

Twinfire

Operating and Installation Instructions

Manufactured by: **XEOOS**[®]
TWINFIRE

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Read this manual carefully and save the instructions.

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General Information

Thank you very much for choosing the Xeoos Twinfire® System, which is a remarkable product that utilizes two fires to create a most efficient product and it is easy to operate.

Specht from Germany has developed this stove with care and is happy to provide you with an exceptionally high-quality and ecological product.

The purpose of this manual is to guide and instruct Twinfire® stove owners in proper burning to achieve environmentally friendly combustion and to minimize the risk of incorrect use and operation of the stove.

Please read these operating instructions carefully before the first initial use. It contains important and beneficial information for the operation of your new Twinfire® stove. Failure to follow instructions may result in property damage, bodily injury, or even death. It is therefore very important to read this entire manual and save the instructions. Correct operation is also vital with regard to our applicable warranty terms.

Before you install your stove, we recommend that you contact your dealer or local Building Inspector to help you follow the rules and regulations in your local area. We also recommend that your dealer check the stove before installation for completeness and functionality.

If your stove is not installed properly, a home fire may result. To reduce the risk of fire, please ensure that the heater is installed only by a professional installer. Contact local building officials about restrictions and installation inspection requirements in your area. Not approved for use in a mobile home.

We wish you and your friends many enjoyable and comfortable hours with your Xeoos Twinfire®.

Follow the manual during installation and operating of the stove.

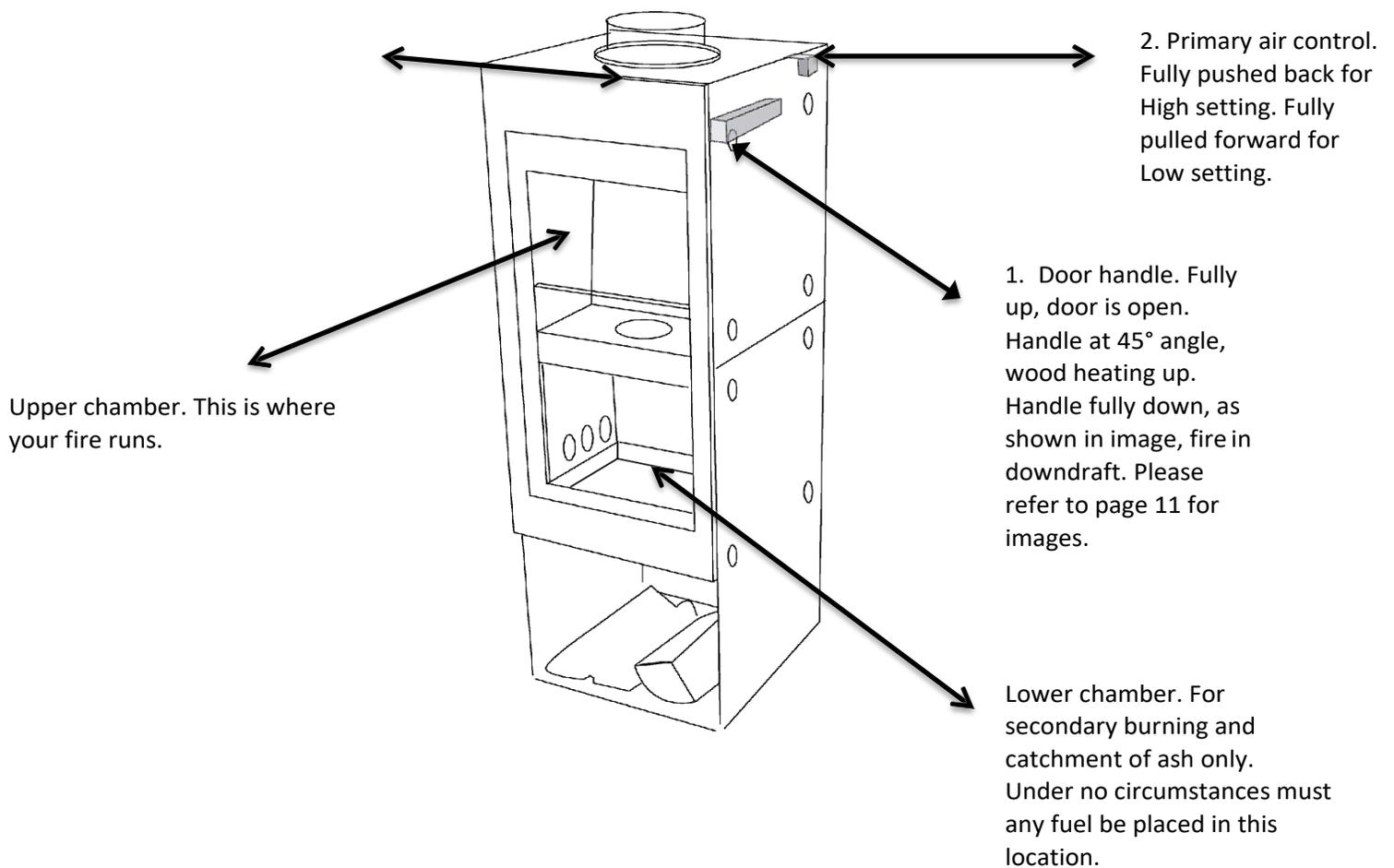


***Take particular note of this symbol throughout the manual.
This indicates special attention.***

Approvals and Basic Controls.

The patented Twinfire® system of Xeos® is based on the principle of gasification with the use of the furnace. The Twinfire® model has been Australian tested in accordance with AS/NZ 4012/4013:2014 and show compliance with AS/NZ 2918:2001.

1. The door handle (1) has two functions. Firstly, it ensures that the door is safely locked during use and secondly it controls the 'downdraft' function.
2. The primary air control (2), located at the back-left hand side of the unit can be pushed fully back for high output and pulled forward for low heat output. It is not designed for setting other than High or Low.



Installation of the Stove

Heating Capacity and Space Requirements

The room-heating capacity is highly dependent on the room's location and interior as well as on the operation method. In a newer air-tight building be prepared to calculate your heat demand. In older buildings, the nominal heating capacity of approximately 27kBTU's (8 kW's) heats an area from 430 - 1,076 ft² (40 -100 m²) based on various conditions.

Outside Air Supply

Ensure that there is enough combustion air in the room in which the stove is installed, and that there is an adequate supply of combustion air to the stove, which can be sourced from another room or from an outside air supply. Rooms with negative pressure (e.g. use of exhaust fan) or newer air-tight buildings are particularly suited for air supply from outside.

Connection to the Chimney

The diameter of the stove pipe is 6" (15.2 cm). Do not use connector pipes and chimneys with smaller clearance diameters or less than 24-gauge steel (0.55mm). It must be installed using an AS/NZS 2918:2001 approved chimney system or a code-approved masonry chimney with a flue liner.

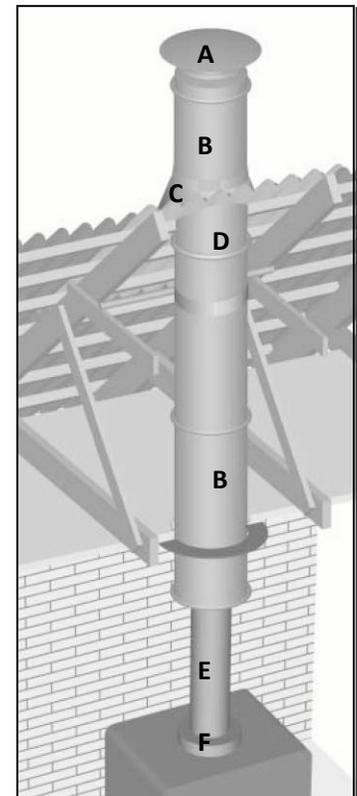
The chimney must extend through the roof for an assembled length not less than 4m and be 600mm above any high section of roofing or adjacent obstruction. If there is no obstruction or ridge within 3m the flue must not be lower than the point at roofline 3m horizontal to the flue center (see detail)

The condition of the chimney and height is very important. We suggest a total minimum height of 4.8m where practical.

To reach the rated heat capacity, the minimum delivery pressure of the chimney must be 10 to 15 Pa (1.0 to 1.5 mm WC).

Follow the rules and regulations in your local area.

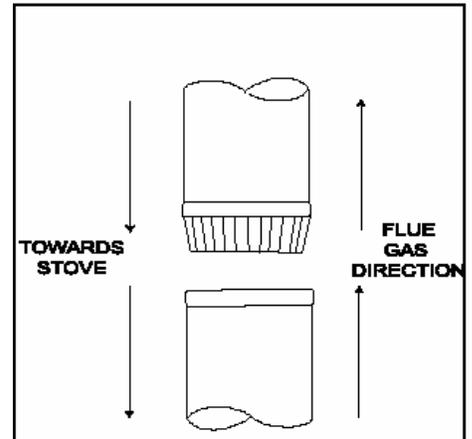
Required Installation Components	
A	Chimney cap
B	Triple skinned chimney
C	Storm collar
D	Roof flashing
E	Ceiling support box
F	Chimney connector pipe



IT IS VERY IMPORTANT TO ENSURE THAT YOUR CHIMNEY HAS A GOOD DRAFT. YOUR DEALER OR CHIMNEY SWEEP WILL BE ABLE TO GUIDE AND ADVISE YOU ON YOUR CHIMNEY CONDITIONS.

Each chimney connector or chimney connector section must be installed to the stove flue collar and to each other with the male (crimped) end toward the stove. This prevents any amount of condensed or liquid creosote from running down the outside of the pipe or the stove top. The flue collar connector should be secured with approved fasteners to ensure that the sections do not separate. For the best performance the chimney connector should be as short and direct as possible, with no more than two 90° elbows.

Chimney Connector

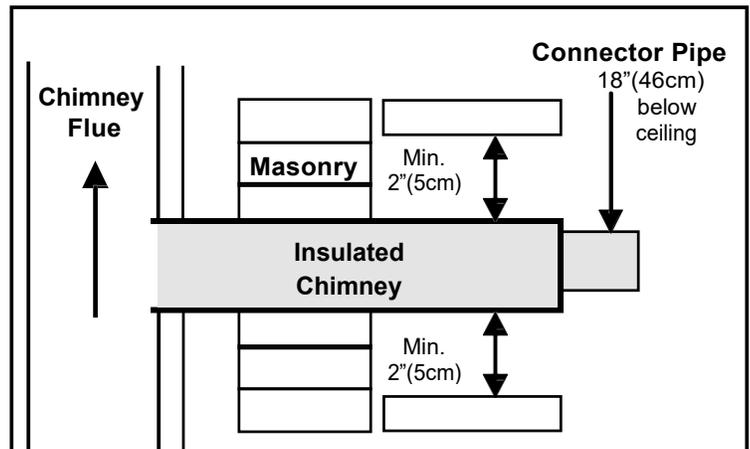


DO NOT CONNECT THIS STOVE TO ANOTHER CHIMNEY FLUE OR AIR DISTRIBUTION DUCT OR ANY SYSTEM SERVING ANOTHER APPLIANCE.

For venting vertically into a masonry chimney, single wall stainless steel (at least 24 gauge and 6" in diameter) must be used in the room where the stove is installed. Refer to the manufacturer's instructions for the connection to the listed chimney.

RURAL ONLY. For rear venting or other not listed configurations, consult the local building codes.

If the chimney connector is fitted with a baffle, it must be manually operated, visibly placed for ease of use, and must not close completely. Consult your chimney expert if you have any questions. Make sure that there is easy access to the chimney cleanout door. Floor protection is required under the chimney connector and 2" (51cm) beyond each side. Baffles should only be fitted to fix situations relating to over drawing.



Technical Specifications

Twinfire	Description		Data	
Heating:	Optimal heat output		5.6kW	
	Heat output range (minimum-maximum)		4 - 7.4kW	
	Heating capacity range		40-100m ²	
	Efficiency		>64%	
Stove dimensions:	Basic			
Height	48" (121cm)			
Width	18.5" (47cm)			
Depth	16" (40cm)			
Weight:	469lbs. (213kg)			
Venting:				
Stove pipe:	Basic			
Diameter of the stove pipe	6" (15cm)			
Top vent – center of pipe to stove back	8" (20cm)			
Outside air supply:	Diameter of the air supply connector		4" (10cm)	
	Location of air supply outlet		Under the lower firebox at the center	

Clearances

Minimum Clearances:

Parallel Position Clearance Distance	Position	Clearance (mm)
	(A) Rear	100
	(B) Side	400
	(C) Floor protector	140
	(D) Front floor protector	300
	(E)	460
	(F)	760
	(G)	800
Corner Position Clearance Distance	Position	Clearance (mm)
	(A) Corner	100
	(B) Front	460
	(C) Floor protector	140
	(D) Front floor protector	300
	(E) Rear floor protector	100
	(F)	1035

USE FLOOR PLATES UNDER THE STOVE MADE WITH NON-COMBUSTIBLE FIRE-RESISTANT MATERIALS SUCH AS STEEL, TILE, OR GLASS. BEFORE INSTALLATION, MAKE SURE THE FLOOR CAN CARRY THE WEIGHT OF THE STOVE.

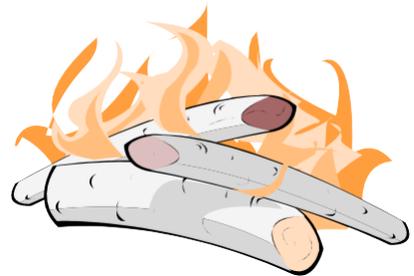
Permitted Fuels

Only natural, air-dried firewood may be burned. Under no circumstances should rubbish, other fuels, and treated or damp wood be burned.



NEVER BURN IMPREGNATED OR PAINTED WOOD, LAMINATED PLASTIC, PLYWOOD, CHIPBOARD, GARBAGE, FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, ENGINE OIL, REFUSE, MILK CARTONS, OR PRINTED MATTER. USE OF SUCH MATERIALS WILL INVALIDATE YOUR WARRANTY, AS THIS MAY EMIT TOXIC, CORROSIVE AND HAZARDOUS FUMES WHEN BURNED. THEY MAY ALSO CAUSE A BUILD-UP OF THE TOXIC GAS DIOXIN, WHICH IS DAMAGING TO THE STOVE AND THE ENVIRONMENT.

We recommend that firewood with less than 20 % moisture content be burned. Wood is an environmentally friendly and widely available solid fuel. To ensure that the wood has a moisture content of 20 % or less, store it under a roof or protected against heavy rain for a year or two. Use of wood with greater moisture content can cause soot and creosote in the pipe and chimney. This can lead to chimney fires.



Combustion involves conversion of the fuel from solid form into gases, water vapor, and charcoal. The heating value is an expression of the content of combustible gases. All wood has roughly the same heating value per kilogram. The lighter the wood, the more that must be used to achieve the same heat value as the heavier species of wood. **Thus, preferred wood types in New Zealand are softwoods and hardwood in Australia.**

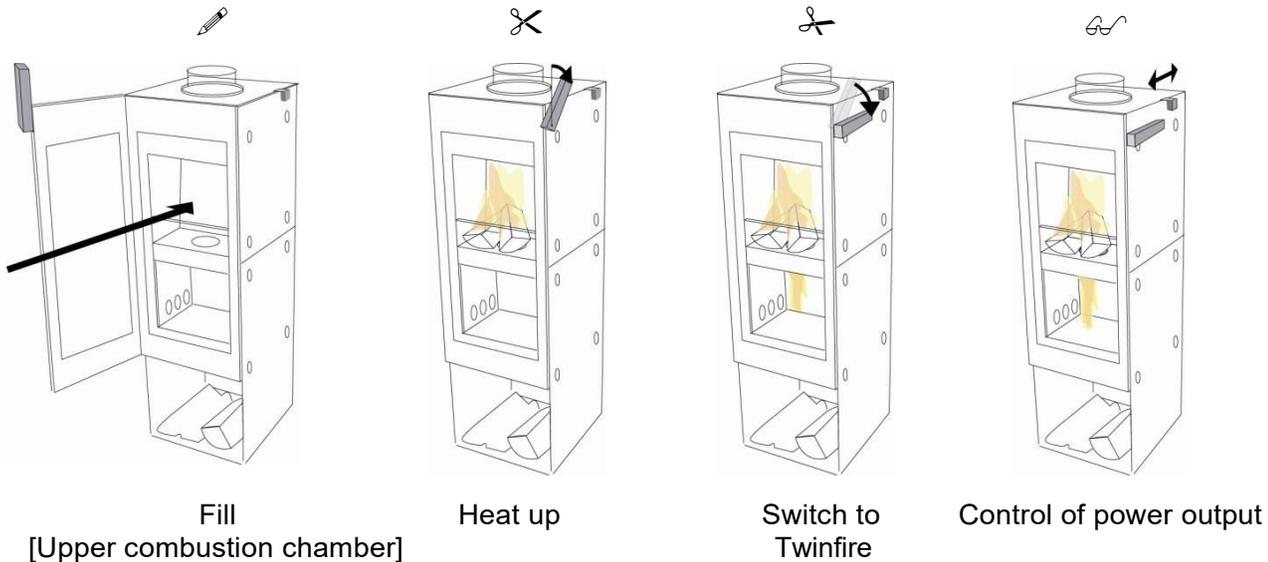
Initial Use



BEFORE STARTING UP THE STOVE, MAKE SURE TO REMOVE THE PACKAGING MATERIAL.

Although the Twinfire is carefully cleaned and inspected several times, remainders of the sand blasting or shavings of the Vermiculite plates in the fireplace can stay. We suggest before use that you vacuum, and wipe clean all surfaces with a soft, dry cloth to avoid baking on film or dust particles. Please note also that the stove paint will harden during the first few initial fires. This means that the stove may generate some smoke and an odor of paint, which will dissipate after about an hour's operation. It is a good idea to insure effective ventilation during this phase. Also, avoid touching the stove during the curing process.

Starting the Fire



Starting your Twinfire® is just like starting any other log burner, it just uses smaller loads! Start with two small logs, each one to be placed on either side of the central dome, each around 250g. Next place the kindling load in a criss cross pattern on top, around 500g in total. Kindling plus small logs, yields an easy start. Kindling and two small logs should total around 1kg. For safety reasons fluid fuels are categorically not allowed to be used. We recommend the use of fire lighters for the most effective start, when used as recommended.

To start the fire the control elements have to be put in the following positions [✂]:

- Door handle: "Heat up" 45° angle.
- Twinfire air control: High (push all the way to the back).

Attention! The surface of the stove could become very hot.

As soon as the kindling has turned into a stable flame, typically after 5 minutes, additional wood can be put into the stove. This next load should be limited to two or three small pieces, totally 1.2kg, in the upper combustion chamber. Until the necessary basic bed of fire is reached, the Twinfire handle has to remain in the "Heat up" position and the air control knob fully open [✂].

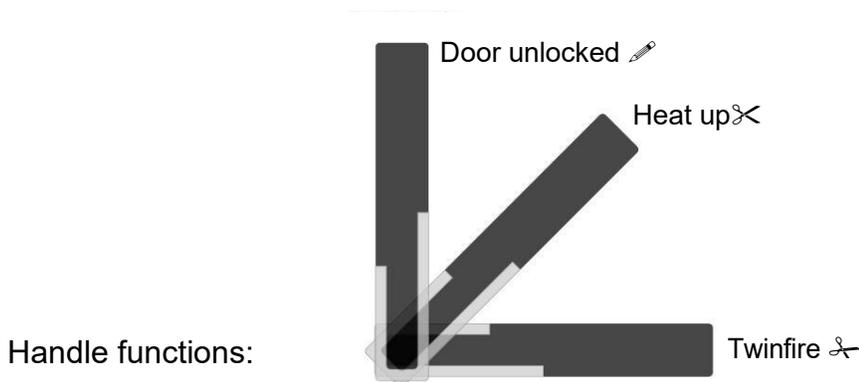
Once the thermometer reads 90°C (please see image on next page) a blaze should have ignited so you can switch the handle to the "Twinfire®" position [✂] The combustion occurs primarily downwards through the flame. Attempting to engage Twinfire® before the thermometer reads the correct temperature may cause unnecessary pollution emission and slow the Heat Up phase of the Xeoos®.

Once the lower chamber flame has a continuing flame, the output can now be regulated with the air control as necessary. The primary air supply should be either fully back for high output and when introducing new fuel, or fully forward when in low setting. The control should not be placed in any position other than fully forward or fully back.

Operation

Door Handle Function

For continued operation, additional wood fuel should be added to the fire when the flames in the upper combustion chamber have died down, but there are still enough hot embers available. Open the door slowly to prevent the flames and ashes from falling out. When opening the door, the integrated door handle prevents the buildup of excessive smoke into the living space. The first 45° of the movement of the handle will turn the stove into the heating up mode. If you move the handle another 45° into the vertical position the door unlocks.



Again, please open the stove door with caution - this enables a stable flow and avoids disruptive turbulence in the fire chamber. After loading the wood, close the door, and when there is enough flame, adjust the handle to the "Twinfire®" position.



Caution: Do not strike or slam the glass door when closing.

If the Twinfire® stove is operated continually at a high output rate in the position of "heat up" the danger of overheating exists. The handle setting serves, as the name states, exclusively for initial heating up the stove.

If the fire has burned down too far, put more fuel on the fire and leave the handle in the position of "Heat up" until more of a flame develops. If the firebox and chimney are still warm, it normally takes only a few minutes to restart.

Air Control Handle

The stove's output is regulated through the Twinfire® air control; to reduce the heat output tilt the knob forward; to increase the heat output tilt the knob backward. The stove's heating output is mainly determined by the amount of burned wood.



ALSO NEVER ADD MORE THAN 3 POUNDS (1.5 KG) OF WOOD (ABOUT 2-3 LOGS). OTHERWISE THE STOVE COULD GET OVERHEATED, WHICH CAN CAUSE IRREPARABLE DAMAGE.

THIS KIND OF DAMAGE IS NOT COVERED BY WARRANTY.

If there is a situation of a poor draft, the stove should not be reduced to the lowest setting of the Twinfire® air control or heating up will take longer. Place small pieces of wood until the chimney is well heated. This can take up to one to two hours. The combustion is optimal when the flames glow light yellow to blue. If too high, use fewer and larger pieces of wood and adjust the air control. **Caution: Open the door only for short periods of time.**

Shutdown and Restart

To shut down the stove, let the fire extinguish and leave the stove closed until it has cooled down.

If the stove has not been in operation for an extended period, we recommend that you pre-heat the stove and the chimney by burning a couple of sheets of newspaper first. This improves the draft of the chimney during the heating up phase. Also insure that the chimney is free of dirt, birds' nest or anything else.



Creosote - Formation and Need for Removal - When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney and chimney connector should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

Appropriate Usage

- The surface is hot while in operation. Keep children, clothing and furniture away. Contact with the hot surfaces may cause skin burns.
- Do not store solid fuel within space heater installation clearances or within the area for loading and ash removal.
- Never use gasoline, gasoline-type, lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this stove. Keep all such liquids well way from the stove while it is in use.
- Do not place candles or other materials in or on the stove, which melt or burn at high temperatures (e.g. paper, plastics). The melted material cannot be removed and can cause permanent odors. Also, the burnt material could cause a house fire.
- DO NOT use a grate or andirons to elevate the fire – build it directly on the hearth.
- Burn a little at the time. Add fuel at regular intervals and run the stove over a period of several hours if possible. The stove should be observed during operation.
- The Twinfire® stove is not suitable for cooking food.
- During room-air operation, the opening under the stove has to be free at all times. During operation with external air supply, insure that the air supply is always free and has not been cut off.
- The stove may not be opened with any tools or pokers.
- The ash pan needs to be emptied when the ash reaches the upper limits of the pan.
- Make no adjustments to the stove; otherwise the license and warranty are void.
- To replace broken or damaged parts, purchase authentic items through your dealer.

Cleaning and Maintenance

Cleaning the Twinfire® stove is periodically necessary. Efficient combustion and optimized air through ducts can ensure the upkeep of your product. Insure that cleaning and maintenance have been done correctly and be sure to inspect your fire chamber. Empty the ash pan regularly.

Empty Out Ash Pan

To remove the ashes first let stove cool down. Then open the combustion chamber door and pull out ash pan. We recommend that you always leave a layer of ash approximately 1 inch (2 cm) deep in the upper fire chamber, since this allows better combustion during the heating.

Disposal of Ashes - Ashes should be placed in a metal container with a tight-fitting lid.



The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Cleaning or Replacing the Glass Pane

The construction of the fire chamber glass makes it necessary to be cleaned after long usage or when improper fuel is burnt. If there is soot build up, we recommend using a glass cleaner or dip a damp paper towel into the cool ashes to clean the glass plate. Remember to clean the glass ONLY when the stove is cold. If the glass breaks, it is necessary to replace the glass (use only approved Twinfire® glass and should be done by an approved professional) and gasket. First carefully unscrew and remove the top and bottom brackets, remove the old and insert the new glass and gasket, and replace the brackets.



Do not use any sharp articles or abrasive cleaners to clean the glass plate, in order not to damage the glass. Do not use aggressive cleaning agents for cleaning the glass plates, since sometimes they can cause damage to the gasket around the plate.

Cleaning the Chimney and Baffle Plates

The chimney and basic servicing should be cleaned annually by a qualified Chimney Sweep. The stove and baffle plates (vermiculite-plates) have to be removed cautiously to avoid breakage. Also, you can easily do the cleaning of the supply air openings in the upper combustion chamber and the smoke gas openings in the lower combustion chamber yourself with a vacuum cleaner from time to time. Vacuum the port in the double bottom. Also clean the grate by knocking off the carbon crusts.

Maintenance Activities

Door-hinges and locks need occasional care. As needed the brass bearing on the door handle can be greased with heat-resistant graphite or Teflon-grease. Also, you can obtain spray cans from your dealer to touch-up scratches in the paint.

Troubleshooting: Causes and Their Repair

Problem	Cause	Remedy
Wood catches fire very slowly or not at all	<ul style="list-style-type: none"> - none or too little combustion air - logs are too thick - wood is too moist - blockage in grate 	<ul style="list-style-type: none"> - completely open the air control and put the handle into position "heat up" - use smaller diameter logs - use drier wood - jiggle grate with poker and remove debris
fire goes out or smolders	<ul style="list-style-type: none"> - none or too little combustion air - logs are too thick - wood is too moist 	<ul style="list-style-type: none"> - completely open the air control and put the handle into the "heat up" position. - use smaller diameter logs - use drier wood
soot films on the glass plate	<ul style="list-style-type: none"> - wood is too moist - draft of the chimney is too strong - primary air supply is incorrectly adjusted - stove is leaking - fuel quantity is too small 	<ul style="list-style-type: none"> - use drier wood - adjust the damper (more closed) - contact the dealer - add fuel (more wood)
wood burns down too quickly	<ul style="list-style-type: none"> - primary air supply is incorrectly adjusted - logs are too small 	<ul style="list-style-type: none"> - reduce the primary air - use greater diameter logs
smoke comes out into the room when the door is opened	<ul style="list-style-type: none"> - chimney not the right size for the firebox - other devices (e.g. exhaust fan) produces negative pressure in the area - Door opened too quickly 	<ul style="list-style-type: none"> - contact the dealer - check other devices / contact the dealer - Open door slowly.

"Snap-Sounds"

This effect is normal for stoves. It arises from the expansion of metal pieces. The tensions which occur with the heating up and cooling down between the different warm stove pieces adjust themselves in this process.

Twinfire Replacement Parts

- Vermiculite upper combustion chamber - 8 KW
- Vermiculite lower combustion chamber - 8 kW Basic
- Twinfire door glass
- Twinfire gasket
- High temperature glue for sealing
- Teflon – lubricant
- Spray paint can - anthracite, black, silver, gray
- Top plate conversion kit - top vent à back vent (without a hole)
- Top plate conversion kit - back vent à top vent (with a hole)

Twinfire Warranty

The Twinfire stoves are built to the highest quality standards. They come with a 5-year warranty, which covers defects in materials or workmanship.

The warranty does not cover the following:

- Incorrect installation of the stove (not according to the Operating and Installation Manual).
- Rust or inappropriate treatment (such as scratches on the stove body, etc.).
- Improper operating or mishandling of the stove.
- Normal wear of parts that are in contact with the fire, e.g. Vermiculite plates and door gaskets.
- Costs of transport, assembly and disassembly, and glass breakage or cracks.
- Any structural changes to the Twinfire stove are not covered by warranty.
- Damage through the use of fuels which are not mentioned in the operating instruction.
- Use non-authentic spare parts that are designed for the Twinfire stove.
- Damage to the unit caused by leaving the handle in 'up' position for longer periods of time than required.

Use only authentic Twinfire stove spare parts and contact the dealer with any warranty issues.