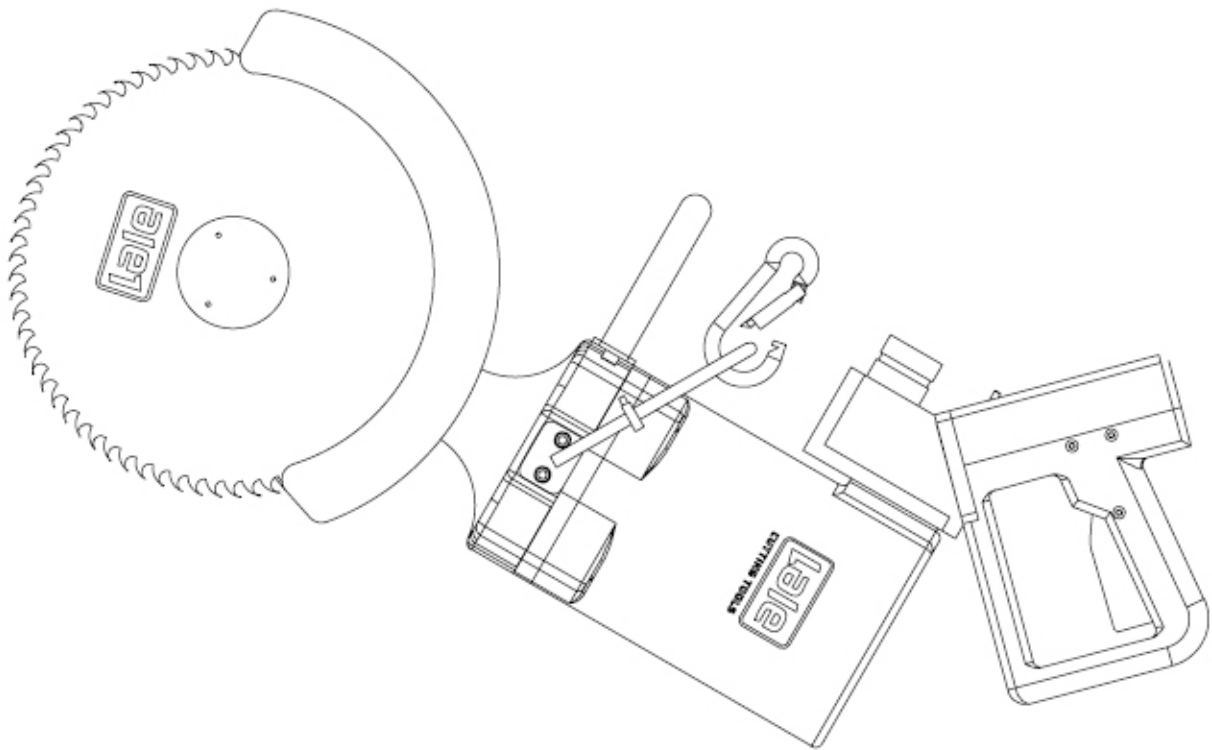


QUARTERING AND BREAKING SAW USER MANUAL CT-280



COMPANY INFORMATION

Registered Trademark: **LALE**

Manufacturer Firm: **CEMSAN A.Ş.**

E-Mail: **info@lalesaws.com**

Web Address: **www.lalesaws.com**

FACTORY

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ABOUT THE MANUAL

■ This manual has been prepared for you to work quickly and safely.

The manual is a component of the machine, and it includes the following:

- Important information
- Usage of the machine in a safe and effective way
- Cleaning and disinfecting for maintenance

Examine the manual carefully before operating the machine.

Be sure that you obey the safety instructions completely.

Always keep the manual near to the machine.

The manufacturer will not take any responsibility for the user errors

To Whom Do We Appeal?

This manual is a necessity for the owners of slaughterhouse, experts, butchers, apprentices, and technical personnels. It has been prepared for the people who have basic know-how.

Conservation of The Manual

This manual is a part of the machine, and must be accessible everywhere!

Operating and maintaining personnel shall be instructed that they must keep the manual with the machine all the time during the service life of the machine.

Order Items

Various parts of this manual enables you to define the specific order items and meaning of the text.

The manual includes reading parts, symbol explainings, numerations, instruction steps, step by step series with a particular order, references to another parts, technical schemes, important supplementary infos, or details regarding to usage of the machine.

About The Manufacturer Firm

CEMSAN Slaughterhouse Systems has been supplying the most modern slaughtering and integrated meat processing facilities such as slaughtering equipment, meat processing equipment, storage, cooling rooms and meat handling systems for slaughterhouses that slaughter cattle and sheep for 39 years. As a result of our R&D activities carried out for many years, we are pleased to present LALE Cutting Tools to all of our customers in accordance with EUROPEAN QUALITY STANDARDS.

As a leading brand in slaughtering technologies with over 550 slaughterhouse and meat processing plant references, it attaches utmost importance to hygiene, ergonomics, safety, quality, animal welfare and



ABOUT THE MANUAL

butcher health in every production. It always prioritizes customer satisfaction, and takes immediate action against all problems that may occur with our quality technical service. We are able to meet all kinds of cutting requirements of all slaughterhouses and meat processing plants of all capacities with the highest standards, including production, assembly and after-sales services with our wide range of products.

Responsibilities and Warranty Terms

All the information and instructions relating to the operation and maintenance of the machine in this manual are presented by considering our experience and knowledge. LALE Cutting Tools refuses any responsibility for the demands which are not covered by guarantee, except for the demands legally indicated and agreed on by both buyer and seller.

Significant Points for Your Safety

It is explained in this part safety precautions and tools for safety. Be sure that you read and understand the following safety instructions before operating the machine. This part aims to lead you about safety issues regarding to the usage of machine.

The original version of the manual has been written in Turkish. In case of any inconsistency or contradiction between Turkish and English version, The Turkish version shall be valid.

Warranty shall be null and void in following situations:

- When there is disobedience to the information in this manual.
- When the machine is used in contrary to its purpose.
- Usage of spare parts or part unapproved by LALE Brand
- Changing parts of other materials without getting approval of LALE brand's managers in advance.
- When the machine is not operated in a proper way or by untrained personnel.
- Any damage occurrence while cutting.
- When the safety device or equipments are removed, taken off, or substituted with another unapproved material.
- When the machine is not cleaned properly or professionally.
- When the machine is exposed to chemical or mechanical stress.
- When the maintenance is made in a wrong way or maintenance periods or instructions is neglected.
- Spare parts

In specific situations, the written approval shall be gotten by discussing with LALE brand managers in case some modifications or settings are desired.

ABOUT THE MANUAL

Warnings to Be Taken Seriously for Safety



Warnings against sharp-edged machine parts. Danger of cutting, injuring, or chopping the limbs.



Warning against rotating blade saw and saws in common.



Warning against dangerous electric potential.



Warning against common hazards.



Warning against hot surface.



Danger for crushing your hand or fingers

Mandatory Occupational Health and Safety Signs to Be Used



Put on enduring and covered-closed shoes.



Wear protective gloves.



Wear eye-protecting equipments.



Wear hearing conservation.



Wear hair net or casque.



Wear protective uniform



ABOUT THE MANUAL

Forbidden Actions



Do Not use high pressured purifier for cleaning

Safety Signs on Machine



Warning for the saw's direction.



Warning against cutting.



Warning against dangerous electric potential

About The Conservation of The Manual

Manual must be always accessible by operating and maintaining personnel during the whole service life of the machine. For this reason, keep the manual near to the machine all the time!

Responsibilities of Business Manager

Keep in mind that in an establishment dealing with the meat market, it is obligatory to give permission only to the older than 18 year-old and to the people who have insurance and are familiar with their work, in accordance with the regulations and rules relating to health and safety. Even when they have completed their occupational training and read safety instructions, their safety must be examined by an official.

Facility manager is responsible for providing training of each employee working in operation of the machine in most effective way. Trained personnel shall work on machine under only the following circumstances:

- The machine must be completely functional.
- Safety points must be checked regularly.
- Business managing director must provide the density of the lighting to be at least 500 lux
- Work places must be at least 1,5m wide, ensure at least 1 m depth per a personnel to enable the personnel to move together with the machine.

ABOUT THE MANUAL

- It must be inspected that the personnel using the machine has a work uniform and protective equipments coherent to the OHS regulations.
- Surface material of the work platform must not be wet, and not carry the risk of slipping on oily surface.
- The place where the machine is must be suitable for hygiene and work place rules.
- Be sure that on the area/platform, the escapeways and/or their functions are not blocked at the moment of accident.

Responsibilities of Employees

- Operating personnels must be informed and trained by the employer properly.
- The personnel must be the one who read and comprehended the safety instructions and are trained, know operating the machine.
- The personnel must be familiar to the manual.
- They must have completed the legal trainings relating to the accident prevention regulations and current OHS.
- Along with assembly, maintenance, and repair, problem solving must be done only by qualified personnel. They must have knowledge about warranty conditions.
- The personnel must keep the work place tidy and clean. Untidy work places and areas may cause accidents.
- The personnel must wear personal protective equipment provided for them.
- The child, young, and untrained must be kept away from the machine.

Electric Safety

About The Purpose of The Machine's Usage

It is designed for pre-shipment quartering, preparation for pre-deboning and further processing.

The points which have huge significance:

- It can be run by only one operator.
- It can run only when specific safety devices are mounted.

ABOUT THE MANUAL

Reminders for running usage of the machine:

- Obedience to safety instructions.
- Conducting the maintenance and repair works properly.
- Cleaning the machine regularly.
- Using the original spare parts.
- That the personnel have training of how to use the machine.

Warning Against Misusage

- Use the machine properly only for its intended purpose. In an uncertainty, consult to manufacturer.
- In no way, do not use the machine for cutting the materials such as wood, rock, plastic.
- Do not extend the cables and connection lines in the machine.
- Do not use the machine if the safety devices do not run.
- Do not use a machine with higher than 380 V in cutting area.

Any other usage apart from the ones indicated in "About the intended purpose of the machine" is accepted as contrary to the intended purpose. LALE Brand or the main manufacturer firm CEMSAN A.Ş. will not take any responsibility for damage or injure. The risk causing from inappropriate utilization belongs only to the user.

About The Permanent Risks

Quartering and Breaking Saw CT-280 has been designed in accordance with the highest technology, and general safety and healthy rules valid in Republic of Türkiye and the European Union.

However, it is still subject to hazards which can not be eliminated with the design precaution:

- Danger of wounding in fingers and hands.
- Danger of injuring yourself due to the meat cut and bone pieces.
- Danger of injuring eyes.

ABOUT THE MANUAL

- Breaking or flouncing of saw's blade.
- Danger of electricity arising from usage of inappropriate connection cables.

Despite all the precautionary measures, remind that undistinct residual risks may be permanent. You can minimize these risks by paying attention to the safety instructions in each part's beginning and to taking the instructions in the manual as a whole.



ATTENTION!

There are sharp-edged machine parts.

Danger of cutting.

- Never put your hands near to the movable machine parts.
- Keep your hands away from the saw's blade or blade.
- Wear protective gloves for your own safety.



About The Electrical Danger

During all the maintenance and repair works, take the machine out of electrical power supply.



About The Heat Dangers

Your skin may burn when you touch it during utilization of the product due to engine's heating.

In case of a necessity to touch, hold the machine only from its handle, and wait for it to be cold. Never touch it before it is cold.



About The Mechanical Dangers

Your fingers and hand may be stuck or crushed during the process.



You will have a great risk due to the movements of the machine (twisting and kicking) while it is working.

Be careful while the machine is running. Try to stand stable!

TRANSFERRING AND STORING

Our machines are designed for the shipment via motorised truck, train, plane or vessel. Shipment may be separately or in multiple packages. Our machines have gone through testing process at our factory and been inspected thoroughly before they are sent out. This inspection means that the machine meets the datas given and it works accurately. The machine may get damaged despite of all the caution.

Taking The Machine Out Of It's Package

The machine is ready as compliant with the installation, and installation rules while you open the package of the product. Installation can be done as convenient with the necessary installation articles.

As per our quality policies, the original package of the machine is made of recyclable material. Product package can be given to the places where the recyclable materials are collected. Thank you for being sensitive to environment.

- Remove all the packing materials and throw them away properly.
- Remove all the protection materials placed in the package.
- Check whether there is a shipment damage in the machine.
- Monitor the machine for inspection at the first working-hours.
- Look out whether there is a fault at the first operating. In case of any, contact immediately with our firm. Do not ever interfere in the machine.

Conversation of The Machine

Be sure that you pay attention to the following notes for conserving the machine safely:

- Store the machine only in dry or places where will not have frost.
- Be sure that the machine is completely dry while storing the machine for a longer period of time.
- Conserve the machine in a way that it does not damage itself.
- Protect the machine against corrosion.

ASSEMBLY AND ENGAGING

The installation and connection of the machine shall be made by the operator. LALE Brand is not responsible for the damages occurring while the assembly is being made not by the authorised operator.



ATTENTION!

Active machine parts. Life-threatening.

- Before operating the machine, cut off it's electricity first and ensure it for not to be opened again by accident.
- Give permission only to the qualified electrician to work on dynamic and electrical components.



WARNING!

It may cause life danger and severe injury if unqualified and incapable personnel are employed.

- While commissioning, it requires to allow only the trained and authorised service personnel to operate the machine.
- Only certified electricians must perform workings on the dynamic and electrical components.



WARNING!

Sharp-edged machine parts. Danger of cutting yourself.

- Do not ever put your hands near or close to the moving machine parts.
- Keep your hands away from the saw's blade or the blade.
- Wear protective gloves for your own safety.

Personel Protective Equipment

Wear personal protective equipments during assembly and operating absolutely in order to prevent any injuring.



Protective gloves



Enduring and covered-closed shoes

ASSEMBLY OF THE BALANCER

Purpose of the balancer is to eliminate the constant weight of a tool during a vertical movement. It has been designed to be used by only one operator at one time manually.

It has been designed to be used in inner places with a temperature between of 5°C and 60°C. It is suggested that the load should be hung at the center of gravity in order for the product to be used.

In the models with locking tool, The device must be activated for stopping the bant (visible red indicator or closed padlock). Then, you must slowly manipulate the load till it is placed in lock hole (placed in about every 100 mm along the rope stroke). The balancers are in accordance with each regulations relating to workplaces.



WARNING!

The balancers need to be inspected and maintained at regular intervals in order to run perfectly in compliance with each regulations relating to workplaces.

BALANCER USAGE

Tool Balancer Installation

Evaluate the working area and, if necessary, suspend the balancer from a support so that it can be used properly within an area large enough to perform the required operations. If screw fastening devices are used to install the balancer, self-locking nuts, split pins, or other safety systems must be used.

Always connect safety suspension S only to a suitably sized support, using only the standard fastening elements supplied.

The safety support must NOT be the same as the one used for the main suspension 23. If the main suspension breaks, the maximum falling distance must not exceed 100 mm. Tighten clamp nuts 20331 to a torque of 4 Nm. To prevent abnormal wear, the load must be applied vertically and, in all cases, the cable must be aligned with the direction of the load.

Balancer Operation

Hold the tool hanging from the balancer and perform the required operations. Then move and release the tool until it balances on the balancer's vertical line. The load to be balanced must be hung from spring hook 39 (Fig. 3). After the load has been attached, the snap hook must be properly closed.

The cable must never be completely unwound; the working travel must end at least 100 mm before reaching the end limit (balancers 9502÷9509 and 9520÷9525 are equipped with an automatic limit stop system). If necessary, move and lock clamp M to stop the upward movement.

⚠ Do not lift the load if clamp M is not resting against the rope bend.

When using the balancer, always wear personal protective equipment and strictly comply with the applicable accident prevention regulations.

The following are strictly prohibited:

- Releasing the load if it is not in a vertical position
- Swinging/throwing the suspended load to another operator
- Moving the load by pulling the balancer cable
- Suspending loads outside the upper and lower limits of the permitted load capacity
- Hanging more than one tool on the balancer

⚠ The only risk associated with the use of the balancer is any uncontrolled rewinding of the balancer cable. This is a very dangerous event and can be prevented by following the instructions below:

⚠ If the spring is to be fully discharged, stop the discharge operation as quickly as possible. The spring is active and becomes fully discharged; going beyond this position will damage the spring and it must be replaced.

BALANCER USAGE

- If, for any reason, the balancer does not rewind the cable, DO NOT attempt any intervention. Do not act on your own initiative; contact customer service immediately.
- If the cable is not fully wound onto the drum, never release the load. If the balancer cable has unwound and no load is applied to it, DO NOT attempt any intervention on your own; contact customer service immediately.

Balancer Adjustment

To enable the balancer to balance heavier loads, use the special key to turn screw 41 in the direction indicated by the “+” symbol. For lighter loads, turn screw 41 in the direction indicated by the “-” symbol.

After adjusting the load, check that the cable moves freely over its entire length; its movement must not be restricted when the spring is fully wound. Check the operation frequently at different speeds.

NOTE: If the balancer’s capacity to support a suspended load decreases, this may indicate that the drum spring is about to break. Do not readjust the balancer. In all cases, support the load and immediately contact qualified maintenance personnel responsible for the equipment.

Drum Spring Breakage

The balancer is equipped with a safety device that activates when the drum spring breaks and stops movement in order to prevent the suspended load from falling.

If the suspended tool cannot be lifted or lowered with normal force, DO NOT FORCE IT and contact customer service.

NOTE: Even if the drum spring is completely discharged, the balancer will stop. In this case, provided that the head of charging screw 41 protrudes approximately 4 mm from the cover, try to recharge the spring as described in the “Balancer Adjustment” section in order to restore operating conditions. If the balancer is not released, DO NOT attempt any intervention and contact customer service.

Manual Lock:

The balancer is equipped with a manual locking system. To stop drum rotation, turn button (6) to position (A). To restore normal operating conditions, turn button (6) to position (B).

NOTE: For safety reasons, the shape of the cover that stops the drum does not allow closing unless the corresponding holes on the drum are perfectly aligned.

To release it, move the load slightly upward and downward until the correct position on the drum is found.

OPTION “B”: Bottom Control

To lock the drum, lower the edge of the handle marked with the RED band; to release it, lower the side of the handle marked with the GREEN band.

WARNING: Do not leave the balancer with the drum locked and without a suspended load.

WARNING: If the balancer cable is not fully wound and no load is applied, do nothing other than contacting customer service immediately.

WARNING: Always comply with safety regulations when using electrical equipment.

BALANCER USAGE

Inspections and Maintenance

Maintenance may only be carried out by qualified and authorized personnel. Inspect the balancer visually on a regular basis (for example, once per shift). In particular, check the condition of suspensions (23) and S (Fig. 1), fastening screws, self-locking systems (if any), as well as the condition of hooks and the cable. If the cable shows any of the defects illustrated in Fig. 5, replace it immediately.

Do not make any modifications to the cable assembly and, in particular, do not shorten the cable. If required, please contact CEMSAN A.Ş.

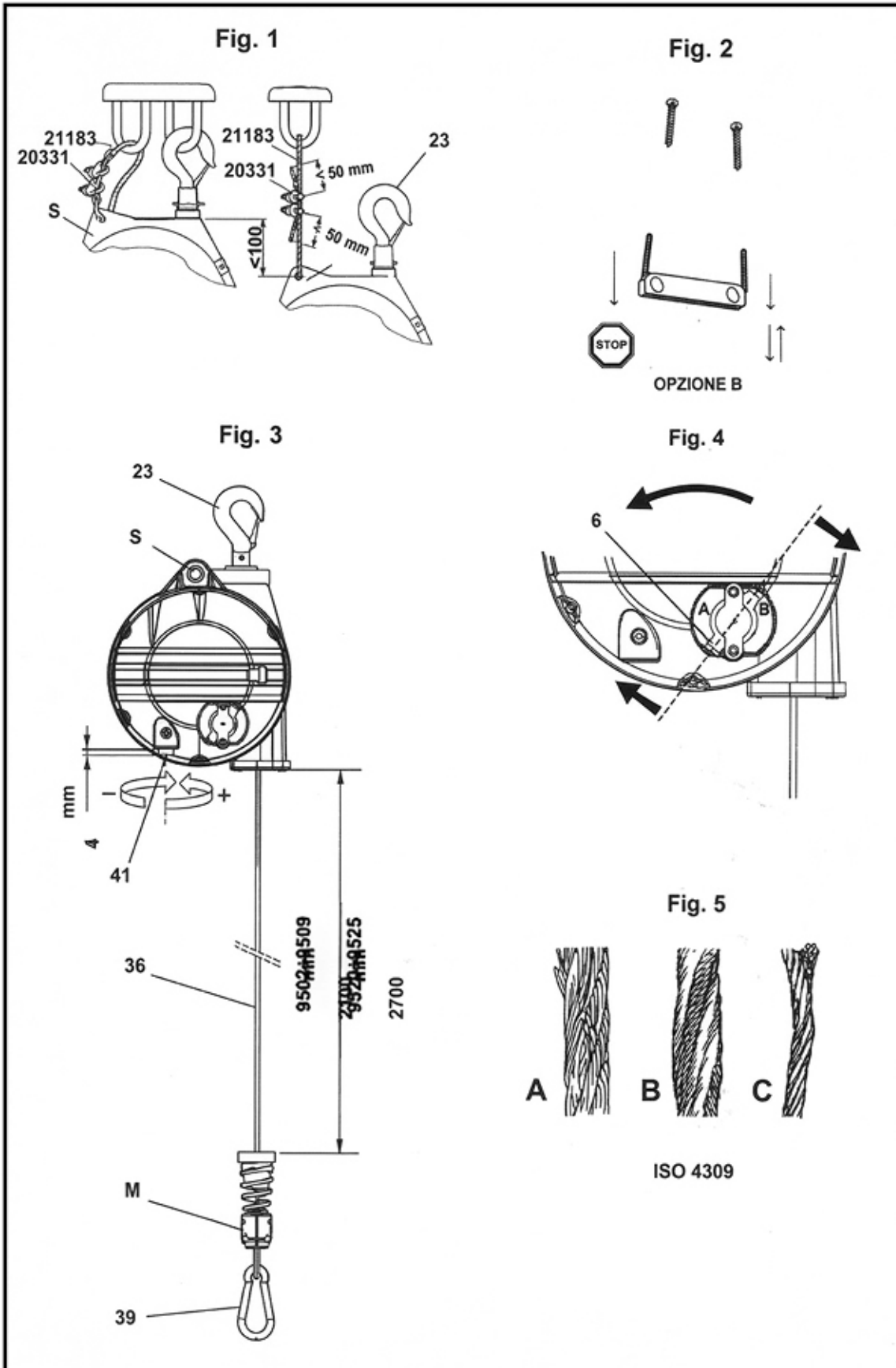
- Check that the cable moves smoothly and does not produce unusual noises.
- Do not lubricate the balancer with flammable or volatile liquids.
- Do not remove any labels. Replace damaged labels.
- The balancer must be inspected at least once a year by qualified and authorized personnel.

Never disassemble the balancer. Maintenance must only be performed by qualified and authorized personnel.

Static and dynamic tests (Machinery Directive 2006/42/EC, Annex I, Section 4.1.3) are carried out by the manufacturer. At the end of its service life, the balancer must be disposed of in accordance with the applicable regulations.

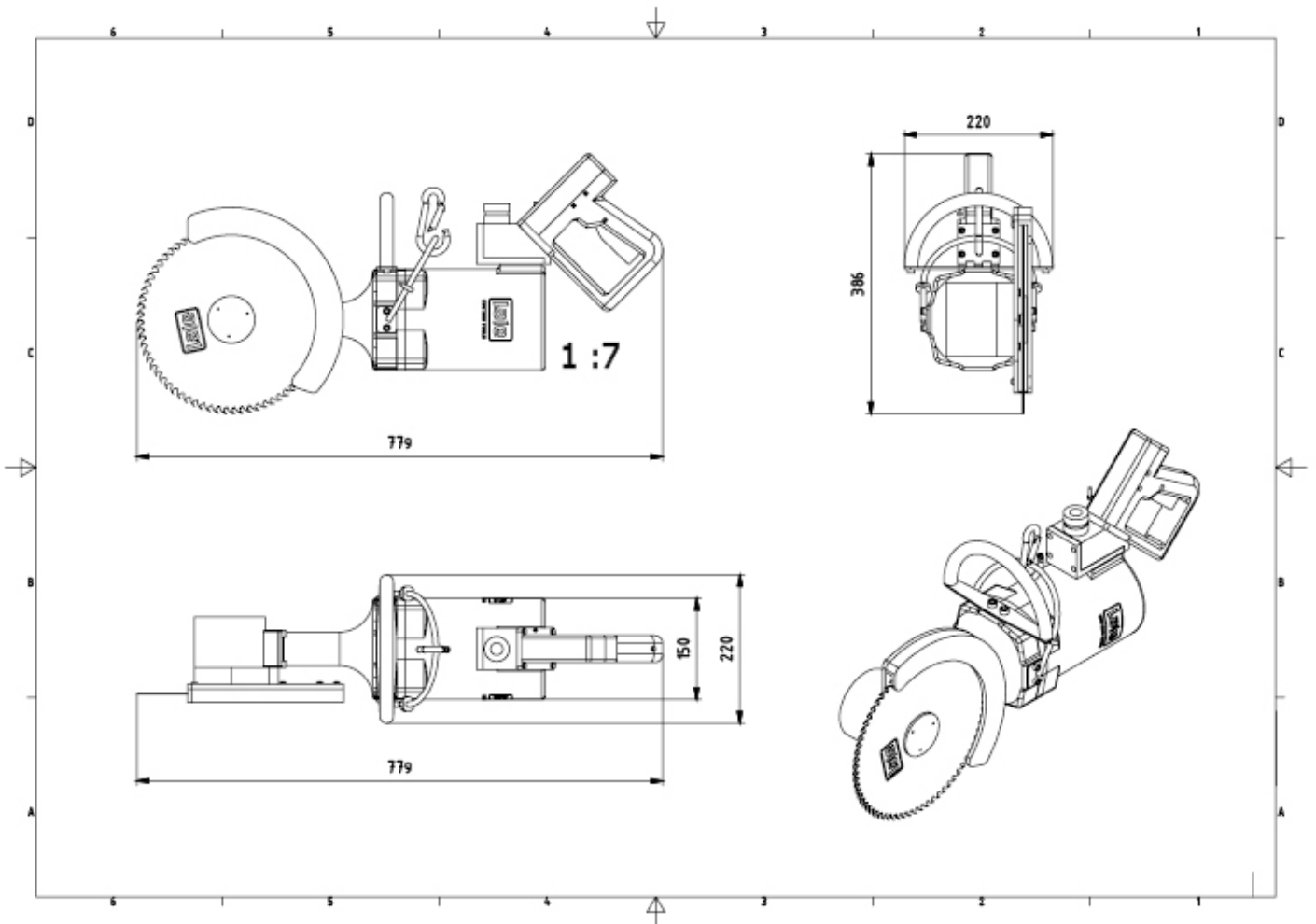
Warranty

The use of non-original LALE Cutting Tools spare parts will adversely affect safety and performance and, in all cases, will render the warranty void.

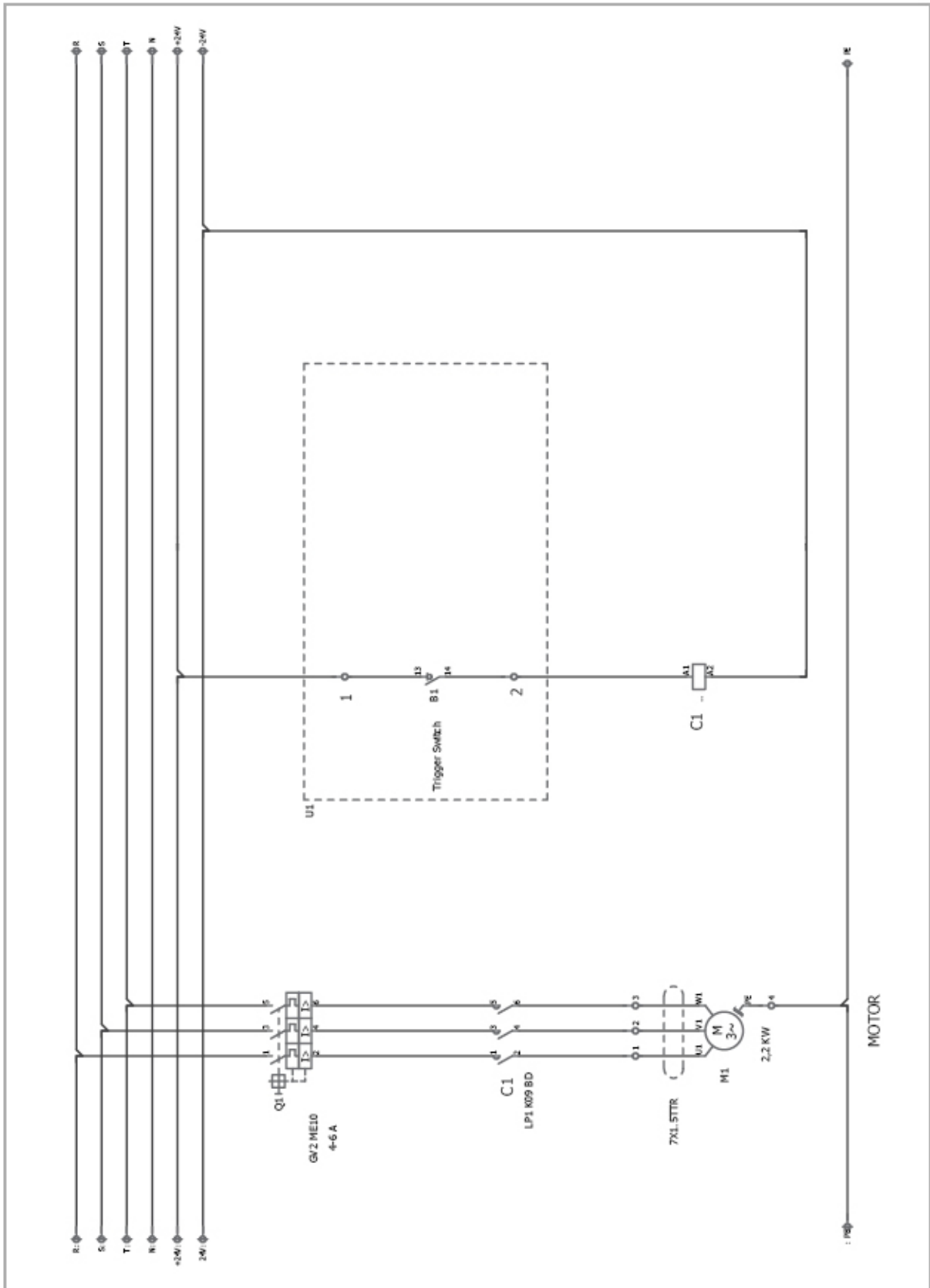


QUARTERING AND BREAKING SAW

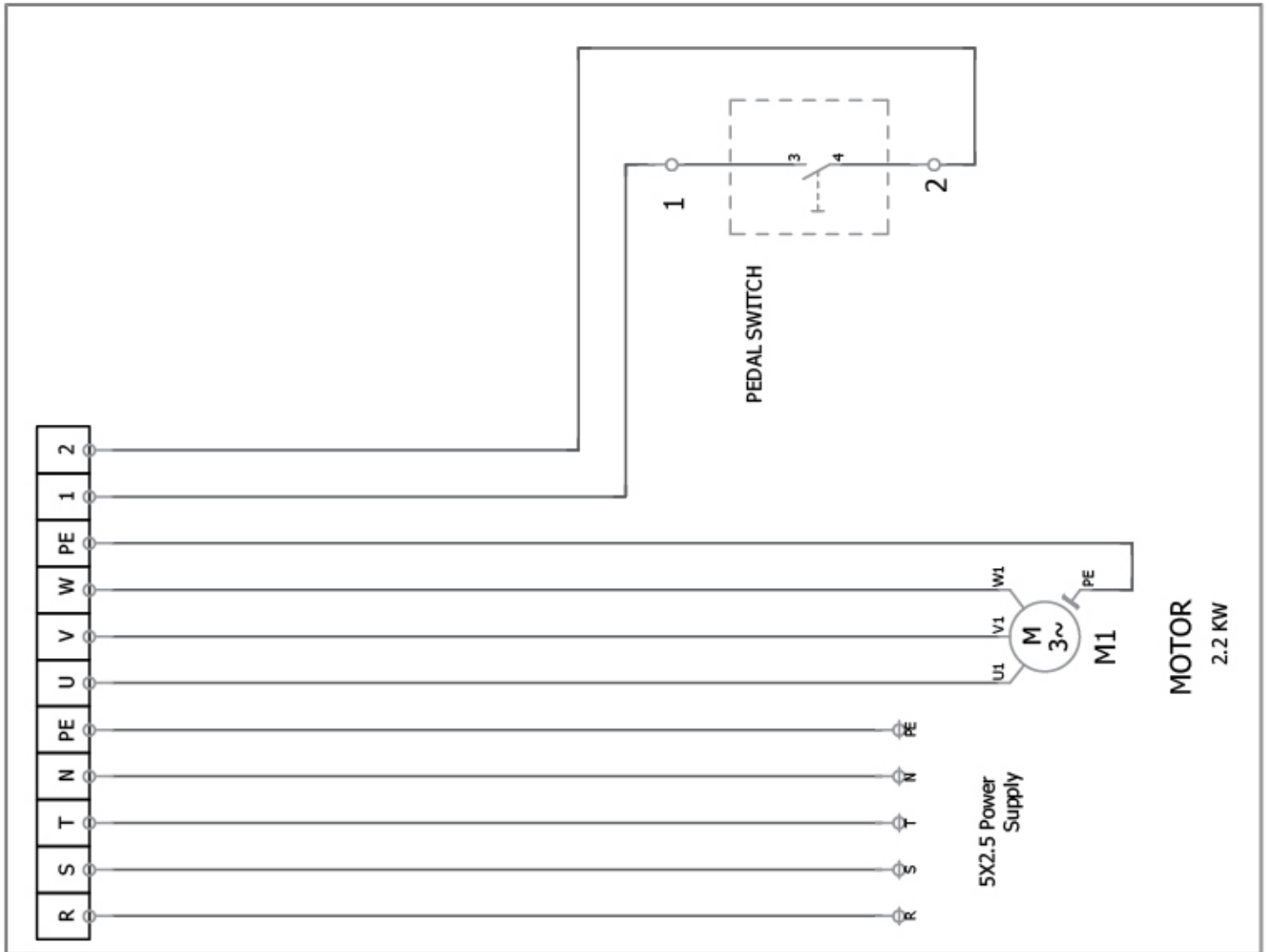
CT-280



ELECTRICAL CONNECTION 1

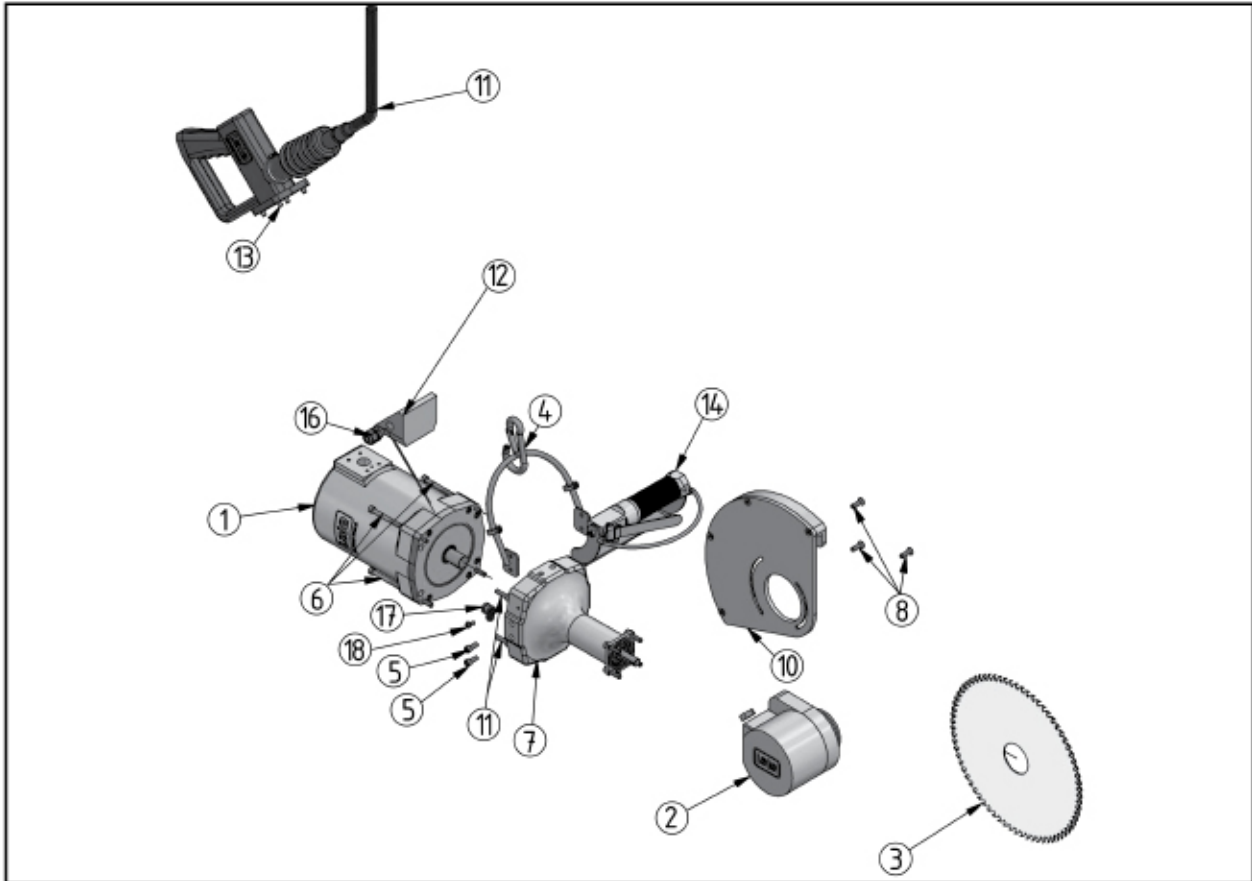


ELECTRICAL CONNECTION 2



SPARE PARTS LIST

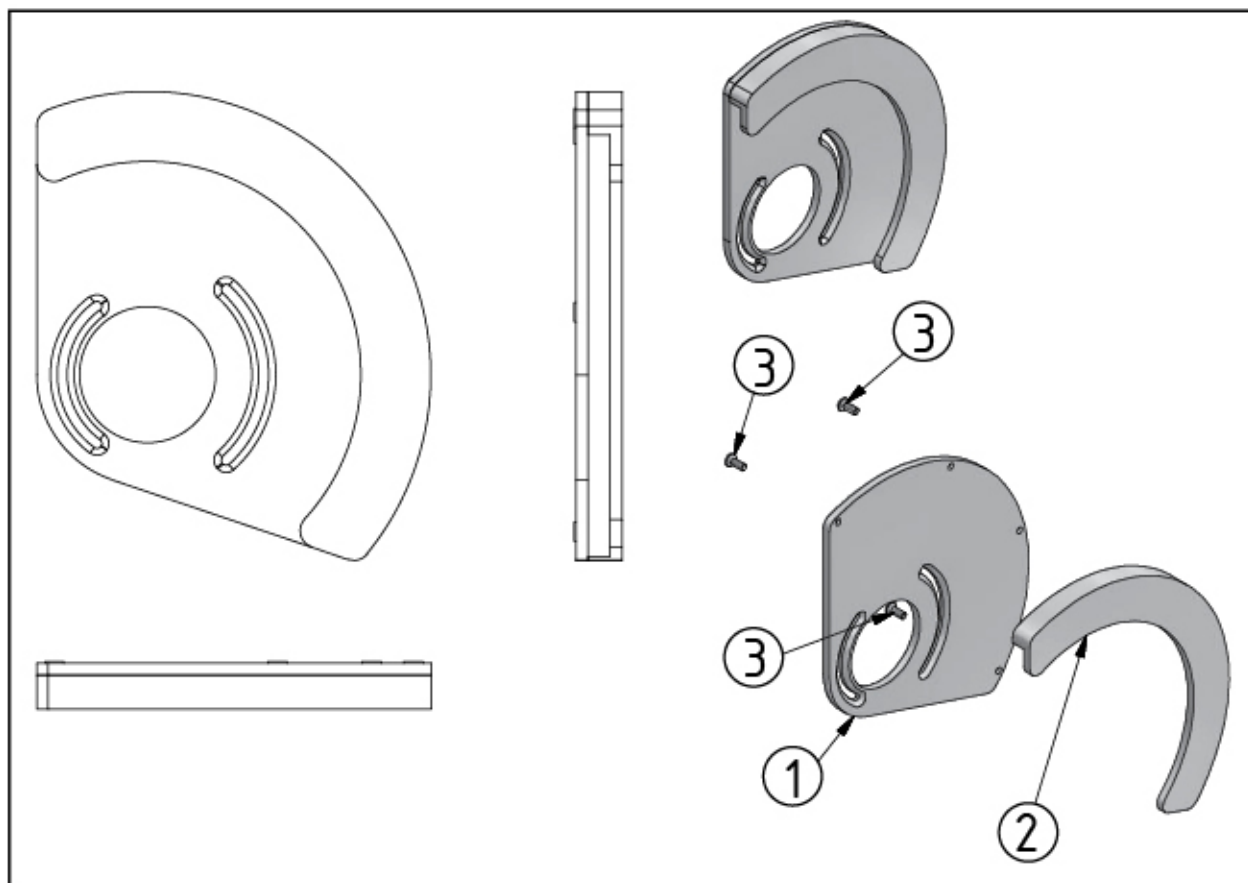
General Overview



PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	CS_KBT530_11_01_00
2	1	210.122.2000
3	1	CT280-BCK-002
4	1	210.122.3000
5	4	DIN 912 - M6 x 16
6	4	DIN 912 - M6 x 60
7	1	210.122.1000
8	3	DIN 7991 - M6 x 20
9	1	DIN 6885 - A 10 x 8 x 25
10	1	210.121.6500
11	1	530.102.3400
12	1	Trigger Lower Aluminum Plate-01

PARTS LIST		
ITEM	QTY	PART NUMBER
13	4	DIN 912 - M6 x 12
14	1	530.111.5100
15	1	DIN EN ISO 4026 - M6 x 6
16	1	PG9
17	1	PHONEX CONTACT WP-BASE-HF-9-10
18	1	ISO 7380-1 - M5 x 12

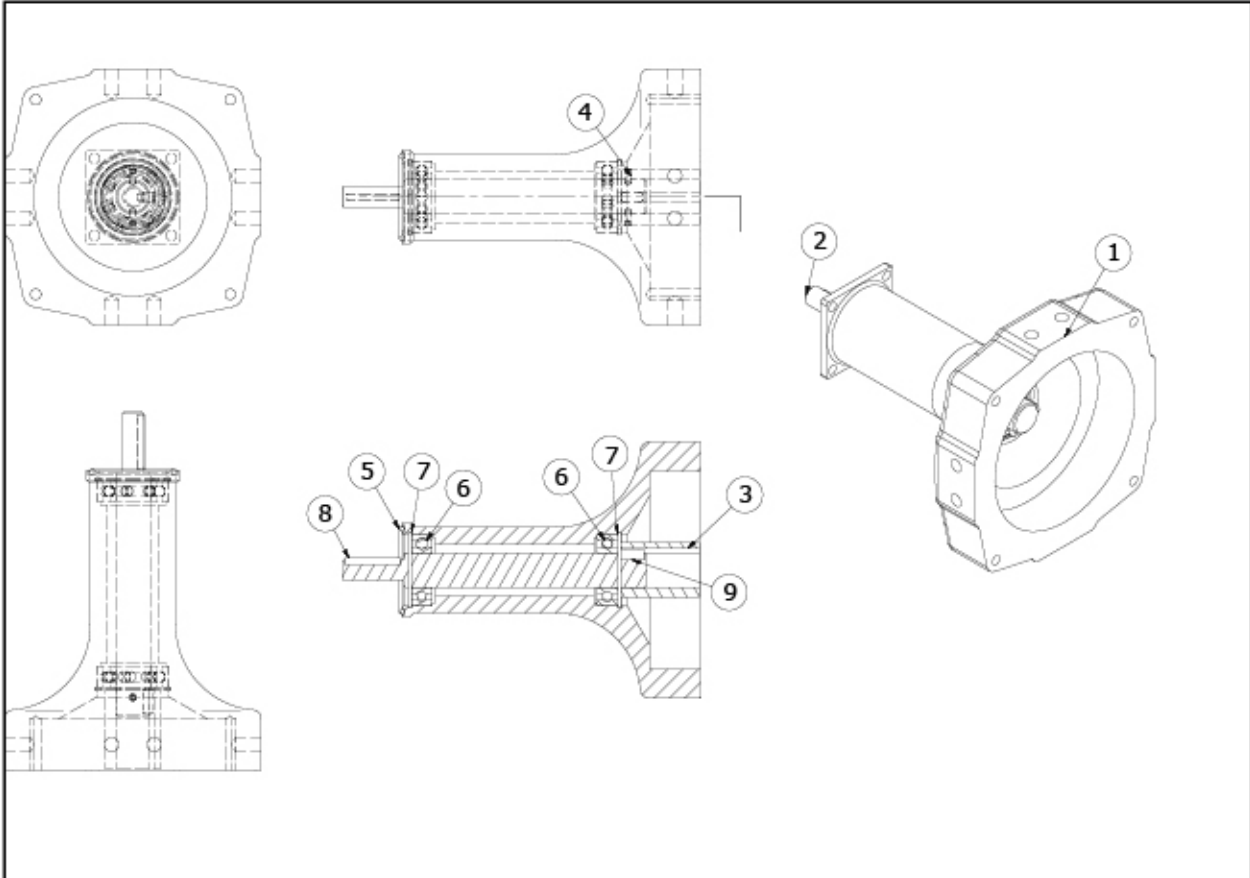
SPARE PARTS LIST



PARTS LIST

ITEM	QTY	PART NUMBER
1	1	210.122.6501
2	1	210.122.6502
3	4	DIN 7991 - M6 x 16

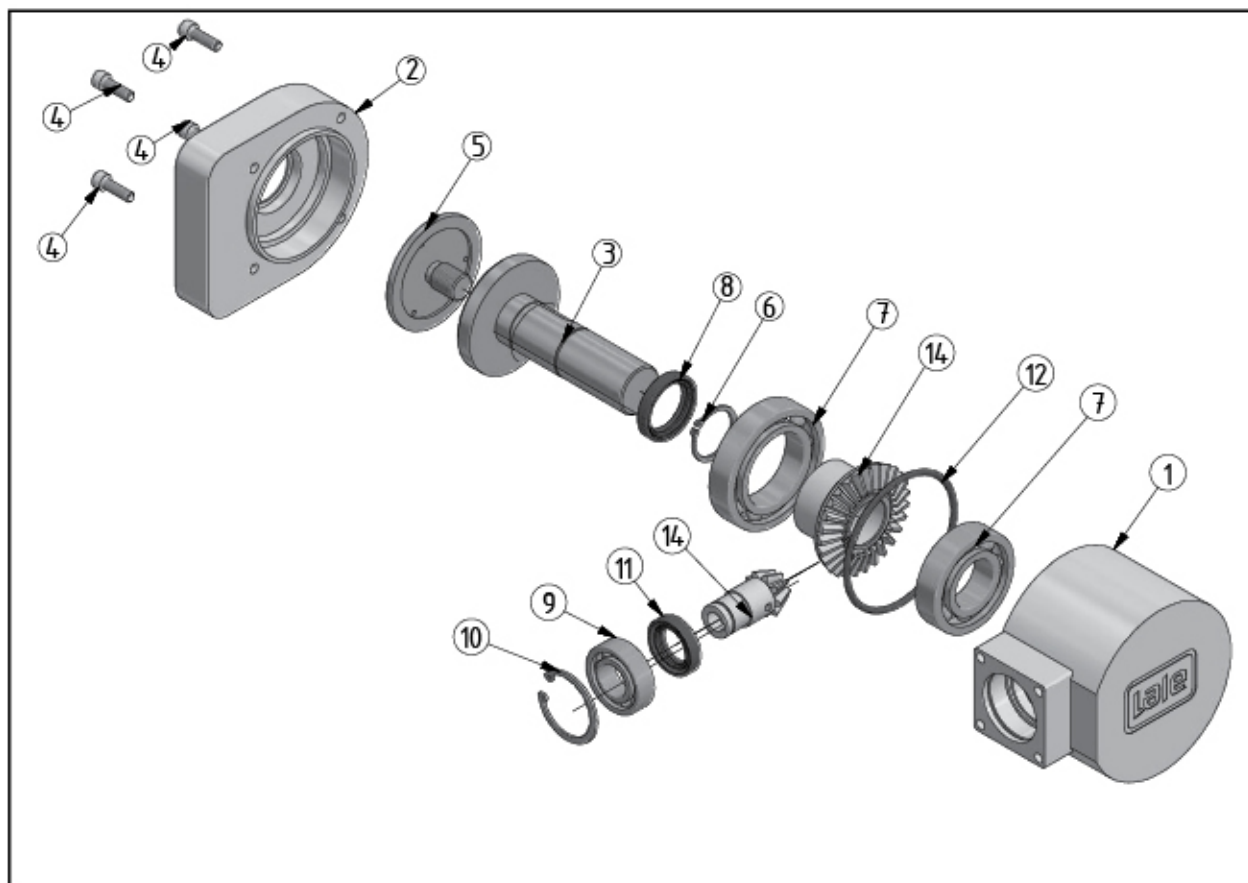
SPARE PARTS LIST



PARTS LIST

ITEM	QTY	PART NUMBER
1	1	210.122.1100
2	1	210.122.1200
3	1	210.122.1300
4	2	DIN 914 - M4 x 10
5	1	DIN 3771 - 45 x 3,55 - N - NBR 70
6	2	DIN 625 SKF - SKF 6004
7	2	DIN 472 - 42 x 1,75
8	1	DIN 6885 - A 4 x 4 x 32
9	1	DIN 6885 - A 6 x 6 x 14

SPARE PARTS LIST



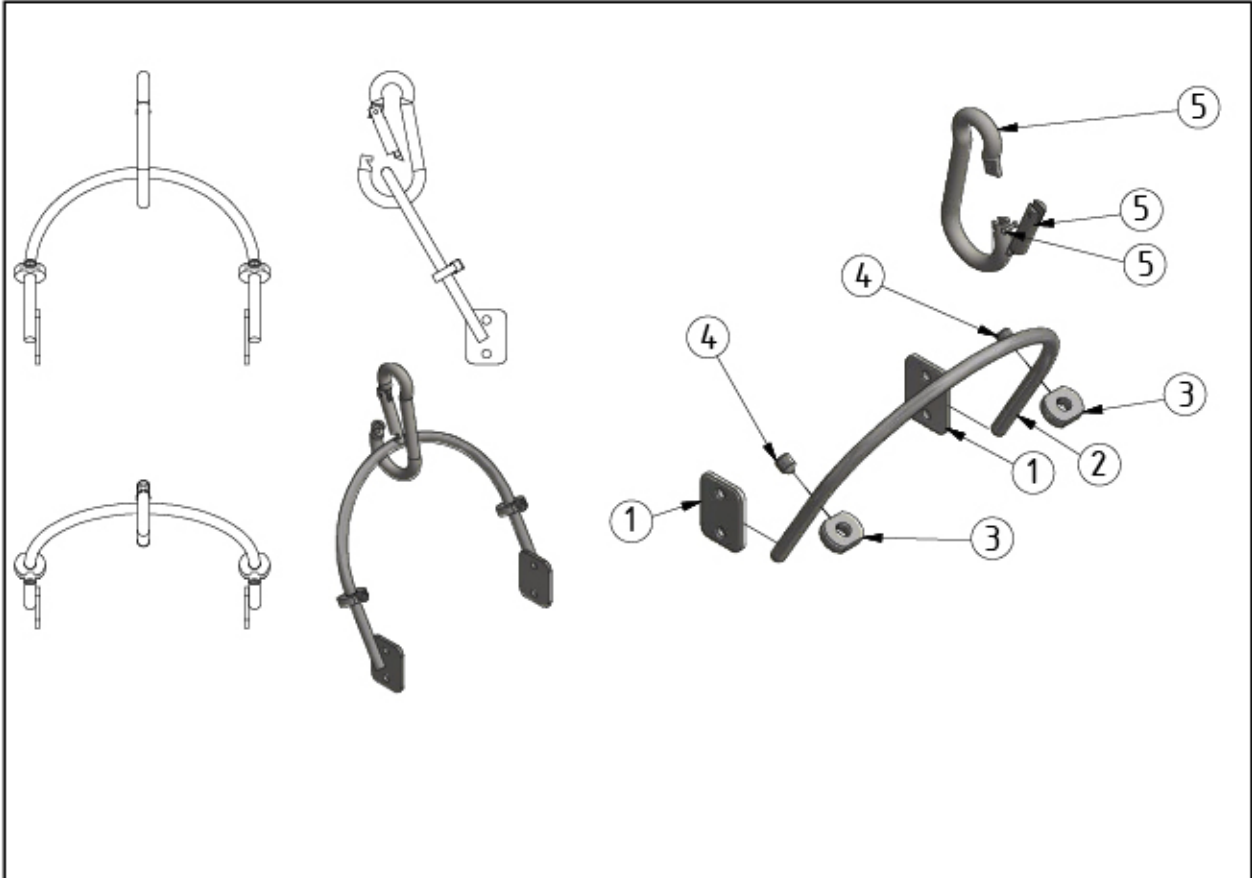
PARTS LIST

ITEM	QTY	PART NUMBER
1	1	210.122.2100
2	1	210.122.2200
3	1	210.122.2300
4	4	DIN 912 - M6 x 20
5	1	210.122.2400
6	2	DIN 471 - 30x1,5
7	2	DIN 625 SKF - SKF 6206

PARTS LIST

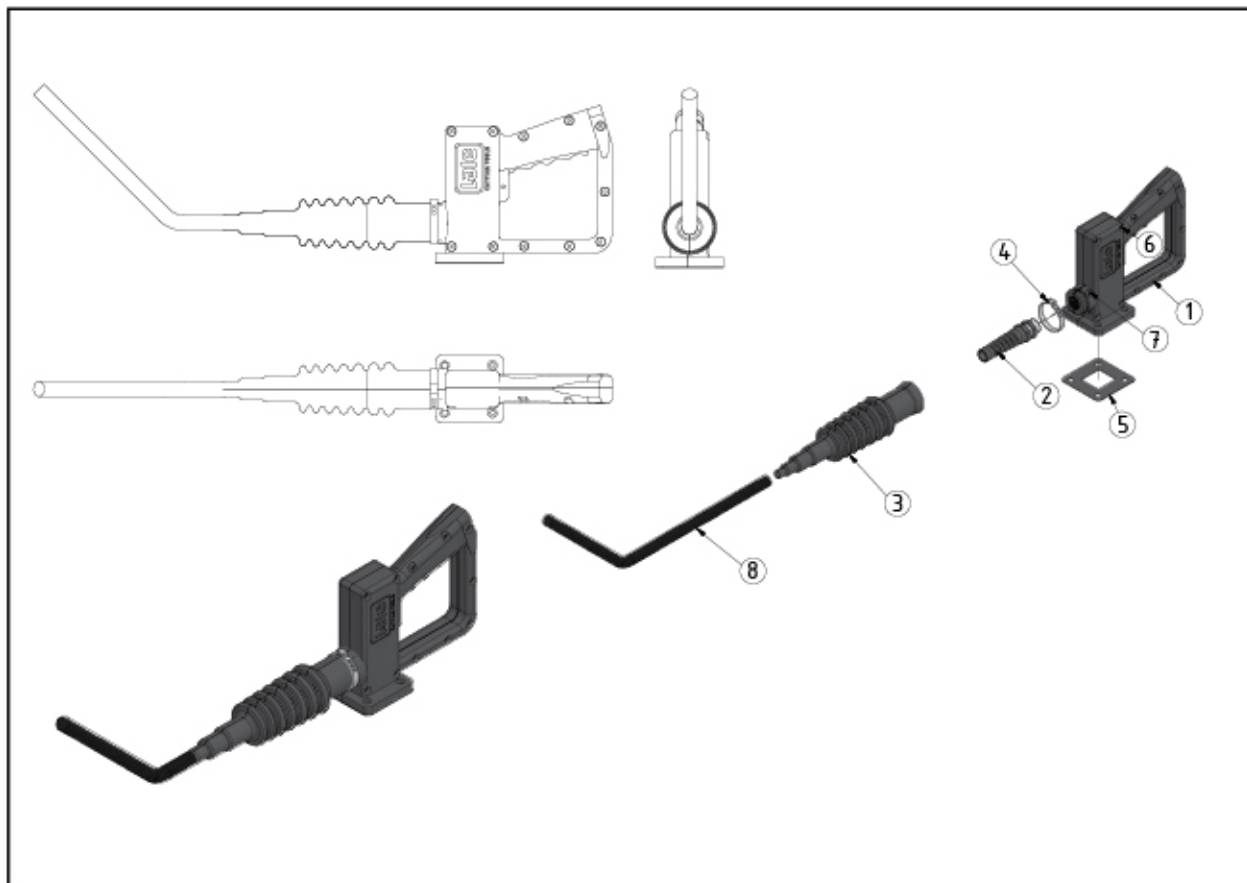
ITEM	QTY	PART NUMBER
8	1	DIN 3760 - AS - 30 x 40 x 7 - NBR
9	1	DIN 625 SKF - SKF 6004
10	1	DIN 472 - 42 x 1,75
11	1	DIN 3760 - AS - 22 x 35 x 7 - NBR
12	1	DIN 3771 - 80 x 3,55 - N - NBR 70
14	1	9-tooth gear
14	1	27-tooth gear

SPARE PARTS LIST



PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	210.122.3200
2	1	210.122.3100
3	2	210.122.3300
4	2	DIN 914 - M8 x 10
5	1	Buckle

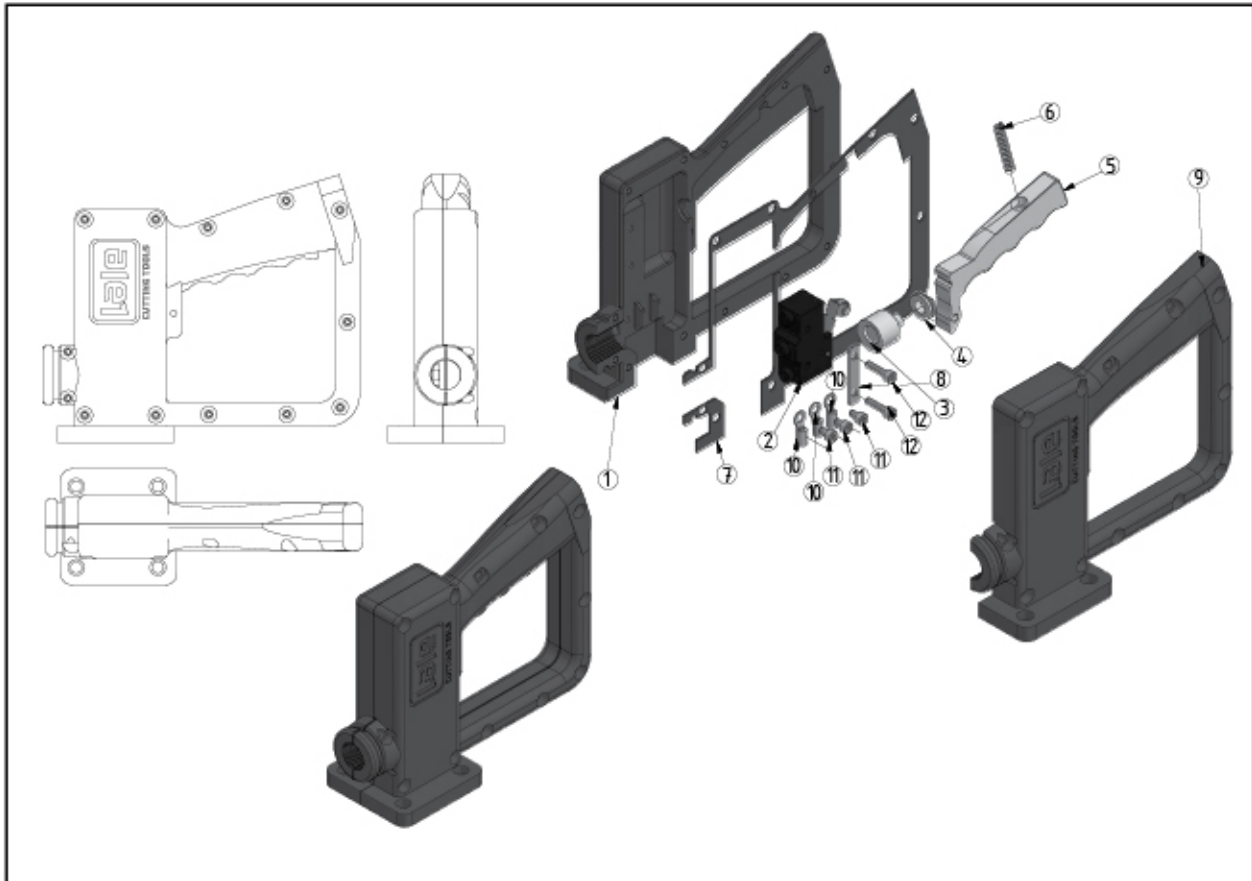
SPARE PARTS LIST



PARTS LIST

ITEM	QTY	PART NUMBER
1	1	530.102.3410
2	1	530.101.3404
3	1	530.101.3405
4	1	530.102.3403
5	1	530.102.3404
6	4	ISO 7380-1 - M5 x 20
7	9	ISO 7380-1 - M5 x 12
8	1	Cable

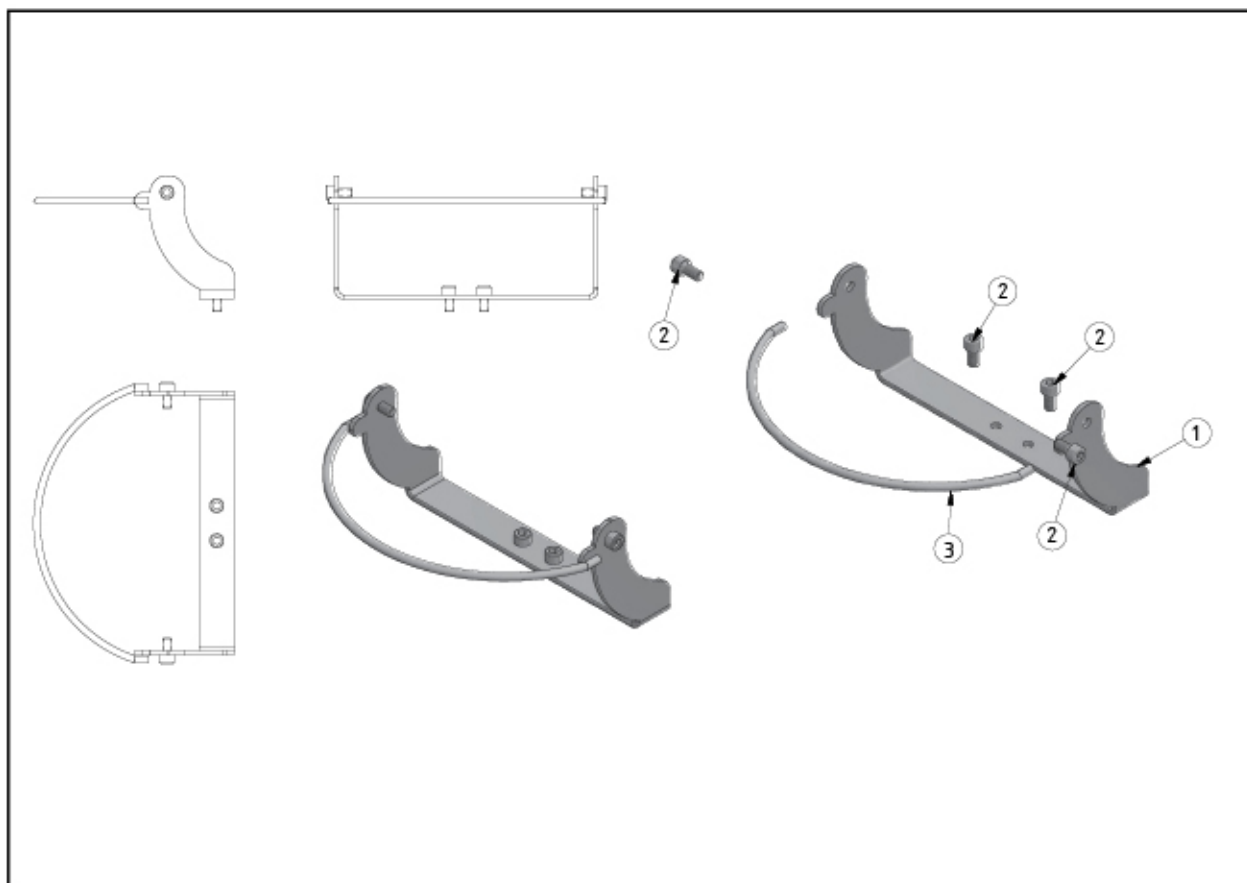
SPARE PARTS LIST



PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	530.102.3411
2	1	Z_15GW22_B
3	1	530.102.3416
4	1	530.102.3417
5	1	530.102.3413
6	1	Spring 6x35x1.5x2.5

PARTS LIST		
ITEM	QTY	PART NUMBER
7	1	530.102.3414
8	1	530.101.3412
9	1	530.102.3412
10	3	2-165655-1
11	3	DIN 912 - M4 x 6
12	2	DIN 912 - M4 x 16

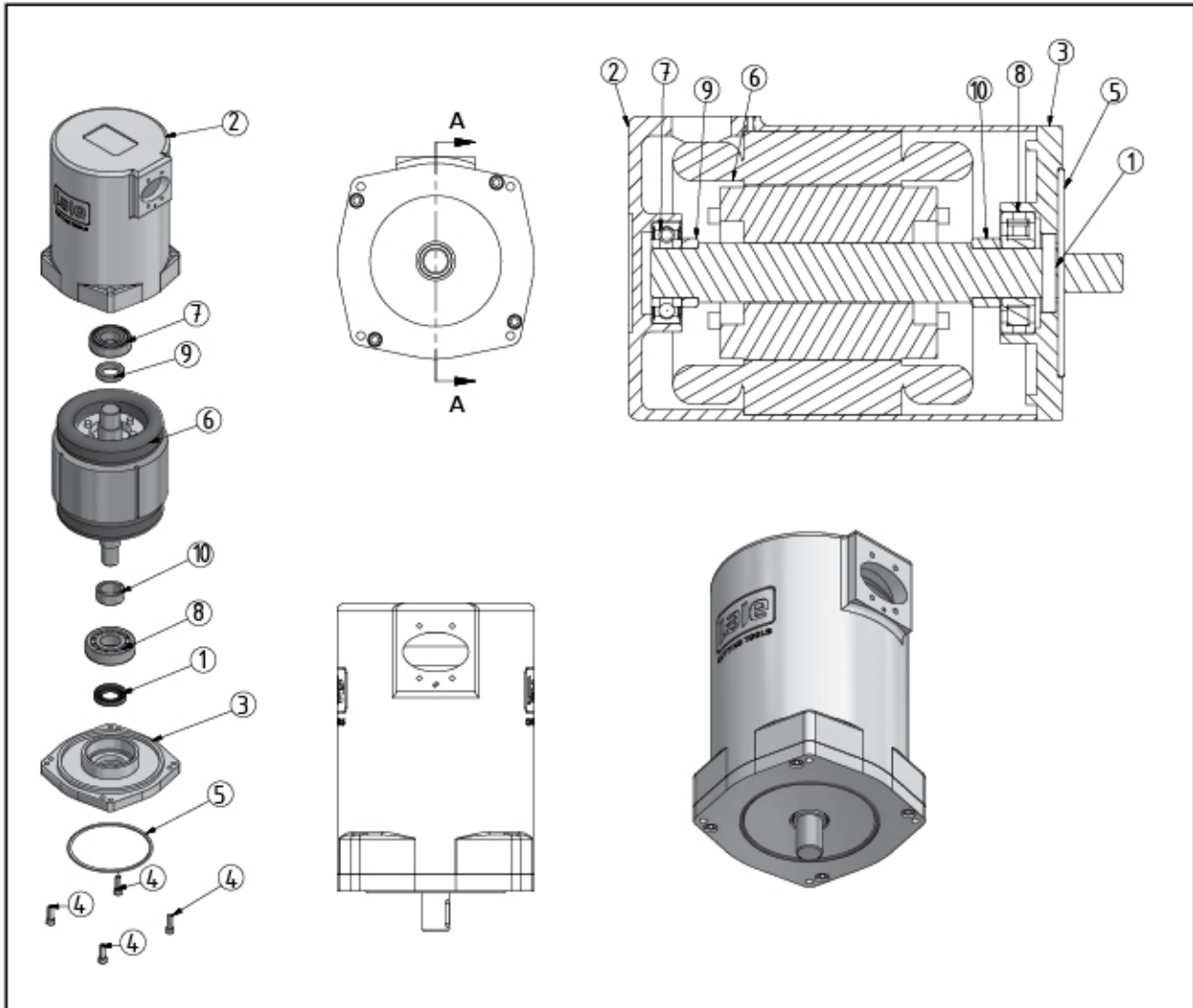
SPARE PARTS LIST



PARTS LIST

ITEM	QTY	PART NUMBER
1	1	530.111.5102
2	4	DIN 912 - M6 x 12
3	1	Ø10 Metal rod

SPARE PARTS LIST



PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	DIN 3760-AS-25x40x7-NBR
2	1	530.152.1001
3	1	530.152.1002
4	4	DIN 912 - M6 x 20
5	1	DIN 3771-100x3,55-N-NBR 70

PARTS LIST		
ITEM	QTY	PART NUMBER
6	1	530.152.2000
7	1	FAG 6205-2Z
8	1	NJ2305-E-XL-TVP2
9	1	Ø35, t = 8.5 Bushing
10	1	Ø35, t = 15 Bushing

CT-280 ENGINE LABEL



CEMSAN MEZBAHANE SİSTEMLERİ A.Ş
Saray Mah. 4.Cad. No:49 K.Kazan-Ankara- TURKEY
+90 312 801 0 222 info@lalesaws.com

PRODUCT NAME / ÜRÜN ADI : QUARTERING SAW
ÇEYREKLEME VE PARÇALAMA TESTERESİ

MODEL: CT-280

POWER/GÜÇ: 2.2 Kw/3.1 Hp

VOLTAGE/VOLTAJ: 380V/50 Hz

PRODUCT YEAR/ÜRETİM YILI:

SERIAL NO/SERİ NO:




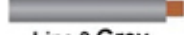




MADE IN TURKEY



ELECTRICAL SOCKET



	Single Phase	Three Phase
Phase Conductor (Line)	 Brown	 Line 1 Brown  Line 2 Black  Line 3 Grey
Neutral Conductor	 Blue	
Protective Conductor (Earth)	 Green-and-Yellow	

Three-Phase Socket Connection

There is logically no difference between the installation of a three-phase socket and that of a single-phase socket. A three-phase socket consists of 3 live conductors + 1 earth conductor + 1 neutral conductor, while a single-phase socket consists of 1 live conductor + 1 earth conductor + 1 neutral conductor. If you only see 4 wires, there is no need to run a separate earth line. The earth line is generally required for motors. The cable cross-sections of the three-phase socket to be used must be selected according to the maximum current the machine will carry, based on the calculations made.

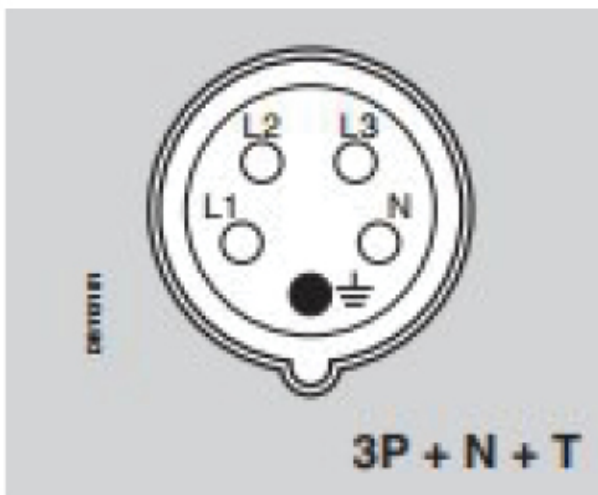
In Figure 1, you can see the color codes of single-phase and three-phase cables as defined by BS 7671 and IEC 60446 standards. In three-phase cables, the R phase is generally grey, the S phase black, the T phase brown, the neutral blue, and the earth yellow/green. In single-phase cables, the colors are brown (phase), blue (neutral), and yellow/green (earth).


Three-Phase Socket Connection

There is no fundamental difference, in principle, between the installation of a three-phase socket and that of a single-phase socket. A three-phase socket consists of 3 live conductors + 1 earth conductor + 1 neutral conductor, whereas a single-phase socket consists of 1 live conductor + 1 earth conductor + 1 neutral conductor. If you only see 4 wires, there is no need to provide a neutral line. The earth line is generally required for motors. The cable cross-sections of the three-phase socket to be used must be selected according to the maximum current that the machine will carry, based on the relevant calculations.

First, the cable ends to be connected must be prepared. After cleaning the cable ends, the wire ends may be bent into a semi-circular shape to facilitate connection. Pliers may be used for this operation. Depending on the operating principle of the equipment to be supplied by the socket, the output terminals may be arranged as 3 phases + 1 earth conductor or 3 phases + 1 earth conductor + 1 neutral conductor. Figure 2: Wiring diagram of 3P+N+E sockets

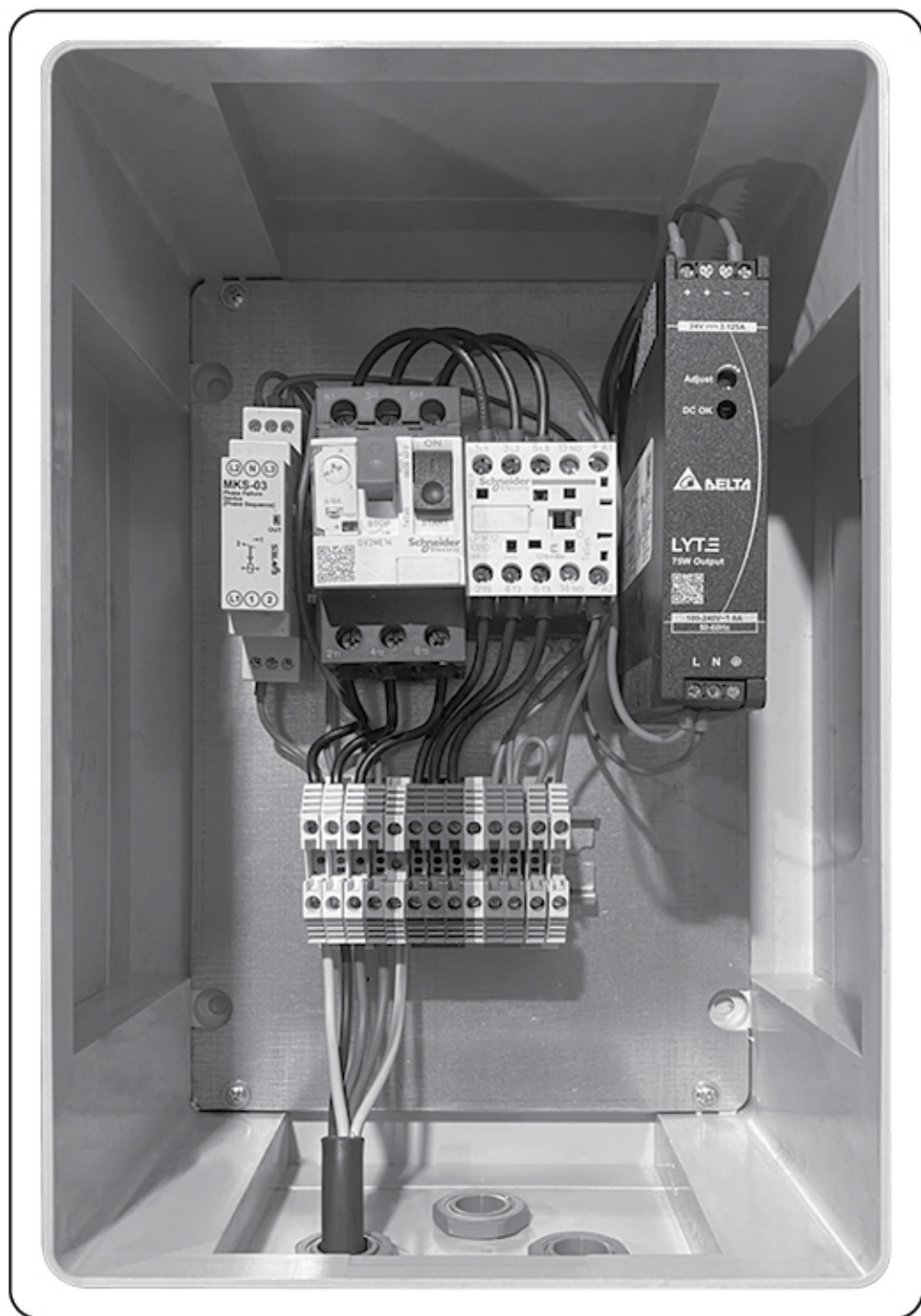
The connection of 3P + N + E cables to a three-phase socket must be made as shown in Figure 2.





IMPORTANT NOTE: Electricity can be fatal and may cause severe damage. Before starting any work on the electrical installation, be absolutely sure that the power has been switched off and that all necessary checks have been carried out. It is also recommended not to place warning signs on the fuse box or electrical panel. Make sure that all work is performed by certified and authorized personnel.

ELECTRICAL PANEL



SAW MAINTENANCE INSTRUCTIONS

A - DAILY SAFETY CHECKS

- Check whether all parts are in proper condition by visual inspection.
- Check the electrical connections.
- Check that all moving parts are correctly positioned.
- Check that the saw blade is properly installed.
- Check the balancer connection and pulling force by testing.

B - DAILY CLEANING OF THE SAW

- The saw must be cleaned every day. Keep the saw clean.

C - MAINTENANCE AND TROUBLESHOOTING

- In order to ensure a long service life of the saw, regular inspection, cleaning, and periodic maintenance must be carried out.

D - MAINTENANCE INTERVALS

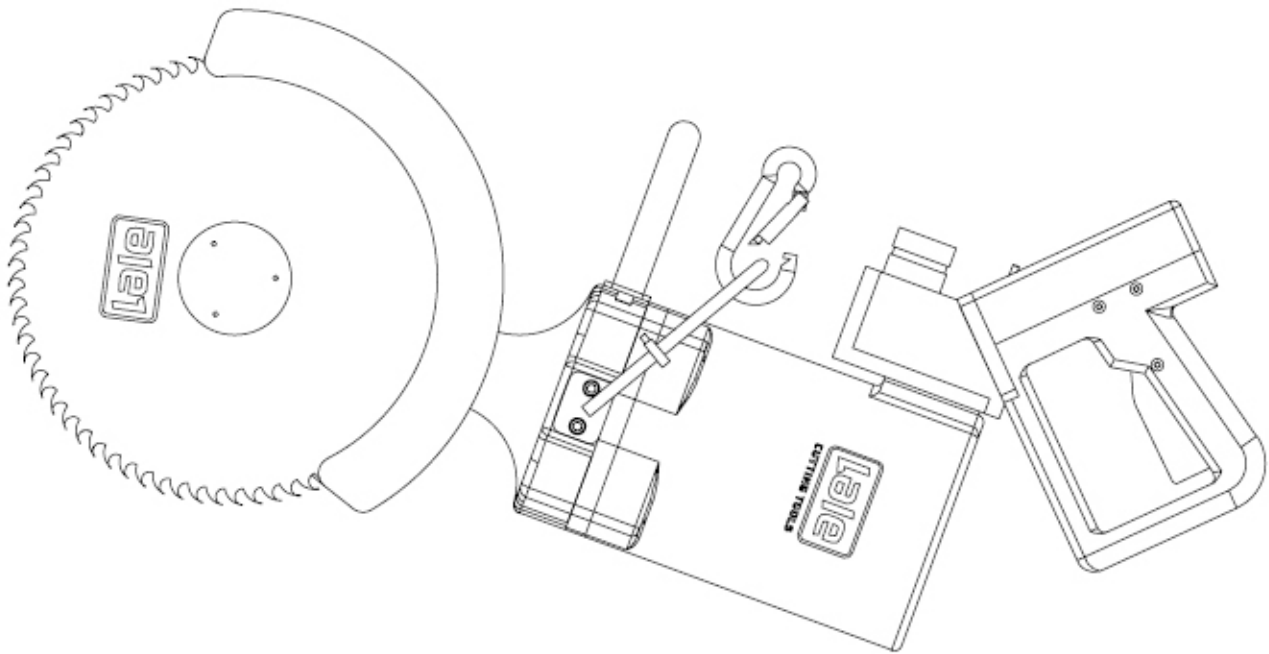
- Daily, weekly, monthly, and six-month inspections are recommended.
- The grease in the gearbox should be replaced every six months. The grease used should be Epro 0 semi-fluid grease.

E - MALFUNCTIONS, CAUSES OF MALFUNCTIONS, AND REQUIRED ACTIONS

- In case of noise, unusual sound, vibration, or any abnormal condition that may occur during the cutting operation, please refer to the table below.

SAW TROUBLESHOOTING

FAULT	POSSIBLE CAUSES	RECOMMENDED ACTIONS
Electric motor does not run or stops	No power supply	Check that the power cable is plugged into the socket, that the power cable is not damaged, and that the electrical fuse is in good condition.
Noisy operation	Blade connections are loose	Check the saw mounting bolts.
Insufficient cutting force	The saw blade is dull; the balancer pulling force is improperly adjusted	Replace the saw blade with a new one and readjust the balancer pulling force.
Abnormal noise from the drive system	The grease properties of the drive mechanism have deteriorated. One electrical phase is disconnected.	Check the connection pins, bolts, and bearings in the drive system. Check the electrical phase connections.
Electric motor overheating	Incorrect cable selection, loose cable connections, or loss of one electrical phase	Use the recommended power cable, measure and check the voltage between phases, and inspect the cable connections.
Saw does not cut at all	The saw blade is dull; low voltage	Check the cutting depth of the saw. Check the voltage between phases.
The cutting blade sticks to the meat	The cutting blade is incorrect, dull, or deformed	Inspect the blade and replace it with a new one.
Motor runs but the blade does not rotate	Drive mechanism failure; faulty key, pin, or bolt connection	Check the drive mechanism.

**SAFETY PRECAUTIONS**

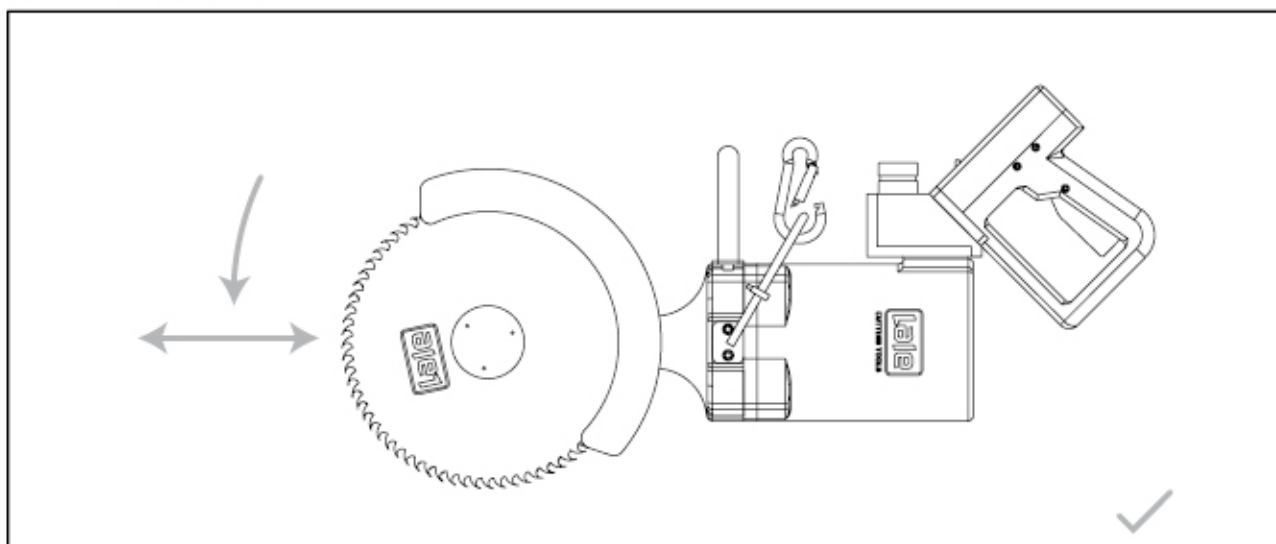
- It is essential that the following safety measures should be observed when operating the circular quartering and breaking saw tool.
- Minors and untrained persons should not have access to the tool.
- Check the tool for any damage.
- Service the tool with care.
- The workplace must be kept clean with care.
- Wear suitable work clothes.
- Make sure that you stand securely.
- Install the tool in accordance with regulations.
- Switch off the main switch or disconnect the power supply.

APPLICATION/DESCRIPTION

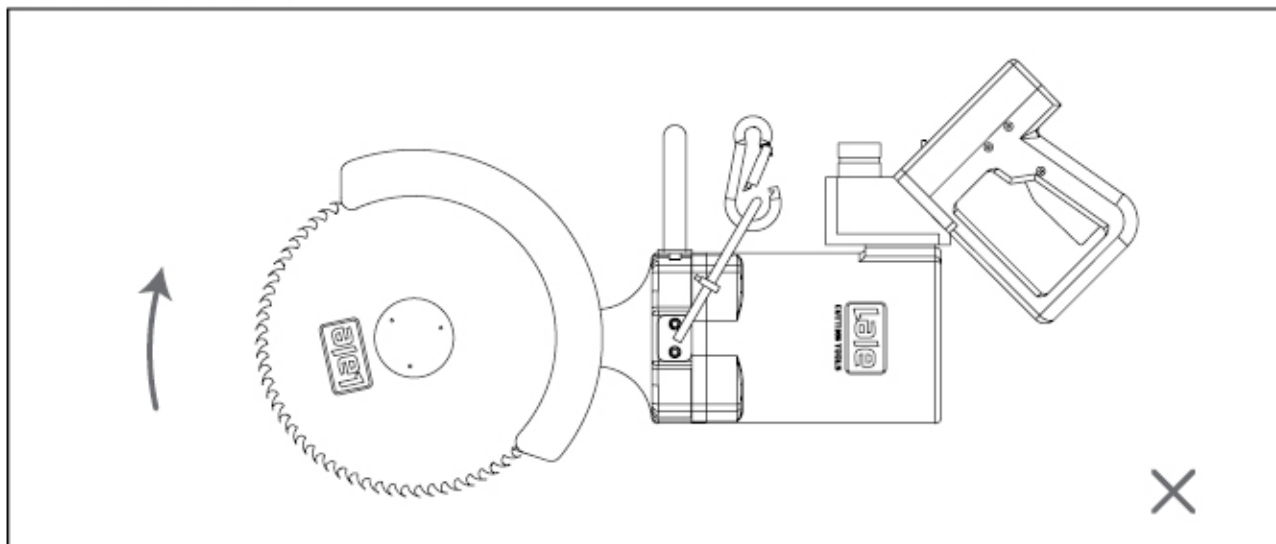


The correct use of the quartering and cutting saw is as follows.

CORRECT USE



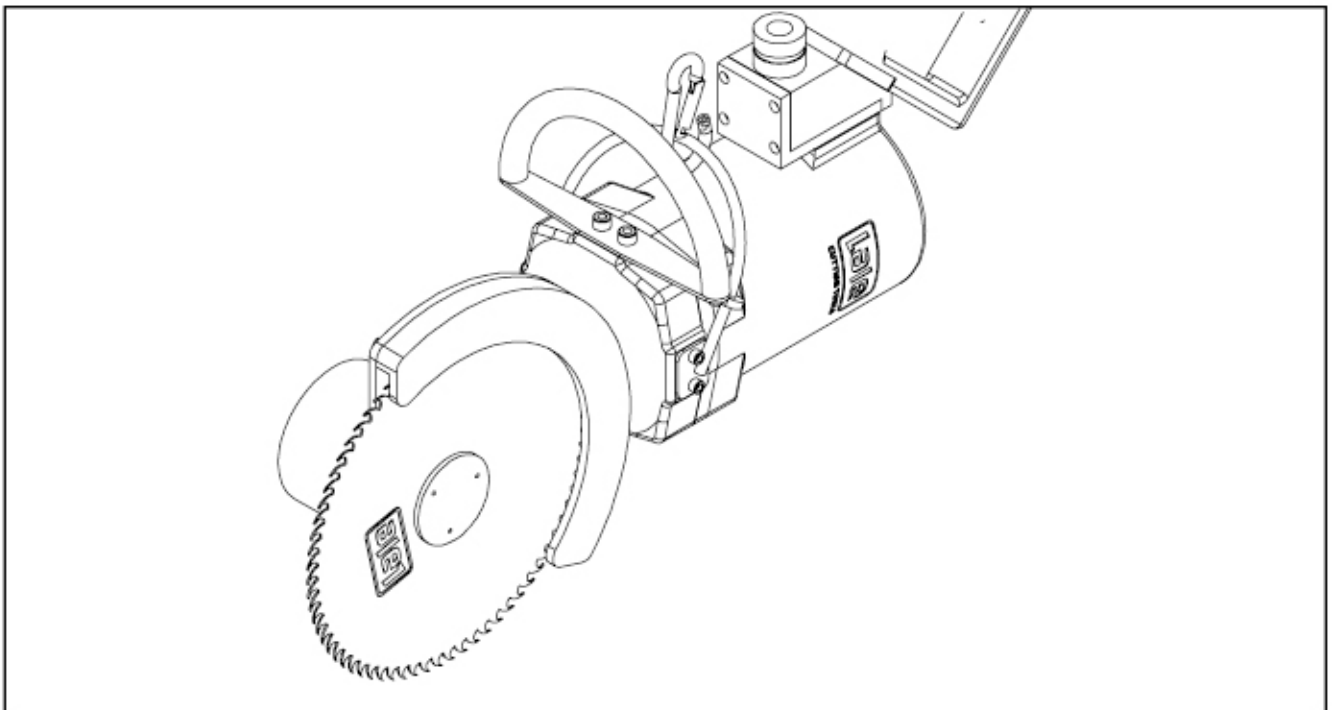
INCORRECT USE





APPLICATION/DESCRIPTION

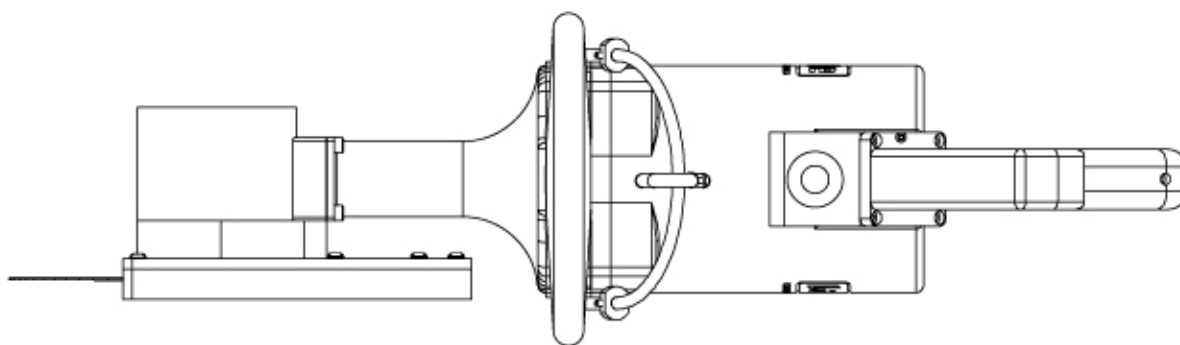
Circular quartering and cutting saw for cattle and pigs in small and medium-sized facilities



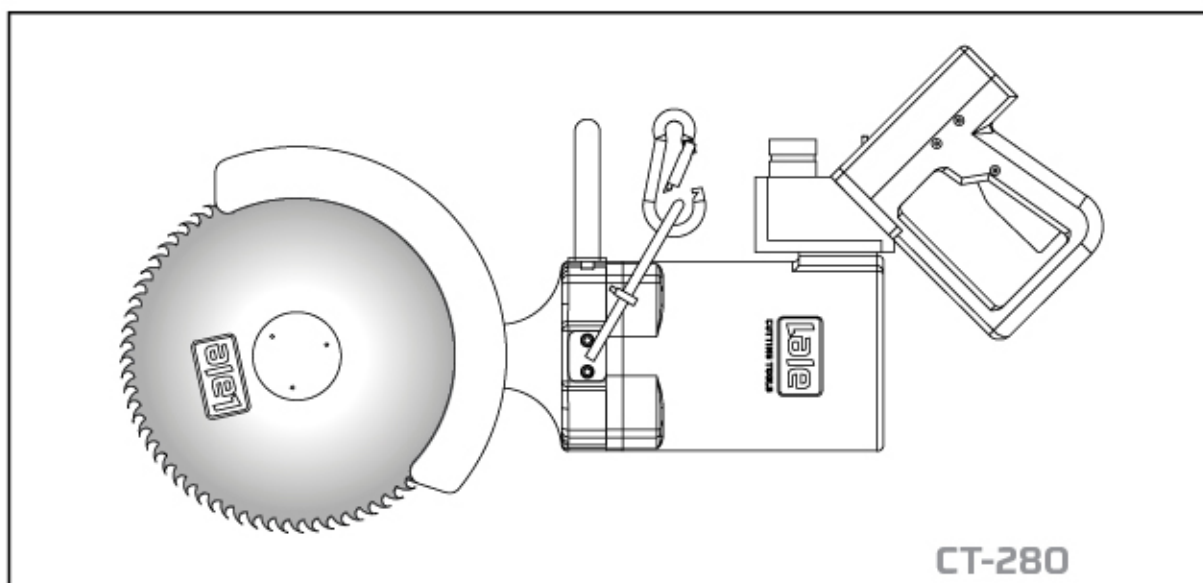
APPLICATION/DESCRIPTION



New developed electrically
circular quartering and breaking saw tool



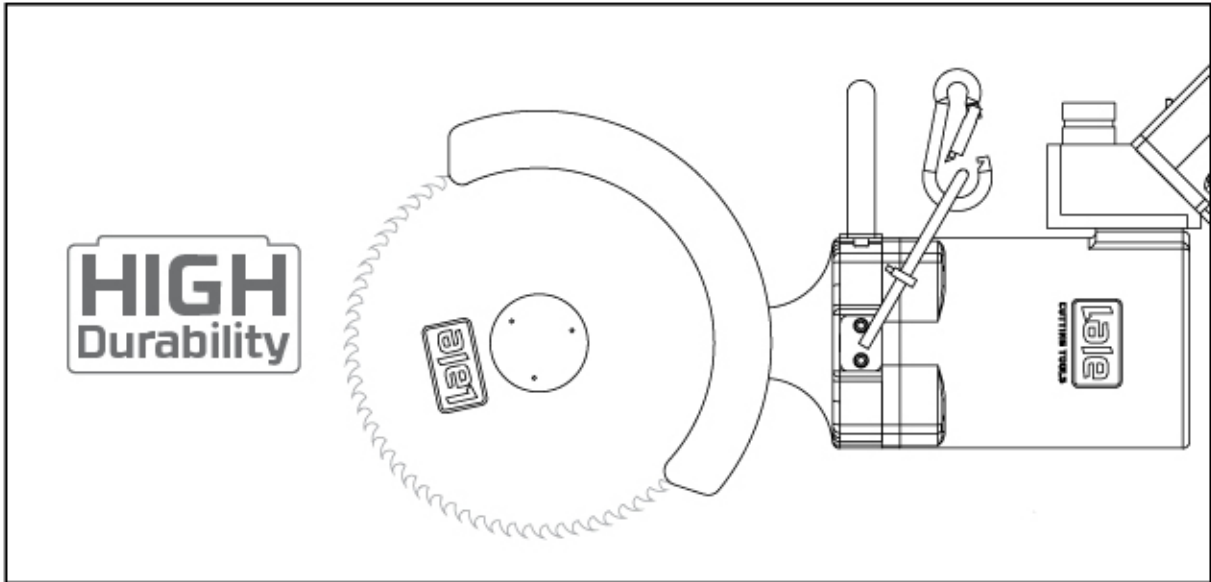
Large opening with 280mm diameter



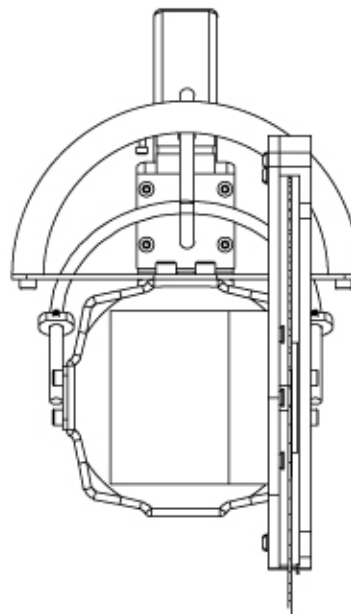


APPLICATION/DESCRIPTION

Long lasting blades cutting depth 100mm



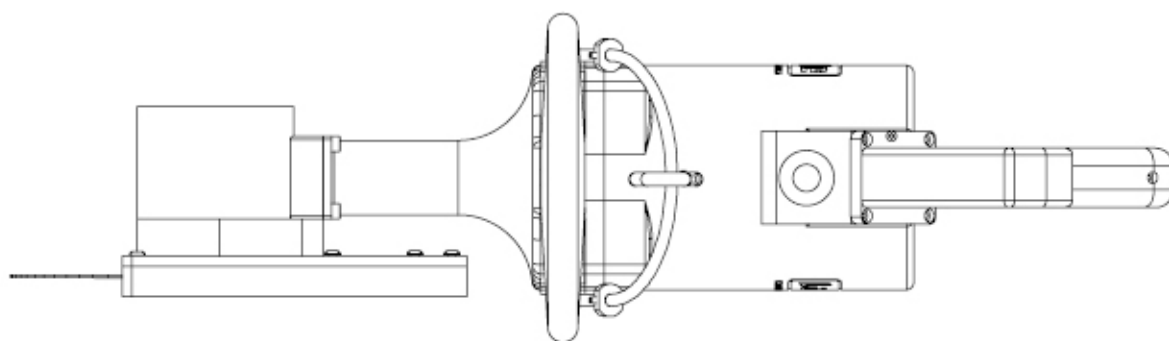
Easy and fast to clean and sterilize be due to smooth finishes and design



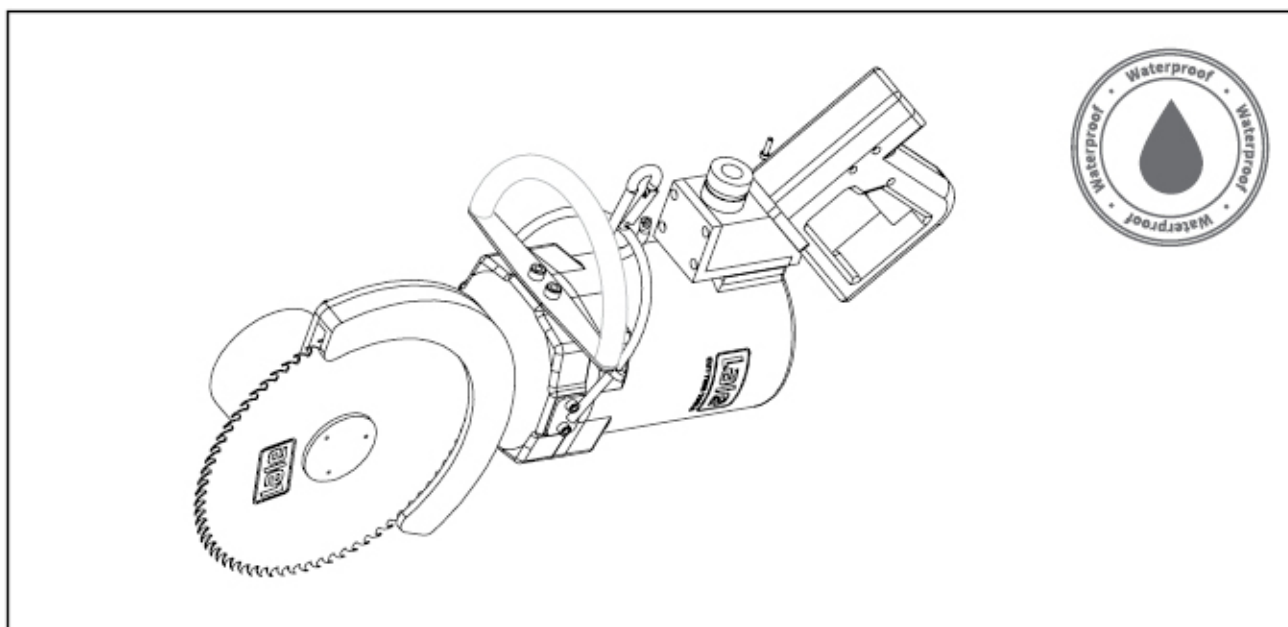
APPLICATION/DESCRIPTION



Safe operation be due to dual safety controls
(Anti-tie-down)



- Totally waterproof
- Optimised ergonomics
- Reciprocating saw blade fine tooth stainless
- Spiral cable 5k
- Round handle



TECHNICAL SPECIFICATIONS

Physical Specifications

Weight	Diameter	Cutting Depth
26 kg	280 mm	90 mm

Electrical Specifications

Phase	Voltage/Frequency/Power	Voltage/Frequency/Power	Trigger	Protection Class
3	380 V / 50Hz / 2.2 Kw (3.1hp)	440 V / 60Hz / 2.5 Kw (3.3hp)	24 Volt Start Switch	IP67

Type: CT-280

Operation: Electric

Control: Electric Trigger with anti-tie-down

Cutting Speed Under Load: 1160 m/min

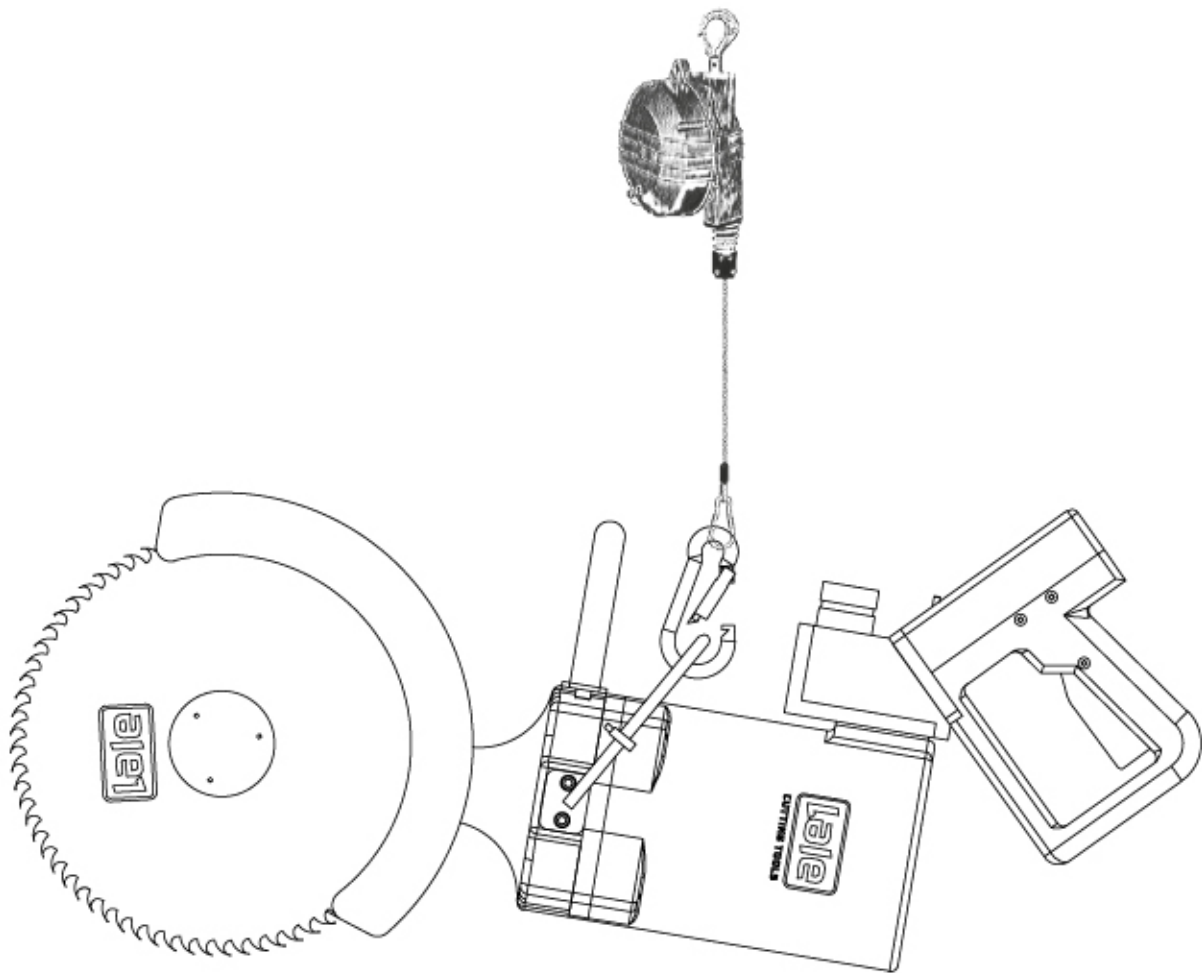
Recommended Balancer Capacity: 30-40kg

Manufacturer **Lale Cutting Tools** Ankara/Türkiye

INSTALLATION / OPERATING PRINCIPLE

■ Installation

- Fasten the balancer with safety chain high enough and append the tool.



- Start the power unit using the main switch.

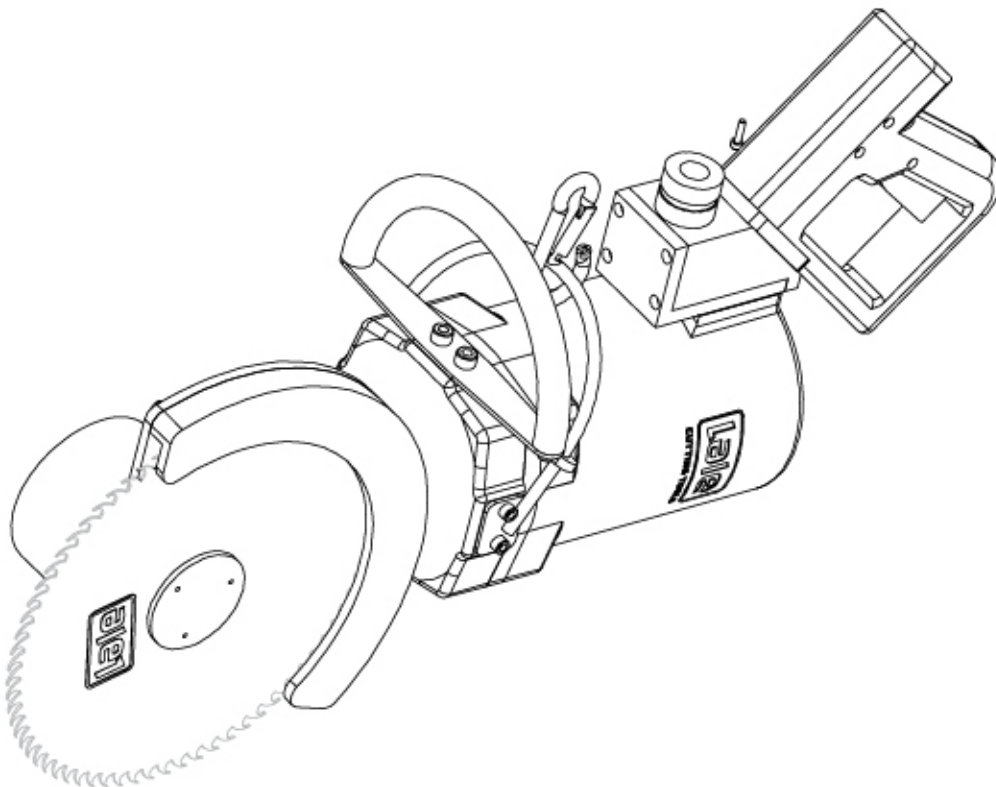
INSTALLATION / OPERATING PRINCIPLE

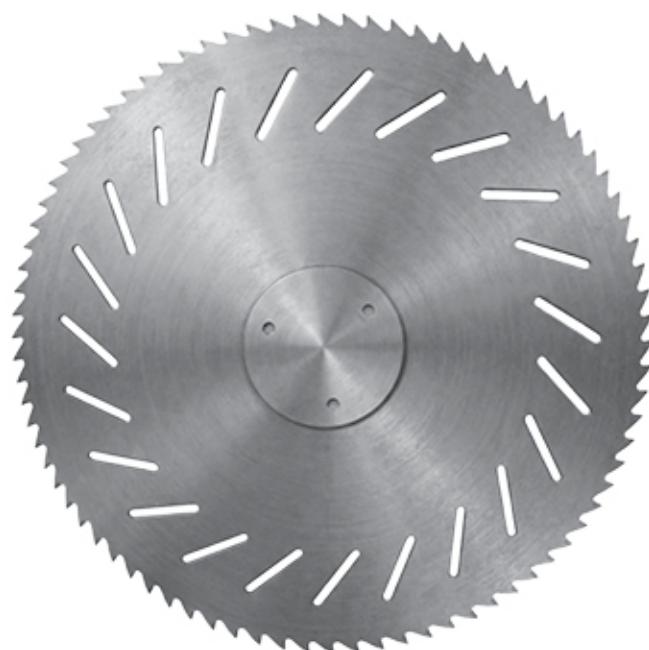
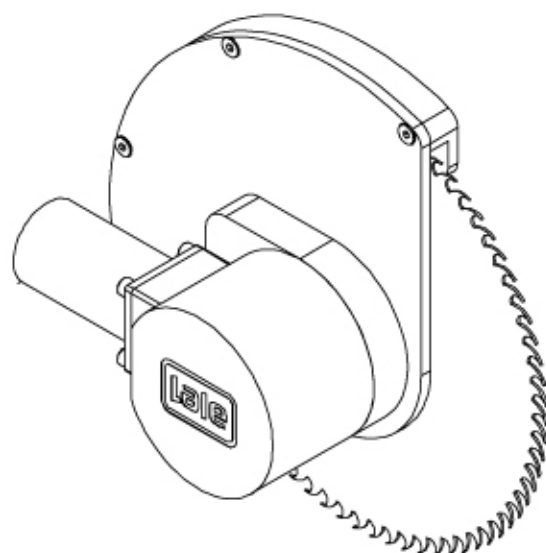
■ Operating Principle

- Lift the open blade away from the body.
- Press the lever of the handle to stop running and hold it-do not use any excessive strength.
- After completion of the splitting event let the electrical hand unpresed then tool automatically stoped.

■ Maintenance

- The cutting operation success depends on the sharpness of the circular saw mainly.
- The circular blade saw always must be sharp
- Clean the shear after work end lubricate the pivot bolts and grease the blades with food grease



SAW BLADE**Model No****CT-280 Spare Saw Blade****Diameter: 280mm**

- Long service life thanks to high-quality material and durable construction.
- Smooth surface finish for hygienic use and easy cleaning.
- Strong, sharp teeth for fast and efficient cutting.
- Precision-ground, sharp teeth for fast and efficient cutting.
- Minimal effort required during operation.
- Low level of bone shavings and dust.

BALANCER**Compatible Balancer model no: YDP-45 ■****Balancer Technical Specifications**

Model No	YDP-45
Capacity	35-45 kg
Cable Travel	2 mt
Weight	10.5 kg

- Sealed monoblock body made of corrosion-resistant aluminum alloy.
- Stainless steel cable.
- Adjustable load by means of a worm screw.
- Safety device against load dropping.
- Upper swivel suspension with safety hook.
- Locking device.
- Adjustable stroke limiter.
- Conical shaft with bearing.
- Friction-reducing cable guide.
- 360° rotating upper hook with bearing.

CT-280

QUARTERING AND BREAKING SAW



CUTTING TOOLS



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