

# VetoMat Burner



## User Manual

## Installation, Operation and Service

Retailer:

------------------

Keep this manual.



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# 1. Introduction

You have made a good choice in purchasing VetoMat burner. The burner together with a Veto boiler offers a pure, economic, efficient, and near-emission-free way of burning renewable energy sources approved by the manufacturer. By avoiding using fossil fuels, you can considerably diminish the burden on the environment and prevent global warming.

This manual is for using VetoMat burner. To gain the best possible benefit of the device, read this manual before installing, connecting or using the device. If all the instructions are followed, the device provides a long-lasting, economic, and faultless performance. Only use this manual with the device it was delivered with.

The instructions, descriptions and technical information are based on the latest knowledge on the structure of the burner at the moment this instruction manual is created. We constantly develop our products further, and we therefore reserve the right to make any alterations without prior notice.

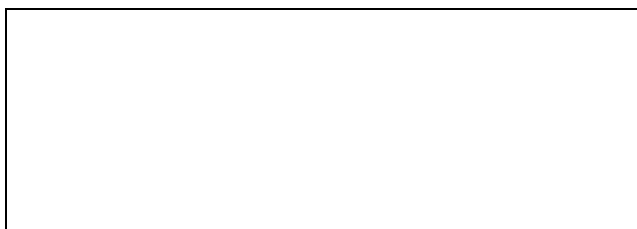


Improper use of the product can result in serious injury. To avoid injury, read and carefully follow all instructions provided in this manual before installing, operating, or servicing the device.



The instructions provided in this manual are recommendations. Laws and regulations of local authorities override our recommendations.

## 1.1. Contact information



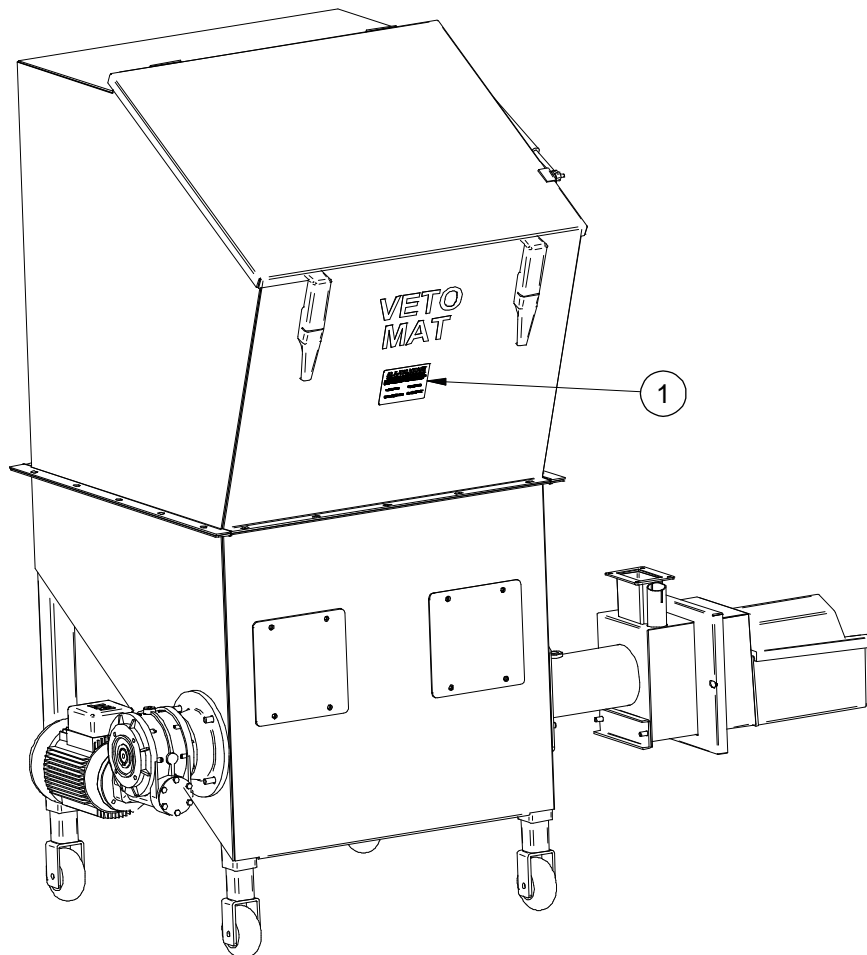
## 1.2. Type plate and delivery information

Write down the information from the type plate for easy reference. You need the information when, for example, ordering spare parts or claiming warranty.

**Table 1** Type plate and delivery information

Type	
Manufacturing year	
Serial number	
Delivery date	

**Figure 1** Type plate location



1 Type plate



### 1.3. Warranty

The manufacturer Veljekset Ala-Talkkari Oy grants a warranty for the products that it manufactures and markets. The user is liable for damage resulting from use of the equipment for any purpose other than that for which it was designed.

The warranty period is one year from the date of delivery (EU countries: The device has a warranty that complies with the legislation in the country of use).

The warranty for parts changed under the warranty continues until the end of the original warranty period.

The prerequisite for warranty is observation of the installation, use, service and safety instructions for the device.

Continuation of the warranty for the device requires the use of original spare parts or those approved by the manufacturer. Service and any repairs performed during the warranty period must be assigned to a service company approved by the manufacturer.

Compensation for service during warranty period can also be claimed if:

- The service visit is unnecessary (the reason is not covered by the warranty).
- The manufacturer's instructions concerning installation, use and care have not been observed.
- Corrective measures were not taken immediately upon observation of the fault.

The warranty covers:

- Manufacturing and raw material defects in products manufactured by Veljekset Ala-Talkkari Oy.

The warranty does not cover:

- Defects or damage caused by:
  - Natural wear (spring agitator springs, feeding screw, grates, blades, feet, etc.)
  - Misuse of the product or use in violation of the instructions
  - Neglect of service in accordance with the instruction manual
  - Change work or repairs made without the manufacturer's consent
  - Other manufacturers' control devices or programs
  - Safety equipment that deviates from that delivered or is installed contrary to the instructions
  - External factors
- Breakage of parts preventing overloading
- Indirect costs or down time, or the resulting financial losses
- Work or travel costs unless separately agreed in advance with the manufacturer

### **1.3.1. Deficiencies in delivery and return of warranty parts**

- Deficiencies in delivery must be reported within seven (7) days of the delivery.
- Broken warranty parts must be returned to the plant for a warranty inspection (include a warranty report).
- A part to replace the broken part can be delivered prior to warranty processing.
- An invoice for returned warranty parts that do not meet the terms of the warranty can be sent after warranty processing.
- The client can be charged for parts that are not returned upon request.

### **1.3.2. Processing of warranty matters**

- The retailer is the primary contact channel in warranty matters and problem situations.
- The retailer handles processing of the matters with the manufacturer.
- The retailer must be provided with the following information: brand, model and purchasing date for the device and the serial number of the device from the type plate.

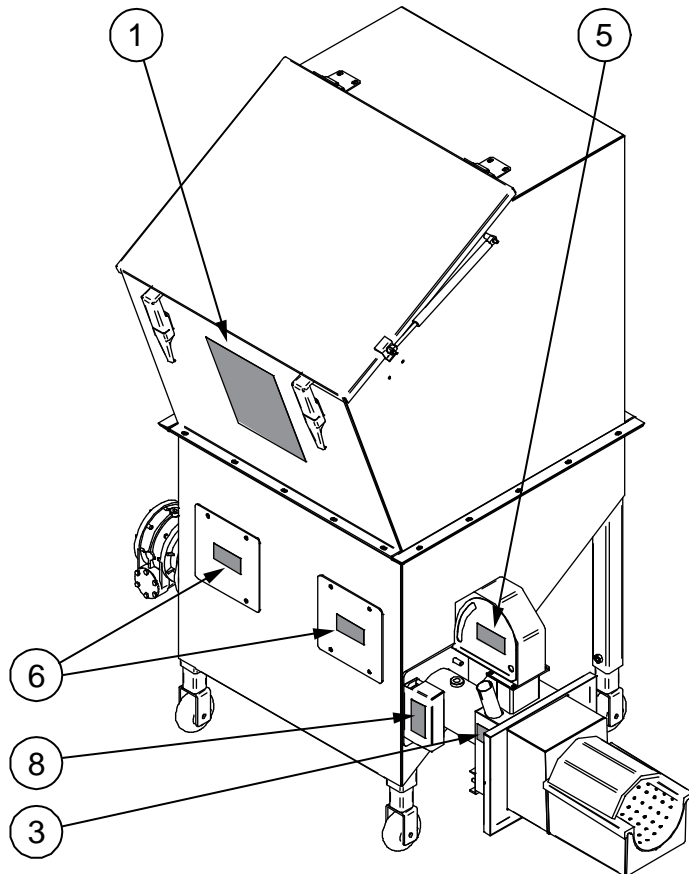
Warranty compensation is subject to determination of the cause of the damage and agreement with the manufacturer concerning the repair prior to initiating any repair work.

## 1.4. Product markings








































### **NOTICE**




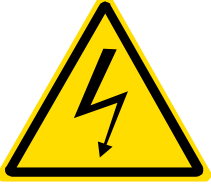
Pay attention to the warning and information stickers: they help you to avoid risks.

**Figure 2** Product marking locations



**Table 2** Product markings on the device

Item	Product marking																												
1	<table border="1"> <tr> <td data-bbox="304 344 488 510">  </td> <td data-bbox="488 344 855 510"> <p><b>⚠ DANGER</b></p> <p>Risk of carbon monoxide poisoning and fire</p> </td> <td data-bbox="876 344 1059 510">  </td> <td data-bbox="1059 344 1426 510"> <p><b>⚠ DANGER</b></p> <p>Hazardous voltage will cause severe injury or death.</p> </td> </tr> <tr> <td data-bbox="304 510 488 676">  </td> <td data-bbox="488 510 855 676"> <p>Leaving covers or hatches open leads to immediate risk of fire when device is in operation.</p> </td> <td data-bbox="876 510 1059 676"> <p>Turn off power. Wait 15 min before service. Although control unit is dead, supply voltage from frequency converter remains.</p> </td> <td data-bbox="1059 510 1426 676"> <p>Close covers and hatches airtight. Ventilate properly before entering fuel bin.</p> </td> </tr> <tr> <td data-bbox="304 676 488 842">  </td> <td data-bbox="488 676 855 842"> <p>Always work in pairs. When entering fuel bin have a person outside fuel bin to secure your safety.</p> </td> <td data-bbox="876 676 1059 842">  </td> <td data-bbox="1059 676 1426 842"> <p><b>⚠ WARNING</b></p> <p>Read manual before using device.</p> <p>Failure to follow instructions could result in death, serious injury or damaged device.</p> </td> </tr> <tr> <td data-bbox="304 875 488 1088">  </td> <td data-bbox="488 875 855 1088"> <p><b>⚠ WARNING</b></p> <p>Moving parts can crush and cut. Blower impeller rotates. Keep fingers away from rotating impeller. Switch off control unit before servicing.</p> </td> <td data-bbox="876 875 1059 1088">  </td> <td data-bbox="1059 875 1426 1088"> <p><b>⚠ WARNING</b></p> <p>Moving parts can crush and cut. Feeding screw under lid starts rotating without warning. 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Do not enter fuel bin while power is on.</p> </td> <td data-bbox="876 1368 1059 1648">  </td> <td data-bbox="1059 1368 1426 1648"> <p><b>⚠ WARNING</b></p> <p>Hot water in boiler. When pressure rises hot water may discharge through relief valve. Be careful near relief valve's downpipe. Do not let cold water inside hot boiler.</p> </td> </tr> <tr> <td data-bbox="304 1682 488 1895">  </td> <td data-bbox="488 1682 855 1895"> <p><b>⚠ WARNING</b></p> <p>Inhalation hazard. Air born particulates. Dust mask required during sweeping boiler and working in silo. Protect device from dust.</p> </td> <td data-bbox="876 1682 1059 1895">  </td> <td data-bbox="1059 1682 1426 1895"> <p><b>⚠ CAUTION</b></p> <p>Do not step on motor. Motor surface is slippery. 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Item	Product marking
3	<div style="border: 1px solid black; padding: 5px;"> <div style="background-color: #FFA500; text-align: center; padding: 2px;"><b>⚠ WARNING</b></div> <div style="display: flex; align-items: center;"> <div style="flex: 1; text-align: center;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>Risk of burn and fire Device is hot and remains hot after switch-off. Do not cover burner head. Keep it clean. Be cautious in boiler room.</p> </div> </div> </div>
5	<div style="border: 1px solid black; padding: 5px;"> <div style="background-color: #FFA500; text-align: center; padding: 2px;"><b>⚠ WARNING</b></div> <div style="display: flex; align-items: center;"> <div style="flex: 1; text-align: center;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>Moving parts can crush and cut. Blower impeller rotates. Keep fingers away from rotating impeller. Switch off control unit before servicing.</p> </div> </div> </div>
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8	<div style="border: 1px solid black; padding: 5px;"> <div style="background-color: #FF0000; color: white; text-align: center; padding: 2px;"><b>⚠ DANGER</b></div> <div style="display: flex; align-items: center;"> <div style="flex: 1; text-align: center;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>Hazardous voltage will cause severe injury or death. Turn off power. Wait 15 min before service. Although control unit is dead, supply voltage from frequency converter remains.</p> </div> </div> </div>

## 1.5. Product documentation

**Table 3** Related product documentation

Manual name	Identification
<b>Boilers</b>	
Veto Stoker Boiler 30, 60, 75, 80, 100, 120, 150, 220 kW	VSB20130328EN1.0
<b>Control unit</b>	
A•T Log-1 and A•T Log-2 Control Unit User Manual	ATL20130328EN 1.0
Lambda 5S control unit	039 028 06_LAMBDA 5S GB_v8
<b>Burners</b>	
VetoMat User Manual	VMB20130328EN 1.0
<b>Other</b>	
TA control Unit Data Sheet	TAC20130328EN 1.0
Ash Screw Data Sheet	ASD20130328EN 1.0
Veto Air	VAIR2V20012012GB
VetoMat Transport and Storage	VMT20121221US1.0
Boiler Transport and Storage	SBT20121221US1.0
<b>Other manufacturers' documentation</b>	
Boiler Thermostat User Manual	1282/B-07/01
Dry-boil Protection Centre User Manual	D17016Ds
GSM Alarm AT Log User Manual	GSM_AT LOG_v1
GSM Alarm Lambda User Manual	GSM_LAMBDA 5_v1





## 1.6. Version history

Version	Date	Changes
EN1.0	28.03.2013	First version

## 1.7. Document conventions

### 1.7.1. Symbols

**Table 4** Symbols used in this document

Symbol	Explanation
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Indicates special information to the reader, but not related to personal injury.

### 1.7.2. Other document conventions

**Table 5** Document conventions

Item	Convention	Example
Italics	Indicates a reference within this document.	Refer to <i>1.7.2. Document conventions</i> .





## 2. General safety and warnings

These general safety instructions help you to avoid dangerous situations when installing, operating or servicing the device. Important safety instructions are also presented in the beginning of each section.



Do not make any alterations to the original device design. Any alterations to the boiler may result in serious hazard to people, property or environment.

Installation and service of the device shall be performed only by an authorized professional installer following all the requirements of the authority having jurisdiction over the installation.

Incorrect installation, operation, and service of this device could result in severe personal injury, death, or substantial property damage from fire, carbon monoxide poisoning, soot or explosion.

Hazardous voltage! Although the control unit is dead, a normal supply voltage from the frequency converter remains. Refer to the frequency converter manual.

Do not use the service space for general storage due to fire hazard.



The burner must only be used together with a Veto boiler and a control unit.

Risk of burn! The lids are always hotter than the rest of the burner surface. Also some of the pipes are hot. Always be cautious in the service space.

When servicing or checking the blower, ensure that it is not rotating. Switch off the control unit with the main switch or with the miniature circuit breaker F1 by setting the switch to down position.

The burning device may only be operated by a person acquainted with the device and the related instructions in this manual.

Risk of burn and fire! The burner head remains hot for a long time after the heating has been switched off. The burner head must not be covered and it must be kept clean.

 **CAUTION**

Ashes or fuel may contain constituents causing allergic reactions.

- Use appropriate protective equipment when handling ashes or fuel.
- Use clothes and gloves made of infusible materials when servicing the device.
- Do not wear clothes that may melt or readily catch fire when working in the boiler room.

### 2.1.1. Fire safety

 **DANGER**

Risk of carbon monoxide poisoning and fire! Always close the covers and hatches airtight. Leaving the covers or hatches open leads to immediate risk of fire when the device is in operation. Excessive fuel in the bin prevents the cover from closing air-tight.

Risk of carbon monoxide poisoning and fire! Always check that the feed and service doors of the boiler are completely shut when in use.

Risk of fire! Fuel that remains on the floor may catch fire from a spark, and fire may spread to the structure of the building.

Risk of burn! Do not try to extinguish an electrical fire with water.

 **WARNING**

Make sure that the container of the back fire control system is filled with water.

Get and maintain suitable firefighting equipment and skills. Place sufficient manual fire extinguishing equipment near the boiler room.

Risk of carbon monoxide poisoning and fire! Never collect ash in a plastic or cardboard box. Do not leave the collected ash indoors, even when collected in a container made of incombustible material, because the ash may produce gases containing carbon monoxide.

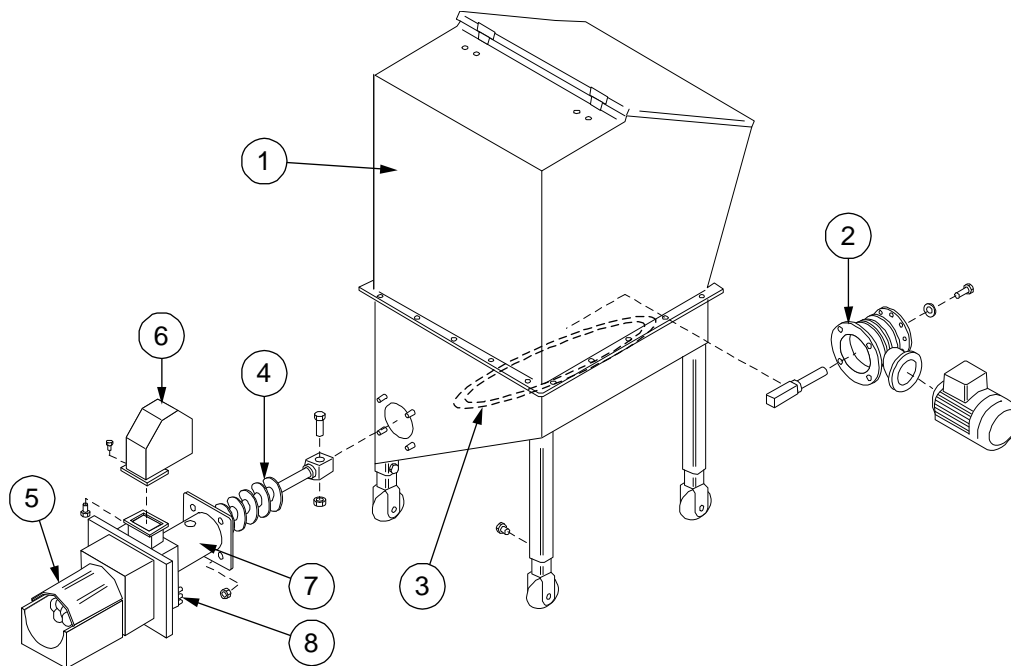
### 3. Product description

VetoMat is designed to be used with a Veto stoker boiler and a control unit. Only solid fuels approved by the manufacturer, such as chips, pellets and briquettes, should be used as a heating source.

The burner delivery includes:

- Fuel bin
- Feeding screw
- Burner head
- Electric motor
- Combustion air blower
- Water tank
- Main distribution board

**Figure 3** VetoMat burner device



- 1 Fuel bin
- 2 Electric motor, gearbox and drive shaft
- 3 Stirrer disc
- 4 Feeding screw
- 5 Cover of burner head
- 6 Combustion air blower
- 7 Outlet for ash inside the burner head
- 8 Feeding pipe with beeswax plug

### 3.1. Operating principle

When the VetoMat burner device is in operation, the stirrer disc transports fuel from the fuel bin to the feeding screw. The feeding screw moves the fuel to the burner head and the fuel burns in the burner head at a high temperature with the help of air blown in by the combustion-air blower, heating up the boiler. Fresh fuel brought in by the feeding screw pushes the remaining small amount of ash to the ash box of the boiler from which it must be removed at certain intervals.

The control unit automatically controls the burner fire heating the boiler.

### 3.2. Product variants

- Burner can be selected to be installed on either side of the fuel bin.

#### **NOTICE**

The opening direction of the fuel bin lid can be freely selected.

### 3.3. Optional accessories

Accessories that can be ordered separately:

- Water level control sensor for water tank
- Lighting automation
- Flue gas blower (including underpressure control)

## 4. Technical data

**Table 6** Dimensions and weight of the burner with devices

Characteristic	Value
Total length	1620 mm
Total width	700 mm
Total depth	900 mm
Filling height	1300 mm
Feeding screw diameter Ø	125 mm
Feeding screw upper pitch	55 mm
Feeding screw lower pitch	90 mm
Shaft diameter Ø	38 mm
Weight, empty	175 kg
Gearbox type	RMI 70
Capacity	500 l
<b>Lower bin</b>	
Width	700 mm
Depth	700 mm
Height	490 mm
<b>Upper bin</b>	
Width	700 mm
Depth	880 mm
Height	810 mm

**Table 7** Rated outputs and gearbox

Rated outputs	Value
Rated output kW	40
Electric motor kW	0.75

**Table 8** Burner output data for different fuel types (moisture content ca. 20%)

Burner output	Wood chips	Wood pellets	Briquet
40 kW, stationary grate	40 kW	46 kW	44 kW

### NOTICE

The outputs are the results from various tests where high quality fuel was used. The output gained from a fuel varies according to fuel's moisture content, piece size, weight, and the remaining energy content.

**Table 9** Feed settings for VetoMat

						Operating condition		Pause condition	
Fuel	Burner power kW	Heat value kW/kg	Moisture %	Blower setting	After-blow (s)	Pulse (ms)	Pause (s)	Pulse (ms)	Pause (min)
Wood chips	40	2.9	20	4	20	1600	15	1000	6 min 40 s
Wood pellets	40	4.8	8–10	3	40	500	33	500	12 min 30 s
Briquets	40	3.5	15	4	40	1100	15	1100	10 min
<b>Space for customized settings</b>									
Wood chips									
Wood pellets									
Briquets									

**NOTICE**

When the fuel moisture percent exceeds 35%, the maximum power of the burner can diminish to half of what it is when using drier fuel. The maximum allowed moisture percent for wood chips is 30%.

The values in the feed settings table are derived from 30-mm wood chips which means that the feeding screw feeds the fuel approximately 2.3 kg /rotation. If the chip size differs from that, the feed values should be calculated again. For example, for Vetomat 40 kW: Operate the feeding chute with no fire for 10 min and weigh the wood chips used. With 30-mm wood chips (moisture 20%) the weight should be ca. 7 kg.

For more information about the fuels, see *7.1. Fuels*.

### **NOTICE**

The moisture content, piece size, thermal value, weight and other parameters of the fuel affect the efficiency of the burner so that using these values may produce different boiler outputs. Therefore, no reference values can be given as to the positions of the blower's air-adjustment plate.

## **4.1. Emissions**

### **NOTICE**

The flue gas emission values apply only when using recommended fuels.

- For flue gas emissions, the device is tested according to the European standard EN 303-5.
- The noise emission of the device is approximately 85 dB, depending on the used fuel type.





## 5. Installation

### **DANGER**

Installation of the device shall be performed only by an authorized professional installer following all the requirements of the authority having jurisdiction over the installation.

Incorrect installation of this device could result in severe personal injury, death, or substantial property damage from fire, carbon monoxide poisoning, soot or explosion.

Failure to follow the installing instructions may lead to dangerous situations.

### **WARNING**

Install the main switch according to the local laws and regulations. If there are no local regulations, it is recommended that the main switch is installed near the boiler room exit.

Lift the device according to the instructions.

Keep the installation space and boiler room clean from extra materials.

Clean up the area where the fuel bin will be placed and make sure that the ground is even. An uneven ground may cause that the lid cannot be closed tightly. Furthermore, an untidy space is a security risk when moving the heavy appliance to its installation space.

When the device is operated manually during maintenance and installation, there should be no other persons near the device than the person servicing it.

### **NOTICE**

When installing, check the air-tightness of the joints and the condition of the cover sealing.

## 5.1. Preparations for installation

### 5.1.1. Inspecting and preparing installation site



Risk of fire! Do not use the boiler room for general storage due to fire hazard.

- The device must be installed in a heated space.
- Minimum safety distances, flooring and materials in the installation site should be according to the regulations.
- Plan where to place the water tank of the backfire prevention system. For connecting the backfire prevention system to the burner, get enough plastic hose with an inner diameter of 13 mm.

#### NOTICE

To avoid air leakage, the water tank must be installed to the wall and not to the side of the fuel bin. The bottom of the water tank must be at least 50 cm higher than the feeding pipe.

- Clear the fuel bin of all loose parts.
- Close tightly all boiler hatches.
- Before installation, adjust the device horizontally straight by adjusting the feet of the fuel bin. The fuel bin lid can then be closed air-tight.

### 5.1.2. Inspecting chimney and venting system

For chimney and venting requirements, see the Veto stoker boiler manual.

### 5.1.3. Inspecting combustion air supply

For combustion air supply requirements, see the Veto stoker boiler manual.

#### 5.1.4. Installing main switch

Install the main switch close to the boiler room door so that in case of emergency the switch is easy to access without entering the boiler room.

#### 5.1.5. Required tools for installation

- 13 mm wrench
- 17 mm wrench
- 19 mm wrench
- Screwdriver
- Level
- Trolley jack

#### **NOTICE**

The burner delivery includes the bolts and nuts needed in burner installation.

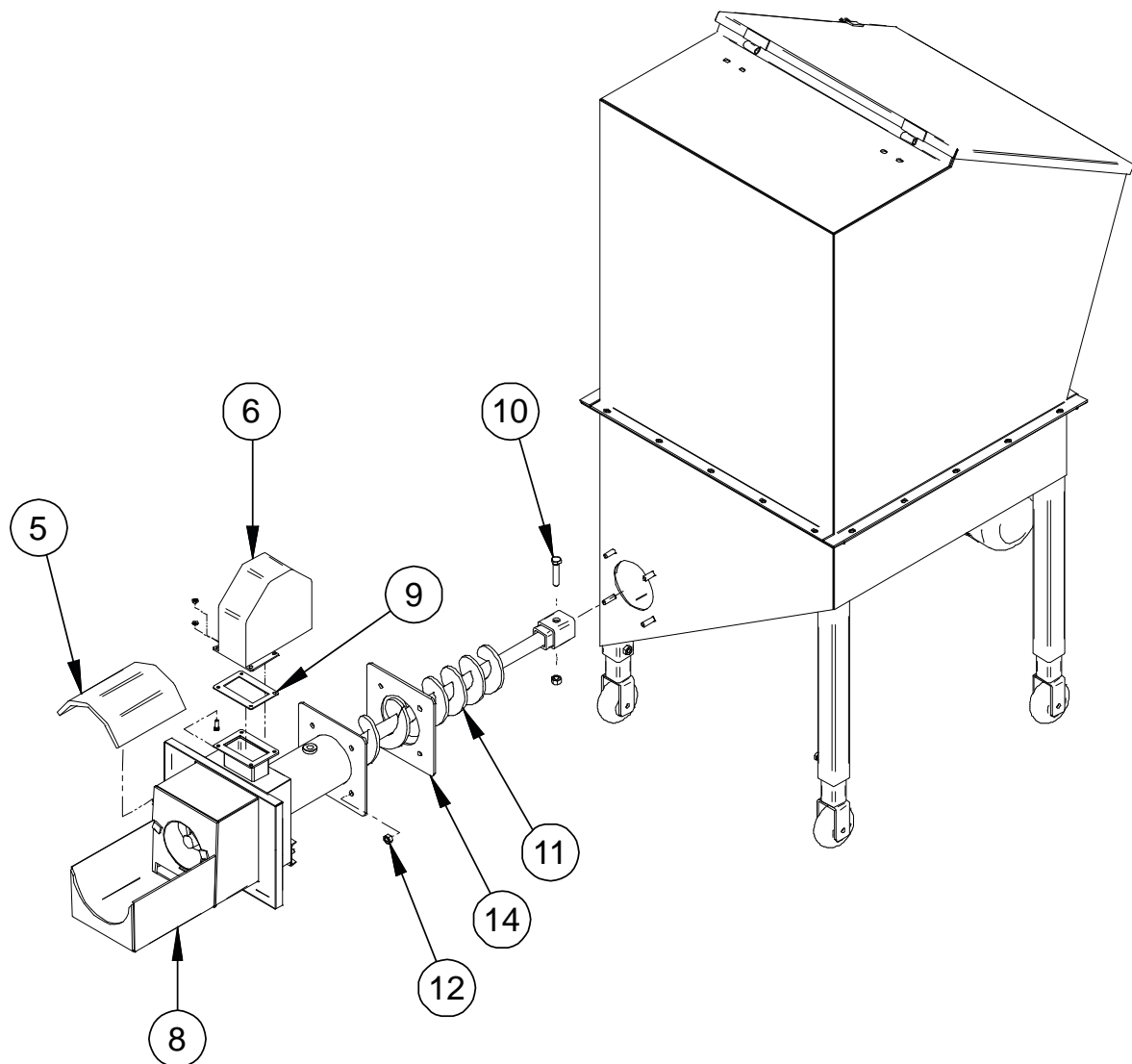
You need two set wrenches of each size.

## 5.2. Checking the device

Quantity	Item	Product number
1	Feeding screw, left-handed	41402
1	Feeding screw, right-handed	41401
1	Burner head cover 40 kW	40776
1	Blower EBM, RFE 140	11109
1	Burner head 40 kW	30646
1	Gasket (for blower stand)	40751
1	Screw M10x65	9311065
4	Nut M10	934M10
1	Gasket btw. feeding chutes	40082
1	Shaft RMI 70	43417
1	Key 8x7x63	74060
1	Washer	43463
1	Water tank rack	41551
1	Water tank 10 l with tap	68530
1	A•T log-1 control unit	62062
1	Screw M10x30	9331030
1	Nut M10 nyloc	72322
1	Fuel bin assembled	
1	Substitute resistant	
	Silicon sealing compound	
	Beeswax plate	
	Beeswax plug	
1	Main switch	
1	Temperature sensor pocket	42086

### 5.3. Installing the burner equipment

Figure 4 Burner equipment



- 5 Burner head cover
- 6 Blower
- 8 Burner head
- 9 Gasket
- 10 M10x65 screw and a M10 nyloc nut
- 11 Feeding screw
- 12 Nut M10
- 14 Gasket

### **5.3.1. Installing the feeding screw**

1. Push the feeding screw through the hole on the lower part of the fuel bin.
2. Locate the feeding screw onto the shaft of the angle transmission.
3. Lock the feeding screw onto its place with an M10x65 screw and a nyloc nut.

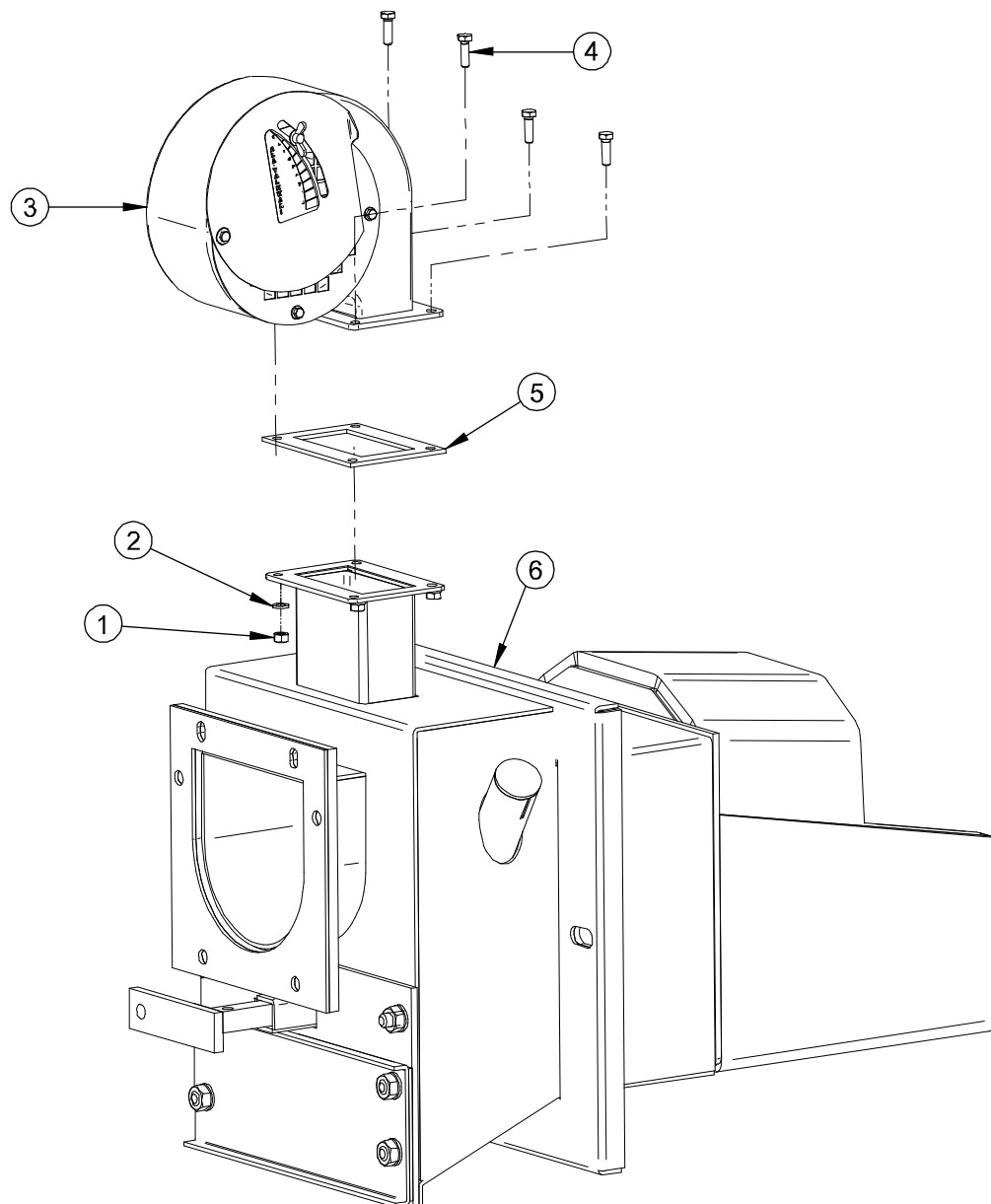
### **5.3.2. Installing burner head to fuel bin**

1. Locate the burner head with gaskets into the screws on the fuel bin.
2. Tighten the nuts.

### **5.3.3. Installing combustion blower to the burner head**

1. Make sure that the gasket between the burner head and the blower is on its place.
2. Fasten the blower to the burner head using M6x16 screws.

**Figure 5** Installing the combustion blower



- 1 Nut M6
- 2 Washer M6
- 3 Blower
- 4 Screw M6x20
- 5 Gasket
- 6 Burner

### 5.3.4. Fastening the fuel bin feet

 **WARNING**

When raising the VetoMat unit using a trolley jack, the part suitable for lifting by is the bottom case. When lifting with straps, use at least two straps. Ensure lifting is done safely. Ensure that the load to be lifted is in balance before lifting it.

1. Make sure the fuel bin is empty.
2. Lift the unit by using a jack and adjust the feet so that the feeding chute is horizontally straight.

**NOTICE**

Make sure the burner device rests on fuel bin feet, not on boiler.

3. To fasten the feet, tighten the screws properly.

### 5.4. Installing burner head to the boiler

**NOTICE**

Test the size and suitability of the burner head cover before installing the burner to the boiler.

1. Close all boiler hatches tightly.
- 2.
3. To seal the joint between the boiler and burner head, install the ceramic wool sealing in the burner head flange of the burner head.
4. Try fitting the unpainted burner head cover to its place before locating the burner head to the boiler.
5. Install the burner head tightly to the boiler (M10 washer and M10 nut).
6. Tighten the nuts.

#### 5.4.1. Installing the burner head cover

Before installing the burner head cover, the burner head must be installed to the boiler.

- Install the cover of the burner head through the service door.



## 5.5. Installing the water tank



**CAUTION** To avoid air leaks, do not install the water tank on the side of the fuel bin, but on a wall.

1. Attach the installing bracket for a water tank to a suitable place on the wall. The bottom of the water tank must be at least 50 cm higher than the feeding pipe.
2. Install the water tank.
3. Connect the hose from the water tank tap to the feeding pipe coupling which is closed with a beeswax plug.

### **NOTICE**

Open the tap and make sure that the tank lid has a 6 mm replacement-air hole.

### 5.5.1. Installing the water level control sensor

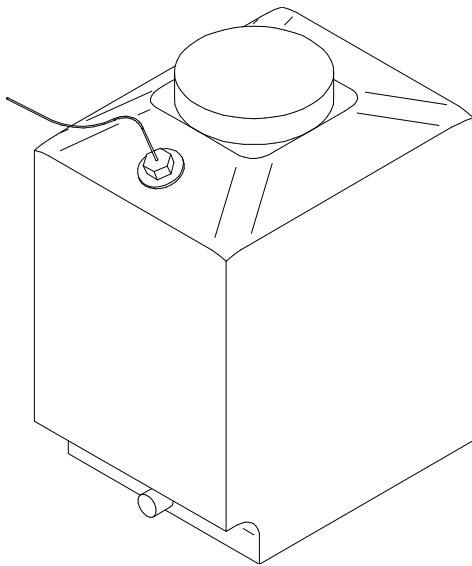
### **NOTICE**

The control sensor is available as optional equipment.

The water level control sensor indicates when the water tank is empty, and stops the device.

1. Drill a hole with a diameter of 12 mm in the upper surface of the water tank.
2. Install a rubber gasket to the threaded part of the sensor.
3. Slide the sensor into the hole from the inside so that the gasket remains inside the water tank.

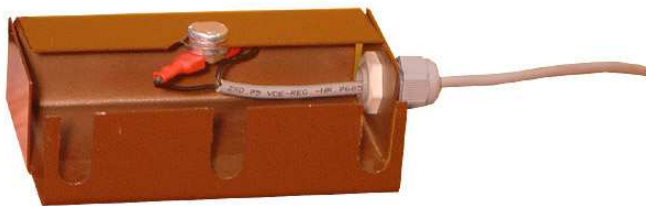
**Figure 6** Water level control sensor installed on the water tank



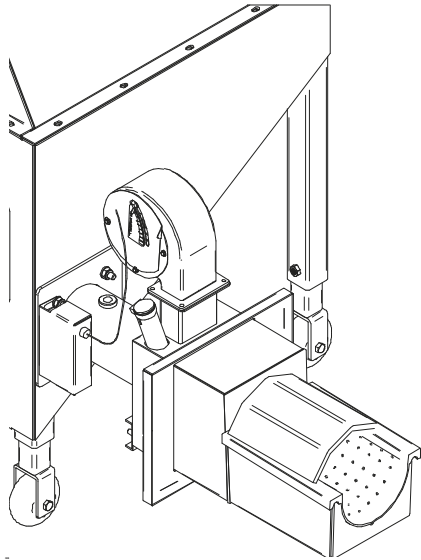
## 5.6. Installing the temperature sensor

1. Install the temperature sensor into its box.
2. Install the temperature sensor box under the feeding chute nuts of the burning device so that the bottom of the sensor box lies on the feeding pipe.

**Figure 7** Temperature sensor installed into its box



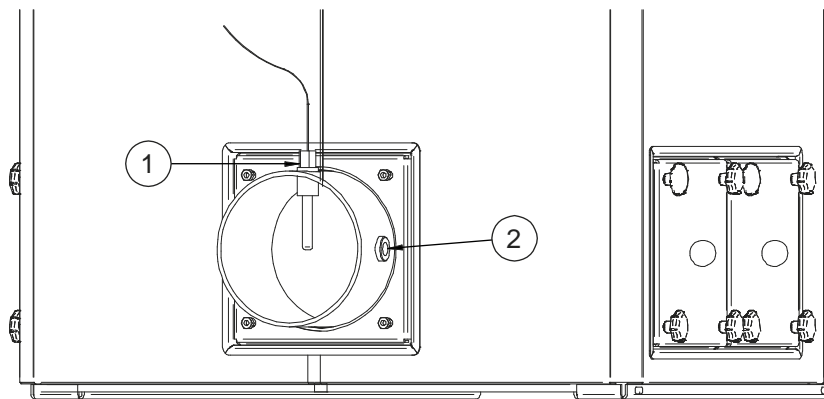
**Figure 8** Temperature sensor installed on the feeding pipe



### 5.7. Installing the flue gas/flame control sensor

In the middle of the boiler's flue connection, approximately 20 mm from the boiler wall, there is a 6 mm hole. Install the sensor into the hole, according to the figure.

**Figure 9** Flue gas/flame control sensor installed in the boiler flue connection



- 1 Flue gas sensor
- 2 Lambda connection

## **5.8. Installing the control unit**

To install the control unit, see the control unit manual.

## 6. Commissioning



Make sure that the reservoir of the back fire control system is filled with water.

For the sake of your own safety, make sure that the clothes you are wearing when working in the boiler room are not flammable or easily fusible.

The installation space and boiler room must be kept clean from extra materials. Sweep the floor after filling up the fuel, because a spark can set the fuel on the floor on fire which will then spread to the structures.

No extra objects or fuel may be left between the seal and lid because it causes air leakage.

Do not overfill the fuel bin. If the cover is not tightly closed, it will lead to immediate risk of fire when the burner is in operation. Refer to the boiler manual.

### 6.1. Before taking the burner into use

Check before taking the burner into use:

- The correct direction of rotation of the screws.
- That the parts have been properly installed.
- The safety devices. See *9.7 Testing the safety devices*.
- That the electrical installation has been approved.
- That the boiler has been installed according to the instructions and regulations.
- That the heating system is ready.
- That the boiler room is properly ventilated especially when the device is started for the first time.

 **WARNING**

Make sure that the boiler is full of water.

There might come some smoke into the boiler room because the boiler water is cold and the chimney draft is poor.

**NOTICE**

When the device is lighted for the first time, or when it is cold, some water may condensate on the fire surfaces and dribble to the ash chamber. Water in the ash chamber does not mean that the boiler leaks.

## 6.2. Initial settings for the burner

See the control unit manual.

## 7. Operation

### **DANGER**

Incorrect operation of this device could result in severe personal injury, death, or substantial property damage from fire, carbon monoxide poisoning, or explosion.

Always close the covers and hatches airtight. Leaving the covers or hatches open will lead to immediate risk of fire when the device is in operation.

Do not use strongly volatile materials, for example, petrol and burning oils. Only burn solid, renewable fuels accepted by the manufacturer.

### **WARNING**

The burner must only be used together with a Veto boiler device and a control unit.

Only burn solid, renewable fuels accepted by the manufacturer.

The burner head remains hot for a long time after the heating has been switched off. The burner head must not be covered and it must be kept clean.

Make sure that the water tank of the back fire control system is filled with water.

Get provided with sufficient skills and suitable equipment for fire prevention. Place adequate manual fire extinguishing equipment near the boiler room.

For the sake of your own safety, make sure that the clothes you are wearing when working in the boiler room are not flammable or easily fusible.

The installation space and boiler room must be kept clean from extra materials. Sweep the floor after filling up the fuel, because a spark can set the fuel on the floor on fire which will then spread to the structures.

When filling up fuel into the fuel bin, make sure to remove all pieces of fuel that might prevent the lid from closing properly.

No extra objects or fuel may be left between the seal and lid because it causes air leakage.

Do not keep the fuel bin lid open unnecessarily. Leaving the fuel bin lid open for a longer time increases the risk of backfire.

 **WARNING**

Do not overfill the fuel bin. If the cover is not tightly closed, it will lead to immediate risk of fire when the burner is in operation.

The bin lid may suddenly close due to strong wind or weakened gas springs. During maintenance, ensure the lid stays open in all conditions.

Sweep the floor after charging the device with fuel, because any fuel left lying on the floor may catch fire from a spark, and the fire may then spread into the structures.

When servicing or checking the blower, ensure that it is not rotating. Switch off the control unit with the main switch.

 **CAUTION**

VetoMat must be installed and operated indoors, and the surrounding temperature must always remain above 0°.

## 7.1. Fuels

### 7.1.1. Chips and sawdust

The best wood chips to be used are of the size 10-30 mm and made of free-length branchless wood. If the chip fuel contains overly big pieces, or is made from whole trees (the trunks are chipped with branches), it may result to malfunctions.

When sawdust is used, the work times must be longer and pause times shorter than with chips. Sawdust is easy to use with chips.

### 7.1.2. Pellets

Wood pellets can be made of chips, cutter chips or grinding mass of wood industry. When adjusting the boiler, pay attention to the fact that pellets require shorter work times and longer pause times than chips due to the higher heating value.

### 7.1.3. Briquets

Briquets can be made of cutter chips or grinding mass of wood industry. When adjusting the boiler, pay attention to the fact that briquets require shorter work times and longer pause times than chips due to higher heating value.

### 7.1.4. Fuel moisture

The moisture content of wood chips should be 20-30%.

If the feeding in of the fuel is slow, the draught in the chimney is strong, and the fuel drier than recommended, the possibility of a backfire increases.



When the fuel moisture is greater than 35%, the efficiency of the burner decreases rapidly and considerably more fuel is consumed than usual. When fuel more moist than recommended is used, the moisture released may condense in the chimney. The operating life of a moist chimney is shorter than that of a dry chimney, and the draught is also worse.

As the moisture content of fuel increases it freezes in a cold storage space, and this may lead to malfunction in feeding. Should this happen, and if the fuel bin is located in a heated facility, it is recommended to feed fuel as often as possible for it to have time to melt.

Always ask the moisture percent of the pellets from the pellet supplier.

### ***Evaluating the fuel moisture***

Evaluate the moisture of the fuel in a ventilated space.

1. Take 1 kg fuel and spread it to a layer of 2.5 cm onto a flat surface.
2. Let the fuel dry for 1-2 weeks.
3. Weigh the fuel.

For example, 1 kg wood chips should weigh 800 g after drying for 1-2 weeks. The fuel moisture has dried approximately to 10% and therefore the moisture percent of the fuel has originally been 30%.

## **7.1.5. Forbidden use of fuels**



Use only fuels recommended in this manual. Any use of other fuels is forbidden.

## **7.2. Burner control**

### **NOTICE**

If the burner is operated via control unit, see the control unit manual.

### **7.2.1. Lighting the burner manually**

- When lighting a cold boiler, the easiest way to start the fire is by using lighter cubes or fire starter.
- When lighting a warm boiler, only use birch bark, paper or lighter cubes.

1. Feed about 1 litre fuel to the burner head by operating the feeding screw manually.
2. Light the fuel using kindling and, for example, long fireplace match.
3. To get the fire properly started, operate the blower manually:
  - Hold the BLOWER-position on about 5 minutes or as long as the fire has properly started.
  - If the burner head is not hot enough when the manual operating switch is turned to AUTO-position, the fuel entering the burner head may push the fire to the ash chamber. In this case, light the fire again.

### 7.2.2. Lighting the burner automatically

- When lighting the burner automatically, see automatic lighting data sheet.

### 7.2.3. Setting combustion manually

**Table 10** Feed settings for VetoMat

						Operating condition		Pause condition	
Fuel	Burner power kW	Heat value kW/kg	Moisture %	Blower setting	After-blow (s)	Pulse (ms)	Pause (s)	Pulse (ms)	Pause (min)
Wood chips	40	2.9	20	4	20	1600	15	1000	6 min 40 s
Wood pellets	40	4.8	8–10	3	40	500	33	500	12 min 30 s
Briquets	40	3.5	15	4	40	1100	15	1100	10 min
<b>Space for customized settings</b>									
Wood chips									
Wood pellets									
Briquets									

### 7.2.4. Shutting down the burner manually

1. To make the fresh fuel to push the burning fuel away from the burner head, operate the feeding screw forward for 10 seconds.
2. To separate the fresh fuel from the burner head, operate the feeding screw backwards for 5 seconds.
3. Allow the blower to operate until the burner head has cooled off.
4. Check that the fire has gone out completely.

### 7.3. Fire-fighting equipment



Keep a fire extinguisher near the boiler room.

### 7.4. Taking the burner out of use

Take the burner out of use between the heating seasons.

- Shut down the burner manually.
- Let the burner cool down properly.
- Service the feeding device according to 9 ..



Remove the compact fuel stuck in the screw trough before the heating season begins (when using wood chips) or once during the heating season (all fuels).

## 7.5. Taking the burner back in use

When starting to use the burner after a longer pause, the burner must be checked. Read also the boiler manual.

- Different parts of the system are properly attached.
- Gaskets do not leak.
- Safety devices are tested.
- Boiler room is properly ventilated.
- Waterlines are open.
- Pumps are operating.
- Flue and chimney are swept.
- Boiler is swept and ashes are removed.
- Burner head is swept.
- Blower impeller is clean. Do not adjust the balancing.
- Screw is rotating.
- The head of the burner head feeding screw is not burned.
- There is oil in the gearbox.
- There is fuel in the fuel bin.
- Dampers are open.



### **WARNING**

Make sure that the boiler is full of water.

There might come some smoke into the boiler room because the boiler water is cold and the chimney draft is poor.

### **NOTICE**

When the device is lighted for the first time, some water may condensate on the fire surfaces and dribble to the ash chamber. Water in the ash chamber does not mean that the boiler leaks.

## 8. Emergency situations



In case of fire, do not enter the boiler room without protective clothing or a smothering blanket.



Keep adequate fire-fighting equipment available. The manufacturer recommends 2 x 6 kg extinguishers near the boiler room. Do not keep them inside the boiler room.

### 8.1. Fire in the boiler room

- If possible, switch off the power from the main switch that is located near the exit of the boiler room.
- Always call the emergency number.

### 8.2. Fire in the fuel bin

- Close the fuel bin lid if possible.
- Always call the emergency number.

### 8.3. Backfire

- Always work in pairs.
- Ventilate the boiler room unless the situation calls for closing the doors.
- Use protective clothing.
- Estimate the severity of the backfire according to the temperature of the bin's surface and decide whether the fire department's help is needed.

**Table 11** Estimating the severity of the backfire

<b>Back fire severity</b>	<b>Solution</b>
<ul style="list-style-type: none"> <li>• Water tank is empty.</li> <li>• Fuel bin surface is hot or blackened.</li> <li>• Fuel bin lid is open and there is smoke and flames coming out of the bin.</li> </ul>	<ol style="list-style-type: none"> <li>1. Switch off the power from the main switch.</li> <li>2. Call the emergency number..</li> <li>3. If the lid is open and the fire has not spread to the boiler room, try to shut the lid with a suitable aid.</li> <li>4. If safe, try to cool down the bin's outside surface with water.</li> </ol>
<ul style="list-style-type: none"> <li>• Water tank is empty.</li> <li>• Feeding pipe and fuel bin surface at the joining point of the feeding pipe is blackened.</li> </ul>	<ol style="list-style-type: none"> <li>1. Switch off the power from the main switch.</li> <li>2. Open slightly the lid.</li> <li>3. If the flue gas is not in danger of spreading in the environment, spray water inside the bin from the crack.</li> </ol>
<ul style="list-style-type: none"> <li>• Water tank is empty.</li> <li>• Fuel bin surface is glowing or blackened.</li> </ul>	<ol style="list-style-type: none"> <li>1. Feed fuel using the forced feeding of the feeding screw into the combustion chamber of the boiler until the incoming fuel smolder just a little or not at all.</li> <li>2. At times the smoldering fuel has to be removed through the ash hatch of the boiler. Open the cover of the fuel bin and pour or spray water into the bin if possible.</li> </ol>

 **WARNING**

Be careful when opening the fuel bin lid because flue gases may come out and the smoldering fire may blaze up when getting more oxygen.

If the fire has spread into the environment, or the fuel bin is glowing strongly, call for help.

After closing the cover, if the fuel bin is still glowing strongly, cool the bin by pouring some water on top of it, until the fire begins to choke inside the bin. Be careful when opening the cover of the fuel bin to pour water on the embers because the steam and flue gases may be burning hot.

### 8.3.1. Actions after backfire

- Try to find out what has caused the backfire.
  - Screw connections and gaskets of the burning device and the gasket of the fuel bin lid damaged
  - Power outage
  - Flue draft
  - Operation of the automatic fire extinguishing system
  - Sweeping interval of the boiler
  - Emptying interval of the burner head ash box
- Check and possibly repair:
  - Gearbox and gaskets
  - Bearings of the stirrer disks
  - Blower
  - Gas springs and the gasket of the fuel bin lid
  - Fire extinguishing system
- When the water tank has been drained to the feeding pipe, unscrew the connector and press a new piece of bee wax into it from both ends. Do not warm the wax with fire.
- When using pellets, drive the wet fuel from the feeding pipe as fast as possible. Pellets can swell and the device jams.





## 9. Service

### **DANGER**

Service of the device shall be performed only by an authorized professional installer following all the requirements of the authority having jurisdiction over the installation.

Incorrect service of this device could result in severe personal injury, death, or substantial property damage from fire, carbon monoxide poisoning, soot or explosion.

The fuel bin may have run out of oxygen or the bin may contain carbon monoxide. Therefore it must be thoroughly ventilated before any maintenance work is started. Even then you should have a lifeline and two persons securing your safety before you enter the bin.

Before you enter the fuel bin or service the device, turn the main switch of the burning device to the zero position.

Always close the covers and hatches airtight. Leaving the covers or hatches open will lead to immediate risk of fire when the burner is in operation.

### **WARNING**

When the device is operated manually, make sure that there is no one nearby when installation or maintenance work is being carried out.

In connection with installation and maintenance, inspect all joints and lid gaskets to ensure they are in good condition to prevent air leakage.

The burner head remains hot for a long time after the heating has been switched off. The burner head must not be covered and it must be kept clean.

Never collect ash in a plastic or cardboard box. Do not leave the collected ash indoors, even when collected in a container made of incombustible material, because the ash may produce gases containing carbon monoxide.

For the sake of your own safety, make sure that the clothes you are wearing when working in the boiler room are not flammable or easily fusible. Use a breathing mask.

### **NOTICE**

When servicing, check the air-tightness of the joints and the condition of the cover sealing.

When the burner is shut down and cooled down, also service the boiler, if needed.

## 9.1. Servicing the burner

**Table 12** Maintenance schedule

Task	Daily	Weekly	Monthly	Every 6 months	Yearly
Check the overall condition and functioning of the devices.	X				
Check the pressure of the boiler.	X				
Check the temperature of the boiler and the heating network.	X				
Clean the fuel bin from possible obstacles.		X			
Check the gearbox for visible leakages.			X		
Check that the surface of the gearbox is dry.			X		
Clean underneath the stirrer disc.				X	
Brush the air holes in the casting parts of the burner head open.				X	
Remove the ash from inside the burner head.			X		
Clean the blower's impeller blades.					X
Check the condition of the stirrer disc bearings.					X
Check the feeding pipe and the inside of the fuel bin for possible corrosion damage.					X
Change the beeswax plug in the muff of the backfire prevention system.					X

### 9.1.1. Tightening the pipe joints

- Tighten the joints of the feeding pipe system attached to the fuel bin and burner head after the first week in use to secure the air tightness.

### 9.1.2. Removing ash from inside the burner

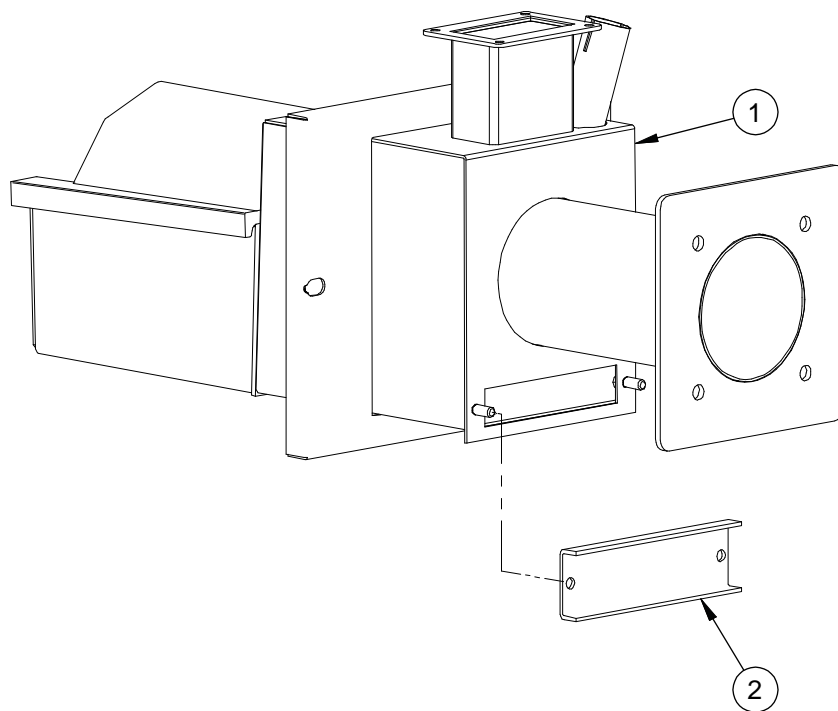


Before removing the ash, shut down the burner and allow it to cool down.

Remove ash from inside the burner head once a month.

- Open the ash box lid below the back part of the burner head and remove the ash with a suitable tool.

**Figure 10** Removing ash from inside the burner



- 1 Burner
- 2 Ash box hatch

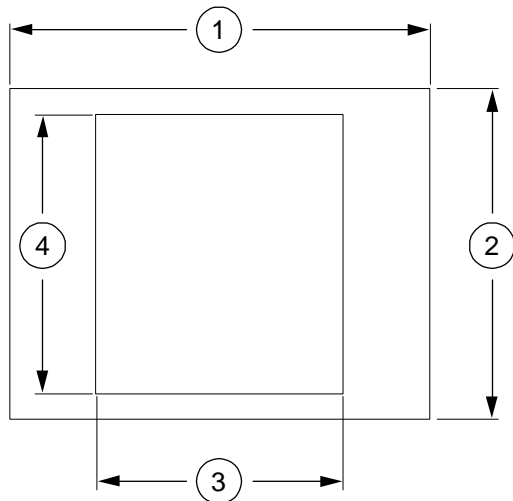
### 9.1.3. Cleaning the burner head air holes

Brush the air holes in the casting parts of the burner head open twice a year with a wire brush, for example.

### 9.1.4. Replacing the burner head gaskets

If the gasket for the burner head flange needs to be replaced, cut the suitable pieces of mineral wool.

**Figure 11** Dimensions for cutting the mineral wool sealing



- 1 325 mm
- 2 255 mm
- 3 190 mm
- 4 215 mm

### 9.2. Servicing the blower

- Clean the blower's impeller blades at least once a year. Do not to loosen the counterbalances attached to the impeller.

### 9.3. Servicing the gearbox

- Check the gearbox every month for visible leakages and that the surface of the gearbox is dry.

The original glycol-based gearbox oil needs no changing. If the oil should be changed for some reason, do not mix the gearbox oil with any other type of oil. Only glycol-based oil may be used for the gearbox. Use oil recommended by the gearbox manufacturer.

**Table 13** Gearbox oil quantity

Gearbox type	Oil quantity
RMI 70	0.55 l

## 9.4. Servicing the feeding screw

- Remove the compact fuel stuck in the feeding screw before the heating season begins (when using wood chips) or once during the heating season (all fuels).

## 9.5. Servicing the fuel bin and the feeding pipe



The fuel bin may have run out of oxygen or the bin may contain carbon monoxide. Thoroughly ventilate before any maintenance work is started. Even then have a lifeline and a person outside fuel bin to secure your safety before you enter the bin.

- Check the feeding pipe and the inside of the fuel bin superficially for possible corrosion damage once a year.

### 9.5.1. Cleaning the fuel bin

Stones and other objects may fall into the fuel bin with the fuel and cause malfunctions when coming into contact with the feeding screw:

1. Once a week, use up the contents of the bin so that it is nearly emptied.
2. Shut down the device.
3. Remove the possible obstacles.

#### **NOTICE**

Clean under the stirrer discs every six months.

### 9.5.2. Checking the stirrer disc bearings

- Check the condition of the stirrer disc bearings once a year by rotating the plate. The bearings must not jam when turned.

## 9.6. Servicing the backfire prevention system

- Change the beeswax plug in the muff of the backfire prevention system once a year. The wax must be pressed on to the plug from its both ends.

## 9.7. Testing the safety devices



Check the safety devices before taking the device into use.

- Feeding screw thermostat



Only an authorized electrician is allowed to disconnect the feeding screw thermostat cable.

1. Disconnect the feeding screw thermostat cable.
2. The logic display should show the alarm FEED SCREW OVERHEATED!
3. The feeding screw is rotated five times with longer operating condition work time.
4. The burner shuts down if the feeding tube temperature has not cooled down below 69°C.

- Boiler thermostat



Only an authorized electrician is allowed to disconnect the boiler thermostat cable.

1. Disconnect the boiler thermostat cable.
2. The logic display should show the alarm BOILER WATER OVERHEATING ALARM! RESET THE THERMOSTAT.

- Fuel bin lid

1. Open the lid.
2. The control unit should shut down.

- Check that the water tank of the extinguisher is full of water.

## 10. Troubleshooting

### 10.1.1. Burning device has stopped

Fault	Solution
The burning device has stopped	<ul style="list-style-type: none"><li>• The device may just seem to be stopped operating. Pause time is a normal operating condition. Wait first.</li><li>• Flame monitoring alarm has stopped the device. Usually there is malfunction in the fuel feeding. Locate and repair.</li><li>• Feeding pipe is overheated. An alarm message is shown in the logic display. Feed fuel to the burner head and light again when the feeding pipe has cooled down.</li></ul>

### 10.1.2. Burning device has stopped and cooled down

Fault	Solution
The burning device has stopped and cooled down	<ul style="list-style-type: none"><li>• The overheating thermostat has stopped the device. Press the reset button on the thermostat.</li><li>• The miniature circuit breakers have tripped because an unsuitable object has entered the fuel bin.<ul style="list-style-type: none"><li>- Acknowledge the circuit breakers.</li><li>- Use forced feeding backwards and then forwards. If the feeding screw turns normally, return to automatic operation.</li></ul></li><li>• The feeding screw and the motor do not rotate when using forced feeding.<ul style="list-style-type: none"><li>- Turn the operating switch to 0 position.</li><li>- Open the service door and try to locate the problem.</li><li>- If the problem is located, return to normal operation.</li></ul></li><li>• The motor rotates but the feeding screw does not when using forced feeding.<ul style="list-style-type: none"><li>- The unsuitable object has damaged the feeding screw.</li><li>- Open the service door and try to locate the problem.</li><li>- If the problem is located, return to normal operation.</li></ul></li></ul>

### 10.1.3. Efficiency of the device weakened

<b>Fault</b>	<b>Solution</b>
Efficiency of the device weakened	<ul style="list-style-type: none"><li>• Check that the blower works properly. If the impeller blades have gathered dust clean them.</li><li>• Check the joints of the casting parts of the burner head and the frame.</li><li>• Check that the air holes of the burner head are open.</li><li>• Check and empty, if necessary, the ash box of the burner head.</li><li>• When using wood chips made from whole trees, use up the contents of the fuel bin at times and remove the layer of stick from the bottom.</li></ul>

### 10.1.4. Smoke coming into the bin

<b>Fault</b>	<b>Solution</b>
Smoke coming into the bin	<ul style="list-style-type: none"><li>• Check that all the air-intake apertures of the boiler are closed.</li><li>• Check the air-tightness of the joints between the chimney and the boiler, and all the joints of the burner device to maintain a proper draught in the chimney.</li><li>• Check that there is no blockage in the chimney or the chimney joint, and make sure that the draught in the chimney is sufficient.</li><li>• Check that there is not too much ash inside the burner head.</li></ul>

### 10.1.5. Adjusting the burner does not succeed

<b>Fault</b>	<b>Solution</b>
Adjusting the burner does not succeed	<ul style="list-style-type: none"><li>• The draft of the chimney is too strong. Weaken the draft with a damper.</li></ul>

### 10.1.6. Feeding pipe gets quickly clogged

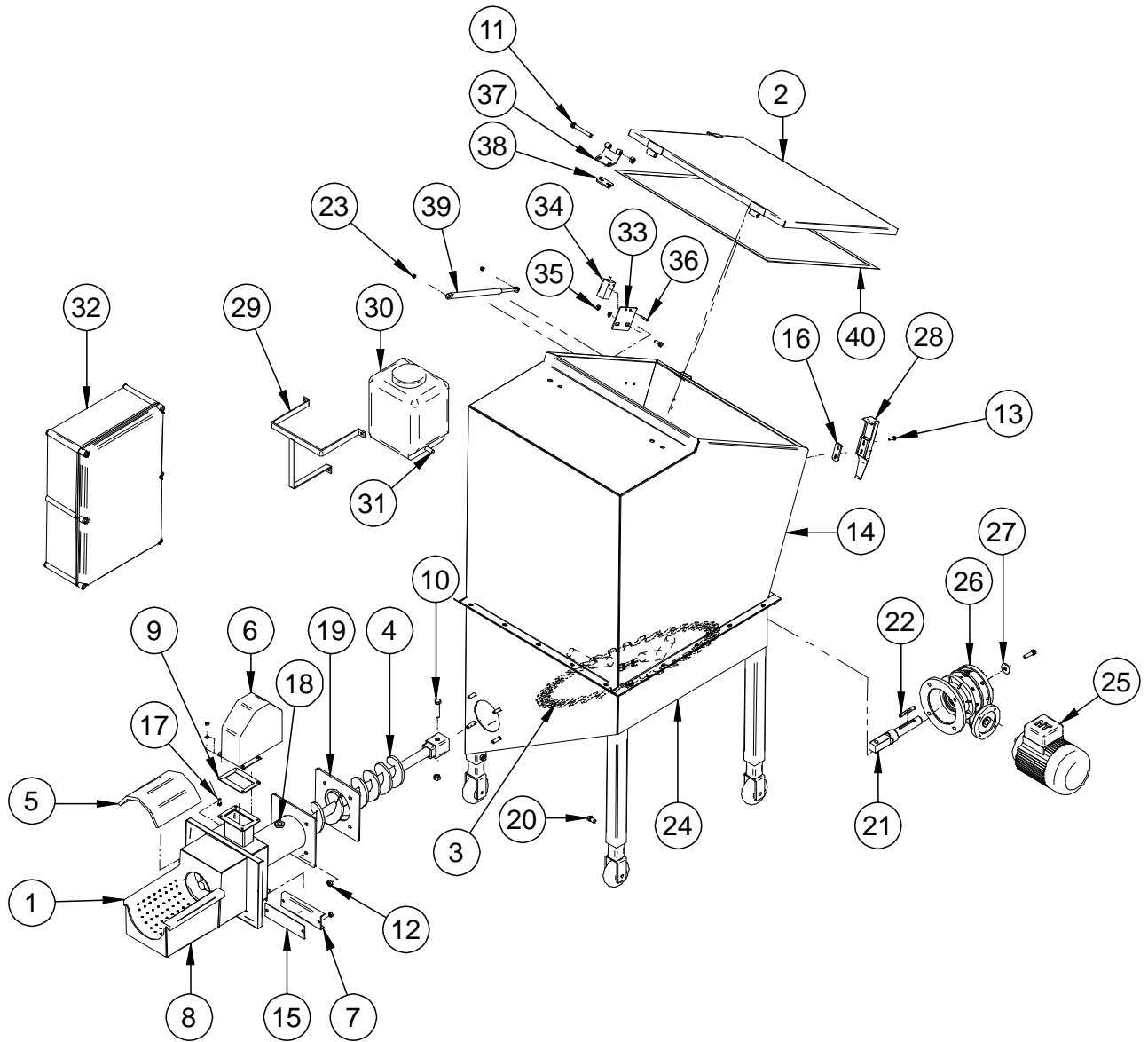
<b>Fault</b>	<b>Solution</b>
Feeding pipe gets quickly clogged	<ul style="list-style-type: none"><li>• Check the rotation direction of the feeding screw. If the feeding screw rotates in a wrong direction, the fuel jams under the stirrer disc and the feeding pipe gets clogged.</li></ul>



# 11. Device components and spare parts

In order to obtain spare parts corresponding to your needs, you are required to give the information provided on the machine plate of the burner to the dealer or the person servicing the burner.

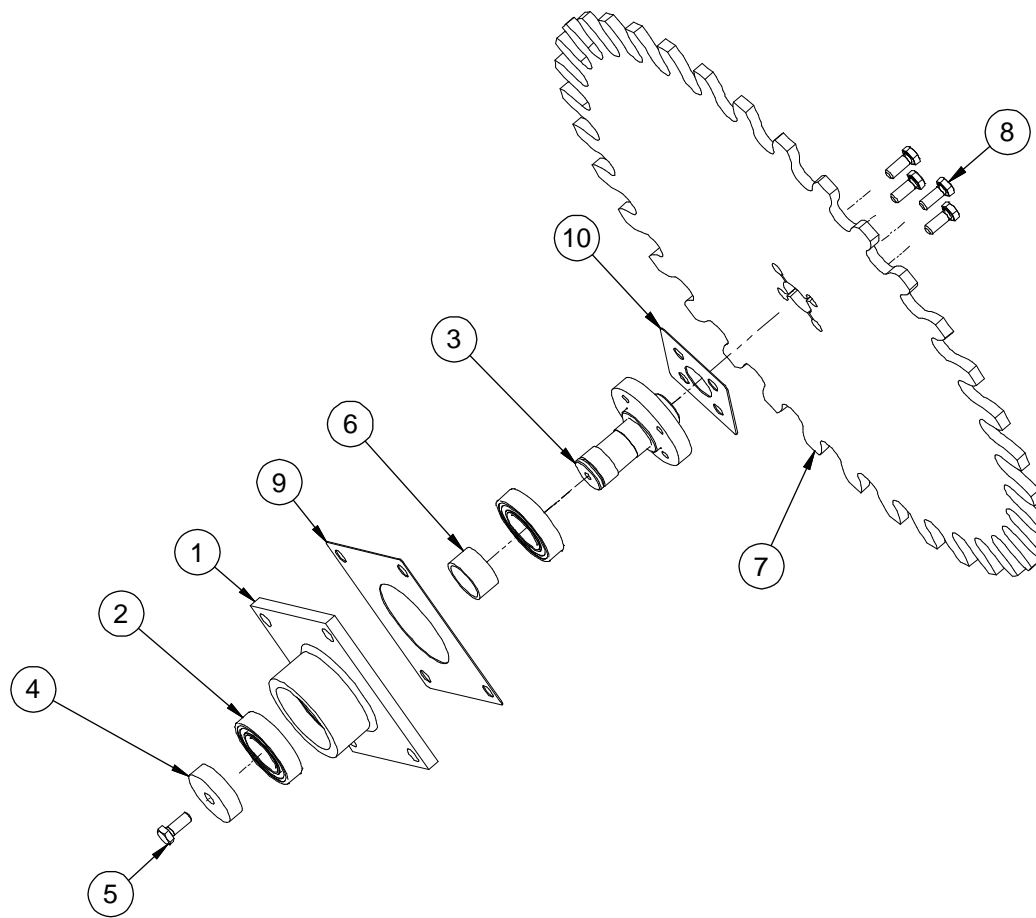
Figure 12 VetoMat device components



**Table 14** Component list for VetoMat

No	Name	Item
1	Burner head stone	42816
2	Fuel bin lid	30341
3	Stirrer disc	11105
4	Feeding screw, left	41402
	Feeding screw, right	41401
5	Burner head cover, 40 kW	40776
6	Blower RFE 140	11109
7	Hatch, ash removal access	40788
8	Burner head, 40 kW	30646
9	Gasket	40751
10	Screw M10x65	72158
11	Screw M8x80	71903
12	Nut M10	73310
13	Screw M6x12	73231
14	Fuel bin	11152A
15	Gasket	410568
16	Lock base 2008	44312
17	Screw M6x16	72117
18	Joint Uk 3/8x13	2932413
19	Gasket	40082
20	Screw M10x20	721481
21	Shaft to RMI 70	43417
22	Key 8x7x63	74060
23	Nut M8	72320
24	Base part, fuel bin	11153A
25	Electric motor 0.75 kW	62024
26	Gearbox RMI 70 100:1	62004
27	Washer	43463
28	Lock	62202
29	Rack	41551
30	Water tank	68530
31	Joint	42499
32	A•T log-1 control unit	62064
	A•T log-1 control unit NOR	620641
33	Plate for limit switch	43706
34	Limit switch N-Serie	6213005
35	Screw M8x20	73130
36	Screw M4x35	73279
37	Hinge, fuel bin	44225
38	Rifle plate	41574
39	Gas spring	62210

**Figure 13** Stirrer disc components



**Table 15** Component list for stirrer disc

No.	Name	Item
	Bearing housing of disc	11108
1	Bearing housing of disc, welded	30032
2	Bearing 6207-2RS	61044
3	Disc shaft	41335
4	Disc axle cup	41633
5	Hex screw M10x25	72150
6	Bushing, bearing housing	41684
7	Stirrer disc	11105
8	Hex screw M10x30	72151
9	Shim 1 mm, bearing housing	42387
	Shim 2 mm, bearing housing	42387-2
	Shim 3 mm, bearing housing	42387-3
10	Shim 1 mm, below stirrer disc	42388

**Table 16** Vetomat spare parts list

<b>No.</b>	<b>Name</b>	<b>Item</b>
1	Burner head stone	42816
2	Fuel bin lid	30341
3	Stirrer disc	30074
4	Feeding screw, left	41402
	Feeding screw, right	41401
5	Burner head cover 40 kW	40776
6	Blower RFE 140	11109
7	Hatch, ash removal access	40788
8	Burner head, 40 kW	30646
9	Gasket	40751
10	Screw M10x70	72158
11	Screw M8x80	71903
12	Nut M10	73310
13	Screw M6x12	912M612
14	Fuel bin	11152
15	Gasket	40789A
16	Lock base 2008	44312
17	Screw M6x16	933M616
18a	Joint Uk 3/8*13	62037
18b		62038
19	Gasket	40720
20	Screw M10x20	72148
21	Shaft to RMI 70	43417
22	Key 8x7x63	74060
23	Nut M8 nyloc	72320
24	Base part, fuel bin	11153
25	Electric motor 0.75 kW	62024
26	Gearbox RMI 70 100:1	62004
27	Washer	43463
28	Lock	62202
29	Rack	41551
30	Water tank	68530
31	Joint	42499
32	A•T log-1 control unit	62064
	A•T log-1 control unit NOR	620641
33	Plate for limit switch	43706
34	Limit switch N-Serie	6213005
35a	Screw M8x20	72129
35b	Washer M8	73104
36a	Screw M4x35	71610
36b	Washer M4	73100
36c	Nut M4	73304

<b>No.</b>	<b>Name</b>	<b>Item</b>
37	Hinge, fuel bin	42822
38	Rifle plate	41574
39	Gas spring	62210
40	Gasket for fuel bin	68525
	Gasket for fuel bin	68527
57	Screw M10x25	72150
58	Stirrer disc	30074
59	Bearing housing of disc	11108
60	Disc axle cup	41633
61	Bearing 6207 - 2Rs	61044
62	Bearing housing of disc, welded	30032
63	Shim 1 mm, bearing housing	42387
	Shim 2 mm, bearing housing	42387-2
	Shim 3 mm, bearing housing	42387-3
64	Bushing, bearing housing	41684
65	Disc shaft	41335
66	Shim 1 mm, stirrer disc	42388
67	Gasket	410568
68	Nut M10 nyloc	72322
69	Washer M10	73106
70	Lid	43461



## 12. Disposal of the burner

When used and serviced properly, the burner will serve you for a long time. In time it will, however, become unprofitable to maintain and thereby be disposed of.

The burner device contains:

- Electronic parts (control center, sensors)
- Steel
- Oil

Deliver the burner device to a waste treatment plant where it is taken to pieces and the parts are recycled in an appropriate way.





## 13. Declaration of conformity

### Declaration of Conformity (EU)

We,

VELJEKSET ALA-TALKKARI OY  
FIN-62130 HELLANMAA  
tel. 06 - 4336333  
fax 06 - 4376363

hereby declare that the product below,

VETOMAT  
beginning from the serial number 4VM001742

to which this declaration relates, is in conformity with the essential requirements of  
the following Directive and the Standards:

#### Directive

2006/42/EEC and its amendments

Hellanmaa, 15.04.2013  
Place and Date

  
Antti Ala-Talkkari  
Managing Director

