

Operating Instructions

1. **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

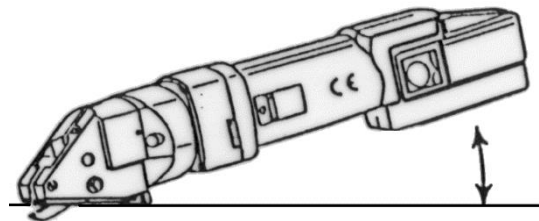
2. Initial Operation

Observe the rated voltage: The voltage of the power source must match that given on the nameplate of the machine. Chargers for 230V can also be operated on 220 V power sources.

Switching ON and OFF

Switching ON: Slide the switch (93) forward

Switching OFF: Slide the switch (93) to the rear.



- The material to be cut must always be free of oil or grease.** Always place the machine flat on the work piece
- Cut-outs:** Drill a starting hole with a 12-14 mm diameter drill. **Circular cuts:** Always cut counter clockwise and from left to right.
- Do NOT cut sheet metal along welding points. Do NOT cut multi layer sheets, which exceed the maximum cutting capacity.
- 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 authorised customer services agent for DRÄCO power tools.

CE-Declaration of conformity

We declare under our sole responsibility that this product is in conformity with the following standards.

EC 98/37, EC 93/ 68 EWG, EC 04/108 EC, or standardisation documents DIN EN ISO 12100-1, DIN EN ISO 12100-2, EN 50 144, EN 55 014

CE 09 Max Draenert

Insert the battery (A)

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

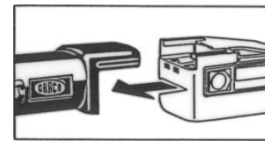


Abb. A

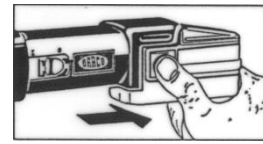


Abb. B

Remove battery (B)

Press both stop locks together, take battery off, see arrow.

- For inside cutting**, if cutting a radius with the right hand, cut from right to left. The outside radius is unlimited.
- 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.
- Both knife and jaws can be sharpened. After being sharpened or replaced, the knife at it's lowest point should protrude the jaws by approximately 3 mm. The knife should have approximately 0,05 mm (0,005") play on each side of the jaws, centring the cutter with spacing shims supplied.
- 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.

Environment protection



Recycling raw materials instead of waste disposal.

Machine, accessories and packaging should be sorted for environment-friendly recycling.



Operating Instructions for the metal-shears AK3514-2, AK3514-7R, AK3520, AK3515

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.

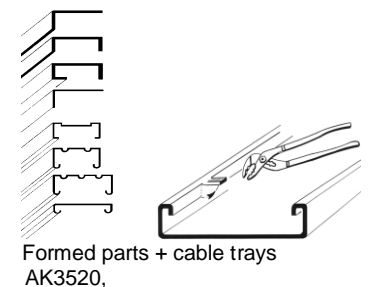
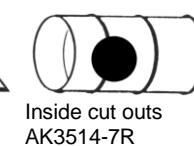
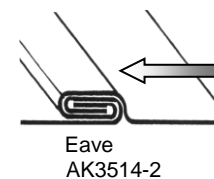
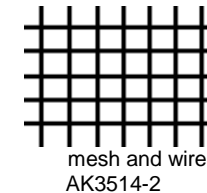
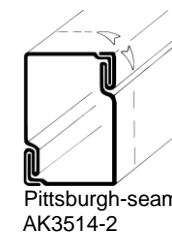
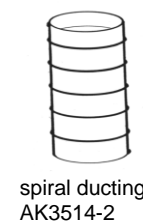
4+5 Always wears protective goggles, protective gloves and heavy-duty shoes when working.

- 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 dose 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.

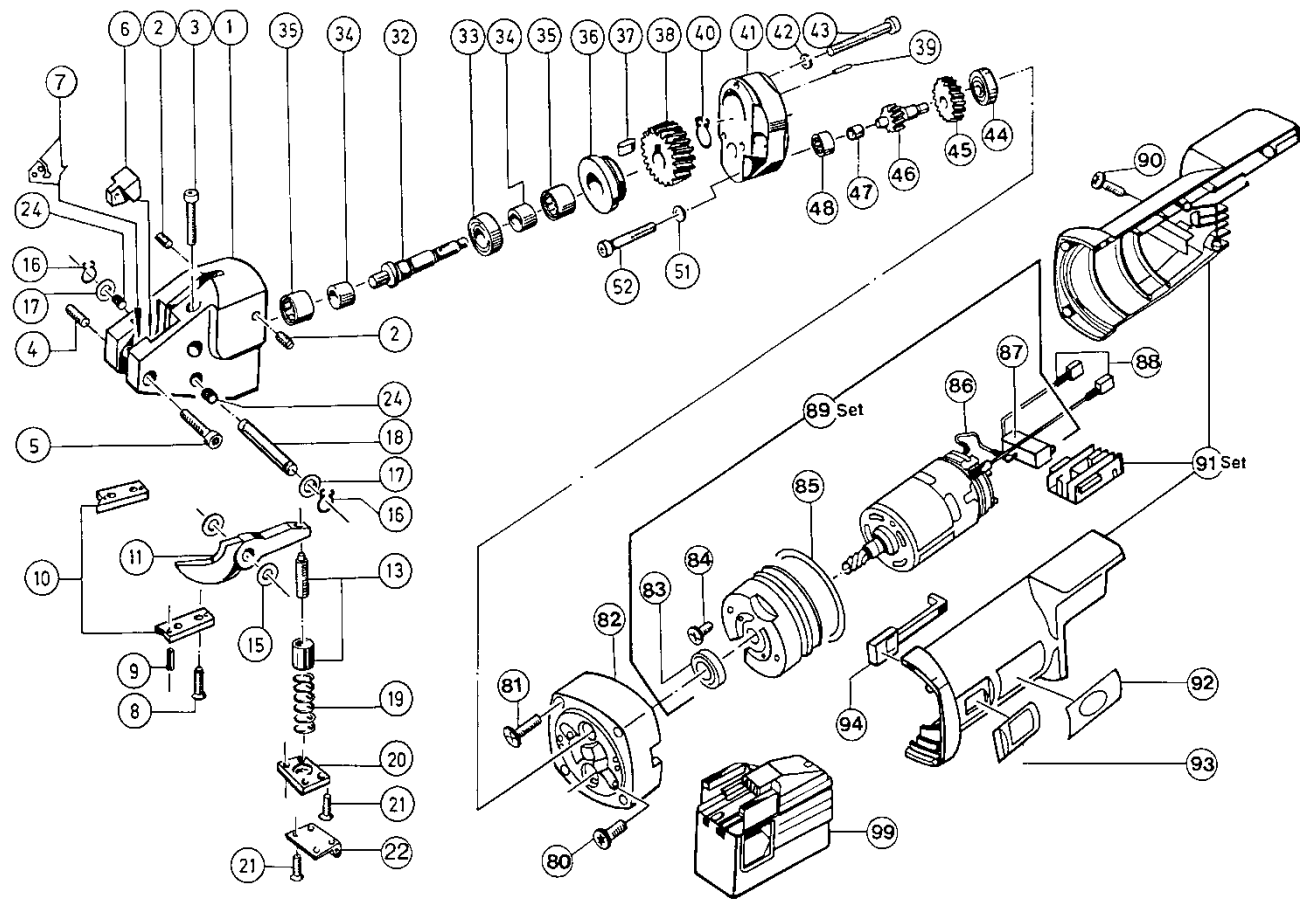
For further notes on safety refer to enclosed sheet

Technical Data:

DRÄCO metal shears	AK 3520	AK 3514-2	AK 3514-7R	AK 3515
Art.no.	35201	351421	351471	35151
max. cutting capacity				
steel 400 N/mm ² mm	1,7	1,7	1,7	1,7
stainless steel 600 N/mm ² mm	1,3	1,3	1,3	1,3
stainless steel 800 N/mm ² mm	1,0	1,0	1,0	1,0
non ferro 250 N/mm ² mm	2,5	2,5	2,5	2,5
tightest radius \pm mm	200	200	45	200
working speed \pm m/min	4	4	4	4
strokes \pm min ⁻¹	1800	1800	1800	1800

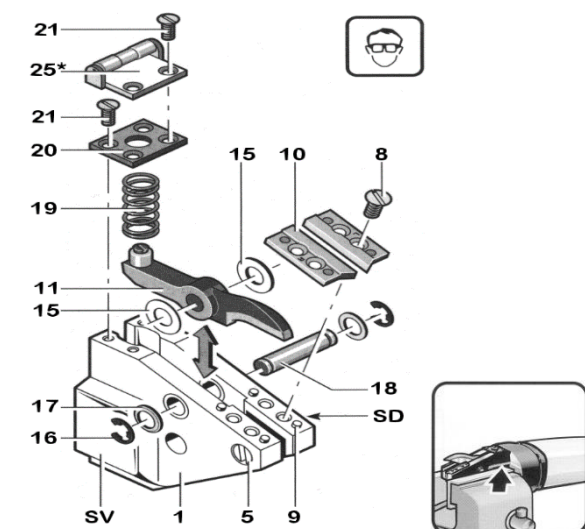


Exploded view DRÄCO AK-Serie Ni-Cd/Mh 12V


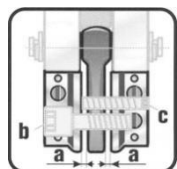
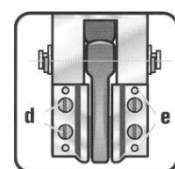


SERVICE TIPS

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.
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- 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 AK3514-2, AK3514-7R, AK3520, AK3515

Pos.	Item	Pc.	Pos.	Item	Pc.
1-43	BG35941 Shear head 3514-2 assembled	1	33	10250 Ball bearing	1
1-43	BG35911 Shear head 3514-7R assembled	1	34	10005 Sleeve	2
1-43	BG35943 Shear head 3515 assembled				
1-43	BG35942 Shear head 3520 assembled	1	35	10300 Needle Bearing	2
1	BG35940 Head Casting Pos. 1,3,6,24,35	1	36	BG10450 Cap for Needle Bearing Pos. 35+36	1
			37	10006 Key	1
3	81019 Screw	1	38	13051 Gear	1
4	81120 Tap Screw with ISK	1	40	10009 Circlip	1
5	81272 Flat Fillister Head Screw	1	41	13046 Gear Case Cover	1
6	35810 Spacing Block	1	42	81249 Securing Washer	3
			43	81262 Flat Fillister Head Screw	3
8	81286 Flat Head Screw	4	44	13039 Ball Bearing	1
9	81248 Pin	4	45	13540 Gear 24 Z	1
			46	13041 Pinion 20 teeth	1
10	35146 Jaws AK 3514-2	1	47	13042 Sleeve	1
11	03514 Knife 3514	1	48	13043 Needle bearing	1
			51	81243 Spring washer	2
10	37222 Jaws AK 3514-7R	1	52	81031 Screw	2
11	37140 Knife 3514-7R	1	80	33080 Screw	1
			81	33081 Screw	1
10	35020 Jaws AK 3520	1	82	33082 Motor Cover	1
11	03520 Knife 3520	1	83	10038 Ball Bearing	1
			84	33084 Motor Cover	1
10	35146 Jaws AK 3515	1	85	33085 O-Ring	1
11	03515 Knife 3515	1	86	33086 Cable	1
			87	33087 Switch	1
15	BG12400 Spacing Shims Set	1	88	33088 Cable	1
16	35054 Cotter pin	2	89	33089 Motor cpl. (Pos.83-88)	1
17	81072 Washer	2	90	33090 Motor Cover	1
18	BG35145 Knife Pin Set	1	91	33091 Motor housing cpl.	1
18	35145 Knife Pin	1	92	33092 Lable	1
19	12200 Spring	1	93	33093 Cap for switch	1
20	12300 Spring Cover	1	94	33094 Switch pad	1
21	81285 Flat Head Screw	4	99	31298S3 High Capacity Battery Pack MXL	
24	35542 Knife pin bushing	2		31297 SRA Charger 220V-240V 60 min.	
32	BG33018 Drive shaft Pos.34-38,40	1			
32	BG35556 Eccentric Shaft Pos.32,33,34,37+40	1			
32	35556 Eccentric Shaft (3514-2, 3514-7R, 3520)	1			
32	35557 Eccentric Shaft (3515)	1			

Ordering spare parts please mention order and item number.

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