PIATTAFORME AEREE SEMOVENTI
SELF-PROPELLED WORK-PLATFORMS
PLATES-FORMES DE TRAVAIL AUTOMOTRICES
SELBSTFAHRENDE HUBARBEITSBÜHNEN
PLATAFORMAS ELEVADORAS AUTOPROPULSADAS
ZELFRIJDENDE HOOGWERKERS

SERIE „XS“

XS7 E - XS8 E - XS9 E

USE AND MAINTENANCE MANUAL

- ENGLISH -

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Tigieffe thanks you for purchasing a product of its range, and invites you to read this manual. Here you can find all the necessary information for a correct use of the purchased machine; therefore, you are advised to follow the instructions carefully and to read the manual thoroughly. The manual should be kept in a suitable place where no damage can occur to it. The content of this manual may be modified without prior notice and further obligations in order to add changes and improvements to the units already delivered. No reproduction or translation may take place without the written permission of the owner.

Contents:

Annexes: hydraulic and electric circuit diagrams
control register
conformity declaration
spare parts manual
troubleshooting guide

1. INTRODUCTION

This Use and Maintenance Manual provides general instructions concerning the complete range of units indicated on the cover. Therefore, the description of their components, as well as control and safety systems, may include parts not present on your unit since supplied on request or not available. In order to keep pace with the technical development *AIRO-Tigieffe s.r.l.* reserves the right to modify the product and/or the use and maintenance manual at any time without updating the units already delivered.

1.1 Legal aspects

1.1.1 Delivery of the unit

Within EU (European Union) member countries the machine is delivered complete with:
- Use and Maintenance manual in your language;
- CE mark applied on the unit;
- CE conformity declaration;
- Guarantee certificate;

  Only for Italy:
  - Specimen for commissioning declaration to ISPESL;
  - List of ISPESL departments by territory;
  - Statement of inside testing.

1.1.2 Declaration of commissioning, first inspection, further periodical inspections and transfers of ownership

The legal obligations of the owner of the machine vary according to the country of commissioning. It is therefore recommended to inquiry about the procedures in force in your country from the boards responsible for industrial safety. This manual contains a final section called "Check register" for a better filing of documents and recording of any modifications.

1.1.2.1 Declaration of commissioning and first inspection

In ITALY the owner of the Aerial Platform must notify the use of the unit to the local competent ISPESL (National Institute for the prevention of accidents at the workplace) and submit it to periodical compulsory inspections. The first one of these inspections is carried out by ISPESL, while the following ones by the territorial inspection boards (ASL/USL or ARPA). The inspections are on a payment basis and the machine owner will be charged for them. For these inspections, the territorial inspection boards (ASL/USL or ARPA) and ISPESL can be supported by authorized public or private subjects. The authorized private subjects acquire the qualification of responsibles of the public service and refer directly to the public structure that controls this function.

To declare the commissioning of the unit in Italy, send the form that is supplied together with other documents upon machine delivery, by registered letter with advice of receipt.

Within one year of the declaration, ISPESL will assign a Serial Number and during the First Inspection will issue a "Check booklet" indicating only the detectable data of the machine already in use or inferable from the relative User Manual. Afterwards ISPESL will send a copy of the same booklet to the territorial inspection boards (ASL/USL or ARPA) which will carry out the further periodical mandatory inspections (every year).

1.1.2.2 Further periodical inspections

Yearly inspections are compulsory. In Italy the owner of the Aerial Platform must apply for a periodical inspection by sending a registered letter to the local competent inspection board (ASL/USL or ARPA) at least twenty days before the expiry of the year from the last inspection.

NB: If a machine without a valid control document should be moved in an area outside the competence of the usual inspection board, the owner of the machine must ask the inspection board, competent for the new territory where the machine is to be used, for the annual inspection.

1.1.2.3 Transfers of Ownership

In case of transfer of ownership (in Italy) the new owner of the Aerial Platform must notify the ownership of the unit to the local competent inspection board (ASL/USL or ARPA) by enclosing a copy of:

- Conformity declaration issued by the manufacturer;
- Declaration of commissioning carried out by the first owner.

1.2 Intended use

The machine described in this use and maintenance manual is a self-propelled aerial platform intended for lifting persons and materials (equipment and building materials) in order to carry out maintenance, installation, cleaning, painting, de-painting, sand-blasting, welding operations, etc.
The max. capacity allowed (which varies according to the model – see paragraph “Technical features”) is divided as follows:

- 80 Kg for each person on board;
- 40 Kg for equipment;
- any remaining load is represented by the material being worked.

In any case NEVER exceed the maximum capacity allowed as indicated in paragraph "Technical features”.
All loads must be positioned inside the platform. Do not lift loads (even if complying with the maximum capacity allowed) hanging from the platform or the lifting structure.
Do not carry large-sized panels since they increase the resistance to wind force thus causing the machine to overturn.
While de-placing the unit with lifted platform do not load horizontal loads onto the platform (the operators on board must not pull ropes, wires, etc.).
A load control system interrupts the operation of the unit if the load on the platform exceeds by 30% approx. the rated load (see chapter "General use instructions”) and the platform is lifted.
The unit cannot be used in areas where road vehicles operate. Always surround the working area by means of suitable signs when the unit is used in public areas.
Do not use the machine to tow trucks or other vehicles.

1.3 Description of the unit

The machine described in this use and maintenance manual is a self-propelled aerial platform equipped with:
- motorized chassis equipped with wheels;
- vertical lifting structure, scissors type, activated by one or several hydraulic cylinders (the number of cylinders depends on the model of the machine);
- operator platform with manually sliding appendix (the max. capacity varies according to the model - see chapter "Technical features").

The chassis is motorized to allow the machine to be moved (see “General use instructions”). The chassis is equipped with two rear idle wheels and two front steering and driving wheels. The rear wheels have a hydraulic parking brake of the positive logic type, (when drive controls are released brakes are automatically activated).
The hydraulic cylinders which move the pivot structure are provided with safety electrovalves directly flanged on the same. These devices allow the booms to remain in position even if one of the supply tubes accidentally breaks.
The platform, which can be manually extended from the front side (optional), is fitted with guardrails and toe boards of prescribed height (the guardrails height ≥ 1100 mm; the toe boards height ≥150 mm).
Should the motive power be absent the manual emergency lowering can be controlled by activating manually the knob from the ground according to the plate instructions.
The machine can be equipped with two types of load control upon customer’s request:
- 1: single load control system where the extension of the mobile platform (optional) reduces the platform capacity to the capacity indicated on the extensible part;
- 2: double load control system where the max. platform capacity is not reduced with the mobile platform extension (optional).

1.4 Control stations

The machine is equipped with two control stations:
- at platform for normal use of the unit;
- at the chassis for emergency controls to lower or stop the unit in emergency situations. The ground control station is also equipped with a key-selector to select the control station and to start the unit.

1.5 Power supply

The machines can be powered by an electro-hydraulic system composed of rechargeable accumulators and electric pump.
The hydraulic and electrical systems are equipped with all necessary protections (see electric and hydraulic diagrams attached to this manual)

Do not use the machine for purposes different from those it was intended for.
If disposal of the unit is necessary, comply with current local regulations. The machine is built mainly with metal parts easy to be identified (mostly steel, and aluminium for the hydraulic blocks); therefore we can state that the machine can be recycled by 75%.

1.6 Identification

In order to identify the machine, when spare parts and service are required, always mention the information given in the serial number plate. Should this plate (as well as the various stickers applied on the unit) be lost or illegible, it is to be replaced as soon as possible. In order to identify the machine when no plate is available the serial number is also stamped on the chassis. To locate the plate and the stamp of the serial number, see the following picture. It is recommended to copy such data in the following boxes.

Model.....……..	Chassis:.....……..	Year:.....……..

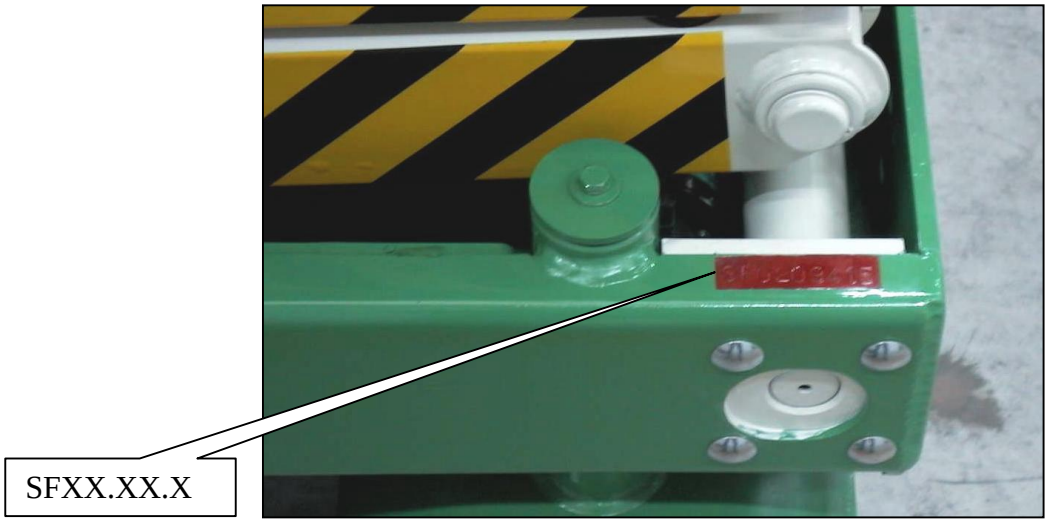


Fig. 1

1.7 Location of main components

Below is a diagram showing the machine and its components.

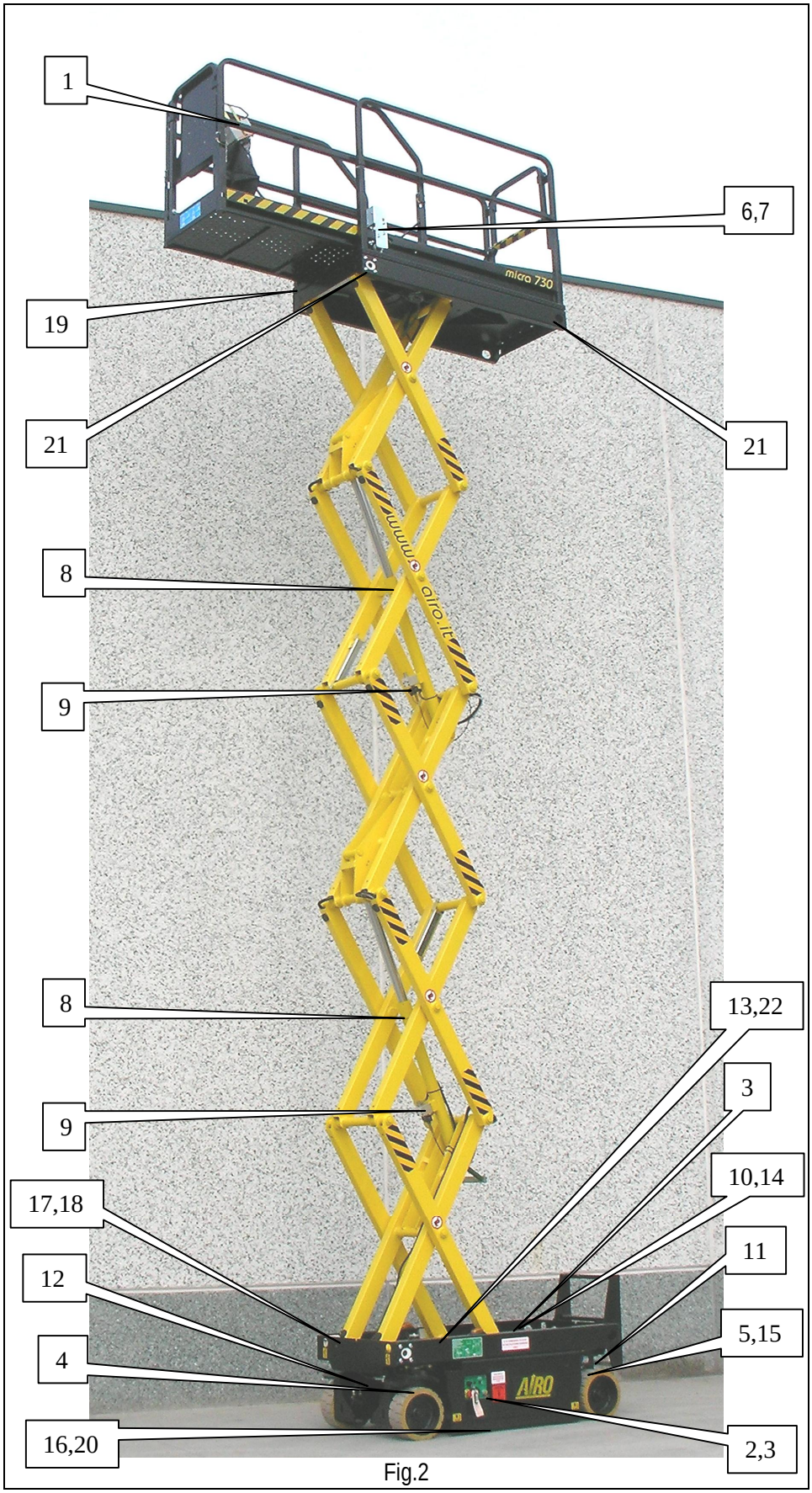


Fig.2

1) Control panel at platform;
2) Electric power unit;
3) Hydraulic power unit;
4) Hydraulic drive engines;
5) Parking brakes;
6) 230V socket;
7) Bubble level for visual check of machine levelling;
8) Lifting cylinders;
9) Lowering control valves;
10) Battery;
11) Battery charger;
12) Steering cylinder;
13) Inclinometer;
14) Control device of electrical system isolation;
15) Manual device for emergency lowering;
16) Pothole guards;
17) Microswitch M1 platform height control;
18) Microswitch M3A + M3B (only XS9 E) electric limit switch for lifting in mode “2 persons” – inhibition of drive control in mode “1 person” with platform at a height over 6 m;
19) Microswitch M5 control of mobile platform position (optional) – drive control inhibited with extended platform (optional);
20) Microswitches MPT1 – MPT2 position control of pothole system;
21) Deformation trasducer;
22) Monitoring circuit board of the control load system at platform.

2. TECHNICAL FEATURES OF STANDARD MACHINES

Description	XS7 E	XS8 E	XS9 E	
			"2 persons"	"1 person"
Max. working height – m -	6.61	7.96	8	9.27
Max. platform height – m -	4.61	5.96	6	7.27
Ground clearance (pothole guards up) – mm -	72	72	72	
Ground clearance (pothole guards down) – mm -	15	15	15	
Inside turning radius – m -	0	0	0	
Outside turning radius – m -	1.48	1.48	1.48	
Max. capacity - Kg -	250	250	200	120
Max. No. of people on platform	2	2	2	1
Max. platform extension - optional – m -	1	1	1	
Max. capacity on the extended part - optional – Kg -	120	120	120	
Max. No. of people on the extended part – optional	1	1	1	
Max. drive height (1) – m -	4.61	5.96	6	
Max. platform dimensions – standard – mm -	740x1650	740x1650	740x1650	
Max. hydraulic pressure - bar -	240	240	240	
Tyre dimensions - mm -	Ø 300	Ø 300	Ø 300	
Tyre type (2)	300-115-240	300-115-240	300-115-240	
Max. operating temperature - °C -	+50°	+50°	+50°	
Min. operating temperature - °C -	-5°	-5°	-5°	
Stability limits:				
Longitudinal inclination - degrees -	1.5°	1.2°	1°	
Transversal inclination - degrees -	1.5°	1°	1°	
Max. wind force - m/s -	0	0	0	
Battery voltage and capacity –V/Ah-	6x4/190	6x4/190	6x4/190	
Battery weight – kg -	33x4	33x4	33x4	
Single-phase battery charger - V/A -	24/30 HF	24/30 HF	24/30 HF	
Max. power absorbed by battery charger -A-	5	5	5	
Electropump power - KW -	3	3	3	
Max. current absorbed – A -	160	160	160	
Max. drive speed - m/s -	1	1	1	
Safety drive speed - m/s -	0.1	0.1	0.1	
Oil tank capacity - l -	20	20	20	
Max. gradeability - % -	30	27	25	
Cubic volume with rails in work position - m^3 -	2.9	3	3.2	
Cubic volume with rails down – standard- m^3 -	2.3	2.4	2.6	
Height / Length with folded down rails - standard – m -	1.65 / 1.805	1.76 / 1.805	1.87 / 1.805	
Cubic volume with rails down – optional- m^3 -	2.8	2.9	3.1	
Height / Length with rails down - optional – m -	1.65 / 2.15	1.76 / 2.15	1.87 / 2.15	
Machine weight (unloaded) (3) - Kg -	1310	1395	1540	

(1) Translation with platform lifted up to the indicated limit possible only if the machine is fitted with automatic or manual pothole guards in lowered position (reduced height of the machine from the ground). Otherwise, translation is possible only with platform completely lowered (until the activation of the microswitch that automatically prevents the operation after 1 m approx. of lifting) or up to the limit shown in the table. With sliding platform (optional) extended drive control is prevented.
(2) Cushion tyres (full rubber).
(3) In some cases different limits can be fixed. It is recommended to comply with the data shown on the machine plate.

Noise tests have been carried out under the most unfavourable conditions to study the effects on the operator. The level of acoustic pressure weighed (A) at work places does not exceed 75,2dB(A).
As to vibrations in ordinary working conditions:
- the rms. value weighed according to acceleration frequency relevant to the upper limbs is lower than 2.5 m/sec^2 ;
- the rms. value weighed according to acceleration frequency relevant to the body is lower than 0.5 m/sec^2 .

3. SAFETY PRECAUTIONS

3.1 Power supply

The electrical and hydraulic circuits are provided with safety devices, calibrated and sealed by the manufacturer.

⚠ Do not tamper with and modify the calibration of any component of the electrical and hydraulic system.

3.2 Work and maintenance rules

- Always wear personal protective clothes according to current regulations concerning industrial health and safety (in particular, helmet and safety harness are COMPULSORY. See picture below).
- The machine should be used in areas well lit up, checking that the ground is flat and firm. The machine can not be used if lighting conditions are not sufficient. The machine is not fitted with its own lighting.
- Before using the machine check its integrity and conservation state.
- During maintenance operations do not dispose of any waste materials in the environment, but comply with current regulations.
- Do not carry out any service or maintenance operations when the machine is connected to the power supply. Follow the instructions given in the following paragraphs.
- Do not approach the electrical and hydraulic system components with sources of heat or flames.
- The platform is intended for people carriage; therefore comply with the current local regulations relevant to this class of machines (see paragraphs 1.1 – 1.2 – 1.3).
- Do not increase the max. allowed height by means of scaffolds, ladders or other.
- Protect the unit (in particular the platform control box with its protection cover) and the operator when working in adverse environmental conditions (painting, de-painting, sand-blasting, washing, etc.).
- Do not use the unit in case of severe weather conditions (rainstorms with wind exceeding the limit speed indicated in chapter "Technical features" – the operator must have an anemometer).
- In the event of rain or in parking condition always protect the platform control panel by means of the specially protection cover.
- Do not use the machine in areas where risks of fire or explosion exist.
- Do not use pressurized water jets (high-pressure cleaners) to wash the machine.

Safety harness coupling

Fig.3

3.3 Safety rules

3.3.1 General

Only adults (full-aged persons), instructed in the use of the machine and aware of the content of this manual, should use the machine.

The machine operators must always be at least two, one of them on the ground, able to carry out the emergency operations described in this manual.

This machine must be used at a distance of at least 5 metres from high voltage lines (in any case not in proximity to live elements).

Use the machine according to the capacity values indicated in the technical features section. The max. No. of people allowed on the platform and the capacity are specified on the identification plate.

Do NOT use the framework of the platform or any of its elements for grounding connection while welding on platform.

It is the machine owner and/or safety manager's responsibility to check that the operators have been thoroughly trained in the use of the machine.

It is the machine owner and/or safety manager's responsibility to check that the maintenance and repair operations are carried out by skilled personnel.

3.3.2 Handling

Before any movement make sure that the machine plugs are disconnected from the power source.

When the mobile platform is extended, the drive control is prevented (from a given height – some tolerance is possible depending on the model). To move the machine the mobile platform must be completely retracted.

In order to avoid any instability, use the machine on regular and firm grounds. To prevent the machine from overturning, comply with the max. gradeability values indicated in the Technical features section under paragraph "Stability limits". However, movements on inclined grounds are to be carried out with the utmost caution.

As soon as the platform is lifted (the tolerance varies from model to model) the safety drive speed is automatically activated (all models described in this manual have passed the stability Tests according to EN280:2001 – see chapter technical Features).

Drive the unit with lifted platform only on flat grounds, verifying the absence of holes or steps on the floor and bearing in mind the overall dimensions of the unit.

While driving the unit with lifted platform the operators are not allowed to place horizontal loads onto the platform (operators on board must not pull ropes, wires, etc.).

The machine must not be used directly for road transport. Do not use it for material transport (see paragraph 1.2 "Intended use").

Check that in the operating area there are not obstacles or other dangerous elements.

Pay particular attention to the area above the machine during lifting to avoid any crushing and collisions.

3.3.3 Operating procedures

The machine is equipped with a control load system at platform to stop lifting and lowering of the platform when it is overloaded. In case of overload with lifted platform also drive operation is prevented. Platform operation can be resumed only after removing the exceeding load. Should the audible alarm and the red warning light located on the platform control panel turn on, then the machine is overloaded (see paragraph relevant to general use instructions). Remove the exceeding load before starting operations again.

The machine is equipped with an inclination control system to disable lifting operations in case of unstable positioning. Working operations can be resumed only after placing the machine in a steady position. Should the audible device and the red light on the platform control panel turn on, the machine is not correctly positioned (see paragraphs relevant to general use instructions). Bring it to safety rest position before resuming operations.

The machine is equipped with a device controlling the electrical system isolation. In case of isolation loss or remote switch fault, such device (located on the chassis – see paragraph "Location of main components") brings the machine to a complete halt and signals the fault by means of a continuous hissing sound.

The machine is equipped with a device to prevent the risk of shearing and crushing in the lifting structure according to EN280:2001: the lowering movement is automatically stopped at a position where the vertical distance between the ends of the scissors is higher than 50 mm. In this condition the audible movement alarm warns of the danger increasing its frequency. The operator on the platform must release the lowering control and wait for the acoustic signal to turn off (about 3 sec.), only then will he be able to proceed with the lowering control (see paragraph "General use instructions").

The machine is equipped with a device for the battery charge level ("battery-protection" device): when the battery charge is at 20% the condition is signalled to the operator on the platform through a red flashing light. In this condition the lifting operation is prevented; recharge battery at once.

Do not lean over the platform guard-rails. Avoid severe weather conditions and, in particular, windy days. (the operator must have an anemometer).

During operations in public areas, in order to prevent people other than the personnel from approaching the machine and being endangered, surround the working area by means of barriers or other suitable signs.

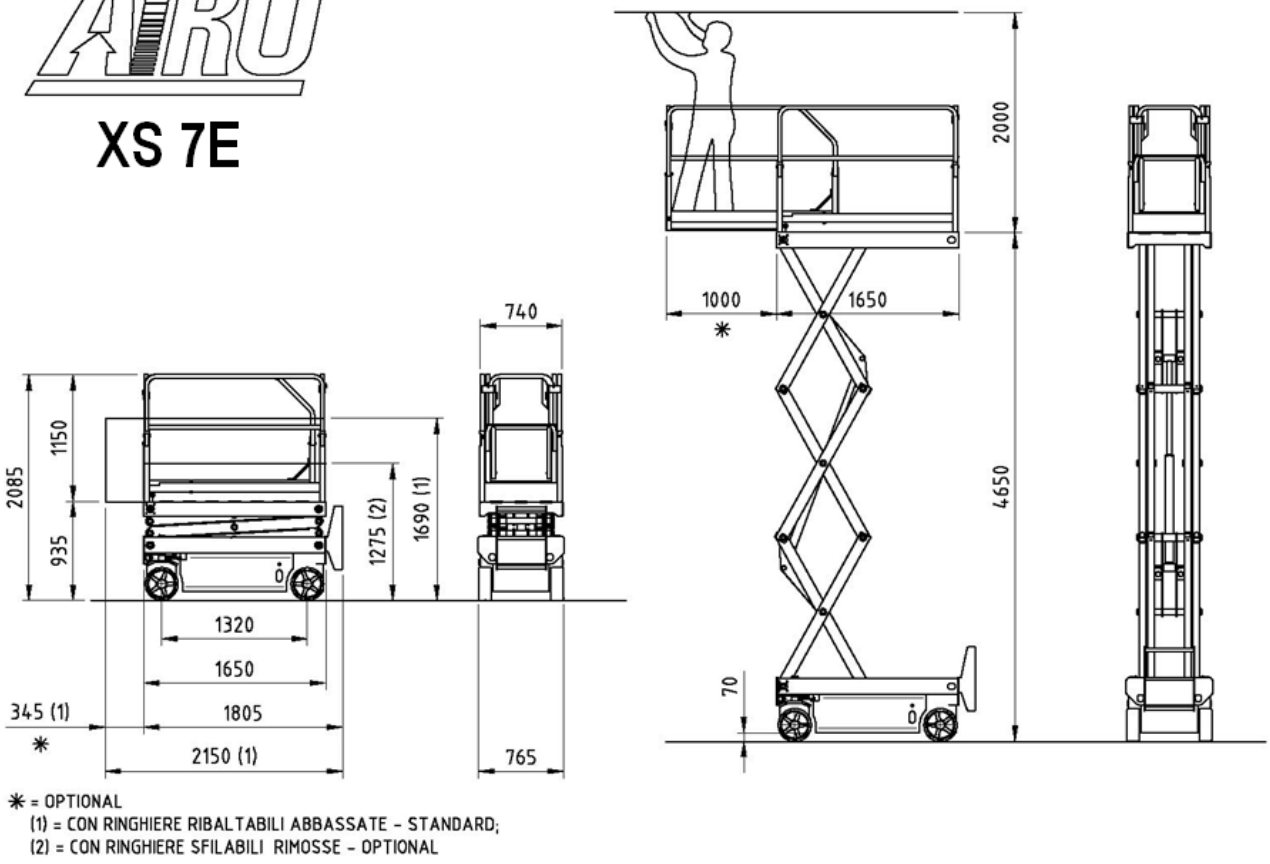
Make sure that no people, apart from the operator, are in the area where the machine is operating (see following pictures). While moving the platform the operator should pay particular attention to avoid any contact with the personnel on the ground.

After each work session, always take the key out of the control panel and keep it in a safe place to prevent unauthorized people from using the machine.

Always place working tools in a steady position to prevent them from falling and hurting the operators on the ground.

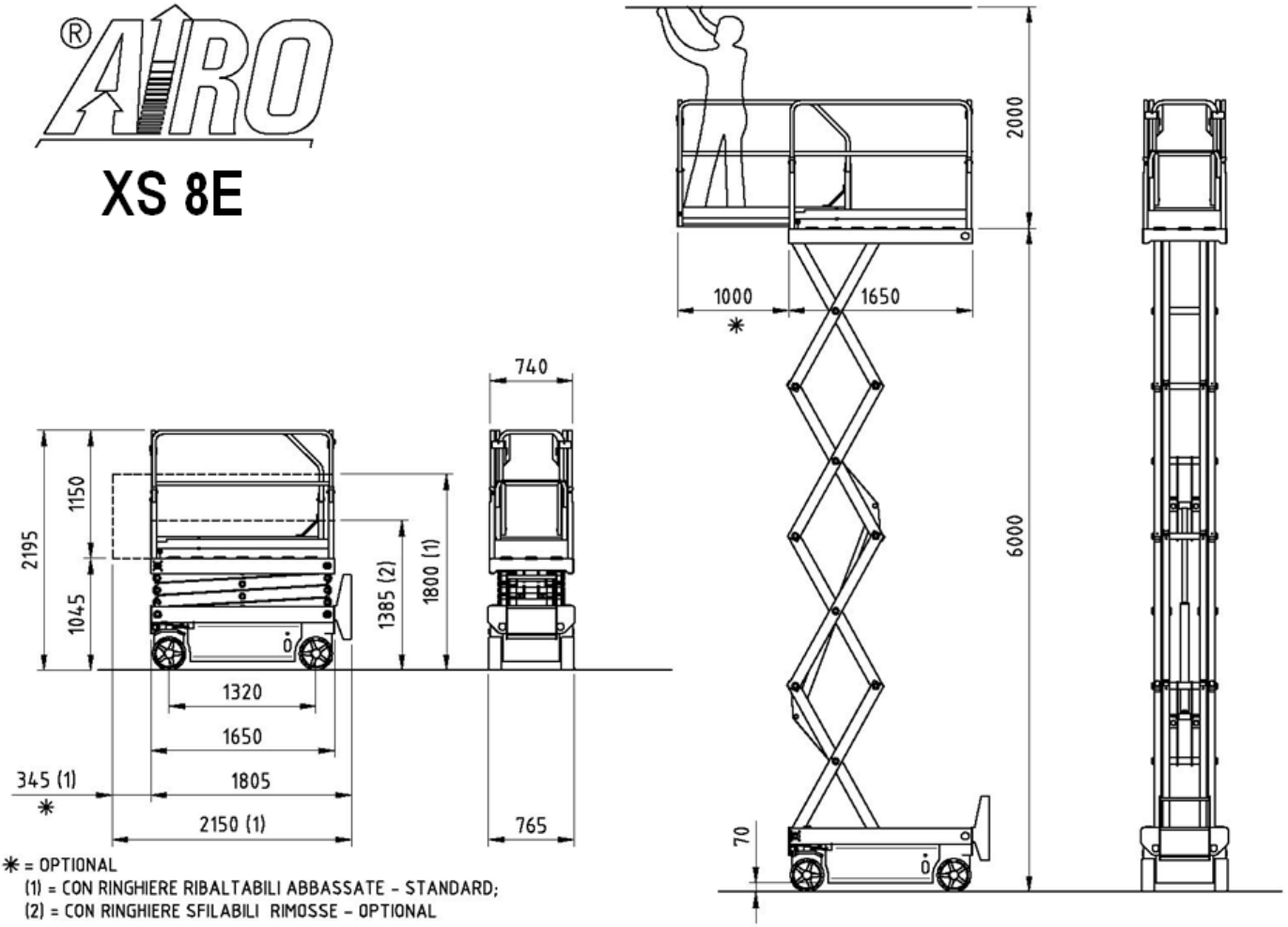
- From the following pictures you can locate the action range of the platform while the chassis is kept in a fixed position. Watch these pictures carefully in order to position the chassis so as to avoid any contacts with obstacles present in the action range.

XS 7E



✳ = OPTIONAL
(1) = CON RINGHIERE RIBALTABILI ABBASSATE - STANDARD;
(2) = CON RINGHIERE SFILABILI RIMOSSE - OPTIONAL

XS 8E



✳ = OPTIONAL
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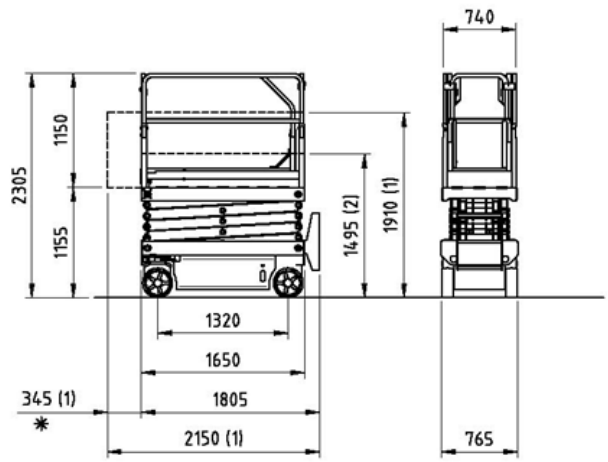
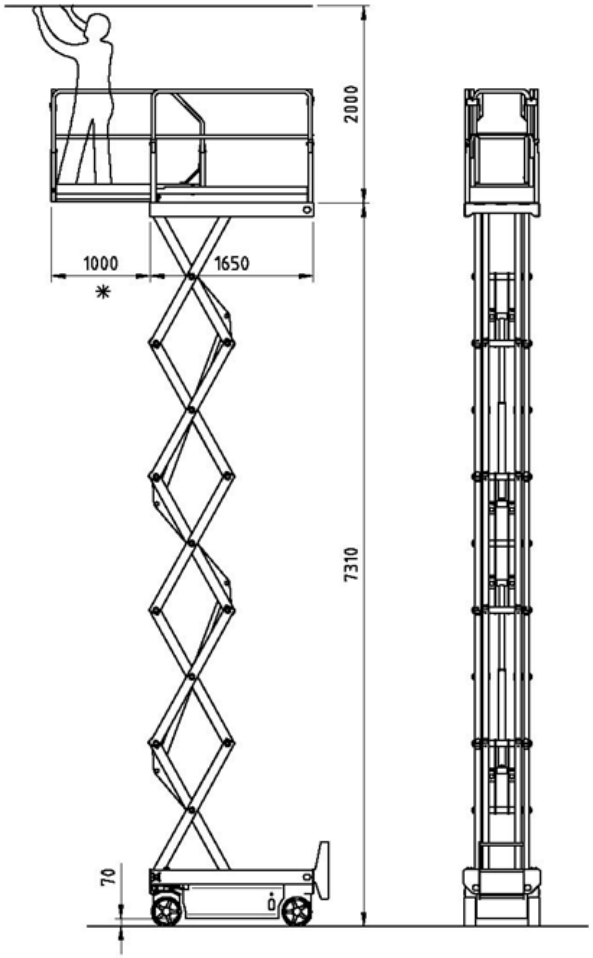
(2) = CON RINGHIERE SFILABILI RIMOSSE - OPTIONAL

XS 9E



✳ = OPTIONAL
(1) = CON RINGHIERE RIBALTABILI ABBASSATE - STANDARD;
(2) = CON RINGHIERE SFILABILI RIMOSSE - OPTIONAL



4. INSTALLATION AND PRELIMINARY CHECKS

The machine is delivered completely assembled. No preliminary operation is required. To unload the machine, follow the instructions in paragraph “Handling and carrying”.
Place the machine onto a firm ground and with a gradeability lower than the max. allowed (see “Stability limits”). The machine is equipped with platform bubble level for visual check and an inclinometer on the chassis to always check machine levelling, both transversal and longitudinal.
Before using the machine read the instructions given in this manual and the concise instructions indicated on the platform plate.
Before starting any operations verify the integrity of the unit (by means of a visual check) and read the plates indicating the operating limits.

4.1 Before using the machine

Before using the machine the operator must always check visually that:

- the battery is completely charged;
- the hydraulic oil level ranges between the min. and max. value (with platform completely lowered);
- the machines carries out all operations in safety;
- the wheels and drive engines are properly fixed;
- the wheels are in good condition;
- the rails are fixed to the platform;
- the structure does not show clear faults (check welding of lifting structure);
- the instructions plates are perfectly readable;
- the controls are perfectly efficient both at platform and at emergency ground control stations, including the “dead-man” system.

5. GENERAL USE INSTRUCTIONS

Before using the machine read this chapter thoroughly.

⚠ Follow exclusively the instructions given in the next paragraphs and the safety rules described both hereafter and in the previous paragraphs. Read the next paragraphs carefully in order to properly understand the on/off procedures as well as all operations and their correct use.

⚠ Before any movement, verify the presence of people in close proximity to the machine and, in any case, proceed with the utmost caution.

5.1 Platform control panel

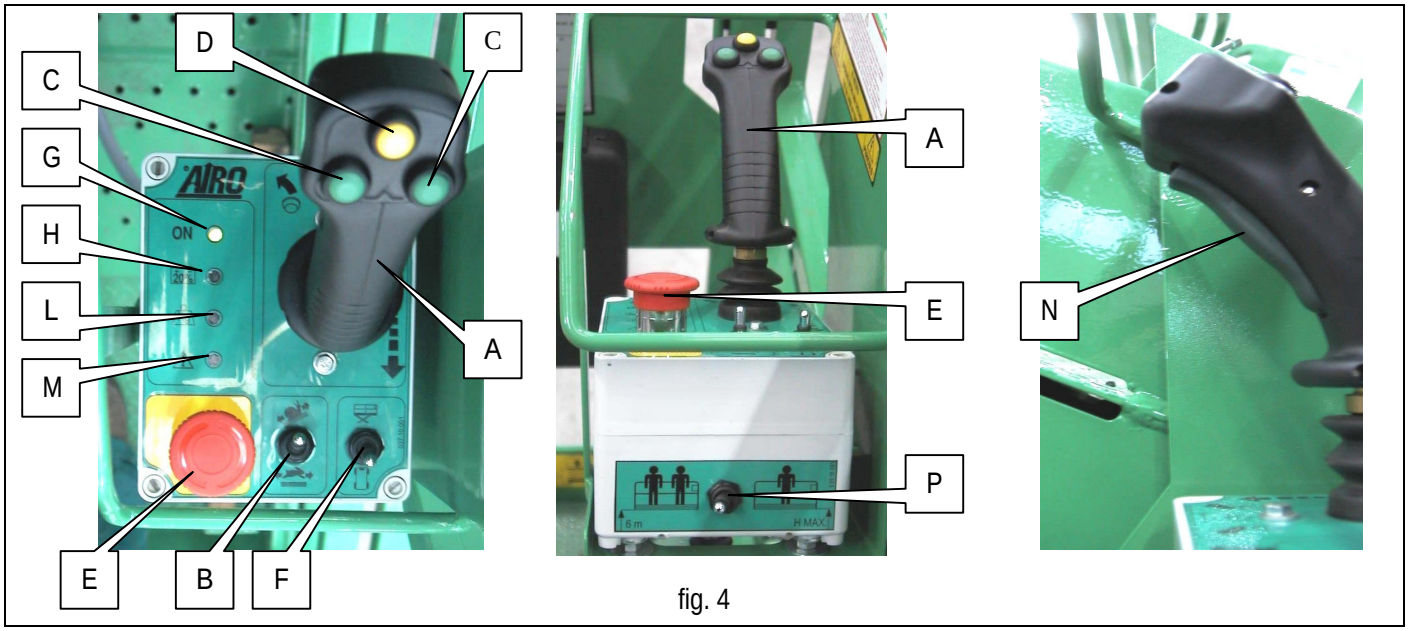


fig. 4

A) Proportional joystick control for platform drive /lifting /lowering
B) Drive speed selector (hare/snail)
C) Steering switch
D) Horn switch
E) Emergency brake (Stop)
F) Movement selector (drive or lifting/lowering)
G) Warning light: control station enabled
H) Warning light: run-down battery
L) Warning light: platform overload
M) Warning light: danger due to instability or malfunctioning of electrical system
N) Deadman switch
P) Operating mode selector (1 person / 2 persons) – ONLY XS9 E

All movements (except steering) are controlled by the proportional joystick; it is therefore possible to adjust movement speed by means of the relative joysticks (except lowering which takes place by gravity – proportional control upon request). To avoid sudden shakes during movements, it is advisable to operate the proportional joystick control gradually.

For safety reasons to operate the machine it is necessary to press the deadman switch N on the front of the proportional joystick before operating the joystick itself. If the deadman switch is accidentally released while the machine is operating, the movement is immediately stopped. To resume the operation it is necessary to release the joystick control and carry out the above described sequence.

WARNING! Holding down the deadman switch for over 10 seconds without carrying out any operation will disable the control station. This condition is signalled by a flashing green LED (H). To operate the machine again it is necessary to release the deadman switch and press it again; the green LED (H) will light up steady and for the next 10 seconds all controls will be enabled.

5.1.1 Drive and steering

The controls used to move the machine are the following:
- Joystick control A;
- Speed selector B;
- Steering switch C;
- Movement selector F;
- Deadman switch N.

To drive the machine it is necessary to carry out the following operations in sequence:
- select the “drive” mode through selector F;
- press the deadman switch N (it is active when the green LED G is steadily lit);
- within 10 seconds of the green LED turning on steadily move the control joystick A forward for forward running or backward for reverse running holding down the deadman switch throughout.

By means of speed selector B it is possible to choose two drive speeds:
- slow speed with selector in “snail” position;
- quick speed with selector in “hare” position.

To steer operate the steering switch C at the same time as the deadman switch N; press the right button for right steering, press the left button for left steering.

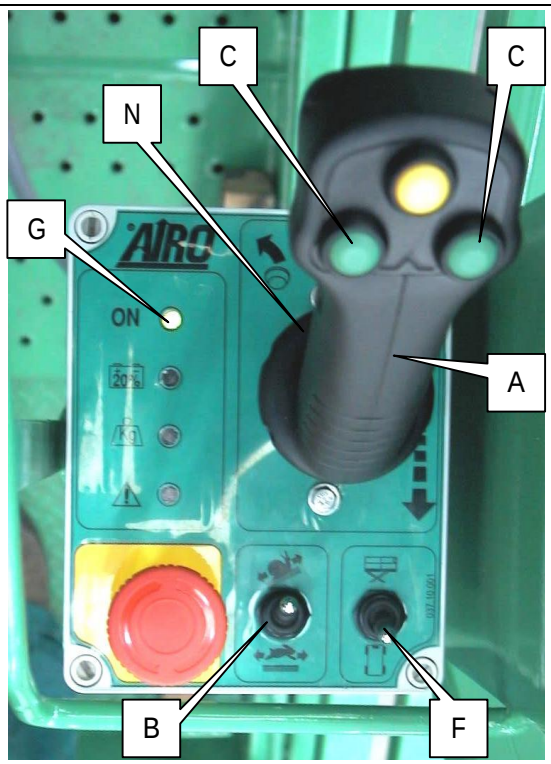


Fig.5

NOTE:
- To achieve <u>maximum drive speed,</u> set the speed selector (B) to position “hare”, and activate the joystick control (A).
<u>- To operate on high ascending or descending slopes</u> (e.g. while loading/unloading the machine onto/from a truck) set the speed selector (B) to position “snail” and activate the joystick control (A).

With platform at a given height (after 1 m approx. of lifting) the safety drive speed is automatically inserted (for machines allowed to translate with lifted platform), therefore the max. speed is automatically adjusted by the control system regardless of the position of the speed selector (B).

⚠	With mobile platform extended (from a given height which depends on the model) the drive and steering control is inhibited. To control drive and steering again, it is necessary to retract the mobile platform completely. MODEL XS9 E: In “1 PERSON” mode the drive and steering control is inhibited from a height of 6 m. To control drive and steering again, it is necessary to lower the platform below this height.

5.1.2 Platform Lifting / Lowering

The controls used to lift and lower the platforms are:
- joystick control A;
- movement selector F;
- deadman switch N.

To lift / lower the platform it is necessary to carry out the following operations in sequence:
- select “lifting/lowering” mode by means of selector F;
- press the deadman switch N (its activation is signalled by a steady light of the green LED G)
- within 10 seconds of green LED turning on steadily, set the joystick control A forward for lifting or backward for lowering holding down the deadman switch throughout.

The lowering operation takes place at a fixed speed.

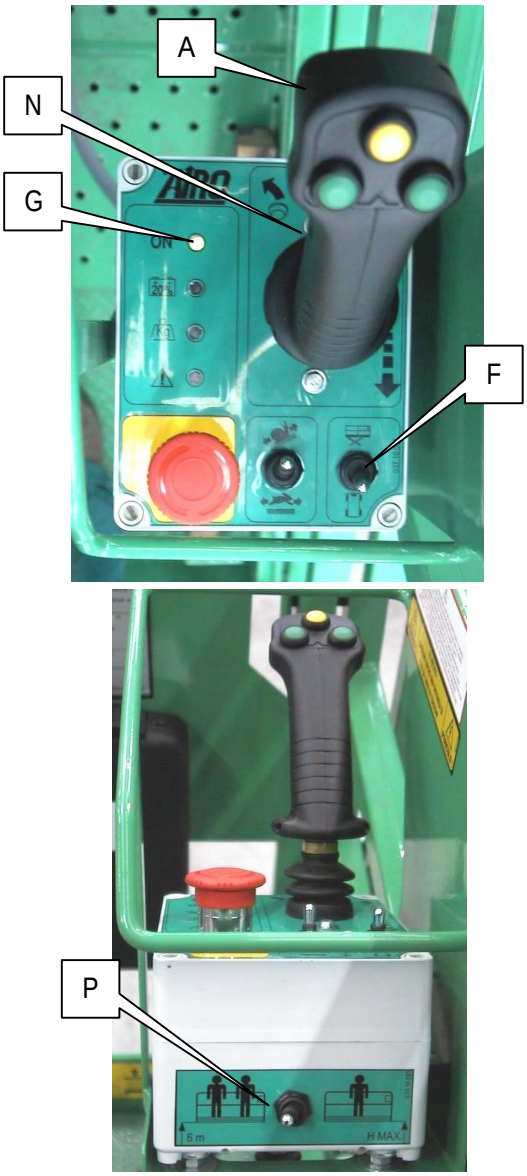


Fig.6

NOTE:

1) The machine is equipped with a device to prevent the risk of shearing and crushing in the lifting structure according to EN280:1991: the lowering movement is automatically stopped at a position where the vertical distance between the ends of the scissors is higher than 50 mm. In this condition the audible movement alarm signals the danger by increasing its frequency. The operator on the platform must release the lowering control and wait until the audible alarm turns off (about 3 sec.), only then will he be able to proceed with the lowering control (see paragraph “General use instructions”).

2) ONLY FOR MODEL XS9 E – if the mode selector (P) is in position “1 person –7.3 m” the machine is enabled to lift the reduced load (120 kg including one person) up to the max. height (7.3 m). In this condition the load control system checks that the max. allowed capacity in this mode is not exceeded (see maintenance chapter to see how the load control device works). If the mode selector (P) is in position “2 persons – 6 m” the machine is enabled to lift the max. load up to a height of 6 m. In this condition the load control system checks that the max. allowed capacity in this mode is not exceeded (see maintenance chapter to see how the load control device works). Bear in mind that the max. capacity may be reduced anyway, due to the extension of the mobile platform (see next paragraph).

5.1.3 Manual platform extension (optional)

The mobile platform extension is carried out manually. To extend the platform it is necessary to:

- press the stop pedal Q;
- push the platform manually acting on the inclined part of the rails, holding down the pedal Q;
- release the pedal Q near one of the two holes according to the type of extension to be obtained;
- check that the stop pedal Q is actually in the hole to make sure the platform is locked.

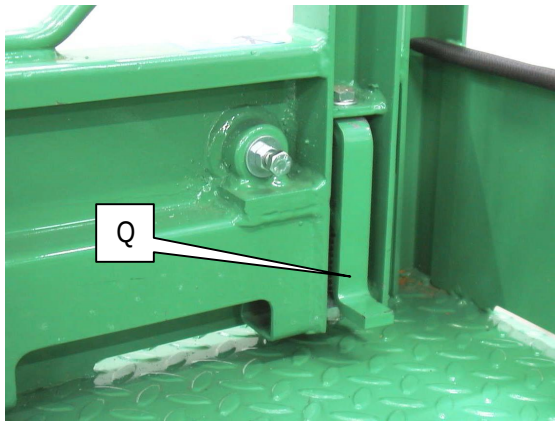


Fig.7

Extending the mobile platform will activate the microswitch M5 which:

1) activates the load control on the overhang:
   - for machines equipped with single load control system, the extension of the mobile platform will cause the reduction of the total capacity of the platform to the capacity indicated on the extending part;
   - for machines equipped with double load control system, the max. capacity of the platform is not reduced with the extension of the mobile platform, and it is still possible to leave the residual load on the fixed part (residual load = max. platform capacity – max. overhang capacity).
2) Inhibits drive and steering control.

5.2 Other functions of the platform control panel

5.2.1 Manual horn (D)

It warns that the machine is moving. It is manually operated by means of the key D.

5.2.2 Emergency brake (STOP) (E)

Pressing the red STOP button all machine control functions will be stopped. Normal functions can be obtained by turning the button one fourth of turn clockwise.

5.2.3 Green warning light: control station enabled (G)

On with flashing light when the machine is turned on. If the platform control station has been selected and this light flashes, the controls are not enabled because the deadman switch (N) is not pressed or it was pressed for more than 10 seconds and no operation was performed.
On steady with machine on and deadman switch pressed for less than 10 seconds. With platform controls all controls are enabled (unless other types of warning show up – see next paragraphs).

5.2.4 Red warning light: run-down battery (H)

Flashing when the battery charge is only at 20%. In this condition lifting is disabled. Recharge battery at once.

5.2.5 Red warning light: overload (L)

On steady and activation of audible alarm with a platform overload exceeding 30% the rated load. If the platform is lifted, the machine is completely locked. If the platform is lowered, driving/steering operations are still possible but lifting is prevented. Remove the overload before using the machine again.
Fast flashing with activation of audible alarm due to a fault in the load control system at platform. With lifted platform the machine is completely locked.

WARNING! The activation of this indicator signals a dangerous situation since the load at platform is exceeding or no load control is active upon signalling.
For adjustment or activation in the event of an emergency read the chapter MAINTENANCE.

5.2.6 Red warning light: danger due to instability or malfunctioning of the electrical system (M)

On steady with activation of audible alarm when:
- the machine is in unsteady position, not perfectly levelled with the ground. The lifting operation cannot be continued (including drive if platform is lifted). To use the machine again, it is necessary to lower the platform completely and position it in condition of stability;

Slow flashing when:
- there is a fault in the operation and it is not possible to move the machine. The operation faults which can lock the machine may be of different types; e.g. fault of a joystick; fault in the main board; fault in the power supply, etc.

5.2.7 Red warning lights (H+L+M): danger due to isolation loss of the electrical system

To prevent uncontrolled movements, a device on the chassis checks that the electrical machine system is isolated from its structure. In case of isolation loss of one of the two battery poles, this device locks all the movements of the machine and warns the operator on the platform about the danger through the simultaneous activation of the warning lights H+L+M and the audible alarm at platform.

5.2.8 Mode selector (1 person / 2 persons) – ONLY XS9 E

If the mode selector (P) is in position “1 person –7.3 m” the machine is enabled to lift the reduced load (120 kg including one person) up to the max. height (7.3 m). In this condition the load control system checks that the max. allowed capacity is not exceeded in this mode (see maintenance chapter to see how the load control device works). If the mode selector (P) is in position “2 persons – 6 m”, the machine is enabled to lift the max. load up to 6 m height. In this condition the load control system checks that the max. allowed capacity in this mode is not exceeded (see maintenance chapter to see how the load control device works). Bear in mind that the max. capacity may be reduced anyway, due to the extension of the mobile platform. It is possible to choose the operation mode with platform at a height lower than 6 m; at higher heights the only possible operation mode is “1 PERSON”. Changing the operation mode with platform at heights higher than 6 m. will cause the automatic activation of the overload alarm and the machine to stop.

5.3 Ground control station

The ground control station is located on the chassis (see paragraph "Location of main components"). It is to be used to:
- turn the machine ON/OFF;
- select the control station (ground or platform);
- operate the platform in emergency situations;
- display some operating parameters (working hours; battery charger operation; etc.);

⚠ The use of ground controls is recommended only for turning on/off the machine, selecting the control station, or in emergency situations for the recovery of the platform.
IT IS FORBIDDEN to use the ground control station as a workstation when personnel is on the platform.

⚠ The key must be given only to authorized personnel. A duplicate key should be kept in a safe place.
At the end of the working session always remove the on/off key.

⚠ Access to the electrical box is allowed to specialized personnel only for maintenance / repair purposes.
Access the electrical box only after the machine has been disconnected from any 230V power sources.

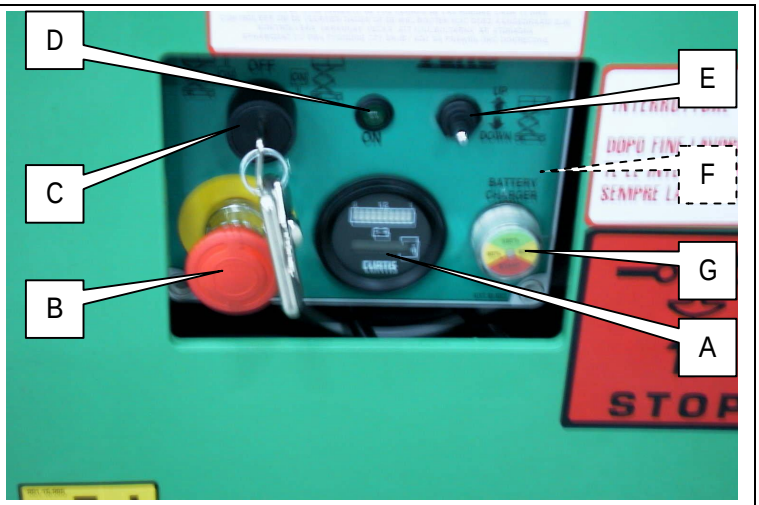


fig.8

A) Hour meter / battery-protection Voltmeter
B) Emergency STOP button
C) Main key: ignition / selection of control station
D) Warning light: control station enabled.
E) Lever: platform lifting/lowering.
F) Movement audible alarm (Indoors).
G) Warning light: battery charger.

5.3.1 Hour meter / battery-protection voltmeter (A)

The hour meter displays the working hours of the electropump (models "E"). The platform lowering takes place by gravity and does not require the activation of the electropump, so the time used for this operation is not counted by the hour meter.
The function of the battery-protection Voltmeter is to prevent the battery from running down excessively. Once the battery has reached a run-down level of 20%, the control system informs the operator on the platform about this condition by means of a red flashing LED (previously described). Lifting is inhibited and batteries must be recharged. At ground control station the condition of run-down battery is signalled in the following way:
- the last two LEDs on the left flash alternatively if the indicator is of circular shape;
- only the last two squares are lit if the indicator is an LCD display.

5.3.2 Emergency stop button (B)

When this button is pressed the machine is completely stopped; when it is rotated by 1/4 turn (clockwise) the machine can be turned ON by means of the main key.

5.3.3 Main key: ignition / selection of control station (C)

The main key located on the ground control station is used to:
- turn ON the machine by selecting one of the two control stations:
    - platform controls enabled with key switch set to platform symbol. Stable position with possibility to extract the key;
    - ground controls enabled (for emergency operations) with key switch set to chassis symbol. Position while action is being carried out. When the key is released, the machine is turned off;
- turn OFF the control circuits by turning it to OFF. Stable position with possibility to extract the key.

5.3.4 Warning light: control station enabled (D)

The green warning light ON indicates that the machine is ON and the ground control station is enabled (main key should be kept in "chassis" position).

5.3.5 Lever platform lifting / lowering (E)

This lever allows the platform to be lifted or lowered. This control can be operated only if the main key is set to ON position downwards (ground control station selected). Bear in mind that the ground controls are to be used to operate the platform only in emergency situations and must not be used for any other purposes. Also for the ground control the limits set by the operation mode selection apply ("1 PERSON / 2 PERSONS") by means of platform selector.

Use the ground controls only to turn on/off the machine, to select the control station, or in emergency situations to allow the platform to be recovered.
IT IS FORBIDDEN to use the ground control station as a workstation when personnel is on the platform.

5.3.6 Movement audible alarm (F)

The machine is fitted with movement audible alarm which is active in the following ways:
- always with intermittent sound roughly every approx. two seconds to indicate all movements of the machine;

- with intermittent sound every 0.5 seconds to indicate the danger of entrapment in the lifting structure in the final section of the lowering operation (see par. “Platform Lifting / Lowering”).

5.3.7 Warning light: battery charger (G)

The models with built-in high-frequency battery charger are provided with this warning light which signals the operation of the battery charger (for more information refer to paragraph about the battery recharge).

5.4 Platform access

To get onto the platform use only the access equipment the platform is provided with.

To get onto the platform:
- climb the ladder holding on to the steps, the ladder uprights or the entry rail uprights;
- lift the bar and get on board.

Check that, once you are on the platform, the bar falls down closing the access. Fasten the safety belts to the provided hooks or to the handrail of the rail.

Do NOT lock the closing bar so as to keep the platform access door open.

fig.9

5.5 Start-up

To start the machine the operator shall:

- release the stop button located on the ground control station by rotating it by 1/4 turn clockwise;
- turn the main key on the ground control station to "platform" position;
- remove the starting key and keep it in a safe place or hand it over to a person in charge on ground, properly informed of the use of the emergency controls;
- get onto the platform;
- release the stop button on the platform control panel (see previous paragraphs).

Now it is possible to carry out the several functions following the instructions in the previous paragraphs carefully.

To turn on the machine, the mushroom power button on the chassis - battery side - must be activated.
To activate the mushroom power button it is necessary to pull it out until the contacts lock in position.
In addition, the battery charger must be off (see paragraph about battery recharge). When the battery charger is running, the machine is OFF and cannot be turned on.

5.6 Machine stop

5.6.1 Normal stop

In normal operating conditions:
- By releasing the controls the operation is stopped. Stop occurs within a time limit set in the factory, which guarantees smooth braking.

5.6.2 Emergency stop

Should it be necessary, the operator can immediately stop all machine functions from both platform and ground control station.

From the platform control station:
- By pressing the mushroom button on the control panel the machine is stopped.

From the ground control station:
- By pressing the stop button on the ground control station the machine is stopped.
- By pressing the power stop button (battery side), thus cutting out machine power (power circuit cut-out).

To resume the operations:

From the platform control station:
- Turn the stop button of 1/4 turn clockwise;

From the ground control station:
- Turn the stop button (if available) of 1/4 turn clockwise;
- Pull out the mushroom button of the power circuit (if available) until it locks in position to power the unit again.

5.7 Manual emergency lowering

⚠ This function is to be used only in emergency situations when no motive power is available.

In case of fault in the electrical or hydraulic system, for manual emergency lowering carry out the following procedure:

- Pull out the knob shown in the picture (for XS9 E both knobs must be pulled).

<u>WARNING: THE EMERGENCY CONTROL CAN BE INTERRUPTED AT ANY MOMENT BY RELEASING THE KNOB.</u>

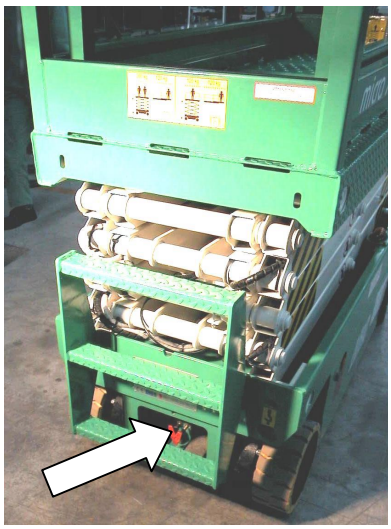


Fig.10

⚠ IT IS FORBIDDEN to use the manual emergency control to lower the platform with overloads.

5.8 Socket for electric tool connection

The platform is equipped with a socket (A) allowing the operator to connect the electric tools, necessary to carry out his operations, to a 230 AC line.
To activate the electric line (see picture aside) insert a cable into the socket (B – this socket is also for powering the battery charger) (230V AC 50 Hz) and set the circuit breaker switch (C) to ON position. It is advisable to check the circuit breaker by means of the specially provided TEST button (D).

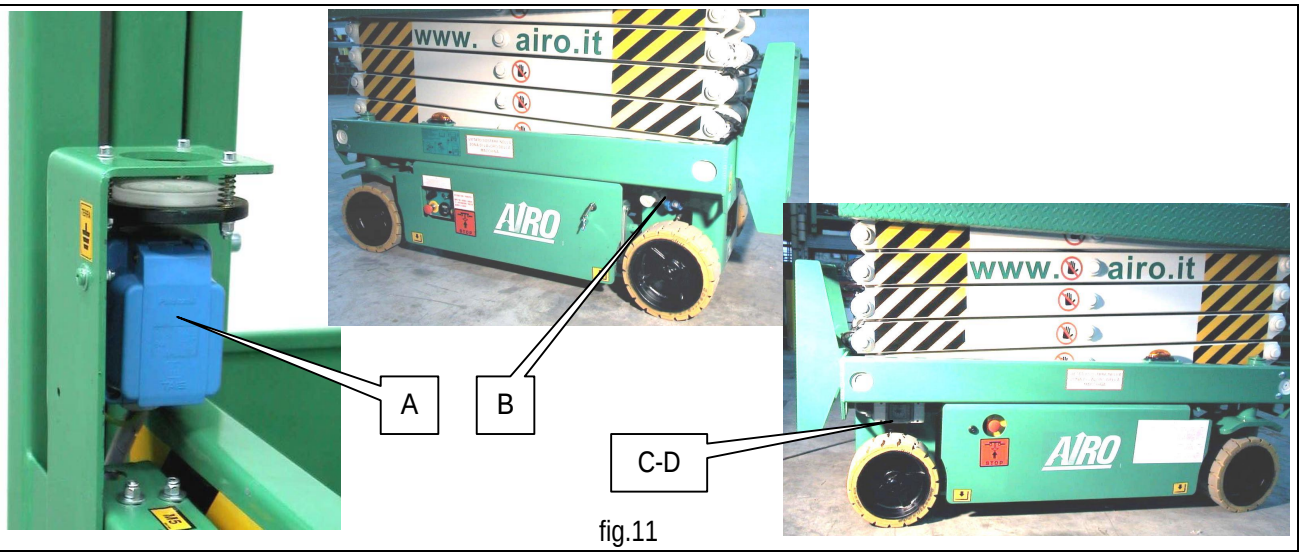


fig.11

The plugs and sockets equipped on standard machines comply with EEC standards and can therefore be used in EU member countries. On request the machine can be equipped with plugs and sockets in compliance with local standards or with particular needs.

Connect to the mains with the following features:
- Power voltage 230V ± 10%
- Frequency 50÷60 Hz
- Connected grounded line
- Protection devices in compliance with standards must be present and working

Do not use extension cords longer than 5 m. for connection to the mains.
Use a cable of suitable section (min. 3x2.5 sqmm).
Do not use rolled up cables.

5.9 End of work

After stopping the machine according to the instructions given in the previous paragraphs, you are advised to:
- Always set the machine to rest position.
- Press the stop button on the ground control station.
- Remove the keys from the control panel to prevent unauthorized people from using the machine.
- Recharge the battery as indicated in the paragraph relevant to maintenance.

6. HANDLING AND CARRYING

6.1 Handling

To handle the machine in normal operating conditions follow the instructions given in chapter "GENERAL USE INSTRUCTIONS" under paragraph "Drive and steering".

When the platform is completely lowered (or up to a height set according to different needs and tests) the machine can be handled (i.e. drive can be performed) at different speeds to be freely selected by the user.
When the platform is lifted and exceeds a given height, the machines fitted with pothole guards lowered can translate at reduced speed (automatically) up to the height indicated in the chapter “Technical Features”.
It is therefore important to be sure that the pothole guards work properly and no objects in the operating area are present.

WARNING! If a hole or a hump is encountered while driving the machine with lifted platform (guards down and safety speed on) the machine will rest on one or both guards, without causing any danger to the operator.
At this point, by lowering the platform completely with both drive wheels lifted from the ground, the machine may not be able to release itself from the locked condition. Emergency towing must be undertaken (see par. “Emergency towing”).

WARNING! Drive with lifted platform may be subject to different restrictions according to the country where the machine is used. Find out about the legislative limits concerning this movement from the bodies of Health and Safety at work.

DO NOT drive the unit when the platform is lifted unless the ground is horizontal, flat and steady.

Check that there are no holes or steps on the floor and bear in mind the overall dimensions of the machine.

Before carrying out any displacement operation, verify that no people are in proximity of the machine and in any case proceed with the utmost caution.

Before handling the machine check that the connection plugs are disconnected from the power supply source.

While the machine is being displaced with lifted platform, no horizontal loads can be loaded onto the platform (operators on board are not allowed to pull wires or ropes, etc.).

From a given height (different from model to model) drive and steering are inhibited if the mobile platform is not completely retracted.

FOR XS9 E: Drive and steering are allowed only with platform up to 6 m.

6.2 Carrying

In order to carry the machine to the various working sites, follow the instructions given below.
Considering the large dimensions of some models, before carrying, it is recommended to inquire about the overall dimension limits for road transport in force in your country.

⚠ Before carrying the machine, turn it off and remove the key from the control panel. No people are allowed in proximity to or on the machine to avoid any risks deriving from sudden movements.
For safety reasons never lift or tow the machine by means of its booms or platform.
Loading operations are to be carried out on a flat surface with a suitable capacity, after setting the platform to rest position.

To carry the machine the operator shall load it onto a vehicle either:

1) By means of chutes and translation controls located on the platform to load it directly onto the vehicle - if ramp slope is within the gradeability described in paragraph "TECHNICAL FEATURES" and capacity is adequate to weight - according to the instructions given in chapter "GENERAL USE INSTRUCTIONS" under paragraph "Drive and steering" for the correct operation of drive controls. If the slope exceeds the gradeability, the machine is to be towed by means of a windlass only if the operator on the platform simultaneously activates the drive control to release the parking brakes or the machine is set to towing position (see par. Emergency towing);

2) For models with 4 anchor holes on the four corners of the machine it is possible to lift the machine with hooks and steel ropes (with safety factor = 5, see machine weight in technical features) connected to the provided holes as indicated in the plates (see picture aside);

Fig.12

3) By means of a lift truck of a suitable capacity (see machine weight in table "technical features" at the beginning of this manual) equipped with forks having at least the same length as the machine width. Insert the forks as indicated by the stickers on the machine. Should these stickers be not available, DO NOT lift the machine by means of a lift truck. Lifting the unit by means of a lift truck is a dangerous operation, which must be carried out by qualified operators only.

⚠ After placing the machine onto the carrying vehicle, fasten it by means of the same holes used for lifting.

⚠ Before carrying the unit check the stability grade. Platform must be completely lowered.

⚠ Do not use the machine to tow other vehicles.

6.2.1 Fold-down rails

The machine is equipped with rails which can be folded down to the inside of the platform. By folding the rails down the overall height dimensions can be reduced for:

- transport
- passage through standard doors.

To fold down the rails:

1) extend the mobile platform (optional) locking it into the shown position;
2) remove the control box;
3) lift and rotate the front rail to the inside;
4) remove the securing dowels of one of the two sliding side rails;
5) rotate the sliding side rail to the inside and push it downwards;
6) repeat operations 4 and 5 for the other sliding side rail;
7) lift and rotate the entry rail to the inside;
8) lift and rotate the two fixed side rails to the inside;
9) to reduce the overall length dimensions of the machine, retract the mobile platform locking it into the shown position.

ATTENTION! The sole purpose of this operation is to reduce the height of the closed machine to facilitate transport operations.
DO NOT lift the platform with personnel on board if the rails are not in lifted position.

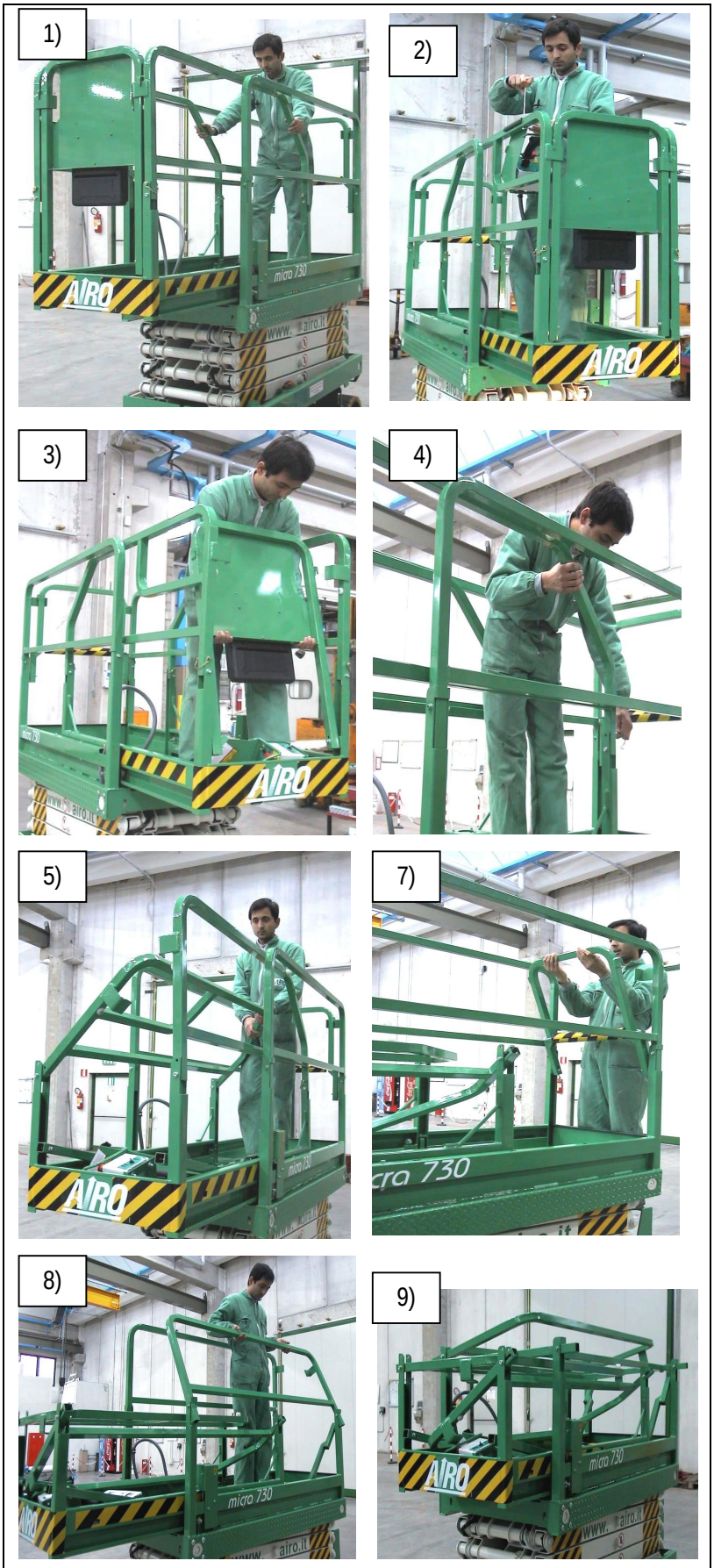


Fig.13

6.3 Emergency towing

In the event of a fault, carry out the following operations to tow the machine:

- Hook the machine to the provided holes (the same ones used for lifting – see previous pictures);
- Unscrew the knob A on the hydraulic block completely;
- Screw the knob B on the hydraulic block completely;
- Screw the lever C on the manual pump D;
- Activate the pump until the control bind; in this way the parking brakes will be released;
- Tow at a very slow speed (remember that when the machine is being towed, brakes are out of order).
- After towing reset the initial conditions:
  - Screw the knob A completely;
  - Unscrew the knob B completely.

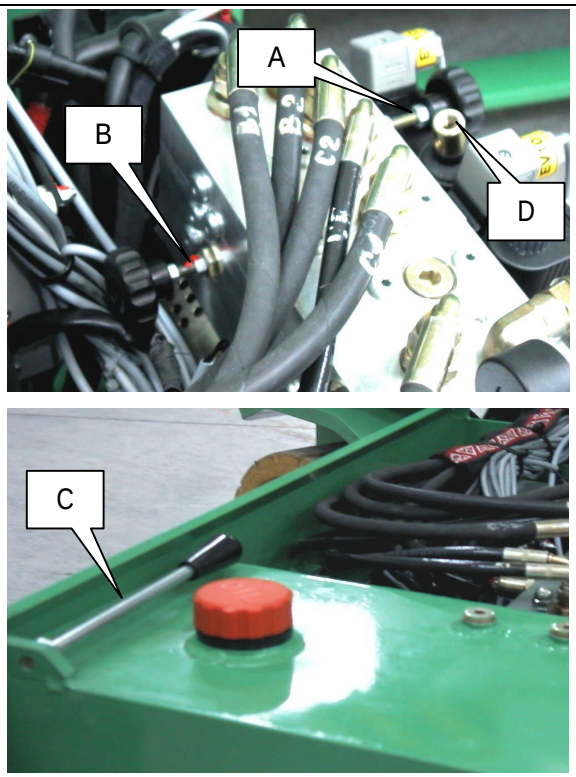


fig.14

⚠ This operation should be carried out only on a flat ground.

⚠ Tow at a very reduced speed (remember that in these conditions the machine does not brake).
Tow only on a flat ground.

7. MAINTENANCE

The maintenance operations described hereafter refer to a machine in normal use conditions. In case of difficult use conditions (extreme temperatures, corrosive environments, etc.) it is necessary to contact AIRO Service Assistance to modify the intervention frequency.
Repairs and maintenance operations are to be carried out by trained personnel only. All maintenance operations must be carried out according to current regulations as to workers safety (work places, suitable safety protections, etc.)
Carry out maintenance operations when the machine is stopped and after removing the key from the control, with platform in rest position.
Carry out only the maintenance and adjusting operations described in this manual. If necessary (e.g. faults, tyre replacement) contact our Technical Assistance only.
During interventions, check that the machine is completely locked. Before carrying out maintenance operations inside the lifting equipment, check that this is locked in order to avoid accidental lowering of the booms.
The lubricants, hydraulic oils, electrolytes and all detergents must be handled with care and discharged in safety in conformance with current norms.
Prolonged contact with the skin may cause forms of irritation and skin diseases; wash with water and soap and rinse well.
Also contact with the eyes, especially with the electrolytes, is dangerous; wash with water and see a doctor.
Remove the battery cables and provide batteries with a suitable protection during welding operations.
In case of replacement, use original spare parts only.
Disconnect the 220V AC and/or 380V AC sockets, if any.

WARNING! NEVER MODIFY OR TAMPER WITH MACHINE PARTS TO IMPROVE THE MACHINE PERFORMANCE AS THIS MAY AFFECT ITS SAFE OPERATION.

Before carrying out maintenance or repair operations inside the lifting structure, observe the picture aside to work out its locking system.

Fig.15a

Fig.15b

7.1 Machine cleaning

To clean the machine use non-pressurized water jets after properly protecting the following parts:
- the control stations (both platform and ground)
- all electrical boxes and electrical devices in general;
- the electric engines.

Do not use pressurized water jets (high-pressure cleaners) to clean the machine.

After washing the machine, always:
- dry the machine;
- check integrity of plates and stickers;
- lubricate the pivot points equipped with greaser and the sliding guides.

7.2 General maintenance

The table below indicates the main maintenance operations and their frequency. The machine is equipped with a service hour-meter.

Operation	Frequency
Screw tightening as indicated in paragraph "Various adjustments"	After the first 10 working hours
Oil level check in hydraulic tank	After the first 10 working hours
Battery condition (charge and liquid level)	Every day
Deformation of tubes and cables	Every month
Oil level check in hydraulic tank	Every month
Greasing of pivot points and sliding blocks	Every month
Stickers and code plates	Every month
Screw tightening as indicated in paragraph "Various adjustments"	Every year
Check of electrical connections	Every year
Check of hydraulic connections	Every year
Periodic operation and structure visual check	Every year
Operation check of inclinometer	Every year
Operation check of control load device at platform	Every year
Calibration check of pressure relief valve	Every year
Calibration check of pressure relief valve of lifting circuit	Every year
Operation check of Microswitch M1	Every year
Operation check of Microswitches M3A+ M3B	Every year
Operation check of Microswitch M5	Every year
Operation check of Microswitch MPT1 and MPT2	Every year
Efficiency check of braking system	Every year
Efficiency check of emergency devices	Every year
Check efficiency of the “dead-man” switch	Every year
Hydraulic filter replacement	Every two years
Total oil change in hydraulic tank	Every two years

7.2.1 Various adjustments

Check the conditions of the following components and, if necessary, tighten:

1) wheel nuts;
2) wheel nut locks;
3) fixing screws of drive engines;
4) fixing screws of parking brakes;
5) steering cylinder fixing;
6) fixing screws of platforms and rails;
7) mechanical stops of mobile platform;
8) hydraulic fittings;
9) seegers and security dowels of boom pins.

For screw tightening refer to following table.

fig.16

SCREW TIGHTENING TORQUE (metric screw thread, standard pitch)						
Class	8.8 (8G)		10.9 (10K)		12.9 (12K)	
Diameter	kgm	Nm	kgm	Nm	kgm	Nm
M4	0.28	2.8	0.39	3.9	0.49	4.9
M5	0.55	5.5	0.78	7.8	0.93	9.3
M6	0.96	9.6	1.30	13.0	1.60	16.0
M8	2.30	23.0	3.30	33.0	3.90	39.0
M10	4.60	46.0	6.50	65.0	7.80	78.0
M12	8.0	80.0	11.0	110	14.0	140
M14	13.0	130	18.0	180	22.0	220
M16	19.0	190	27.0	270	33.0	330
M18	27.0	270	38.0	380	45.0	450
M20	38.0	380	53.0	530	64.0	640
M22	51.0	510	72.0	720	86.0	860
M24	65.0	650	92.0	920	110	1100

7.2.2 Greasing

The pivot points of the lifting structure are equipped with self-lubricating bushes which are maintenance-free. At least once a month with a spatula or a brush, it is recommended to lubricate the sliding guides:

a) of the sliding blocks of the extensible structure on the chassis;
b) of the sliding blocks of the extensible structure under the platform;
c) of the counter sliding blocks of the mobile platforms (optional).

Moreover, remember to grease the pivot points in the following cases:

- after washing the machine;
- before using the machine again after a long time-interval;
- after using the machine in adverse environmental conditions (high humidity levels; presence of dust; coastal areas, etc).

Before greasing clean properly with a wet cloth.
Grease all points indicated in the picture aside (and all pivot points equipped with greaser) with grease type:

ESSO BEACON-EP2

or similar.

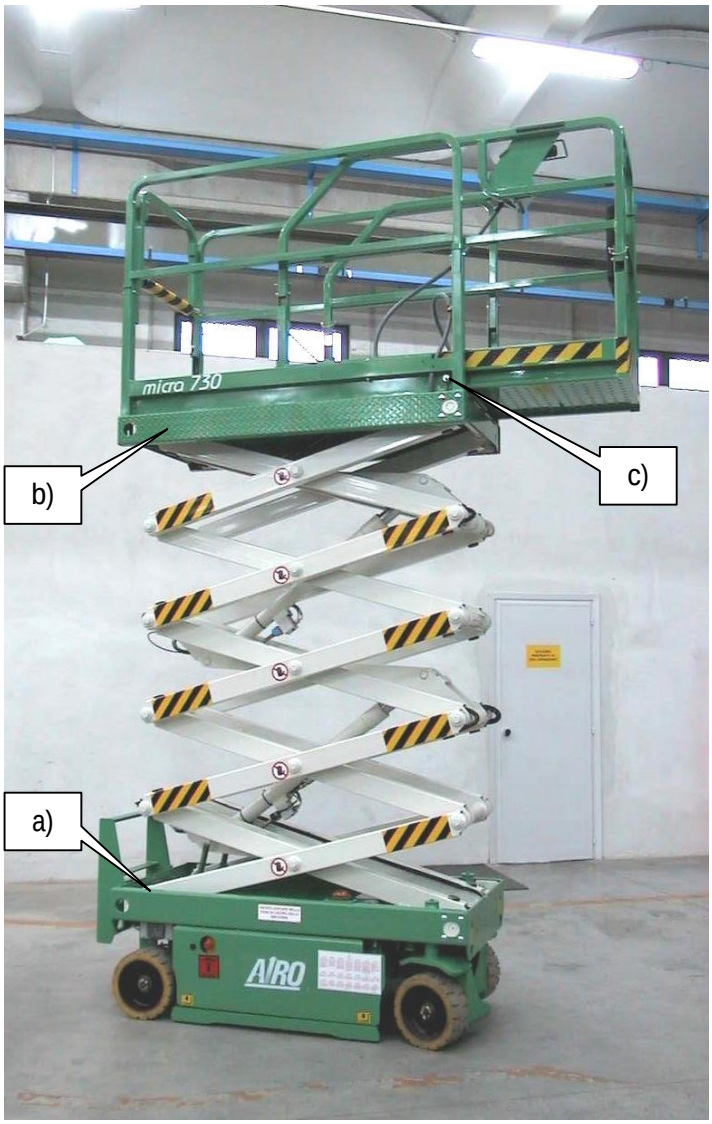


fig.17

7.2.3 Hydraulic circuit oil level check and change

Check the level in the tank at least once a month by means of the provided plug (detail A in the picture aside) equipped with dipstick, and make sure that the level always lies between the max. and min. values; if necessary, top up until the max. level is reached. The oil level check should be carried out with platform completely lowered.

Change the hydraulic oil completely at least once every two years.
To empty the tank, place a container under the plug B and unscrew it.

The oil quantities of the tank of the various models are mentioned in the chapter " Technical features".

Do not dispose of used oil in the environment. Comply with the current local standards.

Use only the types of oil indicated in the following table.

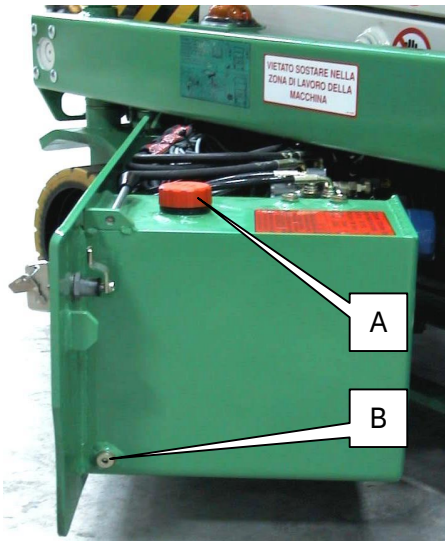


fig.18

7.2.4 Hydraulic filter cleaning / replacing

7.2.4.1 Suction filter: cleaning / replacement

All models are equipped with suction filter flanged inside the tank. It is advisable to clean or replace the filter at least once every two years.

To clean or replace the suction filters inside the tank it is necessary to (see figure):

- turn the machine off pressing the mushroom button of the ground control station;
- disconnect the power cables from the electropumps;
- empty the hydraulic tank;
- unscrew the coupling flange A unlocking the four screws (5mm. Allen wrench);
- remove the electropump from the tank (bear in mind that the weight of each electropump is about 30 Kg.);
- unscrew the filter B from the suction tube and clean it with a detergent and a compressed air jet by blowing from the connection or replace the filtering element;
- to restore the initial condition, carry out the above-mentioned operation in reverse order.

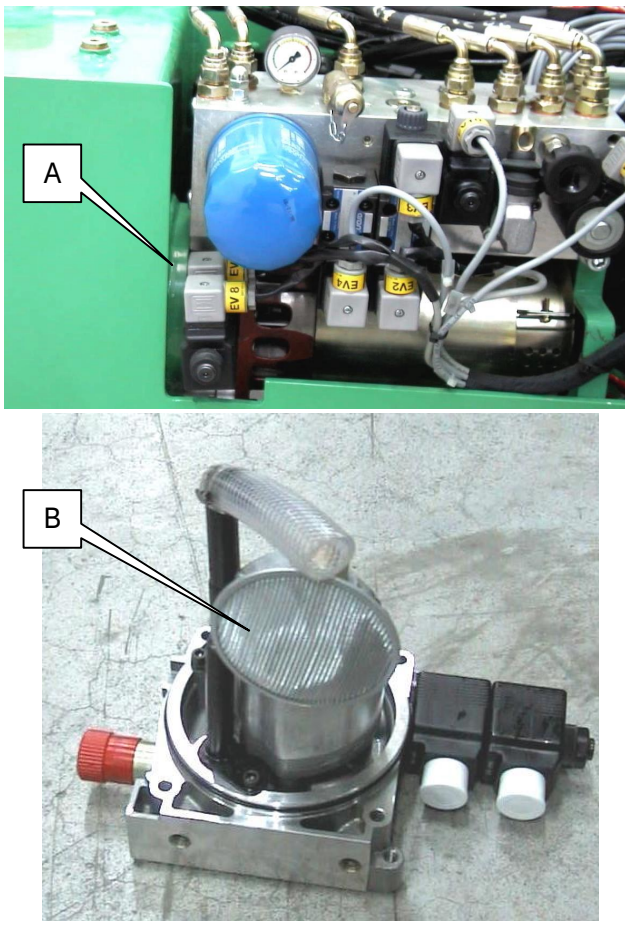


fig.19

7.2.4.2 Return filter: replacement

The return filter A is directly flanged on the hydraulic control block.
The return filter is equipped with a clogging indicator B to indicate when it needs replacing.
During normal operation, the visual indicator is in the green zone. When the indicator is in the red zone, the filter is to be replaced. To replace the filter:

- Stop the machine by pressing the mushroom button on the ground power unit;
- Empty the hydraulic tank or lift the platform completely to reduce the oil in the tank to the minimum level ;
- Unscrew the filter turning it anti-clockwise using the suitable filter tool;
- Screw the new filter turning it clockwise using the suitable filter tool.

During these operations a quantity of oil may leak out. In this case remove the oil by means of cloths or let the oil flow by placing a suitable container under it.

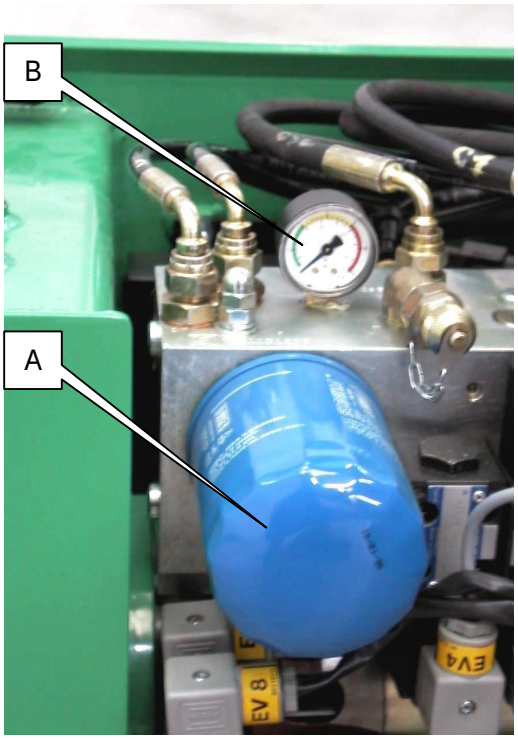


fig.20

Replace the filters using only original accessories available at our Technical Support.
Do not re-use used oil and do not leave it in the environment, but dispose of in compliance with local standards in force.
Once the filters have been replaced (or cleaned), check the hydraulic oil level in the tank.

HYDRAULIC SYSTEM OIL	
BRAND NAME	(0°C +55°C)
ESSO	a Invarol EP46
AGIP	Arnica 45
ELF	Hydrelf DS46
SHELL	Tellus SX46
BP	Energol SHF46
TEXACO	Rando NDZ346

7.2.5 Adjustment and efficiency check of inclinometer

The inclinometer (represented in the figure in the two possible options 1 and 2) does not usually require any adjustment since it was calibrated in the factory before the delivery of the machine.
This device is placed on the chassis at the centre of the lifting structure and checks the machine inclination. Should the allowed inclination be exceeded , the device:

- inhibits the lifting;
- inhibits the drive with platform from a given height (different for each model);
- signals, by means of an audible alarm and a warning light at platform (see “General use instructions”) the condition of instability.

It is necessary to adjust the device only in case of replacement.

Check operation at least once a year.
To check the operation of the inclinometer (both types) it is necessary to incline the machine and place the shims (see following tables) under the wheels. In this condition the audible alarm at platform should not activate. Carry out a lifting of about 1 m and wave the lifting structure manually (simulation of the dynamic effect). After about 3 seconds, the audible alarm and the red light at platform should turn on and it is no longer possible to lift the platform and drive the unit. The only allowed movement is lowering. This test is to be carried out in the four directions.

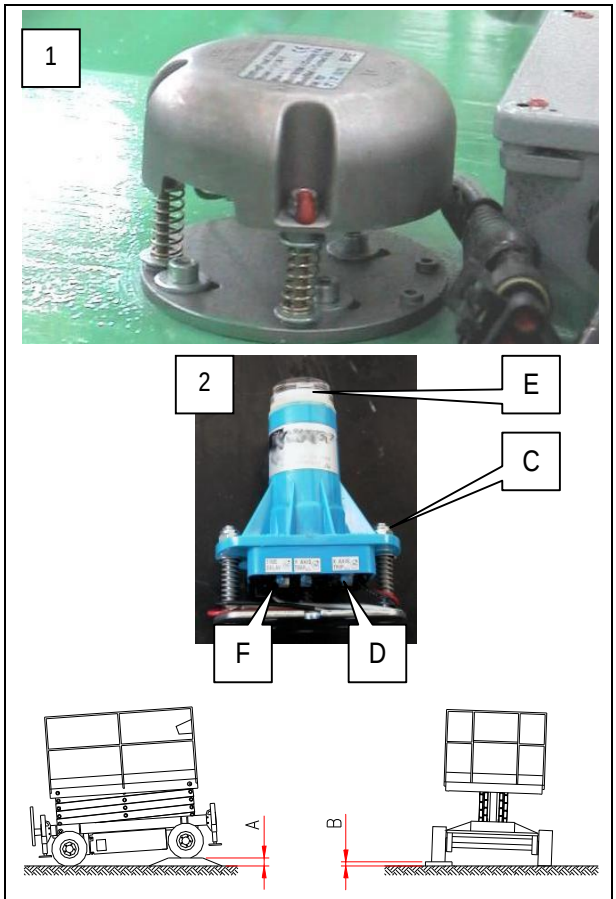


fig.21

The inclinometer of type 1 can be calibrated only by specialized personnel.

CALL THE TECHNICAL SUPPORT

The inclinometer of type 2 checks the inclination with respect to two axes (X;Y); on a few models having the same limits of transversal and longitudinal stability, the check takes place with respect to one axis only (axis X).

To adjust the inclinometer of type 2 with respect to the longitudinal axis (usually Axis X):

- with machine on horizontal ground check that the inclinometer is horizontal by means of level bubble (E) and if necessary, correct the position by acting on screws (C);
- place a shim of dimension (A) under the two rear wheels (see following table);
- act on the adjusting screw (trimmer) (D) named “X AXIS TRIP” screwing it to increase the intervention angle and unscrewing to decrease it until the audible alarm of the platform control station will activate.

To adjust the inclinometer of type 2 with respect to the transversal axis (usually Axis Y):

- with machine on horizontal ground check that the inclinometer is horizontal by means of level bubble (E) and if necessary, correct the position by acting on screws (C);
- place a shim of dimension (B) under the two side wheels (see following table);
- act on the adjusting screw (trimmer) (F) named “Y AXIS TRIP” screwing it to increase the intervention angle and unscrewing to decrease it until the audible alarm of the platform control station will activate.

ATTENTION!! The inclinometer intervenes after about 3 seconds after the calibration angle has been reached. Therefore pay special attention during these adjustments.

SHIMS	XS7 E	XS8 E	XS9 E
A [mm]	35	28	23
B [mm]	17	12	12

7.2.6 Adjusting and checking the pressure relief valve of the lifting circuit

On the self-propelled aerial platforms of the Serie XS there is a relief pressure valve on the lifting circuit to avoid dangerous overpressures. This valve does not usually need any adjustment since it was calibrated in the factory before the delivery of the machine.

This system:
- prevents the platform from lifting over 1,5-3 m from ground level if the load at platform exceeds the nominal load by 75%;

After removing the exceeding load it is possible to continue to use the machine:

The calibration of the system is necessary:
- in case of replacement of the hydraulic power unit;
- in case of replacement of the only relief valve;

Check operation at least once a year.

To check the operation of the pressure relief valve on the lifting circuit:
- Inhibit the load control system (only specialized personnel – see following instructions);
- Lower the platform completely;
- Load the platform with a load of the same nominal capacity and, by means of ground controls, check that the platform can lift up to the max height;
- Lower the platform completely and add a load of 75% of nominal capacity;
- By means of ground controls carry out the lifting;
- If the system works properly the platform slowly lifts up to the maximum effort point (usually with platform at a given height of 1.5÷3 m from the ground) after it stops.

To calibrate the pressure relief valve on the lifting circuit:
- Inhibit the load control system (only specialized personnel – see following instructions);
- Inhibit the microswitches M1 and M3 (only specialized personnel);
- Lower the platform completely;
- Locate the pressure relief valve A of the lifting circuit;

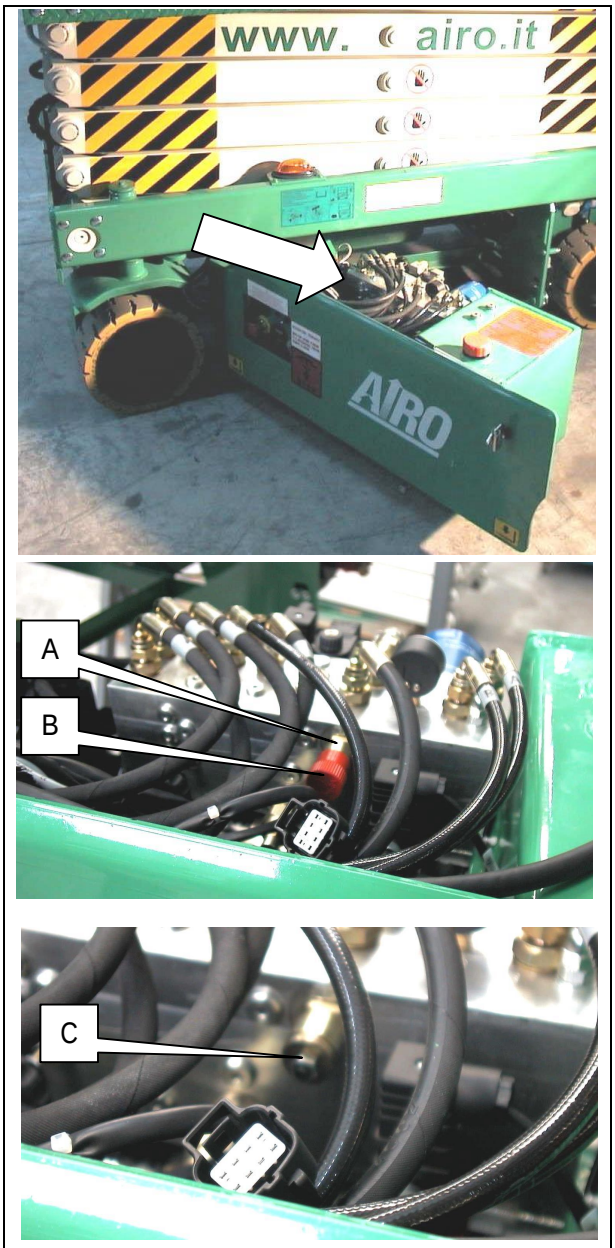


fig.22

- Load the platform with a load of the same nominal capacity and, by means of ground controls, check that the platform can lift up to the max height;
- Lower the platform completely and add a load of 75% of the nominal capacity;
- Remove the protection cover B of the relief valve and unscrew the lock nut of the adjusting dowel;
- Using the ground control station carry out one lifting and adjust the relief valve by acting on the adjusting dowel C so that the platform cannot exceed the major effort point with the nominal load (usually with platform at a given height of 1.5÷3 m from the ground);
- Once the calibration has been completed, lock the adjusting dowel by means of the stop lock nut and insert the protection cover.

ATTENTION!
Calibration should be carried out by specialized personnel. This operation cannot be carried out by the operator.

CALL THE TECHNICAL SUPPORT

7.2.7 Operation check and adjustment of platform overload controller

The AIRO self-propelled aerial platforms, Serie XS, are equipped with a sophisticated system controlling the platform overload.
Normally the overload controller does not require any adjustment, since it is calibrated in the factory before the machine is delivered.
This device checks the load on the platform and:
- stops all movements if platform is overloaded by 30% compared to the rated load (drive and steering stopped with platform lifted);
- warns the user of the overload condition by means of the audible alarm and the platform warning light (optional for ON-OFF machines, see “General use rules”).

By removing the exceeding load, the machine can be operated again.

7.2.7.1 Overload controller with deformation transducer.

This device checks the load on the platform and:

- stops all movements if platform is overloaded by 30%(*) compared to the rated load and is not in rest position;
- warns the user of the overload condition by means of the audible alarm and the platform warning light (see “General use rules”).

By removing the exceeding load, the machine can be operated again.

The overload controller consists of:

- deformation transducer (A) (load cell);
- electronic board (B) for device calibration located inside the box installed on the chassis;

The calibration of the system is necessary:

- in case of replacement of one of the items composing the system;
- when, following an excessive overload, even after removing the excessive load, the danger condition is signalled anyway.

To calibrate the device:

- turn off the machine;
- open the box which contains electronic board C;
- with no load on the platform, introduce the jumper to connector G;
- turn on the machine;
- press button D (the yellow and red light turn on);
- press button E (the luminosity of the red light increases a few seconds), and the load system will be reset;
- on the furthermost part of the platform overhang place a load equal to the rated load plus 25%;
- press button F (the green light turns on a few seconds);
- press button D again to exit the calibration procedure (the yellow light turns off and if the procedure has been carried out correctly, the red light stays on signalling the overload);
- turn off the machine;
- open the jumper on connector G;
- turn on the machine;
- check that after removing the 25% overload (only the rated load stays on the platform) the alarm condition does not occur in any of the platform positions (platform down, up, driving, rotated);
- once the adjustment has been completed, close the box which contains the board.

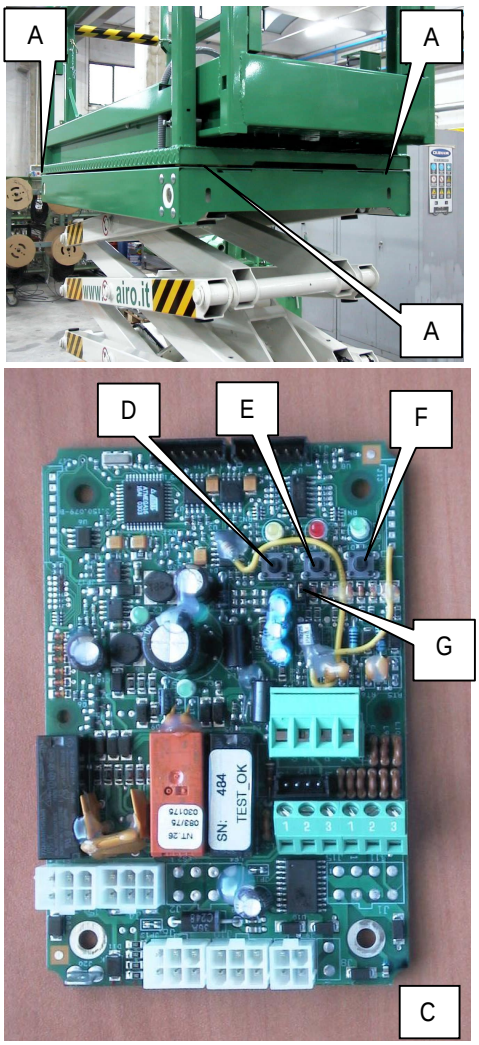


Fig.33

AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.

CALL THE TECHNICAL SUPPORT

7.2.7.2 Control system by-pass.

It is possible to carry out a system by-pass in the following way:
- locate connector A inside the central unit box;
- remove connection;
- locate connector B (by-pass), usually fixed to connector A by means of clamp;
- introduce connector B instead of connector A.

Once this operation has been completed, the machine is without overload controller.

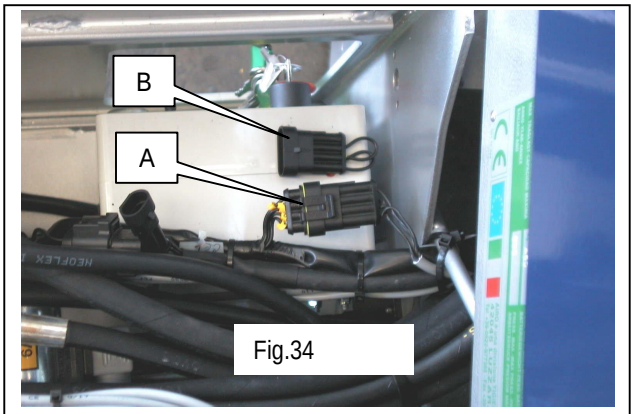


Fig.34

CAUTION!
THIS OPERATION IS ONLY ALLOWED FOR EMERGENCY HANDLING OF THE UNIT OR IMPOSSIBILITY TO CALIBRATE THE SYSTEM. DO NOT USE THE MACHINE IF THE OVERLOAD CONTROLLER IS NOT EFFICIENT.

AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.
CALL THE CUSTOMER SERVICE

7.2.8 Adjusting and efficiency check of pressure relief valve

The pressure relief valve controls the maximum operating pressure of driving operation. This valve does not usually need adjusting since calibrated in the workshop before the machine delivery.

<u>The calibration of the pressure relief valve is necessary:</u>
- in case of replacement of the hydraulic power unit;
- In case of replacement of the only pressure relief valve.

<u>Check operation at least once a year.</u>

<u>To calibrate the pressure relief valve:</u>

- Disconnect the power cable of the lifting electrovalve (EV4);
- Introduce a manometer with maximum scale at least up to 250 bar into the quick coupling A (1/4" BSP);
- Locate the pressure relief valve B;
- Unscrew the lock nut of the adjusting dowel;
- Using the ground control station carry out the lifting operation, and adjust the pressure relief valve acting on the adjusting dowel to reach the pressure value indicated in the chapter "Technical features";
- Once the calibration has been completed, lock the adjusting dowel by means of the lock nut, and insert the protection cover.

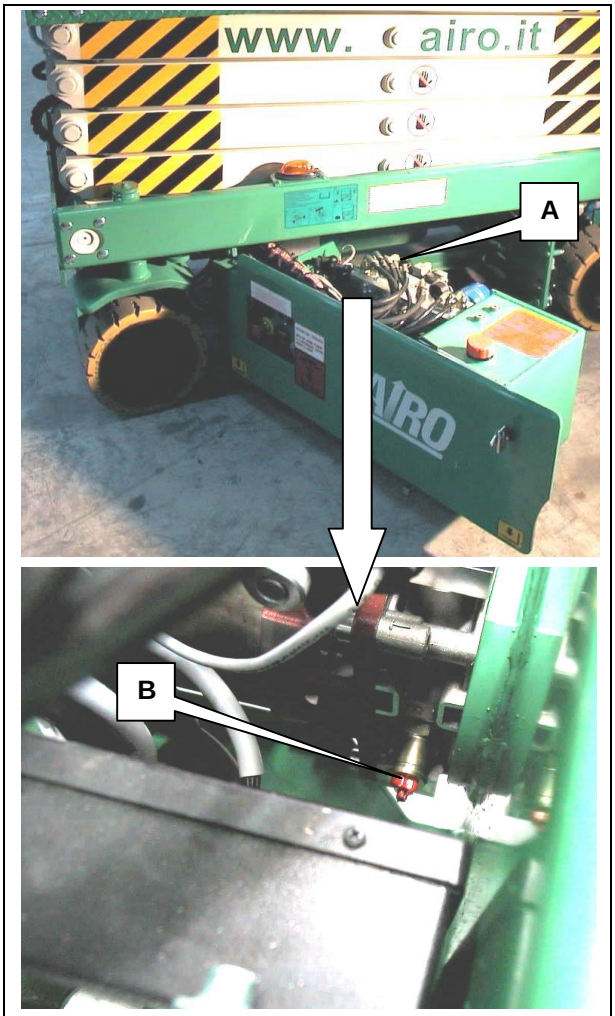


fig.26

<u>AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.</u>

<u>CALL THE TECHNICAL SUPPORT</u>

7.2.9 Adjusting and efficiency control of braking valves (counterbalancing valves)

These valves (in some cases only one valve is provided) check the minimum operating pressure of the drive operation (in both running directions) and influence the dynamic braking and the drive speed. These valves do not usually need any adjustment as they were previously calibrated in the workshop before the delivery of the machine.
The braking systems stop the machine when the drive controls are released. Once the machine has stopped, the automatic intervention of the parking brakes keeps the machine in position.

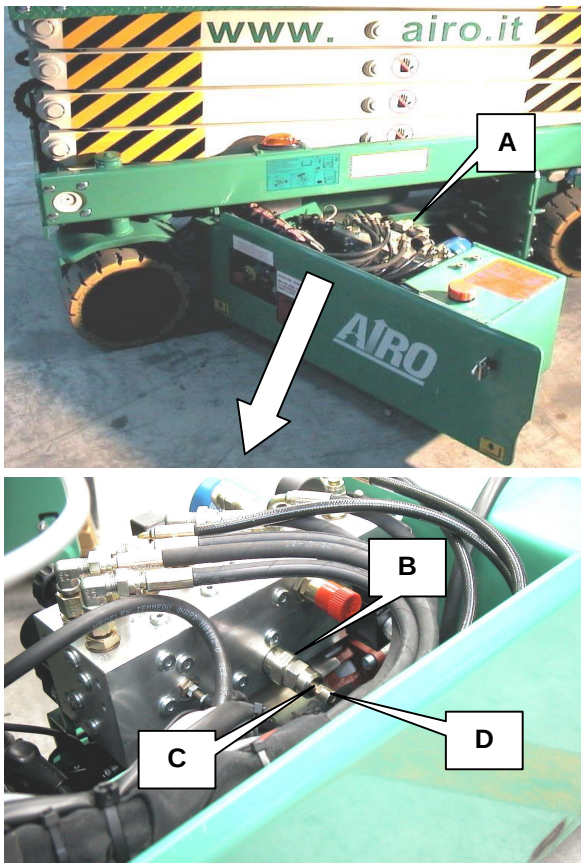


fig.27

Check operation at least once a year.

To check the operation of the braking system:
- With platform completely lowered on a flat ground and free from any obstacles, activate the drive control and, once the maximum speed has been reached, immediately release the control;
- The correct operation of the braking system allows the machine to stop in a space lower than 60 cm;
- However, the braking system can stop and hold the machine on the slopes indicated in chapter “Technical Features” (the braking space on descents is obviously longer; descend at minimum drive speed).

The calibration of both braking valves is necessary:
- in case of replacement of hydraulic unit A;
- in case of replacement of one or both braking valves (in some cases only one valve is necessary).

To calibrate the braking valves:
- Locate the hydraulic unit A;
- Locate the braking valves B (one for each running direction - in some cases only one valve may be required);
- Introduce a manometer with max. scale at least up to 250 bar into the suitable quick coupling of the hydraulic power unit (1/4” BSP);
- Select the minimum drive speed on the platform control box;
- Unscrew the lock nuts C of the adjusting dowel;
- Using the platform control station drive the machine (in the direction influenced by the action of the valve) on a flat ground and straight running, and adjust the braking valve (concerning that direction of running) acting on the adjusting dowel D to obtain the required pressure value (call the nearest Customer Service to request this information)
- Once the required pressure value has been obtained make sure the valve controlling the braking operation in the opposite direction (if any - in some cases only one valve may be required) has kept its adjustment;
- Once the adjustments have been completed (the pressure values in the two directions should not vary from each other by ±5 bar) lock the adjusting dowel by means of the lock nut.

AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.

CALL THE TECHNICAL SUPPORT

7.2.10 Efficiency check of safety microswitches

All microswitches are placed on the chassis and on the platform, and are identified by identification plates.

Microswitch operation:

- M1 inserts the safety drive speed (all models enabled to drive with platform lifted) with platform at a height from the ground higher than 2 m approx.; it automatically stops the lowering in a position where the vertical distance between the scissors ends is higher than 50 mm. In this condition the movement audible alarm will signal the danger by increasing its frequency of operation. The operator on the platform should release the lowering control and wait for the audible alarm to turn off (about 3 sec.); he can then continue with the lowering control.
- M3A+M3B (available only on XS9 E) limit the lifting stroke of the platform to a max. height of about 6 metres if the operation mode "2 persons" has been selected. With platform at a height from the ground higher than 2 m approx. it saves the preset operation mode "1 person".
- M5 checks the extension of the mobile platform (optional). With mobile platform extended:
  - The max. capacity of the platform is automatically reduced to 120 kg including one person (standard load control system) – or
  - The load control system of the mobile platform is enabled (optional load control system).
  - The drive and steering control is inhibited (with platform from a given height according to the model).
- MPT1 and MPT2 check the positioning of the two pothole guards: with one or both microswitches open (guards lifted or not completely lowered) drive is inhibited if platform is lifted over about 2 m (M1 pressed); their function is excluded if platform is lowered (M1 free).

<u>Check operation at least once a year.</u>

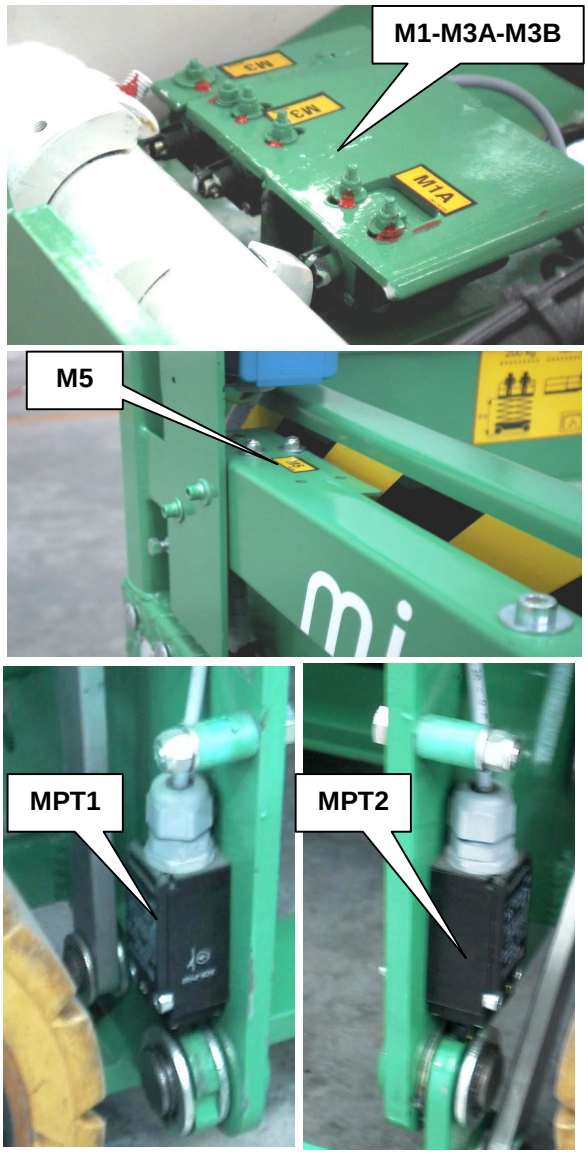


fig.28

7.2.11 Efficiency check of control device of electrical system isolation

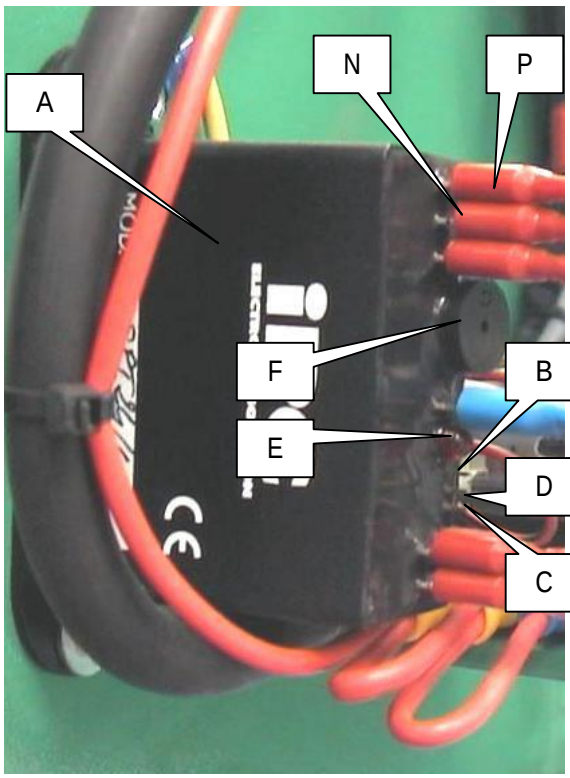


Fig.29

To avoid uncontrolled movements due to accidental contacts between the poles of the battery, the casing, and an electrical actuator, a device on the chassis checks that the electrical system of the machine is isolated from the structure itself. In case of loss of one or both battery poles, this device:

- inhibits all movements of the machine;
- warns the operator on the platform of the danger through the simultaneous activation of the lights and the audible alarm at platform (see par. “General use instructions”).

Check operation at least once a year.

To check the operation of the device:

- locate the device A on the chassis on the side of the battery;
- place the side pin B (or C) in contact with the central pin D by means of a metal tool (screwdriver);
- in this condition (simulation of isolation loss of one of the two battery poles) the red light E and the audible alarm F on the device will turn on;
- with the machine turned on (the alarm simulation is saved) get onto the platform and try to carry out a machine movement (see par. “General use instructions”)
- all movements should be inhibited, and the alarm condition is signalled through the simultaneous activation of LEDs H+L+M (see par. “General use instructions”) and the audible device at platform;
- in condition of simulation of isolation loss, by pressing and resetting the mushroom button on the platform the machine will continue to operate correctly.

In case of faults and impossibility of replacing the device, to move the machine and bring it to safety position for maintenance operations, it is possible to carry out a by-pass of the system by connecting the “faston” N with P (by means of a cable equipped with male “faston” on both ends).
ATTENTION!! IN THIS CONDITION THE MACHINE CAN CARRY OUT ALL MOVEMENTS BUT THE ISOLATION CONTROL OF THE ELECTRICAL SYSTEM IS DEACTIVATED. THIS OPERATION IS ALLOWED ONLY FOR EMERGENCY OPERATIONS. IN NO CIRCUMSTANCES CAN THE MACHINE BE USED IF THE ISOLATION CONTROL DEVICE IS NOT EFFICIENT.

AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.

7.2.12 "Dead-man" switch operation check

If the device works properly, no machine movement is possible from the platform control post unless you press the "dead-man" switch beforehand. If this is pressed for more than 10 seconds and no operation is performed, all movements are stopped; to operate the machine again, release the "dead-man" switch and press it again.

7.2.13 Battery

The battery is one of the most important elements of the machine. It is recommended to keep it in an efficient condition to increase its useful life, to avoid faults and to reduce the management costs of the machine.

7.2.13.1 General instructions

- In case of new batteries do not wait for the low battery signal before charging; charge the batteries after 3 or 4 hours of use for the first 4/5 times.
- In case of new batteries the full performance of the same can be obtained after ten cycles of discharging and charging.
- Charge the battery in airy rooms and open the caps to allow the outflow of gas.
- Do not use extension cords longer than 5 metres to connect the battery charger to the mains.
- Use a cable of suitable section (min. 3x2.5 mm^2).
- Do not use rolled up cables.
- Do not approach the battery with flames. Risk of explosion due to the formation of explosive gases.
- Do not carry out temporary or irregular electrical connections.
- The terminals must be tightened and without deposits. The cables must be provided with a good insulation.
- Keep the battery cleaned, dry and free of oxidation products by using antistatic cloths.
- Do not place tools or any other metal object on the battery.
- Check that the electrolyte level is 5-7 mm higher than the splashguard level.
- During charging operations check that the electrolyte temperature is not higher than 45°C max.
- If the machine is equipped with an automatic topping up device, follow the instructions described in the battery user manual carefully.

7.2.13.2 Battery maintenance

- For normal water operating conditions, water topping up is to be carried out every week.
- Top up using distilled or demineralised water.
- Top up after battery charging. The electrolyte level must be 5-7 mm higher than the splashguard level.
- For machines equipped with automatic topping up device, follow the instructions given in the battery user manual.
- Battery discharge must be stopped when 80% of the battery rated capacity has been used. An excessive and prolonged discharge irreversibly damages the battery.
- Battery charge is to be carried out according to the instructions given in the next paragraphs.
- Keep caps and connections covered and dry. Careful cleaning allows electric insulation protection, good operation and useful life of the battery.
- In case of faulty operations due to the battery, avoid any direct intervention and call the Technical Support.

7.2.13.3 Battery recharge

Explosive gas is originated during battery charging process; therefore, charging must take place in airy rooms where no risks of fire and explosion exist and in the presence of fire extinguishers.
Connect the battery charger to the mains with the following features:
- Power voltage 230V ± 10%
- Frequency 50÷60 Hz
- Connected grounded line

⚠ Do not use extension cords longer than 5 metres to connect the battery charger to the mains.
Use an electric cable of suitable section (min. 3x2.5 mm^2).
Do not use rolled up cables.
Connection with mains not complying with the above mentioned features IS FORBIDDEN. Failure to observe the above mentioned instructions may result in malfunctioning of the battery charger with consequent damage not covered by the guarantee.
WARNING! After charging, when the battery charger is still connected, the electrolyte density values should range from 1.260 to 1.270 g/l (at 25°C).

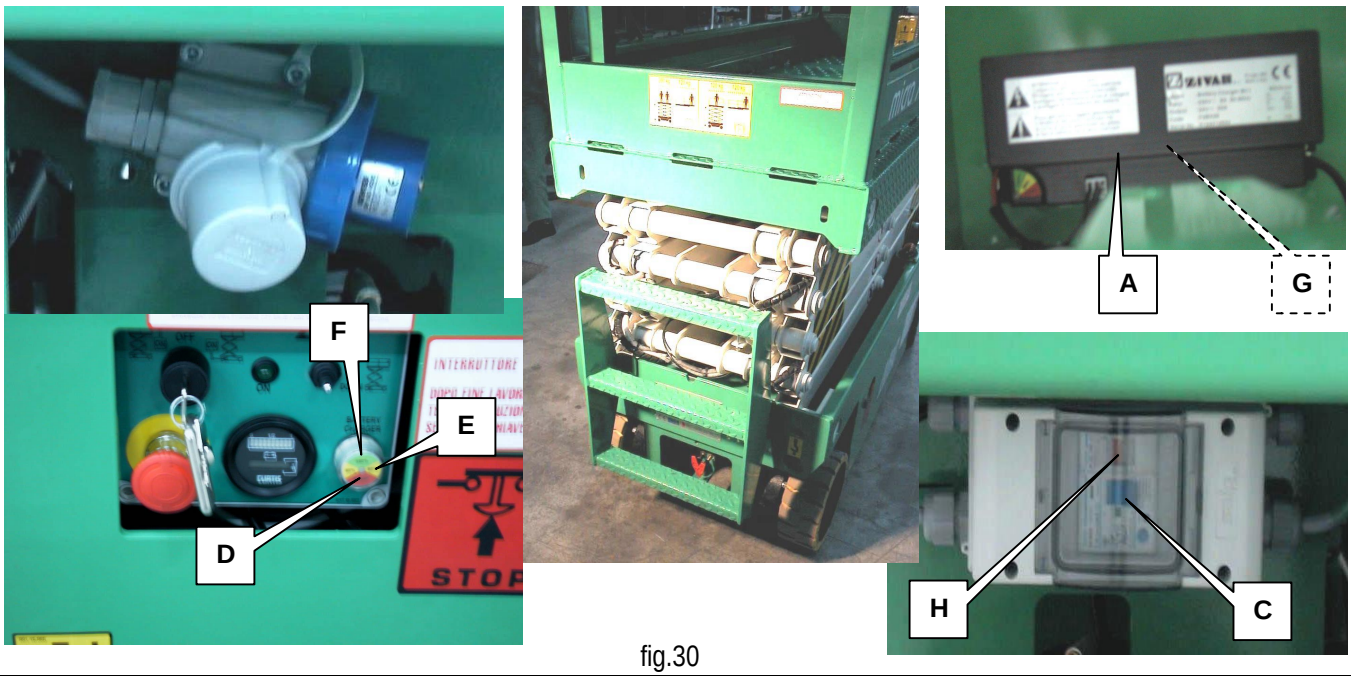


fig.30

A Battery charger
B Single-phase wall plug
C Main switch (circuit breaker)
D Red LED charge indicator (Start)
E Yellow LED charge indicator (80%)
F Green LED charge indicator (100%)
G Internal fuses
H Battery charger switch

To use the battery charger follow these procedures:

- § connect the battery charger by means of plug B to a 230V 50-60Hz socket equipped with all protections according to the current standards in force;
- § activate the main switch C (circuit breaker) and the battery charger switch H setting them to ON position;
- § check the battery charger connection by means of LED D (if it is ON, connection is on-line and charging has started); when the battery charger is ON, the machine is automatically off;
- § If LED E (yellow) lights up, battery charge is about 80%;
- § If LED F (green) lights up, battery charge is over; if the battery charger is kept connected to the mains, it continues to supply a minimum buffer current at constant voltage.

To disconnect the battery charger from the 230V power supply two alternatives are possible:

- § deactivate the battery charger switch H setting it to OFF position;
- § deactivate the main switch (circuit breaker) C setting it to OFF position (in this case also the circuit of the electric line on the platform will open);

7.2.13.3.1 Battery charger: faults report

The flashing LED on the battery charger indicator described in the previous paragraph indicates that a warning situation has occurred:

Signalling	Alarm type	Problem description and troubleshooting
flashing GREEN	Timeout	Phase 1 and/or Phase 2 of duration higher than the max. allowed value (check battery capacity).
flashing RED-YELLOW	Battery Current	Loss of output current control (fault in control logic).
flashing RED-GREEN	Battery Voltage	Loss of output voltage control (battery disconnected or fault in the control logic).
flashing RED-YELLOW-GREEN	Thermal	Over temperature of semiconductors (check the fan operation).

⚠ WARNING!
In presence of alarm the battery charger stops the current delivery.

7.2.13.4 Battery replacement

⚠ Replace the old batteries only with models of the same voltage, capacity, dimensions and weight.
Batteries must be approved by the manufacturer.

AS THIS OPERATION IS VERY IMPORTANT IT IS TO BE CARRIED OUT BY SPECIALIZED TECHNICIANS ONLY.

CALL THE TECHNICAL SUPPORT

8. MARKS AND CERTIFICATIONS

The models of self-propelled aerial platform described in this manual were subject to the CE type test according to the EEC Directive 98/37 and further modifications.
The certification was issued by:

IC.E.P.I. Srl Via P. Belizzi , 29/31/33 29100 Piacenza ITALIA	CE

Test carrying out is shown by the above plate with CE mark applied on the machine and by the declaration of conformity enclosed in this user manual.

9. CONTROL REGISTER

The control register is released to the user of the platform in conformance with Attachment 1 of Directive 89/392/EEC, according to the integration required by Directive 91/368/EEC.
This register is to be considered an integral part of the equipment and must accompany the machine for its entire life until its final disposal.

The register is provided for the notation, according to the proposed format, of the following events that regard the life of the machine:

- Periodic obligatory inspections under the care of the agency responsible for checking it (in Italy, the ASL or ARPA).
- Obligatory periodic inspections to verify the structure, proper machine functioning and the protection and safety systems. Such inspections are the responsibility of the safety manager of the company that owns the machine and must occur with ANNUAL frequency.
- Transfers of Ownership. In Italy, the purchaser must notify the ISPESL department responsible that the installation of the machine has occurred.
- Extraordinary maintenance work and replacement of important elements of the machine.

REQUIRED PERIODIC INSPECTIONS BY THE REGULATORY AGENCY		
Date	Observations	Signature + Stamp

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

STRUCTURAL CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Visual check.	Check the integrity of the guardrails; of any access stairs; condition of the lifting structure; rust; condition of the tyres; oil leaks; dowels of structure pins.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Deformation of tubes and cables.	Most of all, check at pivot points that tubes and cables do not show any evident defects. Operation to be carried out every month. Its performance shall not be indicated every month, but at least every year together with other operations.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

STRUCTURAL CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Various adjustments.	See chapter 7.2.1.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Greasing.	See chapter 7.2.2. Operation to be carried out every month. Its performance shall not be indicated every month, but at least every year together with other operations.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

FUNCTIONAL CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Oil level check in hydraulic tank.	See chapter 7.2.3. Operation to be carried out every month. Its performance shall not be indicated every month, but at least every year together with other operations.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Calibration check of pressure relief valve in the lifting circuit.	See chapter 7.2.6.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

FUNCTIONAL CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Calibration check of pressure relief valve.	See chapter 7.2.8.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Battery condition.	See chapter 7.2.12. Operation to be carried out every day. Its performance shall not be indicated every day, but at least every year together with other operations.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

FUNCTIONAL CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Total oil change in hydraulic tank (EVERY TWO YEARS).	See chapter 7.2.3.

	Date	Observations	Signature + Stamp
2nd Year			
4th Year			
6th Year			
8th Year			
10th Year			

♦ Hydraulic filters cleaning / replacement (EVERY TWO YEARS).	See chapter 7.2.4.

	Date	Observations	Signature + Stamp
2nd Year			
4th Year			
6th Year			
8th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

SAFETY SYSTEM CHECK	DESCRIPTION OF OPERATIONS TO BE PERFORMED
♦ Calibration check and operation of inclinometer.	See chapter 7.2.5.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Efficiency check of load control system at platform.	See chapter 7.2.7.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

SAFETY SYSTEM CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Braking system efficiency check.	See chapter 7.2.9.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

Operation check of microswitches: M1, M3A+M3B (only XS9 E) ,M5, MPT1, MPT2.	See chapter 7.2.10

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

SAFETY SYSTEM CHECK	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Check of control device of electrical system isolation.	See chapter 7.2.11.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

♦ Stickers and Plates check.	Check the legibility of the aluminium plate on the platform where the main instructions are summarised; that the stickers about the platform capacity are present and legible; that the stickers on the ground and platform control stations are legible.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER

CHECK OF EMERGENCY DEVICES	*DESCRIPTION OF OPERATIONS TO BE PERFORMED*
♦ Manual emergency controls check.	See chapter 5.7.

	Date	Observations	Signature + Stamp
1st Year			
2nd Year			
3rd Year			
4th Year			
5th Year			
6th Year			
7th Year			
8th Year			
9th Year			
10th Year			

REQUIRED PERIODIC INSPECTIONS BY THE OWNER			
SAFETY SYSTEM CHECK		*DESCRIPTION OF OPERATIONS TO BE PERFORMED*	
"DEAD-MAN" SYSTEM CHECK		See chapter 7.12	
	DATE	**REMARKS**	**Signature + Stamp**
1° Year			
2° Year			
3° Year			
4° Year			
5° Year			
6° Year			
7° Year			
8° Year			
9° Year			
10° Year			

TRANSFERS OF OWNERSHIP

FIRST OWNER

Company	Date	Model	Serial Number	Date of Delivery

AIRO – Tigieffe S.r.l.

SUBSEQUENT TRANSFERS OF OWNERSHIP

Company	Date

We affirm that, as of the date quoted above, the technical, dimensional and functional characteristics of this machine were in conformance with what was originally required and that any changes have been recorded in this register.

The seller

The Purchaser

SUBSEQUENT TRANSFERS OF OWNERSHIP

Company	Date

We affirm that, as of the date quoted above, the technical, dimensional and functional characteristics of this machine were in conformance with what was originally required and that any changes have been recorded in this register.

The seller

The Purchaser

SUBSEQUENT TRANSFERS OF OWNERSHIP

Company	Date

We affirm that, as of the date quoted above, the technical, dimensional and functional characteristics of this machine were in conformance with what was originally required and that any changes have been recorded in this register.

The seller The Purchaser

SUBSEQUENT TRANSFERS OF OWNERSHIP

Company	Date

We affirm that, as of the date quoted above, the technical, dimensional and functional characteristics of this machine were in conformance with what was originally required and that any changes have been recorded in this register.

The seller The Purchaser

SUBSEQUENT TRANSFERS OF OWNERSHIP

Company	Date

We affirm that, as of the date quoted above, the technical, dimensional and functional characteristics of this machine were in conformance with what was originally required and that any changes have been recorded in this register.

The seller The Purchaser

IMPORTANT BREAKDOWNS

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Assistance

Safety Manager

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Assistance

Safety Manager

IMPORTANT BREAKDOWNS

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Assistance

Safety Manager

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Service

Safety Manager

IMPORTANT BREAKDOWNS

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Service

Safety Manager

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Service

Safety Manager

IMPORTANT BREAKDOWNS

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Service

Safety Manager

DATE	Description of Breakdown	Solution

Spare Parts Used		Description
Code	Quantity	

Service

Safety Manager

SCHEMA ELETTRICO MACCHINE STANDARD
037.08.009 - 037.08.039

AM	INCLINOMETRO
AV1	AVVISATORE ACUSTICO A TERRA
AV2	AVVISATORE ACUSTICO PIATTAFORMA
BC1	INDICATORE CARICABATTERIA
CB	CARABATTERIE ELETTRONICO
CTRL	CONTROLLER ELETTROPOMPA
EP	ELETTROPOMPA
EV2	ELETTROVALVOLA MARCIA AVANTI
EV3	ELETTROVALVOLA MARCIA INDIETRO
EV4	ELETTROVALVOLA DI SALITA
EV5	ELETTROVALVOLA DI DISCESA
EV8	ELETTROVALVOLA STERZO SINISTRA
EV9	ELETTROVALVOLA STERZO DESTRA
EV10A	ELETROVALVOLA SERIE/PARALLELO
EV10B	ELETROVALVOLA SERIE/PARALLELO
EV11	ELETTROVALVOLA DI BY-PASS
FP	FUSIBILE DI POTENZA 160A
FA	FUSIBILE
GB	GRUPPO BATTERIE
GRF1	GIROFARO
HC-FG	CONTAORE-VOLMETRO
KL	CLACSON
L1	LED VERDE MACCHINA ACCESA
L2	LED ROSSO ALLARME
L7	LED VERDE COMANDI IN PIATTAFORMA
L6	LED ROSSO SOVRACCARICO
L8	LED ROSSO BATTERIA SCARICA
MPT1	MICROINTERRUTTORE POT-HOLE 1-2
M1	MICROINTERRUTTORE SICUREZZA PIATTAFORMA SOLLEVATA
M3A	MICROINTERRUTTORE STOP SOLLEVAMENTO CON CARICO MASSIMO
M3B	MICROINTERRUTTORE STOP TRAZIONE
M5	MICROINTERRUTTORE PIATTAFORMA SFILATA
RCB	RELE' CARICABATTERIE
SP1	SENSORE PERDITA DI ISOLAMENTO
SP0	INTERRUTTORE DI POTENZA PER ARRESTO DI EMERGENZA
SP2	INTERRUTTORE ARRESTO DI EMERGENZA IN PIATTAFORMA
SW2	SELETTORE SALITA/DISCESA DA TERRA
SW4	SELETTORE COMANDI TERRA/PIATTAFORMA
SW9	SELETTORE SERIE/PARALLELO TRAZIONE
SW11	SELETTORE TRAZIONE/SOLLEVAMENTO
SW12	SELETTORE CARICO MASSIMO LIMITATO
TLR	TELERUTTORE ELETTROPOMPA
QM	INTERRUTTORE GENERALE QUADRO COMANDI

ELECTRIC DIAGRAM STANDARD MACHINES
037.08.009 - 037.08.039

AM	INCLINOMETER
AV1	GROUND AUDIBLE DEVICE
AV2	PLATFORM AUDIBLE DEVICE
BC1	BATTERY CHARGER INDICATOR
CB	ELECTRONIC BATTERY CHARGER
CTRL	ELECTROPUMP CONTROLLER
EP	ELECTROPUMP
EV2	FORWARD DRIVE SOLENOID VALVE
EV3	BACKWARD DRIVE SOLENOID VALVE
EV4	LIFTING SOLENOID VALVE
EV5	LOWERING SOLENOID VALVE
EV8	LEFT STEERING SOLENOID VALVE
EV9	RIGHT STEERING SOLENOID VALVE
EV10A	SERIES-PARALLEL SOLENOID VALVE
EV10B	SERIES-PARALLEL SOLENOID VALVE
EV11	BY-PASS SOLENOID VALVE
FP	160A POWER FUSE
FA	FUSE
GB	BATTERY GROUP
GRF1	ROTATING BEACON
HC-FG	HOUR METER-VOLTMETER
KL	HORN
L1	SWITCHED-ON MACHINE GREEN LED
L2	ALARM RED LED
L7	PLATFORM CONTROLS GREEN LED
L6	OVERLOAD RED LED
L8	DISCHARGED BATTERY RED LED
MPT1	POT-HOLE 1-2 MICROSWITCH
M1	LIFTED PLATFORM SAFETY MICROSWITCH
M3A	MAX. LOAD LIFTING STOP MICROSWITCH
M3B	TRACTION STOP MICROSWITCH
M5	EXTRACTED PLATFORM MICROSWITCH
RCB	BATTERY CHARGER RELAY
SP1	ISOLATION LOSS SENSOR
SP0	EMERGENCY STOP POWER SWITCH
SP2	PLATFORM EMERGENCY STOP SWITCH
SW2	GROUND LIFTING/LOWERING SELECTOR
SW4	GROUND/PLATFORM CONTROL SELECTOR
SW9	SERIES/PARALLEL DRIVE SELECTOR
SW11	DRIVE/LIFTING SELECTOR
SW12	MAXIMUM LIMITED LOAD SELECTOR
TLR	ELECTROPUMP REMOTE CONTROL SWITCH
QM	CONTROL PANEL ON-OFF SWITCH

SCHEMA ELECTRIQUE POUR MACHINES STANDARD
037.08.009 - 037.08.039

AM	INCLINOMETRE
AV1	AVERTISSEUR SONORE AU SOL
AV2	AVERTISSEUR SONORE PLATE-FORME
BC1	INDICATEUR CHARGEUR DE BATTERIE
CB	CHARGEUR DE BATTERIE ELECTRONIQUE
CTRL	CONTROLEUR ELECTRO-POMPE
EP	ELECTRO-POMPE
EV2	ELECTROVANNE MARCHE AVANT
EV3	ELECTROVANNE MARCHE ARRIERE
EV4	ELECTROVANNE DE MONTEE
EV5	ELECTROVANNE DE DESCENTE
EV8	ELECTROVANNE DIRECTION GAUCHE
EV9	ELECTROVANNE DIRECTION DROITE
EV10A	ELECTROVANNE SERIE/PARALLELE
EV10B	ELECTROVANNE SERIE/PARALLELE
EV11	ELECTROVANNE DE BY-PASS
FP	FUSIBLE DE PUISSANCE 160A
FA	FUSIBLE
GB	GROUPE BATTERIES
GRF1	PHARE TOURNANT
HC-FG	COMPTE-HEURES-VOLTMETRE
KL	KLAXON
L1	TEMOIN VERT MACHINE ALLUMEE
L2	TEMOIN ROUGE ALARME
L7	TEMOIN VERT COMMANDE SUR LA PLATE-FORME
L6	TEMOIN ROUGE SURCHARGE
L8	TEMOIN ROUGE BATTERIE DECHARGEE
MPT1	MICROINTERRUPTEUR POT-HOLE 1-2
M1	MICROINTERRUPTEUR SECURITE PLATE-FORME SOULEVEE
M3A	MICROINTERRUPTEUR STOP SOULEVEMENT AVEC CHARGE MAXIMUM
M3B	MICROINTERRUPTEUR STOP TRACTION
M5	MICROINTERRUPTEUR PLATE-FORME COULISSEE
RCB	RELAIS CHARGEUR DE BATTERIE
SP1	CAPTEUR PERTE D'ISOLATION
SP0	INTERRUPTEUR DE PUISSANCE POUR ARRET D'URGENCE
SP2	INTERRUPTEUR ARRET D'URGENCE SUR LA PLATE-FORME
SW2	SELECTEUR MONTEE/DESCENTE DE TERRE
SW4	SELECTEUR COMMANDES TERRE/PLATE-FORME
SW9	SELECTEUR SERIE/PARALLELE TRACTION
SW11	SELECTEUR TRACTION/SOULEVEMENT
SW12	SELECTEUR CHARGE MAXIMUM LIMITEE
TLR	TELERUPTEUR ELECTRO-POMPE
QM	INTERRUPTEUR GENERAL TABLEAU DE COMMANDES

SCHALTPLAN STANDARDMASCHINEN
037.08.009 - 037.08.039

AM	INKLINOMETER
AV1	AKUSTISCHER MELDER AM BODEN
AV2	AKUSTISCHER MELDER AUF DER ARBEITSBÜHNE
BC1	ANZEIGER LADEGERÄT
CB	ELEKTRONISCHES LADEGERÄT
CTRL	STEUERUNG ELEKTROPUMPE
EP	ELEKTROPUMPE
EV2	ELEKTROVENTIL VORWÄRTSGANG
EV3	ELEKTROVENTIL RÜCKWÄRTSGANG
EV4	ELEKTROVENTIL ANHEBUNG
EV5	ELEKTROVENTIL ABSENKUNG
EV8	ELEKTROVENTIL LENKUNG LINKS
EV9	ELEKTROVENTIL LENKUNG RECHTS
EV10A	REIHEN-PARALLEL-ELEKTROVENTIL
EV10B	REIHEN-PARALLEL-ELEKTROVENTIL
EV11	BYPASS-ELEKTROVENTIL
FP	LEISTUNGS-SCHMELZSICHERUNG 160A
FA	SCHMELZSICHERUNG
GB	BATTERIEAGGREGAT
GRF1	RUNDUMLEUCHTE
HC-FG	STUNDENZÄHLER-SPANNUNGSMESSER
KL	HUPE
L1	GRÜNE LED MASCHINE EINGESCHALTET
L2	ROTE LED ALARM
L7	GRÜNE LED STEUERUNGEN AUF DER ARBEITSBÜHNE
L6	ROTE LED ÜBERLAST
L8	ROTE LED BATTERIE ERSCHÖPFT
MPT1	MIKROSCHALTER SCHLAGLOCH-SCHUTZSYSTEM 1-2
M1	MIKROSCHALTER SICHERHEIT ARBEITSBÜHNE ANGEHOBEN
M3A	MIKROSCHALTER STOPP ANHEBUNG MIT HÖCHSTLAST
M3B	MIKROSCHALTER STOPP FAHREN
M5	MIKROSCHALTER ARBEITSBÜHNE AUSGEZOGEN
RCB	RELAIS LADEGERÄT
SP1	SENSOR ISOLIERUNGSVERLUST
SP0	LEISTUNGSSCHALTER FÜR NOTSTOPP
SP2	NOT-AUS-SCHALTER AUF DER ARBEITSBÜHNE
SW2	WAHLSCHALTER ANHEBUNG/ABSENKUNG DURCH STEUERUNG AM BODEN
SW4	WAHLSCHALTER STEUERUNGEN BODEN/ARBEITSBÜHNE
SW9	REIHEN-PARALLEL-WAHLSCHALTER FAHREN
SW11	WAHLSCHALTER FAHREN/ANHEBUNG
SW12	WAHLSCHALTER BESCHRÄNKTE HÖCHSTLAST
TLR	FERNSCHALTER ELEKTROPUMPE
QM	HAUPTSCHALTER SCHALTTAFEL

ESQUEMA ELÉCTRICO MÁQUINAS STANDARD
037.08.009 - 037.08.039

AM	INCLINÓMETRO
AV1	AVISADOR ACÚSTICO A TIERRA
AV2	AVISADOR ACÚSTICO PLATAFORMA
BC1	INDICADOR DE CARGADOR DE BATERÍA
CB	CARGADOR DE BATERÍA ELECTRÓNICO
CTRL	CONTROLLER ELECTROBOMBA
EP	ELECTROBOMBA
EV2	ELECTROVÁLVULA MARCHA ADELANTE
EV3	ELECTROVÁLVULA MARCHA ATRÁS
EV4	ELECTROVÁLVULA DE SUBIDA
EV5	ELECTROVÁLVULA DE DESCENSO
EV8	ELECTROVÁLVULA DIRECCIÓN IZQUIERDA
EV9	ELECTROVÁLVULA DIRECCIÓN DERECHA
EV10A	ELECTROVÁLVULA SERIE/PARALELO
EV10B	ELECTROVÁLVULA SERIE/PARALELO
EV11	ELECTROVÁLVULA DE BY-PASS
FP	FUSIBLE DE POTENCIA 160A
FA	FUSIBLE
GB	GRUPO BATERÍAS
GRF1	FARO GIRATORIO
HC-FG	CUENTAHORAS- VOLTÍMETRO
KL	CLAXON
L1	LED VERDE MÁQUINA ENCENDIDA
L2	LED ROJOALARMA
L7	LED VERDE MANDOS EN PLATAFORMA
L6	LED ROJO SOBRECARGA
L8	LED ROJO BATERÍA DESCARGADA
MPT1	MICROINTERRUPTOR POT-HOLE 1-2
M1	MICROINTERRUPTOR DE SEGURIDAD PLATAFORMA SUBIDA
M3A	MICROINTERRUPTOR STOP ELEVACIÓN CON CARGA MÁXIMA
M3B	MICROINTERRUPTOR STOP TRACCIÓN
M5	MICROINTERRUPTOR PLATAFORMA DESENSARTADA
RCB	RELÉ CARGADOR DE BATERÍA
SP1	SENSOR PÉRDIDA DE AISLAMIENTO
SP0	INTERRUPTOR DE POTENCIA POR PARADA DE EMERGENCIA
SP2	INTERRUPTOR PARADA DE EMERGENCIA EN PLATAFORMA
SW2	SELECTOR SUBIDA/DESCENSO DESDE TIERRA
SW4	SELECTOR MANDOS TIERRA/PLATAFORMA
SW9	SELECTOR SERIE/PARALELO TRACCIÓN
SW11	SELECTOR TRACCIÓN/SUBIDA
SW12	SELECTOR CARGA MÁXIMA LIMITADO
TLR	TELERRUPTOR ELECTROBOMBA
QM	INTERRUPTOR GENERAL PANEL DE CONTROL

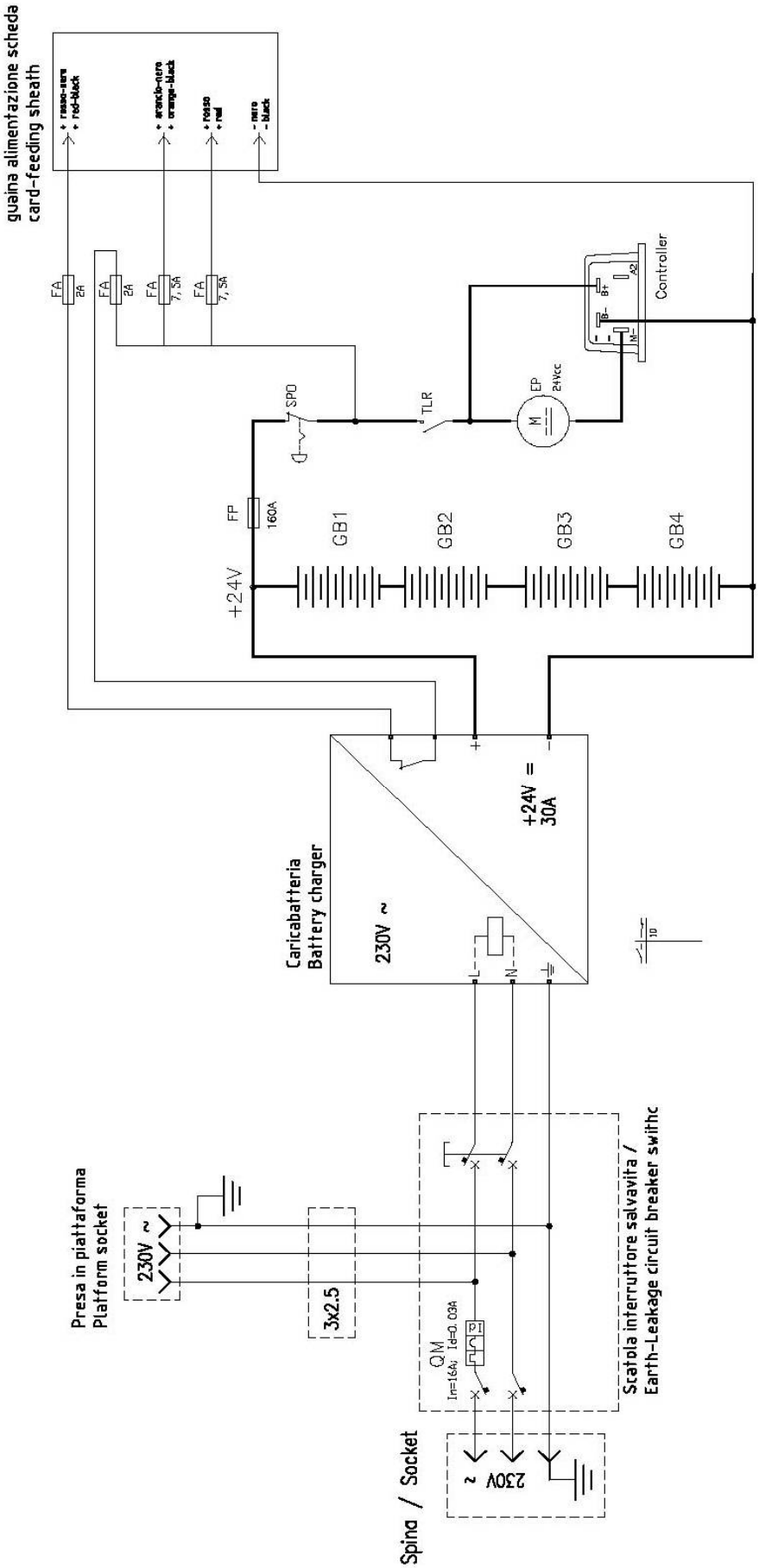
ELEKTRISCH SCHEMA STANDAARD MACHINES
037.08.009 - 037.08.039

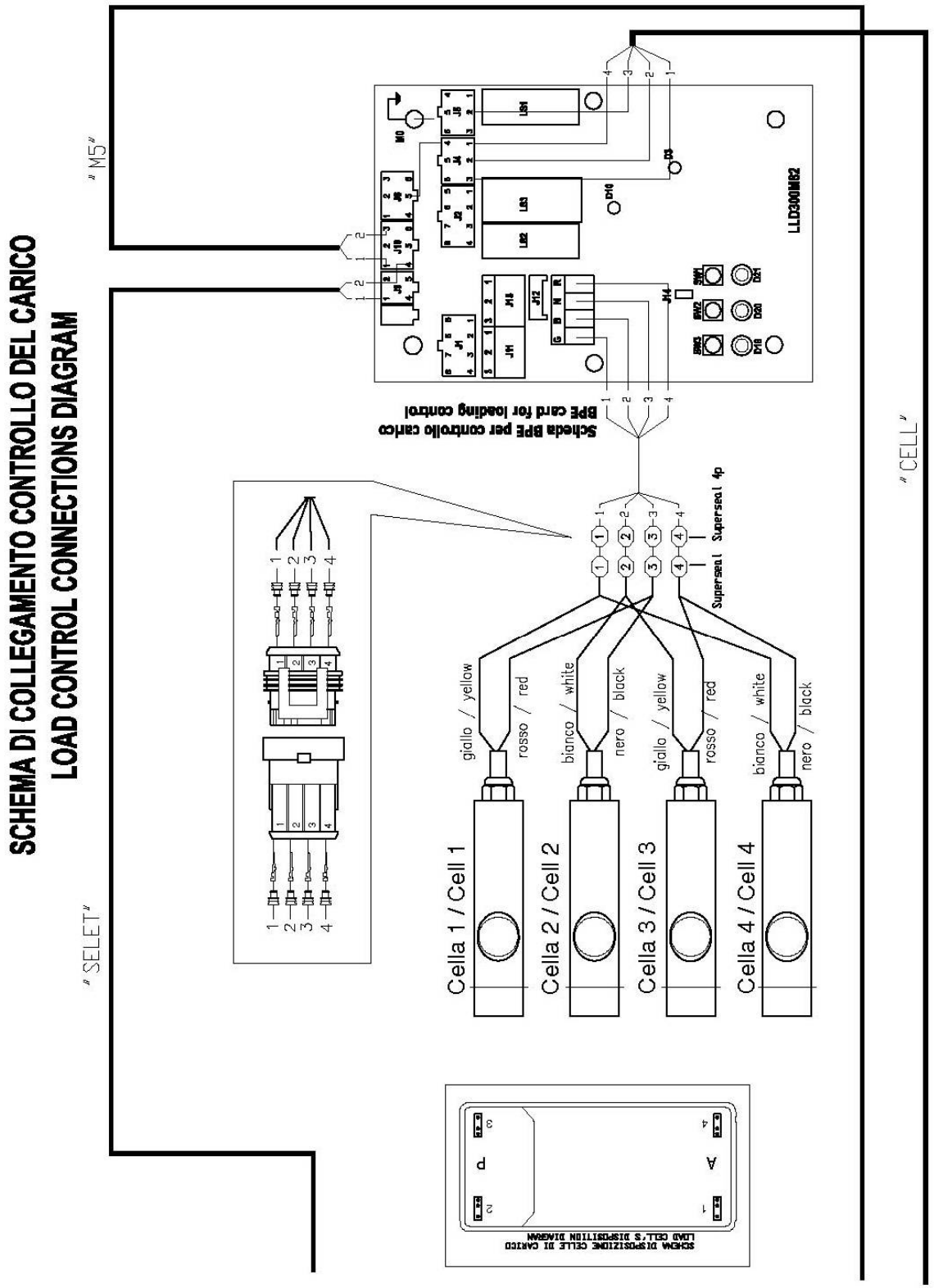
AM	HELLINGMETER
AV1	ZOEMER OP DE GROND
AV2	ZOEMER OP HET PLATFORM
BC1	ACCULAADMETER
CB	ELEKTRONISCHE ACCULADER
CTRL	BESTURING ELEKTRISCHE POMP
EP	ELEKTRISCHE POMP
EV2	ELEKTROMAGNETISCHE KLEP VOORUIT RIJDEN
EV3	ELEKTROMAGNETISCHE KLEP ACHTERUIT RIJDEN
EV4	ELEKTROMAGNETISCHE HEFKLEP
EV5	ELEKTROMAGNETISCHE DAALKLEP
EV8	ELEKTROMAGNETISCHE KLEP STUURBEWEGING NAAR LINKS
EV9	ELEKTROMAGNETISCHE KLEP STUURBEWEGING NAAR RECHTS
EV10A	ELEKTROMAGNETISCHE KLEP SERIE/PARALLEL
EV10B	ELEKTROMAGNETISCHE KLEP SERIE/PARALLEL
EV11	ELEKTROMAGNETISCHE OMLOOPKLEP
FP	STROOMZEKERING 160A
FA	ZEKERING
GB	ACCUEENHEID
GRF1	ZWAAILICHT
HC-FG	URENTELLER-VOLTMETER
KL	CLAXON
L1	GROENE LED MACHINE AAN
L2	RODE LED ALARM
L7	GROENE LED BEDIENINGEN OP HET PLATFORM
L6	RODE LED OVERBELASTING
L8	RODE LED ACCU LEEG
MPT1	MICROSCHAKELAAR POT-HOLE 1-2
M1	VEILIGHEIDSMICROSCHAKELAAR PLATFORM OPGEHEVEN
M3A	MICROSCHAKELAAR STOP HEFFEN BIJ MAXIMUM BELASTING
M3B	MICROSCHAKELAAR STOP RIJDEN (TRACTIE)
M5	MICROSCHAKELAAR PLATFORM UITGESCHOVEN
RCB	RELAIS ACCULADER
SP1	SENSOR ISOLATIEVERLIES
SP0	STROOMSCHAKELAAR VOOR NOODSTOP
SP2	NOODSTOPSCHAKELAAR OP HET PLATFORM
SW2	KEUZESCHAKELAAR HEFFEN/DALEN VANAF DE GROND
SW4	KEUZESCHAKELAAR BEDIENING VANAF DE GROND/VANAF HET PLATFORM
SW9	SCHAKELAAR SERIE/PARALLEL RIJDEN (TRACTIE)
SW11	KEUZESCHAKELAAR RIJDEN (TRACTIE)/HEFFEN
SW12	KEUZESCHAKELAAR BEPERKTE MAXIMUM BELASTING
TLR	AFSTANDSSCHAKELAAR ELEKTRISCHE POMP
QM	HOOFDSCHAKELAAR BEDIENINGSKAST

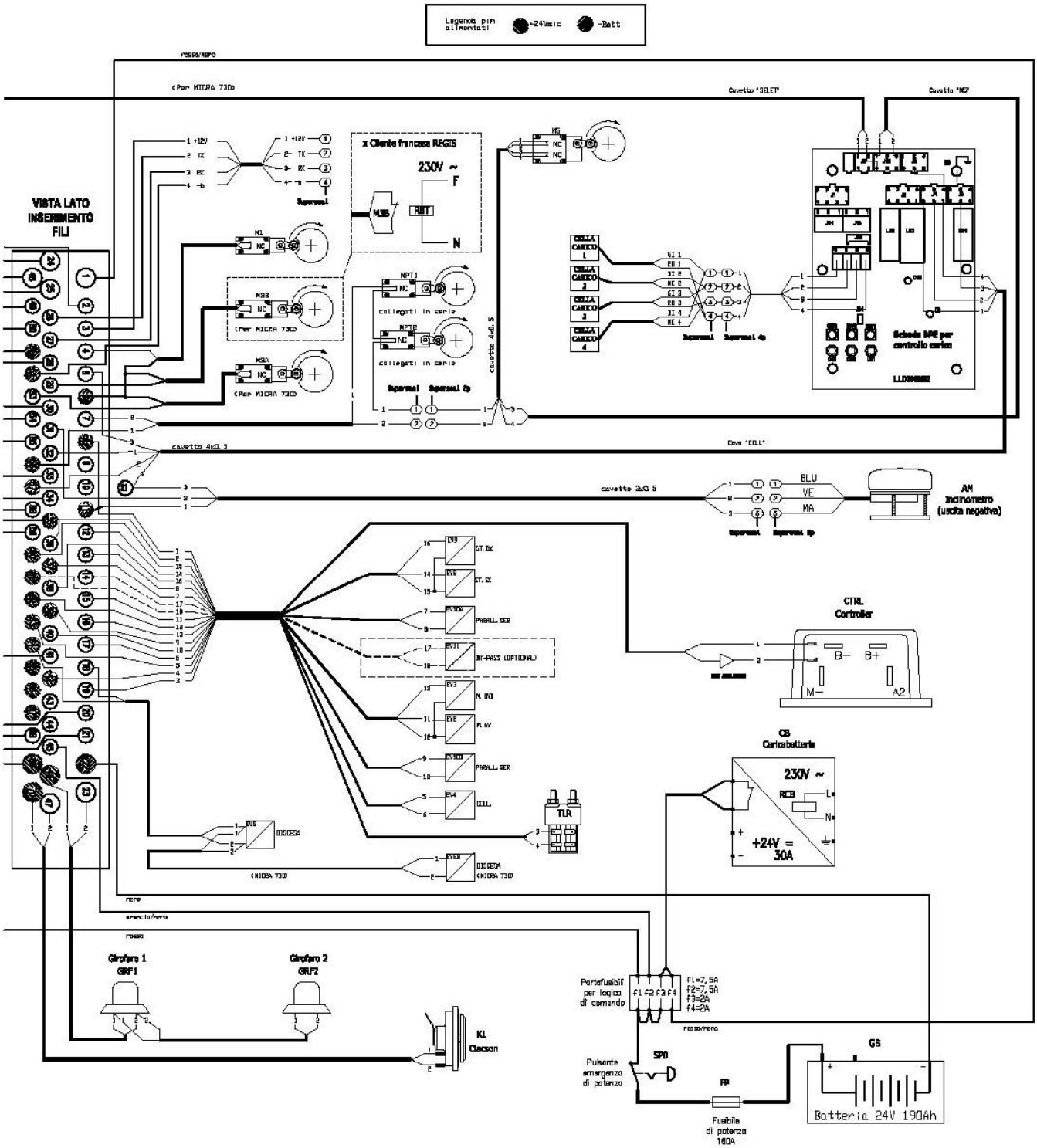
ЭЛЕКТРИЧЕСКАЯ СХЕМА СТАНДАРТНЫХ МАШИН

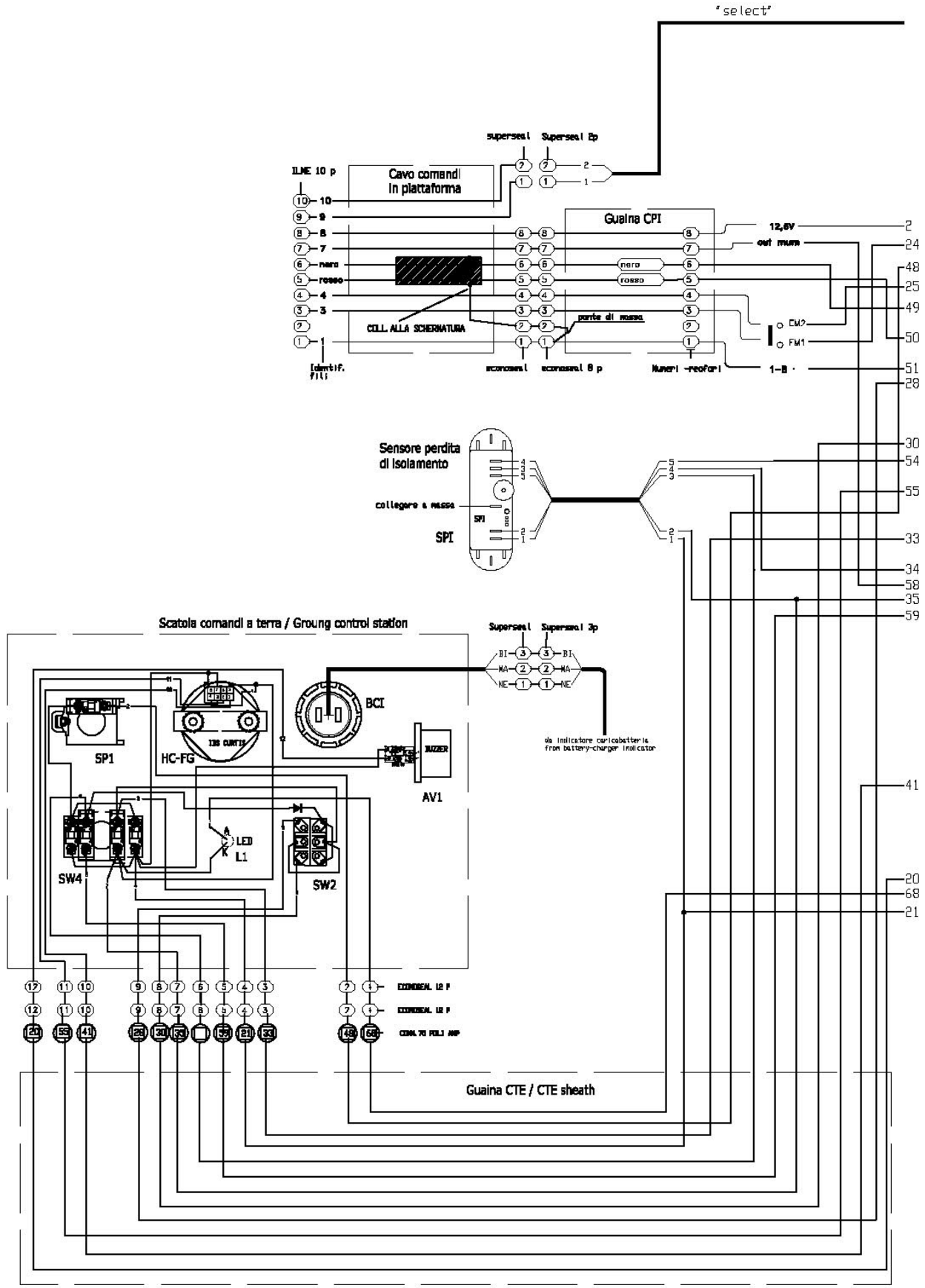
037.08.009 - 037.08.039

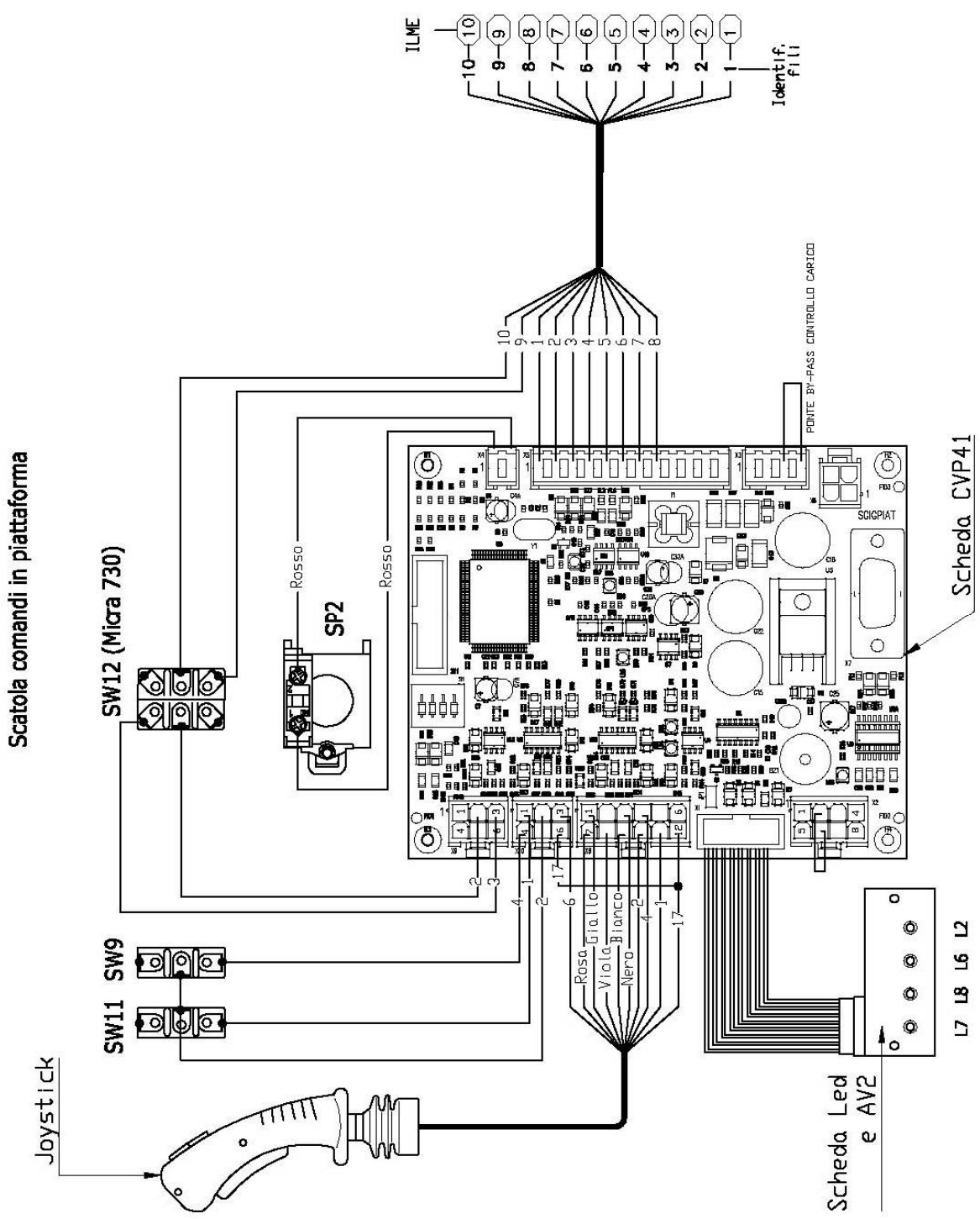
AM	УКЛОНОМЕР
AV1	НАЗЕМНЫЙ ЗВУКОВОЙ СИГНАЛИЗАТОР
AV2	ЗВУКОВОЙ СИГНАЛИЗАТОР НА ПЛАТФОРМЕ
BC1	ИНДИКАТОР ЗАРЯДНОГО УСТРОЙСТВА
CB	ЭЛЕКТРОННОЕ ЗАРЯДНОЕ УСТРОЙСТВО
CTRL	РЕГУЛЯТОР ЭЛЕКТРОНАСОСА
EP	ЭЛЕКТРОНАСОС
EV2	ЭЛЕКТРОКЛАПАН ПЕРЕДНЕГО ХОДА
EV3	ЭЛЕКТРОКЛАПАН ЗАДНЕГО ХОДА
EV4	ЭЛЕКТРОКЛАПАН ПОДЪЕМА
EV5	ЭЛЕКТРОКЛАПАН СПУСКА
EV8	ЭЛЕКТРОКЛАПАН ПОВОРОТА НАЛЕВО
EV9	ЭЛЕКТРОКЛАПАН ПОВОРОТА НАПРАВО
EV10A	СЕРИЙНО/ПАРАЛЛЕЛЬНЫЙ ЭЛЕКТРОКЛАПАН
EV10B	СЕРИЙНО/ПАРАЛЛЕЛЬНЫЙ ЭЛЕКТРОКЛАПАН
EV11	ЭЛЕКТРОКЛАПАН BY-PASS
FP	ПЛАВКИЙ ПРЕДОХРАНИТЕЛЬ МОЩНОСТИ 160A
FA	ПЛАВКИЙ ПРЕДОХРАНИТЕЛЬ
GB	ГРУППА АККУМУЛЯТОРОВ
GRF1	ПРОБЛЕСКОВЫЙ МАЯЧОК
HC-FG	СЧЕТЧИК МОТОЧАСОВ / ВОЛЬТМЕТР
KL	КЛАКСОН
L1	ЗЕЛЕНЫЙ ИНДИКАТОР ВКЛЮЧЕННОЙ МАШИНЫ
L2	КРАСНЫЙ ИНДИКАТОР СИГНАЛА ТРЕВОГИ
L7	ЗЕЛЕНЫЙ ИНДИКАТОР УПРАВЛЕНИЯ С ПЛАТФОРМЫ
L6	КРАСНЫЙ ИНДИКАТОР ПЕРЕГРУЗКИ
L8	КРАСНЫЙ ИНДИКАТОР РАЗРЯЖЕННОГО АККУМУЛЯТОРА
MPT1	МИКРОВЫКЛЮЧАТЕЛЬ POT-HOLE 1-2
M1	МИКРОВЫКЛЮЧАТЕЛЬ БЕЗОПАСНОСТИ ПОДНЯТОЙ ПЛАТФОРМЫ
M3A	МИКРОВЫКЛЮЧАТЕЛЬ СТОП ПОДЪЕМА С МАКСИМАЛЬНЫМ ГРУЗОМ
M3B	МИКРОВЫКЛЮЧАТЕЛЬ СТОП ТЯГОВОГО ДВИЖЕНИЯ
M5	МИКРОВЫКЛЮЧАТЕЛЬ РАЗДВИНУТОЙ ПЛАТФОРМЫ
RCB	РЕЛЕ ЗАРЯДНОГО УСТРОЙСТВА
SP1	ДАТЧИК ПОТЕРИ ИЗОЛЯЦИИ
SP0	ВЫКЛЮЧАТЕЛЬ МОЩНОСТИ ДЛЯ АВАРИЙНОЙ ОСТАНОВКИ
SP2	ВЫКЛЮЧАТЕЛЬ АВАРИЙНОЙ ОСТАНОВКИ НА ПЛАТФОРМЕ
SW2	НАЗЕМНЫЙ ПЕРЕКЛЮЧАТЕЛЬ ПОДЪЕМА/СПУСКА
SW4	ПЕРЕКЛЮЧАТЕЛЬ УПРАВЛЕНИЯ ЗЕМЛЯ/ПЛАТФОРМА
SW9	ПЕРЕКЛЮЧАТЕЛЬ СЕРИЙНО/ПАРАЛЛЕЛЬНОГО ТЯГОВОГО ДВИЖЕНИЯ
SW11	ПЕРЕКЛЮЧАТЕЛЬ ТЯГОВОГО ДВИЖЕНИЯ/ПОДЪЕМА
SW12	ПЕРЕКЛЮЧАТЕЛЬ ОГРАНИЧЕНИЯ МАКСИМАЛЬНОГО ГРУЗА
TLR	ДИСТАНЦИОННЫЙ ВЫКЛЮЧАТЕЛЬ ЭЛЕКТРОНАСОСА
QM	ГЛАВНЫЙ ВЫКЛЮЧАТЕЛЬ КОМАНДНОГО ПУЛЬТА


guaina alimentazione scheda
card-feeding sheath
+ rosso-nero
+ red-black
+ arancio-nero
+ orange-black
+ rosso
+ red
- nero
- black
FA 2A
FA 2A
FA 7,5A
FA 7,5A
SPD
TLR
EP
24Vcc
Controller
FP 160A
+24V
GB1
GB2
GB3
GB4
Caricabatteria
Battery charger
230V ~
+24V =
30A
Presa in piattaforma
Platform socket
230V ~
3x2.5
QM
In=16A; Id=0.03A
Scatola interruttore salvavita /
Earth-Leakage circuit breaker swithc
Spina / Socket
230V ~


SCHEMA DI COLLEGAMENTO CONTROLLO DEL CARICO
LOAD CONTROL CONNECTIONS DIAGRAM
" M5 "
" SELET "
" CELL "
Scheda BPE per controllo carico
BPE card for loading control
LLD300M02
Superseal 4p
Superseal 4p
giallo / yellow
rosso / red
bianco / white
nero / black
giallo / yellow
rosso / red
bianco / white
nero / black
Cella 1 / Cell 1
Cella 2 / Cell 2
Cella 3 / Cell 3
Cella 4 / Cell 4
SCHEMA DISPOSIZIONE CELLE DI CARICO
LOAD CELL'S DISPOSITION DIAGRAM


Legenda pin alimentati
+24Vsic
-Batt
VISTA LATO INSERIMENTO FILI
x Cliente francese REGIS
230V ~
F
N
Sensori
Sensori 4p
collegati in serie
cavetto 4x0.5
cavetto 2x0.5
BLU
VE
MA
AM
Inclinometro
(uscita negativa)
CTRL
Controller
B-
B+
M-
A2
CB
Caricabatteria
230V ~
RCB
+24V =
30A
TLR
DIODO
Girofaro 1
GRF1
Girofaro 2
GRF2
KL
Clacson
Portafusibili
per logica
di comando
F1=7,5A
F2=7,5A
F3=2A
F4=2A
Pulsante
emergenza
di potenza
SPD
FP
Fusibile
di potenza
160A
GB
Batteria 24V 190Ah
Scheda BPE per
controllo carico


"select"
superseal
Superseal 2p
ILME 10 p
Cavo comandi in piattaforma
Guaina CPI
12,6V
out mura
nero
rosso
COLL. ALLA SCHERMATURA
parte di massa
CM2
FM1
1-8
Identif. fili
Numeri -recofori
Sensore perdita di isolamento
collegare a massa
SPI
Scatola comandi a terra / Groung control station
BCI
SP1
HC-FG
AV1
BUZZER
LED L1
SW4
SW2
Guaina CTE / CTE sheath


ILME
10
9
8
7
6
5
4
3
2
1
Identif. fili
PONTE BY-PASS CONTROLLO CARICO
Scheda CVP41
SGIGPIAT
Scatola comandi in piattaforma
SW12 (Micra 730)
SP2
Rosso
Rosso
SW9
SW11
Joystick
Rosa
Giallo
Viola
Bianco
Nero
L7 L8 L6 L2
Scheda Led e AV2

SCHEMA IDRAULICO MACCHINE STANDARD
037.07.011

1	SERBATOIO OLIO
2	FILTRO
3	CENTRALINA IDRAULICA (2,6+ 1,2)
4	CILINDRO STERZO
5	CILINDRO SOLLEVAMENTO
6	GRUPPO INTEGRATO
7	ATTACCO RAPIDO MANOMETRO
8	FILTRO
9	MOTORE TRAZIONE
10	FRENO DI STAZIONAMENTO
11	TRASDUTTORE DI PRESSIONE
M	MOTORE ELETTRICO
MAN	MANOMETRO FILTRO
EV2	ELETTROVALVOLA TRAZIONE AVANTI
EV3	ELETTROVALVOLA TRAZIONE INDIETRO
EV4	ELETTROVALVOLA SOLLEVAMENTO
EV5	ELETTROVALVOLA DISCESA
EV8	ELETTROVALVOLA STERZO SINISTRA
EV9	ELETTROVALVOLA STERZO DESTRA
EV10A-B	ELETTROVALVOLA SERIE-PARALLELO TRAZIONE
EV11	ELETTROVALVOLA BY-PASS
OM 1	OPERATORE MANUALE TRAINO DI EMERGENZA
PM	POMPA MANUALE

HYDRAULIC SYSTEM DIAGRAM STANDARD MACHINES
037.07.011

1	OIL TANK
2	FILTER
3	HYDRAULIC BOX (2,6+ 1,2)
4	STEERING CYLINDER
5	LIFTING CYLINDER
6	INTEGRATED GROUP
7	ATTACHEMENT FOR MANOMETER
8	FILTER
9	HYDRAULIC TRACTION MOTOR
10	STATIONARY BRAKE
11	PRESSURE TRANSDUCER
M	ELECTRIC MOTOR
MAN	FILTER MANOMETER
EV2	FORWARD TRACTION SOLENOID VALVE
EV3	REVERSE TRACTION SOLENOID VALVE
EV4	LIFTING SOLENOID VALVE
EV5	LOWERING SOLENOID VALVE
EV8	LEFT DIRECTION STEERING SOLENOID VALVE
EV9	RIGHT DIRECTION STEERING SOLENOID VALVE
EV10A-B	SERIES-PARALLEL TRACTION SOLENOID VALVE
EV11	BY-PASS SOLENOID VALVE
OM 1	MANUAL ACTUATOR FOR EMERGENCY TOWING
PM	HANDPUMP

SCHEMA HYDRAULIQUE DE BASE POUR MACHINES STANDARD
037.07.011

1	RESERVOIR HUILE
2	FILTRE
3	CENTRALE HYDRAULIQUE (2,6+ 1,2)
4	VERIN DIRECTION
5	VERIN DE LEVEE PLATE-FORME
6	GROUPE EV5
7	RACCORDEMENT MANOMETRE
8	FILTRE
9	MOTEURS DEPLACEMENT
10	FREIN DE STATIONNEMENT
11	TRANSDUCTEUR DE PRESSION
M	MOTEUR ELECTRIQUE
MAN	MANOMETRE
EV2	ELECTROVANNE TRANSLATION EN AVANT
EV3	ELECTROVANNE TRANSLATION EN ARRIERE
EV4	ELECTROVANNE LEVEE
EV5	ELECTROVANNE DESCENTE
EV8	ELECTROVANNE DIRCTION GAUCHE
EV9	ELECTROVANNE DIRECTION DROITE
EV10A-B	ELECTROVANNE SERIE-PARALLELE MOTEURS
EV11	ELECTROVANNE DE BY-PASS
OM 1	ACTIONNEUR MANUEL POR REMORQUE D'URGENCE
PM	POMPE MANUELLE

PLAN HYDRAULIKANLAGE STANDARDMASCHINEN
037.07.011

1	ÖLTANK
2	FILTER
3	HYDRAULIK-ZENTRALEINHEIT (2,6+ 1,2)
4	LENKZYLINDER
5	HUBZYLINDER
6	ELEKTROVORTEILER BEWEGUNGEN
7	ANSCHLUSS FÜR MANOMETER
8	FILTER
9	GETRIEBMOTOR ZUM FAHREN
10	FESTSTELLBREMSE
11	DRUCKWANDLER
M	ELEKTROMOTOR
MAN	MANOMETER
EV2	ELEKTROVENTIL VORWÄRTSFAHRT
EV3	ELEKTROVENTIL RÜCKWÄRTSFAHRT
EV4	ELEKTROVENTIL HEBEN
EV5	ELEKTROVWNTIL SENKEN
EV8	ELEKTROVENTIL LINKSLENKUNG
EV9	ELEKTROVENTIL RECHTSLENKUNG
EV10A-B	ELEKTROVENTIL REIHEN-PARALLEL ANTRIEB
EV11	ELEKTROVENTIL BY-PASS
OM 1	MANUELLER TRIEB ZUM NOTSCHLEPPEN
PM	HANDPUMPE

ESQUEMA IDRÁULICO MÁQUINAS STANDARD
037.07.011

1	DEPOSITO
2	FILTRO
3	CENTRAL IDRÁULICA (2,6+ 1,2)
4	CILINDRO DIRECCIÒN
5	CILINDRO ELEVACIÒN
6	GRUPO INTEGRADO
7	ENGANCHE RAPIDO MANÒMETRO
8	FILTRO
9	MOTOR TRACCIÒN
10	FRENO DE ESTACIONAMIENTO
11	TRANSDUCTOR DE PRESIÓN
M	MOTOR ÉLÉCTRICO
MAN	MANÒMETRO
EV2	ELECTROVÁLVULA TRACCIÒN ADELANTE
EV3	ELECTROVÁLVULA TRACCIÒN ATRÁ
EV4	ELECTROVÁLVULA ELEVACIÒN
EV5	ELECTROVÁLVULA DESCENSO
EV8	ELECTROVÁLVULA DIRECCIÒN IZQUIERDA
EV9	ELECTROVÁLVULA DIRECCIÒN DERECHA
EV10A-B	ELECTROVÁLVULA SERIE-PARALELO TRACCIÒN
EV11	ELECTROVÁLVULA BY-PASS
OM 1	ACCIONADOR MANUAL PARA REMOLQUE D'URGENCIA
PM	BOMBA MANUAL

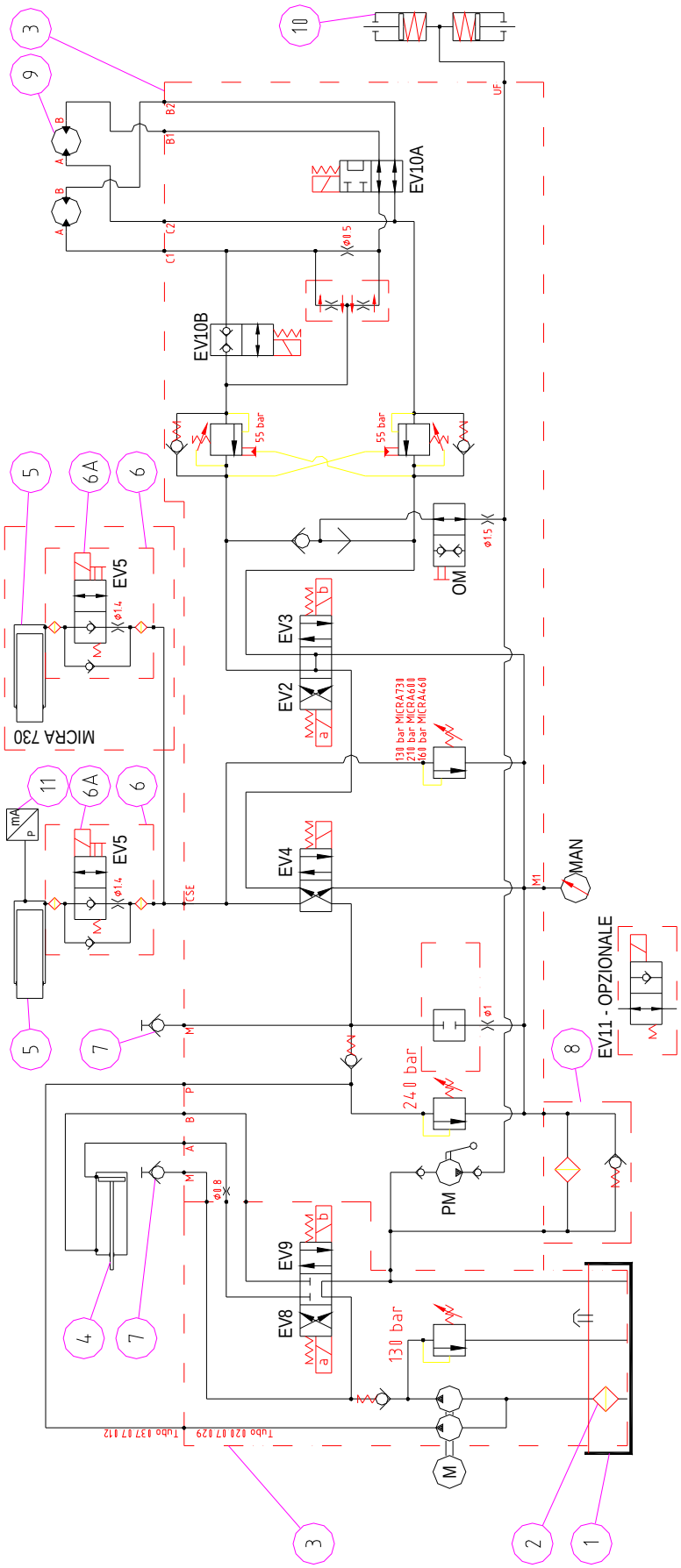
HYDRAULISCH SCHEMA STANDAARD MACHINES
037.07.011

1	OLIERESERVOIR
2	FILTER
3	HYDRAULISCHE REGELEENHEID (2,6+ 1,2)
4	STUURCILINDER
5	HEFCILINDER
6	GEÏNTEGREERDE EENHEID
7	SNELKOPPELING MANOMETER
8	FILTER
9	TRACTIEMOTOR OM TE KUNNEN RIJDEN
10	PARKEERREM
11	DRUKTRANSDUCTOR
M	ELEKTROMOTOR
MAN	MANOMETER
EV2	ELEKTROMAGNETISCHE KLEP VOORUIT RIJDEN (VOORWAARTSE TRACTIE)
EV3	ELEKTROMAGNETISCHE KLEP ACHTERUIT RIJDEN (ACHTERWAARTSE TRACTIE)
EV4	ELEKTROMAGNETISCHE KLEP HEFFEN
EV5	ELEKTROMAGNETISCHE KLEP ZAKKEN
EV8	ELEKTROMAGNETISCHE KLEP STUURBEWEGING LINKS
EV9	ELEKTROMAGNETISCHE KLEP STUURBEWEGING RECHTS
EV10A-B	ELEKTROMAGNETISCHE KLEP SERIE-PARALLEL RIJDEN (TRACTIE)
EV11	ELEKTROMAGNETISCHE OMLOOPKLEP
OM 1	HANDBEDIEND ELEMENT VOOR SLEPEN IN GEVAL VAN NOOD
PM	HANDPOMP

ГИДРАВЛИЧЕСКАЯ СХЕМА СТАНДАРТНЫХ МАШИН

037.07.011

1	МАСЛЯНЫЙ БАК
2	ФИЛЬТР
3	ГИДРАВЛИЧЕСКИЙ РАСПРЕДЕЛИТЕЛЬНЫЙ ПУЛЬТ (2,6+ 1,2)
4	ЦИЛИНДР ПОВОРОТА
5	ЦИЛИНДР ПОДЪЕМА
6	РАСПРЕДЕЛИТЕЛЬ
7	БЫСТРОЕ КРЕПЛЕНИЕ МАНОМЕТРА
8	ФИЛЬТР
9	ДВИГАТЕЛЬ ТЯГИ
10	РУЧНОЙ (СТОЯНОЧНЫЙ) ТОРМОЗ
11	ДАТЧИК ДАВЛЕНИЯ
M	ЭЛЕКТРИЧЕСКИЙ ДВИГАТЕЛЬ
MAN	МАНОМЕТР ФИЛЬТРА
EV2	ЭЛЕКТРОКЛАПАН ТЯГИ ВПЕРЕД
EV3	ЭЛЕКТРОКЛАПАН ТЯГИ НАЗАД
EV4	ЭЛЕКТРОКЛАПАН ПОДЪЕМА
EV5	ЭЛЕКТРОКЛАПАН СПУСКА
EV8	ЭЛЕКТРОКЛАПАН ПОВОРОТА НАЛЕВО
EV9	ЭЛЕКТРОКЛАПАН ПОВОРОТА НАПРАВО
EV10A-B	ЭЛЕКТРОКЛАПАН СЕРИЙНО-ПАРАЛЛЕЛЬНОЙ ТЯГИ
EV11	ЭЛЕКТРОКЛАПАН BY-PASS
OM 1	РУЧНОЙ ОПЕРАТОР АВАРИЙНОЙ БУКСИРОВКИ
PM	РУЧНОЙ НАСОС


EV10A
EV10B
EV5
EV5
EV3
EV2
EV4
EV9
EV8
OM
PM
MAN
MICRA 730
EV11 - OPZIONALE
55 bar
55 bar
240 bar
130 bar
130 bar MICRA730
210 bar MICRA680
160 bar MICRA460
Tubo 020 07 029
Tubo 037 07 012

AIRO è una Divisione TIGIEFFE SRL – Via Villa Superiore, 82 –42045 Luzzara (RE)
Tel. +39 0522 977365 Fax +39 0522 977015

DICHIARAZIONE *CE* DI CONFORMITA' - *CE* DECLARATION OF CONFORMITY - DECLARATION *CE* DE CONFORMITE' - *EG* KONFORMITÄTSERKLÄRUNG - DECLARACION *CE* DE CONFORMIDAD- **ЗАЯВЛЕНИЕ О КОНФОРМНОСТИ** *EC* 2006/42/CE

Dichiarazione originale	Original Declaration	Déclaration Originale	Originalerklärung	Declaración Original	Оригинальная декларация

Noi - We - Nous - Wir – Nosotros- мы

Tigieffe s.r.l. - Via Villa Superiore N.° 82 - Luzzara (Reggio Emilia) - ITALIA

Dichiariamo sotto la nostra esclusiva responsabilità che il prodotto:	Declare under our exclusive responsability that the product:	Declarons sous notre responsabilitè exclusive que le produit:	Erklaren hiermit unter Übernahme der vollen Verantwortung für diese Erklärung , daß das Produkt:	Declaramos bajo nuestra exclusiva responsabilidad que el producto:	Под нашу исключительную ответственность заявляем, что изделие:

Piattaforma di Lavoro Elevabile
Mobile Elevating Work Platform
Plates-forme Elévatrice Mobiles de Personnel
Fahrbare Hubarbeitsbühnen
Plataforma Elevadora Móvil de Personal
Платформа для высотного работ

Modello - Model - Modèle Typ – Modelo-МОДЕЛЬ	N° Chassis - Chassis No. N° Chassis - Fahrgestellnr - N° Chassis - Номер Рама	Anno - Year - Année Baujahr – Ano -Год
XS7 E	*XXXXXXXXXX*	*XXXXXXXXXX*

Al quale questa dichiarazione si riferisce è conforme alle direttive 2006/42/CE, 2004/108/CE, e al modello certificato da:	To which this declaration refers is in compliance with the directives 2006/42/CE, 2004/108/CE, and with the model certified by:	Faisant l'objet de la présente déclaration est conforme aux directives 2006/42/CE, 2004/108/CE, et au modéle certifié par	Auf das sich die vorliegende Erklärung bezieht, den 2006/42/CE, 2004/108/CE, Richtlinien und dem von:	Al cual esta declaración se refiere cumple las directivas 2006/42/CE, 2004/108/CE, y el modelo certificato por:	К которой это заявление относится, соответствует директивами 2006/42/CE, 2004/108/CE, и сертифицированной модели из:

ICEPI Spa Via P. Belizzi, 29/31/33 29100 Piacenza (Italia)
N. di identificazione 0066

con il seguente numero di certificazione:	with the following certification number:	avec le numèro de certification suivant:	Zertifizierten Modell mit folgender Zertifizierungsnummer:	con el siguiente número de certificación:	со следующим сертифицированным номером:

N.Certificato - Certificate No. - N° du certificat - Bestätigungnummer - N° de certificado – Номер Сертификата

10DM4MA22

e alle norme seguenti:	and with the following standards:	et aux normes suivantes:	die Erklärung entspricht den folgenden Normen:	y a las siguentes normas:	и со следующими нормами:

EN 280 :2001 prEN 280:2009 EN ISO 12100-1:2003 EN ISO 12100-2:2003 EN ISO 60204-1:2006

Il firmatario di questa dichiarazione di conformità è autorizzato a costituire il Fascicolo Tecnico.	The signatory of this conformity declaration is authorized to set up the Technical File.	Le signataire de cette déclaration de conformité est autorisé à constituer le Dossier Technique.	Der Unterzeichner dieser Konformitätserklärung ist autorisiert, das technische Unterlagen abzufassen.	El firmante de esta declaración de conformidad está autorizado a crear el Expediente Técnico.	Лицо, подписавшее это заявление о соответствии, уполномочено составить техническую документацию оборудования.

Luzzara (RE), data-date-date-Datum-fecha-Дата

.....
Roberto Ferramola
(Il legale rappresentante - The legal representative)

AIRO è una Divisione TIGIEFFE SRL – Via Villa Superiore, 82 –42045 Luzzara (RE)
Tel. +39 0522 977365 Fax +39 0522 977015

DICHIARAZIONE *CE* DI CONFORMITA' - *CE* DECLARATION OF CONFORMITY - DECLARATION *CE* DE CONFORMITE' - *EG* KONFORMITÄTSERKLÄRUNG - DECLARACION *CE* DE CONFORMIDAD- **ЗАЯВЛЕНИЕ О КОНФОРМНОСТИ** *EC* 2006/42/CE

Dichiarazione originale	Original Declaration	Déclaration Originale	Originalerklärung	Declaración Original	Оригинальная декларация

Noi - We - Nous - Wir – Nosotros- мы

Tigieffe s.r.l. - Via Villa Superiore N.° 82 - Luzzara (Reggio Emilia) - ITALIA

Dichiariamo sotto la nostra esclusiva responsabilità che il prodotto:	Declare under our exclusive responsability that the product:	Declarons sous notre responsabilitè exclusive que le produit:	Erklaren hiermit unter Übernahme der vollen Verantwortung für diese Erklärung , daß das Produkt:	Declaramos bajo nuestra exclusiva responsabilidad que el producto:	Под нашу исключительную ответственность заявляем, что изделие:

Piattaforma di Lavoro Elevabile
Mobile Elevating Work Platform
Plates-forme Elévatrice Mobiles de Personnel
Fahrbare Hubarbeitsbühnen
Plataforma Elevadora Móvil de Personal
Платформа для высотного работ

Modello - Model - Modèle Typ – Modelo-МОДЕЛЬ	N° Chassis - Chassis No. N° Chassis - Fahrgestellnr - N° Chassis - Номер Рама	Anno - Year - Année Baujahr – Ano -Год
XS8 E	*XXXXXXXXXX*	*XXXXXXXXXX*

Al quale questa dichiarazione si riferisce è conforme alle direttive 2006/42/CE, 2004/108/CE, e al modello certificato da:	To which this declaration refers is in compliance with the directives 2006/42/CE, 2004/108/CE, and with the model certified by:	Faisant l'objet de la présente déclaration est conforme aux directives 2006/42/CE, 2004/108/CE, et au modéle certifié par	Auf das sich die vorliegende Erklärung bezieht, den 2006/42/CE, 2004/108/CE, Richtlinien und dem von:	Al cual esta declaración se refiere cumple las directivas 2006/42/CE, 2004/108/CE, y el modelo certificato por:	К которой это заявление относится, соответствует директивами 2006/42/CE, 2004/108/CE, и сертифицированной модели из:

ICEPI Spa Via P. Belizzi, 29/31/33 29100 Piacenza (Italia)
N. di identificazione 0066

con il seguente numero di certificazione:	with the following certification number:	avec le numèro de certification suivant:	Zertifizierten Modell mit folgender Zertifizierungsnummer:	con el siguiente número de certificación:	со следующим сертифицированным номером:

N.Certificato - Certificate No. - N° du certificat - Bestätigungnummer - N° de certificado – Номер Сертификата

10DM4MA23

e alle norme seguenti:	and with the following standards:	et aux normes suivantes:	die Erklärung entspricht den folgenden Normen:	y a las siguentes normas:	и со следующими нормами:

EN 280 :2001 prEN 280:2009 EN ISO 12100-1:2003 EN ISO 12100-2:2003 EN ISO 60204-1:2006

Il firmatario di questa dichiarazione di conformità è autorizzato a costituire il Fascicolo Tecnico.	The signatory of this conformity declaration is authorized to set up the Technical File.	Le signataire de cette déclaration de conformité est autorisé à constituer le Dossier Technique.	Der Unterzeichner dieser Konformitätserklärung ist autorisiert, das technische Unterlagen abzufassen.	El firmante de esta declaración de conformidad está autorizado a crear el Expediente Técnico.	Лицо, подписавшее это заявление о соответствии, уполномочено составить техническую документацию оборудования.

Luzzara (RE), data-date-date-Datum-fecha-Дата

.....
Roberto Ferramola
(Il legale rappresentante - The legal representative)

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Tel. +39 0522 977365 Fax +39 0522 977015

DICHIARAZIONE *CE* DI CONFORMITA' - *CE* DECLARATION OF CONFORMITY - DECLARATION *CE* DE CONFORMITE' - *EG* KONFORMITÄTSERKLÄRUNG - DECLARACION *CE* DE CONFORMIDAD- **ЗАЯВЛЕНИЕ О КОНФОРМНОСТИ** *EC* 2006/42/CE

Dichiarazione originale	Original Declaration	Déclaration Originale	Originalerklärung	Declaración Original	Оригинальная декларация

Noi - We - Nous - Wir – Nosotros- мы

Tigieffe s.r.l. - Via Villa Superiore N.° 82 - Luzzara (Reggio Emilia) - ITALIA

Dichiariamo sotto la nostra esclusiva responsabilità che il prodotto:	Declare under our exclusive responsability that the product:	Declarons sous notre responsabilitè exclusive que le produit:	Erklaren hiermit unter Übernahme der vollen Verantwortung für diese Erklärung , daß das Produkt:	Declaramos bajo nuestra exclusiva responsabilidad que el producto:	Под нашу исключительную ответственность заявляем, что изделие:

Piattaforma di Lavoro Elevabile
Mobile Elevating Work Platform
Plates-forme Elévatrice Mobiles de Personnel
Fahrbare Hubarbeitsbühnen
Plataforma Elevadora Móvil de Personal
Платформа для высотного работ

Modello - Model - Modèle Typ – Modelo-МОДЕЛЬ	N° Chassis - Chassis No. N° Chassis - Fahrgestellnr - N° Chassis - Номер Рама	Anno - Year - Année Baujahr – Ano -Год
XS9 E	*XXXXXXXXXX*	*XXXXXXXXXX*

Al quale questa dichiarazione si riferisce è conforme alle direttive 2006/42/CE, 2004/108/CE, e al modello certificato da:	To which this declaration refers is in compliance with the directives 2006/42/CE, 2004/108/CE, and with the model certified by:	Faisant l'objet de la présente déclaration est conforme aux directives 2006/42/CE, 2004/108/CE, et au modéle certifié par	Auf das sich die vorliegende Erklärung bezieht, den 2006/42/CE, 2004/108/CE, Richtlinien und dem von:	Al cual esta declaración se refiere cumple las directivas 2006/42/CE, 2004/108/CE, y el modelo certificato por:	К которой это заявление относится, соответствует директивами 2006/42/CE, 2004/108/CE, и сертифицированной модели из:

ICEPI Spa Via P. Belizzi, 29/31/33 29100 Piacenza (Italia)
N. di identificazione 0066

con il seguente numero di certificazione:	with the following certification number:	avec le numèro de certification suivant:	Zertifizierten Modell mit folgender Zertifizierungsnummer:	con el siguiente número de certificación:	со следующим сертифицированным номером:

N.Certificato - Certificate No. - N° du certificat - Bestätigungnummer - N° de certificado – Номер Сертификата

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e alle norme seguenti:	and with the following standards:	et aux normes suivantes:	die Erklärung entspricht den folgenden Normen:	y a las siguentes normas:	и со следующими нормами:

EN 280 :2001 prEN 280:2009 EN ISO 12100-1:2003 EN ISO 12100-2:2003 EN ISO 60204-1:2006

Il firmatario di questa dichiarazione di conformità è autorizzato a costituire il Fascicolo Tecnico.	The signatory of this conformity declaration is authorized to set up the Technical File.	Le signataire de cette déclaration de conformité est autorisé à constituer le Dossier Technique.	Der Unterzeichner dieser Konformitätserklärung ist autorisiert, das technische Unterlagen abzufassen.	El firmante de esta declaración de conformidad está autorizado a crear el Expediente Técnico.	Лицо, подписавшее это заявление о соответствии, уполномочено составить техническую документацию оборудования.

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