

EN: Operating manual

DE: Betriebsanleitung

FR: Mode d'emploi

ES: Instrucciones de manejo



DTF 35 SH

VON ARX SHAVER



EN

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arx**®
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NOTES FOR THE USER

Before using

It is extremely important that you:

- Make sure that the delivery is complete and that you check for any possible damage caused during transit/transport.
- Observe the safety instructions
- Read the operating instructions

Reading this Operating Manual

If there are any questions on your part after reading this Operating Manual please get in touch with the manufacturer or the nearest service center.

The manufacturer is not responsible for any damage or breakdown resulting from non-observance of the Operating Manual.

Copyright ©

The text and illustrations may not be copied or reproduced without the express permission of Von Arx EOOD.

Trade marks ®

The words "Von Arx" and the "Von Arx" logo are registered and internationally protected trade marks. Their use by third parties is prohibited!

Patents

Various components and processes listed and illustrated in this Operating Manual are patent pending or national and international patents have already been granted.

Illustrations and technical modifications

Illustrations may differ from the real machine and appear without any obligations on our part. In order to meet the rapidly changing customer demands, we reserve the right to make technical modifications without prior notice.

Translations

Solely the English version of this Operating Manual is legally binding. The English version of this manual is considered as the "Original instructions".

Safekeeping

Please keep this Operating Manual in a safe place and available for the user.

Further information

Manufacturer:
Von Arx EOOD,
4000 Plovdiv
Telefon: +359 32 94 05 53
Country of origin: Bulgaria

Marked parts

Read and always observe the safety instructions in this Operating Manual! The safety instructions are marked like this:



Failing to observe an instruction marked with this sign may lead to serious injury or death.



Failing to observe an instruction marked with this sign may damage the machine or cause damage to property.



Marks any explanatory information or special instructions.

SAFETY INSTRUCTIONS

For your safety

Von Arx machines and tools are state of the art technology and they are built according to the construction guidelines of the EC. They have been tested and approved and are safe to operate when used as described in the instructions.

There are dangers in using machines when the machine is used by an untrained person and when it is not used as described in the operating instructions. Each person who is involved in the preparation, putting into operation, operation and maintenance must have read and understood the operating instructions, especially the safety instructions.



Keep your workstation tidy!

- Untidiness in your work area may be a cause for accidents!



Use caution!

- Always be aware of your actions. Use common sense during work. Do not operate the machine or the tool when distracted.



Avoid an unnatural posture!

- Be sure to stand firmly on the ground while you are working and keep your balance at all times.



Wear suitable protective clothing!

- Do not wear loose fitting clothing or jewelry, it might get caught by moving parts.
- Cover long hair with a hairnet.
- The machine operator must wear goggles, gloves, ear protectors and non-slip safety shoes.
- Wear a dust mask if the work generates dust.



Take your work environment into account!

- Never use the machine or the tool near explosive materials (the electric motor may give off sparks)!
- Never use an electric tool that is damp or wet (electric shock)!
- Protect the machine or the tool from moisture, water, extreme heat, extreme cold, chemical solutions and gases.



Keep other people away!

- Keep other people - especially children - away from the machine or the tool and the power cord.
- Keep other people out of your work area while you are working!



Check the machine or tool for potential damage!

- Prior to operating, safety devices or slightly damaged parts have to be inspected and their satisfactory operating function for the intended purpose to be assured.
- Damaged safety features and switches must be repaired or replaced by an authorized service center. Do not use the electric tool if switches cannot be switched on or off.

**Do not carry!**

- For safety and health reasons, the heavy machines and their drums must not be transported by hand.

**Never leave a machine which is not in a safe state!**

- Before leaving the machine, turn the motor off.
- Secure the machine by placing chocks under the wheels.
- Remove the mains plug or Interrupt the ignition contacts.

**Do not remove protective devices!**

- Only operate the machine when all the protective devices fitted in the factory are mounted and in good working order.

**Only use on horizontal surfaces!**

- The shaver machine must only be used on horizontal surfaces.
- Make sure that the wheels rest firmly on the surface to be treated.

**Do not misuse the electrical power cord!**

- Do not use the cable to pull the plug out of the socket.
- Protect the cable against heat, oil and sharp edges.
- Lay the electric cable in such a way that it cannot be damaged by the working tools.
- In the open air, use only specially authorized and suitably marked extension cables.
- Use only electric cables with a suitable cross-section and the necessary length.
- Unroll the extension cable completely from the cable drum.
- Avoid bodily contacts with earthed parts.

**Comply with the operating instructions of the electric motor manufacturer and the following requirements!**

- When not in use, make sure that the machine is disconnected from the power supply.
- Always pull out the plug when the machine is not being used.
- Modifications to the electrical wiring which may be prejudicial to safety or change the original regulating and control functions are prohibited.
- Repairs to the electrical wiring may only be performed by a qualified electrician.

**Do not remove guard devices!**

- Damaged protection devices on machines must be professionally repaired or replaced by a customer service workshop.
- Operate the machine only if all the guard devices mounted in the factory are in place and in good working order!
- When work generates dust, always connect the vacuum cleaner system.
- Damaged dust aprons are prejudicial to the performance of the connected vacuum cleaner.
- Do not operate the machine unless the emergency stop switch is in working order.
- When working with the machine, always connect the fatigue switch ripcord to your wrist.
- Never work without the belt guard in place.

**Operating location and workplace**

When working with the machine, the machine operator will always stand behind the handlebar. From this position, he can permanently monitor and, if necessary, correct the work to be performed. Standing at this position, the machine operator can:

- Steer the machine
- Hold the machine back
- Actuate all the operating and control elements while the machine is in use.
- Machines with electrical or hydraulic drive must also be operated and controlled by the machine operator from this position.

NOTE: Hand-arm vibrations

Working with the DTF 35 SH leads to vibration stressing. Please follow the legal provisions as regards the permitted operating time.

Safety stickers on the machine



WARNING: CUTTER SHAFT



WARNING: HOT SURFACE



WARNING: ELECTRIC SHOCK HAZARD



STUDY THE OPERATING MANUAL



EAR PROTECTORS MUST BE WORN



SAFETY SHOES MUST BE WORN

Damaged or lost safety stickers must be replaced immediately! These stickers are obtainable from your Customer Service Center.

Use for the intended purpose

The machines are designed exclusively to treat horizontal surfaces. Any other use does not correspond to the intended purpose. The manufacturer declines all liability for damage caused thereby. Surface preparation machines always attack the surface to be treated. They are therefore not suitable for cleaning sensitive surfaces (such as tiled floors) (see also "Field of application" on page 8).

Residual risk

There is still a residual risk owing to differing characteristics of the floor coverings, even if the machine is used in accordance with applicable regulations. If you detect irregular cutting, you must reduce the working depth or check the cutting drum and/or blades.

Safety and responsibility at work

- Make your contribution to safety at the workplace.
- Report any discrepancy deviating from normal working immediately to the responsible person.
- Perform all the work with an awareness of the need for safety.

Further safety instructions

Make sure to comply with your local or national regulations, standards and directives.

FIELD OF APPLICATION

Depending on the blade type, hard, brittle to firm or elastic surface materials can be worked e.g.:

- Asphalt and cast asphalt surfaces
- Concrete and cement, synthetic stone, floor tiles
- Screeds of cement, wood cement, ceramic etc.
- Natural stone
- Thermoplastic materials

Surfaces made of highly elastic soft materials or fabrics and fiber materials cannot be worked, or can only be worked with certain limitations e.g.:

- Latex, rubber, soft plastics and foam materials
- Wood, carpets and woven materials

TOOLS

The right tool for your particular application can be best determined by tests. The following description only gives guide values. Always use the proper tools provided by the manufacturer to achieve the desired results.

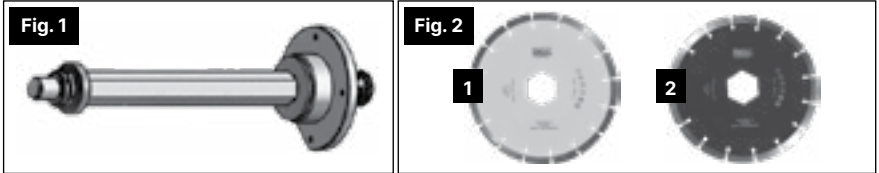
Diamond blades, drums, and spacers

Shaft (Fig. 1).

Diamond blades for shaft mounting. Recommended for 15 kW version (Fig. 2)

Blades are available in 2 variations

1. Yellow - for hard concrete
2. Blue - for regular concrete

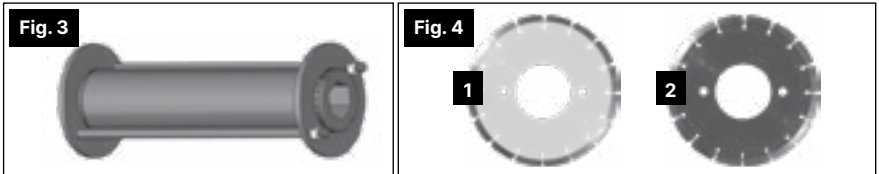


Drum (Fig. 3). Recommended for 22 kW and 25 kW versions

Diamond blades for drum mounting (Fig. 4)

Blades are available in 2 variations

1. Yellow - for hard concrete
2. Blue - for regular concrete



Spacers for shaft (Fig. 5) and spacers for drum (Fig. 6)

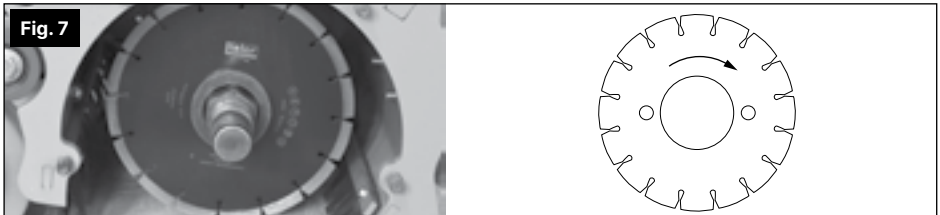
Spacers are available in 3 variations. Thickness: 2mm / 4mm / 5mm



The right tool for your particular application can best be determined by tests.

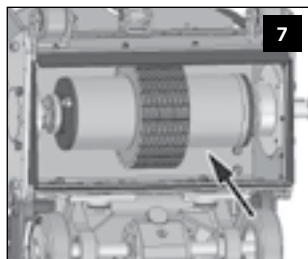
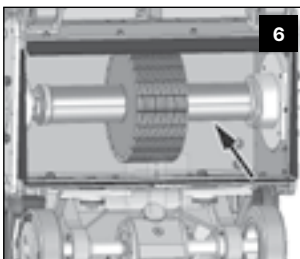
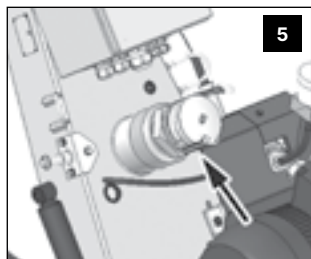
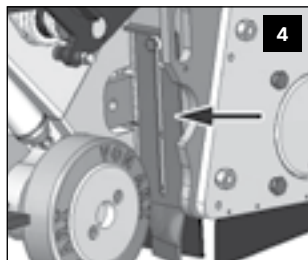
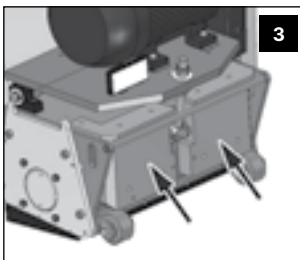
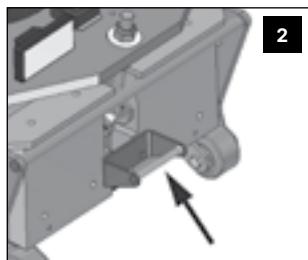
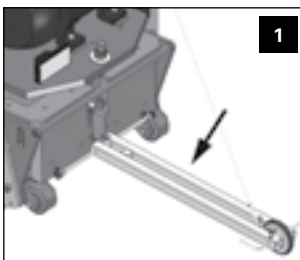


The sense of rotation must be respected when the blades are fitted (Fig. 7).



Special accessories

1. Directional guide
2. Lifting point
3. Front weights
4. Drive wheels shield
5. 4" to 3" camlock adapter
6. Distance bush shaft set
7. Distance bush drum set



OPERATION

Commissioning

Machines with electric motors

The CEE plug is also supplied for countries in which this plug system has not been introduced.

- An extension cable must be available for connection to the machine. Unroll the extension cable completely from the cable drum. Only use permitted extension cables.
- Switch the machine on briefly and compare the direction of rotation of the motor with the arrow on the fan cover. If necessary, change the direction of rotation by phase reversal. (Changing the phase in the CEE plug if automatic or manual if not.)

Work preparation



Check your machine for damage.

- Check whether moving parts are in working order.
- Damaged protection devices and parts must be expertly repaired or replaced by a customer service workshop.

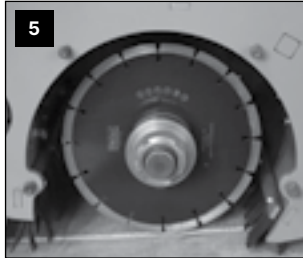
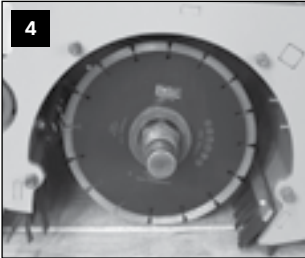
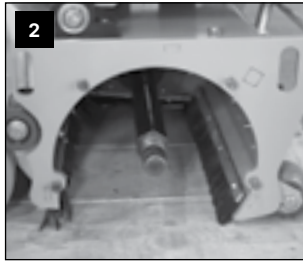
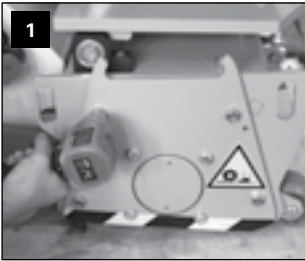
Mounting the tool drums or blades

Mounting on the shaft (applicable for all versions)



Pull out the mains plug

1. Remove the cover nuts from the cover.
2. Remove the cover using the supplied wing screws.
3. Place the needed configuration of blades and spacers.
4. Tighten the nut on the shaft using the supplied key.
5. Tighten the countersunk nut on the shaft using the supplied key.
6. Place the cover back and fasten the nuts.

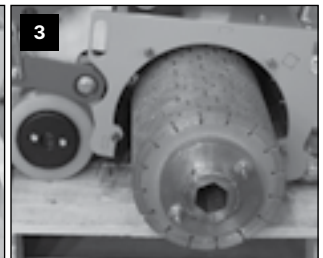
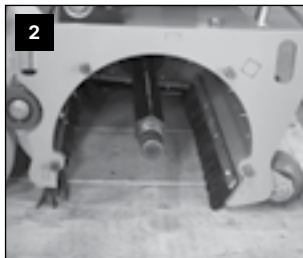


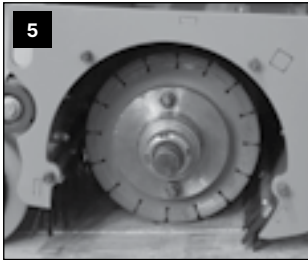
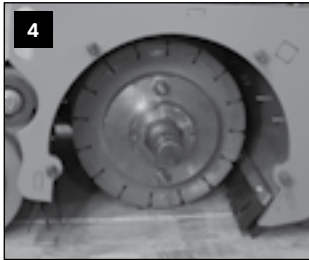
Mounting the drum (applicable for 22 kW and 25 kW versions)



Pull out the mains plug

1. Remove the cover nuts from the cover.
2. Remove the cover using the supplied wing screws.
3. Place the pre-configured with blades and spacers drum on the shaft.
4. Tighten the nut on the shaft using the supplied key.
5. Tighten the countersunk nut on the shaft using the supplied key.
6. Place the cover back and fasten the nuts.





Fitting out the tool drum

Removing the blades

1. Detach the hexagon nuts from the tool drum retaining ring.
2. Remove the retaining ring from the tool drum.
3. Pull the blades and the spacers out of the drum core.

Choosing the type of blade



The blades must not be mixed on a single tool drum.



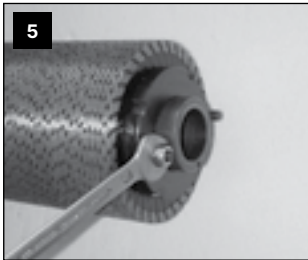
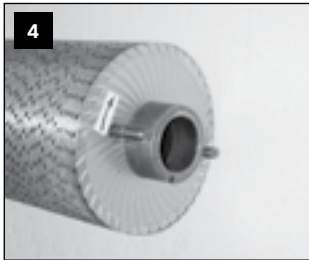
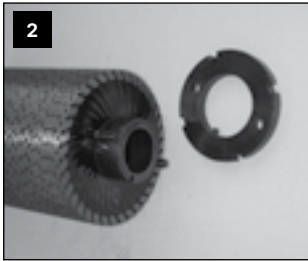
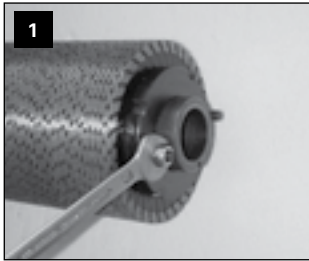
Two blades must not be mounted next to each other. They must always be separated by a spacer.



Diamond blades should only be replaced in sets.

Fitting out the flail shafts

4. Push the diamond blades and the spacers onto the core of the drum (Attention: sense of rotation).
5. Push the retaining ring onto the tool drum and fasten with hexagonal nuts.



Connecting dust vacuuming equipment

The suction hose with camlock fitting of 4" can be connected directly onto the extractor pipe of the housing (Fig. 8).

Water connection

If possible one should work with water cooling (durability of the diamond blades)

- Water connection male quick connection "Gardena" (Fig. 9 - A)
- Safety ball valve (rotate lever 90°) (Fig. 9 - B).

Setting the working depth

1. Start the tool drum drive
2. Turn slowly the handwheel clockwise (Fig. 10)
3. Follow the reference label and the counter to set up the desired depth.

Counter	Depth, mm
10	0
20	3
30	6
40	9
50	12
60	15
70	18
80	21
90	24
93	25

Resetting the depth counter.

1. Make sure the machine is standing on a flat rigid surface on its drive wheels.
2. Start the tool drum drive
3. Turn slowly the handwheel clockwise until diamond blades touch the ground.
4. Adjust zero the scale at the position indicator below the handwheel (loosen tommy screw and turn ring)

Preparing the working surface

Clear major obstacles from the working surface (e.g. projecting reinforcing rods, nails etc.)

Checking the machine



Check your machine for damage. The power supply must be interrupted before performing any kind of work on the machine!

Fig. 8

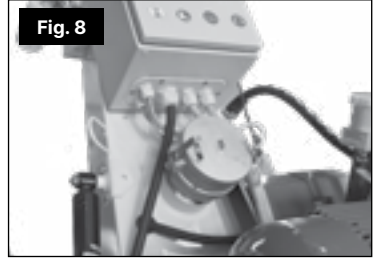


Fig. 9

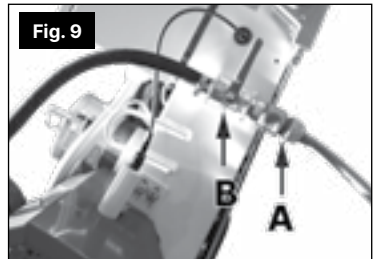
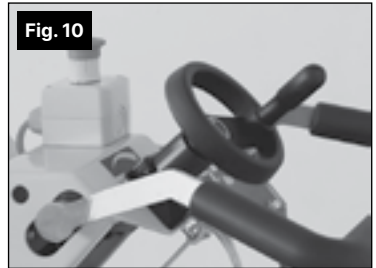


Fig. 10



Check the fatigue protector:

- Is the ripcord in order?
- Does the motor stop when the cord is pulled?

Check the belt guard:

- Is the belt guard firmly fitted?

Check the emergency OFF switch on machines with an electric drive:

- Does the machine switch off after actuation?

Test the bolts:

- Are all the bolts tightened firmly?

Check the electrical connections on machines with an electric drive:

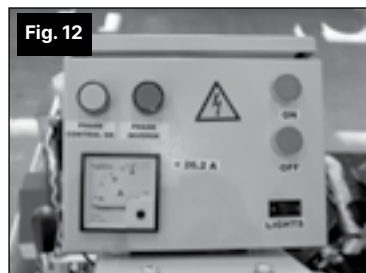
- Does the electric motor rotate in the right direction?
- Are the electrical connections damaged?
- Is a permitted extension cable fitted?
- Has the cable been unwound completely from the drum?

Starting the machine

1. The devices must have been checked
2. Turn the hand wheel counterclockwise
3. Set the traction lever at « 0 »
4. If connected, switch on the dust extraction system
5. If connected, set the water feed going (ball valve)
6. Fasten the fatigue protector to the wrist!
7. Start the motor

**Electric operation and control**

The machine starts with an automatic star-delta switch. It is equipped with a phase inverse follower which lights up in red if the motor is about to rotate in the wrong direction. Once the phases are in order into the plug, the phase control green light is lit, and the machine can be turned on from the green "on" button. The machine stops normally with the "off" button.



The motor nominal current is to be followed up during operation. The factors that can affect the consumption are the cutting depth, the number of the blades and the cutting speed of the machine. The operator should set these factors according to his field of application and operate under the nominal current.

Surface treatment

Make sure that surface to be treated is free from all obstacles.

1. Hold the machine firmly with the steering handle.
2. Turn the hand wheel clockwise and adjust the required working depth
3. Pull the operating handle
4. Turn the traction lever onto the required direction
5. Increase or reduce the milling speed.



Do not mill too deeply! Excessively deep milling does not increase performance. The machine must not „hop“ on the rotating tool. Follow the amperage consumption on the electrical box and reduce either the speed, the cutting depth or the number of the blades to keep below the marked consumption.





In the event of incorrect use, the milling capacity is reduced and the tool unnecessarily stressed and worn.



The surface quality after machining depends essentially on the chosen tools and the fitment method.



To obtain straight grooves, traces etc. a cord may be laid out on the floor or beam may help.



Levelling and coating removal work can also be performed with forward and backward movements of the machine.



Before continuing to work surfaces that have already been treated, brush them down with a broom and clean with a powerful vacuum cleaner.

Final Operations

Stop the machine

1. Lift the tool drum or blades off the ground
2. Switch off the drives.
3. Machine now stationary.
4. Interrupt the energy supply by disconnecting the power cord (models with electric drive).

Switch the dust extraction system off

1. Switch the dust extraction system off.
2. Remove the suction from the machine.

Remove water connection

1. Stop water intake (ball valve).
2. Remove water connection

Storing the machine

The machine should be cleaned after each use!

1. Clean the machine.
 2. Store the machine in a dry place.
- Transport must be effected by means of belts!

CARE AND MAINTENANCE

Maintenance plan

The machine has been specially designed to reduce the time needed for maintenance work to a minimum. However, some maintenance work is essential!

This will enable the machine to operate in a troublefree manner and give you good service for many years.



Always interrupt the energy supply before performing maintenance work.

Remove the mains plug

Daily or after every 10 hours of operation:

- **Clean the outside of the machine.** (do not use solvents)
- **Blades, Flail shafts, Check the condition of the spacers** (remove the tool drum or blades, replace worn parts)
- **Hydraulic oil level-hydraulic traction** (check, top up if necessary with: 10 SAE 40 W) Please perform at weekly intervals after the first week.

Weekly or after every 50 hours of operation:

- **Check the bearings** (Arrange for aftersales service to change damaged bearings)
- **Check bolts** (Tighten any loose bolts, arrange for aftersales service to change any damaged assemblies)

- **Check the dust aprons** (Replace damaged or worn dust aprons)
- **Clean the dust extraction connection**
- **Lubricate the adjusting device** (Check the functions after cleaning and lubricating)

Maintenance work



Always interrupt the energy supply before performing maintenance work.

Wear

All tools and tool components are wear parts and will be worn out after a given period of use. They must then be replaced. The service life of the individual components varies. Apart from wear caused by operating use, it also depends on the type and characteristics of the material of the surface to be treated and on the requisite power during use.

Changing wear parts

All Von Arx wear parts and replacement parts are made on the latest machines. This guarantees a perfect fit for all parts.

Do not use spare parts of unknown manufacture! Even if they look the same, there may be considerable differences in manufacture and/or materials which may be prejudicial to active and passive safety.



All warranty claims lapse if spare parts other than those made by Von Arx or recommended makes are used.

Changing the dust apron

Check the dust aprons regularly and replace them in good time.

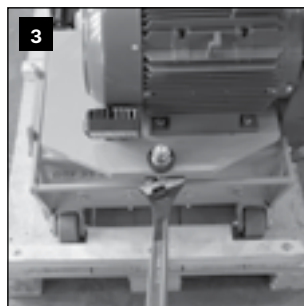
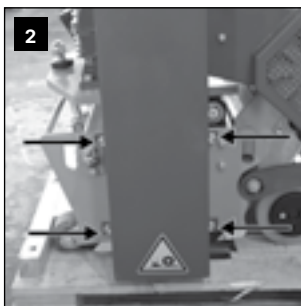
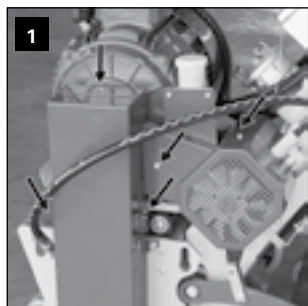
Changing the drive belt



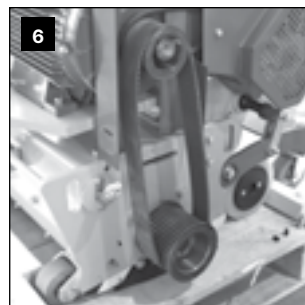
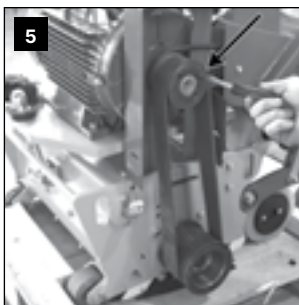
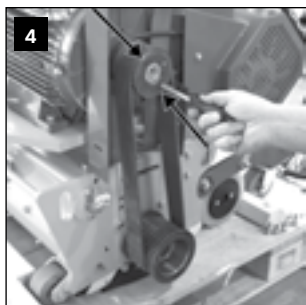
Always interrupt the energy supply before performing maintenance work.

Change toothed belt and v-belt

1. Loosen the screws from fan wheel guard, the top screws from the belt guard and take them away
2. Loosen the side screws from the belt guard, remove them and dismount the belt guard and fan wheel guard
3. Lower the carrier platform by loosen the nut shown on sample 3 until the belts are released enough to be removed



4. Loosen the opposite screws of the toothed washer
5. Turn the middle screw until the toothed washer is completely free
6. Remove the washer and change the belts.



7. Assemble in reversed order – test the tension in the belt with your thumb (the drive belt should give a little, but not more than 10 mm).

REPAIRS

Von Arx machines are sufficiently robust to ensure that your appliance will probably far outlive its drive motor. Arrange for your Von Arx Customer Service to fit a new motor.

Drive modes (e.g. 15 kW electric motor vs 22 kW electric motor) must not be changed!



Alterations to the electrical are prohibited!

FAULT TRACING

Electric motor fails to start:

1. Is the plug connected to the mains supply?
2. Is voltage present in the mains power supply?
3. Are the phases in the correct order (check the phase inversion lamp indication)?
4. Has the emergency STOP push button been locked in its pressed position? (check by turning the red knob to release it)
5. Is the fatigue switch pawl correctly in position and secured?

If the engine still cannot be started, refer to your nearest Von Arx Customer Service Agency.

Dust extraction system fails to function

1. Is the dust apron missing or are the dust aprons worn?
2. Is the dust bag full?
3. Is the dust filter on the suction device clogged?
4. Is the extractor line clogged?

The spray tool does not work

1. Water connected?
2. Is the ball valve open?
3. Rapid action coupling assembled?
4. Spray diffuser blocked?

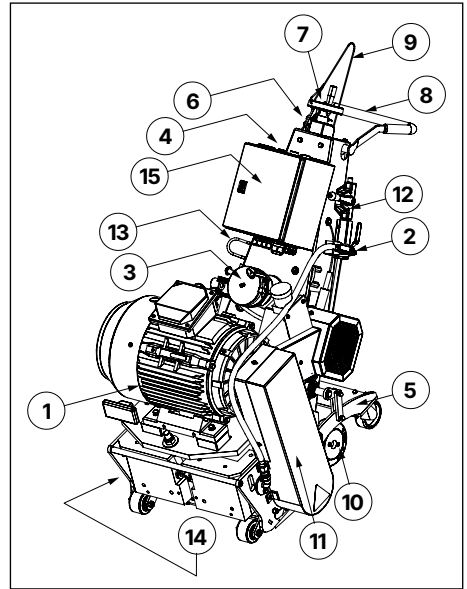
TECHNICAL SPECIFICATIONS

GENERAL	
SERIAL NUMBER	aaa.bb.cc.xyz aaa = Type, bb = Model year, cc = Month, xyz = consecutive
WORKING WIDTH	35 cm / 13.8"
DISTANCE FROM WALL TO MILLING TRACK (ELECTRIC)	10.7 cm / 4.2"
CUTTING DEPTH	Up to 25 mm / 1"
SOUND PRESSURE LEVEL	xxx
ACOUSTIC POWER LEVEL	xxx
VIBRATION LEVEL	xxx
800024	
SUPPLY VOLTAGE	3 × 400 VAC, 50 Hz
POWER	15 kW / 20 HP
WORKING SPEED	2940 U / min
PRODUCTIVITY	Up to 20 m ² /h, 66 ft ² /h
WEIGHT	300 kg / 661 lbs
DIMENSIONS	138 cm / 68cm / 113cm, 54" / 27" / 44"
800072	
SUPPLY VOLTAGE	3 × 400 VAC, 50 Hz
POWER	22 kW / 30 HP
WORKING SPEED	2945 U / min
PRODUCTIVITY	Up to 60 m ² /h, 197 ft ² /h
WEIGHT	410 kg / 904 lbs
DIMENSIONS	138 cm / 71cm / 113cm, 54" / 28" / 44"
800073	
SUPPLY VOLTAGE	3 × 480 VAC, 60 Hz
POWER	25 kW / 33 HP
WORKING SPEED	3534 U / min
PRODUCTIVITY	Up to 60 m ² /h, 197 ft ² /h
WEIGHT	410 kg / 904 lbs
DIMENSIONS	138 cm / 71cm / 113cm, 54" / 28" / 44"

GENERAL DESCRIPTION AND PRINCIPLE OF FUNCTION

Installation of the machine

1. Driving motor
2. Spray tod (water cooling)
3. Dust suction end connector
4. Emergency stop switch
5. Steering device: foot pedal down: easily manoeuvring (rear wheel lifted). Pedal up: working position (engine off) → braking effect parking position)
6. Operation handle (for hydraulic advance) stops if letting go off.
7. Handwheel (Depth adjustment with scale)
8. Steering handle
9. Fatigue protection (Secure to the machine operator's wrist. Automatically interrupts the machine energy supply if the machine operator is no longer able to control the machine.
10. Drive wheels (Are connected directly to hydraulic advance)
11. Belt guard (Safety device)
12. Propulsion lever (Directional and speed indication)
13. Transport hooks (Fixing points for crane)
14. Tool shaft
15. Motor switch:
 - 400 V / 50 Hz motor: off / on
 - 480 V / 60 Hz motor: off / on



Mode of operation

Mode of operation

The surface treating machine works with a rotating tool drum or shaft. The tool drum or shaft can be tipped with different diamond blades for hard, brittle hard and solid or viscoplastic floors.

The machined surface is cut with the diamond blades rotating.

Steering

Machines with a hydraulic advance are provided with a steering device to ensure the manoeuvrability at idle motor. Through pressing down the foot pedal the rear wheels are lifted from the ground and the machine can be manoeuvred easily onto the guide rollers.

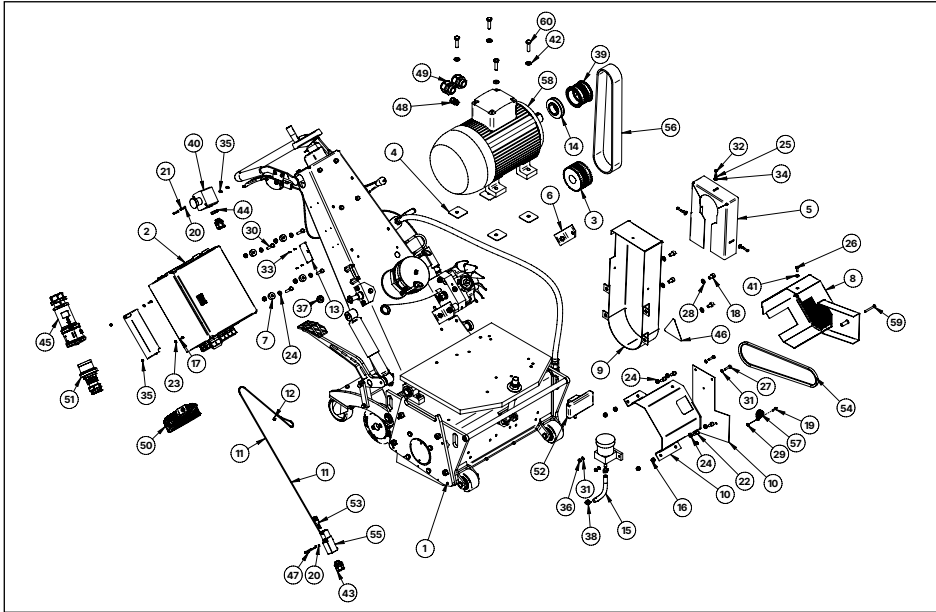


The pedal to be operated only with a lifted shaft or drum position

LIST OF SPARE PARTS

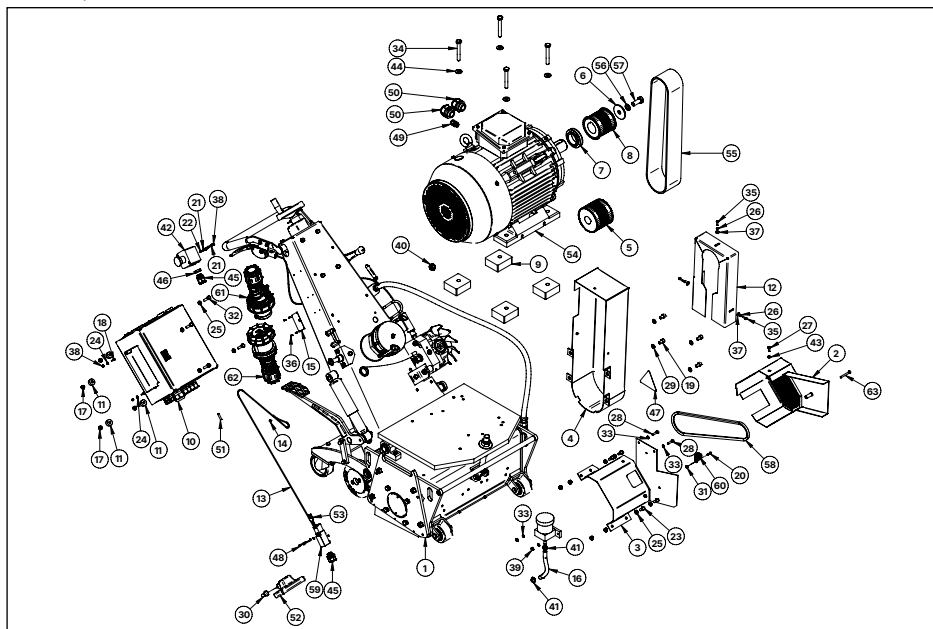
DTF 35 - 15 kW / 20 HP

800024



NO	ARTICLE	PART NAME
1	800022	DTF 35 BASIC
2	600650	SWITCH ASSEMBLED DTF 35 40A
3	600664	TOOTHED PULLEY 40TH DTF 35 15KW
4	600665	STRIP 2MM DTF 35 15KW
5	600925	ADDITIONAL COVER
6	600926	REAR PUMP BRACKET WELDED
7	600928	BUSH
8	600929	FAN WHEEL PROTECTION
9	600933	TIMING BELT COVER WELDED
10	600940	TOP PUMP COVER
11	701242	POLYESTER CORD
12	701243	DOUBLE TUBING CLAMP 0405/2
13	703559	TYPE PLATE
14	708489	BELT PULLEY TO ELECTRIC ENGINE
15	708723	HOSE
16	100263	SAFETY NUT
17	100297	ALLEN SCREW
18	100407	ZYL.-SCHRAUBE 16-KT. - BN 3 - M10 X 16
19	100595	HEXAGON SOCKET HEAD CAP SCREW
20	100615	SAFETY WASHER
21	101590	ALLEN SCREW
22	101600	HEXAGONAL SCREW
23	101652	WASHER
24	101670	WASHER
25	102285	SAFETY WASHER
26	102332	HEXAGONAL SCREW
27	103768	HEXAGON HEAD SCREW
28	104715	SPRING RING BN 762 M10
29	106665	SAFETY NUT
30	106706	HEXAGON HEAD SCREW

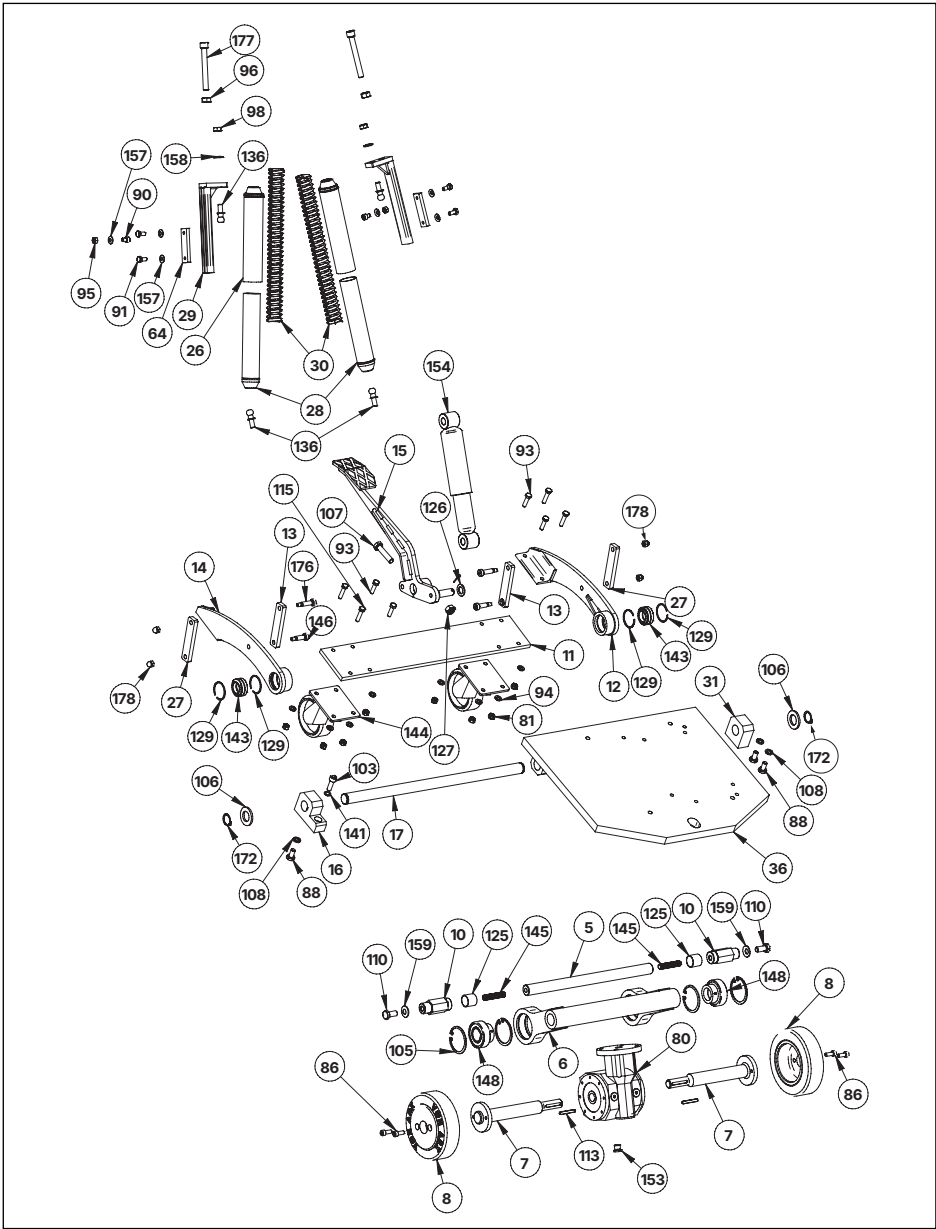
NO	ARTICLE	PART NAME
31	107358	WASHER
32	107912	HEXAGON HEAD SCREW
33	108214	POP RIVET TAP/D320
34	108573	WASHER
35	108692	SAFETY NUT
36	108693	SAFETY NUT
37	109046	CABLE RETAINER
38	109397	CLAMP
39	109466	HTD TOOTHED PULLEY
40	110942	CASING EMERGENCY STOP
41	113917	RIP-LOCK LOCKING WASHER
42	113919	SAFETY WASHER
43	114813	SCREWED CABLE GLAND M20 PLAST
44	114880	COUNTER NUT M20 PLASTICS
45	115310	COUPLING CEE 32 AMP.3P+N+E
46	115650	STICKER "WARNING CUTTER SHAFT"
47	116813	ALLEN SCREW
48	300072	SCREWED CABLE GLAND M16 PLAST.
49	900086	CABLE GLAND M32, LG
50	900150	BACK LIGHT
51	900156	EL. COUPLING 3 X 380V 32 AMP.
52	900175	FRONT LIGHT SINGLE
53	900238	FLAT KEY FOR SWITCH
54	900397	V BELT SPZ
55	900410	SAFETY LIMIT SWITCH
56	900431	BELT HTD 8M
57	900454	RUBBER-LINED CONNECTING CLAMP
58	900492	ELECTRIC MOTOR TYP TE 132M
59	900557	HEXAGONAL SCREW
60	900558	HEXAGONAL SCREW

DTF 35 - 22 kW / 30 HP, 25 kW / 33 HP**800072, 800073**
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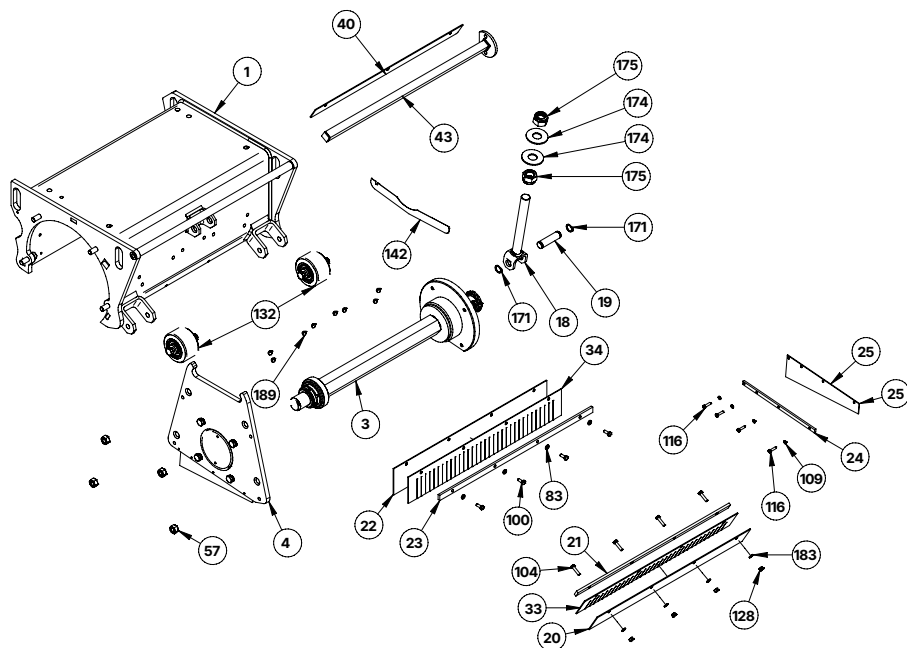
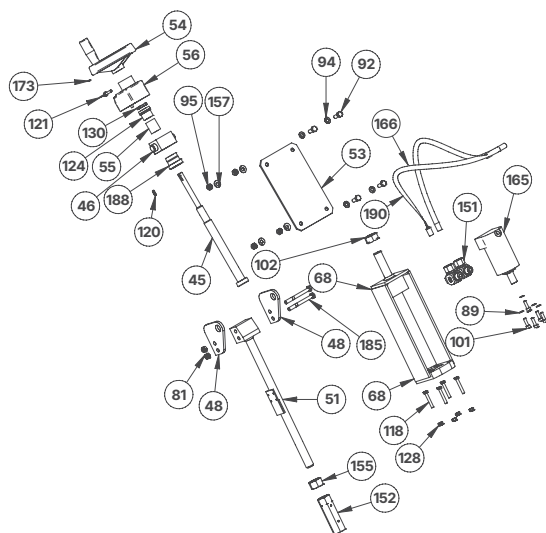
NO	ARTICLE	PART NAME	NO	ARTICLE	PART NAME
1	800022	DTF 35 BASIC	33	107358	WASHER
2	600261	FAN WHEEL PROTECTION	34	107870	HEXAGONAL SCREW
3	600266	TOP PUMP COVER	35	107912	HEXAGON HEAD SCREW
4	600275	TIMING BELT COVER WELDED	36	108214	POP RIVET TAP/D320
5	600509	PULLEY 44TH HTD 8M	37	108573	WASHER
6	600519	WASHER FOR PULLEY	38	108692	SAFETY NUT
7	600526	V BELT PULLEY	39	108693	SAFETY NUT
8	600644	TOOTHED PULLEY 38TH DTF35	40	109046	CABLE RETAINER
9	600645	STRIP DTF35 38TH	41	109397	CLAMP
10	600650	SWITCH ASSEMBLED DTF 35 40A	42	110942	CASING EMERGENCY STOP
11	600928	BUSH	43	113917	RIP-LOCK LOCKING WASHER
12	600937	ADDITIONAL COVER	44	113920	RIP-LOCK LOCKING WASHER
13	701242	POLYESTER CORD	45	114813	SCREWED CABLE GLAND M20 PLAST
14	701243	DOUBLE TUBING CLAMP 0405/2	46	114880	COUNTER NUT M20 PLASTICS
15	703559	TYPE PLATE	47	115650	STICKER "WARNING CUTTER SHAFT"
16	708723	HOSE	48	116813	ALLEN SCREW
17	100263	SAFETY NUT	49	300072	SCREWED CABLE GLAND M16 PLAST.
18	100297	ALLEN SCREW	50	900086	CABLE GLAND M32, LG
19	100407	ZYL.-SCHRAUBE I6-KT. - BN 3 - M10 X 16	51	900150	BACK LIGHT
20	100595	HEXAGON SOCKET HEAD CAP SCREW	52	900175	FRONT LIGHT SINGLE
21	100615	SAFETY WASHER	53	900238	FLAT KEY FOR SWITCH
22	101590	ALLEN SCREW	54	900314	ELECTRIC MOTOR 22KW 400V 2945RPM
23	101600	HEXAGONAL SCREW	55	900328	BELT
24	101652	WASHER	56	900355	SPRING LOCK WASHER
25	101670	WASHER	57	900356	HEXAGONAL SCREW
26	102285	SAFETY WASHER	58	900404	V-BELT
27	102332	HEXAGONAL SCREW	59	900410	SAFETY LIMIT SWITCH
28	103768	HEXAGON HEAD SCREW	60	900454	RUBBER-LINED CONNECTING CLAMP
29	104715	SPRING RING BN 762 M10	61	900510	PLUG 63A 380-415V CEE
30	105910	HEXAGON HEAD SCREW	62	900511	CONNECTOR 63A 380-415V CEE
31	106665	SAFETY NUT	63	900557	HEXAGONAL SCREW
32	106706	HEXAGON HEAD SCREW	64	600147	SHAFT NUT DTF 35

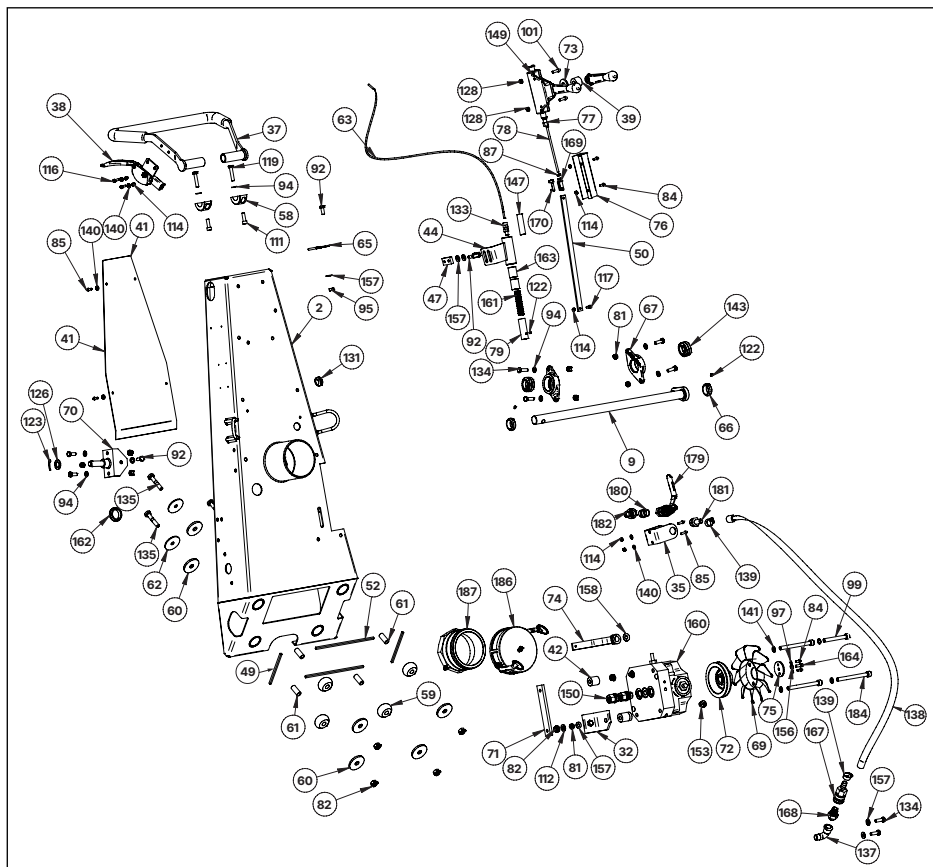
DTF 35 BASIC

800022



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NO	ARTICLE	PART NAME
1	600132	HOUSING DTF 35
2	600139	HANDLE BAR DTF 35
3	600146	SHAFT ASSEMBLED DTF 35
4	600151	SIDE COVER ASSEMBLED
5	600178	CHASSIS SHAFT
6	600179	CHASSIS WELDED DTF 35
7	600183	WHEEL SHAFT
8	600185	WHEEL
9	600187	SHAFT DTF 35
10	600191	STUD BOLT
11	600192	BRACKET CONNECTION
12	600193	BRACKET LEFT
13	600195	PLATE
14	600196	BRACKET RIGHT
15	600197	LEVER DTF 35
16	600202	PLATE HOLDER BOTTOM

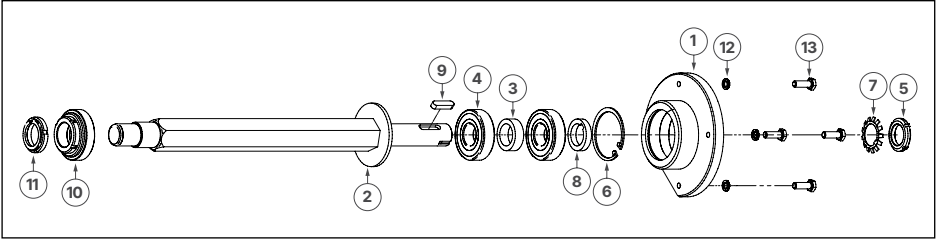
NO	ARTICLE	PART NAME
97	102285	SAFETY WASHER
98	102287	HEXAGONAL NUT
99	102314	HEXAGON SOCKET HEAD CAP SCREW
100	102332	HEXAGONAL SCREW
101	103196	HEXAGON SOCKET HEAD CAP SCREW
102	103504	HEXAGONAL NUT
103	103627	HEXAGON SOCKET HEAD CAP SCREW
104	103768	HEXAGON HEAD SCREW
105	103871	SAFETY RING
106	104259	FLAT WASHER M24
107	104384	HEXAGON HEAD SCREW
108	104715	SPRING RING BN 762 M10
109	104727	LOCK WASHER M5
110	105910	HEXAGON HEAD SCREW
111	105923	ALLEN SCREW
112	106300	WASHER

NO	ARTICLE	PART NAME	NO	ARTICLE	PART NAME
17	600203	MOTOR PLATE AXLE	113	106462	KEY
18	600206	THREADED ROD WELDED	114	106665	SAFETY NUT
19	600209	MOTOR AXLE BOTTOM	115	106706	HEXAGON HEAD SCREW
20	600224	FRONT FENDER	116	107683	HEXAGON HEAD SCREW
21	600225	FRONT FENDER STRIP	117	107912	HEXAGON HEAD SCREW
22	600226	REAR FENDER	118	107923	HEXAGON HEAD SCREW
23	600227	REAR FENDER STRIP	119	107938	HEXAGONAL SCREW
24	600228	LEFT FENDER STRIP	120	107989	KEY
25	600229	LEFT FENDER	121	108024	WING SCREW
26	600245	SPRING GUIDE TOP WELDED	122	108102	HEXAGON SOCKET SET SCREW
27	600248	TRANSFER PLATE	123	108325	SPLIT PIN
28	600250	SPRING GUIDE BOTTOM WELDED	124	108402	AXIAL BALL BEARING
29	600253	ADJUSTING PROFILE	125	108486	CILINDRICAL BUSH
30	600256	HANDLE BAR SPRING	126	108559	WASHER
31	600324	PLATE HOLDER BOTTOM	127	108682	SAFETY NUT
32	600325	REAR PUMP BRACKET WELDED	128	108693	SAFETY NUT
33	600327	FRONT FENDER	129	108736	SPRING RING
34	600328	REAR FENDER	130	108753	SHAFT NUT
35	600366	VALVE BRACKET	131	109046	CABLE RETAINER
36	600524	MOUNTING PLATE WELDED	132	109377	FRONT WHEEL COMPL.
37	600659	HANDLE PUR VA 30/DTF 25	133	109475	ADJUSTING SCREW
38	600887	OPERATING LEVER ASSY	134	109668	HEXAGON HEAD SCREW
39	600898	BUSH	135	110372	HEX. HEAD SCREW BN 57
40	600899	PLATE	136	110390	BALL STUD IN C SHAPE
41	600900	COVER	137	111086	BENT +GF+ MALLEABLE IRON
42	600902	BUSH	138	111093	HOSE
43	600903	SPRAYING DEVICE WELDED	139	111094	HOSE CLAMP FIT-TOPINOX
44	600906	CLUTCH HOUSING WELDED	140	111366	RIB-LOCK SAFETY WASHER
45	600907	ADJUSTMENT ROD DTF 35	141	111721	RIBBED LOCK WASHER
46	600908	NUT FOR LIFTING DEVICE	142	111727	STRIPE BAND -DANGER-
47	600909	THREADED PLATE	143	112560	BEARING
48	600912	PLATE	144	112561	STEERING ROLLER
49	600913	SIDE RUBBER SEAL	145	112563	WORM PIN
50	600914	STRIP FOR CLUTCH	146	112565	HEXAGON SOCKET HEAD SCREW
51	600915	THREADED ROD WELDED	147	112635	HEAT SHRINKABLE TUBE
52	600918	TOP SEAL	148	113111	BALL BEARING
53	600919	WELDED BRACKET	149	113115	ADJUSTING LEVER 46.67 LC
54	701209	HANDWHEEL DTF 25	150	113126	THREADED JOINT EO+
55	701210	REDUCTION BUSH DTF 25	151	113127	ANGLE SWIVELLING SCREW EO+
56	701251	DIGITAL POSITION INDICATOR	152	113128	TURNBUCKLE SLEEVE
57	702623	NUT FOR HOUSING COVER	153	113171	LOCKING SCREW
58	702636	CLAMPING RING	154	113172	SHOCK ABSORBER
59	702643	RUBBER SPRING	155	113368	HEXAGONAL NUT LEFT HAND THREAD
60	702644	RUBBER DISC	156	113917	RIP-LOCK LOCKING WASHER
61	702645	DISTANCE TUBE	157	113918	RIP-LOCK LOCKING WASHER
62	702646	DISC	158	113919	SAFETY WASHER

NO	ARTICLE	PART NAME	NO	ARTICLE	PART NAME
63	702926	BOWDEN SPIRAL	159	113918	RIP-LOCK LOCKING WASHER
64	703025	BRACKET	160	113919	SAFETY WASHER
65	703028	ROPE GUIDE	161	113920	RIP-LOCK LOCKING WASHER
66	706526	ADJUSTING RING VA30-SH	162	114295	REGULATING PUMP LD 0-7.6 CCM
67	706527	FLANGE HOUSING VA 30-SH / DTF	163	114630	COMPRESSION SPRING
68	706805	ATTACHMENT FOR MOTOR VA 30-SH	164	114666	CABLE GLAND
69	706814	FAN WHEEL VA 30 SH / DTF	165	114729	BEARING
70	706836	CLIP ANGLE VA 30 SH	166	114797	HEXAGON SOCKET HEAD CAP SCREW
71	706911	THREADED PLAT VA 30 SH	167	114877	HYDRAULIC MOTOR DTF 25 SH
72	707073	GEAR UNIT PULLEY VA 30 SH	168	114878	HYDRAULIC HOSE COMPL.
73	707202	DISC FOR ADJUSTING LEVER	169	114878	HYDRAULIC HOSE COMPL.
74	707208	PUMP OPERATING LEVER VA 30 SH	170	115033	QUICK COUPLING Ø= 13MM
75	707210	LOCKING DISQUE VA 30 SH	171	115034	PLUG NIPPLE G3/8"
76	707211	COVER	172	115632	FORK HEAD
77	707213	GUIDING BUSH	173	115638	FORK HEAD PIN
78	707214	TUBE DE CONNECTION	174	115745	SAFETY RING
79	707216	PIN FOR DEAD MAN UNIT	175	116781	SAFETY RING
80	707985	GEAR TO DTF 25 SH	176	900099	HEXAGON SOCKET SET SCREW
81	100263	SAFETY NUT	177	900157	FLAT WASHER
82	100283	SAFETY NUT	178	900158	LOCK NUT
83	100302	SPRING RING	179	900165	HEXAGON SOCKET HEAD SHOULDER
84	100594	ALLEN SCREW	180	900167	HEXAGON SOCKET HEAD CAP SCREW
85	100595	HEXAGON SOCKET HEAD CAP SCREW	181	900169	HEXAGON DOMED CAP NUT
86	100598	ALLEN SCREW	182	900220	VALVE 1/2" FF
87	100611	HEXAGONAL NUT	183	900221	BRASS NIPPLE 1/2"
88	100614	HEXAGONAL SCREW	184	900222	BARB FITTING 1/2"
89	100616	SAFETY WASHER SCHNORR®	185	900223	GARDENA 1/2" KOPPLING
90	101595	ALLEN SCREW	186	900255	WASHER
91	101599	HEXAGONAL SCREW	187	900552	HEXAGONAL SCREW
92	101600	HEXAGONAL SCREW	188	900553	HEXAGONAL SCREW
93	101602	HEXAGON HEAD SCREW	189	900622	PLASTIC CAP
94	101670	WASHER	190	900555	KAMLOK
95	101822	HEXAGONAL NUT ~0.8D	191	900556	BEARING
96	101823	HEXAGONAL NUT			

SHAFT ASSEMBLED

600146

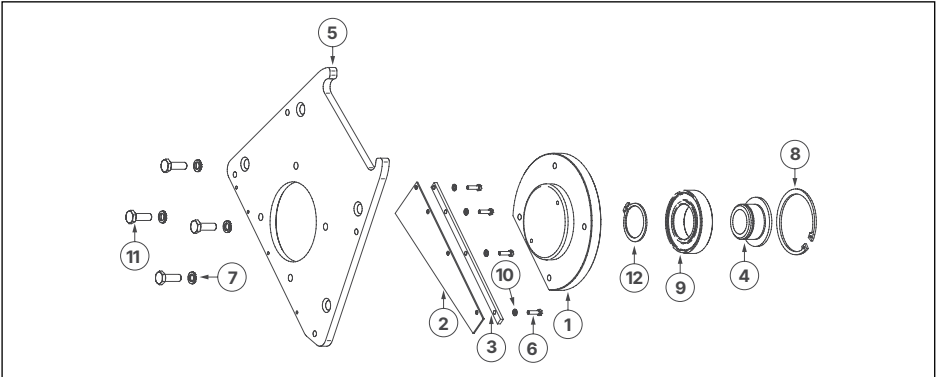


NO	ARTICLE	PART NAME
1	600320	BEARING FLANGE
2	600148	SHAFT WELDED
3	701566	SPACER
4	108279	BALL BEARING
5	108755	SHAFT NUT
6	108723	SAFETY RING
7	108335	SAFETY WASHER

NO	ARTICLE	PART NAME
8	702632	DISTANCE RING
9	105935	SPRING KEY
10	600147	SHAFT NUT DTF 35
11	900144	SELF-LOCKING SHAFT NUT KM8
12	113263	NORD-LOCK LOCKING WASHER
13	101608	HEXAGONAL SCREW

SIDE COVER ASSEMBLED

600151

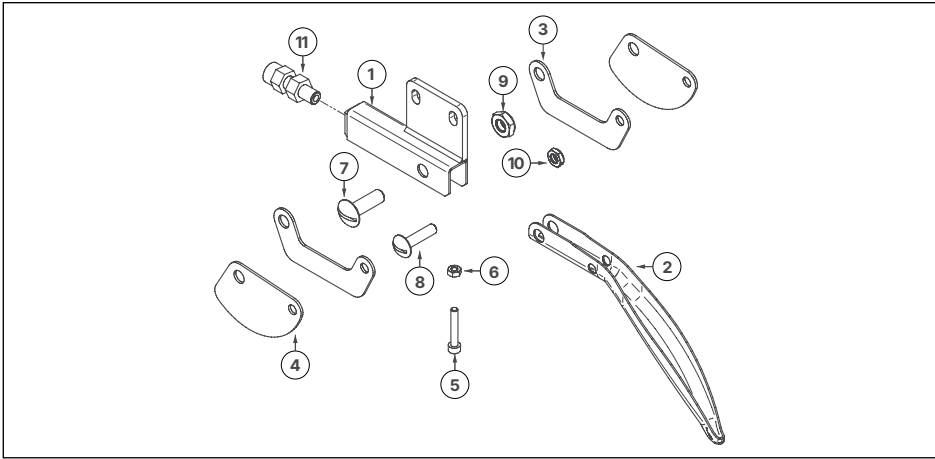


NO	ARTICLE	PART NAME
1	600321	BEARING COVER
2	600229	LEFT FENDER
3	600228	LEFT FENDER STRIP
4	600153	BUSH
5	600152	SIDE COVER DTF 35
6	115741	HEXAGONAL SCREW

NO	ARTICLE	PART NAME
7	113263	NORD-LOCK LOCKING WASHER
8	108724	SAFETY RING
9	108268	BALL BEARING
10	104727	LOCK WASHER M5
11	101608	HEXAGONAL SCREW
12	108721	SAFETY RING

OPERATING LEVER ASSY

600887

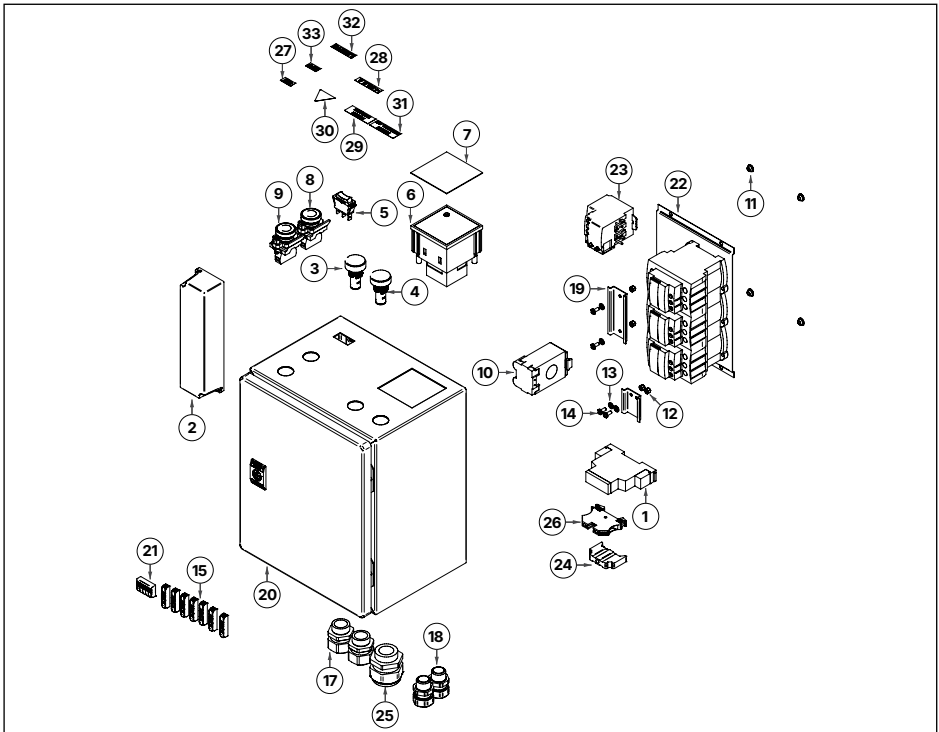


NO	ARTICLE	PART NAME
1	600886	LEVER BASE
2	706414	LEVER CRANKED
3	702893	CONNECTING STRAP
4	702894	GUARD PLATE
5	102271	ALLEN SCREW
6	100326	HEXAGONAL NUT

NO	ARTICLE	PART NAME
7	107957	CUP SCREW
8	107956	CUP SCREW
9	106666	SAFETY NUT
10	108694	SAFETY NUT
11	109475	ADJUSTING SCREW

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SWITCH ASSEMBLED DTF 35 / 40A



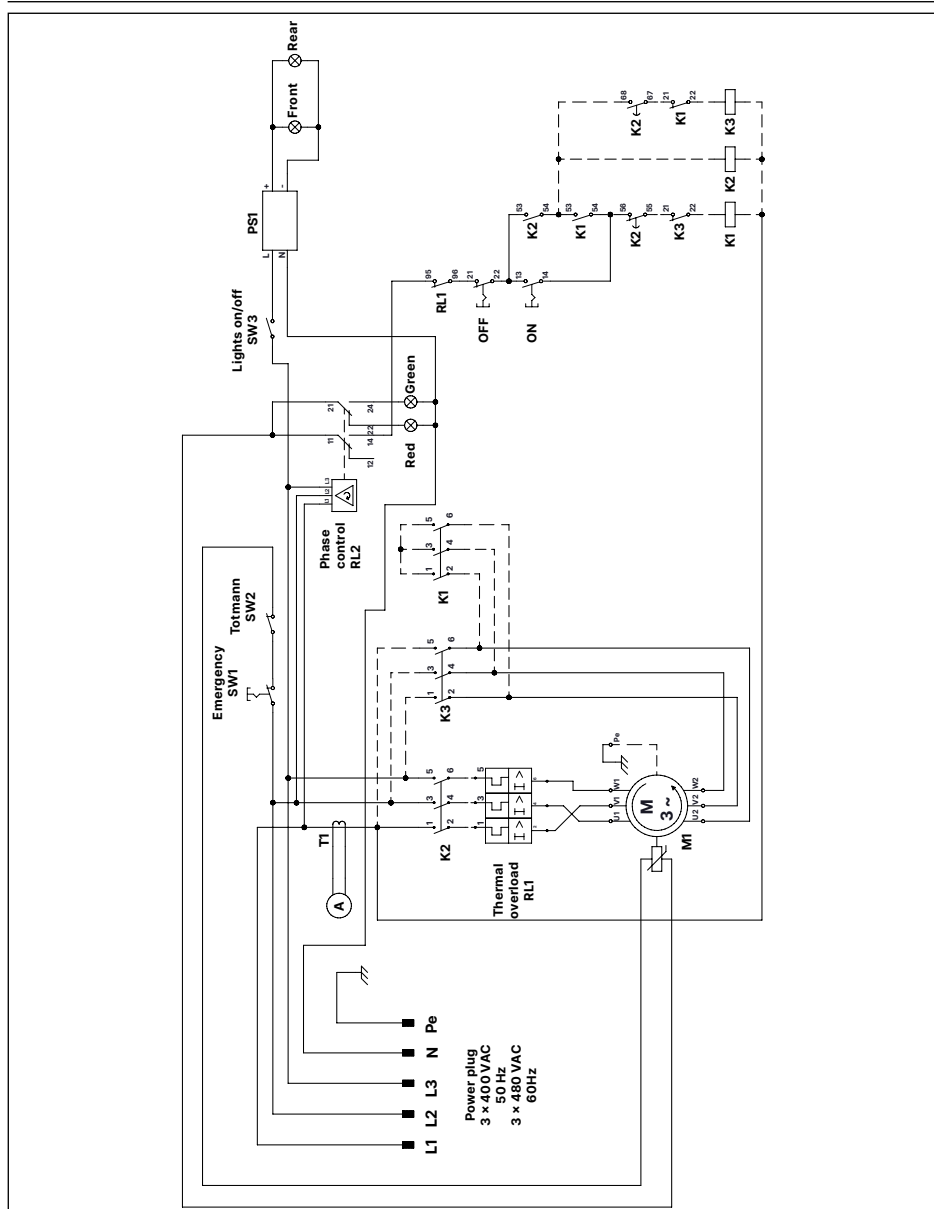
NO ARTICLE PART NAME

1	900209	3P SUPPLY CONTROL RELAY
2	900208	100W SM POWER SUPPLY
3	900211	LED LIGHT 230V RED
4	900212	LED LIGHT 230V GREEN
5	900214	ROCKER SWITCH BLACK 1 POLE
6	900415	AMPER SCALE 1.3IN 72X72
7	900414	AMPER SCALE DIAL 0-60
8	900419	PUSH BUTTON RED 22.5
9	900418	PUSH BUTTON GREEN 22.5
10	900417	CURRENT TRANSFORMER 50/5A
11	900508	BLIND RIVET ALUMINIUM
12	108692	SAFETY NUT
13	101652	WASHER
14	108194	PAN HEAD SCREW
15	900509	INLINE SPLICING CONNECTOR
17	114814	SCREWED CABLE GLAND M25 PLAST
18	115086	CABLE GLAND PROGRESS KST.

NO ARTICLE PART NAME

19	203429	MOUNTING RAIL
20	600818	ELECTRIC SWITCH ENCLOSURE
21	900103	SPLICING CONNECTOR
22	900406	STAR-DELTA MOTOR STARTER 40A
23	900216	THERMAL OVERLOAD RELAY 40A
24	108964	RETAINING PIECE
25	900086	CABLE GLAND M32, LG
26	900507	TERMINAL BLOCK 6MM ² BLUE
27	600831	LABEL STICKER "ON"
28	600836	LABEL STICKER "< 38.5 A"
28	600837	LABEL STICKER "< 26.2 A"
29	600835	LABEL STICKER "PHASE INVERSE"
30	111182	STICKER -CAUTION HIGH VOLTAGE-
31	600834	LABEL STICKER "PHASE CONTROL OK"
32	600833	LABEL STICKER "LIGHTS ON/OFF"
33	600832	LABEL STICKER "OFF"

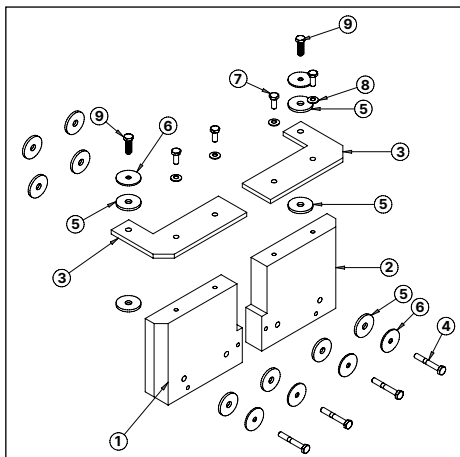
ELECTRICAL SCHEME



ACCESSOIRES

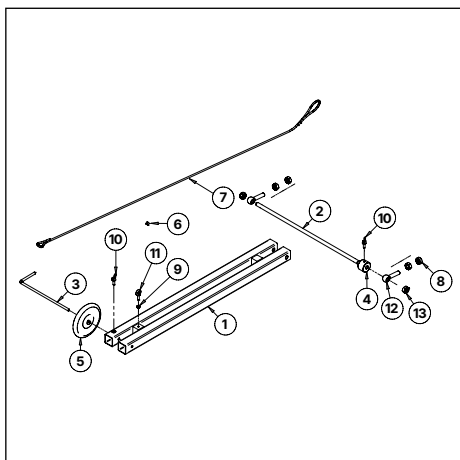
WEIGHTS SET DTF 35 - 600956

NO	ARTICLE	PART NAME
1	600221	FRONT WEIGHT RIGHT BOTTOM
2	600217	FRONT WEIGHT LEFT BOTTOM
3	600218	FRONT WEIGHT LEFT TOP
4	900162	HEXAGON HEAD BOLT
5	702644	RUBBER DISC
6	702646	DISC
7	101607	HEXAGON HEAD SCREW
8	113919	SAFETY WASHER
9	101609	HEXAGON HEAD SCREW M10X35, DIN 933



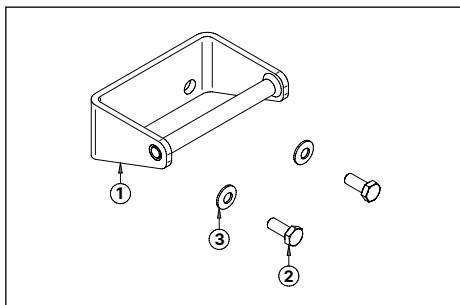
AIMING DEVICE COMPLETE - 600963

NO	ARTICLE	PART NAME
1	701236	ARM
2	600964	ROD
3	701238	POINTER AIMING DEVICE DTF 25
4	701239	SET COLLAR DTF 25
5	701240	DISCUS SHAPED WHEEL DTF 25
6	701243	DOUBLE TUBING CLAMP 0405/2
7	701242	POLYESTER CORD
8	102287	HEXAGONAL NUT
9	100611	HEXAGONAL NUT
10	110441	WING SCREW
11	110442	EYE BOLT
12	114812	EYE SCREW
13	100283	SAFETY NUT



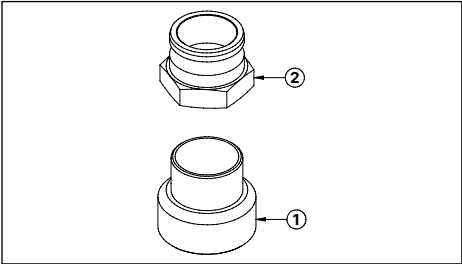
LIFTING POINT SET - 600969

NO	ARTICLE	PART NAME
1	600960	LIFTING POINT WELDED
2	101600	HEXAGONAL SCREW
3	113918	RIP-LOCK LOCKING WASHER



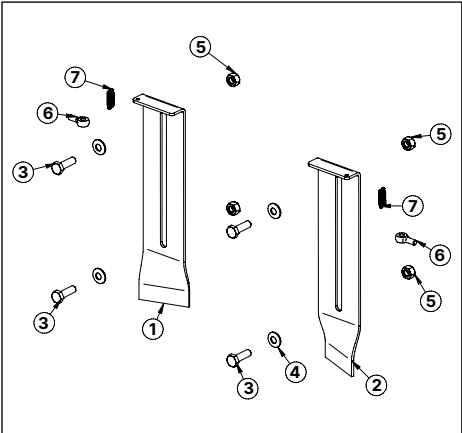
4" TO 3" CAMLOCK ADAPTER SET - 600970

NO	ARTICLE	PART NAME
1	600959	ORIFICE
2	900083	CAMLOCK DN80 FEMALE THREAD 3"



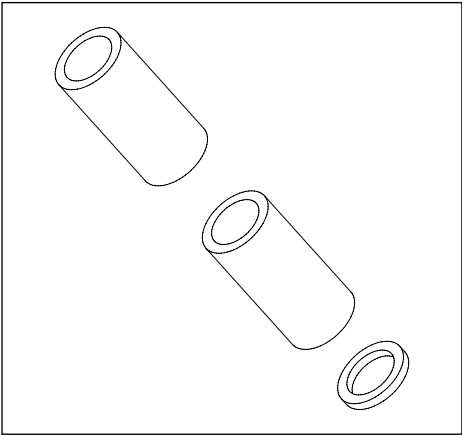
WHEEL PROTECTOR SET - 600971

NO	ARTICLE	PART NAME
1	600965	WHEEL PROTECTOR LEFT
2	600966	WHEEL PROTECTOR RIGHT
3	109668	HEXAGON HEAD SCREW
4	113918	RIP-LOCK LOCKING WASHER
5	100263	SAFETY NUT
6	900649	EYE BOLT
7	600648	SPRING
8	900032	ZIPPED NYLON BAG 23X31



DISTANCE BUSH SETS

ARTICLE	PART NAME
800119	DISTANCE BUSH SHAFT SET 10 CM
800120	DISTANCE BUSH SHAFT SET 15 CM
800121	DISTANCE BUSH SHAFT SET 17 CM
800122	DISTANCE BUSH SHAFT SET 20 CM
800123	DISTANCE BUSH SHAFT SET 25 CM
800124	DISTANCE BUSH DRUM SET 10 CM
800125	DISTANCE BUSH DRUM SET 15 CM
800126	DISTANCE BUSH DRUM SET 17 CM
800127	DISTANCE BUSH DRUM SET 20 CM
800128	DISTANCE BUSH DRUM SET 25 CM



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WARRANTY

Von Arx EOOD guarantees perfect operation of the unit for a period of 24 months from the date of purchase. If the product is used in shift operation this warranty period is halved.

Von Arx EOOD checks all units to ensure they are complete and operating correctly before they leave the works.

The customer must check the machine for any defects or damage in transit immediately on receipt and must inform the sales center and the forwarding agent of any damage or defect without delay.

Von Arx EOOD undertakes to correct all faults demonstrably due to defective materials or workmanship within the stated warranty period as quickly as possible or will arrange repair through an official Von Arx Service and sales center.

No liability whatsoever can be accepted for damage due to incorrect handling, disregarding this Operating Manual, overloading, unsuitable use, incorrect maintenance or natural wear and tear. Repairs or modifications made by the purchaser or third parties without our permission in writing are the responsibility of the customer and immediately void our warranty.

In addition, no claim can be considered under the warranty if any parts other than those manufactured or recommended by Von Arx EOOD are used.

Blades are parts subject to wear and, owing to this, are not covered by warranty.

Von Arx EOOD cannot be held liable for any damage or loss incurred by the purchaser directly or indirectly (consequential loss, loss of profit, extra costs, etc.).

Bought parts such as engines, motors, switches etc. are guaranteed within the warranty determination of the corresponding suppliers.

To prove qualification for a warranty you will need the warranty card and a corresponding commercial invoice of your sales center.

EC DECLARATION OF CONFORMITY

in the sense of the EC machine directive 2006/42/CE

We declare that the tool listed below conforms with the relevant, basic health and safety requirements of the EC Directive on the grounds of its design and construction and with the model put on the market by our company. Any modification of the tool without our consent causes this Declaration to be void.

Applied Standards:

EN ISO 12100:2011

EN ISO 13849-1:2015

EN 13862:2001+A1:2009

EN 60204-1:2019

Designation of the unit:

Surface preparation machine

Type

DTF 35 SH 3×400 V / 50 Hz

Von Arx EOOD, 4000 Plovdiv / Bulgaria**Fredrik Åkermark**

Owner

Plovdiv, 22 July 2022**Responsible for technical documentation:**

eng. Maria Spasova

Manufacturer

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