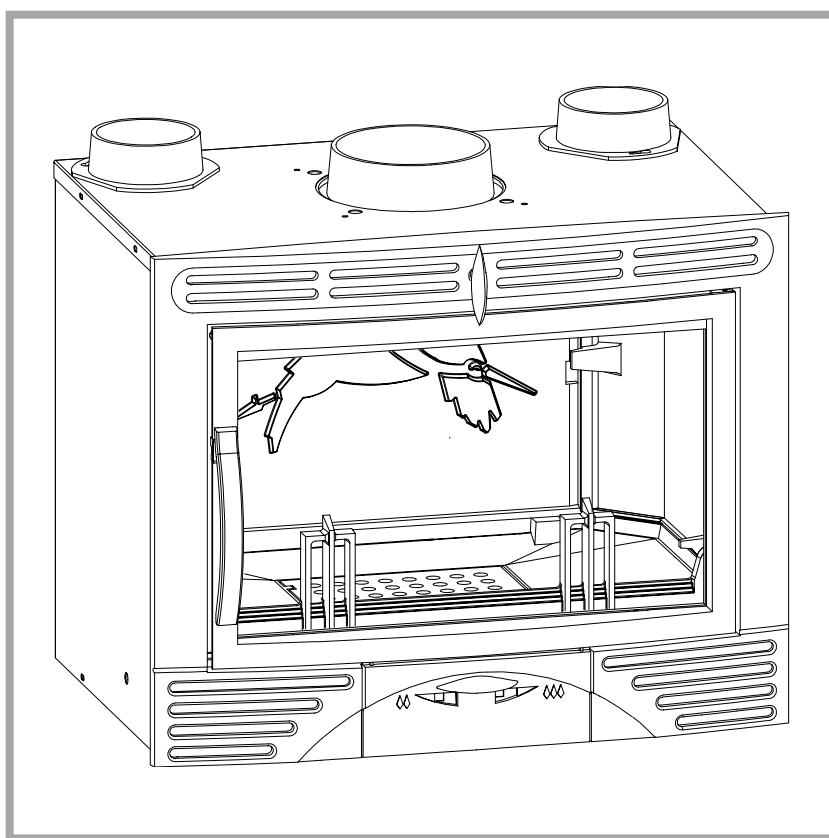

Hekla

Insert fire

I G B sf In - NF D 35-376

Model : 634 10 44

Model : 634 10 45



Description of the appliance

Installation instructions

Operating instructions

Spare parts

Warranty certificate

Document n° 1204-1 ~ 02/05/2005

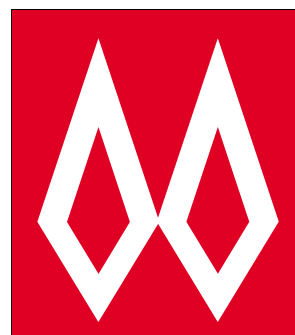


Technical manual

to be saved

by the user

for future reference



FRANCO BELGE

STAUB FONDERIE

SARL with the capital of 6 359 540 €

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Subject to modifications.

FRANCO BELGE congratulates you on your choice.
FRANCO BELGE, which has been granted the ISO 9001 certification, guarantees the quality of its appliances and is committed to meet its customers' needs.
FRANCO BELGE, which can boast a 75-year experience in the industry of heating devices, uses state-of-the-art technologies to design and manufacture its whole range of products.
This document contains instructions on how to install your appliance and make full use of its functions, both for your comfort and safety.

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Warning to the user

A wood stove should only be installed by competent personnel, in the strict application of normal practices and all safety precautions.

An incorrectly installed wood stove can cause serious accidents (chimney fires, burning of plastic insulation materials, in partition walls, etc.).

The manufacturer’s responsibility shall be limited to the supply of the equipment.

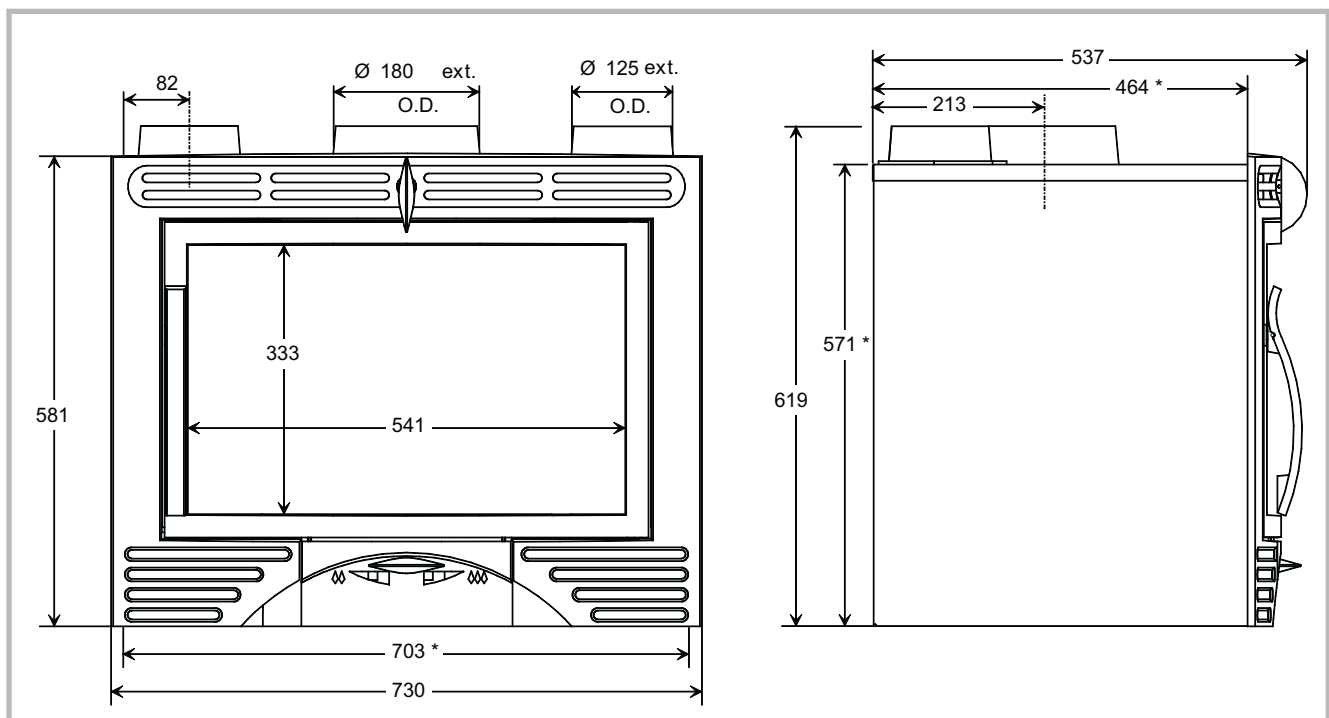
1. Description of the unit

1.1. Specifications

Model	634 10 44	634 10 45
Normal heat output	kW. 10.	10
Firebox dimensions width x depth x height	mm. 585x325x350.	585x325x350
Logs dimensions :		
- length	cm. 50.	50
- diameter	cm 10 to 16	10 to 16
Ash pan capacity	liters 2,5	2,5
Weight	kg 115	115
Autonomy at minimum rate	hr 7	7
Corrected heating volume	m ³ 400	400
Firebox draught at maximum rate	Pa. 10.	10
Firebox draught at minimum rate	Pa 5	5
<i>Fans</i>		
- voltage (~ 50 Hz)	V 230	-
- Electrical power consumed	W. 2 x 35	-

1.2. Optional equipment

- Kit variator of speed for the ventilation
- Kit handle brassplated (KP 1013 D) or chrome (KP 1013 N)



* Part to insert

Figure 1 - Dimensions in mm

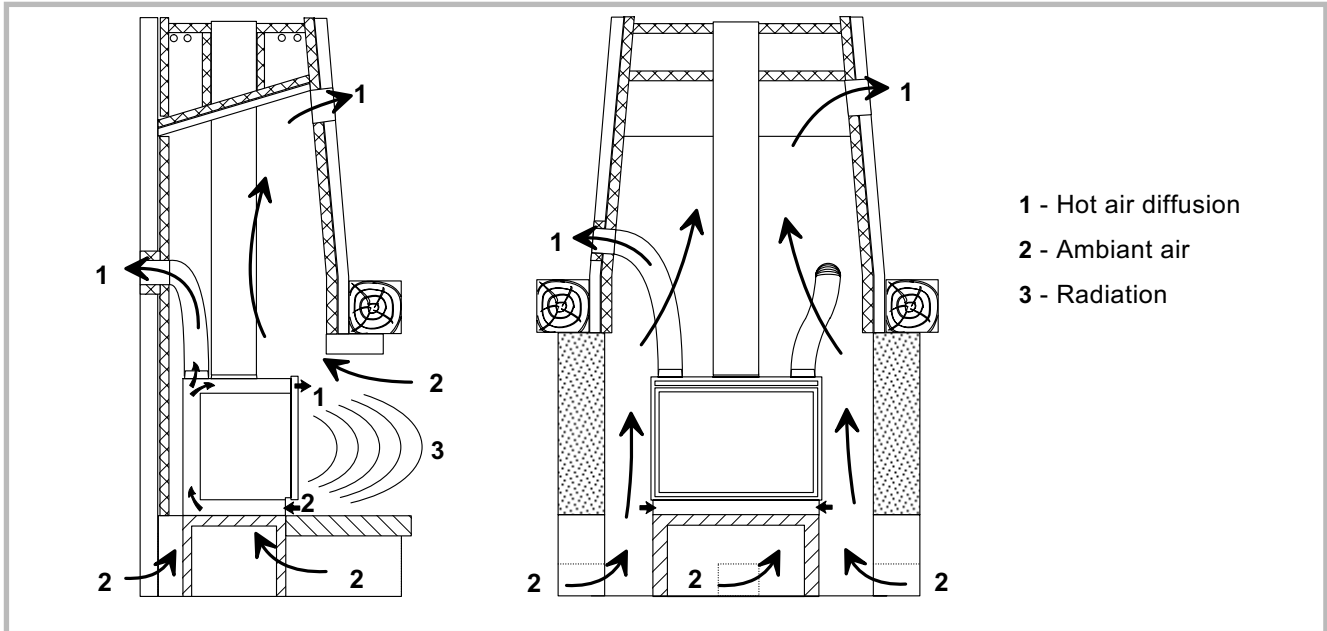


Figure 2 - Heating principle

1.3. Description

Insert fire, I G B sf In - NF D 35-375

I : Intermittent-burning heating appliance.

G : Wood burnt on **grate**

B : **Wood** burning

sf : **semi-close** cast iron firebox with a decorated hearth plate and fire dogs.

In : **Insert** fire

- Hot air convector made of double stainless steel walls forming the heat exchanger.
- (model **634 10 44** only) Two fans with automatic start to accelerate the hot air convection.
- A door made of “vitroc ceramic” glass which can resist to temperatures of up to 750° C and also acts as a sparks guard.
- Combustion speed regulated with an air flap situated on the main door.
- Draught flue damper with a frontal control.

1.4. Working principle

The insert is made to fit into an existing chimney. It can also be used as the hearth of a chimney about to be built.

Strong heat will come through the glass door by radiation.

The air is collected at the bottom of the appliance around the ash pan, spreads around the fire where it becomes hot and is passed out at the top of the unit to convect its efficiently heated air around the room.

(model **634 10 44** only) The air leaving the heat exchanger is accelerated by the automatic start of the fans when the hot air temperature is more than 50 °C. The fans stop when the air temperature fall down.

The speed is regulated with the primary air flap situated on the main door.

A clever secondary air inlet around the glass door completes the combustion of volatile components and allows the door to remain clean.

The flue damper allows and even combustion speed depending on the chimney draught.

2. Installation instructions

2.1. The room

Ventilation :

For satisfactory operation with a natural draught, check that sufficient air for combustion is available in the room.

Chimney position :

For new chimney installations, select a central position within the building, to provide a good heat distribution around the building.

Hearth :

The hearth must be suitable for use with solid fuel burning appliances and must comply with Current Building Regulations. If in doubt, consult your Dealer or local Building Inspector.

Rear wall and ceiling :

The appliance must not be positioned close to combustible materials, wall & ceiling surfaces etc..., Consult your Dealer or local Building Inspector if in doubt.

2.2. Flue

Existing flue :

- The flue must be in good condition and must provide sufficient draught.
- The flue must be suitable for the installation of solid fuel burning appliances and comply with Current Building Regulations.
- The flue must be clean. It should be swept to remove soot and dislodge tar deposits.
- The flue must be well insulated. If the flue inner wall surfaces are cold, a good thermal draw is impossible causing condensation problems (tar formation etc).
- The flue must not be shared with other appliances.
- The recommended minimum flue height is 5 metres.
- If the chimney has any down draught tendency, due to its position in relation to nearby obstacles, an anti-down draught cowl must be installed on the chimney or the chimney height must be increased.
- If the decompression in the chimney is excessive, a draught stabiliser must be installed.

Chimney to be built / Flue non-existent :

- The stove must not support the weight of the flue.
- Consult a chimney specialist for advice on suitable flue systems for solid fuel appliances.

2.3. Connection to flue

- The stove must be installed as close as possible to the chimney.
- The stove should be connected to the flue by a smoke pipe, approved for installation with combustion products (e.g. 360 stainless steel 1 mm thick or vitreous enamel.).
- Pipe diameter must not be less than the appliance spigot diameter.
- The connection can be either vertical or horizontal. For horizontal connections, avoid right angle bends.

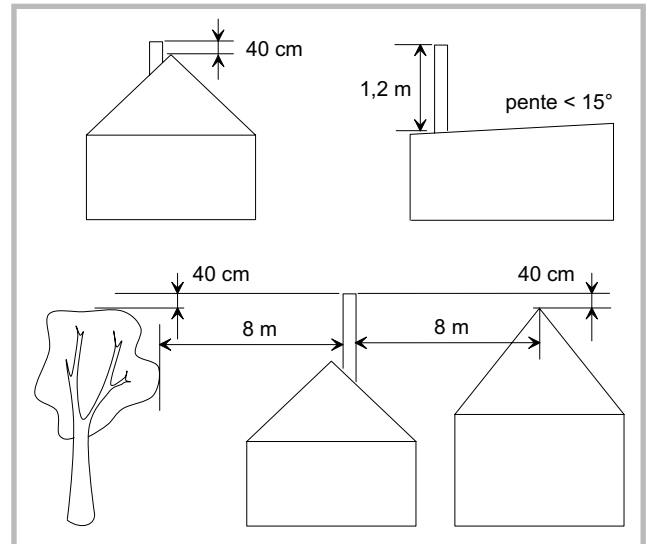


Figure 3 - Flue upper section height

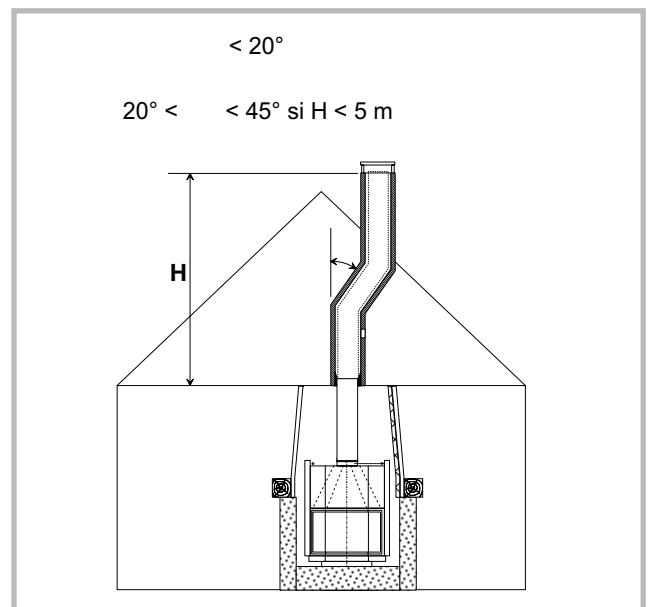


Figure 4 - Flue offset

- The joint between the connection pipe and the stovepipe, and the flue, must be leak tight.
- The connection pipe and any draught stabiliser must have access for cleaning

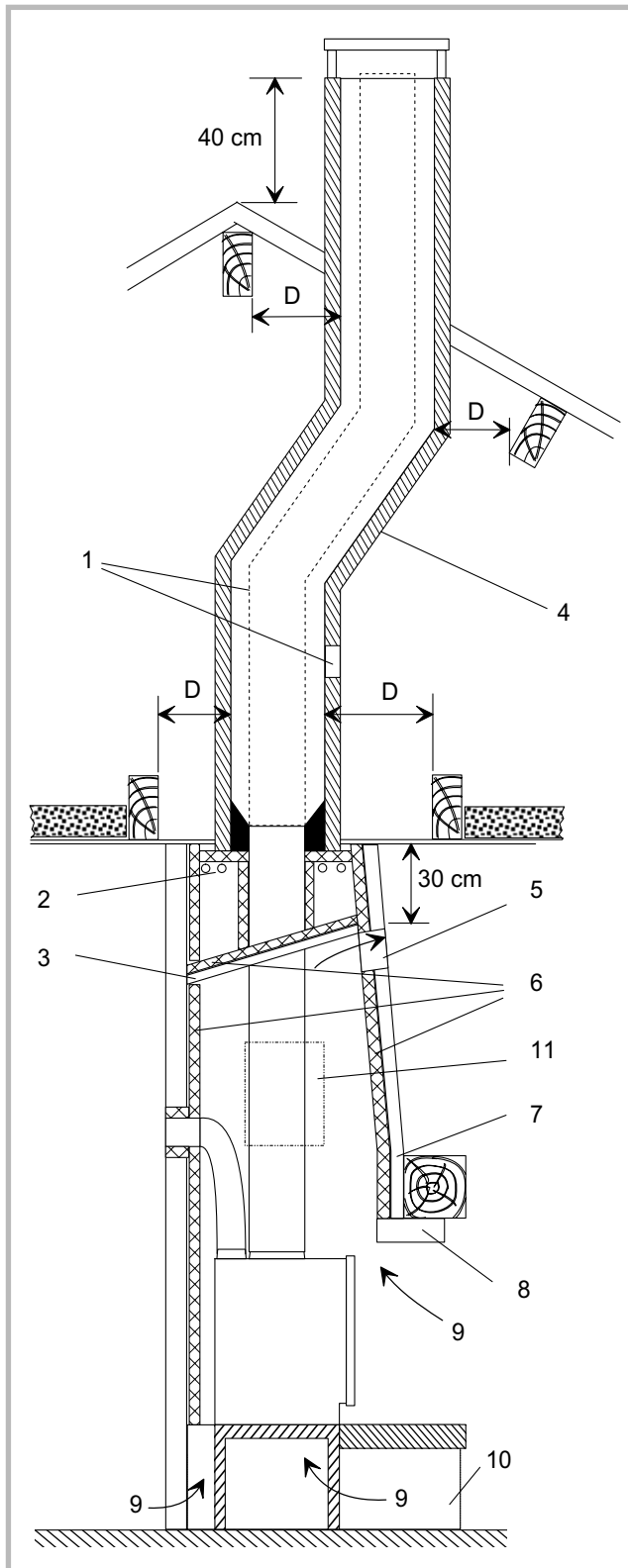


Figure 5 - Chimney constructed around insert

- 1 - Possible tubing with venthole in case existing pipe is not compatible.
- 2 - Decompression holes to ventilate the space between deflector and ceiling.
- 3 - Deflector to guide convection air.
- 4 - Flue in chimney, flue tile or insulated metallic pipe.
- 5 - Warm air diffusion grate (minimum 500 cm³).
- 6 - Insulation (rockwool)
- 7 - Protection hood for girder.
- 8 - Frieze under girder, brick or fireproof concrete.
- 9 - Convection air-inlet

Convection circuit :

- Ensure that the convection air can enter freely under and all around equipment, circulate around the firebox (on the sides and behind) and escape through diffusion vents in the hood (minimum 500 cm²). Good circulation of convection air allows for optimum heat exchange with the cast walls of the firebox without any local overheating as well as a good ventilation of the hood.

10 - Base (or stake), with correct levelling, ventilated, on a solid and reinforced ground.

11 - **Inspection hatch (500 x 350 mm)** to allow access to connection pipe, draught regulator, pressure points, etc...

D - Safety distance :

minimum of 16 cm from the interior wall of the pipe (do not insulate the non-combustible part around the pipe across the ceiling).

2.4. Chimney built around the hearth

Follow the installation instructions provided by the chimney manufacturer.

- Avoid jamming the appliance in the hearth.
- Check proper operation of the moving parts (flap, valve, door, etc...) to ensure they are not blocked by installation materials (plaster, cement, etc...).

Remark : The base of the fireplace must be completely level to avoid hampering the opening of the appliance's glazed door. Once the appliance has been placed on the base, check that the door opens without chafing.

- If it chafes, raise the appliance and, if necessary, turn the door adjustment screw.

2.5. Insertion inside an existing chimney

Make sure hearth dimensions are sufficient (height : 571 mm, width : 703 mm and depth : 464 mm).

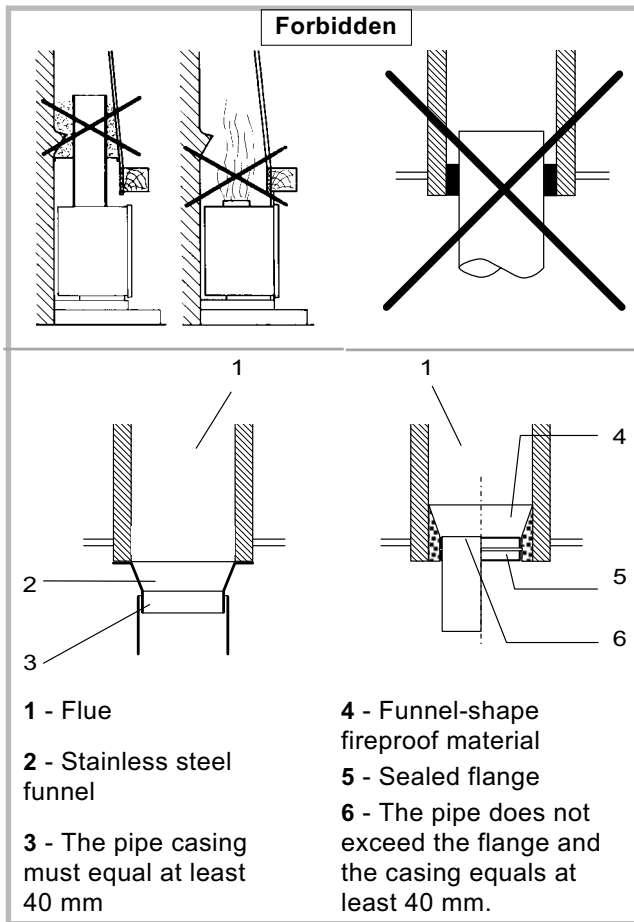


Figure 6 - Connection to flue

2.5.1. Preparing the flue pipe

Figure 7

If the existing chimney has a draught regulating system, it will have to be removed or sealed in the open position.

- Close the base of the throat of the chimney with a sheet-metal plate or masterboard which will have been drilled at the appropriate place and on which will be fitted a small collar of diameter 180 mm.
- Tightly fit the flue connection (X-595) from the stove to the small collar.
- If the floor of the hearth is rough, place a metal plate to ease the setting of the insert fire in the chimney.
- The fans must be plugged on 230 V. (model 634 10 44 only)

2.5.2. Preparing the insert fire

Figure 8

When the chimney hearth high is less than 619 mm :

- Remove the glass door,
- Remove the flue damper control and flue damper (2 bolts),
- Remove the flue collar (2 screws).

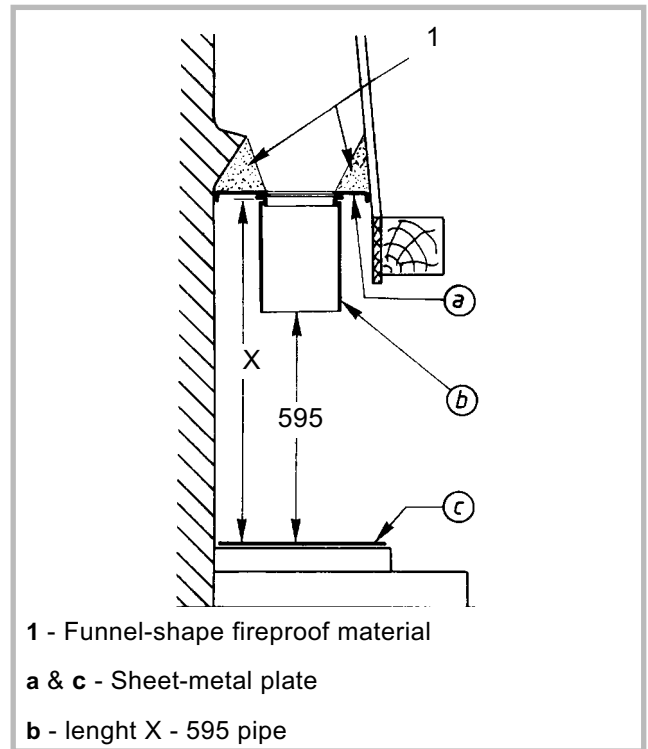


Figure 7 - Preparing the flue

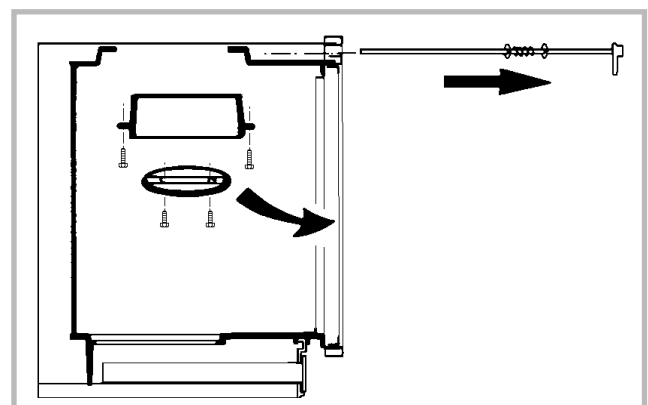


Figure 8 - Preparing the insert fire

2.5.3. Setting

Figure 10

- Slide the insert fire in the chimney hearth by lining up the cast iron fascia with the front of the chimney casing.
- Replace the cast iron flue collar by fitting it in the flue pipe and temporarily refit the flue damper control.
- Refit the flue damper control and the flue damper. The handle of the flue damper control must point upwards when the damper is closed (fig. 9, p. 8).

If there is space left between the inset fire and its housing, it must be concealed with decorative material such as tiles.

If the chimney has a wooden beam, it must be protected by fitting underneath it a metal strip with isolating fibre of air pocket between the beam and the strip.

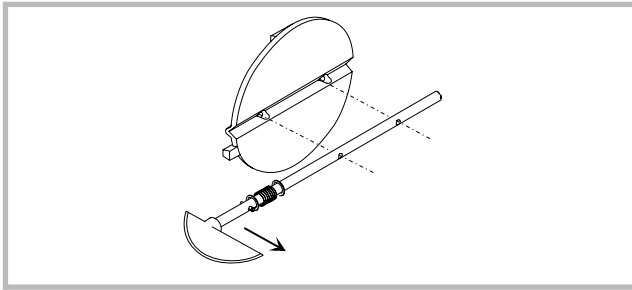


Figure 9 - Flue damper control

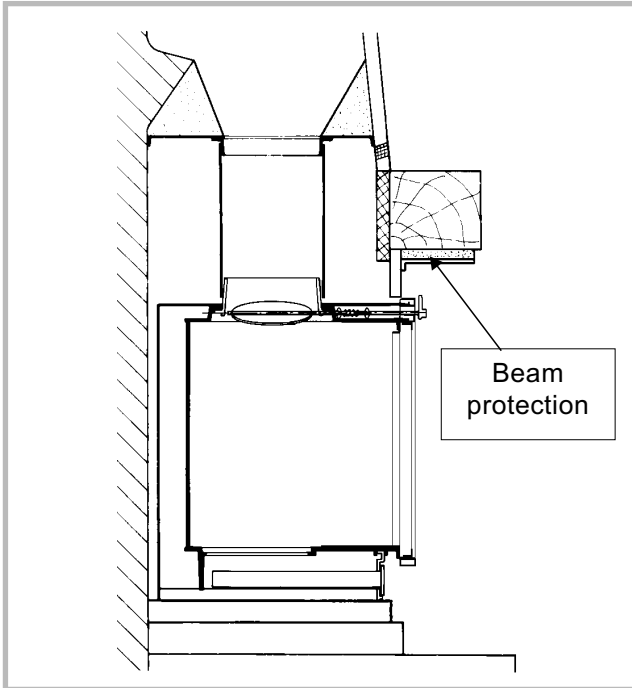


Figure 10 - Setting

2.6. Electrical connection

(model 634 10 44 only) Electrical connections should not be made until all other installation operations are completed (fixing, assembly, etc.).

This appliance complies with the low voltage directive 73/23/EEC and the electromagnetic compability directive 89/336/EEC.

The fans electrical requirement is 230 V ~ 50Hz. Plug in the power cable on a wall socket with a link to an earth socket and protected by a 1 A fuse-wire.

Note : When using a variator of speed (optional), connect the fans on the variator (**Use only the FRANCO BELGE variator ref. V6341037**).

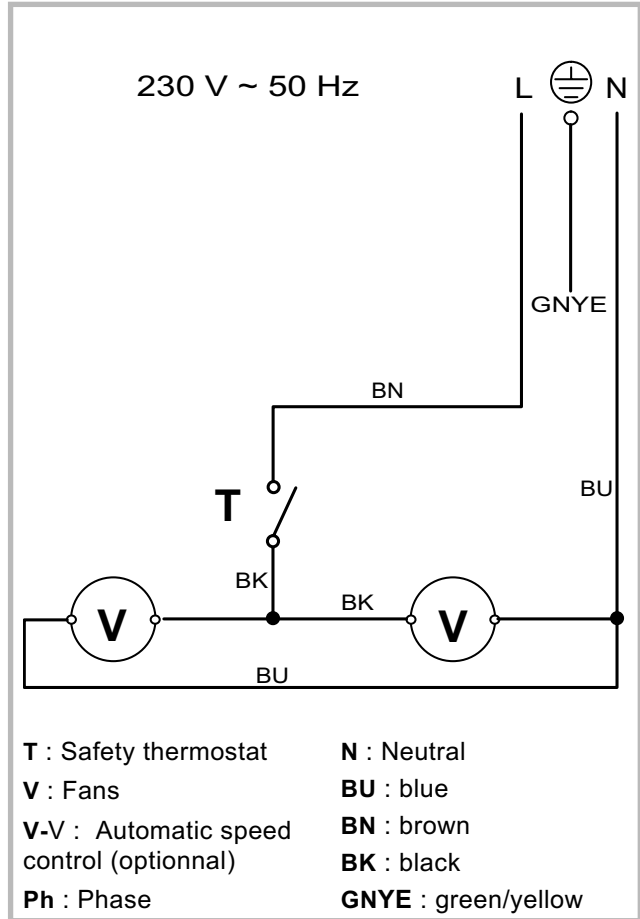


Figure 11 - Electrical wiring (model 634 10 44)

Important : The power supply cable is resistant to temperatures of 300°C. Ensure that the same type of cable is used if it is replaced.

2.7. Hot air outlets

In the case of the insert fire being the hearth of a chimney to be built, it is possible to fit two outlets to diffuse air to adjacent rooms. In this respect :

- remove the blanking plates on the casing on top of the appliance,
- secure the 5 mm O.D. screws,
- fit the flue collars supplied by rotating them,
- use insulated flexible pipe dia. 125 mm.
- avoid using pipes longer than 6 meters.
- eventually use hot-air vent controls.

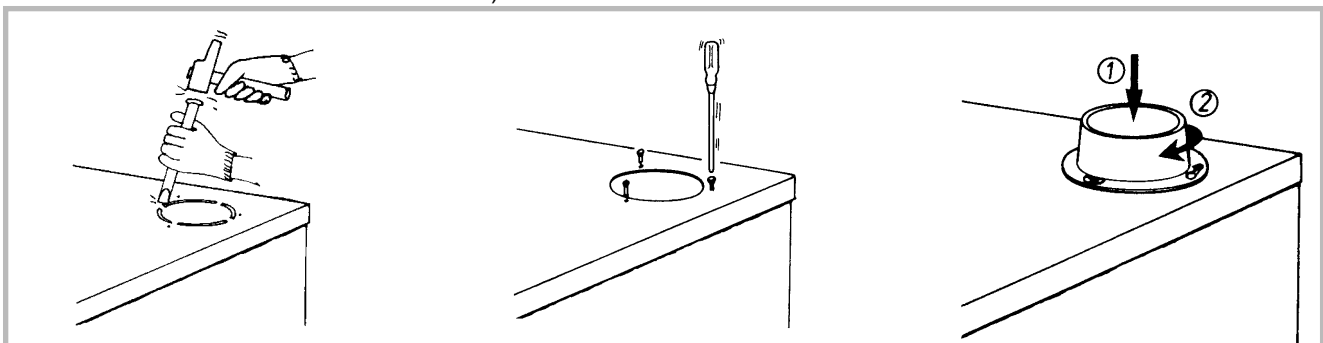


Figure 12 - Hot air outlets

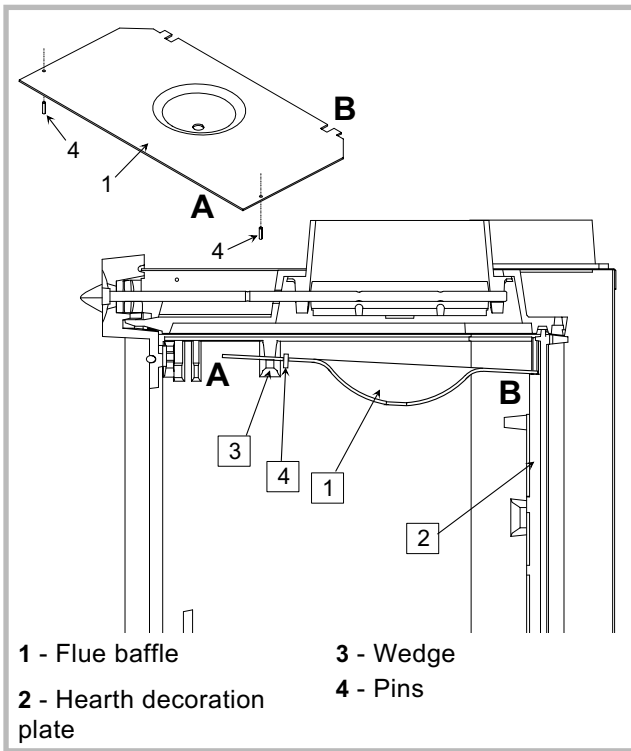


Figure 13 - Flue baffle

2.8. Flue baffle mounting

Install flue baffle (attached on hearth grate before leaving the plant) inside combustion chamber (fig. 13).

- First slide section **A** over front dampers then lay section **B** on hearth decoration plate.
- The pins **4** have to be located behind the brackets.

2.9. Access to the fans

(Ref. 634 10 44)

• Figure 14 :

Open the main door (1) and to withdraw the ashtray (2), to

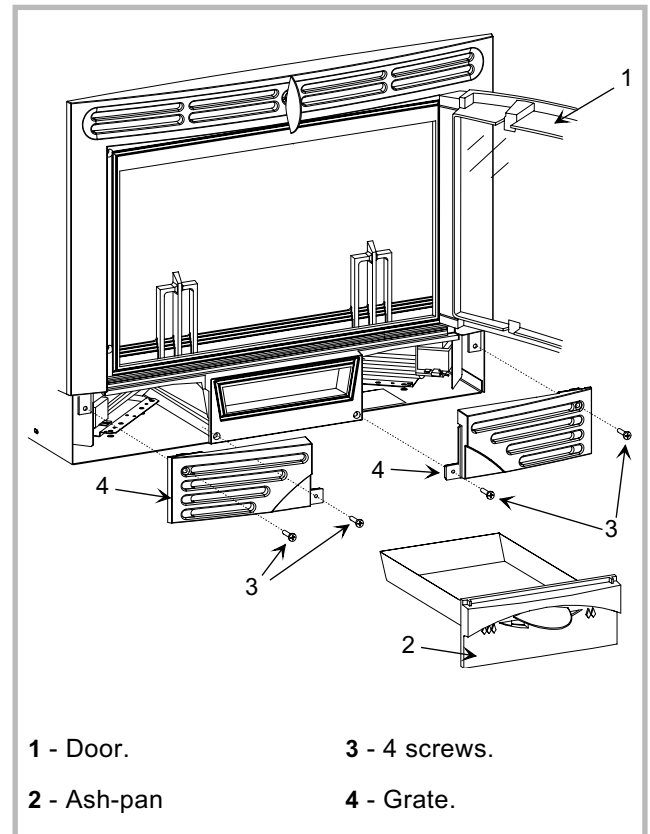


Figure 14 - Access to the fans

remove the 4 screws (3) and to deposit the grids right-hand side and left (4).

To go up them, proceed in the opposite order.

2.10. Maintenance of the chimney

Very important : In order to avoid any incident (chimney fire, etc...), maintenance tasks must be carried out regularly. If the appliance is used frequently, the chimney and the lower part of the hob where the flue pipe is connected must be swept several times a year. The chimney must be checked out at least twice a year.

3. User instructions

Franco Belge will not be responsible for damages on parts of the appliance due to the use of prohibited fuel or due to an alteration of the appliance or its installation.

3.1. Fuel

- Use hard wood logs, which have been cut for at least two years and stored, under shelter.
- Hardwood has a higher calorific value per cu metre.
- Large logs must be split and cut to a usable length, before being stored in a sheltered and ventilated place.

Recommended fuel

- Firewood : Yoke-elm

Suitable fuel

- Firewood : Oak, ash, maple, birch, elm, beech, etc.

Prohibited fuel

- Any form of coal.
- “Green wood”. Green or damp wood reduces stove efficiency and soils the glass, the internal walls and the flue (soot, tar, etc.).
- “Recovered wood”. Burning treated wood (railway sleepers, telegraph poles, offcuts of plywood or chip board, pallets, etc.) quickly clogs the flue ways (soot, tar, etc...), pollutes the environment (pollution and smell, etc.) and cause the fire to burn too quickly and overheat.

“Green wood” and “recovered wood” can cause a chimney fire.

3.2. Lighting

- Open the air regulation flap,
- open the flue damper and loading door,
- place the grate on scrunched up paper, some kindling and some hardwood of small diameter,
- set light to the paper and close the glass door.
- At the first lighting, the fire must be progressively increased to allow the various parts to expand normally and to dry up.
- When the wood is well lit partially close the air regulator, load the appliance without excess and close the flue damper.

Note : When the fire is lit for the first time, the stove may give off fumes from the new paint. This is normal but ensure the room is well ventilated during the first few hours operation.

3.3. Air convection principle

(model **634 10 44** only) Two fans with automatic start to accelerate the hot air convection,

The air leaving the heat exchanger is accelerated by the **automatic** start of the fans when the hot air temperature is more than **50 °C**. The fans stop when the air temperature fall down.

3.4. Combustion

The appliance must function all door properly closed, the speed regulation being carried out using the air regulation on the ash pan door.

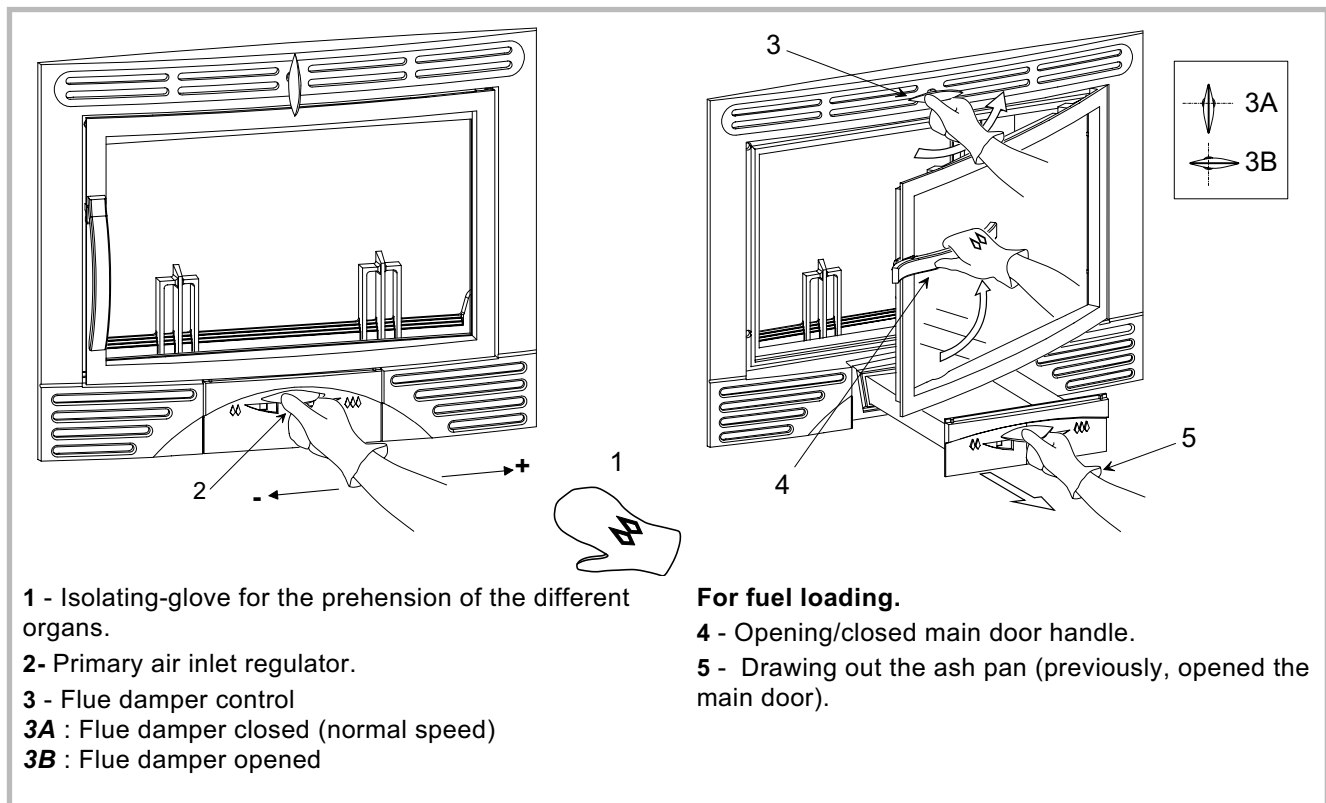


Figure 15 - Operating devices

To load fuel, first open the flue damper. The door should be opened slowly, avoiding a sudden rush of intake air, so that smoke does not escape into the room.

For a briskly burning fire, there should always be at least two logs in the grate. The fire will burn better if there are several logs (diameter 10 to 16 cms).

For a slower burning fire (for example, at night), select larger logs.

After loading fuel, Close the door and **the flue damper**.

3.5. De-ashing

Shake the live coal with the poker. Open the ash pan door and pick up the ash pan with the hand tool. Empty the ashes carefully. Ashes must be removed at least once every other day.

Ashes must never be allowed to pile up to the grate. the grate would not be cooling down and would rapidly deteriorate

3.6. Recommendations

This room heater is a high heat producing appliance and may cause severe burns if touched on the glass

front door, or on top directly over the burner - keep children away.

3.7. Cleaning of the insert fire

- The appliance must be regularly cleaned
- Remove all deposits in the firebox and clean the movable fire grate.
- Cleaning of the glass door can be done with a soft cloth dampened with water and vinegar or potassium ; this must be done when the appliance is cold ; then rince with clear water. Do not use abrasive cleaners.
- The “vitroc ceramic” glass will resist to temperatures of up to 750 C. Should the glass break due to missuse, it must be replaced by the manufacturers own product.
- All the parts forming the casing can be rubbed with a slightly damp cloth. If condensation has occured, do not wait before it has dried out to clean the soiled parts.

3.8. Trouble shooting



: This sign means that you should asked for a qualified engineer to do the work.

Situation	Problem	Action
<i>Fire difficult to start</i> <i>Fire goes out</i>	Wood green or too damp	- Use hard wood logs, which have been cut for at least two years and stored, under shelter.
	Logs are too big.	- To light the fire, use small, very dry twigs. To maintain the fire, use split logs.
	Poor quality wood.	- Use hardwood that have a higher calorific value per cu metre (Yoke-elm, oak, ash, maple, birch, elm, beech, etc.)
	Air starvation.	- Open air control.
	Insufficient draught.	- Open the flue damper for a while. <input checked="" type="checkbox"/> - Check that the flue is not obstructed, sweep it if necessary - Seek advice from a chimney specialist.
<i>Fire burns too quickly.</i>	Too much draught.	- Partially close the air control. - Ensure that the flue damper is closed.
	Excessive draught.	<input checked="" type="checkbox"/> - Install a draught stabiliser. Consult your Dealer.
	Poor quality wood.	- Do not continuously burn small wood, sticks, bundles, carpentry offcuts (plywood, pallets), etc.
<i>Smokes when lighting up.</i>	The flue damper is closed	- Open the flue damper
	Flue duct is cold.	- Burn paper and kindling wood to increase heat.
	Room is in decompression.	- In houses equipped with mechanical ventilation, partly open a window until the fire is well established.
<i>Smokes while burning.</i>	Draught is insufficient.	- Open the flue damper for a while. <input checked="" type="checkbox"/> - Consult a chimney specialist. - Check that the flue is not obstructed, sweep if necessary.

Down draught.	<input checked="" type="checkbox"/>	- Install an anti-down draught cowl. Consult your Dealer.
Room is in decompression.		- In houses equipped with CMV, an outside air intake must be installed for the chimney.
<i>Low heat output.</i>	Incorrect Fuels.	- Use the recommended fuel.

4. Spare parts

For any order of spare parts, please indicate : model nr, code of the colour, description of the part, code number and colour index of the part.

Example : Insert 634 10 44, top plate 352148 ED. **A** = 634 10 44 **B** = 634 10 45

Qty = quantity per appliance

N°	Code	Description	Type	A	B	Qty
1	101043	Axle		A	B	01
2	109128	Wiring system		A		01
3	134107	Glove		A	B	01
4	134702	Pin	5x32	A	B	02
5	134711	Pin	6x30	A	B	01
6	134749	Pin	4x20	A	B	01
7	134758	Pin	4 x16	A	B	04
11	166035	Spring		A	B	01
12	174201	Clamp		A		01
13	179042	Thermostat		A		01
14	181622	Ceramic rope	Ø 8	A	B	2,60 m
15	181625	Ceramic rope	Ø 7	A	B	2,23 m
16	988529	Turbine		A		01
17	988530	Turbine		A		01
18	188810	Ceramic glass	550x345x4	A	B	01
19	913300	Base		A	B	01
21	217131	Shell		A	B	01
22	217202	Shell top		A	B	01
23	222557	Flue baffle		A	B	01
24	224045	Ash-pan		A	B	01
25	249315	Slide plate		A	B	01
26	271008	Bracket		A	B	04
28	300989	EF Handle		A	B	01
29	301166	EF Ash pan door		A	B	01
30	301828	EF Handle		A	B	01
31	303809	ED Flue collar		A	B	01
32	306275	ED Back wall		A	B	01
33	306802	ED Flue collar	Ø 125	A	B	02
34	309229	ED Grate		A	B	01
35	359817	EF Front plate		A	B	01
36	310211	ED Side panel		A	B	02
37	314111	EF Hinge		A	B	01
38	319736	ED Grate support		A	B	01
39	320613	ED Sliding door		A	B	01
40	328229	ED Fuel retainer		A	B	01
41	330020	ED Hearth plate		A	B	01
42	331101	EF Main door		A	B	01
43	352148	ED Top plate		A	B	01
44	900948	EF Knob		A	B	01
45	988853	Complete door		A	B	01
46	900956	Complete sliding door		A	B	01
47	988531	Fan		A		01
48	324112	EF Grate		A	B	01
49	324011	EF Grate		A	B	01

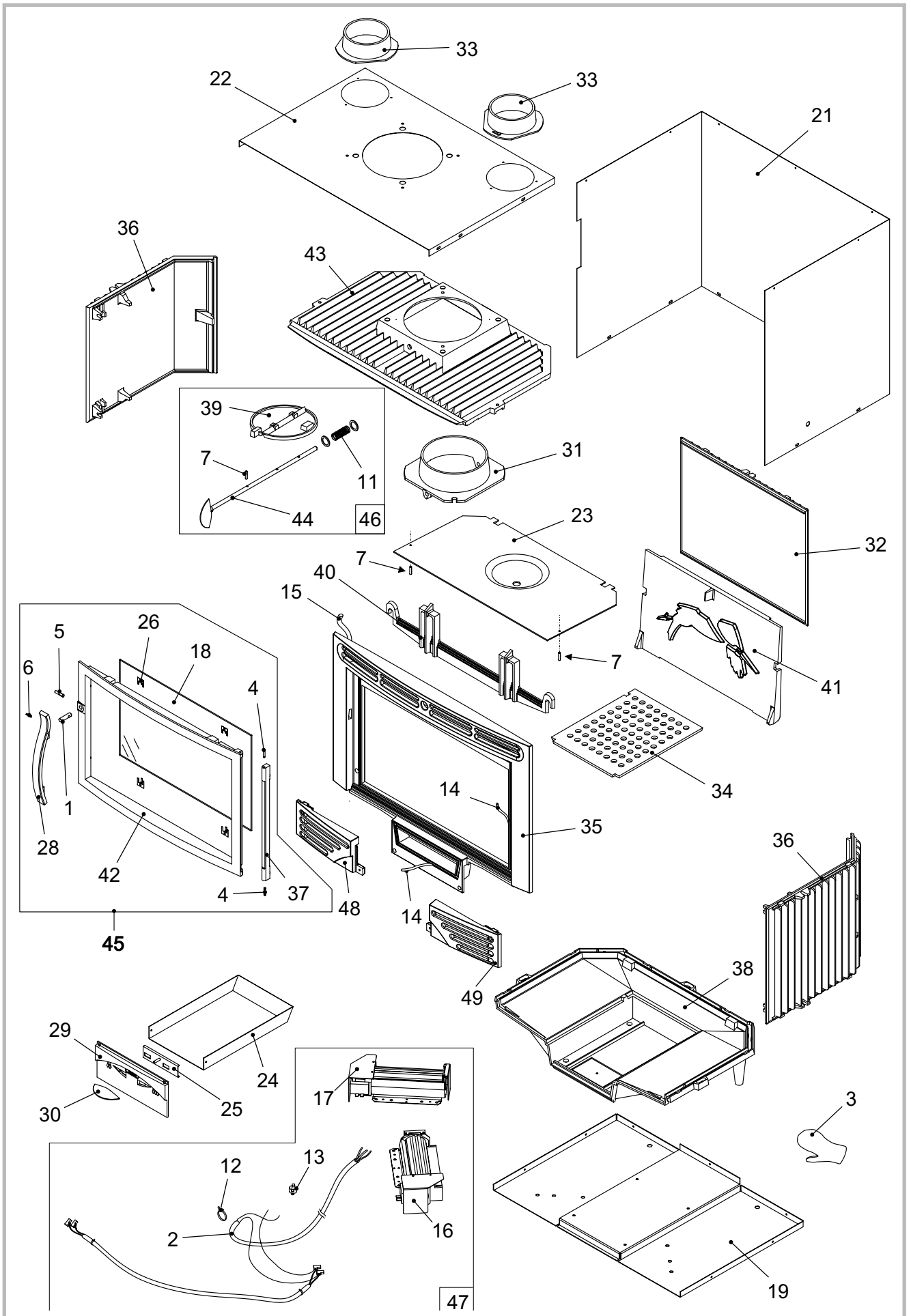


Figure 16 - Stove - exploded view



☞ *Guarantee certificate* ☞

☞ **Legal guarantee**

The specifications, dimensions and information shown on our documents are provided for information purposes only and under no circumstances are binding upon the vendor.

With the aim of constantly improving our equipment, all modifications considered as necessary by our departments may be made without notice.

The provisions of the present guarantee certificate are not excluding or limiting the owner of the equipment's rights, concerning the legal guarantee regarding faults or hidden vices which applies in all circumstances, in the conditions detailed in articles 1641 and following of the civil code, and in the country in which the equipment was purchased.

☞ **Contractual guarantee**

Our equipment is guaranteed against faults and hidden vices subject to the following conditions:

- 1) Installation and adjustment of the device by a professional installer.
- 2) Observance of the instructions provided in our technical documents and our installation/adjustment instructions.
- 3) The installation, use and maintenance of the device carried out in conformity with the applicable standards and legislation, and with the indications provided in the technical instructions accompanying the device.

This guarantee covers the replacement, in our factory, of parts recognised as being defective from the outset by our "Guarantee Inspection" Department. Carriage and

labour is at the user's cost. Moreover, if the repair or replacement of parts covered by the guarantee is found to be too costly vis-à-vis the price of the appliance, the decision to replace or repair the appliance will be taken by the vendor.

Our guarantee is for 2 (two) years for all appliances, with the exception of closed combustion fireplace and inserts for which our guarantee is 5 (five) years excluding the following:

- 1) Indicator lights, fuses, electrical elements and fans.
- 2) Parts subject to wear or in contact with high temperatures namely: soles and burner grills, bottom plates baffles, ash pans, paintwork and surface treatments for decorative parts. Also excluded from this guarantee are seals and windows.
- 3) Any damage which may result from the use of the appliance with a fuel other than that stipulated in our instructions.
- 4) Damage occurring to parts caused by elements outside the appliance (down draught, storm damage, damp, abnormal pressure or vacuum, heat shocks, etc.).
- 5) Damage to electrical parts caused by plugging in and using the appliance on a mains system, the voltage of which (measured at the entrance to the appliance) is 10% above or below the nominal voltage of 220 V.

☞ **Exclusion of liability**

In the case of a product manufactured at the client's request, under no circumstances may we, as a subcontractor, be considered liable vis-a-vis the client or third parties for defects arising from the installation or a design fault with the item in question.

☒ Name and address of the installer : _____

☎ Telephone : _____

☒ Name and address of the customer : _____

Date of installation : ____ / ____ / _____

Model of the appliance : 634 10 44 634 10 45

Color : Y

Serial number : _____

- This certificate has to be completed and kept carefully.

In case of claims, send a copy of this to :

Staub Fonderie, BP 73, 59660 MERVILLE, FRANCE.