

# Super- Universal- Fine Cut Saws

# **Original operating instructions**







\*Except electronics (1 year) and wearing parts

### **Important**

In order to prevent the risk of accidents, please read the operating instructions carefully before installation and use of the machine.

Always keep these operating instruction near to the machine.

It is important that these instructions are always available for reference purposes.















# EC-Conformity Declaration for Super-Universal-Fine Cut Saws

Multicut-1
Multicut-2S
Multicut-SE
Multicut-Quick

We declare on our sole responsibility that the product described under technical data complies with the following conditions:

- 2006/42 EC Machine directive
- 2004/108 EC EMC directive
- 2006/95 EC Low voltage directive

The following regulations were applied to the construction and design of the machine.

#### Harmonised standards:

- EN 12100-1
- EN 12100-2
- EN 294
- EN 349
- EN DIN 61000
- EN 60529
- EN 60204-1

For the machine, a construction test to § 7 of the Machine Safety Law (GPSG) was performed by the Trade Association for Wood Test and Certification Centre in the BG-PRÜFZERT Vollmoellerstraße 11 70563 Stuttgart

and

GS test certificate number **071156** and BG test certificate number **071157** were issued.

Hegner Präzisionsmachinen GmbH Lupfenstraße 29 78056 VS-Schwenningen

VS-Schwenningen, 12.08.2010

Werner Broghammer Technical Manager

#### **Preface**

Machines: Multicut-1

> **Multicut-2S Multicut-SE Multicut-Quick**

are suitable for both professional and private use.

The machines are intended solely for sawing wood, plastics, NF metals and soft iron with fretsaw blades and marquetry saw blades with a length of 130 mm.

These operating instructions should provide the necessary knowledge for installation, commissioning and handling of the machines.

Furthermore the instructions contain important notes for your safety when handling the machine, and give tips for use and repair of faults.

Please read these operating instructions carefully and in particular note the references and warnings.

Incorrect handling and failure to observe the warning notes and descriptions in the operating instructions invalidate any guarantee by the manufacturer of the machines.

If you have any questions after reading these instructions, please contact your dealer.

Hegner Präzisionsmaschinen GmbH

# Symbols and their Meanings



Text marked with this symbol contains very important information, including relating to avoidance of health risks. These texts must be observed.



This symbol points to texts containing comments, information or tips.



This symbol refers to a chapter, subchapter, page or diagram. Follow these references to obtain further information on the current topic.

This point indicates a description of activities which you must perform.



Wear protective goggles.

### **Contents:**

1.0 Technical data

2.0 Delivery of machine

3.0 Operating instructions

4.0 Proper use

5.0 Safety notes 6.0 Remaining risks

7.0 Unpacking/assembly

8.0 Commissioning/decommissioning

9.0 Changing the saw blade

Change the saw blade for internal cutting 10.0

11.0 Swivelling the table plate 12.0 Adjusting the stroke length 13.0 Extraction connections

14.0 Maintenance/cleaning

15.0 Repair/spare parts 16.0 Type of application 17.0 Selection of speed

18.0 Operating errors and causes

## 1.0 Technical Data

### **Multicut-1**

365 mm Clearance length 50 mm Clearance height Max. cut height 50 mm

Saw table size 435 x 230 mm, 45° swivel

Length x width 520 x 270 mm Saw blade stroke 12 and 15 mm

Motor 230 V~, 50 Hz, 100 watt output power

Weight Approx 16 kg net

Length of saw blade 130 mm Ø 35 mm Extraction connection Mains fuse 6 A

## Multicut-2S and SE

460 mm Clearance length 65 mm Clearance height 65 mm Max. cut height

Saw table size 435 x 230 mm, 45°/12° swivel

Length x width 610 x 280 mm Saw blade stroke 12 and 19 mm

Motor 230 V~, 50 Hz, 100 watt output power

Weight Approx 19 kg net / 23 kg

Length of saw blade 130 mm Extraction connection Ø 35 mm Mains fuse 6 A

#### **Multicut-Quick**

Clearance length 560 mm Clearance height 65 mm Max. cut height 65 mm

Saw table size 435 x 230 mm, 45°/12° swivel

Length x width 730 x 280 mm Saw blade stroke 12 and 19 mm

Motor 230 V~, 50 Hz, 100 watt output power

Weight Approx 29 kg net

Length of saw blade 130 mm Extraction connection Ø 35 mm Mains fuse 6 A

#### 1.1 Values for extraction connection

Volume flow for connection Ø 35 mm: 70 m<sup>3</sup>

Vacuum pressure present

for an air speed of 20 m/s: 1666 Pa.

The dust emissions measured according to the principles for testing dust emission (workplace-related dust concentration) from woodworking machines by the Trade Association for Wood lie clearly below the applicable limit value o 2,0 mg/m³.

#### 1.2 Noise emission

#### Measurement conditions:

- prEN 31202 for workplace-related emission values with the following additions established by TC 142 in order to obtain an accuracy class of better than 3 dB:
- The ambient correction factor  $K_{2A}$  or  $K_{3A}$  is < 4 dB.
- The difference between external noise level and the noise sound pressure level is < 6 dB for each measurement point.
- K<sub>3A</sub> is calculated according to appendix A, prEN 31204.
- A square envelope surface with nine measurement points at a distance of 1 m from the reference surface was used.

Workpiece: spruce

- Dimensions 150/100/20 mm (planed all round).

Tool: Fretsaw blade

- Dimensions t = 1.5 mm, b = 1 mm.
- The noise level emitted amounted to:

Sound pressure level at workplace [dB (A)]

Idling: 64.1 Cutting: 74.5

A measurement uncertainty supplement of K = 4 dB (A) applies to the said emission values.

The values given are emission values and therefore do not necessarily equate to safe workplace values. Although there is a correlation between emission and immission levels, it cannot be reliably deduced whether or not additional precautionary measures are required. Factors which can influence the immission level present at the workplace at any time include the duration of effect, the nature of the workplace, other noise sources etc., e.g. the number of machines and other adjacent processes. The reliable immission level may also vary from country to country. This information should however enable the user to make a closer assessment of the risk and danger.

## 2.0 Delivery of machine

- After receiving the machine please check:
- packing for damage (inform carrier immediately in case of damage).
- completeness of content according to delivery note.
- examine the packing for sundry parts.

## 3.0 Operating instructions



Read the operating instructions precisely before commissioning and use of the machine. No guarantee is given in the case of incorrect handling and failure to follow the operating instructions.

## 4.0 Proper use



- The machine is designed solely to cut wood, plastics, NF metal and soft iron using fretsaw blades and marquetry saw blades with a length of 130 mm.
- Only cut workpieces which are securely supported and can be guided.
- No further or different use is intended.
- The machine may only be used, fitted and maintained by people familiar with it and aware of the risks.
- The relevant accident prevention regulations and other generally acknowledged health and safety rules must be observed.
- Only original spare parts may be used.
- The manufacturer is not liable for any damage caused by use of non-original spare parts.
- Changes to the machine or incorrect use of the machine exclude the manufacturer's liability for damage.

## 5.0 Safety notes

## 5.1 General safety notes



- Keep unauthorised persons away from the machine.
- Only allow children to work on the machine under supervision.



- Do not touch any moving parts with fingers.
- Wear protective goggles.

#### 5.2 Commissioning

- Check that the voltage on the motor rating plate corresponds to the voltage from the power source.
- Connect the dust extractor.
- ⇒ Point 13.0
- Only work in ventilated areas.

#### 5.3 Users

- Read the operating instructions to prevent specific machine accident risks.
- Never work under the influence of drugs, alcohol or medication.
- Wear tight fitting clothing and protective goggles.
- Do not wear jewellery when working.

## 5.4 Before starting work

- Check that the machine is switched off.
- ⇒ Point 8.3
- Check that the saw blade fitted is suitable for the work.
- Check that the saw blade is clamped tightly.
- Check that all protective devices are fitted.

### 5.5 During work

- Remove residue and cuttings only when the machine is switched off.
- On power failure, set the on / off switch to O.

#### 5.6 After work

Switch off the machine and remove the plug.

## 6.0 Remaining risks



Even on proper use and despite observation of all relevant safety regulations, because of the design required for the purpose of the machine, the following remaining risks can still arise.

- Touching the fretsaw blade.
- Breakage of fretsaw blade.
- Contact with live parts if there is damage to
  - terminal box
  - capacitor, or
  - exposed supply cables.
- Inhalation of dust harmful to health.

# 7.0 Unpacking / Assembly

## 7.1 Unpacking

- ⇒ Fig. 7-1
- Lift the machine out of the packing box as shown.
- Do not lift by the upper swing arm.

## 7.2 Assembly

- $\Rightarrow$  See Fig. 7-2
- Place the machine on a stable vibration free support so that it can be controlled from the front.
- The height of the support should be adapted to the size of the operator and depends on whether operation is performed seated or standing.
- · Attach the machine.
- either with 2 wood screws inserted from above through the two holes (1) in the subframe (or with 2 coach bolts),
- or with 3 M8 bolts screwed from below into the threaded bore (2) through the machine stand.



The location of the machine should be free from

- vibration
- moisture
- free from aggressive gasses and vapours
- free from mineral dust and
- able to be ventilated.

### 7.4 Electrical installation



The electrical installation of the site must comply with the relevant regulations and meet the requirements of the machine.

## ⇒ 1. Technical data

- Activate the mains switch so that the machine is switched off.
- ⇒ point 8.3 switching off the machine.
- Connect the plug to the socket.

Route the power cable so that

- it does not hinder work
- it does not constitute an obstacle for tripping and
- it is not kinked, crushed or damaged.

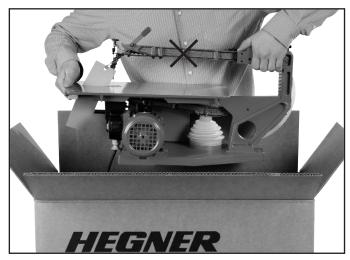


Fig. 7.1

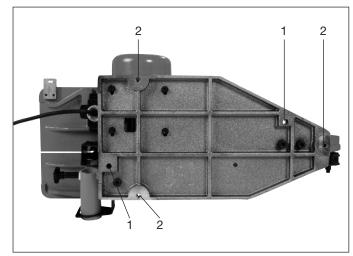


Fig. 7.2

# 8.0 Commissioning/Decommissioning

### 8.1 Commissioning the machine



We assume

- that you have read the previous chapters (in particular Chapter 5, Safety instructions). If not, please do so and return to this point.
- that the machine is properly assembled, installed and connected.
- that all tools or workpieces are removed from the working area.
- that all parts of the machine are undamaged and correctly mounted.



• Check whether the saw blade fitted is straight.

A bent saw blade is unusable and must be replaced with a new one.

 $\Rightarrow$  9. Changing the saw blade.

## 8.1.1 Tensioning the saw blade

- ⇒ Fig. 8-1 and 8-2
- Check that the clamping lever (1) is in the clamping position.
- Tensing the saw blade using the cross-handled screw (2) (Multicut 2S/SE/Quick).
   On Multicut 1, tighten the saw blade with the clamping lever (1).
- To do this turn the cross-handled screw or clamping lever (Multicut 1) clockwise until the saw blade emits a high note when tapped with the finger.

### 8.1.2 Releasing the saw blade

- $\Rightarrow$  Fig. 8-1 and 8-2
- Ensure that the machine is switched off before releasing the saw blade.
- Release the saw blade by pulling the quick release lever (1) forward (Multicut SE/Quick).

On Multicut 1, push the clamping lever up.

### 8.1.3 Connect vacuum cleaner

- ⇒ Fig. 8-1 and 8-2
- Connect the suction nozzle of the vacuum cleaner to the opening provided (3).



Make sure that the protective cover (4) is lifted up

#### Multicut 2S/SE/Quick

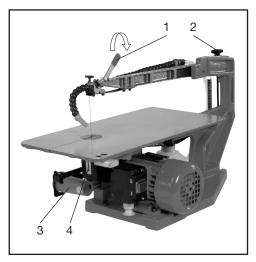


Fig. 8-1

#### Multicut-1

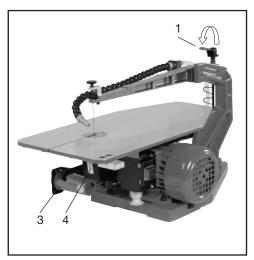


Fig. 8-2

### 8.2 Switching on the machine

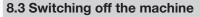
⇒ Fig. 8-3



#### Warning:

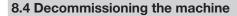
The machine starts to work as soon as it is switched on.

- First remove all tools, workpieces, residue and chippings from the working area.
- Connect the plug to the socket and switch the machine on with the power switch (1) by pressing the rocker switch down (I).
- Switch on the vacuum cleaner.



(for brief interruptions)

- ⇒ Fig. 8-4
  - Switch off the machine with the power switch (1) by pressing the rocker switch up (O).
  - Switch off the vacuum cleaner.
  - Remove all tools, workpieces, residue and chippings from the working area.



(for longer stoppages, change-over, end of work etc.)

- Switch off the machine with the power switch (1) by pressing the rocker switch up (O) and remove the plug from the socket.
- Release the fretsaw blade.
- Remove all workpieces, residue and chippings from the working area.

# 9.0 Changing the Saw Blade

## 9.1 Switch off saw

 $\Rightarrow$  8.4 Decommissioning the machine.

#### 9.2 Release saw blade

⇒ 8.1.2 Release saw blade.
Also release the saw blade if the blade is broken.

### 9.3 Fold protective cover down

- ⇒ Fig. 9.1
  - Fold protective cover (1) down.
  - Also remove chippings and residue from the protective cover.



Fig. 8-3



Fig. 8-4

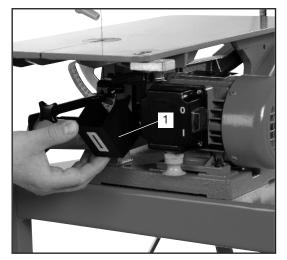


Fig. 9-1

### 9.4 Remove saw blade from machine

- ⇒ Fig. 9-2
- Turn the knurled screw up until it only just projects through the bottom of the saw blade holder.
- ⇒ Fig. 9-3
- Gently press the upper swing arm down and remove the saw blade clamp from its holder.
- ⇒ Fig. 9-4
- Press the clamp retaining spring down slightly and remove the entire saw blade with clamps from the machine.

### 9.5 Remove saw blade from saw blade clamps

- ⇒ Fig. 9-5
- Place the saw blade clamp in the clamp insert device at the front right of the saw table.
- ⇒ Fig. 9-6
- Using the square wrench, open the clamps until you can remove the saw blade.

### 9.6 Clamp new saw blade in saw blade clamps

- ⇒ Fig. 9-5
- Lay the new saw blade in the clamps, precisely centred and straight, with the teeth pointing down to the right.
- Push the saw blade up to the stop (on the square bolt) and then retract it approx 1 – 2 mm (so that the bolt does not twist the blade when it is tightened).
- Clamp the saw blade clamp tightly using the square wrench.
- ⇒ Fig. 9-7
- Clamp the other end of the saw blade in the same way.



- ⇒ Fig. 9-8
- Ensure that the saw blade ends are clamped centrally.

### 9.7 Insert saw blade with clamp in machine

- ⇒ Fig. 9-4
- First insert the lower clamp in the lower swing arm.
- Then insert the upper clamp in the upper swing arm.
- ⇒ Fig. 9-9
- Turn the upper knurled screw towards the clamp so that a gap of around 1 mm exists between the clamp and the bolt.



Fig. 9-2



Fig. 9-3

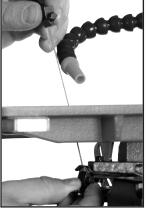


Fig. 9-4



Fig. 9-5



Fig. 9-6



Fig. 9-7



Fig. 9-8



Fig. 9-9

# 10.0 Changing the saw blade for int. cutting



To make an internal cut in a workpiece with the machine, the workpiece must have an opening in which you can insert the saw blade. We recommend using the special clamp for internal cutting.

## 10.1 Decommission the machine

⇒ 8.4 Decommissioning the machine.

## 10.2 Fit the special clamp

- ⇒ Fig. 10-1
- Attach the special clamp in the upper swing arm and lock with the knurled screw.

## 10.3 Insert the workpiece

• Push the saw blade to one side until you can guide the saw blade through the opening of the workpiece.

#### 10.4 Clamp the saw blade

- ⇒ Fig. 10-2
- From the front, guide the saw blade into the special clamp, ensuring that the blade does not bend.
- Close the special clamp by twisting the knurled aluminium screw.

## 10.5 Tensioning the saw blade



- ⇒ 8.1.1 Tensioning the saw blade
- Align the workpiece so that when the machine is switched on, it cannot be touched by the saw blade and flung out.



Note: When using the special clamp, the knurled screw must always be locked in position on the top arm. This will save time when changing the blade.

## 11.0 Swivelling the table plate

By adjusting the table plate, you can make angled cuts up to maximum 45° on workpieces.

### 11.1 Decommission the saw



 $\Rightarrow$  8.4 Decommissioning the saw.

### 11.2 Swivel table plate

- Turn the table insert (1) Fig. 11-1-1
- Turn the cross-handled screw (2), Fig. 11-1-2, around one turn anticlockwise.
- Angle the table plate to the required position and retighten the cross-handled screw.



Fig. 10-1



Fig. 10-2

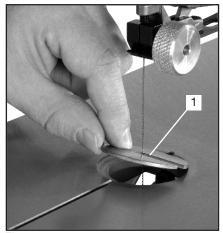


Fig. 11-1-1

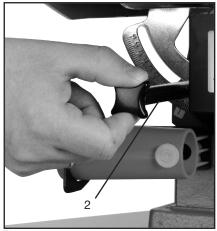


Fig. 11-1-2

# 12.0 Adjusting the stroke length



The machine is set by the factory to a long stroke length which is normally best for most fretsaw work.



For working in extremely thin, light material such as wood veneer or thin sheets, shortening the stroke may improve saw control and smoothness. There is less risk of breaking the thin fretsaw blade.

### 12.1 Decommission the machine

⇒ 8.4 Decommissioning machine.

## 12.2 Unscrew protective cover

- ⇒ Fig. 12-1
- Using the Allen key, unscrew the bolt (1) and remove the protective plate.

### 12.3 Lock the cam

- ⇒ Fig. 12-2
- Push the steel pin (1) into the bore on the cam plate.

### 12.4 Release the connecting rod

- ⇒ Fig. 12-3
- With one hand hold the steel pin (1). This prevents the cam plate turning.
- Using the fork wrench (3) (on Multicut 1, Allen key 3 mm) turn the screw (2) anticlockwise.

## 12.5 Adjust the stroke length

- ⇒ Fig. 12-4
- Push the connecting rod (1) aside. Behind this are the two threaded bores in the shaft of the cam plate.
- For a short saw stroke,
- screw the bolt into the threaded bore closest to the centre point (3).
- For a long saw stroke, screw the bolt into the threaded bore further out.

## 12.6 Clamp the connecting rod



⇒ Fig. 12-5

Before screwing on the connecting rod ensure that the spacer (1) is fitted.

• When tightening the connecting rod again, secure the cam plate against twisting with the steel pin.



Fig. 12-1

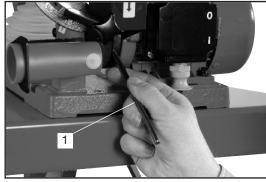


Fig. 12-2

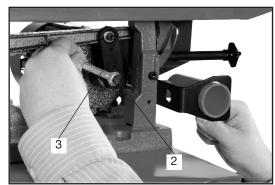


Fig. 12-3

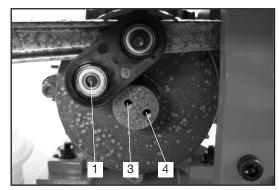


Fig. 12-4

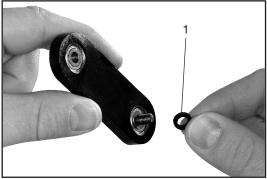


Fig. 12-5

## 13.0 Extraction connection



Certain wood types such as chipboards etc. produce harmful dust emissions during machining. For this reason the machine must be connected to a dust extractor. For long and frequent use of the machine, operating measures must ensure that the extractor is automatically switched on when the machine is switched on.

### 13.1 Connection



⇒ Fig. 13-1

The machine is designed for a standard dust extractor (vacuum cleaner).

Push the connector of the extractor system into opening (1) of the connection piece so that it locks.

## 13.2 Adjust the upper extraction

⇒ Fig. 13-2

• Adjust the upper extraction hose (1) so that it lies on the workpiece around 5 mm away from the saw blade.



If however you want to work without the extractor, the cut line can be blown clear by pulling the hose (4) off the connection piece (5) and inserting it in the pump base (3).



When the dust extractor is not connected, the machine may only be used for open air work. In closed rooms the dust extractor must be connected (see 13.0 Extraction connection).

# 14.0 Maintenance / Cleaning



The machine is low maintenance.

Only the upper and lower arm bearings need to be oiled regularly (approx. every 10 operating hours) with a fine non-resinous oil (e.g. sewing machine oil).

## 14.1 Maintenance - oil arm bearings

⇒ Fig. 14-1

- Remove any dust deposits at the lubrication points.
- Using a light oil, oil both arm bearings (1). Apply 3 to 4 drops of oil at the points marked with arrows (between the swing arm and washer).



The clamping spindle (2) must not be oiled or greased.

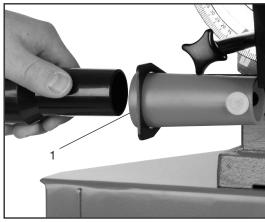


Fig. 13-1

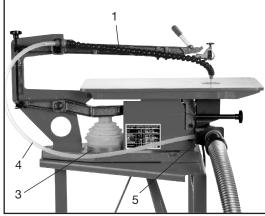


Fig. 13-2

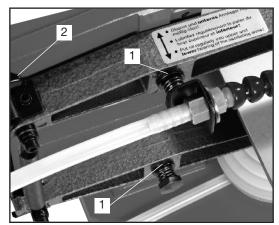


Fig. 14-1

#### 14.2 Maintenance - inspection



- With the machine switched off, carry out a visual inspection at regular intervals and check the parts of the machine for damage, above all
- the plug
- the power cable
- the terminal box
- If damage is found in particular to the electrical equipment, decommission the machine immediately and arrange for professional repair with original spare parts.

#### 14.3 Cleaning



- Clean the machine according to the level of dirt.
- No deposits of dust or chippings should form on or in the machine.

#### 14.3.1 Decommission machine

⇒ 8.4 Decommissioning the machine

#### 14.3.2 Clean the machine

- Clean the machine by extracting the dust with a vacuum cleaner.
- Remove the side protective cover from time to time and remove any dust below it.
- Remove sticky deposits with a brush or similar.



- Do not use any
- flammable
- aggressive or
- scouring cleaning agents
- Prevent the penetration of fluid / liquid into the machine and in particular the electrical parts.
- If however moisture or fluid enters the machine, do not connect the machine to the power supply.
- In this case contact the dealer or manufacturer.

## 15.0 Repair / Spare parts



These operating instructions do not contain any repair instructions. Parts are repaired and / or replaced at your own risk.

• The following notes must be observed.

#### 15.1 Repair



- Do not repair any (faulty) electrical machine parts.
- These parts must be replaced by original spare parts from the manufacturer.
- Only the manufacturer or authorised dealer / specialist with corresponding training (e.g. electricians) may replace electrical machine parts.
- If incorrect D.I.Y. work is performed on electrical machine parts, there is a risk of life-threatening current surges and/or burns.
- The person responsible is liable for all damage or injury caused in this way.

Faulty or worn machine parts:

- may in principle only be replaced by the manufacturer
   / authorised dealer or specialist with corresponding training.
- may be replaced by the user with original parts from the manufacturer if the user has the necessary mechanical knowledge.
- The person responsible is liable for injury and/or damage caused by incorrect repair or replacement work by the user or other unauthorised persons.



#### If you still wish to repair your machine yourself:

 first disconnect the power switch and remove the plug from the socket.

## 16.0 Tips for use

#### 16.1 Examples of correct choice of saw blade

⇒ Table on side protection cover of machine



#### Important:

Blunt saw blades must be replaced. This applies in particular when cutting iron. Full cutting power and accuracy is achieved only if the recommended quality of saw blade is used.



#### **Useful note:**

If for economy reasons you wish to continue to use a blunt saw blade, for example for cutting iron, attach a smooth support approx. 20 mm thick to the saw table plate of the machine using twin-sided adhesive tape, and continue to cut on this. By raising the saw table in this way you can progressively use up more of the saw blade



#### Working with plastics:

To prevent the material melting when cutting, mask off the cutting line with plastic adhesive tape.

#### 16.2 Feed pressure

The feed pressure to be exerted on the workpiece must always be directed obliquely from top to bottom, else the workpiece may jump. Some workpieces require a strong feed pressure.

## 16.3 Stop

In general stops are not used when sawing with fretsaw blades. Fretsaw blades will move off the cutting line if the workpiece is force-guided.

Accurate sawing requires:

- a sharp saw blade
- a thin, accurate cutting line
- correctly applied, bright light

#### 16.4 Straight cutting

 Always hold the workpiece at an angle of 1 to 5° (the angle depends on material, saw blade type and blade tension).

#### 16.5 Notes on sawing metal

- First deburr metal workpieces to be cut on all sides and flatten these off carefully so they sit flat.
- Either glue thin or small workpieces (e.g. thin sheets) onto a 5 mm thick plywood block (using contact adhesive or twin-sided adhesive film) or place these between two pieces of plywood and secure against slipping with pins.
- Then cut the workpiece out together with the plywood (do not choose sheets that are too thick).

#### Use

- fretsaw blade no. 1 to 5 for
- soft NF metals, e.g.
- aluminium (sheet)
- soft copper (sheet)
- soft brass (sheet)

If necessary you can also use metal saw blades numbers 5 to 9.

 Before sawing, coat the cut line with lubricating oil (universal oil).



#### Use

- metal saw blades nos. 1, 5, 9 or 12 for
- hard NF metals e.g. for
- hard aluminium (sheet)
- hard copper (sheet)
- hard brass (sheet)
- iron (sheet).
- Before sawing, coat the cut line with cutting oil or paste.



 Despite using saw blades of top quality, depending on hardness iron will cause greater blade wear.

# 17.0 Speed selection



(only on motors with electronic speed control)

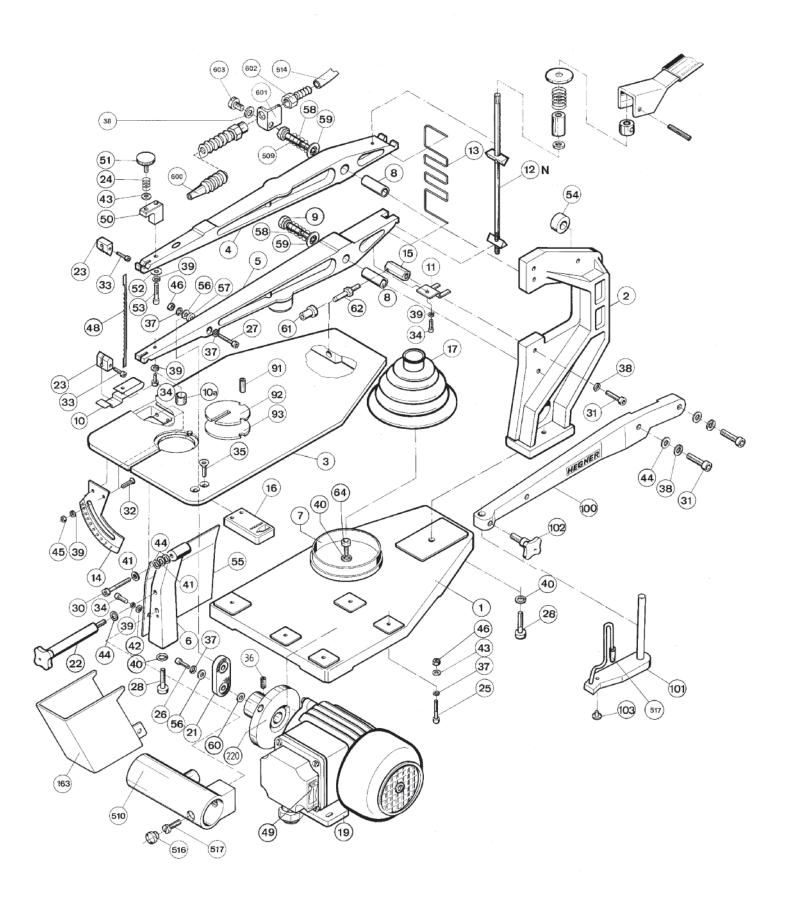
- In general, low speeds are better if accuracy, guidance of the saw blade or durability of the saw blade are important, whereas higher speeds are generally better for higher working output and reduced cutting times.
- Thin or fragile materials are best handled at low speeds.
- Extra thick materials or plastics are best handled at medium or low speeds.

# 18.0 Operating Mistakes and Causes

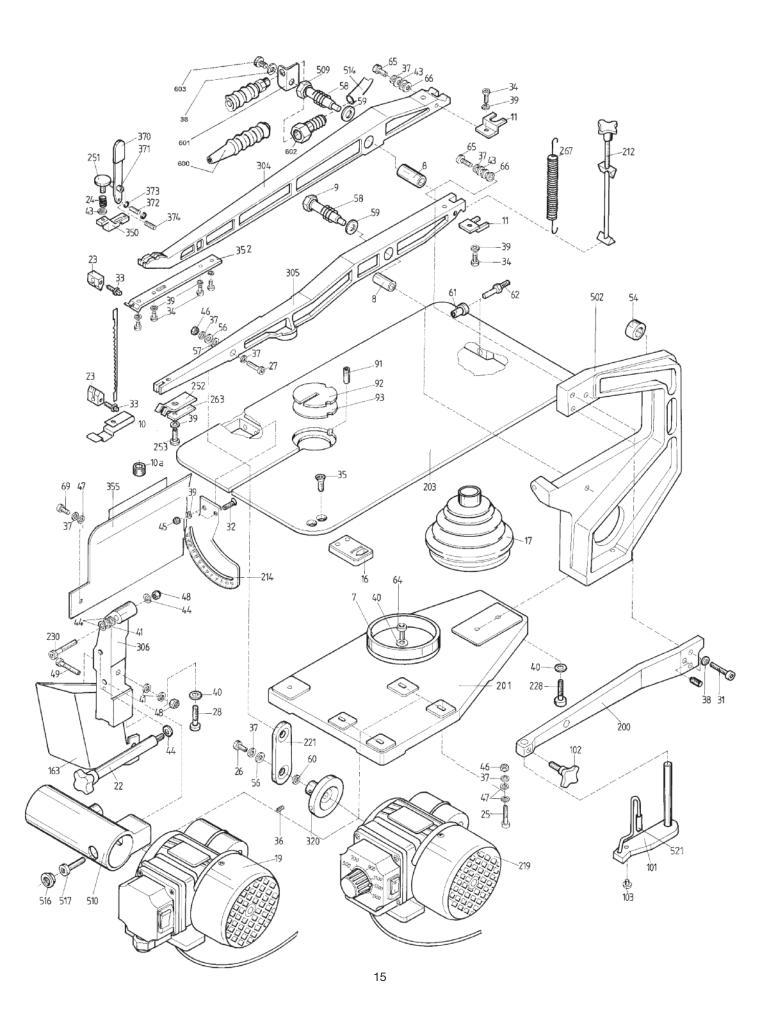
Effect	Cause	Remedy
Workpiece catches or jumps.	To much feed pressure on the workpiece.	Slaken off the pressure. Give the blade time to cut at its own speed.
	Sawblade is in the machine upside down.	Put blade in correctly (see 9.5).
	Turning a sharper radius than the sawblade will comfortably allow at the feed speed.	Slow down, ease the sawblade slowly round tight corners.
Sawblade does not appear to cut well.	Blunt or wrong sawblade.	Replace with sharp and/or correct sawblade!
	Poor quality sawblade.	Use high quality German sawblades!
	Insufficient feed pressure.	Increase feed pressure.
Sawblade pulls out of clamp.	Clock key screw insufficiently tightened.	Increase clamping pressure! If the sawblade continues to pull out - replace clamp.
Sawblade running hot and burning or tearing.	Too strong a feed pressure, turning too quickly in thick timber.	Reduce feed pressure!
	Too fine a sawblade in close grain timber.	Choose coarser sawblade!
	Blunt sawblade.	Replace sawblade.
Hard to follow marked lines.	Too strong a feed pressure.	Reduce feed pressure!
	Blunt or incorrect grade of sawblade.	Replace sawblade or choose finer blade!
	Not enough support on this materials.	Back thin sheet with a 4 mm plywood or hardboard sheet.
Cutting face is bowed.	Insufficient blade tension.	Increase blade tension!
	Blunt sawblade and too strong a feed pressure.	Replace with new sawblade and decrease feed pressure!
	Too fine a sawblade.	Utilise a coarser sawblade!
Cutting face is not vertical.	Table top not a 90° to the blade or table adjustment screw not tightened.	Align table top correctly with a square and tighten screws!
Underside of workpiece splinters.	Wrong type of sawblade.	Utilise reverse tooth sawblades!
	Worn table insert.	Change table insert! (included with standard accessories)
	13	

# **HEGNER Multicut-1**

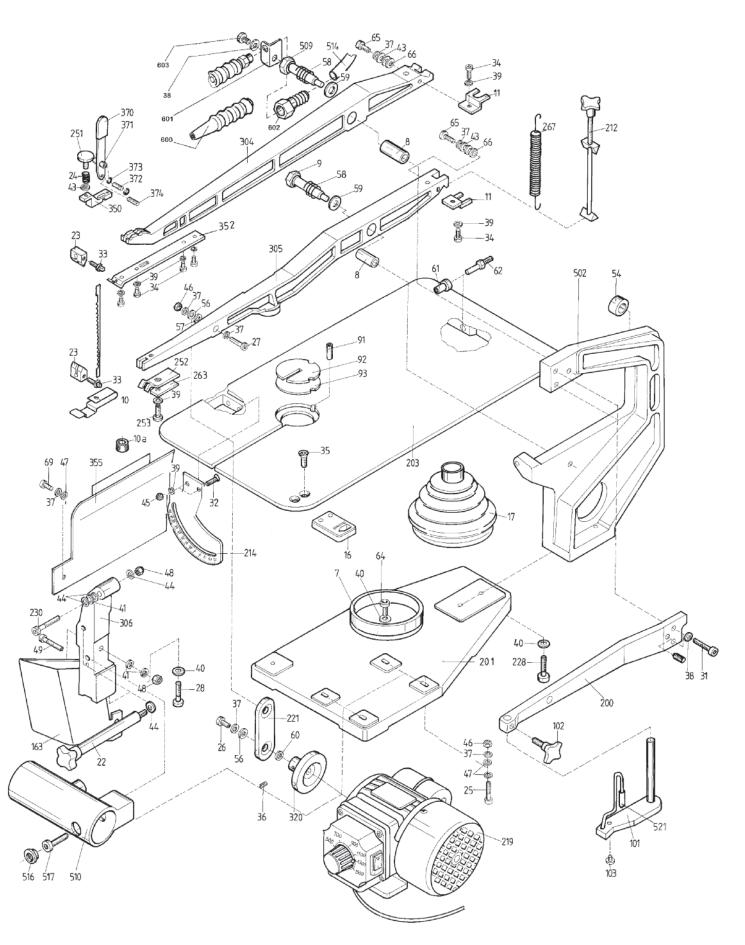
If you require a spare part, simply quote the number shown in the exploded drawing.



# **HEGNER Multicut-2S**



# **HEGNER Multicut-SE**



# **HEGNER Multicut-Quick**

