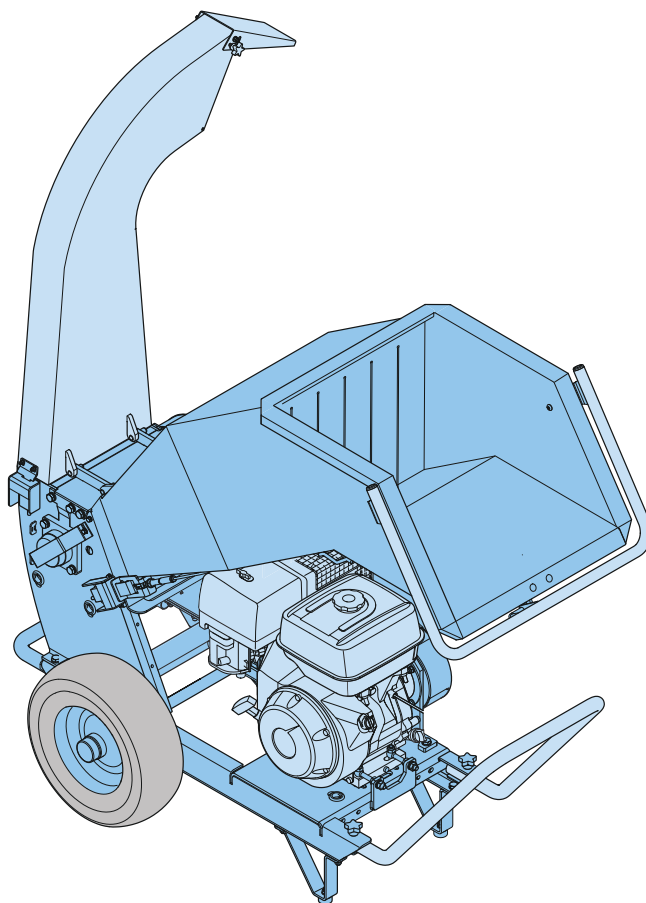




# User manual GTS1300

Wood chipper



English  
Original instructions

## Preface

© Technische Handelmaatschappij J. De Wild B.V.

This document or parts thereof may not be reproduced, copied, distributed, stored in a retrieval system, or transmitted in any form or by any means, electronically nor otherwise, without the prior written permission of Technische Handelmaatschappij J. De Wild B.V.

Specifications and illustrations are subject to change without prior notice. Technische Handelmaatschappij J. De Wild B.V. will not accept liability for any alteration or typing error. Details and values given in this manual are average values and have been compiled with care. They are not binding, however, and Technische Handelmaatschappij J. De Wild B.V. disclaims any liability for damage or detriments suffered as a result of reliance on the information given herein or the use of products, processes or equipment to which this document refers.

# Contents

<b>1</b>	<b>Introduction.....</b>	<b>6</b>
1.1	About this document.....	6
1.1.1	Purpose of this document.....	6
1.1.2	Language.....	6
1.1.3	Illustrations.....	6
1.1.4	Symbols used in this document.....	6
1.2	About the machine and model types in this document.....	7
1.3	How to use this document.....	7
1.4	Contact information.....	7
1.5	Warranty conditions.....	7
<b>2</b>	<b>Safety.....</b>	<b>9</b>
2.1	Approved user.....	9
2.2	Liability.....	9
2.3	Personal protective equipment.....	9
2.4	Safety signs on the machine.....	10
2.5	Safety instructions.....	13
2.5.1	General safety instructions.....	13
2.5.2	Safety instructions for use.....	13
2.5.3	Safety instructions for maintenance, transport and storage.....	14
2.6	Disposal.....	14
<b>3</b>	<b>Description.....</b>	<b>15</b>
3.1	Intended use.....	15
3.2	Identification of the machine.....	15
3.3	Overviews.....	16
3.3.1	Overview of the main components.....	16
3.3.2	Overview of the engine controls.....	17
<b>4</b>	<b>Installation.....</b>	<b>18</b>
4.1	Install the input.....	18
4.2	Install the output.....	19
4.3	Install the handle.....	20
<b>5</b>	<b>Instructions for use.....</b>	<b>21</b>
5.1	Prepare for use.....	21
5.2	Fill the fuel tank.....	21
5.3	Start the machine.....	22

---

5.4	Use the machine.....	22
5.5	Stop the machine.....	22
5.6	Transport the machine.....	23
5.7	Use the panic bar in case of an emergency.....	23
5.8	Release the panic bar.....	23
<b>6</b>	<b>Preventive maintenance.....</b>	<b>25</b>
6.1	Preventive maintenance schedule.....	25
6.2	Do a functional test of the panic bar.....	25
6.3	Do a detection test of the output.....	26
6.4	Clean the machine.....	26
6.5	Do a check of the tension of the belts.....	26
6.6	Replace the air filter.....	27
6.7	Fill the engine with oil.....	27
6.8	Lubricate the bearing housing.....	28
6.9	Replace the belts.....	28
6.9.1	Remove the cover.....	29
6.9.2	Remove the belts.....	29
6.9.3	Install the belts.....	29
6.9.4	Adjust the tension.....	30
6.9.5	Do a check for correct operation.....	30
6.10	Align the pulleys.....	31
<b>7</b>	<b>Corrective maintenance.....</b>	<b>32</b>
7.1	Do maintenance on the blades.....	32
7.1.1	Lock the rotor.....	32
7.1.2	Remove the blades.....	32
7.1.3	Turn the blades.....	33
7.1.4	Sharpen the blades.....	33
7.1.5	Install the blades.....	34
7.1.6	Adjust the gap.....	34
7.1.7	Finish.....	35
7.2	Do maintenance on the engine.....	35
7.3	Remove a blockage.....	35
7.3.1	Do a visual check.....	35
7.3.2	Remove the output.....	35
7.3.3	Remove the input.....	36
7.3.4	Remove the blockage.....	37
7.3.5	Use the rotor deblocking tool.....	37
7.3.6	Finish.....	38
7.4	Replace a safety sign.....	38



<b>8</b>	<b>Troubleshooting.....</b>	<b>39</b>
8.1	General troubleshooting procedure.....	39
8.2	Troubleshooting table.....	39
<b>9</b>	<b>Technical specifications.....</b>	<b>40</b>
9.1	General specifications.....	40
9.2	Material specifications.....	41
9.3	Engine specifications.....	41
9.4	Working area.....	43
9.5	Danger area.....	44
9.6	Wiring diagram.....	45

# 1 Introduction

## 1.1 About this document

### 1.1.1 Purpose of this document

This document contains the information and instructions for an approved user to safely do these tasks:

- Use the machine.
- Do user maintenance on the machine.
- Do user troubleshooting on the machine.

For the requirements of the approved user, refer to section [2.1](#).





### 1.1.2 Language



The original language of the document is English. All other available language versions are translations of the original instructions.

### 1.1.3 Illustrations

The illustrations in this document show a typical setup with relevant details for instructional use only. Minor differences between the illustrations and the machine are possible but do not have an effect on the comprehensibility of this document.

### 1.1.4 Symbols used in this document

Icon	Signal word	Description
	Warning	Injury or death is possible if you do not obey the instructions.
	Caution	Damage to equipment is possible if you do not obey the instructions.
	Note	Gives additional information.
	N/A	Information about the condition of the machine before you start the procedure.
	N/A	Information about spare parts that are necessary for a procedure.

Icon	Signal word	Description
	N/A	Information about support equipment that is necessary for a procedure.
	N/A	Information about supplies (consumables) that are necessary for a procedure.

## 1.2 About the machine and model types in this document

This document is applicable for the wood chipper GTS1300.



**Note:**

- For identification of the model type, refer to section [3.2](#).
- In this document, the wood chipper GTS1300 is referred to as the machine.

## 1.3 How to use this document

1. Read this document completely. Make sure that you know and understand all the instructions.
2. Obey the safety instructions to prevent injury and/or damage to the machine.
3. Do the procedures completely and in the given sequence.
4. Keep this document in a safe area for future use. This document is part of the machine.

## 1.4 Contact information

Company name	Technische Handelmaatschappij J. De Wild B.V.
Address	De Meeten 54 4706 NH Roosendaal The Netherlands
Email	support@gtmprofessional.com

## 1.5 Warranty conditions



**Note:**

For the warranty conditions of the engine, refer to the OEM documentation of the engine.

The purchase invoice and the serial number of the machine is the warranty certificate. Speak to your dealer for the after sales service.

The warranty includes:

- Factory and component faults.
- Replacement of faulty parts and the involved work.

The warranty excludes:

- Parts that are subject to wear.
- Transport costs for part replacement.

The warranty will be void when you do not obey these rules:

- The machine must be operated by approved users.
- Use the machine only as described in this document.
- Obey the safety, user and maintenance instructions in this document.
- Use original spare parts.
- Do not make unapproved changes to the machine.
- Only your dealer is allowed to repair the machine.

## 2 Safety

### 2.1 Approved user

A user must:

- Be 18 years or older to operate the machine.
- Never be under the influence of drugs or alcohol when operating the machine.
- Be familiar with and obey the safety instructions.
- Be able to stop the machine immediately.
- Be aware of the rules and regulations for the environment and for noise levels.
- Wear personal protective equipment. Refer to section [2.3](#).

All users are responsible for:

- Damage caused to a third party.
- The safety of all persons within a radius of 12 m.

### 2.2 Liability

Technische Handelmaatschappij J. De Wild B.V. is not liable if you do not obey these instructions:

- Obey the safety instructions. Refer to section [2.5](#).
- Use the machine only as described in section [3.1](#).
- Use original spare parts.
- Do not make unapproved changes to the machine.
- Only operate and do maintenance on the machine as described in this document.

### 2.3 Personal protective equipment

When you use the machine, always wear appropriate personal protective equipment:

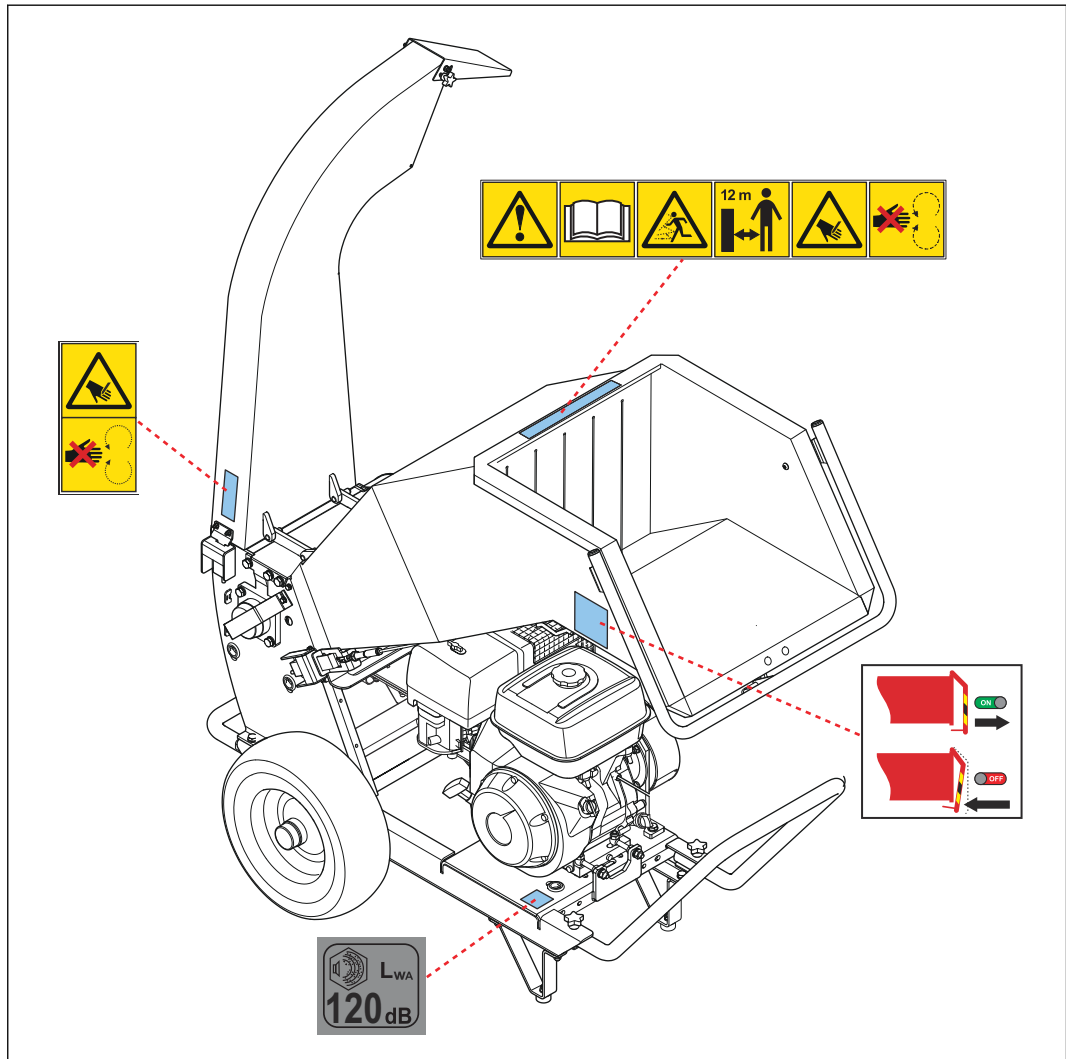
- Ear protection
- Eye protection
- Cut resistant gloves

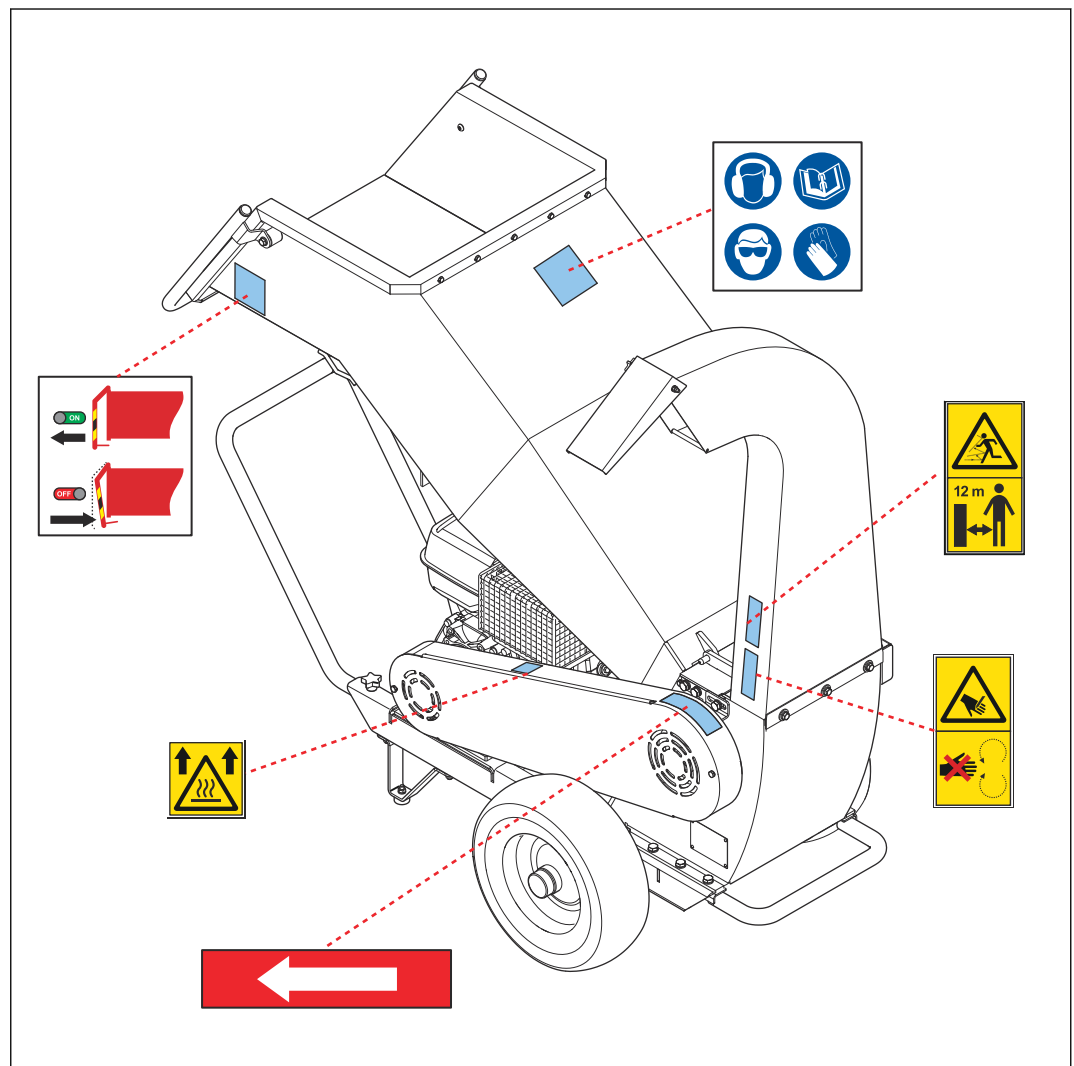


**Warning:**

You must stop the work every hour for a minimum of 15 minutes to prevent noise-induced hearing loss.




## 2.4 Safety signs on the machine















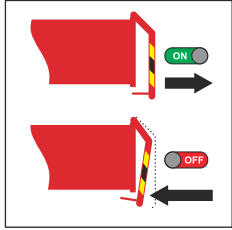
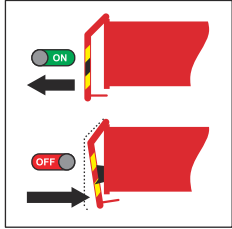
**Note:**

For an overview and explanation of the identification plate, refer to section 3.2.

Sign	Description
	General warning
	Flying debris hazard
	Keep distance from the machine

Sign	Description
	Cutting hazard
	Rotating parts hazard
	Noise level
	Read the manual
	
	Wear ear protection (mandatory PPE)
	Wear eye protection (mandatory PPE)
	Wear cut resistant gloves (mandatory PPE)
	V-belts running direction
	Hot surface hazard



Sign	Description
	Use of the panic bar, left-hand side
	Use of the panic bar, right-hand side

## 2.5 Safety instructions

### 2.5.1 General safety instructions

- Do not leave the working machine unattended.
- Keep away from the discharge zone.
- Do not wear loose clothing.
- Make sure that the machine is level.
- Keep away from moving parts inside the input and output.
- Replace warning signs if they are damaged or illegible.
- Keep the contact key away from children and from not approved users.

### 2.5.2 Safety instructions for use

- Wear appropriate personal protective equipment. Refer to section [2.3](#).
- Do not use the machine if any part of the machine is damaged or defective.
- Make sure that all machine components are installed.
- Never use the machine without the input or output. Refer to section [3.3.1](#).
- Do not climb into the input.
- Make sure that the panic bar is always unobstructed when the machine is used.
- Make sure that you can immediately operate the panic bar when the machine is used.
- Do not use the machine if the blades are dull. This can cause damage to the machine.
- Do not tilt the machine when the engine is running.
- Use the machine in a well-ventilated area. Do not use the machine indoor.
- Do not use the machine on a paved or gravel surface.
- Make sure that the fumes from the exhaust are blown away from the user.
- Only chip material that is described in this document. Refer to section [9.2](#).
- Keep a stable position during operation with your feet firmly on the soil.
- When you chip material, your position must be level with the machine.
- Prevent a buildup of chipped material in the discharge zone.
- Make sure that the input, rotor and output are free of wood chips, leaves and grass before use.

- Make sure that the tire pressure of the machine is correct. Refer to section [9.1](#).
- Immediately stop the machine if the blades hit an unwanted object, if the machine makes an unusual sound or if the machine moves irregularly.

### 2.5.3

#### **Safety instructions for maintenance, transport and storage**

- Never use the engine or output to strap the machine down during transport or storage.
- Always lock the rotor during maintenance, transport and storage. Refer to section [7.1.1](#)
- Always remove the spark plug from the engine.
- Only use original spare parts.
- Replace bent or damaged blades. Never repair them.

## 2.6

### **Disposal**

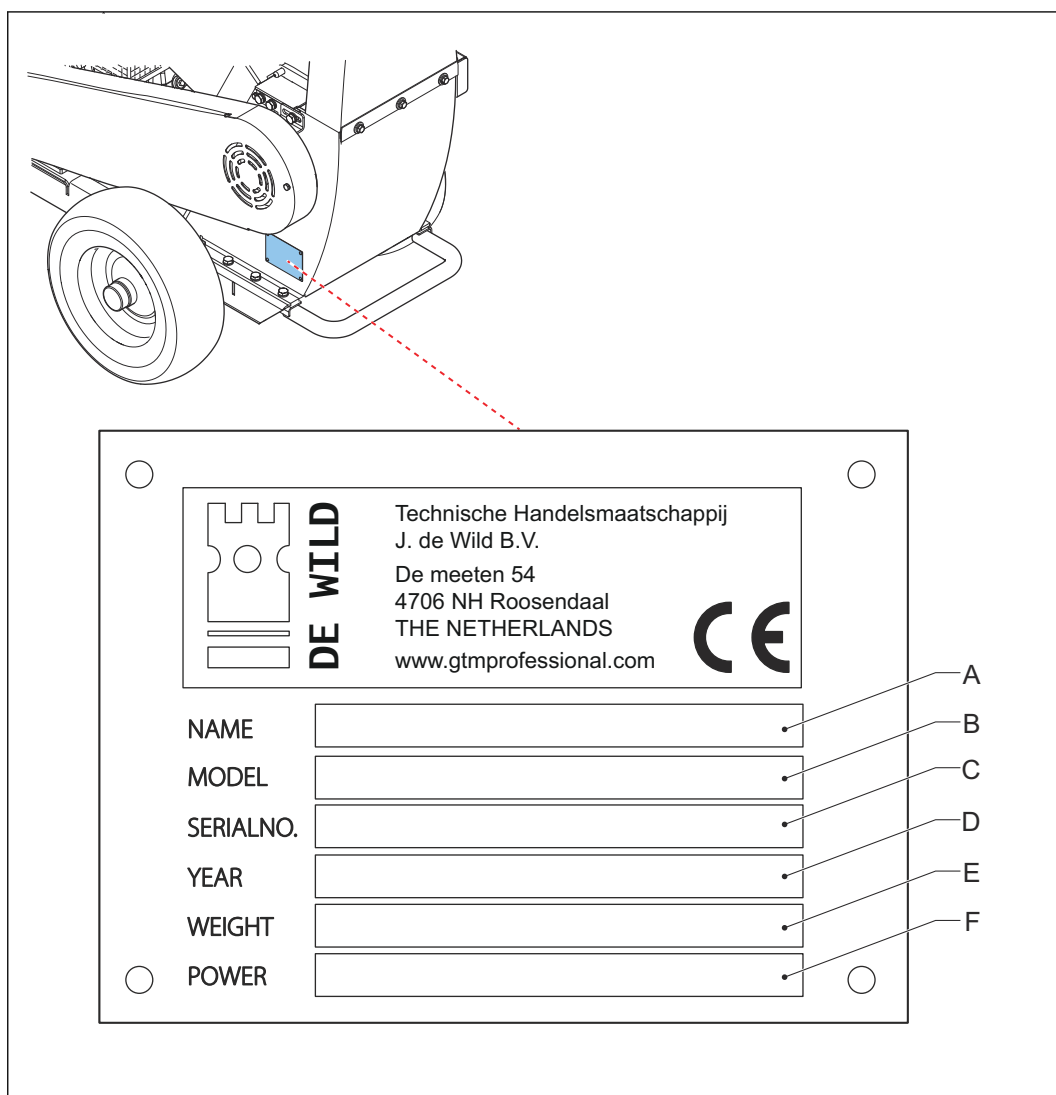
- Do not dispose of the machine into domestic waste.
- Obey the local regulations and the waste sorting instructions of the machine.

## 3 Description

### 3.1 Intended use

The machine is a wood chipper designed to chip wood and roots. For an overview of the specifications of the material, refer to section [9.2](#).

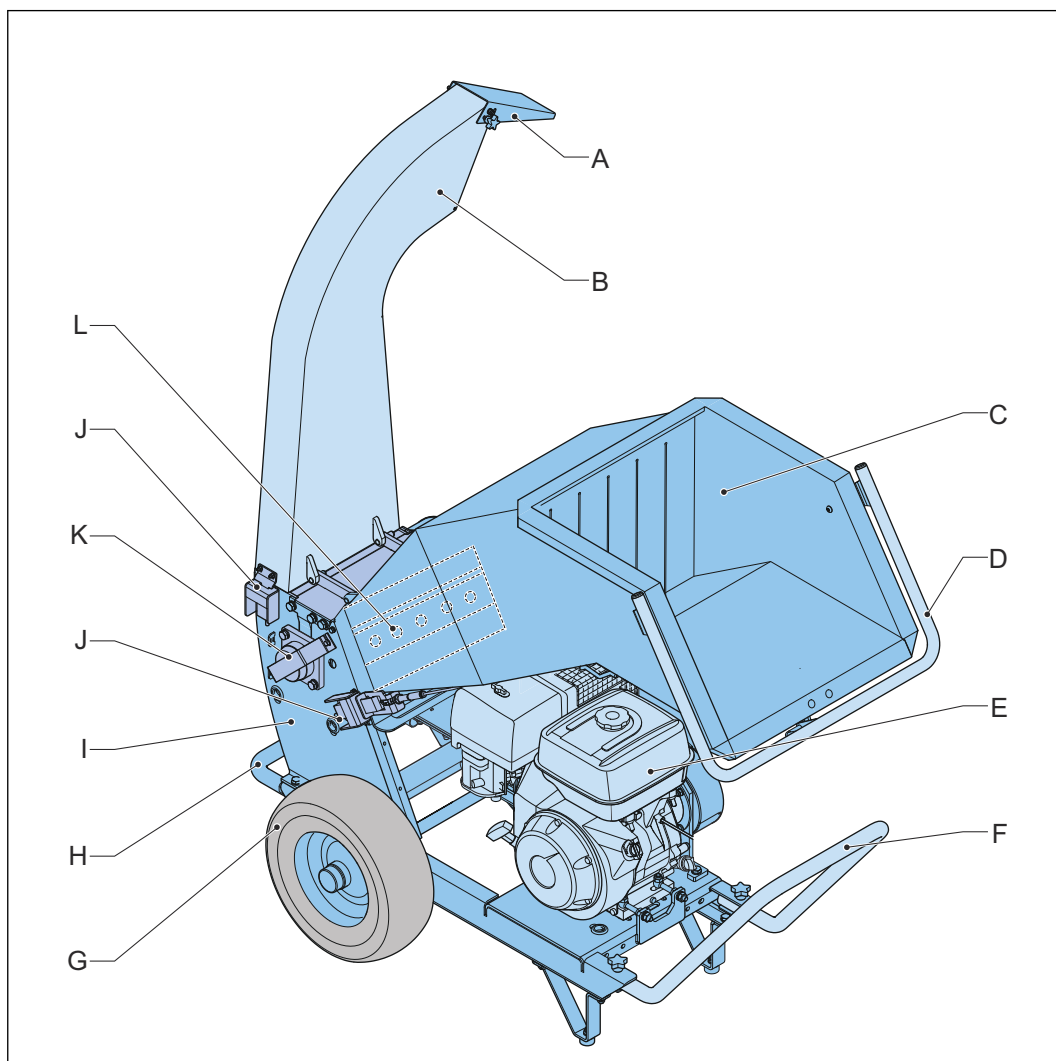
### 3.2 Identification of the machine



- A Name
- B Model
- C Serial number
- D Year of production
- E Weight
- F Power

### 3.3 Overviews

#### 3.3.1 Overview of the main components



Pos.	Item	Description
A	Deflector	The deflector makes sure that the chipped material is put in the correct place.
B	Output	The output is used to guide the chipped material.
C	Input	The input is used to guide the entering material to the shredderbox.
D	Panic bar	The panic bar is used to stop the machine in case of an emergency.
E	Engine	The engine drives the rotor.
F	Handle	The handle and the wheels allow the user to move the machine.
G	Wheel	
H	Bumper	The bumper makes sure that the machine does not tilt over.

Pos.	Item	Description
I	Shredderbox	The shredderbox keeps the rotor in the correct position.
J	Safety lock switch	The safety lock switch detects if the input and output are installed correctly. The machine does not start if the parts are not installed correctly.
K	Rotor	The rotor holds the blades.
L	Blade	The blades chip the material.

### 3.3.2

#### Overview of the engine controls



**Note:**

For an overview of the controls, refer to the OEM documentation of the specific engine of your machine.

## 4 Installation

**Note:**

Use bumper support to make sure that the machine stays balanced during installation.

### 4.1 Install the input

**Warning:**

Two persons are required to install the input. The input is heavy.

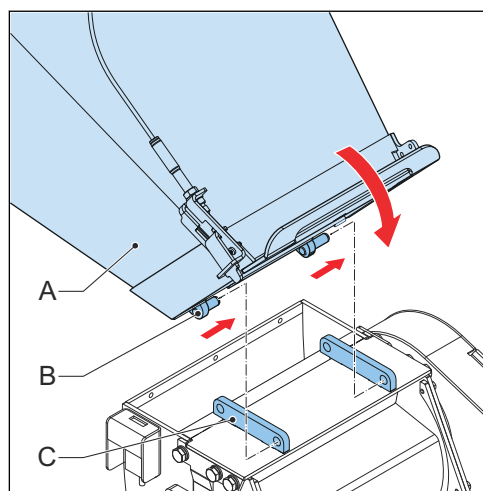
#### Preliminary requirements



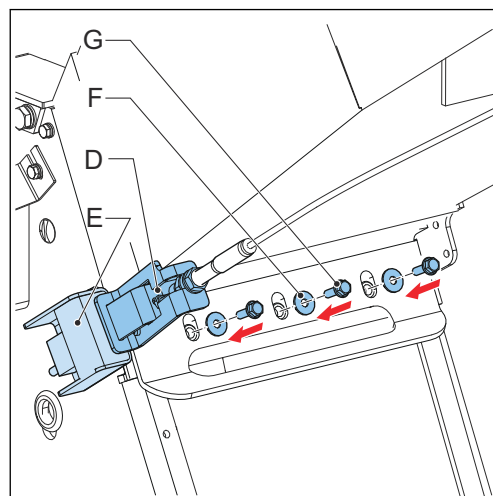
- Wrench size 13

#### Procedure

1. Lift the input (A).
2. Move the hinges (B) into the holes (C).
3. Tilt the input.



4. Make sure that the locking key (D) correctly fits in the safety lock switch (E).
5. Install the bolts (G) and the washers (F).



## 4.2 Install the output

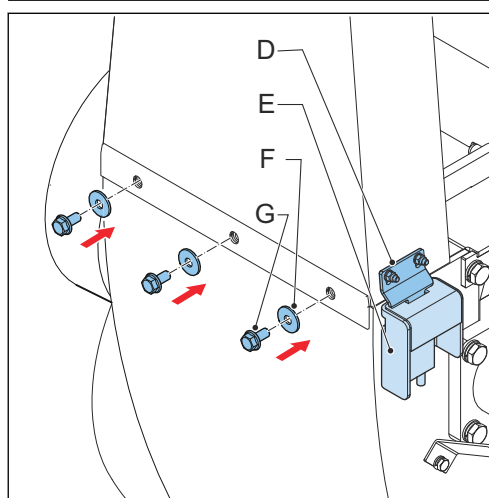
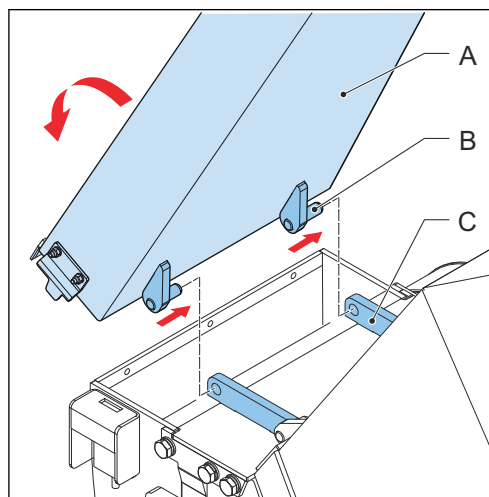
Preliminary requirements



- Wrench size 13

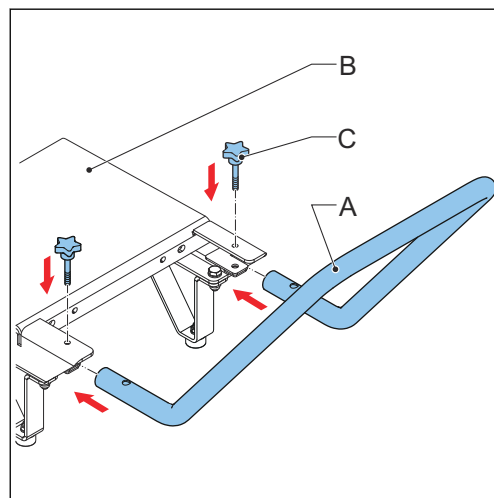
Procedure

1. Lift the output (A).
2. Move the hinges (B) into the holes (C).
3. Tilt the output.
4. Make sure that the locking key (D) correctly fits in the safety lock switch (E).
5. Install the bolts (G) and the washers (F).



## 4.3 Install the handle

1. Position the handle (A) on the frame (B).
2. Install the knobs (C).





## 5 Instructions for use

### 5.1 Prepare for use




**Warning:**  
Do not use a damaged machine.

1. Remove all contamination from the work area.
2. Make sure that all machine parts are installed correctly. Refer to chapter 4.
3. Make sure that the machine is not blocked. If necessary, remove a blockage. Refer to section 7.3.
4. Do a check on the oil level of the engine. If necessary, fill the engine with oil. Refer to section 6.7.
5. Do a check on the fuel level. If necessary, fill the fuel tank. Refer to section 5.2.
6. Do a functional test of the panic bar. Refer to section 6.2.
7. Do a detection test of the output. Refer to section 6.3.

### 5.2 Fill the fuel tank

Preliminary requirements

	• Spout		• Fuel
-------------------------------------------------------------------------------------	---------	--------------------------------------------------------------------------------------	--------



**Warning:**

- Only fill the fuel tank in the open air or in a well-ventilated area.
- Fuel is highly flammable. Do not smoke or light a fire in the surrounding area.
- If you spill fuel, remove it immediately and move the machine away from the spillage area. Clean the spillage area.

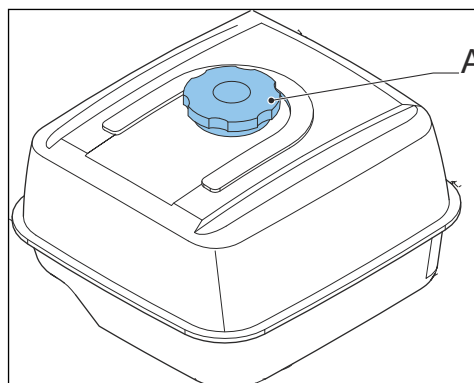
Procedure

1. Stop the machine. Refer to section 5.5.



**Warning:**  
Make sure that the engine is cool.

2. Remove the cap (A).
3. Fill the fuel tank.
4. Install the cap.



## 5.3 Start the machine

### Preliminary requirements



1. The panic bar is in the upper position.
2. The input and the output are installed.
3. The deflector is set to the required position.

**Warning:**

Only start the machine when the input and shredderbox are empty.

### Procedure

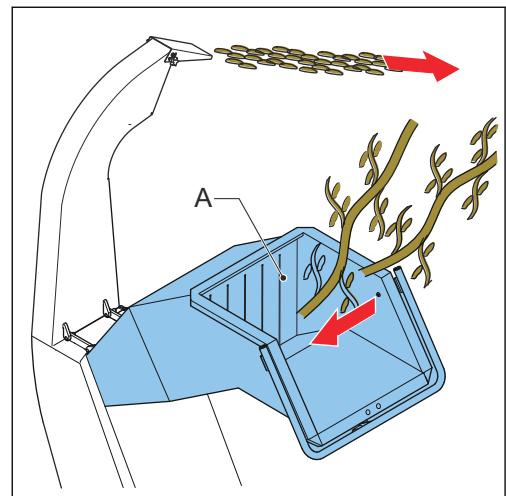
1. Start the machine. Refer to the OEM documentation of the specific engine of your machine.

## 5.4 Use the machine

**Note:**

For an overview of the product specifications, refer to section [9.2](#).

1. If necessary, remove sand, dirt and rocks from the material.
2. Cut side branches off the main branches.
3. Put the material in the input (A).  
The machine automatically pulls the material into the rotor.
4. Put side branches and material with a large diameter in the input separately.
5. After you put branches with leaves in the input, always put a thicker branch without leaves in the input to prevent a blockage.



## 5.5 Stop the machine

1. Put the last material in the input. Refer to section [5.4](#).
2. Let the machine operate until the shredderbox and the output are empty.
3. Set the throttle lever in low speed position.
4. Set the ON/OFF switch to the OFF position.

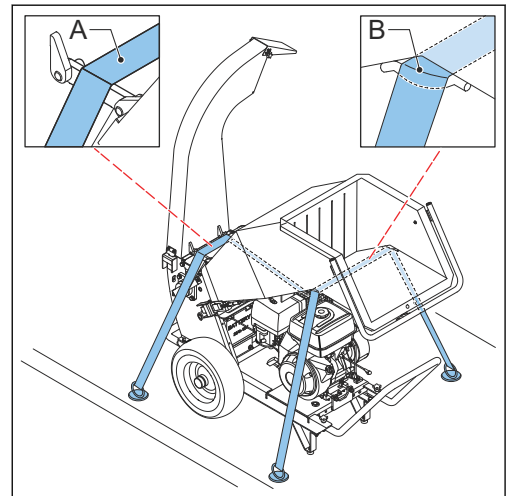
## 5.6 Transport the machine

1. Take out the drive plates of the transport vehicle to safely pull the machine on the transport vehicle.
2. Pull the machine on the transport vehicle.
3. Make sure that the bumper is placed against a vertical flat surface.

**Caution:**

Do not use tie-down straps on the engine or output.

4. Put tie-down straps on the shredderbox (A) and through the hooks (B) of the input to secure the machine to the transporting vehicle.
5. Make sure that the machine cannot move during transport.

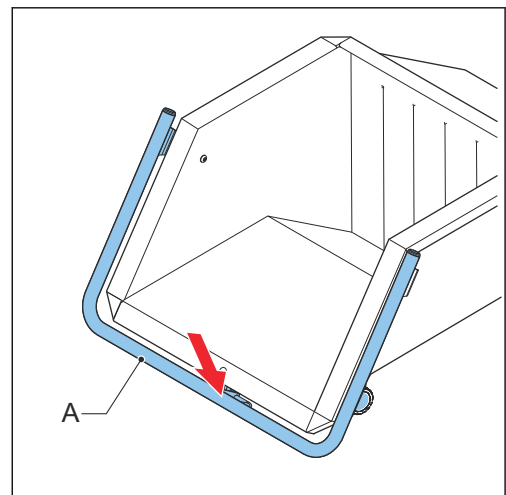


## 5.7 Use the panic bar in case of an emergency

**Note:**

The panic bar can be activated at the bottom, left and right side of the input.

1. In the case of an emergency, push the panic bar (A) down.

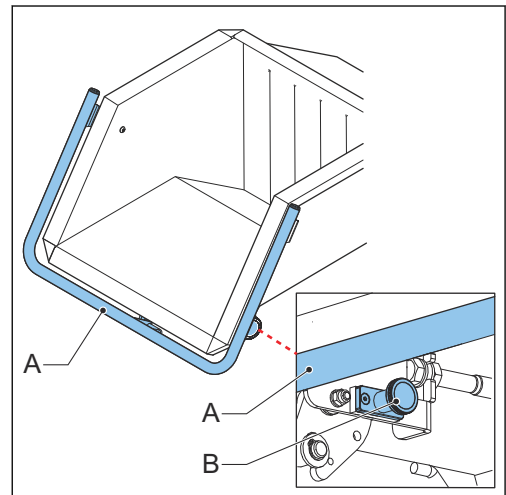


## 5.8 Release the panic bar

**Warning:**

Do not release the panic bar until the situation is safe.

1. Pull the index punger (B) to release the panic bar (A).
2. If necessary, start the machine. Refer to section [5.3](#).



## 6 Preventive maintenance

**Warning:**

Before you do maintenance, make sure that:

- The spark plug wire is disconnected.
- The engine is cool.
- The work area has sufficient light.

### 6.1 Preventive maintenance schedule

Task	Frequency	Procedure
Do a functional test of the panic bar	Before every use	Refer to section <a href="#">6.2</a>
Do a detection test of the output	Before every use	Refer to section <a href="#">6.3</a>
Clean the machine	After every use	Refer to section <a href="#">6.4</a>
Do a check of the tension of the belts	Every week	Refer to section <a href="#">6.5</a>
Clean or replace the air filter	Every month	Refer to section <a href="#">6.6</a>
Replace the engine oil	First time after 20 hours, thereafter every 100 hours or 6 months.	Refer to section <a href="#">6.7</a>
Lubricate the bearing housing	Every year	Refer to section <a href="#">6.8</a>
Replace the belts	Every two years	Refer to section <a href="#">6.9</a>

### 6.2 Do a functional test of the panic bar

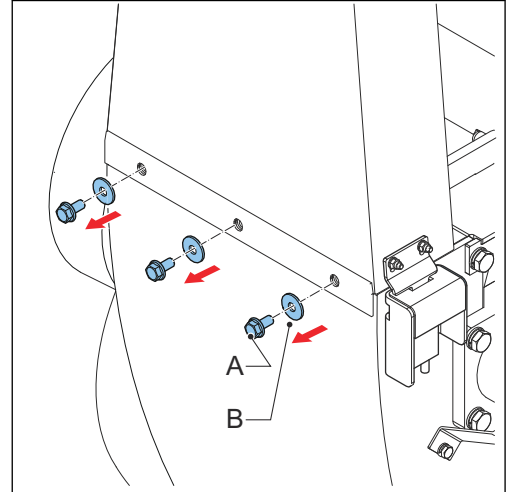
**Procedure**

1. Start the machine. Refer to section [5.3](#).
2. Do not put any material in the input.
3. Push the panic bar down.
  - a. The test is successful if the machine stops.
  - b. If the machine does not stop, there can be a problem with the detection of the input. Speak to your dealer.
4. Release the panic bar. Refer to section [5.7](#).

## 6.3 Do a detection test of the output

### Procedure

1. Remove the bolts (A) and the washers (B).
2. Start the machine and let it run idle. Refer to section 5.3.
3. Do not put any material in the input.

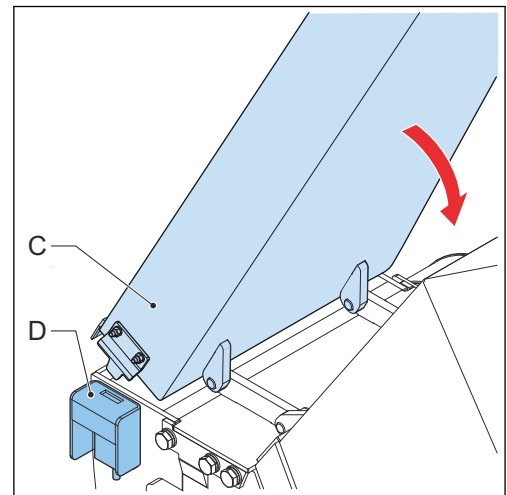


4. Tilt the output (C) until the locking key is removed from the safety lock switch (D).



**Caution:** Make sure that the machine fully stops.

5. The test is successful if the machine stops.
6. Tilt the output back.
7. Install the bolts and washers.



## 6.4 Clean the machine



**Caution:**  
Do not clean the machine with a high-pressure cleaner.

### Procedure

1. Remove wood chips and dust from the machine. Use a soft brush.

## 6.5 Do a check of the tension of the belts

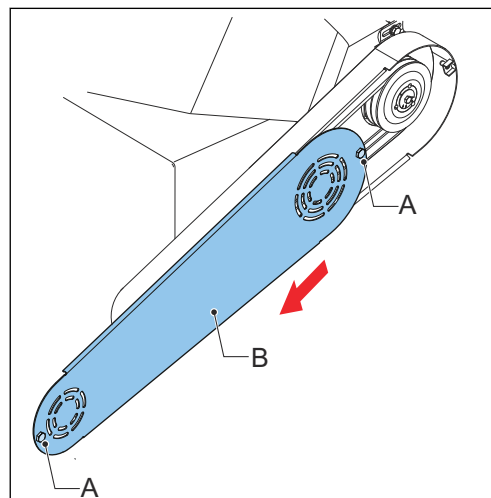
### Preliminary requirements



- Wrench size 10
- Alignment ruler

### Procedure

1. Loosen the bolts (A).
2. Move the cover (B) in the direction of the arrow.
3. Hold the alignment ruler against the front of the pulleys to see if they are aligned. Refer to section 6.10.  
The tension is correct if you can push the belt down approximately 2 - 2,5 cm with a force of 50 N.
4. If the tension is not correct, adjust the tension. Refer to section 6.9.4.
5. If the tension is correct, install the cover (B).



## 6.6 Replace the air filter

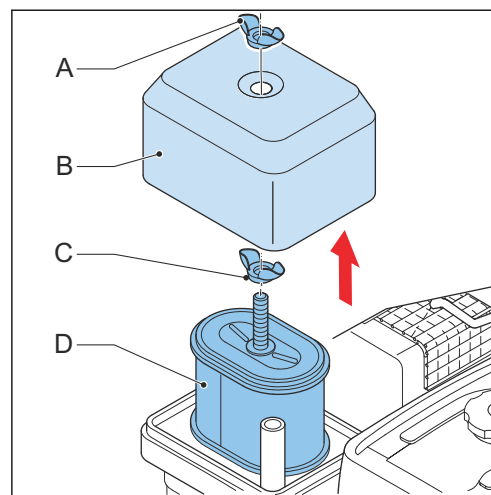
### Preliminary requirements



- Air filter. Refer to the OEM documentation of the engine for the exact type.

### Procedure

1. Remove the winged nut (A).
2. Remove the cover (B).
3. Remove the winged nut (C).
4. Clean the air filter (D).
5. Replace the air filter (D) with a new one.
6. Install the winged nut (C).
7. Install the cover (B).
8. Install the winged nut (A).



## 6.7 Fill the engine with oil

### Preliminary requirements



- Spout



- Engine oil

## Procedure

1. Stop the machine. Refer to section [5.5](#).

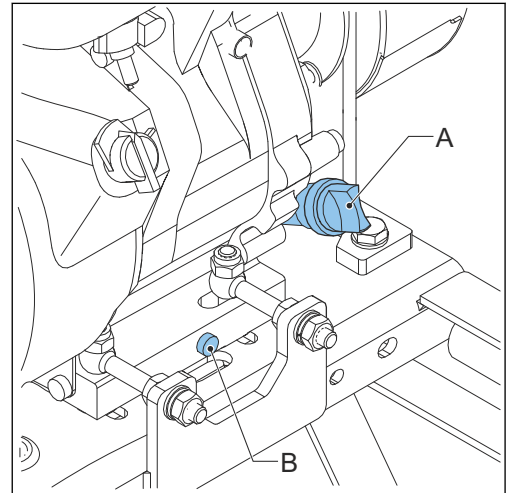


**Warning:**  
Make sure that the engine is still warm.



**Note:**  
For the exact location of the drain plug (B), refer to the OEM documentation of the engine.

2. Remove the drain plug (B).
3. Tilt the machine to drain all the engine oil.
4. Install the drain plug (B).
5. Remove the fill plug (A).
6. Fill the reservoir until the oil reaches the indicator on the plug.
7. Install the fill plug (A).



## 6.8

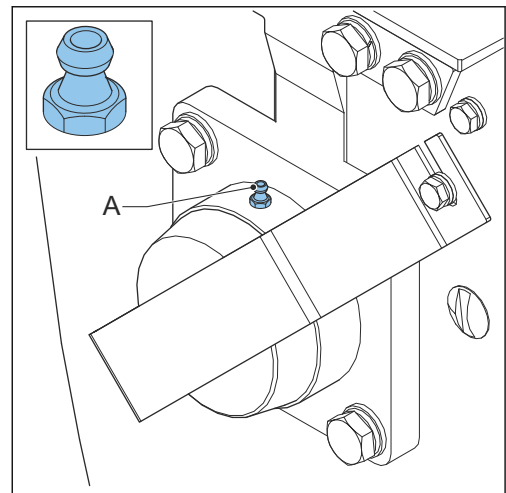
### Lubricate the bearing housing

## Preliminary requirements

	<ul style="list-style-type: none"> <li>• Grease pump</li> </ul>		<ul style="list-style-type: none"> <li>• Universal grease</li> </ul>
--	-----------------------------------------------------------------	--	----------------------------------------------------------------------

## Procedure

1. Clean the grease nipple (A).
2. Add grease through the grease nipple. Use the grease pump.
3. Remove excessive grease.
4. Repeat step 1 and step 2 for the grease nipple at the other side of the machine. Remove the belt cover for access. Refer to section [6.9.1](#).



## 6.9

### Replace the belts



**Caution:**  
Always replace the belts together.



### 6.9.1

#### Remove the cover

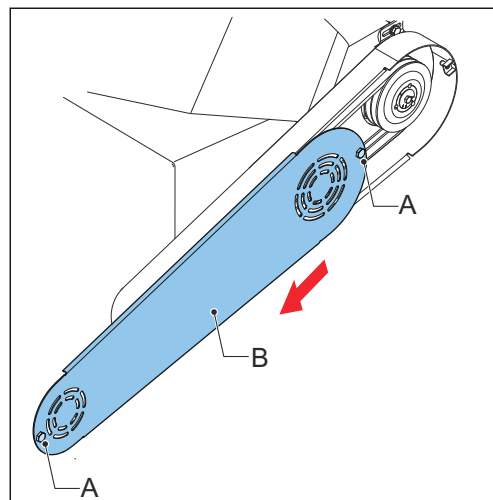
Preliminary requirements



- Wrench size 10

Procedure

1. Loosen the bolts (A).
2. Move the cover (B) in the direction of the arrow.



### 6.9.2

#### Remove the belts

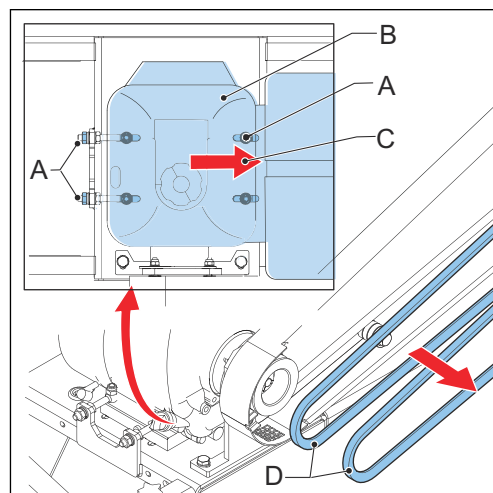
Preliminary requirements



- Wrench size 17

Procedure

1. Loosen the nuts (A) (6x) of the engine (B).
2. Move the engine in the direction of the arrow (C).
3. Remove and discard the belts (D).



### 6.9.3

#### Install the belts

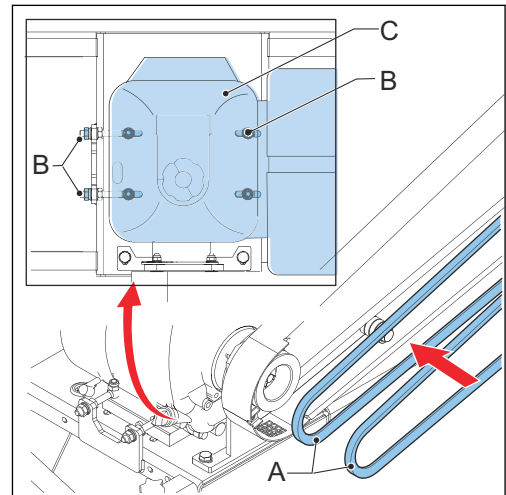
Preliminary requirements



- Belt. Refer to the spare parts list for the exact type.

#### Procedure

1. Install the new belts (A).
2. Adjust the nuts (4x) (B) to put the belts under tension.
3. Tighten the nuts (4x) (B) to fasten the engine (C).



### 6.9.4

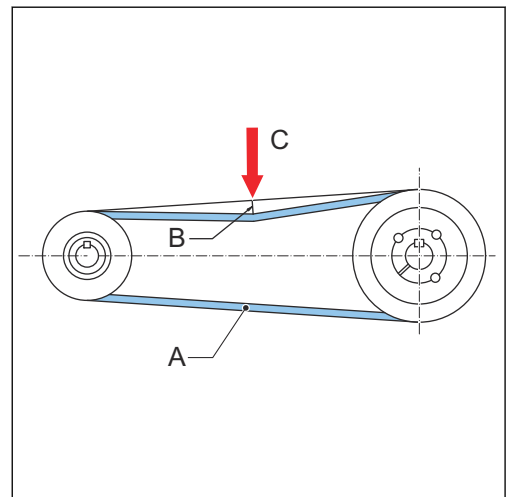
#### Adjust the tension

##### Preliminary requirements

	<ol style="list-style-type: none"> <li>1. The cover is removed.</li> </ol>		<ul style="list-style-type: none"> <li>• Wrench size 10</li> <li>• Wrench size 17</li> <li>• Alignment ruler</li> </ul>
--	----------------------------------------------------------------------------	--	-------------------------------------------------------------------------------------------------------------------------

#### Procedure

1. Hold the alignment ruler against the front of the pulleys to see if they are aligned. Refer to section [6.10](#).
2. The tension is correct if you can push the belt (A) down approximately 2 - 2,5 cm (B) with a force of 50 Nm (C).
3. Loosen the bolts of the engine to decrease the tension.
4. Tighten the bolts of the engine to increase the tension.
5. Install the cover.



### 6.9.5

#### Do a check for correct operation

##### Procedure

1. Start the machine. Refer to section [5.3](#).
2. Let the empty machine operate for 5 minutes.
3. Do a visual check for loose bolts.
4. Listen for unusual noise or vibrations.

## 6.10 Align the pulleys

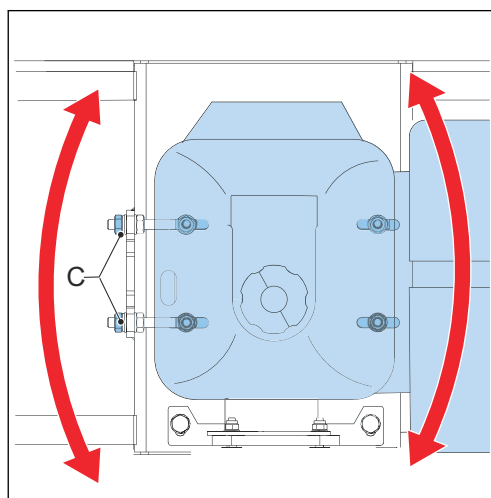
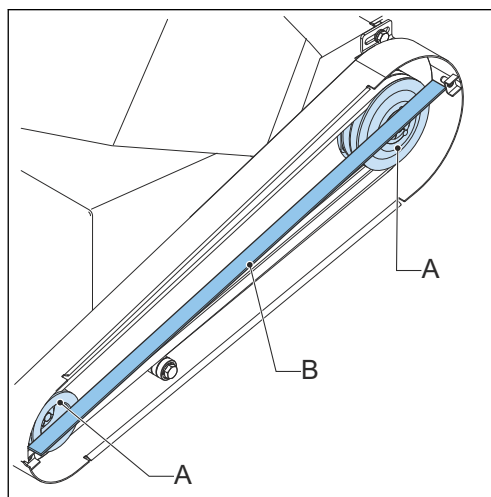
### Preliminary requirements



- Wrench size 17 (2x)
- Alignment ruler

### Procedure

1. Remove the cover of the belt. Refer to section [6.9.1](#).
2. Hold the alignment ruler (B) against the flat surface of both pulleys (A).
3. Do a check to see if there are gaps between the ruler and the pulley surfaces.
4. If there are gaps, use the nuts (C) to adjust the engine.
5. Repeat the steps 2, 3 and 4 until there are no gaps between the ruler and the pulley surfaces.
6. Put back the cover.



## 7 Corrective maintenance


**Note:**

Do the corrective maintenance procedures as required, or to solve a possible problem.

### 7.1 Do maintenance on the blades


**Warning:**

- Speak to your dealer for these procedures.
- Always wear cut resistant gloves when you do work on the blades.

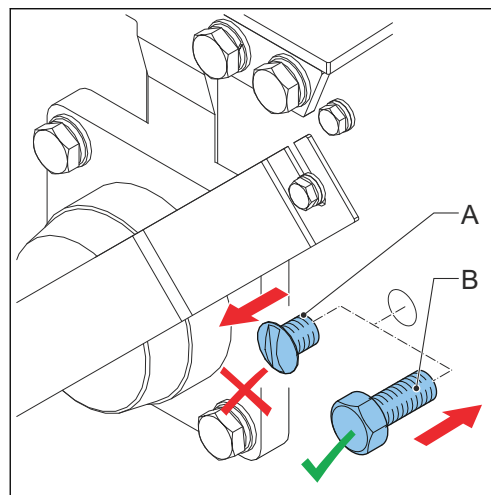
#### 7.1.1 Lock the rotor

##### Preliminary requirements

	<ol style="list-style-type: none"> <li>1. The machine is stopped.</li> <li>2. The input is removed.</li> <li>3. The output is removed.</li> </ol>		<ul style="list-style-type: none"> <li>• M12x30 locking bolt for the rotor</li> </ul>
	<ul style="list-style-type: none"> <li>• Flat-head screwdriver</li> <li>• Wrench size 19</li> </ul>		

##### Procedure

1. Make sure that you see the blades in the shredderbox.
2. Remove the plug (A).
3. Install the locking bolt (B) to lock the rotor.



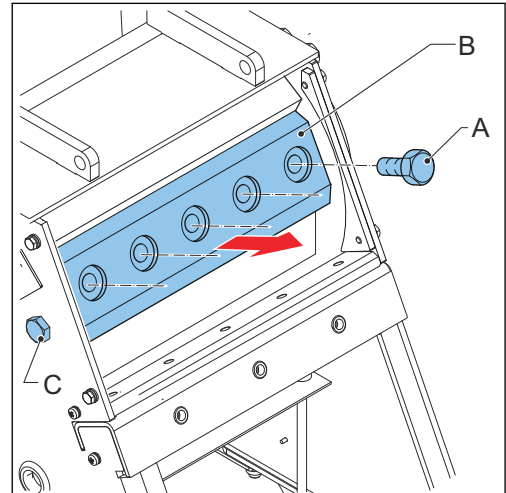
#### 7.1.2 Remove the blades

##### Preliminary requirements

	<ol style="list-style-type: none"> <li>1. The rotor is locked.</li> </ol>		<ul style="list-style-type: none"> <li>• Wrench size 17</li> </ul>
--	---------------------------------------------------------------------------	--	--------------------------------------------------------------------

#### Procedure

1. Remove the bolts (5x) (A).
2. Remove the blade (B).
3. Remove the locking bolt (C).
4. Repeat the procedure for the second blade.



### 7.1.3 Turn the blades

If one side of the blade is dull, you can turn the blade around to the sharper side.

#### Preliminary requirements

	<ol style="list-style-type: none"> <li>1. The blades are removed.</li> </ol>
--	------------------------------------------------------------------------------

#### Procedure

1. Clean the surface of the blade and the blade holder.
2. Turn the blade around to the sharper side.
3. Repeat step 1 and step 2 for the second blade.
4. If both sides of the blade are dull, sharpen or replace the blade. Refer to section [7.1.4](#).
5. Install the blades. Refer to section [7.1.5](#).

### 7.1.4 Sharpen the blades



**Warning:**  
Do not sharpen a damaged blade.



**Caution:**  
Make sure that the blade doesn't become overheated during sharpening. This can cause damage to the steel.



**Note:**

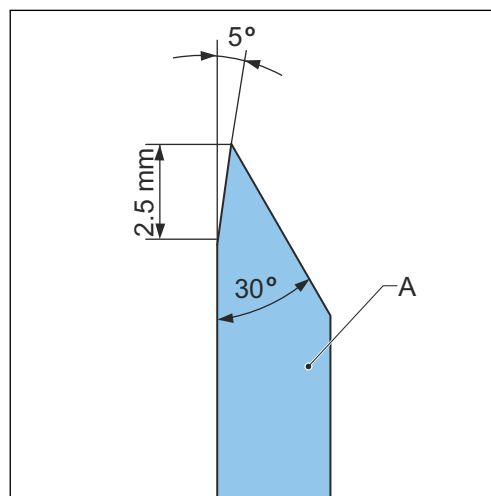
- Blades must be sharpened by a professional.
- A blade can be sharpened 0,5 mm to a maximum of 3 times. After that, the blade has to be replaced.

#### Preliminary requirements

	<ol style="list-style-type: none"> <li>1. The blade is removed</li> </ol>
--	---------------------------------------------------------------------------

## Procedure

1. Sharpen the blade (A) to a maximum of 0.5 mm.
2. Make sure that you comply with the indicated angles.
3. Install the blade. Refer to section [7.1.5](#)



## 7.1.5

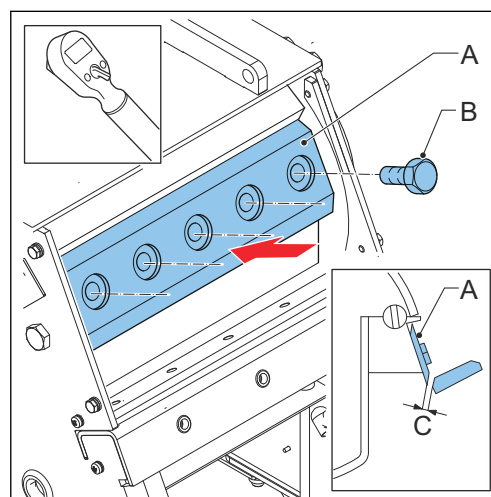
## Install the blades

## Preliminary requirements

	<ul style="list-style-type: none"> <li>• Torque wrench</li> </ul>		<ul style="list-style-type: none"> <li>• Blade (2x). Refer to the spare parts list for the exact type.</li> </ul>
	<ul style="list-style-type: none"> <li>• Loctite 243</li> </ul>		<ul style="list-style-type: none"> <li>• Wear cut resistant gloves.</li> </ul>

## Procedure

1. Put on cut resistant gloves.
2. Clean the surface of the blade and the blade holder.
3. Install the blade (A).
4. Apply Loctite 243 to the bolts (5x) (B).
5. Install the bolts. Apply a torque of 80 Nm.
6. Do a check if the gap (C) between the blade and the counter blade is 0.5 mm.
7. If necessary, adjust the gap. Refer to section [7.1.6](#).
8. Repeat the procedure for the second blade.



## 7.1.6

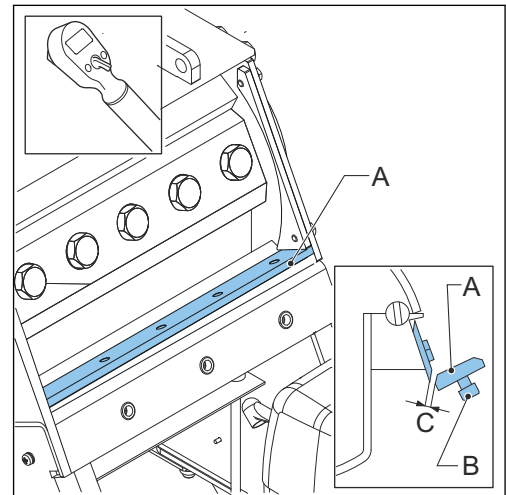
## Adjust the gap

## Preliminary requirements

	<ul style="list-style-type: none"> <li>• Allen wrench size 8</li> </ul>
--	-------------------------------------------------------------------------

Procedure

1. Loosen the bolts (B) (5x).
2. Adjust the position of the counter blade (A).
3. Make sure that the gap (C) is 0.5 mm.
4. Tighten the bolts (B).
5. Check the gap again. If necessary, repeat steps 1 to 4.
6. If the gap (C) is correct, tighten the bolts (B). Apply a torque of 50 Nm.



## 7.1.7

### Finish

Procedure

1. Remove the locking bolt.
2. Install the plug.
3. Install the input. Refer to section [4.1](#).
4. Install the output. Refer to section [4.2](#).

## 7.2

### Do maintenance on the engine

1. Do maintenance on the engine. Refer to the OEM documentation of the specific engine of your machine.

## 7.3

### Remove a blockage



**Warning:**

- Never use your hands to remove wood chips between the blades. Always use a branch or tool.
- Do not touch the blades. The blades are very sharp and could cause serious injuries.

Procedure

1. Follow the procedures in this section in the given sequence to remove a blockage.

### 7.3.1

#### Do a visual check

Procedure

1. Do a visual check for large objects in the input or output.
2. If you see large objects, remove them.

### 7.3.2

#### Remove the output

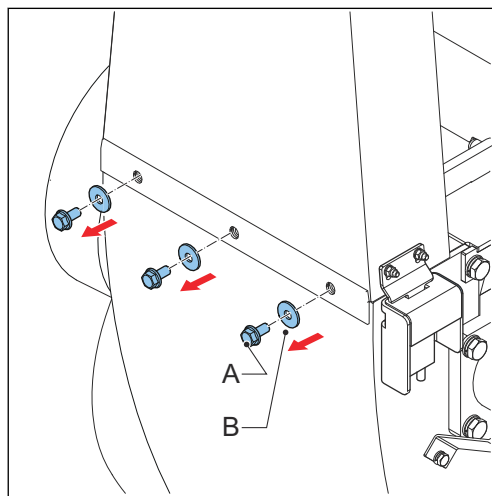
Preliminary requirements



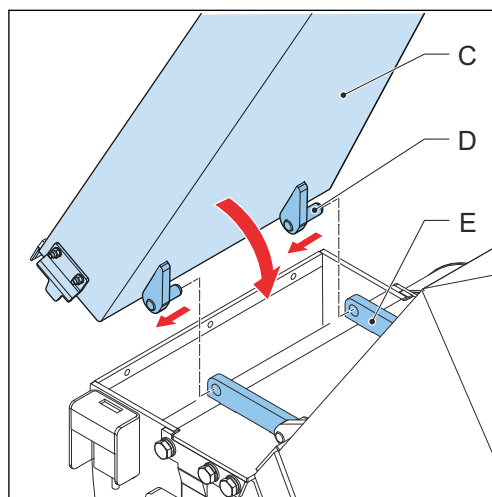
- Wrench size 13

## Procedure

1. Remove the bolts (A) and the washers (B).



2. Tilt the output (C).
3. Remove the hinges (D) from the holes (E).
4. Remove the output.



## 7.3.3

## Remove the input

**Note:**

Two persons are required to remove the input. The input is heavy.

## Preliminary requirements

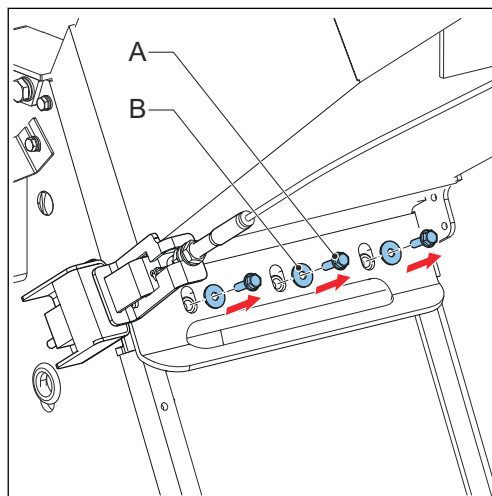


- Wrench size 13

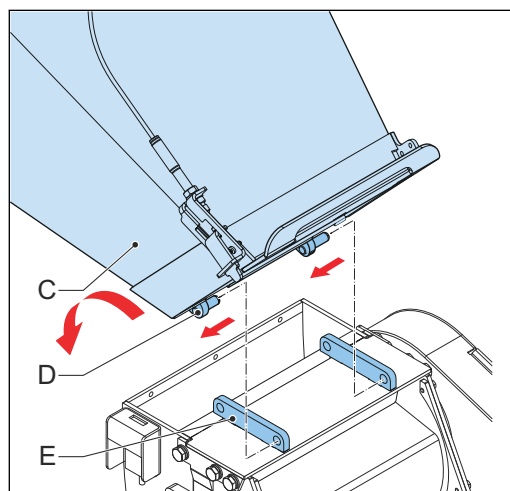


#### Procedure

1. Remove the bolts (A) and the washers (B).



2. Tilt the input (C).
3. Remove the hinges (D) from the holes (E).
4. Remove the input.



### 7.3.4 Remove the blockage

#### Procedure

1. Remove all material from inside the input and the output.
2. Remove all material on top of the rotor.
3. Use the rotor deblocking tool to remove wood chips from the rotor. Refer to section [7.3.5](#).

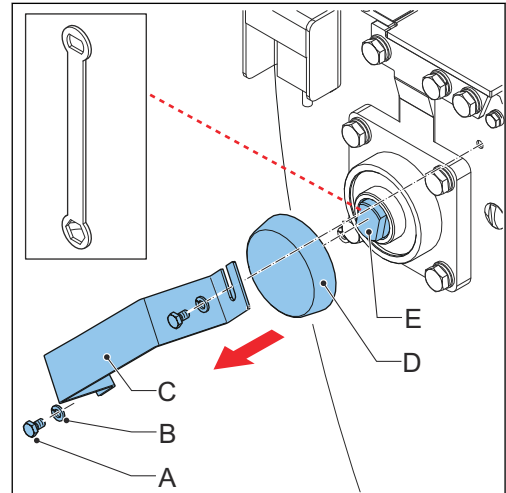
### 7.3.5 Use the rotor deblocking tool

#### Preliminary requirements

	<ul style="list-style-type: none"> <li>• Rotor deblocking tool</li> <li>• Wrench size 10</li> </ul>
--	-----------------------------------------------------------------------------------------------------

#### Procedure

1. Remove the bolts (A) and the washers (B).
2. Remove the bracket (C).
3. Remove the cover (D).
4. Move the rotor deblocking tool over the shaft of the rotor (E).
5. Move the tool to remove the wood chips.



### 7.3.6

#### Finish

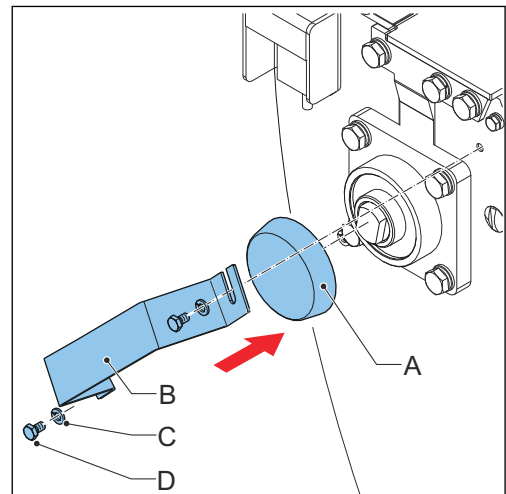
##### Procedure

1. Install the cover (A).
2. Install the bracket (B).
3. Install the bolts (D) and the washers (C).
4. Install the input. Refer to section [4.1](#).
5. Install the output. Refer to section [4.2](#).



**Caution:**  
A blockage can cause damage to the blades.

6. If the blades are damaged after a blockage, replace them. Refer to section [7.1](#).



### 7.4

#### Replace a safety sign



##### Note:

For an overview of the location of the safety signs, refer to section [2.4](#).

1. Remove and discard the damaged or worn safety sign.
2. Clean the surface.
3. Install the new safety sign.

## 8 Troubleshooting

### 8.1 General troubleshooting procedure

1. Try to find a solution for the problem with the help of the troubleshooting table.
2. If you cannot find a solution for the problem, speak to your dealer. Refer to section [1.4](#).

### 8.2 Troubleshooting table

Problem	Possible cause	Possible solution
The machine does not automatically pull in the material.	The blades are worn.	Do maintenance on the blades. Refer to section <a href="#">7.1</a> .
	The diameter of the material is too large.	Do not chip thick material. Refer to section <a href="#">9.2</a> .
The wood chips from the output have different sizes.	The gap between the blade and the counter blade is too large.	Adjust the gap. Refer to section <a href="#">7.1.6</a> .
The engine does not start.	The engine has a fault.	Make sure that: <ul style="list-style-type: none"> <li>• The engine switch is set to the ON position.</li> <li>• The panic bar is released. Refer to section <a href="#">5.8</a>.</li> <li>• The safety lock switches on the input and the output are activated.</li> <li>• The rotor is not locked.</li> </ul>
	The fuel level is too low.	Fill the fuel tank. Refer to section <a href="#">5.2</a> .
	The fuel tap is closed.	Open the fuel tap.
	The oil level is too low (only if the machine has an oil sensor.)	Replace the engine oil. Refer to section <a href="#">6.7</a> .
	The rotor has a blockage.	Remove the blockage. Refer to section <a href="#">7.3</a> .
	There are unwanted objects in the input, such as stones or metal.	
	The output has a blockage.	
There is no output (wood chips) from the machine.		

## 9 Technical specifications

### 9.1 General specifications

For an overview of the specifications of the engine of your machine, refer to the OEM documentation.

**Table 1: Wood chipper**

Item	Specification
Chipping method	Drum chipper
Blade types	Double grinded blades (2x)
Blade bolt tension [Nm]	80
Counterblade	Yes
Counterblade bolt tension [Nm]	50
Blade gap [mm]	0.5 - 1.0
Rotation speed rotor [RPM]	2200
Rotation speed engine [RPM]	3200

**Table 2: Machine**

Item	Specification
Input height [cm]	103
Input opening dimensions	
width [cm]	50
height [cm]	35
Output height [cm]	160
Output direction	Side
Deflector	85° adjustable
Safety items	<ol style="list-style-type: none"> <li>1. Rotor blocking system</li> <li>2. Panic bar</li> <li>3. Safety lock switch (2x)</li> </ol>
Wheels	
diameter [cm]	39
width [cm]	12.5
tire pressure [bar]	1.8 - 2.45
Transmission	Double V-belts
Dimensions - complete machine	
length [cm]	155
width [cm]	77
height [cm]	160
Weight - complete machine [kg]	189
Sound power level [L <sub>WA</sub> ]	120 dB (A)

Item	Specification
Compliant with Machinery Directive	Yes
Accessories	1. Turnable output 2. Towbar 3. Bumper support 4. Small wheels

## 9.2 Material specifications

Item	Specification
Max. diameter material [cm]	10
Max. length material [cm]	240
Fresh cut wood	Allowed
Roots, cleaned	
Stone	Not allowed
Glass	
Metal	
Plastic	

## 9.3 Engine specifications

Table 3: Loncin G420F

Item	Specification
Power	11.02 kW/3600rpm
Weight [kg]	34
Dimensions	
length [mm]	450
width [mm]	405
height [mm]	443
Capacity of fuel tank [l]	6.5

Table 4: Loncin G390F

Item	Specification
Power	9.56 kW/3600rpm
Weight [kg]	34
Dimensions	
length [mm]	450
width [mm]	405
height [mm]	443
Capacity of fuel tank [l]	6.5

**Table 5: Mitsubishi GB40**

Item	Specification
Power	9.56 kW/3600rpm
Weight [kg]	31
Dimensions	
length [mm]	435
width [mm]	450
height [mm]	450
Capacity of fuel tank [l]	6.0

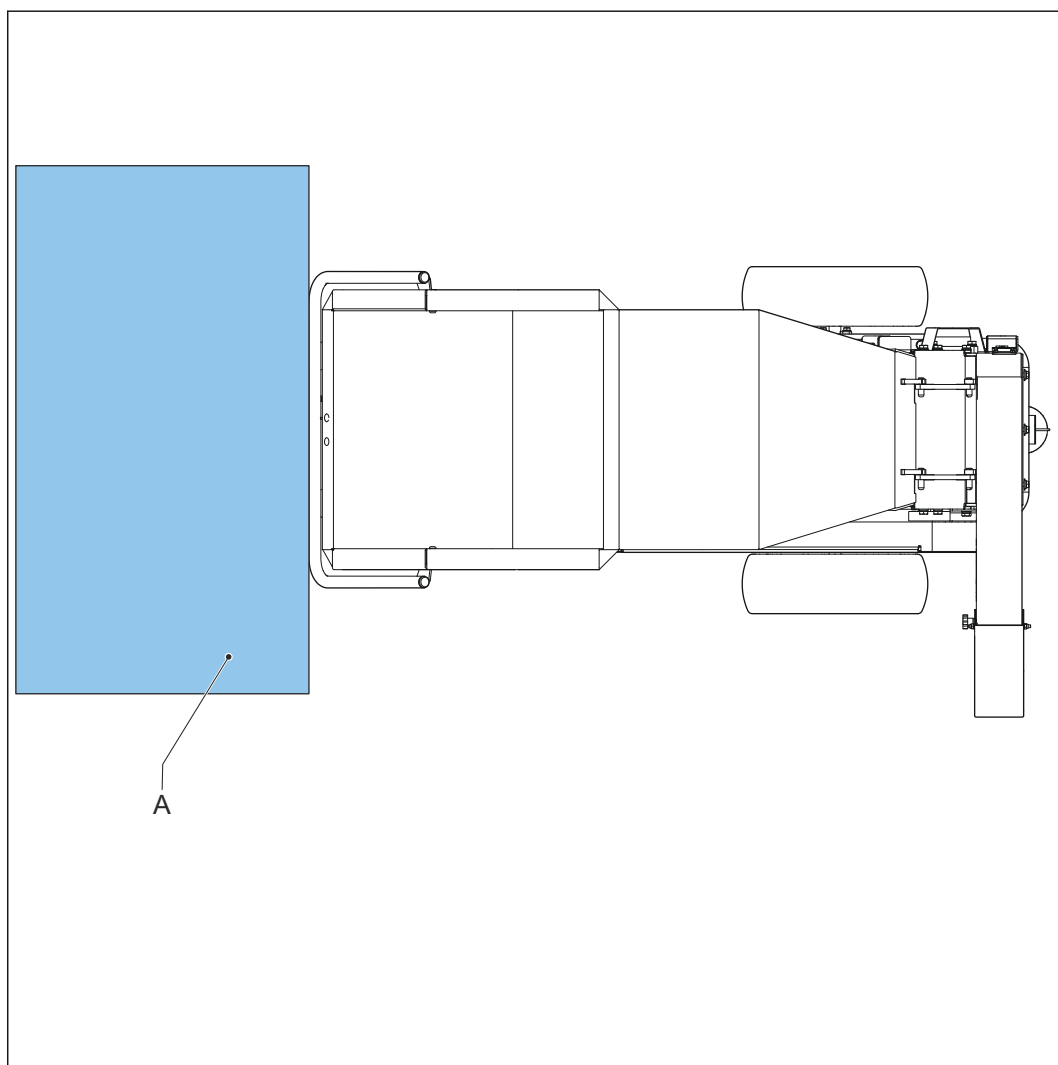
**Table 6: Loncin G420FD e-start**

Item	Specification
Power	11.03 kW/3600rpm
Weight [kg]	36
Dimensions	
length [mm]	450
width [mm]	405
height [mm]	443
Capacity of fuel tank [l]	6.5

**Table 7: Loncin G390FD e-start**

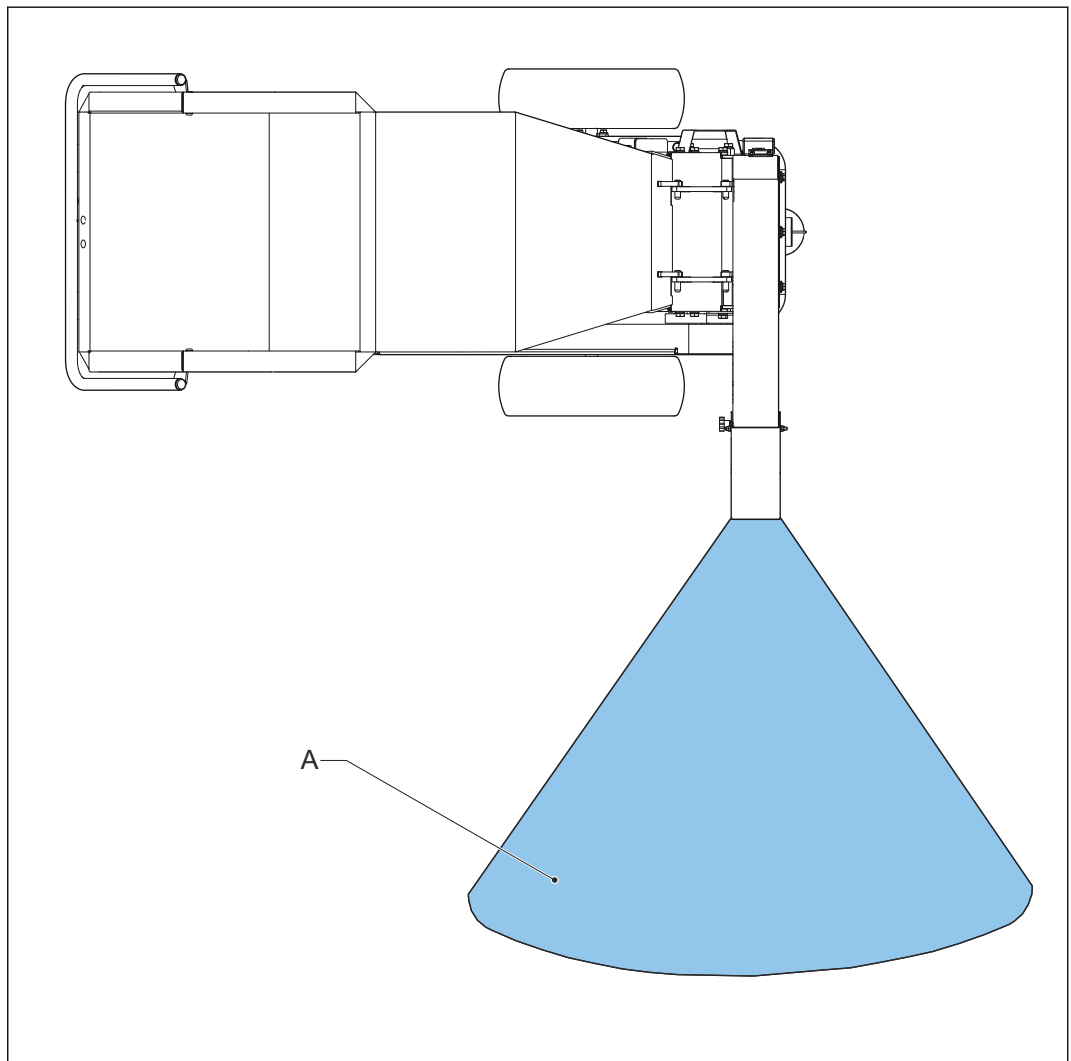
Item	Specification
Power	9.56 kW/3600rpm
Weight [kg]	36
Dimensions	
length [mm]	450
width [mm]	405
height [mm]	443
Capacity of fuel tank [l]	6.5

## 9.4 Working area



- A Working area to control the machine,  
1 meter wide.

## 9.5 Danger area



- A Danger area: area on which the chipped material falls down. Radius is 12 meter.



- A** Spark plug
- B** Ignition coil
- C** SW1 panic bar detection input
- D** SW2 detection output
- E** Engine on/off switch
- F** Earth / ground





