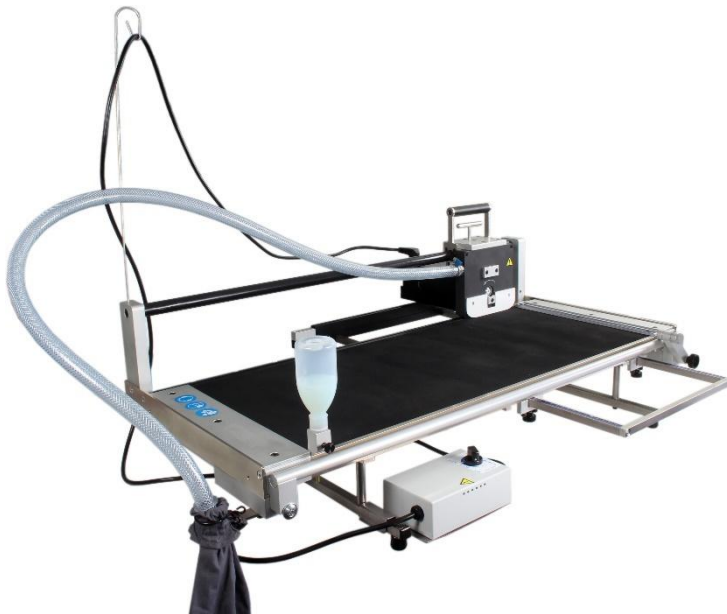


Original Operating Instructions Varga Circular Saw



VARGA models

VA 10

VA 11

VA 21-15

VA 31-15

VA 1

Current version	2.0
Date	21.11.2025
Scope	124 pages



IMPORTANT:

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

Manufacturer

VARGA SYSTEM GmbH

Hainkämpe 5

28832 Achim

Deutschland

www.varga-system.com

VARGA
SYSTEM

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1 Introduction

1.1 Identification

Machine name	Varga Circular Saw
Machine type	Circular saw
VARGA model variants	VA 10, VA 11, VA 21-15, VA 31-15, VA 1
Year of manufacture	2025

1.2 Manufacturer

Manufacturer's name	VARGA SYSTEM GmbH
Street	Hainkämpe 5
ZIP code, city	28832 Achim
Country	Deutschland
Telephone	+49 4232 945870
Email	info@varga-system.com
Web	www.varga-system.com

1.3 Information about the operating instructions

Current version	2.0
Date	21.11.2025

1.4 Change history

Date	Version	Sections affected	Reason for change
08.05.2025	1.0	All	Final version of the document created
21.11.2025	2.0	All	General adjustments

1.5 EC Declaration of Conformity

EC-Declaration of Conformity

according to the EC Machinery Directive 2006/42 / EC, Annex II 1.A

The manufacturer

Varga System GmbH
Hainkämpe 5
28832 Achim

declares that the following machine , in the version placed on the market by the manufacturer, complies with all relevant provisions of Directive 2006/42/EC "Machinery Directive" - including the amendments valid at the time of this declaration.

Name:	VARGA Precision Circular Table Saw VA 1, VA 10, VA 11, VA 21-15 , VA 31-15	Year of construction:	2025
--------------	---	------------------------------	------

Functional description:

The saw unit is manually pushed along a guide to perform the saw cut. The workpiece rests on the saw table. The speed is fixed or can be adjusted within a limited range if a speed controller is installed.

The machinery also fulfills the relevant provisions of the following other directives - including those modifications applicable at the time of this declaration:

Reference	Name
2014/30/EU	Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)

The following harmonised standards according to article 7 (2) of the machinery directive 2006/42/EC were applied:

Reference	Name
EN 60204-1:2018	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
EN 62841-1:2015/A11:2022	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: General requirements (IEC 62841-1:2014, modified)
EN 62841-2-5:2014	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-5: Particular requirements for hand-held circular saws (IEC 62841-2-5:2014, modified)
EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)

The following standards harmonised under other directives, other technical standards or parts of them, and other specifications were applied:

Reference	Name
EN 61000-6-2:2005	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
EN 61000-6-4:2007/A1:2011	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments

Achim, 07.05.2025	<i>A Röhrbein</i>
Location, Date	Signatory
	Alexander Röhrbein , CEO

Figure 1 EC Declaration of Conformity

1.6 CE mark



The CE mark shown here is affixed to the machine.

The mark indicates that the product complies with all EC directives applicable to the machine at the time it was placed on the market.

1.7 Type plates

1.7.1 Variant 230 V~ mains voltage

VARGA SYSTEM	Precision Circular Saw Präzisions-Tischkreissäge Scie circulaire de précision	VARGA SYSTEM	Precision Circular Saw Präzisions-Tischkreissäge Scie circulaire de précision
Model: VA 1 Serial No.: C2-001 Year: 2025 Blade: ø 120 mm	230 V~ 50 Hz 350 W 15000 min ⁻¹ IP 20	Model: VA 10 Serial No.: B2-001 Year: 2025 Blade: ø 120 mm	230 V~ 50 Hz 350 W 15000 min ⁻¹ IP 20
 Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany	 Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany

VARGA SYSTEM	Precision Circular Saw Präzisions-Tischkreissäge Scie circulaire de précision	VARGA SYSTEM	Precision Circular Saw Präzisions-Tischkreissäge Scie circulaire de précision
Model: VA 11 Serial No.: D2-001 Year: 2025 Blade: ø 120 mm	230 V~ 50 Hz 500 W 13000 - 15000 min ⁻¹ IP 20	Model: VA 21-15 Serial No.: E2-001 Year: 2025 Blade: ø 120 mm	230 V~ 50 Hz 500 W 13000 - 15000 min ⁻¹ IP 20
 Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany	 Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany

VARGA SYSTEM	Precision Circular Saw Präzisions-Tischkreissäge Scie circulaire de précision
Model: VA 31-15 Serial No.: F2-001 Year: 2025 Blade: ø 120 mm	230 V~ 50 Hz 500 W 13000 - 15000 min ⁻¹ IP 20
 Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany

Figure 2 Machine type plates 230 V~ mains voltage

VARGA SYSTEM	Motor Unit for VA-Systems Motoreinheit für VA-Systeme Unité moteur pour systèmes VA	VARGA SYSTEM	Motor Unit for VA-Systems Motoreinheit für VA-Systeme Unité moteur pour systèmes VA
Type: VA 1/2/10/21-7 Serial No.: G2-001	230 V~ 50 Hz 350 W 15000 min ⁻¹ IP 20	Type: VA 11/21-15/31-15 Serial No.: H2-001	230 V~ 50 Hz 500 W 13000 - 15000 min ⁻¹ IP 20
Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany	Made in Germany	Varga System GmbH Hainkämpe 5 28832 Achim, Germany

Figure 3 Motor unit plates 230 V~ mains voltage

One of the type plates shown above is affixed to the machine.

It includes identification details, which can be found in Sections 1.1 and 1.2 of these instructions.

1.7.2 Variant 100-120 V~ mains voltage



Figure 4 Machine type plates 100-120 V~ mains voltage

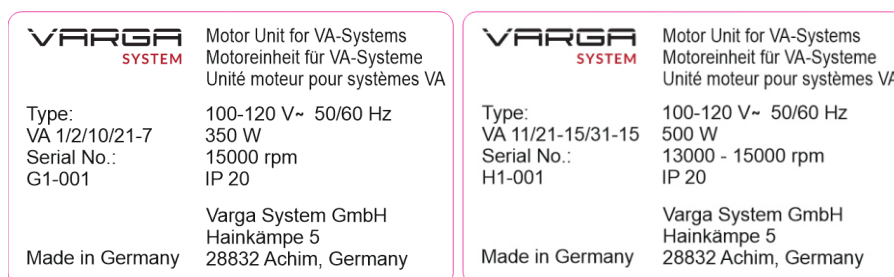


Figure 5 Motor unit plates 100-120 V~ mains voltage

One of the type plates shown above is affixed to the machine.

It includes identification details, which can be found in Sections 1.1 and 1.2 of these instructions.

1.8 Other applicable documents

In addition to these operating instructions, the following documents must also be observed:

- Safety data sheets
- Technical information *Cutting speed range of carbide precision circular saw blades*

2 About these operating instructions

2.1 Target groups

These operating instructions are intended for the following target groups:

- Operating personnel
- Maintenance personnel
- Specialist personnel

Where certain target groups are excluded, the target group permitted to carry out the activities described is specified at the start of the section.

2.1.1 Operating personnel

The operating personnel:

- are authorized by the plant operator to operate the machine;
- are physically and mentally capable of operating the machine without creating additional dangers;
- can speak and write the local language to a level that allows the instructions and user interface to be understood;
- are aware of the risks of working with the machine based on the instruction received and experience with the machine.

2.1.2 Maintenance personnel

The maintenance personnel:

- are qualified by training and experience to carry out work on the machine;
- have basic experience of the system (e.g. electrical control system) on which the work is to be carried out;
- have advanced experience of the system on which the work is to be carried out;
- also have the same qualifications as the operating personnel.

2.1.3 Specialist personnel

The specialist personnel:

- are qualified by training and experience to carry out work on the machine;
- have basic experience of the system (e.g. electrical control system) on which the work is to be carried out;
- have advanced experience of the system on which the work is to be carried out;
- have additional qualifications and experience relating to the relevant life phases of the machine.

2.2 Presentation of information

Safety instructions are presented in the instructions by a pictogram and a keyword.

The content of the information is structured as follows:

Type/source of danger!

Possible consequences!

➤ Measures for prevention

 DANGER!

“DANGER” is used when death or serious damage to health **will** occur if the warning is not observed.

 WARNING!

“WARNING” is used when death or serious damage to health **may** occur if the warning is not observed.

 CAUTION!

“CAUTION” is used when moderate or slight damage to health may occur if the warning is not observed.

ATTENTION

“ATTENTION” is used when damage to the machine or surroundings may occur if the warning is not observed.

NOTE

Helpful application tips and information for using the machine.



Cross-reference to a specific document.

2.3 Display of positions and directions

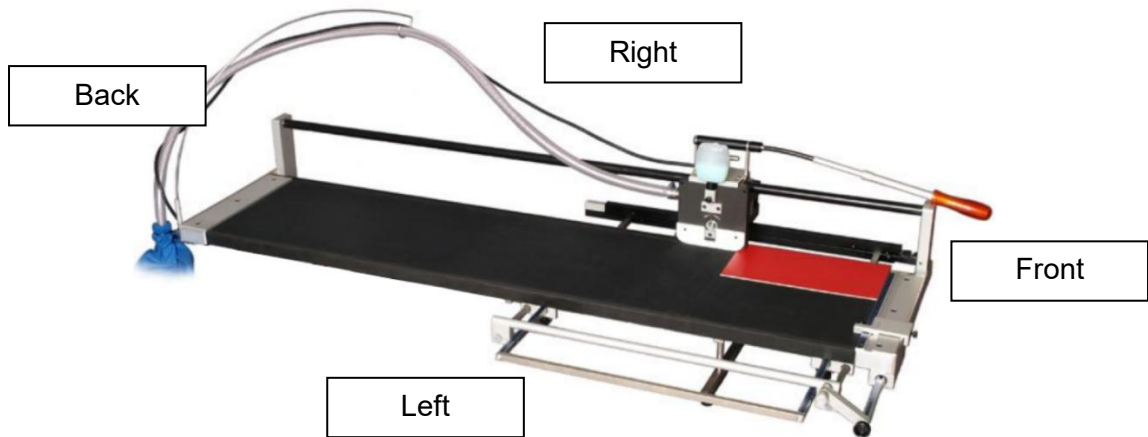


Figure 6 Positions and directions

The positions and directions are based on the perspective of the operating personnel and their view of the machine from the main operating station.

2.4 Presentation of lists

Lists are presented with bullet points. Example:

- Point 1
- Point 2

2.5 Presentation of actions required

2.5.1 Actions with a sequence to be followed

Actions to be carried out in a defined sequence are numbered and displayed in a list. The system reaction of the machine to the respective action is shown in *italics* and has a check mark before it. Example:

Action required

1. Activity, e.g. press the "Horn on" button.
☒ *Reaction 1, e.g. "The signal tone sounds".*
2. Activity, e.g. press the "Horn off" button.
☒ *Reaction 1, e.g. "The signal tone stops".*

2.5.2 Actions without a sequence to be followed

Actions to be carried out without a fixed sequence are shown with an arrow. The system reaction of the machine to the respective action is shown in italics and has a check mark before it. Example:

Action required

- Activity, e.g. press the "Horn off" button.
- ☒ *Reaction 1, e.g. "The signal tone stops".*

3 Safety

3.1 General safety instructions

- Damage due to incorrect handling of the machine. The machine is manufactured according to the current state of the art and in compliance with the relevant legal regulations. Nevertheless, dangers to persons and/or the environment may occur. Deploy trained personnel only.
- Failure to observe these operating instructions can have serious consequences for persons or the environment. Always observe the operating instructions.
- Improper use of the machine may result in serious personal injury and damage to the machine. Only use the machine as intended.

3.2 General safety instructions for power tools

3.2.1 Safety in the workplace

- The workplace must be kept clean and well lit. Untidy or unlit work areas can cause accidents.
- Working in potentially explosive atmospheres in which flammable liquids, gases, or dust are present is prohibited. Power tools generate sparks that can ignite the dust or vapors.
- Keep children and other persons away when using the power tool. Other people can cause distractions, which can result in loss of control of the power tool.

3.2.2 Electrical safety

- The plug of the power tool must match the socket. The plug must not be modified in any way. Do not use adapter plugs with earthed power tools. Unmodified plugs and matching sockets reduce the risk of electric shock.
- Avoid contact with earthed surfaces such as pipes, heaters, stoves, and refrigerators. There is an increased risk of electric shock when the human body is earthed.
- Keep power tools away from rain and moisture. Ingress of water into a power tool increases the risk of electric shock.
- Do not use the power cable to carry the machine. Do not hang the machine by the power cable or pull the plug out of the socket by the power cable. Lay the power cable away from heat, oil, sharp edges, and moving parts. Damaged or entangled connecting cables increase the risk of electric shock.

3.2.3 Safety of personnel

- Work attentively and with care. Do not use the machine if you are tired or under the influence of alcohol, drugs, or medication. Carelessness when using power tools can result in serious injuries.
- Wear the prescribed personal protective equipment. Wear safety goggles. Depending on the type and use of the power tool, wearing personal protective

equipment such as a dust mask, non-slip safety shoes, a hard hat, or hearing protection reduces the risk of injury.

- Avoid unintentional start-up and ensure that the power tool is switched off before connecting it to the power supply, transporting, or moving it. Switching on the power tool inadvertently when moving it can result in serious accidents.
- Remove tools and other objects from the work area before switching on the power tool. A tool or wrench that is in a rotating part of the power tool can cause injury.
- Avoid abnormal postures and always adopt a safe ergonomic stance so that balance can be maintained at all times. This makes it easier to control the power tool in unexpected situations.
- Do not wear loose clothing, have long hair down, or wear jewelry while operating the power tool. Loose clothing, jewelry, and long hair can be caught by moving parts and cause serious accidents.
- Do not use the machine without chip removal. Dust can cause damage to health.
- Observe the safety rules for power tools even after repeated use. Careless actions can lead to serious injuries within fractions of a second. Tools that are suitable for use reduce the risk of accidents.

3.2.4 Use and handling of the power tool

- Do not overload the power tool. Observe the intended use.
- Do not use the machine with a defective toggle switch. A power tool that cannot be switched on or off is dangerous and must be repaired.
- Disconnect the plug from the socket before adjusting appliance settings, replacing saw blades, or carrying out repairs on the electrical device. This precautionary measure prevents the power tool from starting unintentionally.
- Keep power tools out of the reach of children when not in use. Power tools must not be used by persons who are not familiar with them or who have not read the operating instructions. The use of power tools by inexperienced persons carries the risk of serious accidents.
- Check power tools regularly for damage and ensure that all moving parts can be moved freely. Have damaged parts repaired before using power tools. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Carefully maintained cutting tools with sharp cutting edges are less likely to jam and are easier to guide.
- Use power tools in accordance with these instructions. The working conditions and the work to be carried out must be taken into account. The use of power tools for applications other than those for which they are intended can lead to dangerous situations.
- Keep handles and grip surfaces dry and clean and free from oil and grease. Slippery handles and gripping surfaces prevent safe operation and control of the power tool in unforeseen situations.

3.2.5 Service

Have power tools repaired by qualified specialists and with original spare parts only. This ensures that the safety of the power tool is maintained.

3.3 Intended use

The precision circular table saw is suitable only for sawing plates, strips, and panels and, using the correct saw blade or cutting disk, for the following materials:

With carbide saw blade:

- Formica
- Resopal
- Engraving plastics
- Astralon
- PMMA
- PVC
- Aluminum
- Brass
- Wood
- Hard fabric panels

The machine is intended exclusively for industrial use.

The exact limits of the machine can be found in the technical data in Section 4 of these instructions.

3.3.1 Electrical components

Electrical systems and equipment may only be installed, modified, and maintained by a qualified electrician or under the direction and supervision of a qualified electrician in accordance with electrotechnical regulations.

3.4 Reasonably foreseeable misuse

Any applications that do not comply with the intended use are prohibited.

Do not use to saw:

- ferrous metals - especially stainless steel;
- workpieces with irregular thickness;
- workpieces that do not meet the permissible dimensions (see Section 3.10);
- materials that are not suitable for the saw blade;
- magnetic materials.

Operation without protective devices or protective devices that are not in perfect condition or have been modified or rendered ineffective without the manufacturer's approval is prohibited.

Operation is prohibited in the event of damage.

Functional and structural modifications are prohibited.

Changing the performance data of individual components or the machine is prohibited.

Operation is prohibited in the case of changes to or deviations from the specified connected loads.

3.5 Residual risks

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.



- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

Danger of electric shock

Contact between the saw blade and the live cable will result in an electric shock. This will cause serious injury or death.



- Use the cable retaining spring for the power cable.
- Work with care.

Improper maintenance, servicing, or cleaning.

Improper maintenance, servicing, or cleaning may result in serious injury or death.



- During maintenance, servicing, and cleaning work, ensure that the machine is switched off and disconnected from the power supply.

Injuries due to sharp saw blade

Contact with the sharp-edged saw blade may occur during maintenance or cleaning work. This can lead to cuts or puncture wounds to fingers and hands.



- Switch off the machine and disconnect it from the power supply before carrying out maintenance or cleaning work.
- Observe the data sheet for the saw blade.
- Wear cut-resistant protective gloves.
- Handle the saw blade with care and caution.
- Work with care.



Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

3.6 Obligations of plant operators

Plant operators are obliged to comply with national and, where applicable, regional occupational health and safety regulations.

Plant operators are obliged in advance to

- arrange for persons working with the machine to read these instructions;
- inform them about the contents of these instructions;
- instruct them in basic occupational health and safety and accident prevention regulations;
- provide personal protective equipment for safe use of the machine.

3.7 Obligations of personnel

All persons working with the machine are obliged to

- read and ensure that they have understood these instructions before using the machine for the first time;
- avoid any working methods that compromise machine safety;
- report any defects in the machine immediately and have them professionally repaired;
- operate the machine only with protective devices in place;
- prevent and report obviously incorrect actions by third parties.

3.8 Qualification of personnel

The personnel deployed must have the appropriate qualifications, training, and professional experience to carry out the intended work. Experience is largely defined by the individual's ability to prevent personal injury and damage to machines.

Different qualifications are required for different activities that have to be carried out with or on the machine, in accordance with the following matrix:

Activity \ Qualification	Operating personnel	Maintenance personnel	Specialist personnel
Transport	✗	✓	✗
Assembly and installation	✗	✓	✗
Normal operation	✓	✓	✗
Maintenance	✗	✓	✗
Shutdown	✗	✓	✗
Disposal	✗	✗	✓

3.9 Personal protective equipment

The following personal protective equipment must be available:



Wear eye protection.



Wear hearing protection.



Wear a dust mask.



Wear cut-resistant gloves.



Wear foot protection

3.10 Safety markings on the machine

There are safety markings on the machine that indicate residual risks that cannot be avoided by design.



Meaning: Indicates that hearing protection must be worn.

Position: Table



Meaning: Indicates that a dust mask must be worn.

Position: Table



Meaning: Indicates that the instructions must be read.

Position: Table



Meaning: Indicates that foot protection must be worn.

Position: Table



Meaning: Indicates that the mains plug must be disconnected.

Position: On the cable below the plug



Meaning: Warning of a danger point.

Position: On the housing



Meaning: Warning of electrical voltage.

Position: On the housing of the motor

4 Technical data

4.1 Technical data/Auxiliary and operating materials

4.1.1 VARGA VA 10 (Variant 230 V~ mains voltage)

Design variant	VARGA VA 10
Saw blade	Diameter 120 mm 24 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 94 m/s
Machine (length x width x height)	883 x 650 x 258 mm
Work surface - rubber (length x width)	695 x 344 mm
Machine dead weight	16 kg net 20 kg gross
Packaging dimensions (length x width x height)	88 x 59 x 23 cm
Max. cutting thickness for plastic	6 mm
Max. cutting thickness for non-ferrous metal	3 mm
Max. cutting length	620 mm
Motor power	350 W
Speed	15000 rpm
Protection class	IP 20
Supply voltage	230 V~ 50 Hz
Fuse	Diameter 5 x 20 mm T 3.15 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.2 VARGA VA 10 (Variant 100-120 V~ mains voltage)

Design variant	VARGA VA 10
Saw blade	Diameter 120 mm 24 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 94 m/s
Machine (length x width x height)	883 x 650 x 258 mm
Work surface - rubber (length x width)	695 x 344 mm
Machine dead weight	16 kg net 20 kg gross
Packaging dimensions (length x width x height)	88 x 59 x 23 cm
Max. cutting thickness for plastic	6 mm
Max. cutting thickness for non-ferrous metal	3 mm
Max. cutting length	620 mm
Motor power	350 W
Speed	15000 rpm
Protection class	IP 20
Supply voltage	100-120 V~ 50/60 Hz
Fuse	Diameter 5 x 20 mm T 4 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.3 VARGA VA 11 (Variant 230 V~ mains voltage)

Design variant	VARGA VA 11
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	938 x 1002 x 339 mm
Work surface - rubber (length x width)	732 x 315 mm
Machine dead weight	28 kg net 34 kg gross
Packaging dimensions (length x width x height)	90 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	665 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	230 V~ 50 Hz
Fuse	Diameter 5 x 20 mm T 4 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.4 VARGA VA 11 (Variant 100-120 V~ mains voltage)

Design variant	VARGA VA 11
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	938 x 1002 x 339 mm
Work surface - rubber (length x width)	732 x 315 mm
Machine dead weight	28 kg net 34 kg gross
Packaging dimensions (length x width x height)	90 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	665 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	100-120 V~ 50/60 Hz
Fuse	Diameter 5 x 20 mm T 6.3 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.5 VARGA VA 21-15 (Variant 230 V~ mains voltage)

Design variant	VARGA VA 21-15
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	1385 x 965 x 339 mm
Work surface - rubber (length x width)	1110 x 315 mm
Machine dead weight	31 kg net 39 kg gross
Packaging dimensions (length x width x height)	133 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	1030 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	230 V~ 50 Hz
Fuse	Diameter 5 x 20 mm T 4 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.6 VARGA VA 21-15 (Variant 100-120 V~ mains voltage)

Design variant	VARGA VA 21-15
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	1385 x 965 x 339 mm
Work surface - rubber (length x width)	1110 x 315 mm
Machine dead weight	31 kg net 39 kg gross
Packaging dimensions (length x width x height)	133 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	1030 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	100-120 V~ 50/60 Hz
Fuse	Diameter 5 x 20 mm T 6.3 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.7 VARGA VA 31-15 (Variant 230 V~ mains voltage)

Design variant	VARGA VA 31-15
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	1611 x 965 x 339 mm
Work surface - rubber (length x width)	1341 x 315 mm
Machine dead weight	35 kg net 43 kg gross
Packaging dimensions (length x width x height)	156 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	1260 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	230 V~ 50 Hz
Fuse	Diameter 5 x 20 mm T 4 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.8 VARGA VA 31-15 (Variant 100-120 V~ mains voltage)

Design variant	VARGA VA 31-15
Saw blade	Diameter 120 mm 36 teeth
Machinable materials	Formica, Resopal, Engraving plastics, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 82 – 94 m/s
Machine (length x width x height)	1611 x 965 x 339 mm
Work surface - rubber (length x width)	1341 x 315 mm
Machine dead weight	35 kg net 43 kg gross
Packaging dimensions (length x width x height)	156 x 81 x 25 cm
Max. cutting thickness for plastic	15 mm
Max. cutting thickness for non-ferrous metal	5 mm
Max. cutting length	1260 mm
Motor power	500 W
Speed	13000 – 15000 rpm
Protection class	IP 20
Supply voltage	100-120 V~ 50/60 Hz
Fuse	Diameter 5 x 20 mm T 6.3 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.9 VARGA VA 1 (Variant 230 V~ mains voltage)

Design variant	VARGA VA 1
Saw blade	Diameter 120 mm 24 teeth
Machinable materials	Formica, Resopal, Gravoply, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 94 m/s
Machine (length x width x height)	847 x 592 x 298 mm
Work surface - rubber (length x width)	680 x 269 mm
Machine dead weight	18 kg net 22 kg gross
Packaging dimensions (length x width x height)	83 x 50 x 24 cm
Max. cutting thickness for plastic	6 mm
Max. cutting thickness for non- ferrous metal	3 mm
Max. cutting length	620 mm
Motor power	350 W
Speed	15000 rpm
Protection class	IP 20
Supply voltage	230 V~ 50 Hz
Fuse	Diameter 5 x 20 mm T 3.15 A 250 V
Lubricant/cooling lubricant	Vargol

4.1.10 VARGA VA 1 (Variant 100-120 V~ mains voltage)

Design variant	VARGA VA 1
Saw blade	Diameter 120 mm 24 teeth
Machinable materials	Formica, Resopal, Gravoply, Astralon, Plexiglas, PVC, aluminum, brass, wood, hard fabric panels
Cutting speed	Approx. 94 m/s
Machine (length x width x height)	847 x 592 x 298 mm
Work surface - rubber (length x width)	680 x 269 mm
Machine dead weight	18 kg net 22 kg gross
Packaging dimensions (length x width x height)	83 x 50 x 24 cm
Max. cutting thickness for plastic	6 mm
Max. cutting thickness for non- ferrous metal	3 mm
Max. cutting length	620 mm
Motor power	350 W
Speed	15000 rpm
Protection class	IP 20
Supply voltage	100-120 V~ 50/60 Hz
Fuse	Diameter 5 x 20 mm T 4 A 250 V
Lubricant/cooling lubricant	Vargol

4.2 Ambient conditions

4.2.1 Installation requirements

The precision circular table saw should be set up at working height. A workbench or sturdy table, for example, is suitable for this purpose.

The surface/setup area must

- be able to bear the weight of the precision circular table saw;
- be stable and sturdy;
- have a horizontal, even surface and be level in all directions;
- have a non-slip surface;
- meet the ergonomic requirements of the personnel.

4.2.2 Operating conditions

Area	Indoors
Air temperature	+5°C to +40°C <i>(short-term +70°C for a maximum of 24 hours)</i>
Humidity	max. 50% at +40°C <i>(higher relative humidities are permissible at lower temperatures (e.g. 90% at 20°C))</i>

4.2.3 Storage conditions

Area	Indoors
Air temperature	-24°C to +55°C <i>(short-term +70°C for a maximum of 24 hours)</i>
Humidity	max. 50% at +40°C <i>(higher relative humidities are permissible at lower temperatures (e.g. 90% at 20°C))</i>

4.2.4 Time limits

The service life depends on use and the maintenance intervals observed by specialist personnel. Preventive maintenance has a particular impact on service life; this includes timely replacement of wear parts. Elements of functional safety chains, regardless of the standard(s) applied, must be replaced in good time before the calculated or specified service life is reached, in accordance with their switching frequency or operating time.

4.2.5 Spatial limits

The machine must be set up in such a way that there is sufficient space between the machine and other features (walls, other machine, etc.) to allow handling of larger workpieces and/or completion of maintenance and repair work.

4.2.6 Airborne noise emission

A-weighted sound power level

96 dB(A)

The actual noise exposure from the machine depends on the ambient conditions. Further noise measurements must therefore be carried out at the machine's installation site.

5 Structure and function

5.1 Equipment features

Variant Feature	VA 10	VA 11	VA 21-15	VA 31-15	VA 1
Motor	350 W	500 W	500 W	500 W	350 W
Feet	✓	✓	✓	✓	✓
Handle	✓	✓	✓	✓	✓
Rotary handle extension	✗	✗	✓	✓	✗
Lifting handle	✓	✓	✓	✓	✓
Lubrication device	✓	✓	✓	✓	✓
Chip bag with holder	✓	✓	✓	✓	✓
Hose	✓	✓	✓	✓	✓
Cable/hose retaining spring	✓	✓	✓	✓	✓
Lubrication refill holder	✗	✓	✓	✓	✓
Right stop with scale	✓	✓	✓	✓	✓
Fixed stop with scale	✓	✓	✓	✓	✓
Left stop	✗	✓	✓	✓	✗
Material stop (double stop right)	✗	✓	✓	✓	✗
Fine adjustment	✗	✓	✓	✓	✗
Max. workpiece size	620 mm	665 mm	1030 mm	1260 mm	620 mm

5.2 Design variants

The VARGA precision circular table saw is available in several versions:

- VARGA VA 1
- VARGA VA 10
- VARGA VA 11
- VARGA VA 21-15
- VARGA VA 31-15

5.2.1 VARGA VA 10 precision circular table saw

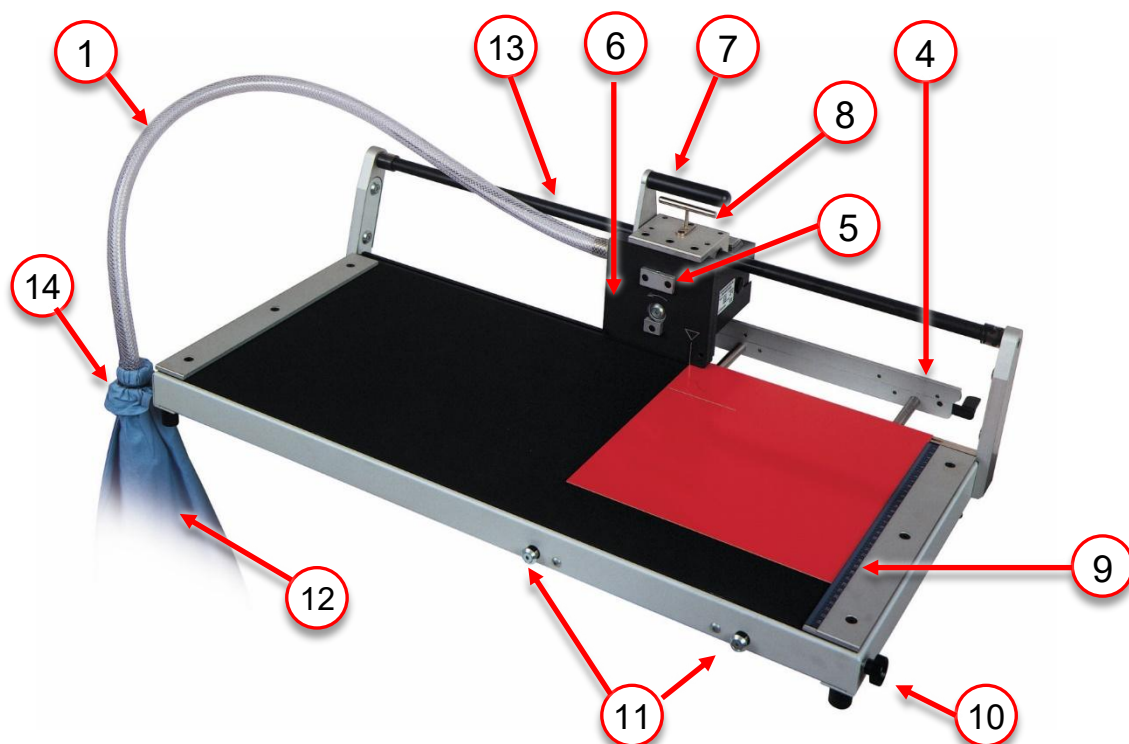


Figure 7 VARGA VA 10 precision circular table saw

Item	Designation
1	Hose
Not shown in image	Cable retaining spring
Not shown in image	Power cable
4	Right stop
5	Holder for lubrication device
6	Sawing unit
7	Handle of the saw
8	Lifting handle for lifting the saw housing
9	Fixed stop with scale (measured from the front of the sheet)
10	Knurled screw for tightening the stop
11	Scale for the right stop
12	Chip bag
13	Guide rod
14	Spring clip for attaching the chips bag

5.2.2 VARGA VA 11 precision circular table saw

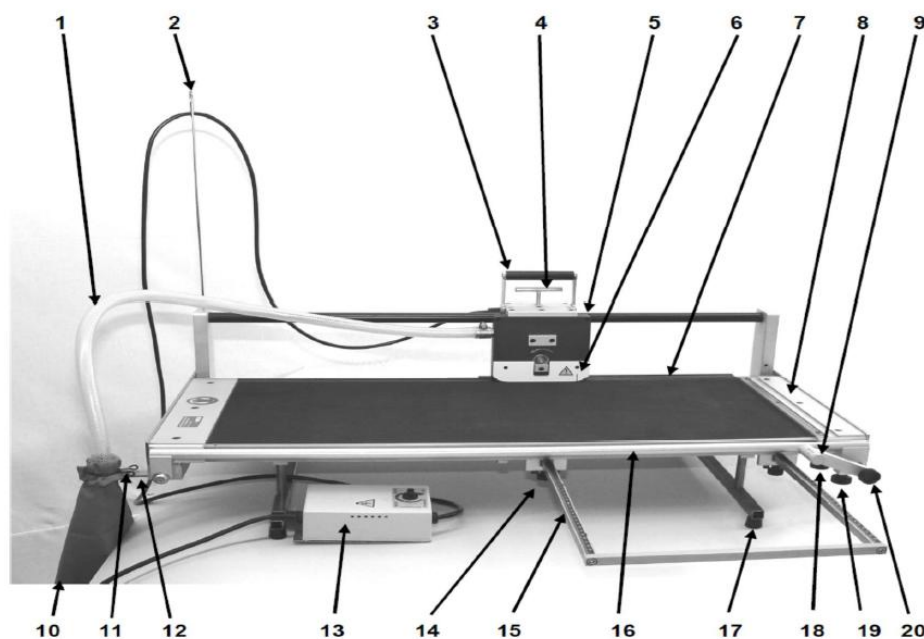


Figure 8 VARGA VA 11 precision circular table saw

Item	Designation
1	Hose
2	Cable retaining spring
3	Handle of the saw
4	Lifting handle for lifting the saw housing
5	Sawing unit
6	Protective plate
7	Material stop (double stop right)
8	Fixed stop with scale (measured from the front of the sheet)
9	Fine adjustment (stop left)
10	Chip bag
11	Spring clip for attaching the chips bag
12	Chip bag holders
13	Speed controller
14	Stop blocking screw M 5 x 0.75 x 15 (Item no. 70-11-5031)
15	Stop guide with scale
16	Material support
17	Feet
18	Stop left, blocking screw M 5 x 25 (Item no. 1-50031)
19	Edition left mounting screw M 5 x 25 (Item no. 70-1-50031)
20	Stop left, fixing screw M 5 x 25 (Item no. 70-1-50031)

5.2.3 VARGA VA 21-15 and VA 31-15 precision circular table saw

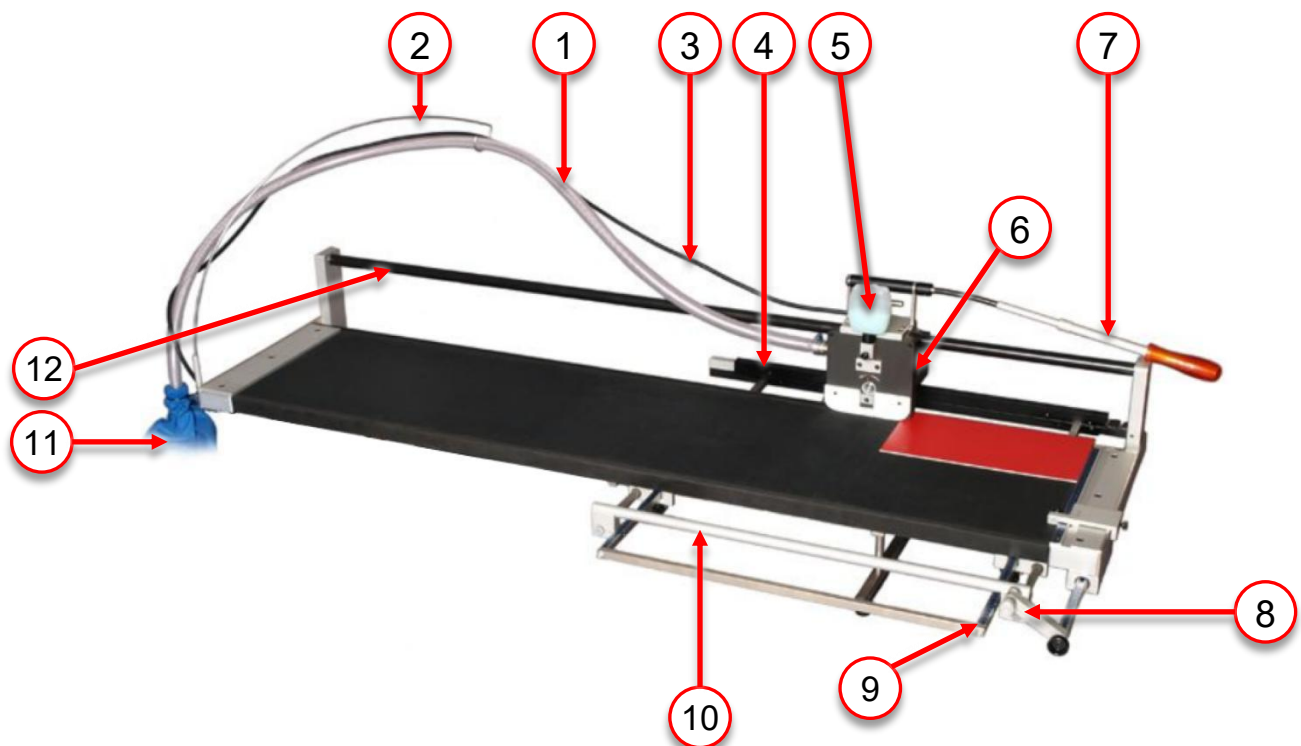


Figure 9 VARGA VA 21-15 and VA 31-15 precision circular table saw

Item	Designation
1	Hose
2	Cable retaining spring
3	Power cable
4	Right stop
5	Lubrication device
6	Sawing unit
7	Rotary handle extension
8	Fine adjustment
9	Scale for the right stop
10	Support for workpiece
11	Chip bag
12	Guide rod
Not shown in image	Speed Controller

5.2.4 VARGA VA 1 precision circular table saw

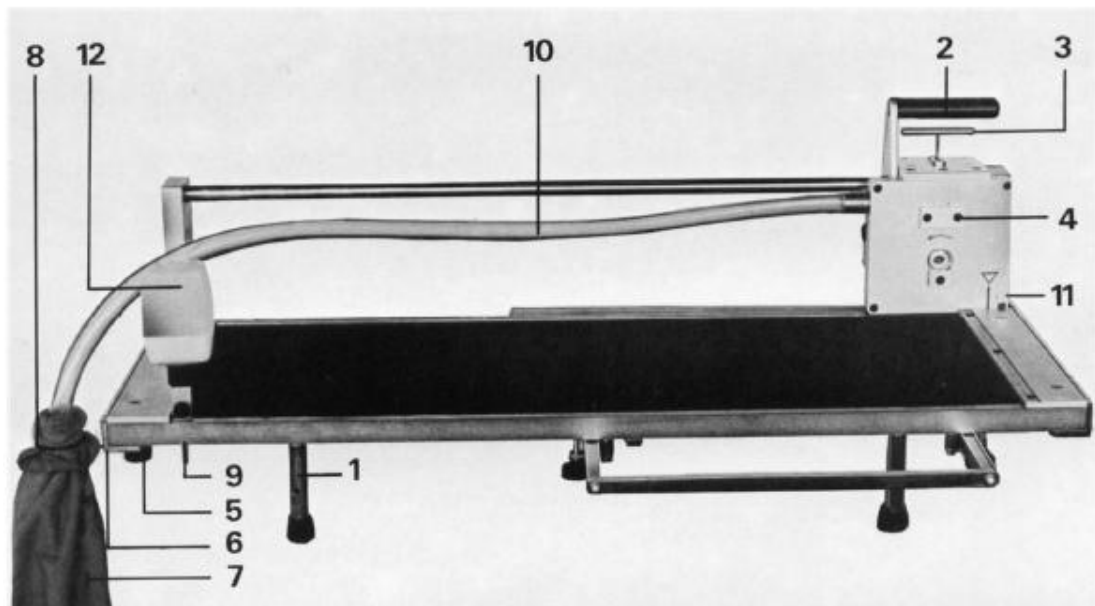


Figure 10 VARGA VA 1 precision circular table saw

Item	Designation
1	Feet (four pieces)
2	Handle
3	Lifting handle for lifting the saw housing
4	Holder for lubrication device
5	Knurled nut for sack holder
6	Chip bag holder
7	Chip bag
8	Spring clip for attaching the chips bag
9	Borehole for storage of the lubrication device
10	Plastic hose-pipe
11	Seed screw with spacer ring
12	Lubrication device

5.3 Component description

5.3.1 Sawing unit with motor

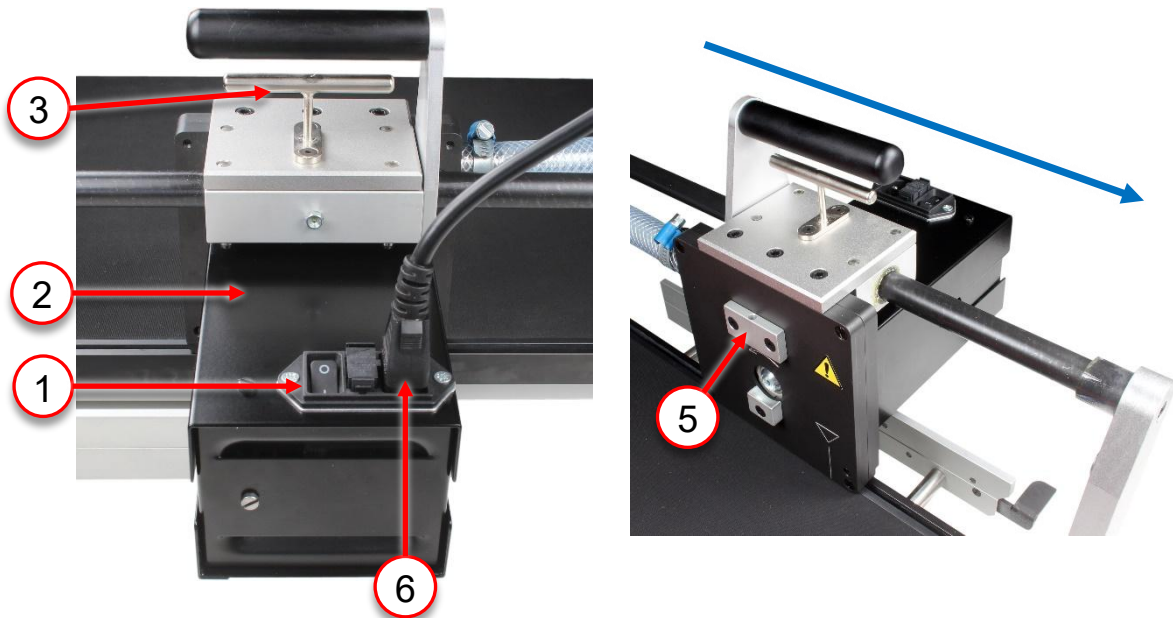


Figure 11 Sawing unit with motor

Item	Designation
	Sawing direction
1	Toggle switch
2	Motor housing with integrated motor
3	Lifting handle
4	Handle
5	Lubrication device holder
6	Mains plug

5.3.2 Lubrication device

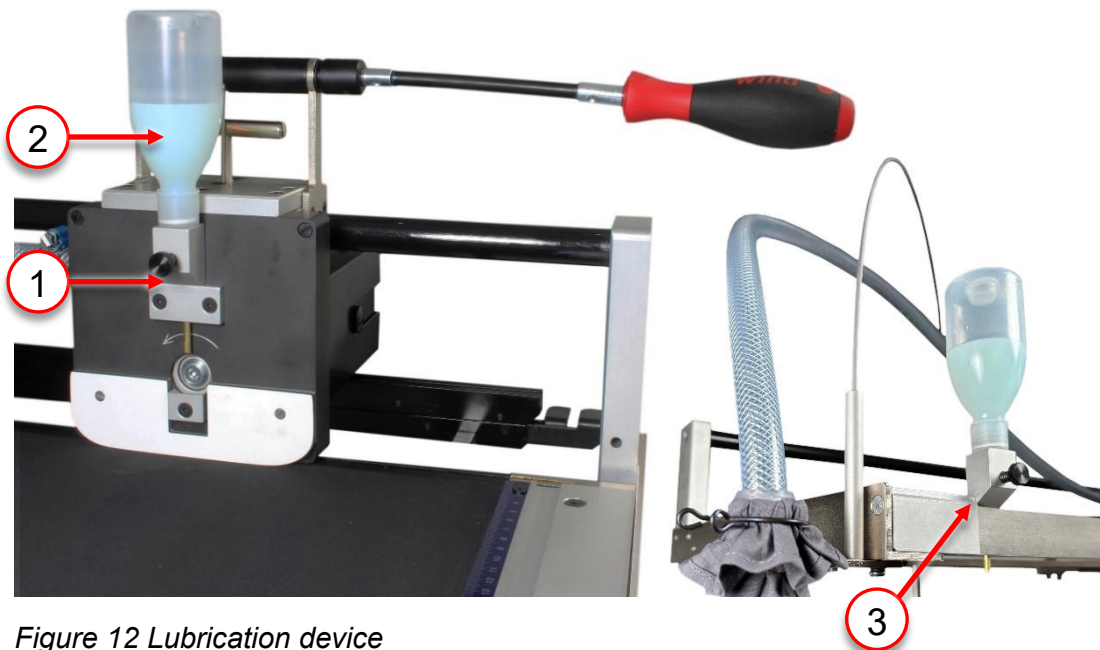


Figure 12 Lubrication device

Item	Designation
1	Adjusting screw
2	Lubricant reservoir
3	Refill holder (only for VA 1, VA 11, VA 21-15 and VA 31-15)

The lubrication device applies lubricant to the workpiece during the sawing process. Lubrication improves the sawing results and extends the service life of the saw blade.

The lubricant quantity is set using the adjusting screw (1, Figure 12). To do this, the motor must first be switched on. When the motor is running, the screw must be turned clockwise until a drop of lubricant is dispensed approximately every two seconds. When not in use or for refilling, the lubricant container (2, Figure 12) can be placed in the refill holder (3, Figure 12). This refill holder is not provided for the VA 10 model.

5.4 Working position

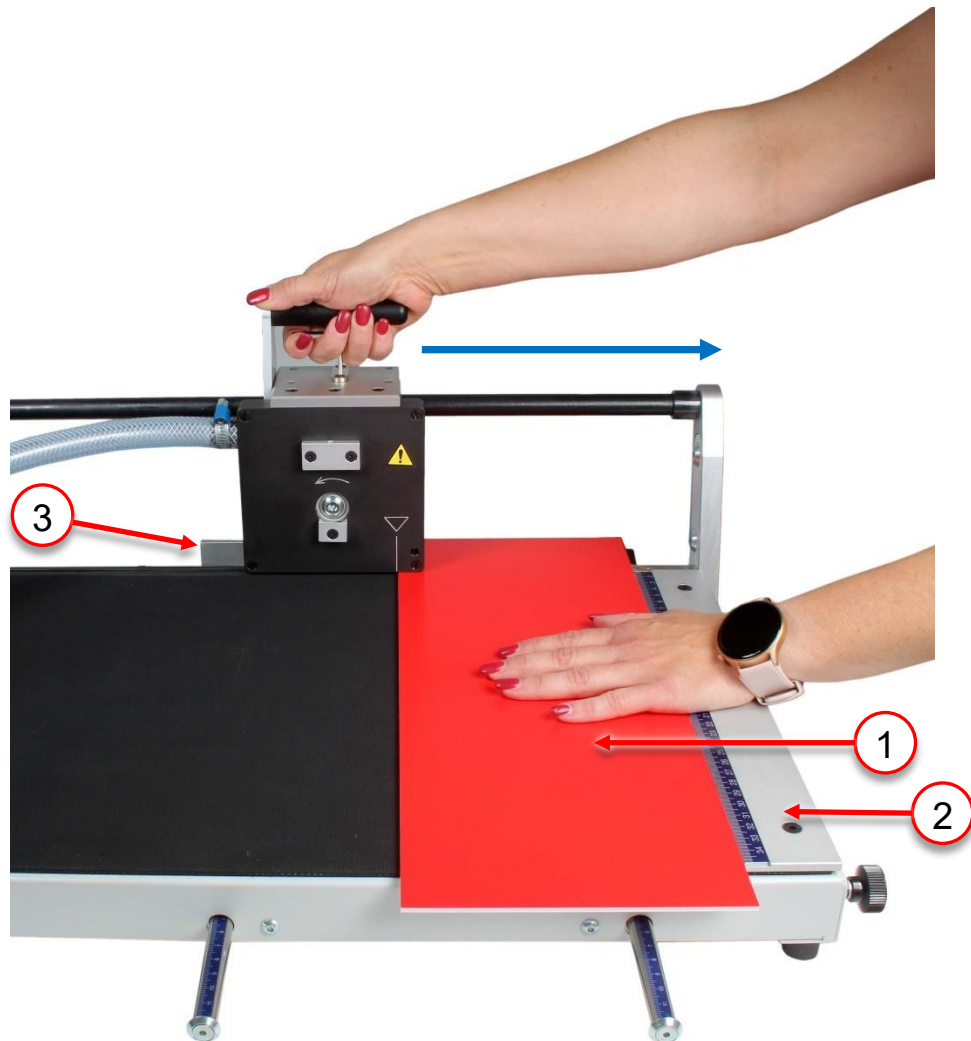


Figure 13 Working position (top view)

Item	Designation
	Hand movement during sawing
1	Workpiece
2	Fixed stop
3	Right stop

6 Transport

Target group: Maintenance personnel



6.1 Special safety instructions

WARNING!

Danger due to unwieldiness and weight of the machine

Various dangers can arise due to the machine's unwieldiness and its own weight. Dropping it can cause bruising or fractures to the feet. Carrying loads incorrectly can damage the musculoskeletal system.

- Transport work may only be carried out by trained personnel.
- The machine must be switched off and the mains plug disconnected from the power supply before transport.
- Secure the sawing unit, cables, and hoses properly.
- Two people are always required to lift and carry the machine.
- Lift and set down the machine ergonomically and gently. If necessary, use transport equipment (e.g. a pallet truck).
- Keep transport routes without transport equipment as short as possible.
- Wear foot protection.
- Wear hand protection.
- Work with care.

 WARNING!

Danger of parts and materials falling during transport with an industrial truck

In the event of improper transport with an industrial truck, sudden shifts in weight can lead to uncontrolled behavior of the load. This can result in serious injuries.

- Secure parts and materials properly to prevent falling.
- Secure the sawing unit with a screw or cable tie before transport.
- Ensure that no one is present under the loads.
- Ensure that no one is on or near the machine during transport.
- Do not use people as counterweights.
- Wear foot protection.

ATTENTION

Falling components

Improper transport can lead to material damage.

- When selecting the means of transport, observe the technical data of the machine and its individual components.

6.2 Delivery

The precision circular table saws are packed in a cardboard box and delivered on a pallet.

Action required

1. Move a pallet truck under the pallet.
 2. Move the precision circular table saw on the pallet to its place of use.
 3. Set the pallet down and remove the pallet truck from the work area.
 4. Remove the transport lock.
- ☒ *Transport packaging can be removed (see Section 7.2).*
 - ☒ *Precision circular table saw can be assembled (see Section **Fehler!** **Verweisquelle konnte nicht gefunden werden.**).*

6.3 Subsequent transport

Action required

1. Ensure that the precision circular table saw is switched off.
2. Ensure that the mains plug is disconnected.
3. Pull the hose out of the chip bag and secure it to the precision circular table saw with cable ties.
4. Remove the chip bag from the holder and empty if necessary.
5. Secure the sawing unit with screw or cable ties (VARGA VA 10).
6. Lift the precision circular table saw with both hands on the left and right and move it to the new workplace.
7. Position the precision circular table saw at the workplace.
8. Assemble and install the precision circular table saw (see *Section Fehler! Verweisquelle konnte nicht gefunden werden.*).

7 Assembly and installation

Target group: Maintenance personnel



7.1 Special safety instructions

CAUTION!

Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

7.2 Remove transport packaging

7.2.1 VARGA VA 10 precision circular table saw

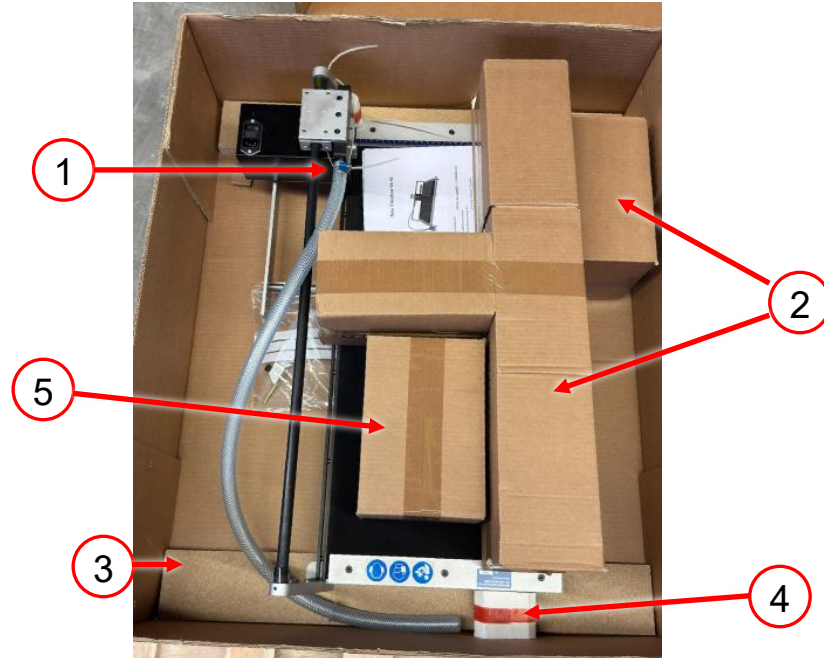


Figure 14 Transport packaging VARGA VA 10

Item	Designation
1	Cable ties
2	Cardboard boxes
3	Compensating board
4	Transport lock
5	Accessories

The precision table saw is delivered in a cardboard box for safe transportation. To prevent damage during transportation, certain components are protected with cardboard (2, Figure 14). The saw unit is secured with cable ties (1, Figure 14). The delivery box also contains compensation boards (3, Figure 14), transport locks (4, Figure 14) and a separate box with accessories (5, Figure 14).

7.2.2 VARGA VA 11, VA 21-15 and VA 31-15 precision circular table saw

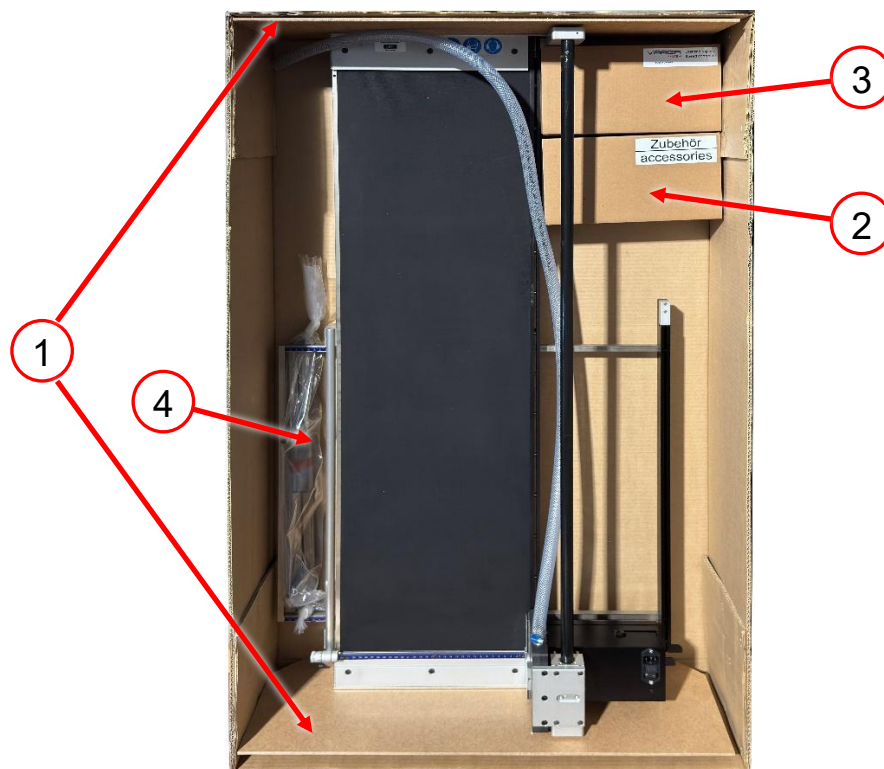


Figure 15 Transport packaging VARGA VA 11, VA 21-15 and VA 31-15

Item	Designation
1	Transport plates
2	Accessories
3	Speed Controller
4	Feet 2x

The precision table saw is supplied in a cardboard box for safe transportation. Transport plates (1, Figure 15) are used to protect the device. The packaging also contains the feet (4, Figure 15), a separate box with accessories (2, Figure 15) and the packaged speed controller (3, Figure 15).

7.2.3 VARGA VA 1 precision circular table saw

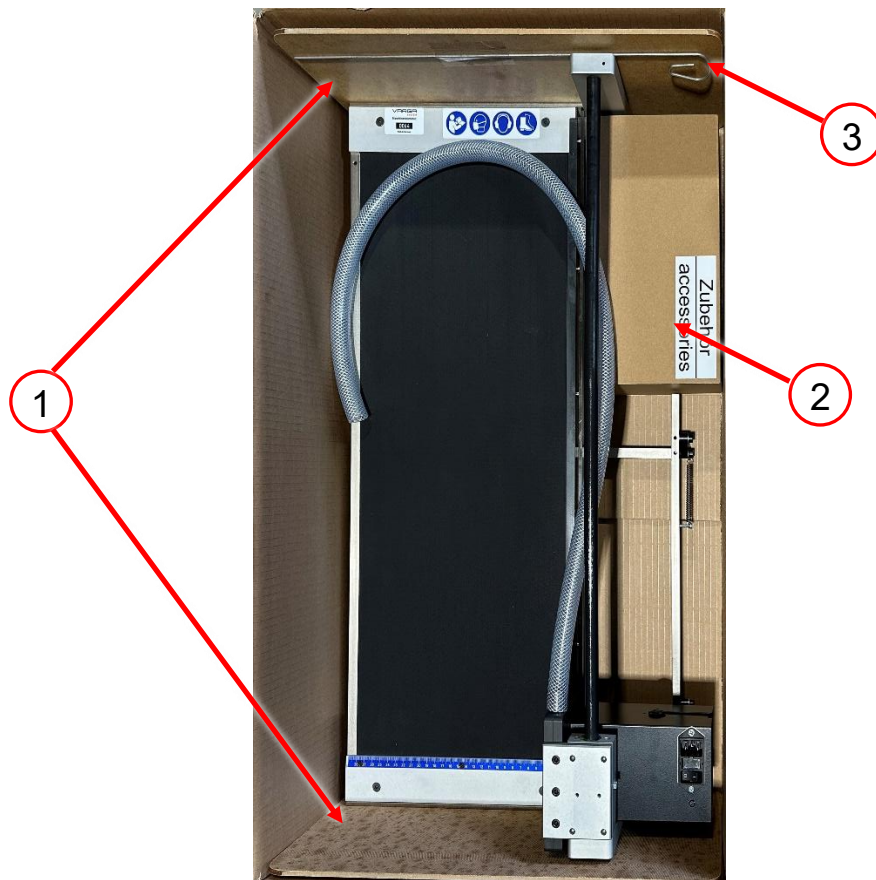


Figure 16 Transport packaging VARGA VA 1

Item	Designation
1	Transport plates
2	Accessories
3	Cable retaining spring

The precision table saw is supplied in a cardboard box for safe transportation. The packaging also contains a separate box with accessories (2, Figure 16) and the cable retaining spring (3, Figure 16).

7.3 Scope of delivery

7.3.1 VARGA VA 10 precision circular table saw

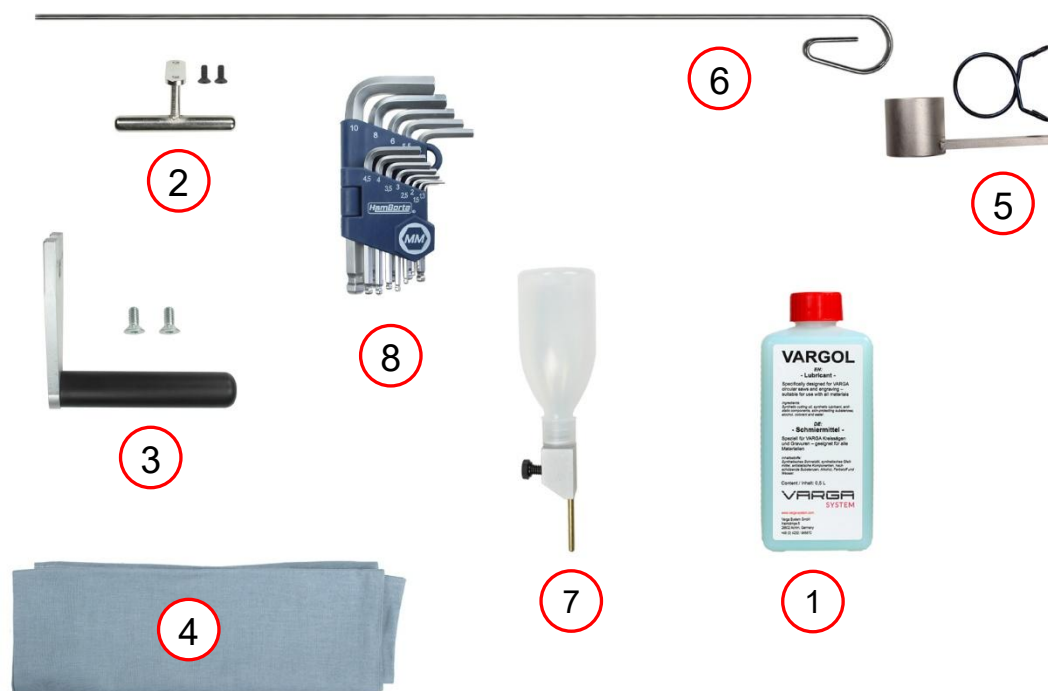


Figure 17 Scope of delivery VARGA VA 10

Item	Designation
1	Vargol lubricant
2	Lifting handle (2x M4x10 screws)
3	Handle (2x M6x14 screws)
4	Chip bag
5	Chip bag holder with spring
6	Cable retaining spring
7	Lubrication device
8	Allen key set
Not shown in image	Cold appliance plug

7.3.2 VARGA VA 11 precision circular table saw



Figure 18 Scope of delivery VARGA VA 11

Pos.	Bezeichnung
1	Vargol lubricant
2	Lifting handle (2x M4x10 screws)
3	Handle (4x M4x10 screws)
4	Chip bag
5	Chip bag holder with spring
6	Feet (2x) with 4x M5x90 screws
7	Cable retaining spring
8	Lubrication device
9	Allen key set
Not shown in image	Cold appliance plug
Not shown in image	Speed Controller

7.3.3 VARGA VA 21-15 and VA 31-15 precision circular table saw

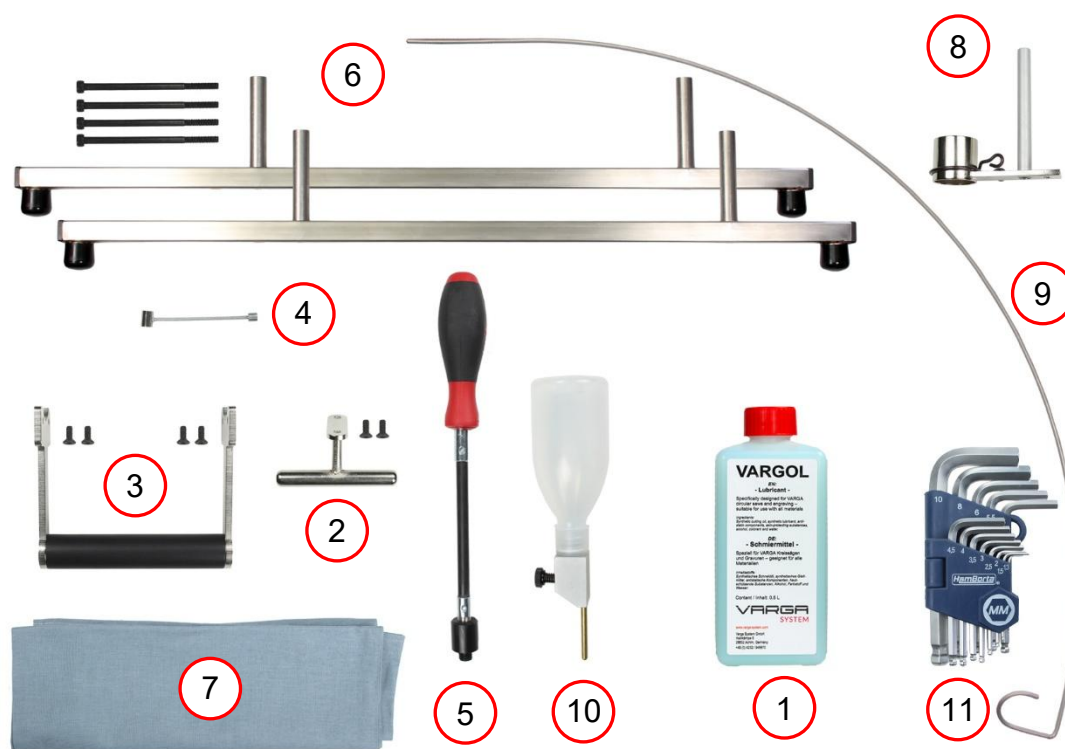


Figure 19 Scope of delivery VARGA VA 21-15 and VA 31-15

Item	Designation
1	Vargol lubricant
2	Lifting handle (2x M4 x 10 screws)
3	Handle (4x M4x10 screws)
4	Lifting cable (Item-no. 70-21-6011)
5	Rotary handle extension
6	Feet (2x) with 4x M5x90 screws
7	Chip bag
8	Chip bag holder with spring
9	Hose retaining spring
10	Lubrication device
11	Allen key set
Not shown in image	Cold appliance plug
Not shown in image	Speed controller

7.3.4 VARGA VA 1 precision circular table saw



Figure 20 Scope of delivery VARGA VA 1

Item	Designation
1	Vargol lubricant
2	Lifting handle (2x M4 x 10 screws)
3	Handle (2x M6x14 screws)
4	Chip bag
5	Chip bag holder with spring
6	Cable retaining spring
7	Lubrication device
8	Allen key set
9	Feet (4x)
Not shown in image	Cold appliance plug

7.4 Assembly

WARNING!

Danger due to unsuitable installation location

An unsuitable installation location can cause the machine to tip over or fall. This can result in various injuries. The following instructions must be observed when setting up the machine.

- Ensure that the surface can bear the weight of the machine and is stable.
- Ensure that the surface is flat, non-slip, and level.
- The installation height must meet the ergonomic requirements of the personnel.
- Work may only be carried out by trained specialist personnel.

WARNING!

Dangers due to improperly fitted chip hose

An improperly fitted chip hose can lead to increased dust and chip exposure and thus to irritation of the eyes and breathing difficulties.

- Before installing the machine, read the operating instructions and always follow them.

WARNING!

Danger due to improperly laid cables

An improperly positioned mains plug cannot be reached quickly in the event of danger. There is a risk of serious injury and death from the rotating saw blade.

- Lay the cable with the mains plug so that it is easily accessible from the workplace.
- Observe the marking on the mains isolating plug.

CAUTION!

Danger due to improperly laid cables

An improperly laid power cable can cause dangers such as tripping or falling. This can lead to bruises, sprains, or fractures.

- Lay and cover power cables safely.
- Work with care.

7.4.1 VARGA VA 10 precision circular table saw

Action required

1. Remove the precision circular table saw from the box and place it on a suitable work surface.
2. Remove the cardboard packaging and dispose of it properly.
3. Unscrew the screw with snap ring (4, Figure 21) from the table underside. Use it to attach the bag holder (3, Figure 21).
4. Pull the chip bag (1, Figure 21) from below through the opening of the bag holder and secure the chip bag with the spring (2, Figure 21).
5. Align the saw that the chip bag hangs freely downwards at the end.
6. Insert the hose into the chip bag opening from above.

NOTE

A plastic ring on the hose marks the correct depth.

7. Remove the cable ties from the sawing unit.
8. Fit the lifting handle (1, Figure 22) with the countersunk screws supplied (M4x10).
9. Fit the handle (2, Figure 22) with the countersunk screws supplied (M6x14).
10. If required, attach the lubrication device to the holder (3, Figure 22).

WARNING!

Danger due to improperly laid cables

An improperly positioned mains plug cannot be reached quickly in the event of danger. There is a risk of serious injury and death from the rotating saw. Lay the cable with the mains plug so that it is easily accessible from the workplace.

11. Hook the cable retaining spring (2, Figure 23) into the opening in the rear guide rod holder (1, Figure 23).
12. Hook the cable (3, Figure 23) into the cable retaining spring and plug it into the motor housing of the precision table saw.

⚠ DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

13. Connect the mains plug to the power supply.

☒ *The precision circular table saw is fully assembled.*



Figure 21 Fitting the VARGA VA 10 chip bag

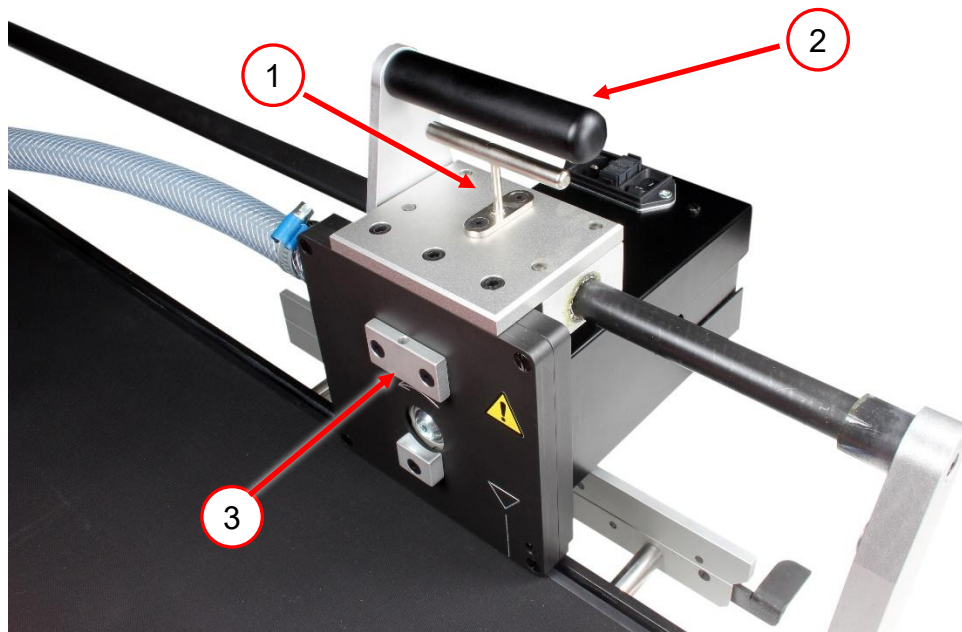


Figure 22 Fitting the VARGA VA 10 lifting handle and handle

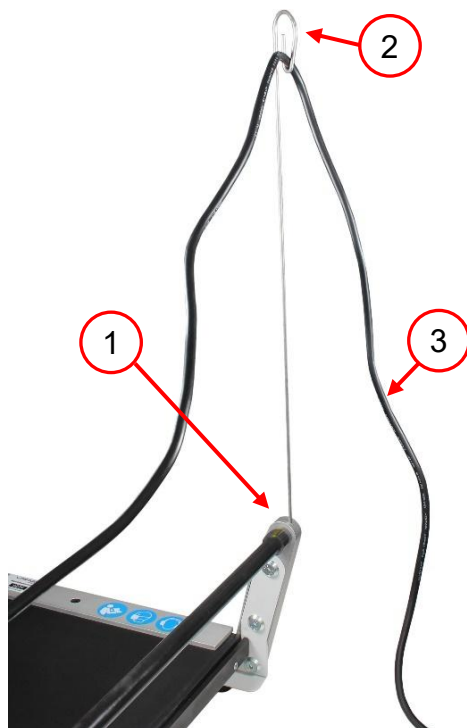


Figure 23 Fitting the VARGA VA 10 cable retaining spring

7.4.2 VARGA VA 11 precision circular table saw

Action required

1. Remove the precision circular table saw from the box and place it on a suitable work surface.
2. Remove the cardboard packaging and dispose of it properly.
3. If necessary, turn the precision circular table saw so that the underside is facing upwards.
4. Screw the feet (2, Figure 24) to the underside of the precision circular table saw using the screws supplied (M5x90).
5. Turn the precision circular table saw back right way up.
6. Remove the transport plates (1, Figure 24).
7. Unscrew the screw with snap ring (4, Figure 25) from the table underside. Use it to attach the bag holder (3, Figure 25).
8. Pull the chip bag (1, Figure 25) from below through the opening of the bag holder and secure the chip bag with the spring (2, Figure 25).
9. Align the saw that the chip bag hangs freely downwards at the end.
10. Insert the hose into the chip bag opening from above.

NOTE

A plastic ring on the hose marks the correct depth.

11. Remove transport screw (1, Figure 26).

NOTE

Before transporting or relocating the precision table saw, it is essential to fit the transport screw together with the corresponding plastic ring to prevent damage.

12. Fit the lifting handle (2, Figure 27) with the countersunk screws supplied (M4x10).
13. Fit the handle (1, Figure 27) with the countersunk screws supplied (M4x10).
14. If required, attach the lubrication device to the holder (5, Figure 27).
15. Hook the cable retaining spring (2, Figure 28) into the opening in the rear guide rod holder (1, Figure 28).

NOTE

Detailed controller instructions are available separately.

16. Ensure that the precision table saw is switched off.
17. Mount the speed controller (2, Figure 29) with the bracket on the base (1, Figure 29) of the precision table saw.

WARNING!

Danger due to improperly laid cables

An improperly positioned mains plug cannot be reached quickly in the event of danger. There is a risk of serious injury and death from the rotating saw. Lay the cable with the mains plug so that it is easily accessible from the workplace.

18. Place the connection plug of the speed controller (1, Figure 30) around the precision table saw and hook it into the cable retaining spring (2, Figure 28).
19. Insert the connection plug of the speed controller (1, Figure 31) into the connection socket (2, Figure 31) on the motor housing of the precision table saw.
20. Ensure that all other cables and hoses have been secured or covered.

DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

21. Connect the mains plug of the speed controller (2, Figure 30) to the power supply.

☒ *The precision circular table saw is fully assembled.*

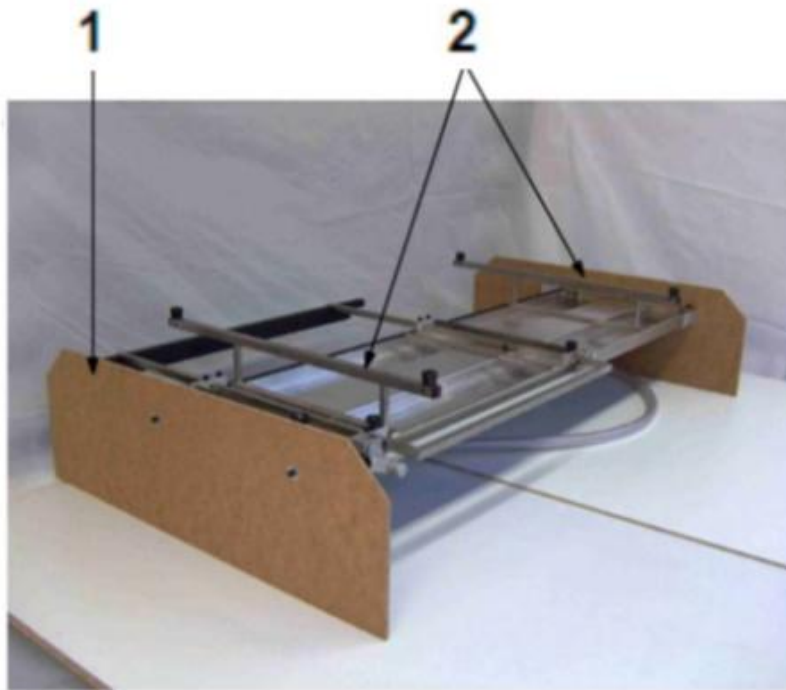


Figure 24 Fitting the feet

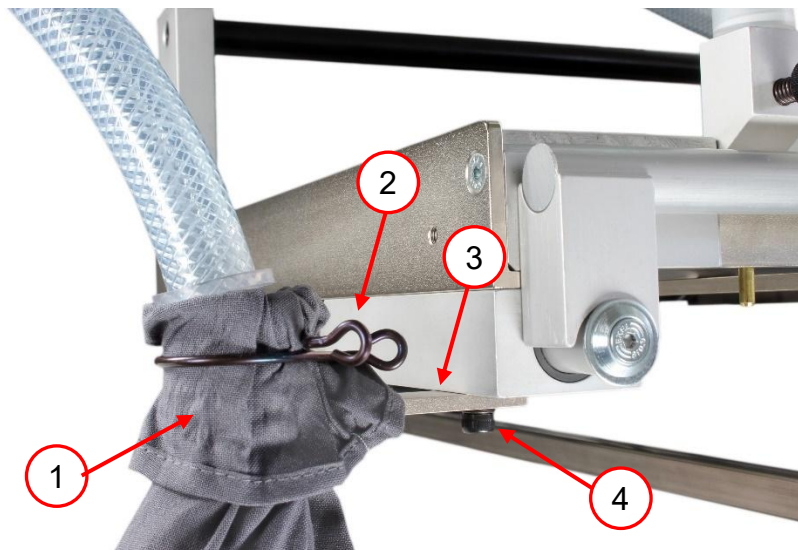


Figure 25 Fitting the VARGA VA 11 chip bag

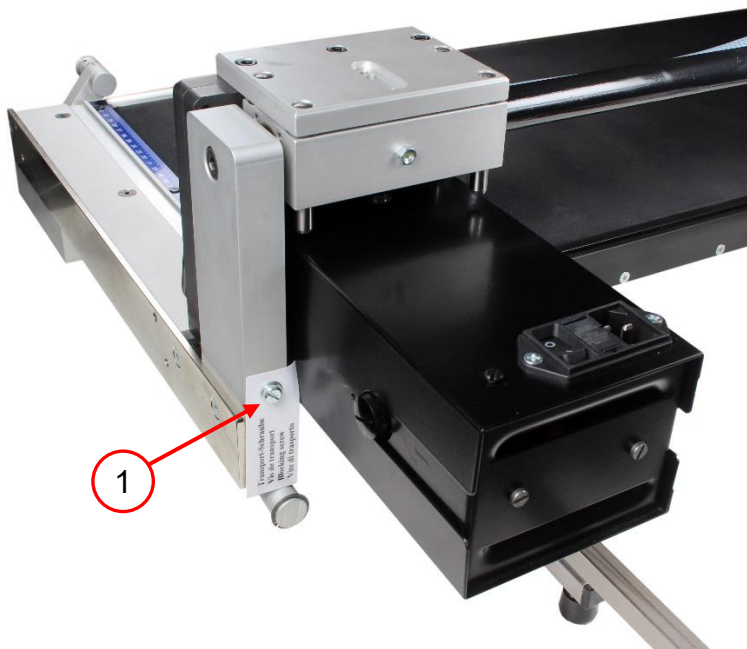


Figure 26 Remove transport screw and plastic ring VARGA VA 11

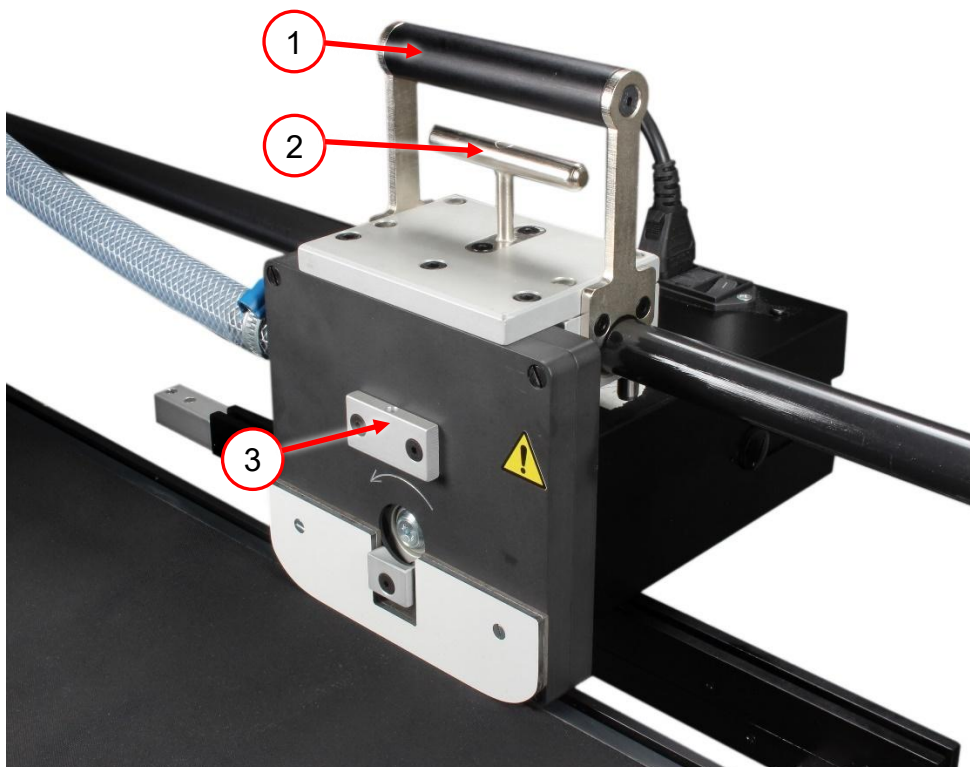


Figure 27 Fitting the VARGA VA 11 lifting handle and handle

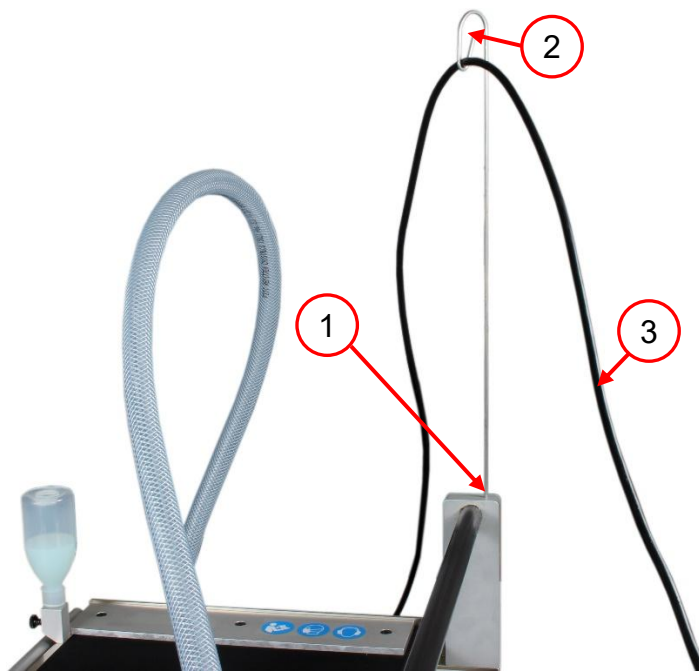


Figure 28 Fitting the VARGA VA 11 cable retaining spring

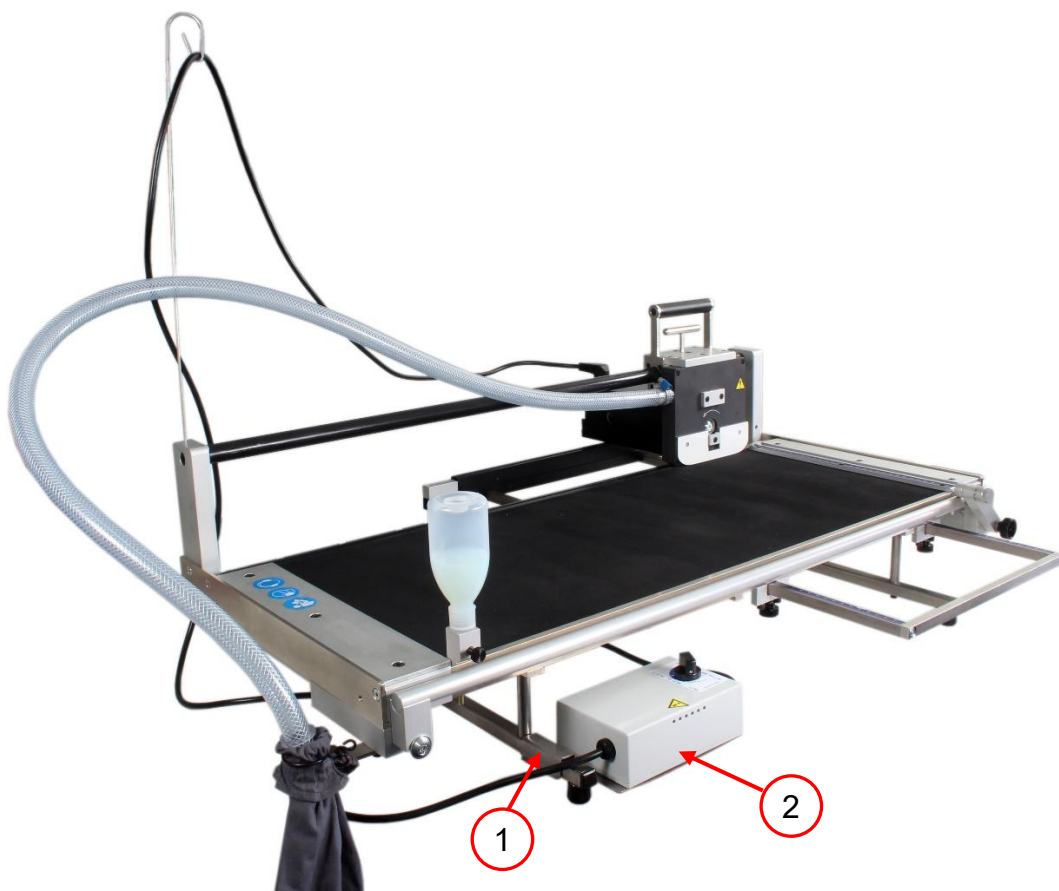


Figure 29 Mounting Speed Controller VARGA VA 11

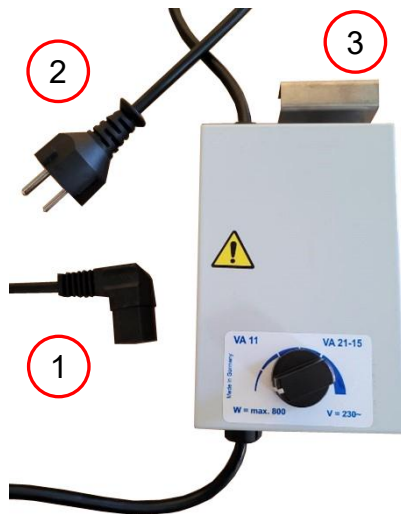


Figure 30 Speed Controller VARGA VA 11

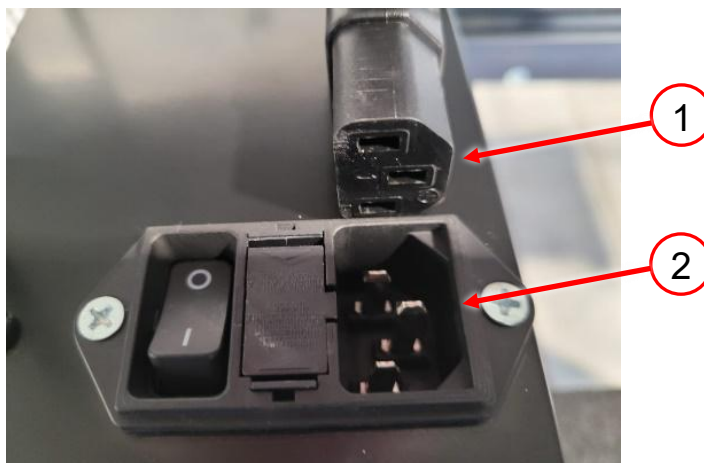


Figure 31 Connection Speed Controller VARGA VA 11

7.4.3 VARGA VA 21-15 and VA 31-15 precision circular table saw

Action required

1. Remove the precision circular table saw from the box and place it on a suitable work surface.
2. Remove the cardboard packaging and dispose of it properly.
3. If necessary, turn the precision circular table saw so that the underside is facing upwards.
4. Screw the feet (2, Figure 32) to the underside of the precision circular table saw using the screws supplied (M5x90).
5. Turn the precision circular table saw back right way up.
6. Remove the transport plates (1, Figure 32).
7. Unscrew the screw with snap ring (4, Figure 33) from the table underside. Use it to attach the bag holder (3, Figure 33).
8. Pull the chip bag (3, Figure 33) from below through the opening of the bag holder and secure the chip bag with the spring (3, Figure 33).
9. Align the saw that the chip bag hangs freely downwards at the end.
10. Insert the hose into the chip bag opening from above.

NOTE

A plastic ring on the hose marks the correct depth.

11. Remove transport screw (1, Figure 34).

NOTE

Before transporting or relocating the precision table saw, it is essential to fit the transport screw together with the corresponding plastic spacer ring to prevent damage.

12. Fit the handle (1, Figure 35) with the countersunk screws supplied (M4x10). Ensure that the thread for the rotary handle extension is positioned correctly (6, Figure 35).
13. Guide the lifting cable (2, Figure 35) from above through the opening in the center of the handle (1, Figure 35) and then through the slot in the lifting handle (3, Figure 35).
14. Fit the handle (5, Figure 35) with the countersunk screws supplied (M4x10).

15. Screw the rotary handle extension (5, Figure 31) into the handle (6, Figure 31). The rotary handle extension is primarily designed for long cuts but may remain attached for short cuts as well.
16. If required, attach the lubrication device to the holder (7, Figure 35).
17. Insert the hose retaining spring (2, Figure 36) into the attachment on the bag holder.
18. Insert the hose (1, Figure 36) into the eyelet of the hose retaining spring.
19. Ensure that the precision table saw is switched off.

NOTE

Detailed controller instructions are available separately.

20. Mount the speed controller (2, Figure 38) with the bracket on the base (1, Figure 38) of the precision table saw.

WARNING!

Danger due to improperly laid cables

An improperly positioned mains plug cannot be reached quickly in the event of danger. There is a risk of serious injury and death from the rotating saw. Lay the cable with the mains plug so that it is easily accessible from the workplace.

21. Place the connection plug of the speed controller (1, Figure 38) around the precision table saw and hook it into the cable retaining spring (2, Figure 36).
22. Insert the connection plug of the speed controller (1, Figure 39) into the connection socket (2, Figure 39) on the motor housing of the precision table saw.
23. Ensure that all other cables and hoses have been secured or covered.

DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

24. Connect the mains plug of the speed controller (2, Figure 38) to the power supply.

☒ *The precision circular table saw is fully assembled.*

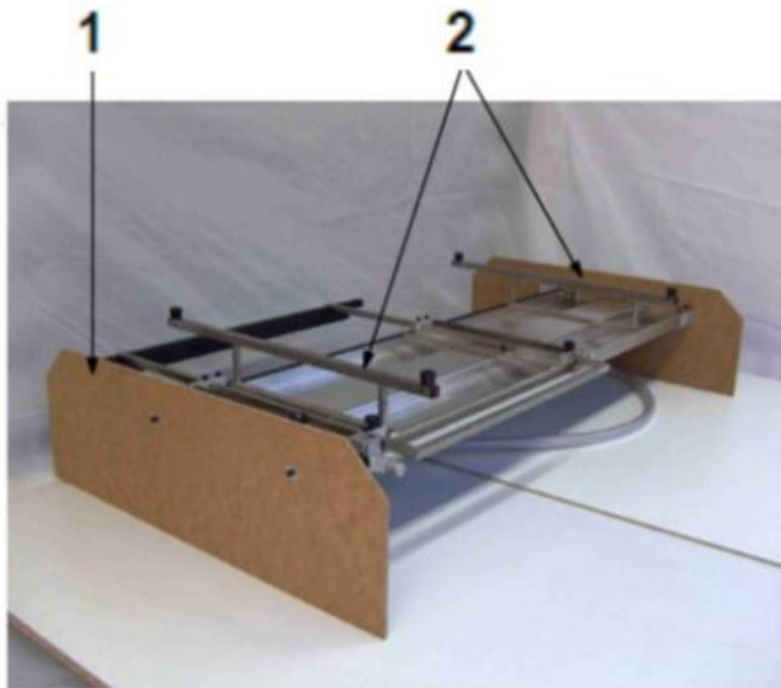


Figure 32 Fitting the feet VARGA VA 21-15 and VA 31-15

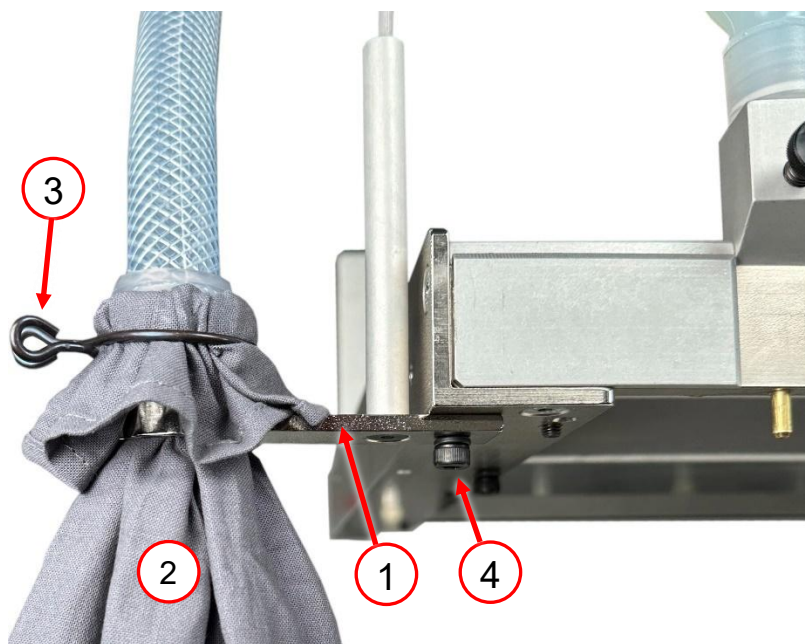


Figure 33 Fitting the VARGA VA 21-15 and VA 31-15 chip bag



Figure 34 Remove transport screw and plastic ring VARGA VA 21-15 and VA 31-15

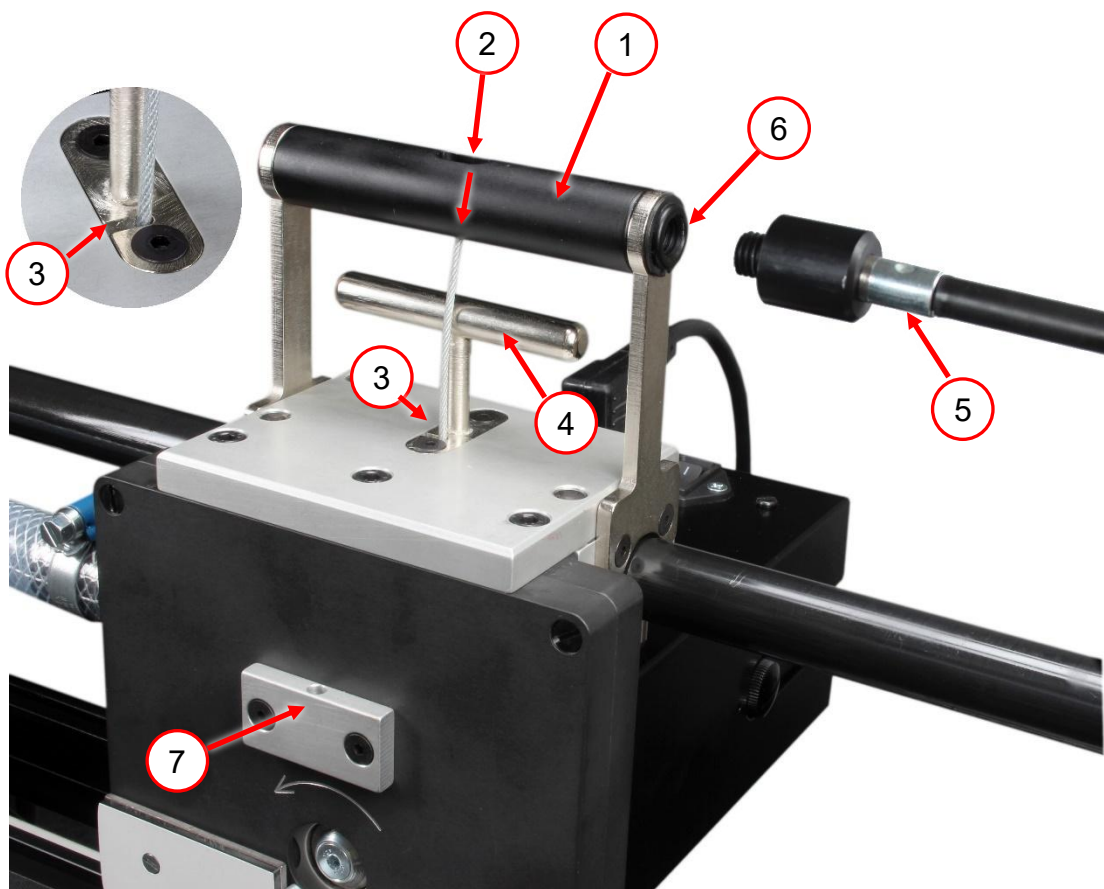


Figure 35 Fitting the VARGA VA 21-15 and VA 31-15 lifting handle, handle, lifting cable and rotary handle extension

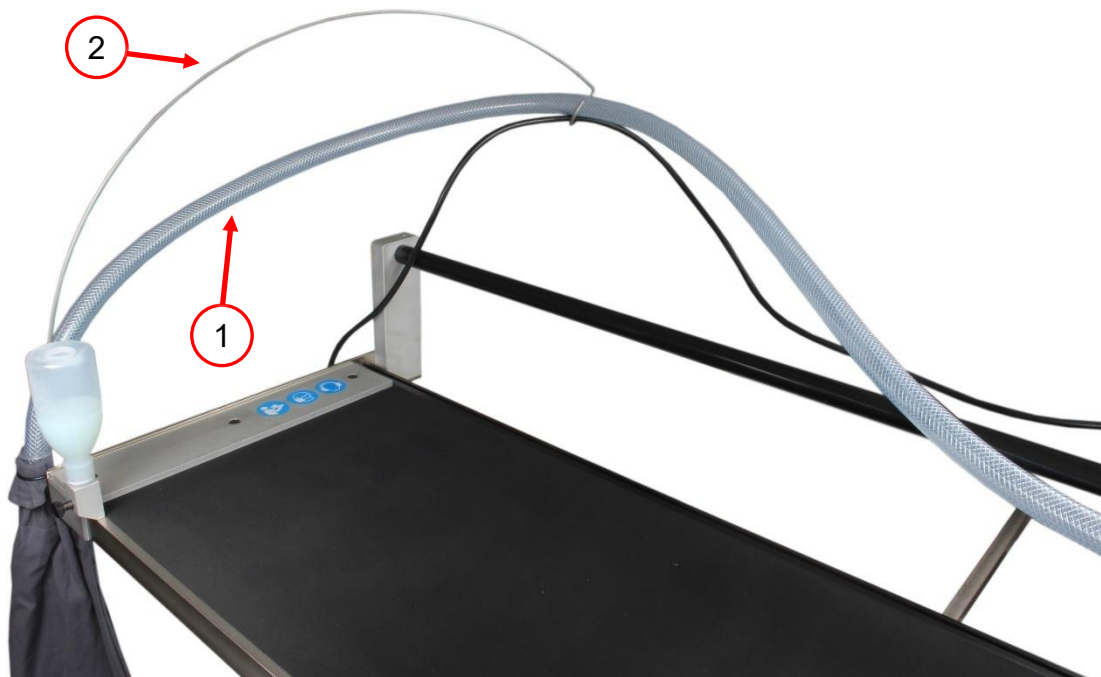


Figure 36 Fitting hose retaining spring VARGA VA 21-15 and VA 31-15

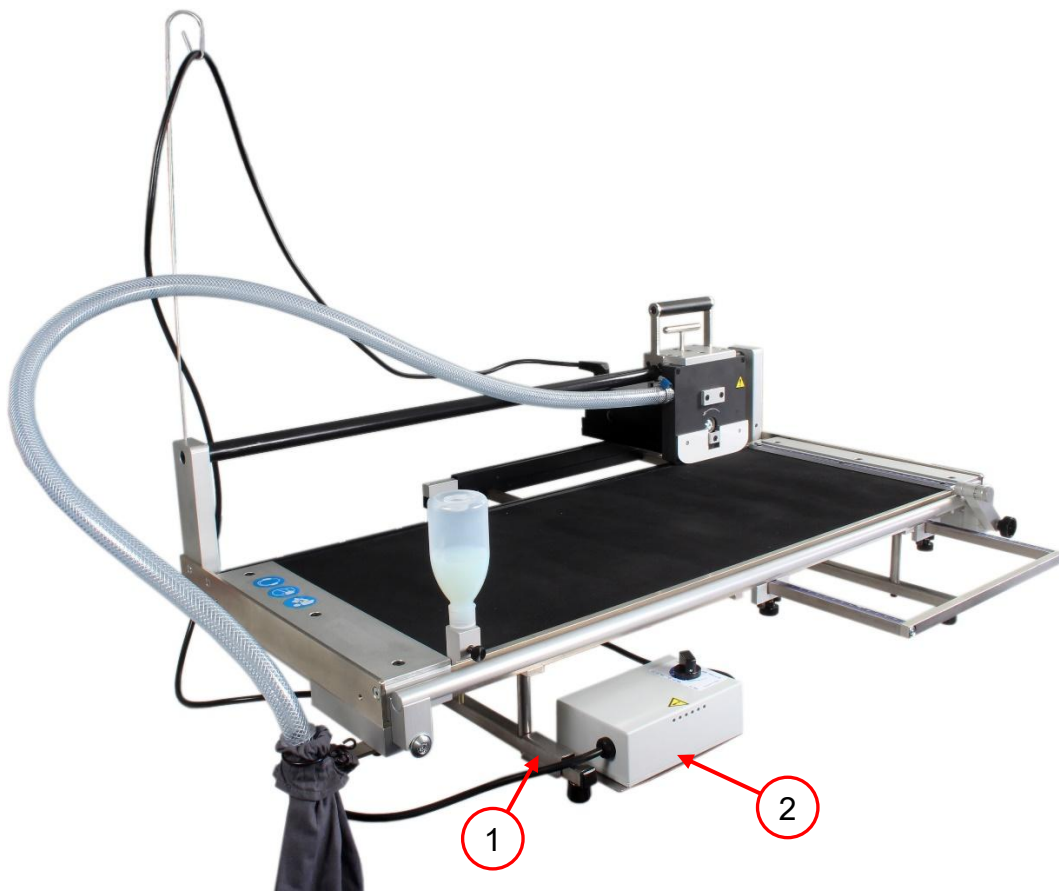


Figure 37 Mounting Speed Controller VARGA VA 21-15 and VA 31-15

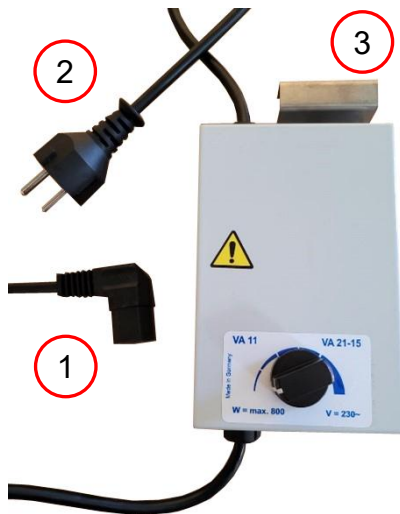


Figure 38 Speed Controller VARGA VA 21-15 and VA 31-15

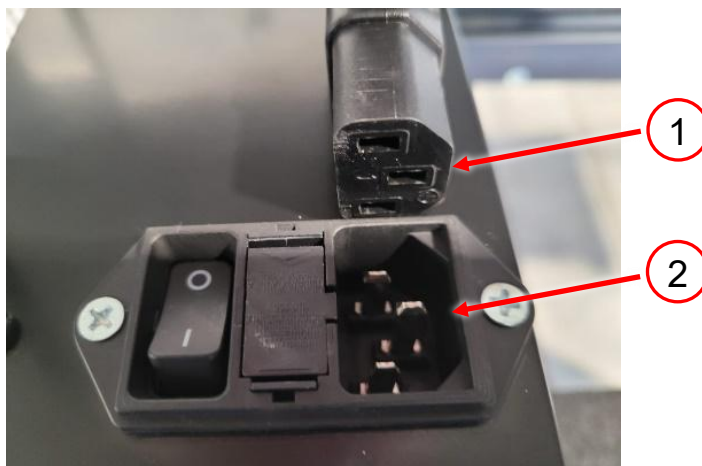


Figure 39 Connection Speed Controller VARGA VA 21-15 and VA 31-15

7.4.4 VARGA VA 1 precision circular table saw

Action required

1. Remove the precision circular table saw from the box and place it on a suitable work surface.
2. Remove the cardboard packaging and dispose of it properly.
3. If necessary, turn the precision circular table saw so that the underside is facing upwards.
4. Screw the four feet (2, Figure 40) under the frame and tighten.
5. Turn the precision circular table saw back right way up and det up the machine vibration-free.
6. Remove the transport plates (1 Figure 40).
7. Unsrew the srew with snap ring (4, Figure 41) from the table underside. Use it to attach the bag holder (3, Figure 41).
8. Pull the chip bag (1, Figure 41) from below through the opening of the bag holder and secure the chip bag with the spring (2, Figure 41).
9. Align the saw that the chip bag hangs freely downwards at the end.
10. Insert the hose into the chip bag opening from above.

NOTE

A plastic ring on the hose marks the correct depth.

11. Remove the transport screw and plastic ring (1, Figure 42). For storage, screw them back into the same hole from behind

NOTE

Before transporting or relocating the precision table saw, it is essential to fit the transport screw together with the corresponding plastic spacer ring to prevent damage.

12. Fit the lifting handle (1, Figure 43) with the countersunk screws supplied (M4x10).
13. Fit the handle (2, Figure 43) with the countersunk screws supplied (M6x14).
14. If required, attach the lubrication device to the holder (3, Figure 43).

 WARNING!**Danger due to improperly laid cables**

An improperly positioned mains plug cannot be reached quickly in the event of danger. There is a risk of serious injury and death from the rotating saw. Lay the cable with the mains plug so that it is easily accessible from the workplace.

15. Hook the cable retaining spring (2, Figure 44) into the opening in the rear guide rod holder (1, Figure 44).
16. Hook the cable (3, Figure 44) into the cable retaining spring and plug it into the motor housing of the precision table saw.

 DANGER!**Danger due to electrical voltage**

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

17. Connect the mains plug to the power supply.

☒ *The precision circular table saw is fully assembled.*

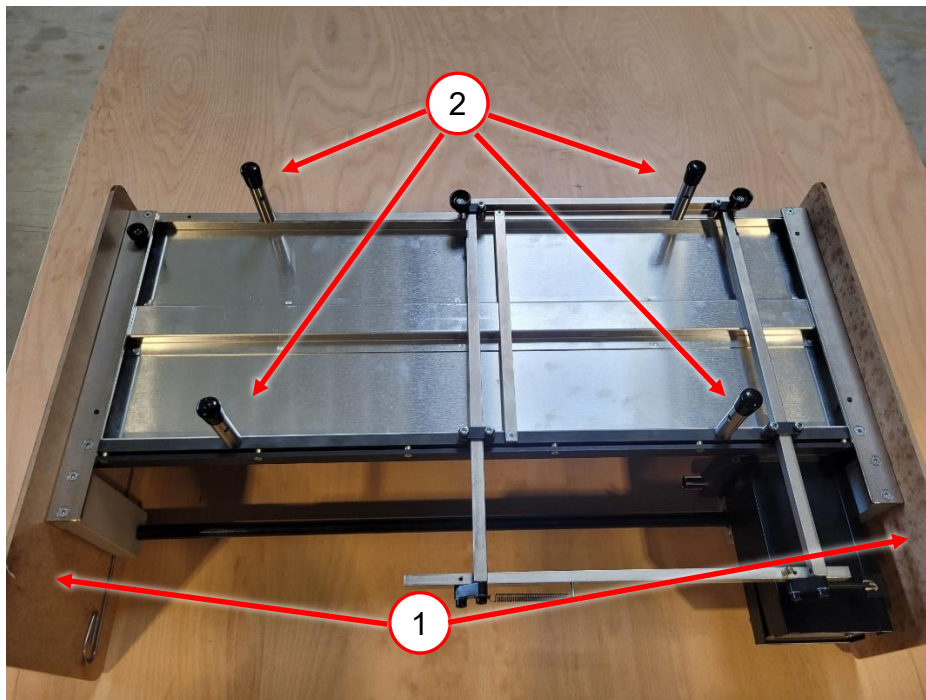


Figure 40 Fitting the feet VARGA VA 1



Figure 41 Fitting the VARGA VA 1



Figure 42 Remove transport screw and plastic ring VARGA VA 1

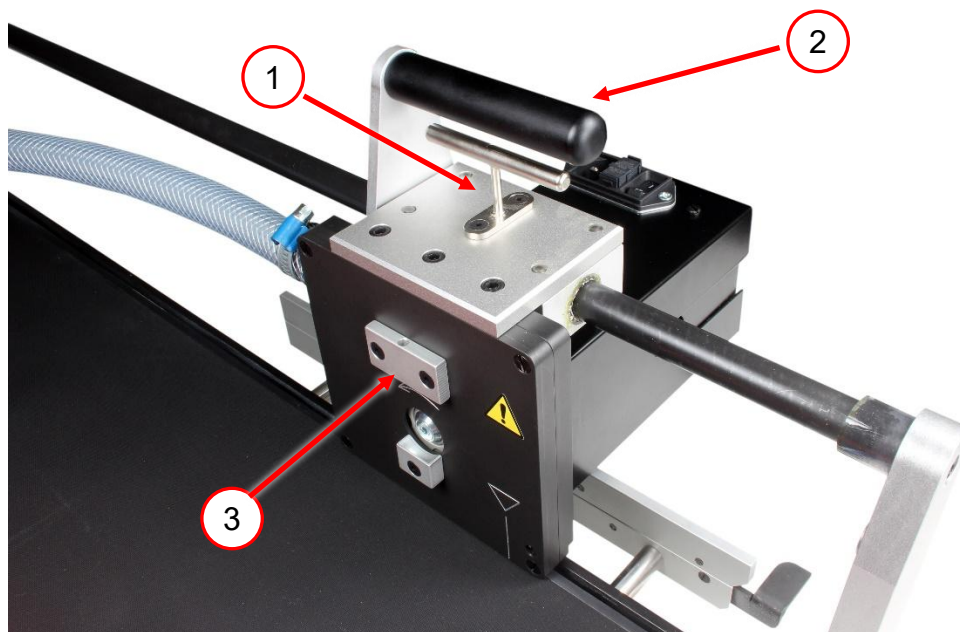


Figure 43 Fitting the VARGA VA 1 lifting handle and handle

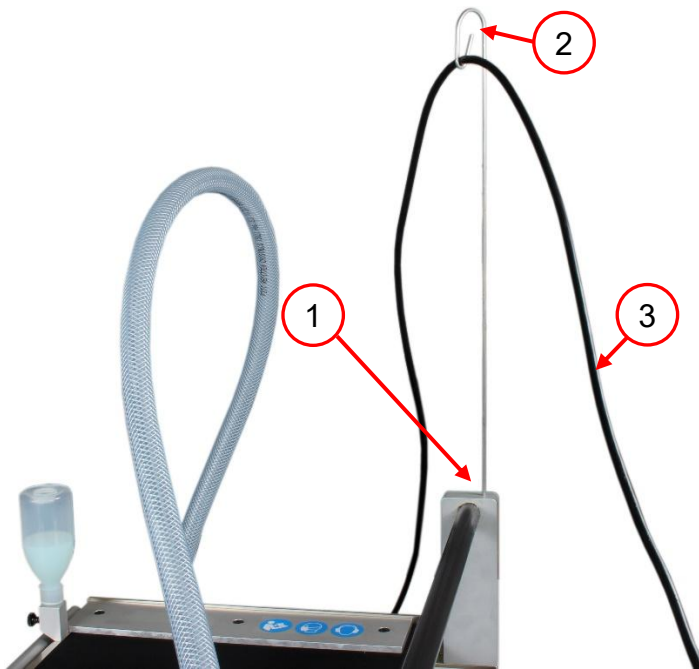


Figure 44 Fitting the VARGA VA 1 cable retaining spring

8 Normal operation

Target group: Operating personnel, maintenance personnel



8.1 Special safety instructions

DANGER!

Danger of electric shock

Contact between the saw blade and the live cable will result in an electric shock. This will cause serious injury or death.

- Use the cable retaining spring for the power cable.
- Work with care.

DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

WARNING!

Danger due to unexpected start-up of the saw blade

A power tool restarts automatically after a power failure if the toggle switch is set to "On". This can lead to cutting injuries, kickback, or bending of the saw blade.

- Switch off the machine in the event of a power failure.
- Work with care.

 WARNING!

Crushing injuries or cuts due to rotating saw blade

When working with the precision circular table saw, contact with the rotating saw blade may occur. This can result in injuries caused by crushing or cutting the fingers.

- Deploy trained personnel only.
- Operate the precision circular table saw only from the working position described.
- Keep your other hand out of the danger zone.
- Observe the data sheet for the saw blade.
- Work with care.

 WARNING!

Danger due to rotating saw blade when the work is complete

Danger of fingers being crushed or cut by the rotating saw blade when the work is complete.

- Complete work on workpiece and remove workpiece.
- Switch off the machine at the on/off switch.
- Allow the saw blade to stop.

 WARNING!

Danger due to ejection of chips and sawdust

Chips are produced during sawing, which can enter the respiratory tract and eyes. This can cause breathing difficulties and injury to the eyes.

- The machine may only be operated by trained and qualified personnel.
- Only operate the machine with the personal protective equipment specified by the plant operator (hearing protection, respiratory protection, full-vision goggles) in accordance with the working conditions at the time.
- Work may only be carried out by trained personnel.

 WARNING!

Danger due to noise

Continuous noise emitted by the machine can cause hearing damage.

- Wear suitable hearing protection during operation.

 CAUTION!

Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

 CAUTION!

Danger due to improper handling of the machine

The machine presents various dangers such as the risk of crushing, cutting, and hearing damage.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling the machine.
- Follow the instructions in the operating manual.

ATTENTION

Poor quality of the saw cut

Incorrect speed selection can result in a poor quality saw cut.

- Use a suitable speed for cutting the material concerned.

8.2 Sawing the workpiece

8.2.1 VARGA VA 10 and VA 1 precision circular table saw

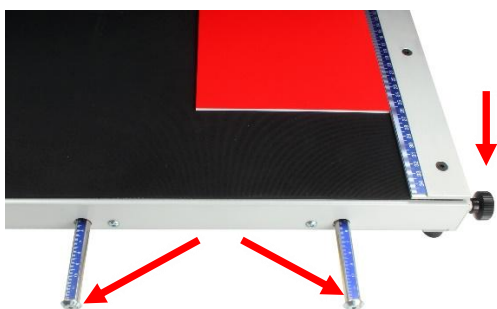
1. Ensure that the precision circular table saw is undamaged.
2. Ensure that the precision circular table saw is securely positioned on a stable surface and that the power cable and the hose cannot get under the saw blade.
3. Ensure that the correct saw blade is in the sawing unit and that it is not worn or damaged.
4. Ensure that the prescribed personal protective clothing (*safety goggles, ear protection*) is worn.
5. Ensure that the sawing unit can be moved easily in both directions.



6. Ensure that there is sufficient lubricant in the lubrication device, see Section 9.3.2.1

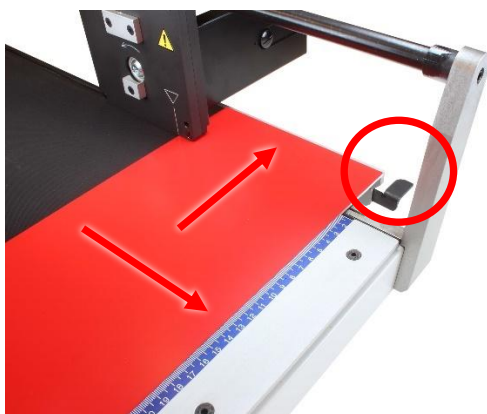


7. Adjust the scale for the right stop if applicable. To do this, press the lever to raise the right stop.
8. Adjust the setting and release the lever.



9. Lock the setting of the right stop by tightening the black knurled on the front of the precision circular table saw.

☑ *Right stop is set and fixed.*



10. Place the workpiece on the precision circular table saw and push it against the stops.

Note! Operate the stop lever (in the red circle) to align the workpiece correctly with the preset stop.



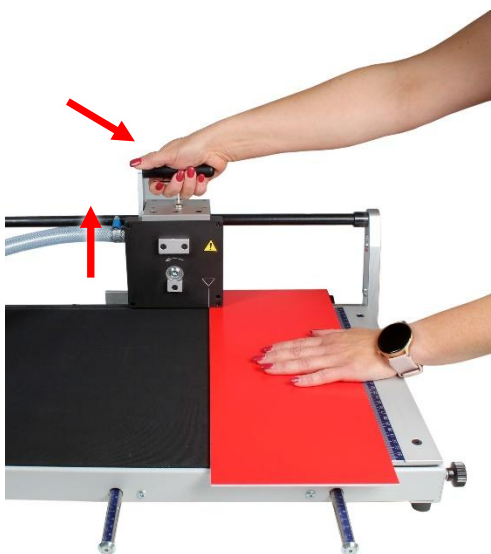
11. Set the toggle switch on the motor housing to 1.

☑ *Power supply is established. Precision circular table saw is switched on.*



12. Set the lubrication device using the adjusting screw until a drop is dispensed approx. every two seconds.

☑ *Lubrication for sawing process is prepared.*



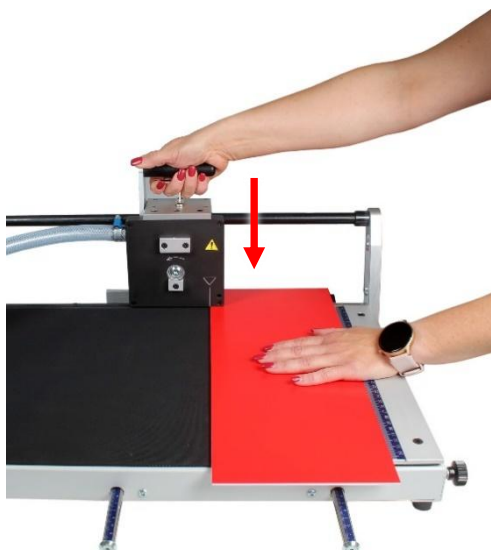
13. Position yourself at the front side of the precision table saw before starting work..

14. Grip the handle of the sawing unit with your right hand and simultaneously pull up the lifting handle with your fingers.

☒ *Sawing unit is raised.*

☒ *Saw unit can be pulled over the workpiece.*

Note: The saw blade rotates in the opposite direction to the feed. The sawing unit serves as a hold-down device so that the workpiece is not pushed up during sawing.



15. Release the lifting handle.

☒ *Workpiece is pressed down by the weight of the sawing unit.*



16. Cut the workpiece. To do this, pull the sawing unit by the handle towards your body until the workpiece has been cut.

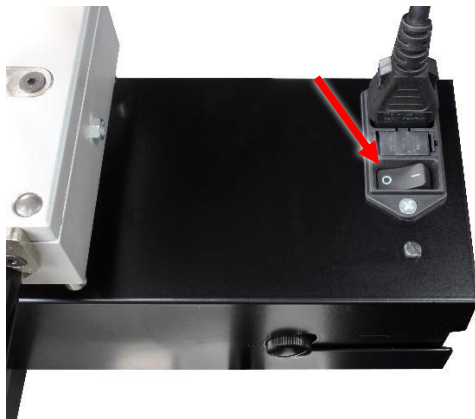
17. Move the sawing unit back in the opposite direction until the workpiece is exposed.

☒ *The sawing process has been completed.*



18. Stop lubrication by closing the lubrication device. Turn the screw in the opposite direction to do so.

☒ *Lubrication is stopped.*



19. Set the toggle switch on the motor housing to 0.

☒ *The precision circular table saw is switched off.*

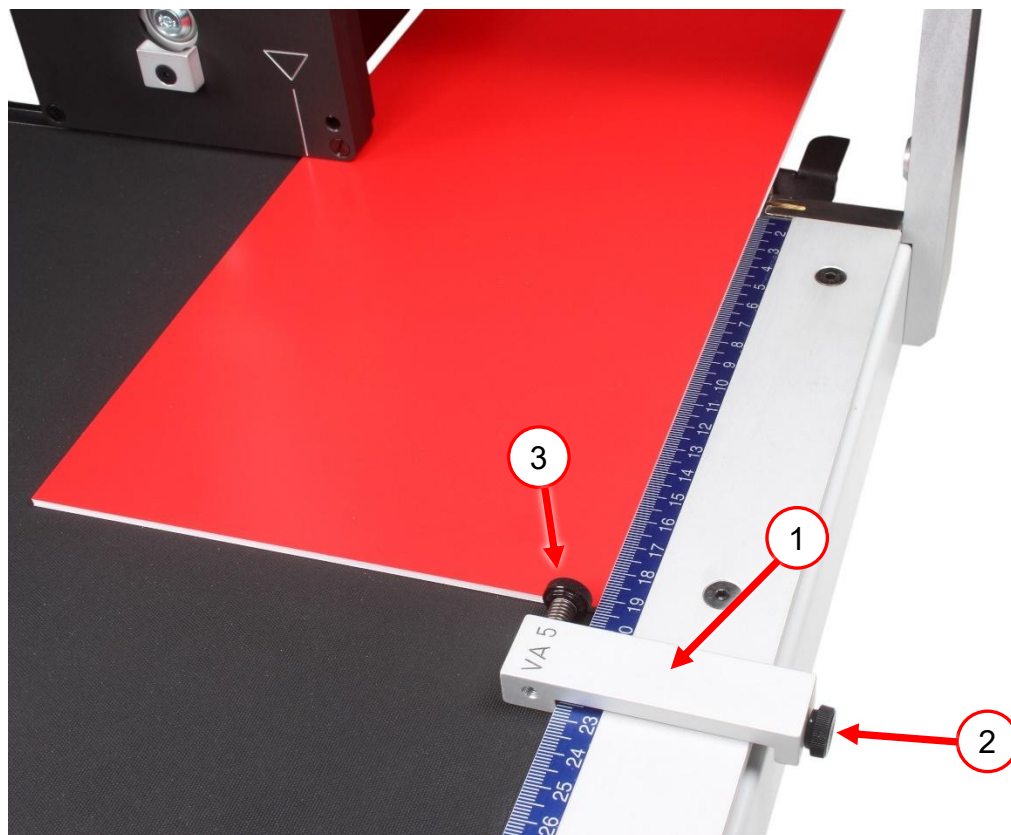


Figure 45 Special accessories Stop VA 5

Item	Designation
1	Stop VA 5 Accessories (Item-no. 70-1-9005)
2	Locking screw
3	Fine adjustment

The VA 5 Stop (optional accessory) extends the options for precise cutting of larger panels and optimizes the range of use of the fixed stop.

To use it, place the VA 5 Stop (1, Figure 45) onto the fixed stop. The required dimension is read off the scale, fixed with the locking screw (2, Figure 45) and can be precisely adjusted as required using the integrated fine adjustment (3, Figure 45).

8.2.2 VARGA VA 11 precision circular table saw

1. Ensure that the precision circular table saw is undamaged.
2. Ensure that the precision circular table saw is securely positioned on a stable surface and that the power cable and the hose cannot get under the saw blade.
3. Ensure that the correct saw blade is in the sawing unit and that it is not worn or damaged.
4. Ensure that the prescribed personal protective clothing (*safety goggles, ear protection*) is worn.
5. Ensure that the sawing unit can be moved easily in both directions.



6. Ensure that there is sufficient lubricant in the lubrication device, see Section 9.3.2.1

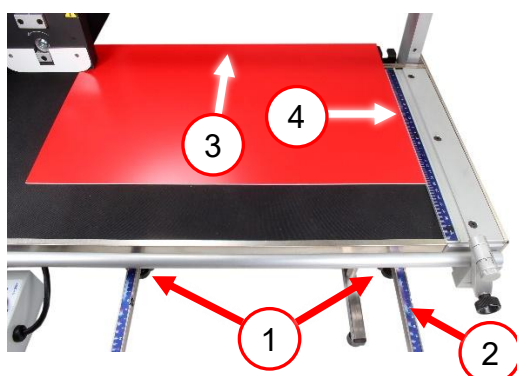


7. If necessary, set the scale for the right stop 1. To do this, press the lever to raise the right stop 1.
8. Adjust the setting and release the lever.



9. If necessary, set the scale for the right stop 2. To do this, operate the lever to raise the right stop 2.

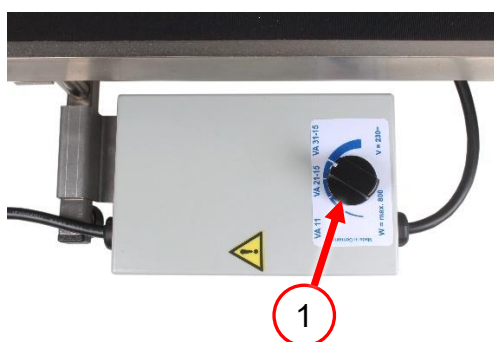
Note! Proceed as for stop 1 but push the material to stop 2.
Advantage: Waste piece rests on stop 1, clean cut to the end. When adjusting, note the dimension on the stop guide minus 10 mm (≈ 0.3937 ").



10. Fix the right stop by firmly tightening the knurled screw (1) of the precision table saw. Adjustment is made on the scale (2).

☒ *Right stop is set and fixed.*

11. Place the workpiece on the precision table saw and slide it to the stops (3 and 4).



12. The speed controller allows the rotational speed to be adjusted according to the material. Adjustment is made via the rotary knob (1).



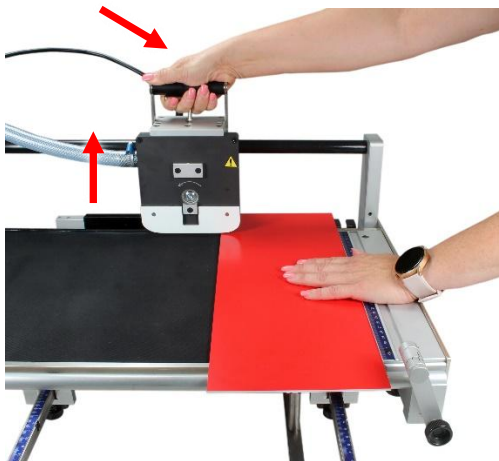
13. Set the toggle switch on the motor housing to 1.

☒ *Power supply is established. Precision circular table saw is switched on.*



14. Set the lubrication device using the adjusting screw until a drop is dispensed approx. every two seconds.

☒ *Lubrication for sawing process is prepared.*



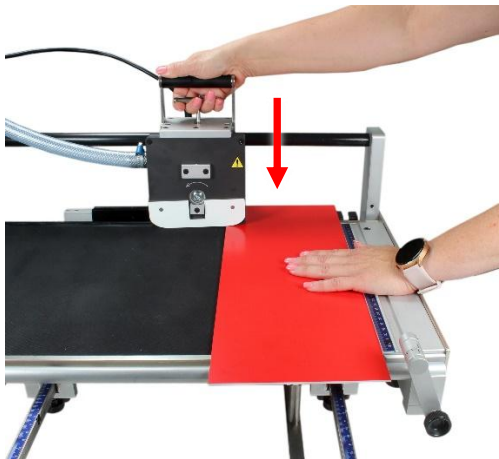
15. Position yourself at the front side of the precision table saw before starting work.

16. Grip the handle of the sawing unit with your right hand and simultaneously pull up the lifting handle with your fingers.

☒ *Sawing unit is raised.*

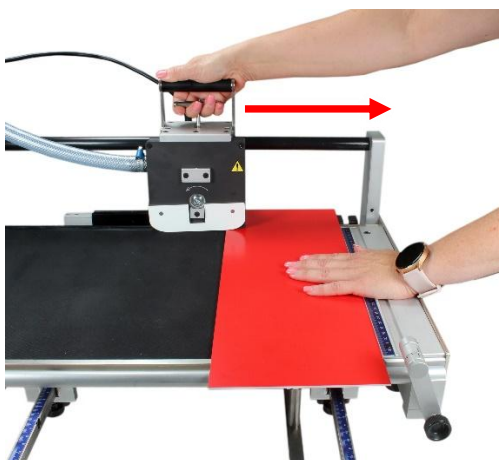
☒ *Saw unit can be pulled over the workpiece.*

Note: The saw blade rotates in the opposite direction to the feed. The sawing unit serves as a hold-down device so that the workpiece is not pushed up during sawing.



17. Release the lifting handle.

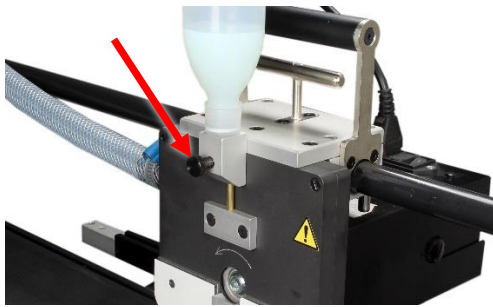
☒ *Workpiece is pressed down by the weight of the sawing unit.*



18. Cut the workpiece. To do this, pull the sawing unit by the handle towards your body until the workpiece has been cut.

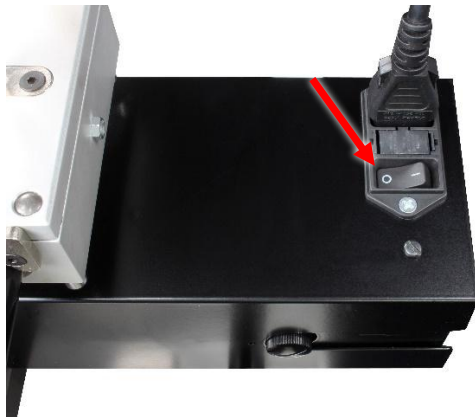
19. Move the sawing unit back in the opposite direction until the workpiece is exposed.

☒ *The sawing process has been completed.*



20. Stop lubrication by closing the lubrication device. Turn the screw in the opposite direction to do so.

☒ *Lubrication is stopped.*



21. Set the toggle switch on the motor housing to 0.

☒ *The precision circular table saw is switched off.*

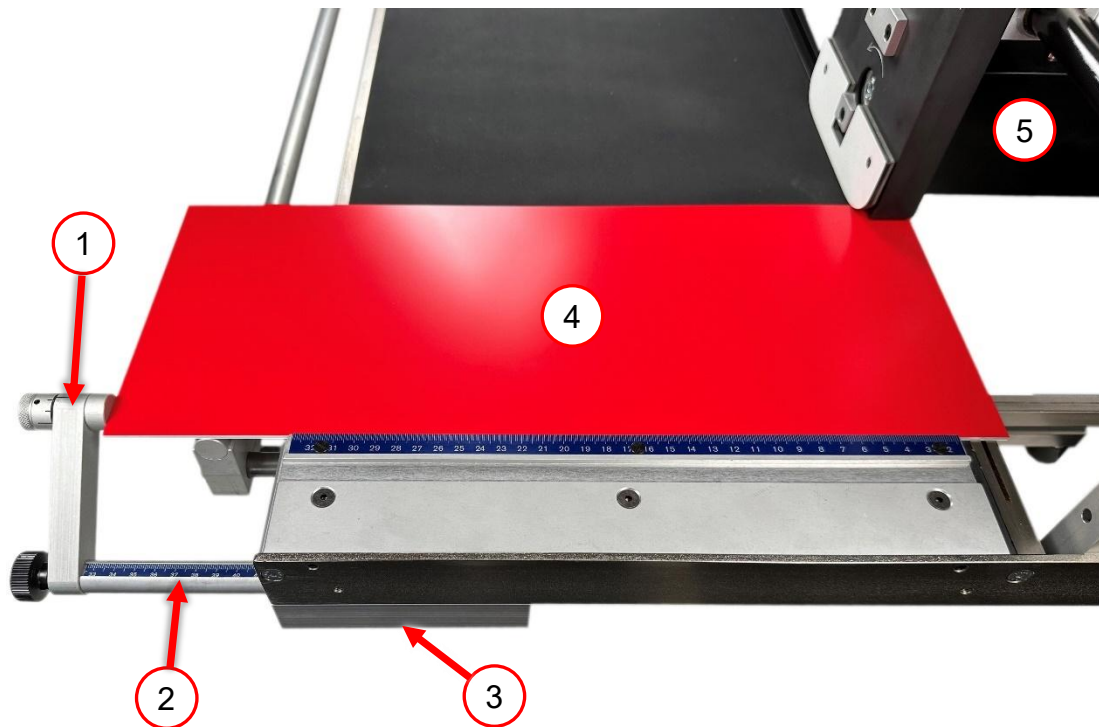


Figure 46 Left stop VARGA VA 11

Item	Designation
1	Left stop with fine adjustment
2	Guidance with scale
3	Locking screw
4	Workpiece
5	Sawing unit

The Left Stop extends the range of applications when cutting large panels. Workpieces up to a width of 610 mm can be processed.

The cutting dimension is set using the guide with dimension scale (2, Figure 46), fixed with the locking screw (3, Figure 46) and can be precisely adjusted as required using the fine adjustment (1, Figure 46) (the long center line marks the zero position). The pull-out support on the left makes it easier to position the plate and improves cutting accuracy.

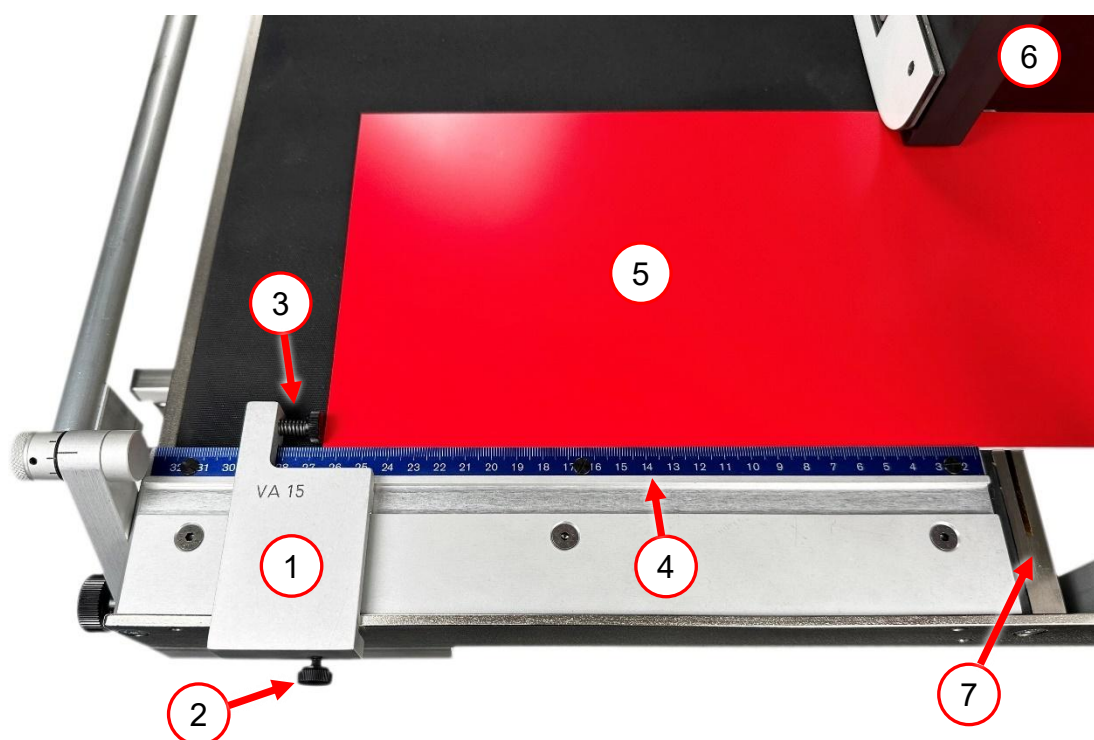


Figure 47 Stop VA 15

Item	Designation
1	Stop VA 15 Accessories (Item-No. 70-11-9005)
2	Locking screw
3	Fine adjustment
4	Fixed stop scale
5	Workpiece
6	Sawing unit
7	T-Stop (Item-No. 70-11-4006)

The **VA 15 Stop** (optional accessory) expands the capabilities for precise cutting of larger panels and optimizes the use of the fixed stop.

Insert stop VA 15 (1, Figure 47) into the dovetail. The dimension is read off the scale, fixed with the locking screw (2, Figure 47) and can be set precisely using the integrated fine adjustment (3, Figure 47) if required.

8.2.3 VARGA VA 21-15 and VA 31-15 precision circular table saw

1. Ensure that the precision circular table saw is undamaged.
2. Ensure that the precision circular table saw is securely positioned on a stable surface and that the power cable and the hose cannot get under the saw blade.
3. Ensure that the correct saw blade is in the sawing unit and that it is not worn or damaged.
4. Ensure that the prescribed personal protective clothing (*safety goggles, ear protection*) is worn.
5. Ensure that the sawing unit can be moved easily in both directions.



6. Ensure that there is sufficient lubricant in the lubrication device, see Section 9.3.2.1

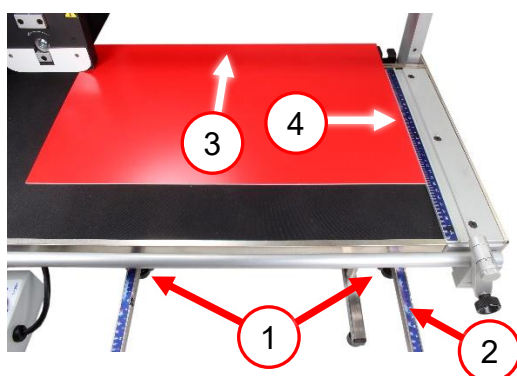


7. If necessary, set the scale for the right stop 1. To do this, press the lever to raise the right stop 1.
8. Adjust the setting and release the lever.



9. If necessary, set the scale for the right stop 2. To do this, operate the lever to raise the right stop 2.

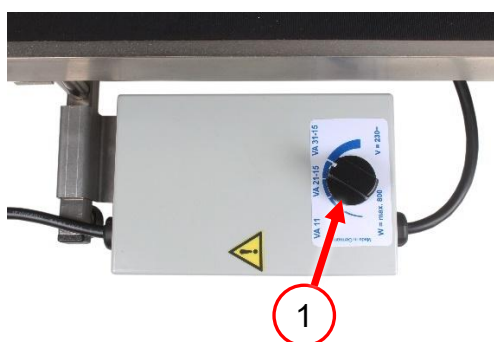
Note! Proceed as for stop 1 but push the material to stop 2. Advantage: Waste piece rests on stop 1, clean cut to the end. When adjusting, note the dimension on the stop guide minus 10 mm ($\approx 0.3937''$).



10. Fix the right stop by firmly tightening the knurled screw (1) of the precision table saw. Adjustment is made on the scale (2).

☒ *Right stop is set and fixed.*

11. Place the workpiece on the precision table saw and slide it to the stops (3 and 4).

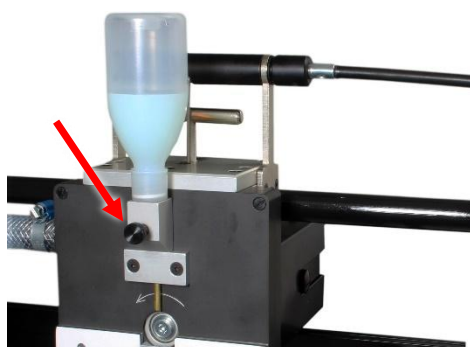


12. The speed controller allows the rotational speed to be adjusted according to the material. Adjustment is made via the rotary knob (1).



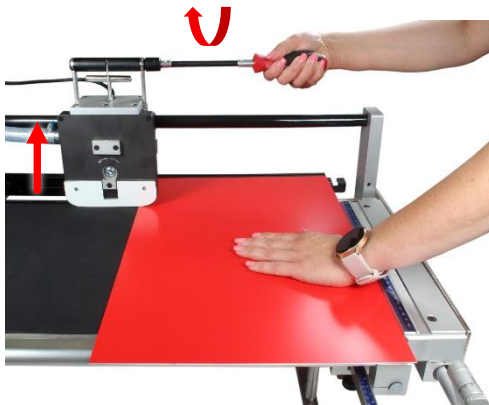
13. Set the toggle switch on the motor housing to 1.

☒ *Power supply is established. Precision circular table saw is switched on.*



14. Set the lubrication device using the adjusting screw until a drop is dispensed approx. every two seconds.

☒ *Lubrication for sawing process is prepared.*



15. Position yourself at the front side of the precision table saw before starting work.

16. Grip the handle of the sawing unit with your right hand and simultaneously pull up the lifting handle with your fingers. Alternatively, the motor housing can be lifted by turning the rotary handle clockwise.

☒ *Sawing unit is raised.*

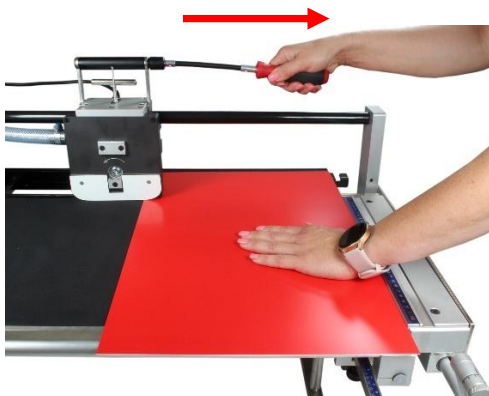
☒ *Saw unit can be pulled over the workpiece.*

Note: The saw blade rotates in the opposite direction to the feed. The sawing unit serves as a hold-down device so that the workpiece is not pushed up during sawing.



17. Release the lifting handle. Alternatively, the sawing unit can be lowered by turning the rotary handle counterclockwise.

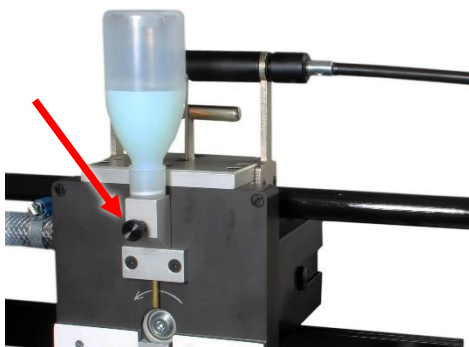
☒ *Workpiece is pressed down by the weight of the sawing unit.*



18. Cut the workpiece. To do this, pull the sawing unit by the handle towards your body until the workpiece has been cut.

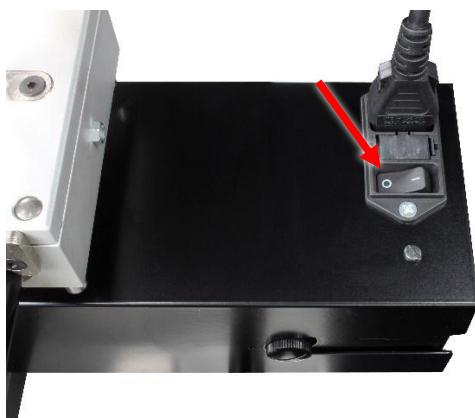
19. Move the sawing unit back in the opposite direction until the workpiece is exposed.

☒ *The sawing process has been completed.*



20. Stop lubrication by closing the lubrication device. Turn the screw in the opposite direction to do so.

☑ *Lubrication is stopped.*



21. Set the toggle switch on the motor housing to 0.

☑ *The precision circular table saw is switched off.*

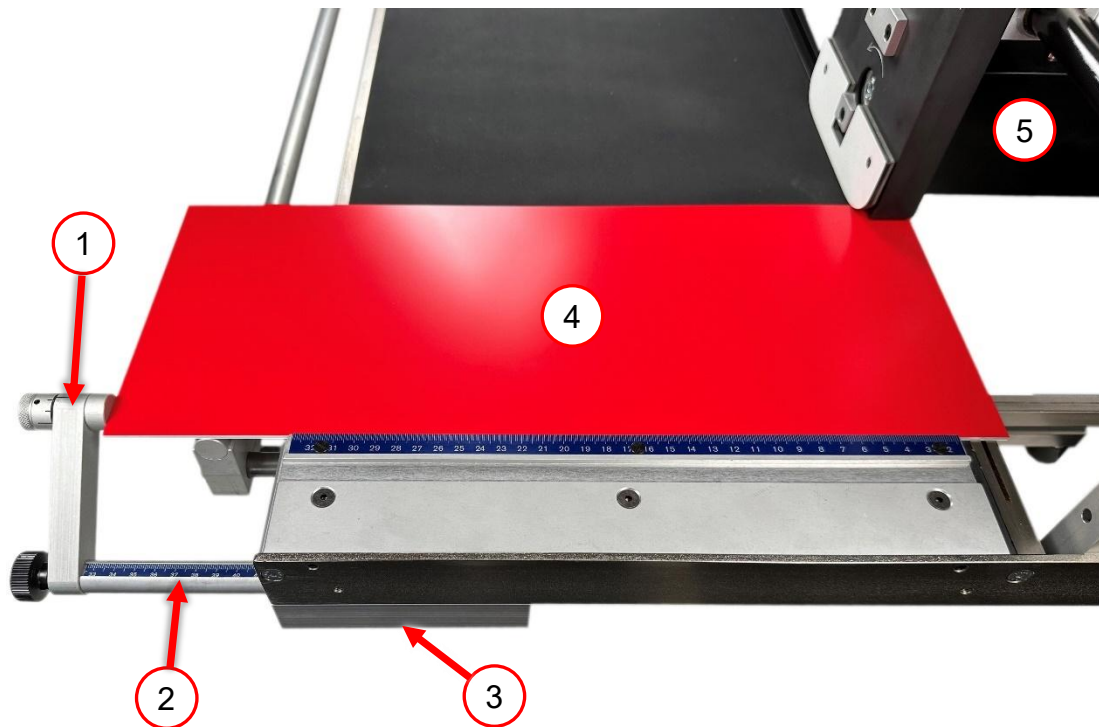


Figure 48 Left stop VARGA VA 21-15 and VA 31-15

Item	Designation
1	Left stop with fine adjustment
2	Guidance with scale
3	Locking screw
4	Workpiece
5	Sawing unit

The Left Stop extends the range of applications when cutting large panels. Workpieces up to a width of 610 mm can be processed.

The cutting dimension is set using the guide with dimension scale (2, Figure 48), fixed with the locking screw (3, Figure 48) and can be precisely adjusted as required using the fine adjustment (1, Figure 48) (the long center line marks the zero position). The pull-out support on the left makes it easier to position the plate and improves cutting accuracy.

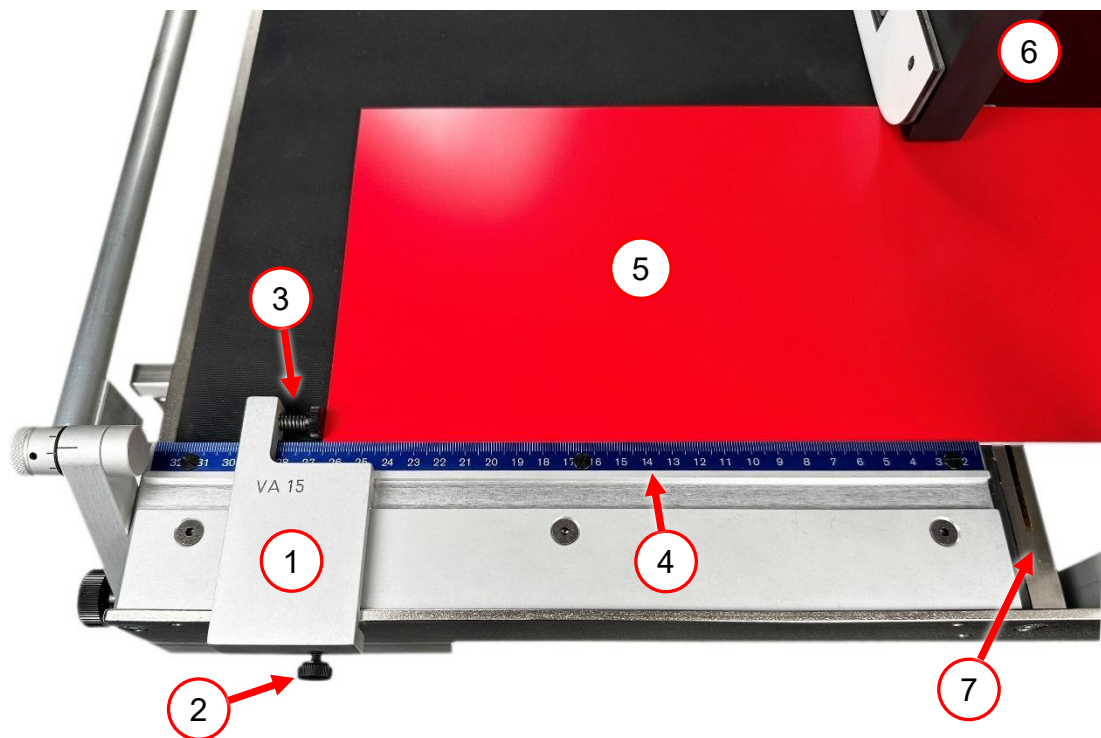


Figure 49 Stop VA 15

Item	Designation
1	Stop VA 15 Accessories (Item-No. 70-11-9005)
2	Locking screw
3	Fine adjustment
4	Fixed stop scale
5	Workpiece
6	Sawing unit
7	T-Stop (Item-No. 70-11-4006)

The **VA 15 Stop** (optional accessory) expands the capabilities for precise cutting of larger panels and optimizes the use of the fixed stop.

Insert stop VA 15 (1, Figure 49) into the dovetail. The dimension is read off the scale, fixed with the locking screw (2, Figure 49) and can be set precisely using the integrated fine adjustment (3, Figure 49) if required.

9 Maintenance

Target group: Maintenance personnel



9.1 Special safety instructions

DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

WARNING!

Improper cleaning, maintenance, or repair

Danger due to improper execution or insufficient knowledge of maintenance, servicing, or cleaning. Incorrect or improperly completed maintenance, servicing, or cleaning can lead to serious injury or damage.

- Before cleaning, maintenance, and repair work, ensure that the machine is switched off and disconnected from the power supply.
- Deploy trained personnel only.
- Follow the operating instructions.

 CAUTION!

Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

 CAUTION!

Variations in intervals

Frequency of use and ambient conditions can lead to variations in the intervals required between the activities described and thus to injuries or damage to property.

- Instruct the personnel responsible for maintaining the machine accordingly.

ATTENTION

Work not described

Work that is not described may only be carried out by the authorized customer service team, otherwise the machine may be damaged.



If in doubt, contact customer service, see Section 9.2.

9.2 Customer service

Manufacturer:	VARGA SYSTEM GmbH
Street:	Hainkämpe 5
Zip code, city:	28832 Achim
Country:	Deutschland
Telephone:	+49 4232 945870
Mail:	info@varga-system.com

9.3 Maintenance/cleaning

Target group: Maintenance personnel



9.3.1 Maintenance/cleaning schedule

Details of the maintenance intervals listed below can be found in the relevant sections of these instructions.

Activity	Maintenance interval
Inspect the precision circular table saw for damage (visual inspection).	Every shift
Clean the precision circular table saw: Action required 1. Disconnect the mains plug. 2. Sweep off the precision circular table saw, wipe with a cloth if necessary.	As required, at least daily.
Clean and grease the guide rail: Action required 1. Disconnect the mains plug. 2. Sweep off the precision circular table saw, wipe with a cloth if necessary. 3. Apply a thin film of grease to the guide rail.	Regularly
Empty the chip bag: Action required 1. Disconnect the mains plug. 2. Pull the hose out of the chip bag. 3. Release the spring and remove the chip bag. 4. Empty the chip bag. Note: The chip bag is fitted in reverse order. 5. Refit the chip bag.	As required (when the chip bag inflates or the lower third is full).

NOTE

Some of the work specified depends on use and environmental conditions. The specified cycles are minimum values. Different maintenance cycles may be required in individual cases. If this is the case:

- adjust the information in these operating instructions.
- instruct the operating personnel accordingly.

9.3.2 Checking auxiliary and operating materials

9.3.2.1 Topping up the lubricant

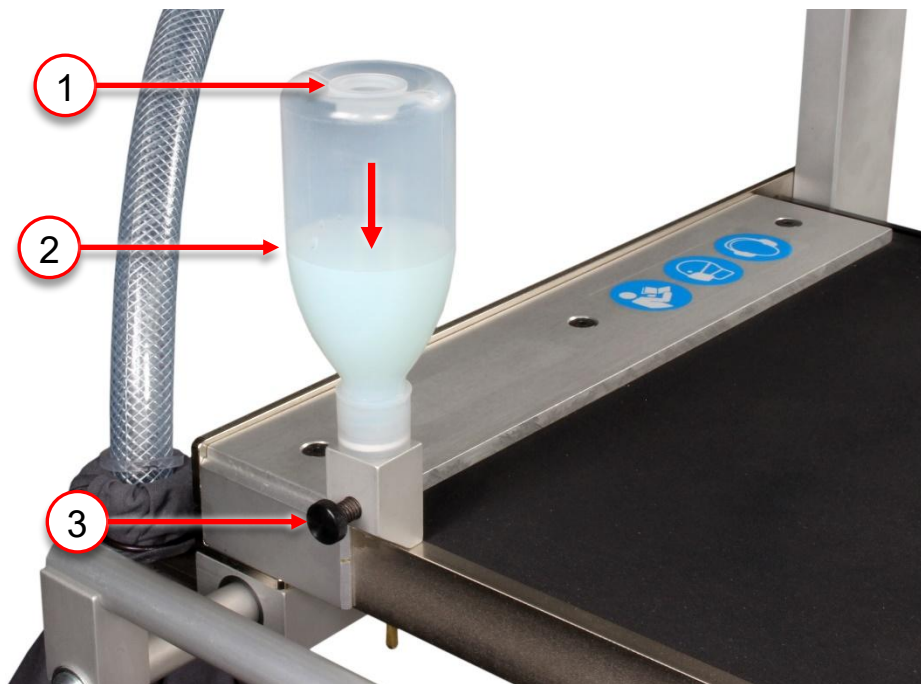


Figure 50 Topping up the lubricant

Action required

1. Ensure that the rotary knob (3, Figure 50) is closed.
2. Remove the sealing plug at the top of the lubricant container (1, Figure 50) and set aside.
3. Fill the lubricant container approx. half full with *Vargol* and close it again with the plug.

- ☒ *The drip quantity of the lubricant can be adjusted using the rotary knob.*
- ☒ *The machine is ready for operation again.*

Repairs

Target group: Maintenance personnel



9.3.3 Troubleshooting

ATTENTION

Unknown fault messages

Unknown faults and attempts to rectify them can lead to damage to the machine.

- If a fault is present but is not displayed on the fault message list, inform customer service.

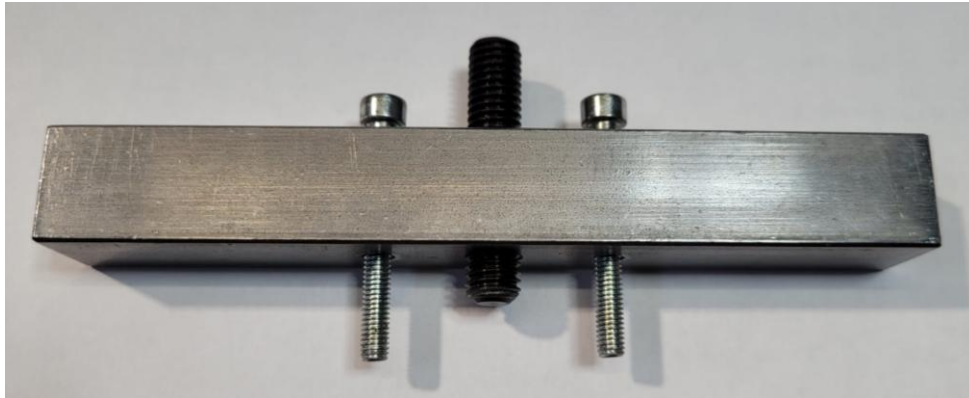
The following overview provides information about faults, their causes, and remedies:

Fault	Possible cause	Remedy
Chips are not being extracted.	➤ Chip bag full.	➤ Empty the chip bag.
	➤ Chip ejection pipe blocked.	➤ Remove the hose and clear the blockage. If necessary, use cleaning brush.

9.3.4 Replacing the motor

Action required

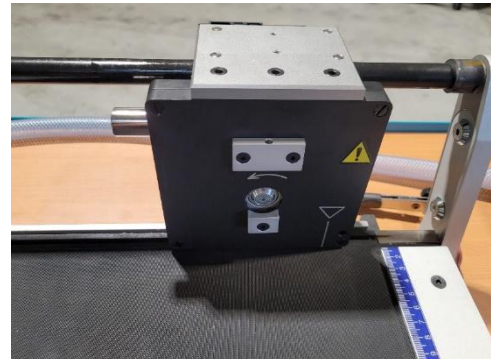
1. Have the peeling tool ready (available through customer service)



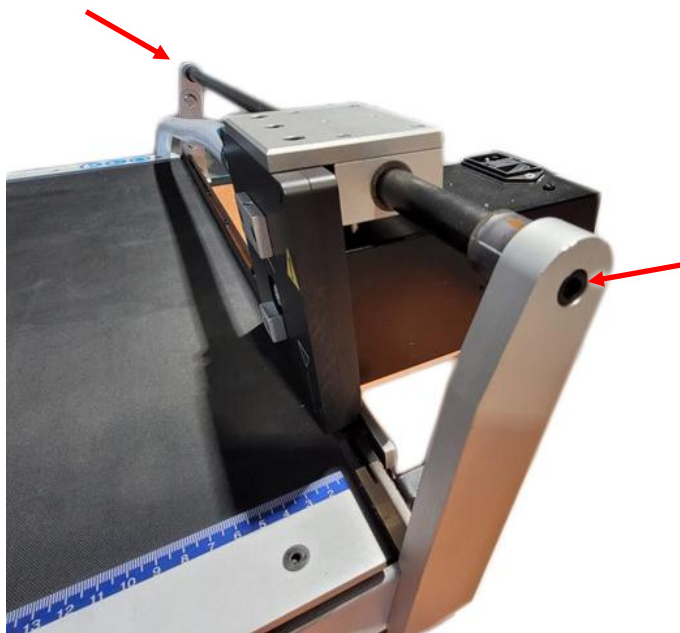
2. Make sure the precision table saw is turned off and unplugged.
3. Ensure that the new motor is suitable for the precision table saw. Compare data on the nameplate of the new engine with the data of the existing engine.



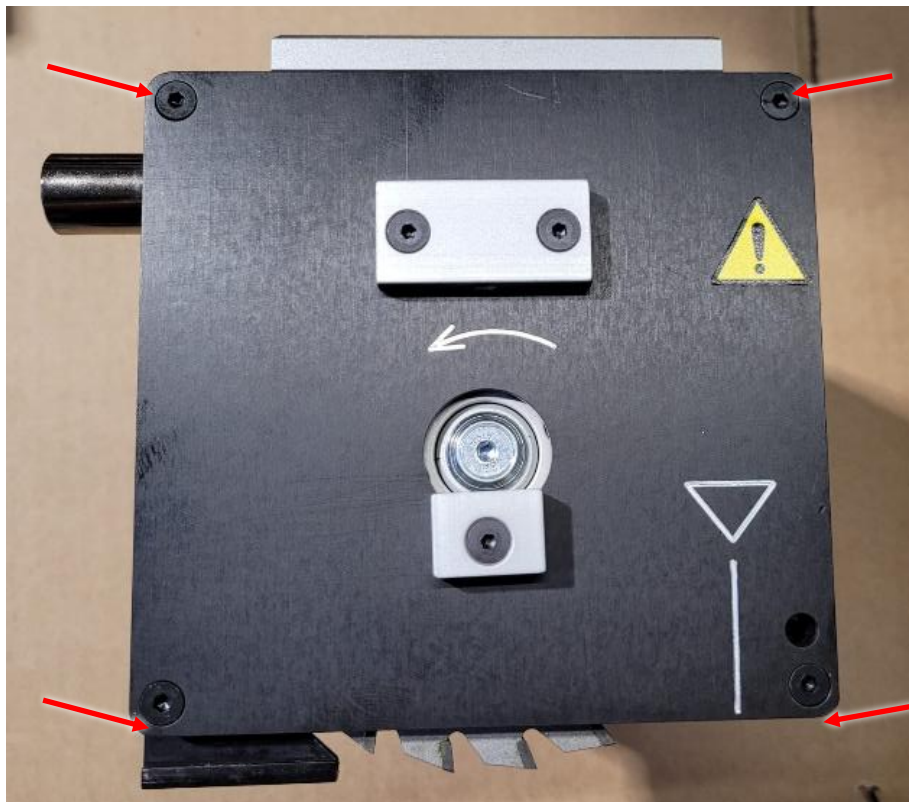
4. Remove the hose from the sawing unit. To do this, loosen the hose clamp and pull the hose off the chip ejection tube.



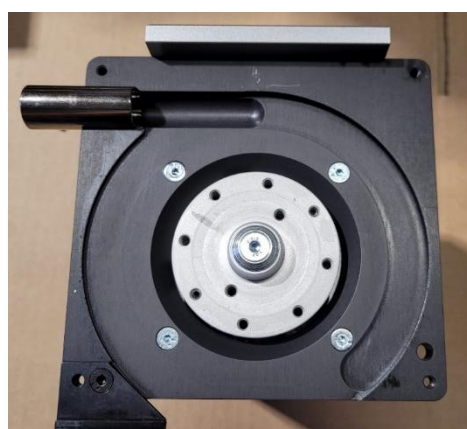
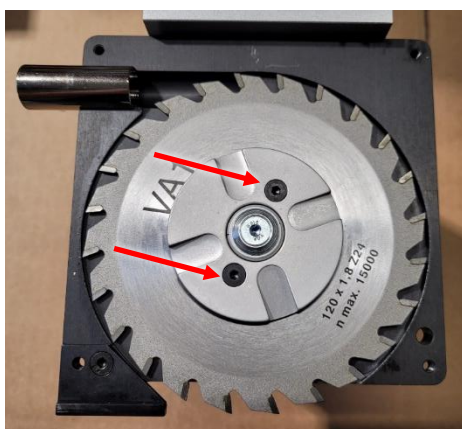
5. Remove the two screws (front VA 10 = M6x20) (front VA 11 / front VA 21-15 / front VA 31-15 = M8x22) from the guide rod.



6. Remove the guide rod including the saw unit.
7. Pull the guide rod out of the sawing unit and place the motor on a suitable work surface.
8. Remove the saw blade cover at the front. To do this, remove the four screws (M4 × 16).



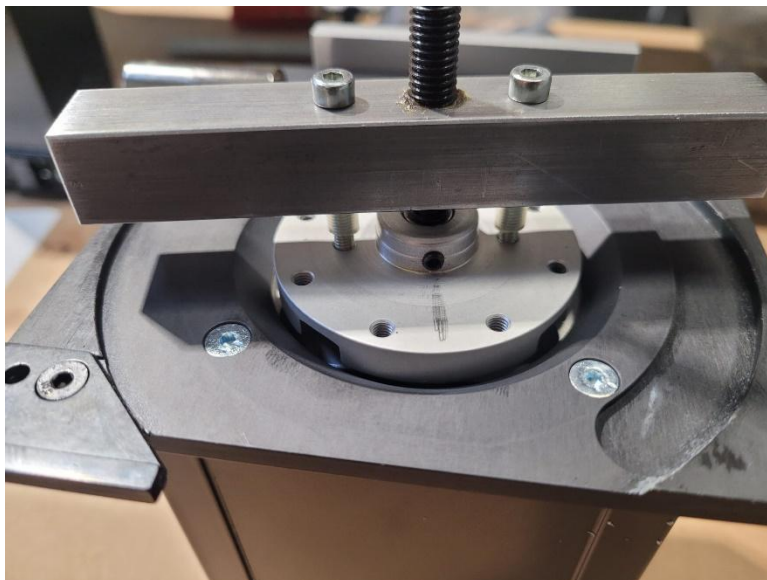
9. Remove the mounting cover and remove the saw blade. To do this, remove the two screws (M4x16).



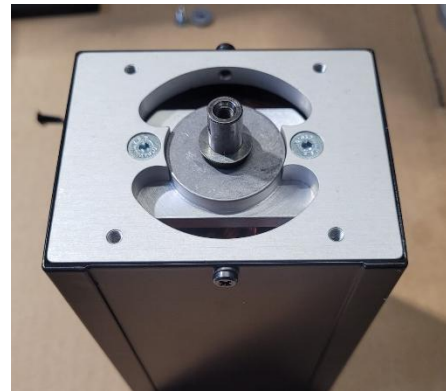
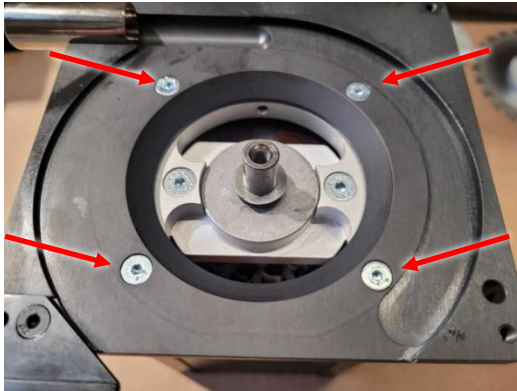
10. Remove the screw (M5x10) from the mounting cover and loosen the threaded pin (M4x5).



11. Remove the mount from the motor shaft with the help of the pull-off tool.



12. Remove the saw blade cover at the rear. To do this, remove the four screws (M4x16).

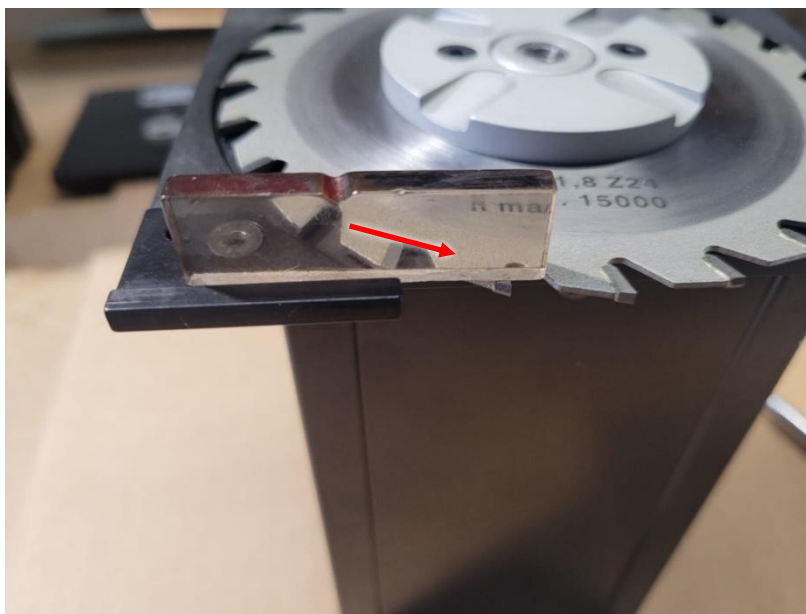


13. Install the saw blade cover at the rear of the new engine.
14. Attach the spacer ring and, if necessary, shims to the motor shaft.



15. Assemble the holder, saw blade and holder cover and adjust the position of the saw blade with a flat tool in the saw blade cover.

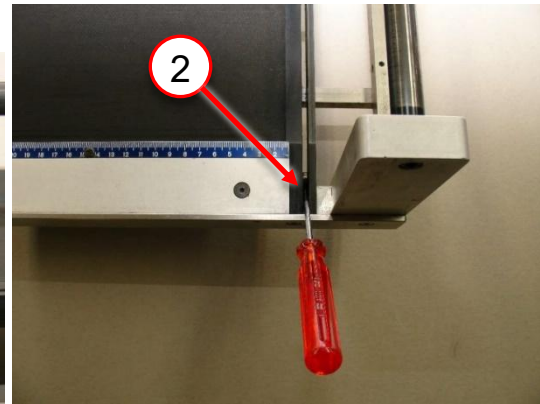
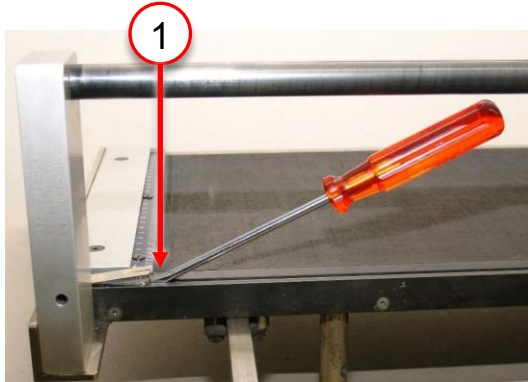
Place the tool on the tongue and turn the saw blade by hand. The cutting edges of the saw blade must grind slightly on the aid from both above and below (exact height adjustment is done via shims).



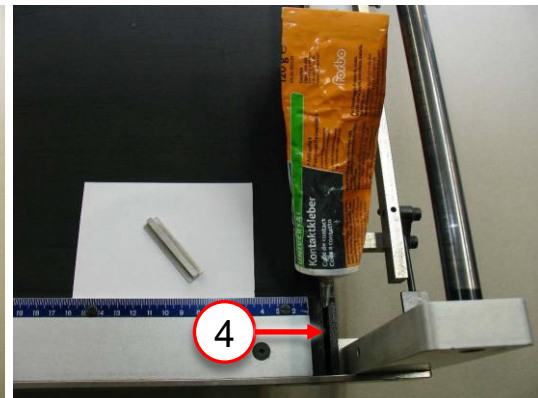
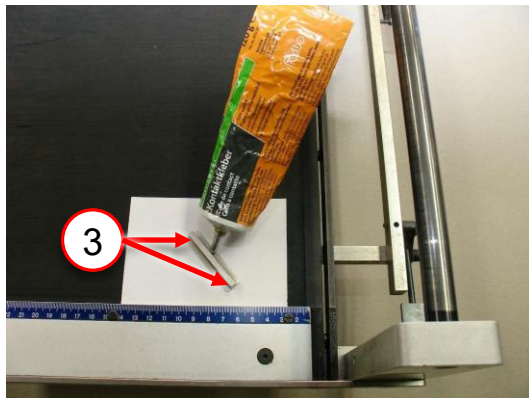
16. Screw in the screw (M5x10) to attach the mount.
17. Mounting the saw blade cover at the front with four screws (M4x16).
18. Push the guide rod back through the sawing unit.
19. Insert the guide rod with saw unit back into the holders on the machine and fix it with the two screws (VA 10 = M6x20) (VA 11 / VA 21-15 / VA 31-15 = M8x22).
20. Attach the hose to the chip ejection pipe and fasten it with a hose clamp.

9.3.5 Replacing the T-stop

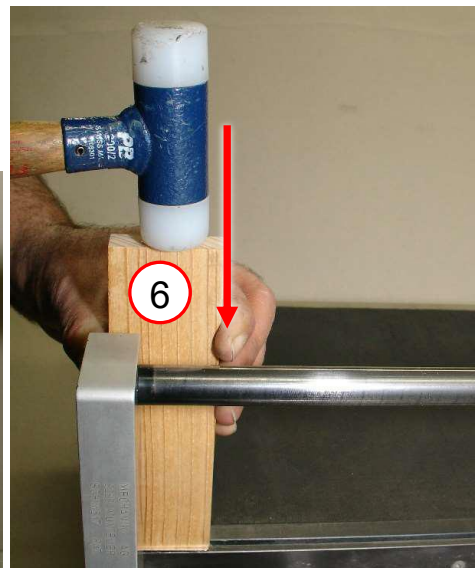
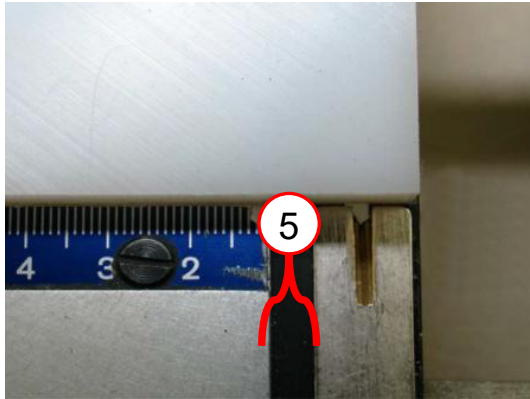
Action required



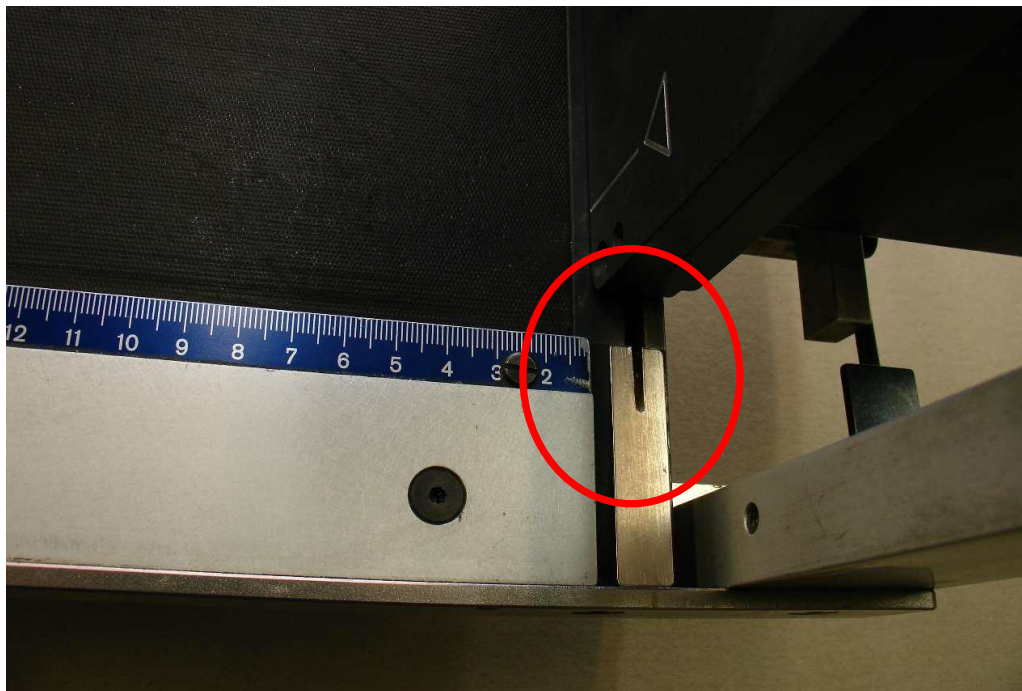
1. Lever out the T-stop bracket using a suitable screwdriver (1).
2. Remove chips from the T-stop guide and clean with thinner (2).



3. Apply a dot of contact adhesive to the outer end of the T-stop (3).
4. Apply some contact adhesive onto and into the guide (4).
5. Allow the contact adhesive to dry for approx. 15 minutes.



6. Insert the T-stop with a gap of 3 mm (5).
7. Press the T-stop into the guide and knock in lightly with a piece of wood (6) and a plastic hammer.



8. Ensure that the gap of 3 mm is maintained.
9. Ensure that the contact adhesive is completely dry.
10. Saw in T-stop with the precision circular table saw.

9.3.6 Replacing the saw blade

⚠ CAUTION!

Injuries due to sharp saw blade

Contact with the sharp-edged saw blade may occur during maintenance or cleaning work. This can lead to cuts or puncture wounds to fingers and hands.

- Switch off the machine and disconnect it from the power supply before carrying out maintenance or cleaning work.
- Observe the data sheet for the saw blade.
- Wear cut-resistant protective gloves.
- Handle the saw blade with care and caution.
- Work with care.

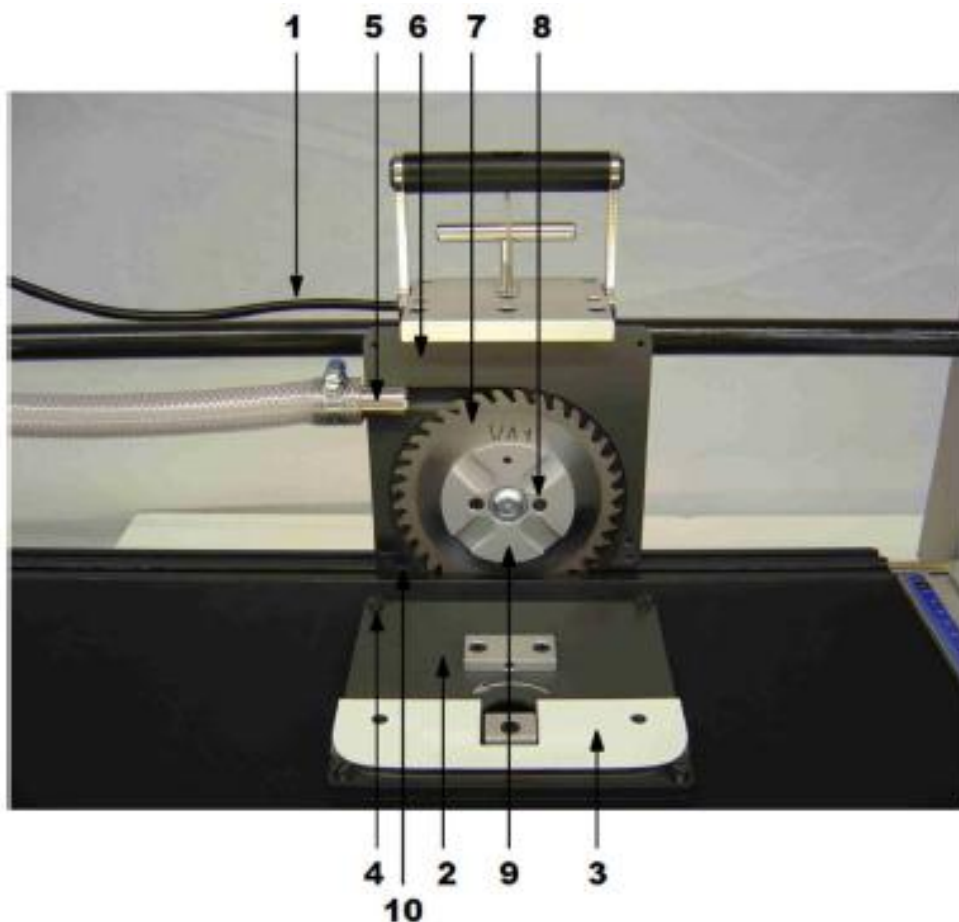


Figure 51 Replacing the saw blade

Item	Designation
1	Power cable
2	Front saw blade cover
3	Protective plate
4	M4x16 screws
5	Tube for hose
6	Saw blade cover at the rear
7	Saw blade (here with 36 teeth)
8	M4x16 screws
9	Mounting cover for saw blade
10	Tongue

Action required

1. Ensure that the precision circular table saw is switched off.
 2. Disconnect the power cable.
 3. Remove the screws M4x16 (item 4, Figure 48) from the saw blade cover at the front (item 2, Figure 48) and store them securely.
 4. Remove the front saw blade cover (2, Figure 51).
 5. Remove screws M4x16 (item 8, Figure 51) from the holder cover for saw blade (item 9, Figure 51) and store them securely.
 6. Remove mounting cover (9, Figure 51).
 7. **Note:** Before removing the saw blade, raise the sawing unit slightly by the lifting handle. This makes it easier to remove the saw blade.
Remove and dispose of the old saw blade.
 8. **Attention:** Make sure you use the correct saw blade! The model of the precision circular table saw is indicated on the saw blade.
Attention: Check the direction of rotation of the saw blade!
Insert the new saw blade.
 9. Insert the front mounting cover and fasten securely with the M4x16 screws.
 10. Insert the saw blade cover and fasten securely with the M4x16 screws.
- ☒ *The saw blade has been replaced.*
11. Plug the power cable back in.
- ☒ *The precision circular table saw is ready for operation again.*

9.3.7 Replacing a fuse



Figure 52 Replacing a fuse

Action required

1. Ensure that the precision circular table saw is switched off.
2. Disconnect the power cable.
3. Remove the cover of the fuse holder (circle).
4. Take out the old fuse and dispose of it.
5. Insert new fuse.
6. Refit the cover of the fuse holder.
- ☒ *Fuse has been replaced.*
7. Plug the power cable back in.
- ☒ *The precision circular table saw is ready for operation again.*

10 Shutdown

Target group: Maintenance personnel



10.1 Special safety instructions

 CAUTION!

Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

10.2 Temporary shutdown

Action required

1. Ensure that the precision circular table saw is switched off.
2. Disconnect the power cable.
3. Empty the lubricant container, observing the disposal instructions for the lubricant *Vargol*.
4. Remove and empty the chip bag.
5. Clean the precision circular table saw.
6. Before each transport or relocation of the precision table saw, the transport screw must be mounted together with the corresponding plastic spacer ring to prevent damage. The following applies to VARGA VA 10: fix the sawing unit with cable ties so that it cannot slide back and forth. Release the cable retaining spring.
7. Cover the precision circular table saw to protect it from dust and transport it to the storage location using a suitable means of transport.



Observe the regional regulations and information in the safety data sheets when disposing of auxiliary and operating materials.

10.3 Final shutdown

Action required

1. Ensure that the precision circular table saw is switched off.
2. Disconnect the power cable.
3. Empty the lubricant container, observing the disposal instructions for the Vargol lubricant.
4. Remove and empty the chip bag.
5. Clean the precision circular table saw.
6. Before each transport or relocation of the precision table saw, the transport screw must be mounted together with the corresponding plastic spacer ring to prevent damage. The following applies to VARGA VA 10: fix the sawing unit with cable ties so that it cannot slide back and forth.
7. Release the cable retaining spring.
8. Transport the precision circular table saw to the storage location using a suitable means of transportation or dispose of it.



Observe the local regulations and information in the safety data sheets when disposing of auxiliary and operating materials.

11 Disposal

Target group: Specialist personnel



11.1 Special safety instructions

CAUTION!

Bruises, cuts, and damage to hearing

The dangers caused by the components installed may vary throughout the phases of the machine's life.

- The machine may only be operated by trained and qualified personnel.
- Read the operating instructions before handling.
- Wear the prescribed personal protective equipment (hearing protection, cut-resistant hand protection).

CAUTION!

Danger to personnel from materials and substances

Improper disposal of materials and substances can lead to personal injury.

- Separate materials by type and recycle according to local regulations.
- When disposing of auxiliary and operating materials, observe the information in the safety data sheets and use appropriate personal protective equipment.
- Observe the disassembly and transport instructions.
- Work may only be carried out by trained personnel.

ATTENTION**Environmental dangers from materials and substances**

When disposing of the product and its individual components, materials and substances pose a danger to the environment.

- Separate materials by type and recycle in accordance with local regulations.
- Observe the local regulations and information in the safety data sheets when disposing of auxiliary and operating materials.

11.2 Disposing of the machine

A defective precision circular table saw can be disposed of using the method of disposal for electrical equipment after final shutdown. (See Section 10.3 Final shutdown).



Observe the local regulations and information in the safety data sheets when disposing of auxiliary and operating materials.



If in doubt about the disposal method, contact the manufacturer or your local waste disposal company.

12 Appendix

12.1 Safety data sheets

 WARNING!

Operator error due to incomplete information

Failure to observe the information in safety data sheets may result in serious injury or death.

- Observe safety data sheets.

No.	Name of hazardous substance	Manufacturer
1	<i>Vargol</i> lubricant	VARGA SYSTEM GmbH Heinkämpe 5 28832 Achim, Germany
2	Contact adhesive, rubber profile adhesive, item no.: 93870, 93835, 93935	PETEC Verbindungstechnik GmbH Wüstenbuch 26 96132 Schlüsselfeld, Germany



If in doubt, contact customer service or the manufacturer.

12.2 Technical information

12.3 Cutting speed range carbide Precision Circular table saw blades

Diameter D (mm)	Speed n (1/min)				
	13000	13500	14000	14500	15000
120	82	85	88	91	94

The above table provides information about the economical cutting speed range of carbide precision table saws depending on the material to be processed.

The cutting speed is calculated according to the formula:

$$V_c = \frac{D \times \pi \times n}{60 \times 1000} \text{ m/s}$$

Where D is to be used in mm (diameter 120 mm) and n in 1/min.

Cutting speed recommendation for circular saw blades

Material	Vc m/s
Formica (HPL)	20 – 40
Resopal (HPL)	20 – 40
Engraving plastics	30 – 60
Astralon	20 – 40
PMMA	50 – 90
PVC	30 – 60
Aluminum	40 – 80
Brass	30 – 60
Wood	60 – 100
Hard fabric panels	25 – 50

NOTE

For materials with a recommended cutting speed of < 50 m/s, the feed rate should be reduced.

WARNING!

Exceeding the maximum permissible speed can lead to the breakage of the tool and uncontrolled spun away of fragments. This poses a considerable risk of injury. This can also cause damage to the machine as well as considerable economic follow-up costs.

12.4 Spare parts list

Variant Spare part	VA 10	VA 11	VA 21-15	VA 31-15	VA 1
Saw blade Ø 120 mm, 24 teeth	✓	✗	✗	✗	✓
Saw blade Ø 120 mm, 36 teeth	✗	✓	✓	✓	✗
<i>Vargol</i> lubricant	✓	✓	✓	✓	✓
Fuse Variant 230 V~ mains voltage Ø 5x20, T 3.15 A, T 250 V	✓	✗	✗	✗	✓
Fuse Variant 230 V~ mains voltage Ø 5x20 mm, T 4 A, T 250 V	✗	✓	✓	✓	✗
Fuse Variant 100-120 V~ mains voltage Ø 5x20 mm, T 4 A, 250 V	✓	✗	✗	✗	✓
Fuse Variant 100-120 V~ mains voltage Ø 5x20 mm, T 6.3 A, 250 V	✗	✓	✓	✓	✗
Motor 350 W	✓	✗	✗	✗	✓
Motor 500 W	✗	✓	✓	✓	✗

NOTE

The voltage rating of 250 V indicated on the fuse represents the maximum operating voltage at which the fuse can safely and reliably interrupt the circuit in compliance with applicable standards. It is therefore fully suitable for use at lower voltages, such as 120 V~.

12.5 Instruction log

COPY SHEET!

➤ Copy first, then fill in.

Date	Name	Type of instruction	Instruction provided by	Signature

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