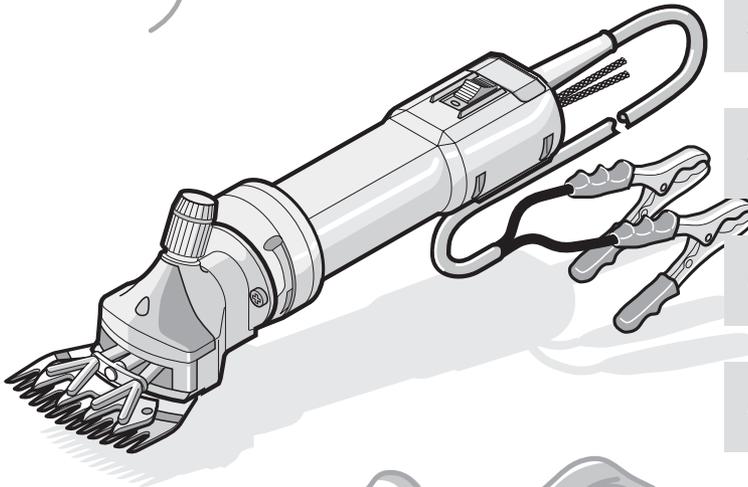


swiss made



Betriebsanleitung

Instruction manual

Mode d'emploi

Istruzioni d'uso

Manual de Instrucciones

Bedieningshandleiding

Instruktionsbog

Instruktionsbok

Instruksjonsbok

Käyttöohjekirja

Manual de instruções

Οδηγίες χρήσης

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Illustrations: at the end of the instructions

1 Proper Use

1.1 Overall View / Controls

Component Names



Illustr. 1

POS	DESCRIPTION	TOTAL	POS	DESCRIPTION	TOTAL
1	Shear head case XTRA/12V	1x	28	Socket head cap screw M3.5 x 8	4x
2	Swivelling fork XTRA/12V	1x	29	Gearbox housing VS84/12V black	1x
3	Sheep shearing head cover XTRA/12V black	1x	30	Reduction gear Z42/12 12V	1x
4	Chicken feet 2.5" XTRA/12V right	option	31	Spindle VS84/12V	1x
5	Chicken feet 2.5" XTRA/12V left	option	32	Countersunk screw M4 x 12	2x
6	Chicken feet 3" XTRA/12V left	1x	33	Seal VS84/HANDY/12V	1x
7	Chicken feet 3" XTRA/12V right	1x	34	Centering flange 12V	1x
8	Retaining spring XTRA/12V	1x	35	Motor with cogwheel 12V	1x
9	Cogwheel Z30 XTRA/12V black	1x	36	Fan wheel 12V	1x
10	Gauge plate 2.5" XTRA/12V	option	37	T-wire 1.5mm_ red with flat connector	1x
11	Gauge plate 3" XTRA/12V	1x	38	Airflow guide 12V	1x
12	Crankshaft XTRA/12V	1x	39	T-wire 1.5mm_ blue with flat connector	1x
13	Ball XTRA/12V	1x	40	Motor housing 12V Heiniger grey	1x
14	Retaining ring XTRA/12V	1x	41	Anti-kink sleeve VS84/HANDY/12V USA	1x
15	Tension nut bushing screw XTRA/12V	1x	42	Cord hanger HANDY/12V	1x
16	Centre post XTRA/12V	1x	43	Cable with terminals 12V	1x
17	Comb screw sheep	2x	44	Main switch VS84/HANDY/12V	1x
18	Tension nut XTRA/12V Heiniger	1x	45	Cable grip VS84/HANDY/12V USA	1x
19	Locknut XTRA/12V	1x	46	Socket head cap screw M3.5 x 10	2x
20	Sliding sleeve XTRA/12V	1x	47	Clamp VS84/HANDY/12V	1x
21	Ball bearing 608-2RS	1x	48	Socket head cap screw M3 x 25	1x
22	Countersunk head screw M4 x 28	2x	49	Dust cover VS84/HANDY/12V	1x
23	Countersunk screw M4 x 8	2x	50	Switch housing, lower VS84/HANDY/12V black	1x
24	Circlip for shaft Ø6	1x	51	Socket head cap screw M3 x 6	4x
25	PH-screw M4 x 10	2x	52	Filter cover complete VS84/HANDY/12V black	1x
26	Ball bearing 608-2Z	1x	53	Capacitor 3.3µF 12V	1x
27	Sheep shearing head 3" XTRA/12V with blades	1x			

1.2 Intended Use

The shearing machine is intended exclusively for use on sheep and goats, as well as llamas, alpacas and other members of the camel family. Its use can also be extended to cattle and horses by changing the standard shearing head.

Other uses, in particular using the machine on people, are expressly prohibited.

1.3 Technical Data

Model Designation:	12V-S (Shearing)
Mains Voltage:	} see rating plate
Motor Output:	
RPM:	
Fuse Protection Needed:	
Dimensions (W/H/L):	approx. 80 mm x 95 mm x 310 mm
Weight, excluding cable:	1250 g
Max. Ambient Temperature:	0°C - 40°C
Max. Air Humidity:	10% - 90% (relative)
Noise Emission (L_{pAm}):	84.3 dB(A) (DIN-45635-1/04.84 + BG-PAS 26)
Acceleration (a_{vhw}):	10.5 m/sec ² (EN-28662-1/01.93)

1.4 Equipment Items

1 Shearing Machine with Shearing Head, 1 Pair of Shearing Blades, 1 Special Screwdriver, 1 Bottle of Special Lubricating Oil, 1 Cleaning Brush, 1 Set of Operating Instructions, 1 Transport and Storage Case

Options:

- Alternative exchangeable clipper head (for cattle and horses)
- Various shearing + clipping blades

2 Safety Regulations

2.1 Introduction

This section describes the mandatory safety regulations which must be observed when using the shearing machine.

All persons undertaking work on or with the machine have an obligation to read the operating instructions.

The operating instructions must be kept safely in the storage case and accessible at all times.

2.2 Symbols and Warning Signs

Various symbols are used in the operating instructions. They refer to potential dangers or point to technical information, the non-observance of which will lead to personal injury, damage to objects or inefficient operation.

Danger Symbols



Warning

indicates a potentially dangerous situation. If preventive action is not taken, death or very serious injury could result.



Caution

indicates a potentially dangerous situation. If preventive action is not taken, the consequences could be slight or minor injuries.

Information Symbols



Note

Note, non-compliance with which can lead to operating malfunctions or damage.



Pictorial Note

This symbol, together with its number, refers to the relevant illustration at the end of the instructions.

2.3 Proper Use

The use to which the machine is intended for, is described in Section 1.2.

The following applies to safe operation:

The details at Section 1.3, "Technical Data", count as mandatory operating limits and ratings.

Shearing other animals, in particular dangerous animals such as beasts of prey and the like, counts as mis-use. This could lead to circumstances dangerous to life and limb.

2.4 Safety Principles

2.4.1 Power Connections



Only connect the machine up to undamaged, fully-charged lead storage batteries. Damaged storage batteries can cause severe caustic injuries from leaking acids. Defective installations can cause an electrical shock or a short circuit. Observe the relevant national regulations.

Ensure that the terminal clamps have the correct polarity, i.e. the red terminal clamp must be connected to the positive terminal and the black terminal clamp to the negative terminal. Wrongly connected terminals can damage the machine.



Illustr. 2

Ensure that the terminal clamps are firmly clipped onto the storage battery's terminals and that they cannot slip off if the cable is tugged. Since the gases released by the storage battery are highly inflammable and could lead to the storage battery exploding, the machine's motor switch must, without exception, be switched off before connecting or removing the terminal clamps (Position 0, Illustration 2).

The terminal clamps must never be removed from the storage battery while the machine is switched on (with motor running).

Servicing and cleaning must only be carried out when the terminal clamps have been removed from the battery.

Never leave the machine unsupervised with the terminal clamps connected. Keep children away from the working area and store the machine out of their reach.

2.4.2 Servicing and Checking Requirement

Only operate the shearing machine if it is undamaged and in a proper condition. Any defects to the housing or the electrical cable should be rectified by a repair or service agent.

2.4.3 Noise Emission / Personal Protective Equipment

Wear Ear Protectors!



Typical sound emissions when working are 84.3 dB(A). We recommend that ear protectors should always be worn when working.

Wear Protective Goggles and Gloves!



For your personal protection we recommend that you wear protective goggles and gloves.



Personal protective equipment is to be provided by the operator.

2.4.4 Other Dangers

Should evidence of dangers or potential dangers, not directly related to the shearing of animals, occur during operation, we would ask you to inform us. This also applies to dangerous technical deficiencies.

2.5 Essential Operator Skills

Operating the machine safely makes only small demands of the operator. However, it is essential that they are observed and carried out.

- The operator must be experienced in handling the animals to be shorn.
- The operator must have read and understood the instructions or have been instructed by an expert in the machine's use and have had the potential dangers explained.

Children are not permitted to operate the equipment.

3 Putting into operation

3.1 Controls and Operating Notes



There are dangers inherent in the improper use of electrical equipment, especially stockbreeding equipment! Therefore, before using the machine, you should observe the following accident-prevention measures:

- Observe the advisory notes listed at 2.4.1 (power connections)
- One or more lead storage batteries connected in parallel must be rated 12V. When operating the machine from several storage batteries simultaneously, they must only be parallel switched and never in series. In case of doubt contact a specialist.
- Avoid all contact with the moving shearing blades.
- Even when the machine is connected off, do not handle the area of the shearing blades as long as the machine is connected to a power source. Always disconnect the power supply first when working on the shearing blades/shearing head.
- Avoid touching any machine which is in contact with any liquids. Never shear wet animals. Any liquid which has got into the machine will lower the electrical insulation. There is then the danger of an electric shock or short circuit. Only clean the machine when dry using a brush or the cleaning brush provided.



Illustr. 2

- An electric cable lying loose on the ground for any distance can snag and become a source of danger. Before starting to shear, lay the cable out carefully and safely. Avoid any kinks in the power cable and prevent it becoming entangled. Animals must not stand on or walk across the power cable or get caught in it. Never wrap the power cable around the machine and keep it away from hot surfaces and objects. This may result in breaks and damage to the insulation. The cable should be regularly checked for damage.
- Switch the machine to OFF (Position 0: Illustration 2) before connecting the terminal clamps to the storage battery or removing them from it.
- Only use original shearing blades. Do not use damaged shearing blades with blunt, missing or broken off teeth. Only work using sharp shearing blades, ground in a specialist workshop.
- Look out for foreign bodies (wire, wood, etc.) in the fleece and remove them before beginning to shear.
- Wear suitable work clothes. Do not wear any loose fitting clothing or items of jewellery which could get caught up in moving machine parts. We would recommend in the strongest terms that protective goggles and ear protectors are worn.
- Never insert any object into any of the machine's apertures.
- Noise from the machine can worry animals. Considerable injury can be caused as a result of being kicked by an animal or being crushed by its body weight. Tether the animal securely, approach it from in front and switch the machine on within the animals' range of vision.
- Animals should only be shorn if unauthorised persons have been excluded from the shearing area.
- Only shear in well-ventilated spaces (dust) and never near objects or gases likely to explode.
- Generally, never plunge the clipper and clipperhead into liquids such as water, soapy water, diesel, petrol, etc. This may cause serious injury to mechanics and motor.



These safety notes must be complied with in all cases.

3.2 Shearing Adjustment using the Tension Nut

Before putting into operation, make adjustments as follows:

Before shearing:



Illustr. 3/6

With the machine switched off: ensure that the pressure yoke's carrier cone pins mesh precisely into the positioning holes in the cutter (Illustration 3, Item 2). Tighten the tension nut until resistance is first noticeable (Illustration 3, Item 1). Then tighten the tension nut a further 1/4 turn.

Start operating the shearing machine. Slacken off the tension nut (Illustration 6) until the shearing blades exert almost no more contact pressure (noise level rises).



Caution! If the tension nut is slackened off too much, the cutter can fly off causing injury.

Now tighten the tension nut slowly until the noise level becomes muffled and some resistance is detectable as you tighten the tension nut. The pressure should now be correctly set. Begin shearing. If it still does not cut properly you will have to add a little more tension.

During shearing:

The shearing system works with much less pressure having to be applied than with traditional sheep shearing machines. Care should be taken, therefore, to ensure that the blade tension is not set too high. Slightly adjust the blade tension from time to time during shearing (max. 1/4 turn).

Hair may collect between the shearing blades, if the tension nut is insufficiently tightened at the start of shearing. This will have an adverse effect on further shearing progress or make it quite impossible. If this happens, the shear blades must be disassembled, cleaned, oiled and re-fitted as described at 4.2.

3.3 Lubrication**Before and During Shearing**

Illustr. 4+8

A thin layer of oil on the cutter and the comb plate (Illustration 4, Items 1 + 3) is essential for good shearing results and so as to increase the life of the machine and its shearing blades. All other moving parts in the shearing head must also be well-oiled. Place a few drops of oil on the shearing blades and pour some into the lubricating holes provided on the shearing head (Illustration 4, Items 2).

Only use our special oil or a paraffin oil meeting the ISO VG 15 specification. This oil is non-toxic and produces no irritation on contact with the skin or the mucous membranes. This paraffin oil degrades to some 20% after 21 days (CEC-L-33-T-82).



Poor lubrication is the most frequent cause of unsatisfactory shearing results. Inadequately oiled shearing blades will overheat, leading to reduced blade life.

The shearing blades and shearing head must be adequately lubricated during shearing (at least every 15 minutes) so that they do not run dry.

3.4 Switching On / Off

Illustr. 2

There are two positions on the slide switch (Illustration 2 shows the 0 Position).

Position **I**: Machine switched on

Position **0**: Machine switched off



Always use the slide switch (Illustration 2) when switching the machine on and off. Check the position of the switch before connecting the terminal clamps.

3.5 Malfunctions

See the list of malfunctions in Section 5, "Repairs", for the rectification of malfunctions.

4 Servicing



Before starting any servicing work, disconnect the power supply; remove the terminal clamps from the storage battery.

Even with the machine switched off, do not handle the area round the shearing blades as long as the machine is still connected to a power source. Whenever working on the shearing blades/shearing head, always remove the terminal clamps from the battery first.

4.1 Cleaning

Cleaning the Shearing Head and Shearing Blades

After shearing, remove all oil from the machine by rubbing it down with a dry cloth and carefully clean the shearing head and shearing blades with a dry brush. Then oil the parts to prevent rusting. Even the smallest rust spots on the blades can adversely affect shearing or make it completely impossible.

4.2 Fitting the Shearing Blade



Illustr. 5

A pair of shearing blades consists of a comb plate (Illustration 5, Item 2) and an cutter (Illustration 5, Item 1). When fitting the blades care should be taken to ensure that the correct surfaces come to rest against each other. The blades are fitted as follows:



Illustr. 6/7

Loosen the tension nut (Illustration 6) and place the machine on a hard surface so that the blade fixing screws lie uppermost. Slacken off the screws and remove both the old shearing blades.

Ensure that the new shearing blades are clean. Particular care should be taken to ensure that the ground surfaces are free of dirt; if not, even newly ground shearing blades will not shear satisfactorily.

Place the new cutter in the pressure yoke's carrier cones (Illustrations 8 + 3, Item 2) and push the new comb plate between the loosened screws (Illustration 9). Now tighten the blade fixing screws until you can just move the new comb plate sideways by hand.

Now turn the machine over so that the tension nut is again uppermost.



Illustr.
8/9/10

What is now important is that you rest the blades against each other in such a way that the ground surface of the comb plate projects approx. 1.5 - 2.0 mm beyond the tips of the upper blade (Illustration 10).

Once you have adjusted the shearing blades, set the position of the comb plate and tighten up the blade fixing screws.

Check that the shearing blades have been correctly fitted and that the pressure yoke's carrier cones (Illustration 3, Item 2) are situated in the holes provided in the cutter. Now tighten up the tension nut until the cutter is pressed against the comb plate and you can feel a slight resistance.

4.3 Resharpener the Shearing Blades

Only work with sharp shearing blades. Replace blunt blades or those with missing teeth. Proper resharpener can only be done with a special machine and by a trained technician contactable through your service centre.

4.4 Cleaning the Air Filter



Illustr. 11

The air filter element is found on the underside of the motor section of the machine. The air filter element can be removed from the machine for cleaning. Regularly cleaning the element with a dry brush is essential. When cleaning the air filter, take care that no foreign bodies get into the machine.

The machine must never be operated without the air filter element!

4.5 Changing the Shearing Head (Option)



Illustr. 12

To change the shearing head from "Sheep" to "Cattle" or vice-versa, loosen both head screws. Remove one head and fit the other (Grease cog wheel, Illustration 1, Item 8, if necessary). Re-tighten both screws.

4.6 Storing the Shearing Machine



Only store the shearing machine in a dry place and in the case supplied. Do not switch on the machine if you suspect any liquid has got into it. There is then a risk of an electric shock or short circuit. Hand the shearing machine into a service centre.



Illustr. 13

Make it a habit to store the machine between use, store it well-cleaned, oiled and with tension slackened off, in its storage case, in a clean, dry place, out of the reach of children.

5 Repairs

This product has been developed and assembled using the best individual components available. It is designed to give longevity and high performance. If spare parts are used during the life of this product, please ensure that they are genuine Heiniger parts. Failure to use genuine Heiniger spares may reduce the performance of this precision engineered product and will void any warranty claim.

5.1 Introduction

Actions to be taken to rectify malfunctions are indicated in the "Rectification" column of the malfunction lists. Those rectification notes printed on a dark background may only be carried out by an authorised service centre.

Details of authorised service centres are to be found at the end in the "Contact Addresses" section.



5.2 Malfunction Lists

Contact an authorised service centre in the event of malfunctions not contained in these instructions.

Sheep Shearing Head

MALFUNCTION	CAUSE	RECTIFICATION
Cutter does not move across its whole running surface	Tension link spring broken	Have tension link spring replaced
	Crank spindle and/or crank roller and/or swiveling fork worn out	Have crank spindle and/or crank roller and/or swiveling fork replaced
	Bearings badly worn	Have bearings replaced
Cutter does not move	Faulty cogwheel, Z30 black (Illustration 1, Item 8)	Replace cogwheel
	Faulty reduction gear in the motor section	Have reduction gear replaced
	Crank spindle broken or bent	Have crank spindle replaced
	Crank roller missing	Have crank roller replaced
Tension nut slackens off by itself	Tension lock spring missing (Illustration 1, Item 4)	Replace tension lock spring and fit it so that the tension nut turns easily to tighten but drag in off direction
	Loose lid bush	Use 'Loctite' or similar adhesive product to glue lid bush
Sufficient pressure cannot be applied to the cutter	Tension link is broken	Have tension link replaced
	Pin sliding sleeve (Illustration 1, Item 6)	Replace sliding sleeve
	Pin sliding sleeve is worn down (Illustration 1, Item 6)	Replace sliding sleeve
	Swiveling fork is worn down on top	Have swiveling fork replaced
	Pressure yokes are worn down (Illustration 1, Item 2)	Have pressure yokes replaced
Pressure yokes fall out	Securing lugs on tension link spring broken	Have tension link spring
Poor cutting	Comb and/or cutter are blunt	Have resharpened with approx. 20 µm negative crown
	Shearing blade tension too low	Increase pressure by tightening the tension nut (Illustration 3, Item 1)
	Blades were not properly sharpened	Have resharpened with approx. 20 µm negative crown

Sheep Shearing Head

MALFUNCTION	CAUSE	RECTIFICATION
Does not cut	Comb plate wrongly fitted	Readjust the upper blade 1.5 mm backwards in relation to the comb plate (Illustration 10)
	Crank roller missing (Illustration 1, Item 25)	Have crank roller replaced
	Cogwheel and/or reducing gear faulty (Illustration 1, Item 8)	Replace cogwheel
		Have reducing gear replaced
	Shearing head worn out (Illustration 1, Item 23)	Have shearing head inspected
Shearing head gets very hot	Shearing tension too high	Reduce shearing tension and have blades resharpened if necessary
	No lubricant film on crank roller (Illustration 1, Item 25)	Oil crank roller
	No grease on sliding sleeve (Illustration 1, Item 6)	Grease sliding sleeve
	Bearings are worn out	Have bearings replaced

Motor Section

MALFUNCTION	CAUSE	RECTIFICATION
Motor does not run	Storage battery empty	Charge storage battery
	Terminal clamps are loose (Illustration 1, Item 19)	Switch off machine (Switch to 0) and secure terminal clamps
	Smell of burning from the motor housing. Motor burned out	Have motor replaced
	Switch without contact	Have switch replaced
	Machine jams because of wrongly or reverse connected terminal clamps	Have machine repaired by specialist workshop
Motor runs very slowly	Storage battery empty	Charge storage battery
	Wrong type of storage battery	Only use 12V lead storage batteries with a min. of 45 Ah
Running time of a charged batterie ist too short and/or motor gets hot	Shearing tension too high and/or shearing blades are blunt	Reduce shearing tension (Illustration 6) Have blades resharpened
	Blades and shearing head were inadequately oiled	Oil blades and shearing head (Illustration 4)
	Air filter blocked	Clean or replace air filter
	Flat, wrong or too small storage battery being used	Use fully charged, 12V lead storage battery with a min. of 45 Ah
	Faulty storage battery	Replace storage battery

6 Environmental Protection and Disposal

6.1 Introduction

The owner has a duty to dispose of the shearing blades as well as of the shearing machine properly at the end of its service life. Please observe your relevant national regulations.

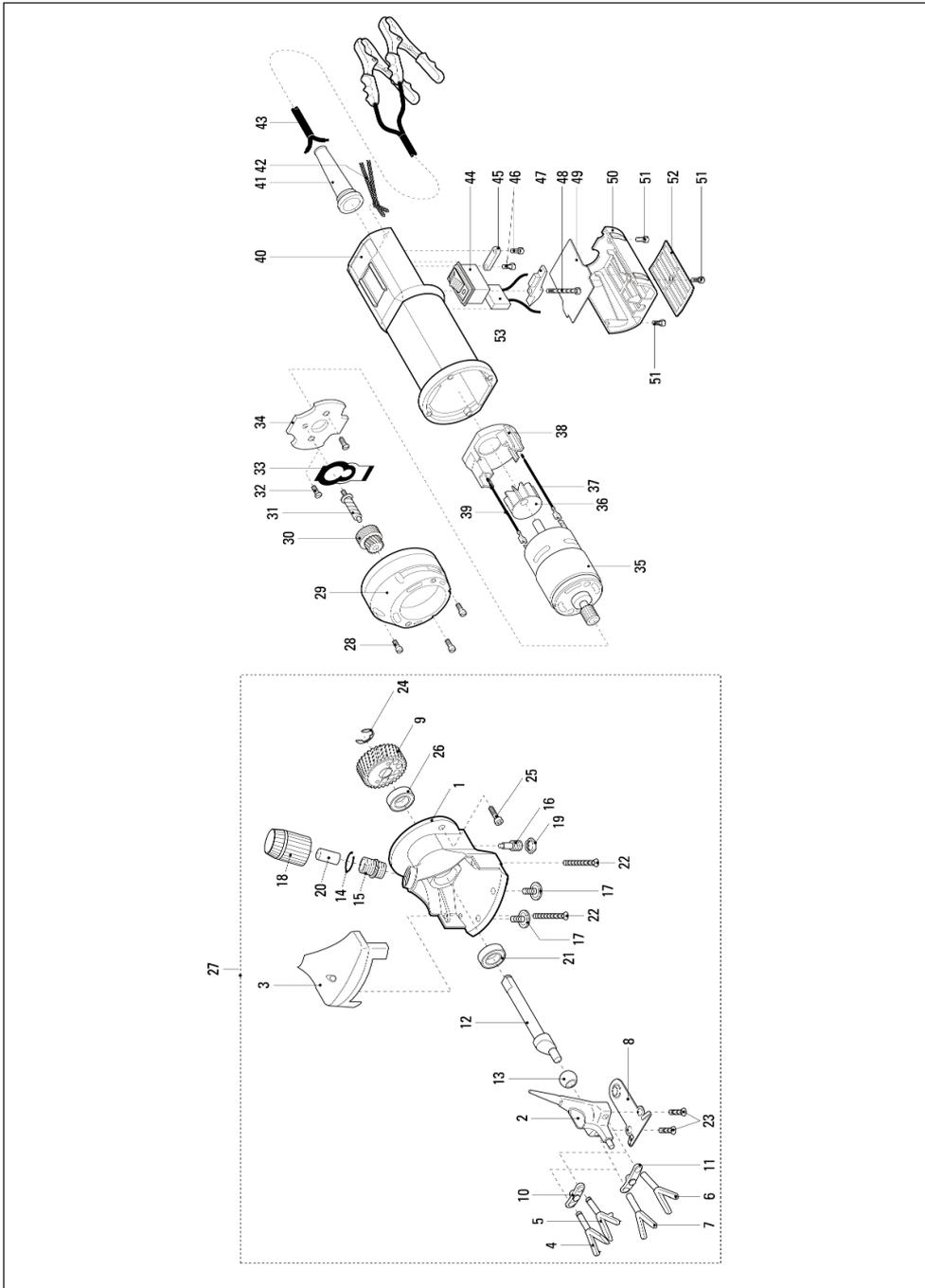
6.2 Material Categories

Please hand the machine to a service centre or to a specialist electrical dealer in your vicinity for disassembly.

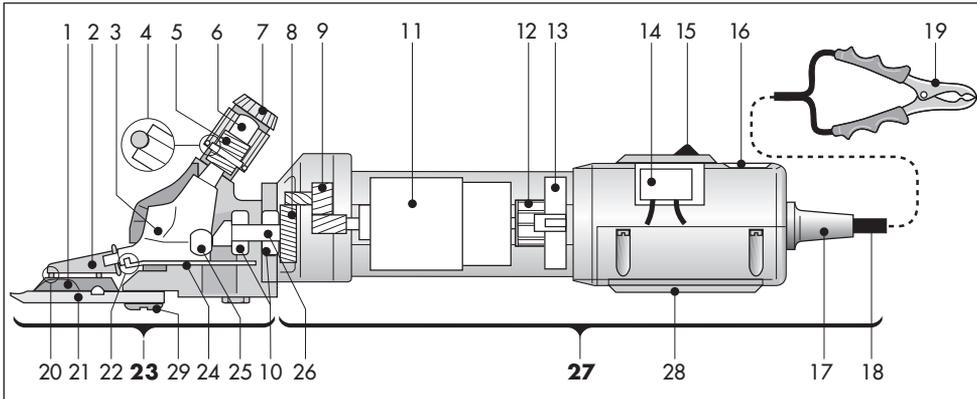
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Rubber	17 / 18
Polyamide	8 / 12 / 13 / 27 / 28
Iron/Steel	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 19 / 20 / 21 / 24 / 25 / 26 / 28 / 29
Copper	11 / 18
Brass	27
Aluminium	23
Other materials	11 / 14 / 15 / 19

7 Contact Addresses

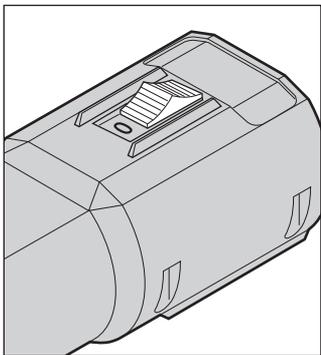
Your purchasing point or the company shown on your guarantee certificate are authorised service centres or refer to the nearest service centre in your area.



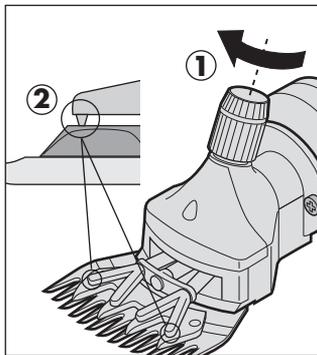
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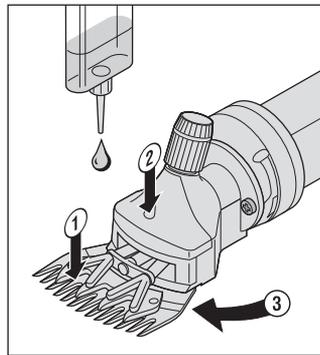
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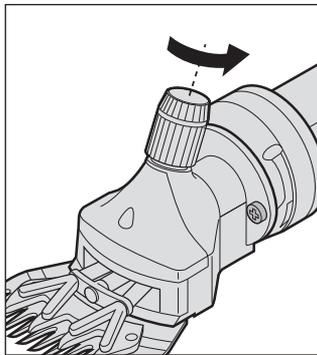
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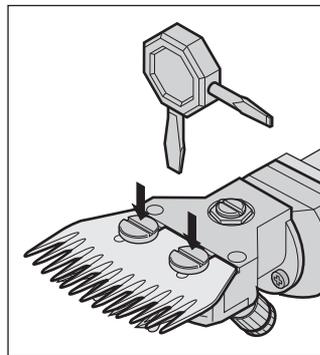
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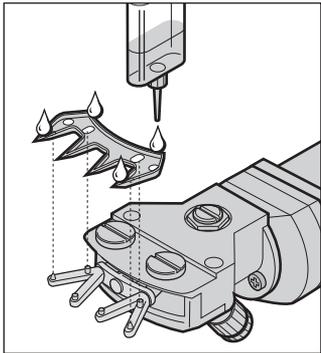
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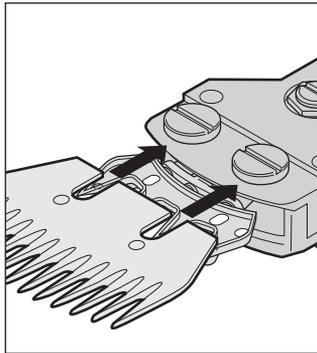
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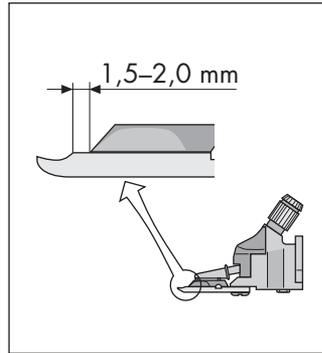
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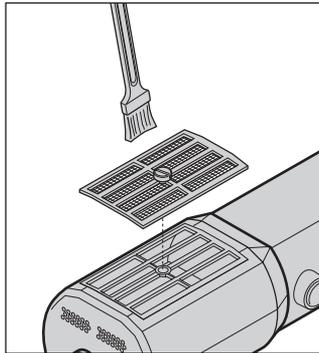
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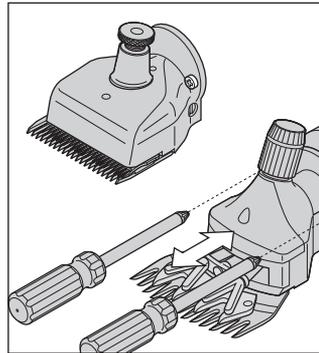
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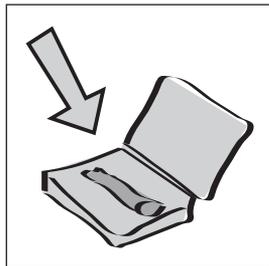
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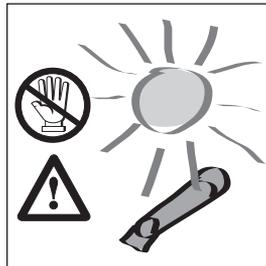
11



12



13





garantía

Item	Artikel
Artículo	Artikel
Article	Artikel
Artikel	Artikkel
Articolo	Tuote
Artico	Προϊόν

Serial no.	Serie nr.
No. de serie	Serie Nr.
No. de série	Serienr.
Seriennummer	Serie nummer
No. di serie	Sarjanro
No. de série	Αρ. σειράς

Date of purchase	Datum van aankoop
Fecha de compra	Købsdato
Date d'achat	Køpdatum
Kaufdatum	Kjøpsdato
Data di vendita	Ostopäivä
Data de compra	Ημερομηνία αγοράς

garantie

Stamp and signature
Sello y firma
Cachet et signature
Stempel und Unterschrift
Timbro e firma
Carimbo e assinatura
Stempel en handtekening
Stempel og underskrift
Stämpel och namnteckning
Stempel og underskrift fra forretningen
Myyjän leima ja allekirjoitus
Σφραγίδα και υπογραφή

warranty

In case of claim, please return your machine with the instruction manual and the warranty card directly to your local distributor. Please do not cut off the warranty card from the instruction manual.

En caso de garantía, devuelva su máquina con el manual de instrucciones y la carta de garantía directamente a su distribuidor local. Por favor no recorte la carta de garantía del manual.

En cas de garantie, retournez votre machine avec le mode d'emploi et la carte de garantie directement à votre distributeur local. Nous vous prions de ne pas couper la carte de garantie du mode d'emploi.

Im Garantiefall retournieren Sie Ihre Maschine mit der Bedienungsanleitung und Garantiekarte direkt Ihrem lokalen Händler. Trennen Sie die Garantiekarte bitte nicht aus der Bedienungsanleitung.

We reserve the right to make technical changes and improvements without notice.

