

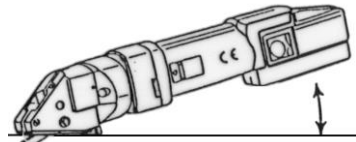
Operating Instructions

- Intended use.** This Power Tool is intended for industrial applications, for cutting sheet metal (maximum capacity is indicated in the Specifications), for use with cutting jaws and cutting blades which are indicated in these operating instructions or recommended by DRÄCO
- Initial Operation**
Observe the rated voltage: The voltage of the power source must match that given on the nameplate of the machine or charger. Chargers for 230V can also be operated on 220 V power sources. Chargers for 115V can also be operated on 110 V power sources.

A powered-on machine does not restart after inserting the batteries again.

To continue work, turn machine OFF and ON again.

- The material to be cut must always be free of oil or grease.** Always place the machine flat on the work piece



- Battery Change**
Before using the cordless tool, charge a new or empty battery. The full capacity is reached, after charging the battery about 4-5 times.

Care and Maintenance

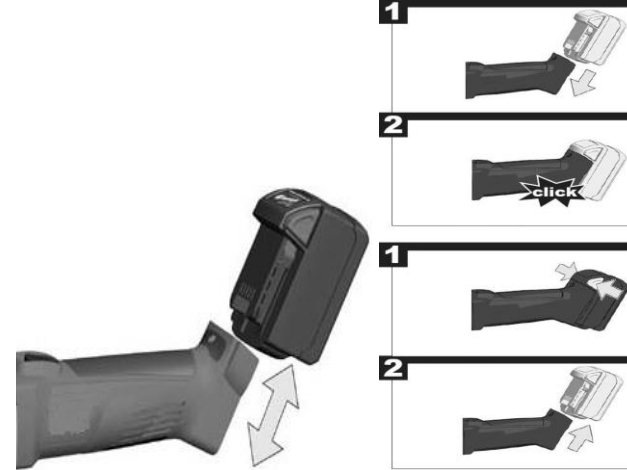
Before working on machine disconnect from power supply by removing plug from socket. Always keep the machine and the ventilation slots clean. Oil the knife pin at regular intervals. If the machine should happen to fail despite the care taken in manufacture and testing, repair should be carried out by an authorized customer services agent for DRÄCO power tools.

CE-Declaration of conformity

We declare that this product is in conformity with the following standards or standardized documents: EN 60745, EN 55014-1, EN 55014-2, in accordance with the regulations 98/37/EC, 2004/108/EC

CE 09 Max Draenert

- Insert the battery**
Insert the battery from the back, until it clicks into place.



- For **cutting out** curved or circular inside patterns, a 14 mm ($\pm 1/2$ ") hole, or a punched slot should be made to insert the centre cutter.
- If after cutting, a **small strip** remains this can easily be trimmed off to the exact measurement, without leaving a burr or any distortion of the material. Just one side of the cordless tools can be used for cutting also (e.g. along a marked line). Lift the power tools out of the shavings while the motor is running. Cut off longer shavings.
- Do NOT cut sheet metal along welding points. Do NOT cut multi layer sheets, which exceed the maximum cutting capacity.
- Every 200 operating ours have the cutting blade and cutting jaws sharpened at a specialist workshop.
- Ensure that the material to be cut is free of oil and grease.**

Warranty

DRÄCO tools carry a guarantee of 12 months from date of delivery. Damage attributable to normal wear and tear, overload or improper handling will be excluded from the guarantee. (e.g. blades/knives and jaws) In case of complaint please send the machine, **undismantled**, to your dealer or the DRÄCO Service Centre for electric power tools.

Environmental protection

Recycling raw materials instead of waste disposal. Machine, accessories and packaging should be sorted for environment-friendly recycling.

Never break open battery packs and chargers and store only in dry rooms. Keep dry at all times. Battery acid may leak from damaged batteries under extreme load or extreme temperatures. In case of contact with battery acid wash it off immediately with soap and water. In case of eye contact rinse thoroughly for at least 10 minutes and immediately seek medical attention.



Operating Instructions for the metal-shears AK 3020 Li-Ion

To avoid any disturbance please read the following instructions:

For your safety:



1 Safe operation of this machine is possible only when the operating instructions and the safety precautions are read completely and the instructions contained therein are strictly observed.

2 The machine must not be used when damp and must not be operated in a wet environment.

3 Always inspect cable and plug before using machine. Only have damage repaired by a qualified professional. Put the plug into the mains socket only when the machine is switched off.

4+5 Always wears protective goggles, protective gloves and heavy-duty shoes when working.

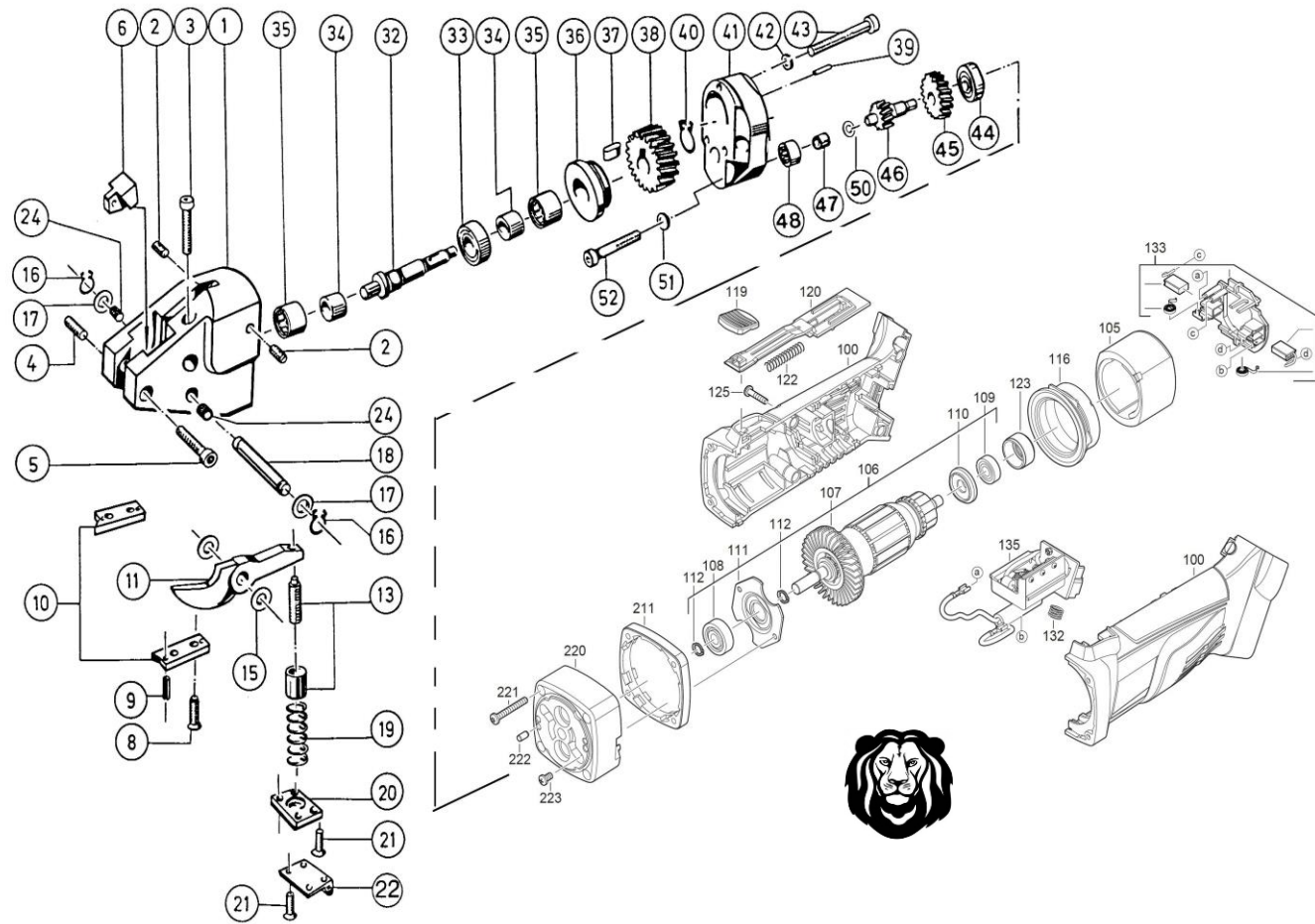
- Do not carry the machine by the cable.
- Always remove the plug from the power supply socket before carrying out any work on the machine, when interrupting work and when not using the machine.
- Always place the cable to the rear away from the machine.
- Apply the machine to the sheet metal only when switched on.
- Always provide for secure footing when working.
- Firmly clamp the work piece if it does not remain stationary from its own weight.
- The knife should not rub on the jaws: Possible danger of cutting tool breakage.
- Do not exceed the maximum allowable material thickness especially when cutting over doublers, folded joints or welded seams.

For further notes on safety refer to enclosed sheet

Technical Data:

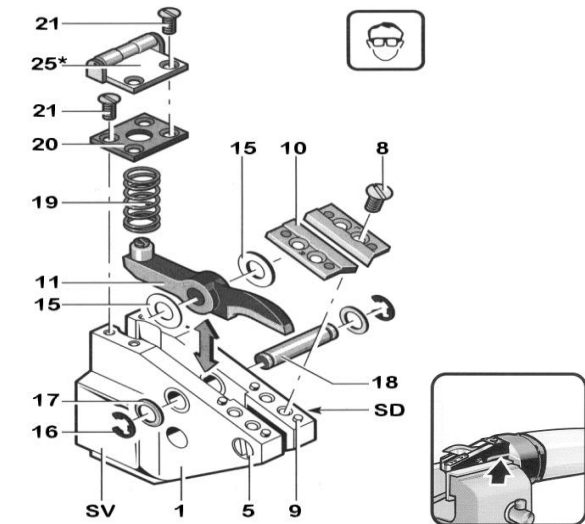
DRÄCO Cordless Metal Shears	AK 3020 Li-Ion	AK SD7-1 Li-Ion
Item no. Profi-Set 5-tlg. Cpl.	630403	
Item no. Shear with battery only	630401	
max. cutting capacity		
steel 400 N/mm ² mm	2,0	2,0
stainless steel 600 N/mm ² mm	1,5	1,5
stainless steel 800 N/mm ² mm	1,3	1,3
non ferro 250 N/mm ² mm	3,0	3,0
tightest radius ± mm	200	50
working speed ± m/min	4	4
strokes ± min ⁻¹	1800	1800

Exploded view DRÄCO Cordless Metal Shears AK3020 Li-Ion



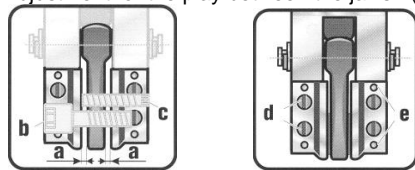
SERVICE TIPS

Before working on machine disconnect from power supply by removing plug from socket. Wear protective glasses!



* Optional

- One drop of oil between knife (11) and head-casting (1) keeps the spacing shims (15) in place.
- Dismantle Spring cover (20) and take spring out (19)
- Take circlip (16) and washer (17) off.

- Push knife pin (18) out of casting.
- Take knife out of housing.
- Attention, do not exchange the spacing shims (15).
- Place the knife inside the housing feed shims in on one side and push knife pin (18) into housing up to the middle of the knife.
- Feed the shims on the other of the knife.
- Push knife pin in completely, and secure washer (17) and circlip (16) again.
- Assemble spring (19) and spring cover (20).
- Between the knife (11) and the jaws (10) should be some distance, approximately 0,05 mm on each side. Knife (11) must be placed tight in the head casting.
- Adjustment for the play between the jaws. (a): 0,1 - 0,15 mm. 
- If knife has contact with the jaws on both sides, adjust with screws in the head casting. If a burr is on the material, adjust the space between the knife and the jaws
- Replace jaws with a new set, loosen 4 screws (8) take jaws (10) and pins (9) off, assemble again and tighten with the screws.

Spare Parts List for DRÄCO Metal Shears AK3020 Li-Ion

Pos. no.	Order no.	Description	Pc.	Pos. no.	Order no.	Description	Pc.
1-43	BG35921	Shear head AK 3020 assembled	1	40	10009	Circlip	1
1-43	BG35922	Shear head AK SD7-1 assembled	1	41	13046	Gear Case Cover	1
				42	81249	Secure Washer	3
1	BG35920	Head casting Pos. 1,3-6, 24, 35	1	43	81262	Flat Filister Head Screw	3
				44	13039	Ball Bearing	1
				45	13540	Gear 24 Z	1
3	81019	Hex Socket Screw	1	46	13041	Pinion 20 teeth	1
4	81120	Spacing-block Set Screw	1	47	13042	Sleeve	1
5	81272	Flat Filister Head Screw	1	48	13043	Needle bearing	1
6	35810	Spacing Block	1	50	81059	Spring washer	1
8	81286	Flat Head Screw	4	51	81243	Screw	2
9	81248	Pin	4	52	81031	Cylindrical screw	2
				100	34100	Motor housing	1
10	BG13574	Set of Jaws AK 3020 (incl. Pos. 8+9)	1	105	34105	Field 18V	1
11	010135	Knife AK 3020 (incl. Pos. 13)	1	106	34106	Armature 18V	1
				107	34107	Ventilator	1
10	BG37222	Set of Jaws AK SD7-1 (incl. Pos. 8+9)	1	108	34108	Ball bearing	1
11	371401S7	Knife AK SD7-1 (incl. Pos. 13)	1	109	34109	Ball bearing	1
				110	34110	Isolator	1
15	BG12400	Spacing Shims SET	1	111	34111	Bearing cover	1
16	81275	Circlip	2	112	34112	Ring	2
17	81072	Washer	2	116	34116	Ventilation ring	1
18	12500	Knife pin	1	119	34119	Switch Pad	1
15-18	BG12555	Knife securing set Pos. 15-18	1	120	34120	Switch rod	1
16-18	BG12500	Knife Pin Set Pos. 16-18	1	122	34122	Spring	1
19	12200	Spring	1				
20	12300	Spring Cover	1	123	34123	Rubber bearing	1
21	81285	Flat Head Screw	4	125	34125	Screw	4
22	BG10077	Supporting roller in metal (incl. Pos. 21)	1	132	34132	Spring	1
24	17900	Knife Pin Bushing Ø10 mm	2	133	34133	Brush Holder	1
		17911 Knife Pin Bushing Ø11mm	2				
32-40	BG33018	Drive Shaft Pos. 32-40	1	135	34135	Electronic device	1
32+	BG10004	Excentric Drive Shaft Pos.32-34,37+40	1	211	34211	Gear casing	1
32	10004	Excentric Drive Shaft	1	220	34220	Motor Cover	1
33	10250	Ball bearing	1	221	34221	Screw	4
34	10005	Sleeve	2	222	34222	Pin	1
35	10300	Needle bearing	2	223	34223	Screw	2
35-36	BG10450	Cap for needle bearing Pos. 35+36	1				
37	10006	Key	1				
38	13051	Gear	1				
39	13036	Pin					

Ordering spare parts please mention order and item number.

Pc.: Quantity of parts built in
BG: Assembly group

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Your dealer: