



Tested and Listed by:



Portland  
Oregon USA

OMNI-Test Laboratories, Inc.

*Please read this manual carefully and save the instructions -*

## *Installation and user manual*

# H530

Manufactured by:

  
**Jydepejsen**<sup>®</sup>

Ahornsvinget 3-7 . DK-7500 Holstebro  
T.++45 96101200 F.++45 97425216 . [www.jydepejsen.com](http://www.jydepejsen.com)

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FIRE BY DESIGN

PO Box 120 . Pound Ridge NY  
T.914-764-5679 . F.914-764-0465 . [www.wittus.com](http://www.wittus.com)

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## 1. INTRODUCTION

**Congratulations on your new H530 wood burning insert.** As a product of superior quality and efficiency, we wish you many years of warmth and pleasure.

We are asking you to:

**PLEASE READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW INSERT. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH. KEEP IT HANDY FOR EASY REFERRAL.**

Please take particular note of this symbol:  
This indicates special attention.



## **Safety and Environmental Testing**

The H530 Inserts have been tested by OMNI-Test Laboratories, Inc. of Portland, Oregon and are listed to UL 1482 and ULC S628. They are also EPA certified.

## **Features and Items Included**

Your H530 has a built in convection system, so it creates air circulation in the room to spread the heat faster and more evenly.

The stove has a small "cool" handle, which enables you to open the door without the use of a glove (however, always use caution when touching areas where HOT surfaces are located).

Included with the insert (in the firebox) are:

- Flue collar with a 45° elbow (to connect to stove/pipe)
- An oven mitt
- A easy to use lighter
- A can of touch-up paint (**Remove from the stove!**)

## **2. INSTALLATION**

### **Precautions and Specifications**

**IF THIS STOVE IS NOT INSTALLED PROPERLY, A HOME FIRE MAY RESULT. TO REDUCE THE RISK, PLEASE CAREFULLY FOLLOW THE DIRECTIONS FOR INSTALLATION.**

First, the stove must be installed according to the directions in this manual. Consult your local Building Inspector or Fire Marshall before installation about restrictions and installation inspection requirements in your area. Also, in some areas a "special permit" is required.

If utilizing an existing chimney, it is suggested that you have a professional mason or stove installer do a complete check-up of your chimney, liner, and flue.

In order for the stove to work and draw properly, sufficient air is important! Be especially aware of any mechanical fans (e.g. kitchen or bathroom) that may affect the proper draw.

In addition, make sure that the floor and sub-flooring is designed to carry the extra weight of the insert.

The floor in front of the insert (if placed lower than 6.5" (16.5cm) above ground) must be thermal protected by a minimum of ½" (1cm) non-combustible material having a thermal conductivity of  $k=.84$ , where  $k=(BTU) \times (in.) / (hr) \times (ft^2) \times (°F)$  (based on 1" thickness). To substitute alternate material, you need to know the k value of that material. Use the following formula to calculate thickness of alternate material (inches):  $k= (AlternateMaterial/.84)$ .

To the front and the sides floor protector must extend as indicated below. When installing the insert, the heat distribution to other rooms should be taken into consideration. The H530 Insert has a heating capacity of approximately 1,076 ft<sup>2</sup> (100m<sup>2</sup>) based on a standard ceiling height.

### Specifications

UL 1777 Listed chimney liner (with a 6" (15cm) diameter) up through the block off plate of an existing masonry chimney, a zero-clearance chimney, or Class A, UL-103 HT, 6" (15cm) diameter chimney

Dimensions (h x w x d) - 21" x 28" x 18" (53cm x 70cm x 45cm)

Firebox Dimensions (h x w x d) - 14" x 24" x 12" (35cm x 60cm x 30cm)

Thermal Output - 20,000 BTU (6 kW); range is 11,100-28,800 BTU

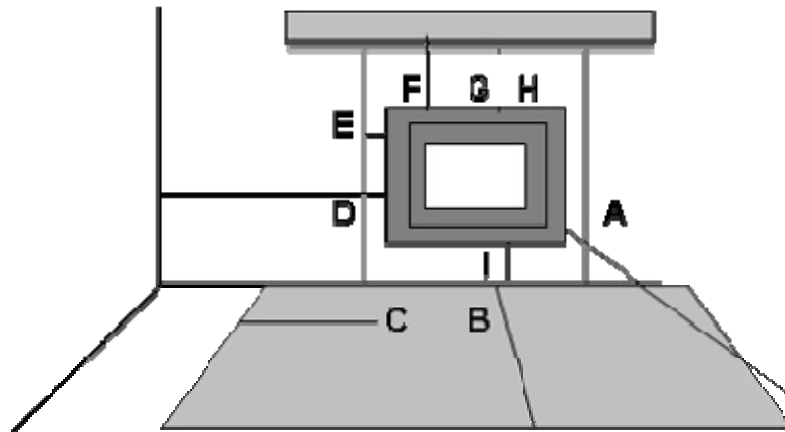
Approximate heating area - 600-1,500ft<sup>2</sup>

Minimum stove pressure at above output - 15 Pascals

Efficiency - 75%

Tested EPA emission particulate rate - 6.6 grams/hour

Minimum distances from edge of Insert Face Plate to combustible material - as shown:



A = Distance to furniture - 36" (91cm)

B = Front protection - 20" (51cm) to unprotected combustible floor

C = Side floor protection - 8" (20cm) from fuel-loading door

D = Distance to a combustibleside adjacent sidewall - 15.5" (39cm)

E = Distance to 3/4" protruding side trim - 2" (5cm)

F = Distance to a combustibleside mantel - 26" (66cm)

G = Distance to 3/4" protruding combustibleside top trim - 19.5" (50cm)

H = Minimum distance to combustibleside material (front facing) - 19" (48cm) from top of the unit

I = Distance to the floor - 6.5" (16.5cm)

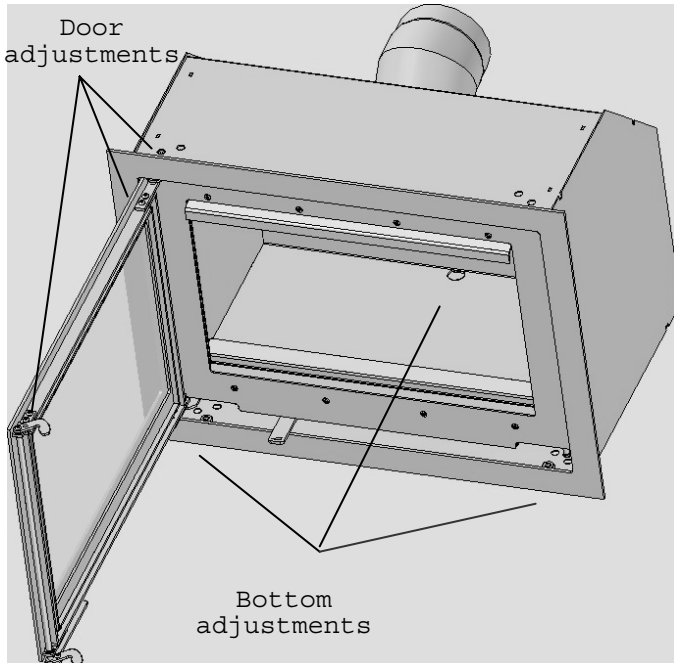
**Note:**

A heat shield or protective wall may be used to reduce clearances if approved by the regulatory authority. Clearances to noncombustible materials are 2" (5cm), but note that "noncombustible" must be solid cement or block (not brick or tile over combustible material).

## Set up and Installation

To minimize the weight of the insert before installation, it is possible and simple to dismount the door by lifting it up and pulling it out of the lower hinge. The wood holder in the combustion chamber should not be removed.

### Illustration I:



Place the insert into the opening. Adjust it by using the 3 screws at the bottom.

The insert must be adjusted both horizontally and vertically.

Also adjust the door at the hinges and the fittings.

Before replacing the baffle plate and the vermiculite panels, place the stove collar in the smoke outlet hole, and put the gasket at the bottom. After this, bend the four small tabs to affix the collar.

First, put in the rear panel.

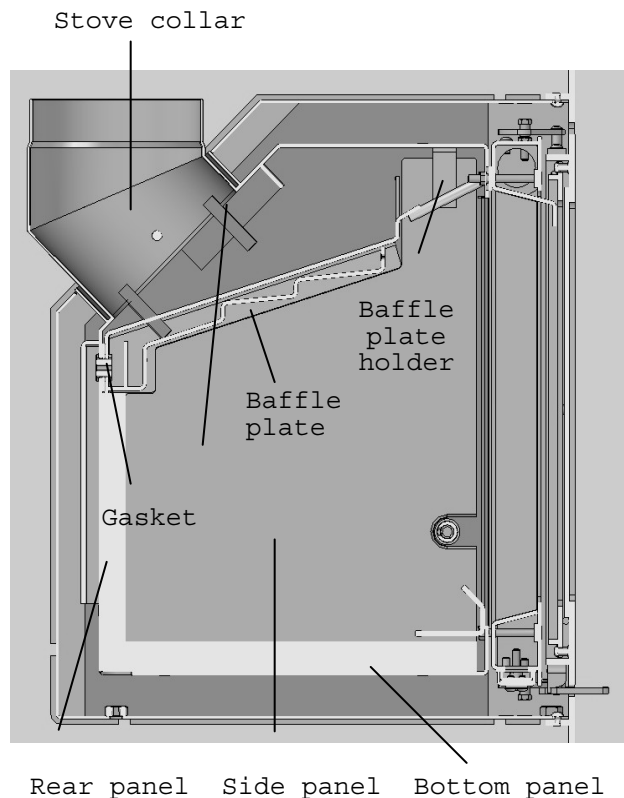
After, replace the baffle plate. Please note that this plate must rest on the attached holders.

Place the gasket on the back of the baffle plate.

Place the direct air device.

Then place the side panels and finally the bottom panels.

The insert **MUST** meet the required minimum distance to combustible materials.



## Chimney

The H530 insert must be installed using a code-approved masonry chimney with a 6" (15cm) diameter flue liner, a zero-clearance chimney, or a Class A UL-103 HT approved factory-built chimney system.

The chimney must extend through the roof at least 3' (1m), and 2' (.6m) above any structure within 10' (3m). The condition of the chimney and height is very important. We suggest a total minimum height of 10' (3m). Consult a chimney expert with any questions.



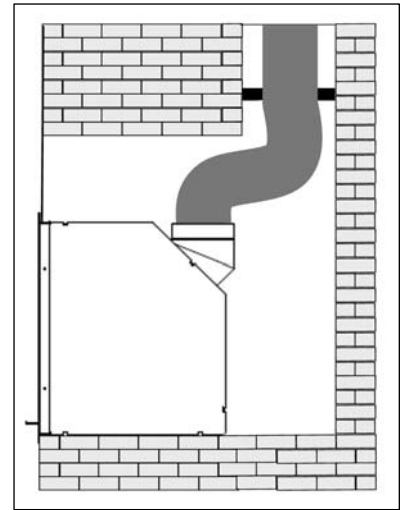
**Do not connect this stove to a chimney flue serving another appliance.**

**Important! Make sure that there is easy access to the chimney cleanout door.**

For venting directly into a masonry chimney (built to UBC Chapter 37 standards) with a clay liner, the installation should be in accordance with the NFPA 211 guidelines and methods.

Insure that there is a secure and airtight connection between the adapter pipe and the clay liner with a block off plate. See the illustrated diagram at right.

First, make sure to secure the fireplace damper in the open position (or remove the damper). Then, have the chimney examined to insure that it is safe for use (e.g. not too large and no cracks), and some of the more critical requirements are:



- A minimum thickness of 4" (10cm) for brick or block and a 12" (30cm) for a natural or rubble stone wall.
- The 6" (15cm) chimney liner options include:
  - A full stainless steel chimney liner (meeting ULC S635 CLASS III standards) and securely attached to the insert and the chimney top. This is required for Canada and recommended for the United States.
  - A fire clay flue liner that is at least 5/8" thick and installed with refractory mortar.
  - An equivalent listed chimney liner system or other approved material.
- A chimney inside the house must have a 2" (5cm) clearance to combustibles, and an outside chimney must have at least a 1" (2.5cm) clearance to a combustible structure. Fire stops must be installed at spaces where the chimney passes through floors and/or ceilings.

The H530 Insert is approved for installation in a masonry fireplace or a metal firebox (heat exchanger) within a masonry chimney (based on UL-907 listing) or for use in an approved factory-built zero-clearance fireplace (listed to UL-127). The clearance requirement is a 2" (5cm) space between the insert and the back and sidewalls of the zero-clearance box.

To fit the insert into the zero-clearance firebox, the following items may be removed: damper, ember catches, fire grate, doors, and viewing screen or curtains. The smoke shelf or baffle can also be removed if done without cutting the material or permanently altering the fireplace structure.

When installing into a masonry opening, it is suggested that you wrap the insert with fiberglass or other non-combustible insulation for better heat retention. Note that bricks and mortar should not be removed from the existing fireplace unless first consulting the Building Inspector or Fire Marshall. As a final note make sure that the surround or shield around the insert seals the fireplace opening to insure proper draft.

### **3. SENSIBLE WOOD BURNING**

#### **Proper wood burning**

When dry wood is burned in a wood-burning stove the following process occurs (over a period of approx. 1 hour):

- After lighting the log starts to dry and heats up.
- After drying the temperature of wood rises to approx. 300-400°F (150-200°C) and is converted into combustible gases/charcoal.
- As the wood is gasified a certain portion of the gases produced burn and are converted into carbon dioxide and water. During this phase the temperature rises to around 1100-1500°F (600-800°C) and a plentiful supply of air is required. If the air supply is accidentally reduced, the flames will be smothered, but this will not stop the conversion of the wood into gas. The unburned gas will then flow out into the chimney, causing a nuisance outdoors and build up of creosote.
- Next-charcoal will burn, which requires very little air supply. Finally, new wood must be laid on the glowing charcoal cinders.



**Warnings** - It is extremely important to ensure that you do not overheat your stove, as this can cause irreparable damage. This kind of damage is not covered by the warranty. Extremely high combustion temperatures can occur when using inappropriate fuel, such as kiln-dried wood, coal, pressure-treated wood, scrap wood.

**NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.**

**HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**

**DO NOT STORE SOLID FUEL WITHIN HEATER INSTALLATION CLEARANCES OR WITHIN THE SPACE REQUIRED FOR FIRE LIGHTING AND ASH REMOVAL.**

#### **Incorrect wood burning**

Too much air supplied to the combustion process causes an uncontrollable fire that will heat the entire stove very rapidly to an extremely high temperature. This can happen if you fire with

conditions that produce an extra-strong draft in the chimney. Never fill the stove completely with wood. It is better to heat a stove up slowly. This will prevent damage to welds and annealing of the iron. Overfilling the firebox also substantially reduces the useful life of the vermiculite panels, as cracks are more easily caused. The log size should be about 2" (5cm) less than the width of the firebox. Start slowly with a "normal" fire from the bottom, and slowly build it up to a maximum of three logs.

**Technical information on wood burning**

1 kilo of dry wood is made up of 20% water, with the remaining 80% divided into 60% gas and 20% charcoal. The 60% gas only contains around half the energy content of the wood, while the 20% charcoal contains the other half. To achieve optimum combustion, the temperature must reach 1100-1500°F (600-800°C).

Reload with a few pieces of wood at a time. If too much wood is placed on a layer of embers, the air supplied will not be sufficient to attain the required temperature, and the gases will disappear out through the chimney unburned. It is vital to supply air to the fire immediately after adding fuel, so there are flames in the firebox, and the gases burn. **Remember that three logs will burn just as quickly as one.** The quantity of firewood determines the heat emission - the more heat you require, the more wood you should add at each refueling.

**Types of fuel and heating values**

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 - stated in kcal/kg. All wood has roughly the same heating value per kilogram. The lighter the wood, the more that must be used to achieve the same heating value as with a heavier species of wood.

<u>Type of wood</u>	<u>Dry wood - Lbs./ft3 (Kg/m3)</u>	<u>Compare to Beech</u>
Beech and oak	36.2 (580)	100%
Ash	35.6 (570)	98%
Maple	33.7 (540)	93%
Birch	31.8 (510)	88%
Mountain pine	30.0 (480)	83%
Fir	24.3 (390)	67%
Poplar	23.7 (380)	65%

As mentioned, air-dried wood contains around 20% water, corresponding to a heating value of approx. 4 kWh/kg equivalent to approx. 3440 kcal/kg (1kW = 860 kcal).



**Warning! NEVER burn treated/painted wood, laminated plastic, plywood, chipboard, refuse, milk cartons, printed matter or similar. 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.**



## Fuel

Recently-felled wood contains 60-70% water and must therefore be seasoned before it can be used in a wood burning stove. It must be cut, split and air dried, and must contain no more than approx. 25% water before use. This equates to the wood being left in the open for approx. 1 year - covered only to protect against rain.



It is very important to always use dry wood. Damp wood requires a lot of air for combustion, as extra energy in the form of heat is needed to dry it out. Heat emission is therefore minimal.

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.



## 4. OPERATING INSTRUCTIONS

### First Fire

Once your insert is installed and all instructions have been read, the first fire can be started. However, please take careful note of the following:

- Your new insert should be broken in gently for top performance and to prevent paint damage, cracks in the vermiculite or firebox lining, and excessive wear and tear.
- The baffle plate and vermiculite panels may crack under hard impact. These are not covered by the warranty, so avoid tossing the wood in the firebox.
- Avoid touching the metal during initial fires, as the paint is hardening at this stage. Otherwise this may mar the paint.

It is a good idea to ensure effective ventilation during the first firing, as the stove will generate smoke and an odor of paint. The smoke and paint odor will dissipate after about 1 hour's operation and is not hazardous to health.

**Do not use a grate or elevate the fire - build wood fire directly on hearth.**

## Lighting the stove

1. Make sure the air vent is in the fully open position (move the handle to the left as shown by the wide end of a triangle).
2. Add crumbled paper / firelighters and kindling wood to the bottom of the fire box (combustion chamber).
3. The kindling (about 3 lbs or 1.5 kg) is to be built up crosswise.
4. Light the fire.
5. The door should be ajar for a couple of minutes during the lighting phase.
6. Once the flames have taken a good hold of the kindling, the door can be shut.
7. The air vent should be adjusted down toward the right after approx. 10 minutes (primary air); how much depends on the chimney draft - however, the air supply must be diminished to the point where you obtain steady and calm flames.



Once there is a good bed of embers in the stove, you can add wood. It is important not to open the door while there are flames in the stove, as this may cause smoke to flow out into the room. Add wood on the basis of your heating requirements. However, never add more than 4.4 lbs or 2 kg of wood every 1.5-2 hours. Please remember that the exterior surfaces especially the top and front of the stove in particular will become very hot during burning.

## Refueling

1. Open the air vent to the maximum (to the left).
2. To minimize the back draft, the door should be ajar for about one minute before you open it completely.
3. Open the door slowly.
4. Add 2 - 3 pieces of firewood to the combustion chamber.
5. Close the door.
6. Turn down the air supply (toward the right) when the fire has caught the wood, to obtain steady and calm flames.

## 5. TROUBLESHOOTING

Combustion problems can arise if the combustion conditions are not optimal. This can be corrected by following the advice given below.

Problem	Explanation	Remedy
<b>Insufficient draft</b>	<ul style="list-style-type: none"> <li>▪ The flue vent is closed.</li> <li>▪ The access hatch in the chimney is defective or missing.</li> <li>▪ The chimney is blocked by a bird's nest or similar.</li> <li>▪ The flue pipe is sooted up, or there is an accumulation of soot on top of the baffle plate.</li> <li>▪ The chimney is too small.</li> <li>▪ The baffle plate may be positioned incorrectly.</li> <li>▪ Negative pressure in the house.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Open the flue vent.</li> <li>▪ Contact your chimney sweep/stove dealer for further advice, or clean the flue pipe and firebox.</li> <li>▪ Check the fitting of the baffle plate – see the operating instructions.</li> <li>▪ In well-insulated buildings negative pressure can occur – increase the air supply to the room.</li> </ul>
<b>Too much draft</b>	<ul style="list-style-type: none"> <li>▪ The baffle plate may be positioned incorrectly.</li> <li>▪ If using kiln-dried wood, this requires less air than normal wood.</li> <li>▪ The air vent is constantly wide open.</li> <li>▪ The sealing strips on the door are worn and pressed completely flat.</li> <li>▪ The chimney is too large.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Check the fitting of the baffle plate – see the operating instructions.</li> <li>▪ Reduce the air supply.</li> <li>▪ Check the sealing strips. If these are worn, replace them as described in the operating instructions.</li> <li>▪ Contact your chimney sweep/stove dealer for further advice.</li> </ul>
<b>The glass pane is sooting up</b>	<ul style="list-style-type: none"> <li>▪ The wood is too wet.</li> <li>▪ The air vent is not sufficiently open.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dry wood with a maximum of 20% moisture should be used.</li> <li>▪ The air vent must be opened to supply more air for combustion.</li> </ul>
<b>Clouded glass or with white film</b>	<ul style="list-style-type: none"> <li>▪ Poor combustion (too low temperature in the stove).</li> <li>▪ Incorrect combustion (burning waste wood, painted wood, impregnated wood, laminated plastic, plywood or similar.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Follow the instructions for correct burning as specified in this manual.</li> <li>▪ Ensure that you use pure, dry wood in your stove.</li> </ul>
<b>Smoke comes out into the room when the door is opened</b>	<ul style="list-style-type: none"> <li>▪ Pressure compensation is occurring in the firebox.</li> <li>▪ The chimney is not a suitable size for the firebox.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Open the air vent wide for about 1 min. before opening the door - avoid opening the door rapidly.</li> <li>▪ Check the height of the chimney. It may be too short for the minimum draught required from the chimney.</li> </ul>
<b>White smoke</b>	<ul style="list-style-type: none"> <li>▪ The combustion temperature is too low.</li> <li>▪ The wood is too damp and contains water vapor.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase the air supply.</li> <li>▪ Always ensure that you use pure, dry wood in your stove.</li> </ul>
<b>Black or greyish black smoke</b>	<ul style="list-style-type: none"> <li>▪ Incomplete combustion.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase the air supply.</li> </ul>



**Lighting and burning problems are usually due to wet wood or insufficient draft.**

## **6. MAINTENANCE**

Gaskets and vermiculite panels are parts which need to be replaced from time to time - depending on how much you use your stove. In some cases, you may need to replace them every year, while in others, replacement every second or third year will suffice. As a rule of thumb, gaskets need to be replaced when it has become flattened and the door no longer fits tightly against the front of the stove. You can purchase gaskets - with adhesive - from your local dealer.

The vermiculite panels must be replaced when they have worn thin, or when cracks - if any - become so wide that you can actually see steel through them. If the panels are not replaced at such time, they will lose their capacity to insulate and reflect heat.

Use only authentic spare parts!

Movable and mechanical parts (closing mechanisms, hinges etc) should be greased once a year with a heat-resistant lubricant.

You should have your stove checked regularly by a qualified professional to ensure the optimal function of the stove at all times. Do not modify the insert, since any unauthorized changes to the design of the stove will also invalidate the stove guarantee and test results.

### **Replacing the gasket on the door**

1. Remove the gasket from the inside edge of the door and clean the sealing track (there is no need to remove the door from the stove).
2. Apply a layer of fire-resistant adhesive to the track where the old gasket was affixed.
3. Press (while stretching it out) the new gasket into the track.
4. Close the door and let the adhesive set for approx. 1 day before opening the door again. If the adhesive has not hardened sufficiently before the door is opened again, the gasket may fall out.

### **Replacing the gasket on the glass**

1. Open the door.
2. On the inside of the door, in each corner of the glass panel, there is a fastening that must be loosened so that each fitting can be turned away from the glass panel.
3. Repeat this procedure for all the fittings and remove the glass panel.
4. Remove the old strip from the glass panel.
5. Fit a new gasket around the glass panel.

To replace the glass panel, simply reverse the process described above.

### **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.

### **Creosote - formation and need for removal**

Refer to the Section on Fuel on Page 9. Insure there is sufficient air supply to avoid incomplete combustion and formation of creosote.

### **Interior cleaning**

Make sure it is possible to access the chimney for sweeping and cleaning.

## **7. WARRANTY**

New wood-burning inserts from Jydepejsen A/S come with a 5-year warranty. The warranty covers defects in materials or workmanship.

Any claims during the warranty period should be directed to the dealer who sold the stove. All stoves from Jydepejsen come with their own individual serial number on the type plate on top of the stove. Record this number and keep it in a safe place. Provide the stove model and serial number to your dealer in connection with service tasks.

In the event of warranty repairs, a signed and dated invoice must also be produced, showing the dealer's name. The warranty does not cover dismantling, transport and reassembly of your stove.

No compensation will be granted for:

- Damage during transport
- Damage to other articles resulting from use of the stove
- Damage arising from misuse, such as overheating. Read the operating instructions carefully to avoid such problems.
- Damage resulting from a failure to follow the directions in the operating instructions.

Normal wear and tear parts such as vermiculite panels, baffle plates, and gaskets are not covered by the warranty. Furthermore, glass, ceramic tiles, and soapstone are not covered by the warranty. If any of the above mentioned need replacing, new parts can be ordered from your dealer.

## **8. SPARE PARTS LIST**

<b>Article No.</b>	<b>Article description</b>	<b>Dimensions H x W x D (mm)</b>
413003-00	Vermiculite bottom panel	305 x 299 x 25
413004-00	Vermiculite baffle plate	558 x 300 x 28
413002-00	Vermiculite rear panel	637 x 247 x 20
413001-00	Vermiculite side panel	430 x 305 x 20
413000-00	Set of 4 vermiculite panels	
400106-00	Glass with gasket	559 x 360 x 4
	Wood holder	60 x 43
	Gasket set with adhesive	

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