



Diamapro[®]
SYSTEMS

OWNER'S MANUAL

DX26-SP

220V & 480V

ROTARY FLOOR GRINDER



OPERATION & MAINTENANCE MANUAL

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

WARNING

CALIFORNIA PROP 65 WARNING

Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm.
www.P65Warnings.ca.gov

WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING

This product contains one or more chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



WARRANTY REGISTRATION CARD

Form must be completed and submitted within 30 days from the date of purchase.

Customer Information

First and Last Name

Company Name

Address

City

State

Zip Code

Phone Number

Email

Machine Information

Machine Type

Machine Model

Serial #

Purchase Date (dd/mm/yy)

Diamapro® Systems
3343 Peachtree Road NE
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Atlanta, GA 30326

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INTRODUCTION

Thank you for purchasing a DIAMAPRO® SYSTEMS product. This manual provides information and procedures to safely operate and maintain the DiamoPro® DX26-SP. For your own safety and protection from injury, carefully read, understand, and observe the safety instructions described in this manual. Keep this manual or a copy of it with the machine. If you lose this manual or need an additional copy, please download from our website or contact DiamoPro® Systems. This machine is designed and built with user safety in mind; however, it can present hazards if improperly operated and serviced. Please follow the operating instructions carefully. If there are any questions regarding operating or servicing of this machine, please contact DiamoPro® Systems.

Disclaimer: DiamoPro® Systems and its affiliates take no responsibility for any damage, injury or death resulting from the incorrect or unsafe use of this product. The use of this product should be undertaken by competent people only. It is the operator's responsibility to ensure that the following safety procedures are followed. If you are unsure, **DO NOT OPERATE** this product.

1. GENERAL INFORMATION

1.1 SAFETY CLASSIFICATIONS

These classifications are here to inform and alert you to potential hazards or situations to you, job site bystanders, or your equipment. Take the time to understand these classifications and pay close attention when you see these words and icons in the book or on the machine. Always carefully read and follow all instructions. **YOUR SAFETY IS AT STAKE.**

1.1.1 Dangers

! DANGER

A **DANGER** indicates a hazardous situation that, if not avoided, will result in death or serious injury.

1.1.2 Warnings

! WARNING

A **WARNING** indicates a hazardous situation in which serious injury or death could result if the warning is ignored.

1.1.3 Cautions

! CAUTION

A **CAUTION** indicates a hazardous situation in which injury, damage to your machine, or both could result if the caution is ignored.

1.1.4 Notices

NOTICE

A **NOTICE** indicates information that is important but not hazard related.

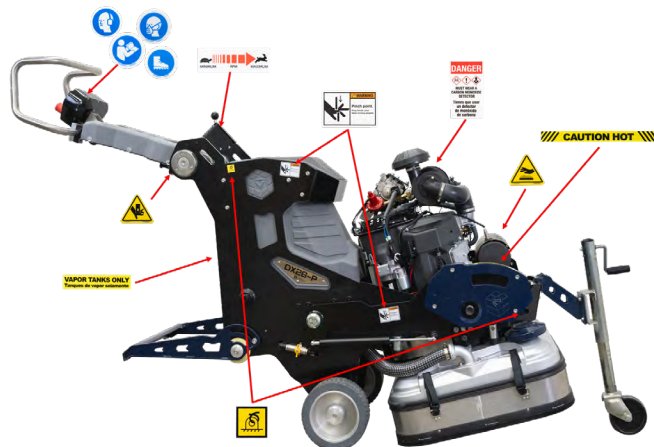
1.1.5 Helpful Tips

Helpful Tip!

A Helpful Tip indicates items that may be helpful to the operator during use of this machine.

1.2 SAFETY SIGNS

It is necessary to recognize the meaning of the signs present on the machine and keep their message readable. In case of damage replace them immediately, preventing the use of the machine. The DiamoPro® DX26-P bears the following safety signs (pictograms).



NOTICE SIGN "Must Read the Manual"	
INSTRUCTION SIGN "Tie Down Point"	
HAZARD SIGN "Warning: Pinch Point"	
HAZARD SIGN "Danger: Electrical Hazard"	
HAZARD SIGN "Warning: Crush Hazard"	
NOTICE SIGN "Mandatory Use of Ear Protection"	
NOTICE SIGN "Mandatory Use of Safety Shoes"	
NOTICE SIGN "Mandatory Use of Appropriate Respirator"	

NOTICE

Do not remove, damage or modify the pictograms on the machine. Before each work shift, check their presence and good condition. In case of deterioration, replace them, preventing the use of the machine until the replacement has taken place.

1.3 SPARE PART ORDERS

The order of replacement parts must clearly state the data necessary for their identification and the data shown on the machine identification plate. Ex.:

- Machine model
- Type
- Serial number
- Year of construction
- Description
- Requested quantity
- Shipping method
- Address, telephone number and name

For any additional information please contact the manufacturer.

2. OPERATING ENVIRONMENT SAFETY

2.1 OPERATING ENVIRONMENT

The DiamoPro® DX26-SP can be operated within the temperature range of 41°F to 86°F (5°C to 30°C). It's crucial to avoid using the machine during rainy or snowy weather conditions. Only use this machine in work areas that are adequately ventilated.

2.2 PROTECTION DEVICES

The DiamoPro® DX26-P is equipped with multiple safety mechanisms, including: a protective skirt and a hood that shields the tool plates, dust port with included cam locks for attachment of an appropriate HEPA-Filter dust collector(s) & voltage surge protection. These device(s) and/or system(s) safeguard the operator and any other individuals from potential harm. It is imperative not to remove them. Instead, prior to utilizing the machinery, ensure that all safety devices are appropriately installed and operational.

2.3 USAGE SAFETY

The DiamoPro® Systems DX26-P is intended to minimize associated hazards related to its operation. Nonetheless, it is not entirely feasible to eliminate the possibility of accidents with the machine. Inexperienced or untrained operators may cause residual risks associated with but not limited to:

- Positional hazards due to improper operator posture.
- Entanglement hazards arising from the use of unsuitable work attire.
- Training hazards caused by insufficient operational training.

2.4 SAFETY MEASURES FOR ELECTRIC MACHINES

NOTE: The operator is responsible for applying a wet-rated plug appropriate for the job site power configuration. The supplied power cord is designed to accept a compatible plug but does not include a factory-installed connector. Use only watertight, corrosion-resistant plugs rated for 220V/480V three-phase operation.

The DX26-SP operates on either 220V three-phase or 480V three-phase electrical power and is designed for use in both wet and dry grinding environments. Improper handling of electrical components can result in serious injury or death. To ensure safe operation, the following electrical safety precautions must be strictly observed at all times:

■ Power Supply and Connection

- Verify that the power source voltage and frequency match the specifications listed on the grinder's data plate before connecting the unit.
- All electrical connections must be made by a qualified electrician in accordance with local electrical codes and OSHA/NEC standards.
- Ensure that the power cord and plug are rated for three-phase 220V/480V operation and include a grounding conductor.
- Use only approved industrial-grade connectors and ensure all connections are secure and free of moisture before energizing the unit.
- Never bypass or modify the electrical connectors, breakers, or safety devices.

■ Grounding Requirements

- The grinder must be properly grounded at all times. Failure to do so may result in electric shock or equipment damage.
- Verify that the electrical supply includes a functional equipment

ground and that the grounding conductor is securely attached to the unit's grounding terminal.

- Do not operate the machine if the grounding system is damaged or missing.

■ Wet Environment Operation

- When operating in wet grinding applications, always connect the unit through a Ground-Fault Circuit Interrupter (GFCI) rated for 3-phase use.
- Keep all electrical connections, plugs, and control panels dry and elevated above the working surface to prevent water intrusion.
- Never touch electrical components, switches, or plugs with wet hands or while standing on a wet surface.
- Inspect the power cord, junction boxes, and plug seals regularly for signs of water ingress or damage.

■ Dry Environment Operation

- Ensure proper ventilation to prevent overheating of electrical components.
- Avoid operating the grinder near flammable dust, fumes, or vapors, as electrical arcs could cause ignition.
- Maintain a clean work area free of concrete dust buildup around electrical panels and vents.

■ Inspection and Maintenance

- Disconnect power at the source before performing any inspection, maintenance, or repair.
- Inspect all cords, plugs, and control components before each use for cuts, frays, exposed wires, or corrosion. Replace any damaged components immediately.
- Do not operate the machine if the power cable insulation is damaged or if there is evidence of arcing or overheating.
- Ensure that the electrical enclosure covers are securely fastened after maintenance or service.

■ Emergency Procedures

- Know the location of the main disconnect switch and ensure it is easily accessible in case of emergency.
- In the event of electrical shock, disconnect power immediately before attempting to assist the injured person.
- Report all electrical incidents to a supervisor and have the equipment inspected by a qualified technician before resuming operation.

2.5 SAFETY MEASURES FOR DUST

Cutting, especially when DRY cutting, generates dust that comes from the material being cut, which frequently contains silica. **When dry-cutting, be sure to use an appropriate sized HEPA filtered dust collector.**



CAUTION



Respirable crystalline silica causes damage to lungs and may cause cancer. Always wear respiratory protection during exposure.
Always use appropriate dust control equipment to keep dust within OSHA and local regulation limits.

Silica is a basic component of sand, quartz, concrete, brick clay, granite and numerous other minerals and rocks. Exposure to excessive amount of such dust can cause the following symptoms according to NTP* and IARC*:

- Respiratory diseases (affecting your ability to breath), including chronic bronchitis, silicosis, and pulmonary fibrosis from exposure to silica. These diseases may be fatal.
- Cancer
- Skin irritation and rash

*National Toxicology Program, International Agency for Research on Cancer

Take precautionary steps:

- Avoid inhalation of and skin contact with dust, mist, and fumes.
- Wet cut when feasible, to minimize dust.
- Wear and ensure that all bystanders wear appropriate respiratory protection such as dust masks designed to filter out microscopic particles (See OSHA 29 CFR Part 1910.1200).

3. MACHINE OPERATION

3.1 SAFETY INSTRUCTIONS

3.1.1 KNOW THE RULES & YOUR EQUIPMENT

Most job sites have rules governing equipment use & maintenance. Before starting at a new work location, check with the supervisor or safety coordinator. Ask about any rules or regulations you need to abide by. OSHA enforces federal laws within the United States that apply to the safe operation, application, & maintenance of equipment on job sites. It is the employer's responsibility to comply with these laws. Do not operate this machine unless you carefully read the operations and maintenance manual.

3.1.2 RECEIVE PROPER TRAINING

Do not operate this machine unless you have received operational and maintenance training from a DiamoPro® Systems representative or from an authorized distributor for DiamoPro® Systems.

3.1.4 PROTECT YOUR FEET

Observe all applicable local, state, and federal safety regulations. Wear OSHA approved foot protection.

3.1.5 PROTECT YOUR EYES

Observe all applicable local, state, and federal safety regulations. Wear OSHA approved safety glasses.

3.1.6 PROTECT YOUR LUNGS



CAUTION

Respirable crystalline silica causes damage to lungs and may cause cancer. Always wear respiratory protection during exposure. Always use appropriate dust control equipment to keep dust within OSHA and local regulation limits.

Breathable silica may be generated by use of this product. Silica can cause severe and permanent lung damage, cancer, and other serious diseases. Do not breathe the dust. Do not rely on your sight or smell to determine if dust is in the air. Silica may be in the air without a visible dust cloud. If air monitoring equipment for silica is not provided by your employer at your work site, you **MUST** wear appropriate respiratory protection when using or servicing the machine. Consult your employer and OSHA regarding the appropriate respiratory protection.

3.1.7 PROTECT YOUR EARS

Observe all applicable local, state, and federal safety regulations. Wear OSHA approved hearing protection.

3.1.8 DRESS PROPERLY

Do not wear loose clothing or jewelry that can be caught in moving parts. Wear protective hair covering to contain long hair. Keep hair away from motor air vent. Rubber gloves and non-skid footwear are recommended when working outdoors.

3.1.9 AVOID A DANGEROUS ENVIRONMENT

Do not expose the machine to rain. Do not use the machine in wet conditions. Keep the work area well lit. When working at an elevated location, pay attention to articles and people below.

3.1.10 BEWARE OF HIDDEN DANGERS IN CONCRETE

Rebar or utility lines may be buried in concrete. Disconnect the power from any utility lines. If these dangers are present and are not clearly indicated, clearly mark the area.

3.1.11 KEEP WORK AREA CLEAN - DO NOT RUN OVER ANYTHING

Loose debris could be thrown from cracks. Make sure the area to be cut is clear from people and any loose objects, nuts, bolts, etc. Never run over any loose objects.

3.1.12 KEEP CHILDREN AND VISITORS AWAY

Do not allow anyone to stand in line with the grinding path. Do not let children or visitors in contact with machine or extension cord. Keep children and visitors away from the work area.

3.1.13 AVOID FLAMMABLE LIQUIDS OR GASES



WARNING

Never use machines in areas containing flammable, combustible, or explosive materials such as but not limited to lacquer, paint, benzene, thinner, gasoline, gases, and adhesive agents. Failure to do so may result in fire or explosion that could cause serious injury or death.

Diamond Tooling produces heat and sparks during operation. Never use machines in dangerous sites containing flammable, combustible, or explosive materials such as lacquer, paint, benzene, thinner, gasoline, gases, and adhesive agents.

3.1.14 AVOID CONTACT WITH HOT TOOLING AND SHROUD



CAUTION

Tooling and the machine shroud can become hot during operation and remain hot after stopped. Do not touch the tooling and shroud without proper hand protection. Failure to do so may cause injury.

The Diamond tooling and shroud become hot during operation and remain hot after stopped. Do not touch the tooling and shroud without proper hand protection.

3.1.15 KEEP FIRM GRIP ON THE MACHINE

Keep a firm hold on the handle grips and maintain control of the machine until the grinding completely stops. **DO NOT** tape or restrict safety handle on handle.

3.1.16 CHECK TOOLING FOR CRACKS, DAMAGE, AND MISALIGNMENT

Never use cracked, damaged, or misaligned tooling. After mounting check to see the tooling is secure.

3.1.17 DO NOT FORCE WRONG SIZE OR TYPE OF TOOLING ONTO THE MACHINE



CAUTION

Always ensure the tooling is properly secured to the tool plates. Failure to do so may cause injury to personnel and/or damage to the machine.

Running the wrong type/size of tooling can cause damage to your machine.

3.1.18 USE EQUIPMENT AND ACCESSORIES PROPERLY

Do not force a small grinder to do the job of a heavy-duty grinder. Do not use the DX26-SP for improper applications. Never cut material for which the tooling was not designed.

3.1.19 STORE EQUIPMENT AFTER USE

The machine and tools should be stored in a dry and secure location when not in use. Keep equipment out of reach of children.

3.1.20 DO NOT FORCE

The grinder will do the job better and safer at the rate for which it was designed.

3.1.21 OBTAIN MATERIAL SAFETY DATA SHEET (MSDS) FOR ALL WORK SURFACE MATERIAL

This includes primers, all coatings, adhesives, tile, and crack filling materials, etc. Do not attempt to cut, clean out or remove material without MSDS information. Consult MSDS sheet for hazards information. Be aware that some materials are explosive such as dust.

3.1.22 DO NOT OVERREACH

Always keep proper footing and balance

3.1.23 MAINTAIN MACHINE WITH CARE

Keep machine clean and follow maintenance procedures for better and safer performance. Keep handles dry, clean, and free from oil and grease. Follow instructions for lubricating and changing accessories.

3.1.24 REMOVE ADJUSTING TOOLS

ALWAYS check to see tools (such as adjustment wrenches) are removed from the machine and are properly stored before use of the machine.

3.1.25 STAY ALERT

Watch what you are doing. Use common sense. Do not operate this machine when you are tired or fatigued.

3.1.26 DO NOT USE DRUGS, ALCOHOL, MEDICATION

Do not operate machine while under the influence of drugs, alcohol, or any medication.

3.1.27 KEEP ALL PARTS IN CORRECT POSITION

Do not operate the machine with missing or improperly mounted parts.

3.1.28 CHECK FOR DAMAGED PARTS

Upon delivery of the machine, the staff responsible should check for its completeness and any transportation damage. Any faults must be reported immediately to the supplying company.

Verify all machine guards are in good condition and will function properly before using the machine. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect machine operation. A guard, power switch or other part that is damaged should be properly repaired or replaced by an authorized service center.

3.1.29 NEVER TOUCH MOVING PARTS

Never touch moving parts such as blades, belts, and others.

3.1.30 STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED

Stop using machine immediately if any abnormalities are observed during operation. Examples of abnormalities include unusual noise and vibration.

3.1.31 WHEN REPLACING A PART, USE THE SAME TYPE AND QUALITY



Never do maintenance on any part of the gearbox, engine, or fuels system while the machine is running. Failure to do so may cause injury or damage to the machine.

When replacing a component part with a new one, use only parts supplied by the manufacturer. Never attempt to repair a machine if you are unfamiliar with proper procedures and techniques required. Refer to this operations and maintenance manual as well as any additional instructions included from other manufacturers.

3.1.32 SAVE THESE INSTRUCTIONS

Refer to this operations and maintenance manual as well as any additional instructions included from other manufacturers.

3.2 LIFTING AND TRANSPORT

Parts of loading, handling, transport, unloading and lifting must only be carried out by qualified personnel with extensive experience of the Diamapro® DX26-SP along with the relevant safety rules and regulations. The means used for handling, lifting and transport must be intact and capable of performing the required operations safely, considering the size, weight, projections, delicate parts, and the center of gravity of the machine. Avoid improper uses and maneuvers, avoid all maneuvers outside the respective field of competence and responsibility. Perform handling and lifting using only the recommended means where indicated. Always use the proper PPE. Do not place hands or other body parts under raised components.



Slings / transport gear must consider the shape and volume and the mass indicated on the machine (crane or forklift truck) with a capacity greater than that to be lifted. Failure to do so may cause injury or damage to the machine.



NEVER stand underneath the DX26-SP when lifted. Failure to do so will cause serious injury or death in the event the machine falls.

3.2.1 LIFTING

The total weight of the machine is about 1200 lbs. The lifting must be performed from the top.

To lift the DiamoPro® DX26-SP with a crane or forklift follow the steps below:

1. The machine is equipped with 4 frame cutouts. The lifting is done by being anchored to these elements in only a single central point as shown in the figure above.
2. Use a lifting device (crane or forklift)
3. The lifting gear must be approved for lifting, without imbalance, and with a load capacity exceeding the total weight of the machine.
4. Lift the machine and keep it as close to the ground as possible.
5. Avoid the machine tilting at an angle.
6. Move and lift the DX26-SP with the help of one person on the ground, away from the suspended load, to give signals to the lift operator to help navigate the load when lifted.

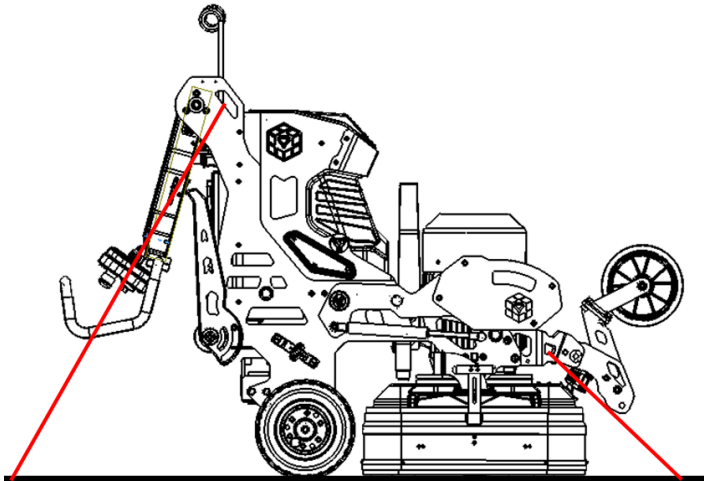
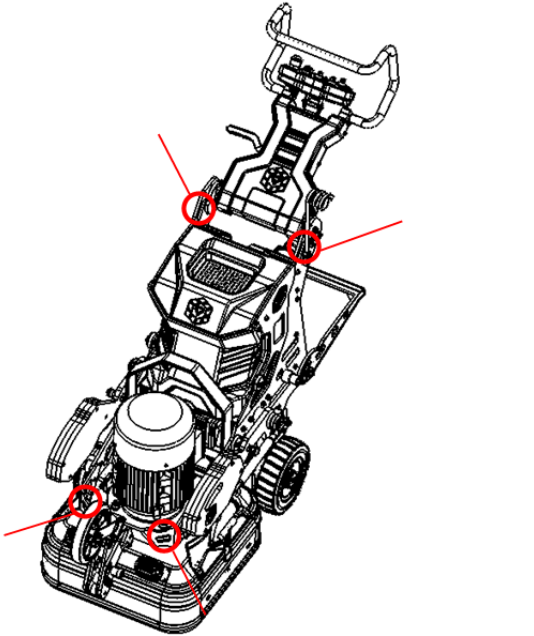
CAUTION

Crush Hazard! Always secure wheels before changing tooling or working under the machine. Failure to do so may cause injury or damage to the machine. NEVER change tooling with a forklift.

3.2.2 TRANSPORT

The DiamoPro® DX26-SP is equipped with 4 frame cutouts (shown in the figure below) on each corner of the DX26-SP

To secure the DX26-SP for transport, be sure to lower the third wheel until the tool plates are evenly on the ground. Attach the appropriate straps to secure the DX26-SP on all 4 corners as shown in the figure below.



CAUTION

Use extra care when loading and unloading the machine onto a trailer or truck. Make sure the personnel responsible for loading and unloading are familiar with the machine and the loading and unloading process. Failure to do so may cause injury or damage to the machine.

3.3 STORAGE

3.3.1 STORAGE

In case the machine is not to be used immediately, please adhere to the guidelines below:

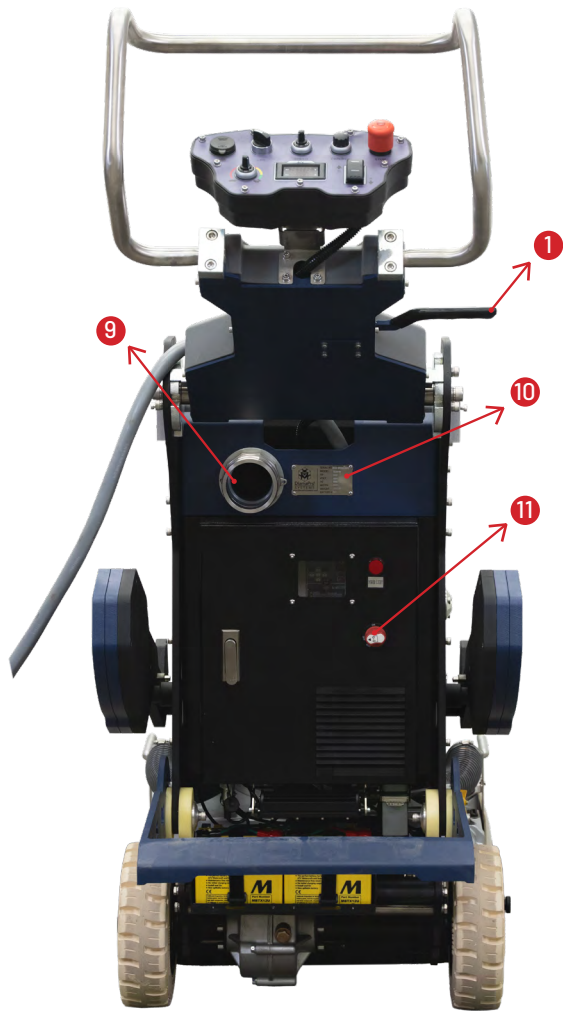
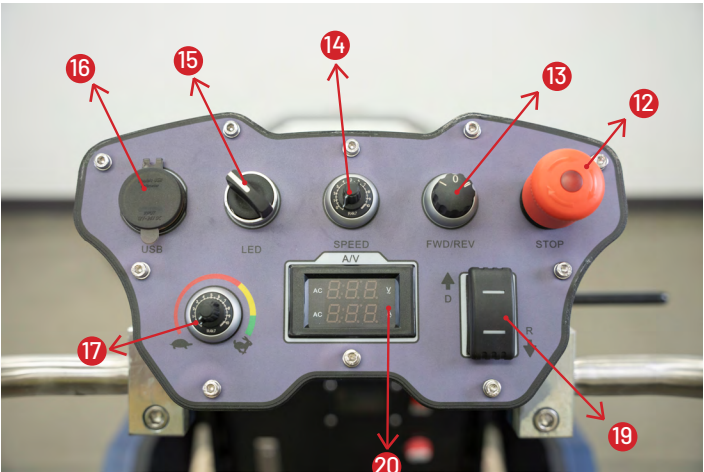
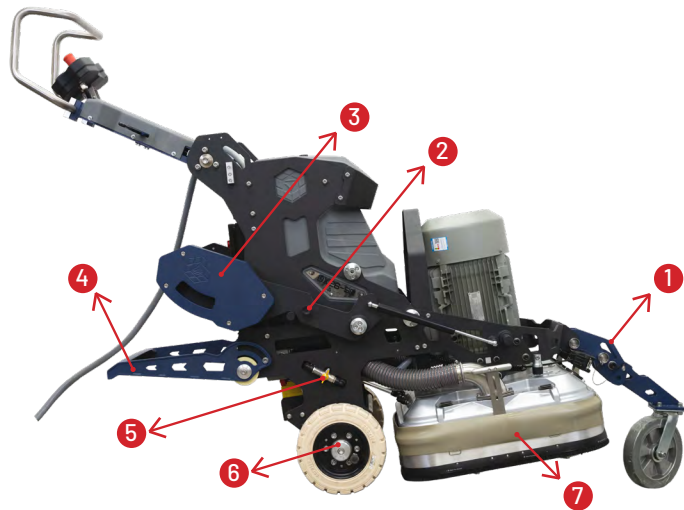
- Shut off propane tank.
- Always place the machine indoors away from areas exposed to moisture or inclement weather for storage.
- Protect unpainted parts with grease to prevent corrosion.
- Disconnect the battery.

If you plan to not use the machine for a period longer than one month:

- Close the propane tank and run out any residual fuel in the engine. Remove and properly store the propane tank.
- Remove battery if long term machine storage area average temperature drops below 40°F (4°C) or above 86°F (30°C)

3.4 MACHINE CONTROLS

The DiamoPro® DX26-SP is designed and manufactured to perform floor grinding, preparation, and polishing. To operate efficiently, the machine is equipped with 4 counter rotating heads. The engine is affixed to the frame and power is transmitted via an electromagnetic clutch through a direct drive gear box to the 4 rotors. The folding handle is attached to the frame with a control panel. All the operator controls are in the control panel. This machine is operated in the standing position.



ITEM NO.	DESCRIPTION
1	Front Moving Wheel
2	Weight Lock
3	Adjustable Side Weights
4	Foot Pedal
5	Water Valve
6	Drive Assist Wheel Locks
7	Metal Dust Shroud
8	Handle Adjustment Lever
9	Dust Port Male Cam
10	Serial Plate
11	Battery Shut Off
12	E-Stop
13	Grinding Direction
14	Grinding Speed
15	LED Switch
16	USB Ports
17	Drive Assist Speed
18	Voltage Display
19	Drive Assist Direction

3.5 MACHINE USE

3.5.1 WORK ENVIRONMENT

The DiamoPro® DX26-SP can be operated within the temperature range of 41°F to 86°F (5°C to 30°C). It's crucial to avoid using the machine during rainy or snowy weather conditions. Only use this machine in work areas that are adequately ventilated.

CAUTION

For stability reasons it is important to use the machine on stable, relatively flat, and horizontal surface. Do not use the machine on slopes greater than 3%-4%. Failure to do so may cause injury or damage to the machine.

3.5.2 TOOL INSTALLATION

1. Turn the ignition to the off position and put the side weights into the back position
2. Fold the handle up slightly and tilt the DX26-SP back all the way until the lower bump stops touching the ground.
3. Ensure no debris is present on the holders or magnets.
4. Install the appropriate uniform tooling to each tool Plate. Use the Velcro holder if using Velcro backed tooling.
5. Use Tool retention bolts to properly secure the tooling to the plates.
6. Tilt the DX26-SP back until the tooling touches the ground. Level the machine if needed and adjust the handle back to the comfortable operating position.

3.5.3 STARTING PROCEDURES

1. Adjust third wheel height so that the machine is planted securely on the work area floor.
2. Remove and safely stow the third wheel and pin before beginning operation.
3. Ensure electrical plug is wired correctly and securely connected to the appropriate power supply (See Section 2.4 for proper electrical safety information).
4. Ensure the battery is connected.
5. If self propelled function is used, make sure wheel locks are engaged
6. Ensure the area is clear and ready for the machine to operate.
7. Turn battery breaker to the "On" Position
8. Check E-Stop to make sure it is not engaged. If engaged, twist slightly to disengage.
9. Select the grinding direction
10. Select the drive direction if the self propelled motors are being used
11. Adjust speed as needed.

Helpful Tip!

If the engine does not start, return key to on position for 5-10 seconds and retry.

3.5.5 GRINDER OPERATION

To move the DX26-P, the operator must engage the clutch and walk in the desired direction. To stop the grinder movement, the operator must disengage the clutch.

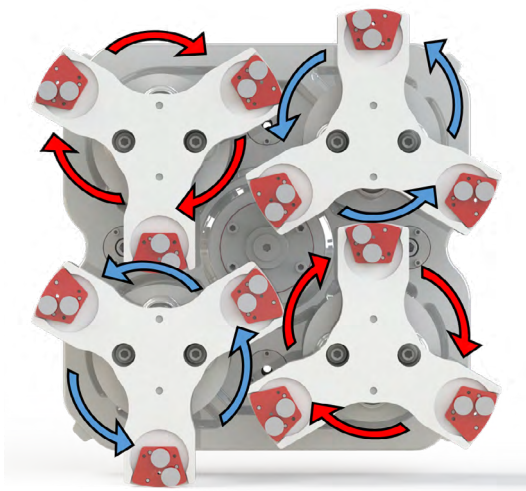
3.5.5.1 HANDLE ADJUSTMENTS

1. To adjust the handles, pull the locking pin and twist to unlock.
2. Pull down on the adjustment lever and move handle to the desired position.
3. Release the adjustment lever and ensure it is locked in position.
4. Twist the locking pin to lock out the adjustment lever.

3.5.5.2 GRINDER LEVEL ADJUSTMENTS

1. Loosen the nut under the support plate on both sides of the axle to lower the rear frame of the grinder. Tighten the upper nut to lock it into place.
2. Loosen the top nut above the support plate on both sides of the axle. Tighten the lower nut under the support plate to raise the rear frame of the grinder. Retighten the top nut to lock it into place.

The DX26-P uses a direct drive system with counter rotating heads. See image below for example of head direction.



3.5.6 SHUT DOWN PROCEDURES

To stop the DX26-P, following the steps below:

1. Disengage the self-propelled motors.
2. Bring the grinding speed to 0.
3. Switch the grinding direction to the middle (neutral) position
4. Wait for Grinder to shut off.
5. Turn the battery circuit breaker to the "off" position
6. Unplug grinder from power source.

If storing the machine, follow section 3.3.1 in this manual for proper procedures.

! WARNING

Always ensure the main power supply is completely de-energized before disconnecting the unit. Failure to do so may result in serious injury or death.

5. MAINTENANCE & REPAIR

! CAUTION

During the execution of maintenance tasks, you must wear the following P.P.E.: CUT RESISTANT GLOVES, SAFETY GLASSES AND SAFETY SHOES. For certain types of activities (lubricant filling-up) make use of airway protection equipment as indicated in the residual risks.

! CAUTION

Before carrying out the maintenance of DiamoPro® Systems DX26-SP, make sure you understand the contents of this manual. Please contact the manufacturer for further explanations and information. Failure to do so may cause injury or damage to the machine.

! CAUTION

Never do maintenance on any part of the gearbox, engine, or fuels system while the machine is running. Failure to do so may cause injury or damage to the machine.

Before carrying out the maintenance of the machine make sure you understand the contents of this manual. Please contact the manufacturer for further explanations and information. Maintenance workers must possess the skills required by this manual, as well as the mental and physical requirements necessary and sufficient to maintain and operate the machine. To ensure the functionality and durability of the machine daily maintenance must be performed, carrying out operations in compliance with the safety requirements. Only the authorized dealer can adjust and perform operations that are not assigned to the operator. It is forbidden to make adjustments and interventions during machine operation. Before performing any maintenance operation disconnect the machine from the power sources and wait for the cooling of the hot parts (engine, spark-plug area, air filter area, etc.)

Follow the safety steps below before performing any maintenance or repairs:

- Follow all safety decals and placards.
- Ensure all power sources are turned off and / or removed.
- Ensure the grinding position switch is set to the neutral position
- Disconnect the battery quick connection.
- Wear all the necessary PPE.
- Always utilize provided stands with safety pins installed correctly on all 4 corners when lifting and / or changing of tooling or foam pads.
- Secure all wheel locks to prevent unwanted movement during service or storage.
- If machine operation is required for troubleshooting task ensure appendages are clear of any rotational parts, pinch points, and crush zones.
- Allow machine to properly cool for motor related tasks.

It is also recommended for proper maintenance to:

- Thoroughly clean the DiamoPro® DX26-SP. If in doubt about how to perform occasional repairs, contact our Technical Support or an authorized dealer.
- Perform a thorough cleaning from processing residues upon finishing the job.

NOTICE

Avoid splashing water on engine and all electronics during cleaning. Cover when possible. ALWAYS ensure the engine is cooled before covering.

5.1 SCHEDULED MAINTENANCE

Good maintenance requires constant and methodical control of all parts of the machine and adaptation of tests to its actual usage. Periodic inspections are crucial to keep the machine efficient and reduce repairs and any resulting dangers.

We recommend that you have your DiamoPro® DX26-SP serviced by an authorized dealer or a DiamoPro® Systems technician every 500 hours.

Note: frequency is taken over considering a working day of 8 hours.

!CAUTION

Some operations of maintenance / replacement of worn components may only be carried out by the authorized dealer or the manufacturer's technician.

They are reported later in this publication. Please note that failure to comply with the requirements of maintenance represents a possible MISUSE or PROHIBITED USE and relieves the manufacturer from any liability for damage to persons and property.

OPERATION	HOUR INTERVAL																			
	8-50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Check gearbox seals for leaks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect tool plates	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect flex coupler bushings	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect power cable & plugs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect gear oil. Replace if needed.		X		X		X		X		X		X		X		X		X		X
Check batteries with load tester. Replace if needed					X					X					X					X

FREQUENCY	PROCEDURES
FIRST 8 HOURS (BREAK-IN PERIOD)	-CHECK TOOLING PLATES FOR WEAR OR DAMAGE -INSPECT POWER CABLE AND PLUG INTEGRITY -TILT MACHINE BACK AND INSPECT GEARBOX SEALS AROUND EACH GRINDING HEAD
EVERY 50 HOURS	-CHECK AND CLEAN ELECTRIC MOTOR FINS -CHECK AND CLEAN ELECTRIC MOTOR FAN
EVERY 200 HOURS	-CHECK SELF-PROPELLED BATTERIES WITH LOAD TESTER. REPLACE IF NEEDED.
EVERY 250 HOURS	-INSPECT RUBBER IN FLEXIBLE TOOL PLATE MOUNT FOR DAMAGE OR EXCESSIVE WEAR. REPLACE AS NEEDED
EVERY 1000 HOURS	-REPLACE GEAR OIL

NAME OF OPERATION	FREQUENCY	PERSON IN CHARGE	OPERATING INSTRUCTIONS	STATE OF MACHINE
MECHANICAL PARTS				
GENERAL CLEANING	AT EACH START		Wash the dirty parts with a brush and water. Lubricate the parts exposed to dust; Do not lubricate the rubber parts subjected to motion (belts, etc).	Machine stopped / Power sources disconnected
POWER CABLE & PLUG	AT EACH START		Check the power Cable and plug for any faulty connections, damage, or defects. Replace if any are present	Machine stopped / Power sources disconnected
GRINDING HEADS	AT EACH START		Lift the gearbox grinding head, check whether the abrasive positioning pins are loose or damaged, and replace them if necessary	Machine stopped / Power sources disconnected
WHEELS & WHEEL BEARINGS	AT EACH START		Inspect wheels & wheel bearings for damage or excessive wear. Replace if needed.	Machine stopped / Power sources disconnected
DUST CONTROL SYSTEM	AT EACH START		Inspect dust skirt and dust hoses for damage or excessive wear. Replace if needed.	Machine stopped / Power sources disconnected
POWER SOURCE	AT EACH START		Verify that the power source is providing the correct voltage and amperage for the machine. The unit is designed for 220V or 480V, 3-phase operation, depending on the model. Confirm that the electrical supply meets the rated current specified on the machine's nameplate. Ensure all power connections are secure, cables are free from damage, and the power source is properly grounded. Operating the unit with an improper or unstable power source may cause damage to the equipment or result in serious injury.	Machine stopped / Power sources disconnected
BATTERIES	WEEKLY OR EVERY 40 HOURS		The DX26-SP is equipped with a maintenance-free batteries. DO NOT TRY TO FILL. Clean the two battery poles to remove oxidation. It is recommended to turn off the battery via the circuit breaker on the side of the grinder when storing or transporting the machine	Machine stopped / Power sources disconnected

NAME OF OPERATION	FREQUENCY	PERSON IN CHARGE	OPERATING INSTRUCTIONS	STATE OF MACHINE
MECHANICAL PARTS				
GEARBOX	WEEKLY OR EVERY 40 HOURS		The gearboxes are sealed upon assembly; if you notice oil leaks, carefully find out their origin because there may be leaks from other sources. If the leaks come from the gearbox, contact our technical service or a qualified technician. Clean any oil leaks at the bottom of the grinder. For a possible change of the lubricant due to leaks or for the topping up operations, use the following type of lubricant: MOBIL SCH 630 CAUTION DO NOT REPLACE THE GEARBOX. CONTACT DIAMAPRO® SYSTEMS OR THE AUTHORIZED DEALER.	Machine stopped / Power sources disconnected
ELECTRIC MOTOR	WEEKLY OR EVERY 40 HOURS		Check & clean any dust or debris, especially if you are working in dusty conditions	Machine stopped / Power sources disconnected
SAFETY SYSTEMS				
SAFETY SYSTEMS	DAILY		Please note the requirement to perform the checking and recording of verifications of safety components every 6 months.	Machine stopped
INTEGRITY OF PICTOGRAMS	WEEKLY OR EVERY 40 HOURS			Machine stopped / Power sources disconnected

5.2 ROUTINE & ADDITIONAL MAINTENANCE

5.2.1 BATTERY REPLACEMENT & MAINTENANCE

To stop the DX26-P, follow the steps below:

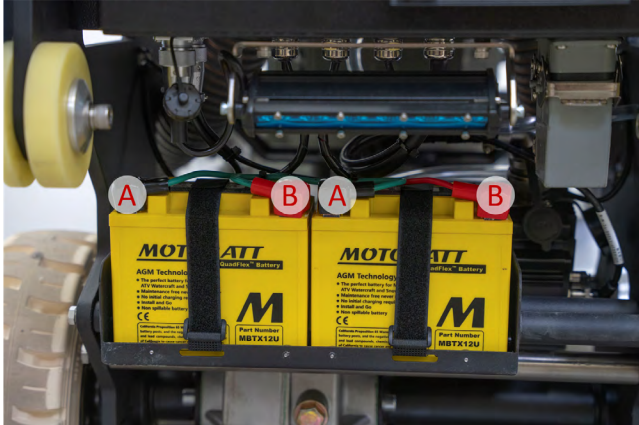
⚠ WARNING

- Always check both battery terminals are securely connected with terminals boots. Loose or exposed battery terminals can result in a spark which could lead to fire or explosion that could cause serious injury or death.
- Always check battery cables and wires for damage. Damaged cables can cause fire which could cause serious injury or death.
- Do not short-circuit the positive and negative terminals of the battery. Doing so may result in fire or explosion that could cause serious injury or death.

1. Turn off power source to the machine



2. Unplug power cable
3. Turn the battery switch to the "out" position



4. Remove the connection terminals (a) and (b) taking care to remove first the negative, black color (a) to prevent possible damage.

⚠ CAUTION

Replace only with manufacturer recommended battery (P/N: W4359)
Use of non-OEM Battery may result in harm to user, damage to the machine, and/or violation of the machine's warranty.

NOTICE

It is recommended to replace both batteries at the same time.
Replacing only one may reduce the life and performance of the new battery.

Helpful Tip!

The OEM battery is non-spillable and does not require fill maintenance.

5. Remove the battery and replace it with an AGM battery having the same specifications.
6. Repeat for second battery.

When charging a battery be sure to follow these steps below:

1. Disconnect the battery by means of the quick disconnects.
2. Remove the enclosing lid by removing the retaining screw.
3. Using a multi-meter battery voltage can be determined. If it is less than 11v the battery may require charging or replacement.
4. Remove the battery and set it on a safe stable surface.
5. Connect the battery charging clamps firmly to the correct terminal posts.
6. Repeat steps 3 when complete. If the battery is less than 11v battery may need to be replaced

⚠ CAUTION

NEVER jump start the DX26-P using a vehicle as the voltage source could damage the system. Failure to comply represents a MISUSE or PROHIBITED USE and may result in harm to user, damage to the machine, and/or violation of the machine's warranty.

NOTICE

Only recharge the battery in a dry environment. Protect the contacts from dirt and moisture stagnation. Don't spray with water.

5.2.5 Gearbox Service

The machine is equipped with a single direct drive gearbox. Periodically check the oil level of the gearboxes and top off as needed. There is a cap visible on top of the gearbox.

If oil is present underneath the machine, perform a thorough cleaning and check the origin of the leak. If topping off is necessary, proceed as follows:

1. Remove the fill cap from the gearbox.

NOTICE

TO AVOID DAMAGE TO THE MACHINE STRICTLY follow the manufacturer's recommended oil in the manual provided with the machine.
Mobil SHC 630 Gear Oil (DP-GH-SHC630) is recommended.

2. Add gear oil as needed to cover the gears.
3. Replace fill cap.
4. When performing a system flush utilize the drain cap first to remove all gear oil. Then reinstall the drain cap.
6. Then, follow the refill steps above.



TRANS FLUID ACCESS

5.3 NOTES ON DISMANTLING

Regarding dismantling activities, there are no security-related or environmental problems. In case you wish to proceed with the dismantling of the various machine parts, it is necessary to pay attention to their movement, considering the respective masses to be handled. In the case of machines used in working environments it is necessary to dispose of the electrical and electronic products, if any, contained in them in accordance with the current legislation.

NOTICE



Do not dispose into the environment products which are not biodegradable, lubricant oils and relevant filters as well as non-ferrous parts (rubber, PVC, etc.). Perform their disposal in accordance with the laws in force and before taking care of this disposal, consult your authorized dealer in order to check whether there are specific programs of withdrawal.

NOTICE

At the time of dismantling, the user shall be required to recover the identification plate of the equipment to prevent the machine from being put back into service without its guards because the
MANUFACTURER IS NO LONGER HELD RESPONSIBLE.

TROUBLESHOOTING

ISSUES	CAUSES	REMEDIES
Grinder oil leakage	Gearbox cover screws are loose	Tighten the screws
	Faulty Seals	Contact the authorized service center
	Oil seals on central and lateral shaft worn	Contact the authorized service center
Motor doesn't start	E-stop engaged	Disengaged E-stop
	Battery circuit breaker turned off	Turn on battery circuit breaker
	Improper Voltage or Amperage	Check power source and extension cable length
	Motor trouble	Contact the authorized service
	Inverter trouble	Contact the authorized service
Motor speed falls	Improper Voltage or Amperage	Check power source and extension cable length
	Motor trouble	Contact the authorized service
	Inverter trouble	Contact the authorized service
Rotor(s) do not turn when grinder is running	Direction Switch	"Check direction switch is engaged Check switch connections Reduce head pressure Contact authorized service center"
	Damaged shear key	Replace damaged shear key
Grinder jumps on floor	Tooling uneven or missing	Check tooling Ensure locking bolt is installed to tooling
	Grinder unlevel	Level grinder
	Damaged tool plates	Replace damaged tool plates
	Damaged shear key	Replace damaged shear key
	Insufficient weight	Lower side weights

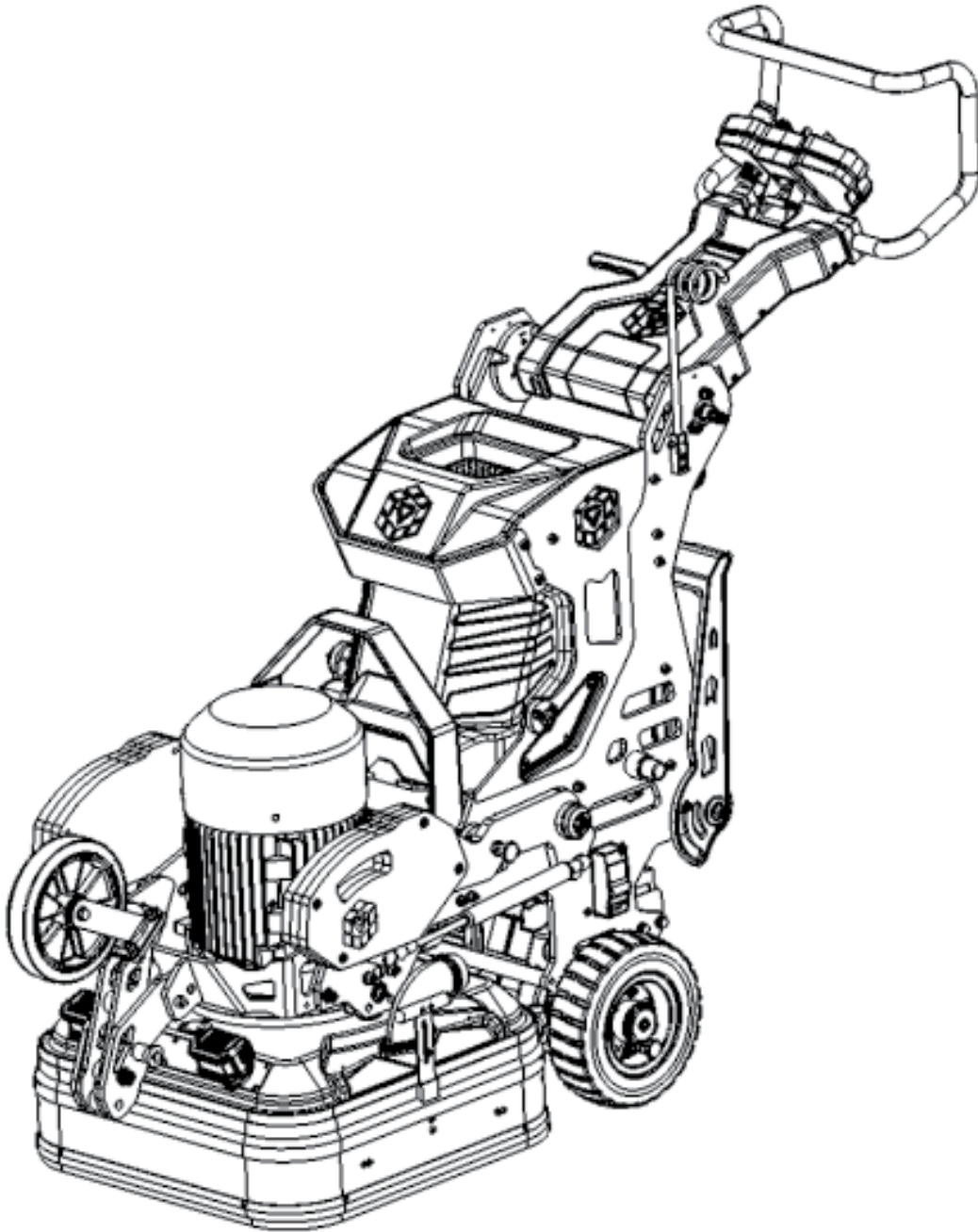
TECHNICAL PARAMETERS



VOLTAGE	480V 3-PHASE	220V 3-PHASE
MOTOR HORSEPOWER	20 HP	20 HP
AMP	30A	50A
WORKING WIDTH	26"	
HEADS	4 X 12 IN	
WEIGHT	1323 LBS (INCLUDES FRONT WHEEL)	
WATER TANK CAPACITY	5 GALLON	
DIMENSIONS (LxWxH)	50x27x55 IN	
GRINDING HEAD SPEED	0-576 RPM	
DUST CONTROL ATTACHMENT	3 IN MALE CAM LOCK	

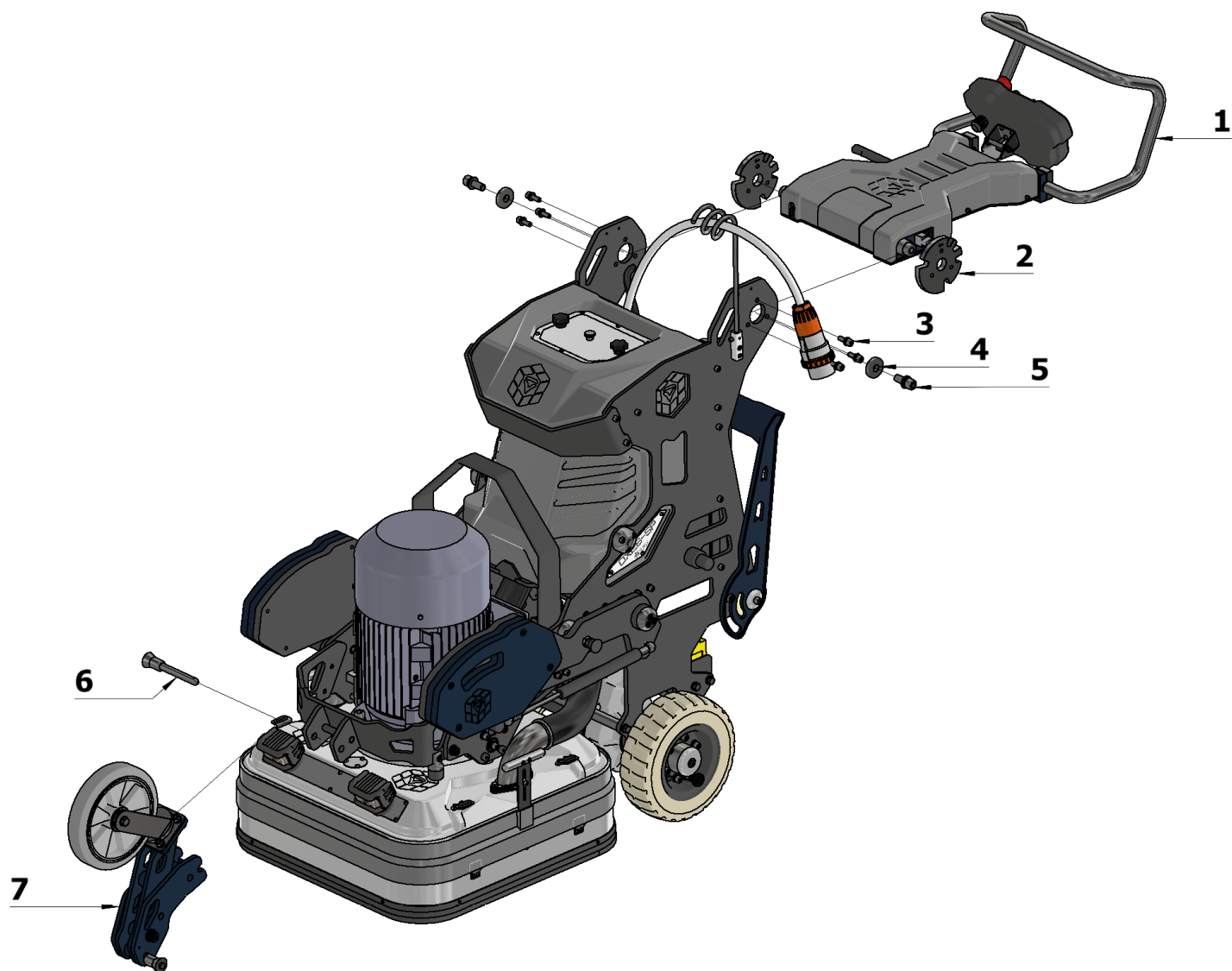


DX26-SP PARTS LIST

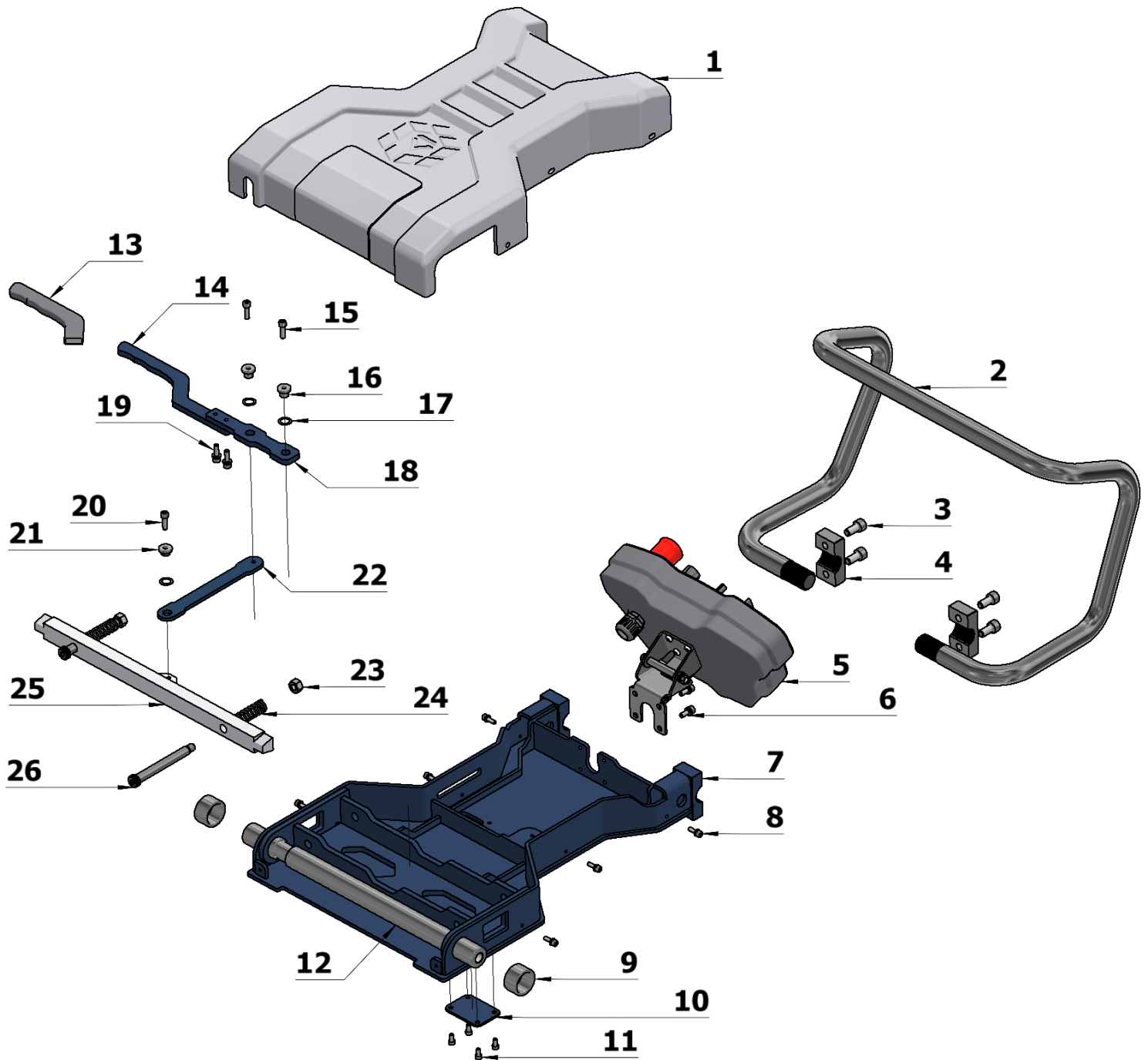


PARTS MANUAL IS IN PROGRESS.
IF THE PART YOU ARE LOOKING FOR IS NOT LISTED,
PLEASE CALL 866-994-2381 FOR ASSISTANCE.

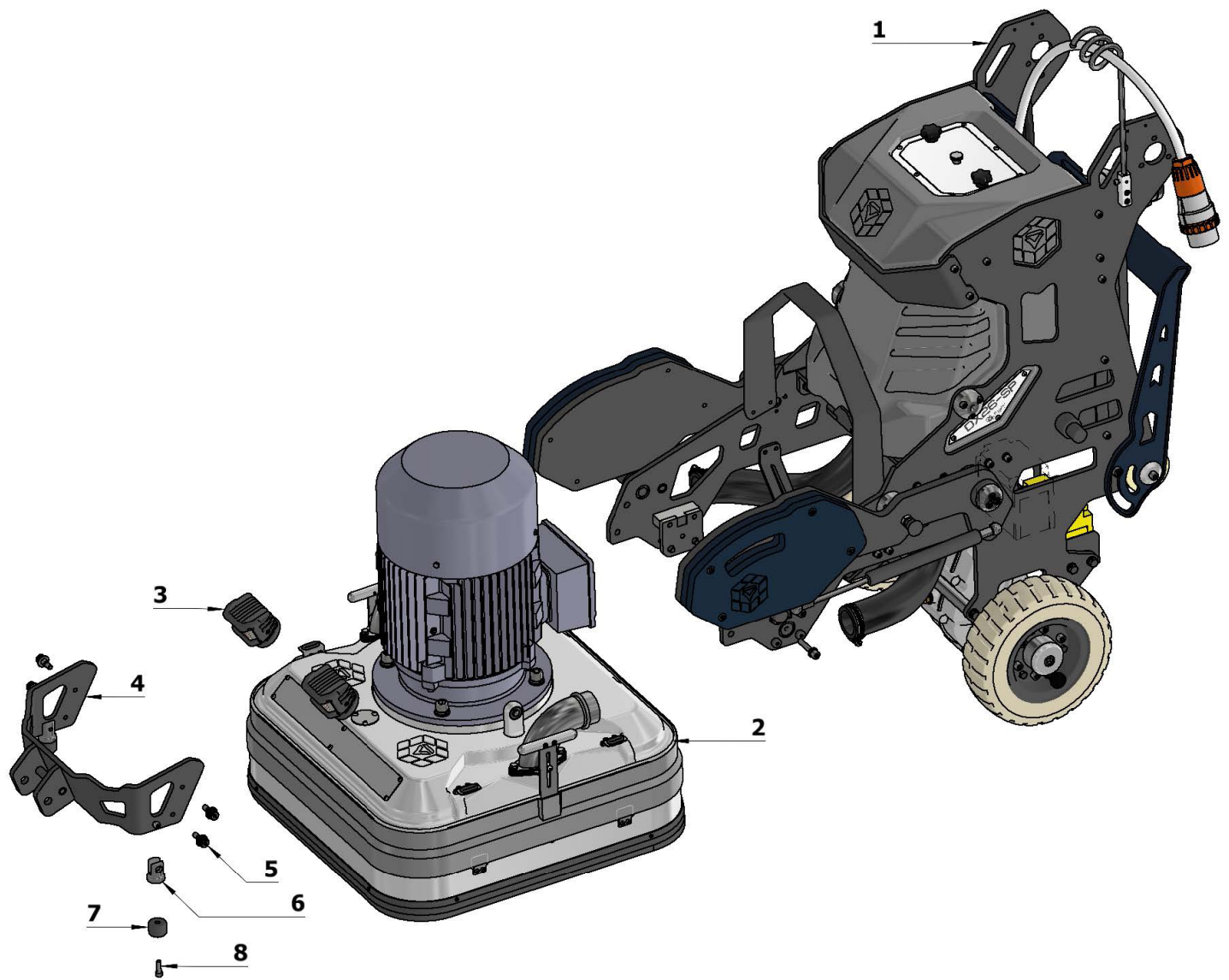
GENERAL PARTS



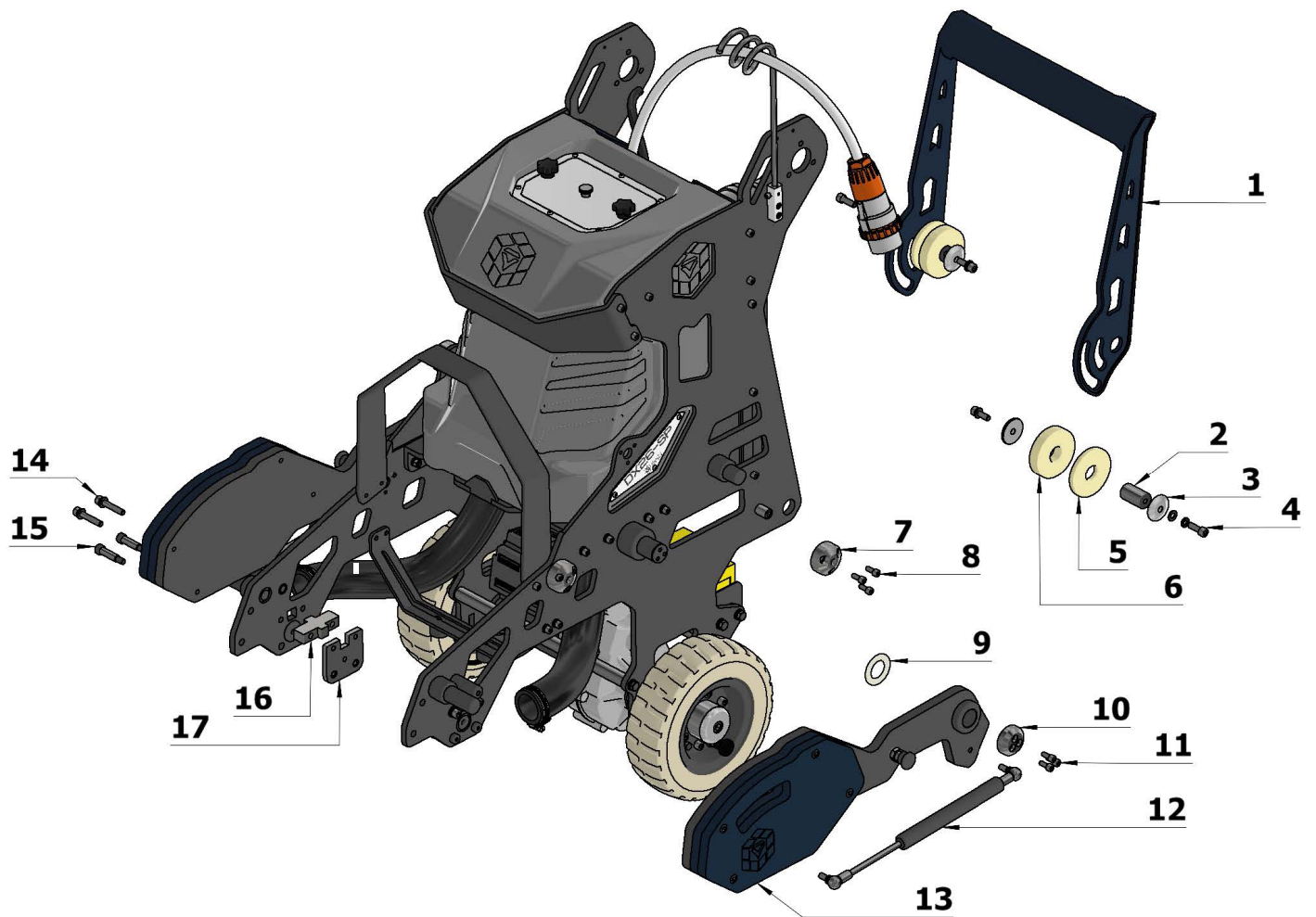
HANDLE ASSEMBLY



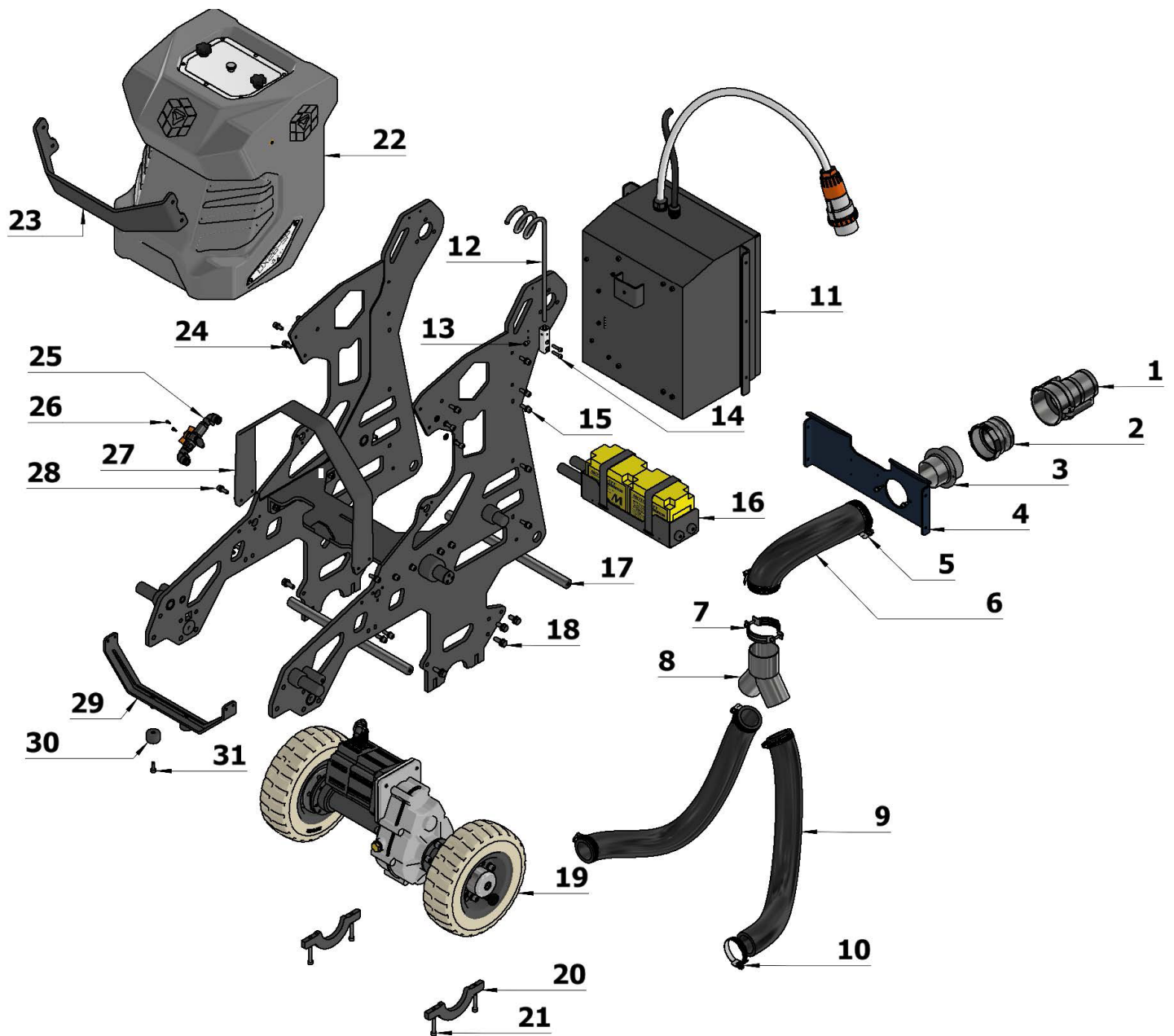
FRAME



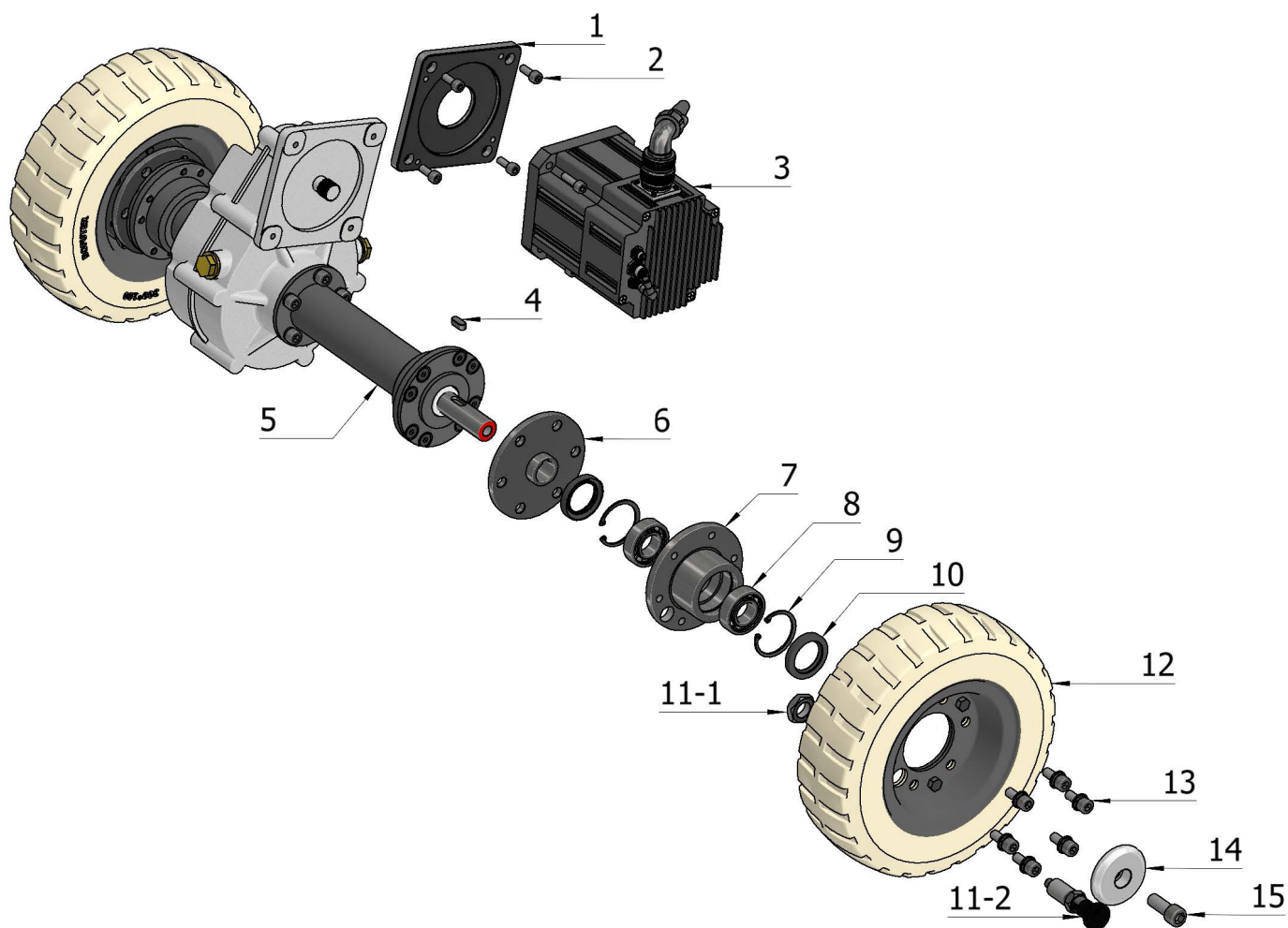
CARRIAGE



FRAME / WHEEL ASSEMBLIES



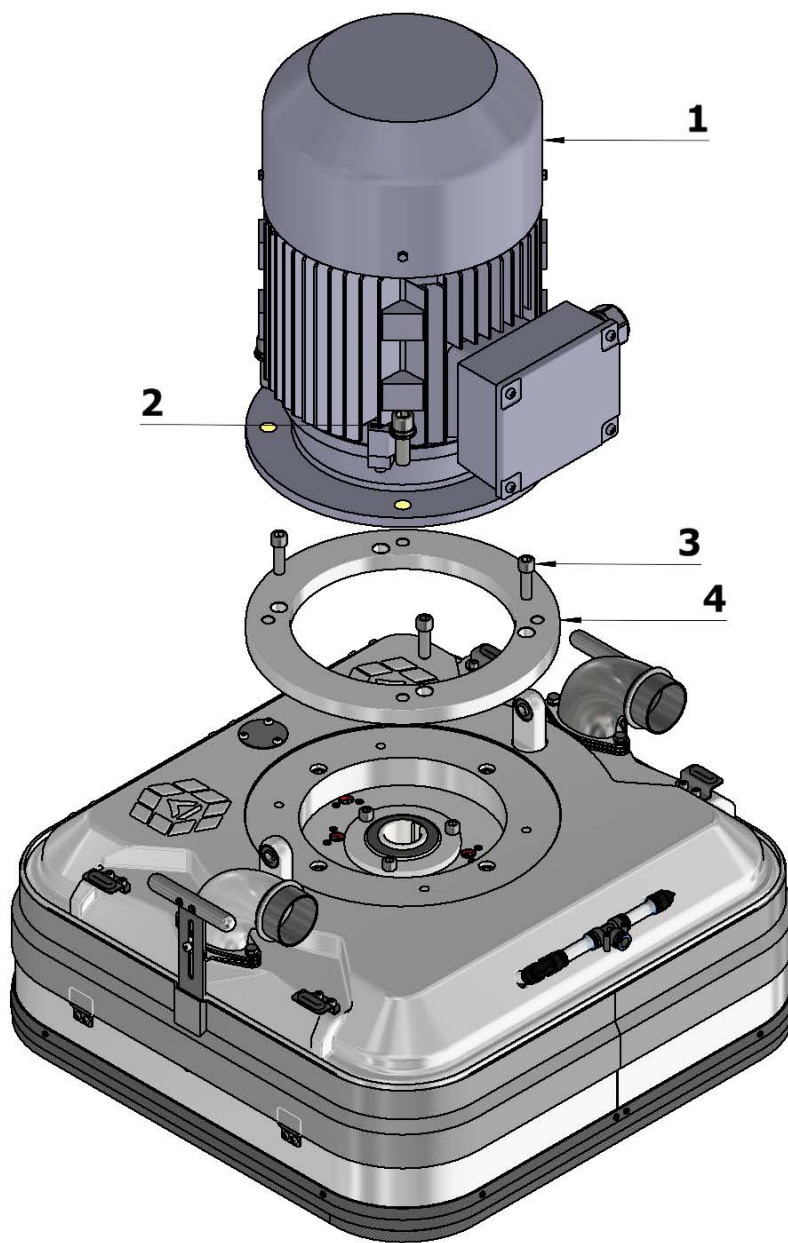
WHEEL DRIVE ASSEMBLY



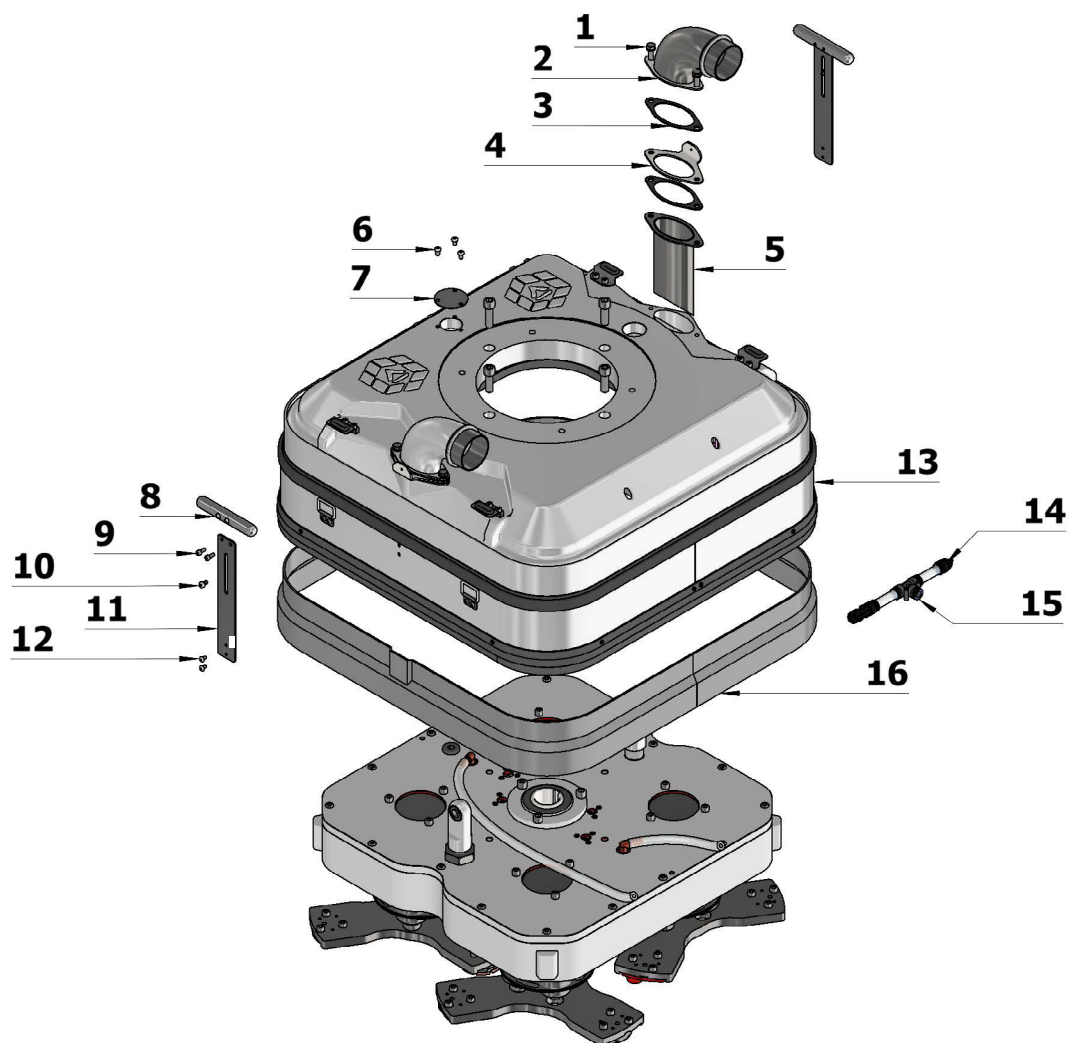
WEIGHT ASSEMBLY



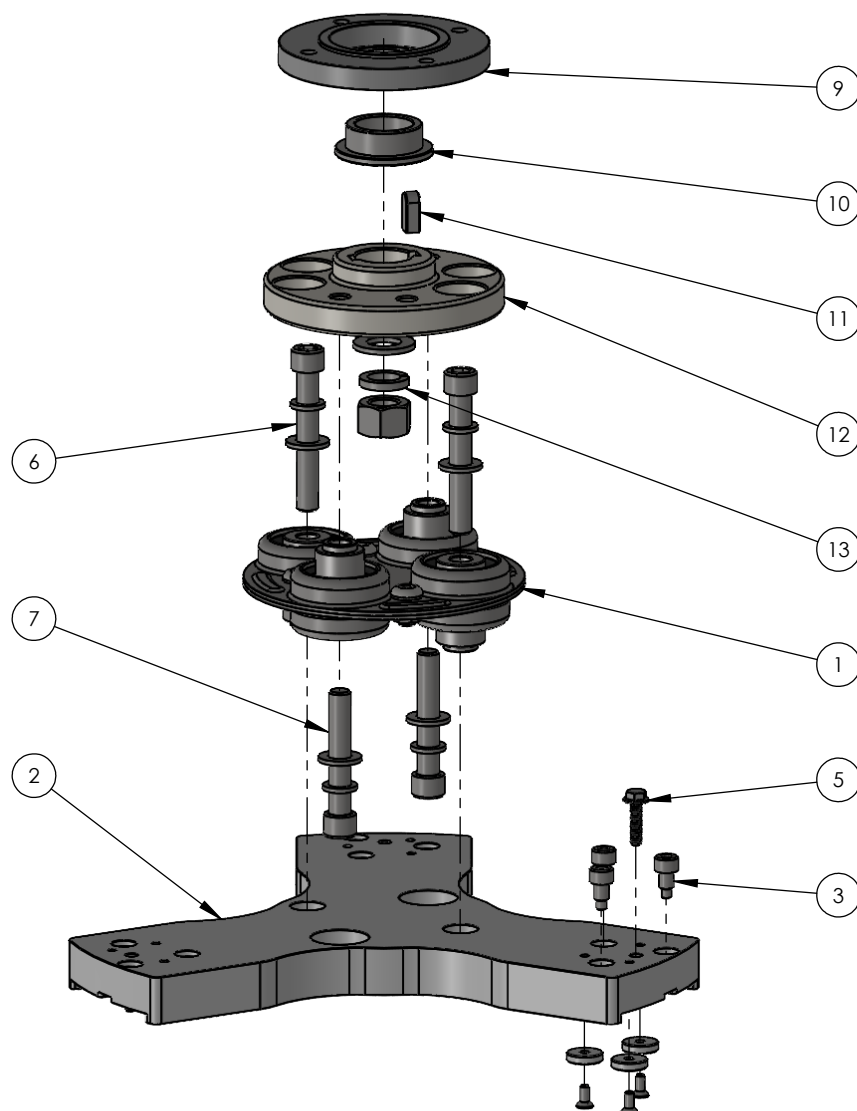
MOTOR BASE ASSEMBLY



TRANSMISSION ASSEMBLY

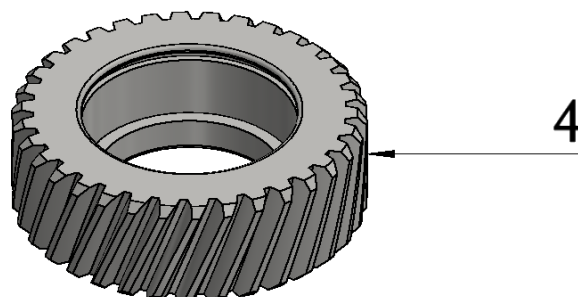
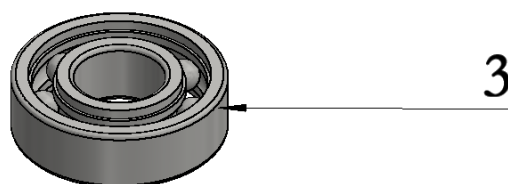
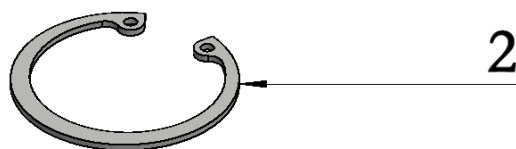
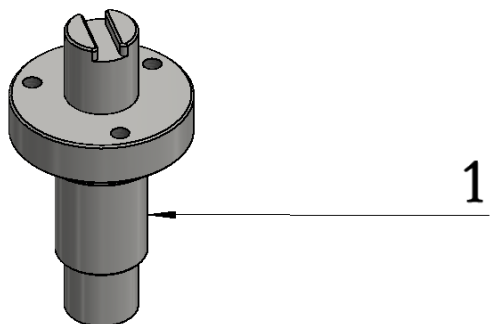


TOOL PLATE ASSEMBLY



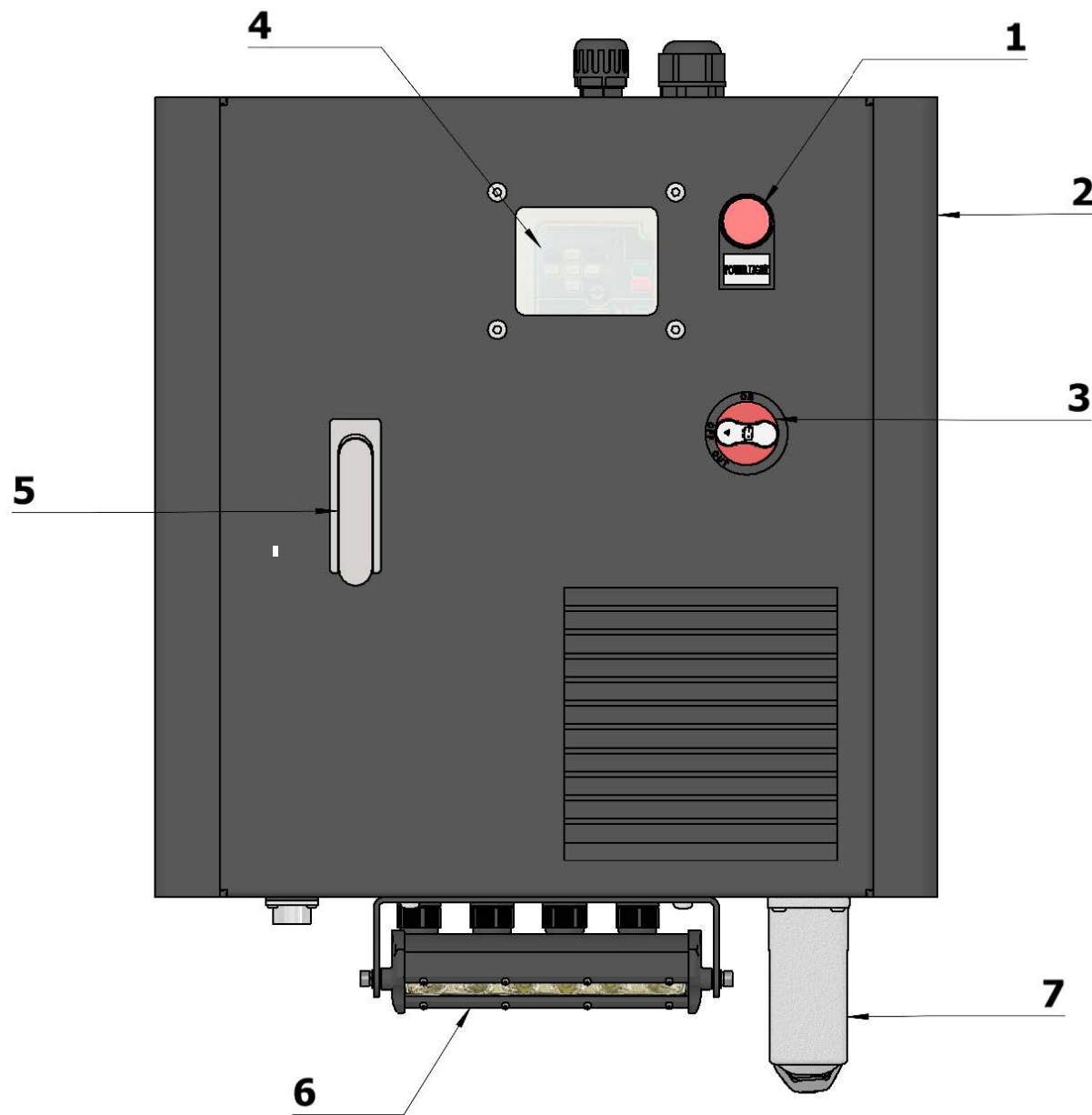
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-GH-FLCO	FLEX COUPLER	4
2	DP-DX26-GRPL-STEEL	GRINDING PLATE, STEEL *PLEASE NOTE; ONLY DP-GH-RTSY-18 WILL WORK WITH STEEL PLATES.	4
3	DP-GH-DXTP	M8 TOOL RETENTION PIN	36
4	DP-GH-RTSY	FLANGE HEAD SECURITY BOLT M6 x 27mm (FOR ALUMINUM TP)	12
5	DP-GH-RTSY-18	FLANGE HEAD SECURITY BOLT M6 x 18mm (FOR STEEL TP)	12
6	DP-GH-DX0115	HEXAGON SOCKET BOLT M12X80 + SPRING WASHER + FLAT WASHER	8
7	DP-GH-DX0116	HEXAGON SOCKET BOLT M12X70 + SPRING WASHER + FLAT WASHER	8
8	DP-DX26-GRPL	GRINDING PLATE, ALUMINUM (OPTIONAL) *PLEASE NOTE; ONLY DP-GH-RTSY WILL WORK WITH ALUMINUM PLATES.	
9	DP-BEAR-6207-LOWER	LOWER BEARING BASE ASSEMBLY 6207	4
10	DP-DX26-SLSR	SEALING STEEL RING	4
11	DP-KEY-10X8X22	SHEAR KEY 10x8x22	4
12	DP-DX26-GRCB	GRINDING CLAW BASE	4
13	DP-DX26-GRCB-HW	NUT M18 + SPRING WASHER + FLAT WASHER	4

GEAR SHAFT ASSEMBLY

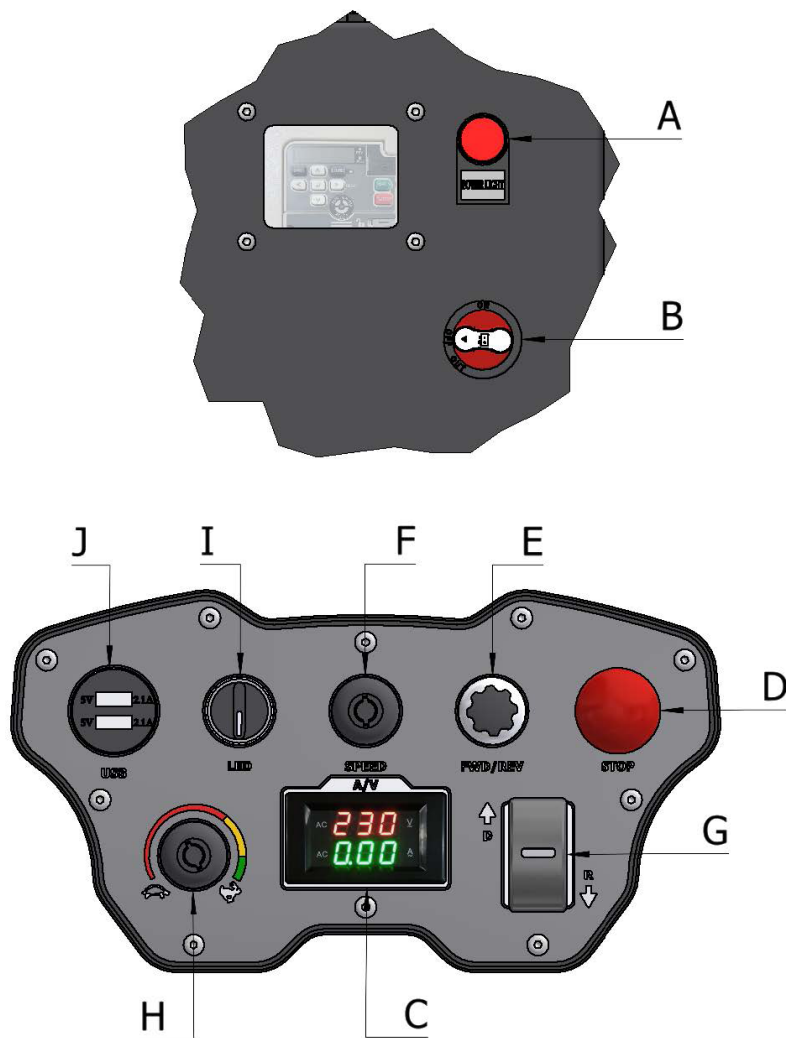


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-DX26-TNSF	TRANSITION SHAFT	4
2	DP-DX26-CN47	CIRCLIP 47MM	4
3	DP-BEAR-6204	BEARING 6204	4
4	DP-DX26-TRNG	TRANSITION GEAR	4

POWER BOX ASSEMBLY



CONTROL PANEL

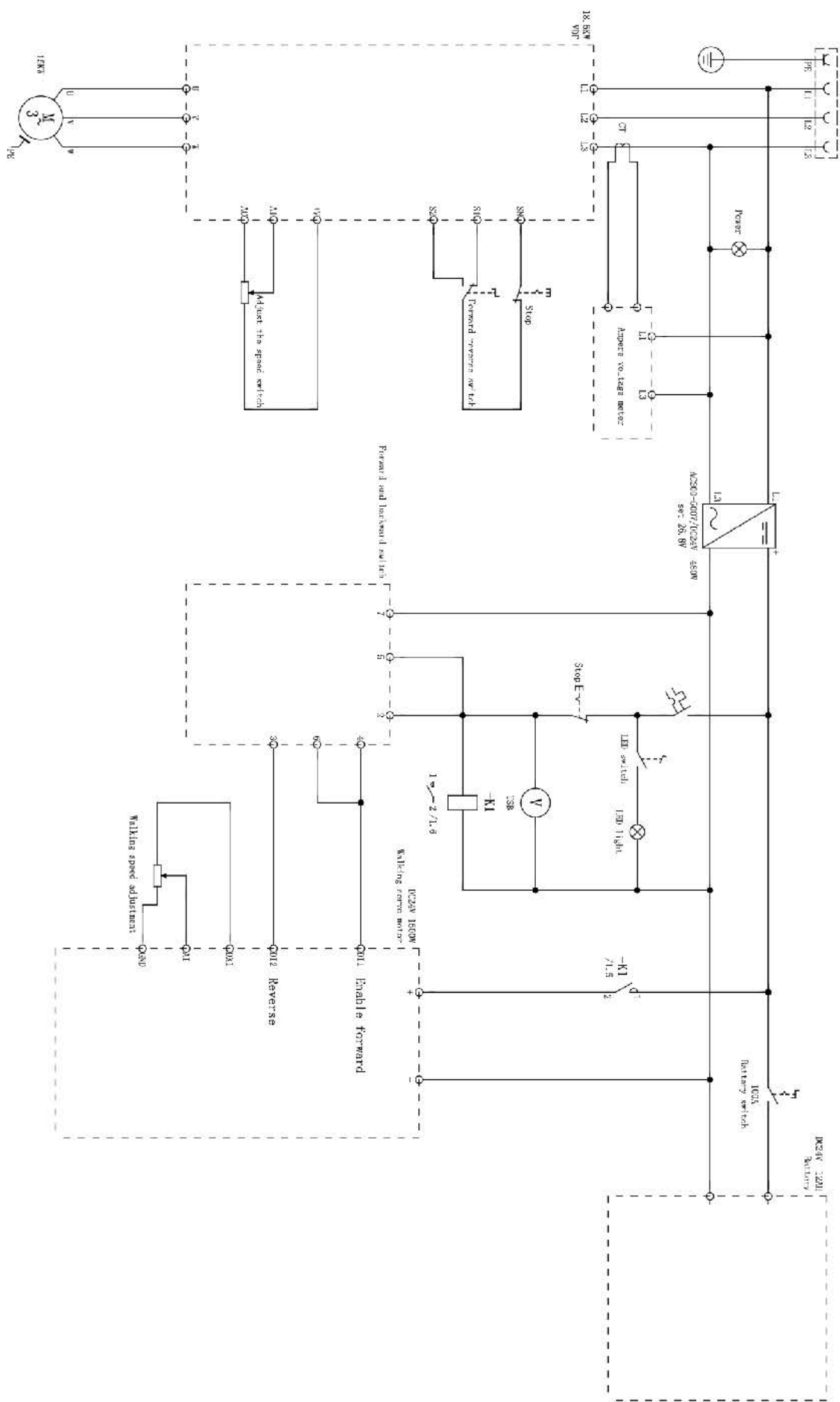


ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
A	POWER INDICATOR LIGHT	F	GRINDING HEAD SPEED
B	BATTERY SWITCH	G	WALK FORWARD / BACKWARD
C	VOLTAGE / CURRENT	H	WALKING SPEED
D	EMERGENCY STOP SWITCH	I	LED LIGHT CONTROL
E	MOTOR FORWARD AND REVERSE ROTATION	J	USB

CONTROL PANEL OPERATION PROCESS

Turn on the power → Check if the {A} power indicator light is always on → Rotate {B} clockwise to power on the battery → Check if the {C} voltage/current is normal → Rotate {D} clockwise → Adjust the grinding head forward and reverse modes with knob {E} → Adjust the {F} knob indicator to control the grinding head speed → Walk forward/backward {G} → Adjust the {H} knob indicator to control the walking speed

CIRCUIT DIAGRAM



Customer Acknowledgment and Assumption of Responsibility for Modification to any Product.

Customer expressly acknowledges that modification of any equipment, machines, or other products purchased from Niagara Machine, Inc. ("Niagara"), including but not limited to DiamaPro Systems Products (collectively, "Products") through the attempted or actual use or misuse, adjustment, alteration, application of additional components, removal of provided components, repairs or attempted repairs by Customer (collectively, "Modifications") can lead to Product malfunction causing serious risks. Such risks include, but are not limited to, Product damage, bodily injury, death, or loss of or damage to property. Customer agrees that Customer is solely responsible for any Modifications Customer performs on any Product purchased from Niagara, and that Niagara is not responsible and will not be held liable for any claims, damages, or injury arising from Modifications by Customer, including Customer's employees, subcontractors, agents, representatives, affiliates, and assigns, to any Product purchased from Niagara. Customer further acknowledges and agrees that any Modification(s) to a Product may, at DiamaPro Systems' and/or Niagara's election, void any warranty applicable to the Product.

Customer agrees that, to the greatest extent permitted by law, Customer shall indemnify, hold harmless and, at Niagara's request, defend (with counsel reasonably approved by Niagara), Niagara, Niagara's parent, subsidiaries, affiliates and the officers, directors, employees and agents of Niagara (individually and collectively "Niagara Indemnitees") from and against, and pay or reimburse them for any and all third-party claims, losses, damages, liabilities, lawsuits and expenses (including reasonable attorneys' fees) relating to bodily injury, death, or loss of or damage to property caused by or arising from any Modification to a Product by Customer, its employees, subcontractors, agents, representatives, affiliates, and assigns (individually and collectively, "Customer Group"), with respect to the Products Customer purchases from Niagara.

Customer acknowledges that Customer has read and understands these terms, and voluntarily assumes full and sole responsibility for any and all effects arising from any Modification to a Product by Customer Group.



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S Y S T E M S

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