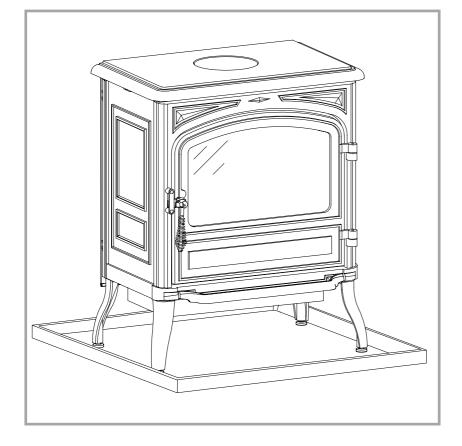
# Bourgogne

## Oil burning stove

## Ref. 174 10 56

(NF EN 1)



Description of the appliance

Installation instructions

**Operating instructions** 

Spare parts

Warranty certificate

Document n° 1091-6 ~ 25/10/2005

## **Technical manual**

to be saved

by the user

for future reference



**STAUB FONDERIE** 

SARL with the capital of 6 359 540 € Head Office Address 2, rue Saint Gilles 68230 TURCKHEIM RCS Colmar SIREN 444 881 953

Address Administration and manufacturing BP 73 59660 MERVILLE (FRANCE) Telephone : 00 333 28 43 43 00 Fax : 00 333 28 43 43 99

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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## This appliance is an oil-fired stove. WARNING

An incorrectly installed oil-fired stove can cause serious accidents. This appliance should only be installed by competent personnel.

## 1. Description of the unit

#### 1.1. Description

Flued oil stove with vaporizing burner. (Norm EN1)

#### 1.2. Package

•1 package : Stove

## 1.3. Optional equipment

- 1 package : Visioflamme (mirrors : P 174 10 53)
- 1 package : Glow-plug ignitor
- •1 package : Coals kit (FC 0802)

#### 1.4. Specifications

Model	174 10 56
Nominal Heat Output kW	10
Oil consumption	
at maximum speed litre/hr	1,27
at minimum speed litre/hr	0,25
Chimney draft required	
at maximum speed Pa	17
at minimum speed Pa	8
Weightkg	118

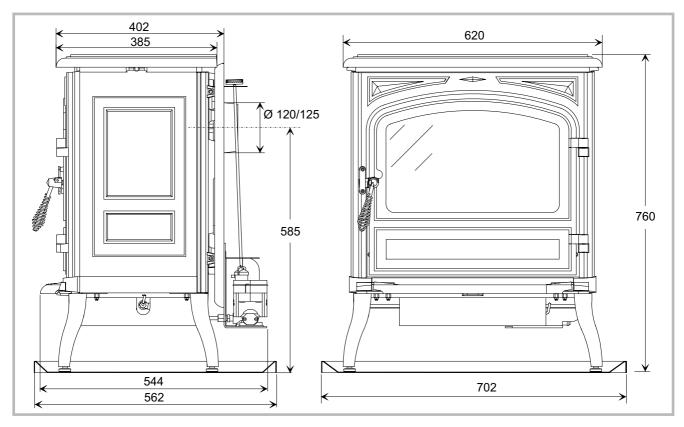


Figure 1 - Dimensions in mm

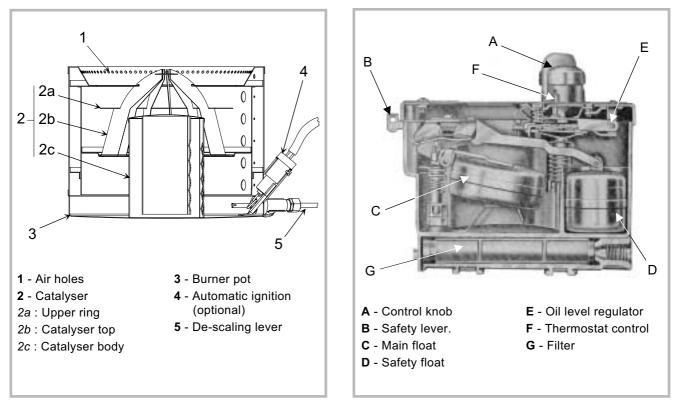


Figure 2 - Burner

## 1.5. Operating principle

Heat is mainly diffused by radiation, through the window and body of the appliance.

The speed control is obtained by control the oil flow into the burner.

The stove is fitted with a vaporizing burner

Furnace oil is fed to the burner floor where is it ignited by means of a firestarter (or with an optional electrical igniter).

The heat produced by this flame brings the burner temperature to the required level to vaporize the oil.

Oil will only burn as a vapor not a liquid.

Combustive air enters the burner through the air way holes.

In the centre of the burner is the catalyser, which aids the good combustion.

Figure 3 - Float regulator

When the stove is in operation, the catalyser glows red. The stove should not be used without the catalyser.

On the feed-line there is a de-scaling lever.

The de-scaling lever can be operated to keep the inlet pipe clear of carbon build-up.

The stove float regulator contains a filter to trap impurities. A safety lever controls oil flow. A float in the chamber raises the oil level available to the burner.

Oil can only enter the float chamber when the safety lever is depressed.

The float regulator is also controlled by a control knob which turns from off to high setting.

A draft regulator ensures a constant air intake to the burner regardless of external factors.

#### Installation instructions 2.

## 2.1. Warning to the user

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

The insulation of both the appliance and the exhaust gas pipe has to be reinforced and built as well as possible according to the norm to make sure of the equipment operational reliability.

The installation must be carried out according to local building regulations.

It is the installer's responsibility to conform to local building standards and requirements with regard to installation.

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

A remote acting fire valve must be fitted on the oil supply line.

Flexible oil lines must not be used to make connections between oil supply line and oil regulator valve.

#### Location of the unit 2.2.

#### Ventilation :

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

In houses equipped with mechanical ventilation, an outside air intake of minimum 50 cm<sup>2</sup> must be installed.

#### Position of the unit :

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

The heat distribution towards the other rooms will be made through the communicating doors. These rooms must be in negative pressure or must include ventilation gratings.

#### Floor and walls :

Make sure there are not combustible or covered with combustible material.

Otherwise it must be necessary to install a non-combustible protection.

Position the unit to comply with the minimum clearances to combustible material (figure 4).

## 2.3. Chimney

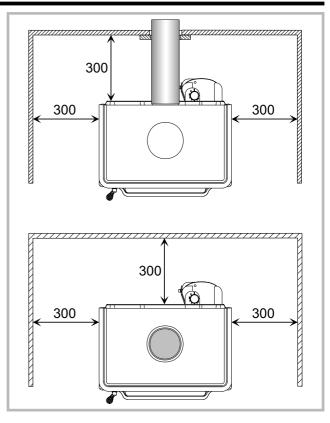
The chimney must comply with Current Building Regulations. If in doubt, consult your Dealer or local Building Inspector.

The flue must be in good condition and must provide sufficient draught. (refer to technical details page 3).

The flue must be suitable for the installation of fuel burning appliances ; otherwise it must necessary to install a tubing.

The flue must be clean. It should be swept to remove soot and dislodge tar deposits.

The flue must be well insulated, water and air tight. A chimney with a cold internal surface can prevent a good chimney draught and condensation will occur. The flue must be watertight.



#### Figure 4 - Minimum clearances

The chimney must have a constant cross section.

The flue must not be shared with any other appliance. The chimney must be at least 4.5 m (15 ft) high.

In case of a flat roof or when the roof gradient is lower than 15°, the stack must be 1,2 m (4 feet) high at least. The capping must not restrain the draught.

If the chimney has any downdraught tendency, due to its position in relation to nearby obstacles, an anti-downdraught cowl must be installed on the chimney or the chimney height must be increased.

If the chimney draught is excessive or irregular, a draught stabilizer (barometric damper) must be installed to the connector pipe.

It must be distant from any combustible material (walls, cross members)

It must permit an easy sweeping.

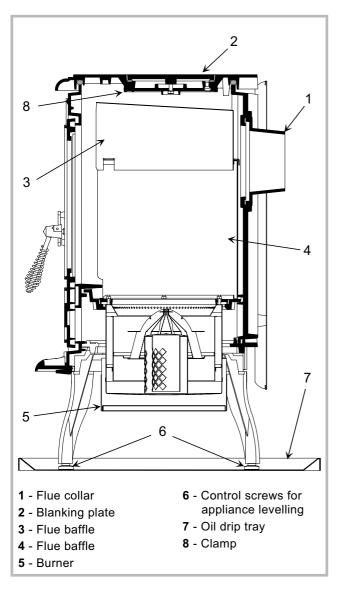


Figure 5 - Cross-section of the appliance

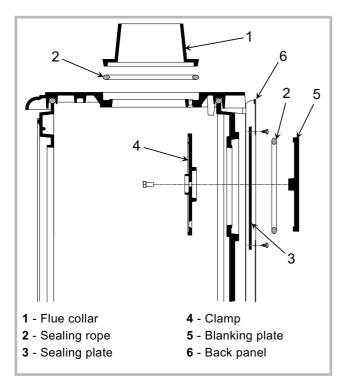


Figure 6 - Smoke exit on the top

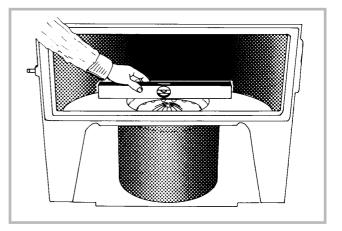


Figure 7 - Burner level check

#### 2.4. Smoke exit

The stove is supplied with the flue collar at rear. For a smoke exit on the top (fig. 6):.

- Remove the reflector and the internal baffle (fig. 11, p. 8)  $\,$
- Exchange the blanking plate **5** with the flue collar **1**, ensuring that it is leaktight.
- Reinstall the internal baffle and the reflector.
- Close the exit position with the iron plate supplied 3.

#### 2.5. Chimney connector

The connection to flue must be carried out according to local building regulations.

The appliance must be installed as close as possible to the chimney.

The connector pipe must be approved for installation with combustion products (either 24 ga. Black painted or blued steel or 316 grade 20 ga. Stainless steel or 1 mm vitreous **enamelled steel**).

Pipe diameter must not be less than the appliance spigot diameter.

If there is no other solution, the reduction can not be more than one diameter lower than the flue spigot and be situated as distant as possible from the flue connection of the appliance.

The join 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.

## 2.6. Levelling

Four adjusting bolts with caps are supplied and which have been placed in the burner for packing purposes only.

- Fit the screws and caps (rep 6, fig. 5) to the bottom of the stove legs.
- Put the stove on the oil drip tray (rep. 7, fig. 5).
- Place the level on the burner (fig. 7) and adjust the bolts until the burner has reached a level position.

#### 2.7. External / remote tank

#### Figure 8

A barometric fuel tank should not be positioned where it will be in the direct rays of the sun or adjacent to a source of intense heat.

If the tank is more than 8 ft (2,5 m) higher than the stove a pressure reducer must be installed on the oil line (max. working pressure : 300 mbar).

If the tank is lower than the stove a lift pump will have to be utilized.

## 2.8. Pre-utilization check

- Check that the glass is not damaged.
- Check that the door closes correctly.
- Check that all removable parts are correctly installed. (flue baffle, reflector, etc.)
- Check that the seals of the smoke-line are in good condition.
- Check that the seals of the feed-line are in good condition.

Light the appliance by referring to the operating instructions.

## 2.9. Oil flows adjustment

The float regulator has been adjusted at the factory and should not need further adjustment.

The eventual re-fit must be realized by a qualified engineer.

If the burner does not work correctly, check possible causes before readjusting the settings :

- Chimney draught
- Fresh air inlet
- Oil supply.

#### Minimum speed (rep. 2, fig. 9)

Set the regulating knob on minimum speed (rep. 2, fig. 13, page 9) and let the burner run for a few minutes. The flame must completely cover the bottom of the burner and the catalyser body must be glowing red hot.

If the flame is too small, the stove will soot up quickly ; increase the flame by turning the setting screw (rep. 2) clockwise.

If the flame is too high, reduce the flame by turning the setting screw (rep. 2) counter clockwise.

#### Maximum speed (rep. 3, fig. 9)

Set the regulating knob on maximum speed and let the burner run for a few minutes. The flame must be shaped like a cone and reach the upper part of the door.

If the flame is too low, increase the flame by turning the setting screw (rep. 3) counter clockwise.

If the flame is too high, reduce the flame by turning the setting screw (rep. 3) clockwise.

**Please note - Very important :** The adjustments of the float regulator are very sensitive. The high and the low setting screws must never be turned more than a 1/4 of a turn at a time in any direction from their initial setting.

When making any adjustments, allow 3 to 5 minutes between adjustments to allow burner to stabilize to previous adjustment before proceeding, if necessary.

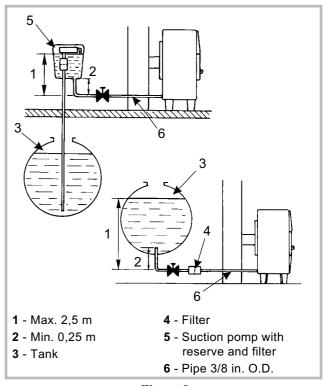
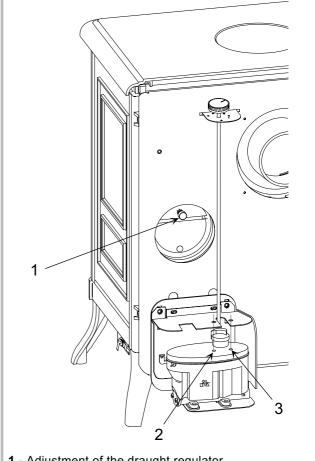


Figure 8 Gravity oil supply Pumped oil supply



- 1 Adjustment of the draught regulator
- 2 Adjustment screw for low setting
- 3 Adjustment screw for high setting

Figure 9 - Adjustment devices

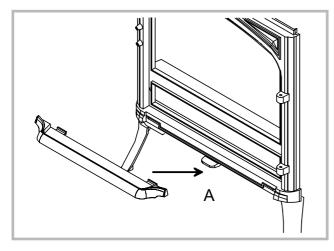


Figure 10 - Mounting the tray

## 2.10. Mounting the tray

#### Figure 10

To avoid damage to the ash tray during transport, it has been disconnected and stored behind the main door of the oil stove. To reinstall the ash tray to the front of the oil stove, tilt the tray at a  $45^{\circ}$  angle, centre onto tab '**A**' and lower into place.

## 2.11. Chimney draught

The reading of the draught must be done once the unit is hot (minimum 30 minutes of use).

Refer to the specifications (p. 3) for minimum draught requirement.

The eventual re-fit must be realized by a qualified engineer.

The adjustment of the draught will be made with the barometric damper (rep. 1, fig. 9) located at the back of the stove.

## 2.12. Maintenance of the Chimney

Chimney condition should be checked at least once per year.

If the appliance is regularly used, the chimney should be swept several times per year, together with the stovepipe connection section.

- First remove the flue baffle (figure 11).

## 2.13. Fitting the "visioflamme" (optional)

#### Figure 12

- Slide each glass piece so that it fits into the upper and lower channels of the reflector.
- Use pliers to pinch the ends of the channels to prevent glass from falling out.

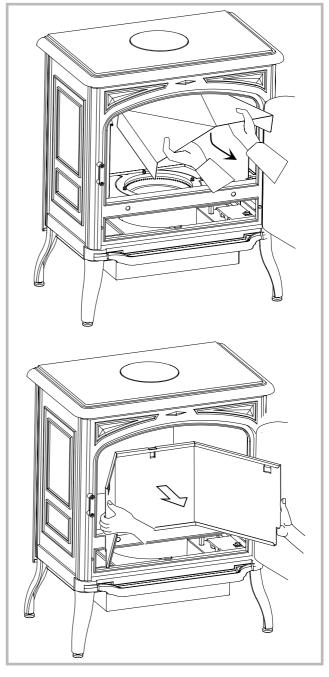


Figure 11 - Removing the flue baffle

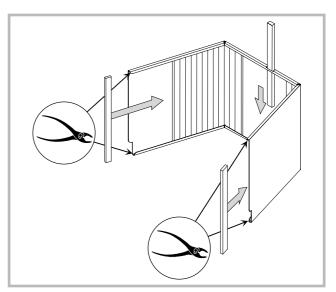


Figure 12 - Fitting the "visioflamme"

## 3. Instructions for user

The manufacturer 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

Your stove is fitted with a specific float regulator for a specific oil.

The fuel oil must be free from any dirt and water, which could disturb the stove in operation.

When filling the tank, the appliance should not be in operation to preserve the burner feed line from choking.

## 3.2. Lighting

#### Figure 13

Don't light the appliance when it is hot. Wait until the burner is completely cool before repeating the lighting procedure.

- Be sure the control knob is to "0" (2a).
- Turn on oil supply,
- Push down gently on the safety lever (rep. 3). This will allow the oil to flow into the float regulator.
- Open the front door, and remove the catalyser (rep. 2, fig. 2, p. 4) from burner. Make sure the inside of the pot is clean thoroughly, and there is no oil accumulation.
- Place 2 tablespoons of methylated spirit or gelled alcohol in the bottom of the pot.
- Light the starter gel or methylated spirit with a fireplace match or long butane lighter.
- Place the catalyser back into the burner, being sure it is centred in the burner. Shut the main door.

Allow the burner to heat approximately 30 to 45 sec. Turn dial to "1" position (2b).

Allow 10 to 15 minutes for oil fire and draught to stabilize. The catalyser (or the ring) should glow red before adjusting the control knob to a higher setting.

At the first lighting, the fire must be progressively increased to allow the various parts to expand normally and to dry up.

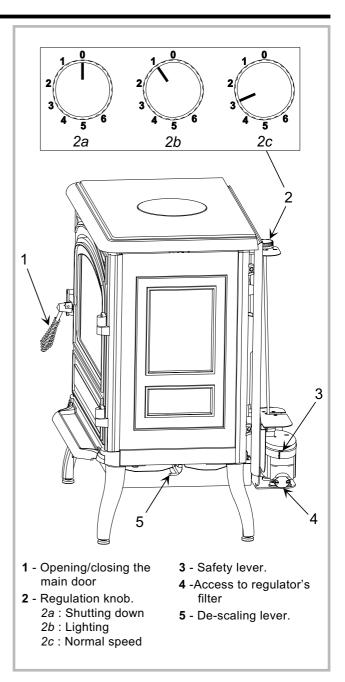
When the fire is lit for the first time, the appliance may give off fumes from the new paint. This is normal but ensure the room is well ventilated during the first few hours operation.

## 3.3. Operating procedure

Allow 10 to 15 minutes after lighting to adjust the control knob to a higher setting, usually setting (2c, fig. 13).

When increasing the heat output, move the control knob only 1 number at a time, allowing 5 minutes between moves for the flame to re-adjust to new setting.

If the burner stops during operating, immediately turn off the control knob to position "0" (2a, fig. 13) and wait until the burner is completely cool before repeating the lighting procedure.



#### Figure 13 - Operating devices

## 3.4. Shutting down

- Set dial to the "0" (2a, fig. 13) position.
- Raise the safety lever (rep. 3, fig. 13) of the regulator.
- Allow the flame to burn out completely before opening the door.

#### 3.5. Recommendations

The adjustment of the stove has been made at the factory and checked by your installer.

In case of trouble shooting, do the usual maintenance operations.

If problem persists call your installer.

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.** 

**CAUTION** : Never light the burner if there is any amount of oil in pot. Clean out oil before lighting.

Too much oil in pot may cause a racing : a very high flame generating vibrations.

#### In case of racing :

Turn off oil supply.

Set dial to the "0" position until fire has decreased to proper burn rate.

Do not overfire. If the unit or chimney connector starts to glow you are overfiring.

#### **3.6.** Maintenance of the stove

- Every week : operate the de-scaling lever. Pull the rod, then push the rod in rotating 360 degrees two or three times (CAUTION : The rod is HOT).
- Every 3 or 4 months : Clean the burner completely.
- Remove and brush off the parts of the catalyser, using a soft bristle brush.
- Loosen any carbon soot from the burner with a putty knife, and vacuum clean. Ensure that the small air holes are free of carbon.
- At least once a year / End of heating season : Clean or replace the oil filters, the oil supply line and to change the joint of the de-scaling lever (rep. A, fig. 15, code 142889) by a professional installer.

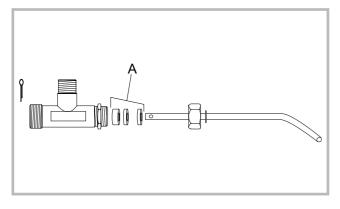
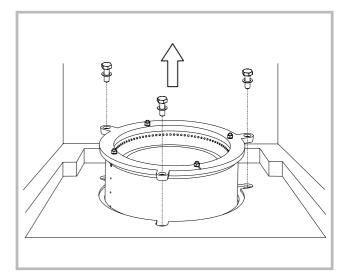


Figure 15 - The joint of the de-scaling lever



#### Figure 14 - Removing the burner

#### To clean the filter of the float regulator :

- Set the regulation knob in closed position "0".
- Turn off the tankvalve or the valve of the oil supply line.
- Raise the safety lever of the float regulator.
- Place a small container (or a small rag) under the regulator filter opening in order to collect the oil contained in the regulator.
- Remove the filter cover plate located under the regulator (rep. 4, fig. 13, p. 9) with a screwdriver,
- Remove the tubular filter from the regulator. Clean it with oil using a soft brush, never a wire-brush.
- Replace the filter in the regulator, install the cover plate and secure with the screw.
- Use a soft clean cloth to wipe the front glass when the unit is running at a low burning rate. **DO NOT CLEAN GLASS WHEN HOT.**
- When the main door (or the cover) is opened for cleaning, the flame will be disturb, and turn to a yellow flame. Clean quickly, but gently. Close the door, the flame will return to a normal burning position.
- Clean all the enamelled panels of the stove with a dry or slightly damp soft cloth.

## 3.7. Removing the burner

- Disconnect the feed line from the de-scaler nut, unscrew the burner fixing nuts (figure 14).

When replacing the burner, tighten the nuts evenly and connect the pipe so as to be airtight.

## 3.8. Trouble shooting

		<b>.</b>	☑ : This sign means that you should asked for a qualified engineer to do the work.
Situation	Probable causes	•	- Corrective action
Flames extinguish during lighting.	Very cold chimney. No draught established.		<ul> <li>Leave door ajar until fire has caught. Check air supply in the room (page 5).</li> </ul>
Fire extinguishes once firestarter has burnt off.	Fuel tank is empty.		- Fill tank.
	Fuel valve is closed.		- Open valve.
	Main regulator float not engaging.		- De-press the safety lever.
	Control knob is set on "0".		- Adjust control knob to (minimum speed).
Fire extinguishes during use. Fuel tank is empty.			- Fill tank.
	Insufficient fuel.		<ul> <li>Check that the de-scaler, the float regulator filter and burner pot are cleaned.</li> </ul>
Flame is excessively large,     Insufficient draught.       smoky and sooty.		V	- Call your installer.
unoky and cooky.	Fuel adjustment made too quickly.		<ul> <li>Return control knob to minimum speed ; wait for normal combustion. (catalyser should glow red); wait 5 to 15 minutes between each adjustment.</li> </ul>
Stove extinguishes and re-lights itself.	Insufficient fuel.		<ul> <li>Check that the de-scaler, the float regulator filter and burner pot are cleaned.</li> </ul>
Stove burns noisily.	Burner contains excess fuel.		<ul> <li>Adjust control knob to minimum speed. If problem persists call your installer.</li> </ul>
Fire smokes. Soot build up noticed. Flame imbalance	Insufficient air supply.		<ul> <li>Increase fresh air supply (open door, window ; add make up air supply).</li> </ul>
	Downdraught or blockage in chimney.	V	- Check chimney for soot build-up. Clean if necessary.
			<ul> <li>Ensure chimney height is sufficient and cap is not affected by any nearby obstructions.</li> </ul>
			- If problem persists call your installer.
	Room is in negative pressure.		- Increase fresh air supply (page 5).
	Oil flow is too low on minimum speed setting.	V	<ul> <li>Adjust low flow rate while control is set on "1", call your installer.</li> </ul>
	Stove is not level. Flame imbalance.	V	- Check level. Adjust if necessary.
	Catalyser not centred.		- Centre catalyser assembly.
	The draught regulator is blocked in open position.		<ul> <li>Unlock the draught regulator. Check the draught regulator, adjustment and refit if necessary.</li> </ul>
Coke build-up noticed.	Insufficient fuel.	V	- Check level.
	Excessive draught	V	<ul> <li>Check draught. If always excessive, a draught stabilizer (barometric damper) must be installed to the connector pipe.</li> </ul>

#### 4. **Spare parts**

When ordering spare parts, specify the stove type and serial number, including the colour index (on the guarantee or identification plate), the name of the part and the part number.

Example : Oil burning stove "Bourgogne" **174 10 56 Y**, Top plate **352124 EF** 

The identification plate is located on the back panel.

<b>A</b> =	174	10	56	L
<b>B</b> =	174	10	56	Υ

N°	Code	Description	Туре	Α	В.	. Qty	N°	Code	Description Type A B Qty
1	100956	Axle		Α	Β.	. 01	47	327901 77	Tray
2	905331	Complete burner					47	327901 EF	Tray
3	109552	Сар					48	352124 77	Top plate
4	110105	Barometric damper					48	352124 EF	Top plate
5	110405	Hinge pin					49	182756	Feed line regulator-burner A B 01
6	119213	Descaler					50	198205	Catalyser ring A B 01
7 8	446310 134601	Protection plate Pin					51 52	194401 194402	Catalyser cover
9	134001	Pin					53	905332	Burner
10	181632	Adhesive rope					54	332200 60	Oil drip tray
11	142327	Gasket				,	55	988869	Complete door
12	149868	Knob					55	988871	Complete door
13	158541	Handle		Α	Β.	. 01	56	199309	Mirror glass (optional) . 1x(260x20) . A B 39
14	164205	Tightness nut					57	199204	Regulator filter A B 01
15	165139	Float regulator					58	104708	Plug
16	179605	Regulator shaft					59	109718	Chain
17	181604						60	124412	StrutB04
18	105006						61	161025	Touch-up paint
19 20	188828 205386	Glass					62 63	209913 142881	Heat shield         A         B         01           Gasket         A         B         04
20	203300 221200 66	Striking plate					05	142001	Gasket
22	222565	Flue baffle.							
23	236129	Sealing plate							
24	236708 94	Bracket							
25	239714 60	Regulator support		Α	Β.	. 01			
26	259015	Fixing plate							
27	260591 60	Heat shield							
28	261811 60	Heat shield							
29	262222	Shield							
30	276231	Reflector							
31 31	300122 77 300122 EF	Leg							
32	300472 77	Base							
32	300472 EF	Base							
33	301515 66	Door lock							
34	303301 76	Bearing		Α		. 01			
34	303301 EF	Bearing							
35	303718 77	Blanking plate							
35	303718 EF	Blanking plate							
36	303828 59	Flue collar							
36 27	303828 77	Flue collar							
37 38	909401 306273 79	Sliding door							
38	306273 FF	Back wall							
39	309857 77	Front plate							
39	309857 EF	Front plate							
40	309975 77	Main door		Α		. 01			
40	309975 EF	Main door							
41	310723 77	R. side panel							
41	310723 EF	R. side panel							
42	310821 77	L. side panel							
42 43	310821 EF	L. side panel							
43 44	312625 321903	Burner support							
44 45	321903 325304 79	Reducing plate							
45 45	325304 75 325304 EF	Reducing plate							
46	327801	Clamp							
		•							

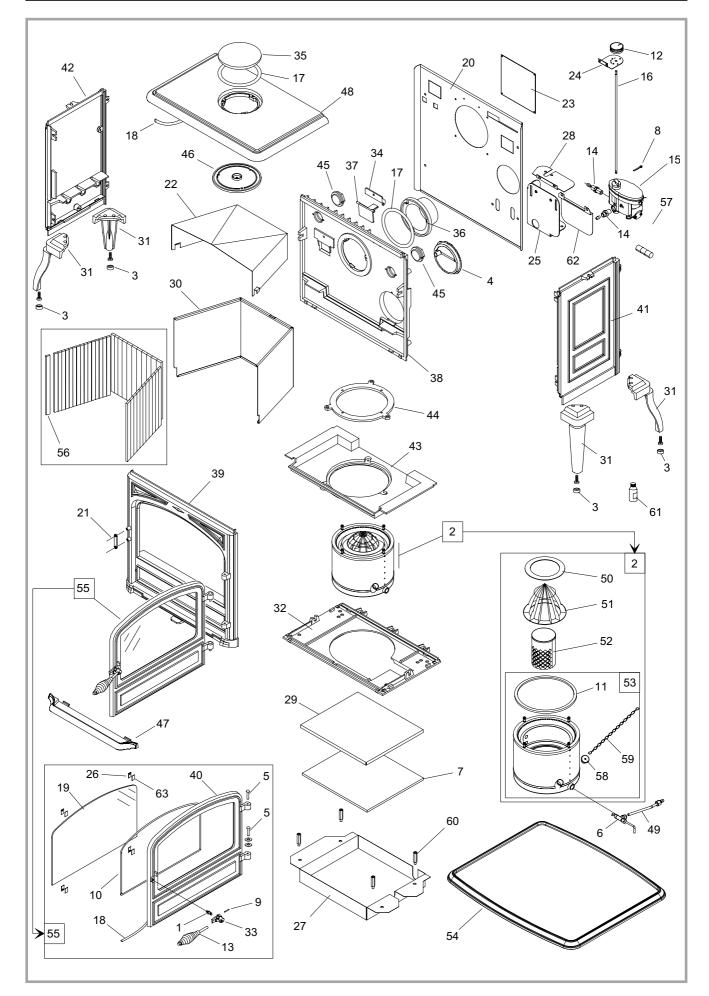


Figure 16 - Spare parts view

## ➢ Guarantee certificate ➢

**FRANCO BELGE** 

#### ➢ 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 1641and 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 : 🖵 174 10 56					
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.					