Industrie spa

CE

STOCK PICKER

ELEVAH 75 TIRES

USE AND MAINTENANCE INSTRUCTIONS

Translation of the original instructions

SECTION 0. *INTRODUCTION*

TABLE OF CONTENTS

ENGLISH

INTRODUCTION

This use and maintenance manual is aimed at providing users with the essential information to carry out the procedures intended for safe and correct machine operation, in accordance with the purposes it has been manufactured for.
All information in this manual must be read and understood before making any attempt to operate the machine.

THIS MANUAL IS VERY IMPORTANT DOCUMENTATION; ALWAYS KEEP IT NEAR THE MACHINE.

Due to continuous improvements to its products, Faraone Industrie Spa reserves the right to change technical data without any prior notice. For updated information, contact Faraone Industrie Spa.

ATTENTION

REMEMBER THAT NO EQUIPMENT IS SAFE IF THE OPERATOR DOES NOT COMPLY WITH THE SAFETY PRECAUTIONS

SYMBOLS AND TERMS

ATTENTION

The danger symbol draws attention to potential hazards that might cause injuries. To prevent any injuries or fatal accidents, comply with all safety instructions associated with the symbol.

Arrows are used in the pictures of the machine to indicate the specific points described in the manual.

- **Stock picker:** A machine designed exclusively to carry, lift, stack or arrange loads on shelving, controlled by an operator stationed in the driver's position, which can be raised at the same time as the load handling device.
- **Cage:** A position from which the operator is able to control all driving positions and handle the load.
- **Loading platform**: Platform from where goods are loaded to be carried, lifted, stacked or arranged on shelving.
- **Extensible structure:** A structure connected to the frame that supports the cage and allows it to move to the required position.
- **Frame:** Machine Base.

TECHNICAL SUPPORT - WARRANTY

The Customer must make sure to have the serial number of the machine and an accurate description of the problem or of the information to be provided before contacting the Manufacturer.
The warranty period is 12 months from the date of the purchase invoice.
Said warranty covers faulty components and the labour required for servicing, if this is carried out at the Manufacturer's premises (transport of the machine is borne by the purchaser).

The warranty is valid provided all rules laid down for correct use of the machine are complied with.

The machine is designed and manufactured to last years, as long as it is always used for the purposes it is intended for, and the inspections and maintenance described herein are carried out.
Faraone Industrie Spa deems it necessary to conduct an extensive analysis of all of the structural components every 10 (ten) years, to confirm their integrity.

NOTICES

In compliance with legislation in force in the country where the machine is operating, the owner of the stock picker must find out whether a declaration of putting the machine into service is required, along with any periodical tests to be carried out thereafter.

SECTION 1. *SAFETY PRECAUTIONS*

GENERAL INFORMATION

This section illustrates the necessary precautions for correct and safe use of the machine and its maintenance. To assure correct use of the machine, it is essential to establish a daily routine procedure based on the instructions provided in the manual. Furthermore, to guarantee safe operation of the machine, a skilled person should establish a maintenance schedule based on the information provided in this manual, which must be strictly complied with.

The owner/user/operator/machine lessor company/lessee of the machine, shall not accept responsibility for its operation before having carefully read the manual and completed training and the operating procedures, guided by an experienced, skilled operator.

For further information relating to safety, training, inspection, maintenance, application and operation, contact Faraone Industrie Spa.

ATTENTION

FAILURE TO COMPLY WITH THE SAFETY PRECAUTIONS LISTED IN THE MANUAL MAY DAMAGE THE MACHINE AND PROPERTY AND CAUSE INJURIES OR FATAL ACCIDENTS.

PRELIMINARY PROCEDURES

Operator training and knowledge

- Carefully read the manual before using the machine.

- Only use the machine after being fully trained by authorised personnel.
- The machine can only be used by authorised, skilled personnel.
- Read carefully and comply with all the ATTENTION statements and operational instructions provided on the machine and in the manual.
- Use the machine for applications falling within those intended by Faraone Industrie Spa.
- All operational personnel must become familiar with the controls and emergency operation of the machine, as specified in the manual.
- Carefully read and comply with all company, local and government regulations in force, relating to machine operation.

Inspection of the workplace

- Before using the machine, the operator must take the necessary precautions to prevent any hazard in the workplace.
- Do not operate the machine on lorries, trailers, railway carriages, boats in water, scaffolding or similar, unless Faraone Industrie Spa has approved the operation in writing.
- The machine can be started up at temperatures between -10°C and 40°C. Contact Faraone Industrie Spa for machine operation at out-of-range temperatures.
- The machine cannot be switched on in environments stated as ATEX, unless specifically indicated in the EC certificate of conformity delivered with the machine in question.

Machine inspection

- Use the machine only after carrying out the inspections and functional checks. For further instructions, refer to *Section 3* of this manual.
- Operate the machine only after carrying out all servicing and maintenance set out in the requirements specified in this manual.
- Make sure all safety devices work properly. Any changes to such devices constitute a breach of the safety regulations.
- Do not operate the machine if the safety signs or stickers affixed to it are illegible or missing.
- Avoid accumulation of debris on the floor of the machine. Prevent mud, oil, grease and other slippery substances from coming into contact with your shoes and the floor of the machine.

ATTENTION

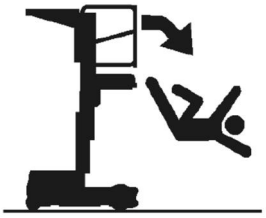
ANY CHANGES OR ALTERATIONS TO THE MACHINE MAY ONLY BE CARRIED OUT WITH THE MANUFACTURER'S PRIOR WRITTEN AUTHORISATION.

OPERATION

General information

- A self-propelled Stock picker is a machine designed solely to carry, lift, stack or arrange loads on shelving, controlled by an operator stationed in the driver's position, which can be raised at the same time as the load handling device.
- Do not operate a faulty machine. Should any fault occur, switch the machine off.
- Do not move the control switches or levers abruptly from one position to the opposite one, straight through the neutral position; always move the switch to the neutral position before moving it to the position of the next function. Operate the controls by applying slow, even pressure.
- If there are any persons in the cage, allow personnel to operate the machine from the ground only in the event of an emergency;
- Completely lower the extensible structure and disconnect the power supply before leaving the machine unattended.
- It is recommended to charge the batteries in a well-ventilated area.

Fall hazard



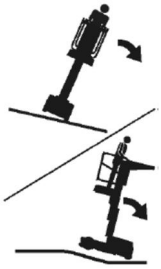
- Before using the machine, ensure all fixed and movable rails are secured in the correct position;
- Keep both feet firmly on the floor of the cage. Do not place ladders, boxes, steps, planks or similar items on the cage to increase its range of action.

- Do not use the extension unit to climb on or off the cage.
- Pay utmost attention when entering or exiting the cage. Make sure the extensible structure is lowered completely. When entering or leaving the cage, face the machine. Always maintain "three contact points" with the machine, by making sure that both hands and one foot, or one hand and both feet, are continuously in contact with the machine when entering and exiting.

Electrocution hazard

With regard to the safety distances from live parts of power lines and electrical systems that are not protected or not sufficiently protected to be complied with when carrying out non-electric jobs, at net clearance deriving from the type of job, the equipment used and the materials handled, as well as the lateral shifting of the conductors owing to the action of wind and lowering of heights due to heat conditions, refer to the Laws regarding safety in the workplaces of the country where the machine is operating.
For Italy, refer to Legislative Decree 81/08, annex IX “Values of rated operating voltages of electrical machines and systems”.

Overturning hazard



- Before driving the machine, the user must become familiar with the surface of the work area. While driving, do not exceed the allowed transversal and longitudinal gradient.
- Do not lift the cage, or drive the machine with a lifted cage, on a slope or an uneven or soft surface.
- Before driving the machine on floors, bridges, lorries and other surfaces, check their maximum capacity.
- Do not exceed the maximum capacity of the machine.
- Keep the machine chassis at a minimum distance of 0.5 m from any holes, unevenness, slopes, obstacles, debris, hidden holes and other potential hazards at ground level.
- Do not use the machine as a crane. Do not tie the machine to any adjacent structure.
- Do not increase the size of the cage or loading platform with unauthorised extensions.
- If the extensible structure or the cage gets stuck so that one or more wheels are lifted from the ground, the operator must leave the cage before attempting to release the machine. Use a crane, forklift or other adequate equipment to stabilise the machine and have personnel climb off the cage.

Crushing and impact hazard

- When using the machine or lifting or lowering the cage, check the distances above, on the sides and below the cage;
- Do not lean over the cage rails when the machine is running;
- Always pay the utmost attention to prevent the operational controls and people in the cage from being hit or hindered by any obstacles;
- Ensure the operators of other machines at a height or at ground level are informed of the presence of the machine;
- Warn personnel not to work, stand or walk underneath the lifted cage;
- When driving in areas where visibility is limited by obstacles, always have a person walk in front to alert you of any dangers;
- While driving, always keep non-operational personnel at a minimum distance of 2 m from the machine.
- Adjust the driving speed according to the following conditions: ground surface, traffic, visibility, gradient, location of personnel and other factors that may pose a risk of collision or injuries to personnel;
- Consider the braking distances, regardless of the speed of the machine;
- Do not drive at high speed in restricted or narrow areas or when reversing.

Towing, lifting and transporting

- Do not allow personnel to stand in the cage during towing, lifting and transporting.
- Only tow the machine in case of emergency, faults, power failures or to load/unload it. Refer to the "Emergency procedures" section in this manual.
- Before towing, lifting and transporting, make sure the cage is completely retracted and emptied.
- Do not pull or push a locked or disabled machine.
- While lifting the machine with a forklift, only place the forks in the specific areas of the machine. Lift with lifting equipment of adequate capacity.

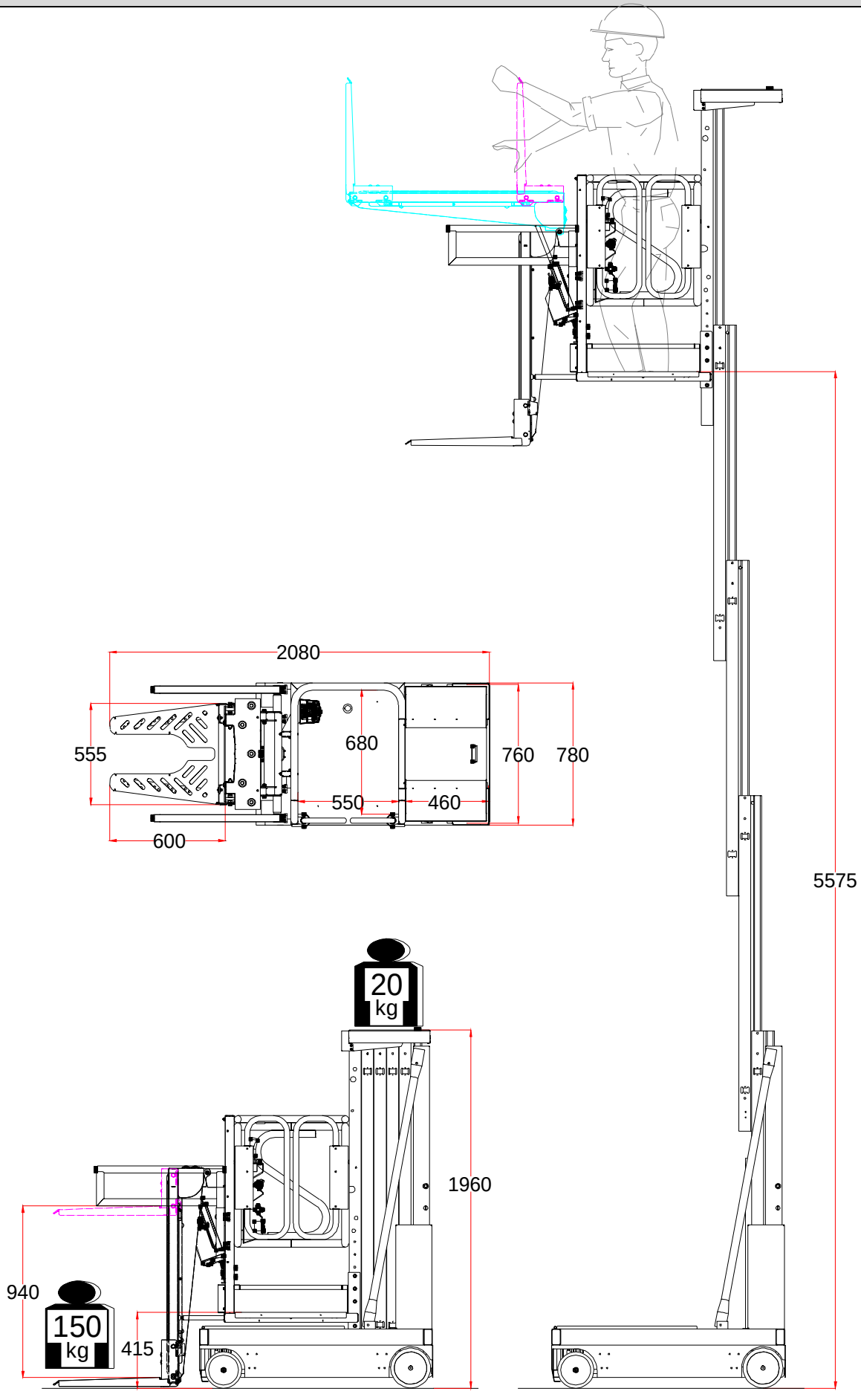
For information regarding lifting, refer to the relevant section in the manual.

SECTION 2. *GENERAL TECHNICAL DATA*

ATTENTION

THE SELF-PROPELLED ELEVAH 75 TIRES STOCK PICKER IS A MACHINE SOLELY DESIGNED TO CARRY, LIFT, STACK OR ARRANGE TYRES ON SHELVING, AND IS CONTROLLED BY AN OPERATOR STATIONED IN THE DRIVER'S POSITION, WHICH CAN BE RAISED AT THE SAME TIME AS THE LOAD HANDLING DEVICE.
THE STOCK PICKER IS DESIGNED TO DRIVE IN CLOSED ENVIRONMENTS ON PREPARED, SMOOTH AND HORIZONTAL SURFACES.
FURTHERMORE, IT CAN ALSO BE USED OUTDOORS IN THE TOTAL ABSENCE OF WIND AND ATMOSPHERIC PRECIPITATIONS.
THE STOCK PICKER MUST ONLY BE USED FOR THE PURPOSE IT WAS DESIGNED FOR. ANY OTHER USE IS CONSIDERED MISUSE.

OVERALL DIMENSIONS



Measurements expressed in mm

GENERAL TECHNICAL DATA

ELEVAH 75 TIRES STOCK PICKER TECHNICAL SPECIFICATIONS	Value
Weight of the machine: (Total)	1015 Kg
Machine height: (in transport position)	196 cm
Maximum resting pressure on the ground: per wheel/outrigger (*)	442 daN
Maximum transmission speeds: (with cage lifted – in transport position)	0.25 m/s – 0.70 m/s
Machine base: (length x width)	208 cm x 78 cm
Power supply	2 Batteries 12V - 105 Ah
Operators in the cage:	1
Maximum cage + tyres tool + object holder tray capacity:	250 kg
Maximum capacity of the tyres tool:	150 kg
Maximum capacity of the object holder tray:	20 kg
Maximum cage height: (between ground and cage floor)	5.57 m
Maximum tyres tool height: (between ground and platform)	5.20 m
Minimum height between ground and tyres tool:	4 cm
Loading platform stroke:	94 cm
Internal dimensions of the cage:	68 cm x 55 cm
Tyres tool dimensions:	60 cm x 55 cm
Dimensions of the loading platform:	76 cm x 46 cm
Maximum longitudinal / transversal gradient in the raised position:	1.5° / 1.5°
Maximum longitudinal / transversal gradient in the transport position:	5° (9%) / 11° (19%)

Table NOTE:

* : Maximum pressure per outrigger considering that the weight of the picker plus the maximum load on the cage are entirely distributed on one side of the machine only (fully asymmetrical load)

BASIC CONSTRUCTION DATA

Machine frame

The frame of the machine (called base) is made completely of aluminium profiles with rectangular sections. All essential components for normal machine operation in stable conditions are installed on the frame.

Extensible structure

The extensible structure consists of special extruded aluminium alloy profiles that slide on each other on runners with nylon wheels. The kinematic connection between profiles is carried out with chains. A hydraulic cylinder is installed between the first and second profile, powered by the hydraulic unit, to lift the structure. The chains interconnect the extensible structure elements so that they lift simultaneously.

Loading platform cage and tyres tool

The cage is made entirely of extruded aluminium profiles, whereas the loading platform and tyres tool are made of metal.
The base floor of the cage is made of 3 mm thick slip-proof aluminium sheet steel.

Exposure to vibration

The stock picker does not produce vibrations that pose a risk to the health of operators. The weighted acceleration that the entire body is exposed to is less than 0.5 m/s^2

Acoustic emissions

The A-weighted emission sound pressure level is below 70dB

ATTENTION

THE ELEVAH 75 TIRES STOCK PICKER HAS BEEN TESTED BY THE MANUFACTURER FOR THE PURPOSE OF CALCULATING THE MAXIMUM PERMITTED TRANSVERSE AND LONGITUDINAL ANGLES.

SECTION 3. *PREPARATION AND INSPECTION*

PERSONNEL TRAINING

The stock picker is a machine designed to carry, lift, stack or arrange loads on shelving; therefore, it is essential for it to be used and serviced by trained personnel only.

The machine cannot be used by persons under the influence of alcohol or drugs or subject to epileptic seizures, dizziness or loss of physical control.

Operator training

Operator training must include the following:

1. Use and limits of the machine's ground and emergency controls, and of the safety systems;
2. Signs/stickers for controls, instructions and warnings on the machine;
3. Rules defined by the employer and government regulations;
4. Sufficient knowledge of the mechanical operation of the machine to be able to recognise a fault;
5. Safe methods for using the machine in the presence of overhead obstacles, other moving equipment and obstacles, dips, holes and slopes.

Training supervision

Training must be carried out under the supervision of a skilled person, in an open space clear of obstacles. and must continue until the trainee can safely operate and use the machine.

Operator responsibility

The operator must be trained with regard to the responsibility and authority to switch off the machine in the event of a fault or any other unsafe condition relating to both the machine and the work area.

NOTE: *the owner shall provide skilled personnel for training upon delivery of the first units and even later, if required by the user or personnel.*

FUNCTIONAL TEST

At the end of the "DAILY INSPECTION" (section 6), carry out a functional test on all systems in an area free from overhead and ground obstacles.

ATTENTION

IF THE MACHINE IS NOT WORKING PROPERLY, SWITCH IT OFF IMMEDIATELY. ALERT MAINTENANCE PERSONNEL OF THE PROBLEM. DO NOT USE THE MACHINE UNTIL IT IS DEEMED SAFE FOR USE.

Carry out a functional test as detailed below.

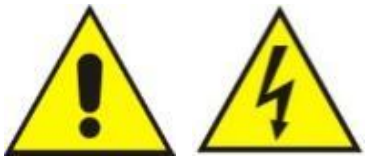
1. **Check the manual descent valve for proper operation (EMERGENCY DESCENT).**
2. **Carry out the specified operations from the cage control console.**
   - **a.** Make sure the control console is correctly assembled and securely fastened;
   - **b.** Lift and lower the cage to check that lifting and lowering take place regularly;
   - **c.** Make sure all machine functions are disabled when the emergency stop button is pressed.
   - **d.** Activate all functions and check all limit, main and activation switches for proper operation:
     - Machine brakes – Drive the machine on a slope (not exceeding the nominal operating capacity on a slope) and stop it to make sure the brakes hold it;
     - Tilt alarm – with the cage completely lowered, drive the machine on a surface with a gradient greater than the maximum allowed in any direction (do not exceed the nominal operational capacity on a slope). Any attempt to lift the cage causes the machine to signal a tilt exceeding the admissible range;
     - Transmission speed reduction – When the cage is lifted, the transmission speed drops in comparison to the speed with lowered cage;
   - **e.** Make sure the loading platform is working correctly. Ensure it travels smoothly without any jolting, and that its up/down movement is not obstructed. Make sure all its parts are intact.

SAFETY WARNINGS FOR OPERATORS

Do not install and use the machine in the following cases:

OUTDOORS AND IN WINDY CONDITIONS

(DANGER OF LOSS OF STABILITY AND OVERTURNING)



CLOSE TO OVERHEAD OBSTACLES (power lines, overhangs, etc.)

(ELECTROCUTION, IMPACT AND COLLISION HAZARD)

WITH EXCESSIVE LOADS COMPARED TO ALLOWED LIMITS

(DANGER OF LOSS OF STABILITY AND OVERTURNING)

ON FLOORING WITH LOWER CAPACITY THAN THE WEIGHT OF THE MACHINE

(DANGER OF LOSS OF STABILITY AND OVERTURNING)

IN ANY CIRCUMSTANCE NOT SPECIFICALLY INDICATED UNDER THE OPERATING CONDITIONS IN THIS MANUAL

(GENERAL DANGER)

ATTENTION

THE ELECTRICAL SYSTEM OF THE MACHINE IS NOT EXPLOSION-PROOF (NO ATEX): THEREFORE ITS USE IN AREAS SUBJECT TO ATEX RISK SHOULD BE STRICTLY AVOIDED.

When travelling on the ground:

- ✓ Move the machine with caution avoiding sudden manoeuvres;
- ✓ **DO NOT CARRY PEOPLE on the base frame of the machine and in any position other than inside the cage;**
- ✓ Check the structural condition and cleanliness of the surfaces that the machine is used on (ensure the surface is suitable for the weight of the machine in work conditions).

During ascent and descent:

- ✓ Comply with the maximum capacity weights allowed in the cage;
- ✓ Ensure there are no overhead obstacles along the vertical trajectory;
- ✓ Do not cause dangerous vibrations and/or oscillations that would result in loss of machine stability and possible overturning.

ATTENTION

THE STOCK PICKER IS FITTED WITH AN AUTOMATIC BASE LEVELLING CHECK SYSTEM. WHEN THE MACHINE EXCEEDS THE MAXIMUM TILT ALLOWED BY THE MANUFACTURER (see the technical specifications of the machine), IT EMITS A WARNING SOUND. IN THESE CONDITIONS, WITH THE CAGE IN STAND-BY POSITION, THE MACHINE CAN STILL MOVE WHEREAS, WITH THE CAGE LIFTED, ANY MOVEMENT OTHER THAN CAGE DESCENT IS PREVENTED.

Prohibition signs:


Prohibition to overload the machine beyond the indicated limits


Prohibition to use the machine as an aerial platform to carry out work at a height


Prohibition to remove or tamper with the machine's stability devices (sensors, ballasts, etc.)


Prohibition to remove or tamper with the machine's safety and protective devices


Prohibition to climb on or off the cage in places other than the appropriate gate


Prohibition to increase outreach or work height of the machine using additional equipment (such as ladders)


Prohibition to cause oscillations on the machine so as not to destabilise it


Prohibition to install any additional device that increases the wind load on the machine (such as warning signs)


Prohibition to come into contact with live electrical conductors


Prohibition to climb on/off the cage when elevated


Prohibition to lift/lower the cage without operator on board


Prohibition to use the machine to transport pallets of any type and shape

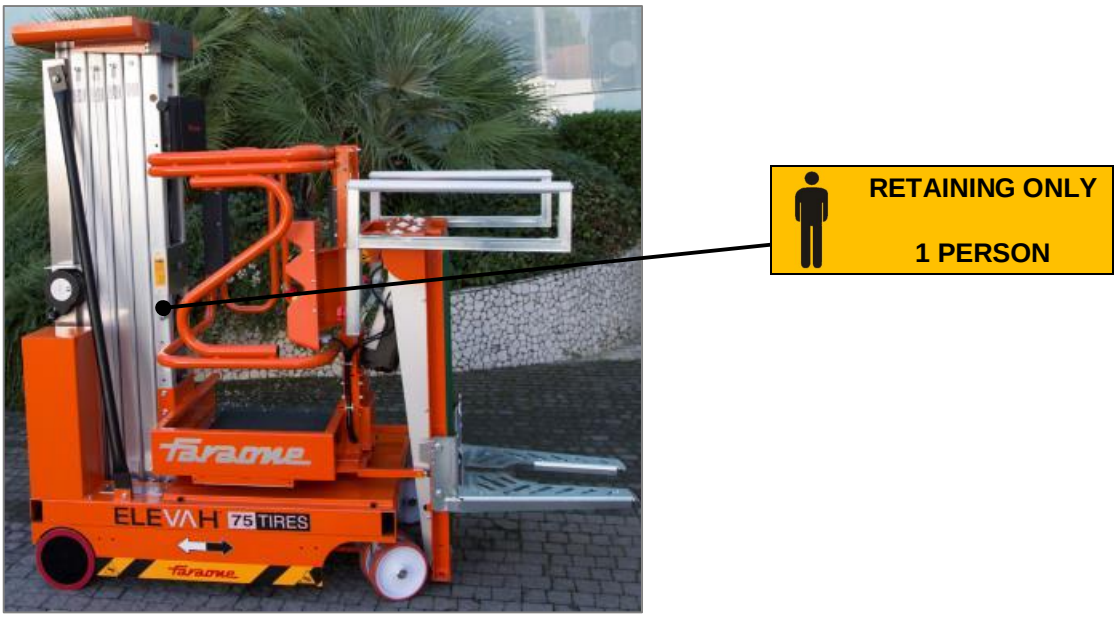
The Manufacturer recommends using the following personal protective equipment for safe use of the machine:

Protection of lower limbs

NON-SLIP SHOES

ATTENTION

THE USE OF ANY ADDITIONAL SPECIFIC PERSONAL PROTECTIVE EQUIPMENT MUST BE CHECKED BASED ON THE ASSESSMENT OF THE SPECIFIC RISKS, CARRIED OUT BY THE EMPLOYER



SECTION 4. *CONTROLS, WARNING LIGHTS AND MACHINE OPERATION*

INTRODUCTION

ATTENTION

THE MANUFACTURER DOES NOT HAVE ANY DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION. THE USER AND OPERATOR ARE REQUIRED TO COMPLY WITH THE CORRECT SAFETY PROCEDURES.

The Stock picker model ELEVAH 75 TIRES is an electric machine fitted with a cage assembled onto a lifting mechanism with aluminium uprights.

The Stock picker is **DESIGNED TO CARRY, LIFT, STACK OR ARRANGE TYRES ON SHELVING, CONTROLLED BY AN OPERATOR STATIONED IN THE DRIVER'S POSITION, WHICH CAN BE RAISED AT THE SAME TIME AS THE LOAD HANDLING DEVICE.**

The main control station is located in the cage. The operator can drive the machine and lift and lower the cage and handle the tyres tool from the control console of the cage.
The vibrations generated by the machine do not constitute any danger for the operator who is inside the cage.
The continuous sound pressure level (A-weighted) in the cage is less than 70 db (A).

MACHINE OPERATION

Preliminary operations

The following control conditions must be met, before being able to operate the machine with the controls.

- The battery voltage must be sufficient to operate the machine.
- The emergency stop switch with removable key, located on the control station in the cage must be on RESET.

CHARGING THE BATTERY

The machine is fitted with a battery charger with AC voltage input/DC voltage output. The battery charger automatically stops charging when the batteries are fully charged.

ATTENTION

KEEP SPARKS, NAKED FLAMES OR CIGARETTES AWAY FROM THE BATTERIES. PROVIDE ADEQUATE VENTILATION WHILE CHARGING. 0DO NOT CHARGE A FROZEN BATTERY.

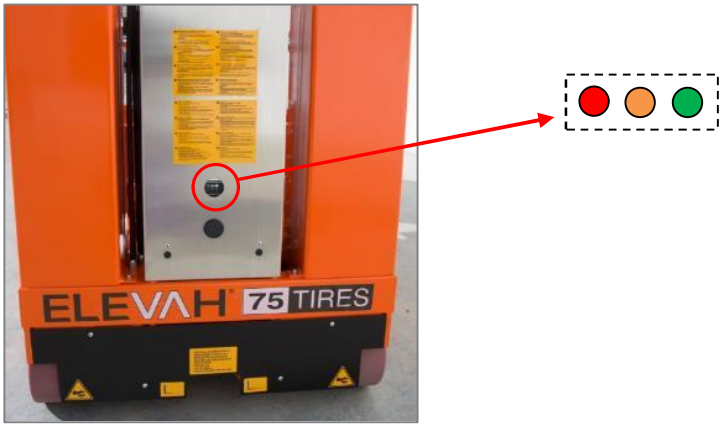
NOTE: *when the battery charger is connected to an AC socket, the transmission function of the machine is disabled.*

Battery charging procedure

1. Park the machine in a well-ventilated area, near an AC electric socket;
2. Turn the main switch to OFF and remove the key;
3. Connect the battery charger to a correctly installed and earthed socket according to regulations in force.

Battery charge warning lights

The battery charge warning lights are located on the right side of the machine's base.



While recharging the battery, the **RED LED** indicates the beginning of the charging cycle.
Charging stops automatically with no need for operator action, and is indicated by the **GREEN LED** on.
While using the machine, the battery charge will change from fully charged (*indicated by the green LED*), to partially charged (*indicated by the orange LED*) to low battery (*indicated by the red LED*).

Perform the following operations carefully:

- ✓ Charging must be carried out in a well-ventilated area, where it is forbidden to smoke and use naked flames;
- ✓ It is recommended to avoid using any possible source of sparks near charging batteries;
- ✓ It is recommended to use anti-static clothing;
- ✓ Do not lift or tilt the batteries;
- ✓ Do not attempt to start the machine;

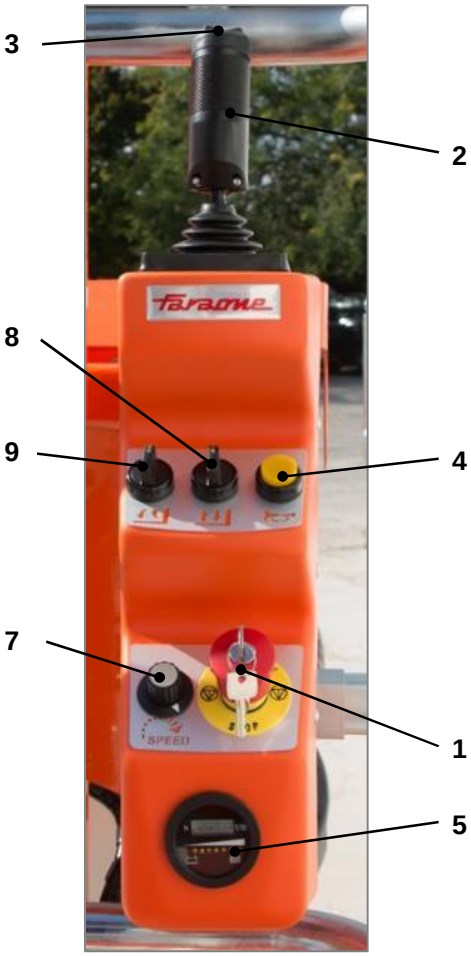
ATTENTION

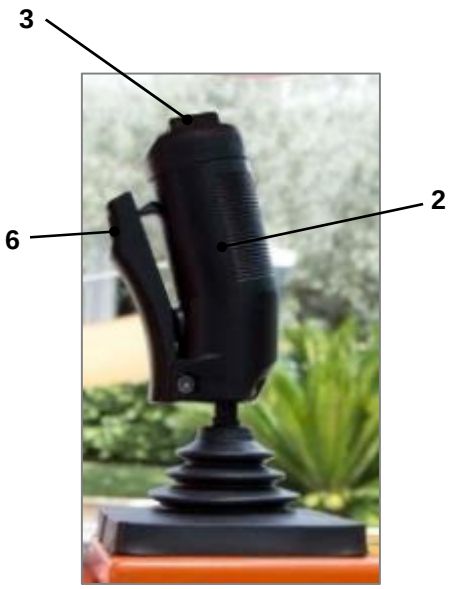
IT IS RECOMMENDED TO NEVER LET THE BATTERIES GO COMPLETELY FLAT.

ATTENTION

WHEN THE MACHINE IS PUT OUT OF SERVICE FOR A LONG TIME, THE BATTERIES MUST BE COMPLETELY AND EVENLY CHARGED AT LEAST ONCE A WEEK AND STORED UNPLUGGED TO STOP THEM FROM GOING FLAT.

CAGE CONTROL CONSOLE





1. Emergency stop button with switch with removable key;
2. Multi-purpose joystick control with dead man enabling control;
3. Cage lifting/lowering selector;
4. Audible device button;
5. Machine operation/battery charge hours display;
6. Dead man enabling control;
7. Transport position speed regulator;
8. Tyres tool ascent/descent control;
9. Tyres tool tilting control (OPTIONAL).

General information

Before operating the machine from the cage control console, the following conditions of the controls must be met:

- The battery voltage must be sufficient to operate the machine.
- The emergency stop switch with removable key, located on the control station in the cage must be on RESET.

Machine operation/battery charge hours display

The display shows the machine's operating hours (expressed in tenths of an hour and only calculating the time of any machine movement) as well as battery charge level (from maximum charge when all yellow LEDs are on, to minimum charge when the red LED is on).

Emergency stop/switch-off button with removable key

The emergency button located inside the control console of the cage is provided with a removable key to prevent the machine from being used by unauthorised personnel. Press the button and remove the key to disconnect the general power supply.

POWER SUPPLY DISCONNECTION

PUSH INWARDS to engage the emergency stop and remove the key to prevent unauthorised use.

POWER SUPPLY CONNECTION

Insert the key and TURN clockwise and RELEASE to restore the emergency stop.

NOTE: *in order for the machine to operate, the emergency stop button on the cage must be on RESET.*

ATTENTION

SWITCH THE MACHINE OFF AND ALWAYS REMOVE THE KEY WHEN THE STOCK PICKER IS NOT IN USE TO PREVENT UNAUTHORISED USE.

Multi-purpose joystick control

The joystick is used to control the following machine functions:

- Transmission/steering
- Cage lifting and lowering

Transmission mode

PRESS THE DEAD MAN BUTTON ON THE JOYSTICK, then move the joystick in the required direction.
The transmission power is applied proportionally to the shift of the joystick from the centre.

NOTE: *the pedal switch must also be pressed and held to activate machine functions*

Cage lifting mode

PRESS THE DEAD MAN BUTTON ON THE JOYSTICK, then:

1. Press to LOWER the cage
2. Press to LIFT the cage

NOTE: *the pedal switch must also be pressed and held to activate machine functions*

ATTENTION

IF THE TILT ALARM IS TRIGGERED WHILE THE OPERATOR IS DRIVING WITH THE CAGE UP, LOWER THE CAGE ALL THE WAY DOWN AND MOVE ON TO A SOLID AND HORIZONTAL SURFACE.
BEFORE LOWERING THE CAGE MAKE SURE THAT THERE IS NO PERSONNEL IN THE AREA BELOW.

Tyres tool ascent/descent control

1. Turn the selector to the RIGHT to LOWER the tyres in the tyres tool.
2. Turn the selector to the LEFT to LIFT the tyres in the tyres tool.

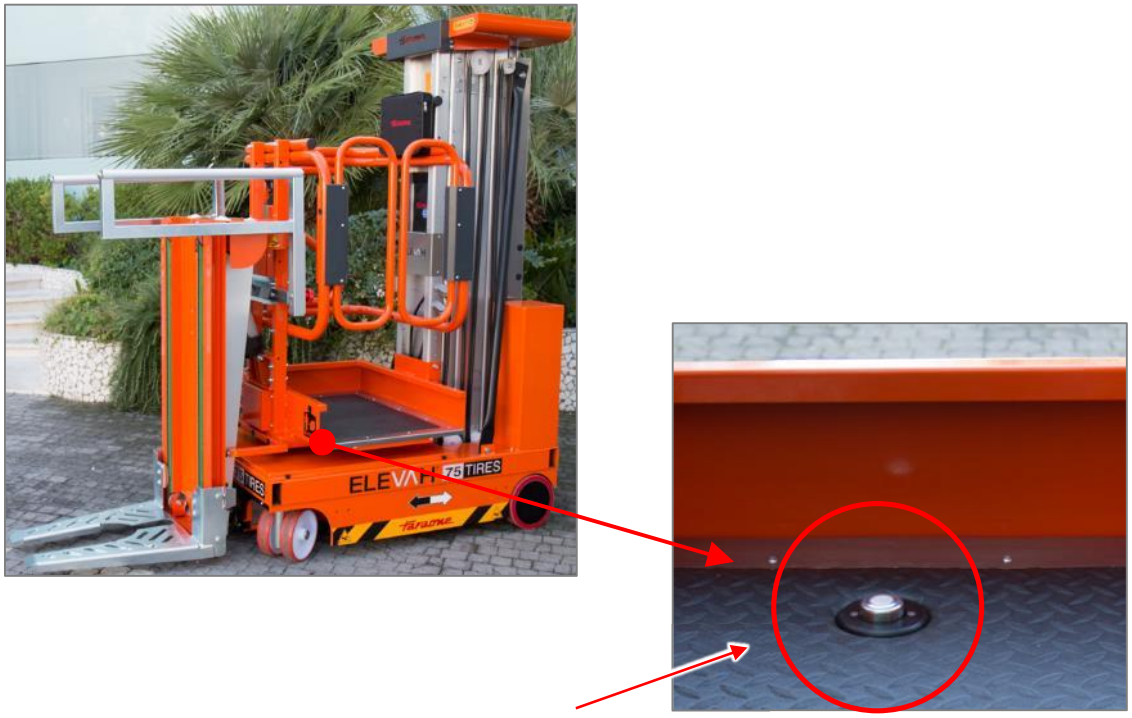
Tyres tool tilting control (OPTIONAL)

1. Turn the selector to the RIGHT for the tyres tool to TILT UPWARDS.
2. Turn the selector to the LEFT for the tyres tool to TILT DOWNWARDS.

Transport position speed regulator

When the machine is in transport position (cage fully lowered), it is possible to regulate the transmission speed by acting on the regulator.
By turning the regulator anti-clockwise it is possible to lower the translation speed.
On the other hand, by turning the regulator clockwise it is possible to increase the translation speed.

PEDAL SWITCH



FUNCTIONS PEDAL SWITCH

Place your foot on the switch, hold it down to actuate the joystick functions.

NOTE: *both pedal-switch and joystick actuation lever must be held down in order to actuate the joystick functions.*

ACCESS TO CAGE

To access the cage, the operator must push the moving parts of the entrance gate inwards; once inside, the gate will close by itself.
The machine will not enable any controls if the gate is not closed properly.

ATTENTION

MAKE SURE THERE ARE NO OBSTACLES PREVENTING THE CAGE GATE FROM CLOSING PROPERLY

ATTENTION

DO NOT OPEN THE GATE OF THE CAGE WHEN IT IS SUSPENDED SO AS TO AVOID THE RISK OF FALLING FROM A HEIGHT AND BLOCKING THE MACHINE FUNCTIONS

ATTENTION

MAKE SURE YOUR HANDS DO NOT GET CAUGHT WHEN CLOSING THE GATE

ATTENTION

DO NOT RAISE/LOWER THE CAGE IF THE MOBILE RAILING DOES NOT APPEAR TO CLOSE PROPERLY, AND HAVE IT REPAIRED (CONTACT THE MANUFACTURER, IF REQUIRED)

ATTENTION

THE TOTAL NOMINAL LOAD IS OBTAINED BY ADDING THE LOAD IN THE CAGE + THE LOAD ON THE TYRES TOOL + THE LOAD IN THE LOADING PLATFORM.
THIS VALUE MAY NOT EXCEED 250 KG IN ANY CASE

ATTENTION

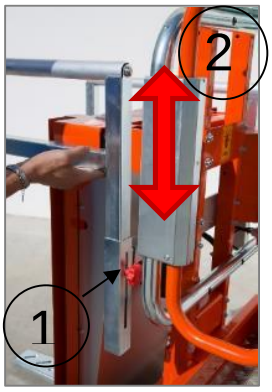
THE MACHINE WAS NOT DESIGNED TO TRANSPORT PALLETS OF ANY TYPE AND SHAPE.

ROLLER CONVEYOR

To simplify tyre loading and unloading, the tyres tool is equipped with two roller conveyors, located on its sides.
Given the multiple tyre options available, these rollers adjust themselves in order to adapt to the size of the tyres loaded.
They are adjusted by locking knobs, which, when loosened, enable each individual roller to be adjusted accordingly.

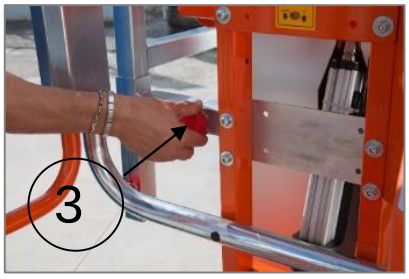
Height adjustment:

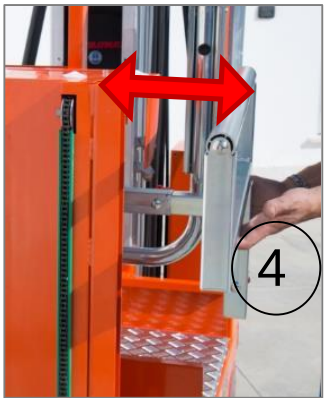
1) Loosen the locking knobs (1), adjust the desired height of the roller (2) and tighten the knobs (1).



Width adjustment:

2) Loosen the locking knobs (3), adjust the desired width of the roller (4) and tighten the knobs (3).





TYRES TOOL

To load the tyres onto the shelves, proceed as follows:

PHASE 1:

Place the forks of the loading platform in the tyre cart (1) *(optional or included in your supply)*, making sure the forks have been inserted all the way under the load, and lift (2).

ATTENTION

MAKE SURE THE FORKS ARE PROPERLY INSERTED ALL THE WAY UNDER THE LOAD

TYRES LIFTING ARM (OPTIONAL)

The tyres lifting arm is an optional accessory designed to lift the tyres and simplify horizontal storage. To use this device, proceed as follows:

1) Lift the tyres tool until the first tyre is level with the roller conveyors (1).
2) Couple the rim with the hooks (2) of the lifting arm and lower the tyres tool slightly.
3) Transfer the tyre to the desired position (3) and release the hooks from the rim.

TYRES TOOL WITH TILTING (OPTIONAL)

To load the tyres onto the shelves, proceed as follows:

PHASE 1:

Place the forks of the loading platform in the tyre cart (1) *(optional or included in your supply)*, making sure the forks have been inserted all the way under the load.

ATTENTION

MAKE SURE THE FORKS ARE PROPERLY INSERTED ALL THE WAY UNDER THE LOAD

PHASE 2:

Make sure the tyre cart *(optional or included in your supply)* is positioned correctly and is centred above the loading forks before lifting.

PHASE 3:

Using the relative control, tilt the loading platform until it almost reaches a horizontal position.

PHASE 4:

Using the relative control, lift the forks in order to move the tyres towards the operator

PHASE 5:

Roll the tyres onto the shelves one at a time. Once a tyre has been unloaded onto the shelf, lift the loading forks so that the remaining tyres move closer to the operator, thus simplifying unloading operations.

To load the tyres from the shelves onto the transport cart, follow the instructions described in PHASES 1-5 in reverse order.

PARKING THE MACHINE

1. Drive the machine to a well-protected and ventilated area.
2. Make sure the cage is completely lowered, press the emergency stop/switch-off button with the removable key and take out the key.

NOTE: *if necessary, charge the batteries in preparation for the following work day.*

ATTENTION

SWITCH THE MACHINE OFF AND ALWAYS REMOVE THE KEY WHEN THE STOCK PICKER IS NOT IN USE TO PREVENT UNAUTHORISED USE.

TRANSPORT AND LIFTING PROCEDURES

General information

The stock picker can be moved to a work site using one of the following methods:

- By driving the machine along the route on its base wheels, if the surface it is travelling on allows doing so.
- By moving it with a forklift (*see the figure below - check the gross weight of the machine in the Operational Technical Data Table for the machine*).

ATTENTION

LOAD THE MACHINE, ONLY IN A VERTICAL POSITION, ONTO A HEAVY DUTY VEHICLE HAVING A USEFUL LOAD CAPACITY THAT WITHSTANDS THE TOTAL WEIGHT OF THE MACHINE (CHECK THE GROSS WEIGHT IN THE OPERATIONAL TECHNICAL DATA TABLE OF THE MACHINE)

ATTENTION

SECURE THE MACHINE SO THAT IT DOES NOT GET DAMAGED DURING TRANSPORT.

Handling with a forklift truck

The machine may be lifted with a forklift truck. In this case, it must be picked up from the front in order to position it in a stable way onto the forks (see picture below).

ATTENTION

ONLY LIFT THE MACHINE WITH THE CAGE COMPLETELY LOWERED.

SECTION 5. *EMERGENCY PROCEDURES*

This section shows the operations to be carried out in the event of an emergency during machine operation.

EMERGENCY OPERATION

Operator unable to control the machine

CONDITIONS IN WHICH THE MACHINE OPERATOR IS IMMOBILISED, TRAPPED OR UNABLE TO OPERATE OR CONTROL THE MACHINE.

- The other personnel must only operate the machine from the emergency controls on the ground in case of absolute need.
- The machine controls must only be used by qualified personnel. DISCONTINUE MACHINE ACTIVITY IF THE CONTROLS ARE NOT WORKING CORRECTLY.
- In case of incorrect operation of the controls or power outage, the emergency stop must be pressed and a qualified operator must carry out the EMERGENCY DESCENT procedure from the ground.

Proceed as follows:

1. Press the emergency button to disconnect the power supply;
2. ATTENTION: make sure there is no one within the working range of the machine;
3. Gradually loosen the knurled knob fitted underneath the base carriage where the hydraulic lifting cylinder is to lower the cage (1);

4. ATTENTION: constantly monitor the entire cage descent phase;
5. Once descent has been completed, tighten the knob again;
6. Reset the emergency button to enable the machine's power supply.

ATTENTION

THE OPERATIVE STAGES OF THE EMERGENCY DESCENT PROCEDURE ARE ILLUSTRATED ON AN APPROPRIATE DECAL NEAR THE EMERGENCY DESCENT CONTROL.

Cage blocked in overhead position

If the cage gets blocked or stuck in overhead equipment or structures, transfer the person from the cage to a safe place before freeing the machine.
Recovery equipment can be used to allow the occupant to climb down from the cage. A crane or forklift may be used to stabilise machine movement.

REPORTING THE INCIDENT

Faraone Industrie Spa must be immediately informed of any incidents involving a Faraone product. Contact the factory by telephone and provide all the necessary details, even if no injuries or evident damage to property are involved.

ATTENTION

AFTER AN ACCIDENT, INSPECT THE ENTIRE MACHINE AND CHECK ALL FUNCTIONS. DO NOT LIFT THE CAGE UNTIL YOU ARE CERTAIN THAT ALL DAMAGE HAS BEEN REPAIRED, AS REQUIRED, AND THAT ALL CONTROLS ARE WORKING PROPERLY.

SECTION 6. *DAILY INSPECTION*

Start the full inspection from point (a), as set out in the following list. Proceed around the machine checking all listed conditions in sequence.

ATTENTION

TO PREVENT ANY INJURIES, ENSURE THAT THE MACHINE POWER SUPPLY IS SWITCHED OFF DURING THE "FULL INSPECTION."
DO NOT USE THE MACHINE BEFORE REPAIRING ALL FAULTS.
DO NOT FAIL TO CARRY OUT A VISUAL INSPECTION OF THE LOWER PART OF THE BASE FRAME. ENSURE THE AREA IS CLEAR OF OBJECTS OR DEBRIS THAT MIGHT CAUSE SERIOUS DAMAGE TO THE MACHINE.

NOTE FOR INSPECTION: *besides complying with the above criteria, ensure for each component that all parts are in place, securely fixed and not loose, and that there is no visible damage, leaks or signs of excessive wear.*

a) **Drive wheels/free wheels and swivel wheels**
Check there is no debris attached to the wheels or around them;
b) **Base frame**
Ensure there are no loose wires or cables hanging underneath the base, check for any dents, breaks or cracks on the profiles;
c) **Manual descent control valve** – See note pertaining to functional check;
d) **Motor/pump/tank unit**
No conspicuous hydraulic leak, hydraulic oil filling level at the "full" line;
e) **Batteries**
Charge them as required;

f) **Cage assembly and entrance doors**
Proper locking of the cage and entrance doors operating correctly;
g) **Control console in the cage**
Controls secured, legible signs, emergency stop switch in the reset position for operation and legible control signs;
h) **Extensible structure unit**
Structure profiles, sliding inserts, chains, belts, sequential activation cables, pulleys able to turn freely;

ATTENTION

DO NOT USE THE MACHINE BEFORE REPAIRING ALL DISCOVERED FAULTS / MALFUNCTIONS

SECTION 7. *ROUTINE MAINTENANCE*

ATTENTION

MAINTENANCE CAN BE CARRIED OUT BY COMPANY PERSONNEL WITH EXPERIENCE IN MAINTENANCE WORK AND ADEQUATELY TRAINED WITH REGARD TO SAFETY STANDARDS IN FORCE.

ATTENTION

IT IS RECOMMENDED TO ONLY USE SPARE PARTS APPROVED BY THE MANUFACTURER.

ATTENTION

CONTACT THE MANUFACTURER IF IN DOUBT WITH REGARD TO THE FREQUENCY AND METHOD OF ROUTINE AND/OR EXTRAORDINARY MAINTENANCE ACTIVITIES.
DO NOT TAKE INITIATIVES IF UNSURE OF WHAT YOU ARE DOING.

ATTENTION

TO CARRY OUT MAINTENANCE AND/OR CLEANING OPERATIONS ON THE MACHINE THAT REQUIRE THE EXTENSIBLE STRUCTURE TO REMAIN IN A PARTIALLY EXTENDED POSITION, ANCHOR THE CAGE SAFELY (FOR EXAMPLE, USING A SUPPORTING STRUT ON THE GROUND) TO PREVENT IT FROM ACCIDENTALLY FALLING ONTO THE OPERATOR PERFORMING THE MAINTENANCE OPERATIONS.

ATTENTION

THE RECOMMENDED FREQUENCY OF LUBRICATION AND OF THE WEAR CHECKS IS BASED ON NORMAL USE. IF THE MACHINE IS USED FOR HEAVY DUTY WORK, SUCH AS A HIGH NUMBER OF CYCLES, UNFAVOURABLE POSITION, CORROSIVE/DIRTY ENVIRONMENT, ETC., THE USER MUST INCREASE THE FREQUENCY OF THE CHECKS ACCORDINGLY.

MONTHLY MAINTENANCE

- ***Torque Reducer***
  Check the oil level, and the lubricant filler cap and drain plug of the Torque Reducer for proper closing;

QUARTERLY MAINTENANCE

- ***Check there is no clearance, mechanical parts not correctly secured and/or bent and no damaged welds on parts/components;***

- ***Check the integrity of the structural profiles;***

- ***Check the emergency descent valve for proper operation.***
  Lift the cage to a height and execute an “emergency descent”, as indicated in the appropriate section of this manual.

- ***Hydraulic Oil***
  Check the hydraulic oil level and top up, as required.
  Refer to the specifications in the appropriate paragraph for information regarding hydraulic oil checks and top-up;

- ***Check the hydraulic oil piping connections and make sure there are no leaks;***

- ***Torque Reducer***
  Clean the outside of the reducer carefully, to remove any filth built up over time which limits heat dissipation ability.

- ***Battery Inspection***
  Periodically check for any corrosion and tightening of the terminals and any acid top-ups required in the battery (if lead/acid type).

- ***Check the cage and entrance doors***
  Proper locking of the cage and entrance doors operating correctly.

- ***Check the controls in the cage and on the ground*** (if applicable)
  Controls secured, legible signs, main power supply selection switch operable, emergency stop switch in the reset position for operation and legible control signs;

- ***Check lubrication and wear of the lifting chains***
  When restoring lubrication, make sure the chains are not dirty or soiled with mud, rubble, ice or other foreign matter. Clean the chains thoroughly before lubricating them.
  The lifting chains must be lubricated with the extensible structure completely closed, by gravity, from the top, directly on the return wheels (where required, temporarily remove the protective cover to access the chains). For the wear condition of chains, refer to “Checks on the lifting chains.”

- ***Tyres tool tilting control actuator (optional)***
  Clean the outside of the actuator carefully, to remove any filth built up over time. For further information, refer to the relative sheet in section 8 “MAINTENANCE OPERATING INSTRUCTIONS.”

- ***Check the wheels for wear***
  Check there is no debris on the wheels or around them. Check the tread for wear or damage.
  The wheels must be replaced if the edges are worn or the profiles deformed. If the wheels have significant damage on tread or sides, immediately assess the severity of the damage before operating the machine again.

MAINTENANCE every 1000 hrs of work

- ***Torque Reducer***
  Check tightening of the screws.

MAINTENANCE EVERY SIX MONTHS

- ***Lubrication of moving parts and sliding wheels check***
  The extensions slide on runners fitted with nylon wheels. Four runners, two upper and two lower, are fitted for each pair of extensions. 3 wheels are fitted on each runner, for a total of 12 for each pair of extensions. On each runner, one of the 3 wheels rotates on an adjustable axle. This allows the wheels to be adjusted when they are worn thus resulting in possible play of the moving extensible structure parts.
  Contact the Manufacturer for further information and instructions regarding the adjustment of the sliding wheels of the extensible structure, when abnormal play is observed.

- ***Transmission motor***
  Check the brushes for wear and replace them if required, and check the manifold.
  Refer to the instructions in the relative paragraph for information regarding checking and replacing the brushes;

- ***Tyres tool lifting motor***
  Check the brushes for wear and replace them if required, and check the manifold.

MAINTENANCE EVERY TWO YEARS

- ***Hydraulic Oil***
  Replace the hydraulic oil in the tank.
  Refer to the specifications described in the appropriate paragraph for hydraulic oil change.

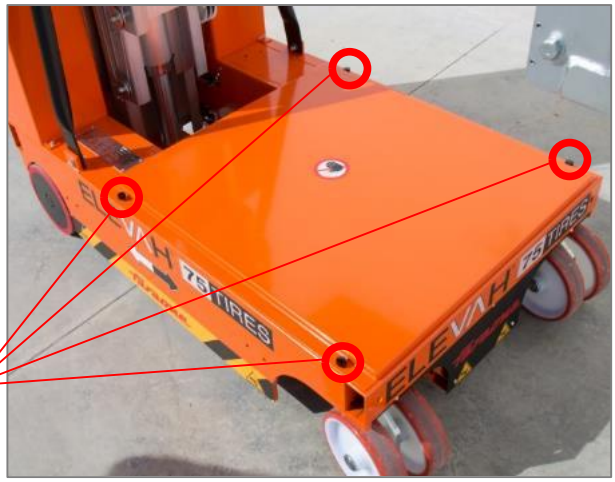
- ***Torque Reducer***
  Inspect the reducer and change the oil.
  Refer to the instructions in the appropriate paragraph for information on changing the oil of the reducer;

SECTION 8. *MAINTENANCE INSTRUCTIONS*

LIFTING THE CAGE FOR MAINTENANCE

To perform maintenance below the cage, use a forklift and proceed as follows:

1. Manually unscrew the four knobs at the corners of the protective casing of the base;



2. Insert the forks below the cage, as pictured, and lift with the utmost care;

3. Support the cage with the forklift truck throughout the maintenance operation;

4. When the operation is over, lower the cage slowly all the way down and refit the base protective casing by re-screwing the four knobs.

BATTERY MAINTENANCE

It is required to periodically check the terminals for any corrosion as well as for proper tightening
If required, replace the batteries as follows:

1. Make sure the machine is not connected to an external mains supply (charging batteries);
2. Use the specific switch to disconnect the machine's power supply;
3. Open the protective cover of the battery compartment;
4. Follow the instructions for lifting the cage as described in paragraph “LIFTING THE CAGE FOR MAINTENANCE;”
5. Loosen the connection terminals of the batteries (positive pole and negative pole);
6. Remove the batteries and replace them with new ones;
7. Connect the terminals of the batteries, making sure to do so correctly (red cable for the positive pole, black cable for the negative pole) and tighten them;
8. Lower the cage all the way by following the instructions described in paragraph “LIFTING THE CAGE FOR MAINTENANCE;”
9. Close and lock the protective cover.

ATTENTION

SHOULD THE BATTERY BE DAMAGED, USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT TO PROTECT YOUR HANDS AGAINST CHEMICAL AGGRESSION WHEN REPLACING THE BATTERY.
DISPOSE OF THE BATTERIES IN ACCORDANCE WITH THE LAWS IN FORCE.
REPLACE THE BATTERIES WITH ONES IDENTICAL TO THOSE SUPPLIED BY THE MANUFACTURER.

CHANGING TORQUE REDUCER OIL

ATTENTION

PAY ATTENTION BECAUSE DURING NORMAL OPERATION THE SURFACES ARE HOT

Change the waste oil when the reducer is still hot.
Before changing the lubricant, make sure that the product has been at a standstill for about 30 minutes, a sufficient amount of time for the oil temperature to drop to levels which are not hazardous for the operator.
Before introducing new oil, flush out any particles inside the casing using the same type of oil.
The new oil must only be added when you are sure that there is no dirt.

Follow these 5 steps to change the oil properly:

1. Place a sufficiently capacious container underneath the drain plug.
2. Remove the filler cap and drain plug, let the lubricant flow out and wait as long as necessary for it to drain completely.
3. Replace the gaskets of the filler cap and drain plug and carefully clean the magnet, if any.
4. Screw the drain plug back on and fit the reducer in its final position.
5. Fill the reducer with new oil until it reaches the level indicated in the cap or sight glass and tighten the filler cap.

HYDRAULIC OIL CHANGE

Faraone Industrie Spa recommends using hydraulic oil with viscosity index 32. It is strongly advised against mixing oils of different makes or types, since they may not contain the necessary additives or viscosity may be different.

ATTENTION

THE HYDRAULIC OIL MUST BE TOPPED UP/CHANGED WITH THE CAGE FULLY DOWN; IF THE HYDRAULIC OIL TANK IS UNDER THE CAGE, KEEP IT AT A HEIGHT OF APPROXIMATELY ONE METRE AND PERFORM TOPPING UP/CHANGE.

ATTENTION

DISPOSE OF THE WASTE OIL IN ACCORDANCE WITH THE LAWS IN FORCE.

TYRES TOOL TILTING ACTUATOR (OPTIONAL)

Manual release

Manual operation of the actuator can only be used in the event of a power failure.

To move the actuator manually, remove the plastic cover and use the Allen wrench to activate the actuator.

6 mm Allen wrench

Maintenance

- Regularly clean the actuator to remove any dust and dirt and inspect it for any mechanical damage or wear;
- Inspect the coupling points, wires, piston rod, cabinet and plug, and make sure the actuator works correctly;
- To ensure that the pre-greased air chamber will remain lubricated, only wash the actuator when the rod is completely retracted;
- The actuator is a closed unit and therefore does not require any internal maintenance.

ATTENTION

THE POWER SUPPLY MUST BE DISCONNECTED DURING MANUAL OPERATION. IF THE ACTUATOR IS TO BE ACTIVATED MANUALLY, ONLY ACTIVATE IT BY HAND, OTHERWISE THERE IS THE POTENTIAL RISK OF AN OVERLOAD AND DAMAGE TO THE ACTUATOR ITSELF.

TRANSMISSION MOTOR

Checking the condition of the motor left in the housing.

1. Remove the clamp from the manifold side support;
2. Use compressed air to remove carbon dust deposits on the internal surfaces of the brush side support;
3. Check the manifold, the length of the brushes and the smooth movement of the latter in their housings;
4. Using a 500-volt megohmmeter, measure the insulation resistance of the armature (terminals A1 - A2) and field (terminals D1 - D2) to the casing, which must be higher than 0.1 mΩ; if it is lower, lift the brushes and test the field and armature again separately to check whether one or both are damaged. In this case, remove the motor if the manifold requires maintenance and the brushes need to be replaced.

Checking the brushes

Check smooth movement as well as length of the brushes to ensure good performance.

Dimension	Maximum length	Minimum length
13 x 9	25 mm	13.5 mm
16 x 9	20 mm	7 mm
20 x 10	22 mm	8 mm

When replacing brushes, pay utmost attention to the welds.

Checking the manifold

If the surface of the manifold bears signs of burns, reduction of the diameter in relation to the brushes or eccentricity, repeat turning and dressing of the surface and undercutting between the slats.

NOTE: *whenever maintenance is performed, it is recommended to replace all consumables – considering these to also include the screws complete with washers and anti-loosening treatment, the keys and the corrugated washers.*

ATTENTION

FOLLOWING A STRONG COLLISION WE RECOMMEND A THOROUGH CHECK OF THE CASTING OF THE REDUCER, THE WHEEL, GEARS AND BEARINGS

ATTENTION

RESTORING THE IP RATING DEPENDS ON CORRECT POSITIONING OF THE O-RINGS AND SILICONE COATING OF THE TIE RODS. AFTER THE MAINTENANCE TECHNICIAN HAS CLOSED THE MOTOR, THEY ARE FULLY RESPONSIBLE FOR THE IP RATING AND THE INTEGRITY OF THE MOTOR.

ELECTROMAGNETIC BRAKE

Checking the electromagnet

If the brake, alternately energised and de-energised, does not release and lock the brake lining correctly, measure the winding resistance, which should be as follows:

	Ø80 Econ.	Ø 80	Ø 100	Ø124
12 Volt brakes		5 Ω	8.3 Ω	4.5 Ω
24 Volt brakes	70 Ω	25 Ω	33 Ω	20 Ω
36 Volt brakes		62 Ω	85 Ω	34 Ω
48 Volt brakes		99 Ω	127 Ω	78 Ω

Also check insulation to motor, using a 500-volt Megohmmeter to measure the insulation resistance, which must be above 0.1 MΩ.
The electromagnet must be replaced if it does not fulfil these conditions.

Replacing the electromagnet and checking the lining with a splined hub

Remove any brake covers, completely loosen the three fixing screws and remove the electromagnet and check the lining disk.
Its thickness must be about 7 mm for the type with diameter of 84 mm.; 8 mm for the type with diameter of 104 mm; and 8.5 mm for the type with diameter of 124 mm.
If the thickness is, respectively, less than 5, 6 and 6.5 mm, it is advisable to replace the complete lining of the splined hub after having removed the Seeger ring or self-locking nut. Reassemble the new brake and proceed to calibrate the clearance of the mobile disc.

Calibrating the clearance of the mobile disc

Calibration should be carried out as described below when replacing the lining or the entire electromagnetic brake:

- loosen the three hexagonal adjustment bushes
- adjust the three fixing screws so as to obtain a clearance between 0.2 and 0.4 mm;
- lock the three hexagonal adjustment bushes and check, with a thickness gauge, that the clearance is within the permitted limits.

CHECKS ON LIFTING CHAINS

1) Chain noise

A grinding metal noise will be heard if the chains are not fully lubricated. This causes metal to rub against metal between the joints of the chain, that can lead to a jamming-slipping effect, making the cage move in an uneven fashion.

2) Surface rust

Plates with rusty surfaces are easily recognisable by the typical brown colour. Rust can lead to chain fatigue failures.

3) Rust on joints

Corroded connection points are recognisable by their red-brown colour. This phenomenon may arise from lack of lubrication, or use of grease and oil unsuitable for penetrating the joints.

4) Stiff joints

Any joint that is not in a straight position when leaving the return pulley, can no longer be used. This phenomenon may be caused by corrosion or cold micro welding.

5) Turned pins

This is the consequence of incorrect lubrication and the aforementioned phenomenon of stiffened joints. This phenomenon is easily recognised by the difference in the pin clinching positions compared to factory standard.

6) Pins coming out of their housings

A direct consequence of the stiff joints of turned pins.

7) Wear

It is important to assess whether the connection plates are very worn.

8) Broken plates

This is the result of fatigue failure caused by overloading. Corrosion phenomena may contribute to this problem.

9) Broken pins

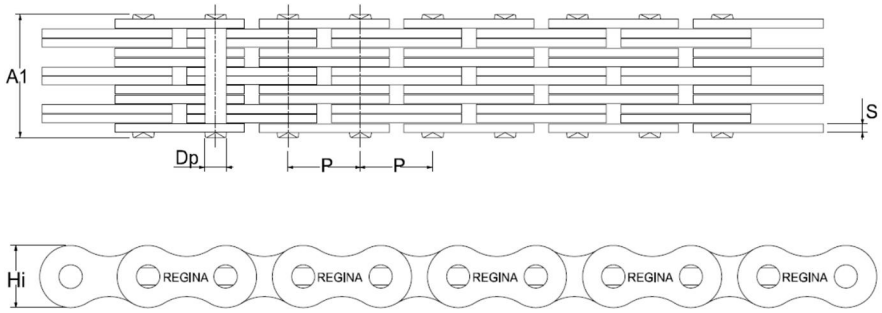
This problem usually occurs as a result of corrosion in the chain joints. Since the pins of a single chain are subject to the same load and corrosion conditions, one failure is usually followed by more. Experience has shown that this type of failure is not always easily recognised as there are no evident changes in the chain conditions, especially in the initial stage.

Checking for chain wear

(Check the cause of the malfunction before installing the new chain)

Lifting chain

Manufacturer: REGINA – Model: AL544



A1 = 19.1 mm ; Dp = 5.09 mm ; P = 15.875 mm ; S = 2.04 mm ; Hi = 12.83 mm

Elongation:

Measurement of slightly tensioned chain, on straight sections 1/5 to 1/15 of the total length. Maximum elongation allowed: 2% along the most worn section.

Wear of plate profiles:

Where the phenomenon is most noticeable: maximum permitted height reduction of 2.5% on one side only, 4% if on two sides, in relation to the initial height.

Wear on the side of the chain:

Replace the chain if the protruding part of the pin heads is worn down by more than 25% or if the outer side is worn down by more than 20% of its thickness.

ATTENTION

FOR FURTHER INFORMATION REGARDING THE PURCHASE OF SPARE PARTS AND CONSUMABLES, PLEASE CONTACT THE MANUFACTURER.

THE MANUFACTURER DISCLAIMS ALL LIABILITY FOR DAMAGE OR MALFUNCTION CAUSED BY USE OF PARTS NOT AUTHORISED BY THE MANUFACTURER.

SECTION 9. *ATTACHED DOCUMENTATION*

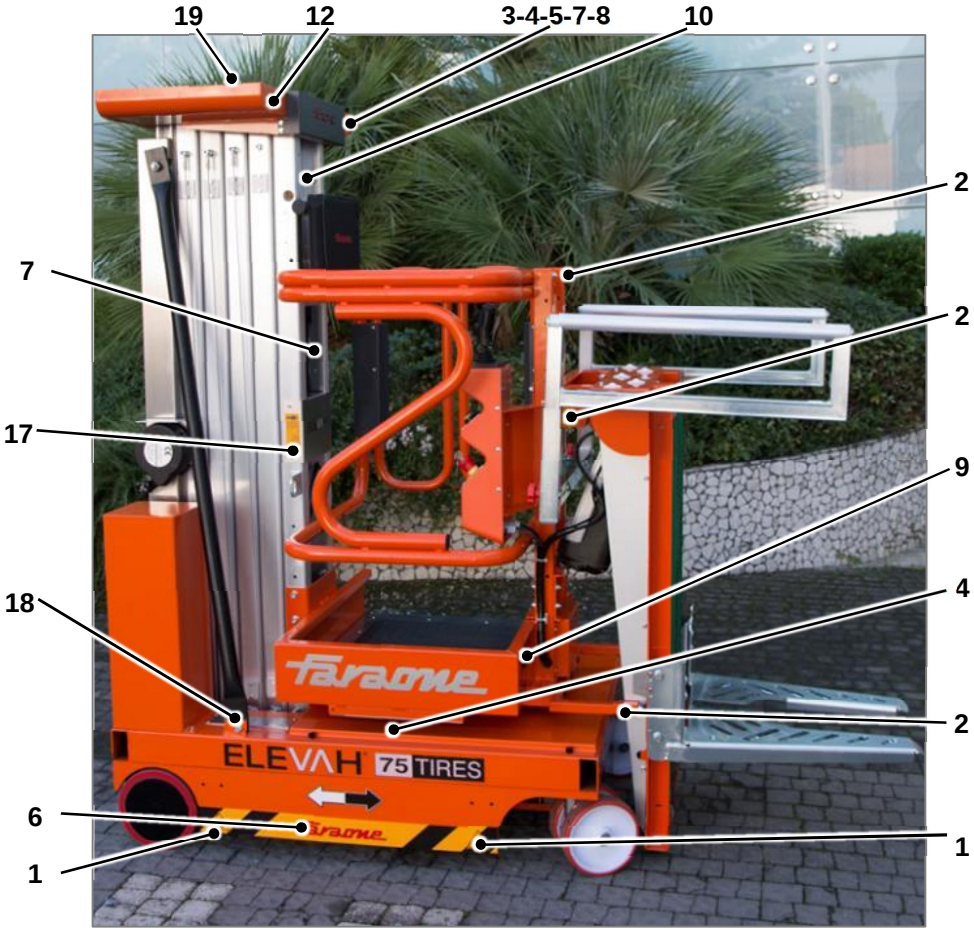
- ✓ ATTACHMENT 1 – Layout for decal application;
- ✓ ATTACHMENT 2 - Hydraulic diagram;
- ✓ ATTACHMENT 3 – Wiring diagram;
- ✓ ATTACHMENT 4 - Passed acceptance test certificate;
- ✓ ATTACHMENT 5 - Declaration of conformity.

ATTENTION

SHOULD THE MACHINE BE SOLD TO A THIRD PARTY, ALL DOCUMENTATION MUST BE DELIVERED WITH IT.

ATTACHMENT 1 – Layout for decal application

Pos.	SYMBOL	DESCRIPTION	Pos.	SYMBOL	DESCRIPTION
1		***DANGER SIGN*** CRUSHING AND TRAPPING OF LOWER LIMBS	2		***DANGER SIGN*** CRUSHING AND TRAPPING OF UPPER LIMBS
3		***DANGER SIGN*** RISK OF FALLING OBJECTS FROM ABOVE	4		***PROHIBITION SIGN*** UNAUTHORISED PERSONNEL MUST NOT USE THE MACHINERY
5		***PROHIBITION SIGN*** DO NOT REMOVE THE SAFETY GUARDS AND DEVICES	6		***DANGER SIGN*** LIKELY IMPACT
7		***OBLIGATION SIGN*** REFER TO THE OPERATING MANUAL	8		***OBLIGATION SIGN*** WEAR SAFETY SHOES
9	 *Max 250 kg*	***INDICATION*** Maximum number of persons and load on the cage	10	***INDICATION***	"DANGERS AND PROHIBITIONS IN USING THE PLATFORM"
11	***INDICATION***	"MAX 150 KG"	12	***INDICATION***	"MAX 20 KG"
13	***INDICATION***	"EMERGENCY DESCENT"	14	***INDICATION***	"EMERGENCY DESCENT PROCEDURE"
15	***INDICATION***	"BATTERY CHARGING POSITION"	16		"LIFTING POINTS WITH FORKS"
17	***INDICATION***	"RETAINING ONLY 1 PERSON"	18	***PLATE***	CE plate
19	***INDICATION***	"USING THE TOOLS HOLDER TRAY"			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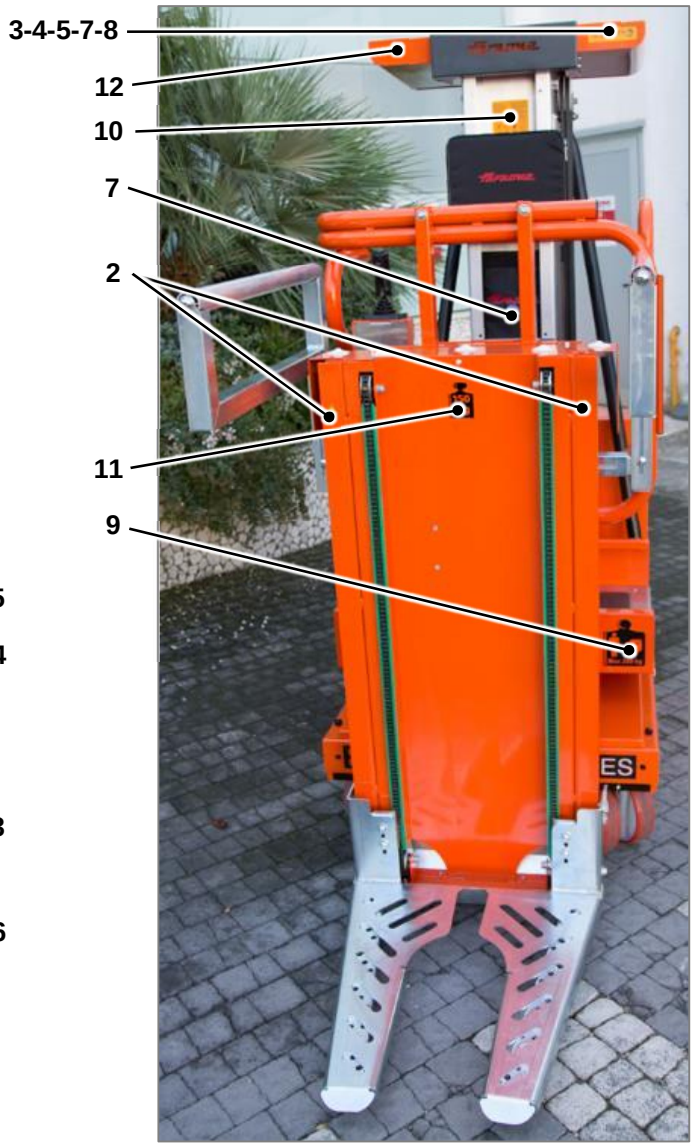
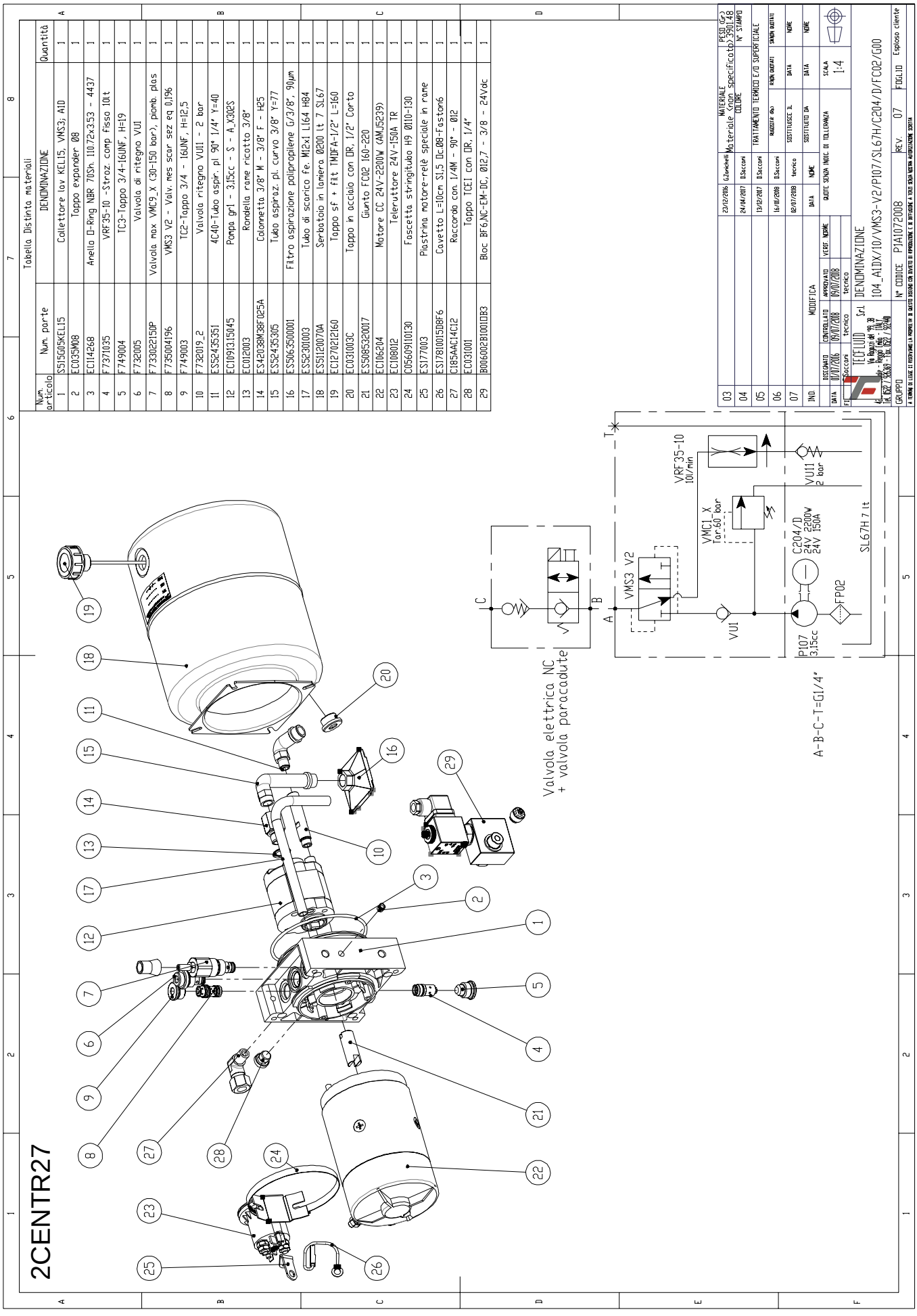
1
ELEVAH 75 TIRES


3-4-5-7-8
12
10
7
2
11
9

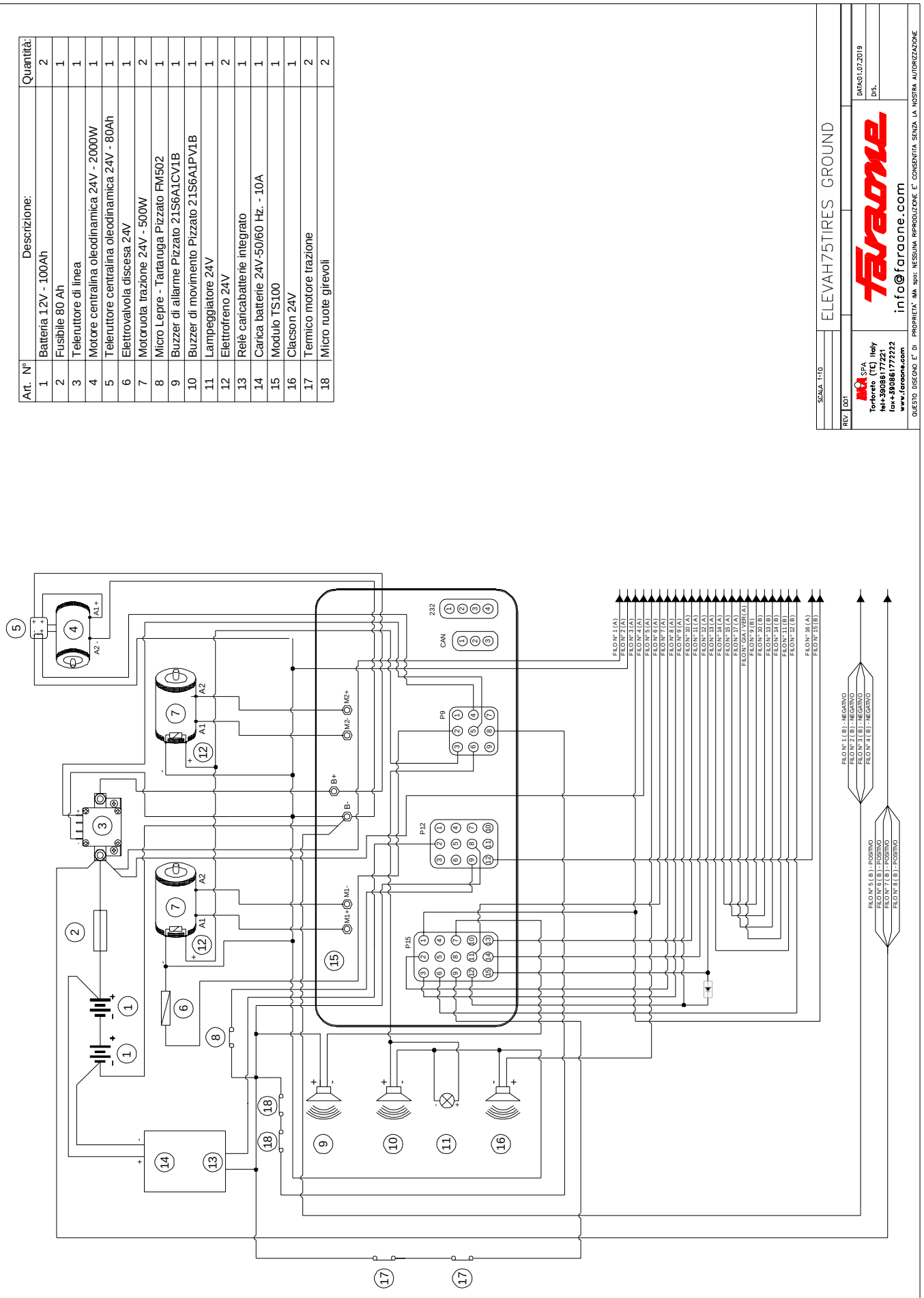

4
2
ELEVAH 75 TIRES

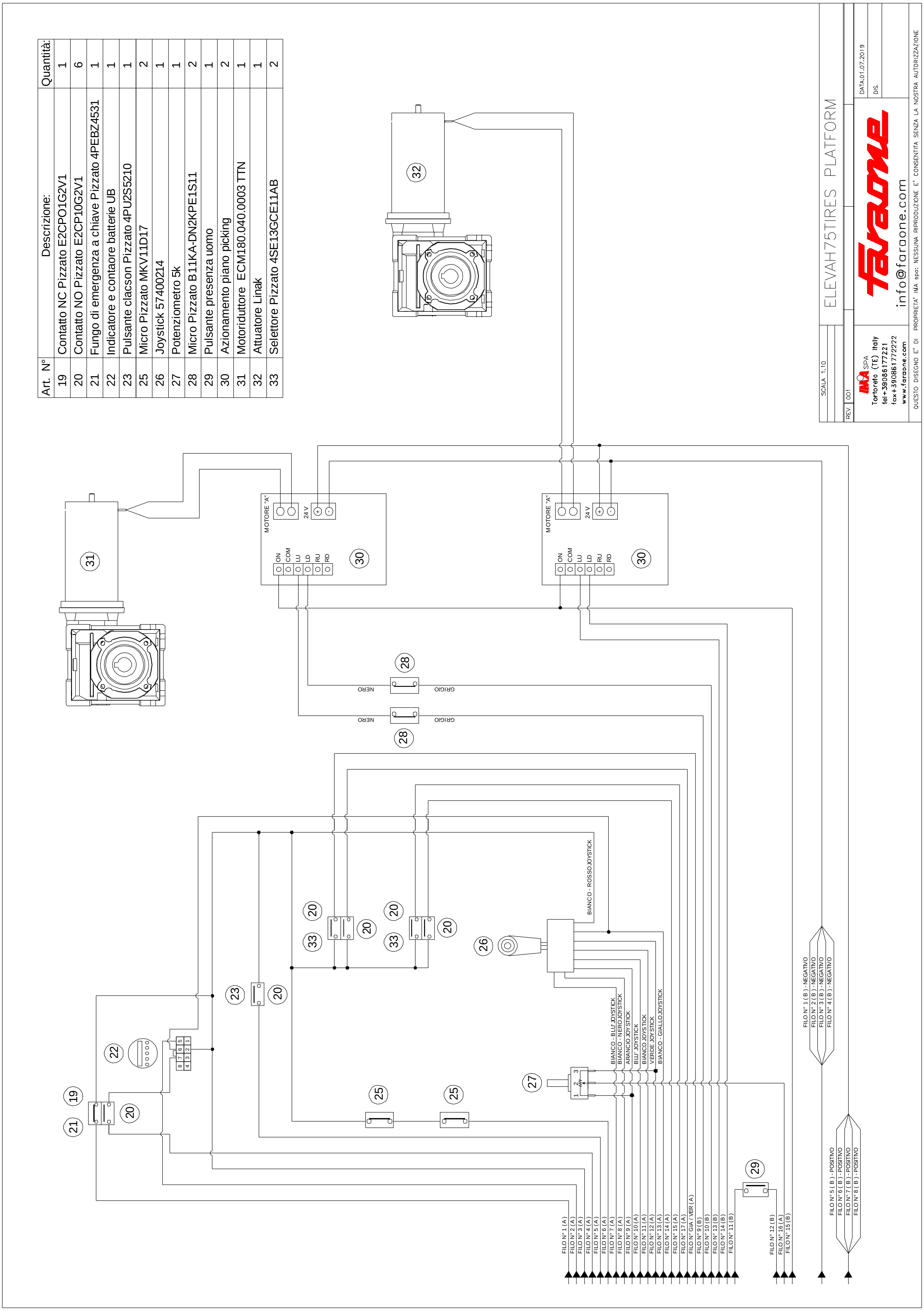
ATTACHMENT 2 - Hydraulic diagram



ATTACHMENT 3 – Wiring diagram

Art. N°	Descrizione:	Quantità:
1	Batteria 12V - 100Ah	2
2	Fusibile 80 Ah	1
3	Teleruttore di linea	1
4	Motore centralina oleodinamica 24V - 2000W	1
5	Teleruttore centralina oleodinamica 24V - 80Ah	1
6	Elettrovalvola discesa 24V	1
7	Motoruota trazione 24V - 500W	2
8	Micro Lepre - Tartaruga Pizzato FM502	1
9	Buzzer di allarme Pizzato 21S6A1CV1B	1
10	Buzzer di movimento Pizzato 21S6A1PV1B	1
11	Lampeggiatore 24V	1
12	Elettrofreno 24V	2
13	Relè caricabatterie integrato	1
14	Carica batterie 24V-50/60 Hz. - 10A	1
15	Modulo TS100	1
16	Clacson 24V	1
17	Termico motore trazione	2
18	Micro ruote girevoli	2





Art. N°	Descrizione:	Quantità:
19	Contatto NC Pizzato E2CPO1G2V1	1
20	Contatto NO Pizzato E2CP10G2V1	6
21	Fungo di emergenza a chiave Pizzato 4PEBZ4531	1
22	Indicatore e contaore batterie UB	1
23	Pulsante clacson Pizzato 4PU2S5210	1
25	Micro Pizzato MKV11D17	2
26	Joystick 57400214	1
27	Potenziometro 5k	1
28	Micro Pizzato B11KA-DN2KPE1S11	2
29	Pulsante presenza uomo	1
30	Azionamento piano picking	2
31	Motoriduttore ECM180.040.0003 TTN	1
32	Attuatore Linak	1
33	Selettore Pizzato 4SE13GCE11AB	2

ATTACHMENT 4 - Successful acceptance test certificate

STOCK PICKER

ELEVAH 75 TIRES

Serial number:

The machine, manufactured according to the type tested model, has undergone the following tests:

- Brake test
- Overload test
- Operating test

And has PASSED them successfully.

Tortoreto, (date)

ATTACHMENT 5 - Declaration of conformity

FARAONE INDUSTRIE SPA
Via San Giovanni, 20 - C.da Salino
64018 Tortoreto (TE) ITALY
Tel. +39 0861.772221
Fax +39 0861.772222

www.faraone.com
info@faraone.com

REA 92848 CCIAA TE
P.IVA e C.F. IT 00732060678
C.S. euro 2.000.000 i.v.

DICHIARAZIONE DI CONFORMITA'-DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE' – EG KONFORMITÄTSERKLÄRUNG

CE

Macchina/Machine/Machine/Maschine	**Carrello Commissionatore/Stock Picker/Chariot commissionateur/Kommissioniergerät**
Modello/Model/Modèle/Modell	**XXXXXXXXXX**
Matricola/Serial No./Numéro sérial/Laufende Nr.	**XXXX/XXXX**
Anno/Year/Année/Jahr	**XXXX**
No. certificato/Technical Report of Compliance Nr. / Rapport technique de conformité No. /Zeugnis Nr.	**XXXXXXXXXXXXXXXXXXXXXX**

Il sottoscritto Faraone Pier Giuseppe, in qualità di legale rappresentante della ditta FARAONE INDUSTRIE S.p.A. – C.da Salino, Tortoreto (Italia), Costruttore, nonché persona giuridica autorizzata a costituire il fascicolo tecnico per la macchina in oggetto DICHIARA CHE il carrello commissionatore summenzionato è stata fabbricata conformemente ai requisiti di sicurezza e salute previsti dalla Direttiva Macchine 2006/42/CE ed alla norma armonizzata UNI EN 3691-1:2015 ed al modello verificato da: TUV ITALIA S.r.l. – TUV SUD Group, n.0948 Via G. Carducci, 125 pal 23 – 20099 Sesto S. Giovanni (MI) Italy.
Il Fascicolo Tecnico di costruzione è conservato presso la FARAONE INDUSTRIE S.p.A.
Il Fascicolo Tecnico e la versione originale delle istruzioni di uso e manutenzione vengono redatti in lingua italiana.

The undersigned Faraone Pier Giuseppe, as legal representative of the company FARAONE INDUSTRIE S.p.A. – C.da Salino, Tortoreto (Italy), manufacturer, as well as a legal person authorized to compile the technical file for the machine in question, DECLARES THAT, the stock picker mentioned above has been manufactured in accordance with the requirements of safety and health of the Machine Directive 2006/42/CE and harmonized standard UNI EN 3691-1:2015 and model checked by TUV ITALIA S.r.l. – TUV SUD Group, n.0948 Via G. Carducci, 125 pal 23 – 20099 Sesto S. Giovanni (MI) Italy.
The technical reference of the platform are kept in the records of FARAONE INDUSTRIE S.p.A.
The technical file and the original version of the user's manual are written in Italian.

Le soussigné Faraone Pier Giuseppe, agissant en tant que représentant légal de la société FARAONE INDUSTRIE S.p.A. – C. da Salino, Tortoreto (Italie), fabricant, ainsi qu'une personne morale autorisée à constituer le dossier technique de la machine en question DECLARE QUE, le chariot commissionateur susmentionnée a été fabriqué en conformité avec les critères de sécurité et de la santé de la Directive Machines 2006/42/CE et la norme harmonisée UNI EN 3691-1:2015 et le modèle certifié par TUV ITALIA S.r.l. – TUV SUD Group, n.0948 Via G. Carducci, 125 pal 23 – 20099 Sesto S. Giovanni (MI) Italy.
Le dossier technique de construction est entreposé chez FARAONE INDUSTRIE S.p.A.
Le dossier technique et la version originale des instructions de fonctionnement et d'entretien sont écrits en italien.

Der unterzeichnete Faraone Pier Giuseppe, als gesetzlicher Vertreter der Firma FARAONE INDUSTRIE S.p.A. – C.da Salino, Tortoreto (Italien), sowie Hersteller und Person die bevollmächtigt ist die technischen Unterlagen für die o.g. Maschine zusammenzustellen, ERKLÄRT dass das o.g. Kommissioniergerät nach den Sicherheits- und Gesundheitsanforderungen der Maschinenrichtlinie 2006/42/EG und der harmonisierten UNI EN 3691-1:2015 gefertigt wurde. Die Maschine ist mit dem Modell identisch welches von TUV ITALIA S.r.l. – TUV SUD Group, n.0948 Via G. Carducci, 125 pal 23 – 20099 Sesto S. Giovanni (MI) Italy, geprüft wurde.
Die technischen Bauunterlagen werden bei FARAONE INDUSTRIE S.p.A. aufbewahren.
Die technischen Unterlagen und die ursprüngliche Version der Bedienungs- und Wartungsanleitungen sind in Italienisch geschrieben.

Faraone Industrie spa
C.da Salino - Via San Giovanni, 20
64018 TORTORETO (Te) - Tel. 0861.772221
Fax 0861.772222 - P. IVA 00732060678

Tortoreto, XX/XX/XXXX

Il Legale Rappresentante
(Faraone Pier Giuseppe)

SECTION 10. *MAINTENANCE LOGBOOK*

MAINTENANCE

OPERATOR: _____

DATE: _____

Monthly

	DONE ✓	DONE ✗
Torque Reducer: Check oil level and proper tightening of caps		

Quarterly

Perform “MONTHLY MAINTENANCE”		
Make sure there is no clearance, no mechanical parts improperly secured and/or bent and no damaged welds on parts/components		
Check the integrity of the structural profiles		
Check the emergency descent valve for proper operation		
Check the hydraulic oil level		
Check the hydraulic piping and make sure there are no oil leaks		
Torque Reducer: External cleaning		
Battery Inspection		
Check the cage and entrance doors		
Check the controls		
Check the lifting chains		
Clean the tyres tool tilting actuator (optional)		
Check the wheels for wear		

Every 1000 hrs of work

Torque Reducer: Check tightening of the screws.		

Every six months

Perform “MONTHLY AND QUARTERLY MAINTENANCE”		
Lubrication of moving parts		
Checking sliding wheels		
Transmission motor: Check the brushes and manifold for wear.		
Tyres tool lifting motor: Check the brushes and manifold for wear.		

Every two years

Perform “MONTHLY, QUARTERLY AND SIX-MONTHLY MAINTENANCE”		
Hydraulic oil change		
Torque Reducer: Inspection and oil change		

Date: _____ Signature: _____

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MAINTENANCE

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Faraone Industrie Spa
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