending on the state of the wick.

This cleaning operation must be carried out outdoors or in a well ventilated place because it may produce a strong smell.

1. Turn the appliance on and allow it to go out on its own.
2. Thirty minutes after complete extinguishing, re-ignite and allow it to go out alone again.
3. When the wick is cold, use a small soft wire brush or a worn toothbrush on the upper part of the wick to remove soot, tar and carbon dust.
4. The wick should be left flexible, but some points may remain stiff. If so, crush them with flat pliers to break the pieces of carbon that remain into dust.

If cleaning does not prove to be entirely satisfactory, you can repeat the procedure over again, first adding some fuel to the tank. However, if the result does not improve, contact the after-sales service so that it can change the wick.

During cleaning, be sure that the particles removed do not fall into the cylinder around which the wick is located.

TEMPERATURE DISPLAY BATTERY REPLACEMENT

Remove the temperature display, open the back of the battery cover, loading the two button cell LR44 1.5V. (2 in figure A)

CLEANING INSULATOR ASS'Y

Clean insulater ass'y with a piece of clean cloth. (13 in figure A)

STORING THE APPLIANCE OUTSIDE OF THE HEATING SEASON

Follow these instructions with care to pave the way for the next heating season.

1. Rinse the inside of the tank, sloshing a small amount of fuel around inside it. Do not use water, whatever happens because it could cause the tank to rust.
2. Empty the tank entirely, making sure there is no fuel left.
3. Put the tank back in place, ignite the appliance and wait until it goes out on its own (approximately one hour).
This operation should be carried out outdoors.
4. Remove the tank and open it so that it may dry.
5. Remove the batteries and keep them in a dry place.

6. Remove the burner, after opening the grill.
7. Clean the burner and the metal parts around the wick.
8. Install the appliance and leave the wick in the low position.
9. Store the appliance in its carton with the original packages, as well as the manual and the plug.
10. Store in a dry and ventilated place.

TROUBLE SHOOTING GUIDE

TROUBLE	SOLUTION
The appliance stops inadvertently and the safety system trips.	Air the room, lower the temperature. Wait approximately 10-15 min. then attempt to ignite the appliance. NEVER ATTEMPT TO RESTART IT IMMEDIATELY. WAIT AT LEAST 30 MINUTES
The heater does not ignite: 1.The tank is empty. 2.There is water in the fuel. 3.The ignition button is not working.	1.Fill the tank with suitable fuel. 2.Drain the tank. Contact your retailer to change the wick. then fill the tank with suitable fuel. 3.Replace the batteries. Replace the igniter. Check for broken or disconnected wires. Refer to page 4 or 8.
The heater gives off fumes or odours: 1.The flame is too high 2.Strong air inlet into stove. 3.Burner not horizontal. 4.Soot or tar appears on wick. 5.Fuel contaminated.	1.With the wick adjustment knob, lower the wick to reduce the height of the flame. 2.Remove the stove from draft. 3.Using the burner spring, turn the back and until it is correctly placed on the wick. 4.Contact your retailer to have the wick maintained. 5.Empty the tank. Have your retailer replace the wick. Then fill the tank with suitable fuel.
The flame flickers or goes out: 1.Water in the fuel. 2.Soot or tar on the wick.	1.Empty the tank. Have the wick replaced by your dealer, then fill the rubber container with suitable fuel. 2.REFER TO PAGE 10. IF THE PROBLEM CONTINUES,CONTACT YOUR RETAILER.
The wick burns too quickly: 1.Non-conforming,volatile or dangerous fuel is mixed with your appliance fuel.	1.Clean and empty the tank. -Have the wick replaced by your retailer. -Fill the tank with suitable fuel.
The wick cannot be adjusted easily: 1.Presence of water in fuel. 2.Appearance of carbon or tar.	1.Clean the tank. -Have the wick replaced by your retailer. -Clean the tank with suitable fuel. 2.Follow the instructions given above.
The appliance is on fire:	the fire department. -Extinguish the flames with an extinguisher or sand. Otherwise, use blankets and pour water onto them. Never throw water directly at the appliance.