

constant4

18990, 18991, 18992

- DE Bedienungsanweisung
- FR Mode d'emploi
- EN Instructions for use
- IT Istruzioni per l'uso
- ES Instrucciones de uso
- NL Gebruiksaanwijzing
- SV Bruksanvisning
- DA Brugsanvisning
- PL Instrukcja obsługi



KERBL



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1. Safety regulations

1.1 General information

These safety regulations contain fundamental information, which must be observed during installation, operation and maintenance. All persons working on and with the clipper must read the operating instructions. The operating instructions must be permanently available at the machine usage site.

1.2 Photo references



This symbol with the picture number refers to the appropriate picture on the operating instructions flap.

1.3 Fundamental safety instructions

**Observe the legal regulations on regular examinations.
Also observe the industrial safety regulations.**

1.3.1 Power supply

Only insert the plug into correctly installed sockets. Defective electrical installations can cause an electric shock or a short-circuit. Sockets should be equipped with an earth leakage circuit breaker (FI). Observe your local pertinent regulations. Only carry out maintenance and cleaning tasks after pulling the plug. Never leave the machine unsupervised when plugged in. Clipping animals is only permissible, if children are kept away from the clipping location. Do not store your machine in reach of children!

1.3.2 Maintenance and service obligation

Never use a damaged machine for clipping. Only allow authorised technical personnel to repair the housing or defective electrical cable.

1.3.3 Radiation

The clipper examination complies with the fundamental protection requirements according to the harmonised European standards of the EEC Directive.

1.3.4 Remaining risks

Please notify us of operational dangers and risks, which do not occur when directly trimming the animals. This also applies to endangering technical defects.

1.4 User requirements

Observe and comply with the instructions in this manual to ensure safe use of the clipper.

- The user has read and understood the operating instructions or an expert has explained the operation and pointed out the risks.
- The user is experienced in clipping animals. Children and frail persons (without supervision) should not use the clipper.

2. Designated use

2.1 Intended purpose

The shearing machine is designed only for shearing cattle, horses or large dogs. Other uses, especially on humans, is expressly prohibited.

2.2 Technical data

Type designation:	Constanta4-R	Constanta4-P
Supply voltage:	230 V AC	230 V AC
Motor rating:	400 W	120 W
Frequency:	50/60 Hz	50/60 Hz
Dimensions (W/H/L):	7,8 x 9,7 x 33 cm	7,8 x 9,7 x 33 cm
Weight without cable:	1490 kg	1390 g
Sound pressure level:	87 dB (A)	78 dB (A)
Strokes:	2400/ min	2300 /min
Protection class:	II	II

Operating conditions

Max. ambient temperature: 0 – 40° C
Max. air humidity: 10 – 90 % (relative)

2.3 Equipment

1 clipper with clipper head, 1 set of shear blades (mounted), 1 bottle of oil SAE 30 HD (100 ml), 1 screwdriver, 1 operating manual and 1 storage case

3. Initial commissioning

3.1 Inspection and operating instructions

The inappropriate use of electrical devices, in particular animal breeding devices, is dangerous! Therefore, observe the following, accident prevention measures before starting the machine.

- Never switch the machine on without properly mounted clipping plates
- The volt specification on the rating plate must correspond to the mains voltage. The machine may only be operated with AC
- Avoid any contact with the moving blades
- Always pull the power supply plug out prior to maintenance work! Do not touch the blade area, even if the machine is switched off, as long as the machine is connected to the current supply
- Always place machine on a dry surface and store in dry rooms
- Avoid any contact with a machine, which is in contact with liquids. Never clip wet animals. Liquids that have penetrated into the machine reduce the electrical insulation. There is the imminent danger of an electric shock or short-circuit. Only clean the machine with a dry cloth and a paint-brush or brush
- A cable lying on the floor can get caught and be dangerous. Lay the cable carefully and safely before clipping. Prevent the clipper connection cable from kinking or tangling. Ensure that animals do not stand on the cable, walk over it or get caught. Keep the cable away from hot surfaces. Never wind the cable around the machine. This can result in insulation damage and cable break. Examine the cable regularly for defects
- Set the machine switch to off (**fig. 1, pos. 1, position 0**) before pulling the plug from the mains
- Do not use damaged shear blades with broken off teeth. Only use sharp shear blades. Only use the original shear blades
- Never insert an item into an opening of the machine. The machine noise can disturb animals. A kick or the weight of the animal can result in substantial injuries. Therefore fixate the animal sufficiently.
- Animals should only be clipped, when unauthorised persons do not have access to the clipping location
- Only clip in well-ventilated rooms and never in the proximity of explosive materials.

These safety notes must be observed in all cases!

3.2 Correct shear blade adjustment

Adjust as follows when placing into operation:

Prior to clipping: Turn the tension screw up to the first noticeable resistance (fig. 2) with the machine switched off (fig. 1). Then continue to turn the tension screw by a further 1/4 rotation.

During clipping: Reset the tension screw by a further quarter-turn (fig. 2), if the blades do not cut sufficiently anymore. The blades are blunt and must be resharpened, if resetting is unsuccessful. Be careful not to overdo the clipping tension. Slightly reset the clipping tension occasionally during clipping. Hairs can accumulate between the shear blades, if you clip with insufficient clipping tension. This negatively influences the clipping procedure or even makes it impossible! The shear blades must be disassembled, cleaned, oiled and reassembled according to item 4.2 if this is the case. Avoid too high plate pressure, since this increases temperature and wear. The factory has fully adjusted shipped shears for clipping.

3.3 Correct clipper head oiling

The most frequent error cause for a non-satisfactory clipping result as well heating up of the clipper is want of lubrication. A light oil film on the shear blades is essential for an optimal clipping result as well as to increase the service life of the shear blades and machine. All other moving parts of the clipper head must also be well lubricated. **Drip oil on the shear blades and into the oil opening of the clipper head every 5 – 10 minutes (fig. 3), so that these do not run dry.** Only use our special clipper machine oil.

3.4 Turning on/off

The slide switch has two positions (fig. 1, pos. 1 shows position 0)

Position 1: Machine is turned on

Position 0: Machine is turned off

Check the switch position before plugging in. The switch must be in position 0. Only use the slide switch for turning the machine on and off.

3.5 Malfunction motor protection switch

The motor protection switch protects the clipper against too high mechanical and electrical loads. Turn the machine off with the slide switch (fig. 1, position 0), if the motor protection switch button (fig. 1, pos. 2) jumps out (the machine stops). Immediately disconnect the plug from the mains. The reasons for the motor protection switch button jumping out can be: the shear blades are tensioned too strongly, defective motor, the clipper head is blocked etc. After a short cooling off period, the clipper can be re-started by lightly pressing the motor protection button until it clicks back.

4. Maintenance

Turn the machine off and pull the power supply plug before beginning maintenance work. Always disconnect the power supply first before working on the shear blades/clipper head. Do not touch the shear blade area even if the machine is switched off as long as the clipper is still connected to the current supply.

4.1 Cleaning

After having finished clipping wipe the oil off the machine, clipping head and shear blades with a dry cloth and remove the hairs with a dry paintbrush or brush. Then lightly oil all parts to prevent rusting. Note that even the smallest rust spots impair clipping considerably or even render this completely impossible.

4.2 Shear blade assembly

The shear blade set consists of a lower plate and an upper plate (**fig. 4**). When assembling the shear blades pay attention that the correct plates lie on top of one another. Assemble the blades as follows: Loosen the clipper tension screw (**fig. 5**) and put the clipper onto a hard surface, so that the blade fastening screws look upwards. Loosen the blade fastening screws (**fig. 6**) and remove the two old blades. Ensure that the new shear blades are clean. Pay particular attention to the fact that the sharpened areas are dirt-free; it is otherwise impossible to achieve a satisfactory clipping result even with newly sharpened shear blades. Put the new upper plate into the swing head guides and then put some drops of oil onto the sharpened areas (**fig. 7**). Now push the new lower plate in between the released screws (**fig. 8**). It is important that the blades lie on each other in such a way that the sharpened area of the lower plate projects over the tips of the upper plate by approximately 3.0 - 5.0 mm (**fig. 8**)! As soon as you have adjusted the shear blades, fixate the lower plate position and tighten the blade fastening screws.

4.3 Resharpener the blades

Resharpener shear blades correctly is only possible with special machines and by the specialised trade. Only use sharp shear blades. Defective blades with broken off teeth or blunt blades must be replaced.

4.4 Cleaning the air supply cap

The air supply covers are located on both rear sides of the machine drive unit. Dismantle the air filters for cleaning. Grasp the hollow in the housing and push the air supply covers out to the rear (**fig. 7**). Blow out the filter fabric in the supply air cover from inwards to outwards. Align the covers on the upper edge of the drive housing and slide on. It is essential to clean the air filters regularly to ensure sufficient motor cooling. Make sure that no foreign matter gets into the machine when cleaning the air filter. Never use the clipper without an air filter.

4.5 Storing the clipper

Between clippings always keep the well-cleaned and lubricated clipper in the supplied case in a dry location, which is not accessible to children. Do not switch the machine on, if you suspect that liquids could have entered. There is danger of an electric shock or short-circuit. Have the machine serviced!

4.6 Cleaning the clipper head

Clean the clipper head after a few days use. Dismantle the cutter plates (**fig. 5-8**). Release both screws (**spare parts list pos. 22**) (Phillips screwdriver Ph2 not contained in the scope of delivery) and remove the clipper head from the drive unit. Now clean the interior of the clipper head and the other components thoroughly with a brush and a paintbrush. Grease the gears on the eccentric shaft (**spare parts list pos. 8**) and on the drive unit (**spare parts list pos. 37**) at least at 2 opposite locations with ball bearing grease (viscosity max. 80 mm²/s according to DIN 51562 T1). Lubricate the clipper head according to 3.3 after careful assembly.

5. Repairs

5.1 Introduction

You can read up on troubleshooting measures on the next page. Only authorised technical personnel may carry out troubleshooting measures marked with an *.

5.2 Malfunction lists

Contact an authorised service department to repair not listed malfunctions.

Motor component	Cause	Troubleshooting
Motor does not work	<ul style="list-style-type: none"> - No current - Cable defective - Switches or motor defective - Motor protection switch off 	Check socket and fuse * Have replaced by specialised workshop * Have replaced by specialised workshop Turn motor protection switch on
Motor protection switch always turns itself off	<ul style="list-style-type: none"> - Rotor or pole ring defective - Blades blocked - Motor protection switch defective - Air filters clogged 	* Have replaced by specialised workshop Repair blockage * Have replaced by specialised workshop Clean air filters
Motor heats up	<ul style="list-style-type: none"> - Supply air covers clogged - Shear blade tension too high 	Clean or replace supply air covers Tighten tension screw less. Replace the blades, if they then don't cut anymore
Motor runs very slowly	<ul style="list-style-type: none"> - Rotor or pole ring defective - Carbon brush used up 	* Have replaced by specialised workshop * Have replaced by specialised workshop
Motor vibrates	<ul style="list-style-type: none"> - Rotor runs untrue - Bearings are worn out - Fan wheel broken 	* Have replaced by specialised workshop * Have replaced by specialised workshop * Have replaced by specialised workshop
Motor makes very loud running noises	<ul style="list-style-type: none"> - Bearing defective 	* Have replaced by specialised workshop

Clipper head	Cause	Troubleshooting
Upper plate does not move	<ul style="list-style-type: none"> - Transmission defective 	*Have replaced by specialised workshop
Upper plate does not move over the entire contact surface	<ul style="list-style-type: none"> - Eccentric shaft defective - Eccentric roller defective 	*Have replaced by specialised workshop Replace eccentric roller & mounting bracket
Blades cut badly	<ul style="list-style-type: none"> - Upper blade and/or lower blade are blunt - Blades haven't been sharpened well - Shear blade tension too low 	*Have specialised workshop resharpen blades *Have specialised workshop resharpen blades Increase tension with tension screw
Blades do not cut	<ul style="list-style-type: none"> - Size cylinder defective - Push rod defective - Clipper head worn out - Blades are blunt 	Replace size cylinder Replace push rod *Replace clipper head *Have specialised workshop resharpen blades
Clipper head gets very hot	<ul style="list-style-type: none"> - Shear blade tension too high - Shear blade and/or eccentric without lubricating film 	Reduce shear blade tension, poss. resharpen blades and relubricate with SAE 30 HD oil

6. Environmental protection and disposal

6.1 Introduction



The user is responsible for the appropriate disposal of the shear blades and clipper after their service life. Observe your local pertinent regulations. Do not dispose of the appliance with domestic refuse. As part of the EU Directive governing the disposal of electric and electronic appliances, the appliance is accepted free of charge by local waste collection points or recycling centers. Correct disposal will ensure environment protection and prevent a potential harmful impact on people and the environment.

6.2 Material groups

Give the drive unit to a specialised workshop or to an electrical workshop in your vicinity for dismantling.

Material	contained in position of the spare parts list
Steel	1, 2, 3-9, 11-25, 22-25, 34, 35
Polyamides	14, 27-33, 36-39
Brass	10, 16-18, 26, 37
Aluminium	10, 37
Other materials	23–25, 38, 39

7. Warranty

In accordance with our general terms and conditions, we are issuing a **2 year warranty in order to remediate damages caused by material or manufacturing flaws for this device.**

The warranty begins at purchase date.

The warranty does not cover:

- 1) Damages caused by normal wear (wear parts, anti-slip parts), capacity overload, and improper usage (non-observance of the instruction manual).
- 2) Damages caused by force majeure or by transport.
- 3) Damage of rubber parts such as those found in connecting lines.

Warranty repairs will only be done directly at the manufacturing plant or at authorized, contracted repair shops! The manufacturer reserves the right to reject every warranty claim if the warranty has been breached.

For this purpose, the assembled, packed and post-free device must be sent or brought back to the point of sale together with the original receipt and the warranty card. The risk is carried by the sender.

Please describe the complaint or concern as precisely as possible. **Costs that arise due to unjustified claims are to be paid by the owner of the device.**



CE-/UKCA-conformity declaration

Albert KERBL GmbH hereby declares that the product / device described in these instructions complies with the fundamental requirements and other relevant stipulations and regulations. The CE/UKCA mark confirms compliance with the Directives of the European Union or the relevant UK legislation.

8. Spare parts list CATTLE

Reference	Art. No.	Amount	Description
1 + 2		1	Shearing blade replacement depends on application, ask your local retailer!
3	CR603	2	Screw for bottom cutter
4	CR604	1	Blade
5	CR605	2	Shaft screw for blades
6	CR606	6	Blade spring leaf
7	CR607	2	Spacer plate for blade spring
8	CR608	1	Spur gear wheel (28 teeth) with shaft
9	CR609	1	Eccentric square blade block
10	CR610	1	Shearing head housing with bush
11	CR611	1	Countersunk screw for shaft, M3x8 mm
12	CR617	2	Screw for blades, rear, M5x12 mm
13	CR616	1	Spring bridge
14	CR613	1	Adjusting screw with plug
15	CR615	1	Screw for spring bridge
16	CR624	1	Bush, large, 12x13.5
17	CR625	1	Bush, small, 6x10
18	CR626	1	Sleeve 14x18
3-18	18930	1	Shearing head complete, without cutter
13-15	CR627	1	Regulating screw replacement set
22	CR618	2	Screw for shearing head fastening
23	CR623	2	Carbon brush with spring
24	CO602	1	Anchor complete with bearing for 400 W motor
25	CO603	1	Stator for 400 W motor
26	CO605	1	Carbon brush holder set, left+right
27	CO607	2	O ring for anchor ball bearing
28	CO608	1	Mains connecting cable with plug
28	CO699	1	Mains connecting cable with plug, English
29	CO609	1	Mains unit switch
30	CO610	1	400W motor safety switch
31	CO611	1	Suppression capacitor
32	CO612	1	Cord
33	CO640	1	Motor housing, two-part
34	CO614	4	Screw 4x12 for gearing
35	CO615	6	Housing screw 4x20
36	CO616	1	Carrier loop
37	CO601	1	Gear 11/32 teeth for 400 W motor
37	CO622	1	Plastic cog wheel, 32 teeth for CO601
23-37	CR620	1	400 W drive motor complete
23-37	CO621	1	400 W drive motor complete, English
38	CR621	1	Air filter, right
39	CR622	1	Air filter, left
without illu.	1850488	1	Shearing machine oil constanta 100 ml
without illu.	CR699	1	Operating instructions, Beef + Horse, DIN A5
without illu.	CO600	1	Plastic case, incl. insert
without illu.	18946	1	TX20 screwdriver for Philips screw
without illu.	18945	1	Screwdriver for SM cutter

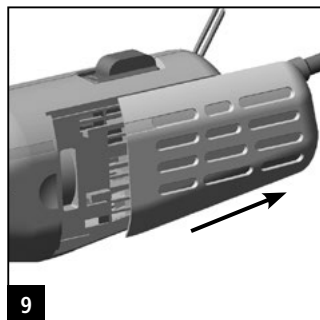
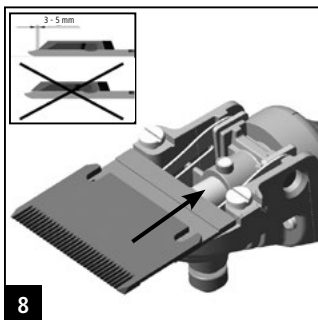
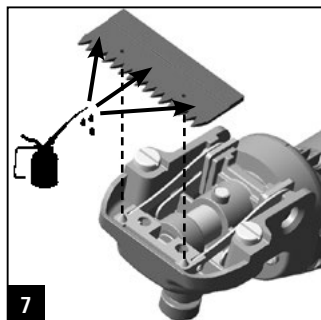
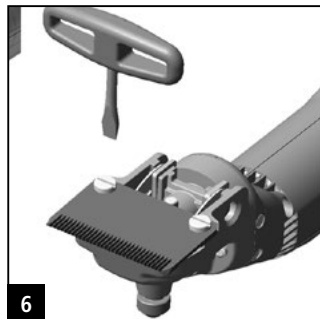
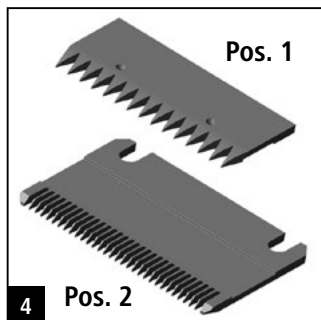
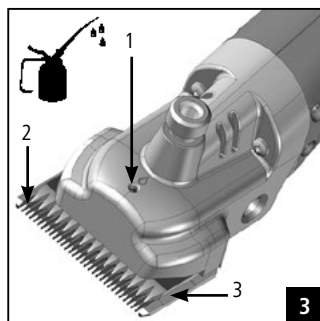
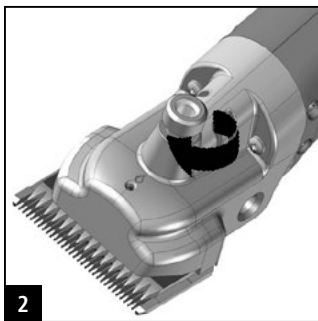
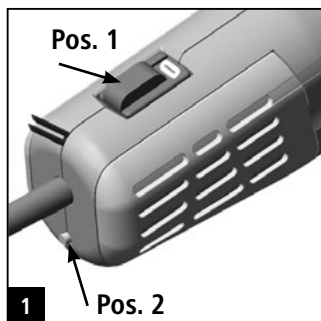
See separate spare parts drawing!

8. Spare parts list HORSE

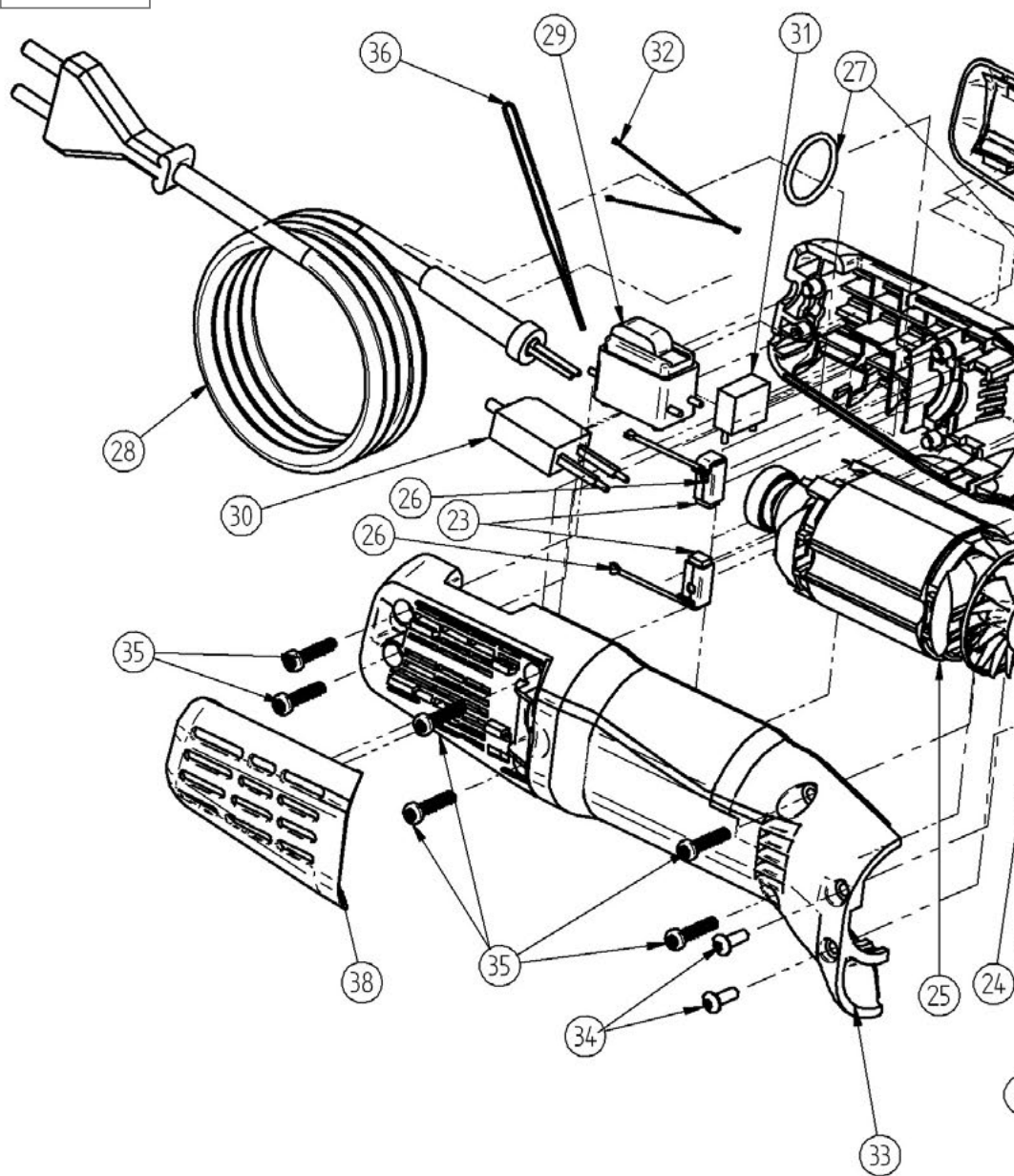
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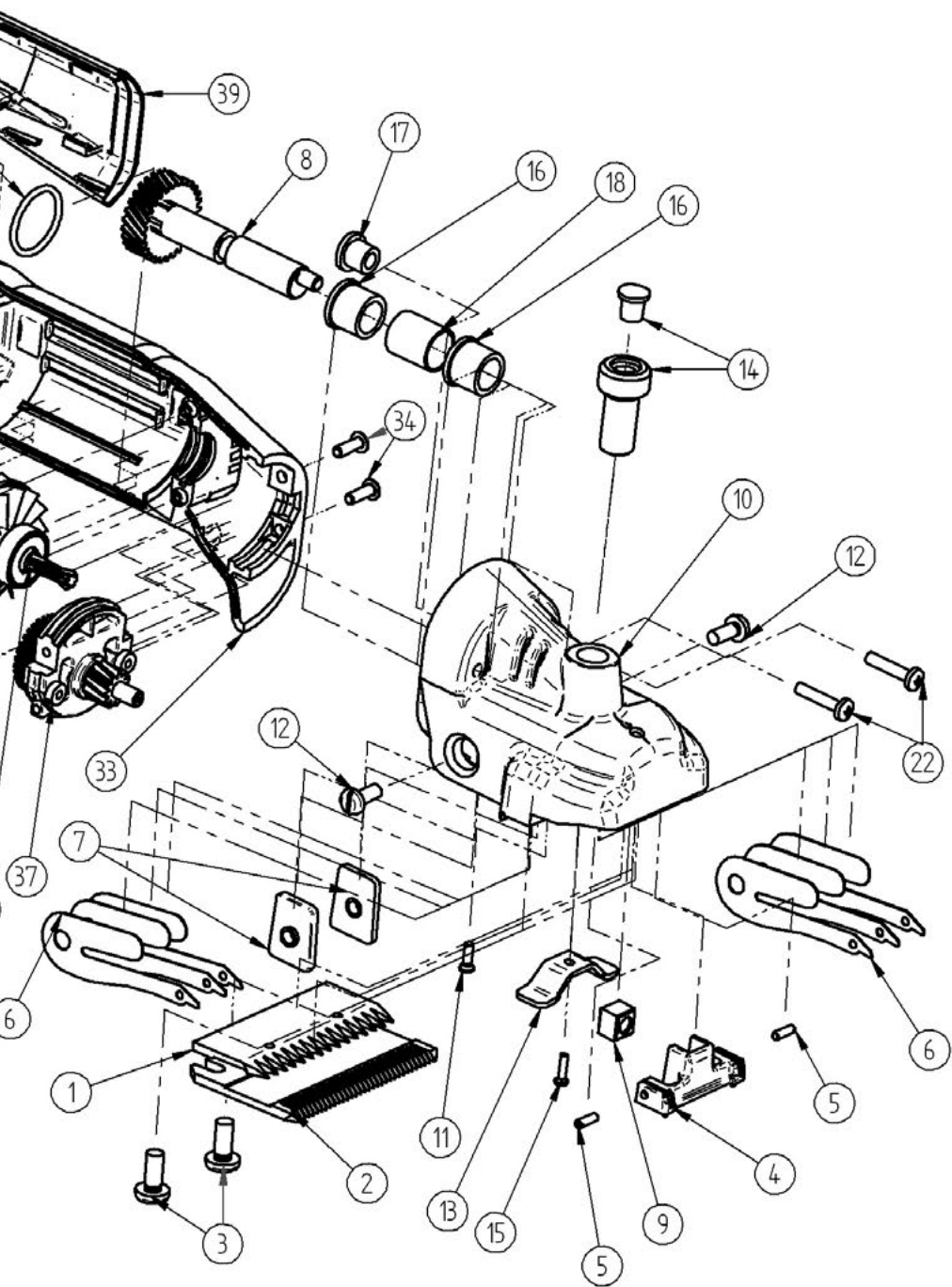
See separate spare parts drawing!

9.



10.





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