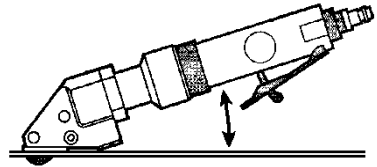


Instructions

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

1. Before using the metalshears please check cutting capacity see technical data.
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.

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 792-13, ISO 8662-1, EN50144, according to the provisions of the regulations 89/37

CE 09 Max Draenert 

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.

Noise/vibration information

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

Typically the A-weighted noise levels of the tool are: Sound pressure level: 78,2 dB (A); Sound power level: 78,9 dB (A)

Wear ear protection!

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

Guarantee

Dräco tools carry a guarantee of 12 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.



Instructions Pneumatic Sheet Metal Shears 19/35xx series

To avoid failure, when using DRÄCO-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.
 - Do not exceed the maximum allowable material thickness especially when cutting over doubles, folded joints or welded seams.
- 2 Use ear protectors and protective goggles.
- 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.

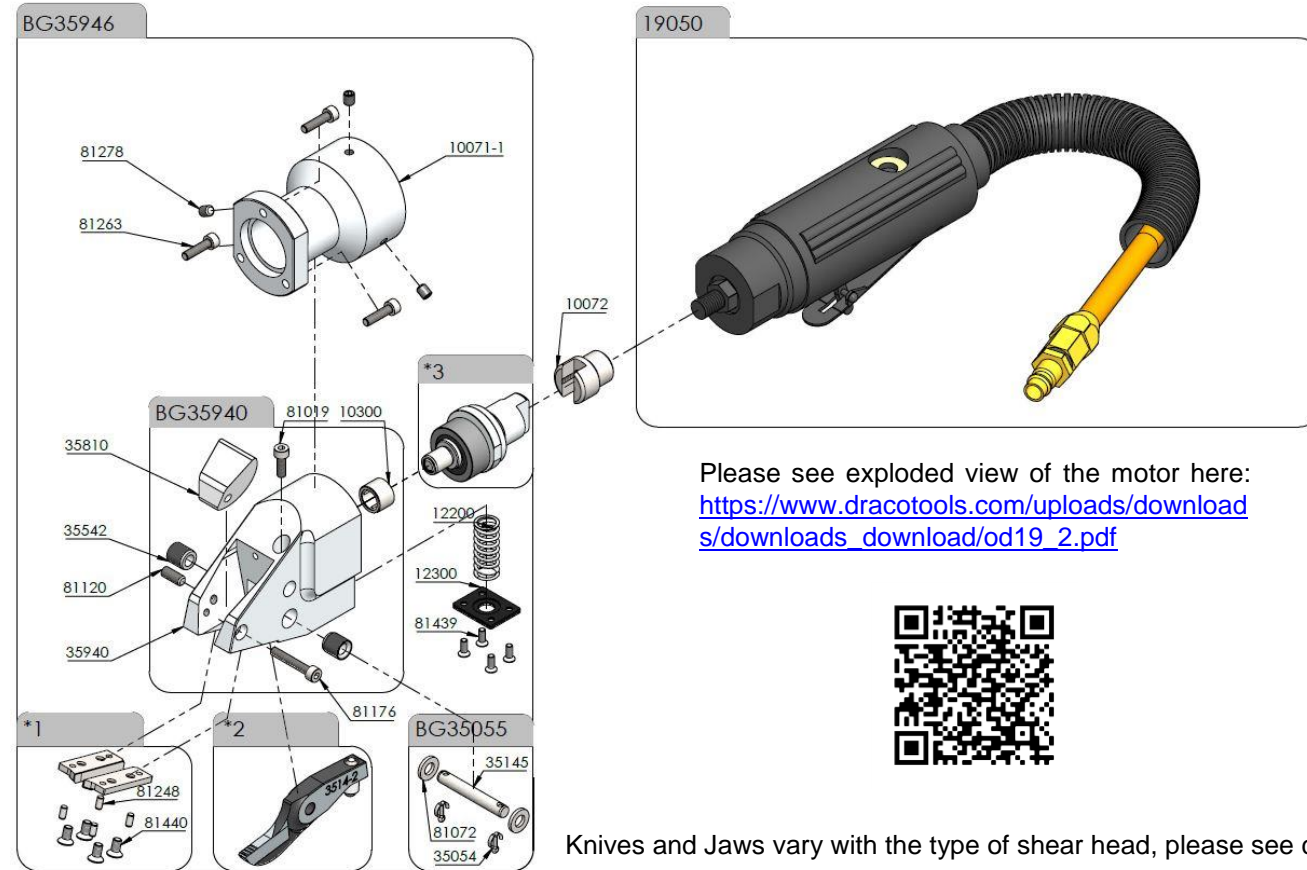
 For further notes on safety refer to enclosed sheet

Technical Data:

DRÄCO Metal Shears	19/	3514-2	3514-7R	3515	3520
max. cutting capacity	Art.no.: 62060-1 62070-1 62063-1 62080-1				
steel	400 N/mm ²	mm/ga. 2,0/14	2,0/14	2,0/14	2,0/14
stainl. steel	600 N/mm ²	mm/ga. 1,5/17	1,5/17	1,5/17	1,5/17
stainl. steel	800 N/mm ²	mm/ga. 1,3/18	1,3/18	1,3/18	1,3/18
aluminium	250 N/mm ²	mm/ga. 3,0/10	3,0/10	3,0/10	3,0/10
tightest radius	mm/ "	200/8	45/1 ³ / ₄	200/8	200/8
duct & Pittsburg Seam	mm	4x0,9	4x0,7		4x0,7
working speed	m/min	9	9	9	9
strokes	min ⁻¹	3000	3000	3000	3000
air-consumption at 6 bar/min.	m ³ ±	0,18	0,18	0,18	0,18
motor capacity	Watts	200	200	200	200
weight	kg	1,3	1,3	1,3	1,3
noise	db(A)	78,2	78,2	78,2	78,2

Spare parts DRÄCO Pneumatic Metal Shears 19/35xx series

TYPE: 19_3514-2 (62060-1)

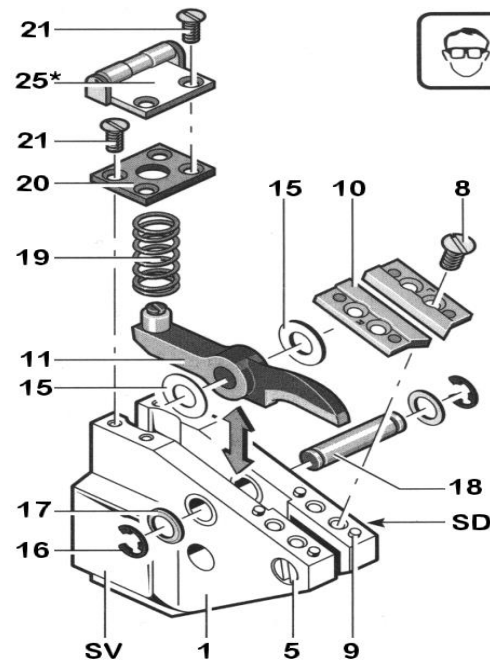


Knives and Jaws vary with the type of shear head, please see chart!

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.



- Before replacing the knife, place a drop of oil on the right and left side between the housing (1) and the knife (11).
- Unscrew the screws (21) and remove the spring plate (20). Remove the spring (19).
- Remove the Circlip ring (16) and screw (17).
- Push the knife pin back (18).
- Lift the knife (11) and remove to the front.
- Do not interchange the spacers (15): The jaws and knife could be ruined by the wrong spacing.**
- Insert a new knife with the spacers (15). Insert the knife pin (18). Mount the washer (17) and the Circlip ring (16)
- 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 resharpening 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 drawing left.

Spare parts list DRÄCO Pneumatic Metal Shears 19/35xx series

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
				19/3514-2			
*1	BG35146	Set of jaws	1	61	19061	Gear housing	1
*2	035141	Knife	1	62	19062	Washer	1
*3	BG31559	Eccentric shaft assembled	1	63	19063	Ball bearing	1
	BG35946	Shear head 3514-2 cpl.	1	64	19064	Front cover	1
				19/3514-7R			
*1	BG37222	Set of jaws	1	65	19065	Pin	3
*2	371401	knife	1	66	19066	Rotor	1
*3	BG31559	Eccentric shaft assembled	1	67	19067	Vane	5
	BG35911	Shear head 3514-7R cpl.	1	68	19068	Cylinder	1
				19/3515			
*1	BG35146	Set of jaws	1	69	19065	Cyl. Pin	3
*2	035151	knife	1	70	19070	Back rotor cover	1
*3	BG31556	Eccentric shaft assembled	1	70	19070	Back rotor cover	1
	BG35947	Shear head 3515 cpl.	1	71	19071	Ball bearing	1
				19/3520			
*1	BG35020	Set of jaws	1	72	19072	Valve screw cover	1
*2	035201	knife	1	73	19073	O-Ring	1
*3	BG31559	Eccentric shaft assembled	1	74	19074	O-Ring	1
	BG35942	Shear head 3520 cpl.	1	74	19074	O-Ring	1
				Spare parts motor:			
				75	19075	Regulator control	1
				76	19076	Valve spring	1
				77	19077	O-Ring	1
				78	19078	Valve nut	1
				79	19079	O-Ring	1
				80	19080	Motor housing	1
				81	19081	End adapter	1
				82	19082	Air connector	1
				83	19083	Valve bushing	1
53	19053	Head Housing Motor Side	1	84	19084	Wrench	1
54	19054	Nut	1	85	19085	Safety lever	1
55	19055	Ball bearing	1	86	19086	Spring	1
56	19056	Ball bearing	1	87	19087	Lever	1
57	19057	Gear holder	1	88	19088	Doval pin	1
58	19058	Cyl. Pin	3	89	19089	Rivit	1
59	19059	Needle bearing	3	90	19090	Air exhaust tube	1
60	19060	Gear	3	91	19091	Plug-in connector	1

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