Directions of use

cordless metal-shear AK 3010, AK 3013, AK 3017

To avoid any disturbance please read the following instructions :

1.Technical details:

DRÄCO metal-shear		type	AK 3010	AK 3013	AK 3017
max. thickness					
steel	400 N/mm²	mm/ga.	**1,0 / 19**	**1,3 / 18**	**1,6 / 17**
stainl. steel	600N/mm²	mm/ga.	**0,7 / 21**	**1,0 / 19**	**1,3 / 18**
stainl. steel	800 N/mm²	mm/ga.	**0,5 / 25**	**0,7 / 21**	**1,0 / 19**
non ferro	250 N/mm²	mm/ga.	**1,5 / 17**	**2,0 / 14**	**2,5 / 12**
tightest radius		±mm/"	**50 / 2**	**100 / 4**	**140 / 5½**
working speed		±m/min	**3,5**	**3,5**	**3,5**
strokes		min $^{-1}$	**1800**	**1800**	**1800**
weight incl. battery		kg	**2,1**	**2,1**	**2,1**

2. Care should be taken, not to cut through double joints or welds.

3. **<u>When cutting sheetmetal etc., do not oil cutting-surface !</u>**
Do not shut power off while cutting, if cutting slots pull machine back while in motion.

4. For cutting out curved, square or circular inside patterns, a 12-16 mm diam. hole, or a punched slot should be made to insert the centre cutter.

5. Inside cutting, the shortest curve radius 50 mm / 2 ga. is possible and depends on thickness of material. If cutting a radius with the right hand, cut from right to left, this enables a shorter inside curve.

L → R É È

6. Cutting on the side of a Sheet-metal-plate, the outside radius is unlimited.

7. 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.

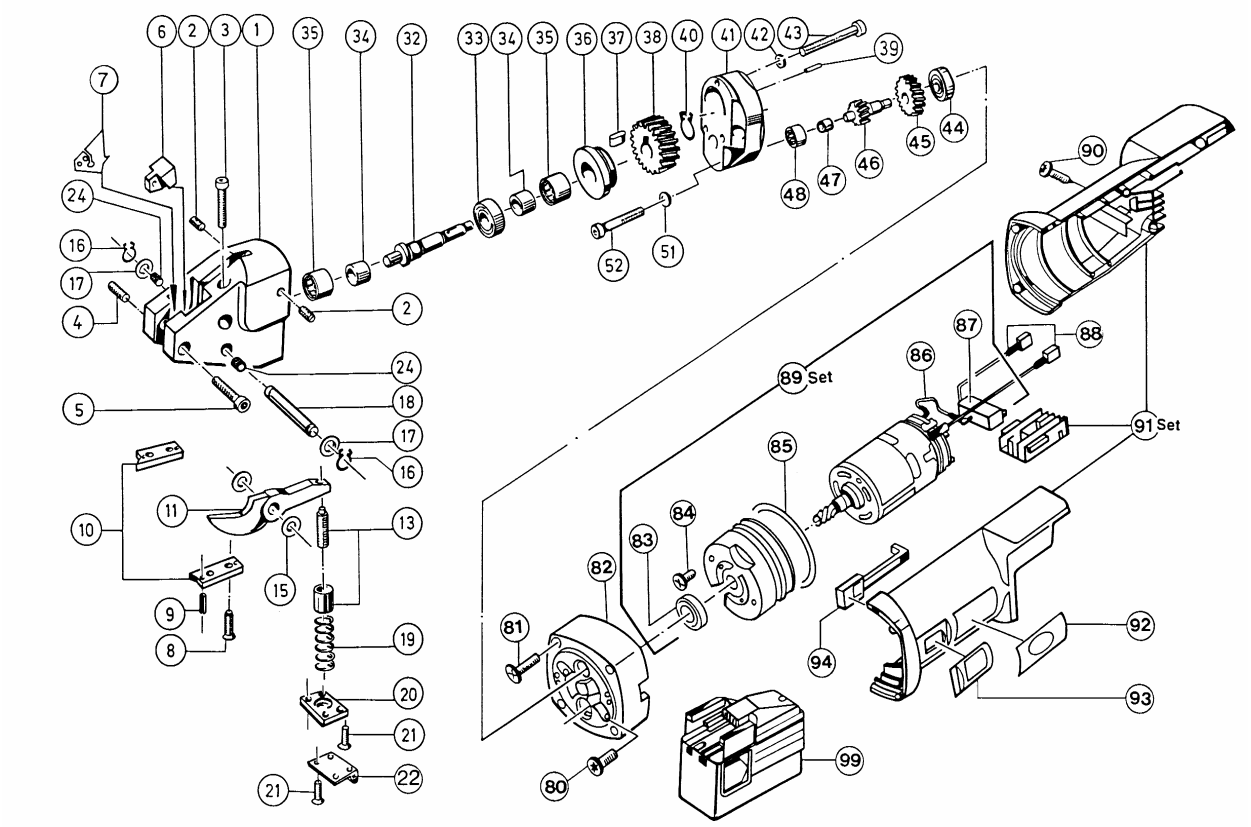
8. The Metal-Shear will cut out any kind of tubing and bend-folded materials without distortion, leaving a burr or straitening. Before cutting aluminium, it is advisable to put one drop of oil on to each cutting jaw, to facilitate ease of cutting.

9. After about 200 working-hours knife and jaws can be resharpened. After being resharpened or replaced, the knife at its lowest point should protrude the jaws by 3,5 mm. The knife should have approximately 0,1 mm play on either side of the jaws, centring the cutter with spacing-shims (order # 12400).

10. The shear is of unit construction, making the replacement of spareparts easy. The shear can cause no injury while in motion. This tool is double insulated and suppressed universal-motor. The motorhousing is made out of a shockproof Polyamid material.

Maintenance

11. Lubrication between knife and knifepin once a week, with a few drops of oil.



Exploded view AK-Serie

SERVICETIPS

- CONTROL:

- Knife and jaws may not getting in contact with each other. Even not if you push the knife to the left or right side.
- The knife (11) should have approximately 0,1mm play on either side of the jaws, centring the cutter with the spacing shims(15) (order # 12400).
- The knife (11) has to placed tight in the head casting (1).

- Cutting ADVICE:

- The shortest curve can be made against the clock.
L ← R
- For safe operation and for cutting smoothly the jaws (10) of the shear must be straight on top of the material while cutting (also in curves).

Eventually you can mount a supporting-roller (order # 10076) to get the shear into the right position.

Spare Parts List for DRÄCO cordless metal-shear AK 3010, AK 3013, AK 3017

Pos. no.	Order no.	Description	Quantity per shear
	33010	Shearhead AK 3010 compl. assembl. 1-43, 48, 51, 52	
	33013	Shearhead AK 3013 compl. assembl. 1-43, 48, 51, 52	
	33017	Shearhead AK 3017 compl. assembl. 1-43, 48, 51, 52	
	33018	Driveshaft complete 34-40	
	33019	Pinion with gear complete 44-47	1
1	10500	Head casting	1
2	11700	Tap Screw	1
3	10001	Screw (only AK3010-17)	1
4	16700	Tap Screw	1
5	11500	Flat Filister Head Screw	1
6	10002	Spacing Block	1
8	11300	Flat Filister Head Screw	4
9	16800	Pin	4
10	13574/1	Set of Jaws 3010	1
10	10600	Set of Jaws 3013	1
10	13074	Set of Jaws 3017	1
11	01011	Knife 3010	1
11	01001	Knife 3013	1
11	01013	Knife 3017	1
13	12222	Knife adjusting screw lockring	1
15	12400	Spacing Shims	1
16	12600	Circlip	2
17	12700	Washer	2
18	12500	Knife Pin	1
19	12200	Spring	1
20	12300	Spring Cover Plate	1
21	11400	Flat Filister Head Screw	4
24	17900	Knife Pin Bushing Ø 10mm	2
24a	17911	Knife Pin Bushing Ø 11mm	2
32	13056	Eccentric shaft	1
33	13055	Ballbearing	1
35	13054	Needle Bearing	1
36	13052	Cover	1
37	13050	Key	1
38	13051	Gear	1
39	13036	Cylindric Pin	1
40	13049	Circlip	1
41	13046	Gear Case Cover	1
42	13044	Securing Washer	3
43	13045	Flat Filister Head Screw	3
44	13039	Ball Bearing	1
45	13540	Pinion	1
46	13041	Gear	1
47	13042	Sleeve	1
48	13043	Needle Bearing	1
51	13047	Securing Washer A5	2
52	13048	Hex Socket Screw	2
80	33080	Screw	1
81	33081	Screw	1
82	33082	Connection Flange	1
83	33083	Ball Bearing	1
84	33084	Screw	1
85	33085	O-Ring	1
86	33086	Cable	1
87	33087	Switch	1
88	33088	Cable	1
89	33089	Motor Set 83-88	1
90	33090	Screw	1
91	33091	Motorhouse Set	1
92	33092	Rating Plate	1
93	33093	Switch Pad	1
94	33094	Guide piece	1
		Accessoire optional	
	18002	Metal box	

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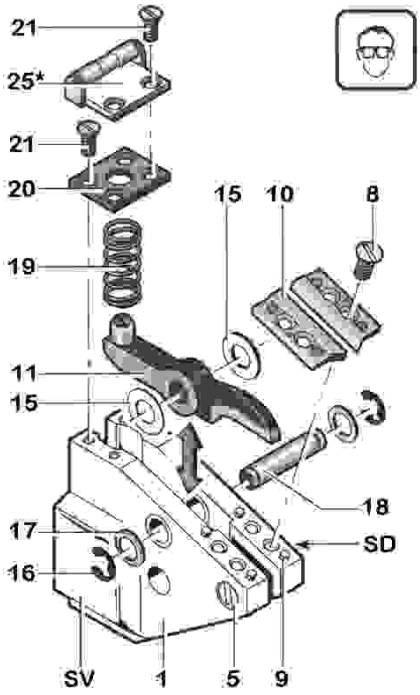
Technical Information:

11/94

You save a lot of time when changing the knifes, if you put the shear into a bench-vice.

1. One drop of oil between knife and head-casting keeps the spacing shims(15) on their place (Can be up to 4 pcs.).
2. Dismantle spring cover(20) and spring(19).
3. Dismantle circlip(16) and washer(17).
4. Push through knife pin (18).
5. Take the knife out..
   - Attention - do not exchange the spacing shims.
6. Place the knife with on one side the right spacing shims
7. Push through knife pin (18) until you reach ten centre of the knife.
   - Advice- Lubrication between knife and knifeman will rise the lifetime of the shear.
8. Touch carefully the other spacing shims on it's place (must be a little harsh).
9. Push knife pin completely through and mount the washer(17) and the circlip (16) again.
10. Mount spring (19) and springcover(20).



- CONTROL:

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- Cutting ADVICE:

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Solutions for disturbance, like: burr, or extra ordinary wear and tear

	Cause:	Solution:
1	The knife is not mounted precisely in the centre.	Use other spacing shims and change them (different thickens) until you have the same play (≅ 0,1mm) on both sides of the knife.
2	The knife is not placed tight enough.	Use thicker spacing shims. Because of too much play between the knife and the head casting the knife can contact the jaws. (The knife can break of cause extra ordinary wear and tear)
3	The knifes play is too big.	Little the play of the knife by uniting the flat fillister head screw (5) and the spacing-block head screw (4). After that you can tighten the flat fillister head screw(5) again). But don't let the play get too small (≅0,1mm).
4	The knifes play is too small.	See pos. 3, but now you have to tighten the spacing-block head screw (4). The play will increase. After that you can tighten the flat fillister head screw(5) again.

Should you be uncertain of the material you wish to cut, send sample of material in for testing and cutting