

BYGG-STRÖM

LUX C12

4x100W LED LIGHTING TOWER

4x200W LED LIGHTING TOWER

USER MANUAL

CE



Dear customer,

We wish to thank you very much for having purchased our product. With proper handling and maintenance, this product will provide dependable, long-term service. Our customer service is always available, might you need it.

This manual is intended for users of the equipment. This manual is compiled from information available and current at time of approval for printing.

Please consider that this manual may refer to controls and optional equipment that are not present on your particular machine.

It is important that you know your machine and its equipment and how to operate it properly, so

please read the operating instructions carefully and understand them before operating the machine.

Machine specifications can be modified at any time without any obligation to update this publications. It is recommended to read this manual thoroughly because incorrect operation may result in the warranty being void.

Reproduction of this manual is not permitted, unless written approval is obtained from factory.

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SAFETY RULES

SAFETY PRECAUTIONS TO BE OBSERVED

Read this manual and learn the operating characteristics and limitations of the machine before operating it.

The manufacturer declines all liability for injury to persons and damage to components due to not respecting the safety rules.

Report all malfunctions to a maintenance responsible. If there are any repairs to be done, do not operate the equipment. Normal service and maintenance, if performed as required, can prevent unexpected and unnecessary down time. This manual describes standard inspections, operation and servicing with the normal safety precautions required for normal servicing and operating conditions.

Operators and maintenance personnel must be safety conscious and alert to recognize potential operating or servicing safety hazards at all times. They should immediately take the necessary precautions to ensure safe operation and servicing of the machine.



- Be aware of operating risks that may be created by weather changes. Follow the correct procedures in the event of heavy rain or electrical storm.
- Lower tower when not in use, or if high winds or electrical storms are expected in the area.
- Use protective clothing and safety equipment: gloves, safety boots, safety hard hat, goggles, ear protection, and dust masks when necessary.
- Know all side clearances and overhead obstructions for safe operation of the machine.
- ALWAYS** make sure area above the tower is open and clear of any kind of obstruction.
- Position and operate the lighting tower on a firm surface.
- The machine must be levelled and outriggers extended before raising tower.
- Keep area around the machine clear of people while raising and lowering the mast.
- NEVER** using the unit if it is in need of repair.
- Check that winch cables are in good condition and are centered on each pulley.
- DO NOT** use the unit if insulation on the electrical cord is cut or worn through.
- DO NOT** permit to untrained personnel to operate the machine.
- NEVER** operate a unit if you are tired, not concentrated or under the influence of drugs or alcohol.
- Keep children and animals away from the machine.

SAFETY RULES

ELECTRICAL HAZARD



Use jumper cables only. Improper use can result in severe damage and safety risk.

- NEVER** use the machine if insulation on electrical cord is cut or worn through.
- NEVER** operate lights without protective lens cover in place or with a lens cover that is cracked or damaged!

SERVICING



Only authorized and trained personnel is allowed to perform the machine maintenance.
Please read the operator's manual and maintenance manual before using or servicing the machine.

- HIGH VOLTAGE!** This equipment utilizes high voltage circuits. Always exercise extreme caution when trouble shooting or repairing any electrical circuit.
- Only a qualified electrician should troubleshoot or repair electrical problems occurring on the machine.
- Disconnect electrical power before removing protective covers on high voltage electrical closures.
- NEVER** allow water to accumulate at the base of the machine. If water is present, **DO NOT** service!
- DO NOT** service electrical components if your clothing or skin is wet.
- Never wash the unit with a high pressure hose or with any kind of power washer.
- Check and replace all missing and hard-to-read labels.
- Make sure slings, chains, hooks, ramps, jacks, and other types of lifting devices are attached securely and have enough weight-bearing capacity to lift or hold the equipment safely.

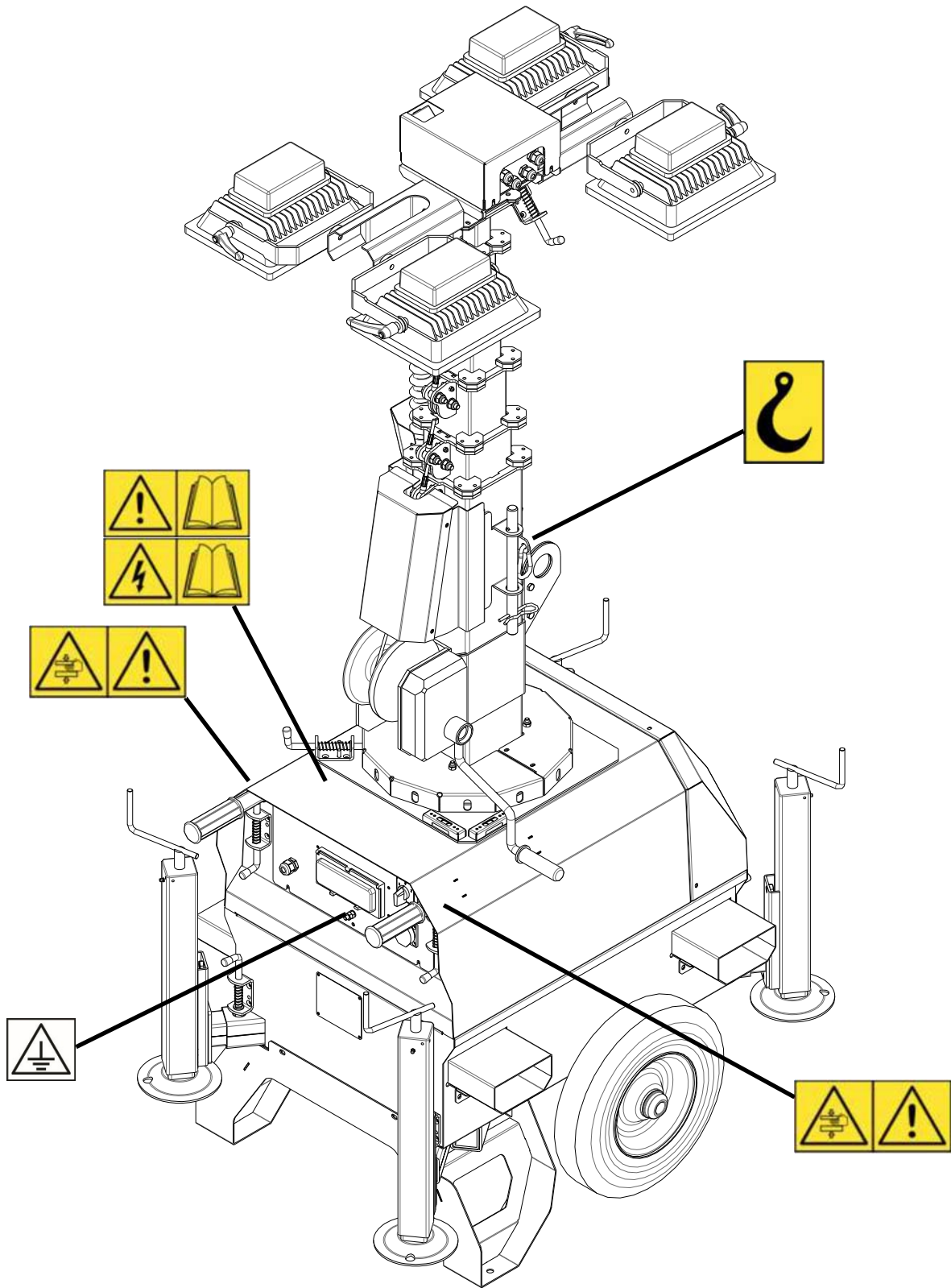
EARTHING



For operators' safety, the **grounding of the machine always needs to be done** paying attention on the section of the cable to be used (never to be less than 10 mm²). For the connection of the grounding cable, please always use the clip located on the control panel.

SAFETY RULES

SAFETY STICKERS GUIDE



SAFETY RULES

SAFETY STICKERS GUIDE

Safety stickers meanings



Attention! Read user's manual before operating the machine.



Attention, high voltage! Read user's manual before operating the machine.



Do not extinguish with water! Attention, don't touch the moving parts.



Attention! Danger of crushing.



Attention, battery on board. Contains corrosive liquids.



Attention! Diesel fuel on board. Stop the engine while refueling. Keep anything that could cause sparks, flame or fire at a safety distance from the machine.



Attention! Hot liquid under pressure during machine use and immediately after. Pay attention when opening.



Lifting point. Ensure lifting device has enough capacity to handle machine weight.



Earthing point. The grounding of the machine always needs to be done paying attention on the section of the cable to be used (never to be less than 10 mm²).

TECHNICAL SPECIFICATIONS

MACHINE IDENTIFICATION

1				
2				
Year of manufacture:		3	Type	4
5 CE	Lamps	V	14	
		W	13	
		Hz	12	
	Power inlet	V	11	
		A	10	
		Hz	9	
Dimensions L x W x H		8		
Weight		7		
SERIAL N°		6		

Information regarding the machine model, code and year of production is on the unit serial number plate. Always quote the machine model and serial number when contacting your dealer, the factory and for any spare parts requests. All of our products comply with CE requirements. They are conform to directives and fulfill all the relevant safety requirements.

1. Manufacturer's logo
2. Manufacturer's address
3. Manufacture year
4. Machine model
5. CE Logo
6. Machine serial number
7. Dry weight
8. Machine dimensions
9. Power inlet frequency
10. Power inlet current
11. Power inlet voltage
12. Lamps frequency
13. Lamps power
14. Lamps voltage

TECHNICAL SPECIFICATIONS

TECHNICAL DATA

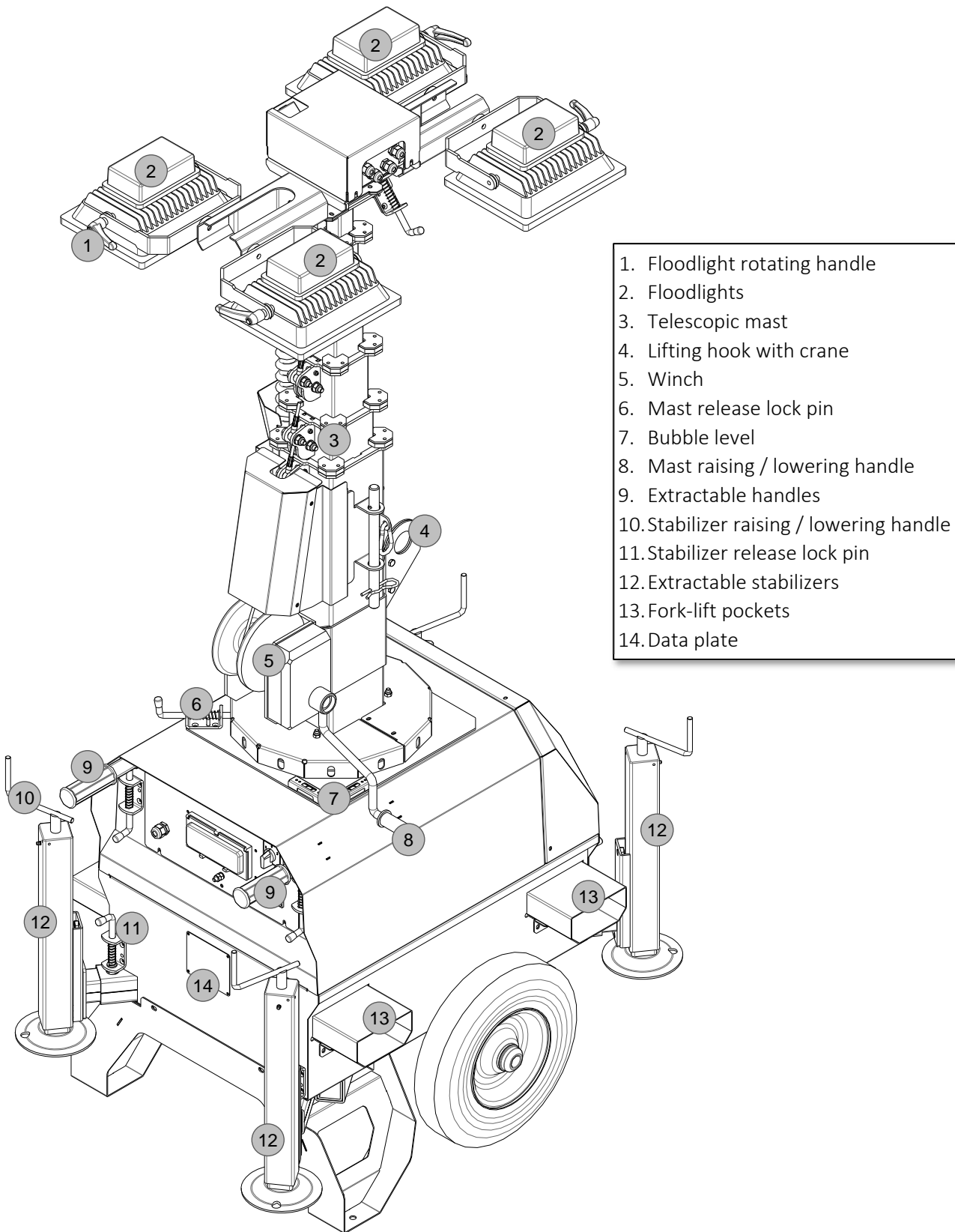
Floodlights	Power of each lamp	100W	200W
	Type	Led	
	Floodlight installed	4	
	Luminous flux	15650 lm	31300 lm
	IP Level	66	

Mast	Lifting Method	Manual
	Maximum Height	7 m
	Maximum Wind Speed (km/h)	110 km/h
	Rotation	340°

General informations	Input electrical plug	230V 16A SCHUKO
	Output electrical socket	230V 16A SCHUKO
	Maximum quantity of machines in a single chain	5
	Dimensions in transport (L x W x H)	1200 x 800 x 2340 mm
	Dimensions in operation (L x W x H)	1850 x 1450 x 7000 mm
	Dry weight	327 kg
	Trailer Type	Hand trolley

TECHNICAL SPECIFICATIONS

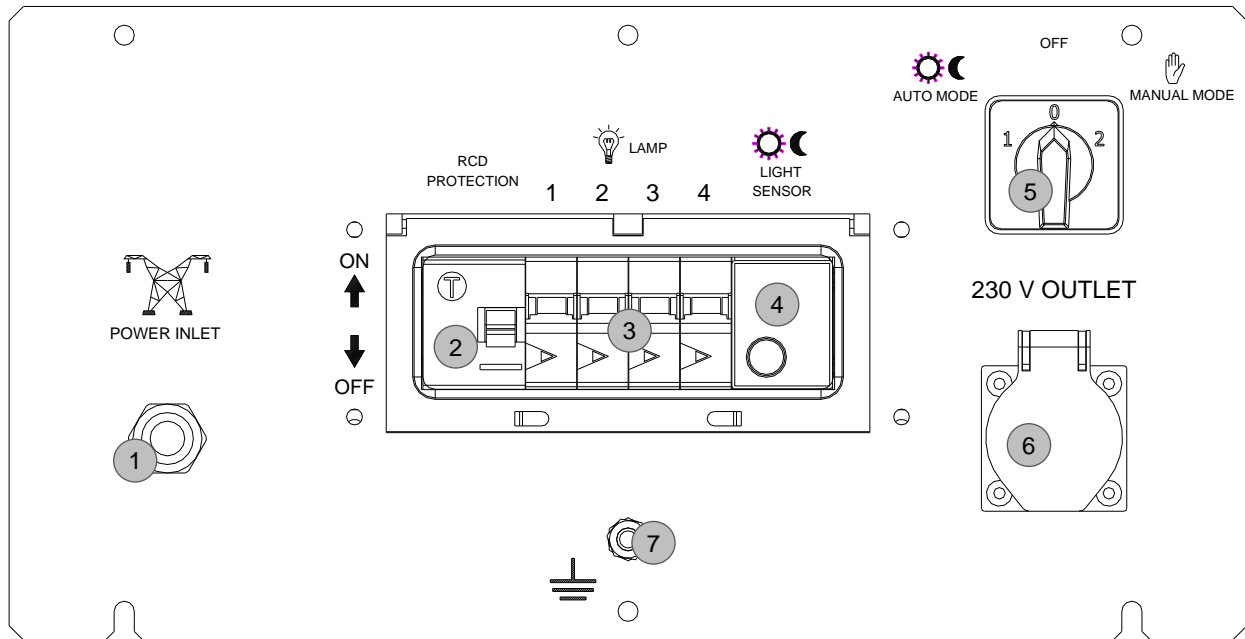
LIGHTING TOWER COMPONENTS



TECHNICAL SPECIFICATIONS

MACHINE CONTROLS

Control panel



- 1) 230V 16A Mains inlet
- 2) 13A RCD protection
- 3) Floodlights switches
- 4) Light sensor
- 5) Operation mode selector switch
- 6) 230V 16A Shuko Power outlet
- 7) Earthing terminal

LIGHTING TOWER POSITIONING

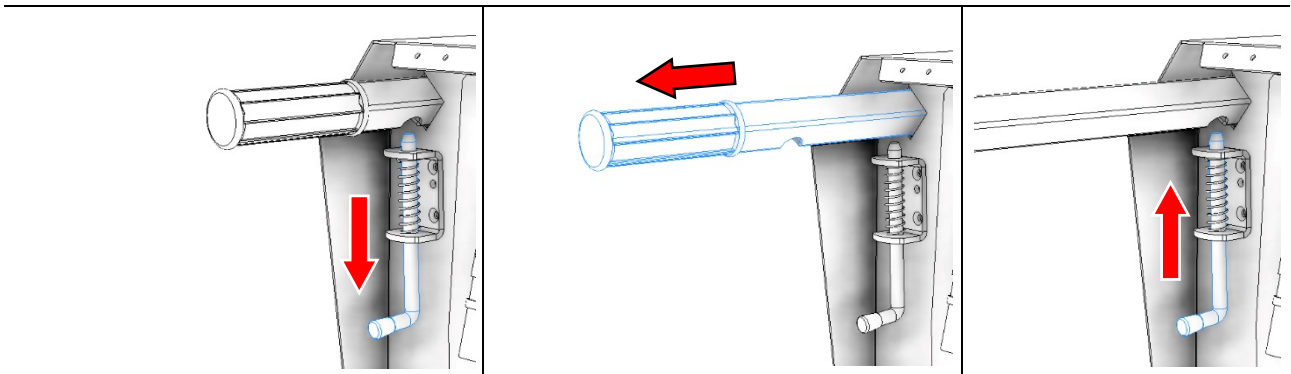
When choosing a location for the lighting tower, bear in mind the following:

- Assess site conditions carefully before positioning and operating the machine.
- The working area should be relatively level and solid. This will ensure smooth, trouble-free telescoping of the mast. (which may not telescope properly if the unit is not level.)
- **Do not position the tower in the vicinity of overhead cables or power lines!**
- **Never raise the mast or operate the tower without properly jacking the unit!**
- For maximum light coverage and illumination efficiency, locate the unit at ground level or in a spot higher than the area being illuminated by the lamps.
- **Do not move the tower with the mast raised!**

HANDLING AND TRANSPORT

HANDLING AND MANUAL TRANSPORTATION

- Hold the extendable handle with one hand and pull the locking pin to release it. Pull the handle outwards until it's fully extended and ensure that the locking pin locked it in place securely in the extended position.
- Move slowly and position the machine where needed.



HANDLING AND TRANSPORT

HANDLING AND TRANSPORT WITH CRANE

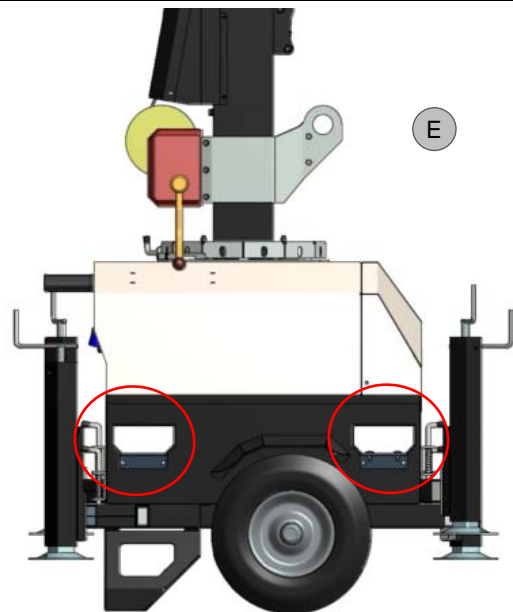
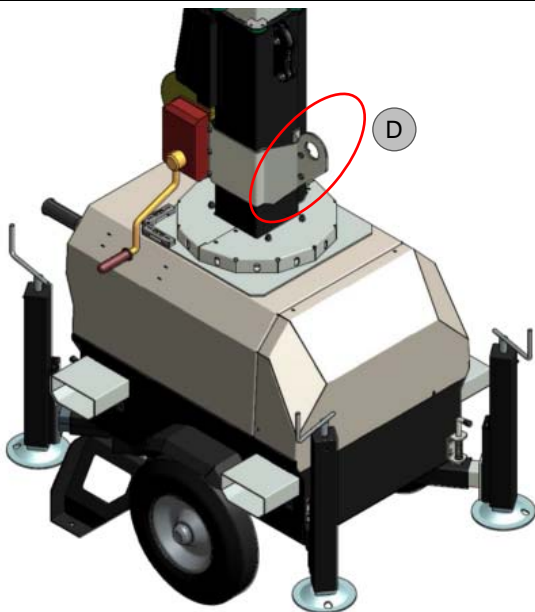


Handling by crane is allowed only if the machine is connected to the crane through the lifting eye. (C)

- Ensure that the lifting capacity of the crane and lifting devices is suited to the weight of the machine to move. The weight is specified in the provided documentation (user's manual) and on the data plate.
- Connect the cable/hook to the lifting eye (D) and tension the cable.
- Lift the machine for about 10 cm (4 in.).
- Move slowly and position the machine on the ground or on the vehicle.

HANDLING AND TRANSPORT WITH FORKLIFT

- Ensure that the lifting capacity of the forklift is suited to the weight of the machine to move. The weight is specified in the provided documentation (user's manual) and on the data plate.
- Insert the forks into the forklift pockets (E).
- Lift the machine for about 10 cm (4 in.).
- Move slowly and position the machine where needed.



LIGHTING TOWER USE

STABILIZING THE UNIT

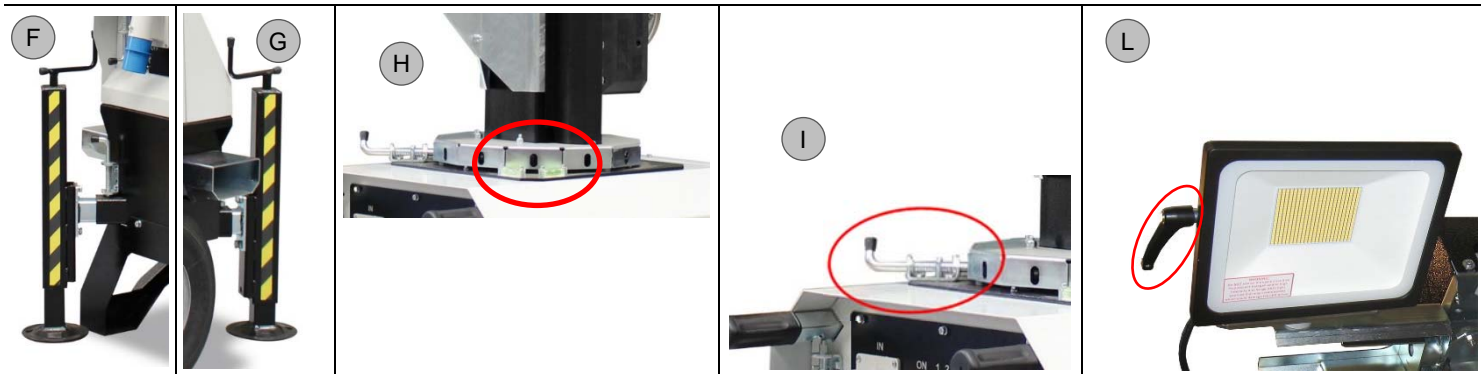
The stabilizers are extendable (F) and (G). Jack up the unit as follows.

- Hold the stabilizer with one hand and pull the locking pin to release it. Pull the stabilizer outwards until it's fully extended and ensure that the locking pin locked it in place securely in the extended position.
- Jack the unit up by rotating the handle on the top of each stabilizer clockwise.
- Please refer to the bubble levels (H) installed on top of the machine (near the mast) in order to have the machine perfectly leveled and stable before rising the tower.
- The wheels of the machine have to touch the ground at all times.

DIRECTING THE FLOODLIGHTS

The tower can be rotated up to **340** degrees in order to direct the light as required.

- Release the rotation locking pin (I) and turn the tower using the rotation handles on the mast in order to direct the lights as needed. Don't forget to lock the rotation afterwards.
- Additionally to the mast rotation, each of the LEDs can be adjusted on two axes and tilted back and forth. This way the lights can be directed either vertically or horizontally. In order to adjust the light on the vertical axes, the encircled pin (L) needs to be unlocked by pulling it and then turning the floodlight. For any adjustments, the mast must be lowered to allow access.

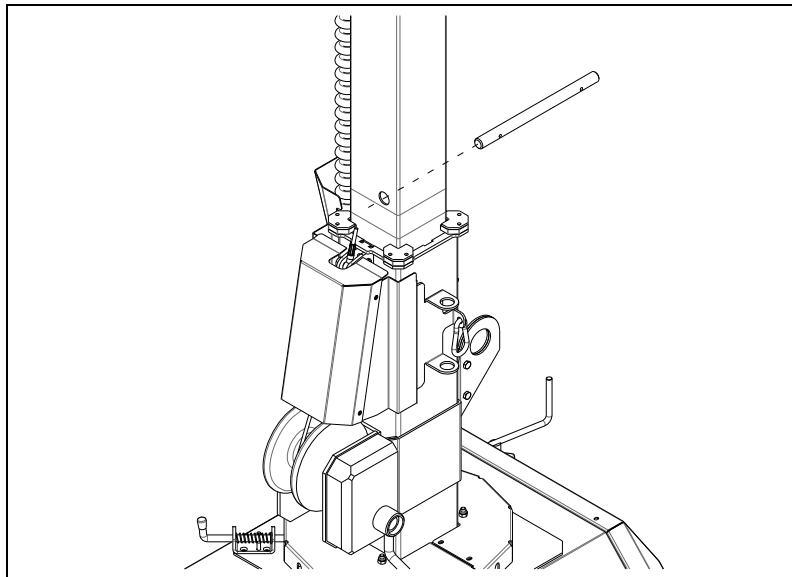


LIGHTING TOWER USE

PRELIMINARY CHECK

Before operating the unit, we suggest making the following routine checks for improved safety, better efficiency, longer product life and in order to avoid work disruptions.

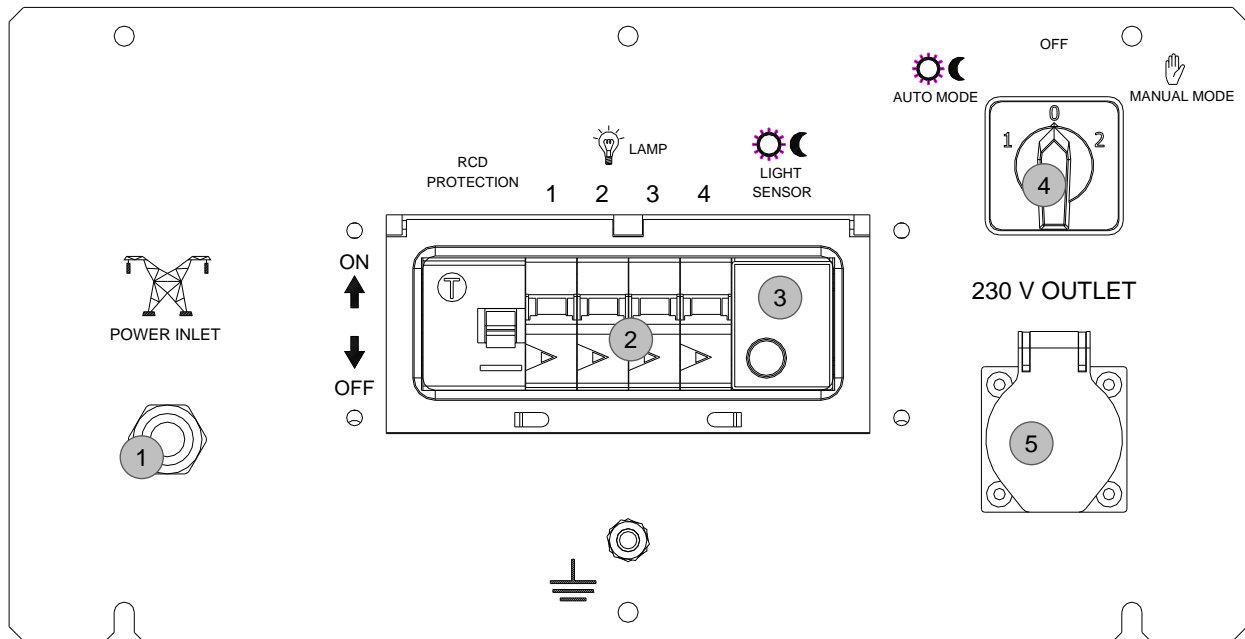
- Check that the machine is leveled correctly and stabilized firmly.
- Check that all the lamp lenses are clean and undamaged.
- After adjusting the lights, prepare to raise the tower by:
 - Inspecting the cable and replacing it, if damaged.
 - Checking mounting hardware for proper tightness and re-torquing if necessary.
 - Raise the mast and insert the safety pin supplied in the appropriate hole, see picture.
- Ensure that all the electrical cables are undamaged and correctly connected.
- Check that the main switch and the lamps switches are in the OFF position.
- Drive the earth picket into the ground (earth) following any risk assessment. (*)
- Check that the grounding cable is securely attached to the unit.
- Open the frontal door to access the control panel.



For operators' safety, the grounding of the machine always needs to be done paying attention on the section of the cable to be used (never to be less than 10 mm²). For the connection of the grounding cable, please always use the clip located on the control panel, on the right side of the machine. Always perform grounding operations in compliance with local/international regulations.

LIGHTING TOWER USE

MANUAL MODE



- Connect an electrical supply to the plug (1). Make sure that the power line is protected by an appropriate differential switch and main switches.
- Use the electrical outlet (5) to connect another unit.
- Turn the selector switch (4) in "Manual Mode".
- Switch on the lights using the switch (2).
- To turn off the lamps, turn the light switch (2) and the selector switch (4) to OFF.

LIGHT SENSOR MODE

- Connect an electrical supply to the plug (1). Make sure that the power line is protected by an appropriate differential switch and main switches.
- Use the electrical outlet (5) to connect another unit.
- Turn the selector switch (4) in "AUTO MODE".
- Set the light sensor (3) to a value between min. 25 and Max. 70.
- Switch on the lights using the switch (2).
- When the ambient brightness drops below the preset level (expressed in Lux), the LED lights turn on automatically.
- When the ambient brightness rises below the preset level (expressed in Lux), the LED lights turn off automatically.

ROUTINE MAINTENANCE

Poorly maintained equipment can become a safety hazard. In order, for the equipment, to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

Any kind of maintenance work on the lighting tower must be carried out by Authorized and trained personnel. It should be done in a safe working environment and with the machine well stabilized. The engine must be turned off and let cool down sufficiently before starting to work on it.

- While performing maintenance work, please use suitable tools and clothes.
- DO NOT modify any component if not authorized.

The repairs cannot be considered among the routine maintenance activities. E.g. the replacement of parts that are subject to occasional damage and the replacement of electric and mechanic components that wear with use. This kind of work is not –in fact– covered by warranty.

DISPOSAL AND DECOMMISSIONING

This machine is made of parts that, if not disposed of correctly, can damage the environment and create ecological hazards. The following parts and materials need to be brought to authorized waste treatment sites:

- Metallic structure;
- Cables.

These components have to be disposed of accordingly to local laws and dispositions. Have qualified personnel disassemble the machine and dispose of parts.

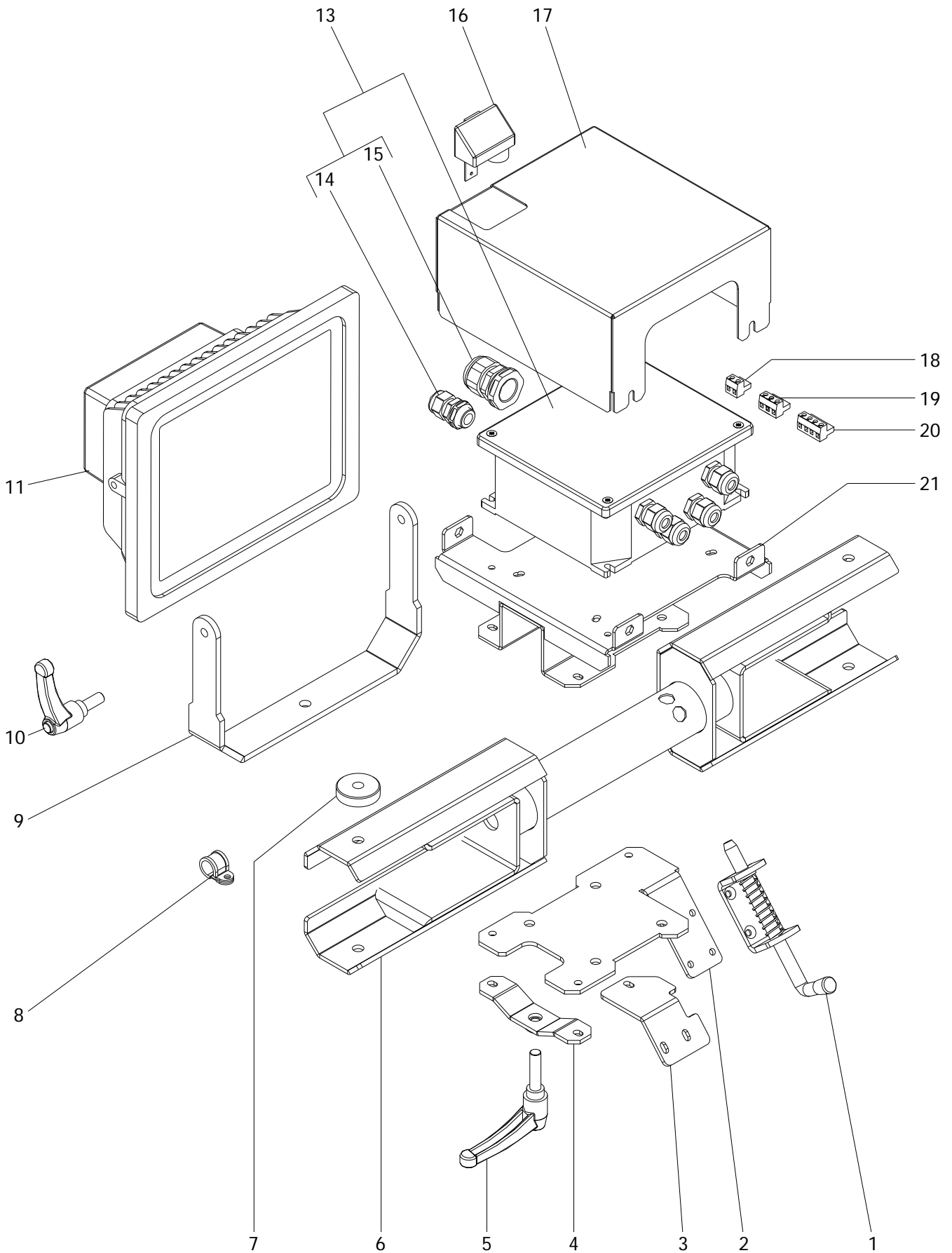
The machine owner is responsible for dismantling and disposal of the machine and its components at the end of its working life.

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LUX C12



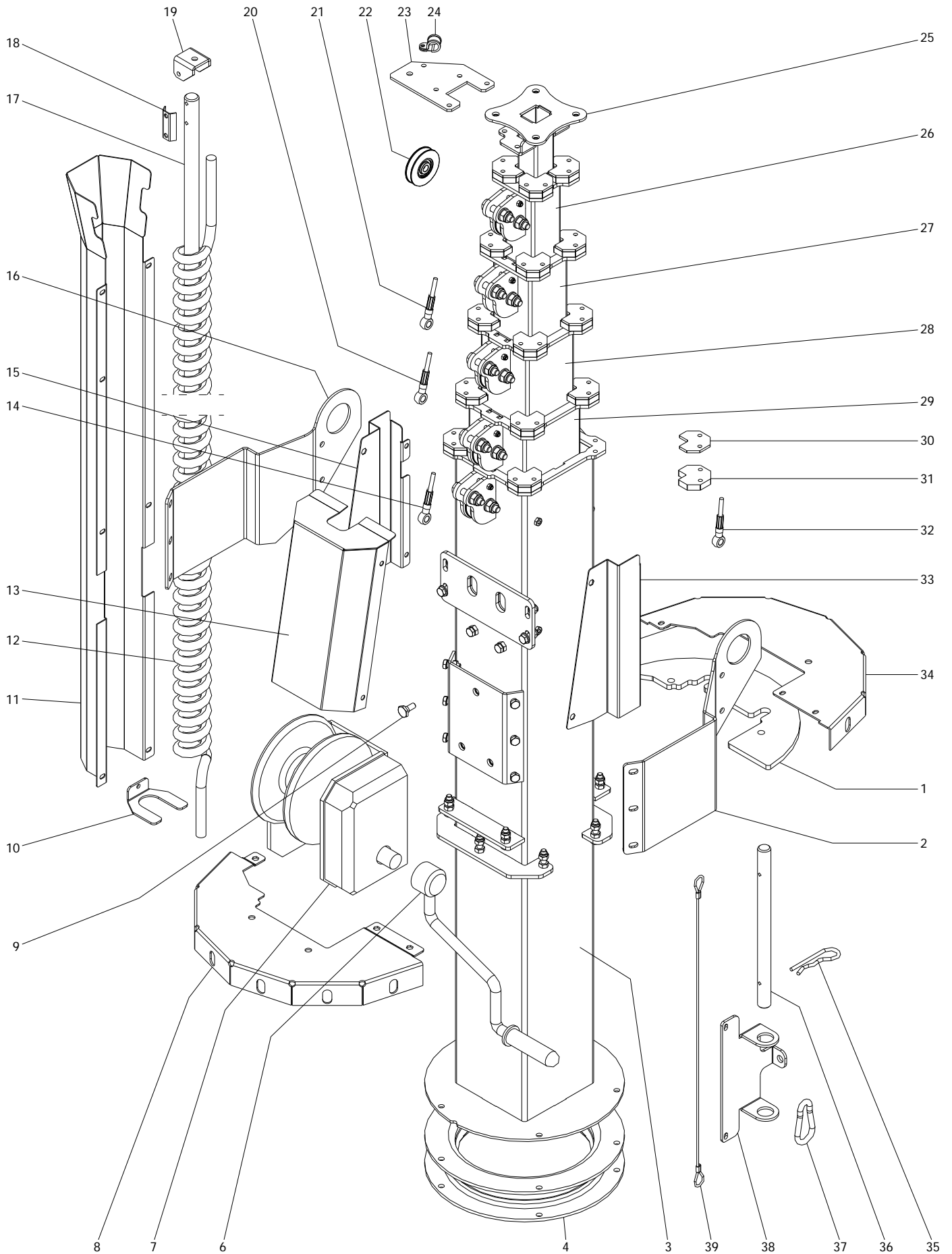
SPARE PARTS



SPARE PARTS

N.	CODE	DESCRIPTION
1	AC000_M000_086	CLOSING LOCK PIN
2	PFM07_C000_040ZN	ROTATION PLATE
3	PFM07_C000_043ZN	PLATE
4	PFM07_C000_018	HANDLE SUPPORT PLATE
5	AC000_M000_076	HANDLE M10x40
6	PFM07_C000_039ZN	CENTRAL FRAME
7	AS000_M023_025	SPACER
8	AC000_M038_007	RUBBERIZED HOSE CLAMP
9	LED04_C000_129ZN	BRACKET FOR LED FLOODLIGHT (100W)
	LED04_C000_143ZN	BRACKET FOR LED FLOODLIGHT (200W)
10	AC000_M000_036	FLOODLIGHT HANDLE
11	-----	LED 100W FLOODLIGHT
13	AS000_E006_035	JUNCTION BOX
14	AC000_E018_008	CABLE GLAND PG11
15	AC000_E018_002	CABLE GLAND PG21
16	AC000_E006_017	LIGHT SENSOR
17	PFM07_C000_042	JUNCTION BOX COVER
18	AC000_E006_002	2 POLES CLAMP
19	AC000_E006_003	3 POLES CLAMP
20	AC000_E006_004	5 POLES CLAMP
21	PFM07_C000_041ZN	SUPPORT FOR FLOODLIGHT FRAME ROTATION

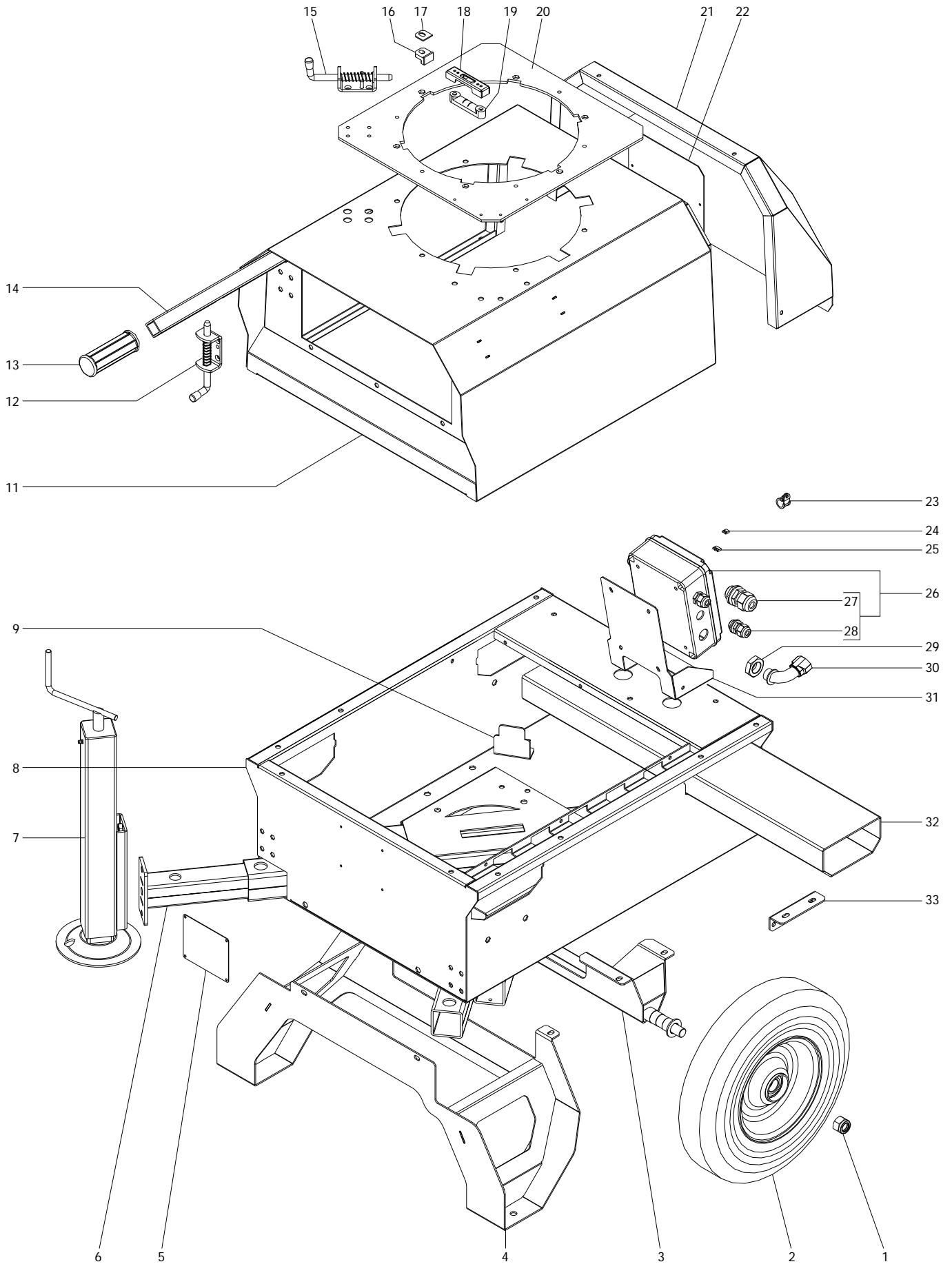
SPARE PARTS



SPARE PARTS

N.	CODE	DESCRIPTION
1	PFM08_C031_061	ROTATION FLANGE
2	PFM07_C000_022ZN	LIFTING EYE ASSEMBLY, RIGHT PART
3	PFM07_C031_075ZN	1° SECTION MAST
4	PFM07_C031_070	MAST SUPPORT
6	AC000_M000_084_01	WINCH HANDLE
7	AC000_M000_084	WINCH BODY
8	PFM08_C031_062ZN	MAST ROTATION POSITIONING DEVICE, LEFT
9	AS000_M000_029	SCREW
10	PFM08_C000_047	COILED CABLE BOTTOM PLATE
11	PFM07_C000_037	COILED CABLE PROTECTION
12	AC000_E006_016	COILED CABLE
13	PFM08_C000_018	FRONT COVER
14	AC000_M021_019	STEEL ROPE – L 1170 mm
15	PFM08_C000_020	LEFT COVER PLATE
16	PFM07_C000_021ZN	LIFTING EYE ASSEMBLY, LEFT PART
17	PFM07_C000_014	CENTERING ROD (OPTION)
18	PFM07_C000_019	CENTERING ROD CLAMP PLATE (OPTION)
19	PFI08_C031_017	CENTERING ROD SUPPORT PLATE (OPTION)
20	AC000_M021_018	STEEL ROPE – L 1210 mm
21	AC000_M021_015	STEEL ROPE – L 1200 mm
22A	AC000_M021_002	PULLEY D. 60
22B	AC000_M021_001	PULLEY D. 58
22C	AC000_M021_003	PULLEY D. 62
22D	AC000_M021_008	PULLEY D. 63
23	PFM07_C000_013	CENTERING ROD SUPPORT PLATE
24	AC000_M038_007	RUBBERIZED HOSE CLAMP
25	PFM07_C000_006ZN	6° SECTION MAST
26	PFM07_C000_035ZN	5° SECTION MAST
27	PFM07_C000_034ZN	4° SECTION MAST
28	PFM07_C000_033ZN	3° SECTION MAST
29	PFM07_C031_076ZN	2° SECTION MAST
30	PFI08_C031_012ZN	RUNNER REINFORCEMENT
31	AS000_M000_005	ANGULAR RUNNER
32	AC000_M021_009	STEEL ROPE – L 4300 mm
33	PFM08_C000_019	RIGHT COVER PLATE
34	PFM08_C031_063ZN	MAST ROTATION POSITIONING DEVICE, RIGHT
35	AC000_M000_079	FORELOCK
36	PFI08_C031_074	SAFETY PIN
37	AC000_M000_143	CARABINER
38	PFM07_C031_080	SAFETY PIN SUPPORT
39	AS000_M036_085	RETENTION ROPE

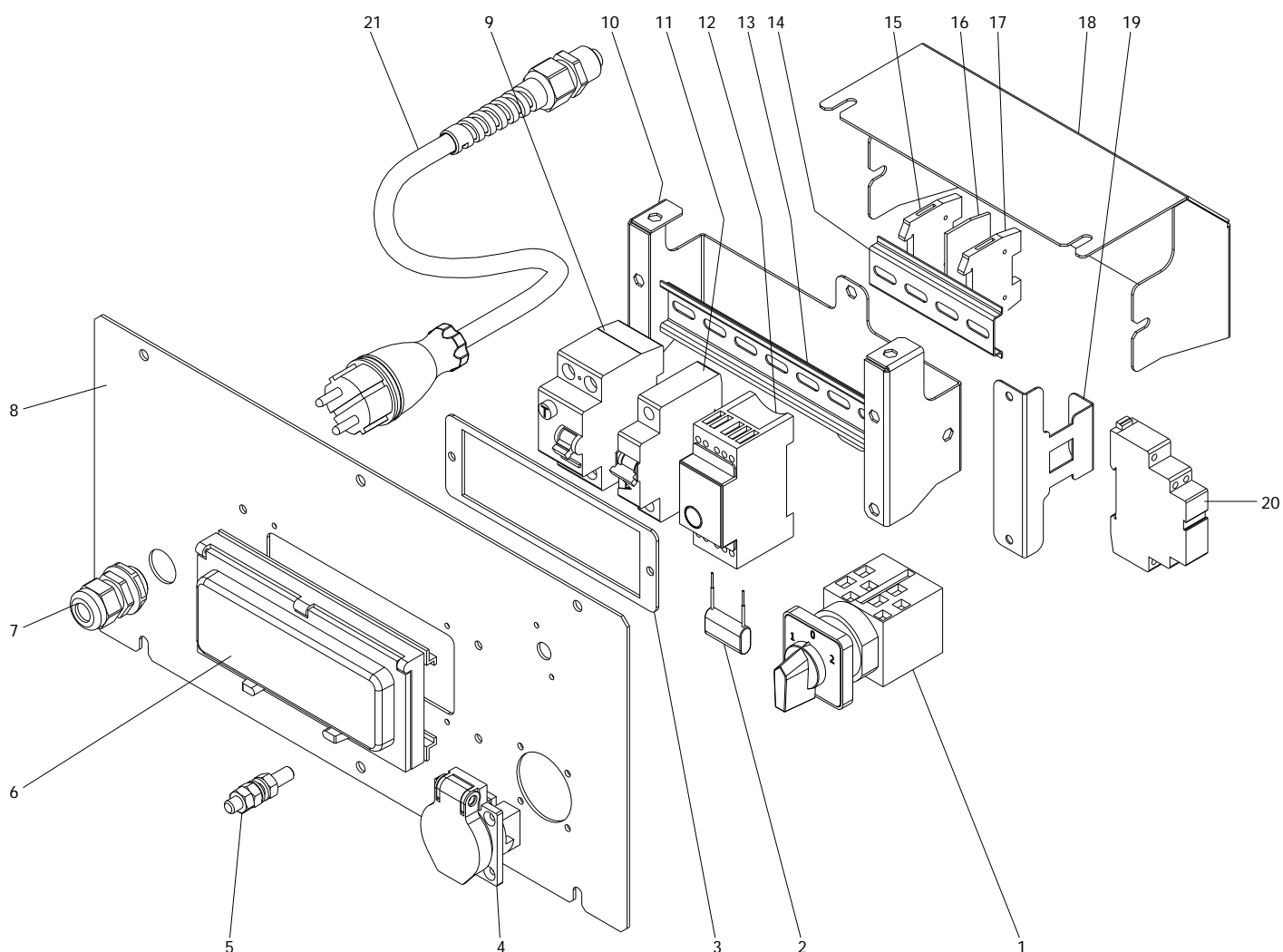
SPARE PARTS



SPARE PARTS

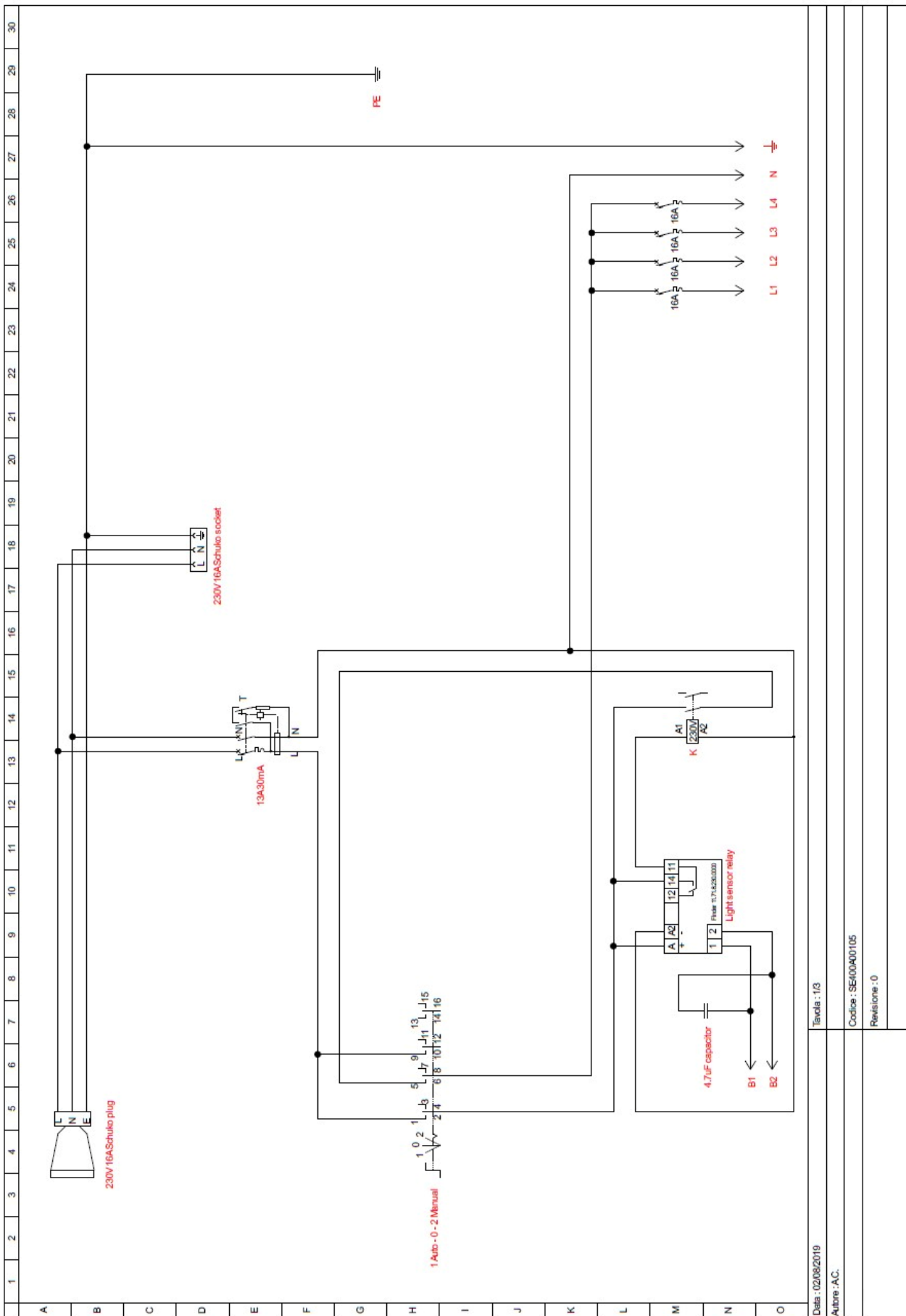
N.	CODE	DESCRIPTION
1	AC000_M038_044	NUT
2	AC000_M000_038	WHEEL
3	LUX C12_C003_033	WHEELS AXLE
4	LUX C12_C000_034	SUPPORT FRAME
5	LUX C12_S010_051B	DATA PLATE
6	LUX C12_C000_031ZN	STABILIZER BEAM
7	AS000_M000_048ZN	STABILIZER
8	LUX C12_C004_030	BASE FRAME
9	LUX C12_C000_036	ANTIROTATION HOLDER
11	LUX C12_C007_035	CANOPY
12	AC000_M000_086	LOCK WITH PIN
13	AC000_P037_003	RUBBER HANDLE
14	LUX C12_AS000_010ZN	HANDLE BEAM
15	AC000_M000_003	LOCK WITH PIN
16	PFI08_C031_013	ROTATIONAL AND DRAG RUNNER
17	PFI08_C031_014ZN	ROTATIONAL AND DRAG RUNNER PLATE
18	PFI08_C031_029	BUBBLE LEVEL PROTECTION COVER
19	AC000_M016_002	BUBBLE LEVEL
20	LUX C12_C000_006ZN	TOP ROTATION CENTERING PLATE
21	LUX C12_C007_056	BACK BODY COVER
22	LUX C12_C007_057	GREEN PLATE
23	AC000_M038_007	RUBBERIZED HOSE CLAMP
24	AC000_E006_002	CLAMP
25	AC000_E006_003	CLAMP
26	AS000_E006_034	JUNCTION BOX
27	AC000_E018_002	CABLE GLAND PG21
28	AC000_E018_008	CABLE GLAND PG11
29	AC000_E018_014	NUT PG16
30	AC000_E018_017	CURVED CONNECTOR
31	LUX C12_C006_050	JUNCTION BOX SUPPORT
32	LUX C12_C000_014ZN	FORKLIFT POCKET
33	LUX C12_C000_017	FORKLIFT POCKET ANGULAR SUPPORT

SPARE PARTS



N.	CODE	DESCRIPTION
1	AC000_E006_041	SELECTOR
2	AC000_E000_070	CAPACITOR
3	LUX C12_C006_044	CIRCUIT BREAKERS FRAME
4	AC000_E011_016	OUTLET SHUKO SOCKET 16A - 230V
5	AC000_M038_035	EARTHING CLIP
6	AC000_E000_008	CIRCUIT BREAKER PROTECTION
7	AC000_E018_007	WIRE HOLDER
8	LUX C12_S010_059B	FRONT PLATE
9	AC000_E012_028	13A RCD
10	LUX C12_C006_076	CIRCUIT BREAKERS SUPPORT
11	AC000_E012_027	LAMP SWITCH
12	AC000_E016_004	LIGHT SENSOR
13	AC000_M038_038	DIN BAR L 175
14	AC000_M038_049	DIN BAR L 100
15	AC000_E006_021	TERMINAL BOARD ELEMENT
16	AC000_E006_024	TERMINAL BOARD COVER
17	AC000_E006_022	FINAL ELEMENT FOR TERMINAL BOARD
18	LUX C12_C006_077	INTERIOR COVER PLATE
19	LUX C12_C006_065	CONTACTOR SWITCH SUPPORT
20	AC000_E006_070	CONTACTOR SWITCH
21	AC000_E011_018	CABLE WITH SCHUKO PLUG

ELECTRICAL DIAGRAM



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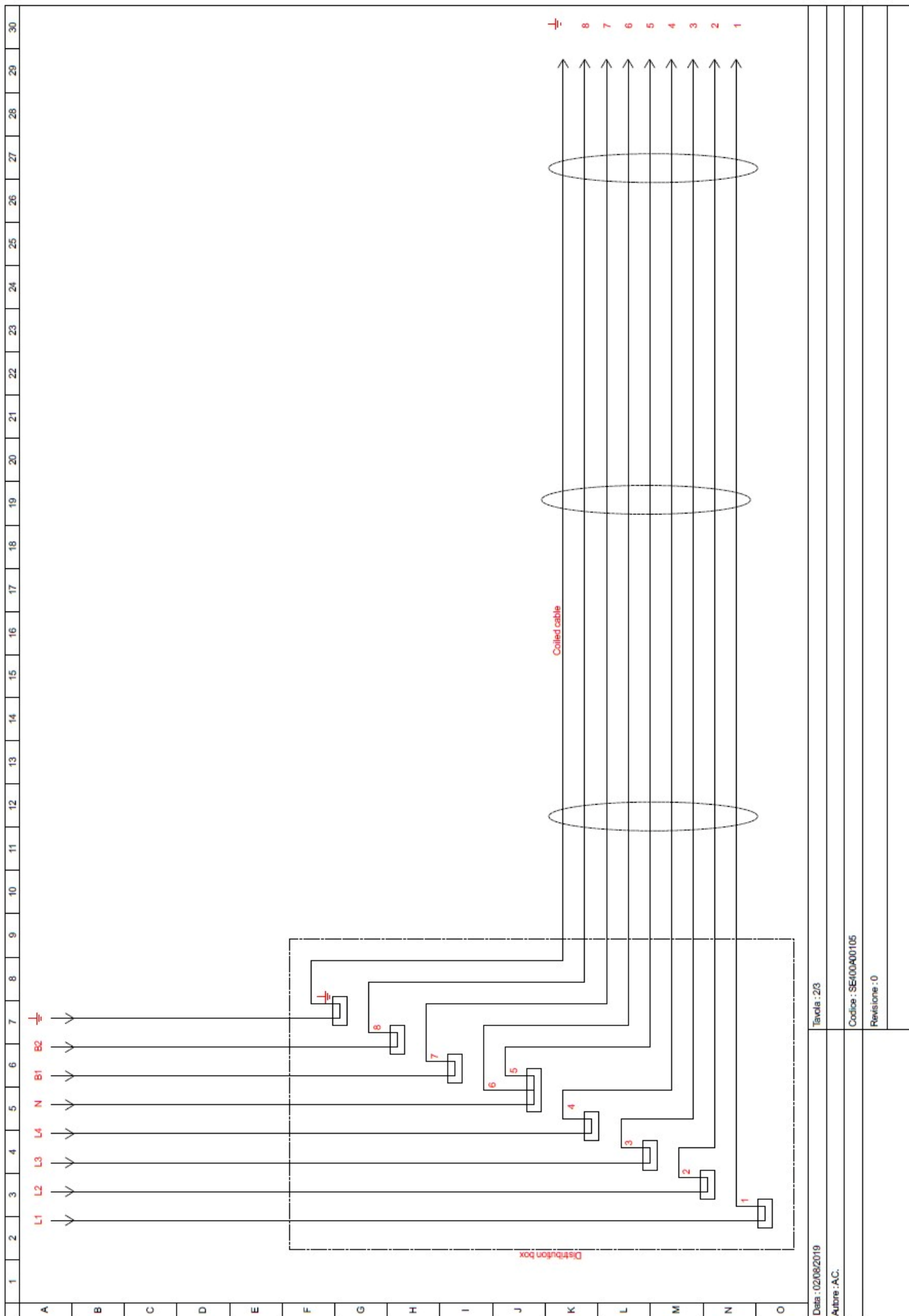
Autore : A.C.

Tavola : 1/3

Codice : SEI00A00105

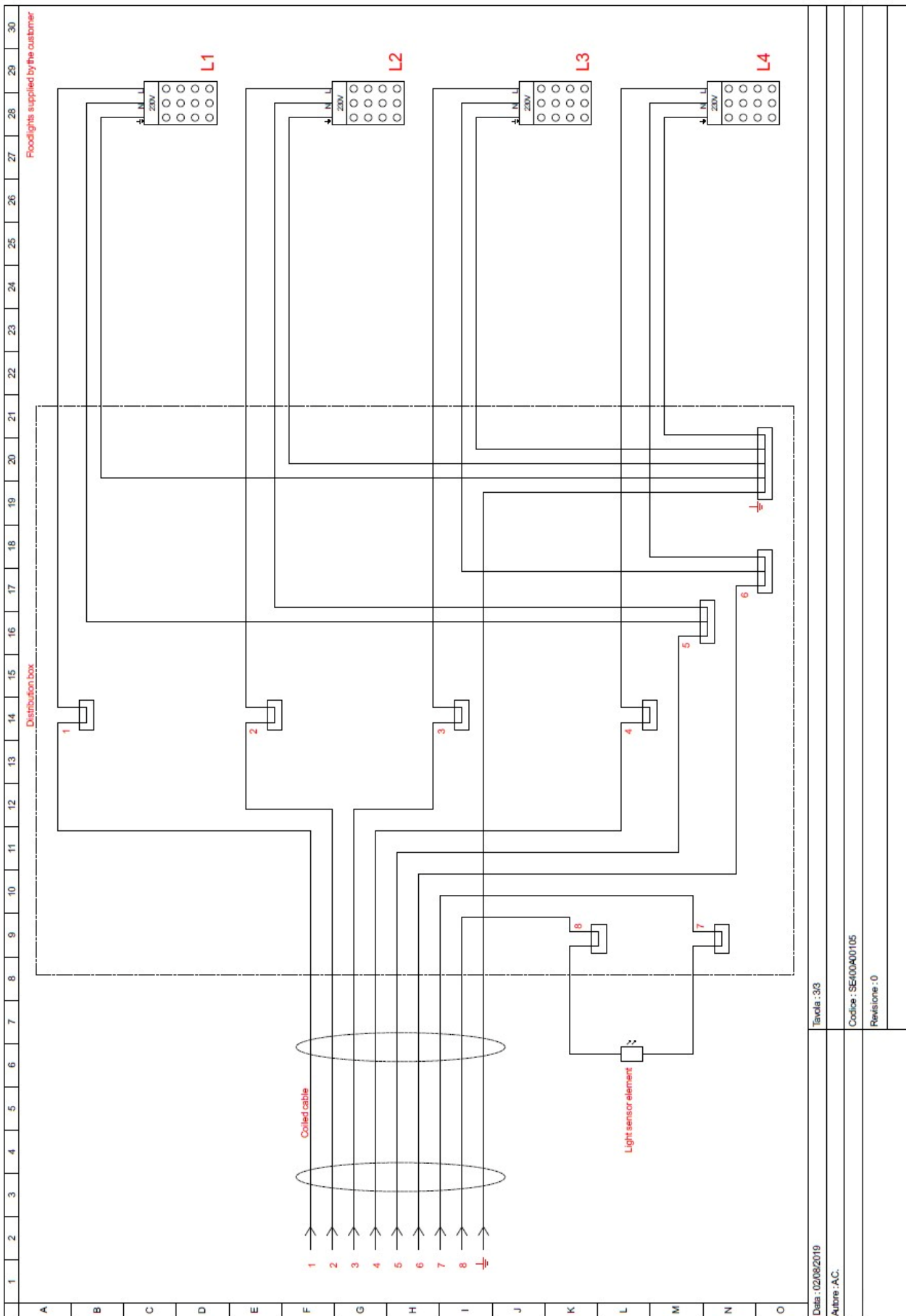
Revisione : 0

ELECTRICAL DIAGRAM



Date : 02/08/2019
 Auteur : A.C.
 Reviseur : 0

ELECTRICAL DIAGRAM



Data : 02/08/2019

Auteur : A.C.

Tavola : 3/3

Codice : SEI00A00105

Revisione : 0

The warranty period Starts on the delivery date to the first purchaser. **The machine is covered by warranty for 1 year from the above mentioned date. Only genuine parts should be used to carry out repairs.** Failure to use only genuine parts may invalidate the manufacturer's warranty. The company reserves the right to request the warranty replaced parts back for analysis.

All engine warranty issues must be directed to the engine manufacturer, or the manufacturer's approved engine dealer.

The company will not be held responsible if:

- the machine has been used to perform tasks that it has not been designed for;
- the machine has undergone modifications not approved by the company;
- conditions of use have been abnormal;
- normal maintenance, compliant to requirements as set out by the manufacturer, have not been adhered to.

No payment or expenses refund should be pretended from the manufacturer for normal maintenance or servicing nor any materials used to carry out routine servicing. The warranty is intended to cover diagnosis, repair or replacement of the defective part, and actuating the repair, should a problem arise during the warranty period. These operations will be performed free of charge.