

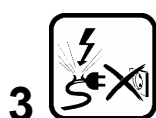
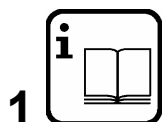


Operating Instructions for the Metal-Shear SD5-1 and S1001N-1

valid 10/2002

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. Have damage repaired by a qualified professional, only. Put the plug into the main socket only, when the machine is in off position.

4+5 Always wear 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 double folded joints, or welded seams.

For further notes on safety we refer to enclosed red safety instructions sheet

Technical Data:

DRACO metal shears		SD5-1	S1001N-1
max. cutting capacity	<i>Art.no.</i>	61000-1	61010-1
steel	400 N/mm ²	mm/ga. 1,0 / 19	1,3 / 18
stainless steel	600 N/mm ²	mm/ga. 0,7 / 21	1,0 / 19
stainless steel	800 N/mm ²	mm/ga. 0,4 / 24	0,7 / 21
aluminium	250 N/mm ²	mm/ga. 1,5 / 16	2,0 / 14
tightest radius	mm/ga.	50	100
working speed	± m/min	5-9	5-9
strokes	min ⁻¹	3000	3000
motor capacity	Watt	300	300
weight	kg	1,6	1,6

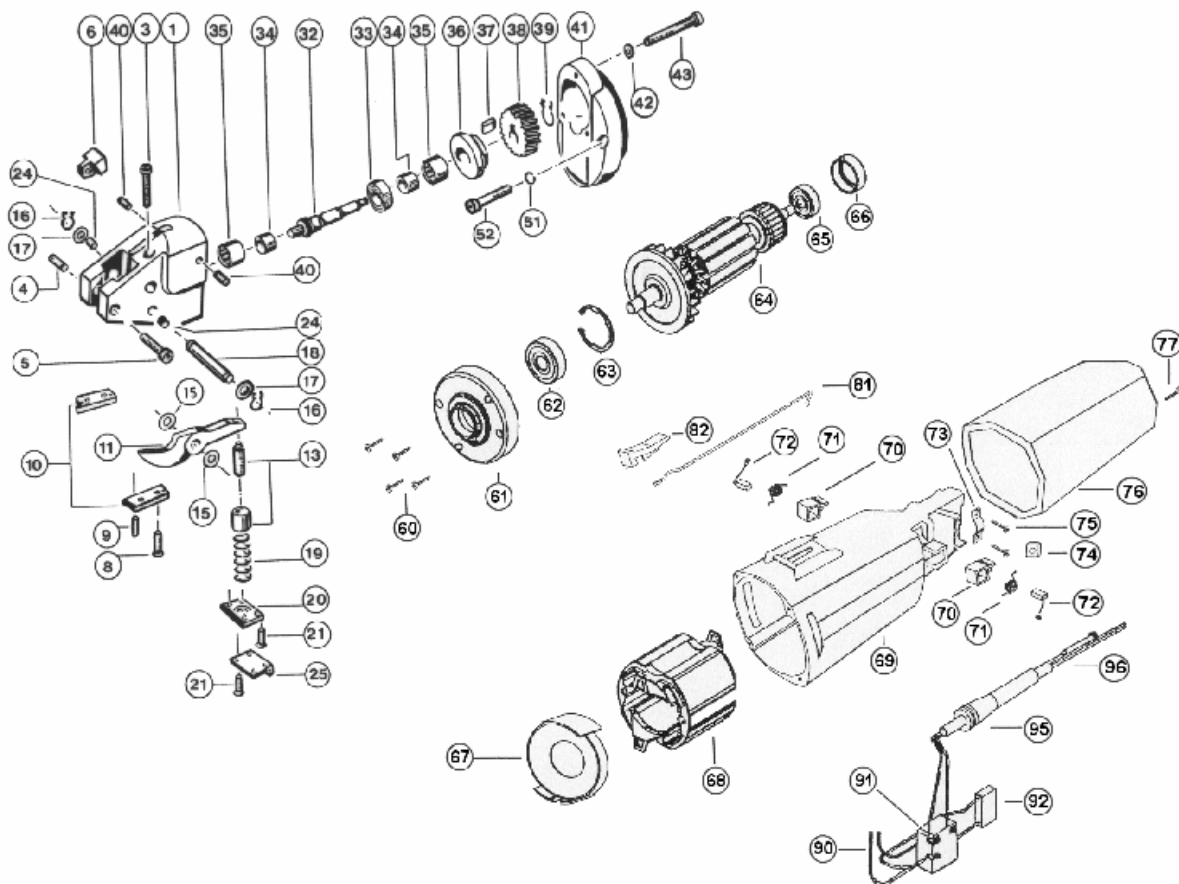
SD5-1		S1001N-1	
spare parts		spare parts	
knife	01011	knife	01001
set of jaws	BG13574/1	set of jaws	BG10600
		knife-pin set	BG12555
optional accessories			
metal-box			18000
adjustable guide	S/01	up to 100 mm	10059
adjustable guide	S/01	up to 250 mm	10060
adjustable guide	S/01	up to 500 mm	10061
support roller			BG10076

all units are ready to use

BG=Set

other voltages available

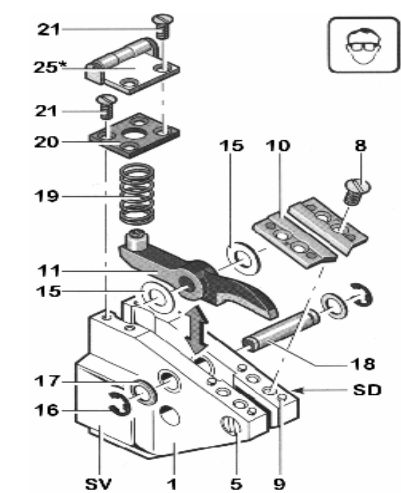
Spare parts for SD5-1 and S1001N-1



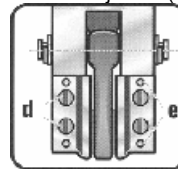
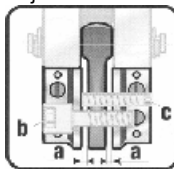
SERVICE TIPS

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. ⚠ 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.



*optional



13. 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.

Spare parts for SD5-1 and S1001N-1

Pos. No.	Order No.	Description	Pcs.	Pos. No.	Order No.	Description	Pcs.
1	BG10500	Head casting (SD5, S1001N)	1	42	81249	Securing washer	3
1-52	10057	Shear head S1001N cpl. assembled, without motor	1	43	81012	Flat fillister head screw	3
1-52	10557	Shear head SD5 cpl. assembled, without motor	1	51	81243	Securing washer	2
3	81263	Hex socket screw	1	52	81181	Hex socket screw	2
4	81089	Spacing-block set screw	1				
5	81272	Flat fillister head screw	1	60-96	16000	Motor cpl. 230 V (VDE)	1
4-6	BG10002	Spacing Block Pos. 4-6	1	60-96	16000 CH	Motor cpl. 230 V (CH)	1
6	10002	Spacing Block	1	60-96	16000 I	Motor cpl. 230 V (I)	1
8	81286	Flat Head Screw	4	60	16013	PT-Screw	4
9	81248	Pin	4	61	16015	Bearing end plate	1
		Knife for S1001N cutting (width: 4 mm)		62	10038	Ball bearing	1
11	01001	Knife 1001 Standard up to 1,3 mm	1	63	16014	Circlip	1
	01001HM	Knife 1001 carbide tipped	1	64	16009	Armature	1
	10111	Knife for radius cutting 1001/01 0,75 mm	1	65	10040	Ballbearing	1
	10110	Pattern Knife up to 0,5 mm	1	66	16029	Insulating ring	1
8-10	BG10600	Jaws for S1001N SET Pos.8-10	1	67	16030	Ventilation cover	1
	10600HM	Jaws for S1001N carbide tipped	1	68	16007	Field 230 V	1
		Knife SD5 for SD5 cutting (width: 5 mm !)		69	16039	Housing	1
11	01011	Knife SD5	1	70-71	BG16035	Brush Holder and Spring	2
8-10	BG13574/1	Set of jaws SD 5 Pos.8-10	1	72	16002	Carbon Brush	2
13	35566	Knife Lock ring with Adjusting Screw	1	73	16021	Cable collar	1
15	BG12400	Spacing shims	1	74	16019	Hex. Nut	1
16	81275	Circlip	2	75	16020	Screw	2
17	81072	Washer	2	76	16036	Switch Cover	1
18	12500	Knife pin	1	77	16018	Screw	1
15-18	BG12555	Knife pin set Pos. 15-18	1	81	16032	Switch Connection Lever	1
19	12200	Spring	1	82	16033	Switch Knob	1
19-21	BG12300	Spring cover Pos. 19-21	1	90	16017	Connection Wire	2
20	12300	Spring cover	1	91	16031	Switch	1
21	81285	Flat Head Screw	4	92	16005	Condensator	1
24	17900	Knife pin bushing Ø 10 mm	2	95	16022	Rubber-Sleeve	1
24	17911	Knife pin bushing Ø 11 mm	2	96	32046	Cable with Plug Europe (VDE)	1
25	BG10076	Support roller	1	96	20260	Cable with plug CH (SEV)	1
32-39	BG10058	Drive Shaft cpl. Assembled Pos. 32-39	1	96	20250	Cable with plug IT	1
32-34,37+39	BG10004	Eccentric drive shaft Pos. 32-34,37+39	1				
32	10004	Eccentric drive shaft	1				
33	10250	Ball bearing	1				
34	10005	Sleeve	2				
35	10300	Needle bearing	2				
35-36	BG10450	Cap for needle bearing Pos. 35-36	1				
37	10006	Key	1				
						Accessories	
38	10007	Gear	1		10059	Adjustable guide S/01 100 mm	
39	10009	Circlip	1		10060	Adjustable guide S/01 250 mm	
40	81239	Tap screw	2		10061	Adjustable guide S/01 500 mm	
41-43, 51+ 52	BG10010	Gear case Pos.41-43,51,52	1		18000	Metal Box (Metal)	

Specifications are subject to change for improvement without prior notice.

When ordering spares, please mention order number and voltage.

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

Factory I: **Administration**
Production

D-73777 Deizisau
D-73779 Deizisau

P.O.Box 1120
Gutenbergstrasse 15-17

Tel. **07153-8217-0**
Fax **07153-8217-66**

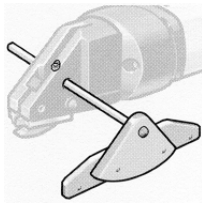
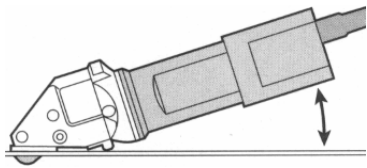
Internet <http://www.dracotools.com>

E-mail: draenert@dracotools.com

Dealer address:

Operating Instructions

1. This Power Tool is intended for industrial applications, for cutting sheet metal max. capacity is indicated in the technical data. Do not cut sheet metal through, or along welding points, or multi layer sheets, which exceed the max. cutting capacity. To cut spiral wound tubing 4 x 0.9 mm in metal, the model 3514-2 or 3514 -7R must be used.
To Switch ON: Slide the switch (82) forward
To Switch OFF: Slide the switch (82) to the rear.
2. The shear must always be guided flat and the best cutting result is achieved, when the jaws pos. 10 are positioned flat on top of the material, also when cutting circular cuts.



Adjustable guide S/01

3. When stopping inside the material, pull metal shear back straight out of the waste, with motor in operation. If too long cut waste off, first.
4. Circular cuts, always cut anti clockwise from right to left. The outside radius is unlimited.
5. For cutting out curved or inside patterns a 12 -14 mm hole must be drilled or punched or a slot should be made to insert the cutting knife. Square or rectangle cut-outs, drill in each corner a hole between 12 -14 mm.
6. A one side cut with the metal shear is possible, a small strip can be easily cut off without leaving a burr and any distortion or scratch marks.
7. Cutting the same parts, a template can be manufactured. Without risk of damaging the knife, a cut along the template is possible. Front points of the jaws left and right are used to cut exact along a marked line. To cut strips, use adjustable guide S/01. This guide is infinitely variable, due to the hole in the housing and can be tightened with the set screw. Adjustable guide S/01 can be delivered in 100, 250 and in 500 mm length.
8. Knife and jaws can be sharpened. After being sharpened or replaced, the knife at it's lowest point, should protrude the jaws by about 2.5 mm. The gap between the knife and the jaws should be approximately 0.1 mm on both sides. For a burr free cutting adjust the cutting gap as follow: Loosen screw, adjust the gap with set screw, to the left narrow, to the right wide, and tighten screw again. Check gap with a feeler gauge.
9. If you read these suggestions carefully, any kind of material can be cut about 200 working hours, before sharpening knife and jaws.
10. The material to be cut, must always be free of oil or grease.

Care and Maintenance

Before repairing or any maintenance on machine, disconnect from power supply by removing plug from socket.

Always keep the machine and the ventilation slots clean.

Oil the knife pin **18** and knife **11** 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.

Declaration of conformity

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

EG 98/37 EG, EG 73/ 23 EG, EG 89/336 EG, or standardisation documents EN 292 part I, EN 292 part II, EN 50 144, EN 55 014, EN 60 555, HD 400, HD 400.3 part II/H

Guarantee

Dräco tools carry a guarantee of 24 months from date of delivery.

Damage attributable to normal wear and tear, overload or improper handling will be excluded from the guarantee.

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.

These instructions are printed on recycling paper manufactured without chlorine.