# **Operating Instructions**

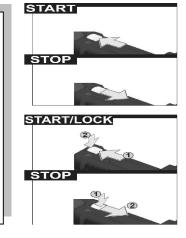
1. Intended use. This Power Tool is intended for industrial applications, for cutting sheet metal (maximum capacity is indicated in the Specifications), for use with cutting jaws and cutting blades which are indicated in these operating instructions or recommended by DRÄCO

#### 2. Initial Operation

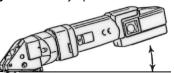
Observe the rated voltage: The voltage of the power source must match that given on the nameplate of the machine or charger. Chargers for 230V can also be operated on 220 V power sources. Chargers for 115V can also be operated on 110 V power sources.

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

To continue work, turn machine OFF and ON again.



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



#### 3. 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**

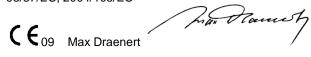
Before working on machine disconnect from power supply by removing plug from socket.

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.

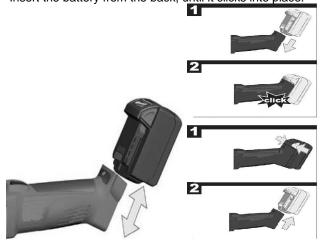
#### **CE-Declaration of conformity**

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



#### 4. 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 (± 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.
- 7. Do NOT cut sheet metal along welding points. Do NOT cut multi layer sheets, which exceed the maximum cutting capacity.
- 8. Every 200 operating ours have the cutting blade and cutting jaws sharpened at a specialist workshop.
- 9. 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

Damage attributable to normal wear and tear, overload or improper handling will be excluded from the guarantee. (e.g. blades/knifes 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







Operating Instructions for the metal-shears AK3514-2Li-Ion, AK3514-7RLi-Ion, AK3515Li-Ion, AK3520Li-Ion

To avoid any disturbance please read the following instructions:

#### For your safety:



observed.



1 Safe operation of this machine is possible only

when the operating instructions and the safety

2 The machine must not be used when damp and

machine. Only have damage repaired by a qualified

professional. Put the plug into the mains socket only

**4+5** Always wears protective goggles, protective

gloves and heavy-duty shoes when working.

precautions are read completely and the

instructions contained therein are strictly

must not be operated in a wet environment.

when the machine is switched off.

3 Always inspect cable and plug before using









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

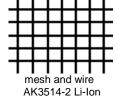
# For further notes on safety refer to enclosed sheet

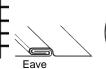
#### **Technical Data:**

DRÄCO Cordl	ess Metal Sh	nears	AK 3514-2Li-lon	AK 3514-7RLi-lon	AK 3515Li-lon	AK 3520Li-lon
Item no. Profi-Set 5-tlg. Cpl.			630703	630803	630633	630603
Item no. Shear v	vith battery only	У	630701	630801	630631	630601
max. cutting c	apacity	-				
steel	400 N/mm <sup>2</sup>	mm	2	2	2	2
stainless steel	600 N/mm <sup>2</sup>	mm	1,5	1,5	1,5	1,5
stainless steel	800 N/mm <sup>2</sup>	mm	1,3	1,3	1,3	1,3
non ferro	250 N/mm <sup>2</sup>	mm	2,5	2,5	2,5	2,5
tightest radius	±	mm	200	200	200	45
working speed	±	m/min	4	4	4	4
strokes	±	min <sup>-1</sup>	1800	1800	1800	1800











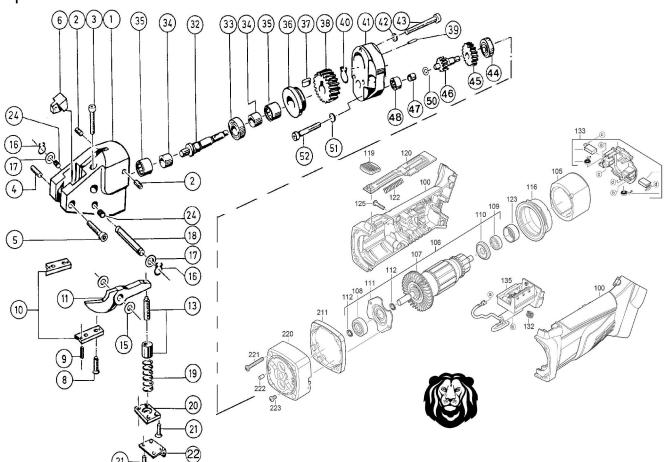


Formed parts + cable AK3520 Li-Ion

AK3514-2Li-lon AK3514-2 Li-Ion

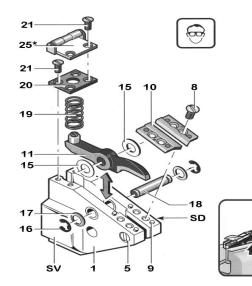
Inside cut outs AK3514-2 Li-lon AK3514-7RLi-Ion

# Exploded view DRÄCO Cordless Metal Shears series 35 Li-Ion 18 Volt



## **SERVICE TIPS**

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



\*Optional

- 1. One drop of oil between knife (11) and head-casting (1) keeps the spacing shims (15) in place.
- 2. Dismantle Spring cover (20) and take spring out (19)
- 3. Take circlip (16) and washer (17) off.
- 4. Push knife pin (18) out of casting.
- Take knife out of housing.
- . Attention, do not exchange the spacing shims (15).
- 7. 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.
- 8. Feed the shims on the other of the knife.
- 9. Push knife pin in completely, and secure washer (17) and circlip (16) again.
- 10. 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.
- 12. Adjustment for the play between the jaws. (a): 0,1 0,15 mm.





- 13. If knife has contact with the jaws on both sides, adjust with screws in the head
  - If a burr is on the material, adjust the space between the knife and the jaws
- 14. 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 AK3514-2Li-lon, AK3514-7RLi-lon, AK3515Li-lon AK3520Li-lon

Pos. Nr.	Item Nr.	Description	Qty.	Pos. Nr.	Item Nr.	Description	Qty	
1-43	35515	Shear head 3514-2 assembled	1	36	BG10450	Cap for Needle Bearing Pos. 35+36		
1-43	37515	Shear head 3514-7R assembled	1	37	10006	Key	1	
1-43	32263	Shear head 3520 assembled	1	38	13051	Gear	1	
1-43	32364	Head Casting Pos. 1-3, 24,35	1	40	10009	Circlip	1	
1	BG37547	Tap Screw with ISK	1	41	13046	Gear Case Cover	1	
2	81239	Screw	2	42	81249	Securing Washer	3	
3	81263	Tap Screw with ISK	1	43	81262	Flat Fillister Head Screw	3	
4	81089	Flat Fillister Head Screw	1	44	13039	Ball Bearing	1	
5	81272	Spacing Block	1	45	13540	Gear 24 Z	1	
6	10002	Spacing Block Pos.	1	46	13041	Pinion 20 teeth	1	
6	BG37059	Flat Head Screw	1	47	13042	Sleeve	1	
8	81286	Pin	4	48	13043	Needle bearing	1	
9	81248	Shear head 3514-2 assembled	4	50	81059	Spring washer	1	
				51	81243	Screw	2	
8-10	BG35146	Set of jaws for (AK)3514-2	1	52	81031	Cylindrical screw	2	
11	035141	Knife for (AK)3514-2	1	100	34100	Motor housing	1	
				105	34105	Field 18V	1	
8-10	BG37222	Set of jaws for (AK)3514-7R	1	106	34106	Armature 18V	1	
11	37140	Knife for (AK)3514-7R	1	107	34107	Ventilator	1	
		• •		108	34108	Ball bearing	1	
8-10	BG35146	Set of jaws for (AK)3515	1	109	34109	Ball bearing	1	
11	035151	Knife for (AK)3515	1	110	34110	Isolator	1	
				111	34111	Bearing cover	1	
8-10	BG35020	Set of jaws for (AK)3520	1	112	34112	Ring	2	
11	035201	Knife for (AK)3520	1	116	34116	Ventilation ring		
				119	34119	Switch Pad	1	
15	BG12400	Spacing Shims Set	1	120	34120	Switch rod	1	
16	81275	Circlip	2	122	34122	Spring	1	
17	81072	Washer	2	123	34123	Rubber bearing	1	
18	BG35145	Knife Pin Set	1	125	34125	Screw	4	
18	12500	Spacing Shims	1	132	34132	Spring	1	
19	12200	Spring	1	133	34133	Brush Holder	1	
20	12300	Spring Cover	1	135	34135	Electronic device	1	
21	81285	Flat Head Screw	4	211	34211	Gear casing	1	
24	35542	Knife pin bushing	2	220	34220	Motor Cover	1	
32	BG33018	Drive shaft Pos.34-38,40	1	221	34221	Screw	4	
32	BG35556	Eccentric Shaft Pos.32,33,34,37+40	1	222	34222	Pin	1	
32	35556	Eccentric Drive Shaft for 3514-2,-7R, 3520	1	223	34223	Screw	2	
32	35557	Eccentric Drive Shaft for 3515	1		341800	Motor 18V cpl. Pos. 100-223		
33	10250	Ball bearing	1		341820	Battery Li-Ion M18 18V/2,0 Ah		
34	10005	Sleeve	2		341840	Battery Li-Ion M18 18V/4,0 Ah		
35	10300	Needle Bearing	2		341810	Charger EU Cli 230V/18 V		
		re parts please mention order and item number.			_ <del>_</del>	Qty.: Quantity of parts built in		

Max Draenert GmbH & Co.KG	Electric - Cordless	- Pneumatic Tools - Machines	German
---------------------------	---------------------	------------------------------	--------

Factory I:	Administration	D-73777 Deizisau	P.O.Box	1120	Phone	+49-7153-8217-0
	Manufacturing Shears	D-73779 Deizisau	Gutenbergstrasse	15-17	Fax	+49-7153-8217-66

Internet: http://www.dracotools.com e-mail: draenert@dracotools.com

Your dealer: