SAFETY INSTRUCTIONS
AND OPERATOR'S MANUAL
FOR
DRILLING MACHINE
AIRBEAST 35



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1. INTENDED USE

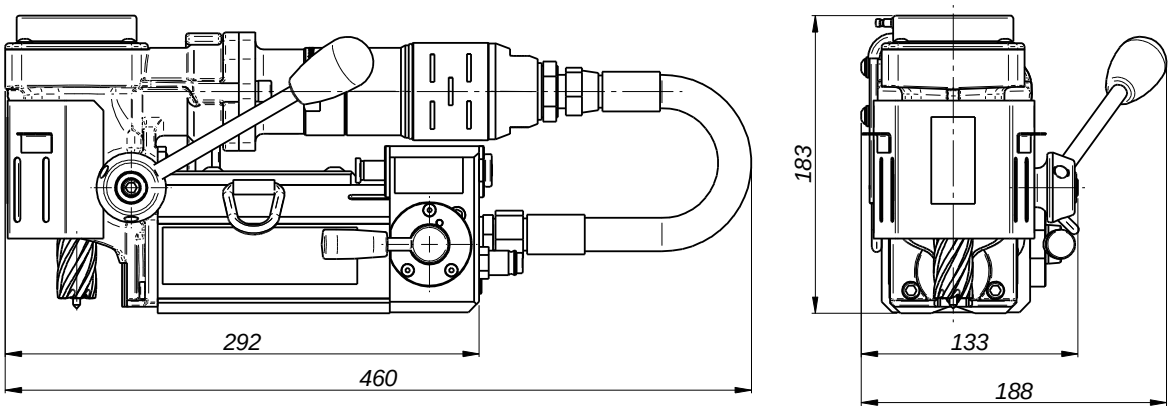
Thanks to its properties and capabilities concerning the dimensions of drilled openings, this drill is perfect for use on any construction site and industrial installations where electric appliances are prohibited for safety reasons, and the dimensions and character of the elements involved make it impossible for them to be transported to another location.

Using the drill **Airforce 35 AD-A** with magnetic base and special milling cutters gives the ability to make holes with diameters up to 35 mm and a depth of 25 mm with a precision only previously found in a workshop.

The magnetic base of the drill ensures the attachment of the machine to steel constructions, with enough force to guarantee the correct functioning of the appliance as well as the user's safety. This method of affixing the machine makes it possible to make holes in many different positions, for example, on vertical pillars or steel ceilings. In these cases, despite the considerable force of the magnet, all drills must be secured using safety belts or chains included with the equipment. This action eliminates potential risk in the case of a pressure drop in the net.

The compressed-air motor used in the Airforce 35 AD-A drill is certified ATEX II2 G/D C IIC T6;T4 and meets the requirements for use in areas with a risk of explosion.

2. TECHNICAL DATA



Operating pressure	6 bar
Air consumption	(1400 l/min) 369.84 gal/min (218.72 yd/min)
Motor power	800 W
Arbor size	3/4” Weldon /19,05 mm/
Hole capacity with annular cutter	35mm (1.38 in)
Maximum drilling depth	25mm (0.98 in)
Stroke	39mm (1.54 in)
Magnet force [25mm, Ra=1,25]	6,500 N
Free speed	500 rpm
Load speed	240 rpm
Magnetic base	80x80x143 mm
Weight	14kg (30.86 lb)
Noise level	up to 70 dB
Working temperature range	-20°C /+ 40°C

3. STANDARD ACCESSORIES

The product includes

- metal box qt. 1
- drill qt. 1
- allen key SW4 qt. 1
- allen key SW3 qt. 1
- cooling system qt. 1
- handle assembly qt. 1
- pilot pin qt. 1
- safety chain qt. 1
- instruction manual qt. 1

4. SAFE WORKING CONDITIONS

The drill should never be used when:

1. The operator has not become familiar with the user's manual and has not been trained in industrial safety.
2. The machine is to be used for purposes that are not appropriate as stated in the user's manual.
3. The drill is not complete or parts used in its repair are not original.
4. The air parameters are not consistent with those given on the rating plate.
5. The operator has not checked the state of the machine before beginning its operation, especially the state of the air line, positions of levers and cutting tools.
6. The machine is not secured with a chain, especially during operation at a height and in inverted positions.
7. Outside persons are found in the immediate vicinity of the work area.

Detailed safety instructions for use of the drill on a magnetic base:

1) Check the state of the air lines and connections before beginning operation of the machine.
2) Make sure the drill is powered by cleaned and oiled air.
3) Do not allow the drill to be submerged in water, and after use, do not leave in places where it could be exposed to corrosion /sea water, precipitation, etc./.
4) Do not attach the machine on surfaces that are corroded, covered with a thick layer of paint, uneven, or whippy.
5) Always use the chain or the safety belt.
6) Always wear safety goggles and ear protectors while drilling.
7) Do not remove shavings formed during drilling by hand.
8) Do not touch the spindle or drilling tools while they are in motion.
9) Drilling tools must be affixed in a stable fashion. If the annular cutter is being used, the fastening screws should be checked for tightness.
10) Do not allow the use of blunt or damaged drilling tools.
11) Do not use cutters without pilot pins or arbors without springs.
12) Only use tools recommended by the manufacturer.
13) Remove all metal shavings from the drill after it has finished running.
14) Always disconnect air during replacing milling cutters and any type of repair or maintenance actions

The adhesive force on thin elements (under 10 mm) rapidly declines and work on such surface thicknesses is not recommended! The machine must be mounted on the material being drilled with the whole surface of its base! The surface that is being mounted on must be sanded using coarse-grained sandpaper before each mounting.



ATTENTION: Never use the flexible hose as a lifting handle!

5. BEFORE STARTING WORK

5.1 Operation of the annular cutter.

The drill's spindle has a socket with a Weldon 19,05 mm shank.

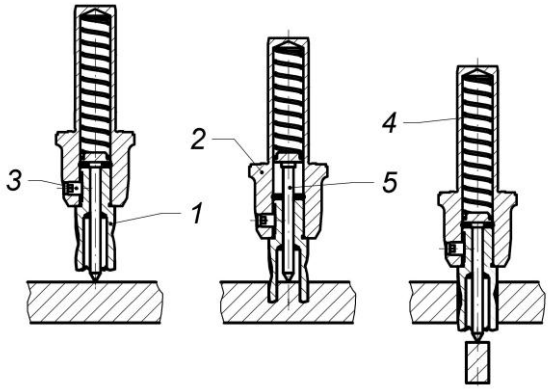


Fig. 2
Operation of the annular cutters

An annular cutter (1) secured by screws (3) is mounted in the spindle (2). Pay attention to correctly screwing in the fastening screws while mounting the milling cutter on the fixture, so that they won't unscrew themselves during the operation of the machine. It is important to situate the milling cutter relative to the fixture's body, so that the fastening planes on the milling fixture are located opposite to the fastening screws (3). Whatever the clamping, both fastening screws (3) must be used.

A pilot pin (5) is located inside the milling cutter. This aligning pin facilitates the correct positioning of the drilling axis. As the milling cutter sinks into the material during the drilling, the pilot pin draws back to the inside of the fixture, stretching the spring (4). The spring causes the core formed during the drilling to be pushed out once the milling cutter cuts through the entire thickness of the material.

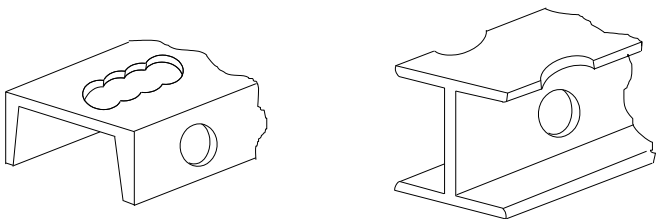


Fig. 3
Holes that are possible to make using the annular cutter

Basically milling cutters are designed to make through holes. The only exception to using the pilot pin is when performing blind holes.

5.2 Operate

The drill is provided to the client in a metal box along with the complete standard equipment. Verify that the parts in the packaging correspond with the specifications found in this user's manual – see point 3. Steel elements coated with a layer of lubricant for the period of storage and transport must be cleaned prior to their usage.

The magnet (**MAGNET**) switch and the motor connection lever (**MOTOR**) are part of the control elements. The location of these elements is shown on fig.4.

In order to start the machine:

- turn the magnet switch to the ON position. Prior to this, make sure that the motor connection lever is in the OFF position.
- turn the motor connection lever to the ON position.
- turning the motor connection lever to the OFF position will cause the motor to stop running. The magnetic base will still be on.
- in order to change the drilling location, the magnet switch should be set to the OFF position after the drive has been stopped.

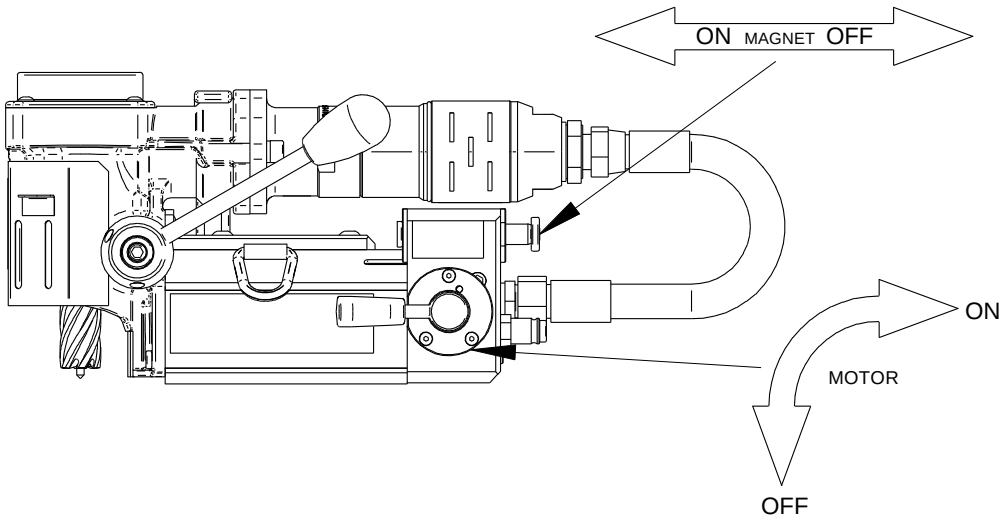


Fig. 4
Drill control elements

D USAGE INSTRUCTIONS –
READ CAREFULLY BEFORE USING THIS APPLIANCE

Before placing the machine on workplace verify that:

- the surface is steel and ferromagnetic (certain types of stainless or acid resistant steel don't conduct magnetic flux);
- the surface has a thickness of at least 10 mm;
- the surface is flat;
- the surface is clean with no rust or a layer of paint that could cause a decrease in the adhesive force of the magnetic base;

5.3 Preparing the machine for drilling

5.3.1 Make sure the motor connection lever is in the OFF position!

5.3.2 Securely and surely fasten the cutter (see point 5). To do this, place the drill on its side and loosen two set screws on the spindle. Place the bit in the spindle socket so that the two flat surfaces on the shank are lined up with the set screws. Fasten and tighten the screws. Make sure the pilot pin can be easily shifted in the trepanning bit.

The AIRFORCE35 AD-A drill is adapted for drilling with annular cutters with a maximum drilling depth of 25 mm and such bits should be employed.

5.3.3 Clean the bottom surface of the magnet and the surface of the element that is to be drilled of shavings and other grime. Place the drill on the work location.

5.3.4 Place the spindle's axis directly above the drilling location (the pilot pin makes this easier when using the cutter).

5.3.5 Safeguard the drill using the safety chain, looping the chain through the safety link and fastening it to the element being worked on or any other dependable place.

5.3.6 Connect air line with the proper parameters (6 bar/90 PSI, 1400 l/min/.

5.4 Drilling.

5.4.1 Turn on magnetic fixation using the MAGNET switch. Make sure the magnet is fixed securely and reliably.

5.4.2 Fill the container of the cooling system with cutting-tool lubricant. Supply coolant to drilling hole. In order to do this, the coolant container's lever must be pressed several time to produce pressure inside container and feed to the spindle must be decreased in order to allow the pilot pin located inside the cutter drill to bend

slightly. Coolant will spread through the system and will start leaking out of the center of the cutter momentarily.

<u>ATTENTION:</u> The cutting tool lubricant is fed under pressure, which makes it possible to use the cooling system when the drill is in a non-horizontal position.

5.4.3 Turn on the motor using the motor connection lever. The motor will not activate if the magnet is not turned on.

5.4.4 Bring the tool closer to the drilling surface by turning the levers and carefully start drilling. Increase the pressure on the lever until the attaining the desired air motor load and keep pressure steady while drilling.

5.4.5 When the cutter completes the drilling of a hole, the core is pushed out of the tool with significant force. Withdraw the tool from the material after completing a hole.

5.4.6 Stop the motor, and turn off the magnetic base.

5.4.7 After the machine ends its operation, it should be disconnect from the air line and cleaned of shavings and the remainder of the coolant.

6. MAINTENANCE AND SERVICING



During every maintenance, repair or inspection the appliance must be disconnected from the air line!

6.1 Regularly grease the pinion and the teeth on the pinole sleeve.

6.2 All component parts should be cleaned and maintained with a thin oil film.

6.3 Use only clean, detergent-free oil with a density compliant with SAE 10 (90SSU) or lower.

6.4 When working with a pneumatic motor, it is necessary to use an air preparation unit.

ATTENTION: The pneumatic motor's guarantee is invalid when damages arise from pollution in the air feed or lack of lubrication.

6.5 Lubrication of the pneumatic motor.

6.5.1 Direct servicing is not necessary when drill usage is normal.

6.5.2 It is necessary to use an air preparation unit in the air feed system.

6.5.3 Inspections and servicing of the air preparation unit should be carried out as needed depending on the air pollution level. Clean the filter, dry out the dehydrator, and maintain an oil level with drips every 2-5 seconds.

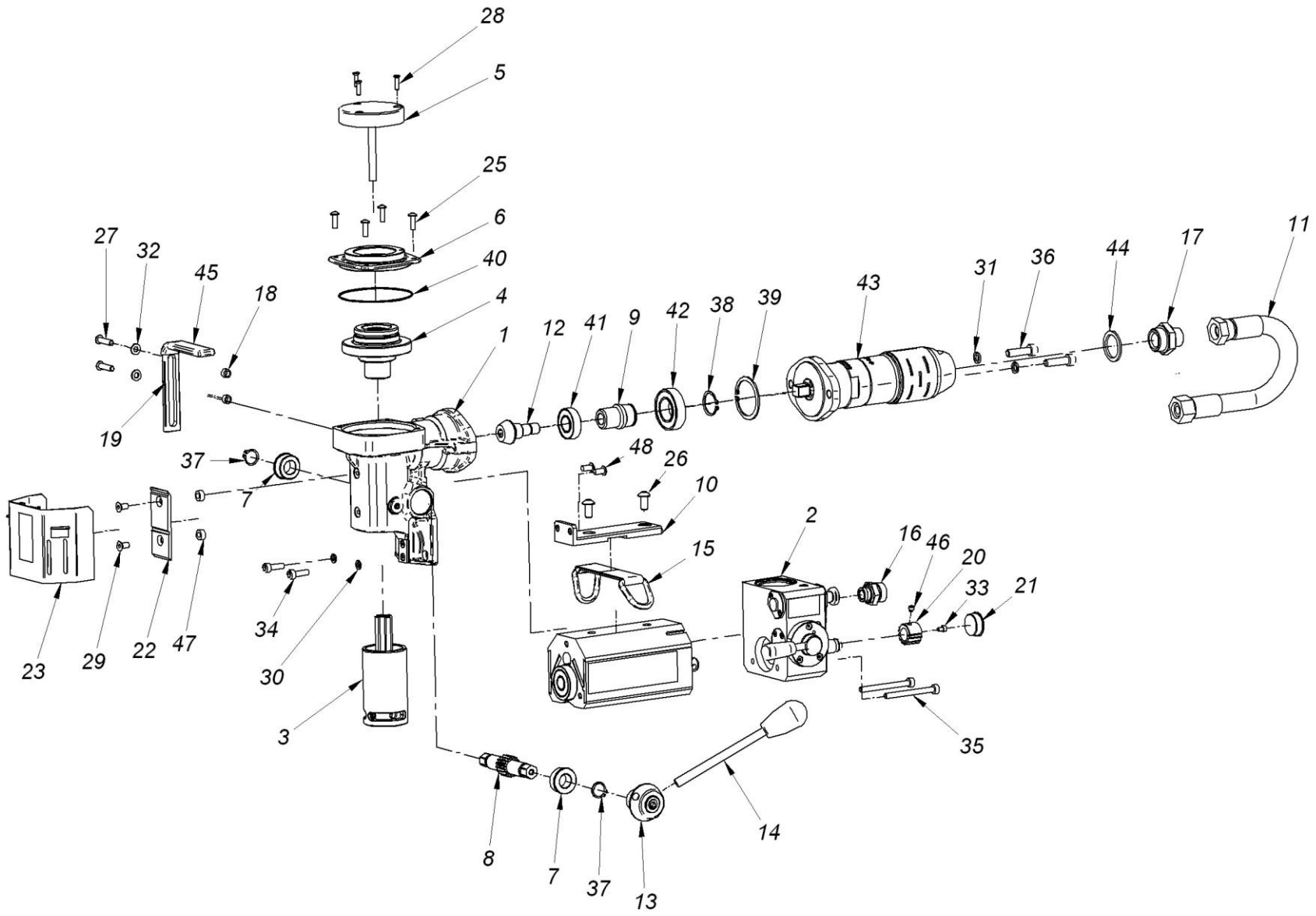
6.5.4 Oil used in the air preparation unit must have an ignition temperature higher than 260°C.

6.6 Any type of mechanical repair of the drill should be done at a service workshop recommended by the vendor. When repairing use only original parts.

ATTENTION: The AIRFORCE35 AD-A drill is adapted for powered by air with working pressure 4 to 6 bar /60 to 90 PSI/. Maintenance of the machine's technical parameters and its general state are strictly dependent on the cleanness and preparation of the air and proper servicing.

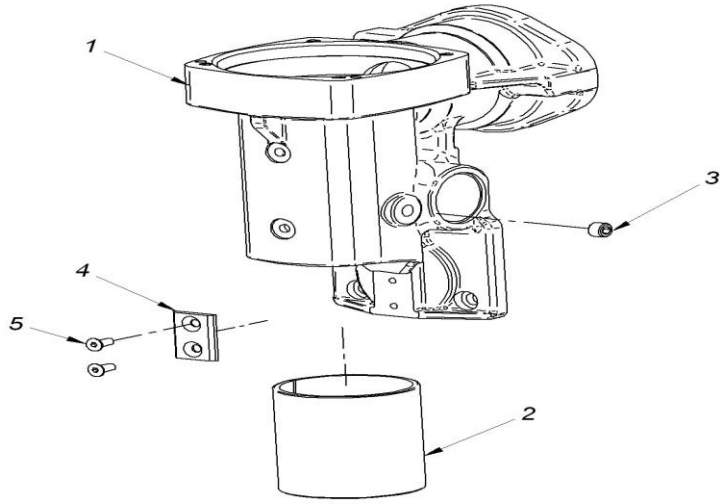
PARTS LIST

Part number: WRT-0418-04-00-00-0		**AIRFORCE-35 DRILLING MACHINE**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
1	KRP-0418-01-00-00-1	MAIN BODY ASSEMBLY	1
2	ZSP-0418-10-00-00-0	VALVE ASSEMBLY	1
3	ZSP-0378-03-00-00-0	QUILL ASSEMBLY	1
4	ZSP-0378-04-00-00-0	BEVEL GEAR T=39 ASSEMBLY	1
5	PKR-0378-05-00-00-0	GEAR BOX COVER ASSEMBLY	1
6	OBS-0378-06-00-00-1	BEARING NUT HOLDER	1
7	TLJ-0418-02-00-00-0	SLEEVE	2
8	WLK-0418-03-00-00-0	PINION	1
9	ZBI-0418-04-00-00-0	DRIVER	1
10	WSP-0418-05-00-00-0	MAIN BODY BRACKET	1
11	PWD-0418-14-00-00-0	MOTOR HOSE ASSY	1
12	WLK-0378-17-00-00-0	GEARSHFT T=11	1
13	GLW-0231-36-00-00-1	HEAD ASSEMBLY	1
14	DZW-0140-04-00-00-0	SPOKE HANDLE INCLUDING 35406 KNOB	1
15	PAS-0271-01-03-00-0	D-RING STRAP	1
16	ZLC-0418-18-00-00-0	STRAIGHT COUPLING 1/2" - 3/8"	1
17	ZLC-0418-19-00-00-0	STRAIGHT COUPLING 3/4" - 3/8"	1
18	TLJ-0418-08-00-00-0	HOLDER SLEEVE	2
19	UCW-0418-09-00-00-0	HOLDER	1
20	ZBT-0418-11-00-00-0	TURN ON/OFF GEAR	1
21	ZLP-0418-12-00-00-0	GEAR PLUG	1
22	PRW-0418-15-00-00-0	GUARD'S SLIDE	1
23	OSL-0418-16-00-00-0	GUARD ASSEMBLY	1
25	WKR-000098	SOCKET BUTTON HEAD CAP SCREW M5	4
26	WKR-000106	SCREW M8x16	2
27	WKR-000101	SOCKET BUTTON HEAD CAP SCREW M6	2
28	WKR-000132	SCR, M4 x 16 FHSCS	3
29	WKR-000141	SCR, M6 x 12 FHSCS	2
30	PDK-000046	SPRING WASHER 6,1	2
31	PDK-000051	SPRING WASHER 8.2	2
32	PDK-000021	ROUND WASHER 6,4	2
33	SRB-000071	HEX. SOCKET BOLT M4x6	1
34	SRB-000114	HEX. SOCKET BOLT M6x20	2
35	SRB-000135	HEX. SOCKET BOLT M6x65	2
36	SRB-000155	HEX SOCKET BOLT-M8X30	2
37	PRS-000238	EXTERNALE RETAINING RING 16z	2
38	PRS-000017	EXTERNALE RETAINING RING 25z	1
39	PRS-000030	INTERNAL RETAINING RING-47W	1
40	PRS-000224	SEAL RING 80x1,3	1
41	LOZ-000043	BEARING BALL 6003	1
42	LOZ-000048	BEARING, BALL 6005 ZZ	1
43	SLN-000089	AIR MOTOR	1
44	USZ-000014	SEAL, 3/4"	1
45	NSD-000009	SWITCH CONNECTOR	1
46	WKR-000396	HEX SET SCREW-M6 x 6	1
47	TLJ-0418-20-00-00-0	GUARD SLEEVE	2
48	ZST-0418-25-01-00-0	LABELS, SET	1
PARTS NOT SHOWN ON DRAWINGS			
1	PJM-000007	COOLING SYSTEM	1
2	SKR-0131-60-00-00-0	METAL BOX	1
3	KLC-000007	HEX. WRENCH 4	1
4	KLC-000008	HEX. WRENCH S=5	1
5	PLT-0378-15-00-00-0	PILOT PIN	1
6	LNC-0129-80-01-00-0	SAFETY CHAIN	1

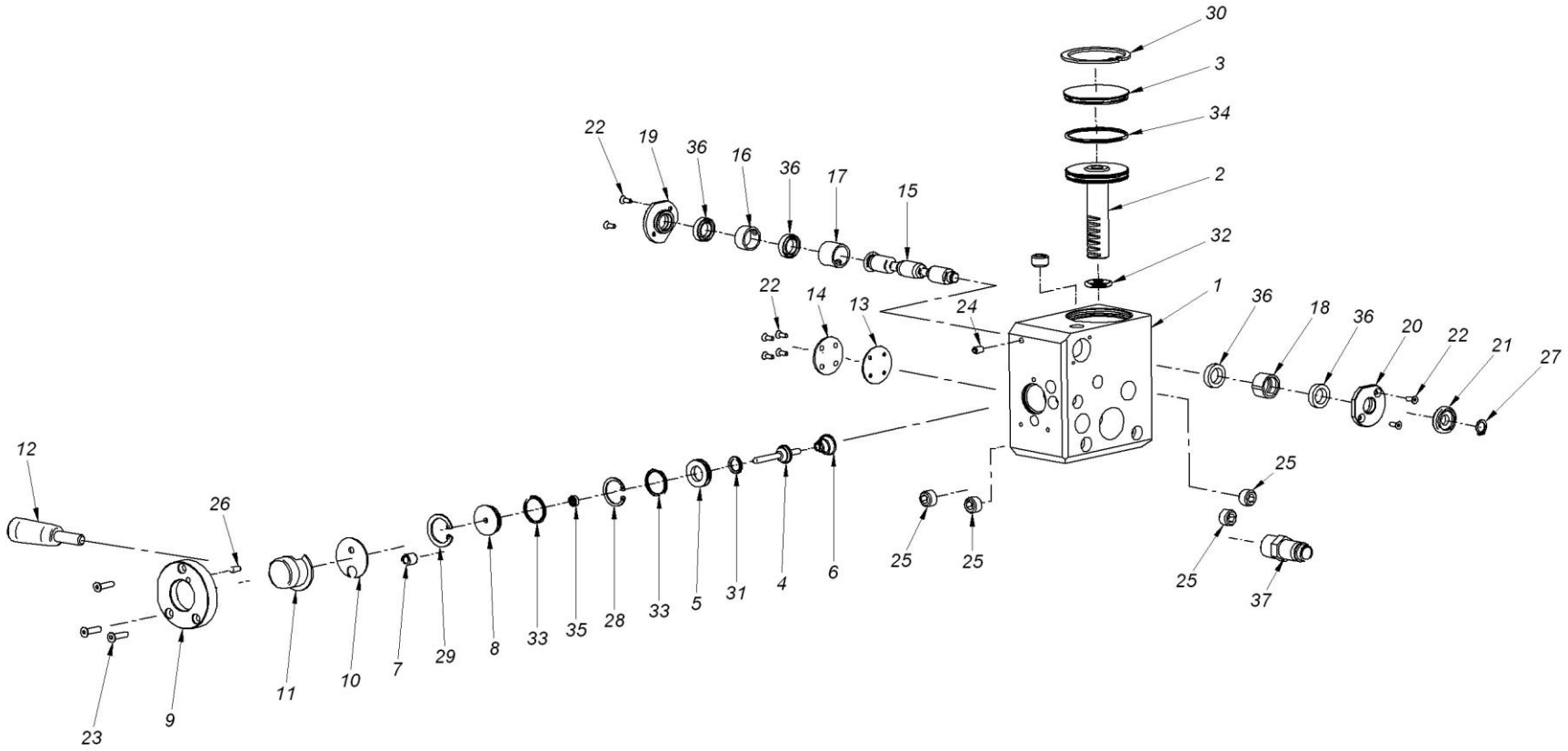

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Part Number:KRP-0378-01-00-00-0	**MAIN BODY ASSEMBLY**

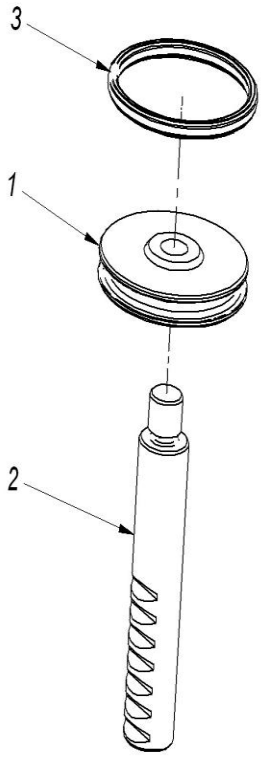
ITEM	PART NUMBER	DESCRIPTION	QTY
1.1	KRP-0418-01-01-00-2	MAIN BODY	1
1.2	TLJ-0378-01-05-00-0	BUSHING PERMAGLIDE	1
1.3	WKR-000031	HEX. INSERT SCREW M8x6	1
1.4	PLY-0418-01-02-00-0	MAIN BODY PLATE	1
1.5	WKR-000130	SCR, M4 x 10 FHSCS	2



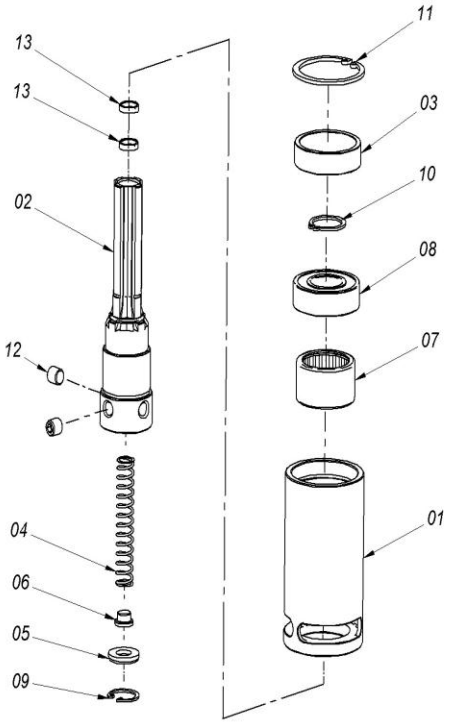
Part Number:ZSP-0418-10-00-00-0		**VALVE ASSEMBLY**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
2.1	KRP-0418-10-01-00-0	VALVE HOUSING	1
2.2	TLK-0418-10-02-00-0	PISTON ASSY	1
2.3	ZLP-0418-10-03-00-0	PISTON PLUG	1
2.4	DCS-0418-10-04-00-0	STOP PLUG	1
2.5	PRS-0418-10-06-00-0	LOCKING RING	1
2.6	SPR-0418-10-07-00-0	SPRING	1
2.7	ZTR-000001	BALL LOCK GN 614-8-NI	1
2.8	PRS-0418-10-09-00-0	EXTERNAL RING	1
2.9	OBS-0418-10-10-00-0	HANDLE HOLDER	1
2.10	PDK-0418-10-11-00-0	WASHER	1
2.11	WLK-0418-10-12-00-0	HANDLE SHAFT	1
2.12	DZW-0418-13-00-00-0	HANDLE ASSY	1
2.13	USZ-0418-10-05-00-0	SEAL COVER	1
2.14	ZLP-0418-10-13-00-0	COVER	1
2.15	WLK-0418-10-15-00-0	DIVIDING SHAFT	1
2.16	TLJ-0215-00-29-00-0	SLEEVE I	1
2.17	TLJ-0418-10-16-00-0	SLEEVE CENTER	2
2.18	TLJ-0418-10-17-00-0	SLEEVE II	1
2.19	PKR-0418-10-14-00-0	COVER I	1
2.20	PKR-0418-10-18-00-0	COVER II	1
2.21	PRS-0418-10-19-00-0	SHAFT RING	1
2.22	WKR-000398	SCR, M3 x 8 FHSCS	8
2.23	WKR-000132	SCR, M4 x 16 FHSCS	3
2.24	WKR-000026	HEX. INSERT SCREW M5x8	1
2.25	WKR-000040	HEX. INSERT SCREW M12x8	4
2.26	KLK-000032	PIN 4x10	1
2.27	PRS-000041	EXTERNAL RETAINING RING 8z	1
2.28	PRS-000012	RETAINING RING INTERNAL 21w	1
2.29	PRS-000016	RETAINING RING INTERNAL 24w	1
2.30	PRS-000030	INTERNAL RETAINING RING-47W	1
2.31	PRS-000240	O-RING 9x2	1
2.32	PRS-000233	O-RING 15,3x2,4	1
2.33	PRS-000241	O-RING 18x2	2
2.34	PRS-000242	O-RING 42x2	1
2.35	PRS-000243	SEAL, 4x8,2x4	1
2.36	PRS-000125	SEAL U2 012x18.4	4
2.37	KRC-000005	MALE PLUG, G3/8" 10mm	1


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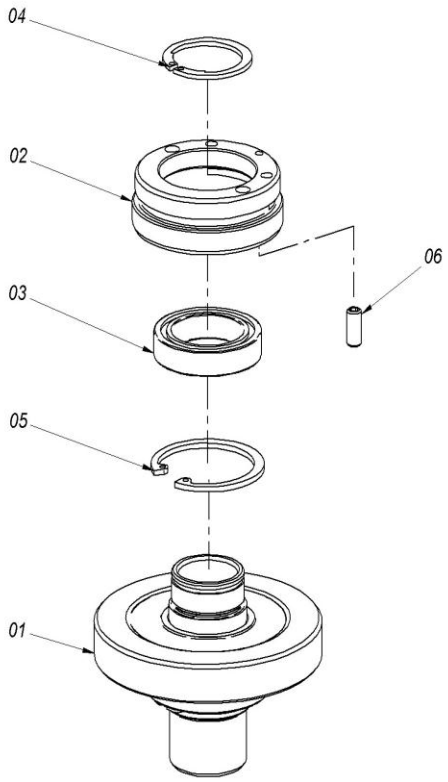
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2.2.1	TLK-0418-10-02-01-0	PISTON	1
2.2.2	LST-0418-10-02-02-0	PISTON GEAR RACK	1
2.2.3	PRS-000194	O-RING 39,2x3	1



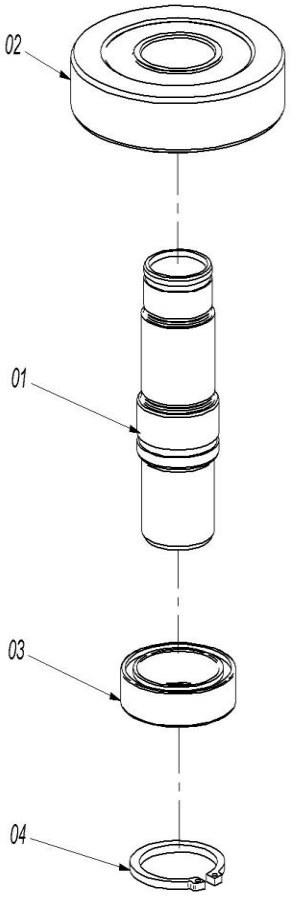
Part Number:ZSP-0378-03-00-00-0		**QUILL ASSEMBLY**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
3.1	TLJ-0378-03-01-00-0	QUILL CARRIER,	1
3.2	WRZ-0378-03-02-00-0	SPINDLE,	1
3.3	TLJ-0378-03-03-00-0	DISTANCE SLEEVE,	1
3.4	SPR-0378-03-04-00-0	SPRING,	1
3.5	USZ-0279-02-01-06-0	SEAL	1
3.6	WYP-0378-03-05-00-0	PLUNGER,	1
3.7	LOZ-000099	NEEDLE BEARING RHNA303720,	1
3.8	LOZ-000045	BEARING BALL 6004 2RS	1
3.9	PRS-000009	INTERNAL RETAINING RING 19W	1
3.10	PRS-000011	EXTERNAL RETAINING RING- 20Z	1
3.11	PRS-000026	INTERNAL RETAINING RING - 42W	1
3.12	WKR-000063	HEX SET SCREW M8x10	2
3.13	PRS-000222	SEAL RING TRK000080,	2



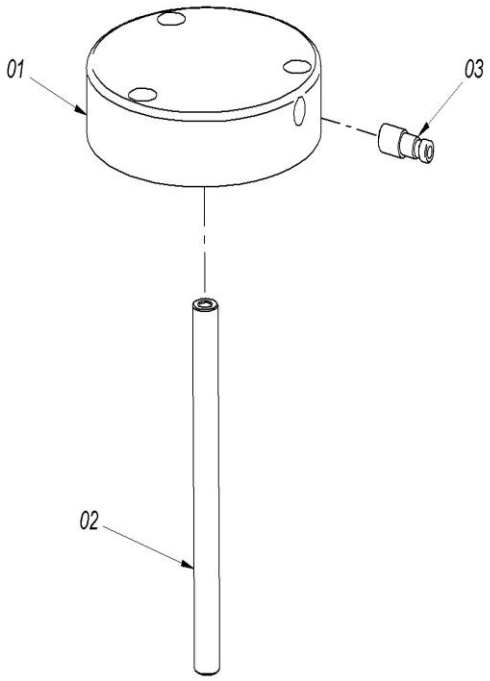
Part Number:ZSP-0378-04-00-00-0		**BEVEL GEAR T=39 ASSEMBLY**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
4.1	KOL-0378-04-01-00-0	BEVEL GEAR T=39 ASSY / INCL. SLEEVE	1
4.2	TLJ-0378-04-02-00-0	BEARING NUT	1
4.3	LOZ-000089	BEARING BALL 61805 2RS	1
4.4	PRS-000223	EXTERNAL RETAINING RING 25Z TYPE A	1
4.5	PRS-000025	INTERNAL RETAINING RING 37W	1
4.6	WKR-000043	HEX SET SCREW M5x10	1



Part Number:KOL-0378-04-01-00-0		**BEVEL GEAR T=39 ASSY / INCL. SLEEVE**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
4.1.1	TLJ-0378-04-01-01-0	SLEEVE	1
4.1.2	KOL-0378-04-01-02-0	BEVEL GEAR T=39	1
4.1.3	LOZ-000100	BEARING BALL 6806 LLU	1
4.1.4	PRS-000021	EXTERNAL RETAINING RING 30z	1



Part Number:PKR-0378-05-00-00-0		**GEAR BOX COVER ASSEMBLY**	
ITEM	**PART NUMBER**	**DESCRIPTION**	**QTY**
5.1	PKR-0378-05-01-00-0	GEAR BOX COVER	1
5.2	RRA-0378-05-02-00-0	JUMPER	1
5.3	KNC-0234-00-10-00-0	COOLING TIP	1



7. DECLARATION OF CONFORMITY

PROMOTECH Sp. z o.o.
str. Elewatorska 23/1
15-620 Białystok, Polska

Declaration of Conformity

We declare, with full liability, that the product:

Pneumatically driven drill AIRFORCE35 AD-A with magnetic base

to which this declaration refers to conforms to the following Directive: 2006/42/WE.



Białystok 08.10.2009

Chairman of the Company Board

8. QUALITY CERTIFICATE

MACHINE INSPECTION CARD

Pneumatically driven drill AIRFORCE35 AD-A with magnetic base

Serial number _____
Spindle lateral whip _____
Perpendicularity of spindle motion relative to base _____
Perpendicularity of spindle axis relative to base _____
Base adhesive strength _____
(surface with a min. thickness of 22 mm and smoothness less than 1.25)

Machine examined by _____

Quality Control:. _____

9. GUARANTEE CERTIFICATE

1. The manufacturer offers the buyer a 6 month guarantee from the date of purchase, but not longer than 12 months from the date of production, on the stand and the power feed installed on the stand during its manufacture and being a machine as a whole with the stand.
2. The buyer voids the guarantee or warranty in the event of:
   - removal of the guarantee seals;
   - unauthorized repairs or modification;
   - usage of the machine for purposes not specified in the user's manual;
   - usage of inappropriate tools or other materials not specified in the user's manual;

   the occurrence of damages caused by reasons other than flaws of the materials or improper installation.
3. The guarantor is obligated to carry out repairs concerning the guarantee within 14 days of the delivery of the machine to the point of service. This time is increased to 21 days if the machine is sent by mail.
   In the event of damage to the power feed, time for repair is increased to 30 days.
4. The guarantee or warranty does not include: safety fuses, cutting tools, the machine's standard equipment, power feed brushes, or damage arising from the normal wear of the machine (for example scratches on the adhesive side of the base).
5. Machines not packed in their original packaging will not be accepted for repairs concerning the guarantee, and after the period, the vendor does not take responsibility for any damage to the machine arising from shipping to and from the service point if the machine is not packed in the original packaging.

Date of Production.. Factory No. : ….....

Quality Control:.

Date of sale:..

Vendor Signature and Stamp