



Instructions Pneumatic Sheet Metal Shears 18/3514-2, 18/3514-7R

To avoid failure, when using DRACO - Metal shears, please read these 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.
 - Apply the machine to the sheet metal only when switched on.
 - Always provide for secure footing when working.
 - Firmly clamp the workpiece if it does not remain stationary from its own weight.
 - The knife should not rub on the jaws: Possible danger of cutting tool breakage.
- 2** Use ear protectors and protective goggles.
 - Do not exceed the maximum allowable material thickness especially when cutting over doubles, folded joints or welded seams.
- 3** Wear protective gloves and sturdy footwear.
 - Before carrying out any work on the tool itself, during pauses in the work and when not in use, disconnect the air supply.

For further notes on safety refer to enclosed sheet

Technical Data:

DRACO Metal Shears	type	18/3514-2	18/3514-7R
max. cutting capacity	Art.no.:	62060	62070
steel	400 N/mm ² mm/ga.	2,0	2,0
stainl. steel	600 N/mm ² mm/ga.	1,5	1,5
stainl. steel	800 N/mm ² mm/ga.	1,3	1,3
aluminium	250 N/mm ² mm/ga.	3,0	3,0
tightest radius	mm/ "	200	45
working speed	m/min	7	7
strokes	min ⁻¹	3000	3000
air-consumption at 6 bar/min.	m ³ ±	0,18	0,18
motor capacity	watts	200	200
weight	kg	1,3	1,3
noise	dB(A)	89	89

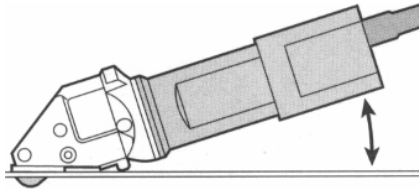
Spare parts	18/3514-2	18/3514-7R
knife	035141	371401
set of jaws	35146	37222
knife-pin set	BG 35055	BG35055

Optional accessories	
support roller (plastic)	BG10076
support roller (metal)	BG10077

Instructions

The pos. number used are in connection with the opposite Service-tips

1. Before using the metalshears please check cutting capacity see technical data. For cutting spiral pipes through a seam. It is possible, when using model number 18/3514-2. (4 x 0,90 mm).
2. Always place the machine straight on the work piece. The jaws (pos. 10) must lay flat on the material. When cutting sheet metal etc. do not oil cutting surface.



3. When cutting a slot without drilling an end hole, pull shear backwards with motor running.
4. **Circular cuts:** Always cut counter clockwise from right to left, this enables a shorter inside curve.

5. For cutting out curved or square inside patterns a hole between 10 - 14 mm should be drilled to insert the cutting knife. For square cut outs drill a hole in each corner.
6. If after cutting, a small strip remains, this can be trimmed off to the exact marked line, without leaving a burr or any distortion of the material.
7. When producing the same parts several times a template can be used. The knife will follow the template on the side. A marked line can be easily followed due to the points on the jaws.
8. Both knife and jaws can be resharpened. After being resharpened or replaced, the knife should be adjusted at it's lowest point and should protrude the jaws by approximately 2.5 mm.
9. If following these instructions, you are able to work with the knife and jaws about 200 working hours depending on the hardness of the materials.

ATTENTION : THE MATERIAL MUST ALWAYS BE FREE OF GREASE OR OIL.

Equipment protection

The maximum allowable operating pressure of 6.6 bar must not be exceeded; use a pressure reducer if necessary.

To avoid damage by contaminated pressurised air, a maintenance unit must be used in the air supply system.

The maintenance unit consists of three main components:

- Filter with water separator
- Pressure reducer with manometer

Mist oilier for lubricating the machine with SAE 20 or SAE 10 motor oil.

Do not use petroleum or diesel oil.

Care and Maintenance

Before carrying out any work on the tool itself, disconnect the air supply.

Oil the knife pin 18 and knife 11 at regular intervals.

Should the tool fail in spite of careful manufacturing and testing procedures, the repair is to be performed by an authorised customer service location for pneumatic or electric tools.

CE Declaration of conformity

We declare under our sole responsibility that this product is in conformity with the following standards or standardisation documents:

EN 792, PNEUROP PN8NTC1, ISO 3744, ISO 8662/1, according to the provisions of the regulations 89/392/EWG.

CE₉₅ Max Draenert

A handwritten signature in black ink, appearing to read 'Max Draenert', written over a light grey background.

Noise/vibration information

Measured values determined according to EN 792, PNEUROP PN8NTC1, ISO 3744, ISO 8662/1.

Typically the A-weighted noise levels of the tool are: Sound pressure level: 88,4 dB (A); Sound power level: 89,9 dB (A)

Wear ear protection!

The typical hand-arm vibration is below 2,5 m/s².

Guarantee

Dräco tools carry a guarantee of 6 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, to your dealer or the Dräco Service Centre for electric power tools.

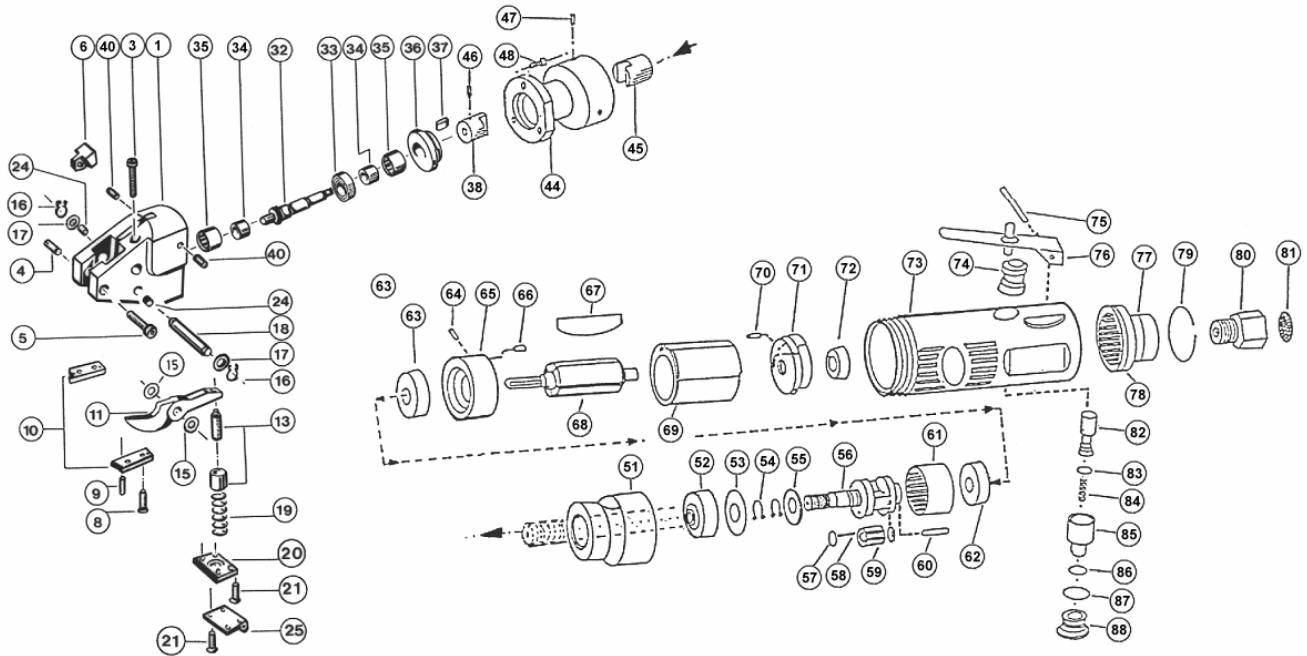
Environmental protection



Recycling raw materials instead of waste disposal
Machine, accessories and packaging should be sorted for environment-friendly recycling.

These instructions are printed on recycled paper manufactured with chlorine.

Spare parts DRÄCO Pneumatic Metal Shears 18/3514-2 & 18/3514-7R



SERVICE-TIPS (Dismantling/ assembling Knife)

Before performing any work on machine itself, disconnect the air supply.

Clamp the machine in a vice on the clamping surfaces (SV) between aluminium protective jaws.

1. Before replacing the knife, place a drop of oil on the right and left side between the housing (1) and the knife (11).
2. Unscrew the screws (21) and remove the spring plate (20). Remove the spring (19).
3. Remove the Circlip ring (16) and screw (17).
4. Push the knife pin back (18).
5. Lift the knife (11) and remove to the front.

6. **⚠ Do not interchange the spacers (15): The jaws and knife could be ruined by the wrong spacing.**
7. Insert a new knife with the spacers (15). Insert the knife pin (18). Mount the washer (17) and the Circlip ring (16)
8. Insert the spring (19). Remount the spring plate (20).

Replacing the Jaws

Loosen the screws (8) and remove the jaws (10). Press out the positioning pins (9). Mount new jaws and position pins again. Tighten the screws (8)

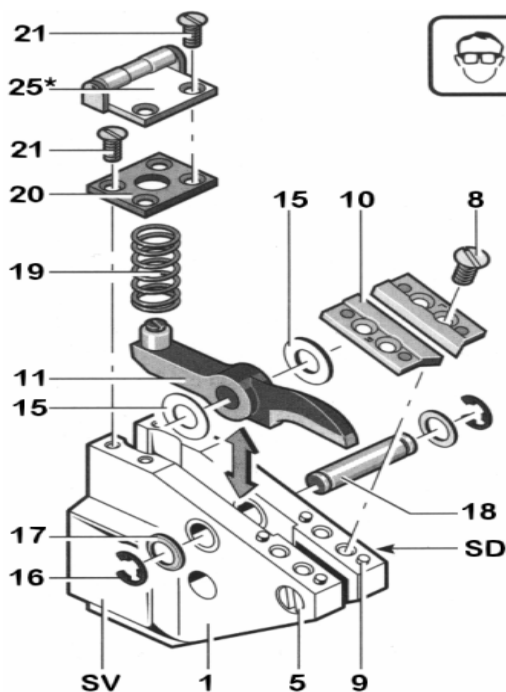


The knife (11) must not rub against the jaws (10): Danger of breakage.

Note: If heavy burring is produced while cutting, repeat the adjustment.

Sharpening the Knife/Jaws

The knife and the jaws can be sharpened and must be adjusted after sharpening or replacing. This work should be performed by an authorised Dräco customer service location. Send in the complete machine for this purpose.



No warranty on knives and jaws.

The pos. numbers used on the service tips are in connection with the first page.

Spare parts list DRÄCO Pneumatic Metal Shears 18/3514-2 & 18/3514-7R

The pos. numbers used, are in connection with the opposite spare parts list.

Pos. no.	Order no.	Description	Quantity per shear	Pos. no.	Order no.	Description	Quantity per shear
1	37547	Head casting	1	44	10071	Flange	1
3	81263	Screw M 4 x 16	1	45	10072	Coupling motor	1
4	81120	Tap screw M 5 x 12	1	46	81280	Tap screw M 5 x 8	1
5	81176	Hex. socket screw M 4 x 25	1	47	81278	Tap screw M 5 x 6	3
6	37059	Spacing block	1	48	81263	Hex. socket screw M 4 x 16	3
8	11300	Flat head screw M 4 x 8	4	51	18051	Nut	1
9	81248	Pin 3x7	4	52	18052	Ballbearing	1
				53	18053	Seal	1
				54	18054	Circlip	2
				55	18055	Washer	1
		Knife for 18/3514-2		56	18056	Planet shaft	1
11	035141	Knife 19/3514-2	1	57	18057	Needle holder	4
10	35146	Set of jaws	1	58	18058	Needles	18
				59	18059	Gear	1
		Knife for 18/3514-7R		60	18060	Pin	1
11	371401	Knife 19/3514-7R	1	61	18061	Gear housing	1
10	37222	Set of jaws 1001	1	62	18062	Ballbearing	1
				63	18063	Ballbearing	1
				64	18064	Pin	1
				65	18065	Motor front cover	1
13	35067	Knife adjusting screw with lockring	1	66	18066	Pin	1
14	12100	Lock ring M6	1	67	18067	Vane	4
15	12400	Spacing shims set	1	68	18068	Rotor	1
16	35054	Safety cotter pin	2	69	18069	Cylinder	1
17	81072	Washer M 6	2	70	18070	Pin	1
16-18	35142	Knife pin 6 Ø	1	71	18071	Motor end cover	1
15-18	35055	Knife pin set	1	72	18072	Ballbearing	1
19	12200	Spring	1	73	18073	Motor housing	1
20	12300	Spring cover	1	74	18074	Valve nut	1
21	81271	Flat head screw M 3 x 8	4	75	18075	Pin	1
24	35542	Bushing Ø 10 mm	2	76	18076	Lever	1
25	10076	Support roller	1	77	18077	Air exhaust	1
35	10300	Needle bearing HK 1010	1	78	18078	O-ring	1
29	10005	Sleeve	1	79	18079	Spring ring	1
32	35556	Eccentric drive shaft	1	80	18080	Air connector	1
32	35557	Eccentric drive shaft for 19/3515	1	81	18081	Filter	1
33	35285	Ballbearing	1	82	18082	Valve nut	1
34	10005	Sleeve 7 x 10 12 JR	1	83	18083	O-ring	1
35	10300	Needlebearing HK 1010	1	84	18084	Valve spring	1
36	10450	Cap for needlebearing	1	85	18085	Valve bushing	1
37	10006	Key 12 x 3 x 2	1	86	18086	O-ring	1
38	10070	Coupling shear	1	87	18087	O-ring	1
40	11700	Tap screw M4x6	2	88	18088	Valve screw cover	1

When ordering spare parts, please state position and order numbers.

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