CEABIS®

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ORIGINAL INSTRUCTIONS

OPERATION AND MAINTENANCE MANUAL

Country: ITALY **Language: ITALIAN**

APPLIES TO MACHINERY: HYDRAULIC AND ELECTRIC LIFTING TROLLEY WITH AND WITHOUT ELECTRONIC WEIGHING SYSTEM

MODEL: CEAC040

REGISTRATION NUMBER: ELE0315504

➔ ➔ ➔ IMPORTANT ← ← ←

<THE INSTALLATION MUST BE PERFORMED BY QUALIFIED PERSONNEL>
<THE APPLIANCE MUST NOT BE INSTALLED / USED IN PREMISES/AREAS AT RISK OF EXPLOSION>
<THE APPLIANCE CAN BE USED BY AUTHORIZED PERSONNEL EXCLUSIVELY>

☞ Please read this manual carefully at the TIME OF DELIVERY and before storing and / or installing and / or using the trolley.

☞ This Manual provides essential information regarding safety during INSTALLATION, USE, MAINTENANCE, ETC.; It is an integral part of the product, so it must be delivered to the OPERATOR, who will keep it safe and consult it carefully during each service phase.

☞ Please do not remove, tear or rewrite any parts of this Manual for any reason whatsoever.

☞ Keep this manual in areas protected from moisture and heat for future reference.

THE PRODUCT MUST BE INSTALLED

AND USED

ONLY AND EXCLUSIVELY

ACCORDING TO THE INSTRUCTIONS

SPECIFIED IN THIS TECHNICAL MANUAL

THIS MANUAL APPLIES TO DIFFERENT CONFIGURATION VERSIONS AND EQUIPMENT OPTIONS.

PLEASE READ EVERY PART OF THIS MANUAL AND PRECISELY THE PARTS RELATING TO THE SPECIFIC EQUIPMENT THAT YOU HAVE PURCHASED.

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0 INTRODUCTION

This Operation and Maintenance Manual was designed to provide a general understanding of the TROLLEY and of the transport, operation, maintenance instructions, and any additional information deemed necessary for its INSTALLATION, its proper use and its proper functioning.

Please read it CAREFULLY BEFORE CARRYING OUT ANY OPERATION on the TROLLEY[1].

If your require another copy of this Operation and Maintenance Manual, please submit a request directly to the CEABIS TECHNICAL OFFICE, quoting the model and its serial number specified on the title page or directly on the nameplate of the Device.

IMPORTANT NOTICE

THE TROLLEY IS MASS PRODUCED BY CEABIS SO IN CASE YOU HAVE MORE THAN ONE MACHINE AT YOUR SITE PLEASE ENSURE THAT YOU KEEP THE OPERATION AND MAINTENANCE MANUAL STRICTLY WITH THE RIGHT MACHINE AS DEFINED AT SOURCE.

1 GENERAL INSTRUCTIONS AND INFORMATION FOR THE RECIPIENT

1.1 DEFINITION OF REPORTS SUBJECT TO REGULATION

1.1.1 LIABILITY

CEABIS DOES NOT PROVIDE ANY WARRANTIES ABOUT THE TECHNICAL / LEGAL SUITABILITY OF THE AREA WHERE THE TROLLEY IS INSTALLED AND ALL SUPPORT SERVICES THERETO. EVEN THOUGH THIS TECHNICAL MANUAL PROVIDES IMPORTANT INSTRUCTIONS FOR ITS INSTALLATION IN THIS REGARD, WE RECOMMENDED YOU SEEK THE ADVICE OF QUALIFIED PROFESSIONAL EXPERTS ALSO RELATING TO ANY APPLICABLE LAWS AND / OR REGULATIONS.

DO NOT ALLOW THE OPERATOR TO OPERATE THE TROLLEY WITHOUT HAVING CAREFULLY READ AND FULLY UNDERSTOOD ALL INFORMATION DISPLAYED ON THE APPARATUS AND SPECIFIED IN THIS TECHNICAL MANUAL.

THIS TROLLEY IS BUILT IN COMPLIANCE WITH APPLICABLE REGULATION. WE KINDLY REQUEST THAT BEFORE PROCEEDING WITH THE INSTALLATION, USE, MAINTENANCE AND REPAIR OF THE MACHINERY, YOU READ THIS OPERATION AND MAINTENANCE MANUAL, AS IT CONTAINS ALL INFORMATION REQUIRED FOR PROPER USE AND OPERATION TO AVOID INJURIES.

THIS OPERATION AND MAINTENANCE MANUAL MUST BE REGARDED AS AN INTEGRAL PART OF THE APPLIANCE AND MUST ACCOMPANY IT THROUGHOUT ITS USEFUL LIFE.

The inspection and maintenance frequencies recommended in this technical manual are indicated as a minimum requirement to ensure the efficiency, safety and lifetime of the TROLLEY under normal working conditions. Systematic supervision is nevertheless necessary, and immediate action is required in case of faults.

The position of the identification plate and the CE marking are specified in chapter 11 DOCUMENTATION of this technical manual, under DIAGRAM OF SYMBOLS APPLIED AND IDENTIFICATION .

CEABIS ASSUMES NO LIABILITY WHATSOEVER FOR DAMAGE TO THE TROLLEY, TO PERSONS, ANIMALS AND / OR PROPERTY, AND THIS WARRANTY IS IMMEDIATELY WITHDRAWN[2], IF:

[1] See paragraph below for the definitions: 1.3.1.1 - DEFINITIONS AND ACRONYMS USED.
[2] See paragraph 1.1.2 - WARRANTY CONDITIONS

- THE INSTALLATION [3] OF THE DEVICE IS NOT PERFORMED BY QUALIFIED PERSONNEL, IN COMPLIANCE WITH APPLICABLE RULES;
- THE MACHINE IS NOT USED EXCLUSIVELY BY AUTHORIZED PERSONNEL;
- PERSONNEL QUALIFIED TO USE AND / OR OPERATE THE MACHINE DO NOT COMPLY WITH THE INFORMATION SET FORTH IN THIS OPERATION AND MAINTENANCE MANUAL, OR AS A RESULT OF ANY OPERATION NOT SPECIFICALLY DESCRIBED HEREIN.

PLEASE ENSURE THAT ALL TROLLEY COMPONENTS CORRESPOND TO THE SPECIFICATIONS WHEN READING THIS TECHNICAL MANUAL AND CHECK:

- THAT IT HAS NOT SUFFERED ANY DAMAGE AND/OR CHANGES,
- THAT ALL ACCIDENT-RELATED SYMBOLS AND OPERATING PROCEDURES/INSTRUCTIONS FOR THE OPERATOR AND APPLIED TO THE TROLLEY ARE SUPPLIED (see par. : 11.1.4 - DIAGRAM OF SYMBOLS APPLIED AND IDENTIFICATION).

DO NOT MAKE THE TROLLEY AVAILABLE FOR USE UNLESS ALL THE ELEMENTS DESCRIBED ABOVE APPLY.

CEABIS ASSUMES NO LIABILITY FOR DAMAGES CAUSED TO THE TROLLEY ITSELF, TO PEOPLE, ANIMALS AND/OR PROPERTY IF ANY FAULTS FOUND ARE NOT IMMEDIATELY REPORTED TO THE CEABIS TECHNICAL OFFICE OR TO ITS DELEGATED OFFICES, AND THE TROLLEY IS USED ANYWAY; THE PERSON WHO HAS CAUSED THE DAMAGE SHALL BE LIABLE FOR ANY CLAIMS.

ANY ALTERATION (THIS INCLUDES THE NON-OBSERVANCE OF THE INSTRUCTIONS, NON-REGULATION COMPLIANT OPERATION AND THE USE OF NON-ORIGINAL PARTS) PERFORMED ON THE TROLLEY or its SAFETY DEVICES, WHICH MAY ALTER THE FUNCTIONALITY PROVIDED BY CEABIS and the risks specified in the risk analysis, which are an integral part of the "Technical Production File", WILL BE THE SOLE RESPONSIBILITY OF THE PERSON OPERATING THE MACHINE.

Please inform the CEABIS TECHNICAL OFFICE of any alteration, even minor, for approval subject to the amendment not constituting an implementation of risk in the risk analysis.

Any change implemented without informing the CEABIS TECHNICAL OFFICE shall result in the cancellation of the Declaration of "CE" compliance and shall cancel any kind of warranty and liability.

1.1.2 WARRANTY CONDITIONS

This appliance is covered by a one year warranty (12 months) from the date of purchase; the date of the packing slip/invoice shall constitute proof thereof.

The appliance is exclusively intended for professional use or for business activity.

During this period, CEABIS will repair or replace components which, at its sole discretion, may be originally faulty, free of charge, except for the travel expenses incurred by the "Service Centre" technicians, or totally free of charge if the device is delivered for free at the CEABIS headquarters in ESTE (PD).

Any defective parts replaced are the property of CEABIS.

If a fault cannot be fixed, CEABIS may avoid the termination of the contract by offering the customer a free replacement.

The warranty does not cover: parts damaged during transport or due to shocks, to improper or wrong installation/use, to neglect or misuse, to tampering by unauthorised persons, to damage from weather or other natural events or for reasons not attributable to CEABIS, to construction materials used and/or subject to wear and tear or overuse.

The warranty further excludes any other claims for damages, in addition to those required by law.

CEABIS reserves the right to charge the repair cost if the returned product is not covered by the warranty.

Actions for alleged defects or convenience checks shall be borne by the Customer.

The costs of transport of any appliance for repair to and from the "Technical Service Centre" in ESTE (PD) shall be borne by and made at the Customer's expense .

Any requests for on-site assistance by CEABIS technical personnel will be undertaken within a time frame compatible with CEABIS business requirements.

Any prohibitions of use of the device imposed by the Health Authorities or other competent bodies, do not entitle the Customer to demand its return or ask for damages.

Any differences on colours or chromatic effects outside the appliance component parts are not considered defects: they are due to the manual stainless steel brushing operations.

[3] See definitions in paragraph 1.3.1.1 DEFINITIONS AND ACRONYMS USED

The inability to guarantee the interchangeability of the components making up the appliance with parts from the same series/registration/supplies not specifically purchased as spares is not considered a defect.

In case of repair/replacement of defective parts or replacement of the goods during the warranty period, the warranty remains unchanged, i.e. always starting from the date of the original purchase of the equipment.

For anything not reported herein, the general conditions specified in the sales catalogue/documentation remain effective at the time of purchase.

1.1.3 RETURN PROCEDURES

Returns will not be accepted without prior written consent by CEABIS. The components or the full product returned must be undamaged in their original packaging/package, complete with all accessories delivered originally. This packaging shall be further protected by other packaging for shipment.

The shipment must be made by prepaid freight (paid by the customer).

If one or more of the above requirements are not met, the goods will be rejected or returned to the sender or all inspection, repair and storage fees will be charged to the sender.

1.2 GENERAL AND SAFETY INSTRUCTIONS

1.2.1 INSTRUCTIONS/INFORMATION FOR THE PURCHASER

1st **THE EMPLOYER (PURCHASER) OR HIS REPRESENTATIVE, IS REQUIRED TO DELIVER AND EXPLAIN THIS OPERATION AND MAINTENANCE MANUAL AND ITS ANNEXES TO THE OPERATOR (EMPLOYEE).**

2nd **THE MANUAL IS WRITTEN IN ENGLISH, BUT IF THE EMPLOYER CAN ASSUME THAT WORKERS RESPONSIBLE FOR OPERATION (OPERATORS), ONLY UNDERSTAND A LANGUAGE OTHER THAN ENGLISH, THE EMPLOYER MUST MAKE THIS MANUAL READABLE IN THAT LANGUAGE.**

3rd **CHECK THAT THERE IS NO VISIBLE DAMAGE BEFORE THE TROLLEY IS INSTALLED AND USED; DO NOT INSTALL OR USE A MACHINE THAT IS DAMAGED.**

4th **THE EQUIPMENT MUST BE USED IN FULL COMPLIANCE WITH CURRENT REGULATIONS IN THE TERRITORY APPLICABLE TO CEMETERY SERVICES/PROCEDURES.**

5th **FLAMES ARE NOT ALLOWED IN THE VICINITY OF THE TROLLEY.**

6th PERSONS SUFFERING FROM PHYSICAL DISABILITIES, SENSORY OR PSYCHIC IMPAIRMENTS , OR WHO HAVE INSUFFICIENT EXPERIENCE AND KNOWLEDGE TO OPERATE THE MACHINE, OR PERSONS WHO ARE NOT CAPABLE OF INSTALLING OR USING THE EQUIPMENT SAFELY ON THEIR OWN CAN CARRY OUT SPECIFIC ACTIVITIES ONLY IF SPECIFICALLY AUTHORISED BY THE EMPLOYER AT THE PLACE OF USE, WHO SHALL ASSUME FULL RESPONSIBILITY.

7th THE TROLLEY SHALL BE USED EXCLUSIVELY IN AREAS WITH RESTRICTED PUBLIC ACCESS (ESPECIALLY YOUNG CHILDREN); OTHERWISE, EVEN FOR OCCASIONAL REASONS, THE TROLLEY MUST BE MADE INOPERATIVE (ZERO ENERGY CONDITION).

8th THE REPLACEABILITY OF THE APPLIANCE COMPONENTS WITH OTHER REPLACEMENT SERIES/REGISTRATION/SUPPLY PARTS CANNOT BE GUARANTEED. IT IS THEREFORE IMPERATIVE THAT THE OPERATOR KEEP THE PARTS CONSTITUTING A SINGLE UNIT TOGETHER AND SEPARATE THEM FROM THE COMPONENTS OF OTHER MACHINERY, IF THE OPERATOR IS IN POSSESSION OF OTHER PRODUCTS.

9th NEVER LEAVE THE TROLLEY (OR LEAVE IT UNATTENDED) WITH THE PLATFORM RAISED (WITH OR WITHOUT LOAD).

10th DO NOT STORE THE TROLLEY (AFTER USE) WITHOUT DISABLING THE ON/OFF SWITCH (ONLY FOR THE VERSION WITH ELECTRIC ACTUATOR).

11th PLEASE FOLLOW ALL SAFETY RULES DICTATED BY THE OPERATOR WHEN HANDLING THE TROLLEY.

12th LEAVE THE PLATFORM RAISED STRICTLY FOR THE AMOUNT OF TIME REQUIRED TO UPLOAD/DOWNLOAD THE CORPSE.

13th HANDLE AND/OR TRANSPORT THE TROLLEY ONLY WHEN THE ARMS ARE COMPLETELY AT REST.

14th IT IS FORBIDDEN TO TRANSIT PAST, STOP AND/OR ENTER THE OPERATING RANGE OF THE MECHANISMS.

15th THE TROLLEY SHOULD BE OPERATED ONLY AND EXCLUSIVELY INDOORS AND AWAY FROM DRAUGHTS WHICH COULD CAUSE INSTABILITY.

16th THE TROLLEY MUST BE HANDLED EXCLUSIVELY ON FLAT (MAX 1% GRADIENT), WELL LEVELLED, LOAD- AND SLIP-RESISTANT SURFACES; IT IS FORBIDDEN TO USE THE TROLLEY ON NATURAL TERRAIN OR GRAVEL, AND FLOORING WHICH DOES NOT HAVE AT LEAST ONE PERFECTLY LEVELED CONCRETE SLAB.

17th DO NOT USE THE APPLIANCE IN DAMP OR WET ENVIRONMENTS, NEAR SOURCES OF HEAT, ETC.

18th YOU ARE REQUIRED TO KNOW THE OPERATIONAL PROCEDURES AND COMMAND/CONTROL DEVICES BEFORE OPERATING THE TROLLEY. THESE CONCEPTS SHOULD ALWAYS BE LEARNT BEFORE THE START OF ANY OPERATION. UNAUTHORISED AND INADEQUATELY INFORMED PERSONS ARE NOT ALLOWED TO OPERATE THE TROLLEY.

19th PLEASE READ ALL SAFETY INSTRUCTIONS GIVEN IN THIS MANUAL CAREFULLY AND UNDERSTAND ALL THE PLATES (SAFETY PROVISIONS) / INSTRUCTIONS (OPERATING PROCEDURES). THE SIGNS ON THE APPLIANCE MUST ALWAYS BE PERFECTLY LEGIBLE, REPLACE THEM IF THEY ARE DAMAGED OR SUBJECT TO WEAR IN TIME, ACCORDING TO THE INDICATIONS IN PARAGRAPH 11.1.4 - DIAGRAM OF SYMBOLS APPLIED AND IDENTIFICATION .

20th THERE IS NO GUARANTEE TO ENSURE THE SMOOTH OPERATION OF THE TROLLEY OR THE SAFETY OF THE OPERATOR AND/OR AUTHORISED PERSONS AND/OR OTHER PERSONS AND/OR THE ENVIRONMENT, IN THE EVENT THAT:

- THE TROLLEY IS INSTALLED AND USED WITHOUT COMPLYING WITH THE REQUIREMENTS LAID DOWN IN THIS OPERATION AND MAINTENANCE MANUAL;
- THE MAINTENANCE SCHEDULE INDICATED IN PARAGRAPH 8 IS NOT ADHERED TO.

21st THE OPERATIONAL SAFETY OF THE TROLLEY IS GUARANTEED IF THE INSTALLATION IS CARRIED OUT BY QUALIFIED PERSONNEL IN COMPLIANCE WITH THE INSTRUCTIONS GIVEN IN THIS OPERATION AND MAINTENANCE MANUAL AND ALL APPLICABLE RULES.

22nd ALL ORDINARY/EXTRAORDINARY MAINTENANCE, INSPECTIONS AND CLEANING MUST BE PERFORMED WHEN THE TROLLEY IS STOPPED (ZERO ENERGY CONDITION AND WITHOUT ANY LOAD ON THE PLATFORM), AND EXCLUSIVELY BY PERSONNEL WITH APPROPRIATE EXPERTISE TO PERFORM THESE TASKS. PLEASE PAY SPECIAL ATTENTION TO THE THRUST GENERATED BY THE GAS SPRINGS (IF THESE ARE USED IN CONJUNCTION WITH THE ELECTRIC ACTUATOR VERSION); THESE SPRINGS ARE ALWAYS SUBJECT TO THRUST, EVEN WHEN THE ACTUATOR IS IN THE FULLY EXTENDED POSITION.

23rd AUTHORISED STAFF IS REQUIRED TO USE ADEQUATE PROTECTIVE DEVICES OR CLOTHING ON EVERY OCCASION AS APPROPRIATE.

24th NEVER PUT YOUR HANDS OR OTHER BODY PARTS UNDER UNPROPERLY FIXED COMPONENTS AND/OR IN PLACES NOT DIRECTLY VISIBLE TO THE PERSON OPERATING THE MACHINE.

25th ALWAYS KEEP THIS OPERATION AND MAINTENANCE MANUAL AT HAND AND MAKE IT AVAILABLE TO AUTHORISED STAFF DURING INSTALLATION AND USE.

26th PLEASE PROVIDE A FIRE EXTINGUISHER SUITABLE FOR EXTINGUISHING FIRES NEAR THE TROLLEY.

27th PLEASE MAKE DUPLICATE COPIES (AUTHORIZED BY CEABIS MANAGEMENT FOR INTERNAL USE ONLY) OF THIS OPERATION AND MAINTENANCE MANUAL AND PROVIDE AUTHORISED PERSONNEL WITH A DUPLICATE OF THIS MANUAL; THEN STORE THE ORIGINAL COPY IN A SAFE PLACE FOR EASY ACCESS.

28th ANY MAINTENANCE REQUIRING OPERATIONS ON THE MECHANISMS SHALL BE PERFORMED BY APPROPRIATELY QUALIFIED AND SKILLED PERSONNEL.

29th IF THE PROVISION PROVIDES FOR AN ELECTRONIC WEIGHING SYSTEM PAY THE UTMOST ATTENTION:
- WHILE MOVING THE TROLLEY,
- WHILE RAISING AND LOWERING THE PLATFORM,
- WHILE LOADING AND UNLOADING THE PLATFORM.

THIS SYSTEM IS SENSITIVE TO IMPACTS AND/OR OVERLOADS, WHICH COULD CAUSE IRRETRIEVABLE DAMAGE.

30TH THE ELECTRONIC WEIGHING SYSTEM (IF PROVIDED) ALLOWS THE CORPSE WEIGHT DETECTION, BUT THE VALUE DISPLAYED IS FOR INFORMATIONAL PURPOSES ONLY, AND CANNOT BE USED FOR LEGAL PURPOSES.

1.3 CODING ELEMENTS

1.3.1 DEFINITIONS AND SYMBOLS USED IN THE PRESENT OPERATION AND MAINTENANCE MANUAL

The definitions, acronyms and symbols used in this manual and the meaning of the signs on the appliance (signs of safety) are reported below.

Please read these definitions CAREFULLY so as not to make ERRORS IN THE INTERPRETATION of what is reported in the description of the present Operation and Maintenance Manual.

1.3.1.1 DEFINITIONS AND ACRONYMS USED

Definitions and acronyms are listed in alphabetical order.

Table 1

DEFINITION/ACRONYM	MEANING
AREAS AT RISK (FORBIDDEN AREAS)	This includes all the moving parts of the arms and the hydraulic actuator. The area within 5 meters of the appliance is also considered "at risk".
RATED LOAD (MAXIMUM LOAD)	The maximum load, as stated by the manufacturer, which may be lifted by the machine if used in accordance with the Operation and Maintenance Manual. This also applies if the load is only conveyed.
TROLLEY	The machine consists of a welded and assembled stainless steel structure equipped with: • A hydraulic actuator and hydraulic pump - for the HYDRAULIC MODELS, • An electric actuator and a battery (and battery) - for ELECTRIC MODELS, To allow the load platform to be raised and lowered.
CEABIS	CEABIS is a registered trademark of VEZZANI S.p.A. The company VEZZANI S.p.A. is identified with CEABIS, and • its operational headquarters are located in Via G. B. Brunelli, 16 - 35042 ESTE (PD) • its registered office is located in Via Maresciallo Tito, 3 - 42020 Montecavolo di Quattro Castella (RE)
ZERO ENERGY CONDITION	In this condition the equipment is harmless; this condition can be set by checking that the platform is load-free and in the fully lowered position. Please note that there may still be some hydraulic pressure in the hydraulic system in this condition. In addition to the above, in ELECTRIC MODELS this condition can be set by removing the battery from its seat and unplugging the battery charger from the power supply. Some ELECTRIC MODELS can be equipped with gas springs that generate high energy in any position they are placed in, even when they are in a stationary position or with the electric actuator fully extended (platform in the highest position). PLEASE TAKE ALL DUE CARE WHEN SPRINGS ARE MOUNTED ON THE TROLLEY.
P.P.E. (PERSONAL PROTECTIVE EQUIPMENT) (PROTECTION DEVICES)	These devices protect the person wearing them from health and safety risks. There are various categories of P.P.E. based on the risks present.
STANDARD OUTFIT	The TROLLEY is provided as a single unit consisting of: 1. arms, 2. base frame, 3. 4 castor wheels (no. 3 with parking brake and no. 1 with directional brake), 4. mobile platform (on one of the models provided), 5. hydraulic actuator with control system (HYDRAULIC MODELS), 6. electric Actuator with battery and battery charger (ELECTRIC MODELS). The STANDARD OUTFIT excludes: • TROLLEY DELIVERY and INSTALLATION, • the weighing system, • the gas springs on electric model.

DEFINITION/ACRONYM	***MEANING***
INSTALLER	Person authorised to perform the installation of the trolley (see INSTALLATION).
INSTALLATION	Preliminary operation(s), which is the exclusive RESPONSIBILITY AND LIABILITY of AUTHORISED PERSONS, to allow operation by the operator. All in accordance with the HIGHEST STANDARDS OF PROFESSIONAL WORKMANSHIP.
M.U.M.	Abbreviation for: OPERATION AND MAINTENANCE MANUAL
MACHINE (APPLIANCE)	This defines the TROLLEY, which is the subject of this Operation and Maintenance Manual. The term TROLLEY or EQUIPMENT or MACHINE includes all the parts that jointly constitute the unit designed for proper and safe operation (see the definition of TROLLEY as well).
MAINTENANCE	Any operation designed to maintain the machine described in the Operation and Maintenance Manual in proper working order over time. Maintenance refers both to periodic checks by QUALIFIED STAFF, which in the case of ordinary and qualified maintenance aims to ensure the machine is in proper working order without altering the original features and operation of the TROLLEY. Any extraordinary maintenance is included in the maintenance.
STORAGE (STOW AWAY)	Operation performed by AUTHORISED/OPERATING PERSONNEL after use. This includes all activities performed prior to its reuse.
APPLICABLE RULES	Generic term that includes all regulations, rules, legislation and applicable laws regarding the construction and/or installation and/or use of the appliance described in this Operation and Maintenance Manual. The term APPLICABLE RULES also includes all the directives of the European Community (EEC) applicable to the type of installation of the appliance.
MANDATORY	Procedures or actions that the staff is required to observe so as not to endanger their own safety and that of others.
DANGER	Source of possible injury or damage to health.
AUTHORISED PERSON and/or QUALIFIED PERSON and/or TRAINED OPERATOR	Person having technical knowledge (technical education), experience, training, capacity, and any authorizations required by law so as to allow them to operate the TROLLEY safely, during INSTALLATION, TRANSPORT, OPERATION, MAINTENANCE, and anything else as required and where as explicitly requested in this Operation and Maintenance Manual. The phases referred to above can also be carried out by more than one AUTHORISED PERSON.
GUARDS	Safety measures that involve the use of specific technical tools for the protection of people from dangers that cannot reasonably be eliminated or limited through the design of the machine.
STANDARDS OF PROFESSIONAL WORKMANSHIP	Term used to define a specific action/component performed in accordance with due criteria and in accordance with the laws, regulations and legislation in this area.
RISK	Combination of likelihood and severity of injury or damage to health by a dangerous situation.
RESIDUAL RISK	Risk not entirely eliminated during the design phase and/or construction of the trolley.
Subsequent amendments and additions	Subsequent additions and modifications.
SAFETY SIGN	Sign conveying a general message of safety, using a combination of colours and geometric shapes. Safety signs are also symbols/labels affixed to parts of the appliance.
DANGEROUS SITUATION	Any situation in which a person (e.g., AUTHORISED PERSON, OPERATOR) is exposed to one or more hazards.

DEFINITION/ACRONYM	MEANING
OPERATOR	Person who operates the TROLLEY. Sufficiently skilled person , who is responsible for constantly monitoring and controlling the operation of the equipment; this person must first be informed/trained on operating procedures, by interfacing with the AUTHORISED PERSON who is responsible for the appliance and has read/understood the instructions for their attention. For example, the OPERATOR could be an employee of the company which purchased the appliance. The OPERATOR can also be the AUTHORISED PERSON (if specifically trained).
FORBIDDEN	Any procedure or action that the staff is required to observe so as not to endanger their own safety and that of others.

1.3.1.2 SYMBOLS USED

Table 2 displays all the symbols used totally or partially within this Operation and Maintenance Manual.

Table 2

SYMBOL	MEANING	REMARKS
	**DANGER**	This indicates a hazard with potentially lethal risk to the user. This indicates a hazard with the risk of potentially serious damage to the appliance.
	**WARNING**	This indicates a warning or a notice regarding key functions or useful information. Pay close attention to text blocks indicated by this symbol.
	**PROHIBITION**	Any procedure or action that the staff is required to observe so as not to endanger their own safety and that of others. Any procedure or action that could cause potentially serious damage to the appliance.
	**OBLIGATION**	Any procedure or action that the staff is required to observe because otherwise they could endanger their own safety and that of others. Any procedure or action that the staff is required to observe because otherwise they could cause potentially serious damage to the appliance.

1.3.2 MEANINGS AND SHAPES OF SYMBOLS AND COLOURS USED ON THE MACHINE

1.3.2.1 MEANING OF COLOURS OF THE VISUAL SIGNS LOCATED ON THE MACHINE

The colours that can be used for the visual signs include:

RED; GREEN; YELLOW; BLUE; WHITE; GRAY; BLACK.

The meaning and explanation of visual signs must be interpreted differently depending on whether the visual sign is a warning about the safety of persons or indicates the condition of the machine (see Table 3).

Table 3

Colour	Meaning		Explanation		Examples of application
	Safety of persons	*Condition of the machine (Process conditions)*	*Safety of persons*	*Condition of the machine (Process conditions)*	
RED	Danger/prohibition	Emergency	Dangerous situation or imperative order	Dangerous conditions	- Access denied in hazardous areas.
YELLOW	Caution	Abnormal	- Out of service. - Failure situation. - Permanent or temporary risk.	- Abnormal Condition - Imminent critical condition	- High/low temperature hazard sign. - Hydraulic risk hazard sign.
GREEN	Safety	Normal	Indication of a safe situation	Normal conditions	- Escape routes - Authorisation to proceed.

Colour	Meaning		Explanation		Examples of application
	Safety of persons	Condition of the machine (Process conditions)	Safety of persons	Condition of the machine (Process conditions)	
					- Pressures/temperatures within normal limits.
	Compulsory		Request for compulsory action by the operator	Condition that requires action	- Wearing P.P:E. is mandatory - Training the operator to obtain pre-selected values.

1.3.2.2 MEANING OF SHAPES AND SIGNS

Safety signs are used to inform the operator and any person in the vicinity of the machine of any requirements which they must abide by. The shapes and colours of these signs correspond to those reported in Table 4; the meaning of these signs is required to be fully understood.

A safety sign is a sign which conveys a specific safety message with a combination of geometric shape, colour and symbol.

Safety signs are:

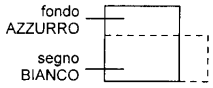
- requirement sign,
- prohibition sign,
- warning sign.

The pictograms contained in the safety signs are normalized at Community level.

These do not always represent an object called *icon.* In addition to icons, *symbology* or *indications* of a particular state or condition, or the representation of a*n action or event* to be forbidden or about which a warning is to be issued can be used.

Each specific safety sign was placed where there are conditions that are at the origin of the signalling requirement. The staff in the area of the machine is required to comply with THESE GUIDELINES.

Table 4

SIGN	MEANING	REMARKS
	**WARNING**	*SHAPE* A triangular shape with YELLOW base colour and a BLACK peripheral edge. The symbol inside this sign is required to be BLACK. *MEANING* This warns of a potentially lethal danger or risk to the user or other person operating on the machine.
	**PROHIBITION**	*SHAPE* This sign is round in shape with WHITE base colour, RED border colour and with a transversal bar. The symbol inside this sign is required to be BLACK. *MEANING* This forbids the performance of specific actions or specific behaviours, which are potentially dangerous. Failure to comply with these obligations could lead the user or any person operating on the machine to incur a potentially lethal risk.
	**OBLIGATION**	*SHAPE* This sign is round in shape with LIGHT BLUE base colour. The symbol inside this sign is required to be WHITE. *MEANING* This sign SPECIFIES (requires) a specific type of behaviour. Any procedure or action that the staff is required to observe because otherwise they could endanger their own safety and that of others.
	**INFORMATION**	*SHAPE* This sign is rectangular in shape with LIGHT BLUE base colour. The symbol inside this sign is required to be WHITE. *MEANING* General information.

2 SUPPLY CONDITION - TRANSPORT - STORAGE

2.1 SUPPLY CONDITION:

The TROLLEY is supplied as a single piece (in the predetermined version) and equipped with one of the platforms requested at the time of the order.

Note: The image displays the platform with guides

Note: The image displays the roller platform

2.2 TRANSPORT

The equipment must be transported ONLY and EXCLUSIVELY with the platform (or table) fully lowered.

Cover the entire TROLLEY with a waterproof plastic cover.

If the TROLLEY is transported on a platform, once the position is identified, the four brakes on the castors must be locked and the base structure must be anchored to the transport platform with ropes to avoid unforeseen shifts, shocks and/or overturning.

If the TROLLEY is transported by hand using the castor wheels supplied, ensure that the wheel "directional lock" is actuated prior to transportation; the only grip point for moving the TROLLEY is the handle supplied.

☞ **Six healthy males are required to transport the equipment when this involves lifting the machine completely; they should be arranged three on each side of the trolley, grasping the lower structure (NEVER the mobile platform nor the arms of the parallelogram).**

2.2.1 WEIGHT

The EC plate of the TROLLEY indicates the total mass (weight) in Kg.

2.3 STORAGE CONDITIONS

Proper storage of the equipment requires the performance of the following activities:

- Exclude outdoor areas, areas exposed to inclement weather or with excessive moisture, areas directly exposed to sun rays or heat sources,
- always place decks of wood or other materials between the floor and the appliance to prevent direct contact with the ground; the decks must be smooth and have no sharp protruding parts that could damage the trolley.

The machines (or parts of these) are not allowed to be stacked one on top of the other or laid on other material.

The hydraulic or electric equipment (depending on the model), including all mechanical parts, can withstand temperatures in the range -15 to +50 °C in warehouse storage.

Please consult following paragraph of the TECHNICAL SPECIFICATIONS for other climatic conditions that the machine can endure other than the temperatures described above: 4.2.

Please consult paragraph 5.7 as well regarding the storage procedure after the first and subsequent machine operation.

3 INSTALLATION

	**THE TROLLEY MUST BE INSTALLED AND USED ONLY AND EXCLUSIVELY ON A PERFECTLY LEVEL FLOOR (THE MAXIMUM GRADIENT IS REPORTED IN THE FOLLOWING PARAGRAPH OF THE TECHNICAL SPECIFICATIONS : 4.2).**	

The replaceability of the appliance components with other replacement series/registration/supply parts cannot be guaranteed. It is therefore COMPULSORY for the OPERATOR to keep the parts constituting a single unit together and separate them from the components of other machinery, if the operator is in possession of other products.

The appliance requires some operations before proceeding with its OPERATION.

The TROLLEY is required to be INSTALLED exclusively by QUALIFIED STAFF appropriately trained/informed by CEABIS, in accordance with the specifications in this Operation and Maintenance Manual, in compliance with APPLICABLE RULES.

Make sure that the components are all intact and not damaged with particular reference to:

- the hydraulic cylinder, the pump and control systems (HYDRAULIC MODEL),
- the electric actuator, the battery and control systems (ELECTRICAL MODEL).

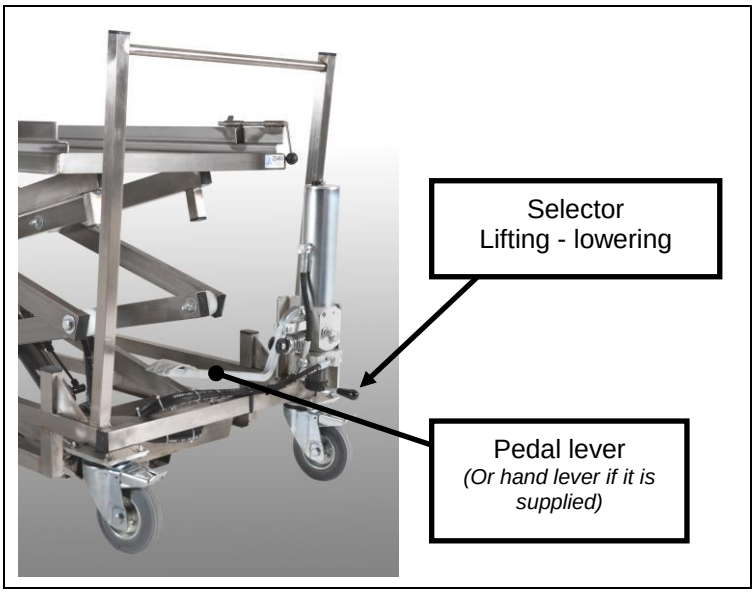
IT IS FORBIDDEN TO USE THE APPLIANCE IF ANY MALFUNCTIONS AND/OR FAULTS ARE DETECTED DURING EQUIPMENT INSTALLATION.

3.1 VERSIONS WITH HYDRAULIC EQUIPMENT

Check that the oil level is optimal with the trolley in the fully lowered position. [See paragraph 8.2.1 - RESERVOIR OIL LEVEL CHECK (HYDRAULIC MODELS)

Place the selector lever as indicated in the photograph to allow the platform to rise.

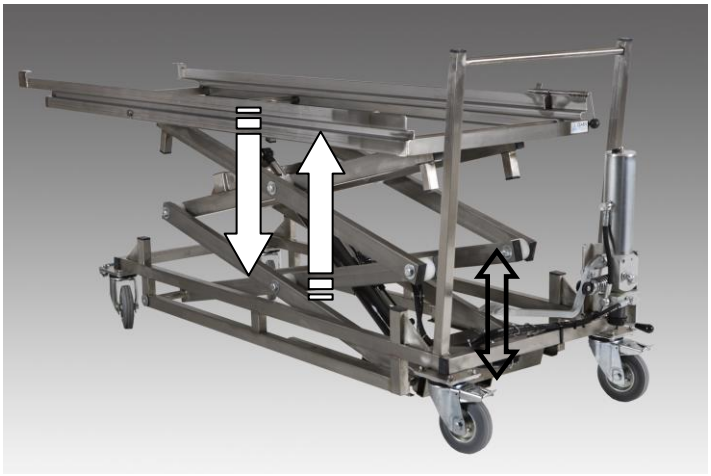
Note = turning the lever 90° to the left reverses the motion (lowering the platform)



Perform 2/3 full test cycles by raising and lowering the movable platform.

Ensure that the operation takes place without hesitation, without the use of force and without creaks during these movements.

Note = The pump must be operated by the operator's foot (standard equipment) and by the operator's hand (hand lever supplied as an optional accessory)



REVERSE USAGE IS FORBIDDEN: THE PEDAL LEVER SHOULD NOT BE OPERATED BY HAND, AND VICE VERSA.

3.2 VERSIONS WITH ELECTRICAL EQUIPMENT

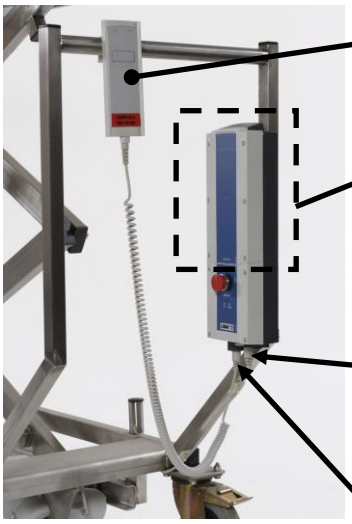
Fit the battery pack (if it is provided without being installed in its position) into the base pre-assembled on the TROLLEY handle.

Fit the connector of the mobile push-button panel at the base of the battery charger (if it is provided without being installed in its position).

Fully charge the battery before use by inserting one end of the power cord into the base of the battery charger and the other end into a power outlet provided by the Purchaser.

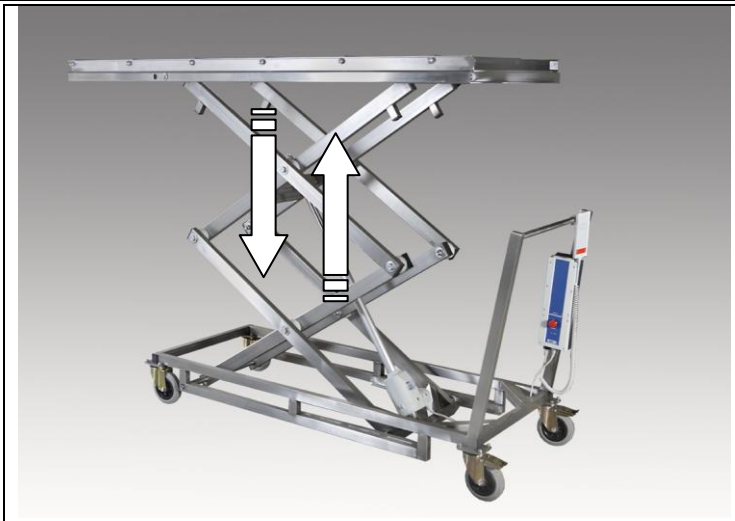
Note = please consult the specific documentation in the annex regarding the plate data of the battery charger.

Unplug the mains power cord at the end of the charging cycle and proceed with operation.



Perform 2/3 full test cycles by raising and lowering the movable platform.

Ensure that the operation takes place without hesitation, without the use of force and without creaks during these movements.



3.2.1 VERSIONS WITH ELECTRIC EQUIPMENT AND GAS SPRINGS

Verify that the block/blocks of the pantograph arms is/are inactive.

The "inactive" position for this block is shown in the figure to the side.

Correct position for the pantograph arm block.
(when it is inactive)

3.3 ENVIRONMENTAL CONDITIONS ALLOWED FOR TROLLEY INSTALLATION

The TROLLEY is suitable for installation in a sheltered, closed environment, not directly in contact with rain, snow, frost, ice, dust, etc.

The floor in the premises where the machine is operated is required to be clean, slip-resistant and perfectly level; the maximum allowed gradient for safe operation shall not exceed 1% (1 cm inclination per 1 m. length).

There shall be no deposits of flammable substances or other substances potentially dangerous to operation in the premises where the machinery is operated.

If the TROLLEY is required to be installed in places that are not stationary/stable (e.g. on ships) the installation shall be performed by technical personnel specifically qualified to ensure that the conditions for operating the machinery comply with safety requirements.

3.3.1 TEMPERATURE AND HUMIDITY

Please consult paragraph: 4.2.

3.3.2 EXPOSURE TO RADIATION

The appliance is not intended to be used when it is directly exposed to:

- X-ray radiation, microwave radiation, laser radiation, etc.

If there is a risk of ***direct radiation*** *on the appliance in the environment where the machine is installed, the purchaser is required to take specific measures to protect the exposed parts.*

3.3.3 USING THE APPLIANCE IN EXPLOSIVE ENVIRONMENTS

The trolley shall not be used in an environment where there is a risk of explosion or in an environment potentially at risk of explosion UNDER ANY CIRCUMSTANCE and for ANY REASON WHATSOEVER.

IT IS FORBIDDEN TO USE THE APPLIANCE IN AN ENVIRONMENT THAT IS EXPLOSIVE OR DEEMED TO BE SO.

3.3.4 LIGHTING IN THE PLACE OF INSTALLATION

The place of operation is to be considered a "workplace"; consequently it must comply with the instructions specified in directive 89/654/EEC (and subsequent additions and amendments), regarding work environments and the requirements of current APPLICABLE RULES in the place of INSTALLATION.

3.3.5 SPACE REQUIREMENTS TO BE TAKEN INTO CONSIDERATION DURING INSTALLATION, FOR OPERATION, CLEANING AND MAINTENANCE

The working area required around the TROLLEY where it is positioned, must:

- be free of bumps, potholes, materials and slippery surfaces, slopes that restrict access or potentially hazardous to the intervention of QUALIFIED PERSONNEL and/or the USER,
- ensure a minimum passage width, or in any case sufficient space to allow the normal movement of AUTHORISED PERSONNEL, in relation to all the tasks to be performed in the area around the TROLLEY, including ordinary and extraordinary maintenance,
- be appropriately protected from falling or running over materials. Other appropriate measures or precautions must be provided where technical means cannot be used.

	**NEVER RESTRICT ESCAPE ROUTES, WALKWAYS, OPENING DOORS, ETC. WITH THE BULK OF THE TROLLEY.**	

3.4 INSTRUCTIONS FOR THE INSTALLATION OF ALL GUARDS AND PROTECTION DEVICES REQUIRED TO MAKE THE APPARATUS SUITABLE FOR USE

The appliance is delivered for use in different premises types and sizes.

As it is not possible for us to predict and provide a priori all the protections required in the area surrounding the machine for safe operation, the INSTALLER is required to equip the premises with any ad hoc protection equipment deemed necessary during installation to allow safe machine operation during its USE (both by AUTHORISED STAFF and the OPERATOR).

In this phase, it is important to comply with all the APPLICABLE RULES which you are kindly requested to refer to for correct installation. Our technical office is available to advise you in this regard.

We would like to remind you that while the "EC" Declaration of Conformity, delivered together with the appliance, issues warnings about the suitability of the APPLICABLE RULES of the trolley, the on-site INSTALLATION, be it in public and/or private premises, is your responsibility, and by extension so is the implementation of safety solutions in the immediate surroundings of the equipment that make the Appliance safe for use during operation. This responsibility rests with the persons who INSTALL/OPERATE the machine.

If the TROLLEY is required to access pathways used by other personnel as well, dedicated lanes explicitly marked with appropriate signs and strips on the floor must be provided.

3.5 INSTRUCTIONS FOR CONNECTING THE TROLLEY TO THE ELECTRICAL SYSTEM (THIS INFORMATION APPLIES TO THE ELECTRICAL MODEL)

The appliance is equipped with a battery for the normal operation of the electric actuator.

Whenever the battery is flat, the battery charger must be connected to a power outlet (not supplied).

The required power outlet provided near the place assigned for charging the battery, is required to have appropriate features and to be built with materials and techniques in compliance with the APPLICABLE RULES.

Before connecting check that:

- The electric power supply is compatible with the data on the charger plate (see the specific booklet attached to this technical manual).
- There is a general switch and/or other devices as required by the APPLICABLE RULES (e.g. differential - cutout switch). This switch(s) must be present and provided in an easily accessible area.

The electrical system must be appropriate for the maximum power absorbed by the battery charger of the TROLLEY; its characteristics, including: rated voltage and frequency, type of power supply, full load current, current rating of the greatest load, are reported in the TECHNICAL SPECIFICATIONS, at paragraph: 4.2.

As regards the appliance power supply from the electric mains, you are required to avoid using adapters, multiple sockets and/or extension leads; install a suitable facility for this purpose.

Do not use damaged and/or repaired cables.

The minimum required level of insulation of the electrical system on board the trolley is stated in the TECHNICAL SPECIFICATIONS, at paragraph: 4.2 which you are required to refer to.

If you use an electrical extension lead, it must be of an approved type, and with suitable characteristics to guarantee the power supply of the equipment; always extract the entire length of the cable when using a winder.

It is always best to position the device as close as possible to the power socket during the battery charging phase, to ensure that any extensions leads do not hinder the movement of persons in the area surrounding the trolley; if possible, the connecting cable of the power supply should not rest on the floor. In this case this must be duly noted and possibly protected if there is a risk of walking over it.

3.5.1 INSTRUCTIONS FOR THE CONNECTION OF THE WEIGHING SYSTEM TO THE ELECTRICAL SYSTEM - IF IT IS PROVIDED WITH THE EQUIPMENT

The weighing system is equipped with a readout display powered by a stand-alone battery.

Whenever the battery is flat it must be recharged using the battery charger supplied.

Please consult chapter 3.5 for the general rules for connecting the weighing system to the electrical system.

4 APPLIANCE DESCRIPTION

4.1 GENERAL INFORMATION

The appliance is a trolley with a rectangular layout, to be moved by hand, equipped with 4 castors (360° rotation) and fully built (the structure) in stainless steel in compliance with hygiene requirements and for duration in time.

It is equipped with movable parallelogram arms that allow it to be raised up to the level reported in specific layout diagram of the equipment (please refer to paragraph: 11.1.3 - LAYOUT DIAGRAM.

The (mobile) platform is provided as standard for one of the following types of service:

1. Roller platform (to allow the movement of the wooden coffin inside and outside the cold rooms).
2. Platform with guides to allow the handling of the deceased placed on the CEABIS type stretcher.
3. Smooth platform to allow it to assist the handling/shifting of the deceased for example coming from the autopsy tables.
4. Platform equipped with an electronic weighing system.

The platform is chosen among available types at the time of the order and cannot be changed subsequently, so it is FORBIDDEN for the Purchaser to replace one type of platform with another.

With HYDRAULIC TROLLEY models, the platform is raised and lowered by the actuation of a foot lever by the operator; a hand lever can be provided on request. In HYDRAULIC models, TROLLEY operation requires human strength (foot or hand/arm).

In ELECTRIC MODELS, TROLLEYS are operated by pressing a button on the push-button panel. These models are equipped with motorized actuator.

To enhance the performance of ELECTRIC models, springs pre-loaded with inert gas (nitrogen), which increase the capacity of the TROLLEY, can be provided (by request at the time of ordering), (please refer to paragraph: 4.2 TECHNICAL SPECIFICATIONS.

INSTALLATION and some types of maintenance (please refer to paragraph: 8 - ORDINARY/EXTRAORDINARY CLEANING AND MAINTENANCE are the exclusive responsibility of AUTHORISED PERSONNEL.

The OPERATOR is responsible for all control tasks to check the machine works properly during operation and any MAINTENANCE scheduled at the OPERATOR's discretion (please refer to paragraph: 8 - ORDINARY/EXTRAORDINARY CLEANING AND MAINTENANCE).

The Operation and Maintenance Manual is provided with *the standard equipment*. This technical manual must be accessible to persons who may need to consult it.

The basic principles of operation and the materials used make the TROLLEY a safe tool for its specified operation, if all the indications specified in the Operation and Maintenance Manual are complied with during installation and operation.

Please refer to paragraph: 11 DOCUMENTATION ATTACHED for all indications and schematics useful during installation, use and maintenance of the TROLLEY and paragraph: 4.2 TECHNICAL SPECIFICATIONS, TECHNICAL CHARACTERISTICS, for all the specifications required for correct operation.

The GENERAL MACHINE DIAGRAM reported in paragraph: 11 - DOCUMENTATION ATTACHED shows the type of machine and safety devices installed; the same diagram shows all the commands that a QUALIFIED / AUTHORISED OPERATOR needs to access when using the TROLLEY.

4.2 TECHNICAL SPECIFICATIONS

DATA		TROLLEY				M.U.
		HYDRAULIC MOD.	ELECTRIC MOD.	ELECTRIC MOD. (with gas springs)	ELECTRONIC WEIGHING SYSTEM	
WAREHOUSE STORAGE SPECIFICATIONS	Room Temperature	From - 15 to + 60	From - 10 to + 50	From - 10 to + 50	From - 0 to + 50	°C
	Moisture	From 20 to 90 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	%
	Atmospheric Pressure	From 700 to 1060	From 700 to 1060	From 700 to 1060	From 700 to 1060	hPa
ENVIRONMENTAL CHARACTERISTICS IN OPERATION	Room Temperature	From -10 to +50	From -10 to +40	From -10 to +40	From -0 to +40	°C
	Moisture	From 20 to 90 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	From 20 to 70 (at 30 °C) (WITHOUT CONDENSATION)	%
	Atmospheric Pressure	From 700 to 1060	From 700 to 1060	From 700 to 1060	From 700 to 1060	hPa
TOTAL WEIGHT (WITH ROLLER PLATFORM)		148	127	135	.....	kg
MAXIMUM LOAD (NOMINAL LOAD)		200	175	200	200	kg
CYCLE OF USE - SERVICE		CONTINUOUS	INTERMITTENT 10% MAX (*2 min. of work alternating with 18 min of rest)*	INTERMITTENT 10% MAX (*2 min. of work alternating with 18 min of rest)*	CONTINUOUS	-
OIL RESERVOIR CAPACITY		1.0	-	-	-	Lt.
Maximum working pressure		7.5/75	-	-	-	MPa/bar
overcentre valve calibration		17.0/170	-	-	-	MPa/bar
ELECTRICAL DATA	Voltage	-	See operating manual attached	See operating manual attached	See operating manual attached	Volts
	NO. Phases	-	See operating manual attached	See operating manual attached	See operating manual attached	-
	Neutral	-	See operating manual attached	See operating manual attached	See operating manual attached	-
	Frequency	-	See operating manual attached	See operating manual attached	See operating manual attached	Hz
	Total electric current absorbed	-	See operating manual attached	See operating manual attached	See operating manual attached	A
	Degree of electrical insulation	-	See operating manual attached	See operating manual attached	See operating manual attached	-
MAXIMUM NOISE LEVEL	Continuous Level equivalent of the acoustic pressure where the operator is situated [Leq(A)]	….	….	….	-	dB(A)
	Sound power level [Lw(A)]	….	….	….	-	dB(A)
DEGREE OF LEVELLING		10/1000 (1%)	10/1000 (1%)	10/1000 (1%)	10/1000 (1%)	mm
PREDOMINANT COLOUR		"Brushed" stainless steel	"Brushed" stainless steel	"Brushed" stainless steel	"Brushed" stainless steel	-
TROLLEY MAIN DIMENSIONS	Width (maximum floor space)	See layout diagram	See layout diagram	See layout diagram	See layout diagram	-
	Length (maximum floor space)	See layout diagram	See layout diagram	See layout diagram	See layout diagram	-
	Height (maximum height)	See layout diagram	See layout diagram	See layout diagram	See layout diagram	-

4.3 SAFETY DEVICES

During the operation and service of the equipment ALL safety devices must be operational and should not be rendered inoperative for any reason.

	**IT IS FORBIDDEN TO BYPASS /MODIFY/TAMPER WITH/… ONE OR MORE SAFETY DEVICES PRESENT/PROVIDED.**	

4.3.1 HYDRAULIC MODELS

4.3.1.1 PRESSURE RELIEF VALVE

The actuator (hydraulic cylinder) is equipped with a factory preset pressure relief valve that stops operation with overloads.

4.3.1.2 OVERCENTRE VALVE

An "overcentre valve" is installed on the hydraulic cylinder to lock the hydraulic cylinder in the event that there is a break-down of the oil delivery and/or return hose.

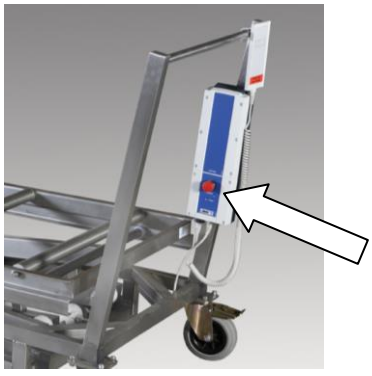
4.3.2 ELECTRIC MODELS

4.3.2.1 ELECTRIC MOTOR THERMAL CUTOUT SWITCH

The actuator is equipped with an internal thermal fuse to "cut" the power of the motor in the presence of possible overloads.

4.3.2.2 EMERGENCY STOP

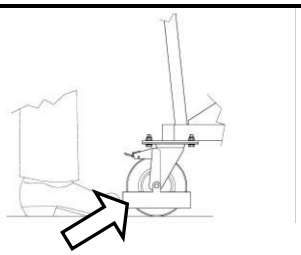
The appliance provides for an emergency stop to be operated as required to halt operation immediately.



4.4 OTHER IMPORTANT AND ESSENTIAL DEVICES (MANDATORY AND COMMON TO ALL MODELS)

4.4.1 FOOT GUARDS

The wheels are fitted with a ring guard to prevent foot crushing.



4.5 NOISE

Please consult paragraph: 4.2 – TECHNICAL SPECIFICATIONS.

5 USING THE MACHINE

The OPERATOR is RESPONSIBLE for operating the TROLLEY; the OPERATOR must be appropriately authorised, instructed, and trained by the Purchaser/Employer to operate the TROLLEY safely.

The TROLLEY must be operated by a SINGLE OPERATOR (operation by several OPERATORS is forbidden) and proper installation is required.

Apart from the OPERATOR, any other staff present in the vicinity of the appliance must remain at a safe distance and respect the signs displayed on the machine.

The OPERATOR/AUTHORISED STAFF are required to *systematically* monitor the TROLLEY during operation, and to act PROMPTLY in the event of a fault.

Any operation performed in the immediate vicinity of the TROLLEY must be performed exclusively in accordance with the contents of the present Operation and Maintenance Manual.

The OPERATOR is required to ensure that all the operating SIGNS/SYMBOLS/INSTRUCTIONS on the TROLLEY remain perfectly legible and to endeavour enforce them.

For electric models the OPERATOR must be in possession of the operating key to be inserted on the push-button panel (see paragraph: 5.1.2).

	**IT IS FORBIDDEN FOR MORE THAN ONE OPERATOR TO OPERATE THE MACHINE AT THE SAME TIME. THE TROLLEY IS DESIGNED TO BE USED BY A SINGLE OPERATOR.**	

5.1 GENERAL REQUIREMENTS

5.1.1 P.P.E. TO PREVENT THE OCCURRENCE OF DAMAGE CAUSED BY RESIDUAL RISKS

In accordance with the requirements dictated by current regulations, the Health and Safety officer responsible for the OPERATOR is required to analyse the potential risks and to ensure EXPOSED PERSONS wear suitable Personal Protective Equipment (P.P.E.). In all cases this paragraph specifies the required COMPULSORY P.P.E., regardless of the risk analysis performed by the Health and Safety officer, which EXPOSED PERSONNEL is required to use any time they are in the area of Machine operation. The use of additional P.P.E. is at the discretion of the *Health and Safety Officer* responsible for the OPERATOR.

1 ***Safety shoes to ensure sufficient mechanical isolation.***

2 ***Protective gloves.***

5.1.2 ASSIGNMENTS FOR THE PROPER USE OF THE TROLLEY

The TROLLEY is FOR PROFESSIONAL USE ONLY; hence, frequent and regular checks and maintenance are required to ensure it is in good condition for long-term operation.

Before OPERATING the TROLLEY and in compliance with RULES APPLICABLE to Health and Safety at work, AUTHORISED STAFF are required to appoint (authorise) and specifically train persons able to operate the TROLLEY throughout its life cycle (subject to the opinion of the Employer or their representative).

Solely for ELECTRIC MODELS: the appointed person shall be provided with a key to activate the push-button control panel; this is a personal key and shall not be given to other persons or left unattended.

5.1.3 LOGBOOK

It is recommended that a *"LOGBOOK"* be created to record all problems encountered, failures, checks and/or maintenance operations performed by QUALIFIED STAFF. The logbook is also useful for issuing quotes for equipment maintenance to avoid unwanted MACHINE DOWNTIME.

5.2 MODES OF OPERATION

5.2.1 NOMINAL LOAD (MAXIMUM LOAD)

The nominal load specified in paragraph: 4.2 - TECHNICAL SPECIFICATIONS, must not be exceeded by the OPERATOR when operating the TROLLEY. Given that there are no acoustic devices (there is only a plate indicating the maximum load) warning that the nominal load has been exceeded, the OPERATOR must know the weight to be lifted to ensure it does not exceed the maximum load allowed.

Use the weight detected by the weighing system, if supplied, to ensure the maximum load has not been exceeded.

⚠	**PLEASE REFER TO CHAPTER 4.2 TECHNICAL SPECIFICATIONS, FOR THE MAXIMUM LOAD. ELECTRIC MODEL LOADS DIFFER FROM HYDRAULIC MODEL LOADS (THESE LOADS MAY VARY DEPENDING ON THE TYPE OF INSTALLATION).**	⚠

5.2.2 LOADING AND POSITIONING

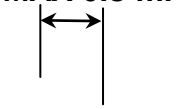
It is difficult to determine all load handling situations using the TROLLEY.

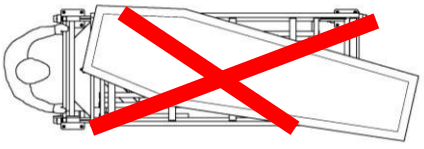
We specify some general guidelines that should always be respected by the OPERATOR. The OPERATOR should dutifully comply with further measures in addition to these requirements to avoid any hazardous events.

Do not load any type of load without knowing its weight, which must not exceed the maximum load specified by CEABIS.

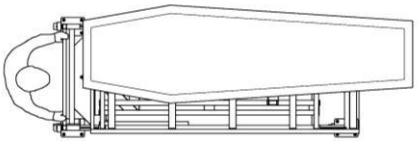
The centre of gravity of the load placed on the platform should be on the axis of the TROLLEY's centre of gravity as far as possible; on the OPERATOR POSITION end, the load bulk should not exceed the dimensions of the platform; on the lower end, the load bulk should not protrude more than 0.5 meters from the edge of the wheels.

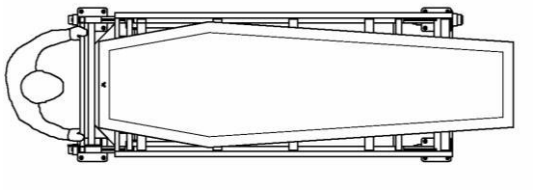
YES





NO

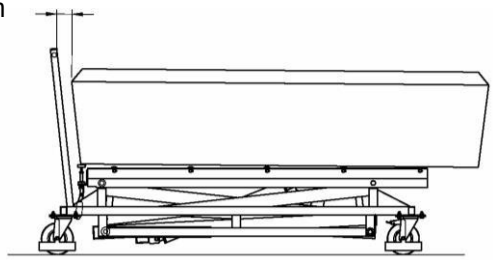




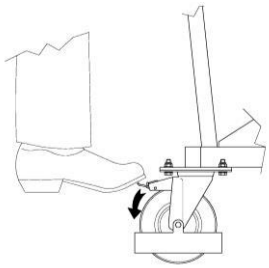
NO

Ensure load passage while lowering the platform, at the height of the handle: it should remain at a distance of not less than 2.5 cm. (8 ÷ 10 cm. recommended)

Min 2.5 cm



Lock the 3 (three) castors with the parking brake provided when loading or unloading the platform both in raised and lowered positions.



5.2.2.1 LOADING AND POSITIONING THE LOAD ON A ROLLER PLATFORM

The roller platform is recommended for easy handling of corpses in coffins, which would be tiring with a smooth type platform given the high sliding friction to be overcome while moving.

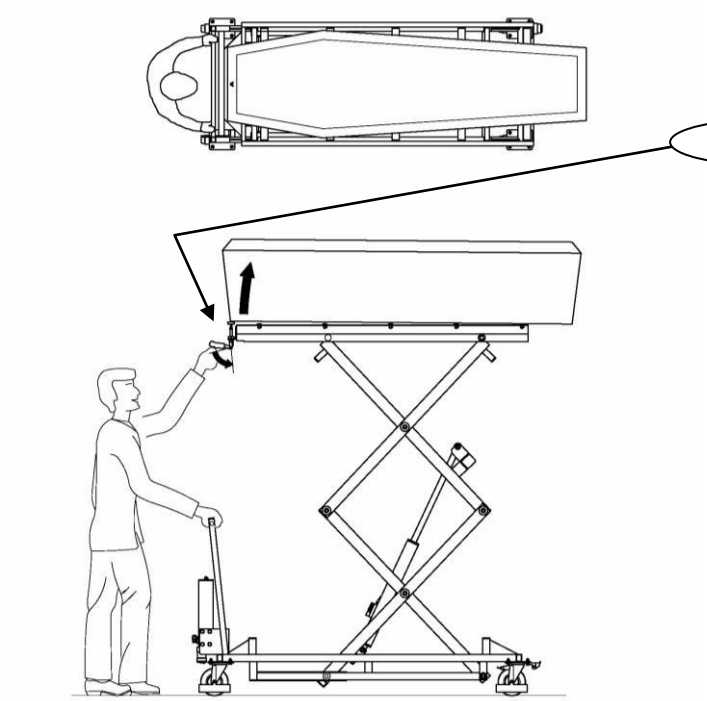
If the TROLLEY is equipped with a roller platform, ensure the load is blocked when it is on the "roller".

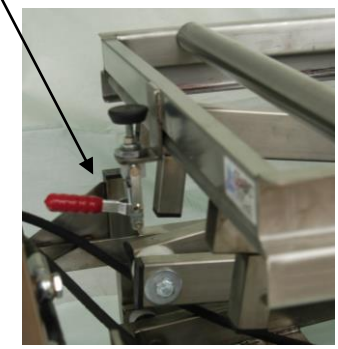
The rollers facilitate loading the weight on the TROLLEY, but they are subject to a higher risk of accidental movement even after slight manual movements.

Once the load is on the platform, with due care to ensure the load is pushed and pulled very carefully and cautiously (to prevent the load sliding off the platform), lift the holder pin at the end of the platform (on the OPERATOR POSITION end) to raise the far end of the load (turn the lever to raise the holder pin).

Blocking the load with the holder pin provided allows safe small load movements; the load should be secured with ropes or straps (not provided) for longer movements.

☞ **Adjust the holder pin to ensure that when the latter is fully raised the far end of the coffin is at least 5 mm from the first roller on the OPERATOR POSITION end.**





IF THE LOAD HAS TO BE TRANSPORTED OVER LONGER DISTANCES, SECURE IT USING ROPES AND/OR STRAPS (NOT INCLUDED).

5.2.2.2 LOADING AND POSITIONING THE LOAD ON A PLATFORM WITH GUIDES (FOR STRETCHER)

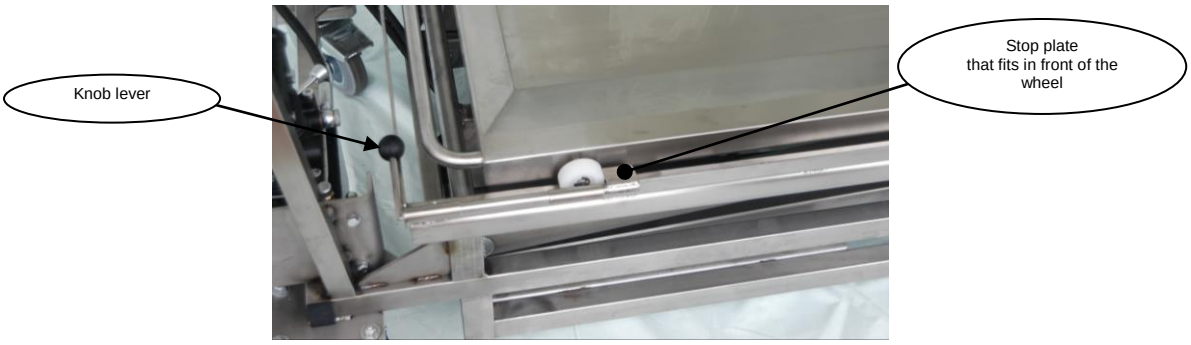
The platform with guides is recommended for carrying CEABIS type stretchers equipped with wheels designed to run in the platform guides; other types of stretchers are not considered to be compatible.

The wheels are designed to facilitate sliding, but they expose the stretcher to a greater risk of accidental movement even with slight manual movements.

Pay maximum attention to securing the load on the platform with this type of equipment.

Once the stretcher is fully fitted onto the platform (up to its natural abutment with the latch provided), turn the knob lever to allow the insertion of a stop plate in front of the first wheel (right-hand side toward the OPERATOR POSITION), to avoid the stretcher sliding off during subsequent shifting.

Check constantly that this lever performs its latch function whenever the TROLLEY is shifted.



5.2.2.3 LOADING AND POSITIONING THE LOAD ON A SMOOTH PLATFORM

The smooth platform is recommended for transferring the corpse on different platforms and/or other tables.

The only important precautions for using this type of platform are determined by the fact that it is perfectly smooth without concavity.

Given the aforementioned, please note the following risks to be assessed by the OPERATOR:

1. seepage of liquids from the corpse on the platform to the ground.
2. the corpse (or parts of it) rolling to the ground if it is precariously or unstably positioned on the platform.

Given these risks it is FORBIDDEN to load corpses subject to liquid or pasty substance percolation which could seep to the ground during movement.

The smooth platform was not designed by CEABIS for the transportation of loads that can roll off.

5.2.2.4 LOADING AND POSITIONING THE LOAD WITH WEIGHING SYSTEM

If the TROLLEY is equipped with a weighing system, pay particular attention to its load cell system.

Avoid exposing all instrumentation, including the LCD indicator, to:

- Sources of heat, direct sunlight and extreme temperatures;
- vibrations;
- moisture, rain and water splashes.

Leave the corpse on the platform as strictly necessary for weighing (and subsequent transport) activities.

Do not knock the front of the frame where the load cells are installed when moving a corpse or the TROLLEY.

Lay or slide the corpse slowly onto the platform taking care to avoid impacts or movements; also ensure abutment with the coffin stop is done gently.

To obtain a good approximation of the weight of the corpse, it must be positioned as close to the centre of the loading platform and on a perfectly level surface by lowering the platform as far as possible as long as it abuts on the mechanical stops.

The weight displayed is indicative and cannot be used for tax purposes, i.e. the value displayed or the printout of a docket/ticket, cannot be used for commercial/official purposes as the weighing system is not designed, nor can it be USED FOR present or future LEGAL PURPOSES.

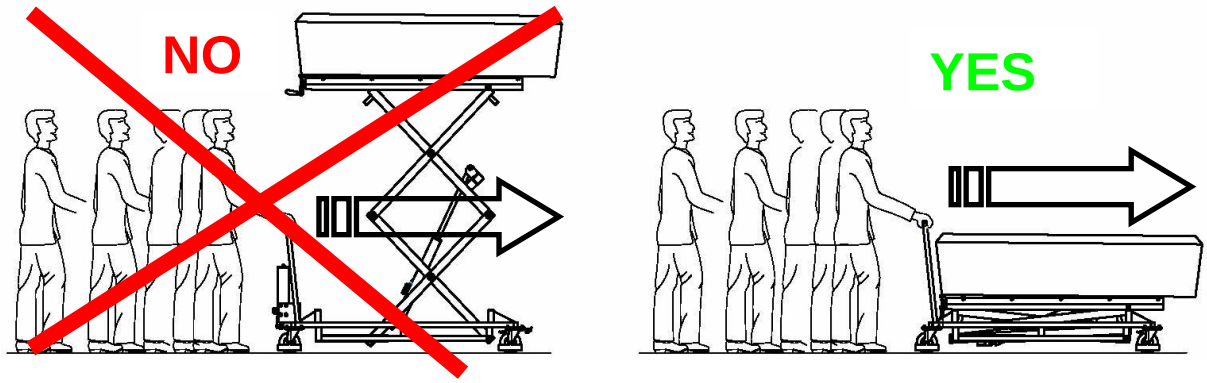
5.2.3 HANDLING OF THE LOADED OR UNLOADED TROLLEY

The TROLLEY is not equipped with its own driving motor and must therefore be moved manually by the OPERATOR using the tubular element designed to be used as a handle. The greater the load weight the greater the effort required for moving the load.

Do no run while moving the TROLLEY: proceed slowly and keep to the OPERATOR POSITION. It is important to proceed slowly and carefully because the TROLLEY can only be stopped using human force (this force must be able to counter the motion of the TROLLEY).

In the presence of the risk of interference from walking personnel, always proceed in lanes specifically designed for TROLLEY transit.

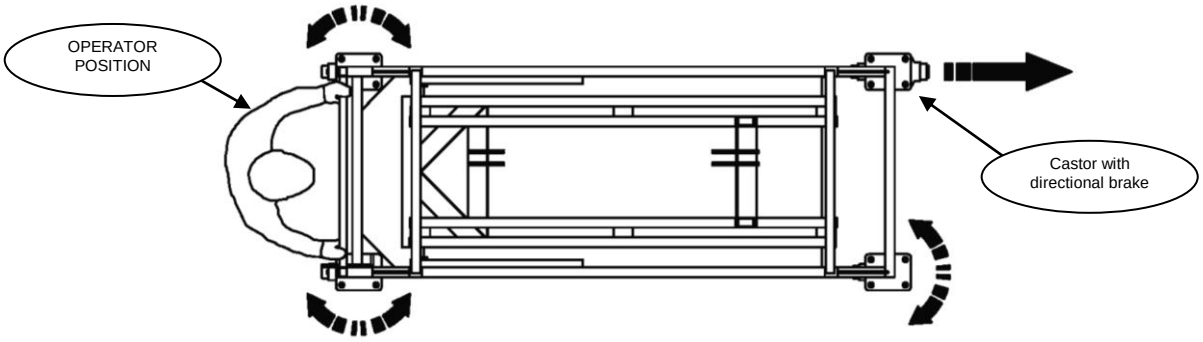
The platform is REQUIRED to be completely lowered while moving the TROLLEY; this requirement is also essential for good visibility while moving.



The centre of gravity of the load on a loaded platform must align with the longitudinal axis of the TROLLEY.

If there is a risk of displacement/rolling of the load on the platform it must be secured using the tightening ropes/straps (not included).

Engage the directional brake for greater TROLLEY control on long straight shifts.

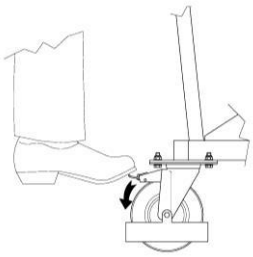


	IT IS ABSOLUTELY FORBIDDEN TO MOVE A LOADED TROLLEY ON SECTIONS WITH SLOPE GREATER THAN 1 %.	

	IT IS ABSOLUTELY FORBIDDEN FOR THE TROLLEY TO ROLL OVER STEPS, EVEN HORIZONTALLY; THE ONLY EXCEPTION ARE DOOR SILLS LOWER THAN 1 CM IN HEIGHT.	

5.2.4 RAISING AND LOWERING THE PLATFORM

Raise and lower the platform from the OPERATOR POSITION, locking the parking brakes of three 3 (three) castors and keeping at least one hand on the grip handle.



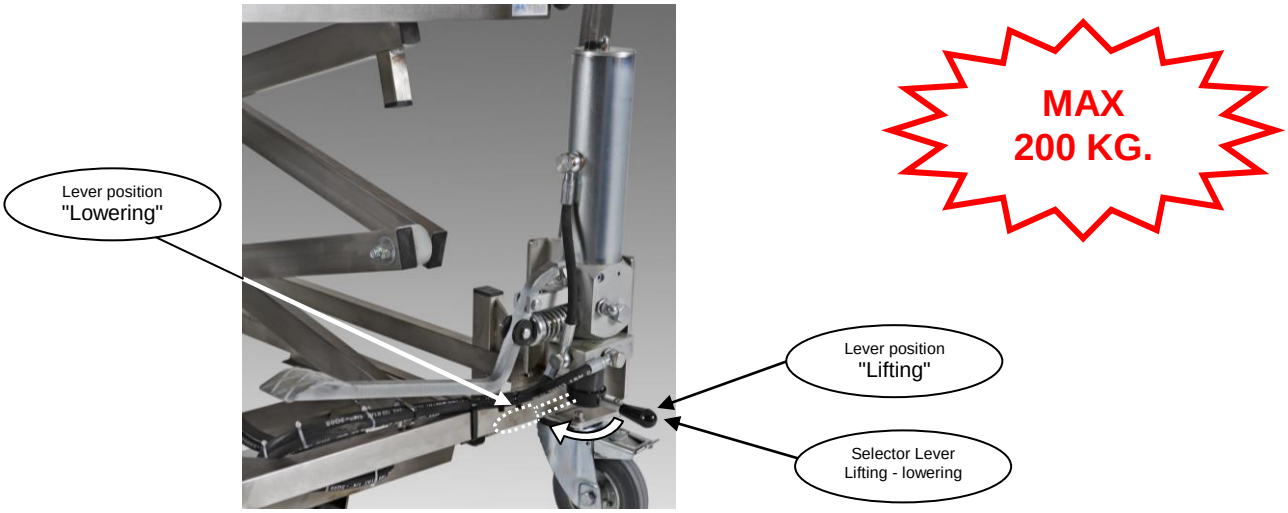
IT IS ABSOLUTELY FORBIDDEN TO MOVE THE TROLLEY WHILE RAISING OR LOWERING THE PLATFORM.

The operator must be able to see all moving parts (of the TROLLEY and load) clearly from the OPERATOR POSITION at all times throughout the entire vertical movement of the platform.

5.2.4.1 HYDRAULIC MODELS

Use the selector lever under the main body of the pump (the position indicated in the photo is for lifting the platform) to raise the platform to the required height.

Turn the lever 90° to the left to lower the platform.



5.2.4.2 ELECTRIC MODELS

Unlock the push-button panel using the key to move the selector to the symbol "Unlocked".

Press button (▲) on the push-button panel to lift the platform to the required height.
Press button (▼) on the push-button panel to lower the platform to the required height.

MAX 175 KG.
Standard Version

MAX 225 KG.
Exclusively for
GAS SPRING
version

The best place for the push-button panel during operation is to keep it hooked to the handle.
You can hold it with one hand, but do not leave it on the floor or on other parts of the TROLLEY.

5.3 DESCRIPTION OF THE CONTROLS

The controls on the TROLLEY are shown in the GENERAL MACHINE DIAGRAM reported in paragraph: 11.1.1.

5.4 INFORMATION ON RESIDUAL HAZARDS

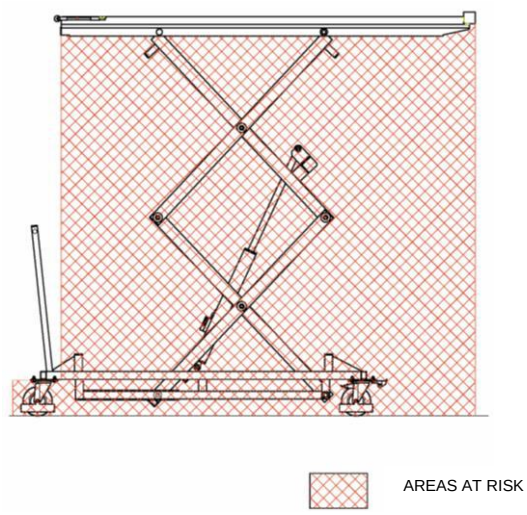
5.4.1 RESIDUAL HAZARDS AND THEIR SIGNALLING

Standard symbols are displayed on the TROLLEY and described in the DIAGRAM OF SYMBOLS APPLIED AND IDENTIFICATION , to inform AUTHORISED STAFF and the OPERATOR of residual risks which they must pay particular attention to; this is attached to paragraph: 11.1.4.

Furthermore, AUTHORISED STAFF should be made aware of the following residual risks which have not been safeguarded against as it would have made the TROLLEY more difficult to operate, obstructing its intended use.

1 Risk of crushing the lower limbs (at the wheels), while moving the TROLLEY.

2 Risk of crushing the upper limbs by placing arms between moving mechanisms.



Operate the TROLLEY as follows (this list is only indicative and not exhaustive) to avoid these risks:

1 Inform the OPERATOR as appropriate.

2 Provide the OPERATOR with specific training.

3 Use appropriate PPE.

5.4.2 HAZARDS THAT MAY BE INCURRED IF AUTHORISED STAFF DO NOT COMPLY WITH ALLOWED OPERATING PROCEDURES

Probable risks arising from specific FORBIDDEN modes of OPERATION, include the following (this list is only indicative and not exhaustive):

A Machine operation by AUTHORISED PERSONNEL not previously instructed and trained.

B Machine operation by OPERATOR not previously instructed and trained.

C Risk of load falling when operating the equipment on a non-horizontal surface.

D Risk of load fall when operating with a roller platform without making every effort to use the locking mechanism.

E Risk of equipment instability when operating the TROLLEY on a non-horizontal surface.

F ONLY FOR ELECTRIC MODELS
Tripping Hazards, leaving the charger power cord on the ground, and in transit areas.

G ELECTRIC MODELS ONLY
Electrical hazards may be incurred by connecting the appliance to an electrical system

not provided with a differential cutout switch.

5.5 INTENDED USE

The TROLLEY was designed and built ***FOR PROFESSIONAL USE ONLY and as stated by CEABIS in the Declaration of Conformity.***

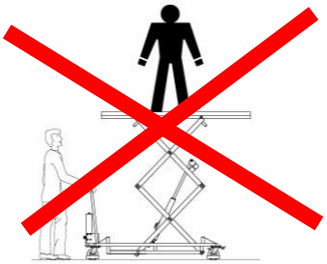
This appliance is designed for lifting, lowering, and moving mortal remains inside a morgue or in adjacent premises. It is mainly used to collect or insert a corpse up to the third highest place in cold rooms. Other uses include lifting, lowering or shifting the corpse between different platforms or from other tables (inside mortuaries).

	**USE THE DEVICE IN COMPLIANCE WITH THE APPLICABLE LOCAL LAWS ON CEMETARY SERVICES AND RELATED ACTIVITIES.**	

5.6 FORBIDDEN USE

The following is not allowed:

- TROLLEY operation by qualified staff who has not read and fully understood the contents of this Operation and Maintenance Manual,
- Using a TROLLEY that has not been INSTALLED in compliance with APPLICABLE RULES or by UNAUTHORISED STAFF,
- TROLLEY operation for purposes other than lifting and transporting corpses,
- Using the TROLLEY in cases of non-compliance with health and safety and funeral police regulation and with any other applicable law.
- Using the TROLLEY to lift living persons/animals or as an elevator.



NO

- TROLLEY operation in areas/zones where public access (especially small children) is likely.
- TROLLEY operation in open areas and spaces; on inclined planes/flooring; on natural terrain or gravelled surfaces,
- Towing the TROLLEY as a trailer for other equipment.
- TROLLEY operation by USERS not PREVIOUSLY INFORMED AND INSTRUCTED, or who have not read and understood all the information and instructions provided with the appliance and in the case where AUTHORISED STAFF have not explained the activities they are required to perform under their own responsibility,
- TROLLEY operation for purposes other than those provided for and declared in the Declaration of Conformity.
- TROLLEY operation in potentially explosive environments or where there are similar risks,
- Drawing up the TROLLEY or in any case altering its cycle and performance, operating the TROLLEY for uses not provided for in the TECHNICAL SPECIFICATIONS,
- Altering the control system and actuators and/or safety devices connected to these,
- TROLLEY operation on floor conveyor belts (tapis roulant - treadmill),
- Storing the TROLLEY loaded,
- For ELECTRIC MODELS: leaving the key unattended (for activating the push-button control panel) or giving it to people who are not the APPOINTED OPERATOR,
- NON-COMPLIANCE WITH THE INSTRUCTIONS, THE OBLIGATIONS AND PROHIBITIONS LISTED IN THIS MANUAL AND ON THE TROLLEY.

5.7 TROLLEY PARKING (STORAGE)

AUTHORISED STAFF/OPERATOR is responsible for TROLLEY STORAGE.
Proceed as follows:

1. Lower the mobile platform fully.
2. Park the TROLLEY only in designated areas set aside for this purpose. The surface must be flat and level; parking the TROLLEY on inclined planes with a slope in excess of 1% is forbidden.
3. Engage the parking brakes on 3 (three) castors (excluding the directional brake).
4. ELECTRIC MODELS only: place the selector key under the symbol "locked".

Never restrict escape routes, walkways, opening doors, etc. with the bulk of the TROLLEY.

NEVER LEAVE THE LOADED OR UNLOADED TROLLEY UNATTENDED WITHOUT LOCKING THE CASTOR WHEELS VIA THE PARKING BRAKES FIRST[4].

- ELECTRIC MODELS ONLY -
DURING STORAGE THE SELECTOR KEY MUST BE IN THE "CLOSED LOCK" POSITION

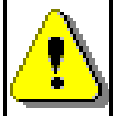
6 DISASSEMBLY

Pending the arrival of AUTHORISED STAFF to dismantle the TROLLEY, place the TROLLEY in ZERO ENERGY STATE (harmless state).

It is MANDATORY for the TROLLEY to be dismantled by QUALIFIED STAFF appropriately trained for this operation. Dispose of any part of the TROLLEY in an environmentally-friendly manner, by recycling all materials/substances such as: stainless steel, plastics, hydraulic oil, electrical equipment, etc.

Appropriate differentiated waste collection for the subsequent use of the equipment decommissioned for recycling, eco-friendly treatment and disposal helps to avoid possible negative effects on the environment and human health.

The improper disposal of the product by the OPERATOR is subject to administrative penalties prescribed by current environmental regulation.



THE ELECTRIC VERSION OF THE APPLIANCE CAN BE EQUIPPED WITH GAS SPRINGS. THESE SPRINGS (WHEN PRESENT) ARE MOUNTED TO THE SIDE OF THE ELECTRIC ACTUATOR AND ARE ALWAYS ACTIVE IN ANY POSITION OF THE ELECTRIC ACTUATOR.
FOLLOW THE PROCEDURES DESCRIBED IN THE FOLLOWING PARAGRAPH FOR THE DISASSEMBLY PROCEDURE THEREOF: 8.2.

7 FAILURE OR DAMAGE DIAGNOSTICS AND TROUBLESHOOTING

In the event of TROLLEY failure or malfunction, IT IS FORBIDDEN FOR THE OPERATOR/USER TO PERFORM ANY ATTEMPTS AT REPAIR OF ANY KIND. ALWAYS CONSULT AUTHORISED STAFF.

[4] Except for one (1) wheel equipped with directional brake the remaining wheels (three) are all provided with a parking brake.

7.1 ANALYSIS OF EVENTS AND FAILURES

Anomaly	Fault	Remedy
The TROLLEY moves with difficulty	***The brake on one or more castors is engaged***	Disengage the wheel brake(s).
	Probable damage to the wheel tread	Check the integrity of the tread of the wheels and in the case of flats, cracks, breaks, etc. , have them replaced by AUTHORISED PERSONNEL.
The TROLLEY struggles to maintain directionality while moving	***The directional brake is off***	Engage the directional lock of the castor wheel.
Heavy parts dropping on the platform	***Probable damage to functional parts***	1. Position the TROLLEY SAFELY, i.e. in ZERO ENERGY state. 2. Perform an EXCLUSIVELY VISUAL check of any parts that may be affected, 3. Consult AUTHORISED STAFF BEFORE TAKING ANY OTHER ACTION, describe what happened and provide a summary report describing any damage.
Fires in the area around the TROLLEY	***Probable damage to functional parts***	Without prejudice to the behaviour dictated by the APPLICABLE RULES: 1. Position the TROLLEY SAFELY, as far as possible, or in ZERO ENERGY state; 2. Depending on the severity of the event, call the Fire Brigade, and while waiting, try to extinguish the fire, TO THE EXTENT OF YOUR RESPONSIBILITY and WITH APPROPRIATE FIREFIGHTING EQUIPMENT and PERSONAL PROTECTIVE EQUIPMENT, 3. Check, ONLY VISUALLY, when all the fires have been extinguished , all parts that may have been affected, 4. Consult AUTHORISED STAFF BEFORE TAKING ANY OTHER ACTION, describe what happened and provide a summary report describing any damage.
Other accidents deemed at risk for further use of the equipment	***Probable damage to functional parts***	Without prejudice to the behaviour dictated by the APPLICABLE RULES: 1. Position the TROLLEY SAFELY, as far as possible, or in ZERO ENERGY state; 2. Consult AUTHORISED STAFF BEFORE TAKING ANY OTHER ACTION.
HYDRAULIC MODELS ONLY ***The platform does not move when activating the lifting/lowering selector.***	***The selector lever is not fully positioned at its end-of-travel point***	Ensure the selector lever is perfectly positioned at its end-of-travel point
	Lever is positioned in lifting position and the platform is already at its end-of-travel point	Reverse the position of the selector lever.
	Lever is positioned in lowering position and the platform is already at its end-of-travel point	Reverse the position of the selector lever.

Anomaly	Fault	Remedy
HYDRAULIC MODELS ONLY ***The pump control lever does not move***	***The selector lever is not fully positioned at its end-of-travel point***	Place the selector lever in its end-of-travel point.
HYDRAULIC MODELS ONLY ***The vertical position of the platform is not maintained***	***Probable damage to the internal seals of the hydraulic pump***	Position the TROLLEY SAFELY (in ZERO ENERGY STATE) and consult AUTHORISED/CEABIS STAFF for due checks.
HYDRAULIC MODELS ONLY ***The platform does not reach its end-of-travel position***	***Insufficient oil in the reservoir***	Add oil to the reservoir. Please consult paragraph: 8.2.1-RESERVOIR OIL LEVEL CHECK (HYDRAULIC MODELS)
Strange noises during operation coming from the hydraulic or electrical actuator	***Probable damage to internal functional parts***	Position the TROLLEY SAFELY (in ZERO ENERGY STATE) and consult AUTHORISED/CEABIS STAFF for due checks.
ELECTRIC MODELS ONLY ***After the operation of the lifting/lowering button, the platform does not move***	***Flat Battery***	Charge the battery for the required time.
	Connecting plug of the push-button panel is not properly inserted in the socket on the battery charger	Check that the plug is fully inserted in the appropriate socket.
	Push-button control panel damaged	Replace the push-button control panel.
	Position of the activating selector key in the "closed lock" position	Turn the selector key to the "open lock" position with the activation selector key provided.
	Other causes	Contact AUTHORISED STAFF ENABLED for appropriate checks/repairs
ELECTRIC MODELS ONLY ***After the operation of the***	***Partially discharged battery***	Charge the battery for the required time.
	Gas springs empty or partially empty	Replace both gas springs.

Anomaly	Fault	Remedy
lifting button, the platform moves with difficulty (generally when the load is close to the allowed limit)		

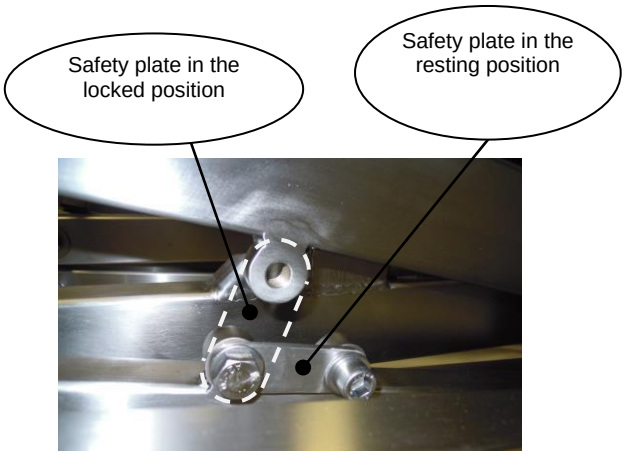
8 ORDINARY/EXTRAORDINARY CLEANING AND MAINTENANCE

ALL MAINTENANCE OPERATIONS MUST BE PERFORMED WITH THE PLATFORM IN ITS FULLY LOWERED POSITION

Any cleaning and/or maintenance operation **IS REQUIRED to be performed** by specially authorized staff instructed by the employer, in compliance with the requirements set out in this Operation and Maintenance Manual and all procedures in keeping with the state of the art rules designed to avoid exposing the operators and others to risks (e.g., using appropriate PPE).

All operations must be performed when the TROLLEY is at a standstill in **ZERO ENERGY** state, with the MOBILE PLATFORM FULLY LOWERED and unloaded. Further, for ELECTRICAL MODELS only, with the battery removed from its compartment. If the TROLLEY is also equipped with gas springs that work jointly with the electric actuator plug, ensure these are in a harmless state. This requires inserting the safety plate that prevents these being accidentally released.

During normal operation, the safety plate is locked on the TROLLEY in the resting position and it should be turned about 90° exclusively to block the release of the springs, by blocking the two arms of the TROLLEY pantograph together using the screws provided.



Notwithstanding the above only and exclusively for activities that cannot be performed otherwise, implementing other measures to ensure an adequate level of safety.

The wheel brakes must be engaged during all maintenance activities.

The operator should NEVER be below the movable platform or between the platform and the other components underneath except as strictly necessary and taking all appropriate measures for each case in point.

Use only non-aggressive cleaning products, and in all cases avoid substances that can alter the surfaces of the Appliance. See the paragraph below as well for cleaning stainless steel: 8.1 - CLEANING STAINLESS STEEL.

FOR ELECTRIC MODELS ONLY - Consult the appropriate Operation and Maintenance Manuals listed in the appendix for instructions on cleaning the electric actuator, the electronic control unit (or battery charger), the battery and the electronic weighing system.

If the time schedule specified in this Operation and Maintenance Manual (and its appendices) seem insufficient, during the use of the equipment, the Employer, or their representative is REQUIRED to update/modify them according to the requirements dictated by the specific case.

Never disconnect, bypass or alter safety and/or protection devices.

The use of sharp tools or other materials which may irreparably damage parts of the appliance with their mechanical action IS FORBIDDEN.

AUTHORISED STAFF is required to perform ordinary maintenance to ensure smooth operation and good preservation of the TROLLEY. The scheduled maintenance can be limited to a few actions which may safeguard the equipment from unwanted DOWNTIME AND MUST NEVERTHELESS BE PERFORMED IN COMPLIANCE WITH THE TERMS ESTABLISHED BY THE APPLICABLE RULES.

In case of TROLLEY part replacement, use genuine parts to avoid altering its performance and/or to reduce safety levels provided for.

FOR HYDRAULIC MODELS ONLY

FOR INTERVENTIONS ON THE HYDRAULIC SYSTEM REMEMBER THAT IT CONTAINS HYDRAULIC OIL THAT MAY BE UNDER PRESSURE AND COULD SPLASH ON BODY PARTS INCLUDING EYES.

DRAINING THE HYDRAULIC SYSTEM MAY ALSO GENERATE UNEXPECTED/ACCIDENTAL MOVEMENTS OF THE MOBILE PLATFORM AND OF MECHANISMS/COMPONENTS CONNECTED TO IT.

Do not hesitate to contact us at the following address if you have any questions and/or require assistance regarding cleaning/maintenance:

CEABIS is a registered trademark of VEZZANI S.p.A.
VEZZANI SPA Via M. Tito, 3 - 42020 Montecavolo di Quattro Castella (RE)
CEABIS Via G. B. Brunelli, 16 - 35042 ESTE (PD)
Phone: ++39 (0) 429 602323 - Fax ++39 (0) 429 601484
www.ceabis.it e-mail= info@ceabis.it

8.1 CLEANING STAINLESS STEEL

Stainless steel is mainly used for its great resistance to weathering and corrosion. However, some cleaning methods can damage stainless steel and affect its quality; it is therefore important to remember firstly that the steel surface underwent treatments for a satin-smooth finish, and, consequently, it is always best to perform cleaning duties with due care to maintain optimal product quality.

Do not exert too much pressure when cleaning by hand; when using cleaning tools, ensure these are not overly powerful. It is strongly advisable to follow the direction of the satin finish during cleaning operations and above all, avoid using sharp metal tools (such as scissors, knives, awls or scrapers) to eliminate dirt, as these can damage the metal surface thus causing corrosion to set in.

The incorrect use of chlorine or hydrochloric acid, muriatic acid, hydrofluoric acid and sulphuric acid (such as some descalers) based detergents can ruin the characteristic brightness of stainless steel and sometimes even reduce its resistance permanently.

The best method to clean stainless steel is to use specially designed and readily available products; alternatively, the following can be used: mild soap, rubbing alcohol or white vinegar (best diluted with water).

8.2 ORDINARY MAINTENANCE.

Only a few maintenance operations are required to keep the machine in perfect working order; these are specified in the time schedule detailed in Table 5.

Ordinary maintenance should be performed by persons appropriately instructed and trained for this purpose as specified in the table below under the heading COMPETENCE.

See also the paragraphs following the table for detailed procedures and precautions to be observed during maintenance activities.

Table 5

MAINTENANCE SUMMARY TABLE						
MAINTENANCE DESCRIPTION	MAINTENANCE FREQUENCY					
	Each time the machine is USED	Every Month	Every 6 months	Every 3 Years	Every 5 Years/10,000 services[5]	COMPETENCE
General Cleaning.	●					*OPERATOR AUTHORISED PERSONNEL*
Tightening screws in general, with particular regard to lifting mechanisms.			●[6]			*AUTHORISED PERSONNEL*
Checking the wheel locking brakes function properly.		●[6]				*OPERATOR*
Checking the directional lock mounted on one wheel functions properly.			●[6]			*OPERATOR*
Arm joint lubrication (*use silicone oil).*			●[6]			*AUTHORISED PERSONNEL*
Greasing the roller sliding guides (*with silicone grease)* 1. mobile platform, 2. base.		●[6]				*AUTHORISED PERSONNEL*
Reservoir oil level check (HYDRAULIC MODELS ONLY).		●[6]				*OPERATOR*
Hydraulic oil replacement (HYDRAULIC MODELS ONLY).				●[6]		*AUTHORISED PERSONNEL*
Hydraulic line integrity check (HYDRAULIC MODELS ONLY).			●[6]			*AUTHORISED PERSONNEL*
Hydraulic hose replacement (HYDRAULIC MODELS ONLY).					●[6]	*AUTHORISED PERSONNEL*
Replacement of the bushings on the electric actuator fastening axis (ELECTRIC MODELS ONLY).				●[6]		*AUTHORISED PERSONNEL*
Replacement (or regeneration) of the electric actuator[7] (ELECTRIC MODELS ONLY).					●	*AUTHORISED PERSONNEL*
Condition of the electric power supply cable (ELECTRIC MODELS ONLY).	●					*AUTHORISED PERSONNEL*
Gas spring replacement[8].				●		*AUTHORISED PERSONNEL*

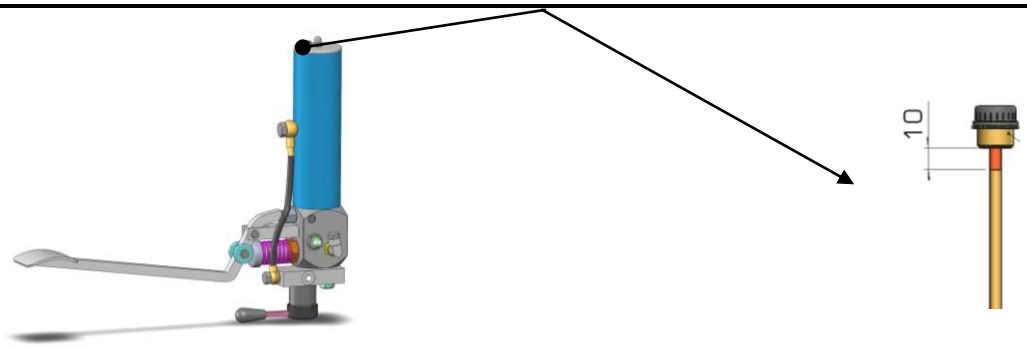
8.2.1 RESERVOIR OIL LEVEL CHECK (HYDRAULIC MODELS)

On the reservoir above the pump there is a cap with dipstick (level cap) for checking the oil level.

Lower the platform completely in the resting position, engage the brakes, unscrew the cap and clean it with a cloth, screw it back in by hand.

Unscrew it again checking that after this operation the oil is about 10 mm from the cap (see the image below).

[5] The term "service" refers to a complete cycle, consisting of 1 (one) lifting and 1 (one) lowering.
[6] The recommended maintenance frequency is as specified: it may be altered subject to the intensity of use and the accuracy of handling operations.
[7] If the TROLLEY is used under optimal conditions: it may be altered subject to adverse weather conditions and with a different work/rest alternation than specified (see data reported in paragraph: 4.2 - TECHNICAL SPECIFICATIONS.
[8] Operation under optimal conditions: maintenance frequency may be altered in the presence of adverse weather conditions.



Use only hydraulic mineral oil ISO 6743/4 to top up the oil; (recommended viscosity: ISO VG 46). The oil used must be compatible with standard seals in NBR rubber (ACRYLONITRILE BUTADIENE RUBBER) and absolutely clean or filtered with 30-35 µm filter. (Recommended Oil: Nuto H 32).

Tighten the level plug fully at the end of the operation.

	NEVER USE BRAKE OIL, ENGINE OIL OR ANY OTHER TYPE OF FLUID. THE USE OF SPECIAL OILS MAY REQUIRE SPECIAL TYPE OF GASKETS NOT PROVIDED WITH THE PUMP.	

8.2.2 HYDRAULIC LINE INTEGRITY CHECK (HYDRAULIC MODELS)

Check to ensure that the outer rubber coating is not scratched, abraded or torn during checking operations. The hose should be replaced IMMEDIATELY in case of any defects (see paragraph: 8.2.3)

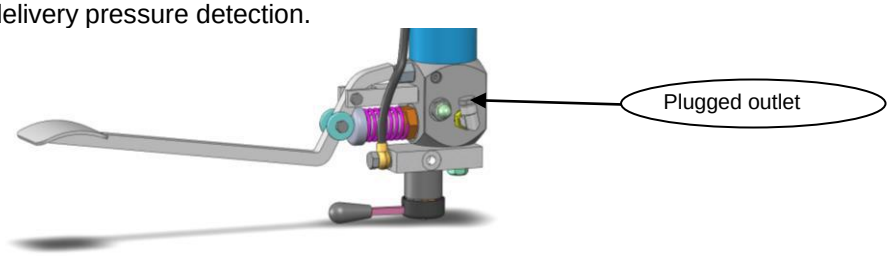
8.2.3 HYDRAULIC HOSE REPLACEMENT (HYDRAULIC MODELS)

Contact AUTHORISED PERSONNEL or CEABIS directly for this extremely delicate operation.

The replacement should have equal or superior performance characteristics. Fittings should be crimped by machine (THE USE of "recoverable" type FITTINGS IS FORBIDDEN).

8.2.4 CONNECTING THE PRESSURE GAUGE TO THE PUMP (HYDRAULIC MODELS)

The pump body has a plugged outlet which can be used to connect a pressure gauge (not supplied), for pump delivery pressure detection.



Place the TROLLEY in ZERO ENERGY STATE, i.e. lower the platform completely so that it rests on the mechanical stops taking care not to tighten the metallic structure with the traction of the cylinder, prior to unscrewing the cap; this is to avoid leaving residual pressure within the hydraulic circuit.

Put a pan under the plug to collect oil seepage.

Use an Allen key and proceed by slowly unscrewing the cap; if during this step the pressure thrust obstructs the unscrewing of the cap then tighten the plug again and operate the lever by acting on the direction selector (lifting or lowering) to find a zero pressure position.

At this point proceed by unscrewing the cap completely and apply the pressure gauge (not supplied).

At the end of the check, reposition the equipment so that there is no pressure inside the pump and re-install the cap by tightening it fully (if there is no oil seal apply liquid sealant to the thread of the teflon tape sealant to ensure pressure tightness).

At the end of operations make sure that the oil level is still optimal [see paragraph: 8.2.1- RESERVOIR OIL LEVEL CHECK (HYDRAULIC MODELS).

8.2.5 REPLACEMENT OF THE BUSHINGS ON THE ELECTRIC ACTUATOR FASTENING AXIS (ELECTRIC MODELS)

2 pairs of centering bushes are mounted on the mounting studs of the electric actuator on the metal structure; two are plastic and mounted on the fork of the electric actuator and two are on the metal structure (see drawing below).

These bushes need to be replaced according to the maintenance plan reported in Table 5.

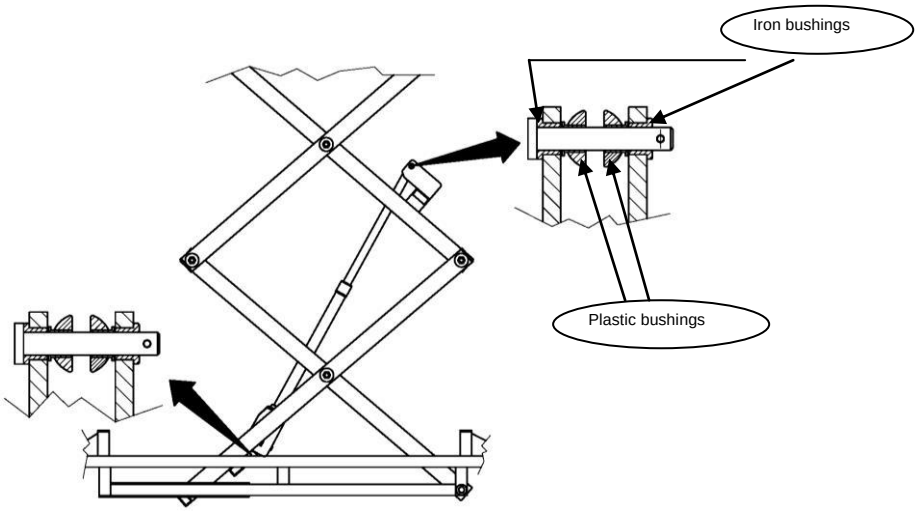
Place the TROLLEY in ZERO ENERGY STATE (in the absence of load, with mobile platform completely lowered) for the replacement. If the model is equipped with gas springs it is necessary to block the movement of the arms of the pantograph by activating the "fastening plate(s)" provided.

Use specific tools on the pins to slide them apart from their seat, with due care, making sure the part of the actuator is supported to prevent it from falling to the ground.

To facilitate the knock-out of the bushes in the presence of gas springs, once its safety plate(s) is/are activated, move the electric actuator with small pulses and find the thrust point of the above springs.

Place the new bushings and refit the pins as they were originally.

Remember to reposition the safety plate(s) at the end of the operation if these were activated in order to allow the movement of the arms.



8.2.6 STATE OF THE ELECTRIC POWER SUPPLY CABLE (ELECTRIC MODELS)

It is important to constantly check the state of the electric power cord which could be damaged and/or cracked/cut/crushed in the course of time.

In all cases NEVER use a cable which was found to be damaged during prior checks.

8.2.7 ELECTRIC ACTUATOR REPLACEMENT (OR REGENERATION) (ELECTRIC MODELS)

The electric actuator should be regenerated or replaced according to the specified time schedule or based on its state of wear. This activity must be performed by CEABIS directly.

8.2.8 REPLACEMENT OF GAS SPRINGS (ONLY ON ELECTRIC MODELS - WHERE THESE EXIST)

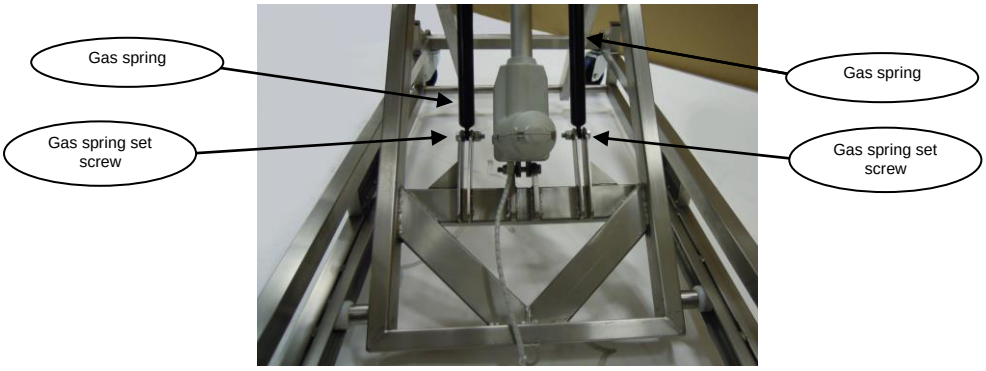
These should be regenerated or replaced according to the specified time schedule or based on its state of wear. This activity must be performed by CEABIS directly.

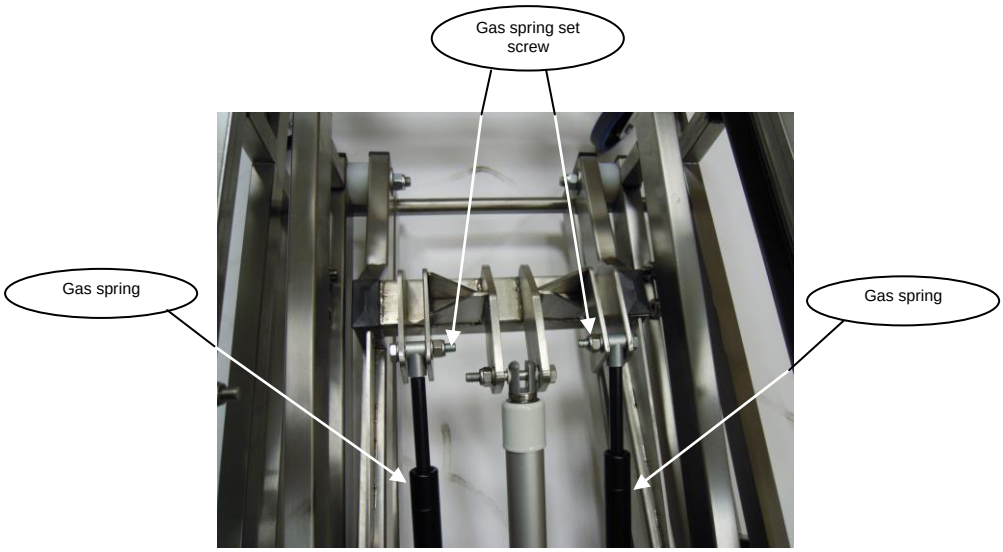
THE GAS SPRINGS SHOULD ALWAYS ALL BE REPLACED TOGETHER.

The TROLLEY position required to allow for easy replacement is with the platform unloaded and completely raised.

In this position, the gas springs should be at their end-of-travel point, and should therefore be easy to dismantle by extracting the screws on which they are hinged.

If, after positioning the platform in the fully raised position, the gas springs continue to press against their own mounting pins (or set screws), contact our technical office for the necessary explanations to disassemble the springs safely.





8.3 EXTRAORDINARY MAINTENANCE

Extraordinary maintenance includes any intervention, excluding ordinary maintenance and cleaning, that must be carried out in response to a failure or malfunction that may compromise proper functioning.

Extraordinary maintenance may be necessary in the event of:

- Breakage of one or more castor wheels,
- Breakage of a hydraulic hose (HYDRAULIC MODELS),
- Breakage of the hydraulic pump (HYDRAULIC MODELS),
- Breakage of the cylinder (HYDRAULIC MODELS),
- Breakage of the overcentre valve mounted on the cylinder (HYDRAULIC MODELS),
- Breakage of the electric actuator/battery charger (ELECTRIC MODELS),
- Breakage of the gas spring (ELECTRIC MODELS),

- etc.

In the presence of one or more of these events, put the appliance in its safe position immediately, and consult AUTHORISED PERSONNEL directly who may undertake repairs directly or contact CEABIS directly at the address shown in paragraph: 8 - ORDINARY/EXTRAORDINARY CLEANING AND MAINTENANCE .

8.4 IMPORTANT MAINTENANCE

Important maintenance includes any intervention, excluding ordinary and extraordinary cleaning and maintenance, which must be carried out in response to a failure or malfunction that may compromise the proper functioning of the equipment.

Important maintenance could be:

- Replacement of an arm or a linkage,
- Replacement of the base frame,
- Replacement of a platform,
- Mechanical failures caused by overloads,
- etc.

In the presence of one or more of these events, put the appliance in its safe position immediately, and consult AUTHORISED PERSONNEL directly who may undertake repairs directly or contact CEABIS directly at the address shown in paragraph: 8 - ORDINARY/EXTRAORDINARY CLEANING AND MAINTENANCE .

	**IT IS FORBIDDEN FOR THE OPERATOR TO PERFORM ANY ATTEMPT AT REPAIR OF ANY NATURE; ALWAYS CONSULT CEABIS OR SPECIFICALLY SKILLED QUALIFIED STAFF.**	

	**THE TROLLEY MUST BE SUBJECTED TO A COMPLIANCE TEST AFTER ANY MAJOR REPAIR (SEE PARAGRAPH: 8.4.1 - COMPLIANCE TEST.**	

8.4.1 COMPLIANCE TEST

The TROLLEY must be returned to CEABIS for the purpose of testing instruments to determine safety of use following any extraordinary and/or important maintenance.

CEABIS shall not be liable for damages if due checks are not performed prior to reinstating the device for operation following important/extraordinary maintenance.

8.5 REMOVAL/DISPOSAL OF RESIDUES/WASTE MATERIALS CREATED DURING CLEANING AND/OR MAINTENANCE OPERATIONS

For the removal of deposits and residues, AUTHORISED PERSONNEL must follow:

- the normal precautions and warnings given in this Operation and Maintenance Manual
- the APPLICABLE RULES,
- common sense,
- the instructions below,

all this to avoid endangering themselves and other persons, animals and objects.

For the removal of deposits/residues (e.g. debris), authorised personnel must:

- wear suitable clothing,
- where possible only use vacuum cleaners,
- also wear mask, goggles, gloves and always close sleeves with elastic when using compressed air,
- Dispose of any deposits and residues in full respect of the environment and the laws in force.

It is forbidden to use jets of water or other fluids on all the parts of the appliance.

Jets of water include both splashes generated at atmospheric pressure and jets under pressure generated by cleaning machines for industrial washing.

9 SPARE PARTS INCLUDING THOSE RECOMMENDED

Order spare parts from CEABIS in writing by fax, email or letter.

Please specify:

- Your personal data (name, address, VAT registration number),
- equipment identification data for which you require spare(s) (description, article, serial number and year of manufacture),
- the description and the quantity of spare parts required.

Send your request to the address shown in paragraph: 8.3 - EXTRAORDINARY MAINTENANCE.

The complete and correct drawing up of the request will give us a chance to avoid unnecessary mistakes and loss of time in sending you the required spare parts in the shortest possible time.

It is recommended that in your machine spare parts area you keep the spare parts indicated in Table 6, which, in the event of unwanted machine downtime, may be useful to authorised staff during maintenance, thus avoiding prolonging MACHINE DOWNTIME longer than necessary, which may in some cases damage/inconvenience your business.

Table 6

RECOMMENDED SPARE PARTS			
Code	***Name***	***Qty***	***Remarks:***
-	Castor wheel with parking brake	1	-
-	Castor wheel with directional brake	1	-
-	Kit no. 2 Gas Springs (if the model you purchased is equipped with this accessory)	1	-

10 EMERGENCIES - INSTRUCTIONS FOR DEALING WITH

10.1 FIRE

Water should not be used for extinguishing fires, because it could react with the materials with which it may come in contact, causing a significant increase in temperature or the emission of flammable and/or harmful gases.

Use powder extinguishers where these are not contraindicated.

Ensure there is always at least one fire extinguisher of an approved type and of adequate size near the appliance.

Fire-fighting equipment must be maintained and inspected regularly by trained and qualified staff, according to the time schedule required by the APPLICABLE RULES.

10.1.1 HARMFUL EMISSIONS IN CASE OF FIRE

In case of fire, noxious emissions from the TROLLEY are mainly caused by paints, plastics, rubbers and hydraulic oil.

Use the required normal precautions in the event of a fire according to each specific case.

11 DOCUMENTATION ATTACHED

11.1 DIAGRAMS

11.1.1 GENERAL MACHINE DIAGRAM

11.1.2 HYDRAULIC/ELECTRICAL DIAGRAM

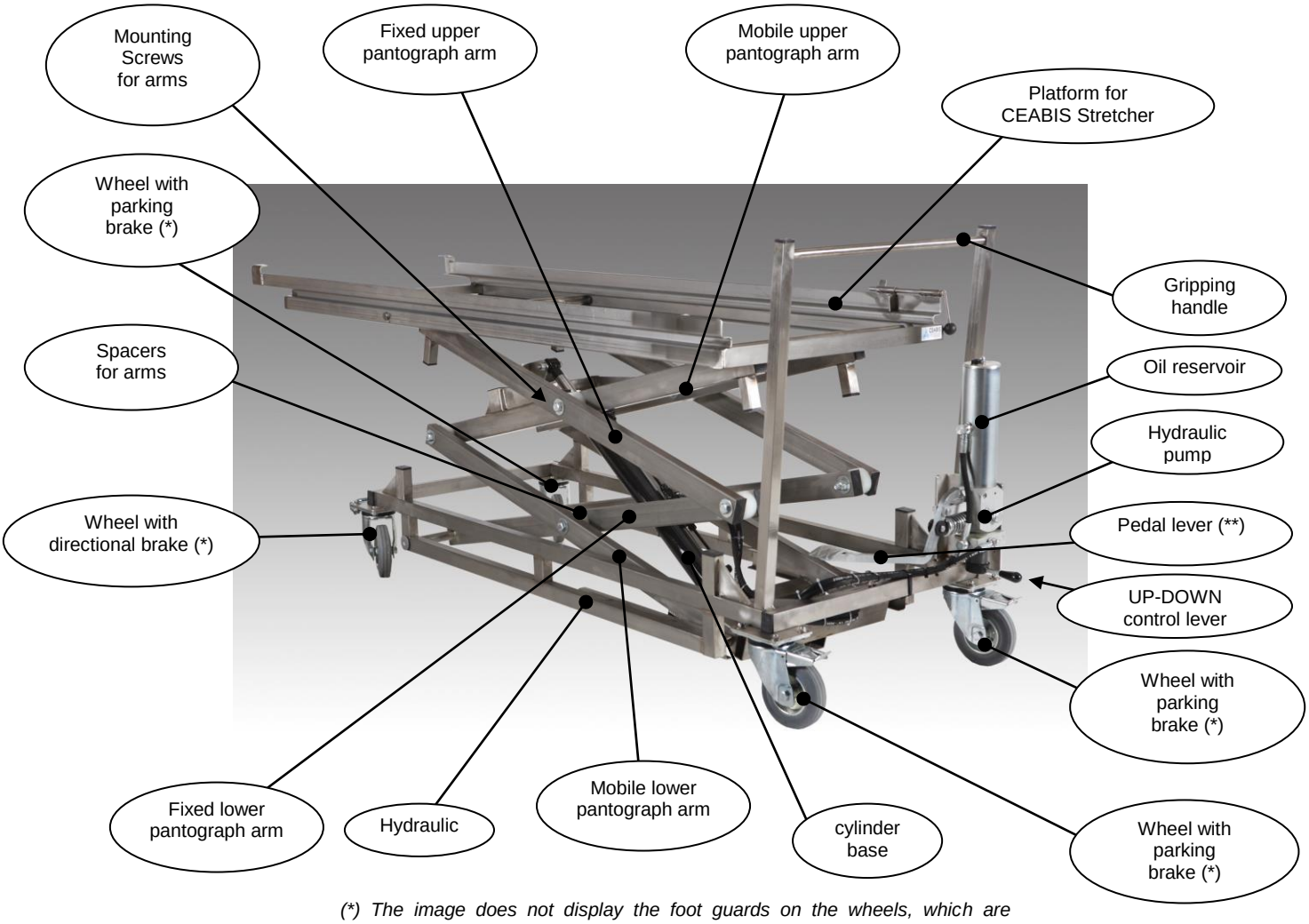
11.1.3 LAYOUT DIAGRAM

11.1.4 DIAGRAM OF SYMBOLS APPLIED AND IDENTIFICATION PLATE

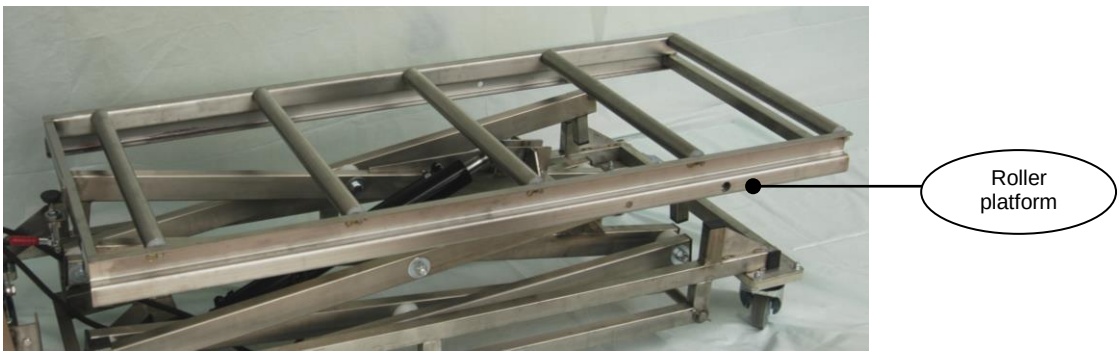
11.1.5 DECLARATION OF CONFORMITY

*** HYDRAULIC MODELS ***

GENERAL MACHINE DIAGRAM



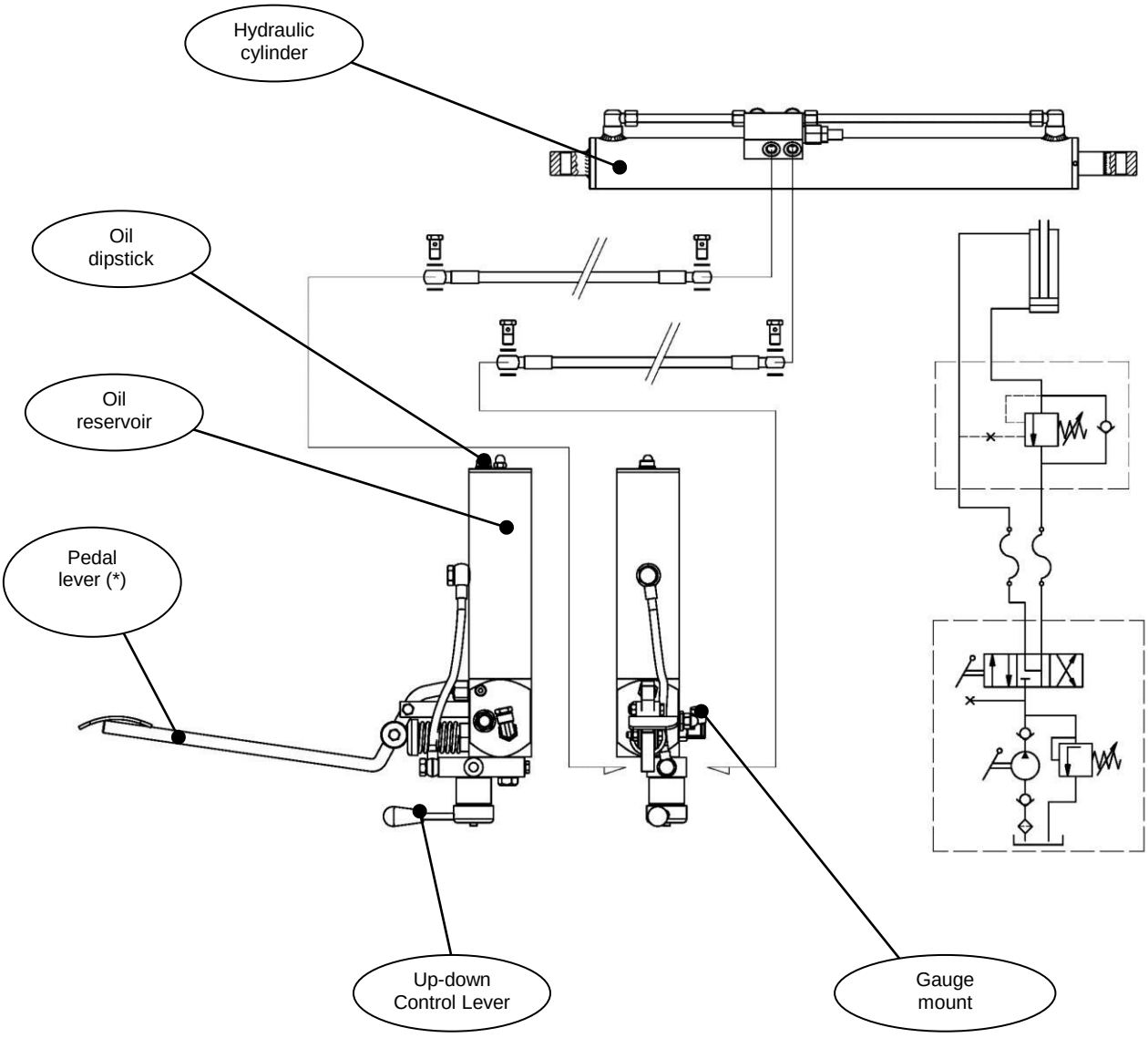
(*) The image does not display the foot guards on the wheels, which are supplied as standard.
(**) Hand lever if the provision provides for its supply.



N.B.) The smooth platform that is not represented is a stainless steel flat surface which acts as a supporting plane

***** HYDRAULIC MODELS *****

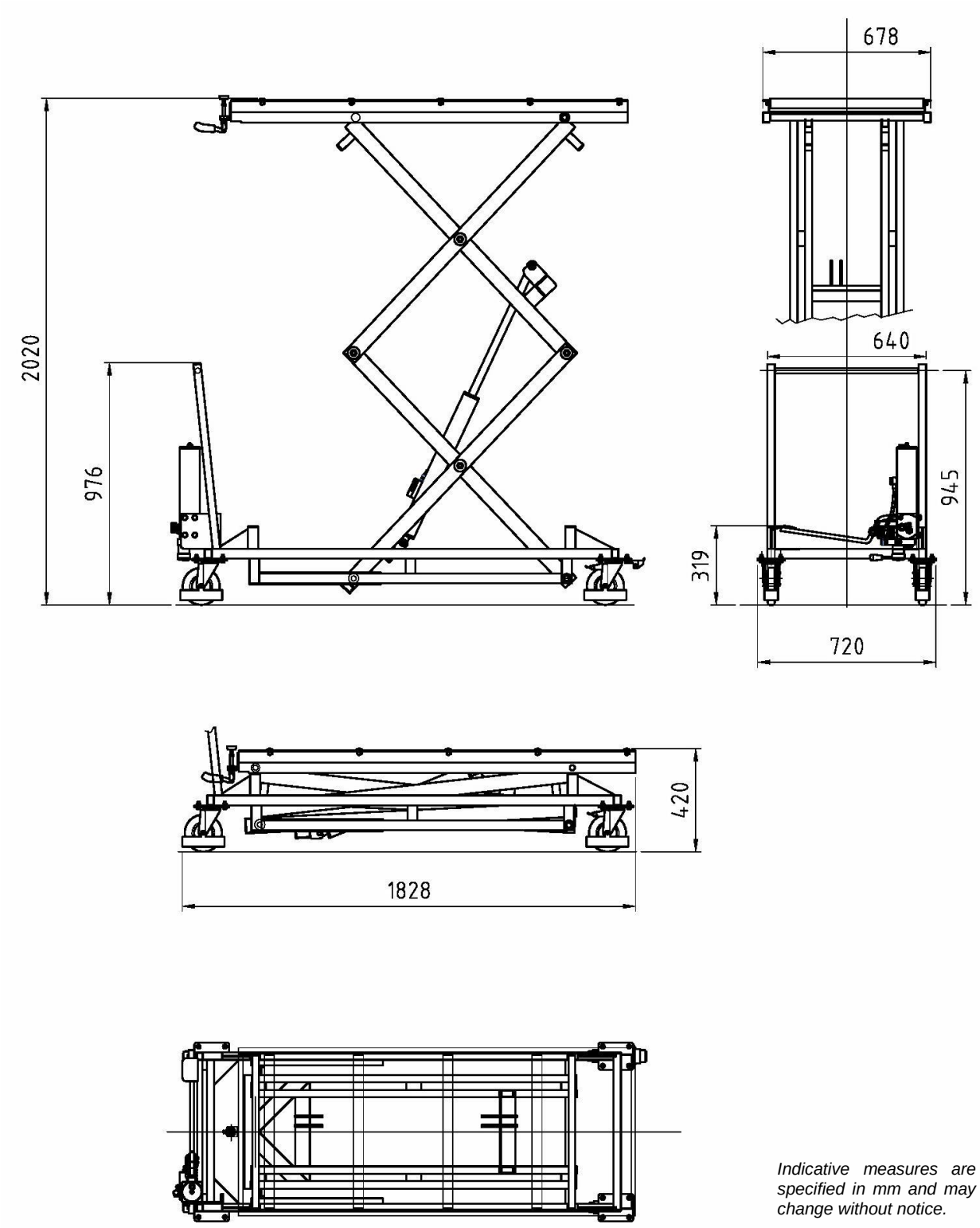
HYDRAULIC DIAGRAM



(*) the pump may be provided with a hand lever on request.

***** HYDRAULIC MODELS *****

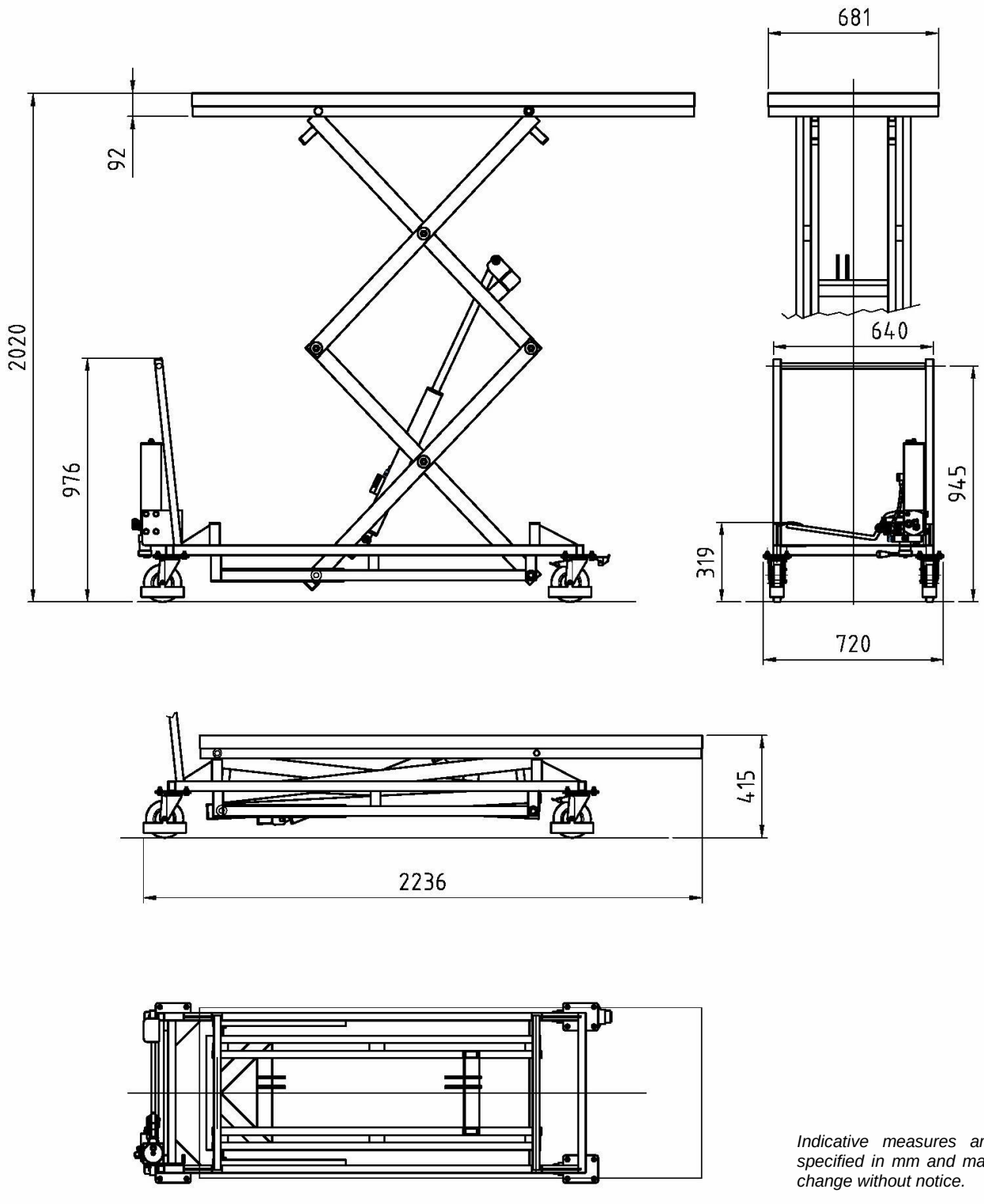
LAYOUT DIAGRAM
Total weight (with roller platform)



Indicative measures are specified in mm and may change without notice.

***** HYDRAULIC MODELS *****

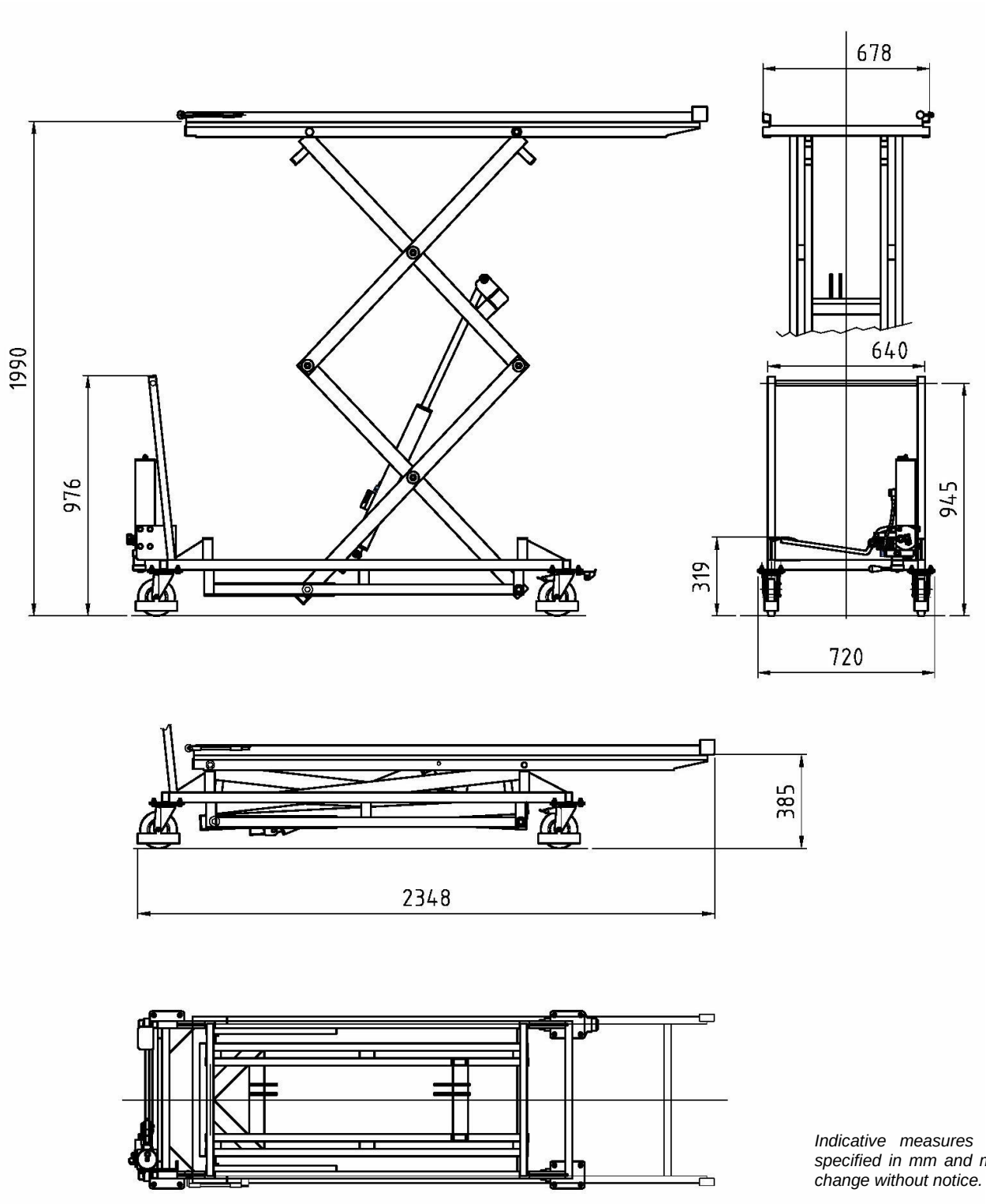
LAYOUT DIAGRAM
(With smooth platform)



Indicative measures are specified in mm and may change without notice.

***** HYDRAULIC MODELS *****

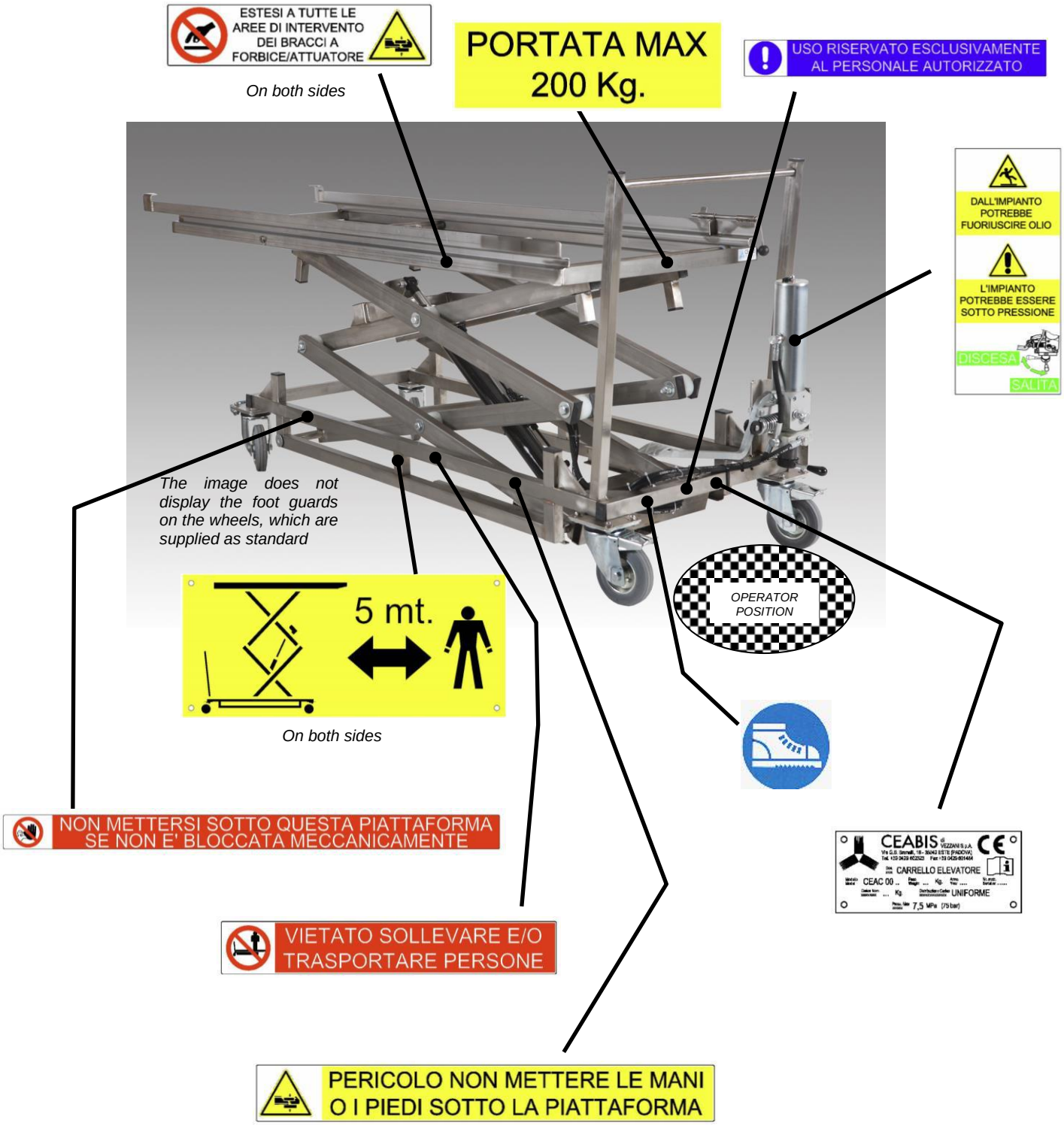
LAYOUT DIAGRAM
(With platform for CEABIS stretcher)



Indicative measures are specified in mm and may change without notice.

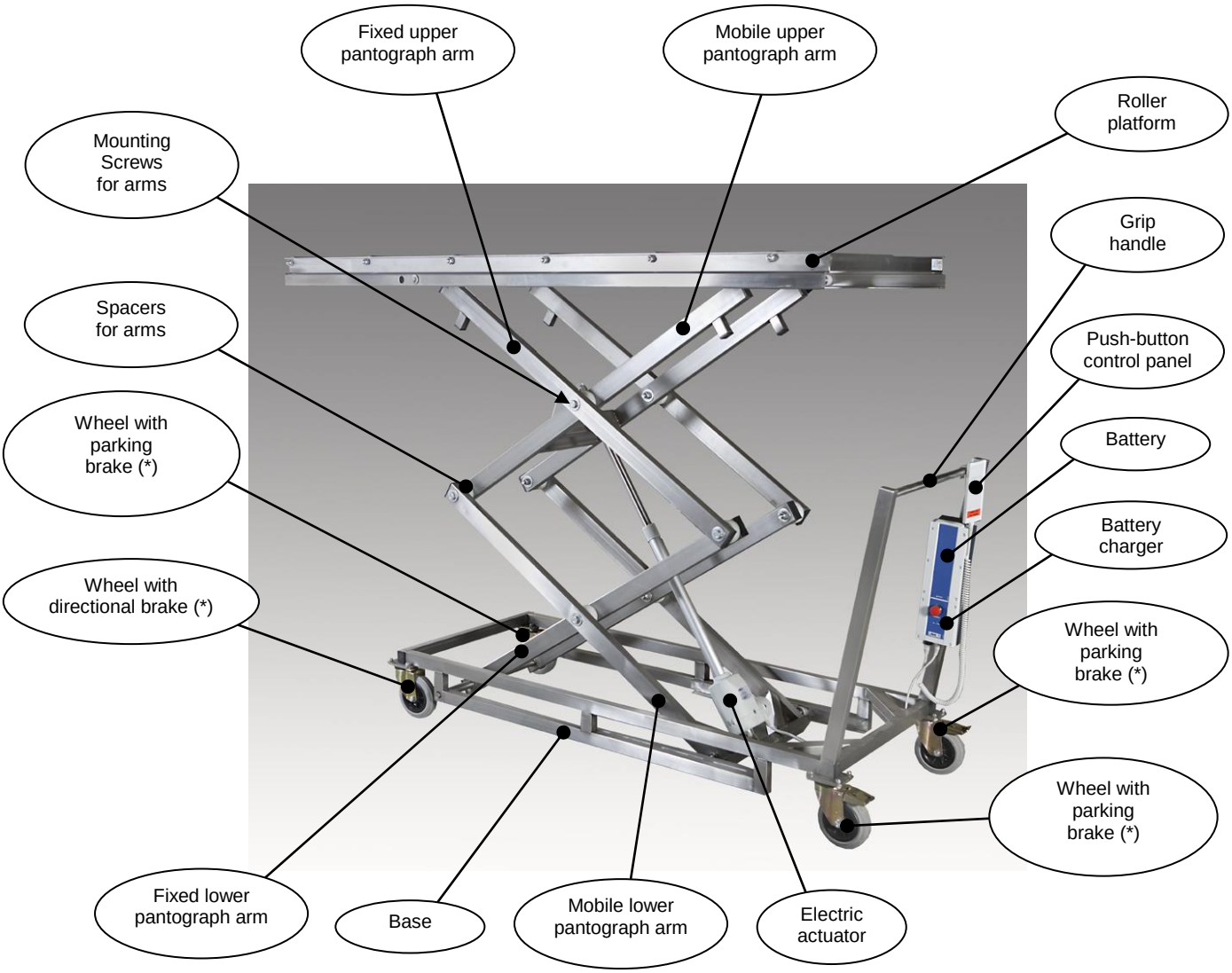
***** HYDRAULIC MODELS *****

DIAGRAM OF SYMBOLS APPLIED

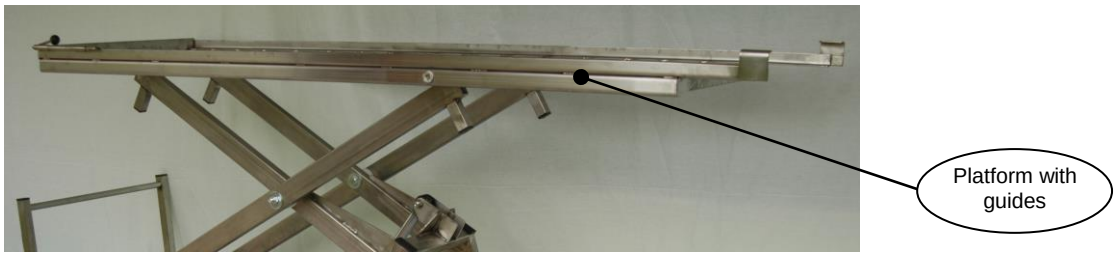


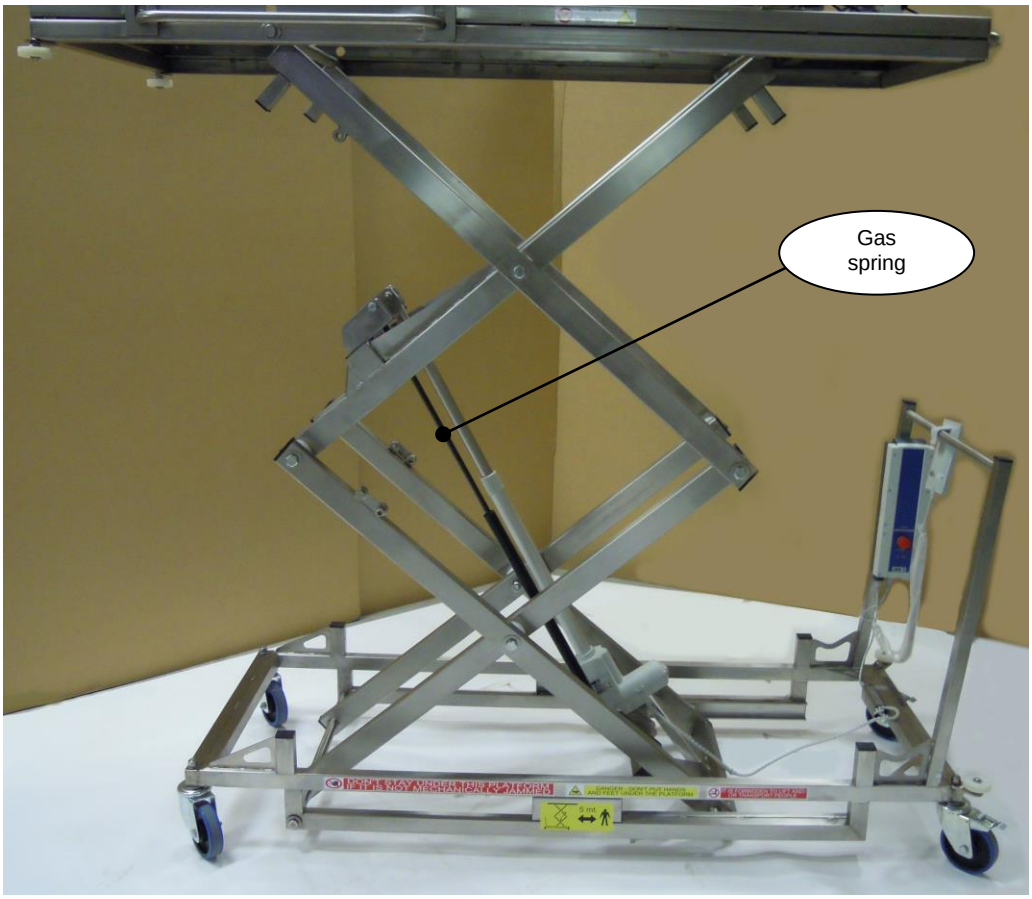
***** ELECTRIC MODELS *****

GENERAL MACHINE DIAGRAM



(*) The image does not display foot guards on the wheels, which are supplied as standard.

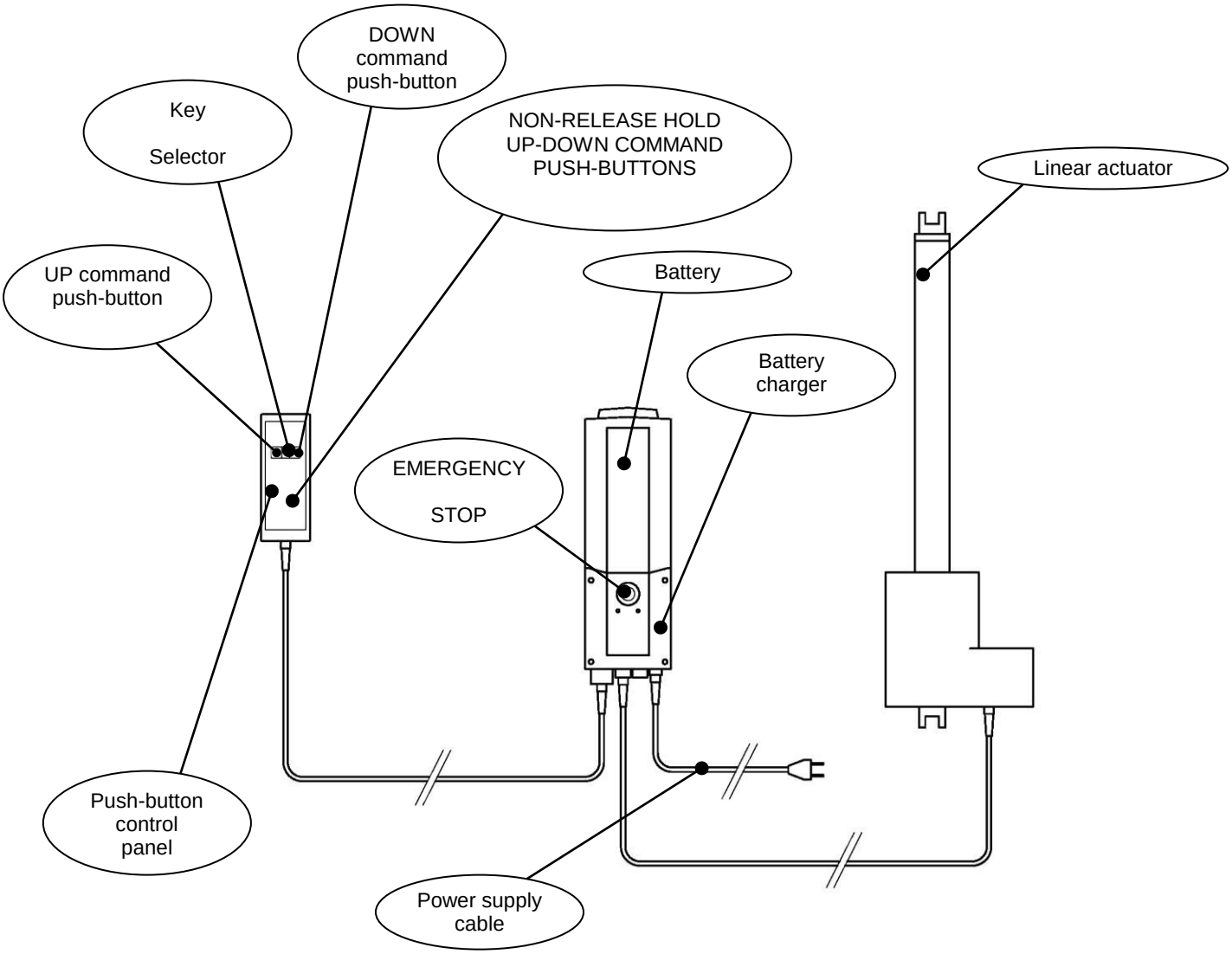


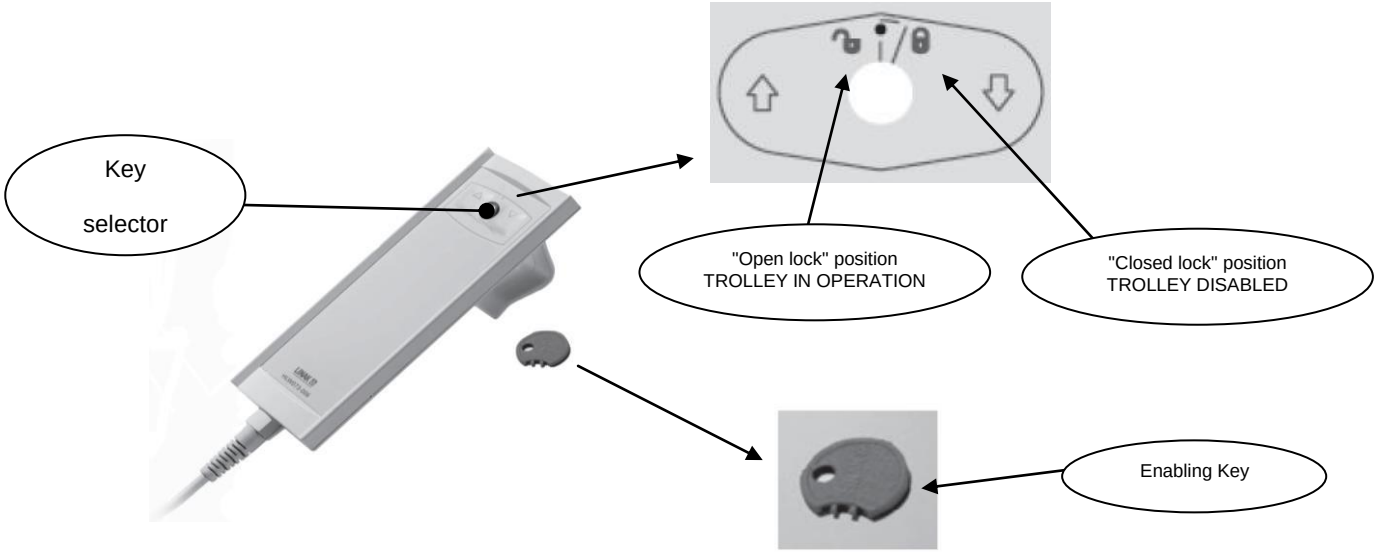


N.B.) The smooth platform that is not represented is a stainless steel flat surface that acts as a supporting plane

***** ELECTRIC MODELS *****

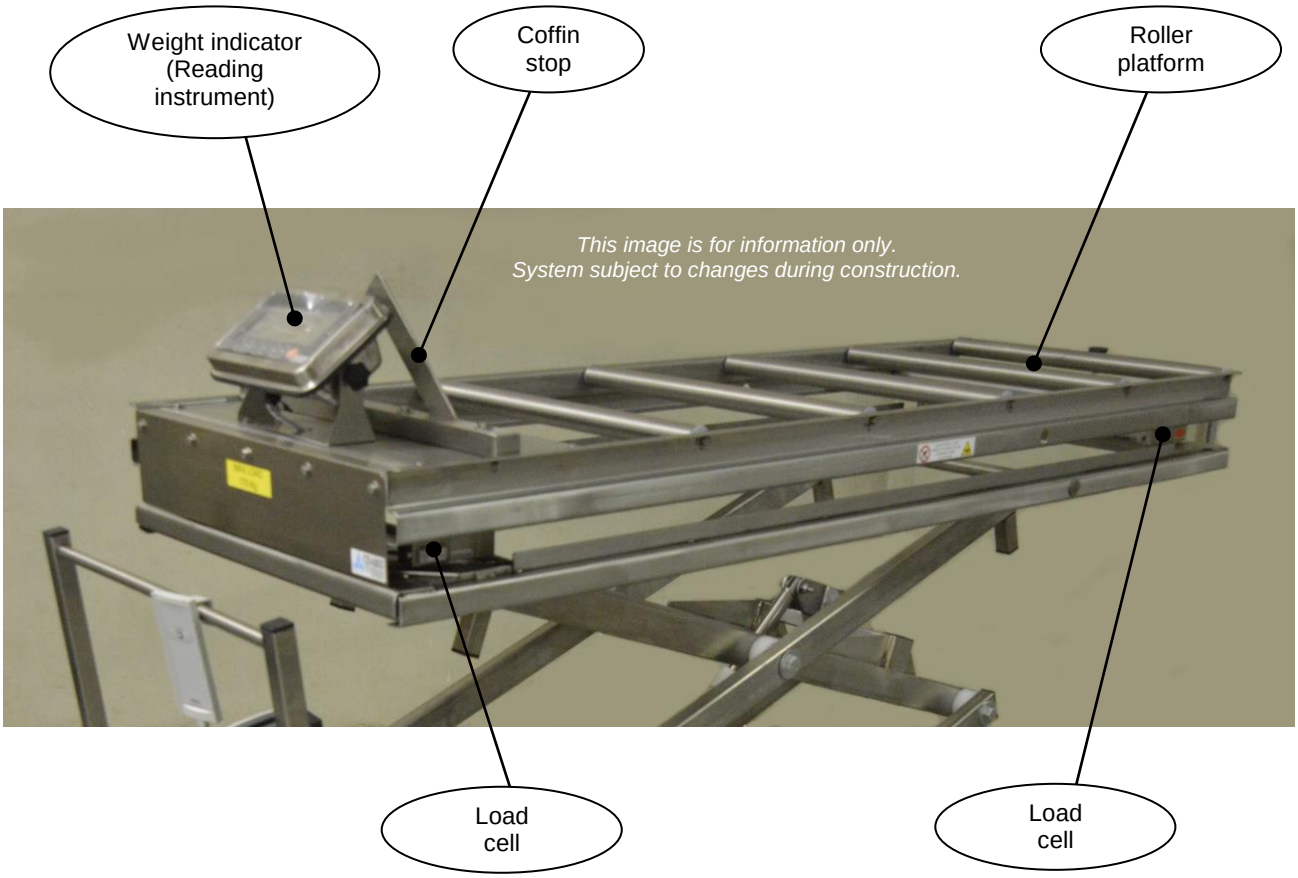
WIRING DIAGRAM





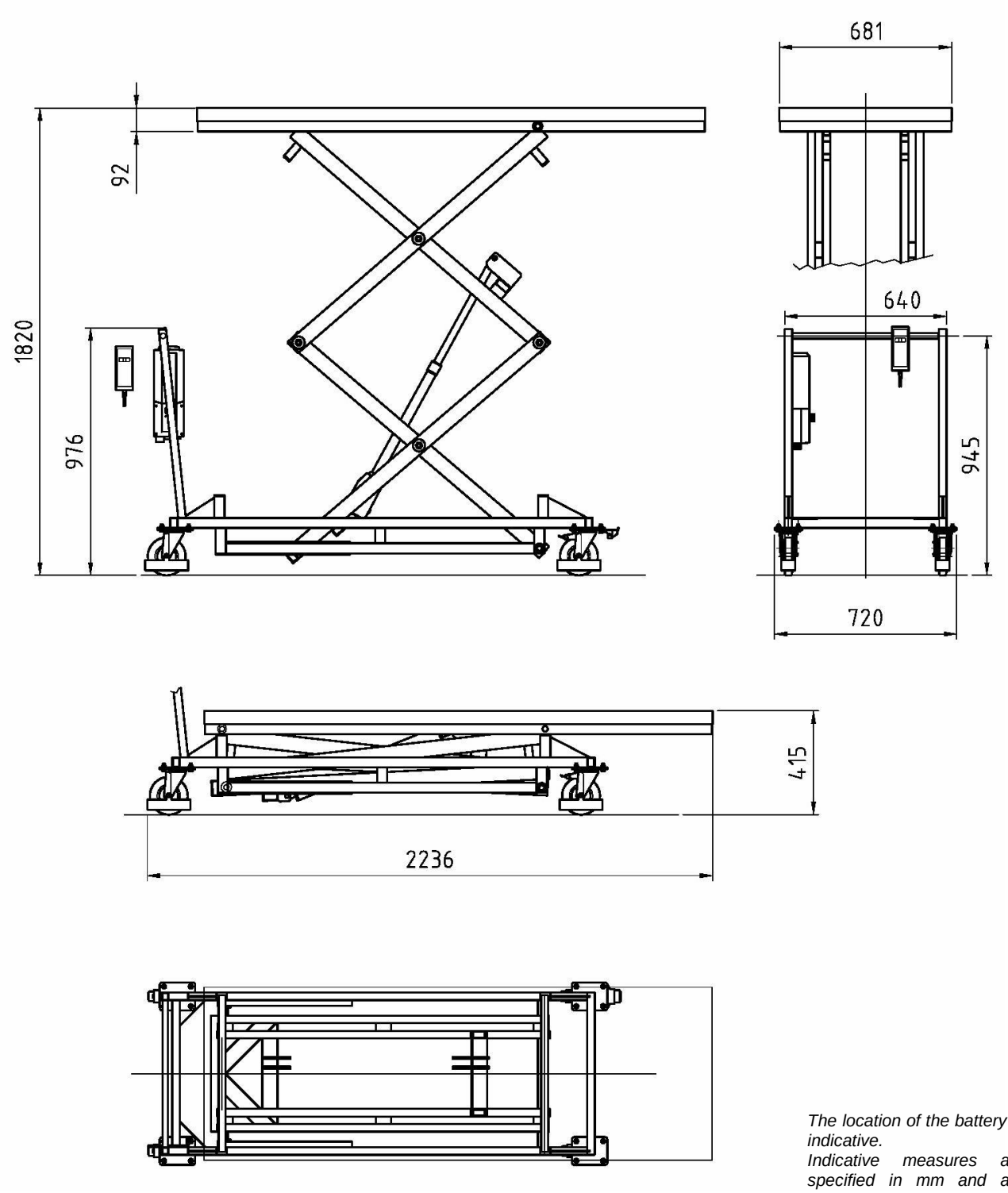
***** MODELS WITH (ELECTRONIC) WEIGHING SYSTEM *****

GENERAL MACHINE DIAGRAM



***** ELECTRIC MODELS *****

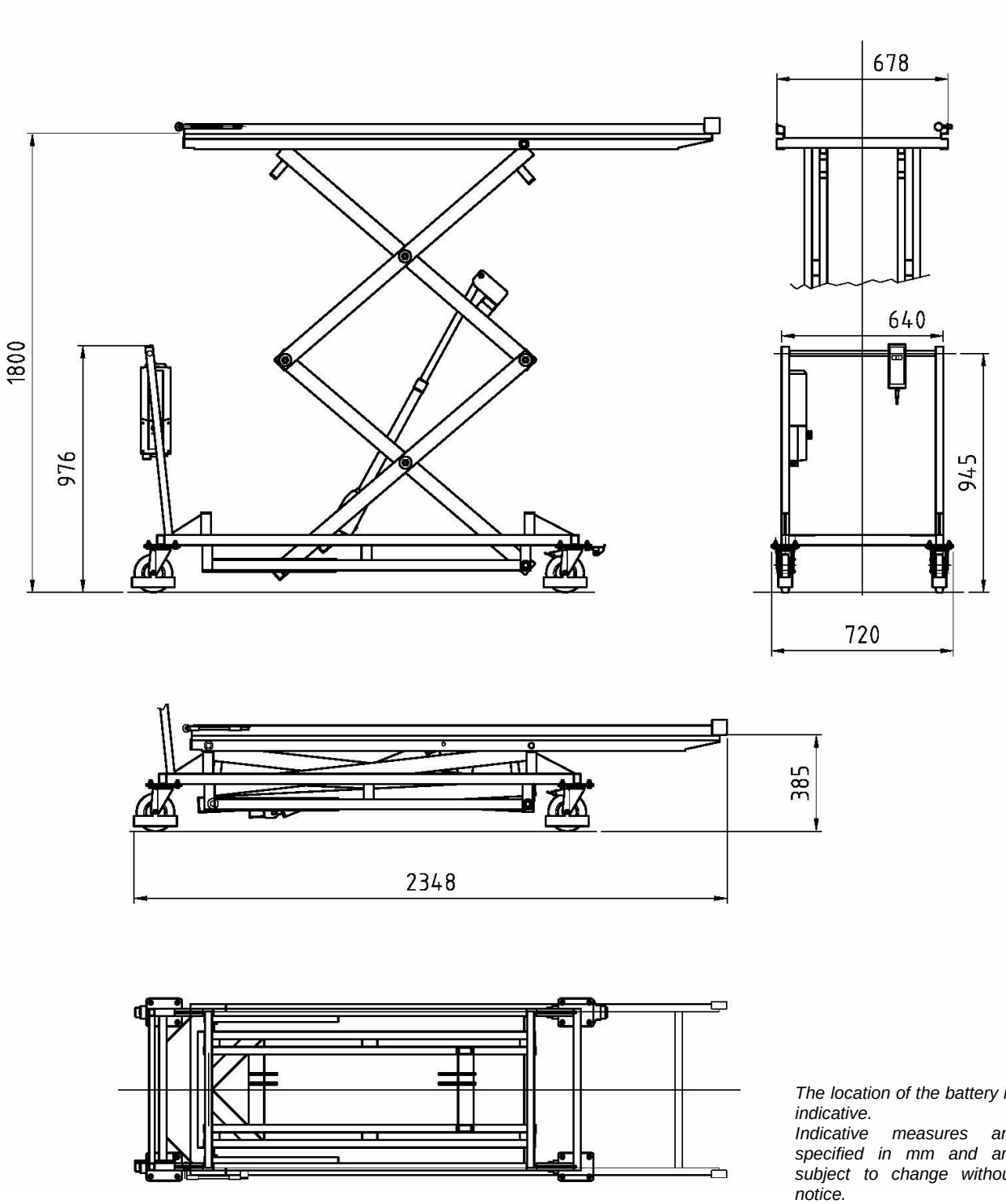
LAYOUT DIAGRAM
(with smooth platform)



The location of the battery is indicative.
Indicative measures are specified in mm and are subject to change without notice.

***** ELECTRIC MODELS *****

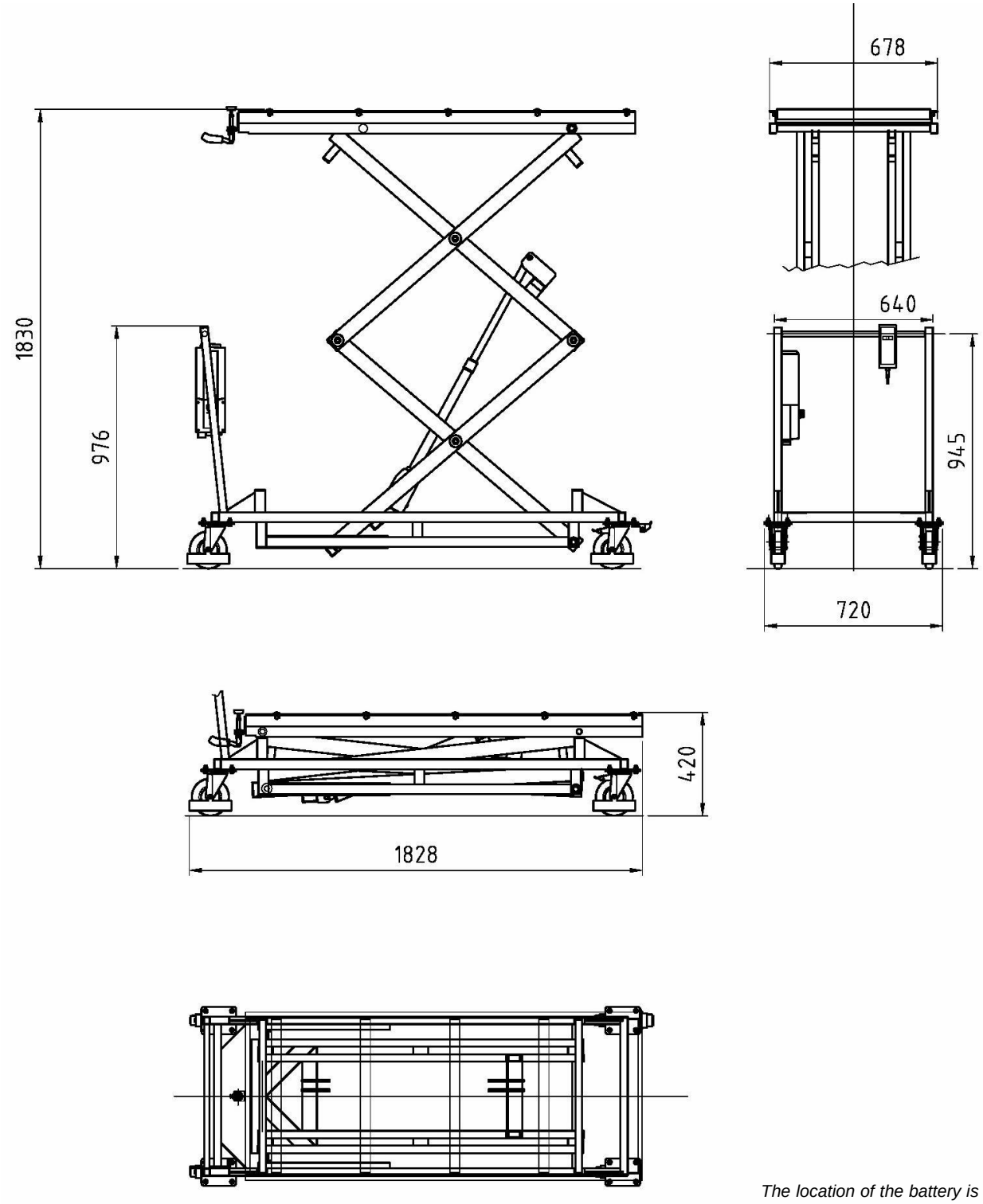
LAYOUT DIAGRAM
(with platform for CEABIS stretcher)



The location of the battery is indicative.
Indicative measures are specified in mm and are subject to change without notice.

***** ELECTRIC MODELS *****

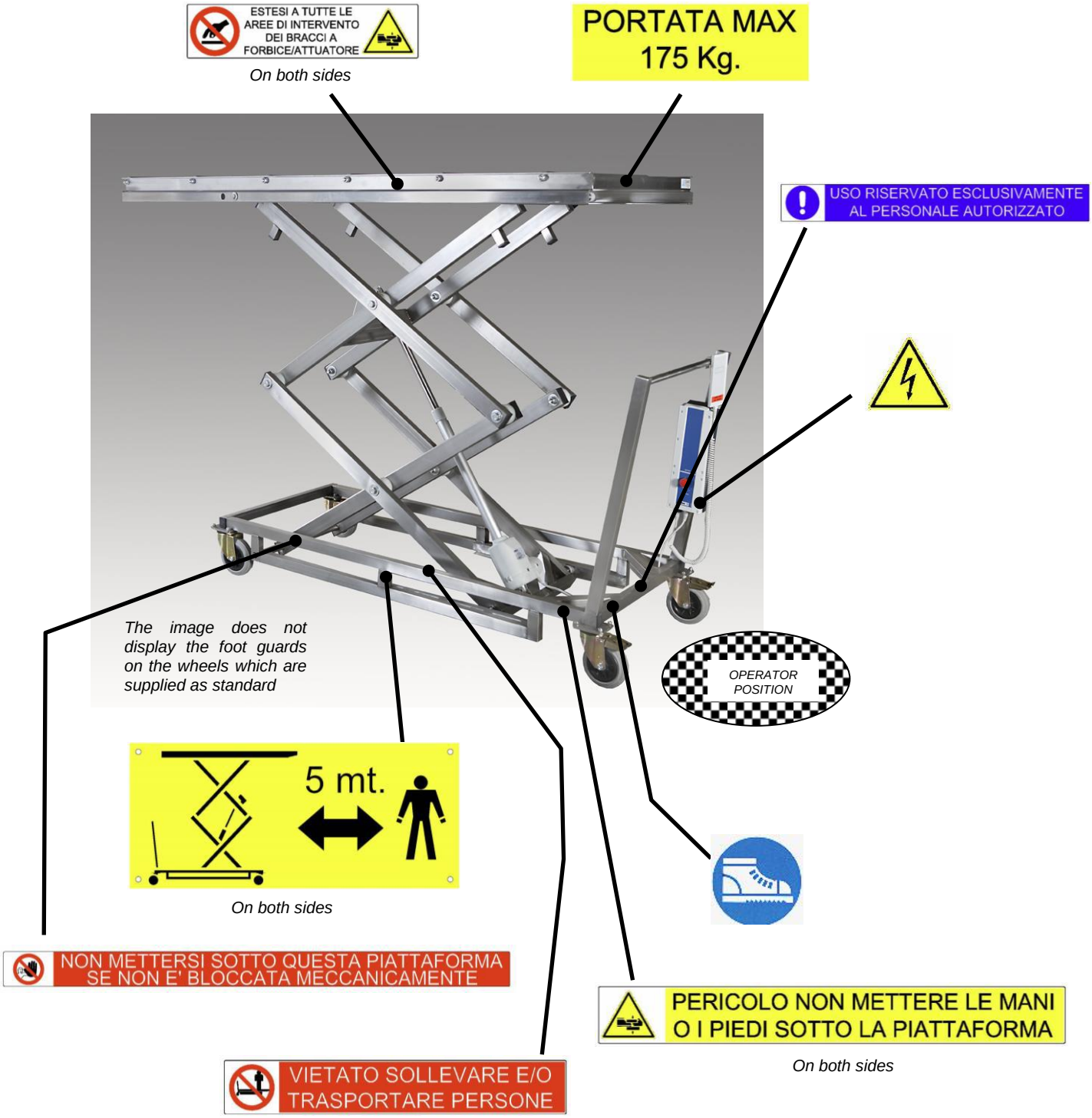
LAYOUT DIAGRAM
(with roller platform)



The location of the battery is indicative.
Indicative measures are specified in mm and are subject to change without notice.

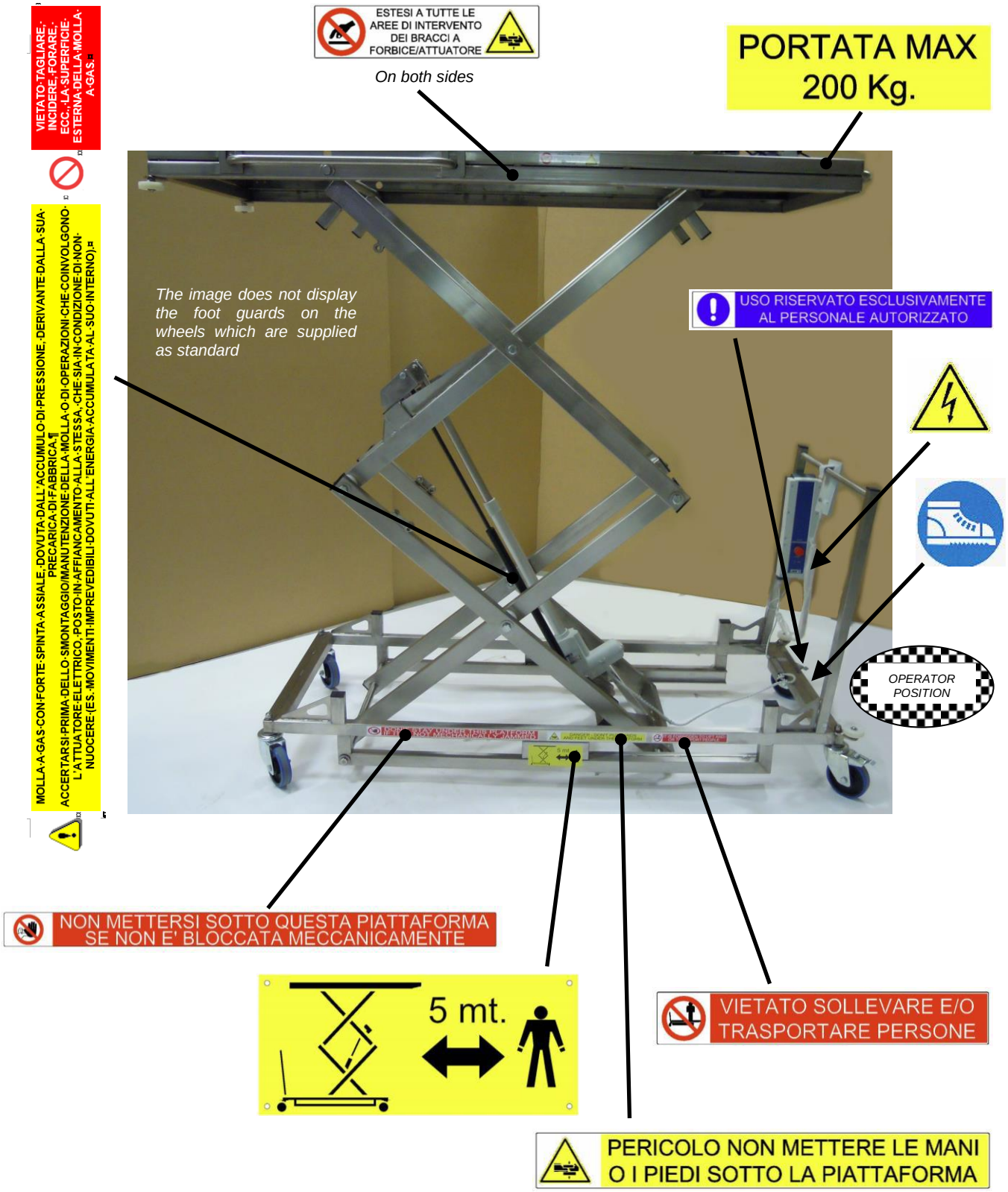
***** ELECTRIC MODELS *****

DIAGRAM OF SYMBOLS APPLIED
(EXCLUDING VERSION WITH GAS SPRINGS)



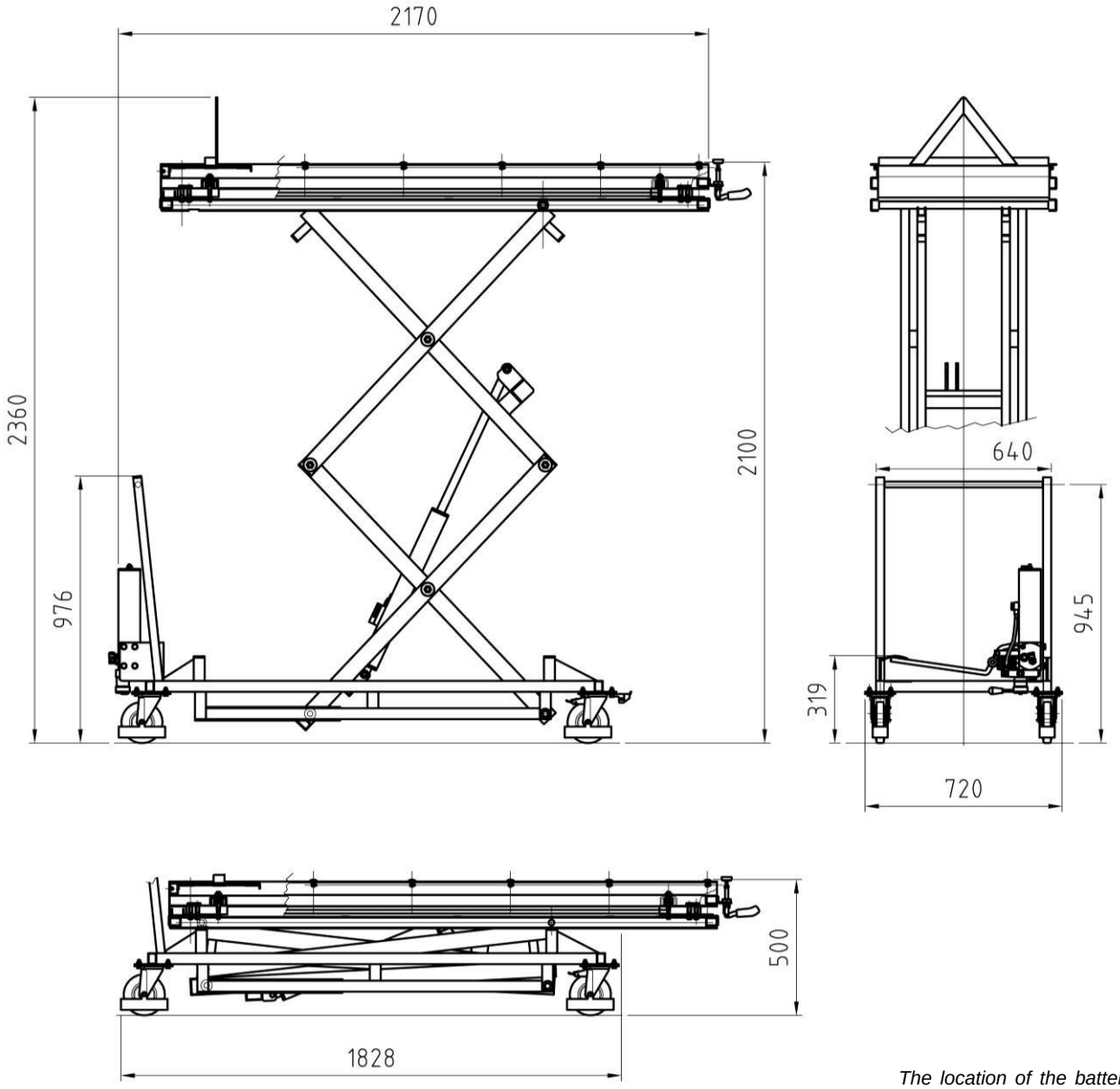
***** ELECTRIC MODELS *****

DIAGRAM OF SYMBOLS APPLIED
(ONLY VERSION WITH GAS SPRINGS)



***** MODELS WITH ELECTRONIC WEIGHING *****
HYDRAULIC MODELS

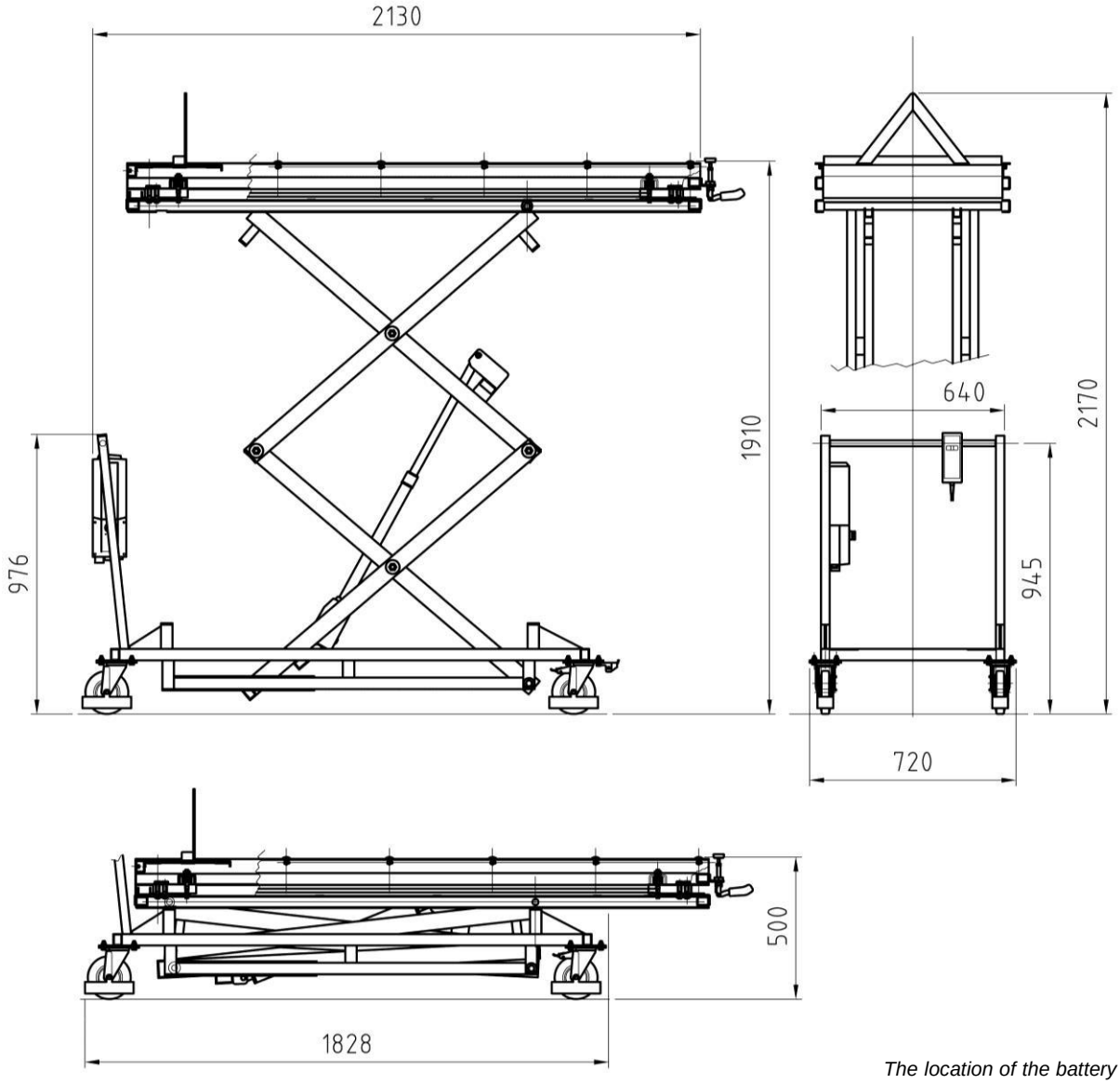
LAYOUT DIAGRAM
(with roller platform)



The location of the battery is indicative.
Indicative measures are specified in mm and are subject to change without notice.

***** MODELS WITH ELECTRONIC WEIGHING *****
(with electric models)

LAYOUT DIAGRAM
(with roller platform)



The location of the battery is indicative.
Indicative measures are specified in mm and are subject to change without notice.

***

FOR ELECTRIC MODELS/ELECTRONIC WEIGHING SYSTEM EQUIPMENT ONLY

See the documentation in the appendix for the instructions for use of the electric actuator and/or the weighing device

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