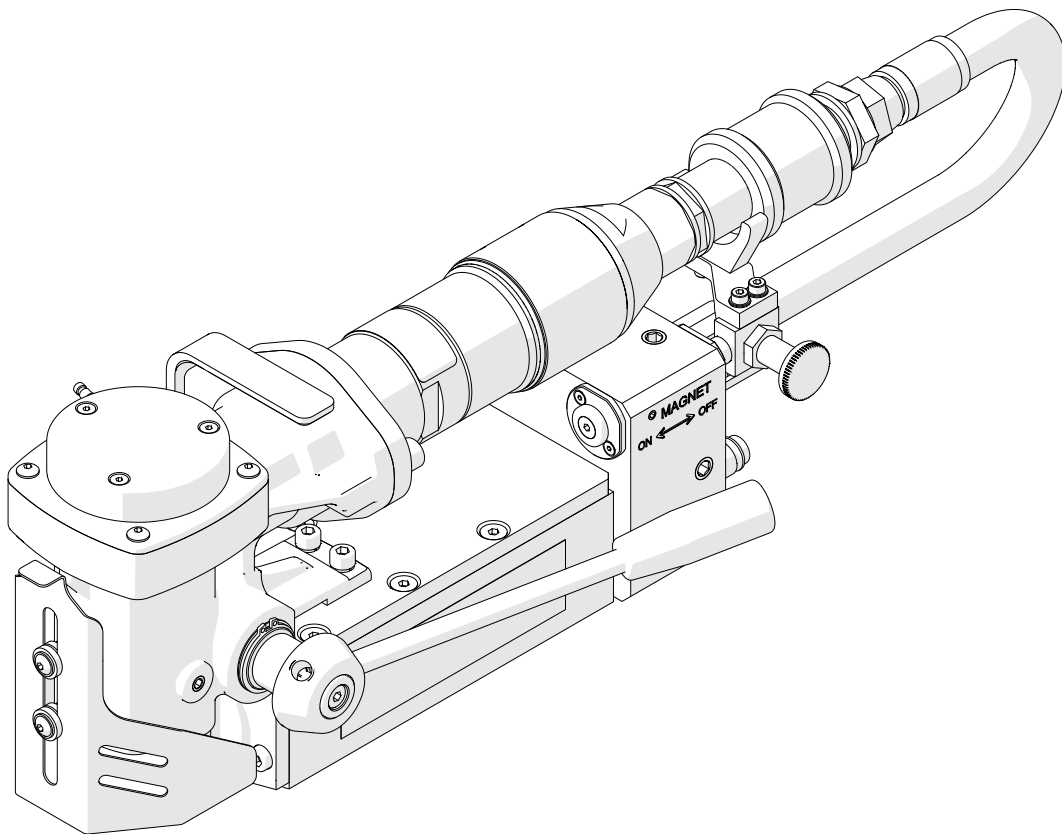


OPERATOR'S MANUAL

HOLEMAKER 40 PNEUMATIC MAGNETIC DRILLING MACHINE **HMP40AD-ATEX**



Contents

1. LIMITED WARRANTY	3
2. GENERAL INFORMATION	4
2.1. Application	4
2.2. Technical data.....	4
2.3. Equipment included	5
2.4. Dimensions	5
2.5. Design	6
3. SAFETY PRECAUTIONS.....	7
4. SYMBOLS.....	9
5. STARTUP AND OPERATION	10
5.1. Installing the feed lever	10
5.2. Installing and removing the annular cutter	11
5.3. Preparing	12
5.4. Drilling.....	16
5.5. Maintaining the air preparation unit	17
6. ACCESSORIES	18
7. PARTS LIST.....	19

1. LIMITED WARRANTY

Industrial Tool & Machinery Sales (hereinafter referred to as ITMS) will, within twenty four (24) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.

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2. GENERAL INFORMATION

2.1. Application

The PRO-40 AD ATEX is a drilling machine designed to drill holes of diameters of up to 40 mm (1 37/64") to a depth of up to 25 mm (63/64") by using annular cutters.

The machine is II 2G Ex h IIC 135°C (T4) Gb II 2D Ex h IIIB T135°C Db certified to allow work in potentially explosive atmospheres.

The magnetic base clamps the machine to ferromagnetic surfaces. This assures that the operator is safe, and the machine works correctly. A safety strap protects the machine from falling in case of clamping loss.

It is allowed to drill outside pipes of a minimum diameter of 250 mm after checking the clamping of the magnetic base using the indicator.

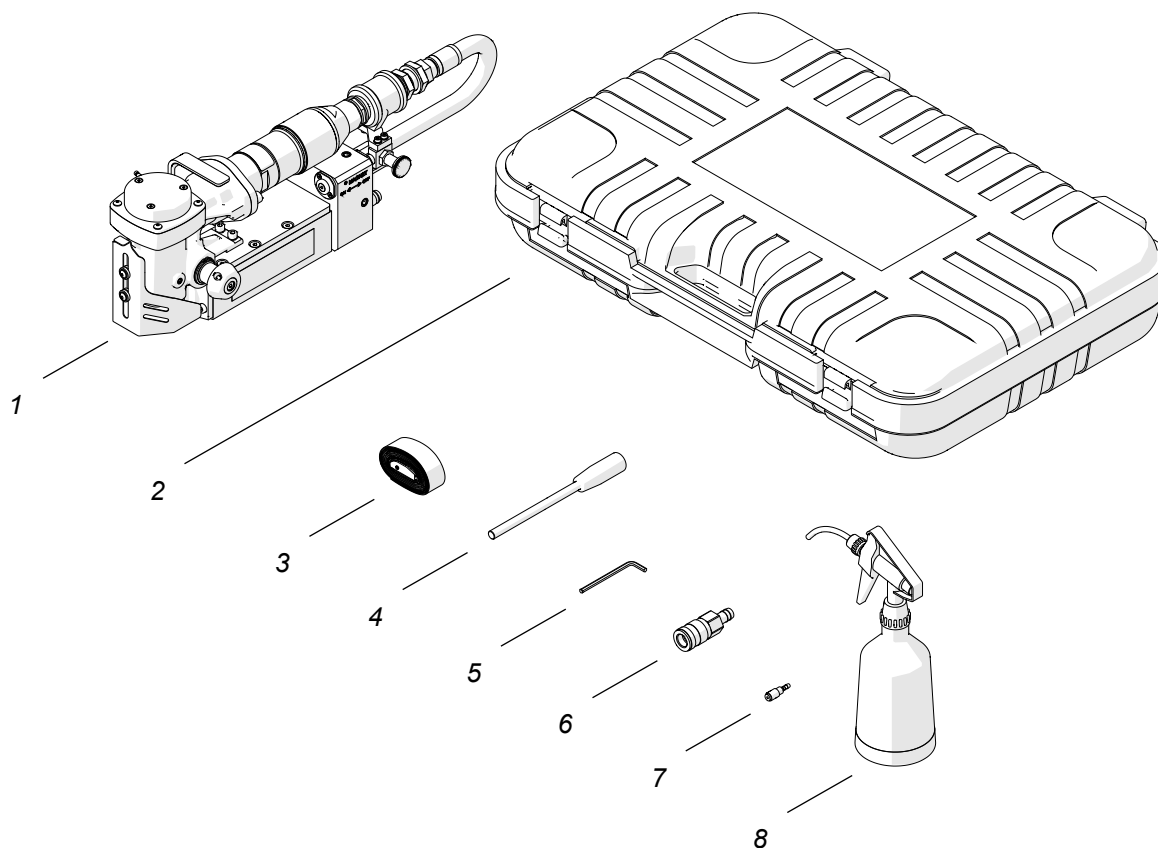
The machine is designed for use by a professional operator only.

2.2. Technical data

Pressure	6 bar (87 psi)
Air connection	CEJN 410 DN 10.4 R 3/8" BSPT fitting for quick coupling
Air consumption	1400 l/min (50 CFM)
Required air purity	40 µm (5 class)
Minimum diameter of air hoses	13 mm (33/64")
Power	800 W
Tool holder	19 mm (3/4") Weldon
Maximum drilling diameter	40 mm (1 37/64")
Maximum drilling depth	25 mm (63/64")
Stroke	40 mm (1 37/64")
Minimum pipe diameter*	250 mm (9 27/32")
Minimum workpiece thickness	10 mm (25/64")
Clamping force surface with the thickness of 25 mm (63/64") and roughness R _a = 1.25	7000 N
Magnetic base dimensions	75 mm x 188 mm x 56 mm (2 61/64" x 7 13/32" x 2 13/64")
Rotational speed with load	240 rpm
Noise level	More than 70 dB
Required ambient temperature during operation	0 – 40 °C (32 – 104 °F)
Required ambient temperature during storage	-10 – 50 °C (14 – 122 °F)
Maximum allowed ambient humidity	80% (non-condensing)
Weight	15 kg (33 lbs)
Potentially explosive atmosphere	II 2G Ex h IIC 135°C (T4) Gb II 2D Ex h IIIB T135°C Db

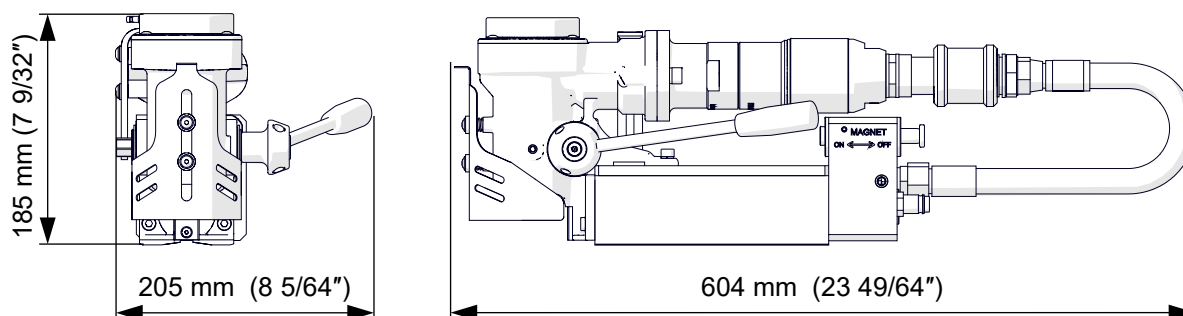
* Always check the clamping of the magnetic base using the indicator

2.3. Equipment included

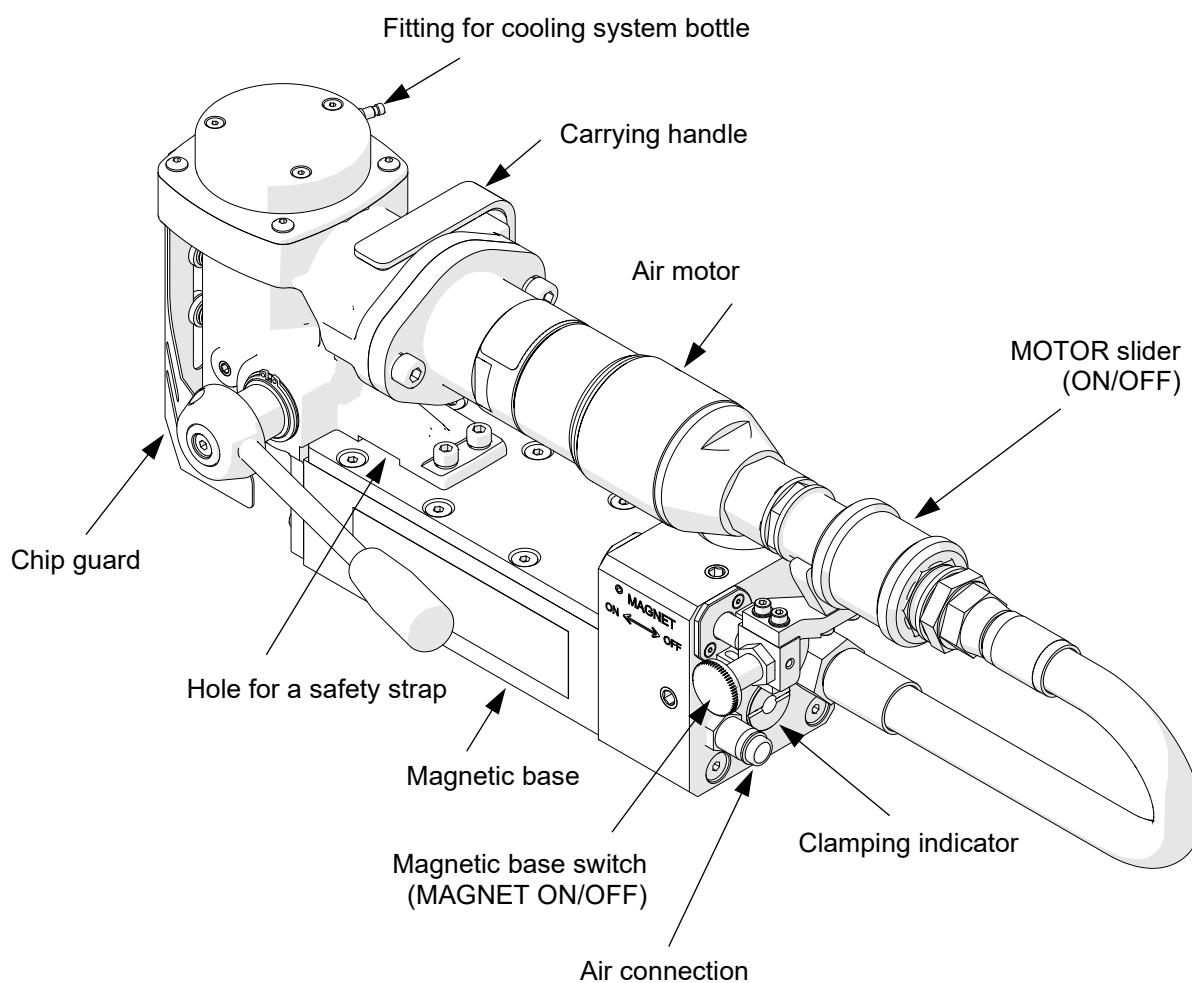


1	Drilling machine	1 unit
2	Box	1 unit
3	Safety strap	1 unit
4	Feed lever	1 unit
5	4 mm hex wrench	1 unit
6	Air quick coupling	1 unit
7	Quick coupling for cooling system bottle	1 unit
8	Cooling system bottle 0.5 l	1 unit
–	Operator's manual	1 unit

2.4. Dimensions



2.5. Design



3. SAFETY PRECAUTIONS

1. Before use, read this Operator's Manual and complete a training in occupational health and safety.
2. Use only in applications specified in this Operator's Manual.
3. Make sure that the machine has all parts and they are genuine and not damaged.
4. Make sure that the specifications of the power source are the same as those specified on the rating plate.
5. Supply only with clean and lubricated air. Make sure that the air source has an air preparation unit (filter, regulator, and lubricator). Do not supply air by using a hose without a quick coupling.
6. Do not carry the machine by the hoses and do not pull the hoses. This can cause damage and serious injury.
7. Set the MAGNET switch and MOTOR slider to OFF before you move the machine. Use carrying handle to move the machine.
8. Keep untrained persons away from the machine.
9. Before each use, ensure the correct condition of the machine, air source, supply hose, air connection, quick coupling and tools.
10. Before each use, make sure that no part is cracked or loose. Make sure to maintain correct conditions that can have an effect on the operation of the machine.
11. Keep the machine dry. Do not expose the machine to rain, snow, or frost. Protect the supply hose from the sun.
12. Do not stay below the machine that is put at heights.
13. Keep the work area well-lit, clean, and free of obstacles.
14. Remove all elements from the work area before you connect the machine to the air source.
15. Use the set screws to tighten the annular cutter.
16. Do not use cutters that are dull or damaged.
17. Unplug the supply hose before you install and remove annular cutters.
18. Install and remove annular cutter by using protective gloves.
19. Use annular cutters without the pilot pin only when you drill incomplete through holes.
20. Do not drill holes whose diameter or depth differ from those specified in the technical data.

21. Do not use on surfaces that are rough, not flat, not rigid, or have rust, paint, chips, or dirt.
22. Ensure that the machine is correctly attached to the surface by checking the position of clamping indicator.
23. Use the safety strap to attach the machine to a stable structure. Put the strap through the hole in the machine body. Do not put the strap into the buckle from the front.
24. Each time before you put the machine on the workpiece, rub the workpiece with coarse-grained sandpaper. Make sure that the full bottom of the base touches the workpiece.
25. Always use eye and hearing protection and protective clothing during work. Do not use loose clothing.
26. Do not touch chips or moving parts. Do not let anything to be caught in moving parts.
27. After use, clean the machine and the cutter. Do not remove chips with bare hands.
28. Unplug the supply hose before you do maintenance or install/remove parts.
29. Repair only in a service center appointed by the seller.
30. If the machine falls, is wet, or has any damage, stop the work and immediately send the machine to the service center for check and repair.
31. Do not leave the machine when it operates.
32. If you are not going to use the machine, remove the cutter from the holder. Then, remove the machine from the work area and keep it in a safe and dry place.
33. If you are not going to use the machine for an extended period, put anti-corrosion material on the steel parts.

4. SYMBOLS



Refer to instruction manual



Wear ear protection

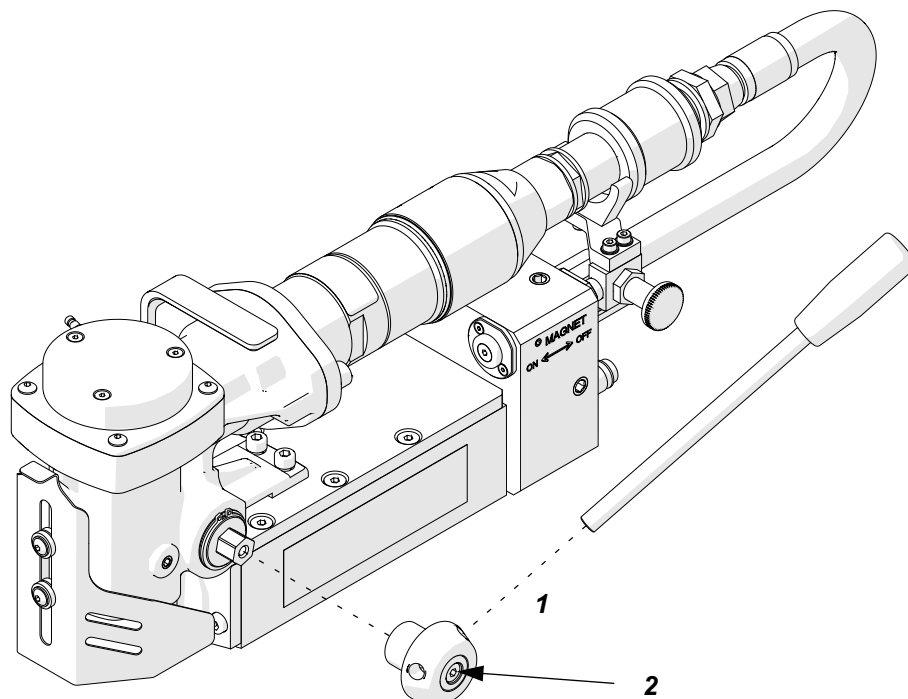


Wear eye protection

5. STARTUP AND OPERATION

5.1. Installing the feed lever

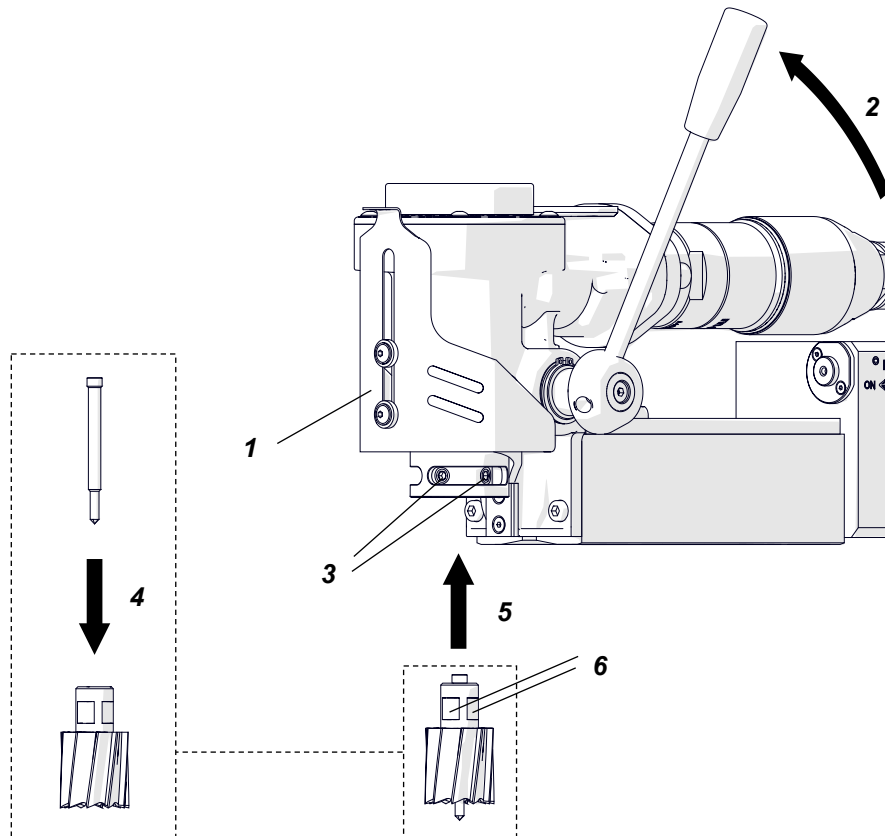
Attach the feed lever (1). To install the lever at the other side of the machine, use the 4 mm hex wrench and loosen the head screw (2). Then, attach the head at the other side.



5.2. Installing and removing the annular cutter

Unplug the supply hose and lift the chip guard (1). Turn the feed lever to the left (2) to get access to the set screws (3). Use gloves to put the correct pilot pin into the annular cutter (4). Clean the cutter with a dry cloth. Put the cutter into the arbor (5) to align the flat surfaces (6) with the screws (3). Use the 4 mm hex wrench to tighten the screws.

To remove the cutter, loosen the screws (3) with the 4 mm hex wrench.



5.3. Preparing

The motor is at its full power after one hour of operation. Before the first use or after a long period of storage, put 3–5 drops of oil into the air connection. Then, connect the machine to a 6 bar air source and let the machine operate for 5–10 minutes.

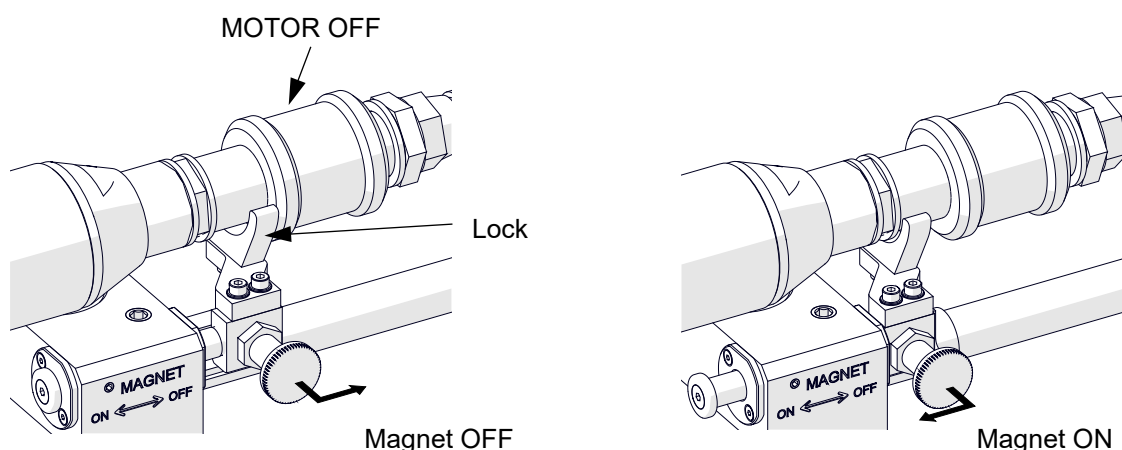
Before use, clean steel parts, including the Weldon socket, from anti-corrosion material used to preserve the machine for storage and transport.

Select the cutter that matches the required hole diameter. Use a dry cloth to clean the spindle and the cutter. Then, install the cutter as described before.

Connect the machine to a correctly prepared air source of sufficient purity. Use a supply hose with the air quick coupling. Make sure that all inner diameters of the air source (including the supply hose and fittings) are of at least 13 mm (33/64"). Use an air preparation unit that has a filter, regulator, and lubricator.

Put the machine on a ferromagnetic workpiece of thickness of at least 10 mm (25/64"). Drilling on cylindrical surfaces is allowed only after checking the clamping of the magnetic base using the indicator. Make sure that there is no rust, paint, chips, or dirt on the surface. They decrease the clamping force. The force will be lower also if the surface is thin, rough, not flat, not rigid, or the bottom of the base is worn. Some types of steel (non-ferromagnetic) do not conduct magnetic flux so the machine cannot clamp onto them.

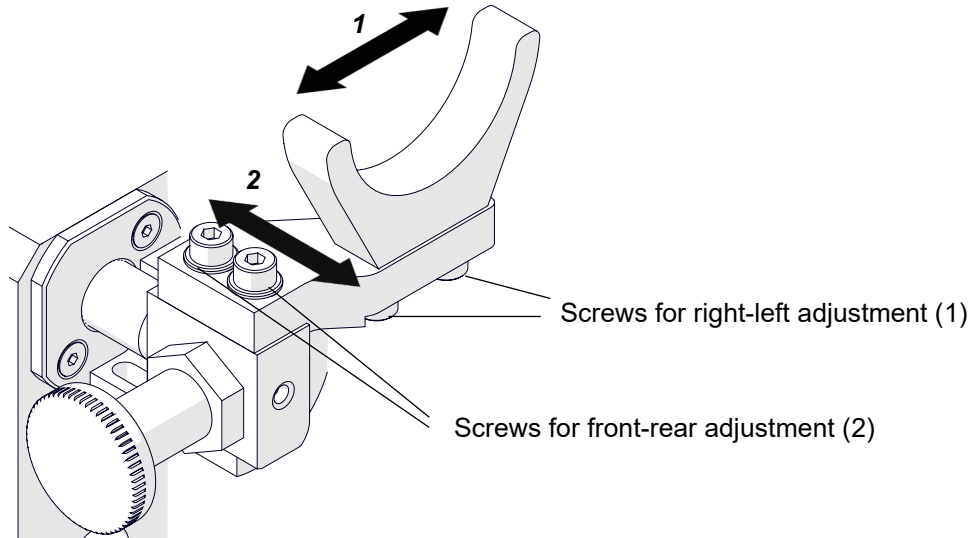
Set the MAGNET switch to ON to turn on the clamping.



Turning off the magnet will move the lock and disable the motor!

If the position of the lock has become loose during operation, use a 3 mm hex wrench to loosen the screws, adjust the lock (1, 2) and tighten the screws.

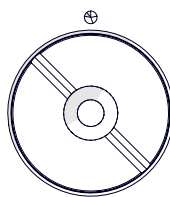
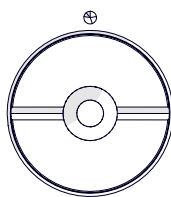
CAUTION: Removing the lock is forbidden!



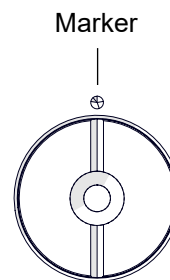
Then ensure that the machine is clamped to the surface by checking the position of clamping indicator.



Drilling is allowed only when the clamping indicator matches the marker.

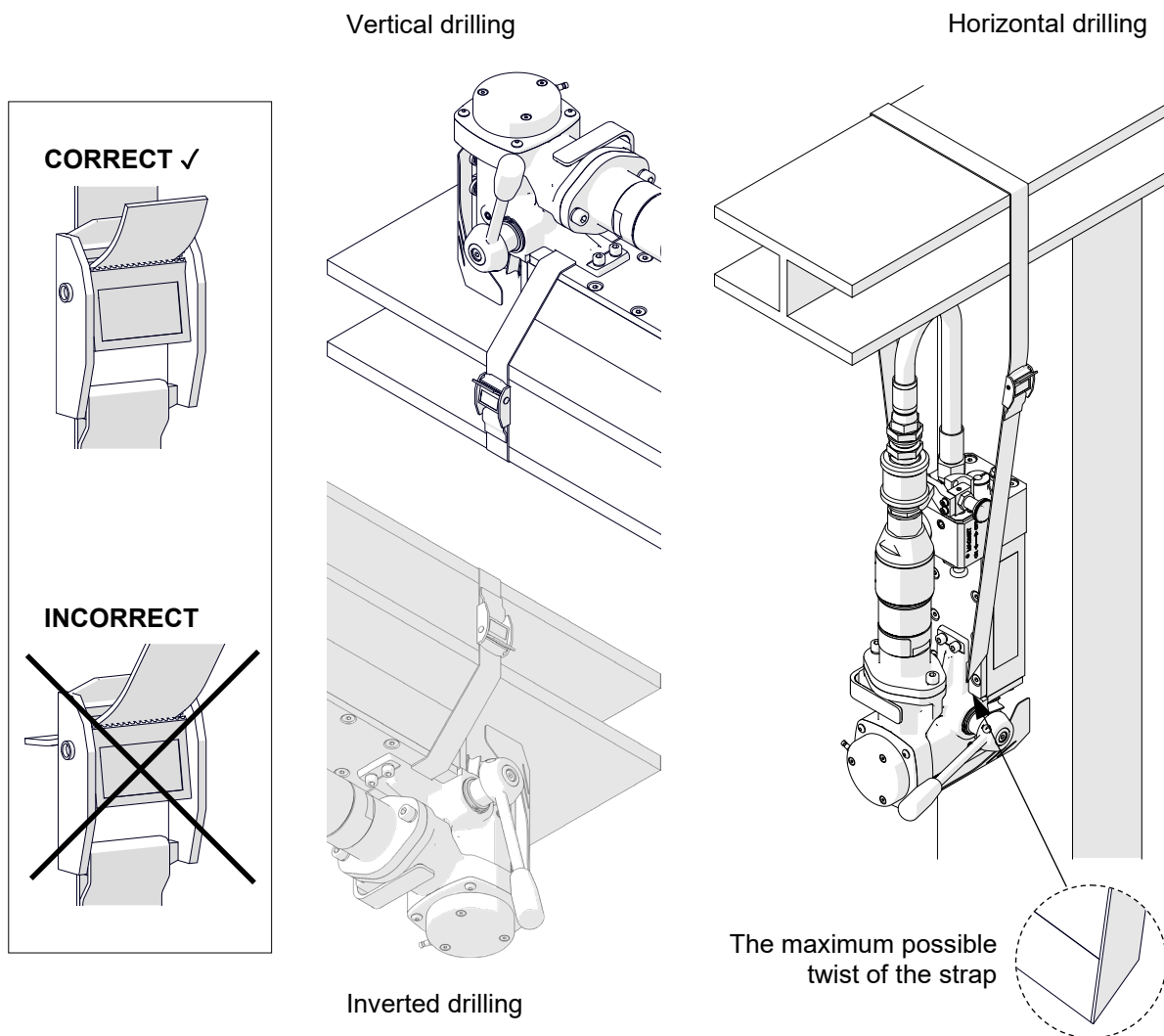


Unclamped ✗

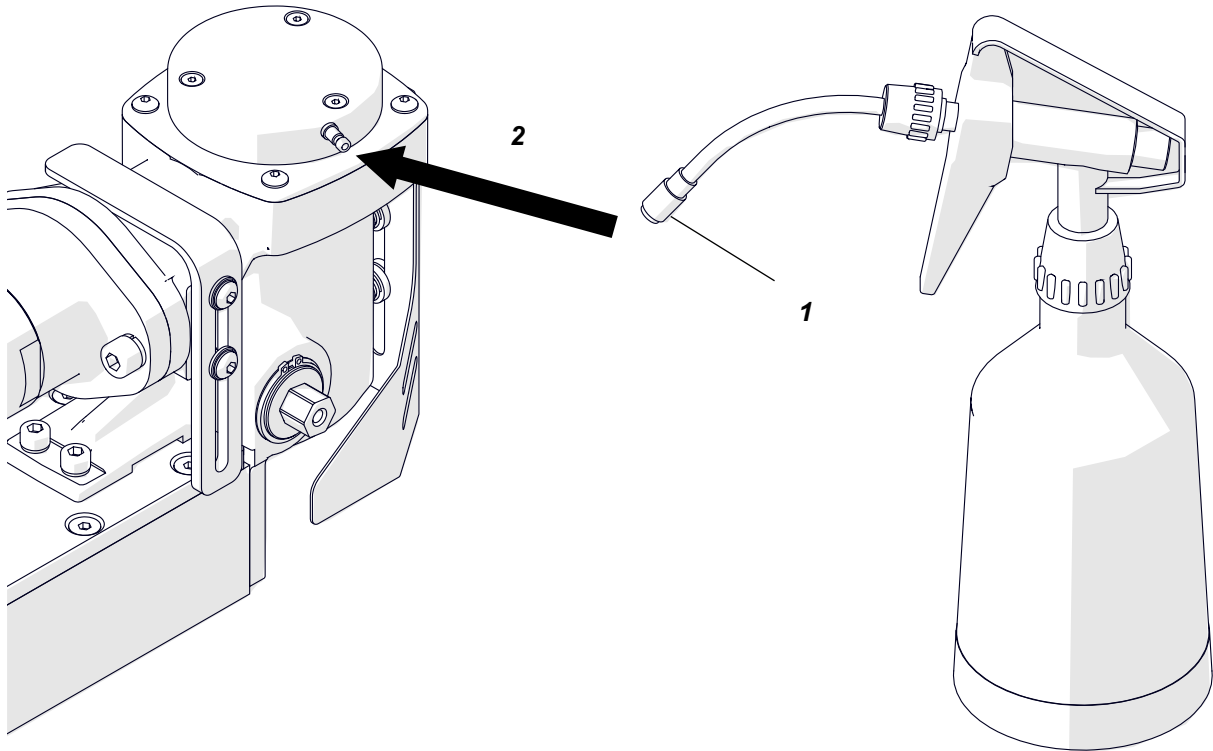


Clamped ✓

Use the safety strap to prevent fall and injury if the machine loses the clamping. Attach the machine to a stable structure by putting the strap through the hole in the machine body. Make sure that the strap is tight and not twisted (except for horizontal drilling; the maximum possible twist is shown in the figure). If the machine comes loose from the workpiece and hangs on the strap, replace the strap. Do not put the strap into the buckle from the front.



Use the cooling system supplied with the machine. To do this, connect the quick coupling (1) to the bottle. Then, fill the bottle with coolant and connect the bottle to the fitting (2).



Do not use only water as the coolant. You can use a mixture of water and drilling oil. Then, make sure that the cooling system works correctly. To do this, press the lever of the bottle several times. Then, turn the feed lever to apply a light pressure on the pilot pin. The coolant should fill the system and start flowing from the cutter.

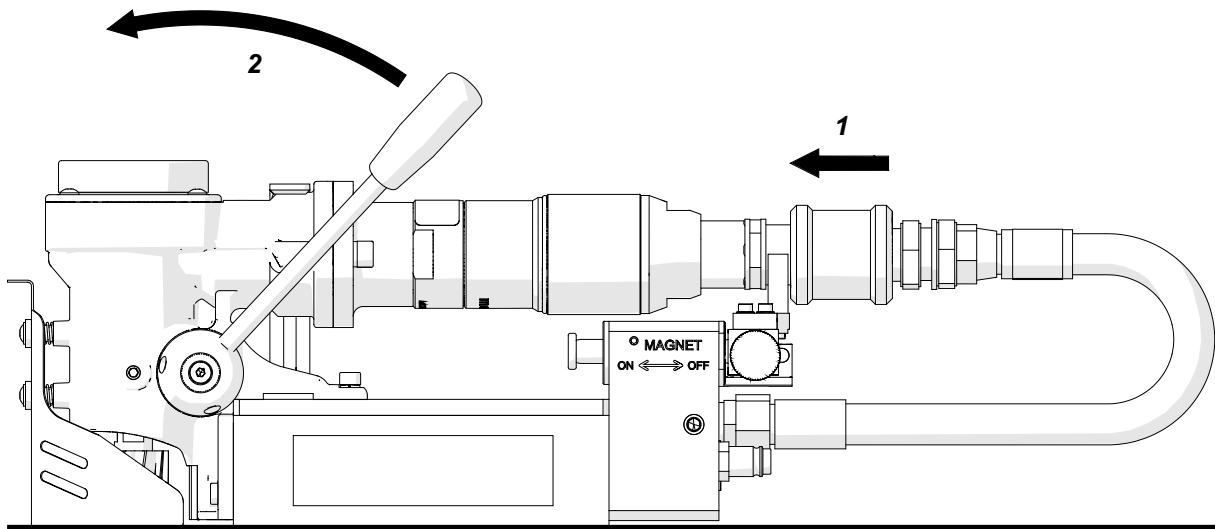
5.4. Drilling

Set the MOTOR slider to ON (1) to start the motor.

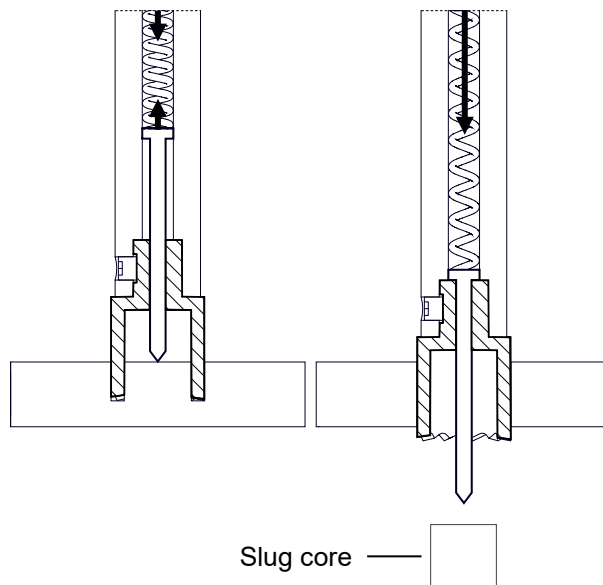


The motor does not start if the **MAGNET** switch is set to OFF.

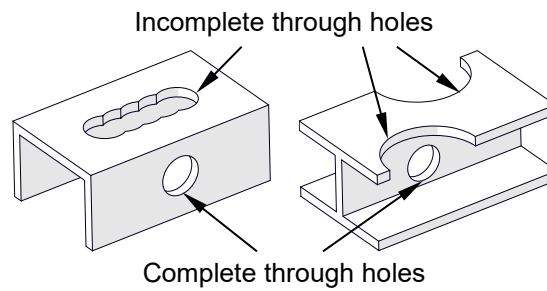
Then, turn the feed lever to the left (2) to put the tool into the workpiece. Maintain a constant pressure on the lever. Keep the machine in the same position until the hole is made.



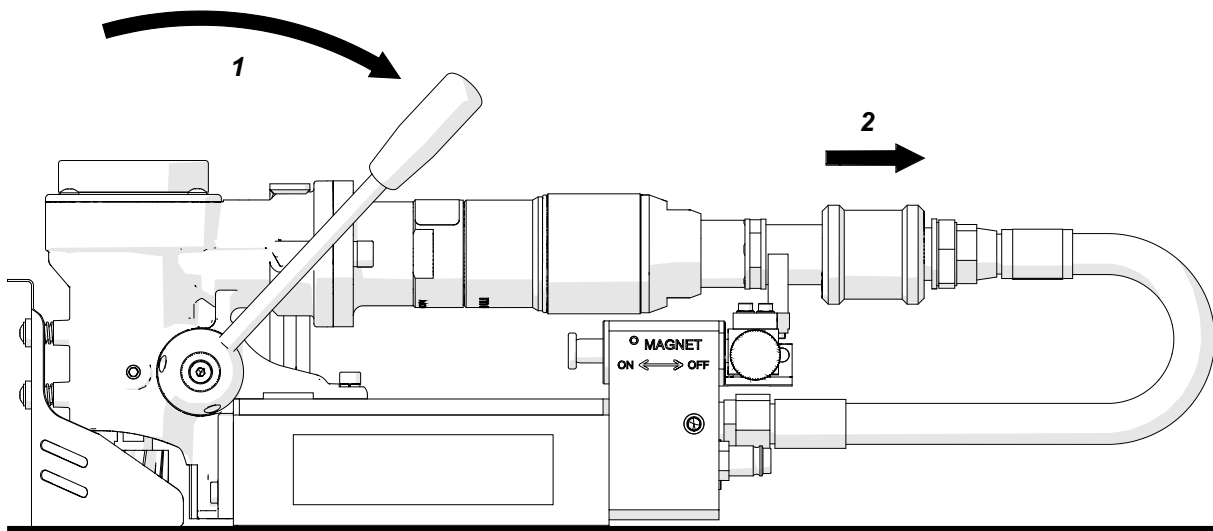
When the annular cutter goes through the workpiece, the slug core is pushed out with a large force.



Drill only through holes. For incomplete through holes do not use the pilot pin.



After the hole is made, retract the cutter from the workpiece (1). Then vigorously set the MOTOR slider to OFF (2) to turn off the engine.



Before you move the machine, set the MAGNET switch to OFF to turn off the base.

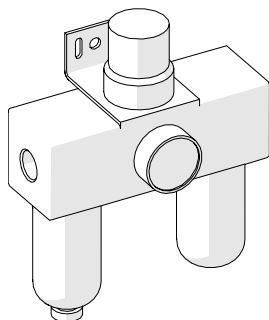
After use, turn off the motor and the base, and then unplug the supply hose. Clean the machine and the cutter, and then remove the machine from the work area.

Press the pilot pin to remove the coolant that remains in the system. Before you put the machine into the box, remove the bottle, and use gloves to remove the cutter from the holder.

5.5. Maintaining the air preparation unit

Maintain the air preparation unit as required. Keep the water trap drained, filter cleaned, and oil reservoir filled so that there is a drop of oil every 2–5 seconds. Use only oil of ignition temperature over 260°C (500°F). If you are not going to use the machine for at least 24 hours, increase the supply of oil and let the motor operate for 2–3 seconds. This will prevent rusting and degrading of the rotor vanes.

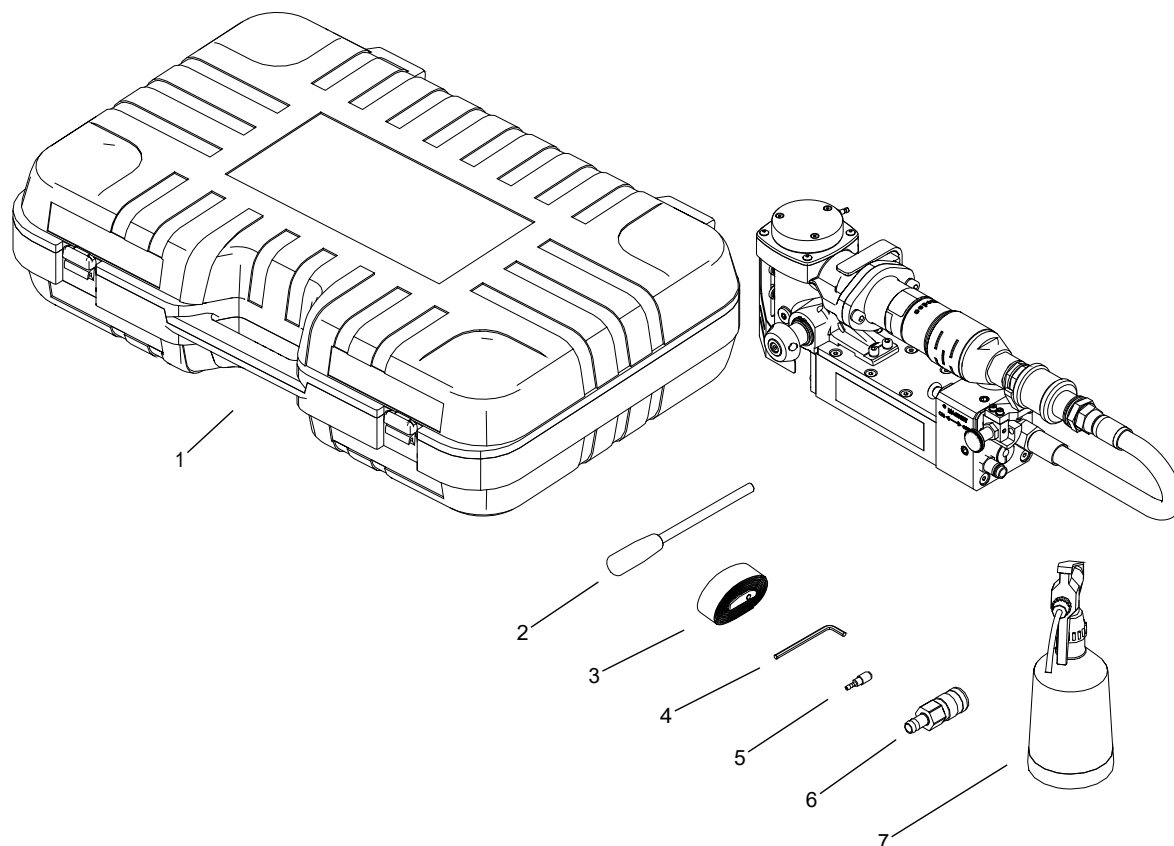
6. ACCESSORIES



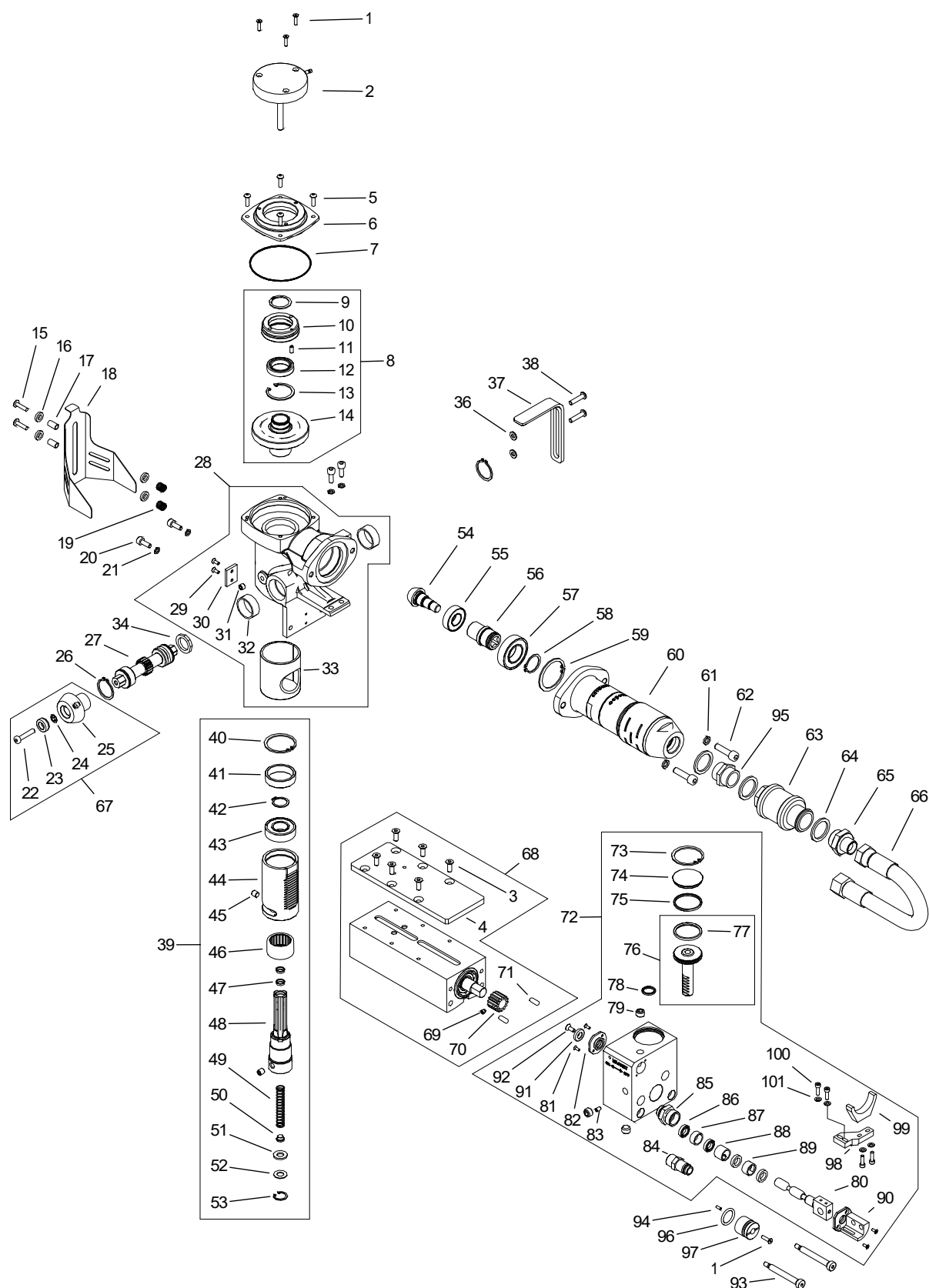
Air preparation unit

Part number (filter, regulator, lubricator):
ZST-000021

7. PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	SKR-000024	PLASTIC BOX	1
2	DZW-0802-06-00-00-0	LEVER ASSY	1
3	PAS-000007	SAFETY STRAP 250	1
4	KLC-000007	HEX WRENCH 4 MM	1
5	SZB-000003	QUICK COUPLING 4 MM	1
6	SZB-000019	QUICK COUPLING 13 MM	1
7	PJM-000007	PRESSURE BOTTLE	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	WKR-000132	HEX SOCKET COUNTERSUNK HEAD SCREW M4x16	4
2	PKR-0520-06-00-00-1	GEAR BOX COVER ASSY	1
3	WKR-000142	HEX SOCKET COUNTERSUNK HEAD SCREW M6x16	6
4	PLY-0802-03-02-00-0	PLATE	1
5	WKR-000098	HEX SOCKET BUTTON HEAD SCREW M5x16	4
6	OBS-0520-05-00-00-2	BEARING NUT HOLDER	1
7	PRS-000224	SEAL RING 80x1.3	1
8	ZSP-0378-04-00-00-0	BEVEL GEAR SET	1
9	PRS-000223	EXTERNAL RETAINING RING 25z	1
10	TLJ-0378-04-02-00-0	BEARING SLEEVE	1
11	WKR-000043	HEX SOCKET SET SCREW WITH FLAT POINT M5x10	1
12	LOZ-000089	BALL BEARING 25x37x7	1
13	PRS-000025	INTERNAL RETAINING RING 37w	1
14	KOL-0378-04-01-00-0	GEAR z=39 ASSY	1
15	WKR-000395	HEX SOCKET ROUND HEAD SCREW WITH FLANGE M5x20	2
16	PDK-000151	NYLON WASHER 8.1x14x3	4
17	TLJ-0399-06-00-00-0	BOTTOM SLEEVE	2
18	OSL-0521-09-01-00-0	GUARD	1
19	SPR-000030	PRESSURE SPRING	2
20	SRB-000106	HEX SOCKET HEAD CAP SCREW M6x16	4
21	PDK-000046	SPRING WASHER 6.1	4
22	SRB-000259	HEX SOCKET LOW HEAD BOLT M6x30	1
23	TLJ-0231-36-02-00-0	HEAD SLEEVE	1
24	ZBZ-000001	PROTECTIVE RING	1
25	GLW-0231-36-01-00-0	HEAD	1
26	PRS-000019	EXTERNAL RETAINING RING 28z	2
27	WLK-0802-08-00-00-0	PINION	1
28	KRP-0802-01-00-00-0	BODY ASSY	1
29	WKR-000130	HEX SOCKET COUNTERSUNK HEAD SCREW M4x10	2
30	PLY-0418-01-02-00-0	MAIN BODY PLATE	1
31	WKR-000031	HEX SOCKET SET SCREW WITH FLAT POINT M8x6	1
32	TLJ-000034	SLIDE BUSHING 28x32x12	2
33	TLJ-0378-01-05-00-0	SLIDE BUSHING 50/55x60	1
34	PRS-0440-11-02-00-0	BREAKING RING 20x28x3.9	1
36	PDK-000021	ROUND WASHER 6.4	2

ITEM	PART NUMBER	DESCRIPTION	Q-TY
37	UCW-0802-05-00-00-0	HANDLE	1
38	WKR-000103	HEX SOCKET BUTTON HEAD SCREW M6x25	2
39	ZSP-0802-07-00-00-0	QUILL ASSY	1
40	PRS-000026	INTERNAL RETAINING RING 42w	1
41	TLJ-0378-03-03-00-0	SPACING SLEEVE	1
42	PRS-000011	EXTERNAL RETAINING RING 20z	1
43	LOZ-000045	BALL BEARING 20x42x12	1
44	TLJ-0802-07-01-00-0	QUILL CARRIER	1
45	WKR-000063	HEX SOCKET SET SCREW WITH FLAT POINT M8x8	2
46	LOZ-000237	NEEDLE BEARING 30x37x20	1
47	PRS-000222	SEAL RING 8/12x3	2
48	WRZ-0378-03-02-00-0	SPINDLE	1
49	SPR-0378-03-04-00-0	SPRING	1
50	WYP-0378-03-05-00-0	PLUNGER	1
51	KZK-0279-02-01-06-2	RUBBER RING 2x19.5/8	1
52	PDK-0279-02-01-06-1	WASHER 1x18.8/8	1
53	PRS-000009	INTERNAL RETAINING RING 19w	1
54	WLK-0378-17-00-00-1	PINION SHAFT	1
55	LOZ-000043	BALL BEARING 17x35x10	1
56	ZBI-0418-04-00-00-0	DRIVER	1
57	LOZ-000048	BALL BEARING 25x47x12	1
58	PRS-000017	EXTERNAL RETAINING RING 25z	1
59	PRS-000030	INTERNAL RETAINING RING 47w	1
60	SLN-000182	AIR MOTOR	1
61	PDK-000051	SPRING WASHER 8.2	2
62	SRB-000155	HEX SOCKET HEAD CAP SCREW M8x30	2
63	ZWR-000149	AIR VALVE 3/4"	1
64	USZ-000017	SEAL 3/4"	3
65	ZLC-0418-19-00-00-0	COUPLING 3/4"- 1/2"	1
66	PWD-0802-04-00-00-0	MOTOR HOSE ASSY	1
67	GLW-0231-36-00-00-1	KNOB HEAD ASSY	1
68	PDS-0802-03-00-00-0	MAGNETIC BASE	1

ITEM	PART NUMBER	DESCRIPTION	Q-TY
69	WKR-000029	HEX SOCKET SET SCREW WITH DOG POINT M6x6	1
70	ZBT-0418-11-00-00-0	TURN ON/OFF GEAR	1
71	KLK-000058	DOWEL PIN 6n6x14	2
72	ZSP-0802-02-00-00-0	VALVE ASSY	1
73	PRS-000026	INTERNAL RETAINING RING 42w	1
74	ZLP-0802-02-03-00-0	CAP	1
75	PRS-000444	SEAL RING 35x2,5	1
76	TLK-0802-02-02-00-0	PISTON ASSY	1
77	PRS-000401	SEAL 32.2x3	1
78	PRS-000233	SEAL RING 15.3x2.4	1
79	WKR-000040	HEX SOCKET SET SCREW WITH FLAT POINT M12x8	3
80	WLK-0802-02-04-00-0	DIVIDING SHAFT	1
81	WKR-000398	HEX SOCKET COUNTERSUNK HEAD SCREW M3x8	4
82	PKR-0418-10-18-00-0	COVER II	1
83	WKR-000026	HEX SOCKET SET SCREW WITH FLAT POINT M5x8	1
84	KRC-000005	MALE PLUG G3/8"	1
85	ZLC-0418-18-00-00-0	COUPLING 3/8"	1
86	PRS-000125	SEAL RING U2 12x18.4	4
87	TLJ-0215-00-29-00-0	SLEEVE I	1
88	TLJ-0418-10-16-00-0	CENTER SLEEVE	1
89	TLJ-0418-10-17-00-0	SLEEVE II	1
90	PKR-0802-02-05-00-0	COVER	1
91	PRS-0215-00-32-00-0	SHAFT RING	1
92	WKR-000134	HEX SOCKET COUNTERSUNK HEAD SCREW M5x12	1
93	SRB-000542	HEX SOCKET HEAD CAP SCREW M6x55	2
94	KLK-000168	DOWEL PIN 3m6x8	1
95	LCZ-000104	COUPLING 3/4" - 3/4"	1
96	PRS-000349	SEAL 19x3	1
97	WSK-0802-10-00-00-0	ROTATION GAUGE	1
98	PDS-0802-02-06-00-0	LOCK BASE	1
99	WDL-0802-02-07-00-0	LOCKING FORK	1
100	SRB-000063	HEX SOCKET HEAD CAP SCREW M4x14	4
101	PDK-000015	ROUND WASHER 4.3	4