



Directions of use metal-shears types 1013 & 1013-5

To avoid any disturbance please read the following instructions :

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DRÄCO metal-shears	type	1013	1013-5
max. thickness			
steel 400 N/mm ²	mm	2,0	2,0
stainl. steel 600N/mm ²	mm	1,5	1,5
stainl. steel 800 N/mm ²	mm	1,3	1,3
aluminium 250 N/mm ²	mm	3,0	3,0
shortest curve radius	mm	250	250
working speed max. ca.	m/min	9	9
strokes	min ⁻¹	1850	1850
power consumption	Watt	280	280
weight	kg	2	2

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

3. When cutting sheetmetal etc., do not oil cutting-surface !

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 250mm 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.

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.

1013		1013-5		
spareparts		spareparts		
knife	1013	knife 1	0135	
set of jaws	13074	set of jaws 1	3574	
knife-pin-set	12555	knife-pin-set	12555	
optional accessories				
metal box	18000			
suproller	10077			
adjustable gu	uide S/01	up to 100 mm	10059	
adjustable gu	uide S/01	up to 250 mm	10060	
adjustable gu	uide S/01	up to 500 mm	10061	

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.



SERVICE TIPS

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



- 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.
- 5. Take knife out of housing
- 6. \triangle 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 side 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).
- 11. Between the knife (11) and the jaws (10) should be some distance, approximately 0,1 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.



1 3 . 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.

Pos.	Order		Quantity	Pos.	Order		Quantity
no.	no.	Describtion	per shear	no.	no.	Describtion	per shear
1-41	13083	Motor 280 Watt 230 Volt	1	52	13047	Securing washer	2
1	13001	Motorhousing	1	53	13048	Hex socket screw	2
2	13002	Switch connection lever	1	54	13049	Circlip	1
3-4	13505	Switch lever & switch pad	1	54-62	13077	Eccentric drive shaft cpl. ass.	1
5	13005	Round head screw	1	55	10006	Kev	1
6	13008	Field 230 Volt	1	56	13051	Gear (36 teeth)	1
7	13010	Securing washer	2	57	10450	Cover for needle bearing	1
8	13011	Flat fillister head screw	2	58	10005	Sleeve 7x10x12 JR	1
9	13012	Sealing cover	1	59	10300	Needlebearing	1
10	13013	Carbon brush holder right	1	60	10250	Ball bearing	1
10a	13014	Carbon brush holder left	1	61	10004	Eccentric shaft	1
11	13015	Carbon brush	2	62	10005	Sleeve 7x10x12	1
13	13016	Round head screw	2	63	10300	Needlebearing	1
14	13017	Switch	1	64-68	10500	Head casting	1
15	13018	Condensator	1	65	17900	Knife pin bushing ø 10 mm	2
16	13019	Round head screw	1	65a	13158	Knife pin bushing ø 11 mm	2
17	13020	Cable with plug 3m	1	66	10002	Spacing block	1
18	13022	Rubber-sleeve	1	67	11500	Flat fillister head screw	1
19	13023	Cord-clamp	1	68	16700	Tap screw	1
20	13024	Round head screw	2	69	11700	Tap screw	2
21	13025	Motorhousing cover	1	70	11400	Flat head screw	4
22	13026	Round head screw	1	71	12300	Spring cover plate	1
23	13027	Round head screw	1	72	12200	Spring	1
26-31	13030	Armature cpl.	1	73	12100	Knife lockring	1
30	13032	Gear (6 teeth)	1	74	12000	Knife adjusting screw	1
31	13033	Round head screw	3	73-75	1013	Knife 1013	1
33	13034	Ball bearing	2	73-75	10135	Knife 10135	1
34	13090	Spacer ring	1	-			1
40	13035	Connection flange	1	77	12600	circlip	2
41	13036	Pin	1	77-78	12500	Knife pin	1
42	13037	Securing washer	4	79	12400	Spacing shims (var. thickn.)	4
43	13038	Flat fillister head screw	4	80	11300	Flat head screw	4
44-47	13177	Drive shaft cpl.	1	81	16800	Pin 3x6	4
44-83	90320	Shear-head cpl. 1013	1	82	13074	Set of jaws 1013	1
44-83	90330	Shear-head cpl. 1013-5	1	82	13574	Set of jaws 10135	
44	13039	Ball bearing	1	83	10001	Hex socket screw	1
45	13040	Gear (30 teeth)	1		13076	Hex socket wrench	1
46	13041	Pinion (20 teeth)	1	-			
47	13042	Sleeve	1	-			
48	13043	Needlebearing	1	-			
49	13044	Securing washer	3	-			
50	13045	Flat fillister head screw	3	-			
51	13046	Gear case cover	1	-			

Spare Parts List for DRÄCO metalshears 1013 & 1013-5

Please use order # to order.