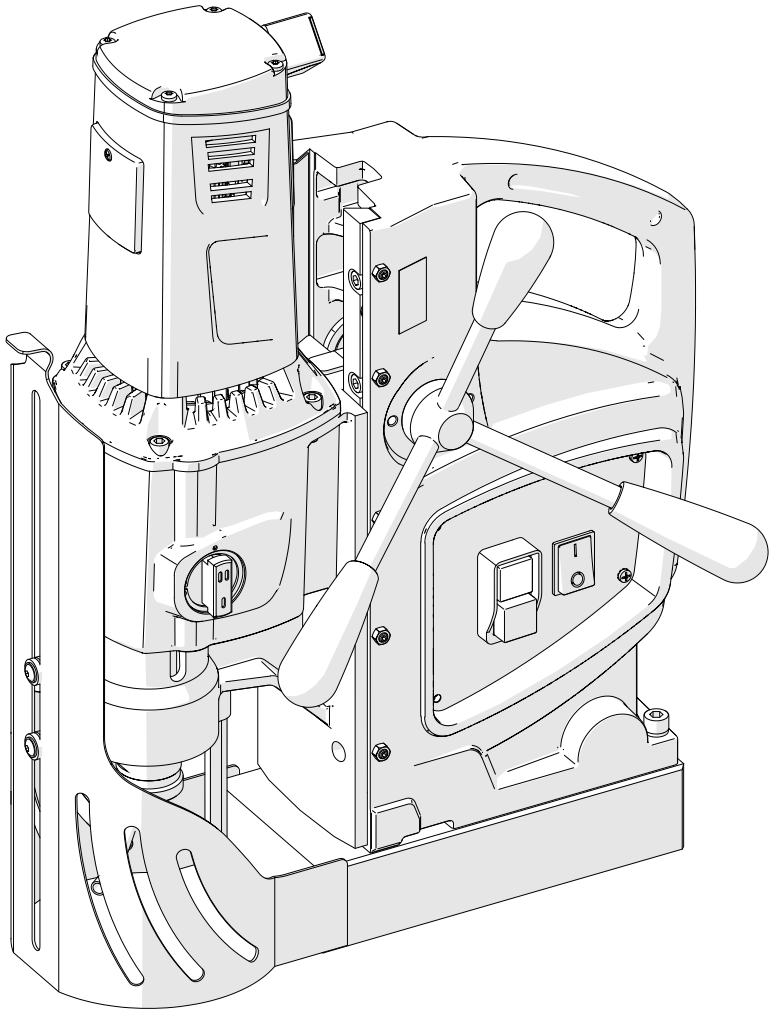
The tools of innovation.

OPERATOR'S MANUAL

DRILLING MACHINE
WITH ELECTROMAGNETIC BASE

D4 PRO



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Contents

1. GENERAL INFORMATION

1.1. Application

The D4 PRO is a drilling machine designed to drill holes of diameters of up to 4″ (10 mm) by using annular cutters. The machine can also drill holes with diameters of up to 1 1/4″ (31.75 mm) by using twist drill bits.

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

When the brushes are worn, the machine turns off automatically.

An optional attachment allows you to drill in pipes.

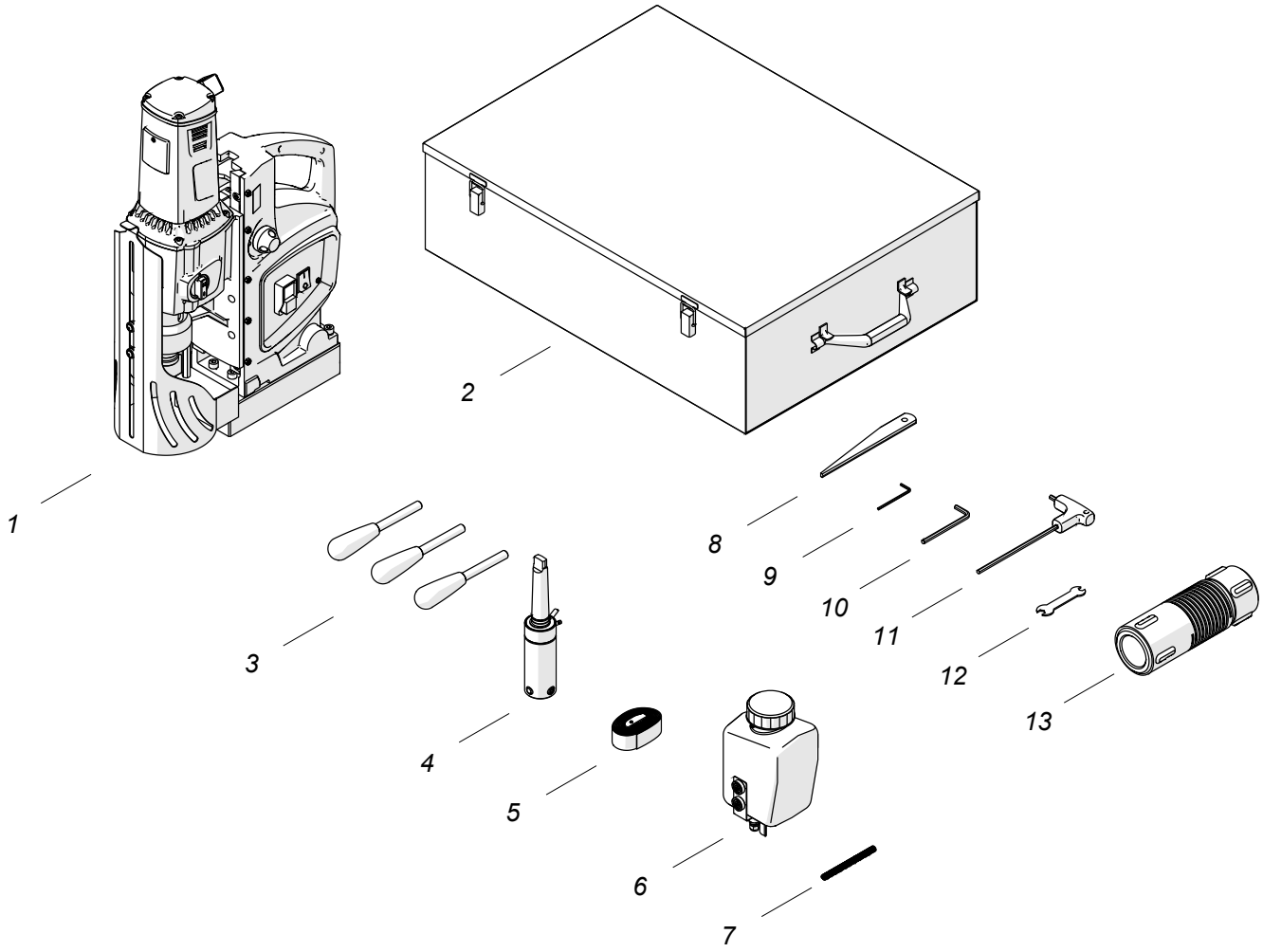
The machine is designed for professional use only.

1.2. Technical data

Voltage	1~ 110-120 V, 50-60 Hz 1~ 220-240 V, 50-60 Hz
Power	1650 W
Spindle shank	MT3
Tool holder	19 mm 3/4″ (19 mm) Weldon
Maximum drilling diameter with an annular cutter	100 mm 4″ (100 mm)*
Maximum drilling diameter with a twist drill bit	1 1/4″ (31.75 mm)
Maximum drilling depth	4″ (100 mm)
Clamping force (surface with the thickness of 25 mm and roughness R_a = 1.25)	18,000 N
Electromagnetic base dimensions	4 21/64″ × 8 21/32″ × 1 61/64″ 110 mm × 220 mm × 49,8 mm
Stroke	8 55/64″ (225 mm)
Rotational speed under load	100 rpm 175 rpm 275 rpm 500 rpm
Minimum workpiece thickness	25/64″ (10 mm)
Protection class	I
Protection level	IP 20
Noise level	More than 70 dB
Required ambient temperature	32-104°F (0-40°C)
Weight	53 lbs (24 kg)

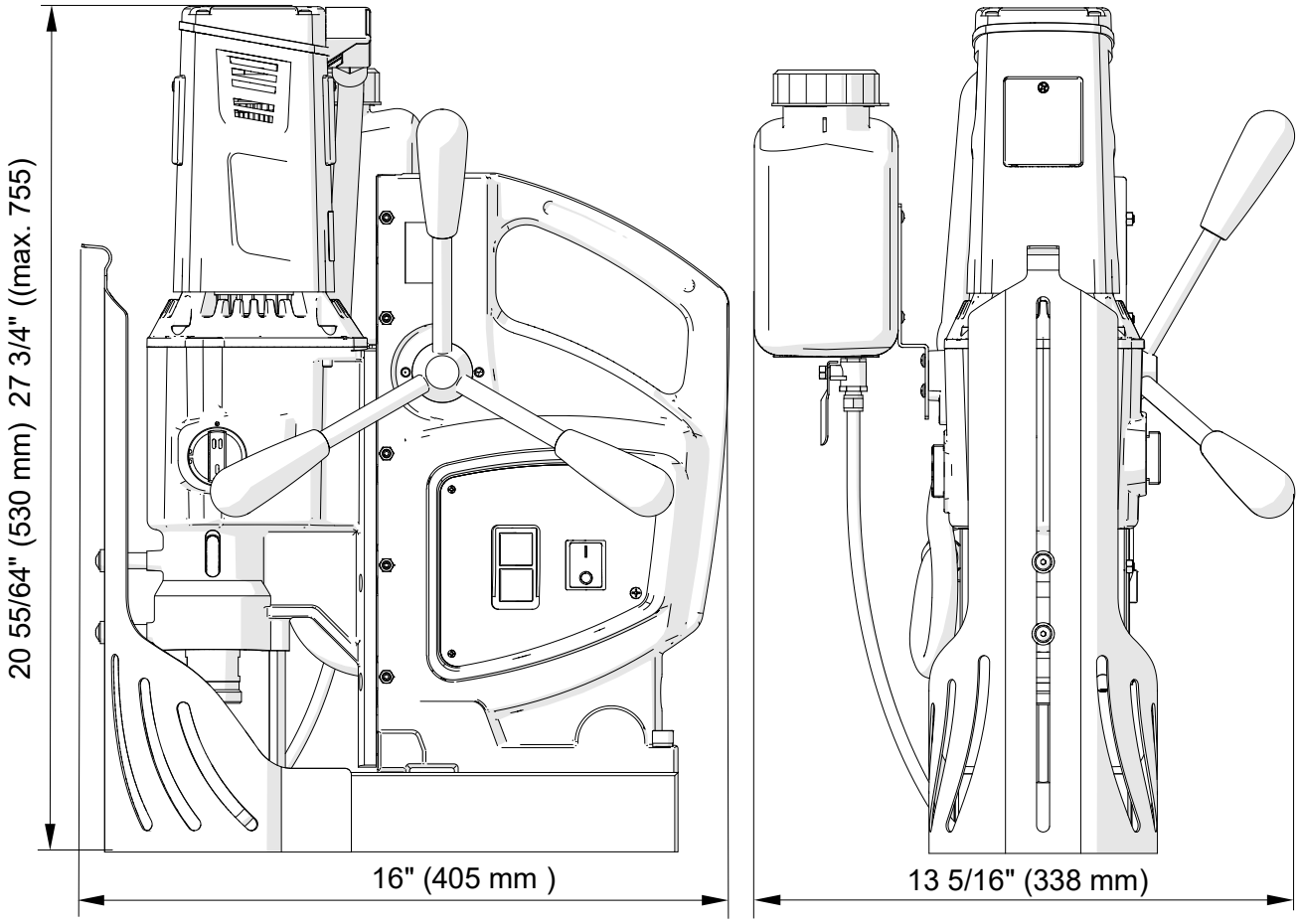
* If more than 2-3/8″ (60 mm), use an MT3 arbor with 32 mm Weldon tool holder (UCW-0563-22-00-00-0). Above 100 mm 4” (100 mm) use only TCT cutter of drilling depth up to 2” (50 mm).

1.3. Equipment included

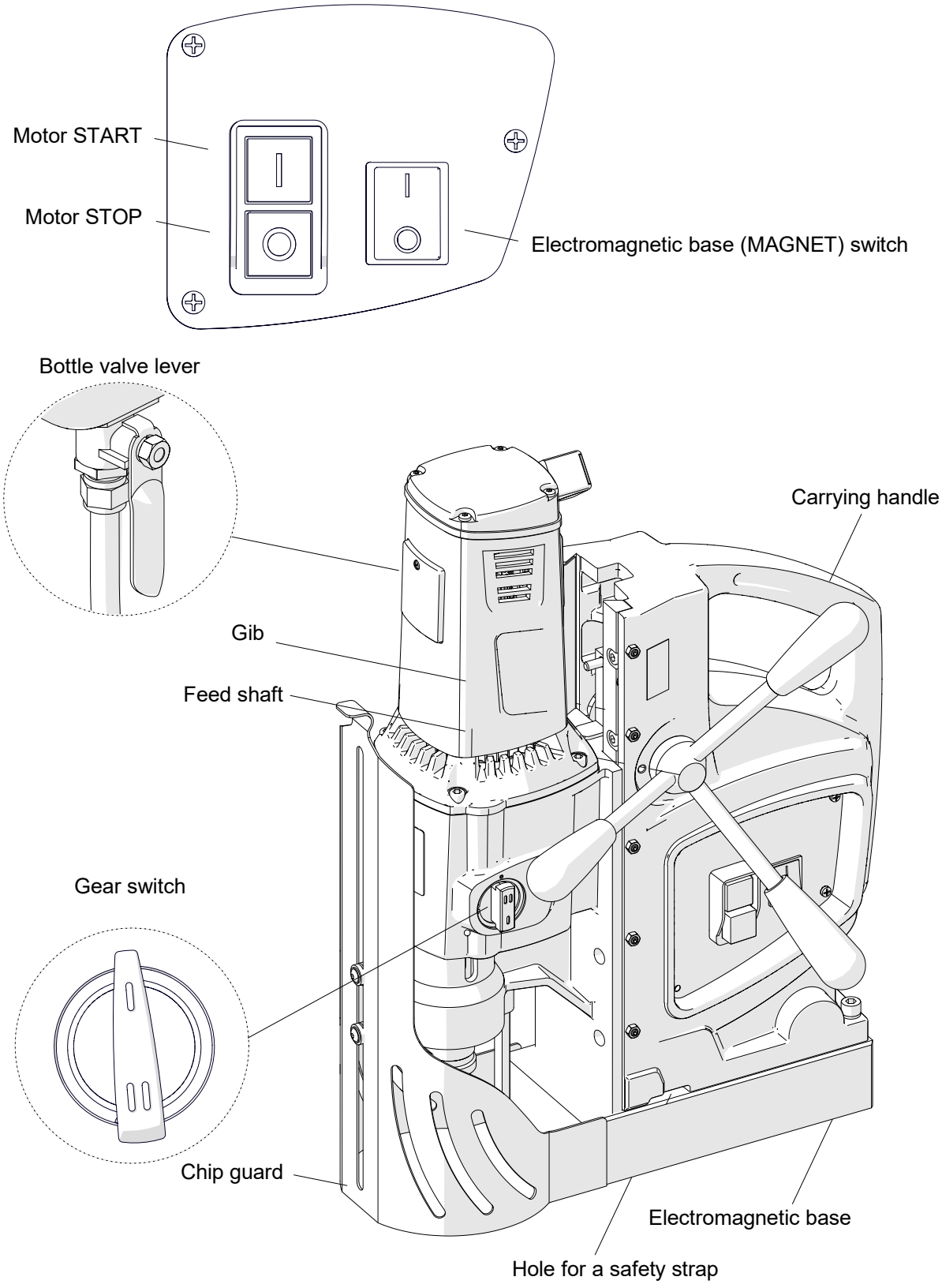


1	Drilling machine	1 unit
2	Metal box	1 unit
3	Handle	3 units
4	MT3 arbor with 19 mm (3/4″) Weldon tool holder	1 unit
5	Safety strap	1 unit
6	Cooling system	1 unit
7	Protective spring for cooling hose	1 unit
8	MT3 drift	1 unit
9	2.5 mm hex wrench	1 unit
10	5 mm hex wrench	1 unit
11	5 mm hex wrench with a handle	1 unit
12	8/10 mm flat wrench	1 unit
13	Tool can	1 unit
-	Operator’s Manual	1 unit

1.4. Dimensions



1.5. Design


Motor START
Motor STOP
Electromagnetic base (MAGNET) switch
Bottle valve lever
Carrying handle
Gib
Feed shaft
Gear switch
Chip guard
Electromagnetic base
Hole for a safety strap

2. SAFETY PRECAUTIONS

1. Before use, read this Operator's Manual and complete a training in occupational safety and health.
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. Connect the machine to a correctly grounded power source. Protect the power source with a 16 A fuse for 230 V or a 32 A fuse for 115 V. If you are going to work on building sites, supply the machine through an isolation transformer with class II protection only.
6. Let only qualified electrician do the connection to the 115 V power source.
7. Set the MAGNET switch to 'O' before you move the machine. Use carrying handle to move the machine.
8. Do not carry the machine by the power cord and do not pull the cord. This can cause damage and electric shock.
9. Keep untrained bystanders away from the machine.
10. Before each use, ensure the correct condition of the machine, power source, power cord, plug, control panel, and tools.
11. 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.
12. Keep the machine dry. Do not expose the machine to rain, snow, or frost.
13. Do not stay below the machine that is put at heights.
14. Keep the work area well lit, clean, and free of obstacles.
15. Make sure that the tool is correctly attached. Remove wrenches from the work area before you connect the machine to the power source.
16. Do not use tools that are dull or damaged.
17. Unplug the power cord before you install and remove tools. Use protective gloves to install and remove tools.
18. Unplug the power cord before you manually turn the spindle.
19. Use annular cutters without the pilot pin only when you drill incomplete through holes. Do not use arbors without a spring.
20. Do not make holes/threads whose diameter or depth differ from those specified in the technical data.

21. Do not use in explosive environments or near flammable materials.
22. Do not use on surfaces that are rough, not flat, not rigid, or have rust, paint, chips, or dirt.
23. Do not use if the gibs are adjusted incorrectly.
24. Do not use if there is no grease on the gibs.
25. Do not use the gear switches if the motor is on.
26. Use the safety strap to attach the machine to a stable structure. Put the strap through the hole in the machine body. In the horizontal position, attach the strap to the carrying handle. Do not put the strap into the buckle from the front.
27. Use eye and ear protection and protective clothing. Do not use loose clothing.
28. We do not recommend work on workpieces thinner than 25/64″ (10 mm). The clamping force depends on the workpiece thickness and is much lower for thin plates.
29. Each time before you put the machine on the workpiece, rub the workpiece with coarse-grained sandpaper. Make sure that the bottom of the base is in full contact with the workpiece.
30. Do not touch chips or moving parts. Do not let anything catch in moving parts.
31. After each use, remove chips and coolant from the machine and the tool. Do not remove chips with bare hands.
32. Unplug the power cord before you do maintenance or install/remove parts.
33. Repair only in a service center appointed by the seller.
34. 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.
35. Do not leave the machine when it operates.
36. If you are not going to use the machine, remove the tool from the holder. Then, remove the machine from the work area and keep it in a safe and dry place.
37. If you are not going to use the machine for an extended period, put anti-corrosion material on the steel parts.

3. SYMBOLS

Before using the machine, read the description of the following symbols (Tab. 1).

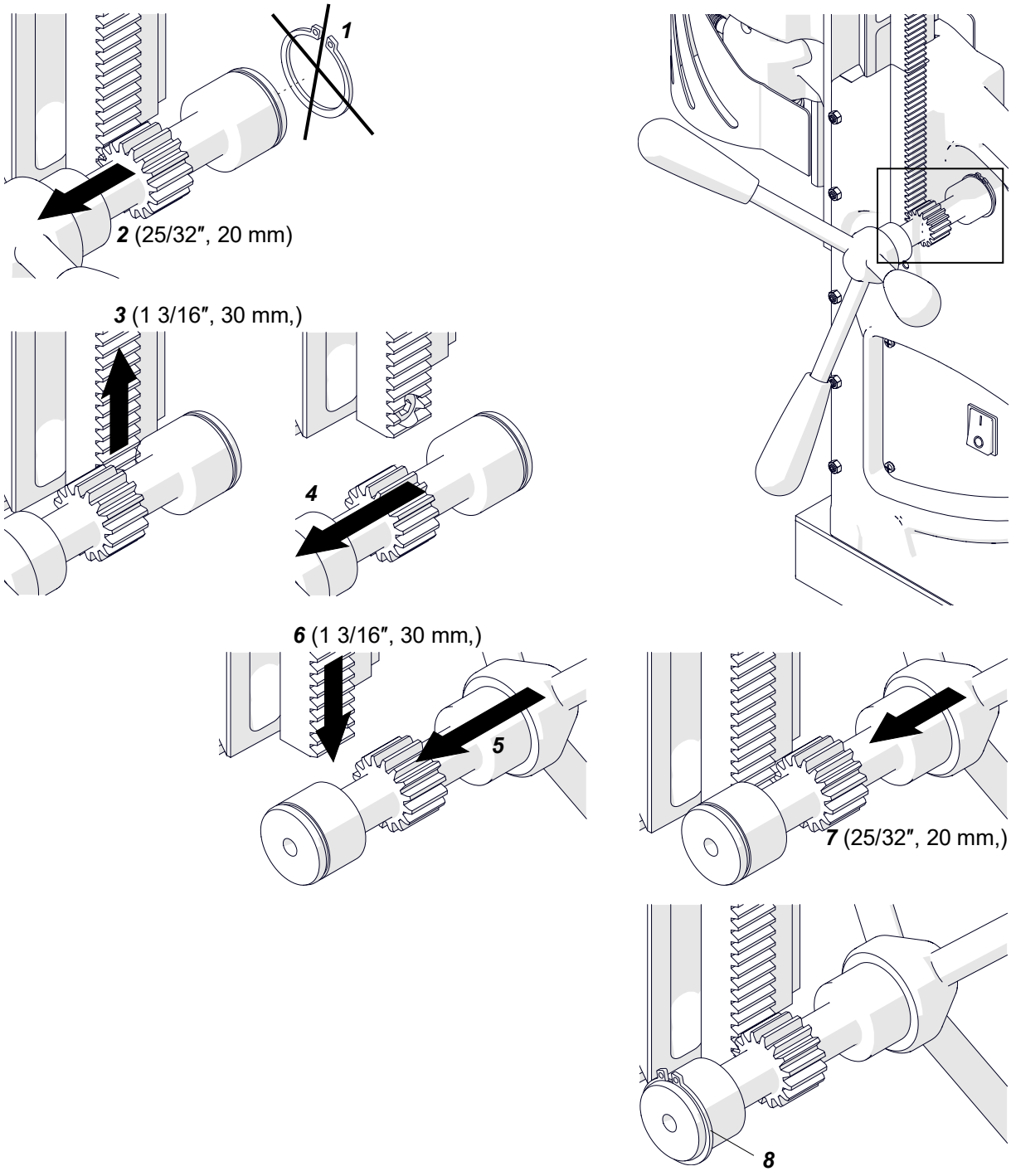
	Wear eye protection
	Wear ear protection
	Refer to instruction manual
	Warning against electric voltage

Tab. 1. Description of symbols

4. STARTUP AND OPERATION

4.1. Installing the handles

Attach the handles to the feed shaft. You can install the shaft so that the handles are on the opposite side of the machine. To do this, lift the motor to the maximum and continue in the sequence that follows.

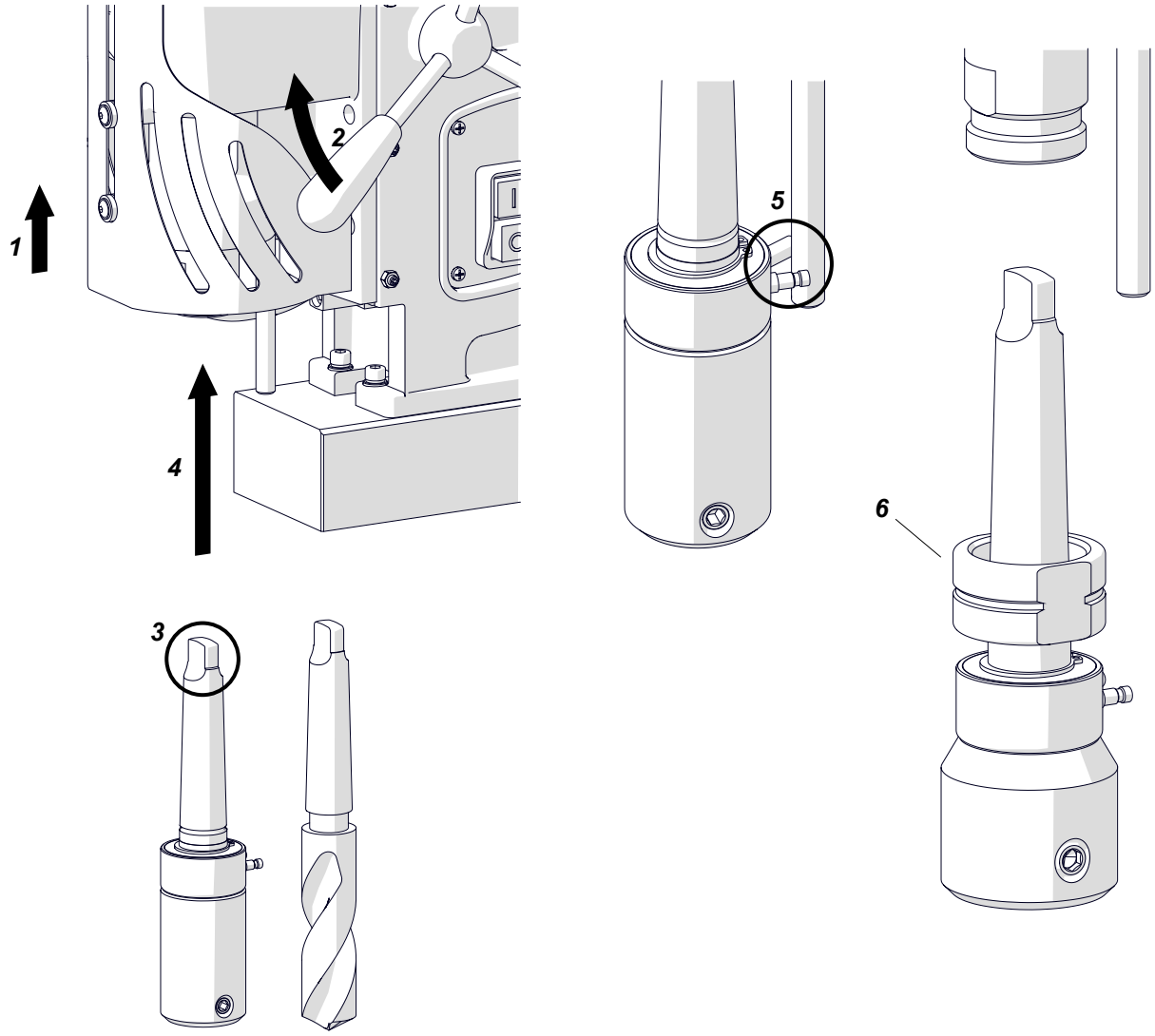


4.2. Installing and removing the arbor or MT3 twist drill bit

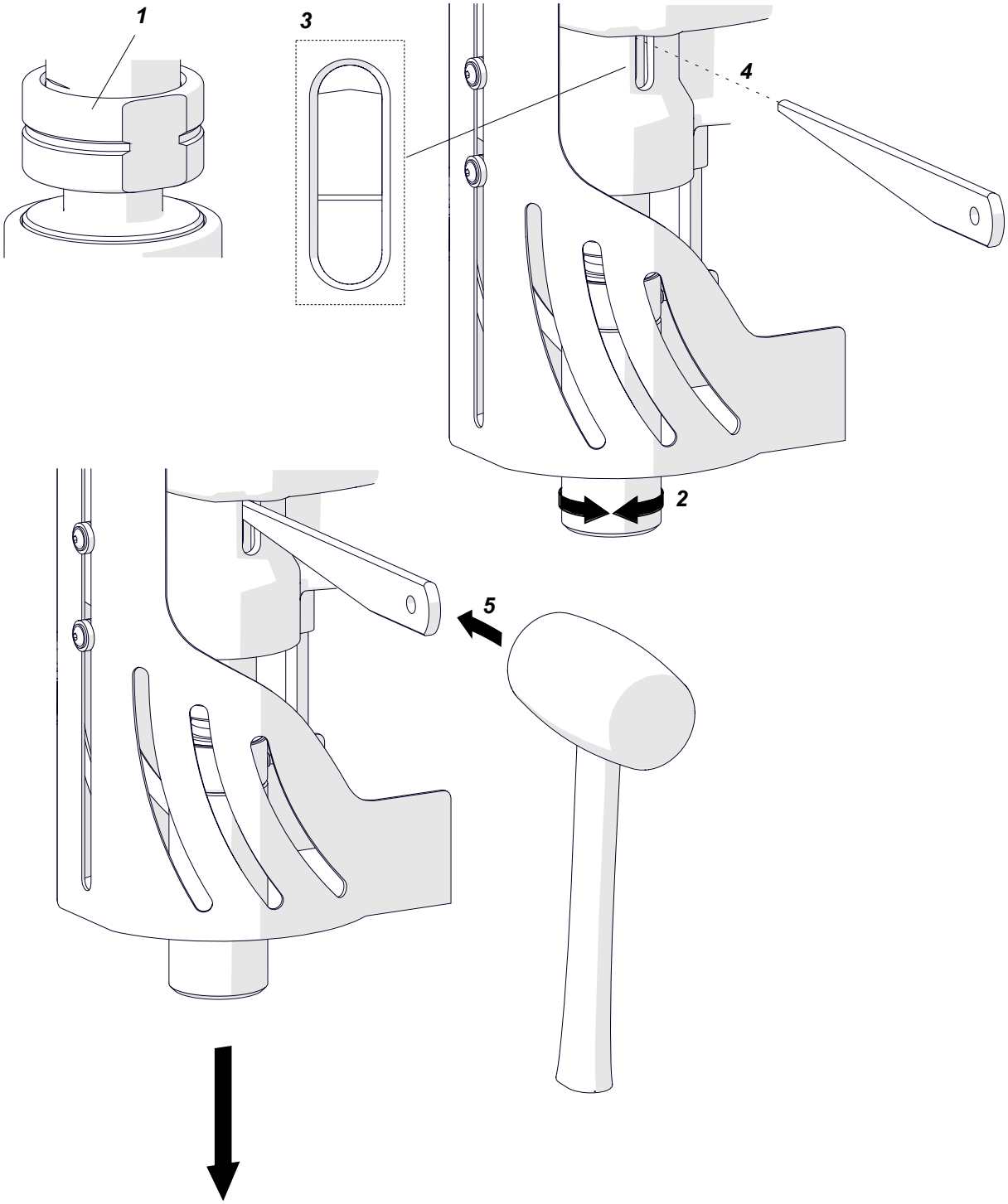
Unplug the power cord and lift the chip guard (*1*). Turn the handles to the right (*2*) to lift the motor. Use petroleum ether to clean the spindle and the arbor (drill bit). Then, clean them with a dry cloth.

Chips or grease in the spindle or on the Morse taper (*3*) can damage the spindle.

Use gloves and a quick movement to put the arbor (drill bit) into the spindle (*4*). Make sure that the stop rod is between the pin and the fitting (*5*). If the arbor has a nut (*6*), tighten the nut to the spindle.



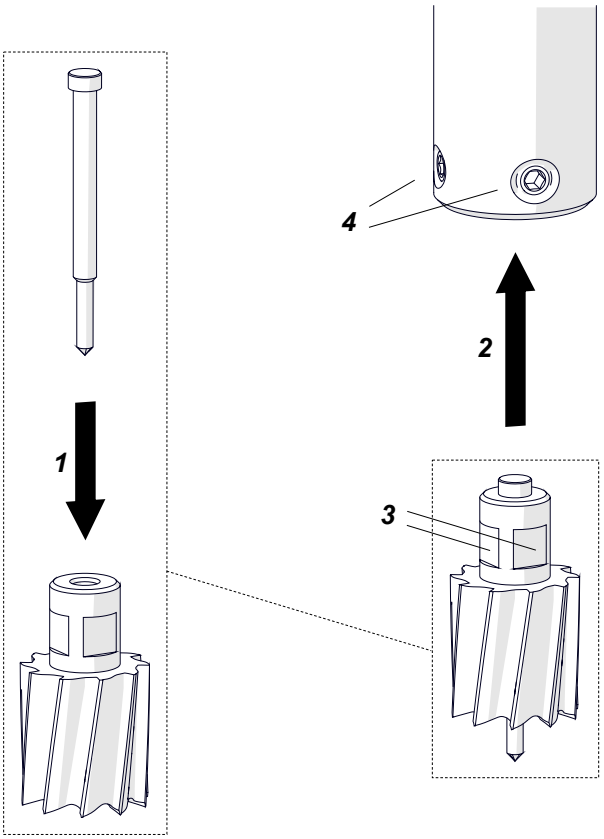
To remove the arbor (drill bit), continue as follows. If the arbor (tap chuck) has a nut (*1*), remove the nut. Next, lift the motor and turn the spindle (*2*) to align the holes in the spindle and gearbox (*3*). Put the drift into the hole (*4*). Next, hold the carrying handle with one hand and hit the drift with a mallet (*5*).



4.3. Installing and removing the annular cutter

Install the arbor as described before. Use gloves to put the correct pilot pin into the annular cutter (*1*). Use a dry cloth to clean the arbor and the cutter. Put the cutter into the arbor (*2*) to align the flat surfaces (*3*) with the screws (*4*). Use the 5 mm hex wrench to tighten the screws.

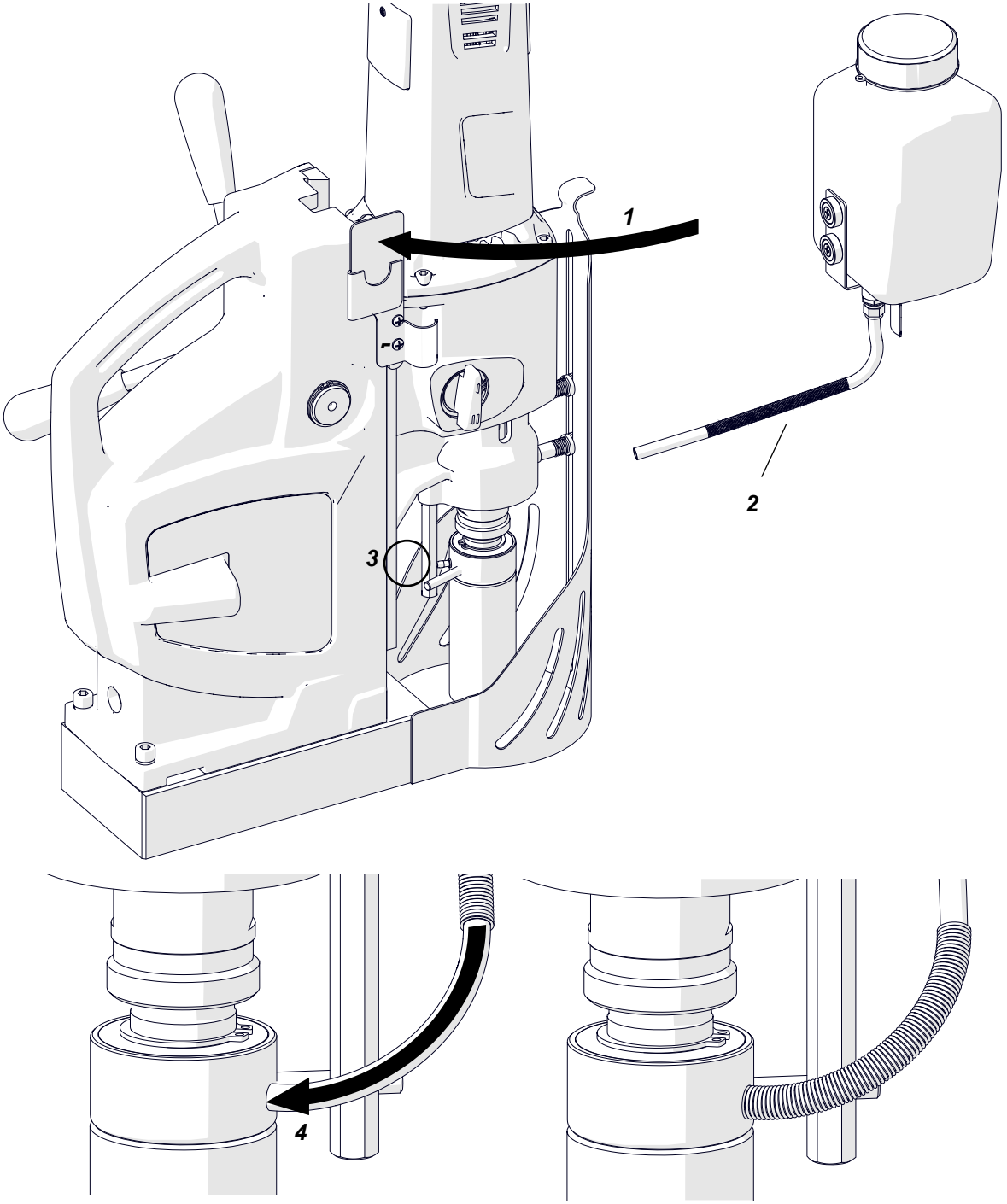
To remove the cutter, loosen the screws (*4*) with the 5 mm hex wrench.



4.4. Installing and removing the cooling system

Attach the bottle to the bracket (*1*). Put the hose with the spring (*2*) between the stop rod and the body (*3*). Then, attach the hose to the fitting and move the spring to the arbor (*4*, *5*).

To remove the bottle, continue in reverse sequence.



4.5. Monitoring system of the clamping force

The drilling machine has a system that monitors the clamping force of the electro-magnetic base. The force will be lower if there is rust, paint, chips, or dirt. The force will be lower also if the surface is thin, rough, not flat, not rigid, the voltage is lower than required, or the bottom of the base is worn.

If the clamping force is too low, the system will not allow the machine to operate. Then, after you release the green MOTOR button, the motor stops. This happens on a surface thinner than 13/64″ (5 mm). The clamping force is then only about 25% of the force that you can get on a flat plate that is 1″ (25 mm) thick. Then, to drill on thin plates, press and hold the green MOTOR button.

4.6. Preparing

Before use, clean steel parts, including the MT3 socket, from anti-corrosion material used to preserve the machine for storage and transport.

Attach the handles to the feed shaft. You can install the shaft so that the handles are on the opposite side of the machine.

Apply a thin layer of grease to the gibs.

Select the annular cutter, drill bit, or screw tap that matches the required hole diameter. When you drill holes with diameters of 25/32-1 1/4″ (20-31.75 mm) by using twist drill bits, select two bits: with 70% and 100% of the required diameter.

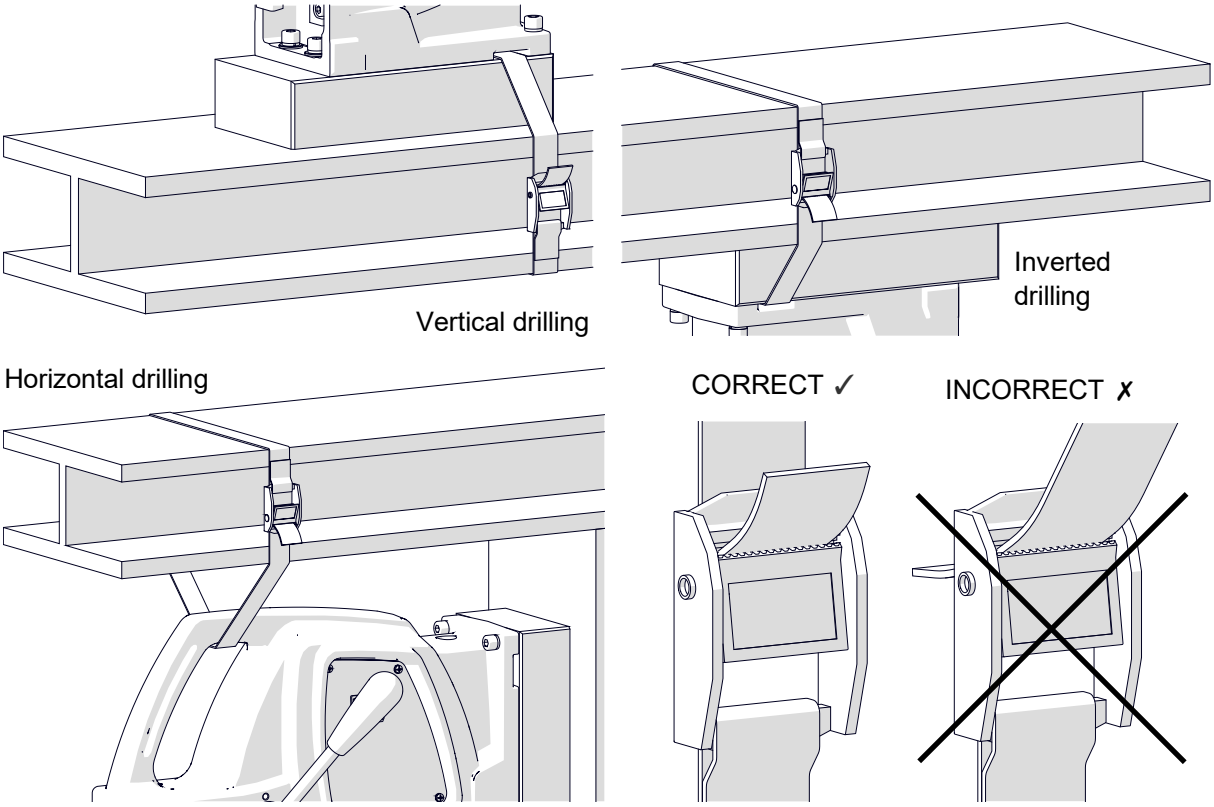
Use a dry cloth to clean the spindle, arbor (drill bit), and cutter. Then, as described before, install the arbor (and then the cutter), drill bit with the smaller diameter, or tap chuck (and then the screw tap with adapter).

Put the machine on a flat ferromagnetic workpiece of the thickness of at least 15/64″ (6 mm). Make sure that there is no rust, paint, chips, or dirt. They decrease the clamping force. The force will be lower also if the surface is thin, rough, not flat, not rigid, the voltage is lower than required, or the bottom of the base is worn.

Connect the machine to the power source. To connect the machine to a 115 V power source, use the locking connector. Refer to the instructions included with the connector.

Set the MAGNET switch to ‘I’ to turn on the clamping. Some types of steel (non-ferromagnetic) do not conduct magnetic flux so the machine cannot clamp onto them.

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. In the horizontal position, attach the strap to the carrying handle. Make sure that the strap is tight and not twisted. 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.



Turn the handles to the left to put the tool above the workpiece.

For vertical drilling with an annular cutter, install the cooling system and fill it with coolant. Do not use only water as the coolant. But you can mix water and drilling oil. Then, make sure that the cooling system works correctly. To do this, lightly loosen the bottle cap and use the lever to open the valve. Then, turn the handles to the left to apply a light pressure on the pilot pin. The coolant should fill the system and start flowing from the cutter.

The cooling system works by gravity. Thus, in the horizontal position, turn the bottle. In the inverted position, use coolants under pressure or in the form of spray or paste.

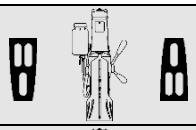
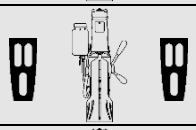
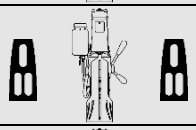
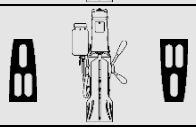
4.7. Drilling

Set the speed based on the table that follows.

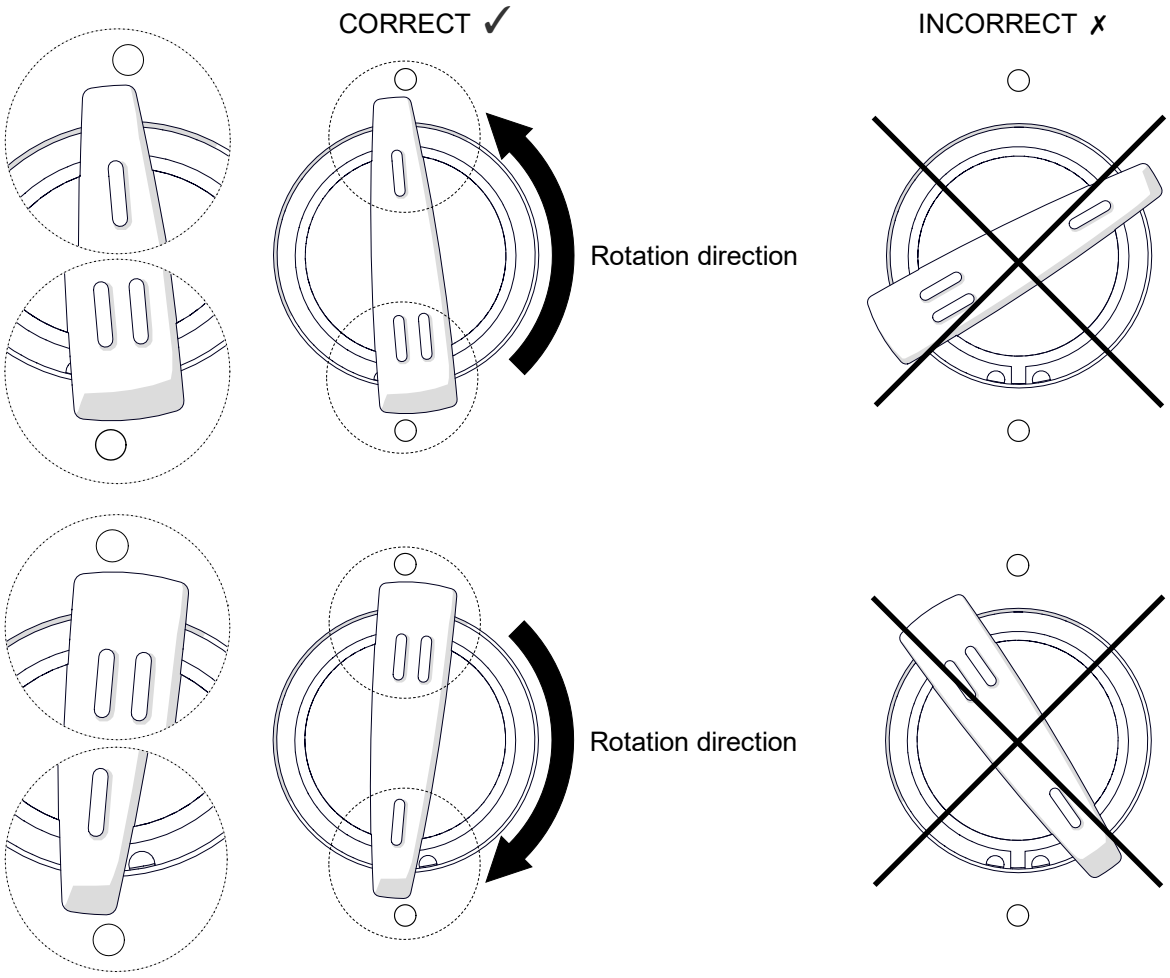
Tool	Maximum hole diameter		Rotational speed* [rpm]
	[mm]	[in]	
HSS annular cutter	80	3 5/32	100 (gear I)
	52	2 3/64	175 (gear II)
	33	1 19/64	275 (gear III)
	18	45/64	500 (gear IV)
TCT annular cutter	100	4	100 (gear I)
	63	2 31/64	175 (gear II)
	40	1 37/64	275 (gear III)
	22	55/64	500 (gear IV)
Twist drill bit	32	1 17/64	100 (gear I)
	26	1 1/32	175 (gear II)
	18	45/64	275 (gear III)
	15	19/32	500 (gear IV)

* For a sharp tool and mild steel with a strength R_m < 500 N/mm^2 (70,000 psi), such as St0 (S185), St3S (S235JR), or St4W (S275JO).

Change gears according to the table below:

Rotational speed [rpm]	Gear switches setting
500	
275	
175	
100	

Turn the gear switch as shown in the figure until you feel resistance. Incorrect setting can damage the gearbox.

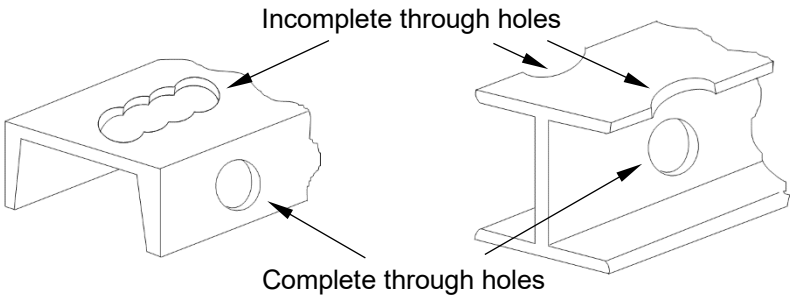


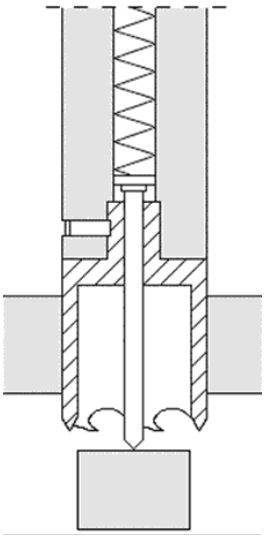
Steel of strength $R_m \geq 500$ N/mm^2 (70,000 psi), such as St5 (E295), 18G2A (S355N), or 45 (C45), requires lower speeds. If the speed is too high or too low for the workpiece strength and the type/diameter of the tool, the tool will wear faster or be unable to drill the hole.

Press the green  button to start the motor. Turn the handles to the left to put the tool into the workpiece.

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

When you use an annular cutter, drill only through holes. For incomplete through holes do not use the pilot pin.





Keep the machine in the same position until the hole is made.

When you use a drill bit, drill holes of diameters of 45/64-1″ (18-25 mm) in two steps. First, use the drill bit with the 70% diameter of the required diameter to drill a hole. Then, keep the machine in the same position, and drill again with the drill bit that matches the required diameter.

If you are going to drill holes deeper than 2″ (50 mm), remove the tool from the workpiece as often as possible. This allows chips to be removed from the hole. If the grooves of the tool are clogged, turn off the motor and use a brush to clean them.

After you get to the depth of 1 37/64″ (40 mm), remove the tool from the workpiece as often as possible. Then, manually apply the coolant from the bottle into the drilling area.

After the hole is made, remove the tool from the workpiece, and press the red button  to turn off the motor. Before you move the machine, set the MAGNET switch to 'O' to turn off the base.

When the brushes are worn, the machine turns off.
In this case, replace the brushes.

After the work is finished and the motor turned off, set the gear switch to the opposite position. Then, turn on the motor and let it operate for a while with no load to improve lubrication. Next, turn off the motor and the base, and then unplug the power cord. Clean the machine and the tool, and then remove the machine from the work area.

Tighten the bottle cap, close the valve, and then press the pilot pin to remove the coolant that remains in the cooling system. Before you put the machine into the box, remove the bottle, and use gloves to remove the tool from the holder.

4.8. Adjusting the gibs

Every 50 work hours, make sure that the gibs are correctly adjusted. To do this, move the motor up and down and make sure that it moves smoothly.

To adjust the gibs, apply a thin layer of grease on them. Then, use the 8 mm wrench, the 2.5 mm hex wrench, and the 5 mm hex wrench to loosen the nuts and screws (*1*). Put the motor so that the slider is in the center of the gibs (*2*). Then, lightly tighten the screws (*3*) so that they touch the gib. Move the motor up and down and adjust the screws (*3*) so that the travel is smooth. Next, tighten the screws (*4*) and then tighten the nuts (*5*).

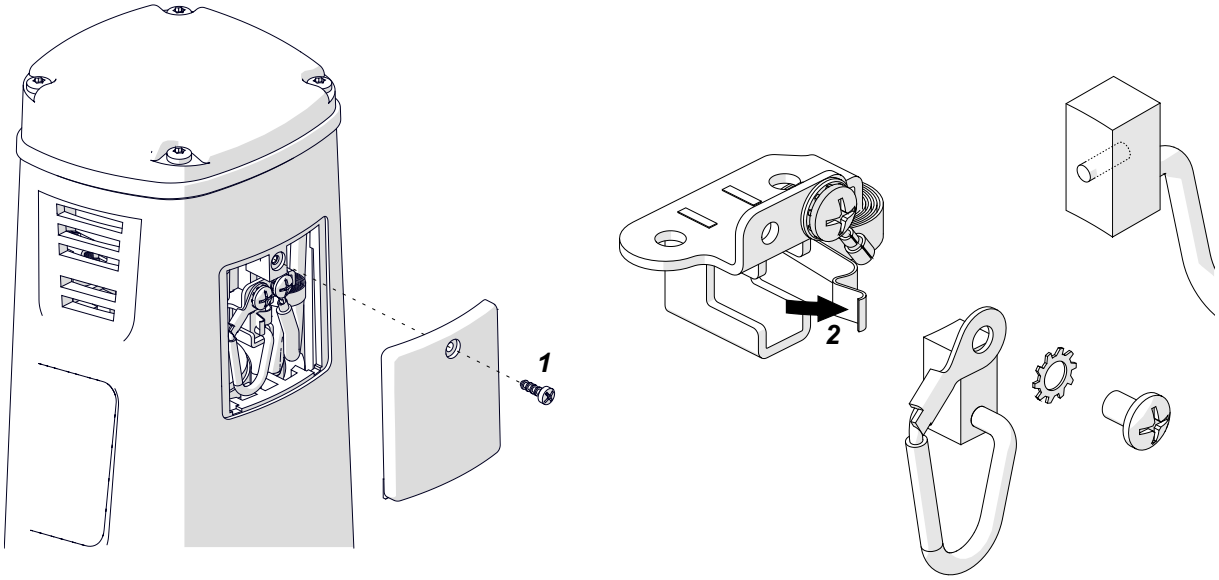
4.9. Replacing the motor brushes

When the brushes are worn, the machine turns off.

To replace the brushes, unplug the power cord and remove the cover (*1*). Lift the spring (*2*) and remove the brush.

Install in reverse sequence. Then, let the motor operate with no load for 20 minutes.

Use only genuine brushes.

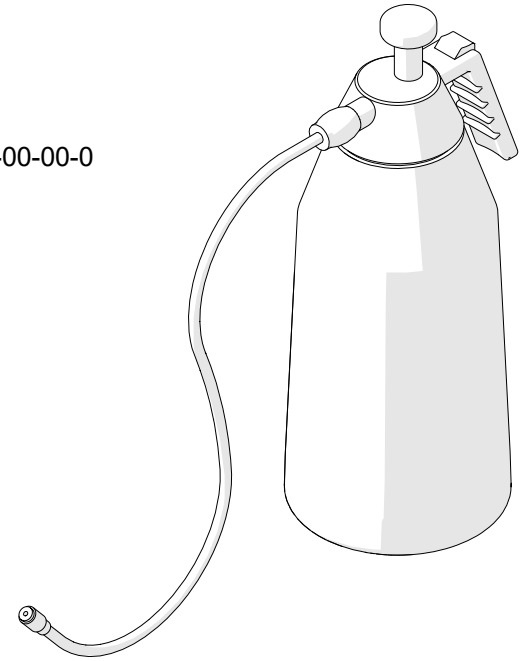


5. ACCESSORIES

5.1. Pressure cooling system

Capacity of 2 liters.

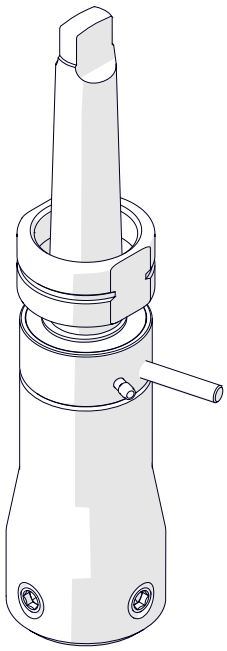
Part number:
UKL-0440-16-00-00-0



5.2. Arbor MT3 × 32 mm Weldon

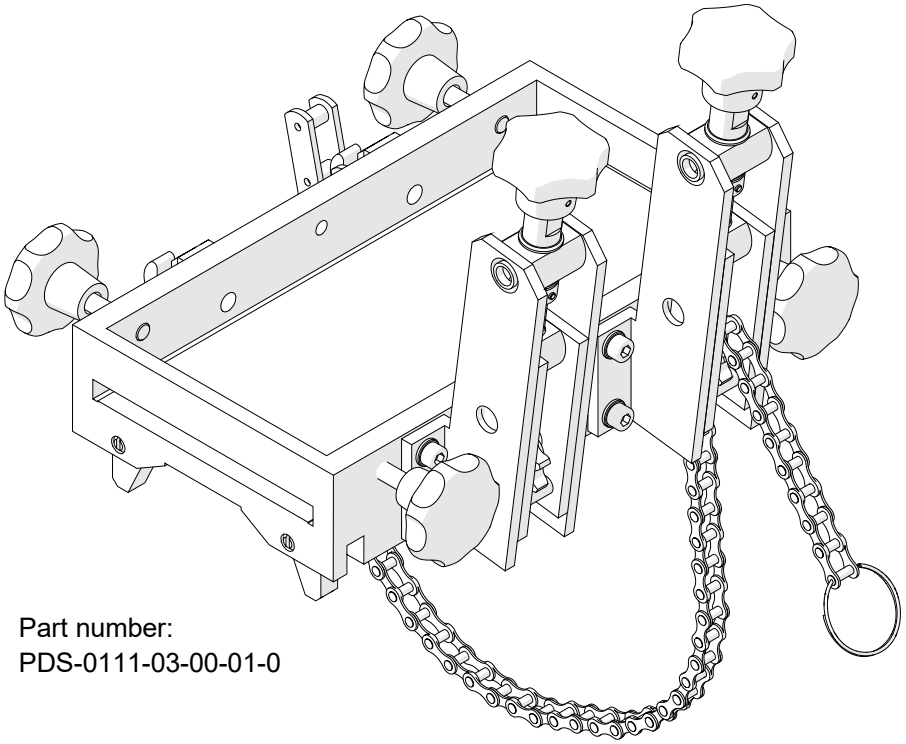
Required when drilling diameter is 60-100 mm 2 23/64-3 15/64” (60-100 mm) up to depth of 4”.

Part number:
UCW-0563-22-00-00-0



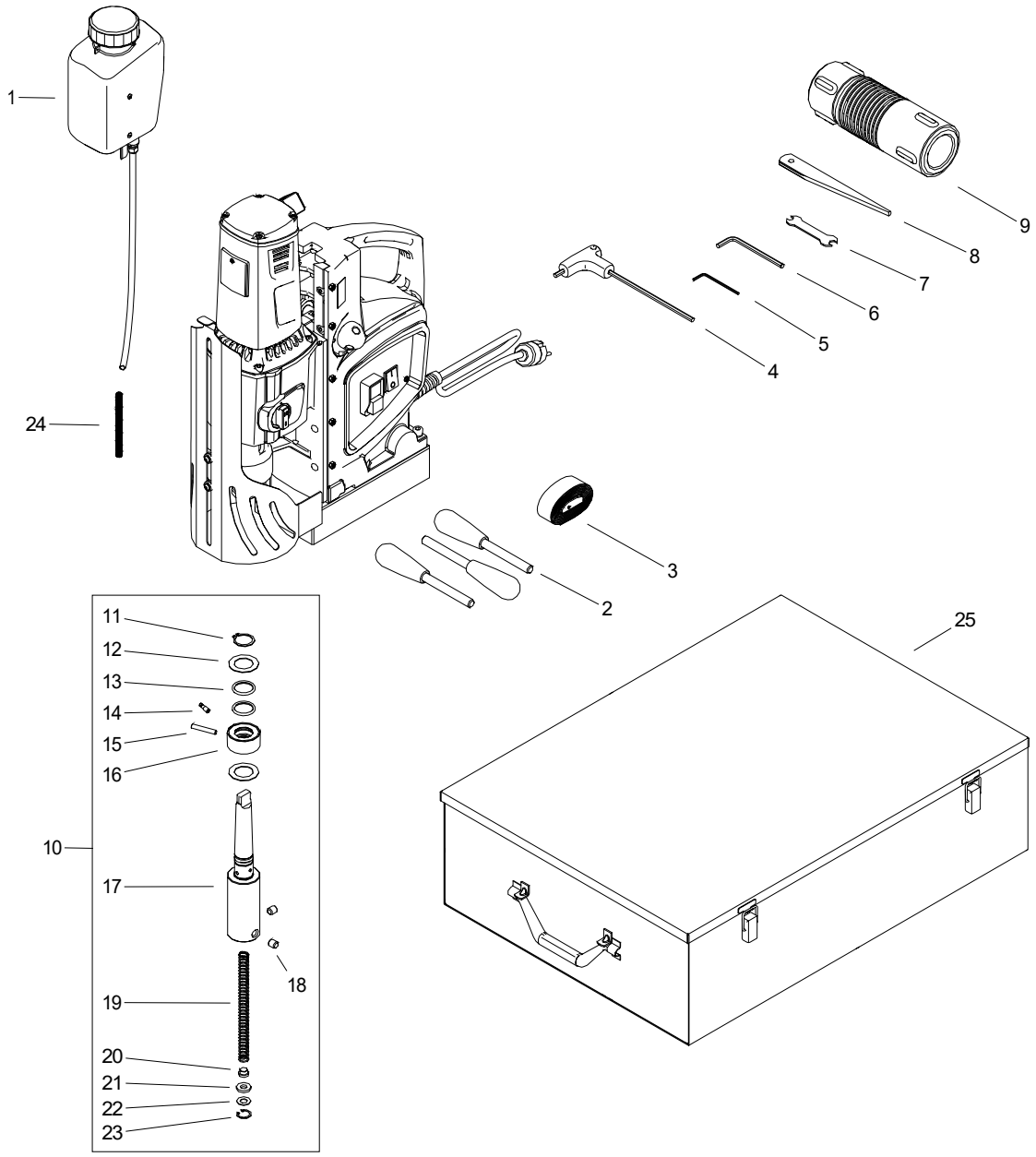
5.3. Pipe attachment DMP 501

For pipes of diameters of 6-20″ (150-500 mm).



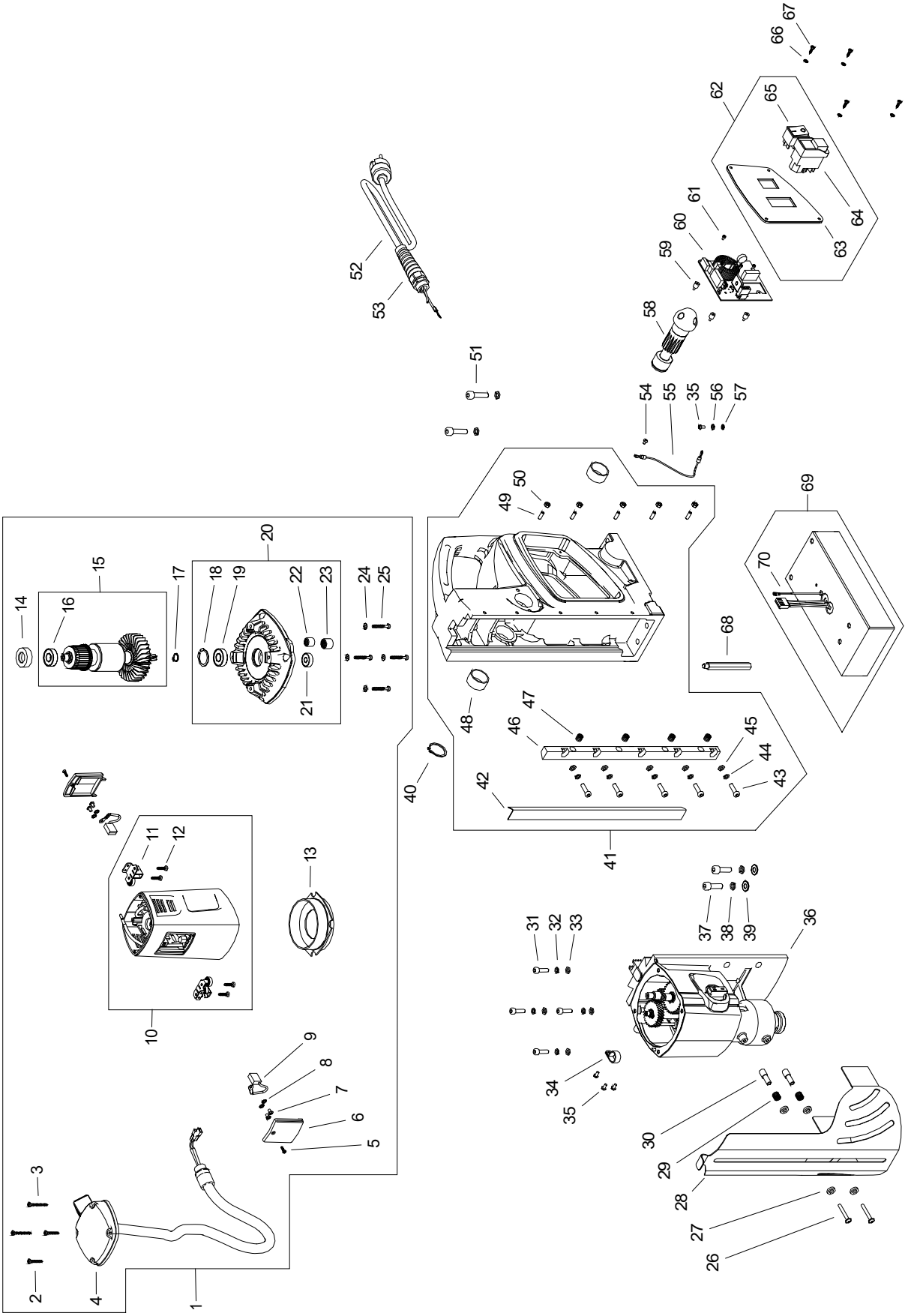
Part number:
PDS-0111-03-00-01-0

6. EXPLODED VIEWS AND PARTS LISTS



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	UKL-0563-24-00-00-0	COOLANT SYSTEM ASSY	1
2	DZW-0178-09-00-00-0	LEVER	3
3	PAS-000008	SAFETY STRAP 500	1
4	KLC-000037	HEX WRENCH 5 MM WITH HANDLE	1
5	KLC-000005	HEX WRENCH 2.5 MM	1
6	KLC-000008	HEX WRENCH 5 MM	1
7	KLC-000095	8-10 MM WRENCH	1
8	KLN-0103-00-00-00-0	WEDGE MT3	1

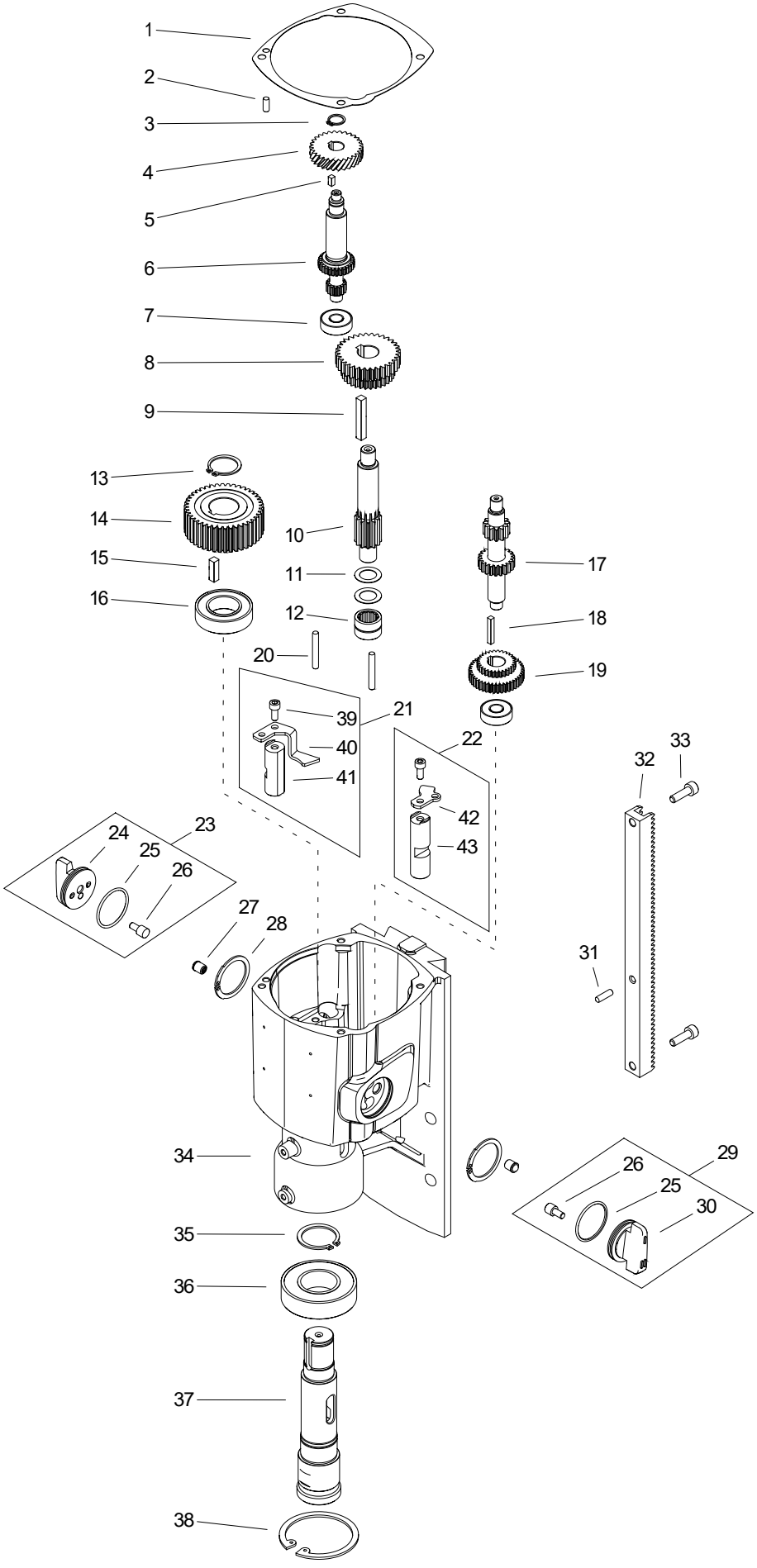
ITEM	PART NUMBER	DESCRIPTION	Q-TY
9	OPK-000001	TOOL CAN	1
10	UCW-0563-20-00-00-0	ARBOR ASSY AMT3-C-19-4	1
11	PRS-000017	EXTERNAL RETAINING RING 25z	1
12	PDK-0234-00-09-00-0	WASHER II	2
13	PRS-000105	SEAL RING 25.2x3	2
14	KNC-0234-00-10-00-0	HOSE FITTING	1
15	PRT-0151-06-13-00-2	ROD L=35	1
16	TLJ-0284-00-07-00-1	COOLING SLEEVE	1
17	KRP-0563-20-01-00-0	ARBOR BODY AMT3-C-19-4	1
18	WKR-000032	HEX SOCKET SET SCREW WITH FLAT POINT M10x10	2
19	SPR-0563-20-02-00-0	SPRING	1
20	WYP-0563-20-03-00-0	PLUNGER	1
21	USZ-0220-00-04-00-0	SEAL	1
22	PDK-0139-00-04-00-0	WASHER 18.8x10x1	1
23	PRS-000009	INTERNAL RETAINING RING 19w	1
24	OSL-0399-17-00-00-0	SAFETY SPRING	1
25	SKR-0563-12-00-00-0	METAL BOX	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	SLN-0710-01-00-00-1	MOTOR ASSY - 230V	1

ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	SLN-0710-01-00-00-0	MOTOR ASSY - 115V	1
2	WKR-000526	TORX PAN HEAD SCREW 4x25	2
3	WKR-000527	TORX PAN HEAD SCREW 4x35	2
4	WZK-0710-01-04-00-0	MOTOR HARNESS ASSY	1
5	WKR-000506	SCREW FOR PLASTIC 3x10	2
6	PKR-0563-01-09-00-0	BRUSH COVER	2
7	WKR-000192	CROSS RECESSED PAN HEAD SCREW M4x6	4
8	PDK-000166	EXTERNAL TOOTH LOCK WASHER 4.3	4
9	SCZ-000036	BRUSH - 230V	2
9	SCZ-000035	BRUSH - 115V	2
10	OBD-0710-99-03-00-1	STATOR HOUSING ASSY – 230V	1
10	OBD-0710-99-03-00-0	STATOR HOUSING ASSY – 115V	1
11	SCT-000013	BRUSH HOLDER	2
12	WKR-000300	SCREW FOR PLASTIC 4x16	4
13	OBD-0563-01-07-00-0	FAN COVER	1
14	WKL-000046	BEARING INSERT	1
15	WRN-0710-99-01-00-1	ROTOT ASSY - 230V	1
15	WRN-0710-99-01-00-0	ROTOT ASSY - 115V	1
16	LOZ-000158	BALL BEARING 12x28x8	1
17	PRS-000003	EXTERNAL RETAINING RING 12z	1
18	PRS-000356	INTERNAL RETAINING RING 28w	1
19	LOZ-000158	BALL BEARING 12x28x8	1
20	PKR-0710-99-02-00-0	GEARBOX COVER ASSY	1
21	LOZ-000053	BALL BEARING 8x22x7	1
22	LOZ-000162	NEEDLE BEARING 10x14x12	1
23	LOZ-000176	NEEDLE BEARING 12x16x14	1
24	PDK-000017	ROUND WASHER 5.3	4
25	WKR-000525	TORX PAN HEAD TAPPING SCREW 5x30	4
26	WKR-000531	HEX SOCKET ROUND HEAD SCREW WITH FLANGE M5x35	2
27	PDK-000151	NYLON WASHER 8.1x14x3	4
28	OSL-0563-05-00-00-0	GUARD	1
29	SPR-000030	PRESSURE SPRING	2
30	TLJ-0563-04-00-00-0	SLEEVE	2
31	SRB-000114	HEX SOCKET HEAD CAP SCREW M6x20	4
32	PDK-000046	SPRING WASHER 6.1	4
33	PDK-000136	SMALL ROUND WASHER 6.4	4
34	ZCS-000029	CABLE TERMINAL	1
35	WKR-000193	CROSS RECESSED PAN HEAD SCREW M4x8	4
36	ZSP-0563-02-00-00-1	GEARBOX ASSY	1
37	SRB-000153	HEX SOCKET HEAD CAP SCREW M8x25	2
38	PDK-000051	SPRING WASHER 8.2	4
39	PDK-000022	ROUND WASHER 8.4	2
40	PRS-000019	EXTERNAL RETAINING RING 28z	1
41	KRP-0563-03-01-00-0	DRILLING MACHINE BODY	1
42	LST-0563-03-01-03-0	GIB	1
43	SRB-000304	LOW HEAD SOCKET CAP SCREW M6x20	5
44	PDK-000046	SPRING WASHER 6.1	5
45	PDK-000136	SMALL ROUND WASHER 6.4	5
46	LST-0563-03-01-02-0	ADJUSTABLE GIB	1
47	SPR-000043	SPRING 1.6x8x14.5	4
48	TLJ-000010	SELF-LUBRICATING SLEEVE 28.05H7x32x16	2

ITEM	PART NUMBER	DESCRIPTION	Q-TY
49	WKR-000410	HEX SOCKET SET SCREW WITH FLAT POINT M5x14	5
50	NKR-000016	HEX NUT M5	5
51	SRB-000155	HEX SOCKET HEAD CAP SCREW M8x30	2
52	PWD-0710-03-00-00-0	POWER CORD 120V WITH STRAIN RELIEF ASSY (US)	1
52	PWD-0563-16-02-00-0	POWER CORD 230V WITH STRAIN RELIEF ASSY (EU)	1
52	PWD-0563-16-03-00-0	POWER CORD 230V WITH STRAIN RELIEF ASSY (AU)	1
52	PWD-0563-16-04-00-0	POWER CORD 230V WITH STRAIN RELIEF ASSY (INDIA)	1
52	PWD-0563-16-05-00-0	POWER CORD 230V WITH STRAIN RELIEF ASSY (UK)	1
53	DLW-000008	CABLE GLAND WITH STRAIN RELIEF PG13.5	1
54	WKR-000292	HEX SOCKET BUTTON HEAD SCREW M4x6	1
55	WZK-0563-03-10-00-0	PROTECTION WIRE HARNESS	1
56	PDK-000015	ROUND WASHER 4.3	1
57	PDK-000166	EXTERNAL TOOTH LOCK WASHER 4.3	1
58	WLK-0563-14-00-00-0	PINION SHAFT	1
59	WBR-000004	VIBRATION DAMPER	3
60	MDL-0687-80-02-00-0	MODULE – 230V	1
60	MDL-0687-80-01-00-0	MODULE – 115V	1
61	WKR-000180	CROSS RECESSED PAN HEAD SCREW M3x5	3
62	ZSP-0710-02-00-00-1	CONTROL PANEL ASSY - 230V	1
62	ZSP-0710-02-00-00-0	CONTROL PANEL ASSY - 115V	1
63	MSK-0710-02-01-00-0	PANEL PLATE ASSY	1
64	WLC-000007	START-STOP SWITCH - 230V	1
64	WLC-000005	START-STOP SWITCH - 115V	1
65	PNK-000013	SWITCH	1
66	PDK-000161	EXTERNAL TOOTH LOCK WASHER 3.7	4
67	WKR-000415	CROSS RECESSED PAN HEAD SELF-TAPPING SCREW 3.5x13	4
68	PLC-0563-17-00-00-0	STOP ROD	1
69	PDS-0563-03-02-00-0	ELECTROMAGNETIC BASE	1
70	WZK-0563-03-02-02-0	REED WIRES SET	1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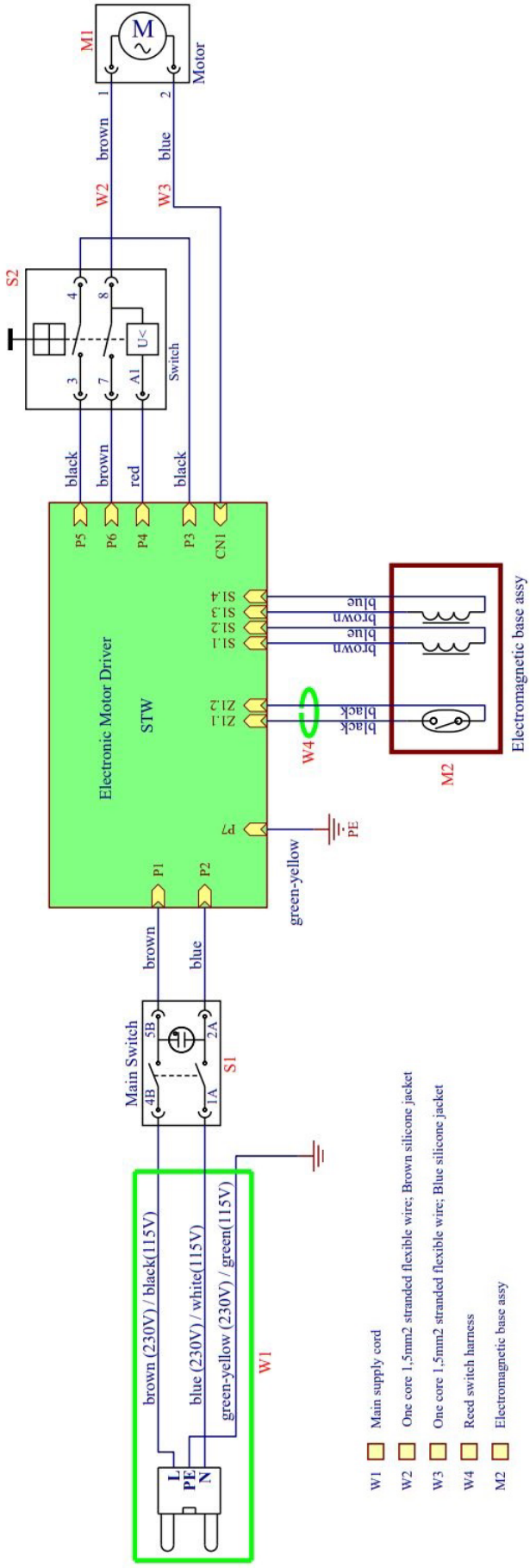
ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	USZ-0563-02-17-00-0	BODY SEAL	1
2	KLK-000045	DOWEL PIN 5n6x12	1
3	PRS-000003	EXTERNAL RETAINING RING 12z	1
4	KOL-0563-02-03-02-0	GEAR z29	1
5	WPS-0563-02-23-00-0	PARALLEL KEY 4x4x8	1
6	WLK-0563-02-02-00-0	CLUTCH SHAFT ASSY	1
7	LOZ-000161	BALL BEARING 10x26x8	2
8	KOL-0563-02-07-00-0	GEAR z32, z32	1
9	WPS-0563-02-19-00-1	PARALLEL KEY 6x6x40	1
10	WLK-0563-02-06-00-0	PINION SHAFT z12	1
11	PDK-0563-02-22-00-0	WASHER 14x22x0.5	2
12	LOZ-000175	NEEDLE ROLLER BEARING 14x22x16	1
13	PRS-000322	EXTERNAL RETAINING RING 24z	1
14	KOL-0563-02-08-00-0	GEAR z42	1
15	WPS-0563-02-18-00-1	PARALLEL KEY 6x6x20	1
16	LOZ-000028	BALL BEARING 25x47x12	1
17	WLK-0563-02-04-00-0	PINION SHAFT z12, z21	1
18	WPS-0563-02-20-00-1	PARALLEL KEY 4x4x25	1
19	KOL-0563-02-05-00-0	GEAR z29, z43	1
20	KLK-000052	DOWEL PIN 5n6x40	2
21	WDZ-0563-02-10-00-0	SHORT SLIPPER ASSY	1
22	WDZ-0563-02-11-00-0	LONG SLIPPER ASSY	1
23	PKT-0563-02-12-00-0	SHORT SHIFT KNOB ASSY	1
24	KRP-0563-02-12-02-0	SHORT SHIFT KNOB	1
25	PRS-000418	OS-RING 32x2	2
26	KLK-0599-02-09-02-0	KNOB PIN	2
27	ZTR-000001	BALL LOCK 8	2
28	PRS-000346	INTERNAL RETAINGING RING 36w	2
29	PKT-0563-02-13-00-0	LONG SHIFT KNOB ASSY	1
30	KRP-0563-02-13-02-0	LONG SHIFT KNOB	1
31	KLK-000047	DOWEL PIN 5n6x16	1
32	LST-0563-02-15-00-0	GEAR RACK	1
33	SRB-000114	HEX SOCKET HEAD CAP SCREW M6x20	2
34	KRP-0563-02-01-01-1	GEARBOX BODY	1
35	PRS-000021	EXTERNAL RETAINING RING 30z	1
36	LOZ-000075	BALL BEARING 30x62x16	1
37	WRZ-0563-02-09-00-0	SPINDLE	1
38	PRS-000035	INTERNAL RETAINING RING 62w	1
39	SRB-000078	HEX SOCKET HEAD CAP SCREW M5x12	2
40	ZCZ-0563-02-10-02-0	SHORT SLIPPER BRACKET	1
41	WLK-0563-02-10-01-0	SHORT SLIPPER SHAFT	1
42	ZCZ-0563-02-11-02-0	LONG SLIPPER BRACKET	1
43	WLK-0563-02-11-01-0	LONG SLIPPER SHAFT	1
44*	SMR-000009	GREASE	0,8

*not shown in the drawing

WIRING DIAGRAM



7. DECLARATION OF CONFORMITY

Declaration of Conformity

PROMOTECH sp. z o.o.
ul. Elewatorska 23/1
15-620 Białystok
Poland

We declare with full responsibility that:

Drilling machine with electromagnetic base D4 PRO

is manufactured in accordance with the following standards:

- EN ISO 12100: 2010,
- EN 62841-1: 2015,
- EN 55014-1: 2017,

and satisfies the regulations of the guidelines: 2014/30/EU, 2006/42/EC, 2011/65/EU.

Person authorized to compile the technical file:
Artur Zawadzki, ul. Elewatorska 23/1, 15-620 Białystok, Poland

Białystok, 22.12.2023

Artur Zawadzki
CEO

8. WARRANTY CARD

WARRANTY CARD No.....

…….. in the name of Manufacturer warrants the Drilling Machine with Electromagnetic Base D4 PRO to be free of defects in material and workmanship under normal use for a period of 12 months from the date of sale.

This warranty does not cover tools as well as damage or wear that arise from misuse, accident, tampering or any other causes not related to defects in workmanship or material.

Serial number .....

Date of sale .....

Signature and stamp of the seller .....

0.01 / 29 April 2024

WE RESERVE THE RIGHT TO MAKE CHANGES IN THIS MANUAL WITHOUT NOTICE