# Instruction for use Saf-e-fire Blue Flame Heater

This New Heater is:

- odourless
- 100% safe

#### The flame is:

- visible all-round
- perfectly adjustable by a wonderful new system

#### The wick:

- lasts for two burning seasons
- is easy to replace

Keep this instruction booklet:

if lost obtain a new copy through
your supplier or direct from us



### INSTRUCTIONS for the care and operation



of the BK Saf-e-fire BLUE FLAME HEATER.

The BK Saf-e-fire you have just bought is ready for use. The Heater is amazingly simple to operate and when the flame is set in the right position, it needs no attention during operation.

In order to obtain best results from your BK Saf-e-fire Blue Flame Heater, the following instructions should be read with attention and the essential points should be clearly understood.

If the directions are followed, this BK Heater is completely odourless and 100% safe. It will give many years good service.

#### First handling:

Remove packing and make sure that the perforated flame spreader is in the right position on top of the wick tube and pushed down home.

#### Filling:

Unscrew filler cap and fill the container with a good quality paraffin. The container holds one gallon, but do not fill right up to the filler opening. Wipe off any spilt paraffin and always keep container clean. When filling the container for the first time, make sure that it is at least three quarter full. The foolproof indicator will always show how much paraffin is in the container. The float painted in red and white, rises and sinks with the fuel level.

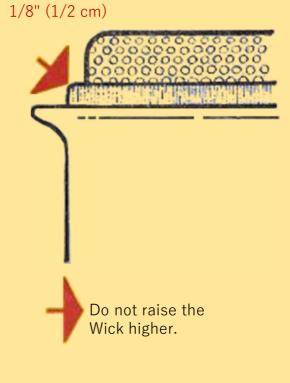
Under no circumstances use petrol or benzol. Never mix any other fuel with the paraffin or add anything to it.

Replace filler cap by screwing clockwise. Make sure it is fitting tightly. The packing ring in the screw cap seals off the opening completely.

The container can be refilled whilst alight, provided this is done carefully. This is quite safe.

When using the heater for the first time the tank should be filled an hour beforehand, so that the wick can get well soaked with paraffin. The wick only obtains its full soaking capacity after approx 12 hours. Once the wick is well soaked, it can always be lit immediately after the container has been filled.



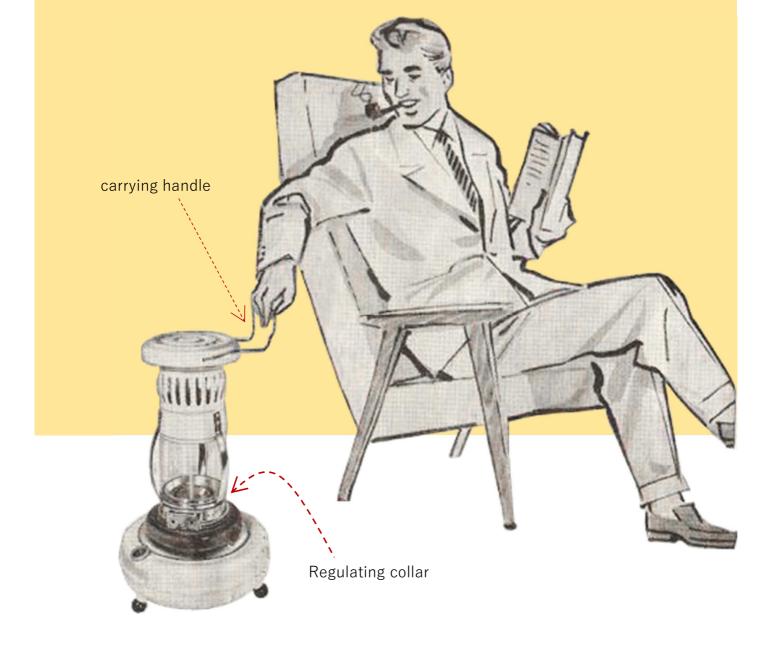


#### Lighting:

Raise the wick by turning carrying handle or regulating collar clockwise until the wick is approx. 1/8" (1/2 cm) above wick gallery flange. Generally two complete twists will be sufficient but always check when the heater is opened.

If the wick is raised too high, a large yellow flame will result, which must be immediately reduced until it is blue

The chimney assembly can be lowered by pressing lightly on spring clip. Light wick all-round and close top of heater. Check that spring catch is fastened.



#### Regulating:

When the wick is fully alight, the flame can be adjusted by turning carrying handle or regulating collar clockwise or counter-clockwise.

#### Important:

One of the striking novelties of the BK Saf-e-fire Flame Heater is, that the wick movement is not controlled by a regulating spindle, but by an ingenious interlocking device, which enables the flame to be adjusted simply by turning the carrying handle or regulating collar.

The shield shown here and fixed just underneath the regulating collar, will always indicate the right direction.



. Clockwise: Lighting, High

**Position** 

. Counter-clockwise: Low Position, Extinguishing

#### Caution:

The BK Saf-e-fire is a **Blue Flame** Heater. The flame should always be **blue**. When the heater is burning in low, medium or high position, the flame must be blue and transparent as shown here (A).

If set **Too High**, yellow streaks will appear resting on the ridge of the round blue flame, as shown here (B).

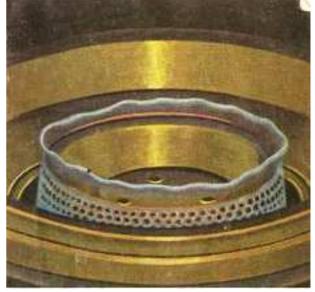
If set **Too Low**, the flame will be wholly or partly yellow, as shown here (C).

The user should thoroughly familiarise himself with these flame pictures became the heater must be adjusted within the limits shown. If the heater is used in a dusty atmosphere, dust particles will be sucked in by the burner and burned with the oxygen. Minute reddish yellow sparks will shoot up then above the blue flame. **These are harmless**.

#### **Extinguishing:**

Turn the chimney assembly counterclockwise by means of carrying handle or the regulating collar until the flame dies down, 2 or 3 twists will normally suffice.

It is not necessary to blow flame out. When relighting observe the above instructing. The heater will reach its maximum output within a minute.



A. Correctly Adjusted



B. Turn wick down until streaks disappear



C. Turn wick up until a completely blue flame is obtained

#### Wick cleaning:

When in continuous use, the wick should be scraped approx, once a fortnight with the wick cleaner provided. The carbon or chars formed on the wick after continuous operation can be removed by scraping the wick top.

**Remove flame spreader** before placing the scraper on top of the wick. Pressing gently, rotate the cleaner until no more carbon is coming through the holes of the cleaner. Any remaining deposits can best be removed from wick or gallery flange by wiping carefully with a cloth.

Never use scissors, razor blades, etc.

#### **Burning dry:**

In case the container should not have been refilled in time and the partially dry wick will start glowing, the heater should not be extinguished nor the container be filled, but the tank should be allowed to burn completely dry.

A yellow-red flame instead of the normal blue one is the danger signal that the container is burning dry and the wick itself is glowing. When the tank is allowed to burn completely dry, the wick-edge will burn off evenly and the wick can be scraped and reshaped as described under, Wick cleaning.

The wick is now ins perfect condition again, but after filling the container, wait an hour before relighting. Failure to observe these instructions will cause a flame with yellow spiked resulting in a reduced heat output and posibly some odour. Watch the indicator therefore and fill the container regularly. **Avoid burning dry**.

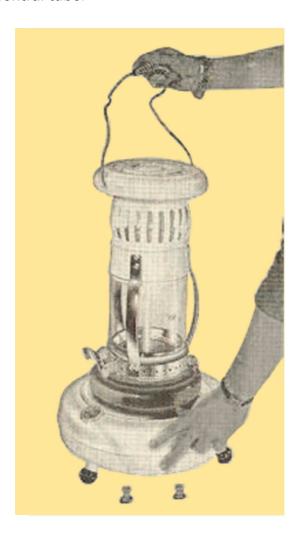


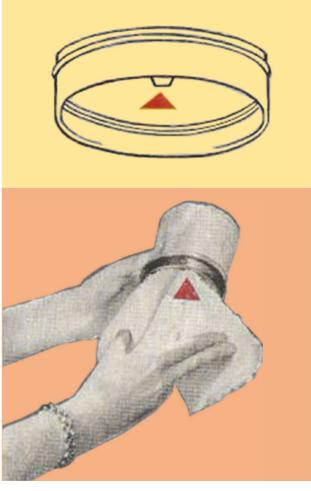
#### Inserting new wick:

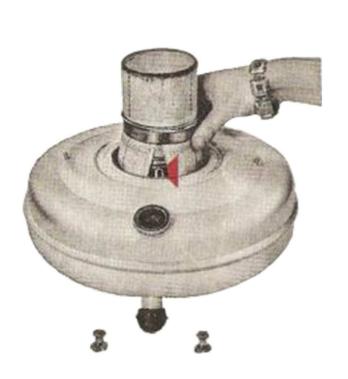
The effective burning length of the wick is approx. 2 3/4"(7cm) which ensures, if treated correctly, a working life of two years under normal conditions. When a replacement ultimately becomes necessary, it is recommended to allow the container to burn dry. This will avoid spilling of paraffin and odour. It will be found convenient to place the heater on a table when fitting a new wick.

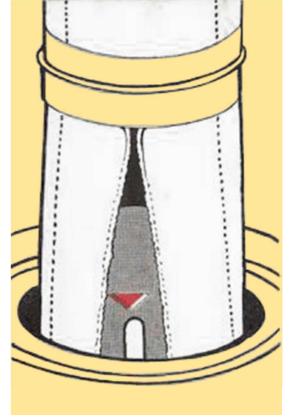
Now adopt the following procedure.

- 1) Turn chimney assembly by means of carrying handle or regulating collar counter-clockwise until the wick and wick carrier are free from the gallery. 5 of 6 complete twists will suffice.
- 2) Unscrew the two nuts from fastening ring.
- 3) Lift chimney assembly from container, leaving wick exposed. If by mistake the wick and wick carrier have not been turned down far enough, these will remain screwed on to the gallery when the chimney assembly is lifted. Simply screw off wick and wick carrier by turning anti-clockwise.
- 4) Remove flame spreader and pull off worn out wick with wick carrier from central tube.









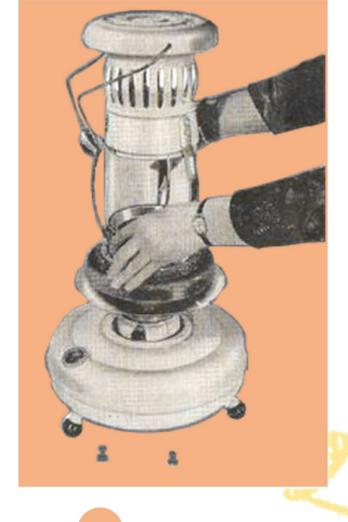
- 5) Push wick carrier over new wick as shown here: Make sure that the stud on the wick carrier is placed between the slits of the new wick and protrudes freely.
- 6) Replace flame spreader on central tube and place new wick and wick carrier over the central tube in such a way, that the stud of wick carrier will be above the groove in the central tube.

This pressed-in groove is directly visible from the direction of the filler cap. First push wick carrier stud over the edge of the central tube and pull down wick at the opposite split end until the wick carrier stud slides into the groove in the central tube.

Take care, that the yellow tape inside the wick is not damaged. Replacing the flame spreader before the new wick is inserted, will minimize this risk.

- 7) Check by pushing wick up and down that the wick carrier stud engages the groove in the central tube. This is imperative because otherwise the wick will turn. In this position the wick should be pushed freely upwards by the pressure of the spiral spring round the central tube. If because of the newness of the wick there is too much friction. press the wick carrier all-round against the central tube until wick and wick carrier shoot upwards by the spring pressure.
- 8) Replace the chimney assembly with wick gallery over the wick and push downwards until the fastening ring slides on the screwed stude and screw on nuts firmly.
- 9) After turning up the wick, the heater is ready for use again but the tank should be filled an hour before relighting.

This operation is simple and when attention is paid to the above instructions, need only take a few minutes.



#### **CAUTION:**

Only the genuine BK wicks should be used. If there should be any difficulty to obtain these wicks, please communicate with us.

#### Wick raising:

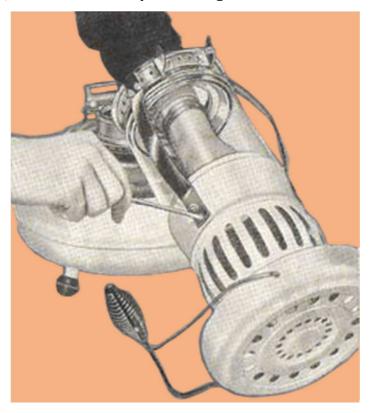
The wick can be raised several times before replacement will become necessary. When the wick can no longer be turned approx 1/5" (1/2cm) above gallery flange, the wick can be raised quite easily. Remove chimney assembly from container as just described. Pull off wick and wick carrier from central tube and push wick carrier approx, one inch downwards. Take care, that also now the wick carrier stud is placed between the slits of the wick. Replace wick on central tube and the chimney assembly on container as described above.

Take care that the wick carrier sits square on the wick.

#### Replacing glass cylinder:

In case the glass cylinder is damaged or broken by very rough handling, replacement is necessary.

Obtain a new cylinder through the original supplier of the stove. Open heater and take off the burner basket fitted in the lower part of the chimney. This is a push fit only and the basket is not screwed on or specially fastened. Remove the enamelled part of the chimney by unscrewing the six screws which fasten the three steel supports to the enamelled upper part. Insert new cylinder and screw on again the supports to the chimney upper part. See to it that after fitting the glass chimney will be free and not tight, otherwise there is the risk of cracking. After replacing the burner basket, the heater is ready for use again.



The cylinder is made of heat resistant glass and proof against cold water splashed and cold air draughts, even when the flame is in the highest position. If there should be any trouble to obtain a new cylinder, please communicate with us.

#### Care and upkeep:

After continuous burning for some length of time, a dullish film may develop on the enamelled part of the chimney and the glass cylinder. This film can be easily removed by using a cloth and some soap. The chimney can be cleaned from the inside by opening the heater and taking out burner basket.

#### Storage:

When the heater will not be used for a long period, e.g. during the summer months. It is recommended to empty the container.



#### Summing up:

In order to obtain best results from your BK Saf-efire Blue Flame Heater at all times, keep always in mind the following directions:

- a) The flame always must be blue. Avoid yellow streaks or a yellow flame throughout.
- b) Claen wick with the BK scraper only at least once a fortnight.
- c) Do not allow container to burn dry. Fill regularly.
- d) Do not operate stove with broken or cracked glass cylinder. Obtain new one.
- e) Never use any other fuel except kerosene, commonly called paraffin or burning oil. The BK Saf-e-fire has been tested and approved on ESSO BLUE paraffin. The fuel we recommended for best results.
- f) The room where the heater is used must have a normal supply of fresh air. Each paraffin burning appliance burns considerable quantities of air to each gallon of paraffin.
- g) The BK Saf-e-fire Blue Flame Heater can be used effectively for cooking. The full heat is directed straight to the bottom of any vessel placed on top.
- h) Always keep the heater clean.
- i) For servicing use BK spare parts only.

## Performance

#### Consumption:

0.58 pints (1/3 litre) p. hour High Position 0.23 pints (1/8 litre) p. hour Low Position

#### **Heat Output:**

10,500 B, Th. Us/Hr. (2,625 kcals/hr) High Position 4,000 B, Th. Us/Hr. (1,000 kcals/hr) Low Position Equivalent to 3 kilowatts High Position Low Position

#### Capacity of container:

1 gallon (4.5litres), sufficient for approx. 15 hours burning in High Position or 36 hours burning in Low Position.

#### list of spareparts



#### The BK Saf-e-fire BLUE FLAME HEATER

is a product of the ROYAL KAMPEN ENAMEL WORKS (HOLLAND). Sole sale in England by Royal Kampen Enamelworks, 19, Moorgate, London - E.C.2. Telephone: Morarch 1814 - 3621