

Original Operating Instructions Motor Replacement



VARGA models

VA 10

VA 11

VA 21-15

VA 31-15

VA 1

Current version	1.0
Date	03.12.2025
Scope	12 pages

1 Introduction

1.1 Identification

Replacement Part	Motor Replacement
VARGA model variants	VA 10, VA 11, VA 21-15, VA 31-15, VA 1

1.2 Manufacturer

Manufacturer's name	VARGA SYSTEM GmbH
Street	Hainkämpe 5
ZIP code, city	28832 Achim
Country	Germany
Email	info@varga-system.com
Web	www.varga-system.com

1.3 Information about the operating instructions

Current version	1.0
Date	03.12.2025

1.4 Change history

Date	Version	Sections affected	Reason for change
03.12.2025	1.0	All	First Version

2 About these operating instructions

2.1 Target groups

These operating instructions are intended for the following target groups:

- 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 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.

3 Safety

3.1 General safety instructions for power tools

3.1.1 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.

3.1.2 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.

3.1.3 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.

3.2 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).

3.3 Safety markings on the machine

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



Meaning: Warning of a danger point.

Position: On the housing



Meaning: Warning of electrical voltage.

Position: On the housing of the motor

4 Replacing the Motor

Action required

1. Prepare the puller tool (available from customer service).

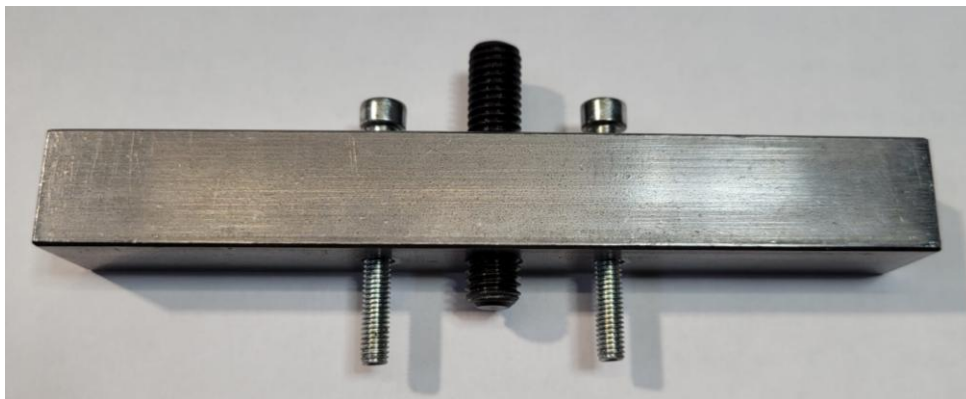


Figure 1 Puller tool

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.



Figure 2 Motor nameplate

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

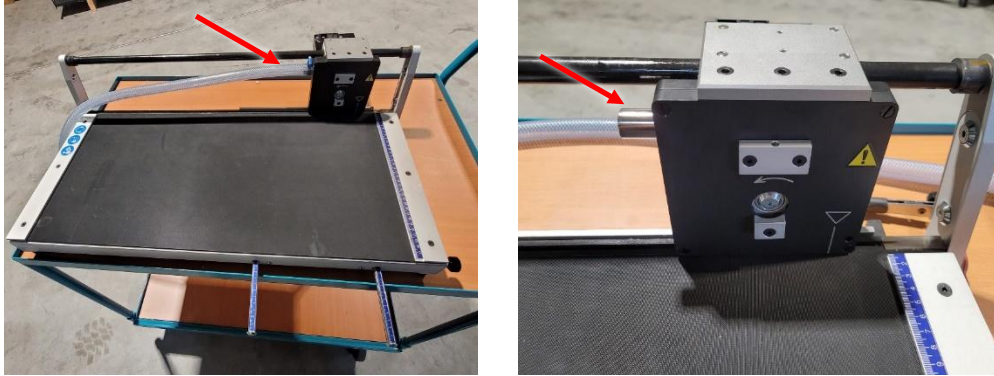


Figure 3 Remove hose

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.

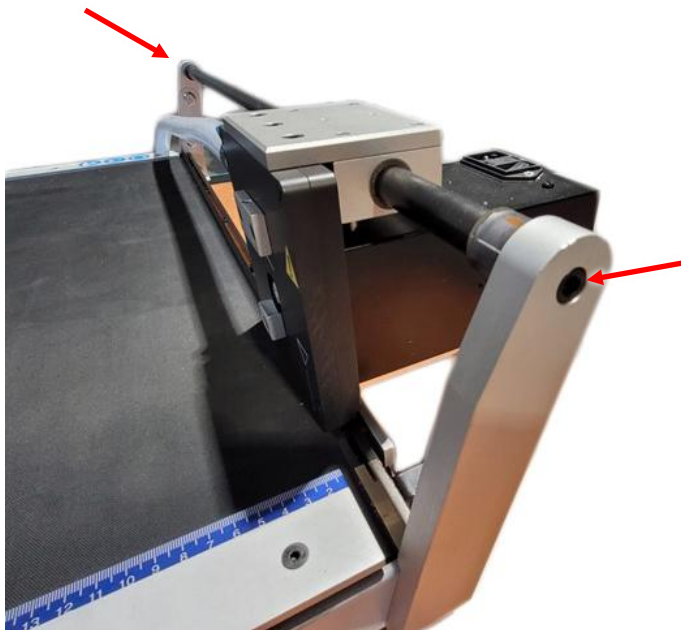


Figure 4 Remove screws from the guide rod

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).

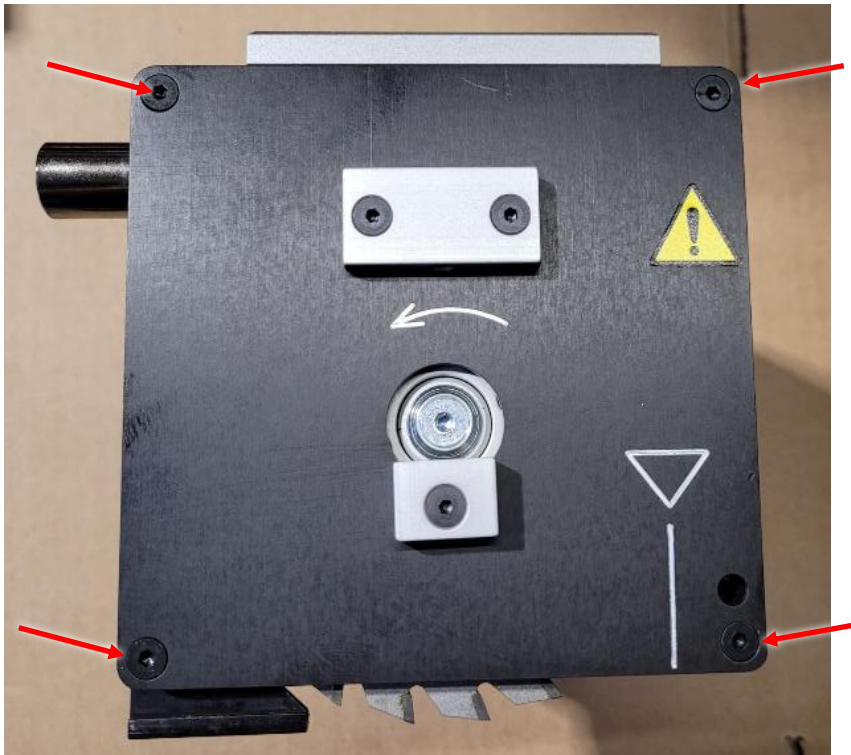


Figure 5 Remove saw blade cover

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

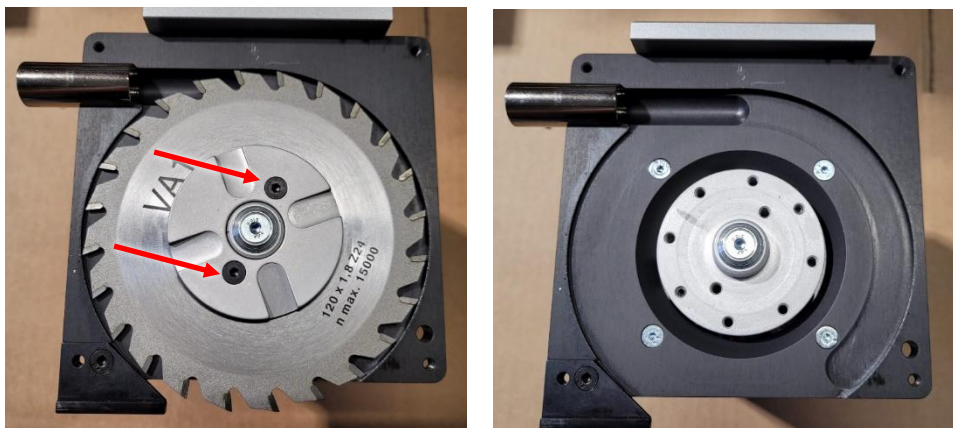


Figure 6 Remove mounting cover and saw blade

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



Figure 7 Remove screw from mounting cover

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

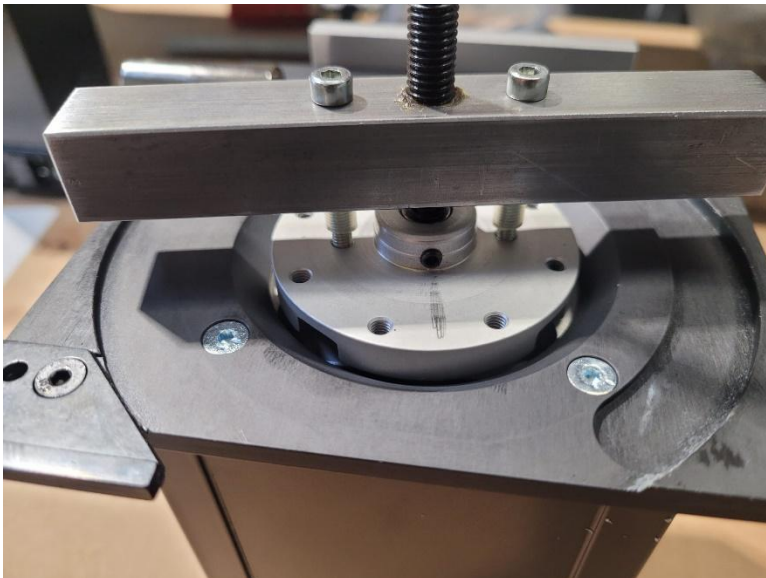


Figure 8 Remove the mount from the motor shaft

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

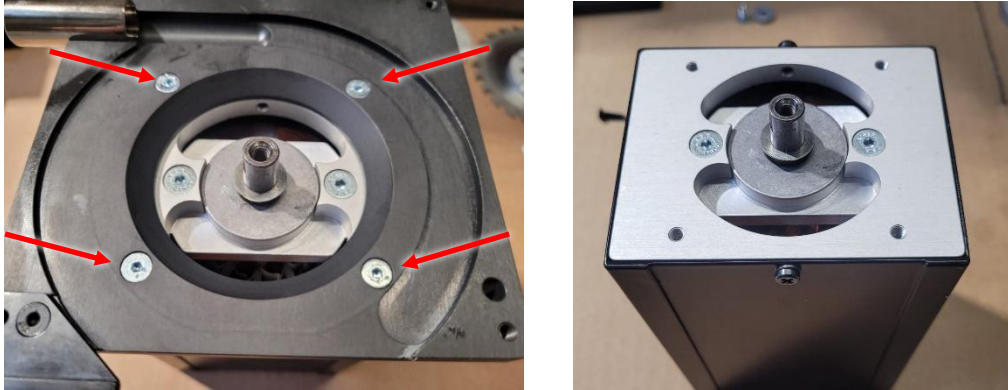


Figure 9 Remove the saw blade cover at the rear

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.



Figure 10 Attach the spacer ring

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).

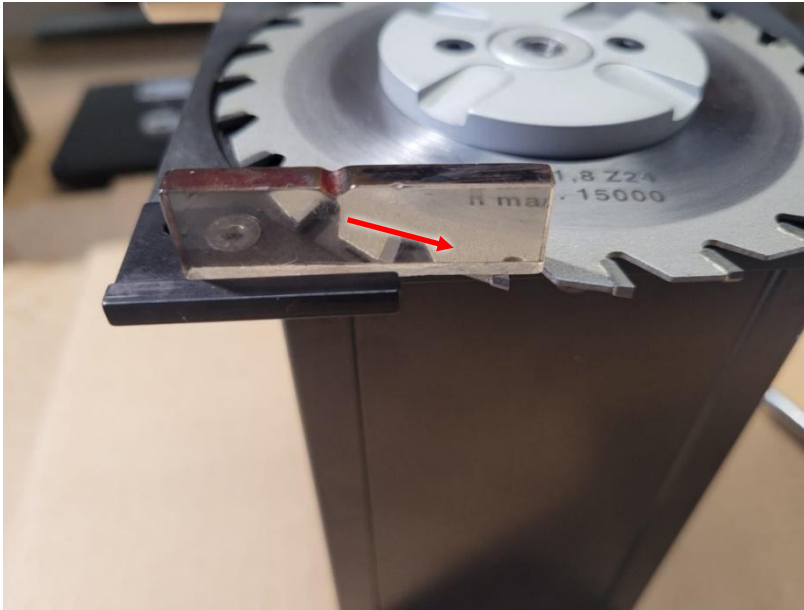


Figure 11 Adjustment of saw blade position using flat tool

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.