

Type:

Weld trimmer

Code:

K01405B

Betriebsanleitung *Operating instructions*



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Hinweis: Diese Betriebsanleitung muss dem Bedienungspersonal jederzeit zur Verfügung stehen. Lesen Sie die vorliegende Betriebsanleitung vor Inbetriebnahme des Gerätes sorgfältig durch.

Note: These operating instructions must always be available to the machine operators. Make sure to read them carefully before placing the unit in service.

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Konformitätserklärung des Herstellers
nach der EG-Maschinenrichtlinie 2006/42/EG Anhang II, Nr. 1 A
Declaration of Conformity by the Manufacturer
as defined by machinery directive 2006/42/EC, Annex II, No. 1 A



MUNSCH Kunststoff-Schweißtechnik GmbH
Im Staudchen
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hereby declares on its own behalf and responsibility that the weld trimmer unit to which this declaration refers, conforms to the following standards, codes or regulations:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Directive 2006/42/EC | <input checked="" type="checkbox"/> Directive 89/336/EC |
| <input checked="" type="checkbox"/> EN 61029-1 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> VDE 0701 Part 1 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> VDE 0702 Part 1 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> EN 50144 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Directive 73/23/EC | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> EN 60204-1 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> EN 61029-1 | <input type="checkbox"/> |

Conformance of the product with the above standards is subject to the condition that it is used in accordance with the contractually agreed service conditions, the responsibility for which shall rest with the user.

Modifications to the machine/unit or the use of the machine/unit for applications other than the intended service will make this declaration null and void, unless expressly approved in writing by the manufacturer.



Ransbach-Baumbach, März 2013

Dipl.-Ing. Stefan Munsch
Managing director

Foreword

This instruction handbook should help you to become familiar with the Weld trimmer and to use its intended application possibilities.

The instruction handbook contains important information on safety, proper and economic operation of the Weld trimmer. Observing these instructions will help prevent hazards, reduce repair costs and non-productive times and increase the reliability as well as the life limit of the Weld trimmer.

The instruction handbook must always be available at the location where the Weld trimmer is in use. The instruction handbook must be read and used by anyone who has been appointed to work with/on the Weld trimmer, for example, during

- **Assembly**
- **operation**
- **maintenance** (service, ...) and / or
- **transport.**

Specially trained personnel must be used for operation and maintenance of the Weld trimmer.

Apart from the instruction handbook and those obligatory regulations for accident prevention applicable in the country of use and application location, the standard technical regulations for safe and professional operation must be observed.

This instruction book contains basic information which must be observed during installation, operation and maintenance. For this reason, this instruction book must be read by the mechanic as well as the responsible specialist personnel/user before assembly and initial operation and must always be available at the location where the Weld trimmer is in use.

Not only the general safety instructions listed in the chapter on "Safety" but also the special safety instructions added to the other main points must be observed.

	<p>Safety symbol according to DIN 4844-W9</p>
	<p>Safety symbol according to DIN 4844-W8</p>
<p>Caution</p>	<p>Danger for functions</p>
	<p>Use of special tools</p>

Instructions attached to the Weld trimmer such as, e.g.,

- warning plate
- rating plate

must be observed and must always be clearly visible.

Hazards resulting from non-observance of the safety instructions

Non-observance of the safety instructions may lead to hazards to personnel as well as the environment and device.

Non-observance of the safety instructions may lead to the loss of any claims for damages.

Non-observance of the safety instructions may lead in particular to the following hazards, for example:

- Failure of important Weld trimmer functions
- Failure of specified methods for care and maintenance
- Personal hazard due to electrical and mechanical influences.

MUNSCH Kunststoff-Schweißtechnik GmbH strives to keep not only its products but also the relevant documentation up to date and to describe these as clearly as possible for the user.

If you have any suggestions for improving our documentation, we would be pleased to hear from you.

Please let us know your suggestions.

Safety

General

The general agreement concerning safety regulations in the VDE 0701 standard applies analogously. The operation of Weld trimmers is subject to the applicable national regulations.

Apart from the instruction book and the obligatory regulations for accident prevention applicable in the country of use and application location, the technical regulations for safe and professional operation must be observed. Guideline 92/57/EWG of 24.06.1992 applies analogously.

Not only the general safety instructions listed in this chapter but also the special safety instructions added to the other main points must be observed.

Do not attempt any operation which may be a safety hazard.

Intended use

The Weld trimmer has been constructed according to the latest technology and safety regulations. However, improper use may lead to hazards for the user or a third party or damage to the machine and other material assets.

The Weld trimmer must only be used if it is in excellent technical condition. Use the Weld trimmer according to regulations and be aware of safety and hazards described in the instruction handbook.

If the Weld trimmer fails to function correctly, stop work immediately and secure! Mal-functions should be eliminated (or have them eliminated) straightaway.

The Weld trimmer is only to be used as agreed in the order confirmation. Another use or use beyond this is not as intended. The manufacturer/supplier is not liable for damages resulting from this. The user is solely responsible. Intended use involves observance of the instruction hand-book and keeping to the inspection and maintenance conditions.

If a new application of the Weld trimmer lies outside the limits of use defined in the order confirmation or if the user is in doubt regarding changes, the change must be approved by the manufacturer/supplier.

Organizational measures

Always keep the instruction handbook ready to hand at the location where the Weld trimmer is in use. Observe the general, legal, national and other compulsory regulations on accident prevention and environmental protection in addition to those described in the instruction handbook.

The individual appointed to undertake work using the device must have read the instruction hand-book before start working, paying particular attention to the chapter on safety instructions.

If changes are made to the Weld trimmer or its operating performance relevant to safety, stop working with the Weld trimmer immediately and report the malfunctions to the authority/person responsible.

Do not undertake any changes on, add to or reconvert the Weld trimmer which could impair safety, without permission from the supplier.

Personnel selection and qualification

Work on electrical parts of the Weld trimmer may only be undertaken by skilled electricians or by persons instructed under direction and supervision of a skilled electrician according to electrotechnical regulations.

Only specially trained personnel may be used for the assembly, operation and maintenance of the Weld trimmer.

Safety instructions on specific Operating phases

Observe the specified adjustment, maintenance and inspection activities and deadlines including information on parts/part equipment in the instruction handbook. These activities may only be carried out by trained personnel.

Individual parts and larger components must be secured carefully when being exchanged so that they do not cause any hazard.

Before cleaning the Weld trimmer, cover/glue up all openings into which a cleaning agent must not penetrate due to safety and/or functioning reasons (e. g. electro motors).

After cleaning, completely remove the covers/glue.

Always tighten screw connections loosened during maintenance and repair work.

If safety devices have to be removed during set-up, maintenance and repair, these must be reassembled and inspected once the maintenance and repair work has been concluded.



According to VDE 0701 (IEC 335), it is stipulated, that the protective resistor, insulation resistance and the current earth leakage must be measured after every maintenance or change. In addition a visual inspection of the connecting cable, a voltage and electric charge measurement and a functional check must be carried out.

Make sure process materials as well as replacements parts are disposed of safely and with consideration to the environment.

Safety equipment



Personally safety equipment (gloves and protection glasses) are required for working with the weld trimmer.

Instructions on specific types of danger

Contact



The weld trimmer may only be held and touched on the handles intended.

- The Weld trimmer has to be held fixed with both hands
- The yellow button of the locking device should only be pressed if the machine is out of operation.
- The safety cover of the Weld trimmer may only be opened for cleaning- and maintenance purposes, when the machine is not running and the mains plug is pulled out.
- During operation objects may not get near the opening of the Weld trimmer, because this can lead to danger for human being and machine.

Working area

The working area of the Weld trimmer should be clean and free from objects. The weld seams should be cured.

Operation



Before connecting to the mains, check the rated voltage of the Weld trimmer.

The mains voltage must correspond to the rated voltage on the Weld trimmer's rating plate.

When using an extension cable, be aware of the minimum cross section of the cables.

Length [m]	Cross section [mm ²]
Up to 19	2,5 ¹⁾
	4,0 ²⁾
20 – 50	4,0 ¹⁾
	6,0 ²⁾

1) with 230 Vac. Voltage

2) with 110 Vac. voltage

The extension cable must be permitted for the application location (e.g. outdoors) and marked accordingly. Always take care when handling the connecting cable.

– Make sure the connecting cable does not have any kinks.

– Do not place any object on the connecting cable.

– Do not clamp or squash the connecting cable.

Do not touch plug and connecting cable with wet hands. When plugging in and out, you may only held the connecting cable at the connector.



Never continue using the Weld trimmer, take it apart or make any changes yourself if

- The connecting cable or the plug of the Weld trimmer is damaged.
- The safety devices are damaged.
- A foreign body or fluid has penetrated the inside of the Weld trimmer.
- The device is not functioning normally.
- Unusual changes occur in the operating status.



Never splash the Weld trimmer with water: risk of personal injury, short circuit



The Weld trimmer must not be used in a potentially explosive or inflammable environment.

Make sure you are in a stable standing position when operating the Weld trimmer

The connecting cable must be able to move freely and not be hindered by the user or a third party during operation.

Taking a break / End of work

Take care that the cutter head's safety cover is closing automatically, when taking a break or end of work.

Plug off the mains, to avoid an unintentional commissioning.

Devices usable in different locations

Reassemble the parts which had to be dismantled for transport purposes and secure before continuing operation.

When putting into operation again, proceed according to the instruction handbook.

Accessories/Replacement parts

Only those products approved by MUNSCH may be used as spare-parts. The manufacturer is not liable for any damages which arise from using products and accessories not approved.

Conversion or change of the Weld trimmer is only permitted after consultation with the manufacturer. The replacement parts and authorized accessories approved by the manufacturer serve safety purposes. Use of other parts can cancel the liability for the consequences resulting.

Product description

General

The Weld trimmer is equipped with a speed-controlled, motor. The on/off switch is a slide switch with a fast unlocking device operated by pressure on the back end of the slide switch.

The Welding trimmer consists of a strong motor and a cutter head, which is flanged on the angular gear. The cutter head has a safety cover, which opens only during operation to release the cutter knives.

The safety cover is opened by two rubber feet, which is mounted on the cutter head. It will open when the Weld trimmer is placed on the work piece and is moved in working direction.

The Weld trimmer consists of a fixed housing with two slide discs. Inside the housing the cutter head rotates with four knives. The cutter head rotates against working direction.

A constant attack on the working piece is warranted by the arrangement of the knives.

If the performance of the Weld trimmer is definitely decreasing, the cutter knives have to be replaced.

The cutter knives have two cutting edges and can be turned once.

See chapter maintenance.

The plating of the machine on the working place by the glide discs enables working without any difficulties, also on curved surfaces.

Inspection

All MUNSCH Weld trimmers are subject to extensive performance inspection before delivery. Only aggregates in perfect technical condition leave the factory.

By observing this instruction handbook and the agreed operating conditions trouble-free operation is guaranteed.

Commissioning / De-commissioning

General

Beside the instruction handbook and the obliging regulations for accident prevention in the country and place of usage the standard technical regulations for safety- and professional working are also to consider.

Every safety endangering working procedure is to be avoided.

Please read thoroughly through the chapter safety before starting commissioning/de-commissioning. The use of trained experts is required for the commissioning and de-commissioning of the Weld trimmer.

Completion of the Weld trimmer



The mains plug should not be plugged in.

Mount the handle

- Put the Weld trimmer in a stable position
- Put on the handle (K02941) and screw up tightly clockwise. Tighten it with a screw-wrench.



The handle may not loosen itself

Incommissioning

Preparations

Prior working steps:

Completion of the Weld trimmer

Commissioning of the Weld trimmer

Observe chapter safety.

Caution

The Weld trimmer has to be switched off and the mains plug has to be plugged out.

After opening the safety cover, please check if the cutter head is running properly, no objects are clamped and all cutter knives are mounted correctly.

Please make sure, if the drive is not switched on before putting in the mains plug.

Have the Weld trimmer in your hands and put in the mains plug.

The machine may only be held and touched on the handles intended.

You engage the machine by pressing the on / off switch.

The Weld trimmer is to put with the rubber feet at the housing downwards on the weld seam. The weld seam should be in the middle of the rubber feet.



The safety cover is opened by moving the machine in working direction and the cutter head can be put on the weld seam.

Traction occurs against working direction during operation.



Please put the Weld trimmer only on the weld seam, if the machine is switched on.



Milling direction / speed

The milling direction (working direction) is towards the user, this means in direction of the power line.

The milling speed depends on the level of the weld seam bead and also on the adjusted speed. The surface, which is milled, has to be even. If the surface is not even, the milling speed should be adjusted or the revolution should be increased



Taking a break



Observe the chapter on safety.

If you take a break from milling, the drive device must be switched off and the Weld trimmer placed in a secure position.

The machine is switched off by pressing on the back part of the fast releasing device of the on/off switch.



After switching off, the machine is running 5 seconds further.
Do not leave the Weld trimmer unattended.

De-commissioning



Observe the chapter on safety.

When finish milling, the driving device must be switched off and the Weld trimmer placed in a secure position.

The machine is switched off, when pressing on the back part of the fast releasing device's on/off switch.



After switching off, the machine is running 5 seconds further.
Do not leave the Weld trimmer unattended.

Transport / Storage

Observe the chapter transport and storage.

Maintenance

General



Before carrying out any maintenance work on the device, pull out the mains plug!
Maintenance work on electric tools may only be carried out by skilled electricians



The Weld trimmer must be cool enough to touch.

Observe the chapter on Safety.

Maintenance work may only be carried out by suitable specialist personnel or by our customer services' employees.

To make sure that the Weld trimmers will function safely during their life within their intended use, we recommend:

- All maintenance, inspection and assembly work must be executed by authorized and qualified specialist personnel who have gained sufficient knowledge by reading the instruction handbook thoroughly.
- All work has to be executed when the device is at a standstill.
- Directly after concluding any work all safety and protection devices have to be attached again and/or made functional.

During maintenance, make sure that the Weld trimmer and/or its individual parts is/are stable.

Apart from the instruction handbook and the obligatory regulations for accident prevention applicable in the country of use and application location, the standard technical regulations for safe and professional operation must be observed.



Do not attempt any operation which may be a safety hazard.

Activities not mentioned here may only be carried out by the manufacturer!

Maintenance / Inspection

Motor

If a motor cleansing is necessary, blow out the motor housing through the air slots on the back. This may only be carried out by a skilled electrician.

Carbon brushes

The carbon brushes of the drive may only be checked and changed, if applicable, by a skilled electrician.

Observe the chapter on Accessories/Replacement parts.

Cutter head

Maintenance works may only be carried out, if the machine is not running any more and the mains plug is pulled out.

Caution

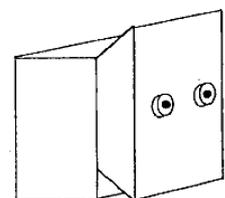
Please do always change / turn over all four knives at the cutter head.



The knives of the cutter head preheat during operation and may only be changed, if the machine is already cooled down.

Please proceed following these steps:

- Open the cutter head's safety cover.
- Turn the cutter head to the respective knife
- Open both hexagon socket screws of the knife.
- Take out the knife and check the grade of abrasion.
- Also check the other knives.
- All four cutter knives have to be replaced at all times.
- Fasten the new / turned knives.
- Close the cutter head's safety cover.



Fitting position of the knives

Mains connection cable

If the mains connection cable is defective, it has to be changed completely.

Patched cables are life-threatening.



According to VDE 0701 (IC 335), it is required to measure the protective resistance, the insulating resistance and the current leakage of all electrical tools after every repair or change. In addition, a visual examination of the connection cable, a tension measurement and a power measurement is to be done.



Pull out the mains plug first!

This work may only be carried out by a skilled electrician.

Regular maintenance

The Weld trimmer is extensively insensible against fouling.

However, it is recommended to clean the Weld trimmer after every use.



Do not use caustic cleansing agents!

If removing tenacious dirt, please take care that the Weld trimmer, especially the connection cable, is not damaged.

Fault finding

Fault finding

The following table contains malfunctions which may occur on the Weld trimmer and information on the possible causes and how to remove them (Fault diagnosis table).

If malfunctions occur which are not mentioned here or if the malfunctions do not lead back to the cause specified, please contact MUNSCH Kunststoff-Schweißtechnik GmbH.

Malfunction	Error no.
Drive motor does not start	1, 2, 3, 4, 5, 6, 7
Drive motor switches off	1, 2, 4, 5, 6, 7
Motor rotation speed varies	5, 6, 9, 10
The milling result is dissatisfactory	8, 9, 10

Fault-no.	Possible cause	Corrective action
1	Cable connections defective	Check cable connections ¹⁾
2	No power supply	Produce power supply
3	Nominal voltage > permissible voltage	Do not use the Weld trimmer any more and check acc. To VDE 0701, or send to MUNSCH Kunststoff-Schweißtechnik GmbH
4	Extension cable heats up	- Unroll the cable reel. - Check the cable cross section (see also chapter on Safety)
5	Defect in the driving device	¹⁾
6	Carbon brushes of the driving motor defective	 Observe the instructions in the Maintenance and Safety chapter Exchange the carbon brushes See chapter Maintenance
7	Cutter head is blocked by objects	 Observe the instructions in the Maintenance and Safety chapter! Remove object in the cutter head. Check, if the cutter knives are not damaged and are in tightly.

Fault-no.	Possible cause	Corrective action
8	Cutter knives are used up	 Observe the instructions in the Maintenance and Safety chapter! Change the cutter knives. See chapter Maintenance
9	The fitting position of the cutter knives is not correct	 Observe the instructions in the Maintenance and Safety chapter! Mount the cutter knives in the right fitting position. See chapter Maintenance.
10	Feed rate too high, or speed too low	 Reduce the feed rate or raise the speed. See chapter Commissioning / De-Commissioning

Transport / Storage

Safety instructions



Observe the chapter on Safety.

For transport / storage, the Weld trimmer must have cooled down so that it's maximum hand-hot.

Contact



The weld trimmer may only be held and touched on the handles intended.

Storage conditions

Keep away unauthorized people.

Store it in a dry place.

Transport to MUNSCH

If it is necessary to send the Weld trimmer to MUNSCH Kunststoff-Schweißtechnik GmbH use the original packing.

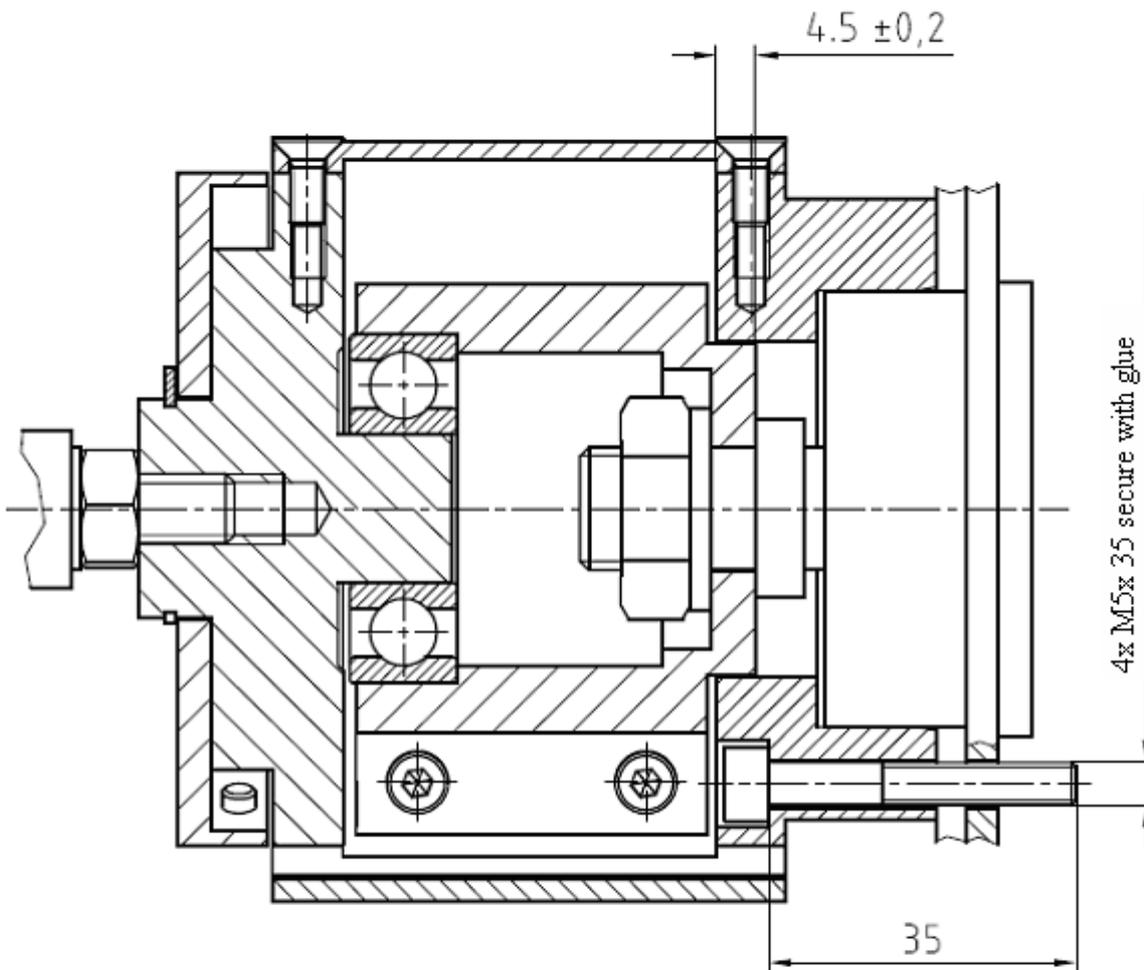
Please include a description of the fault, to make possible a quick fault cause finding.

Conservation

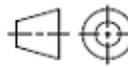
A special conservation is not necessary.

Mounting

Is the casing basement mounted the distance dimension $4,5 \pm 0,2$ has to be controlled with a depth gauge.



As a help for mounting use 2 Hexagon socket head cap screws M5x40.

MUNSCH Chemie-Pumpen GmbH D-56221 Ransbach-Baumbach			 ISO-METHODE "E"		Maßstab 1:1	Werkstoff
					Type	
					Designation Mounting Weld trimmer K01405B	
			Teile-Nr.: Schweißnahtfraese_K01405a.dwg		Zng.-Nr.: K01405B-Mon	
					Blatt 1 Bl.	
Zust.	Änderung	Datum	Name	Zchnp. Datum:	Ers.für	Ers.durch

Parts list

Code	K01405B	weld trimmer 950 W		
Item	Quantity	Unit	Code	Designation
01	1,00	Stück	K01406	blade holder;
02	1,00	Stück	K01564	set of blades Maß 40x12x1,5
03	1,00	Stück	K04982	casing base;
04	1,00	Stück	K01409	Ring;
05	1,00	Stück	K01410	Cover plate;
06	1,00	Stück	K01411	Casing cover;
07	1,00	Stück	K01413	guide;
08	8,00	Stück	K01454	Socket head cap screw M 4 x 8
09	11,00	Stück	K01545	Countersunk screw M 4 x 10
10	2,00	Stück	K01418	Countersunk screw M 3 x 8
11	2,00	Stück	K00684	Slotted cheese head screw M 4 x 6
12	2,00	Stück	K00681	spacer rubber M4 x D10 x 15 UK
13	1,00	Stück	K00574	Circlip A 25 x 1,2
14	1,00	Stück	K01422	Spring washer A 14
15	1,00	Stück	K01423	Hexagon nut M 14 - 8
16	1,00	Stück	K01420	strain spring RZ-036 RX
17	1,00	Stück	K01424	Ball bearing 6203 2 RS;
19	1,00	Stück	K04983	Drive 950 W; Drehzahl regelbar
20	4,00	Stück	K04984	Socket head cap screw; M 5 x 35