TRIME

X-HYBRID

4x150W 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.
It is also recommended to use only original factory spare parts

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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.
- ☐ **ALWAYS** handle fuels and lubricants carefully, clean up spills to avoid fire and slipping risks.
- ☐ **NEVER** using the unit if is in need of repair.
- ☐ The area near the exhaust pipe become hot in use. Be careful if you need to work there.
- ☐ 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.

FIRE PRECAUTIONS

- ☐ Clean all dirt, oil and other fluids from components to minimize fire risks and aid in spotting loose or leaking components.

- ☐ Check the engine for oily rags or other debris that could be potential cause of fire before starting the unit.
- ☐ Have a fire extinguisher nearby. Be sure the extinguisher is properly maintained and be familiar with its use.
- ☐ In the event of fire, the following extinction means are appropriated: carbonate anhydride (or carbon dioxide), powder, foam, nebulized water. Avoid to use water jets.
- ☐ In the event of fire, wear a breathing apparatus if there is heavy smoke.

FLAMMABLE FLUID PRECAUTIONS

- ☐ Take due care when working with fuel. Diesel fuel is a health hazard. Be aware that there is also danger of fire and pollution.

- ☐ **DO NOT** clean the unit components using flammable fluids.
- ☐ Check and ensure that all-fluid systems caps, drain, valves, fittings, lines etc., are secure and leak free.
- ☐ **ALWAYS** shut off engine while refueling and be very cautious if engine is still hot.
- ☐ **NEVER** smoke while checking or adding fuel or handling fluid containers.
- ☐ **NEVER** refuel near an open flame
- ☐ **DO NOT** fill the tank completely.
- ☐ **DO NOT** refuel in an enclosed area with poor ventilation.
- ☐ **DO NOT** run engine without the fuel tank cap.
- ☐ **DO NOT** use the machine in areas with risk of explosion or fire.

SAFETY RULES

ELECTRICAL HAZARD

- ☐ **DO NOT** smoke or allow open flames or sparks near the batteries.

- ☐ Before doing repair works, **ALWAYS** disconnect batteries. Disconnect negative terminal first and reconnect last.
- ☐ Before carrying out any welding on the machine, ALWAYS make sure to disconnect batteries and alternator leads.
- ☐ The tools must **NOT** come into contact with the battery terminals with the risk of creating an electric arc.
- ☐ 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!

LUBRICATION AND 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.

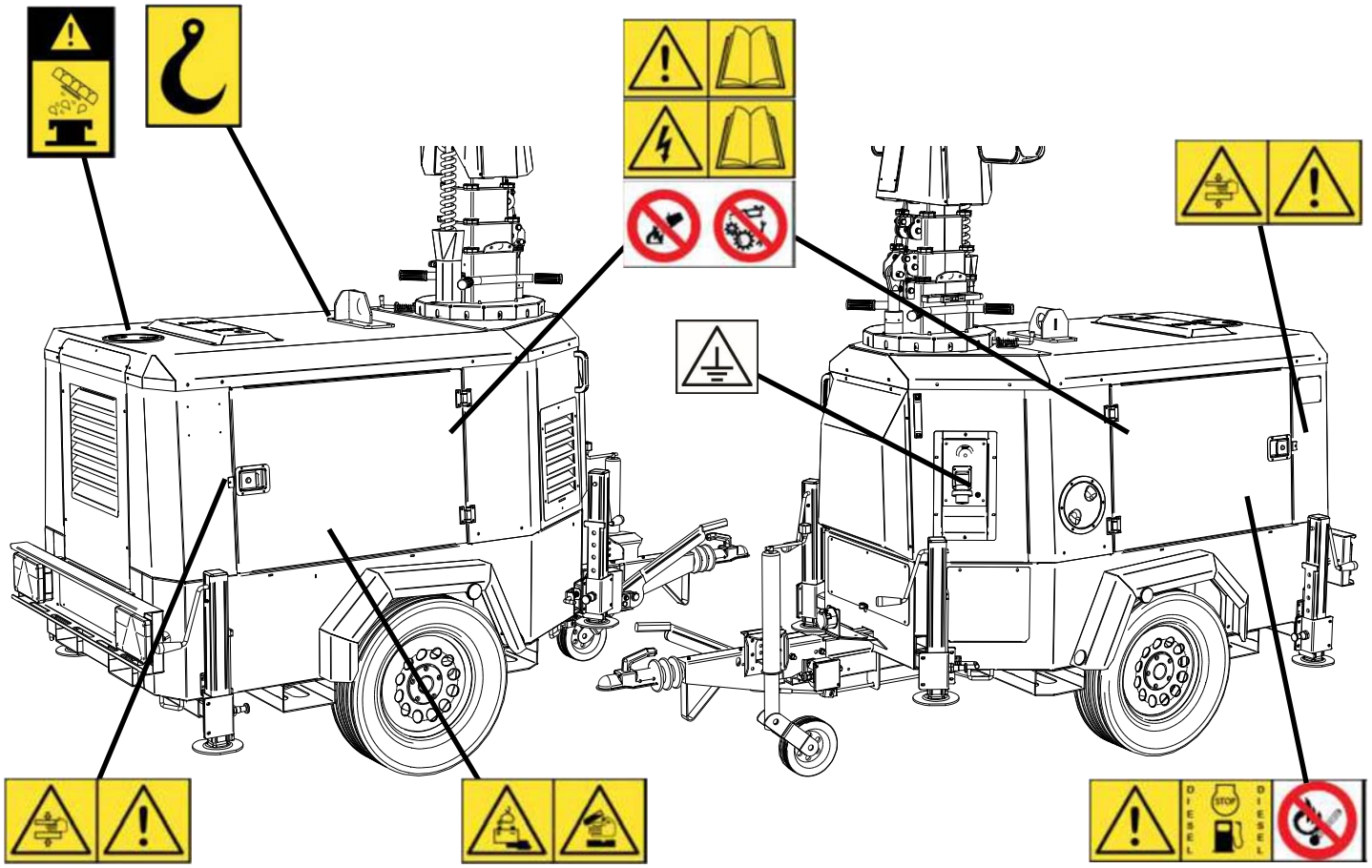
- ☐ HIGH VOLTAGE! This equipment utilizes high voltage circuits. Always exercise extreme caution when trouble shooting or repairing any electrical circuit.
- ☐ Only a qualified electrician should troubleshoot or repair electrical problems occurring on the machine.
- ☐ Before servicing the lighting tower, ensure that the engine start switch is turned to OFF.
- ☐ Disconnect electrical power and turn off engine before removing protective covers on high voltage electrical closures.
- ☐ NEVER perform even routine service (oil/filter changes, cleaning, etc.) if all electrical components aren't shut down.
- ☐ 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.
- ☐ If the unit is stored outside, check the engine and generator for any moisture. If wet, dry the unit thoroughly before starting.
- ☐ Never wash the unit with a high pressure hose or with any kind of power washer.
- ☐ Open main circuit breaker before disconnecting battery cables.
- ☐ Ensure to always relieve pressure before servicing any pressurized system.
- ☐ Be aware of hot exhaust pipes and engine.
- ☐ KEEP AWAY from moving parts on generator and engine. Be aware of the hazard if you wear loose clothing.
- ☐ 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.

TOWING SAFETY

- ☐ **Be careful while towing a trailer!** Both the trailer and vehicle must be in good condition and securely fastened to each other.

- ☐ Check that the hitch and coupling on the towing vehicle are adequately dimensioned and rated to the trailer's "gross vehicle weight rating" (GVWR).
- ☐ Do not tow a trailer using defective parts coupling!
- ☐ Check the tires of the trailer: tread wear, tire pressure, general conditions.
- ☐ Connect breakaway safety line securely to towing vehicle.
- ☐ If fitted, connect safety chains in a crossing pattern under the connecting beam.
- ☐ Check that wheel nuts are ALL tight.
- ☐ Check that the road running lights are connected and operating, if applicable.
- ☐ Maximum recommended speed for highway towing is 75 km/h. Recommended maximum off-road towing speed is 15 km/h (less on uneven terrain).
- ☐ When towing, maintain extra space between vehicles and avoid soft shoulders, curbs and sudden lane changes. If you are not experts in tow, to practice in a far from heavy traffic area.

SAFETY STICKERS GUIDE



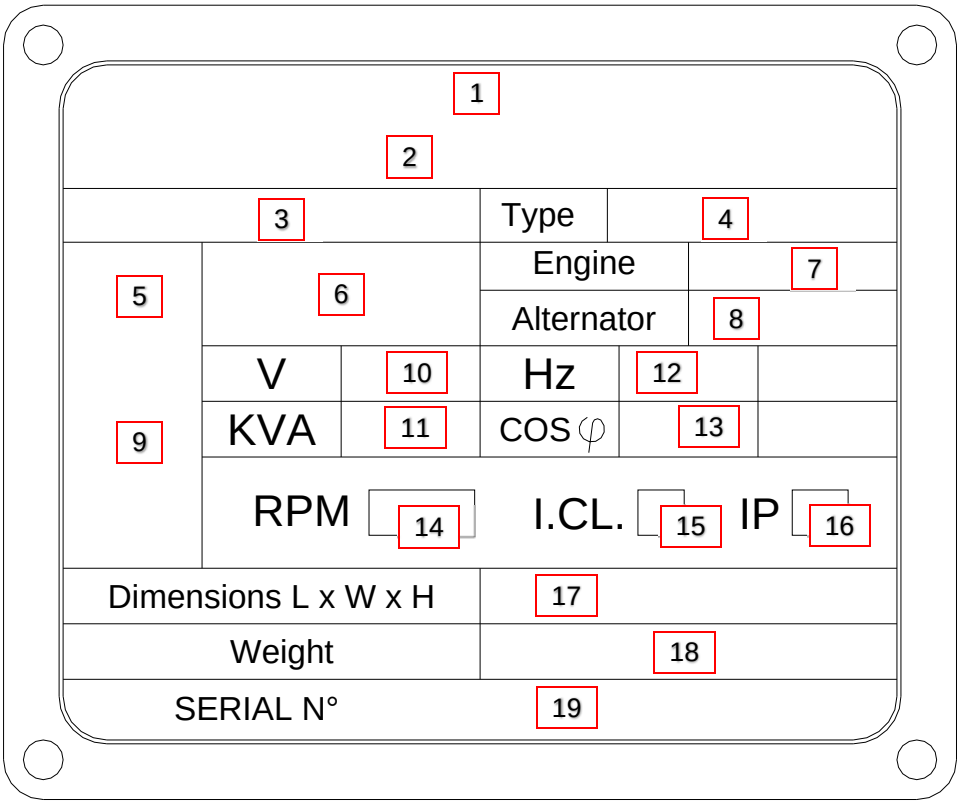
Safety stickers meanings

 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! 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.

 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.	 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).

LIGHTONG TOWER IDENTIFICATION



1. Manufacturer's logo
2. Manufacturer's address
3. Manufacture year
4. Machine model
5. CE Logo
6. Generator symbol
7. Engine type
8. Alternator type
9. Single phase machine
10. Rated voltage
11. Rated power
12. Frequency
13. Power factor
14. Engine speed
15. Insulation class
16. Degree of protection
17. Machine dimensions
18. Dry weight
19. Machine serial number

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.

TECHNICAL DATA

FLOODLIGHTS	
Type	LED
Power (each)	150W
Floodlights number	4
IP level	65
Illuminated area (5 lux min.) (sqm)	3000

MAST	
Lifting method	Hydraulic
Maximum Height	8,5 m
Maximum Wind Speed	110 km/h
Rotation	340°

GENERATOR	
Model	Linz Alumen SB
Rated Output	3,5 kVA
Rated Frequency	50 Hz
Rated Voltage	230 V

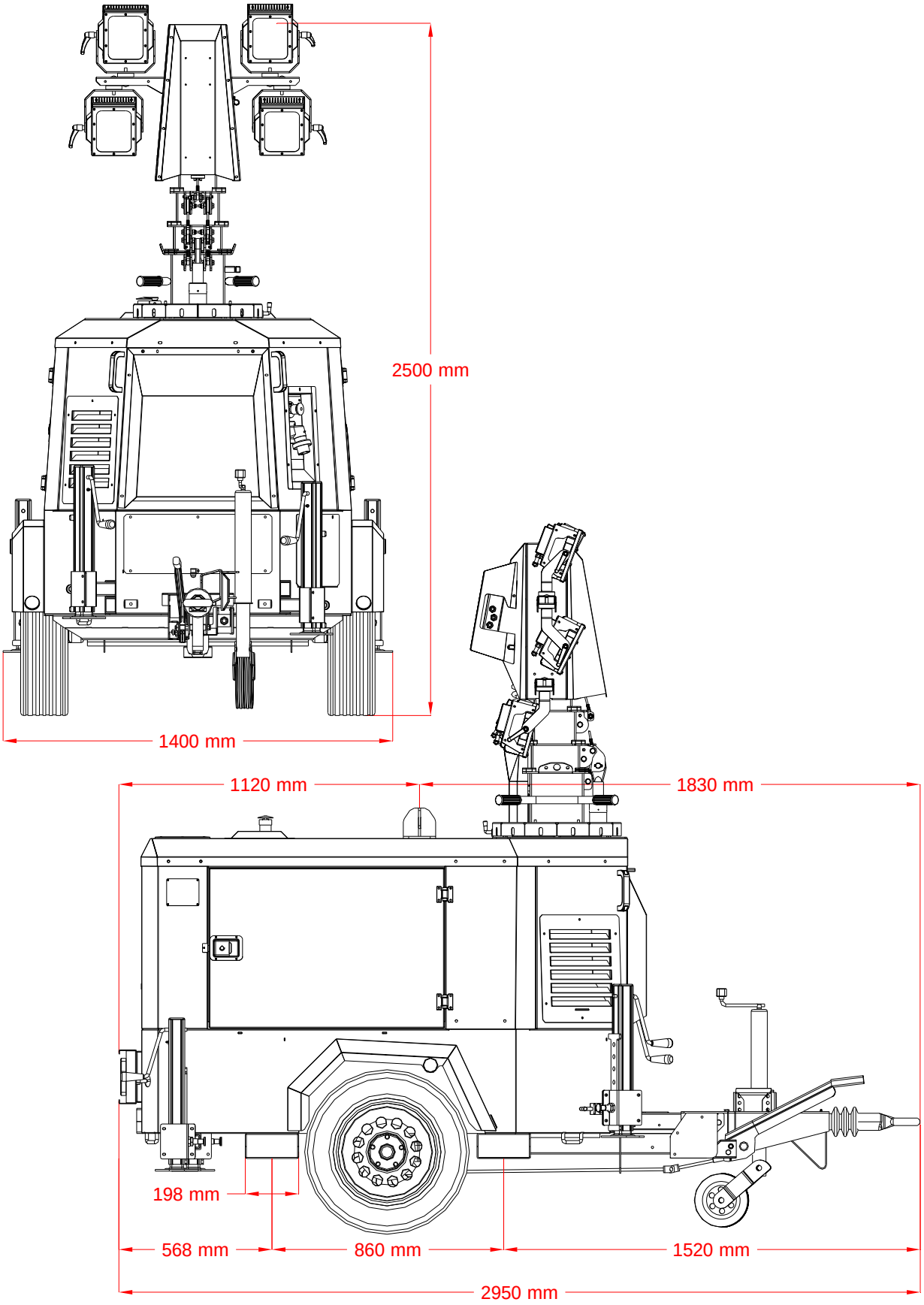
BATTERIES	
Type	AGM ZL 06 130
Batteries number	4
Batteries pack	24V DC 400 Ah
Expected battery cycle	500
Expected battery life time	13000 h

HYBRID MODE	
Running time	18 h
Charging time	9 h
Charging time with floodlights off	8 h
Complete discharge / charge cycle	26 h
Hybrid mode consumption	0,17 l/h

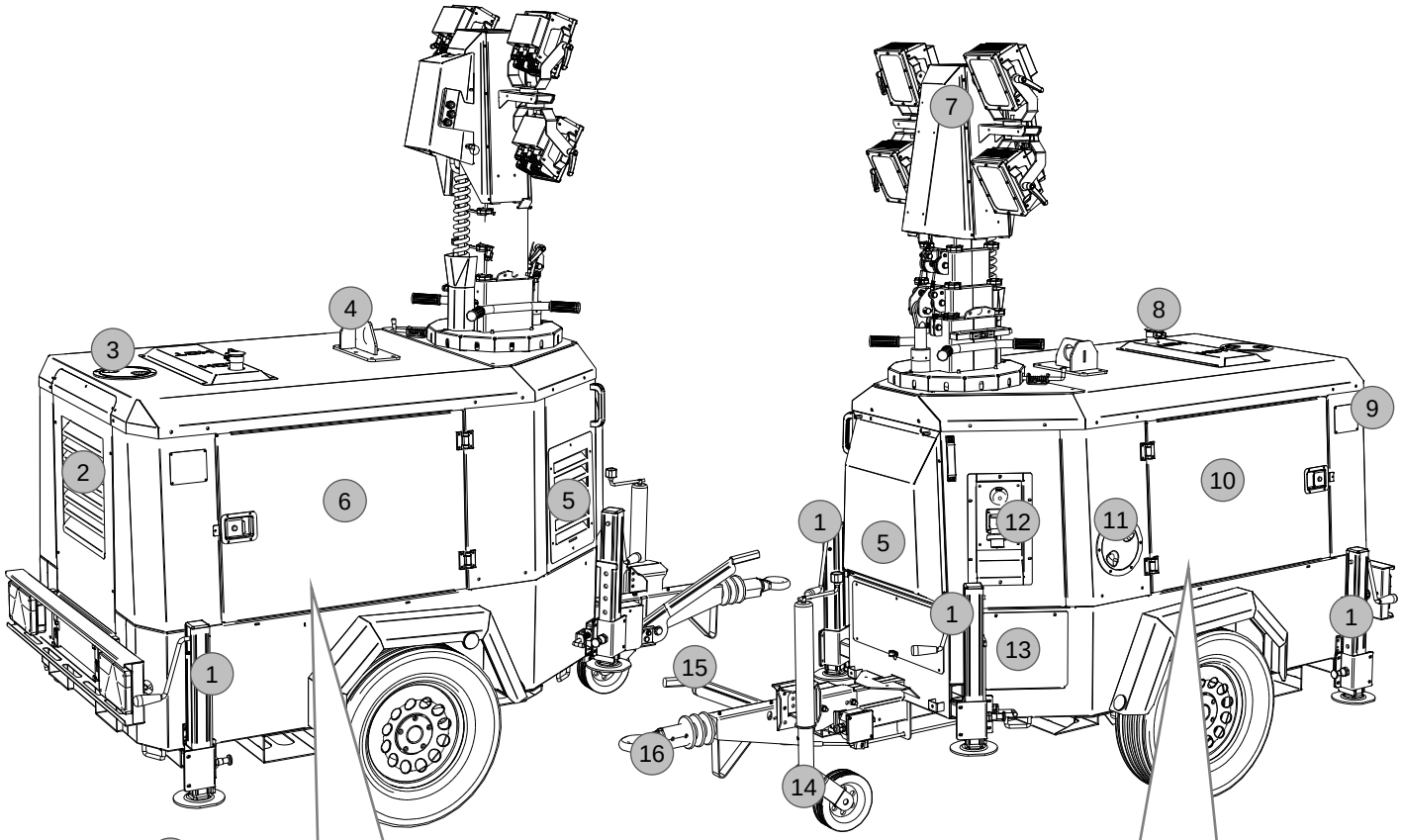
ENGINE	
Type	Kubota Z482 Stage V
Governor	Electronic
Number of cylinder	2
Displacement	479 cm^3
Engine speed	1500 rpm
Fuel consumption	0,55 l/h
Running time	1180 h
Cooling system	liquid

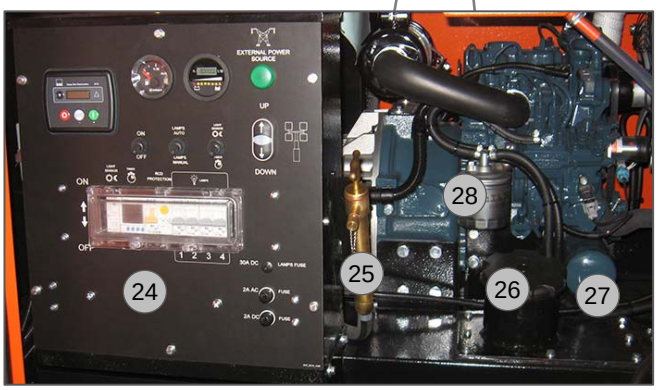
GENERAL	
Engine battery	12 V – 62 Ah
Fuel tank capacity	222 l
Dimensions in transport (L x W x H)	2950 x 1400 x 2500 mm
Dimensions in operation (L x W x H)	2950 x 2880 x 8500 mm
Dry Weight	1280 Kg

MACHINE LAYOUT



MACHINE COMPONENTS



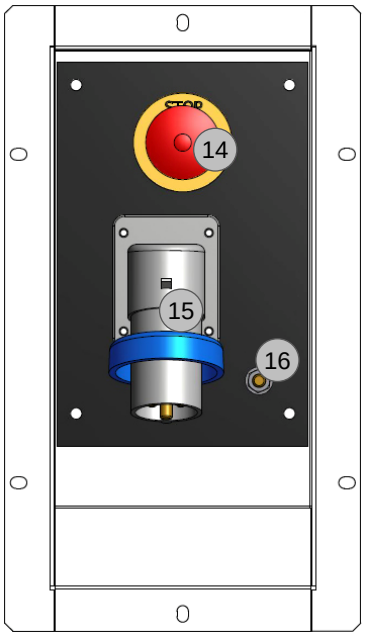


1. Stabilizers
2. Air output
3. Radiator cap access
4. Lifting eye
5. Air inlet
6. Rear door
7. Lighting tower
8. Exhaust vent
9. Data plate
10. Frontal door
11. Hydraulic unit filler cap access
12. External control panel
13. Power supplies access
14. Rudder stabilizer with wheel
15. Handbrake
16. Rudder hook
17. Muffler extension
18. Oil filler
19. Air filter
20. Batteries box
21. Battery charger box
22. Engine battery
23. Starting motor
24. Control panel
25. Oil drain pump
26. Fuel filler
27. Oil filter
28. Fuel filter

MACHINE CONTROLS

Control panel

External control panel

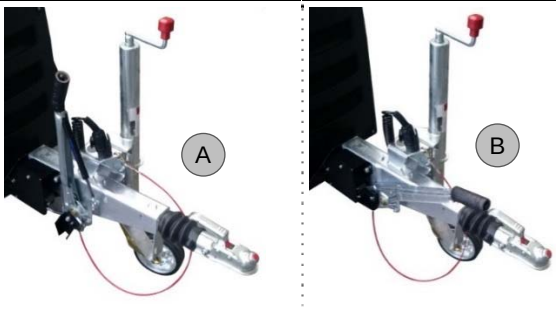


1. DSE 3110 module
2. Fuel level gauge
3. AGM batteries charge indicator
4. External power source signal lamp
5. Mast control buttons
6. Light sensor / Timer switch
7. Lamps Auto / Manual switch
8. Power supply switch
9. Light sensor relay
10. Timer
11. RCD main breaker protection
12. Floodlights switches
13. 2A Fuses
14. Emergency stop button
15. 230V 16A external power source inlet
16. Earthing terminal

CONTROL DEVICES

Automatic Mast Operating Safety System

All the STANDARD units are fitted with the Automatic Mast Operating Safety System **(AMOSS)**. This system will prevent potentially dangerous situations of the trailer being moved while the mast is still in its raised, operational position. The system will lower the mast.
Automatically when the trailer handbrake is released and it will also inhibit the mast from being raised if the handbrake is not applied.
To apply the handbrake, pull the lever upwards **(A)**.
To release the handbrake, press the button at the tip of the lever and lower it **(B)**.



DSE 3110 manual & auto start control module

The **DSE 3110** is an compact control module that provides a comprehensive range of features for single-set applications. The controller can be used in manual or auto start mode.

Light sensor

The light sensor is a device that automatically activated the illumination when sunlight falls: at dusk, for precisely.

Timer

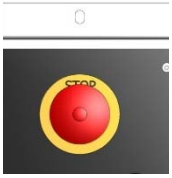
The timer is a device that automatically activates and deactivates the lighting at the time intervals set by the operator.

Residual-current device (RCD)

The unit is equipped with an residual-current device (RCD) capable of ensuring user protection in case of accidental contact with live parts or failure of the insulation system of connected users. Press the test button T every month: the earth leakage circuit breaker should trip and de-energise the system. If this would not be the case, then it is advisable not to use the unit and immediately seek technical advice.

Emergency stop button

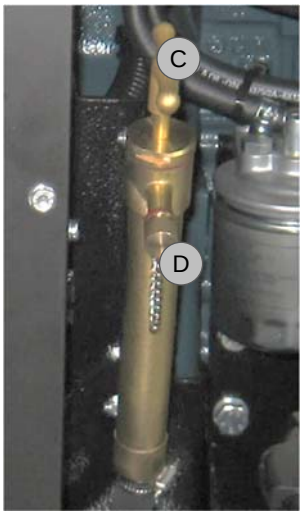
The lighting tower is fitted with a emergency stop button as standard. It is located on the external panel.
In case of need, push the emergency button and it will shut off the engine in a few seconds.
The engine will remain off until the emergency stop button is released.
To release the button, twist it in the direction of the arrows on the button (clockwise sense).



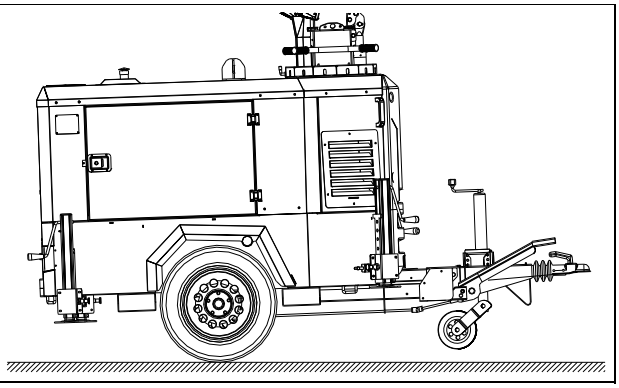
Engine oil drain manual pump

The lighting tower is fitted with a manual pump as standard, to facilitate the operator in the engine oil drain. Proceed as follows:
☐ Put under the cap **(D)** a container.
☐ Remove the cap **(D).**
☐ Operate the pump by acting to the handle **(C)**.
☐ Emptied all the oil replace the cap **(D)**.

Dispose of the oil according to local regulations.



WHEN MOVING THE LIGHTING TOWER, HOLD IT IN AN ALMOST HORIZONTAL POSITION.

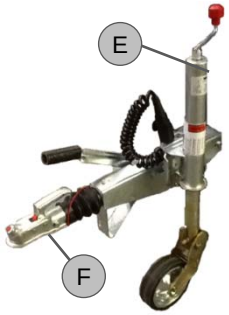


TOWING & MOVING WITH TOWING VEHICLE

Do not move the trailer with the tower raised! NEVER release the jokey wheel or the stabilizer (fixed to the rudder of the trailer) while are supporting the unit! The machine would tip forward and could cause damage or personal injury.

Before coupling the unit to a towing vehicle check the tyres and check that all the lights work properly.
Procedure:

- ☐ Turn off the lights and allow time for them to cool.
- ☐ Lower the tower.
- ☐ Ensure that the jokey wheel **(E)** or the stabilizer **(G)** are down so the unit will not tip over when the other stabilizer are raised.
- ☐ Raise all the stabilizer and retract the retractable ones.
- ☐ Couple the unit to a towing vehicle between the rudder eye **(F)**.
- ☐ The unit can be now be towed to the new location.



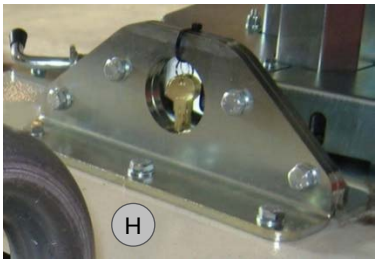
HANDLING AND TRANSPORT WITH CRANE

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

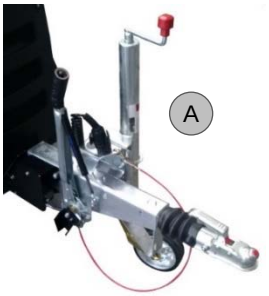
- ☐ Ensure that the lifting capacity of the crane and lifting devices is suited to the weight of the machine to move. The weight is specified in the provided documentation (user's manual) and on the data plate.
- ☐ Connect the cable/hook to the lifting eye **(H)** and tension the cable.
- ☐ Lift the 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 (transversal **(I)** or longitudinal **(L)**, depending on machine and your moving requirements).
- ☐ Lift the machine for about 10 cm (4 in.).
- ☐ Move slowly and position the machine where needed.



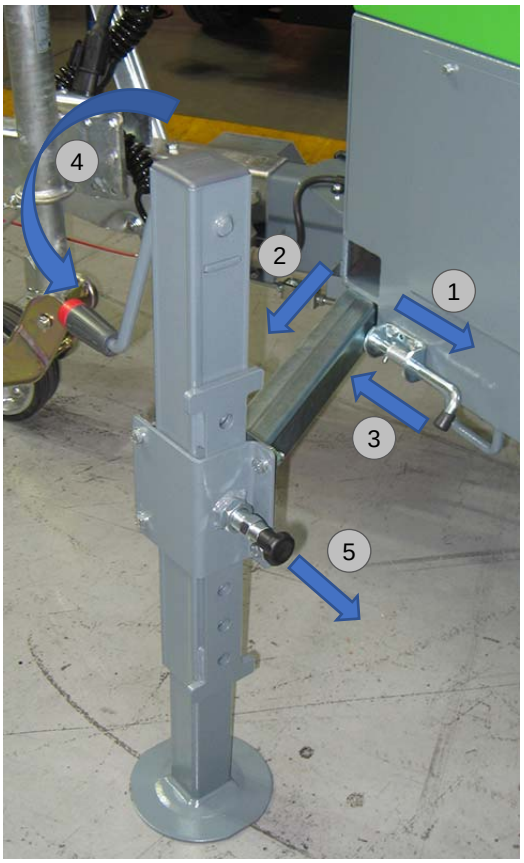
ATTENTION!
BEFORE USING THE LIGHTING TOWER APPLY THE HANDBRAKE!
TO APPLY THE HANDBRAKE, PULL THE LEVER UPWARDS (A).

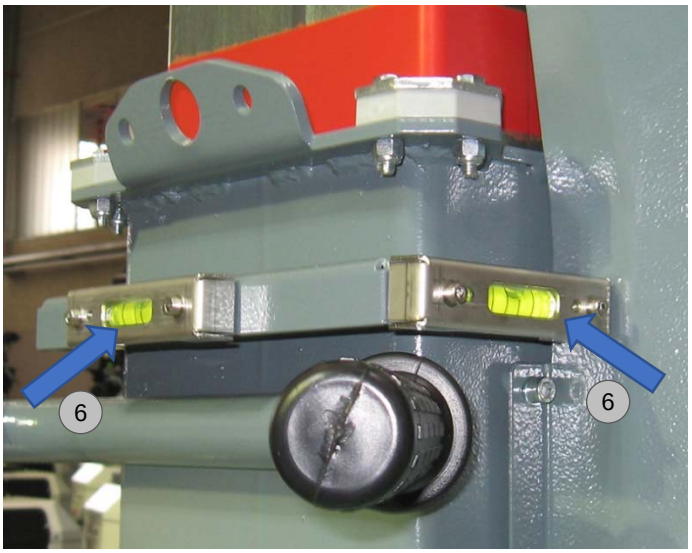


STABILIZING THE UNIT

Stabilize the unit as follows. Consider that the stabilizers are extendable.

- ☐ Hold the stabilizer with one hand and pull the locking pin **(1)** to release it. Pull the stabilizer outwards until it's fully extended **(2)** and ensure that the locking pin locked it **(3)** in place securely in the extended position.
- ☐ Stabilize the unit up by rotating the handle **(4)** and pulling the locking pin **(5)** of each stabilizer.
- ☐ Please refer to the bubble levels **(6)** installed on 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.

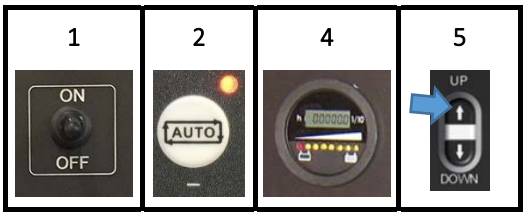
- ☐ Release the rotation locking pin **(O)** and turn the tower using the rotation handles on the mast in order to direct the lights as needed. Don't forget to lock the rotation afterwards.
- ☐ Additionally to the mast rotation, each of the LEDs can be adjusted on two axes and tilted back and forth.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

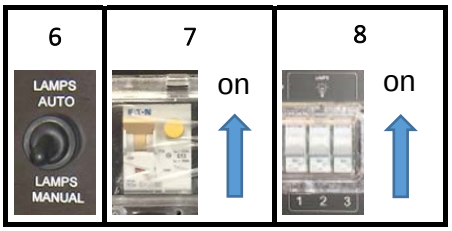
EARTHING THE UNIT

For operators' safety, the earthing 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 indicated. Always perform grounding operations in compliance with local/international regulations.

MANUAL MODE

1. Set the ON / OFF selector to **"ON"** position
2. Led "AUTO" button on
3. The icon  appears on the DSE display
4. The indicator gauge shows the battery charge status
5. Adjust the mast height using the UP/DOWN buttons.
6. Set the LAMPS AUTO / LAMPS MANUAL selector to **"LAMPS MANUAL"** position
7. Set the RCD protection to **"ON"** position
8. Set the lamps switch to **"ON"** position





ATTENTION! When the battery level reaches 22,2 V, the engine starts and charge the battery. When the battery is charged, the engine will switched off.

ATTENTION! The fuel level gauge will turn on only when the engine is running

AUTO / LIGHT SENSOR MODE

1 Set the ON / OFF selector to **"ON"** position

2 Led "AUTO" button on

3 The icon  appears on the DSE display

4 The indicator gauge shows the battery charge status

5 Adjust the mast height using the UP/DOWN buttons.

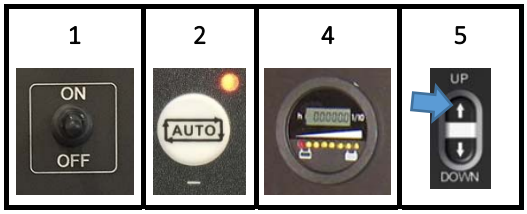
6 Set the LAMPS AUTO / LAMPS MANUAL selector to **"LAMPS AUTO"** position

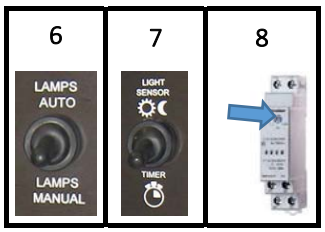
7 Set the LIGHT SENSOR / TIMER selector to **"LIGHT SENSOR"** position

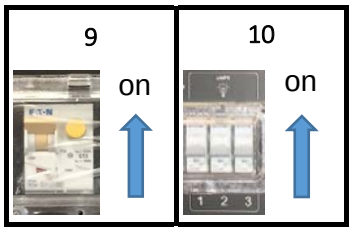
8 Through the trimmer on the light sensor set the light sensor sensitivity

9 Set the RCD protection to **"ON"** position

10 Set the lamps switch to **"ON"** position







<u>The machine is now ready to start based on the LIGHT SENSOR signal.</u>
On the light sensor there is a red LED light:

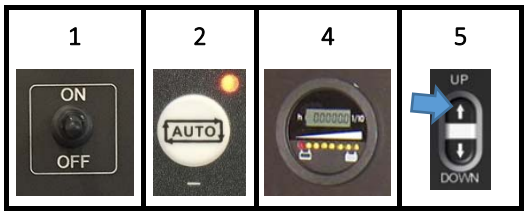
- if it flashes slowly, there is power, but the sensor is off
- if it flashes quickly, the timing procedure is ongoing
- permanent light means that the power is on, the sensor is on, the machine starts and, after the engine has completed the warm up, the lamps will be turned on.

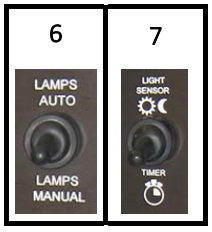
ATTENTION! When the battery level reaches 22,2 V, the engine starts and charge the battery. When the light sensor signal turns off the floodlights, <u>THE ENGINE WILL SWITCHED OFF.</u>

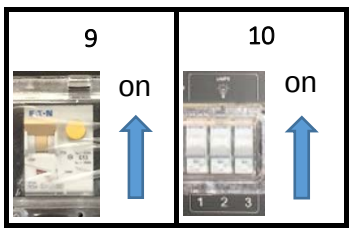
ATTENTION! The fuel level gauge will turn on only when the engine is running

AUTO / TIMER MODE

1. Set the ON / OFF selector to **"ON"** position
2. Led "AUTO" button on
3. The icon  appears on the DSE display
4. The indicator gauge shows the battery charge status
5. Adjust the mast height using the UP/DOWN buttons.
6. Set the LAMPS AUTO / LAMPS MANUAL selector to **"LAMPS AUTO"** position
7. Set the LIGHT SENSOR / TIMER selector to **"TIMER"** position
8. Set the Timer **(see attached manual)**
9. Set the RCD protection to **"ON"** position
10. Set the lamps switch to **"ON"** position







<u>The machine is now ready to start based on the TIMER signal.</u>

ATTENTION! When the battery level reaches 22,2 V, the engine starts and load the battery. When the timer signal turns off the floodlights, <u>THE ENGINE SWITCHES OFF.</u>

ATTENTION! The fuel level gauge will turn on only when the engine is running

DSE 3110 MODULE: DESCRIPTION OF CONTROLS

STOP/RESET

This button places the module into its **Stop/Reset** mode. This will clear any alarm conditions for which the triggering criteria have been removed. If the engine is running and the module is in Stop mode, the module will automatically instruct the changeover device to unload the generator ("**Close Generator**" becomes inactive (is used)). The fuel supply de-energises and the engine comes to a standstill. Should a **remote start signal** be present while operating in this mode, a remote start will not occur.

AUTO

This button places the module into its **Automatic** mode. This mode allows the module to control the function of the generator automatically. The module will monitor the remote start input and once a start request is made, the set will be automatically started and placed on load.

Upon removal of the starting signal, the module will automatically transfer the load from the generator and shut the set down observing the stop delay timer and cooling timer as necessary. The module will then await the next start event.

START

Pressing this button in auto mode will start the engine and run off load.

Pressing this button in Stop/Reset mode will turn on the CAN engine ECU (when correctly configured and fitted to a compatible engine ECU)

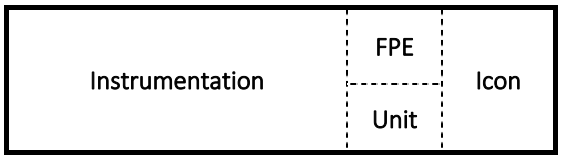
PAGE

Pressing this button scroll the display to show the various instruments.

DISPLAY

A 32x132 pixel LCD is available for the display of generator instrumentation and alarm conditions. The display is segmented into areas for instrumentation, unit, alarm icons and for Front Panel Editor (FPE) use.

When not in the Front Panel Editor (FPE) mode the FPE area of the display is used to display the currently active configuration. The letter 'M' is displayed for main configuration active, the letter 'A' for alternative configuration active.



DSE 3110 MODULE: PROTECTIONS

When an alarm is present, the Common alarm LED if configured will illuminate. The LCD display will show an icon to indicate the failure.

Warnings

Warnings are non-critical alarm conditions and do not affect the operation of the generator system, they serve to draw the operators attention to an undesirable condition. Warning alarms are self-resetting when the fault condition is removed. The icon will appear steady in the display.

Shutdowns

Shutdowns are critical alarm conditions that stop the engine and draw the operator's attention to an undesirable condition. Shutdown alarms are latching.

The fault must be removed and the button  pressed to reset the module. The icon will appear flashing in the display.

DSE 3110 MODULE: ICONS

	Description	
	Timer Icon	When the module is controlling the engine (starting and stopping) an animated timer icon will be displayed in the icon area to indicate that a timer is active, for example cranking time, crank rest etc.
	Stop mode - Stopped Icon	When there are no alarms present, an icon will be displayed to indicate the engine is stopped and what mode the unit is in. The hand is only displayed when the 'arming options' is enabled, otherwise the engine starts when entering the manual mode.
	Auto mode - Stopped Icon	
	Manual mode - Stopped Icon	
	Running Icon	When there are no alarms present, this animated icon is displayed to indicate the engine is running
	Usb Icon	When a USB connection is made to the module this icon is displayed
	Memory Corruption	If either the config. file or engine file becomes corrupted the unit will display this icon.

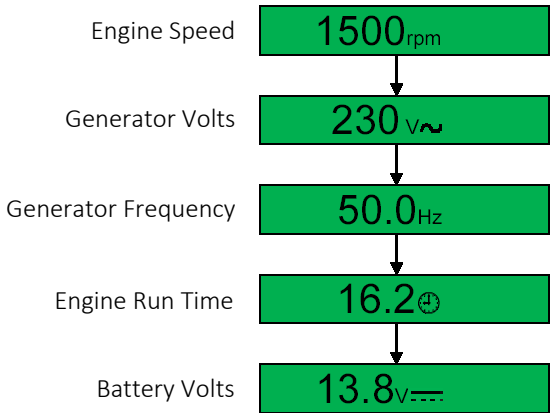
	Fail to start	The engine has not fired after the preset number of start attempts
	Fail to stop	The module has detected a condition that indicates that the engine is running when it has been instructed to stop. NOTE: 'Fail to Stop' could indicat a faulty oil pressure sensor - If engine is at rest check oil sensor wiring and configuration.
	Low oil pressure	The module detects that the engine oil pressure has fallen below the low oil pressure pre-alarm setting level after the *Safety O*n timer has expired.
	Engine high temperature	The module detects that the engine coolant temperature has exceeded the high engine temperature pre-alarm setting level after the Safety On timer has expired.
	Charge failure	The auxiliary charge alternator voltage is low as measured from the W/L terminal.
	Low fuel level	The level detected by the fuel level sensor is below the low fuel level setting.
	Generator under voltage	The generator output voltage has fallen below the pre-set pre-alarm setting after the Safety On timer has expired.
	Generator over voltage	The generator output voltage has risen above the pre-set pre-alarm setting.
	Generator under frequency	The generator output frequency has fallen below the pre-set pre-alarm setting after the Safety On timer has expired.
	Generator over frequency	The generator output frequency has risen above the pre-set pre-alarm setting.
	Emergency stop	Pressing the emergency stop button, the machine automatically stops. NOTE:- The Emergency Stop Positive signal must be present otherwise the unit will shutdown.
	Internal memory error	Either the configuration file or engine file memory is corrupted. Contact your supplier for assistance.

DSE 3110 MODULE: VIEWING THE INSTRUMENTS

It is possible to scroll to display the different pages of information by repeatedly operating the scroll button:

Once selected, the page will remain on the LCD display until the user selects a different page or after an extended period of inactivity, the module will revert to the status display.
When scrolling manually, the display will automatically return to the Status page if no buttons are pressed for the duration of the configurable LCD Page Timer. If an alarm becomes active while viewing the status page, the display shows the Alarms page to draw the operator's attention to the alarm condition.

Page order

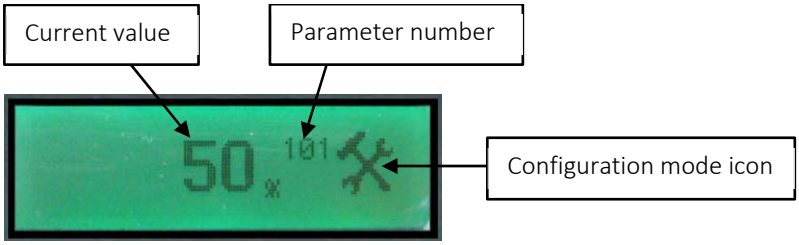


DSE 3110 MODULE: CONFIGURATION

This configuration mode allows the operator limited customizing of the way the module operates. Use the module's navigation buttons to traverse the menu and make value changes to the parameters.

Accessing The Front Panel Editor (FPE)

Press and buttons simultaneously.
The display shows the configuration icon:
The first parameter is also displayed.



Editing a parameter

Enter the editor as described before.
Press to select the required 'page' as detailed below:
Press (+) to select the next parameter or (-) to select the previous parameter within the current page.
When viewing the parameter to be changed, press the button. The value begins to flash.
Press (+) or (-) to adjust the value to the required setting.
Press the save the current value, the value ceases flashing.
Press and hold the button to exit the editor, the configuration icon is removed from the display.

NOTE: Values representing pressure will be displayed in Bar. Values representing temperature are displayed in degrees Celsius.

NOTE: When adjusting values in the FPE a press and hold of the increment button will cover the full range of the item being adjusted (min to max) in under 20 seconds.

NOTE: When the editor is visible, it is exited after 5 minutes of inactivity to ensure security.

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.
- ☐ **If you need to work while the engine is running, pay attention to all moving parts, hot parts and electrical parts which may be unprotected while the machine is open.**
- ☐ 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.

The periodic maintenance should be performed according to the documentation provided by the engine and alternator manufacturers. Please refer to the relevant manual supplied with the machine and to the hour meter on the machine in order to determine when service is needed.

DISPOSAL AND DECOMMISSIONING

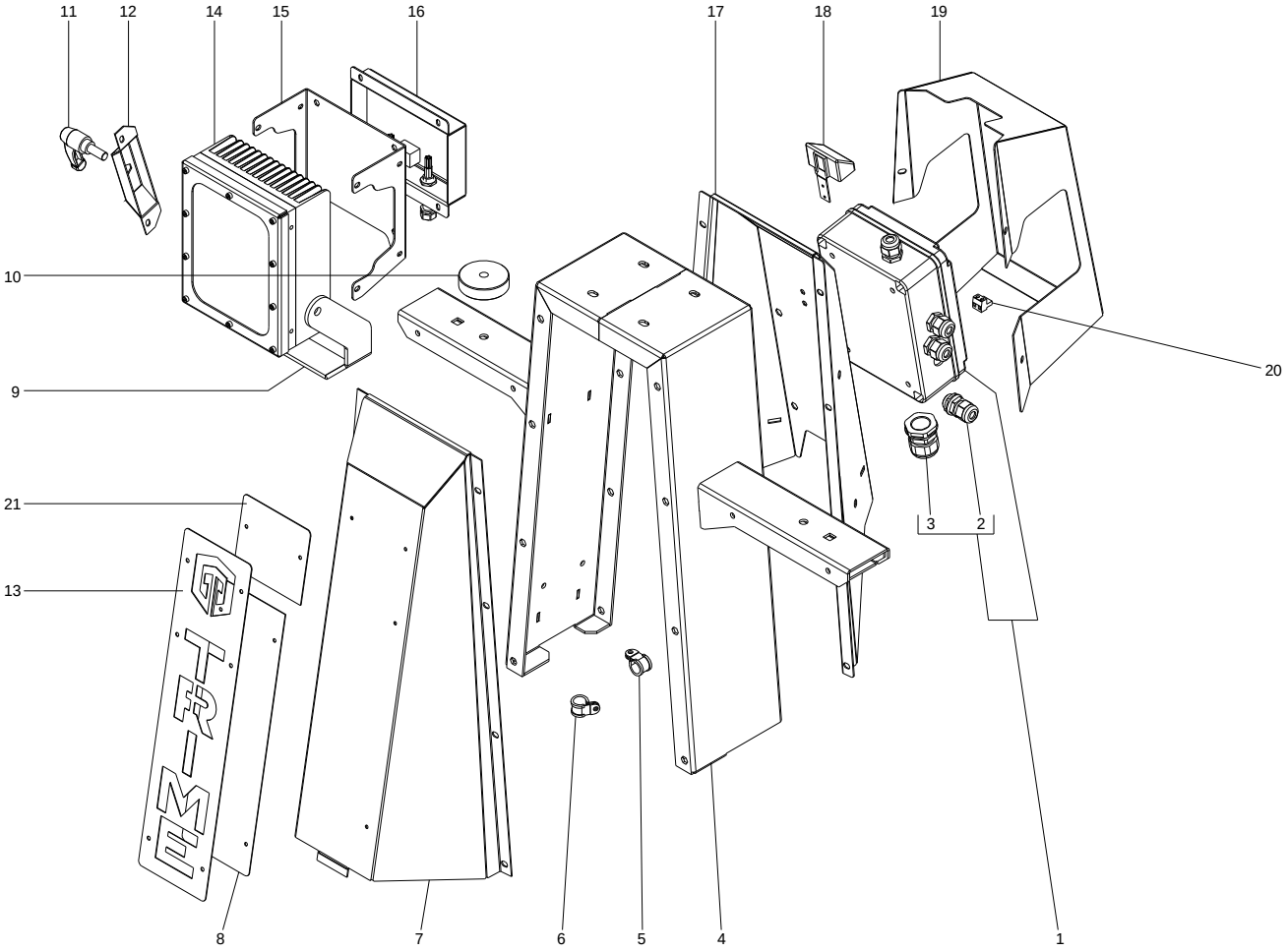
This machine is made of parts that, if not disposed of correctly, can damage the environment and create ecological hazards. The following parts and materials need to be brought to authorized waste treatment sites:

- Metallic structure;
- Batteries;
- Engine and hydraulic oils;
- Cooling liquid;
- Filters;
- Cables.

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

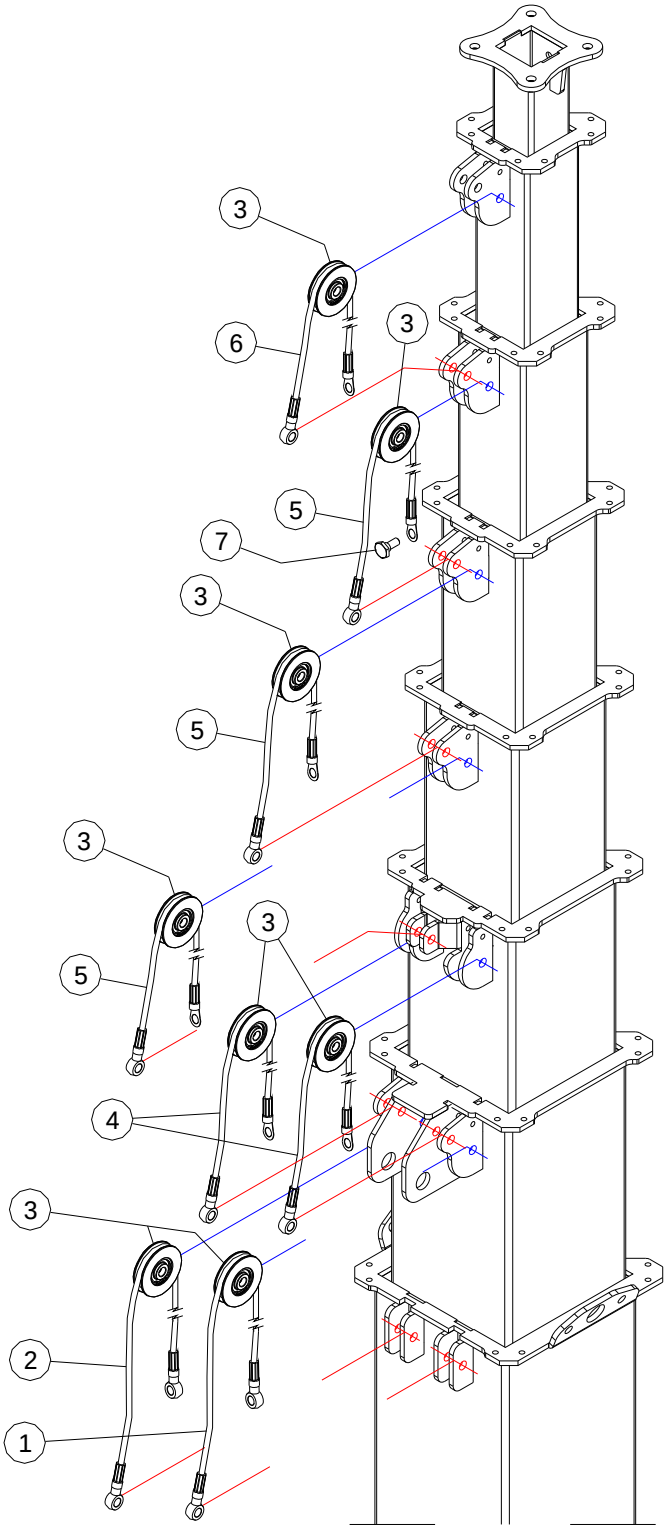
The machine owner is responsible for dismantling and disposal of the machine and its components at the end of its working life.

FLOODLIGHTS



N.	CODE	DESCRIPTION
1	AS000_E006_029	JUNCTION BOX
2	AC000_E018_008	PG11 WIRE HOLDER
3	AC000_E018_002	PG21 WIRE HOLDER
4	LED04_C000_01	CENTRAL SUPPORT
5	AC000_E018_018	CLAMP WITH RUBBER
6	AC000_M038_007	CLAMP WITH RUBBER
7	LED04_C000_020	FRONT COVER
8	PFM08_C000_071	WHITE PLATE
9	LED06_C000_09ZN	FLOODLIGHT SUPPORT
10	AS000_M023_001	SPACER
11	AC000_M000_007	HANDLE
12	LED06_C000_07	HANDLE SUPPORT
13	PFM08_C000_070	LOGO PLATE
14	AC000_E026_043	FLOODLIGHT
15	AC000_E026_034	POWER SUPPLY SUPPORT
16	AC000_E026_044	POWER SUPPLY
17	LED04_C000_021	REAR COVER
18	AC000_E016_005	LIGHT SENSOR
19	LED04_C000_022	JUNCTION BOX COVER
20	AC000_E006_002	ELECTRICAL CLAMP
21	PFM08_C000_072	RED PLATE

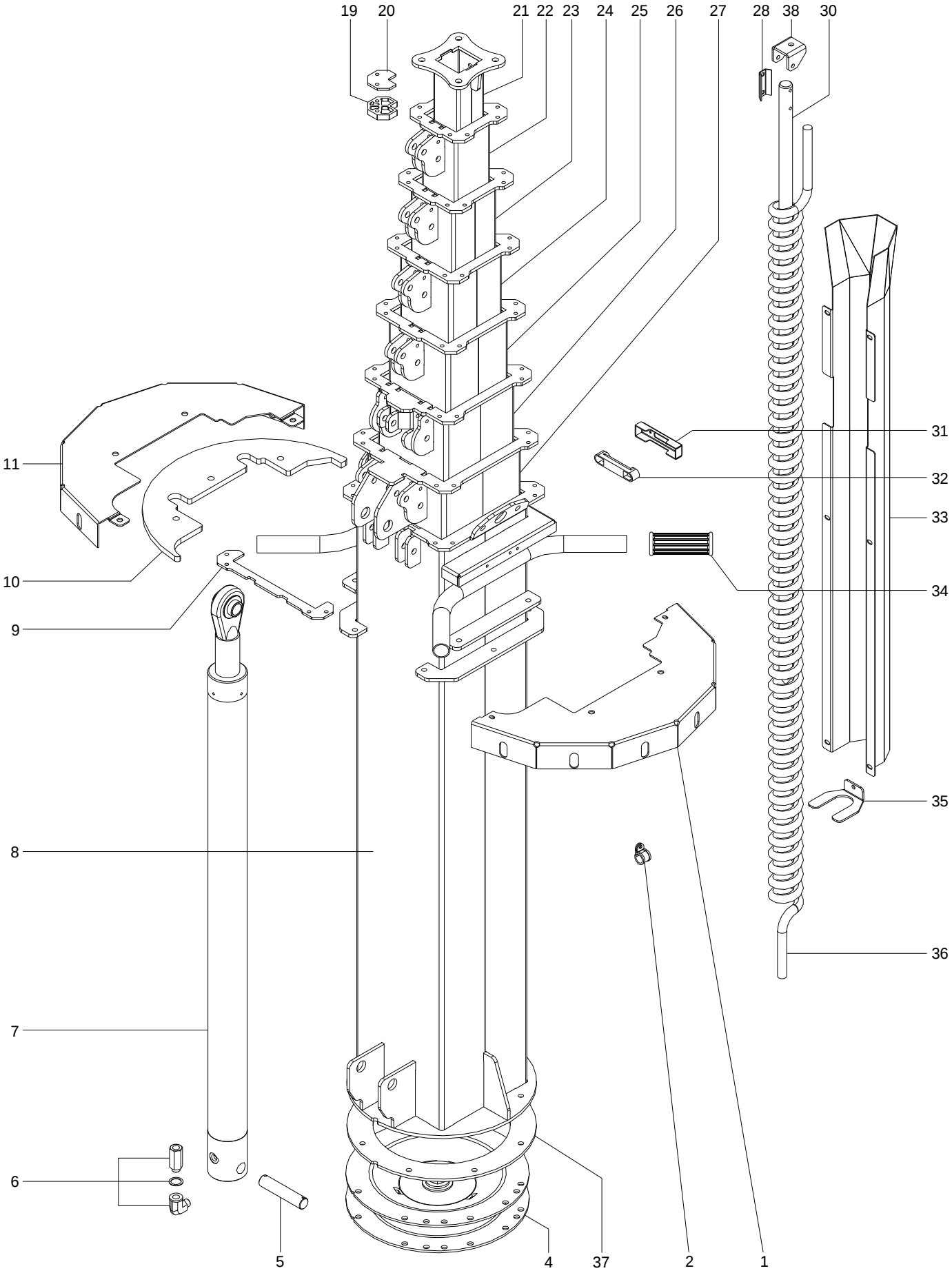
STEEL ROPES AND PULLEYS



N.	CODE	DESCRIPTION
1	AC000_M021_012	STEEL ROPE L.1440 mm
2	AC000_M021_005	STEEL ROPE L.1460 mm
3 (*)	AC000_M021_002	PULLEY D.60
	AC000_M021_003	PULLEY D.62
	AC000_M021_008	PULLEY D.63
4	AC000_M021_007	STEEL ROPE L.1385 mm
5	AC000_M021_006	STEEL ROPE L.1415 mm
6	AC000_M021_004	STEEL ROPE L.1440 mm
7	AS000_M000_029	SCREW

(*)	PLEASE AT THE TIME OF THE ORDER MEASURE THE DIAMETER

MAST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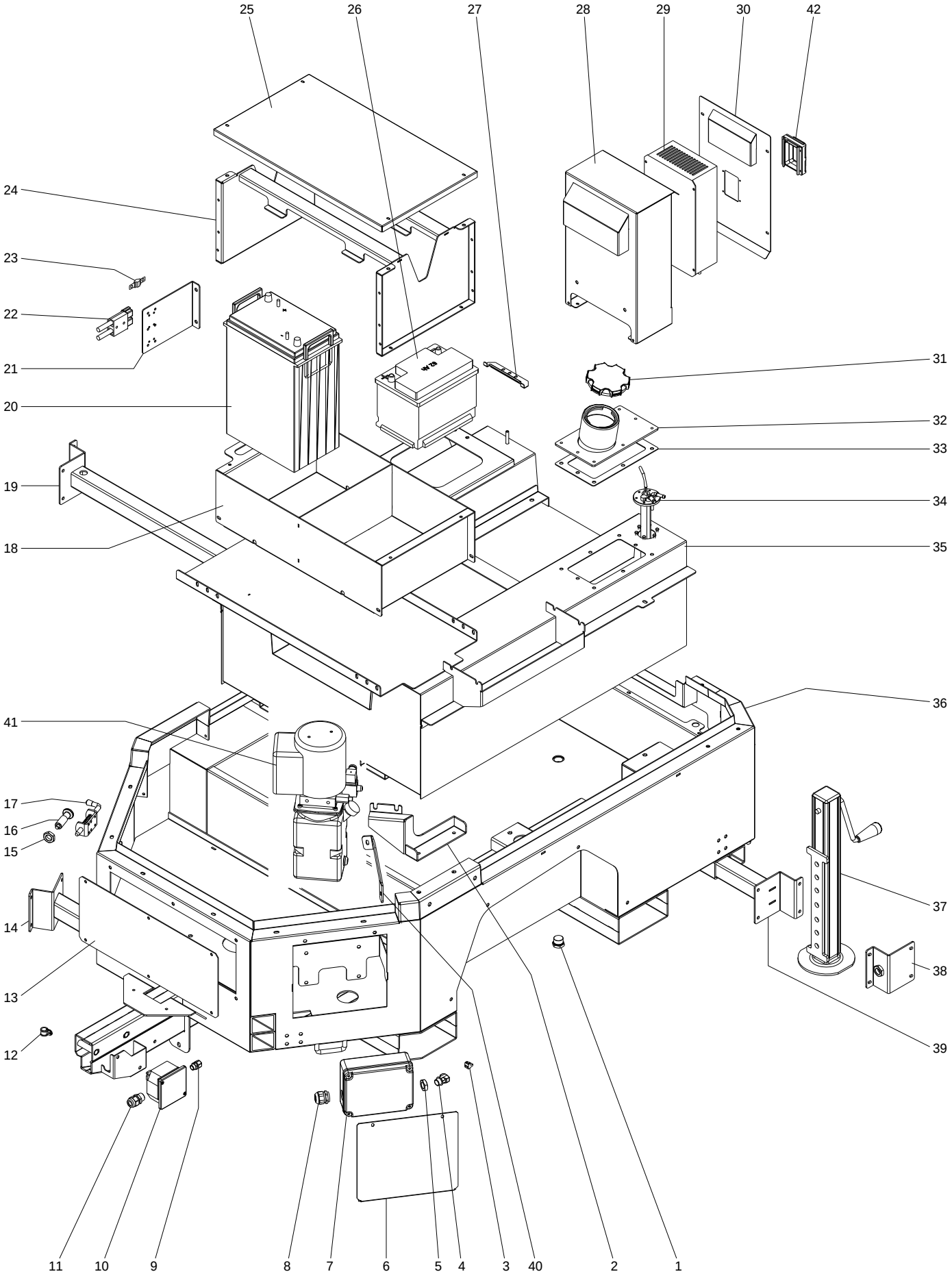
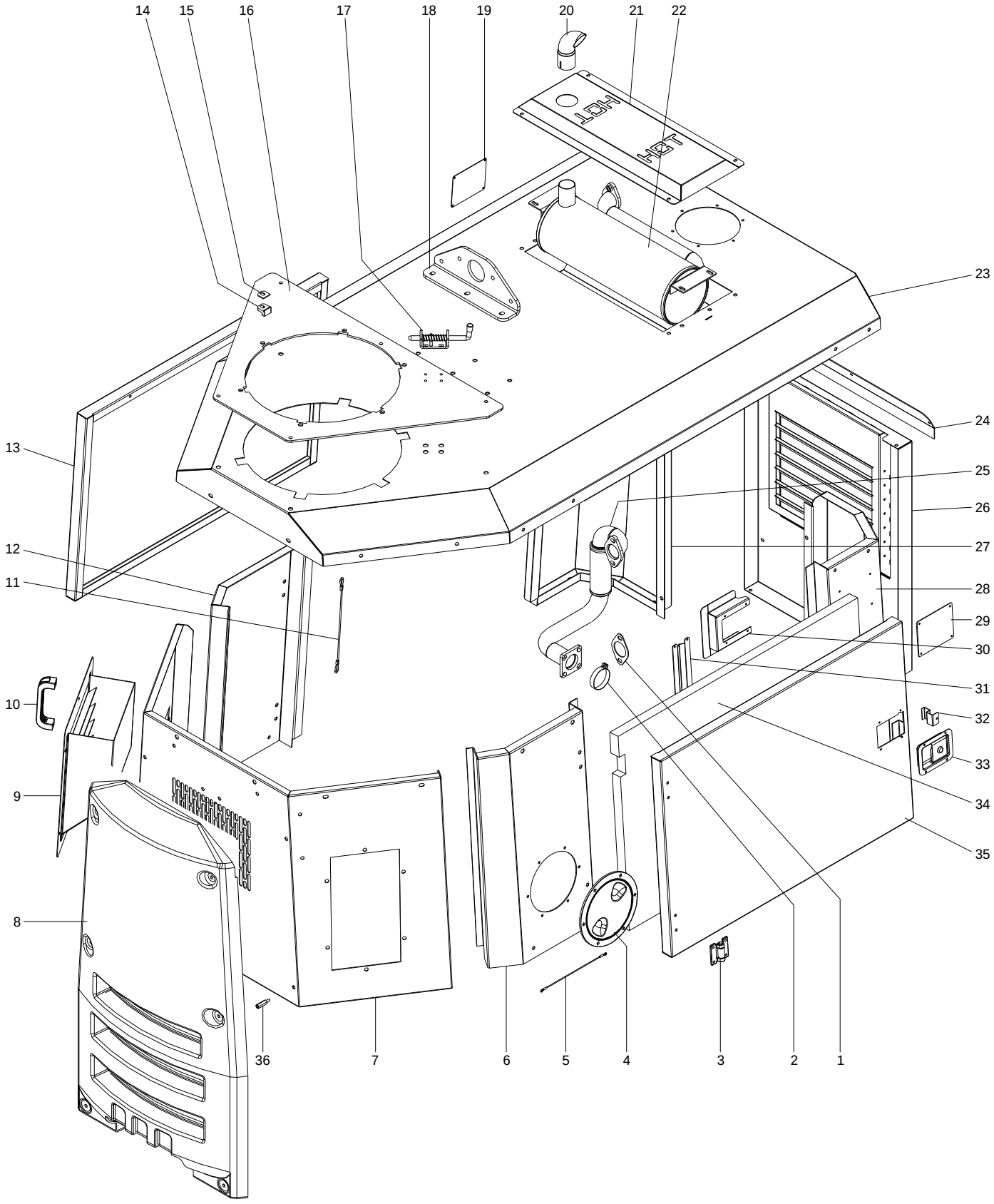
N.	CODE	DESCRIPTION
1	PFI08_C031_019ZN	MAST POSITIONING PLATE, LEFT
2	AC000_M038_007	CLAMP WITH RUBBER
4	PFM07_C031_070	MAST ROTATING SUPPORT
5	AS000_M023_026	HYDRAULIC PIPE PIN
6	AC000_G025_001	HYDRAULIC PIPE KIT
7	AS000_I025_001	HYDRAULIC PIPE
8	PFI08_C031_001ZN	1° SECTION MAST
9	PFI08_C031_024	SPACER
10	PFI08_C031_015	DRAG FLANGE
11	PFI08_C031_018ZN	MAST POSITIONING PLATE, RIGHT
19	AS000_M000_005	MAST ANGLE GUIDE
20	PFI08_C031_012ZN	MAST ANGLE GUIDE REINFORCEMENT
21	PFI08_C031_008ZN	8° SECTION MAST
22	PFI08_C031_007ZN	7° SECTION MAST
23	PFI08_C031_006ZN	6° SECTION MAST
24	PFI08_C031_005ZN	5° SECTION MAST
25	PFI08_C031_004ZN	4° SECTION MAST
26	PFI08_C031_003ZN	3° SECTION MAST
27	PFI08_C031_002ZN	2° SECTION MAST
28	PFM07_C000_019	CENTERING PIN CLAMP (OPTIONAL)
30	PFM07_C000_014	CENTERING PIN (OPTIONAL)
31	PFI08_C031_029	AIR BUBBLE LEVEL PROTECTION (OPTIONAL)
32	AC000_M016_002	AIR BUBBLE LEVEL
33	PFI08_C031_009ZN	COILED CABLE PROTECTION
34	AC000_P037_001	POMELLO
35	PFM08_C000_047	COILED CABLE LOCK
36	AC000_E006_109	COILED CABLE
37	XRENT_C031_087	MAST ROTATING SUPPORT FRAME
38	PFI08_C031_017	CENTERING PIN SUPPORT (OPTIONAL)

BASE STRUCTURE



N.	CODE	DESCRIPTION
1	AC000_M000_081	DRAIN CAP
2	XHY_C000_131	HYDRAULIC UNIT SUPPORT
3	AC000_E006_002	CLAMP
4	AC000_E018_016	CONNECTOR PG16
5	AC000_E018_014	NUT PG16
6	XHY_C008_137	JUNCTION BOX COVER
7	AS000_E006_033	JUNCTION BOX
8	AC000_E018_002	CABLE GLAND PG21
9	AC000_E018_003	CABLE GLAND PG9
10	AC000_G006_001	JUNCTION BOX
11	AC000_E018_009	CABLE GLAND PG16
12	AC000_M038_007	CLAMP WITH RUBBER
13	XECOK2_C008_036	FRONTAL COVER
14	XHY_C000_101ZN	FRONTAL STABILIZER BEAM
15	AC000_M038_026	BOLT
16	AC000_M000_077	PIN LOCK WITH SPRING
17	AC000_M000_086	CLOSING LOCK PIN
18	XHY_C006_112	BATTERIES TANK
19	XHY_C000_103ZN	REAR LEFT STABILIZER BEAM
20	AC000_E000_021	BATTERY 400AH
21	XHY_C006_114	BATTERIES CONNECTOR SUPPORT
22	AC000_E011_015	BATTERIES CONNECTOR
23	AC000_E012_056	40A FUSE
24	XHY_C006_113	BATTERIES LOCK
25	XHY_C006_115	BATTERIES COVER
26	AC000_E000_027	BATTERY 62AH
27	TF8K1_C000_0014	BATTERY LOCK
28	XHY_C004_116	BATTERY CHARGER BOX
29	AC000_E000_023A	BATTERY CHARGER
30	XHY_C004_117	BATTERY CHARGER COVER
31	AC000_M000_028	FUEL TANK CAP
32	XECOK2_C005_149	FUEL FILLER PLATE
33	XECOK_AS05_009	GASKET
34	AC000_E006_025	FUEL LEVEL SENSOR
35	XHY_C005_107	FUEL TANK
36	XHY_C004_100	MAIN BASE STRUCTURE
37	XECOK2_C003_200	STABILIZER
38	XE48_C000_014	STABILIZER PLATE
39	XHY_C000_102ZN	REAR RIGHT STABILIZER BEAM
40	XHY_C000_257	REINFORCEMENT
41	AS000_I000_012	HYDRAULIC UNIT
42	AC000_E000_057	COVER

CANOPY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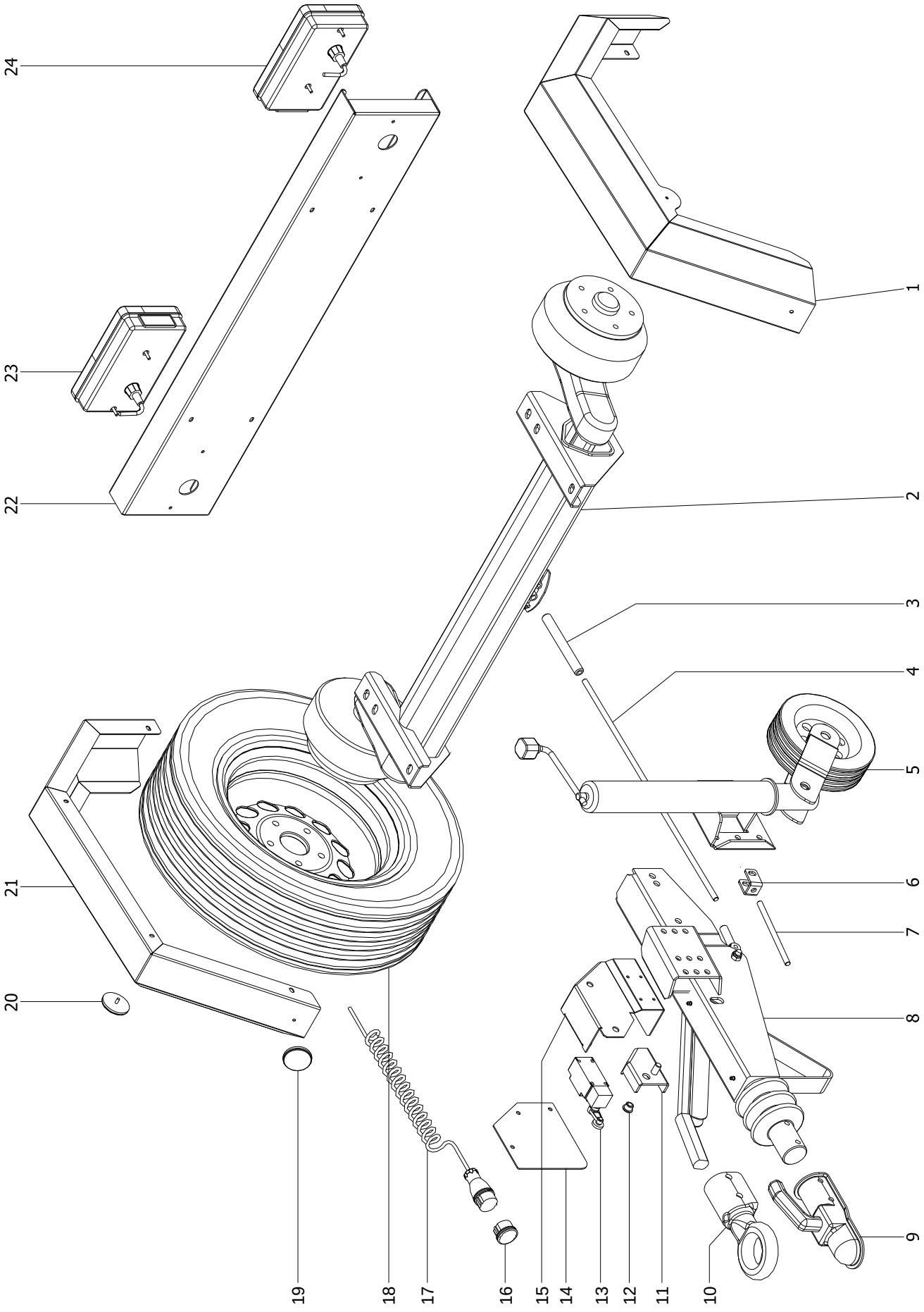
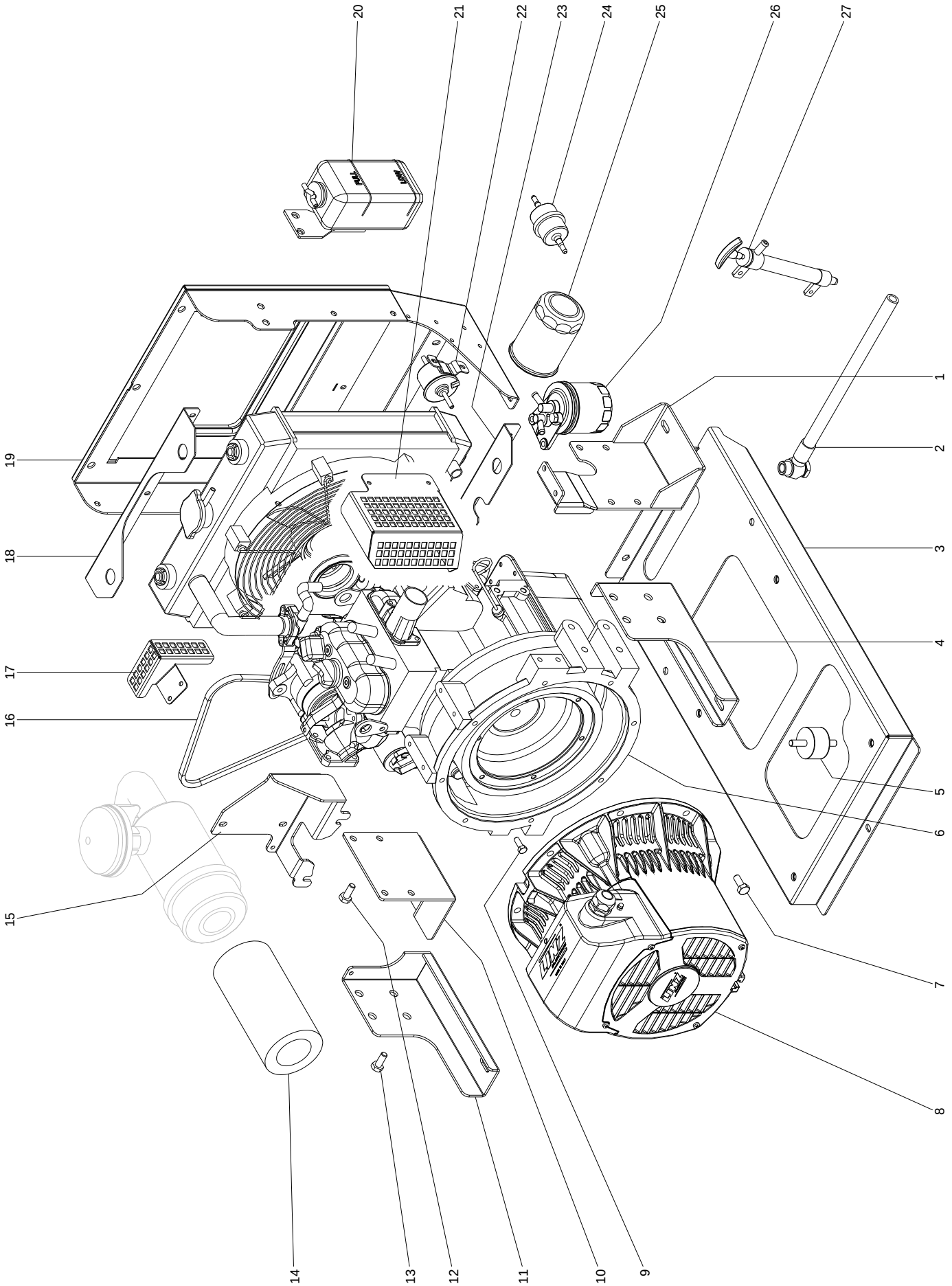
N.	CODE	DESCRIPTION
1	AC000_M001_007	MUFFLER EXTENSION GASKET
2	AC000_M038_009	CLAMP
3	AC000_M000_009	DOOR HINGE
4	AC000_M001_035	PLASTIC COVER
5	AS000_G031_083	PLASTIC COVER RETENTION ROPE
6	XHY_C007_126	FRONT RIGHT PANEL
7	XHY_C007_123	FRONT PANEL
8	XHY_AS009_151	PLASTIC COVER
9	XRENT_C008_044	GRID
10	AC000_M000_005	HANDLE
11	XECOK2_M009_161	DOOR RETENTION ROPE
12	XHY_C007_127	FRONT LEFT PANEL
13	XHY_C007_128	LEFT DOOR
14	PFI08_C031_013	ROTATIONAL SLIDING PLATE
15	PFI08_C031_014ZN	ROTATIONAL SLIDING PLATE REINFORCEMENT
16	XHY_C000_130	MAST ROTATION GUIDE PLATE
17	AC000_M000_003	CLOSING LOCK PIN
18	XECOK2_C036_386ZN	LIFTING EYE
19	XHY_S010_169B	APPROBATION PLATE
20	AC000_M000_105	EXHAUST RAIN COVER
21	XECOK_C007_032	MUFFLER COVER
22	XECOK_C035_045	MUFFLER
23	XHY_C007_124	TOP CANOPY
24	XHY_C007_125	TOP CANOPY COVER PLATE
25	XECOK2_C035_046	MUFFLER EXTENSION
26	XHY_C008_122	REAR PANEL
27	XHY_C007_121	REAR LEFT PANEL
28	XHY_C007_120	REAR RIGHT PANEL
29	XHY_S010_142B	DATA PLATE
30	XECOK2_C008_118	DOOR LOCK FRAME (OPTIONAL)
31	XHY_C000_158	DOOR COVERING SUPPORT (OPTIONAL)
32	XRENT_C000_040	LOCK CONTRAST
33	AC000_M000_017	DOOR LOCK
34	XHY_AS009_157	DOOR COVERING (OPTIONAL)
35	XHY_C007_129	RIGHT DOOR
36	AC000_M038_041	SPACER

TOW BAR, AXLE AND WHEELS



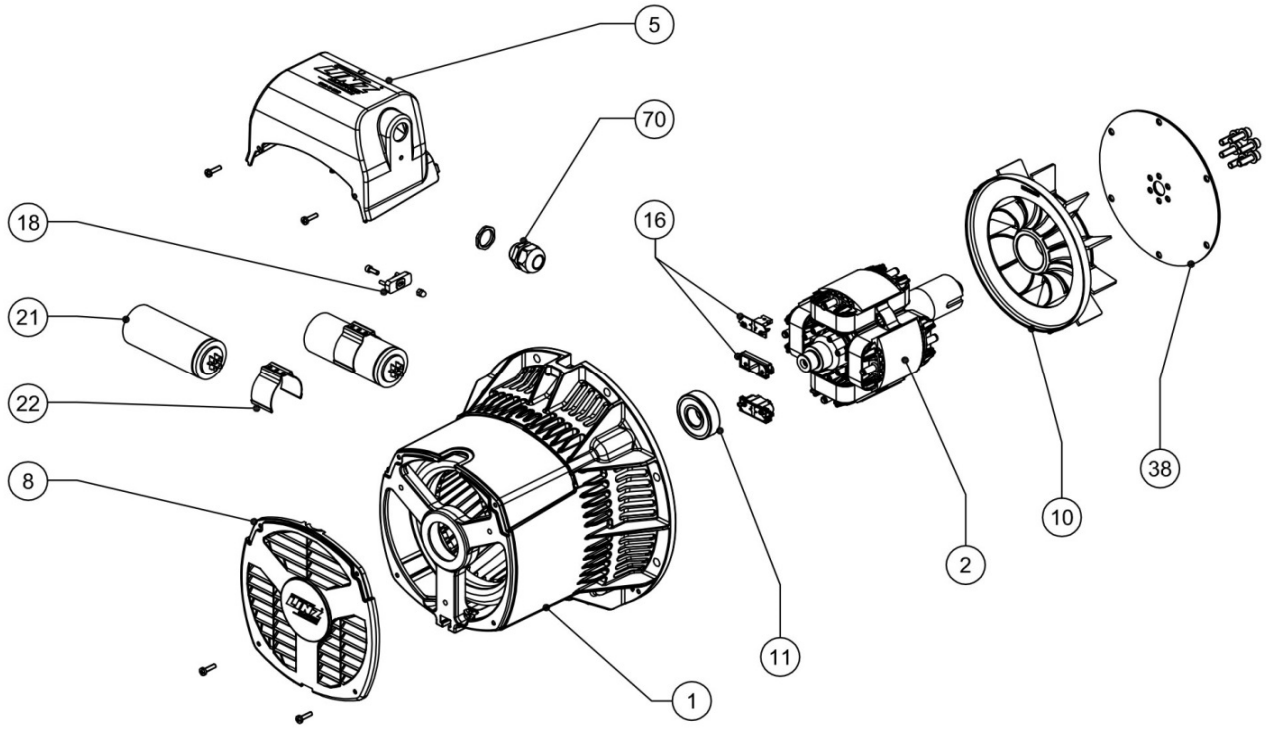
N.	CODE	DESCRIPTION
1	XHY_C004_108	RIGHT MUDGUARD
2	AC000_T003_015	AXLE
3	AS000_M000_073	SLIDE PIN
4	AS000_M020_004ZN	REAR TIE ROD
5	AC000_T003_003	JOCKEY WHEEL
6	XECOK2_C005_186ZN	TIE RODS JUNCTION
7	XECOK2_C005_059_03ZN	FRONT TIE ROD
8	AC000_T003_004	RUDDER
9	AC000_T003_007	HOOK BALL
10	AC000_T003_016	HOOK D.50
11	XECOK2_C000_098	LIMIT SWITCHES PLATE
12	XECOK2_C001_101ZN	ADAPTATION BUSHING
13	SI000_G006_009	LIMIT SWITCHES
14	XECOK2_C000_100	COVER PLATE
15	XECOK2_C000_099	LIMIT SWITCHES SUPPORT
16	AC000_E000_062	ADAPTER
17	AC000_E050_096	CABLE WITH CONNECTOR
18	AC000_T003_001	WHEEL
19	AC000_T013_001	WHITE REFLECTER
20	AC000_T013_002	ORANGE REFLECTER
21	XHY_C004_109	LEFT MUDGUARD
22	XHY_C000_105	LIGHTS HOLDER BAR
23	AC000_E013_006	LEFT SIDE LIGHT
24	AC000_E013_005	RIGHT SIDE LIGHT

ENGINE



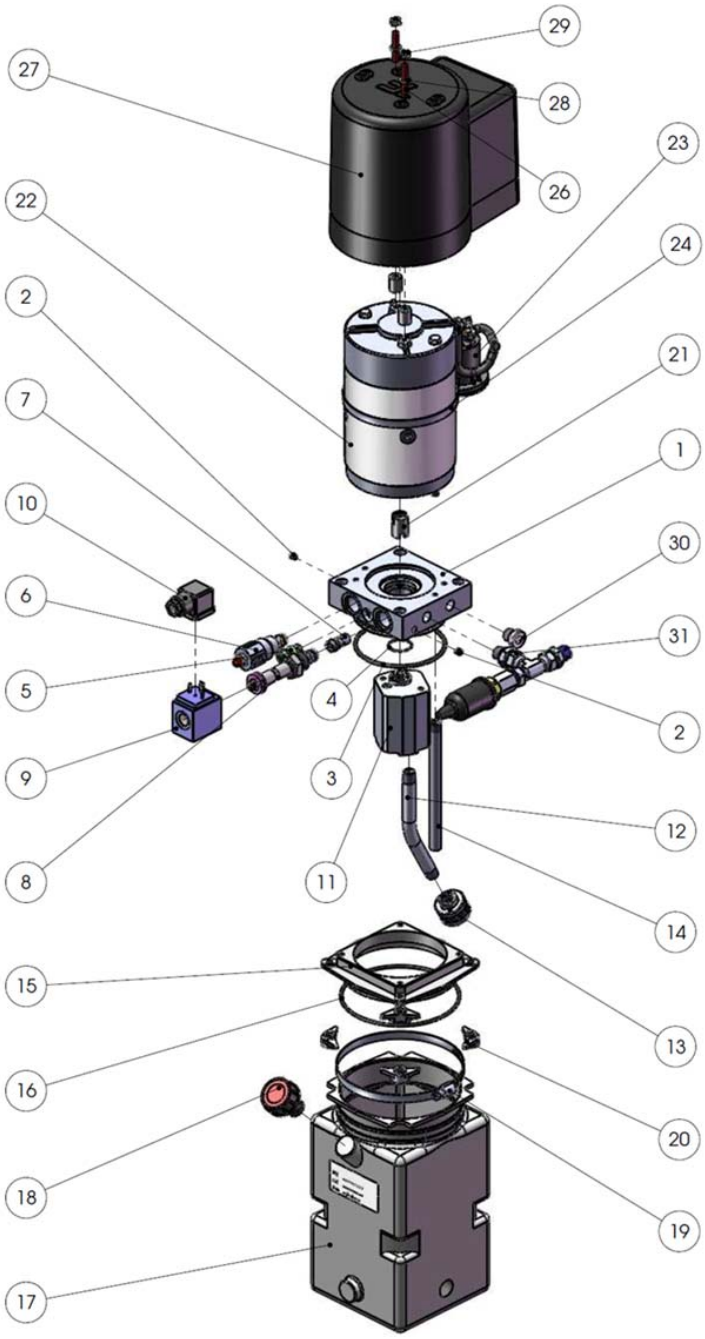
N.	CODE	DESCRIPTION
1	XECOK2_C001_006	ENGINE REAR RIGHT SUPPORT
2	AC000_G001_001	OIL DRAIN PIPE
3	XECOK2_C001_126	ENGINE / ALTERNATOR SUPPORT
4	XECOK2_C001_008	ENGINE FRONT RIGHT SUPPORT
5	AC000_M024_054	SCHOCK ABSORBER
6	AC000_M033_024	ENGINE Z482_STAGE V
7	AC000_M038_014	ALTERNATOR FIXING SCREW
8	AC000_E034_007	ALTERNATOR
9	AC000_M038_013	ENGINE FIXING SCREW
10	XECOK2_C001_005	ENGINE REAR LEFT SUPPORT
11	XECOK2_C001_007	ENGINE FRONT LEFT SUPPORT
12	AC000_M038_015	ENGINE REAR SUPPORTS SCREW
13	AC000_M038_047	ENGINE FRONT SUPPORTS SCREW
14	K-K121182320	AIR FILTER
15	XECOK2_C001_458	AIR FILTER SUPPORT
16	K-1980572530	ENGINE BELT
17	B-BO_C001_120	BELT PROTECTION
18	XE48_C001_005	RADIATOR TOP SUPPORT
19	XECOK2_C001_224	RADIATOR FRAME
20	K-1553172402	RADIATOR TANK
21	B-BO_C001_121	FAN PROTECTION
22	K-R140151352	ELECTRIC PUMP
23	XECOK2_C001_236	RADIATOR INFERIOR SUPPORT
24	AC000_M001_008	FUEL PRE-FILTER
25	K-1542632430	OIL FILTER
26	K-1522143170	FUEL FILTER
27	AS000_M000_060	OIL DRAIN MANUAL PUMP

ALTERNATOR



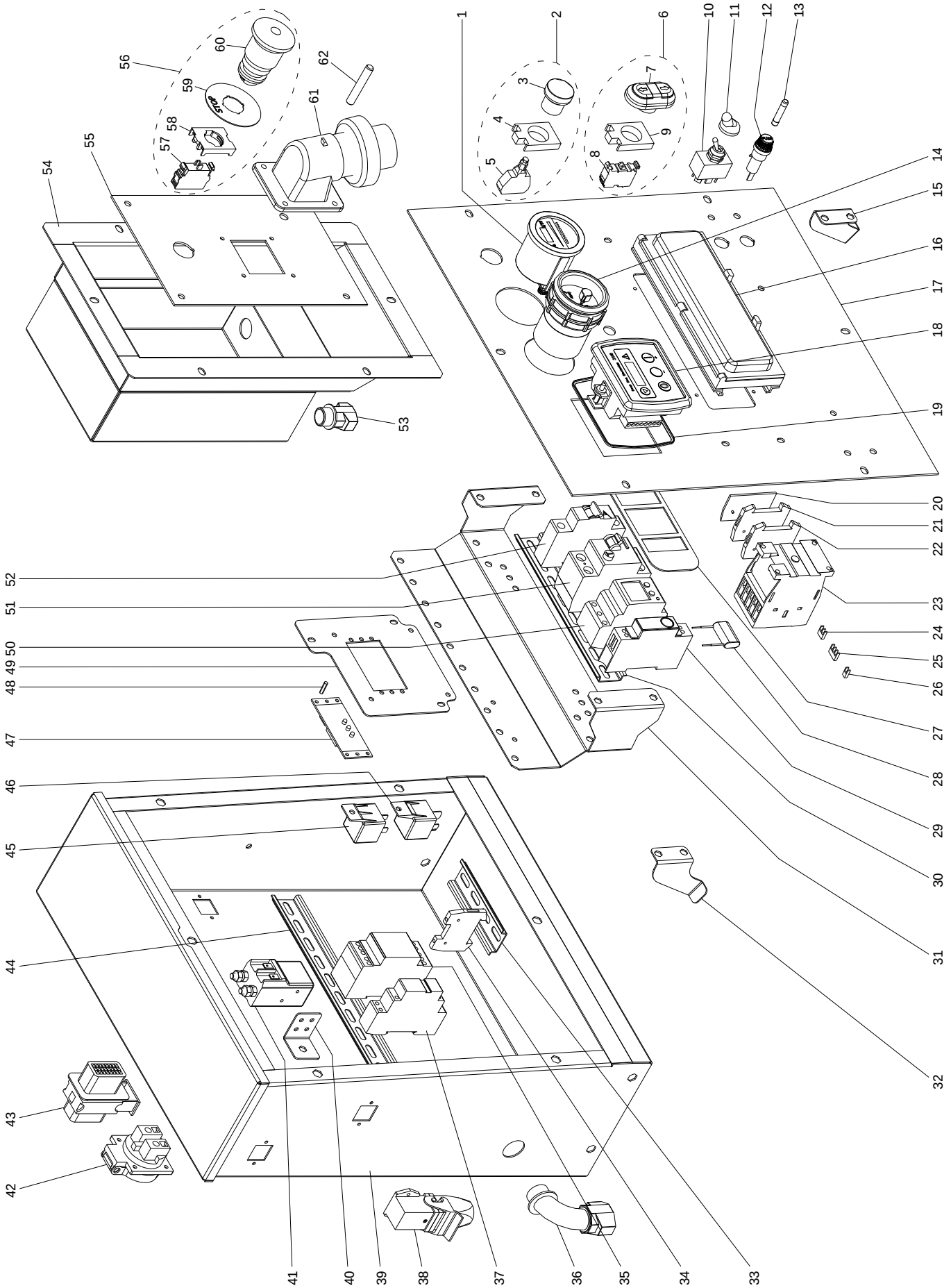
N.	CODE	DESCRIPTION
1	L-E13CA114AA1	FRAME WITH STATOR
2	L-E13RA491B	ROTATING INDUCTOR
5	L-E13QU068B00-002	TOP COVER
8	L-13KA089D	FRONT COVER
10	L-E13VE000C	FAN
11	L-EX411465325	BEARING
16	L-E13KA045A	WIRED DIODE
18	-----	-----
21	L-EX541511025	25uF 550V CAPACITOR
22A	L-E10KA109A	CAPACITOR CLAMP D. 40 SP10
22B	-----	-----
38	L-E13GE211A	SAE DISCS 6 ½
70	-----	-----

HYDRAULIC UNIT



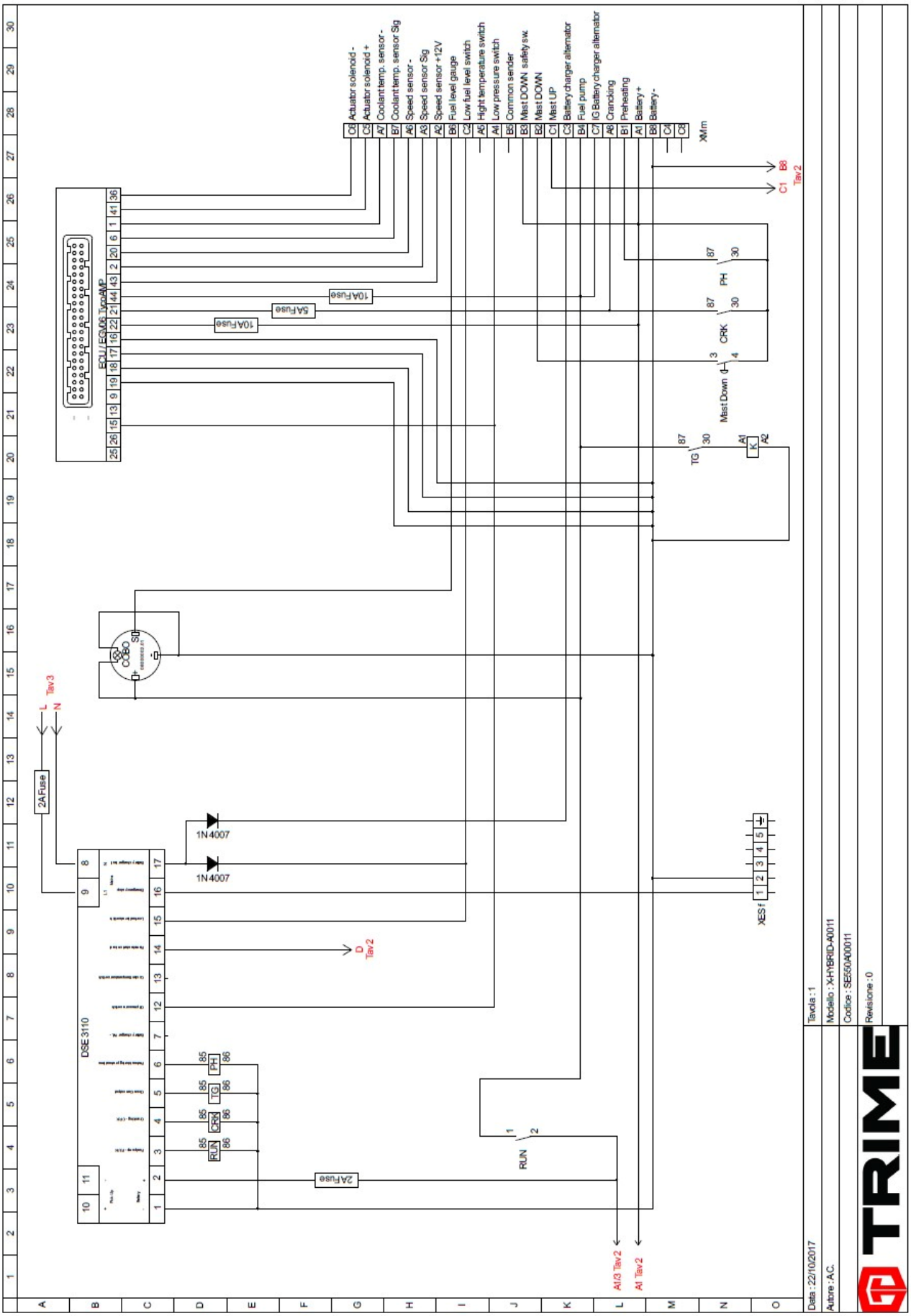
N.	CODE	DESCRIPTION
1	AS-ES516007	COLLECTOR
2	AS-EC035M06	CAP
3	AS-EC114261	RING
4	AS-EC114024	RING
5	AS-F73200114	CHECK VALVE
6	AS-F733006250	VALVE
7	AS-F7370212	CHOKE
8	AS-F720002B1	VALVE
9	AS-C150001OA	BOBINE
10	AS-EC167002	CONNECTOR
11	AS-EC10901.50001	PUMP
12	AS-ES5224FE009	PIPE
13	AS-ES506FR5.01759	FILTER
14	AS-ES52301105	DRAIN PIPE
15	AS-ES5072000002	TANK FLANGE
16	AS-EC114611	RING
17	AS-ES512AB25B	TANK
18	AS-EC1271120	VENT CAP
19	AS-C05609110130	CLAMP
20	AS-ES419002	ANGLE NUT
21	AS-ES5085320020	JOINT
22	AS-EC106115	HYDRAULIC UNIT ENGINE
23	AS-EC108011	CONTACTOR
24	AS-K180A01F	BRACKET
25	AS-ES427002	SPACER RING
26	AS-EC008AB0635	TIE-ROD
27	AS-ES513033	COVER
28	AS-EC010002	WASHER
29	AS-EC000BBB06	NUT
30	AS-EC031001	CAP
31	AS-CL000008	JOINTS AND PRESSURE SWITCH KIT

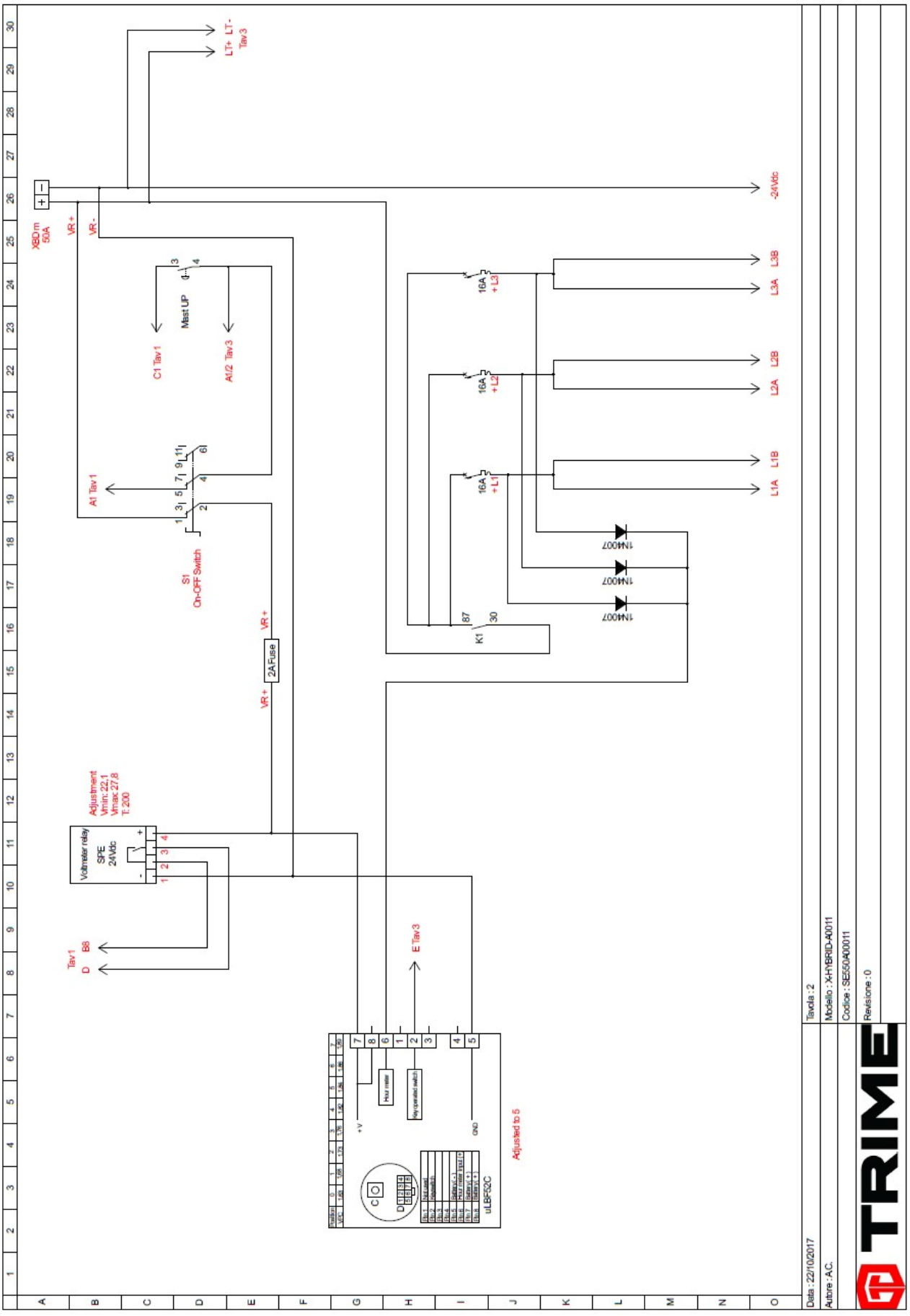
CONTROL PANELS

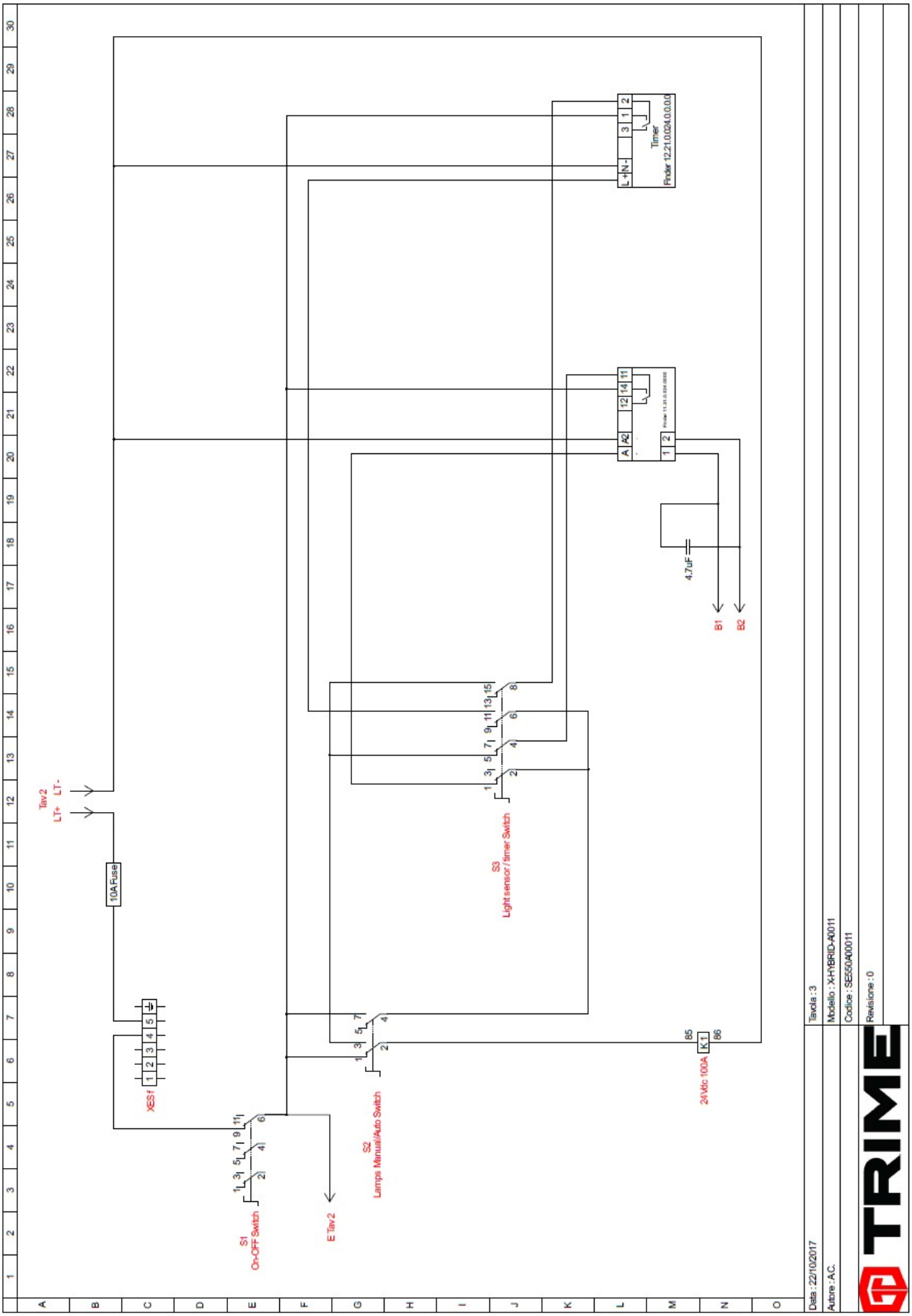


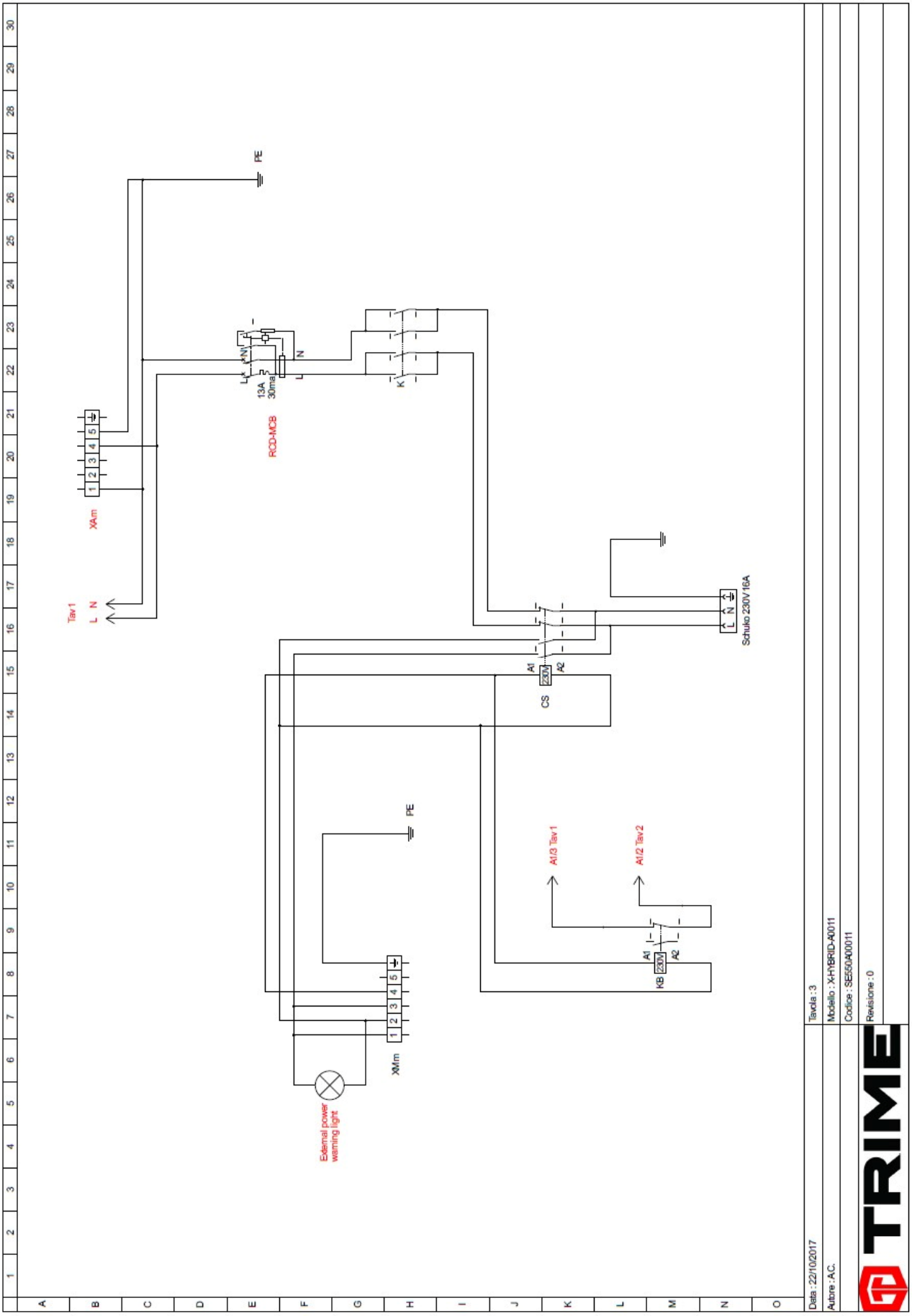
N.	CODE	DESCRIPTION
1	AC000_E006_076	AGM BATTERIES CHARGE INDICATOR
2	SI000_G006_005	ASSEMBLED GREEN LAMP
3	AC000_E006_045	GREEN LAMP
4	AC000_E006_043	GREEN LAMP SUPPORT
5	AC000_E006_046	GREEN LAMP CONTACT
6	SI000_G006_006	ASSEMBLED MAST BUTTONS
7	AC000_E006_044	MAST BUTTONS
8	AC000_E006_043	MAST BUTTONS SUPPORT
9	AC000_E006_042	MAST BUTTONS CONTACT
10	AC000_E000_016	2 POLES SWITCH
11	AC000_E000_019	SWITCH COVER
12	AC000_E012_030	FUSE HOLDER
13	AC000_E012_014	FUSE
14	AC000_E015_005	FUEL LEVEL GAUGE
15	XECOK2_C019_232	RIGHT LOCK PLATE
16	AC000_E000_020	CIRCUIT BREAKERS COVER
17	XHY_S010_168B	INSTRUMENTS SUPPORT
18	AC000_E014_001	CONTROL UNIT
19	AC000_E006_001	CONTROL UNIT GASKET
20	AC000_E006_024	CLAMP TERMINAL
21	AC000_E006_022	CLAMP
22	AC000_E006_021	CLAMP
23	AC000_E006_054	CONTACTOR SWITCH
24	AC000_E006_062	3 PIN BRIDGE
25	AC000_E006_063	4 PIN BRIDGE
26	AC000_E006_023	2 PIN BRIDGE
27	XHY_C006_163	CIRCUIT BREAKERS FRAME
28	AC000_E000_070	CAPACITOR
29	AC000_E016_005	LIGHT SENSOR RELAY
30	AC000_M038_037	BAR L.200
31	XHY_C006_162	CIRCUIT BREAKERS SUPPORT
32	XECOK2_C019_233	LEFT LOCK PLATE
33	AC000_M038_049	BAR L.100
34	AC000_E006_021	CLAMP
35	AC000_E006_049	CONTACTOR
36	AC000_E018_017	90° CONNECTOR
37	AC000_E006_047	CONTACTOR
38	AC000_E000_071	5 POLES CONNECTOR
39	XHY_C019_160	CONTROL PANEL BOX
40	XHY_C006_136	REMOTE CONTROL SWITCH SUPPORT
41	AC000_E006_097	REMOTE CONTROL SWITCH
42	AC000_E011_016	SOCKET
43	AC000_G006_003	ENGINE CONNECTOR
44	AC000_M038_036	BAR L.300
45	AC000_E000_040	12V 40A RELAY
46	AC000_E000_041	12V 70A RELAY

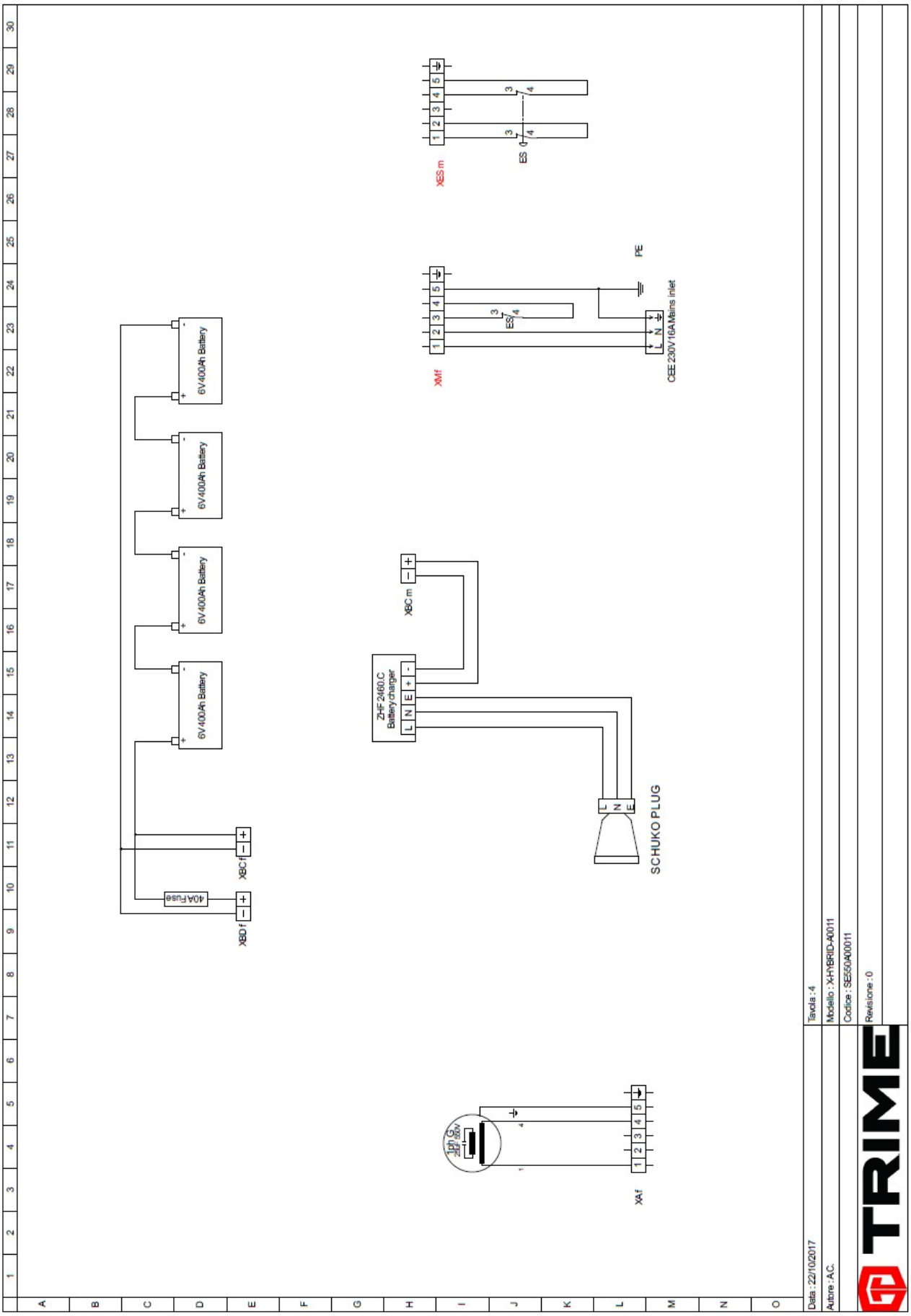
N.	CODE	DESCRIPTION
47	AC000_E006_111	VOLTMETRIC RELAY
48	AC000_M038_060	SPACER
49	XHY_C006_161	VOLTMETRIC RELAY SUPPORT
50	AC000_E006_060	TIMER
51	AC000_E012_028	RCBO 13A
52	AC000_E012_027	LAMP SWITCH
53	AC000_E018_019	CONNECTOR
54	XECOK2_C006_105	EXTERNAL CONTROL PANEL BOX
55	XHY_S010_140B	INSTRUMENTS SUPPORT
56	SI000_G006_001	ASSEMBLED STOP BUTTON
57	AC000_E006_052	STOP BUTTON CONTACT
58	AC000_E006_043	STOP BUTTON SUPPORT
59	AC000_E006_053	STOP BUTTON RATING PLATE
60	AC000_E006_051	STOP BUTTON
61	AC000_E011_010	INLET SOCKET 230V 16A
62	AC000_M038_035	EARTHING TERMINAL

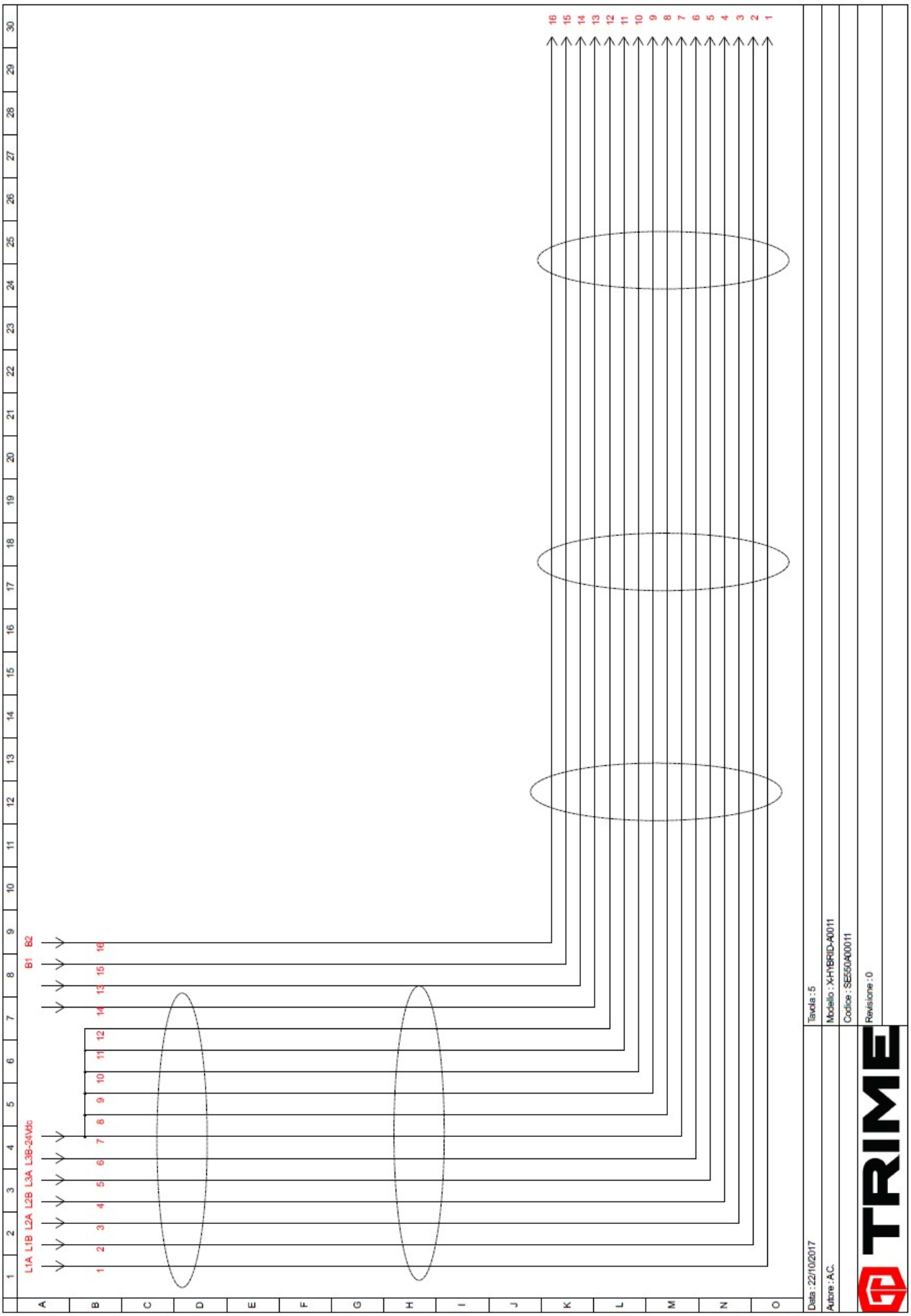

Actuator solenoid -
Actuator solenoid +
Coolant temp. sensor -
Coolant temp. sensor Sig
Speed sensor -
Speed sensor Sig
Speed sensor +12V
Fuel level gauge
Low fuel level switch
Hight temperature switch
Low pressure switch
Common sender
Mast DOWN safety sw.
Mast DOWN
Mast UP
Battery charger alternator
Fuel pump
IG Battery charger alternator
Cranking
Preheating
Battery+
Battery-
XMm
ECU EGM06 TypeMP
10A Fuse
5A Fuse
10A Fuse
PH
CRK
Mast Down
TG
K
2A Fuse
1N 4007
1N 4007
DSE 3110
RUN
2A Fuse
XES f
L
N
Tav 3
D
Tav 2
C1 B8
Tav 2
A1/3 Tav 2
A1 Tav 2
Data : 22/10/2017
Tavola : 1
Autore : A.C.
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
TRIME

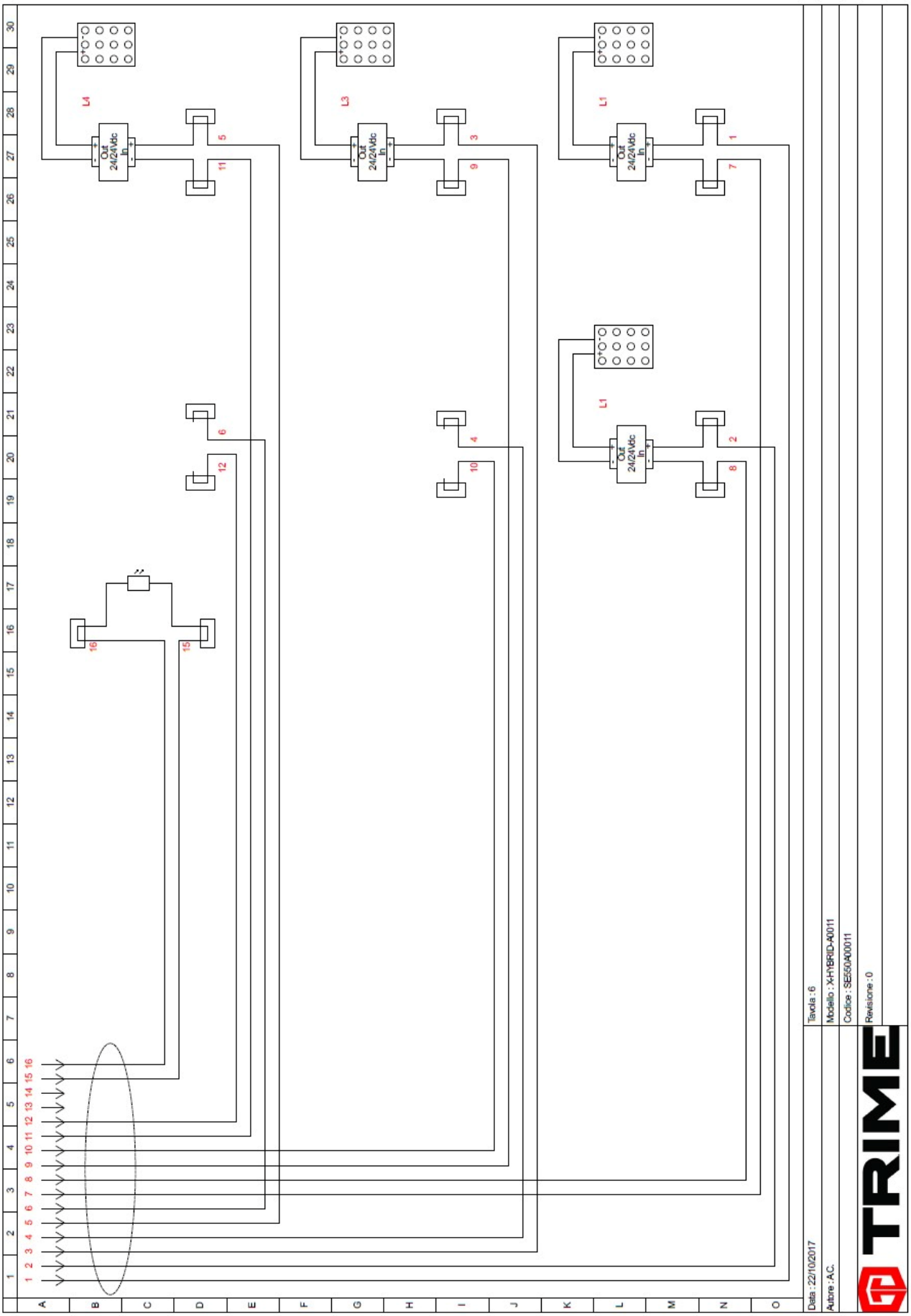

XBD m
50A
VR+
VR-
LT+ LT-
Tav3
-24Vdc
Mast UP
C1 Tav 1
A1/2 Tav3
A1 Tav 1
S1
On-OFF Switch
16A
+ L3
16A
+ L2
16A
+ L1
L3B
L3A
L2B
L2A
L1B
L1A
1N4007
1N4007
1N4007
87
30
K1
VR+
2A Fuse
VR+
Adjustment
Vmin: 22.1
Vmax 27.8
T: 200
Voltmeter relay
SPE
24Vdc
Tav1
D B8
E Tav 3
Hour meter
Key-operated switch
+V
GND
Adjusted to 5
uLBF02C
Data : 22/10/2017
Autore : A.C.
Tavola : 2
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
TRIME

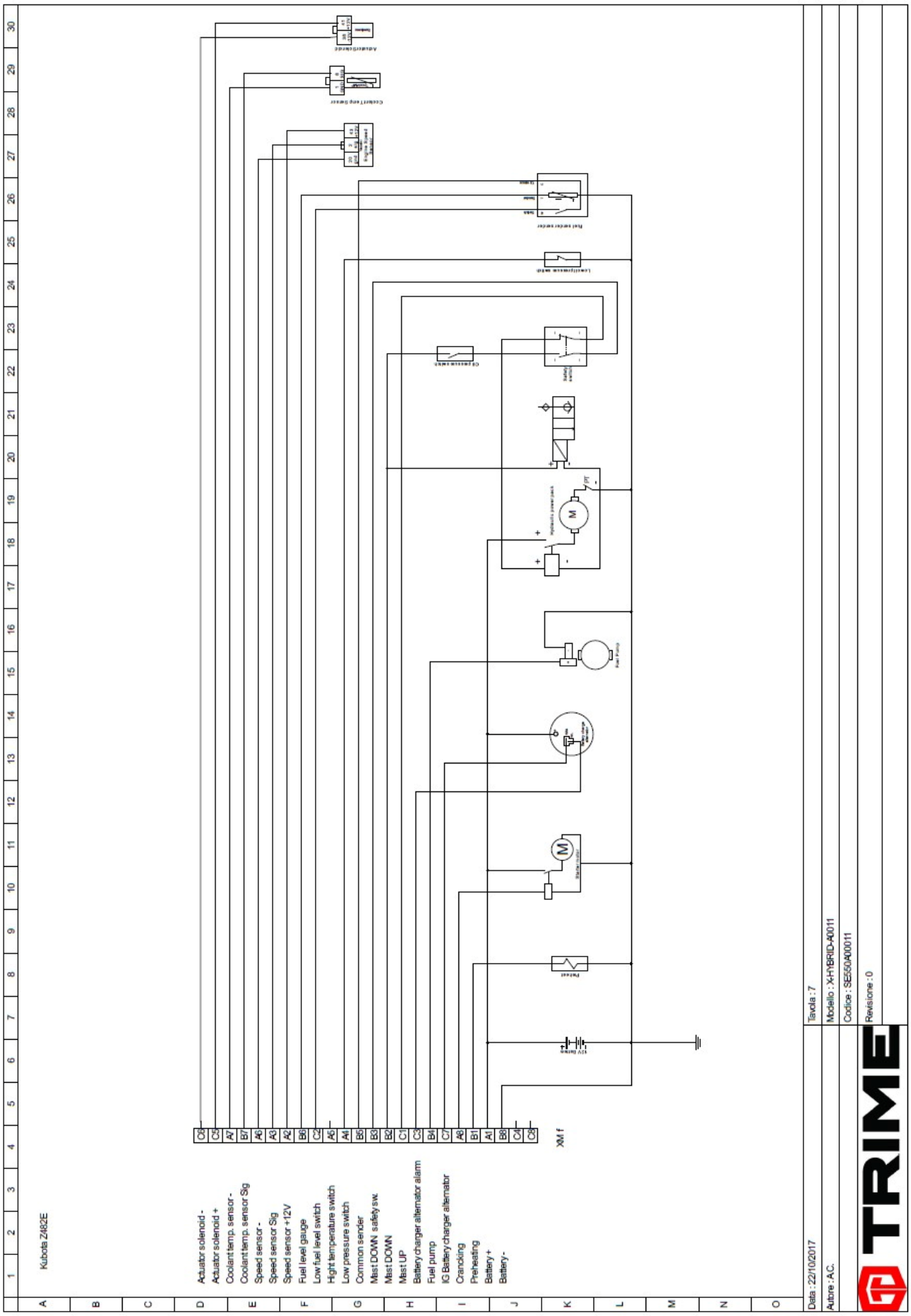

Tav.2
LT+ LT-
10A Fuse
XES f
S1
On-OFF Switch
E Tav.2
S2
Lamps Manual/Auto Switch
S3
Light sensor / timer Switch
Timer
Finder 12.21.0.024.0.0.0.0
4.7uF
B1
B2
24 Vdc 100A
K1
Data : 22/10/2017
Autore : A.C.
Tavola : 3
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
TRIME


PE
RCD-MCB
13A
30mA
XAm
Tav1
L N
CS
A1
A2
230V
Schuko 230V 16A
A1/3 Tav 1
A1/2 Tav 2
KB
XMm
External power warning light
Tavola : 3
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
Data : 22/10/2017
Autore : A.C.
TRIME


6V 400Ah Battery
6V 400Ah Battery
6V 400Ah Battery
6V 400Ah Battery
40A Fuse
XBC f
XBD f
XBC m
ZHF 2460.C
Battery charger
SCHUKO PLUG
XES m
ES
XMf
ES
PE
CEE 230V 16A Mains inlet
2Ph G
2P 36V
XA f
Data : 22/10/2017
Autore : A.C.
Tavola : 4
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
TRIME


16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
B1 B2
L1A L1B L2A L2B L3A L3B-24Vdc
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
A B C D E F G H I J K L M N O
Tavola : 5
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
Data : 22/10/2017
Autore : A.C.
TRIME


L4
L3
L1
L1
Out
24/24Vdc
In
Tavola : 6
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
Data : 22/10/2017
Autore : A.C.
TRIME


Kubota Z482E
Actuator solenoid -
Actuator solenoid +
Coolant temp. sensor -
Coolant temp. sensor Sig
Speed sensor -
Speed sensor Sig
Speed sensor +12V
Fuel level gauge
Low fuel level switch
Hight temperature switch
Low pressure switch
Common sender
Mast DOWN safety sw.
Mast DOWN
Mast UP
Battery charger alternator alarm
Fuel pump
IG Battery charger alternator
Cranking
Preheating
Battery +
Battery -
XM f
Data : 22/10/2017
Autore : A.C.
Tavola : 7
Modello : X-HYBRID-A0011
Codice : SE550A00011
Revisione : 0
TRIME

The warranty period starts on the delivery date to the first purchaser.
The machine is covered by warranty for one 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.
We reserve 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.

We 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 us;
- 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 us 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.
We offer service and warranty training for service and maintenance personnel, if required.
Training can be carried out at a our depot or at a venue of your choice.
Don't hesitate to contact us for any further information.