

# Working Instructions Translation

**WIDOS Circular power hand saw  
with guide chain type 35**



Keep for further use!

## Identification of product

---

Type / Model:

WIDOS Circular power hand saw with guide chain type 35

Serial number, year of construction:

see type plate

### Customer entries

Inventory-no.:

Place of working:

### Order of spare parts and after sales service:

#### Address of manufacturer

#### WIDOS

W. Dommer Söhne GmbH  
Einsteinstr. 5

D -71254 Ditzingen

Phone: ++49 71 52 99 39 0

Fax: ++49 71 52 99 39 40

E-Mail: [info@widos.de](mailto:info@widos.de)

### Purpose of the document

These working instructions give you information about all important questions which refer to the construction and the safe working of your machine.

Just as we are, you are obliged to engage in these working instructions, as well.

Not only to run your machine economically but also to avoid damages and injuries.

Should questions arise, contact our service team in the factory or in our subsidiary companies.

We will help you with pleasure.

According to our interest to continuously improve our products and working instructions, we kindly ask you to inform us about problems and defects which occur in exercise.

Thank you.

### Structure of the Working Instructions

This manual is arranged in chapters, which belong to the different using phases of the machine.

Therefore the searched information can be easily found.



©5/6/2019 **WIDOS**

W. Dommer Söhne GmbH  
Einsteinstraße 5  
D-71254 Ditzingen

All rights reserved

Reprinting only allowed with permission of the corporation.

Any changes are subject to technical innovations.

# Contents

<b>1. DESCRIPTION OF THE PRODUCT</b> .....	<b>5</b>
1.1. Application and prescribed use .....	5
1.2. Conformity .....	5
1.3. Designation of the product .....	5
1.4. Technical data .....	5
<b>2. SAFETY RULES</b> .....	<b>6</b>
2.1. Explanation of the different symbols .....	6
2.2. Obligations of the owner .....	7
2.3. Obligations of the worker .....	7
2.4. Measures of organization .....	7
2.5. Information about safety precautions .....	7
2.6. Instructions for the staff .....	7
2.7. Dangers while handling the machine .....	8
2.8. Warranty and liability .....	9
2.9. Extension cable and stand-by unit .....	9
<b>3. OPERATING ELEMENTS</b> .....	<b>10</b>
<b>4. STARTING AND OPERATING</b> .....	<b>12</b>
4.1. Operating .....	12
4.1.1 How to tension the pipe and the chain .....	12
4.1.2 How to adjust the saw on pipe diameter .....	13
4.1.3 How to put the saw on the chain guide .....	13
4.1.4 How to set the cutting depth .....	14
4.1.5 Cutting .....	14
4.2. How to extend the chain (when using system chains) .....	15
4.2.1 Extend chain for pipes with OD 710 mm until OD 1200 mm .....	15
4.2.2 Extension of the chain for pipes with OD 1400 mm until OD 1600 mm .....	16
<b>5. STORING / MAINTENANCE / EXCHANGE OF THE SAW BLADE</b> .....	<b>17</b>
5.1. Storage .....	17
5.2. Maintenance .....	17
5.3. How to change the saw blade .....	17
<b>6. SPARE PARTS LIST</b> .....	<b>22</b>
<b>7. DECLARATION OF CONFORMITY</b> .....	<b>23</b>

# 1. Description of the product

This chapter gives important basic information about the product and its prescribed use. All technical details of the machine are put together as a general arrangement.

## 1.1. Application and prescribed use

The **circular power hand saw with guide chain type 35** is designed exclusively to cut plastic pipes with outside  $\varnothing =$  (mm) 500 / 560 / 630 / 710 / 800 / 900 / 1000 / 1100 / 1200 / 1400 / 1600 / 2000 / 2400 / 2600 / 2800 / 3000 / 3200 / 3500 mm (depending on the length of the chain).

All use going beyond is not prescribed.

The manufacturer is not responsible for damages caused by misuse.

The risk is held only by the user.

Prescribed use also means:

- respecting all indications of this manual
- performing the inspection and repair work.

## 1.2. Conformity

The machine corresponds in its construction to the valid recommendations of the European Community as well as to the according European standard specifications.

The development, manufacturing and mounting of the machine were made very carefully.

## 1.3. Designation of the product

The product is designated by a type label at the base.

It contains the type of the machine, the serial number and the year of construction.

## 1.4. Technical data

Voltage	230 V
Frequency	50 / 60 Hz
Current draw:	12,4 A
Power	2,3 kW
Saw blade speed:	2200 rpm
Fuse protection	16 A, delay fuse
Circular saw blade:	350 x 5,0 x 3,2 x 30mm; Z = 20+2+2 FZ
Depth of immersion:	110 mm
Weight without chain:	appr. 16 kg
Emission:	Noise level may exceed 80 dB (A) during cutting. Ear protection is obligatory!

## 2. Safety rules

The base for the safe handling and the fault-free operation of this machine is the knowledge of the basic safety indications and rules.

- These working instructions contain the most important indications to run the machine safely.
- The safety indications are to be followed by all persons working on the machine.

### 2.1. Explanation of the different symbols

In the working instructions, following denominations and signs are used for dangers:



- This symbol means a possible danger for the life and the health of persons.
- The disrespect of these indications may have heavy consequences for the health.



- This symbol means a possible dangerous situation.
- The disrespect of these indications may cause light injuries or damages on goods.



- This symbol means a possible risk of saw dust.
- Protective goggles is obligatory.



- This symbol means a possible risk of injury by noise exceeding 80 dB(A).
- Ear protection is obligatory



- This symbol gives important indications for the proper use of the machine.
- The disrespect of these indications may conduct to malfunctions and damages on the machine or on goods in the surrounding.



- Under this symbol you get user tips and particularly useful information.
- It is a help for using all the functions on your machine in an optimal way and helps you to make the job easier.

**The regulations for prevention of accidents are valid (UVV).**



- Read these working instructions carefully.
- In case of damages caused by not following these instructions your guarantee expires.
- For thus resulting consequential damages we accept **no** liability.

## 2.2. Obligations of the owner

The owner is obliged only to let persons work at the machine, who

- know about basic safety and accident prevention rules and are instructed in the handling of the machine
- have read and understood the safety chapter of this manual and certify this by their signature.

***The safety-conscious working of the staff has to be checked in regular intervals.***

## 2.3. Obligations of the worker

All persons who are to work at the machine are obliged before working:

- to follow the basic safety and accident protections rules.
- to have read and understood the safety chapter and the warnings in this manual and to confirm by their signature that they have well understood them.
- to inform themselves about the functions of the machine before using it.

## 2.4. Measures of organization

- All equipment required for personal safety is to be provided by the owner.
- In addition to the manual, the common valid and the local accident protection rules and regulations for the environmental protection must be available and followed.

## 2.5. Information about safety precautions

- The working instructions are to be permanently kept at the place of use of the machine. They are to be at the operator's disposal at any time and without much effort.
- In addition to the working instructions, you are to provide and observe the generally accepted as well as local regulations for accident prevention and environmental protection.
- All available safety equipment is to be inspected regularly.
- Every time the machine changes hands or is being rent to third persons, the working instructions are to be sent along with and their importance is to be emphasized.

## 2.6. Instructions for the staff

- Only skilled and trained persons are allowed to work at the machine.
- It must be clearly defined who is responsible for transport, mounting and dismounting, and starting the operation.
- A person who is being trained may only work at the machine under supervision of an experienced person.

## 2.7. Dangers while handling the machine

The **WIDOS Circular power hand saw with guide chain type 35** is constructed according to the latest technical standard and the acknowledged technical safety rules.

However, dangers for the operator or other persons standing nearby may occur.

Also material damages are possible.

The machine may only be used:

- according to the purpose-oriented usage
- in safety technical impeccable status

***Disturbances which may affect the safety of the machine must be cleared immediately.***



**The following general safety instructions must be absolutely observed when working with electric tools!**

- Protect electric tools from humidity (e.g. rain)!
- Do not use in the vicinity of inflammable liquids or gases.
- Do not use the cable for any other purposes! Do not use the power cable to carry the tool. Do not pull the plug out of the electric socket at the cable. Protect the cable from heat, oil and sharp edges!
- Remove the power plug whenever the tool is not in use.
- Use only approved and respectively marked extension cables.
- Check your machine on damages before starting the sawing operation!
- The working area must be kept clean. Lack of tidiness in the working area can lead to accidents.
- Keep visitors away.
- Damaged parts may only be inspected and changed by the **WIDOS** company or an authorized service partner.
- **Never** remove remaining parts near the saw blade with your fingers.
- The machine has to be switched off and the cable plug has **necessarily** to be unplugged before any fault clearance, repair or maintenance work.
- A working area around the machine without obstacles and a nonslip planar floor is of basic importance for a safe operation.
- The working area must be well lightened and free of waste (cuttings, remaining parts).
- Wear tight-fitting clothes during the work.
- Keep handles dry and free of grease and oil.
- Do not wear finger-rings, bracelets, etc.
- If you have long hair, wear a hair net.



- During sawing it is obligatory to wear protection goggles!
- During sawing it is obligatory to wear ear protection!



- Take care that nobody has to step over the electric cable.

- Any unauthorized modification on devices relevant to safety is forbidden.



**The crankcase and the swivel bearing may only be opened by an authorized service partner (torsion spring in the inside is under high pressure!).**

## 2.8. Warranty and liability

Fundamentally our „general sales and delivery conditions“ are valid.

They are at the owner's disposal latest when signing the contract.

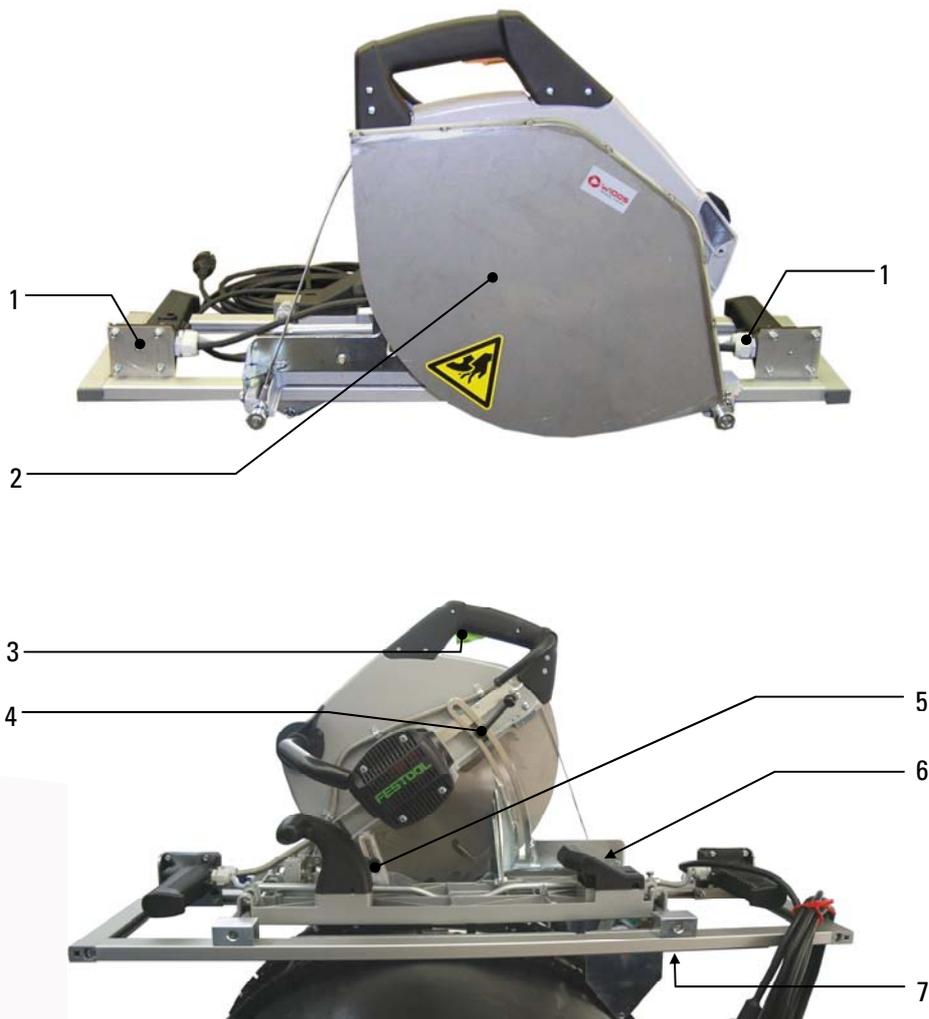
Guarantee and liability demands referring to personal injuries or damages on objects are excluded if they are caused by one or several of the following reasons:

- not using the machine according to the prescriptions
- inexpert transport, mounting, starting, operating, and maintenance of the machine
- running the machine with defective or not orderly mounted safety appliances
- ignoring the information given in this manual
- structural modifications on the machine without permission
- unsatisfactory checking of parts of the machine which are worn out
- repairs performed in an inexpert way
- in case of catastrophes and force majeure

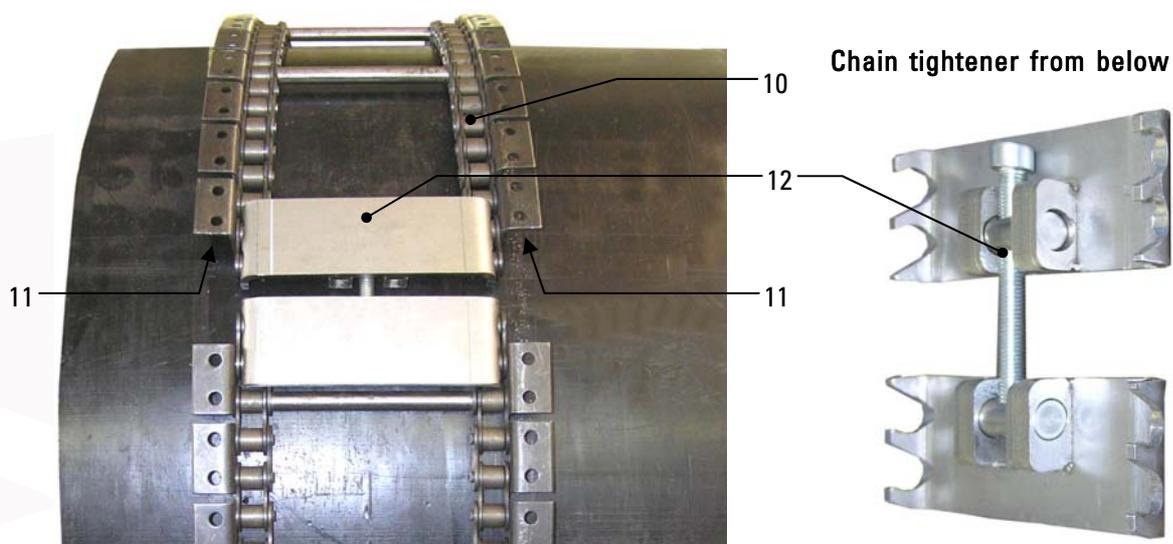
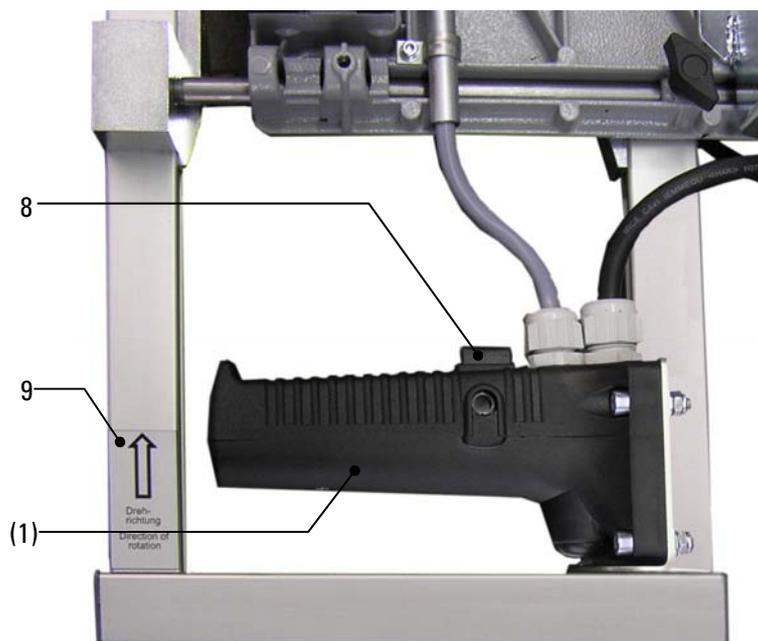
## 2.9. Extension cable and stand-by unit

- Only use a **not winded-up** extension cable with a cross section of 3x1.5 mm<sup>2</sup>, max. 20 m (3x 2.5 mm<sup>2</sup>, max. 50 m). At outdoor usage, only use approved and respectively marked extension cables.
- Connection to stand-by unit: minimum power 5 kVA.

### 3. Operating elements



No.	Denomination / Function
1	Handle to guide the saw (on both sides)
2	Saw blade cover, providing protection against injuries
3	Push-button to activate the saw motor
4	Lever to lock the cutting depth
5	Detent to plunge into the pipe. <b>Important</b> → after fixing the cutting depth, the detent must be released again
6	Locking bolt, keeping the saw blade in lowered position
7	Scale to set the pipe diameter (on both sides)



No.	Denomination / Function
8	Push-button to activate the saw motor, available on both handles same as puschbutton position no. 3.
9	Sticker indicating the sawing direction
10	Guide chain (fitting to the pipe OD / system chain)
11	Lead-in of the guide carriage
12	Chain tightener as far as possible to be attached to the upper side of the pipe

## 4. Starting and operating



The pipe must be solid and not deformed during the sawing operation.



In order to achieve a clean and satisfactory cut, the sawing operation of large pipe diameters should be done by 2 persons.

### 4.1. Operating



Risk of accident upon using the device with incorrect electrical current input from the power supply.

- Make sure that the indication on the type label of the machine matches the voltage of the energy source.

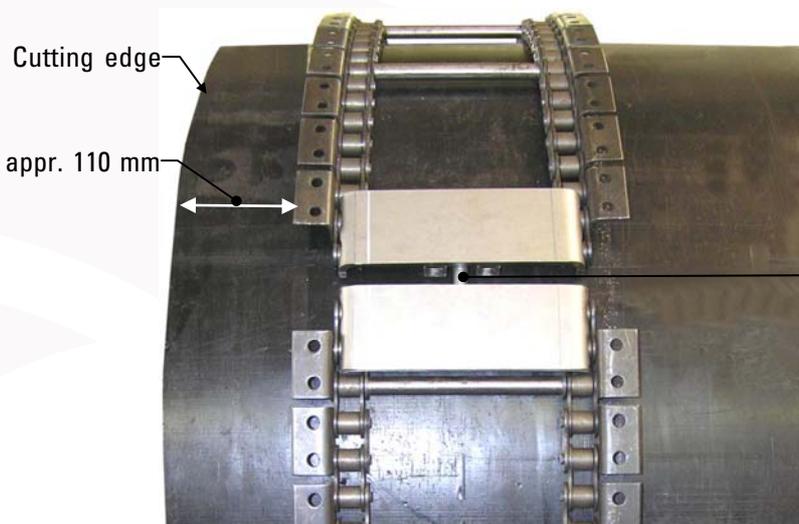


- The sound pressure level is higher than 80 dB (A). Therefore an officially approved **ear protector** must be worn.

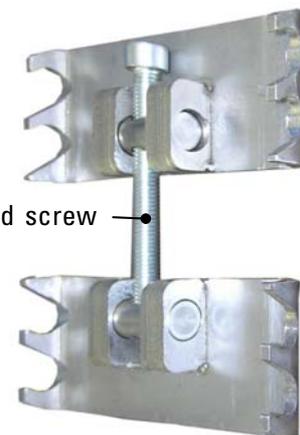


- Wear **protective goggles** in order to protect your eyes against the chips.

#### 4.1.1 How to tension the pipe and the chain



Chain tensioner from below



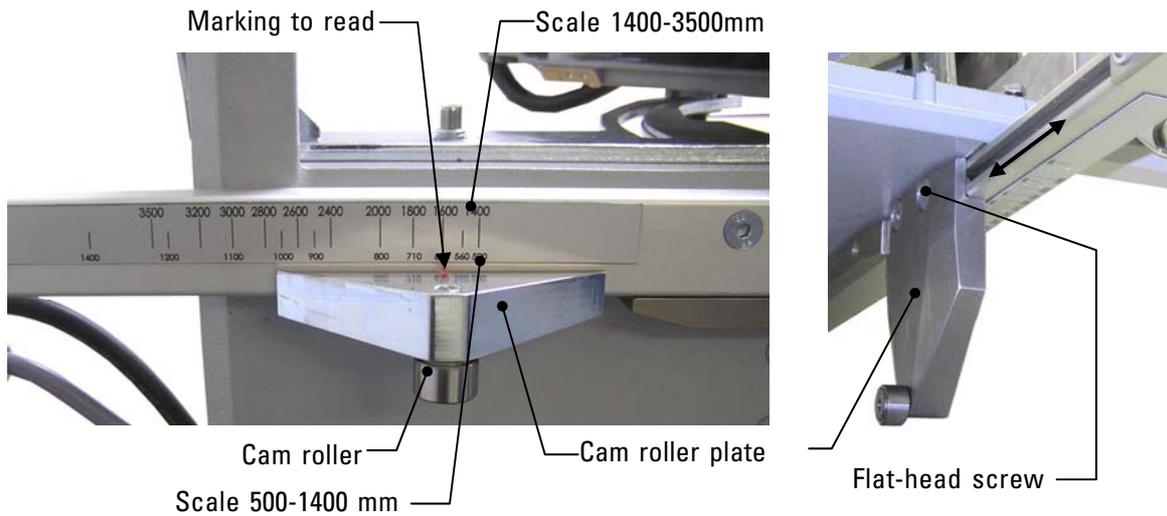
Pan-head screw

- Clamp the pipe firmly. As support use a pedestal.
- Place the chain with the requested cutting surface with a distance of approx. 110 mm onto the fix part of the pipe.
- The ends of the chain must be at the upper side of the pipe.
- Hang in the chain tightener with its claws into the link plates at the end of the chain.
- Tighten the chain at the joint by means of the pan-head screw making sure that the chain can still move around the pipe.
- Adjust the chain on a straight line around the pipe.
- Now tighten the pipe firmly.

### 4.1.2 How to adjust the saw on pipe diameter

With the cam rollers at the bottom of guides set the saw on the pipe diameter.

- Loosen the flat head screws and move the cam roller onto the right diameters at the scale.
- Tighten the flat head screws in this position.
- Perform this on both guides.



**There are two sizes of the cam roller plates.**

The small cam plate for pipe diameters with 500 mm up to 1400 mm is set with the inner scale.

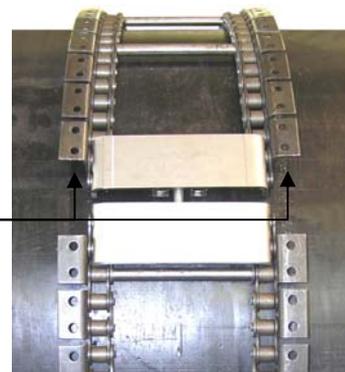
The large cam plate for pipe diameters with 1400 mm up to 3500 mm is set with the outer scale.

- Detach the two flat-head screws and the cam roller plate.
- Mount the other cam roller plate to the frame by the two flat-head screws according to the image above.

### 4.1.3 How to put the saw on the chain guide

- Put the rollers into the gap of the chain.
- Move the saw on the chain. The guide carriage must be easily movable.

Cam rollers insert here



- Turn the locking (C) down until it plunges into the chain. So you can fix the saw in chain.
- Lay the connection cable around the pipe. The plug should be at the side of the fixed part of the pipe in order to avoid a damage of the cable.

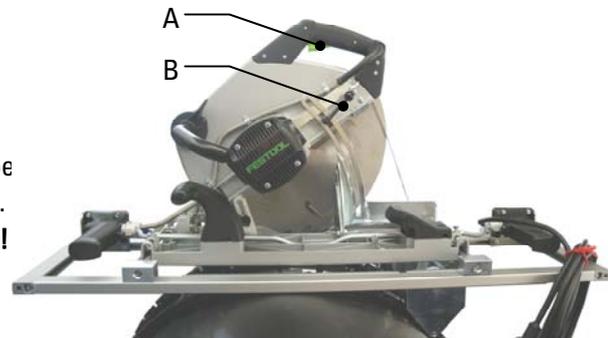


Make sure that the cable is long enough.

- Plug in the cable at a plug box (230 V / 50 Hz / fuse protection 16 A delay fuse).

### 4.1.4 How to set the cutting depth

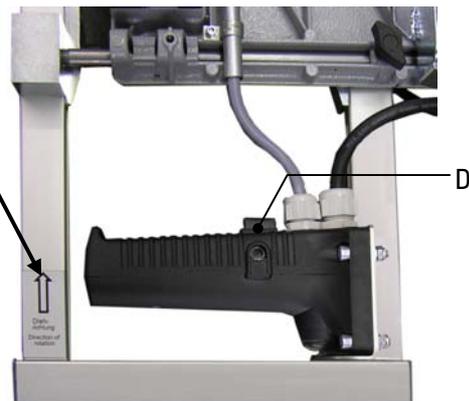
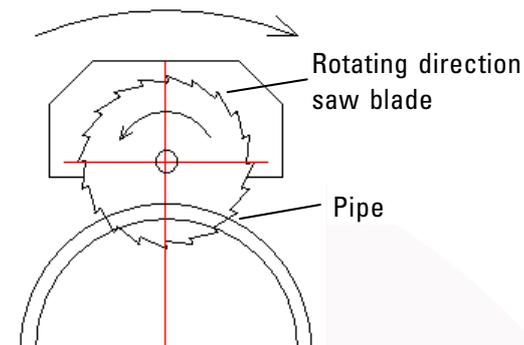
- Activate the saw by button <A> and keep the button pressed.
- Release the locking lever (B).
- Lower the saw with running cutting blade downwards to the pipe and cut a grade into the pipe until the locking bolt (E) snaps in the lower position.
- **Now tighten the locking lever (B) again properly!**



### 4.1.5 Cutting

- Cutting must be carried out in **counter direction**. The cutting direction is indicated next to the handle.

Advance direction during cutting



- Release the detent <C> in order to cut.

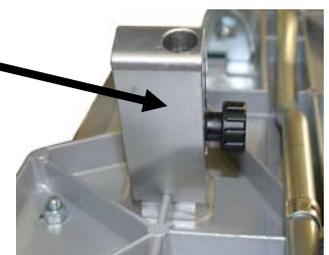


Saw in **reverse rotation**.

Otherwise you run the risk of an unexpected saccadic movement onwards into sawing direction and of injuries.

- Keep the button <A> or an other button <D> pressed.
- Pull the cutting device constantly around the pipe with appropriate speed.
- Release button <A> or <D> on the handle.
- Lock the saw in the basic position by pulling lever <C> and locking it in its basic position
- Loosen locking lever <B> and release locking bolt <E>, and move saw back into initial position.
- Clamp the saw in this position by locking lever <B> again.
- Then pull mains plug.
- Remove chip piles to the pipe and within the housing after the saw blade has entirely stopped.

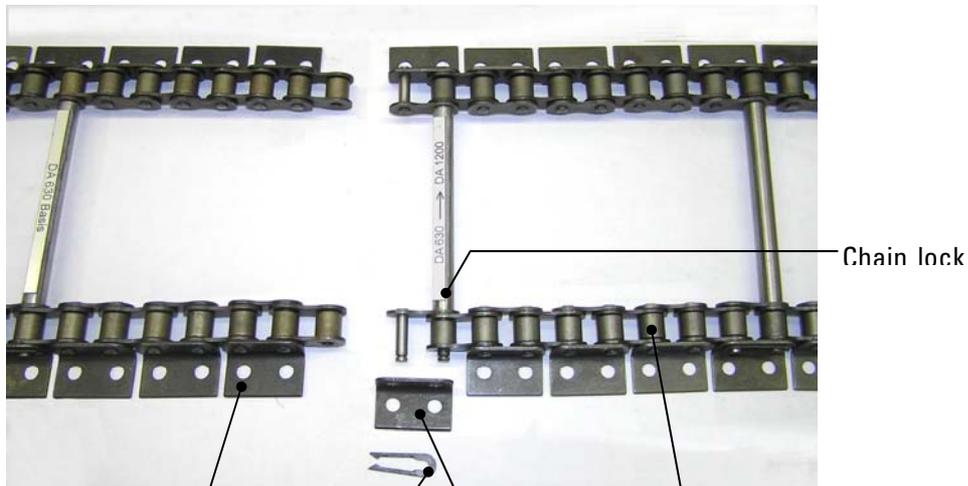
The sawing process is completed.



## 4.2. How to extend the chain (when using system chains)

### 4.2.1 Extend chain for pipes with OD 710 mm until OD 1200 mm

Open the chain lock at the extension; for this purpose first remove the spring and then both lugs.

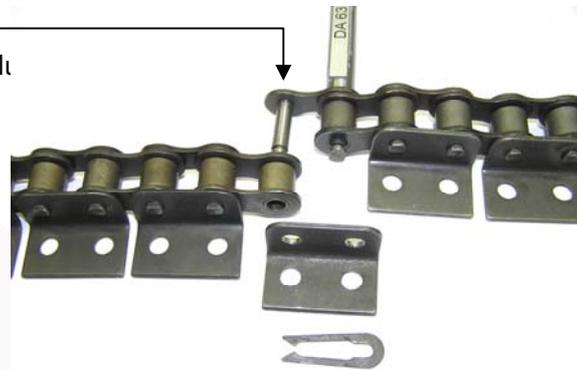


Basic chain for OD 630 mm

Spring Lug

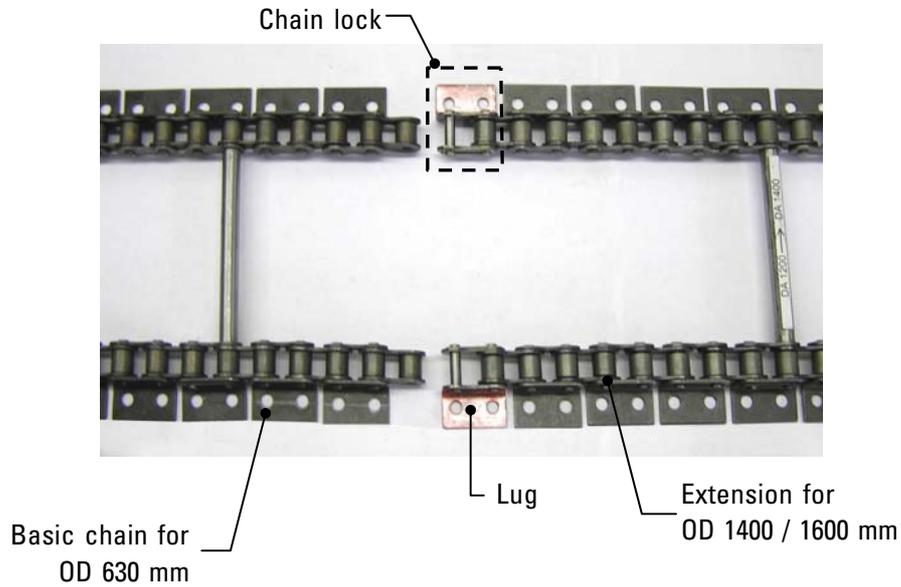
Extension for OD 710 / 800 / 900 / 1000 / 1100 / 1200 mm

Place the roller of the chain next to the extension, plug the pins of the lugs into the rollers and secure the lock with the spring.

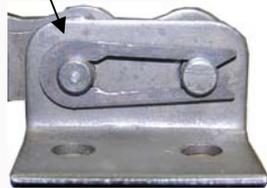


### 4.2.2 Extension of the chain for pipes with OD 1400 mm until OD 1600 mm

Open the chain lock at the extension; for this purpose first remove the spring and then both lugs.



Place the roller of the chain next to the extension, plug the pins of the lugs into the rollers and secure the lock with the spring.



## 5. Storing / Maintenance / Exchange of the saw blade

### 5.1. Storage

- Store the saw dry and inaccessible for unauthorized persons.
- Protect it from pushes.
- Do not lay the saw on the saw blade.

### 5.2. Maintenance

The circular power hand saw requires practically no maintenance. The lubrication for the antifriction bearings and gears is designed to last for the service life of the machine.

It is recommended to clean the air intake and outlet ports occasionally with compressed air while the machine is at standstill. This will prevent the openings from becoming clogged with dust.

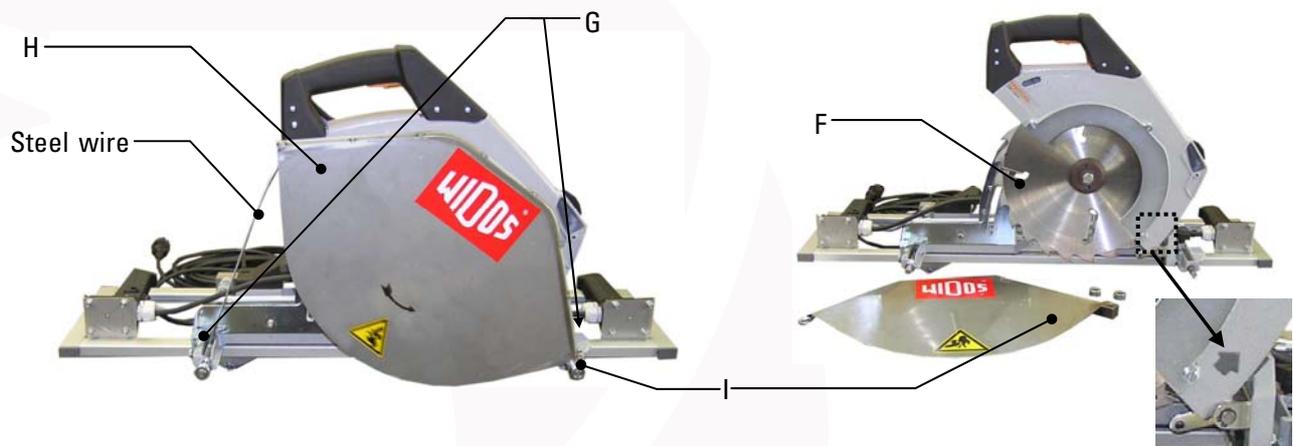
### 5.3. How to change the saw blade



Before changing the saw blade or any work on the machine, first remove the plug from the mains.



- Saw blades of highly alloyed, high speed steel (HSS) **must not** be used.
- Always use a properly sharpened cutting blade prescribed for the application.
- Please observe that any other cutting blades or kinds of it are not destined for the saw.
- Blunt or cracked and deformed blades are dangerous and **must not** be used.
- Put saw onto the pipe or work station and secure it.



- Release the threaded pins <G> by the enclosed Allen key size 2,5 and remove the adjusting rings <I>.
- Unhinge the steel wire.

- Remove the guard plate <H> to the front.
- Block the clamping flange <F> by the enclosed special ring spanner.
- Detach the hexagon socket screw by the enclosed ring spanner size 19.
- Remove the saw blade.
- Before mounting, clean the seatings between tool flange, cutting blade and clamping flange.
- Insert the cutting blade according to the illustration (right image); make sure that the driving pins are fitting into the drill holes of the cutting blade.
- Insert the clamping flange <F> onto the driving pins and check if the clamping flange <F> rests against the saw blade.
- Please observe the rotating direction of the cutting blade upon assembly.
- Fix the hexagon socket screw by the enclosed ring spanner size 19. Block the clamping flange <F> by the enclosed ring spanner.
- Mount the guard plate <H>.
- Hinge the steel wire.
- Insert the adjusting rings <I>.
- Retighten the threaded pins <G>.

## 6. Spare parts list



You can access our website and select our spare parts lists via the qr code shown here. Select "Circular power hand saw with guide chain, type 35"

## 7. Declaration of conformity

Issuing the declaration of conformity with regard to complying with the basic requirements and assembling the technical documentation is in the sole responsibility of:	
Manufacturer / Installation company:	WIDOS Wilhelm Dommer Söhne GmbH
Address:	WIDOS GmbH Einsteinstr. 5 D-71254 Ditzingen

Subject of the present declaration is the following device:	
<i>Product name:</i>	<b>WIDOS Circular power hand saw with guide Type 35</b>
<i>Model name:</i>	Circular power hand saw with guide Type 35
<i>Machine number:</i>	
<i>Year of construction:</i>	

For the stated device we herewith declare that it complies with the <b>basic requirements</b> stipulated in the following designated harmonizing regulations: <b>in the sense of the EC guideline EC-Machinery Directive 2006/42/EC</b>
--

Statement of the relevant <b>harmonizing standards</b> referred to, or indication of the specifications that the conformity is declared for:	
Standard	Title
DIN EN ISO 12100	Safety of machines, basic terminology, general guidelines for design
EN 55014-1	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
EN 55014-2	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard
EN 61 000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)
EN 61 000-3-3	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection

Entitled to compile the technical documentation:	
Name:	WIDOS Wilhelm Dommer Söhne GmbH
Address:	Einsteinstr. 5 D-71254 Ditzingen

Signed on behalf of the company:	
Name, first name:	Dommer, Martin
Function:	Technical director



Heimerdingen, 06.05.2019

Place / Date

Legally binding signature

This declaration is to certify the compliance with the mentioned harmonizing regulations, however does not include any assurance of properties.