



STOCK PICKER

- *ELEVAH 65 MOVE PICKING*
- *ELEVAH 80 MOVE PICKING*

USE AND MAINTENANCE INSTRUCTIONS

Translation of the original instructions



SEZIONE 0. INTRODUCTION

INDEX

SEZIONE 0. INTRODUCTION	0-1
INDEX.....	0-1
INTRODUCTION.....	0-3
SYMBOLS AND TERMS	0-4
TECHNICAL ASSISTANCE - WARRANTY	0-5
NOTICES.....	0-5
SEZIONE 1. SAFETY PRECAUTIONS.....	1-1
GENERAL INFORMATION	1-1
PRELIMINARY PROCEDURES.....	1-2
OPERATION	1-4
SEZIONE 2. GENERAL TECHNICAL DATA.....	2-1
OVERALL DIMENSIONS	2-2
GENERAL TECHNICAL DATA	2-4
BASIC CONSTRUCTIVE DATA.....	2-6
SEZIONE 3. PREPARATION AND INSPECTION.....	3-1
PERSONNEL TRAINING	3-1
FUNCTIONAL TEST	3-3
SAFETY WARNINGS FOR THE OPERATORS.....	3-5
SEZIONE 4. CONTROLS, LIGHTS AND MACHINE OPERATION	4-1
INTRODUCTION.....	4-1
MACHINE OPERATION	4-2
CHARGING THE BATTERY.....	4-2
CAGE CONTROL CONSOLE	4-5
ACTIVATION PEDAL SWITCH	4-10
LOADING PLATFORM	4-13
LOADING PLATFORM EXTENSION (OPTIONAL)	4-14
PARKING THE MACHINE.....	4-15
TRANSPORT AND LIFTING PROCEDURES.....	4-15
SEZIONE 5. EMERGENCY PROCEDURES	5-1
EMERGENCY OPERATION	5-1
REPORTING THE ACCIDENT.....	5-3

SEZIONE 6.	DAILY INSPECTION.....	6-1
SEZIONE 7.	ROUTINE MAINTENANCE	7-1
	MONTHLY MAINTENANCE	7-2
	MAINTENANCE EVERY THREE MONTHS.....	7-2
	MAINTENANCE every 1000 h of work.....	7-3
	MAINTENANCE EVERY SIX MONTHS	7-4
	MAINTENANCE EVERY TWO YEARS	7-4
SEZIONE 8.	MAINTENANCE OPERATING INSTRUCTIONS	8-5
	LIFTING THE CAGE FOR MAINTENANCE	8-5
	BATTERY MAINTENANCE	8-7
	CHANGING TORQUE REDUCER OIL	8-8
	HYDRAULIC OIL CHANGE	8-9
	TRANSMISSION MOTOR	8-10
	ELECTROMAGNETIC BRAKE	8-12
	CHECKS ON LIFTING CHAINS.....	8-13
SEZIONE 9.	ATTACHED DOCUMENTATION.....	9-1
	ATTACHMENT 1 – Layout for the application of the stickers	9-2
	ATTACHMENT 2 - hydraulic diagram	9-6
	ATTACHMENT 3 - Electrical layout	9-8
	ATTACHMENT 4 – Inspection certificate.....	9-11



ENGLISH

INTRODUCTION

The purpose of this use and maintenance manual is to supply the users with the essential information for carrying out the procedures for safe and correct operation of the machine, for the purposes for which the same has been manufactured.

All information contained in this manual must be read and understood before making any attempt to operate the machine.

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

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



ATTENTION

REMEMBER NO EQUIPMENT IS SAFE IF THE OPERATOR DOES NOT OBSERVE THE SAFETY PRECAUTIONS

SYMBOLS AND TERMS



ATTENTION

The danger symbol recalls the attention to potential dangers that might cause injuries. To avoid possible injuries or fatal accidents, comply with all safety instructions that follow the symbol.



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

Stock Picker: Machine designed exclusively to carry, lift, stack or arrange loads on shelving, controlled by an operator stationed in the driver's seat, 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 to load goods to carry, lift, stack or arrange on shelving.

Extending structure: A structure connected to the frame that supports the cage and enables movement from the cage to the required position.

Frame: Machine Base.

TECHNICAL ASSISTANCE - WARRANTY

The Client 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 (the 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 built to last years, as long as it is always used for the purposes it is intended for and that 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 stationed and operating, the owner of the Stock Picker must find out whether a declaration is required when the machine is commissioned and for any periodical tests that are carried out thereafter.

SEZIONE 1. SAFETY PRECAUTIONS

GENERAL INFORMATION

This section illustrates the necessary precautions for the correct and safe use and for machine maintenance. To guarantee correct use of the machine, it is essential to establish a daily routine procedure based on the instructions provided in the manual. Also, to guarantee safe operation of the machine, it is necessary for a qualified person to establish a maintenance programme based on the information provided in this manual; such programme must be scrupulously followed.

The owner/user/operator/company granting in leasing/person receiving in leasing the machine, must not accept responsibility of its operation before having carefully read the manual and completed the training and the functioning procedures, guided by an experienced and qualified operator.

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



ATTENTION

THE NON COMPLIANCE WITH THE SAFETY PRECAUTIONS LISTED IN THE MANUAL MAY CAUSE DAMAGES TO THE MACHINE AND TO THE PROPERTY AND INJURIES OR FATAL ACCIDENTS.

PRELIMINARY PROCEDURES

Operator training and know-how

- Carefully read the manual before using the machine.



- Use the machine only after complete training by authorised personnel.
- The use of the machine is allowed exclusively to authorised and qualified personnel.
- Read carefully and follow all the WARNING statements and the operational instructions reported on the machine and in the manual.
- Use the machine for the applications falling within those envisioned by Faraone Industrie Spa.
- All operational personnel must familiarise with the emergency operations and controls of the machine, as specified in the manual.
- Carefully read and comply with all company, local and government Standards in force, relating to machine operation.

Inspection of the work place

- Before using the machine, the operator must take the necessary precautions to avoid any danger in the work place.
- Do not activate the machine on lorries, trailers, railway wagons, boats, scaffolding or similar, unless Faraone Industrie Spa has approved the operation in writing.
- The machine can be switched on at temperatures between -15°C and 40°C. Contact Faraone Industrie for values relating to machine operation at temperatures not within the indicated range.

- The machine cannot be started in environments declared ATEX, unless specifically indicated in the EC certificate of conformity delivered with the machine in question.

Machine inspection

- Use the machine only after having carried out the functional verifications and inspections. For further instructions, consult *Section 3* of this manual.
- Activate the machine only after having carried out all assistance and maintenance interventions envisioned by the requirements specified in this manual.
- Make sure all safety devices work properly. Any amendments to such devices constitute violation of the safety Standards.
- Do not activate the machine whose signs or adhesives indicating the safety Standards or instructions are illegible or missing.
- Avoid the accumulation of debris on the floor of the machine. Avoid mud, oil, grease and other slippery substances coming into contact with shoes and with the floor of the machine.



ATTENTION

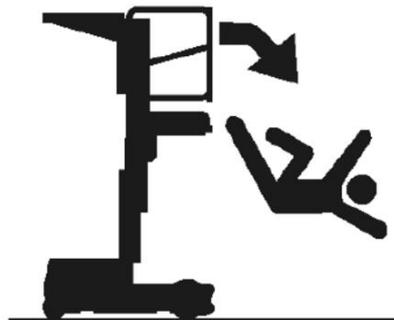
ANY AMENDMENTS OR ALTERATIONS TO THE MACHINE MAY ONLY BE APPLIED EXCLUSIVELY WITH PRIOR WRITTEN AUTHORISATION FROM THE PRODUCER.

OPERATION

General information

- A self-propelled Stock Picker is a machine designed exclusively to carry, lift, stack or arrange loads on shelving, controlled by an operator stationed in the driver's seat, which can be raised at the same time as the load handling device.
- Do not activate a faulty machine. If a fault occurs, switch-off the machine.
- Do not suddenly move the control switches or levers from one position to the opposite one, going via the neutral position; always bring the switch to neutral position before moving it in the position corresponding to the next function. Activate the controls by applying slow and even pressure.
- If there are any people on the work platform, allow personnel to operate the machine from the ground only in the event of an emergency.
- Completely lower the extending structure and disconnect the power supply before moving away from the machine.
- You are reminded to charge batteries in a well-ventilated area.

Risk of falls



- Prior to using the machine, ensure all railings and gates are fastened in the correct position.
- Keep both feet firmly on the floor of the cage. Do not arrange ladders, boxes, steps, planks or similar items on the cage to increase the range of action.

- Do not use the extension unit to climb on or off the cage.
- Pay maximum attention when entering or exiting the cage. Ensure the extending structure is completely lowered. Face the machine when entering or exiting the cage. Always maintain "three contact points" with the machine, ensuring both hands and one foot or one hand and both feet are continuously in contact with the machine when entering and exiting.

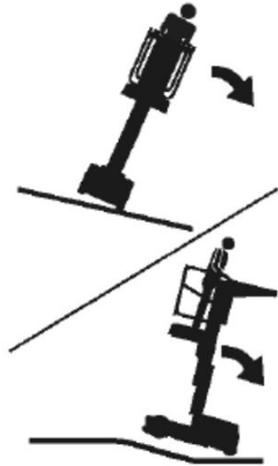
Electrocution hazard



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".

Danger of overturning



- Before driving the machine, the user must be familiar with the work area surface. While driving, do not exceed the admitted transversal and longitudinal slopes.
- Do not lift the basket or drive the machine with the basket raised (*on a machine with a self-propeller*) on a slope or uneven or soft surface;
- Before driving the machine on floors, bridges, lorries and other surfaces, check their maximum capacity values.
- Do not exceed the maximum capacity of the machine.
- Keep the machine chassis at a minimum distance of 0.5 m from holes, unevenness, descents, obstacles, debris, hidden holes and other potential dangers found at ground level.
- Do not attempt to use the machine as a crane. Do not tie the machine to an adjacent structure.
- Do not increase the dimension of the cage or loading platform with unauthorised extensions or by extending the platform.
- If the extending structure or cage remain jammed so that one or more wheels are lifted from the ground, it is necessary for the operator to climb off the cage, before attempting to free the machine. To stabilise the machine and have personnel climb down from the cage, use a crane, Stock Picker trucks or other adequate equipment.
- (*For machine without self-propeller*) Do not move the machine with the stabilisers engaged (*if present*) or with the extending structure raised. Before moving the machine, completely lower the extending structure.

Danger of crushing and impact



- When using the machine or lifting or lowering the basket, check the distances above, at the sides and below the basket;
- Do not lean over the rails of the basket when the machine is running;
- Always pay the utmost attention to prevent the operational controls and people in the basket 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 basket;
- When driving in areas where visibility is limited by obstacles, always have a person precede the vehicle to signal 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, slope, location of personnel and other factors that can pose a risk of collision or injuries to personnel;
- Take into account the braking distances regardless of the speed of the machine;
- Do not drive at high speed in reserved or tight areas or when reversing.

Towing, lifting and carrying

- Do not allow personnel to stand on the cage while towing, lifting and carrying.
- Tow the machine exclusively in case of emergency, fault, power supply cut-off or to load/unload it. Consult the "Emergency procedures" section in this manual.
- Before towing, lifting and carrying, ensure the cage is completely retracted and emptied.
- Do not pull or push a blocked or disabled machine.
- While lifting the machine by means of a Stock Picker, arrange the latter exclusively in correspondence of the appropriate areas of the same machine. Lift by means of a lifting device with adequate capacity.

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

SEZIONE 2. GENERAL TECHNICAL DATA**ATTENTION**

SELF-PROPELLED STOCK PICKER ELEVAH 65-80 MOVE PICKING IS A MACHINE DESIGNED EXCLUSIVELY TO CARRY, LIFT, STACK OR ARRANGE LOADS ON SHELVING, CONTROLLED BY AN OPERATOR STATIONED IN THE DRIVER'S SEAT, WHICH CAN BE RAISED AT THE SAME TIME AS THE LOAD HANDLING DEVICE.

THE STOCK PICKER IS DESIGNED TO CIRCULATE IN CLOSED ENVIRONMENTS ON PREPARED SMOOTH HORIZONTAL SURFACES.

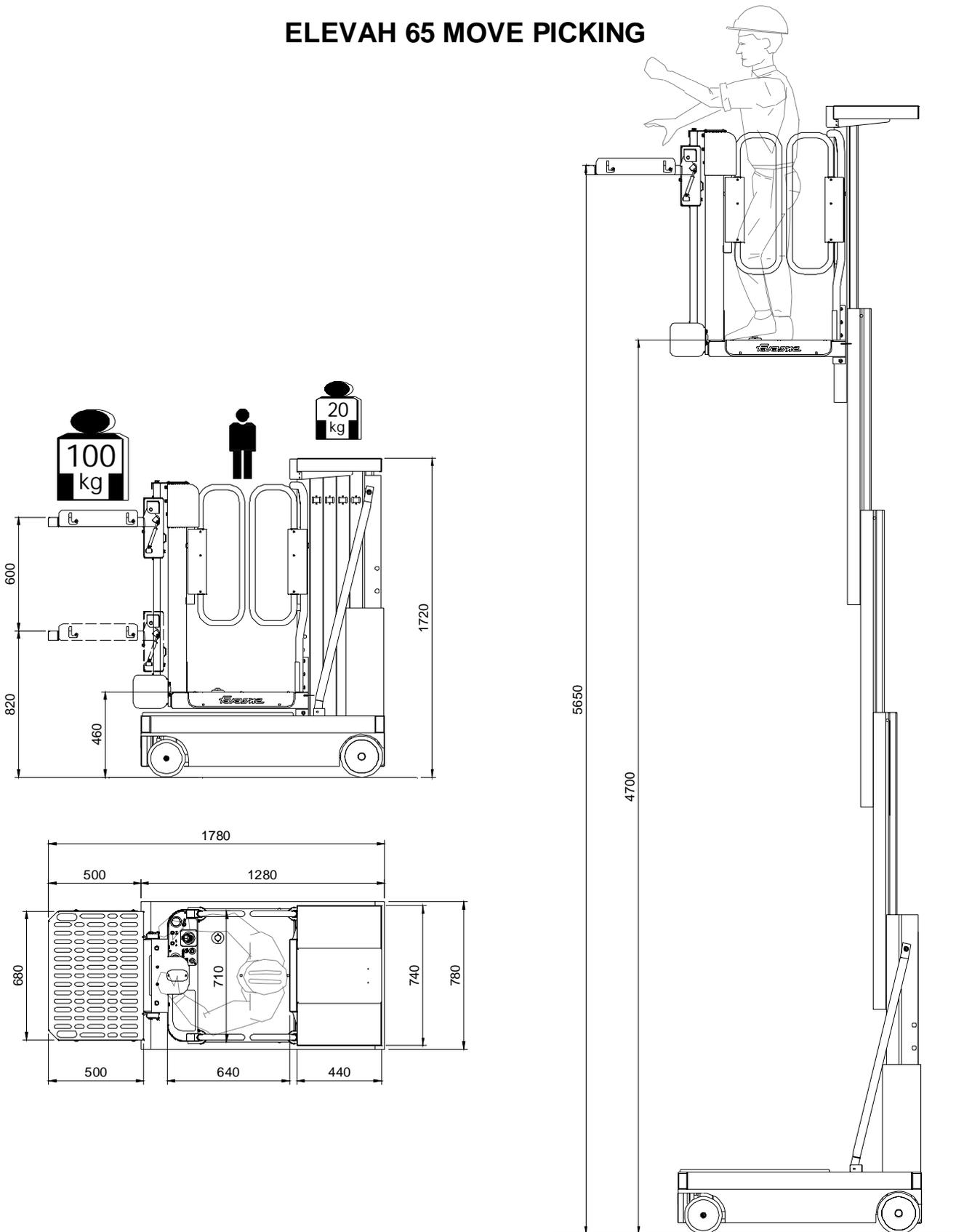
FURTHERMORE, IT CAN ALSO BE USED OUTDOORS IN THE TOTAL ABSENCE OF WIND AND ATMOSPHERIC PRECIPITATIONS.

THE STOCK PICKER MUST ONLY BE USED FOR THE PURPOSE IT WAS DESIGNED FOR.

ANY OTHER USE IS CONSIDERED IMPROPER.

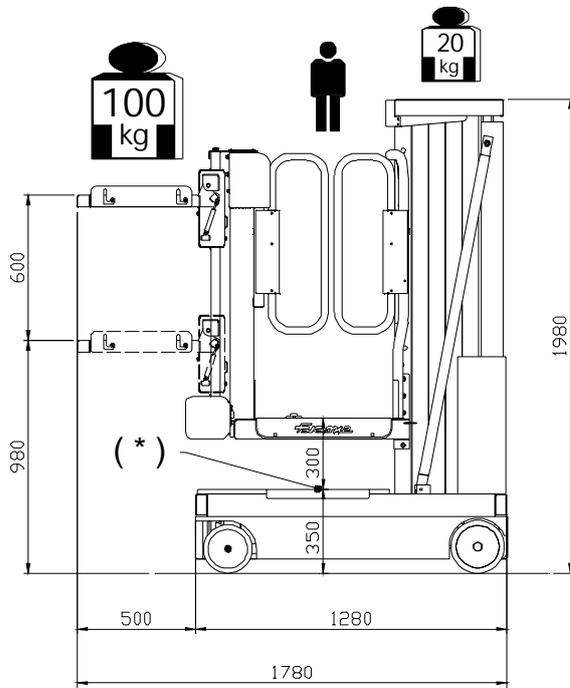
OVERALL DIMENSIONS

ELEVAH 65 MOVE PICKING

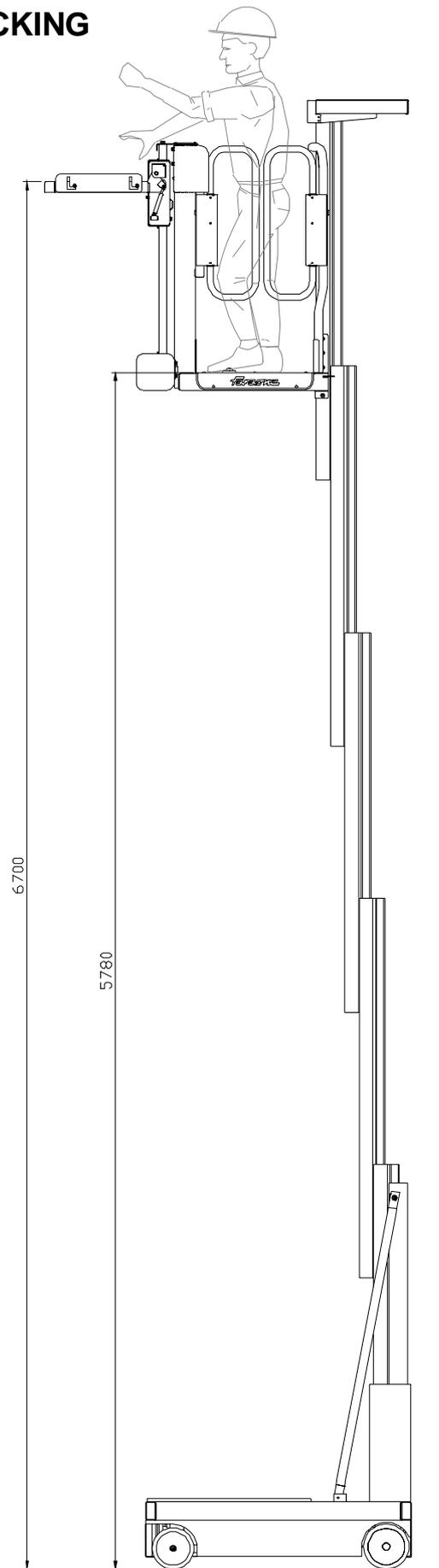
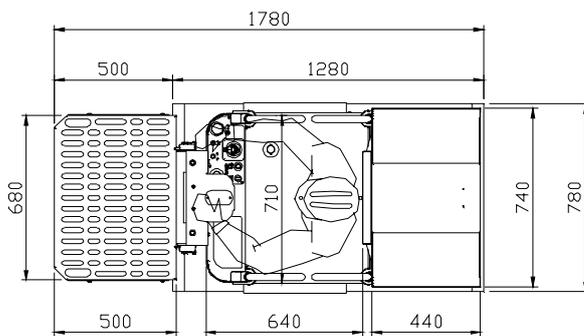


Measurements expressed in mm

ELEVAH 80 MOVE PICKING



(*) - E' presente un gradino intermedio.



Measurements expressed in mm

GENERAL TECHNICAL DATA

STOCK PICKER TECHNICAL SPECIFICATIONS ELEVAH 65 MOVE PICKING	Value
Weight of the machine: (Total)	830 kg
Machine height: (in transport position)	172 cm
Maximum resting pressure on the ground: per wheel/outrigger (*)	360 daN
Maximum transmission speeds: (with cage lifted – in transport position)	0.22 m/s – 1.00 m/s
Machine base with loading platform closed: (length x width)	128 cm x 78 cm
Machine base with loading platform extended: (length x width)	178 cm x 78 cm
Power supply	2 Batteries 12V - 105 Ah
Operators in the cage:	1
Maximum cage + loading platform + object holder tray capacity:	200 kg
Maximum capacity of the loading platform:	100 kg
Maximum capacity of the object holder tray:	20 kg
Maximum cage height: (between ground and cage floor)	4.70 m
Maximum height of loading platform: (between ground and platform)	5.65 m
Minimum height between ground and loading platform:	82 cm
Loading platform stroke:	60 cm
Internal dimensions of the cage:	71 cm x 64 cm
Dimensions of the loading platform:	68 cm x 50 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 of the stabiliser/wheel considering the weight of the machine plus the maximum load on the cage are fully distributed on only one side of the machine (fully asymmetrical load)

STOCK PICKER TECHNICAL SPECIFICATIONS ELEVAH 80 MOVE PICKING	Value
Weight of the machine: (Total)	860 kg
Machine height: (in transport position)	198 cm
Maximum resting pressure on the ground: per wheel/outrigger (*)	371 daN
Maximum transmission speeds: (with cage lifted – in transport position)	0,22 m/s – 1,00 m/s
Machine base with loading platform closed: (length x width)	128 cm x 78 cm
Machine base with loading platform extended: (length x width)	178 cm x 78 cm
Power supply	2 Batteries 12V - 105 Ah
Operators in the cage:	1
Maximum cage + loading platform + object holder tray capacity:	200 kg
Maximum capacity of the loading platform:	100 kg
Maximum capacity of the object holder tray:	20 kg
Maximum cage height: (between ground and cage floor)	5,78 m
Maximum height of loading platform: (between ground and platform)	6,70 m
Minimum height between ground and loading platform:	98 cm
Loading platform stroke:	60 cm
Internal dimensions of the cage:	71 cm x 64 cm
Dimensions of the loading platform:	68 cm x 50 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 of the stabiliser/wheel considering the weight of the machine plus the maximum load on the cage are fully distributed on only one side of the machine (fully asymmetrical load)

BASIC CONSTRUCTIVE DATA

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

EXTENDING STRUCTURE: The extending structure is made of special extruded aluminium alloy profiles that slide along each other on sliding blocks with nylon wheels. The kinematic connection between profiles is set up using chains.

A fluid power cylinder is installed between the first and second profile that, powered by the hydraulic control unit, enables to lift the structure. The chains connect the extendible structure elements to each other so that these can simultaneously lift.

CAGE AND LOADING PLATFORM: The cage and loading platform are built entirely of extruded aluminium profiles. The base floors are built with 3 mm thick, non-slip, chequered, aluminium sheet steel.

EXPOSURE TO VIBRATIONS: The Stock Picker does not produce vibrations that place the health of the operators at risk. The weighted acceleration to which the entire body is subjected is less than 0.5 m/s^2

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

**ATTENTION**

THE STOCK PICKER ELEVAH 65-80 MOVE PICKING HAS BEEN INSPECTED BY THE MANUFACTURER FOR THE PURPOSE OF CALCULATING THE MAXIMUM ADMISSIBLE TRANSVERSE AND LONGITUDINAL ANGLES.

SEZIONE 3. PREPARATION AND INSPECTION

PERSONNEL TRAINING

The Stock Picker is a machine designed to carry, lift, stack or arrange loads on shelving; accordingly, it is essential that it be used and serviced exclusively by trained personnel.

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

Operator training

Operator training must include the following:

1. Use and limits of the platform and emergency controls, on the ground, and of the safety systems;
2. Signs/labels for controls, instructions and warnings on the machine;
3. Regulations defined by the employer and government standards;
4. Knowledge of the mechanical operation of the machine sufficient to enable recognising of a fault;
5. Safe methods for using the machine in presence of overhead obstacles, other moving equipment and obstacles, depressions, holes and descents.

Training supervision

Training must be carried out under the supervision of a qualified person, in an open space and free from obstacles and must continue until the trainee is able to safely activate and use the machine.

Operator responsibility

The operator must be trained with regard to responsibility and authority to switch-off the machine in case of fault or in presence of other unsafe conditions, both relating to the machine and to the work area.

NOTE: *the owner shall provide qualified personnel for training both at the time of delivery of the first units and later, if requested by the user or by personnel.*

FUNCTIONAL TEST

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



ATTENTION

IF THE MACHINE DOES NOT WORK PROPERLY, SWITCH IT OFF IMMEDIATELY. WARN MAINTENANCE PERSONNEL OF THE PROBLEM. DO NOT USE THE MACHINE UNTIL IT IS DECLARED SAFE TO USE.

Carry out a functional test as detailed below.

1. **Check the correct operation of the manual descent valve (EMERGENCY DESCENT).**
2. **From the control console of the cage, carry out the detailed operations.**
 - a. Ensure the control console is correctly assembled and securely fastened;
 - b. Lift and lower the cage checking lifting and lowering happen regularly;
 - c. Ensure all machine functions are disabled when activating (pressing) the emergency stop button.
 - d. Activate all functions and check the correct operation of all end run switches, main and activation switches.
 - Machine brakes – Drive the machine on a slope (not exceeding the nominal functioning capacity on a slope) and stop it to ensure the brakes hold it;

- Inclination alarm – With the cage completely lowered, drive the machine on a surface with a slope greater than the maximum slope admitted in any direction (do not exceed the maximum nominal operational capacity on a slope). Any attempt to lift the cage makes the machine signal an inclination that exceeds the admissible range;
 - Transmission speed reduction – When the cage is lifted, the transmission speed is reduced compared to the speed with the cage lowered;
- e. Make sure the loading deck is working correctly. Make sure that it travels smoothly without any jerky movements, and that its up/down movement is not obstructed. Make sure all of its parts are intact.

SAFETY WARNINGS FOR THE OPERATORS

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



OUTDOORS IN PRESENCE OF WIND
(DANGER OF STABILITY LOSS AND OVERTURNING)



NEXT TO AERIAL OBSTACLES (electric lines, protrusions, etc.)
(DANGER OF ELECTROCUTION AND IMPACT)



WITH EXCESSIVE CAPACITIES COMPARED TO ADMITTED LIMITS
(DANGER OF STABILITY LOSS AND OVERTURNING)



ON FLOORING WITH MINOR RESISTANCE OF THE WEIGHT OF THE MACHINE
(DANGER OF STABILITY LOSS AND OVERTURNING)



IN ALL CIRCUMSTANCES NOT EXPRESSLY INDICATED AMONG THE USE
CONDITIONS INDICATED IN THIS MANUAL
(GENERAL DANGER)

**ATTENTION**

THE ELECTRICAL SYSTEM OF THE PLATFORM IS NOT IN ANTI-EXPLOSIVE EXECUTION (NO ATEX): THEREFORE YOU SHOULD CAREFULLY AVOID ITS USE IN AREAS SUBJECT TO ATEX RISK.

During the moving phase (on the ground):

- ✓ Cautiously move the machine avoiding sudden manoeuvres;
- ✓ **DO NOT TRANSPORT PERSONS on the base frame of the machine and in any other position except for in the position inside the cage;**
- ✓ Check the structural condition and cleanliness of the surfaces on which the machine is used (verify the surface is suitable for the weight of the machine in work conditions).

During the ascent and descent phase:

- ✓ Observe the maximum admissible capacity weights in the cage;
- ✓ Ascertain overhead obstacles are not present along the trajectory, in vertical;
- ✓ Do not induce dangerous vibrations and/or oscillations such to entail stability loss of the machine and cause an eventual overturning.

**ATTENTION**

THE STOCK PICKER IS PROVIDED WITH AN AUTOMATIC BASE LEVELLING VERIFICATION SYSTEM. WHEN THE MACHINE EXCEEDS THE MAXIMUM SLOPE ALLOWED BY THE MANUFACTURER (SEE THE TECHNICAL CHARACTERISTICS 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, EACH MOVEMENT IS PREVENTED APART FROM CAGE DESCENT.

Prohibition signs:

Prohibition to overload the machine beyond the limits indicated



Prohibition to use the machine as an aerial platform to carry out works from heights



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



Prohibition to remove or tamper with the safety and protection devices of the machine



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



Prohibition to increase outreach or work height of the machine using additional equipment (for example, ladders)



Prohibition to induce oscillations on the machine so as not to make it unstable



Prohibition to install any additional device that increases the wind load on the machine (for example, 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

When using the machine, the manufacturer recommends using the following personal protective equipment:



Protection of the lower limbs

SLIP-PROOF SHOES



ATTENTION

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



SEZIONE 4. CONTROLS, LIGHTS AND MACHINE OPERATION

INTRODUCTION



ATTENTION

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

Stock Picker models ELEVAH 65-80 MOVE PICKING are electric machines equipped with a cage assembled onto a lifting mechanism with aluminium uprights.

The Stock Picker is **DESIGNED TO CARRY, LIFT, STACK OR ARRANGE LOADS ON SHELVING, CONTROLLED BY AN OPERATOR STATIONED IN THE DRIVER'S SEAT, 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 from the control console of the cage. Vibrations generated by machines do not constitute any danger for the operator who is inside the cage.

The level of continuous sound pressure (A measurement) in the cage is less than 70 db (A).

MACHINE OPERATION

Preliminary operations

It is necessary for the following control conditions to be satisfied, before activating the machine from the controls.

- The voltage of the batteries must be sufficient to activate the machine.
- The machine's main power switch on the control station in the cage must be set at ON.
- The emergency stop switch located on the control station in the cage must be on RESTORE.

CHARGING THE BATTERY

The machine is equipped with a battery charger with a.c. voltage input/d.c. voltage output. The battery charger stops charging automatically when the batteries are fully charged.



ATTENTION

KEEP SPARKS, OPEN FLAMES OR LIT TOBACCO AWAY FROM THE BATTERIES. PROVIDE ADEQUATE VENTILATION DURING CHARGING. DO NOT CHARGE A FROZEN BATTERY.

NOTE: *when the battery charger is connected to an a.c. socket, the transmission function of the machine is deactivated.*

Battery charging procedure

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

Battery charge status lights

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



The **RED LED**, when charging the battery, indicates the beginning of the charging cycle.

Charging finishes automatically without warning the operator, and is indicated by a **GREEN LED** coming on.

While using the machine, the battery status will switch from completely charged (indicated by the green Led), to the partially charged (indicated by the orange Led) to low battery (indicated by the red Led).

Carry out the following operations carefully:

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



ATTENTION

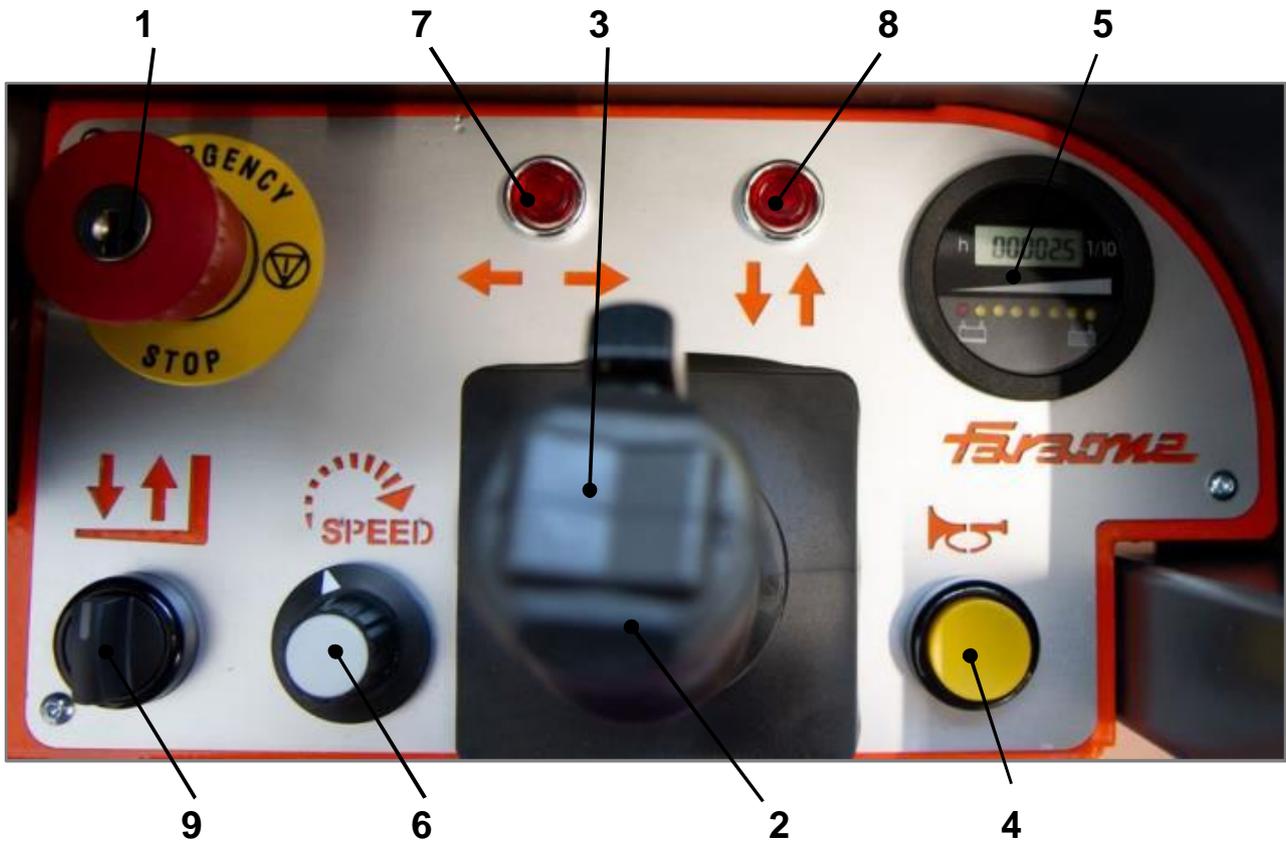
IT IS RECOMMENDED NOT TO LET THE BATTERIES GO COMPLETELY FLAT.



ATTENTION

WHEN THE MACHINE IS PUT OUT OF SERVICE FOR A LONG PERIOD, THE BATTERIES MUST BE COMPLETELY AND EVENLY CHARGED AT LEAST ONCE A WEEK AND KEPT WITH THE PLUG DISCONNECTED TO AVOID THE SAME BATTERIES 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. Battery charge/machine operation hour display;
6. Transport position speed regulator;
7. Start indicator LED;
8. Cage lifting or lowering indicator LED.
9. Loading platform up/down control.

General information

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

- The master switch must be ON.
- The emergency stop switch with removable key, located on the control station in the cage must be on RESET.

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.

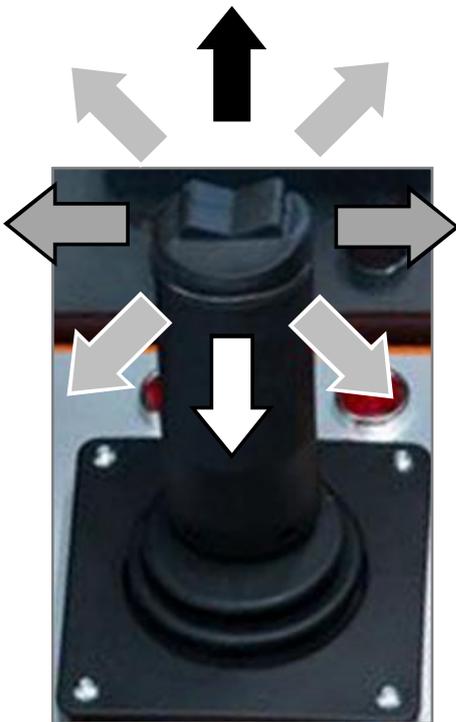
Multi-purpose joystick control

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 how far the joystick is shifted from the centre.

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

Lifting mode



PRESS THE DEAD MAN BUTTON ON THE JOYSTICK, then:

1. Press to the LEFT to LOWER the cage.
2. Press to the RIGHT to RAISE 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.**

Battery charge/machine operation hour 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).

Transport position speed regulator



When the machine is in transport position (cage fully lowered) it is possible to regulate the transmission speed from the regulator.

By turning the regulator counter-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.

Loading platform up/down control



1. Turn the selector to the LEFT to LOWER the loading platform.
2. Turn the selector to the RIGHT to RAISE the loading platform.

ACTIVATION PEDAL SWITCH



FUNCTION ACTIVATION PEDAL SWITCH

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

NOTE: *it is necessary to hold both the pedal-switch and the cloche actuation lever down in order to actuate the cloche functions.*

ACCESS TO CAGE

You can access and leave the cage from both sides of the machine.
To access and leave 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 OBJECTS HOLDER TRAY + THE LOAD ON THE LOADING PLATFORM.
THIS VALUE CANNOT EXCEED 200 KG IN ANY CASE

LOADING PLATFORM

Mobile loading platform closure

The loading platform in the ELEVAH 65-80 MOVE PICKING machine can be closed to facilitate the movement of the machine in confined places.

To close the loading platform proceed as follows:

1. Raise the loading platform up to the maximum height using the specific control;
2. Hold the loading platform with both hands and make it rotate upwards until it is blocked;
3. Use the specific control to lower the loading platform.



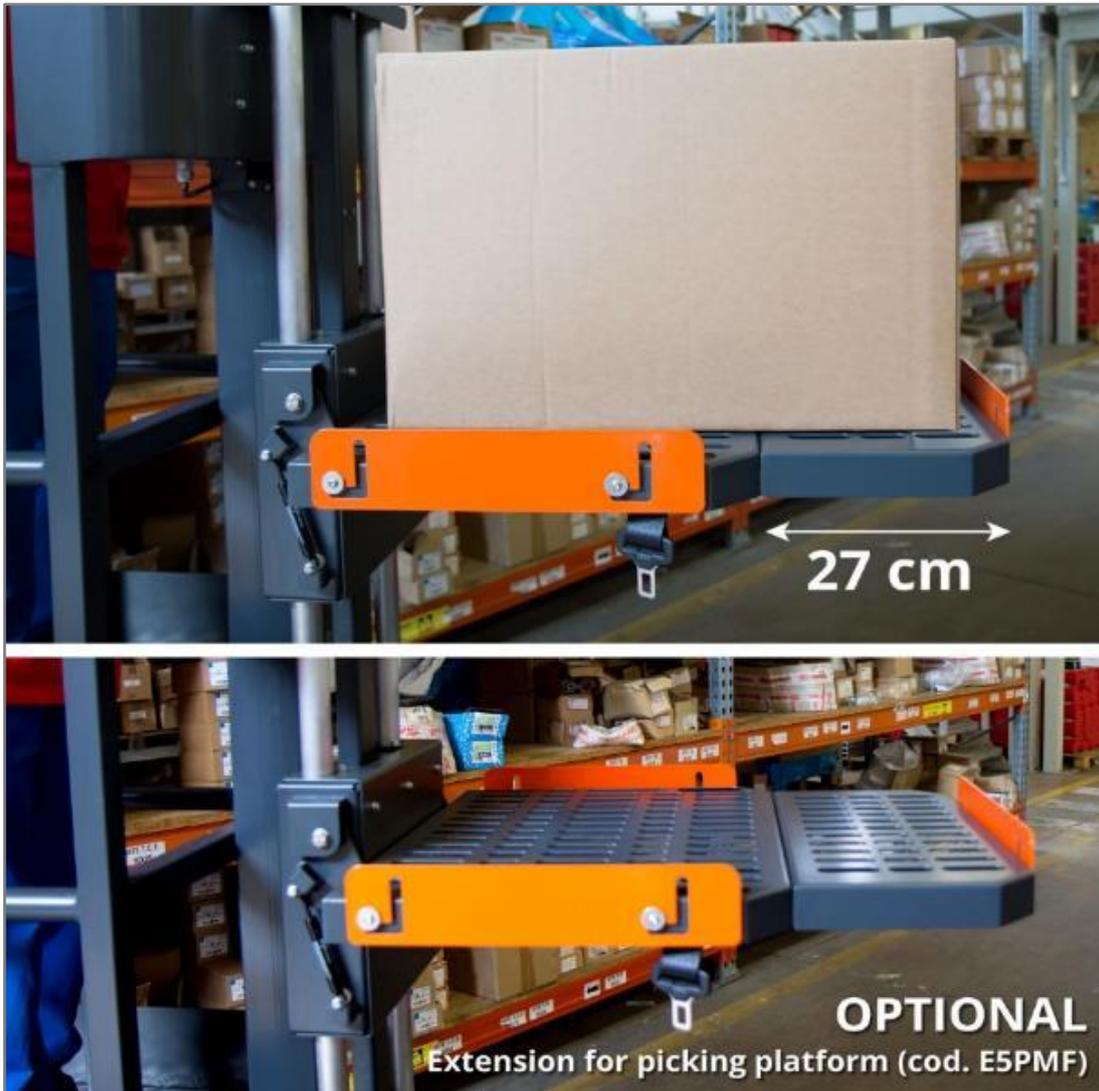
ATTENTION

MAKE SURE YOUR HANDS DO NOT GET TRAPPED WHEN THE LOADING PLATFORM IS CLOSING

LOADING PLATFORM EXTENSION (OPTIONAL)

An extension can be added to the loading platform to increase the supporting surface by 27 cm.

The extension does not change the maximum load on the loading platform which is still 100kg.

**ATTENTION**

THE TOTAL NOMINAL LOAD IS OBTAINED BY ADDING THE LOAD IN THE CAGE + THE LOAD ON THE OBJECTS HOLDER TRAY + THE LOAD ON THE LOADING PLATFORM.

THIS VALUE CANNOT EXCEED 200 KG IN ANY CASE

PARKING THE MACHINE

1. Drive the machine in a well-protected and ventilated area.
2. Make sure that the cage is completely lowered, turn the main switch to OFF

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



ATTENTION

PREVENT UNAUTHORISED USE BY SWITCHING THE MACHINE OFF AND REMOVING THE KEY WHEN THE OVERHEAD STOCK PICKER IS NOT IN USE.

TRANSPORT AND LIFTING PROCEDURES

General information

It is possible to transport the Stock Picker 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 it.
 - By moving it with a Stock Picker (*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 ABLE TO SUPPORT THE TOTAL WEIGHT OF THE MACHINE (CHECK THE GROSS WEIGHT OF THE MACHINE IN THE OPERATIONAL TECHNICAL DATA TABLE OF THE MACHINE)

Handling with a Stock Picker truck

The machine can be lifted with a Stock Picker truck. In this case, it must be held from the front part of the machine in order to position it in a stable way onto the forks (see following figure).



ATTENTION

LIFT THE MACHINE ONLY WITH WORK PLATFORM FULLY LOWERED.

SEZIONE 5. EMERGENCY PROCEDURES

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

EMERGENCY OPERATION

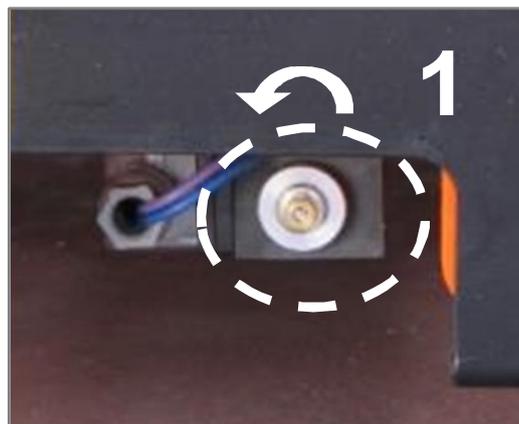
Operator unable to control the machine

CONDITIONS IN WHICH THE MACHINE OPERATOR IS IMMOBILISED, TRAPPED OR UNABLE TO ACTIVATE 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. INTERRUPT MACHINE ACTIVITY IF THE CONTROLS DO NOT FUNCTION CORRECTLY.
- In case of incorrect operation of the controls or interruption of the electric power supply, the emergency stop must be activated and, if necessary, a qualified operator must carry out the EMERGENCY DESCENT phases from the ground.

Proceed as follows:

1. Activate the emergency button to disconnect the power supply;
2. ATTENTION: ensure there are no persons within the action range of the machine;
3. Gradually loosen the knurled knob installed underneath the base carriage in correspondence of the hydraulic lifting cylinder to lower the operator platform (1);



4. ATTENTION: always monitor the entire descent phase of the operator platform;
5. Once descent is completed, tighten the knob again;
6. Restore the emergency button to activate the machine's power supply.



ATTENTION

THE OPERATIONAL PHASES OF THE EMERGENCY DESCENT ARE REPORTED ON APPROPRIATE ADHESIVE NEAR THE EMERGENCY DESCENT CONTROL.

Cage blocked in overhead position

If the cage blocks or jams in overhead equipment or structures, transfer the person present in the cage to a safe place before freeing the machine. Recovery equipment can be used to allow the occupier to climb down from the cage. To stabilise the machine movement use a crane or Stock Picker.

REPORTING THE ACCIDENT

Faraone Industrie Spa must be immediately informed of any accidents to a Faraone product. Contact the factory by telephone and give all the necessary details, also in absence of injuries or evident damages to the property.



ATTENTION

AFTER AN ACCIDENT, INSPECT THE ENTIRE MACHINE AND CHECK ALL FUNCTIONS. DO NOT LIFT THE CAGE UNTIL ONE IS SURE THAT ALL DAMAGES HAVE BEEN REPAIRED, AS REQUIRED, AND THAT ALL CONTROLS WORK PROPERLY.

SEZIONE 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 AVOID 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 present, securely fixed and not loose and that there are no visible damage, leaks or signs of excessive wear.*

a) Drive wheels/free wheels and swivel castors

Check there is no debris on 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

If necessary, charge them;

f) Cage assembly and entrance doors

Correct blocking 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 and legible control signs;

h) Extendable structure unit

Structure profiles, sliding inserts, chains, sequential activation cables, pulleys able to turn freely;

**ATTENTION**

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

SEZIONE 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 YOU ARE UNSURE OF WHAT YOU ARE DOING.**

**ATTENTION**

TO CARRY OUT MAINTENANCE AND/OR CLEANING OPERATIONS ON THE MACHINE THAT REQUIRE THE EXTENDABLE STRUCTURE TO BE IN A PARTIALLY EXTENDED POSITION, ANCHOR THE CAGE SAFELY (FOR EXAMPLE, USING A CONTRASTING 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 proper closing of the lubricant filler cap and drain plug of the Torque Reducer;

MAINTENANCE EVERY THREE MONTHS

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

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

- ***Check correct operation of the emergency descent valve.***

Take the cage to a height and execute an “emergency descent”, as shown in the relative section of this manual.

- ***Hydraulic Oil***

Check the level of hydraulic oil and top up, if necessary.

Refer to the specifications described in the relative 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 its heat dissipation capability.

- **Checking the Battery**

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

- **Check the cage and the entrance doors**

Correct blocking of the cage and entrance doors operating correctly.

- **Check the controls present in the cage and on the ground (if applicable)**

Controls secured, legible signs, main power supply selection switch operable, emergency stop switch in a reset position 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 extendable structure completely closed, by gravity, from the top, directly on the return wheels (if necessary, temporarily remove the protective cover to access the chains). For information regarding the wear of chains, refer to "Checks on the lifting chains".

- **Check the wheels for wear**

Check there is no debris on the wheels or around them. Check for wear or damage to the tread. The wheels must be replaced if the edges are worn or the profiles are 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 h 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 positioned on each runner, for a total of 12 for each pair of extensions. On each runner, one of the 3 wheels turns on an adjustable axis. This allows the wheels to be adjusted when they are worn thus giving rise to possible play of the moving extendable structure parts.

Contact the Manufacturer for further information and instructions regarding the adjustment of the sliding wheels of the extendable structure, when a backlash anomaly is found.

- **Transmission motor**

Checking the electromagnet: If the brake does not release and lock the lining properly when it is energised and de-energised in alternation, measure the resistance of the winding, and if necessary, replace the electromagnet or the lining disc.

Refer to the instructions in the relative paragraph for information on how to check and replace it.

MAINTENANCE EVERY TWO YEARS

- **Hydraulic Oil**

Change the hydraulic oil in the tank.

Refer to the specifications described in the relative paragraph for information regarding hydraulic oil change.

- **Torque Reducer**

Inspect the reducer and change the oil.

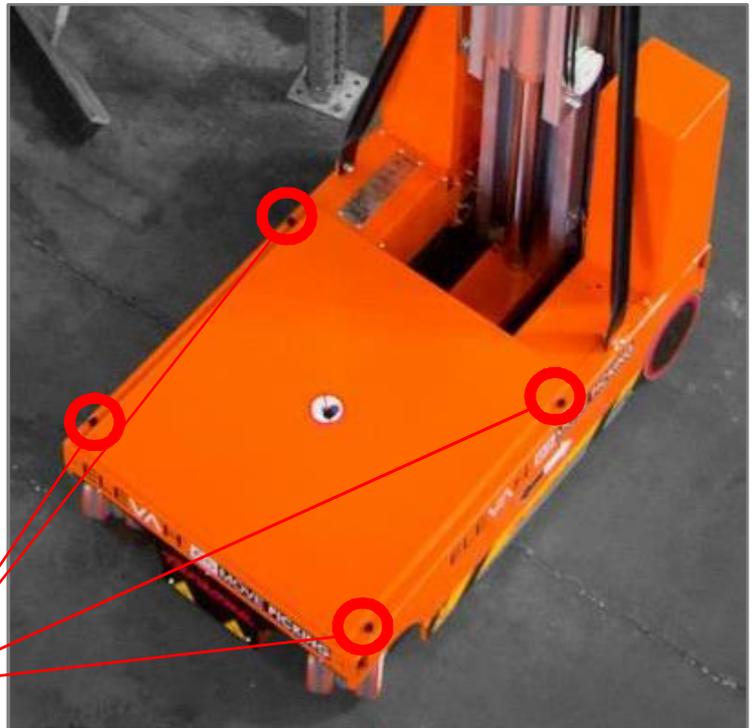
Refer to the instructions in the relative paragraph for information on changing the oil of the reducer;

SEZIONE 8. MAINTENANCE OPERATING 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;



Knobs

2. Insert the forks below the cage, as indicated in the figure, and lift with the utmost care;



3. Support the cage with the forklift truck during the entire duration of the maintenance operation;
4. When the operation is over, lower the cage slowly to its end of stroke and reposition the protective casing of the base by re-screwing the four knobs.

BATTERY MAINTENANCE

It is necessary to periodically check for any corrosion and tightening of the terminals.

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 RELATIVE 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 THE SAME TYPES AS THOSE SUPPLIED BY THE MANUFACTURER.

CHANGING TORQUE REDUCER OIL**ATTENTION****PAY ATTENTION BECAUSE THE SURFACES ARE HOT DURING NORMAL OPERATION**

Change the exhaust oil with the reducer 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 any particles inside the casing using the same type of oil.

You must only introduce the new oil when you are sure that there are no impurities.

Follow these 5 steps to change the oil properly:

1. Places a sufficiently spacious 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 empty 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 the visual level and tighten the filler cap.

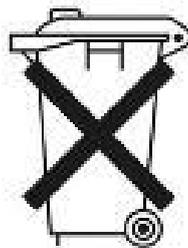
HYDRAULIC OIL CHANGE

Faraone Industrie Spa recommends using hydraulic oil with viscosity index 32. Mixing oils of different makes or types is strongly ill advised, 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 TOP UP/CHANGE IT.



ATTENTION

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

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 the brushes, pay the 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:

- a. loosen the three hexagonal adjustment bushes
- b. 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-metal friction between the joints of the chain, which can lead to seizing-slipping effect, causing the work platform to move unevenly.

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

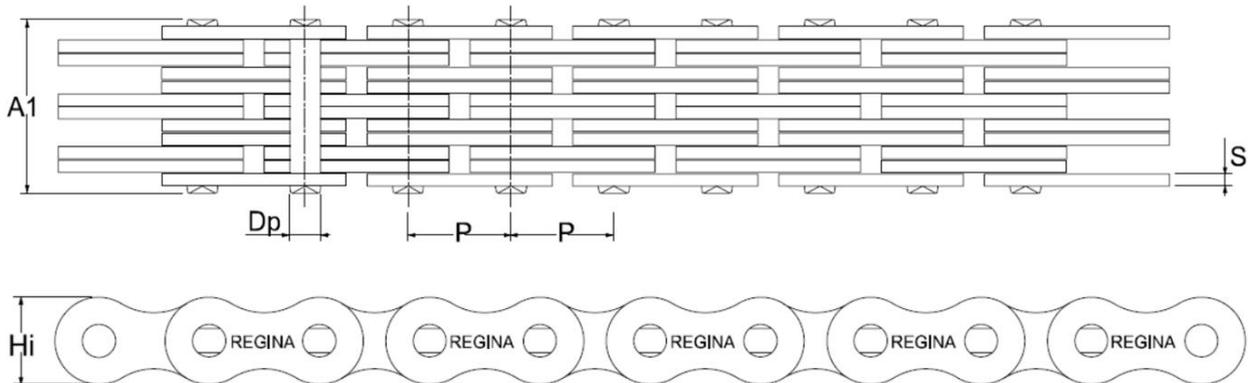
This problem usually occurs as a result of corrosion in the chain joints. Since the pins of a single chain are subject to the same load and corrosion conditions, one failure is usually followed by more. Experience has shown that this type of failure is not always easily recognised as there are no evident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



$A1 = 19.1 \text{ mm}$; $Dp = 5.09 \text{ mm}$; $P = 15.875 \text{ mm}$; $S = 2.04 \text{ mm}$; $Hi = 12.83 \text{ mm}$

Elongation:

Measurement of chain slightly tightened 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 PURCHASE OF SPARE PARTS AND CONSUMABLES, PLEASE CONTACT THE MANUFACTURER.

THE MANUFACTURER DECLINES ALL LIABILITY DUE TO DAMAGE OR MALFUNCTION CAUSED BY USE OF PARTS NOT AUTHORISED BY THE SAID MANUFACTURER.

SEZIONE 9. ATTACHED DOCUMENTATION

- ✓ ATTACHMENT 1 – Layout for the application of the stickers;
- ✓ ATTACHMENT 2 - Hydraulic layout;
- ✓ ATTACHMENT 3 – Electrical layout;
- ✓ ATTACHMENT 4 – Inspection certificate.

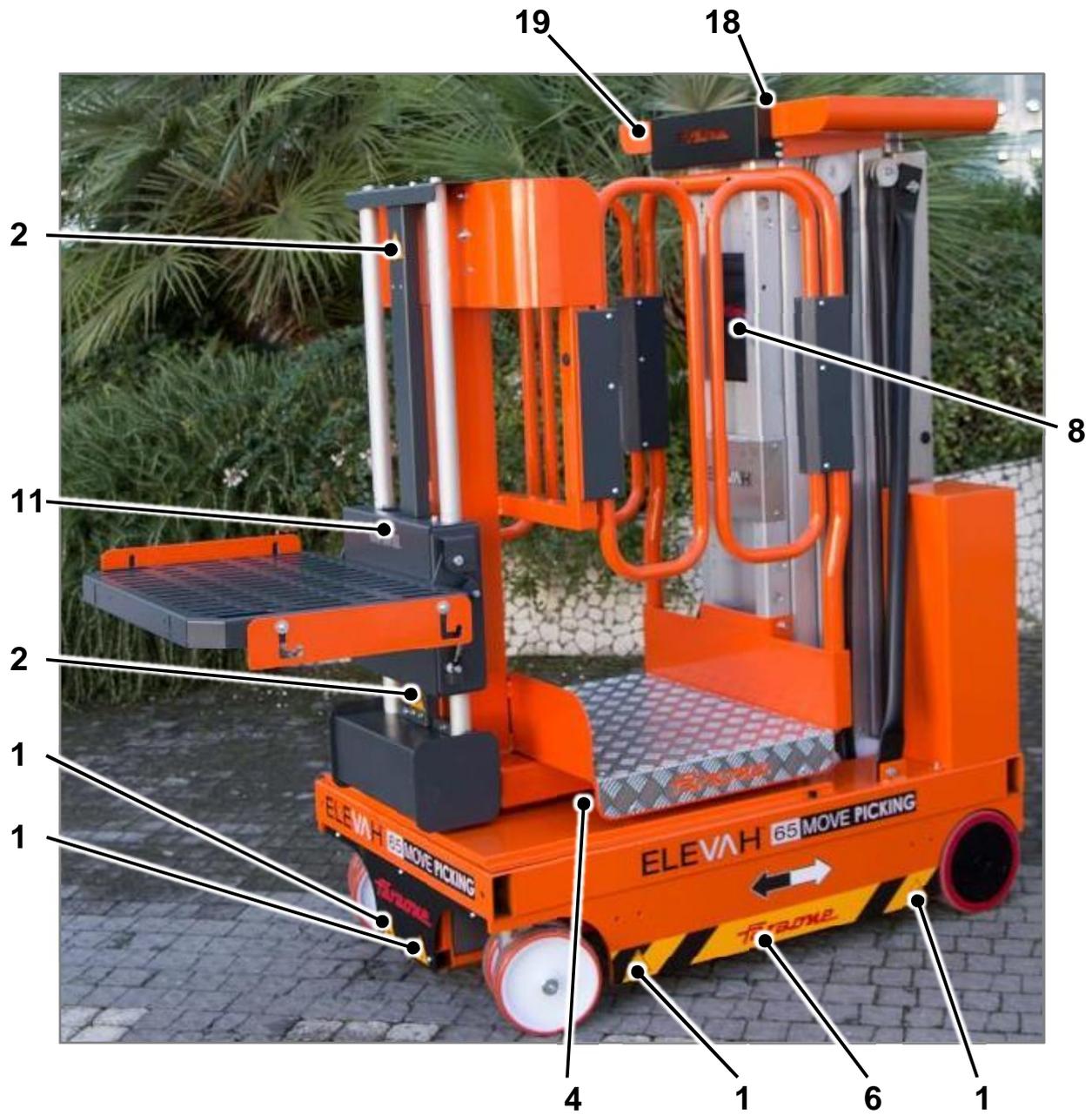


ATTENTION

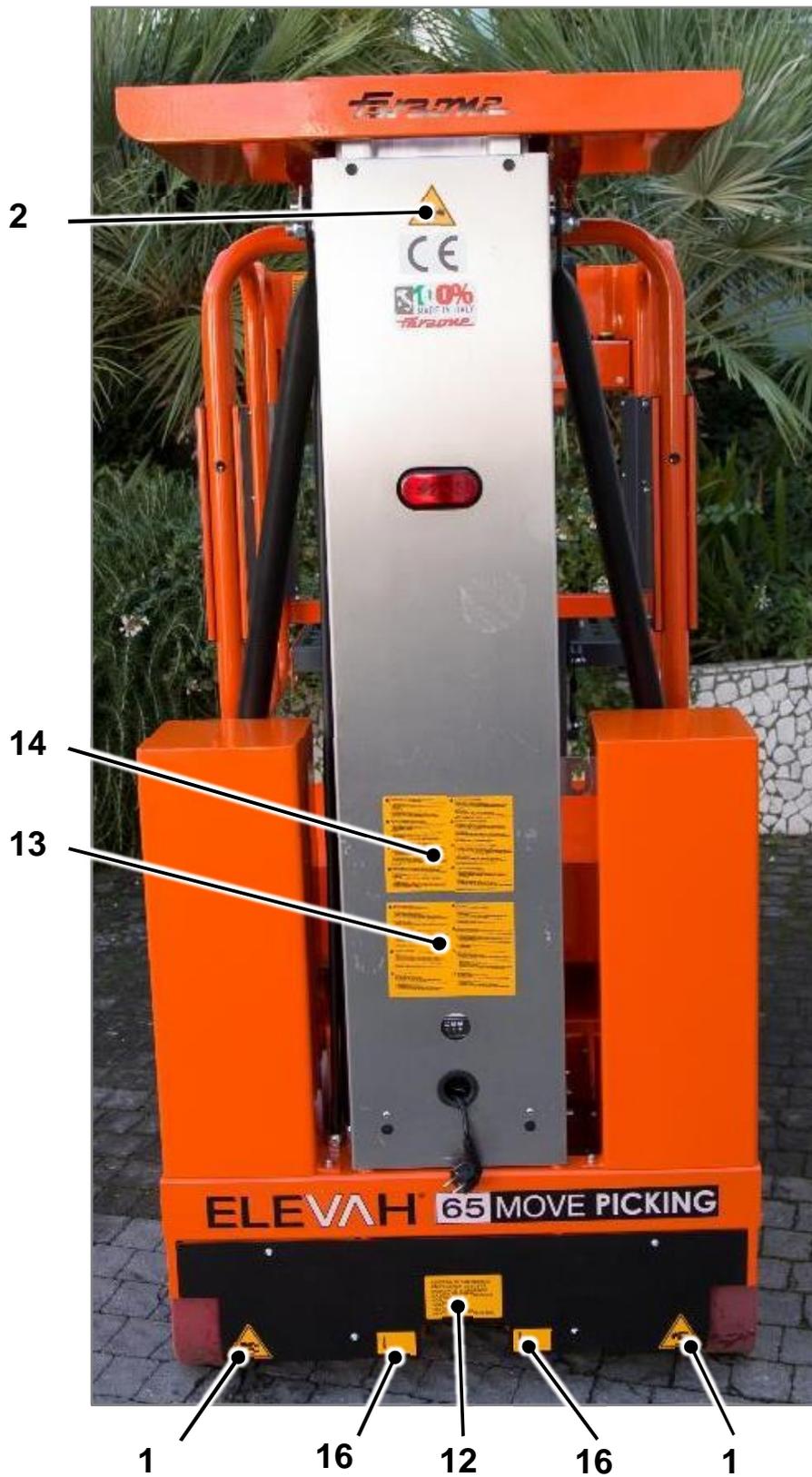
SHOULD THE MACHINE BE TRANSFERRED TO A THIRD PARTY, ALL DOCUMENTATION MUST BE DELIVERED WITH THE SAME.

ATTACHMENT 1 – Layout for the application of the stickers

Pos.	SYMBOL	DESCRIPTION	Pos.	SYMBOL	DESCRIPTION
1		<u>DANGER SIGN</u> CRUSHING AND TRAPPING OF LOWER LIMBS	2		<u>DANGER SIGN</u> CRUSHING AND TRAPPING OF UPPER LIMBS
3		<u>DANGER SIGN</u> RISK OF FALLING OBJECTS FROM ABOVE	4		<u>PROHIBITION SIGN</u> UNAUTHORISED PERSONNEL MUST NOT USE THE MACHINERY
5		<u>PROHIBITION SIGN</u> DO NOT REMOVE THE SAFETY GUARDS AND DEVICES	6		<u>DANGER SIGN</u> LIKELY IMPACT
7		<u>OBLIGATION SIGN</u> WEAR SAFETY SHOES	8		<u>OBLIGATION SIGN</u> REFER TO THE OPERATING MANUAL
9		<u>INDICATION</u> Maximum number of persons and load on the cage	10	<u>INDICATION</u>	"DANGERS AND PROHIBITIONS IN USING THE PLATFORM"
11	<u>INDICATION</u>	"MAX 100 KG"	12	<u>INDICATION</u>	"EMERGENCY DESCENT"
13	<u>INDICATION</u>	"EMERGENCY DESCENT PROCEDURE"	14	<u>INDICATION</u>	"BATTERY CHARGING POSITION"
15	<u>INDICATION</u>	"RETAINING ONLY 1 PERSON"	16		"LIFTING POINTS WITH FORKS"
17	<u>PLATE</u>	CE plate	18	<u>INDICATION</u>	"USING THE TOOLS HOLDER TRAY"
19	<u>INDICATION</u>	"MAX 20 KG"			







ATTACHMENT 2 - hydraulic diagram

12345678

2 CENTR 27

Num. partec. articolato	Num. parte	DENOMINAZIONE	Quantità
1	ES315G0KEL15	Collettore lav KEL15, VMS3: AID	1
2	ED05M08	Tappo expander 08	1
3	EC114268	Anello O-Ring NBR 70Sh. 110.72x3.33 - 4437	1
4	F731035	VRF 35-10 - Stroz. comp. fisso 10lt	1
5	F74904	TC3-Tappo 3/4-16UNF, H=19	1
6	F732005	Valvola di ritegno VU1	1
7	F73302150P	Valvola max VMC9.X (30-150 bar), piomb. plas	1
8	F733004196	VMS3 V2 - Valv. nes scar sez eq 0,196	1
9	F749013	TC2-Tappo 3/4 - 16UNF, H=12,5	1
10	F732019.2	Valvola ritegno VIII - 2 bar	1
11	ES52435351	4E-40-Tubo aspir. pl. 90° 1/4" Y=40	1
12	EC1091315045	Pompa gr1 - 315cc - S - A.X302S	1
13	ED012003	Rondella rame piccolo 3/8"	1
14	ES42038K38F025A	Colometta 3/8" M - 3/8" F - H25	1
15	ES52435305	Tubo aspiraz. pl. curva 3/8" Y=77	1
16	ES5063500001	Filtro aspirazione polipropilene G/3/8", 90µm	1
17	ES52301003	Tubo di scarico Fe. M2x1 L164 H84	1
18	ES5120070A	Serpentino in lamiera Ø200 Ht 7 SL67	1
19	EC1270212160	Tappo sf + filt TMIFA-1/2" L=160	1
20	ED03003C	Tappo in acciaio con DR. 1/2" Corto	1
21	ES5085320017	Giunto FC02 160-220	1
22	EC106204	Motore CC 24V-2200W (AMJ5239)	1
23	EC108012	Teleruttore 24V-150A TR	1
24	CP5609101130	Fascetta stringitubo H9 Ø110-130	1
25	ES177003	Piastrina motore-relè speciale in rame	1
26	ES1781001508F6	Covetto L=110cm SL5 DC08-Faston6	1
27	CI85AAC14C12	Raccordo con 1/4M - 90° - Ø12	1
28	ED03001	Tappo ICEI con DR. 1/4"	1
29	B1060402P1001B3	Bloc BF6.NC-EM-DC, Ø12,7 - 3/8 - 24Vdc	1

D

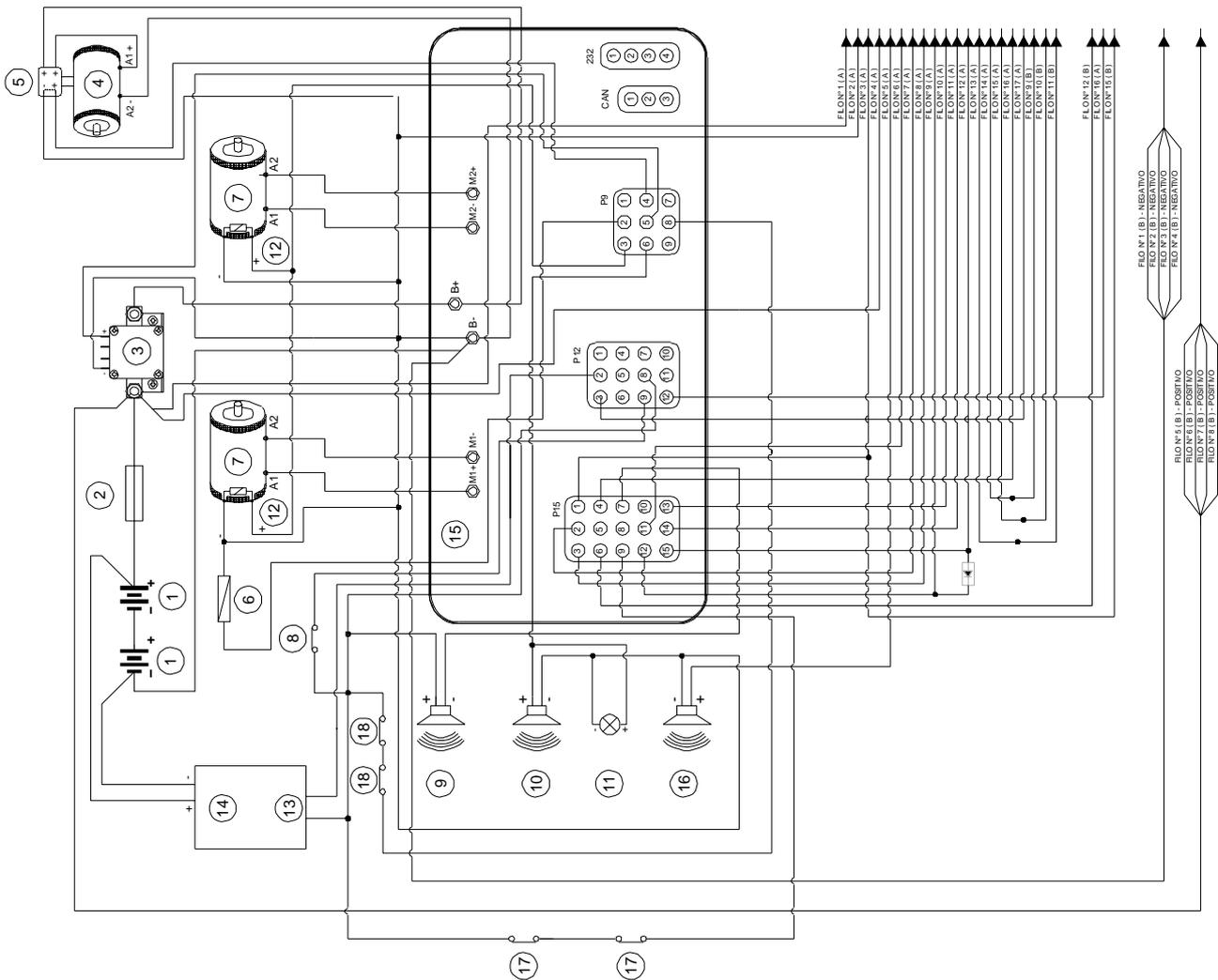
E

F

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04	24/04/2017	19/12/2017	19/01/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018
05	19/12/2017	19/01/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018
06	19/01/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018
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29	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018

ATTACHMENT 3 - Electrical layout

Art. N°	Descrizione:	Quantità:
1	Batteria 12V - 100Ah	2
2	Fusibile 80 Ah	1
3	Teleuttore di linea	1
4	Motore centralina oleodinamica 24V - 2000W	1
5	Teleuttore centralina oleodinamica 24V - 80Ah	1
6	Elettrovalvola discesa 24V	1
7	Motoruota trazione 24V - 500W	2
8	Micro Lepre - Tattaruga 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	Ciacson 24V	1
17	Termico motore trazione	2
18	Micro ruote girevoli	2



SCALA 1:10
REV. 002

ELEVAH65/80 PICKING GROUND

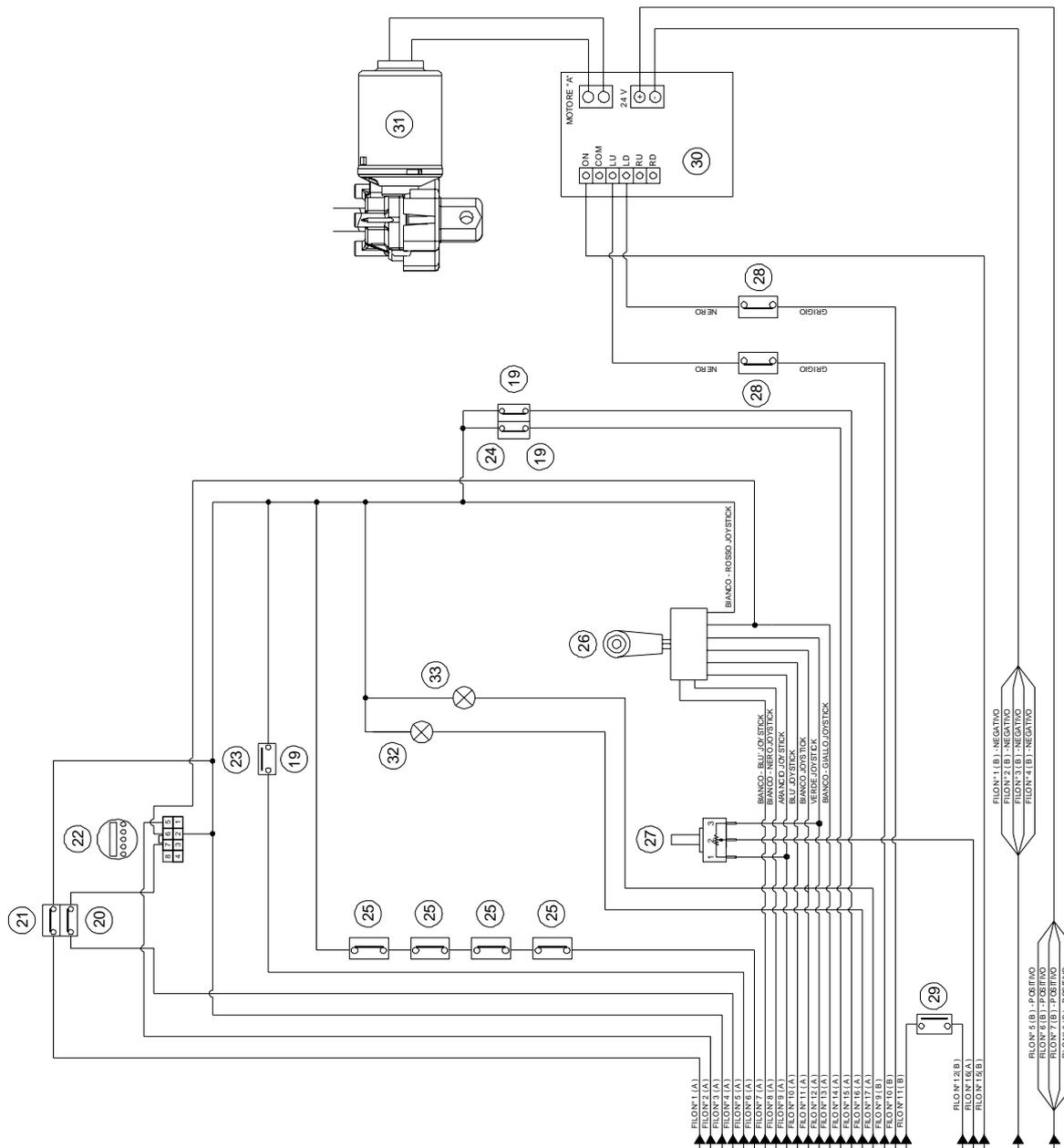
IMA SPA
Toronolo (17) Italy
tel.+390586177221
fax.+390586177222
www.imaonline.com

info@fardome.com

DATA: 15.10.2019
DIS.

QUESTO DEGRADO È DI PROPRIETÀ IMA. NON È NESSUNA RIPRODUZIONE. È CONSENTITA SENZA LA NOSTRA AUTORIZZAZIONE.

Art. N°	Descrizione:	Quantità:
19	Contatto NO Pizzato E2CP10G2V1	3
20	Contatto NC Pizzato E2CPO1G2V1	2
21	Fungo di emergenza a chiave Pizzato 4PEBZ4531	1
22	Indicatore e contaore batterie UB	1
23	Pulsante d'arresto Pizzato 4PU2S5210	1
24	Selettore Pizzato 4SE13GCE11AB	1
25	Micro Pizzato MKV11D17	4
26	Joystick 57400214	1
27	Potenzimetro 5k	1
28	Micro Pizzato B11KA-DN2KPE1S11	2
29	Pulsante presenza uomo	1
30	Azionamento motore FF3101V01	1
31	Attuatore piano picking	1
32	Spia rossa 24V S.2233.R.24 Trazione	1
33	Spia rossa 24V S.2233.R.24 Salita/Discesa	1



SCALA 1:10

REV. 002

ELEVAH/65/80 PICKING PLATFORM


 info@faraone.com
 Tel. +39 051 772222
 Fax +39 051 772222
 www.faraone.com

DATA: 15.10.2019

DIS.

QUESTO DISEGNO È DI PROPRIETÀ U.S.A. 999. NESSUNA RIPRODUZIONE È CONSENTITA SENZA LA NOSTRA AUTORIZZAZIONE

ATTACHMENT 4 – Inspection certificate**STOCK PICKER**

ELEVAH 65 MOVE PICKING

ELEVAH 80 MOVE PICKING

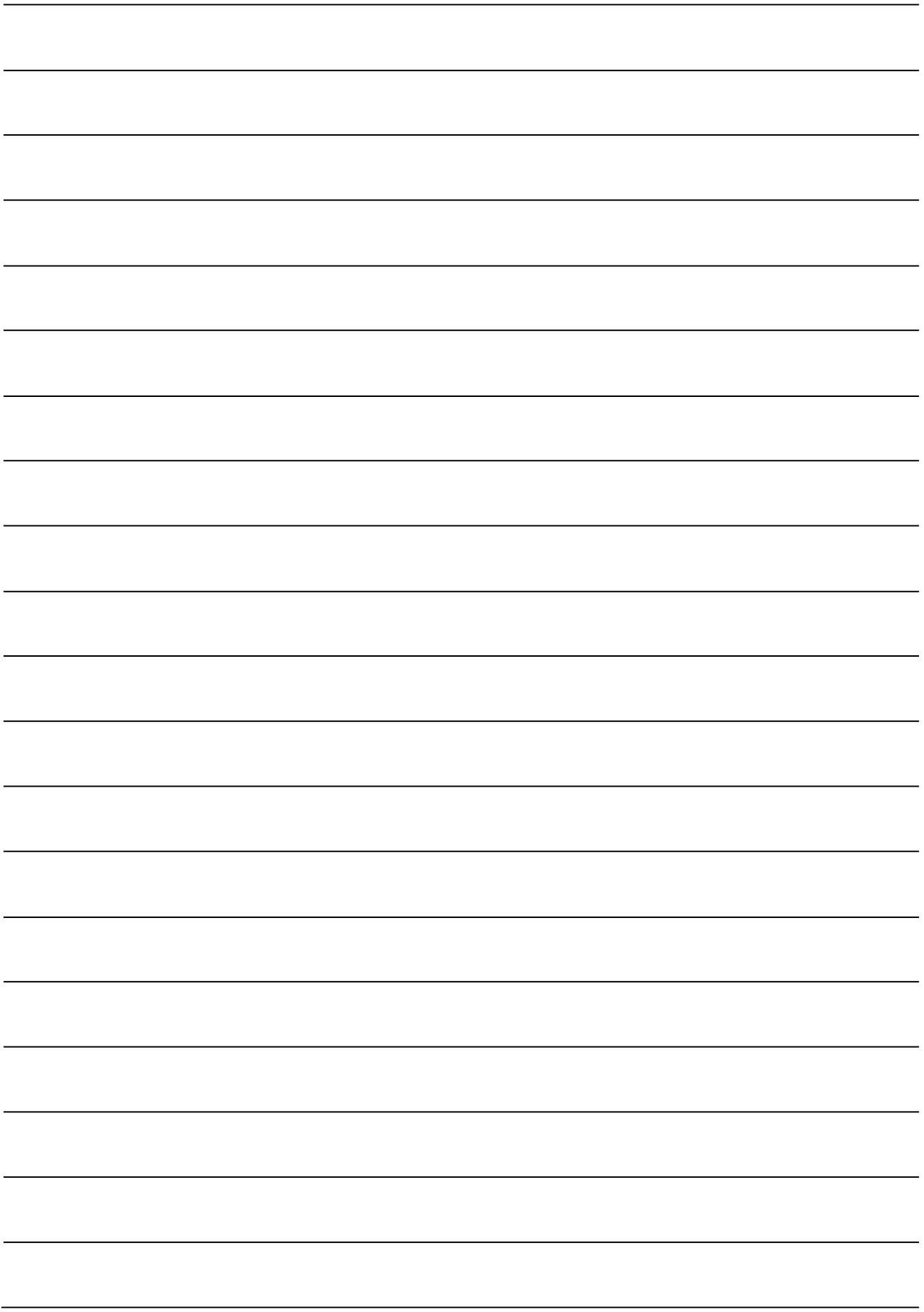
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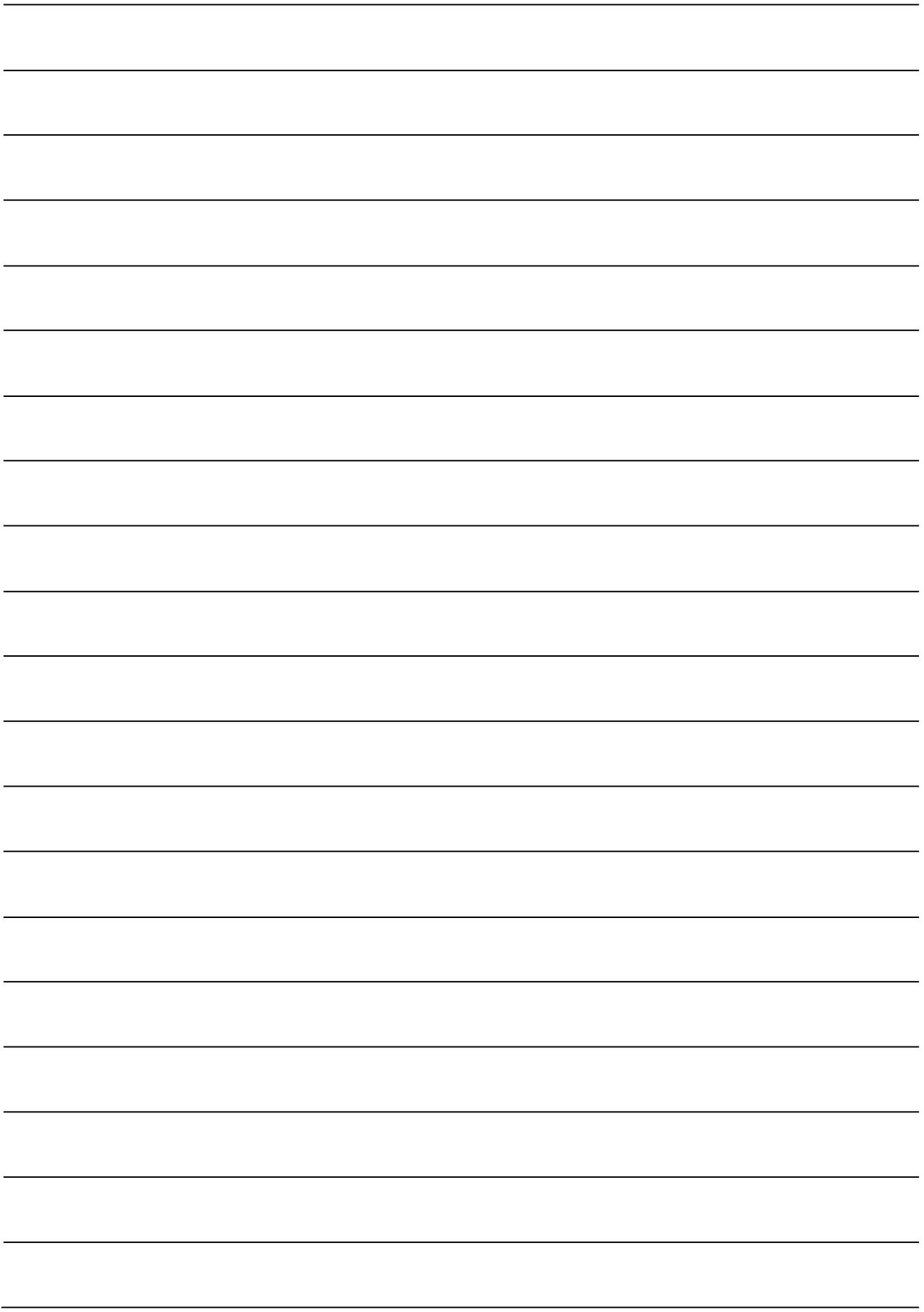
The machine underwent the following tests:

- Brake test
- Overload test
- Operation test

Producing a POSITIVE result.

Tortoreto, on







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