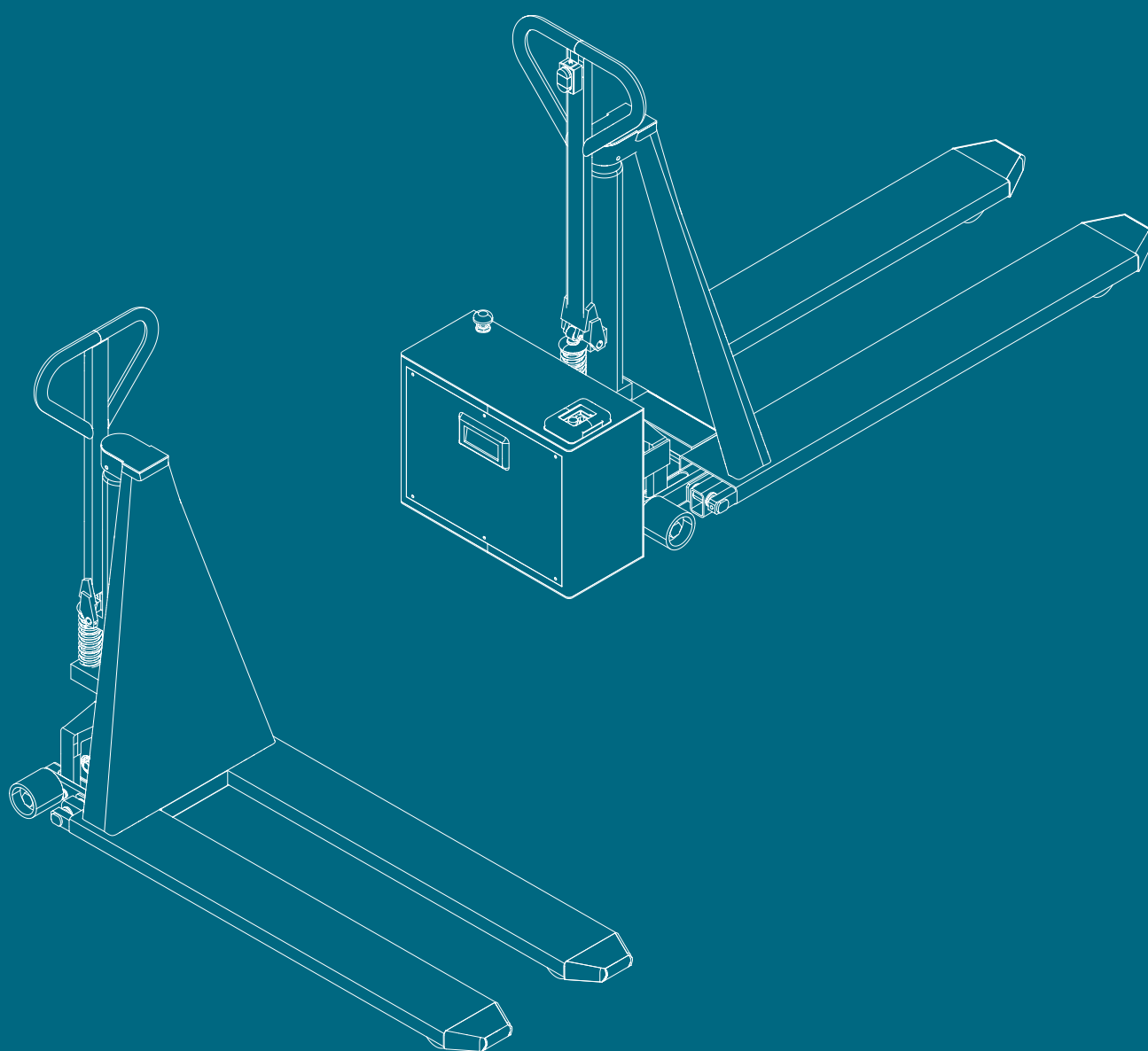




User and Maintenance Manual

ORIGINAL INSTRUCTIONS



PTM 1.0 SCISSOR INOX
PTM 1.0 SCISSOR INOX ELECTRIC

INTRODUCTION

All rights reserved. No part of this manual may be reproduced or transmitted by any electronic or mechanical means, including photocopying, recording or any other storage and retrieval system, for any purpose other than the purchaser's personal use, without the express written permission of the Manufacturer.

The Manufacturer shall in no way be liable for any consequences arising from any incorrect operations carried out by the user.

All the instructions set out in this manual must be followed. If you require a hard copy of the manual, please contact: info@badamh.com

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1. GENERAL PRELIMINARY INFORMATION

1.1. PURPOSE OF THIS DOCUMENT

This manual contains information on the correct and safe use of the machine, from installation to dismantling.

1.2. ADDRESSEES

This manual is intended for **authorised personnel responsible for operating and maintaining the machine throughout its technical life cycle.**

1.3. FORMAT AND STORAGE

The manual is **available in both printed and electronic formats.**

The manual is an integral part of the safety procedures. It must:

- ◆ **Be kept in good condition so that it can be consulted** throughout the machine's service life.
- ◆ **Stay with the vehicle until it is scrapped**, even if it is moved or resold.

In the event of damage or loss, please request a copy of the manual from the manufacturer.

Additional documentation for the machine is attached to the manual (e.g. electrical diagrams, pneumatic diagrams, sub-supplier manuals, etc.). The additional documentation is also an integral part of the machine.

1.4. UPDATES

In the event of modifications and/or functional replacements to the machine, the manufacturer must send the user an updated copy of the relevant sections of the manual affected by the modification.

The user must dispose of obsolete parts.

1.5. LANGUAGE

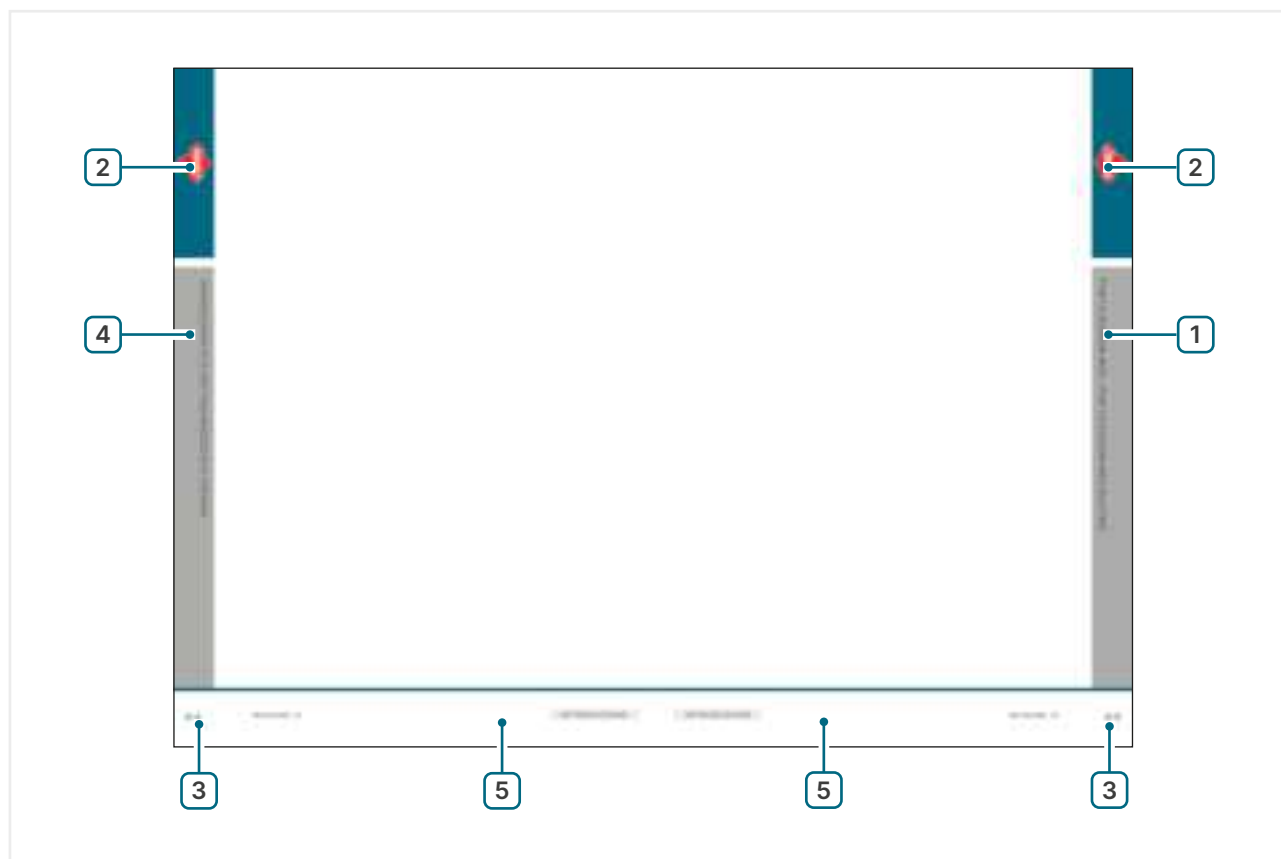
The original manual is in **Italian**.

The Italian language is the source of every translation.

1.6. HOW TO USE THIS MANUAL

This manual has been organised in such a way as to make it easy to find the topic you are interested in. The pages are designed to provide the operator with important information, regardless of which page they are on:

POS.	ITEM
1	Machine Type
2	Company logo
3	Page number
4	Document type
5	Chapter number and title



This manual contains photographs or diagrams to help you understand the topics covered. Sometimes, some of these differ slightly from the actual appearance of the vehicle, but this does not distort the nature of the content, which remains reliable and accurate.

1.7. CONSULTATION NOTES

Symbols are used throughout the manual to highlight information of particular importance.

The following are the ones used:

SYMBOL	TYPE	DESCRIPTION
-	Bold text	Highlight some key sentences and the references in the text.
	General or specific warning sign	Highlights risk to the health and safety of authorised personnel and/or risks of damage to or malfunction of the machine.
	General or specific prohibition sign	It indicates that an action is prohibited.
	General or specific obligation sign	Indicates a requirement (an obligation to perform an action).
	Sign indicating that the manual must be read	To use the machine safely, you must read and understand the manual and the accompanying documentation in their entirety.



DANGER

Indicates a high-risk hazard that may result in death or serious injury



WARNING

Indicates a hazard with a medium level of risk that may result in death or serious injury.



ATTENTION

Indicates a hazard with a low level of risk that may result in minor or non-serious injuries.



INFORMATION

Indicates and important piece of information.



1.8. DEFINITION OF THE QUALIFICATIONS OF AUTHORISED STAFF FOR THE PURPOSES OF PROFESSIONALISM

The table sets out the qualifications of staff authorised to practise their tasks.

QUALIFICATION	DESCRIPTION
OPERATOR 	Staff responsible for operating the material-processing machine. They are able to carry out all the tasks necessary to ensure the machine operates correctly and to safeguard their own safety and that of any colleagues. Note: He/she is not authorised to carry out maintenance work.
MECHANICAL MAINTENANCE PERSON 	A qualified technician capable of: ◆ Operating the machine just like the operator ◆ Carrying out work on mechanical components for adjustment, maintenance and repairs ◆ Reading pneumatic, hydraulic and oleodynamic diagrams, technical drawings and lists of the spare parts. In exceptional circumstances, he is trained to operate the machine with reduced safety measures. If necessary, he or she can provide the operator with instructions on how to use the machine effectively for production purposes. Note: The user is not authorised to carry out work on live electrical installations (if available).
ELECTRICAL MAINTENANCE PERSON 	A qualified technician capable of: ◆ Operating the machine just like the operator ◆ Carry out maintenance work on electrical settings and installations, repair and replacement of worn parts ◆ Read circuit diagrams and check that the operational cycle is correct. If necessary, he or she can provide the operator with instructions on how to use the machine effectively for production purposes. Work may only be carried out whilst electrical circuits are live inside switchboards, junction boxes, control equipment, etc., if the person carrying out the work is a qualified person (PEI). Note: He/she does not carry out software programming for systems such as PLCs (logic or safety) and cannot change system passwords.
MANUFACTURER'S TECHNICIAN 	MANUFACTURER'S TECHNICIAN: A qualified technician employed by the manufacturer and/or its authorised service centre, capable of carrying out complex operations due to their knowledge of the machine's construction. Operates in accordance with the user's requirements.
LIFTING EQUIPMENT OPERATOR 	Staff qualified to operate equipment for lifting and handling materials and machinery, in accordance with the laws in force in the country where the device is used.

1.9. DIFINITIONS AND GLOSSARY

1.9.1. DEFINITIONS UNDER THE MACHINERY DIRECTIVE 2006/42/EC

The following definitions, as set out in paragraph 1.1.1 of **Directive 2006/42/EC**, have been applied in the design of the machine.

TERM	DESCRIPTION
Hazard	A potential source of injury or harm to health.
Hazardous area	Any area within and/or in the vicinity of a machine where the presence of a person poses a risk to that person's health and safety.
Exposed person	Any person who is wholly or partly within a hazardous area.
Risk	A combination of the probability and severity of an injury or harm to health that may arise in a hazardous situation.
Safety device	A machine component specifically designed to provide protection by means of a physical barrier.
Protection device	A device (other than a guard) that reduces the risk, either on its own or in combination with a guard.
Intended use	The machine is used in accordance with the information provided in the user manual.
Reasonably foreseeable misuse	Use of the machine in a manner other than that specified in the user manual, but which may result from easily foreseeable human behaviour.



1.9.2. GLOSSARY SPECIFIC TERMS

The specific terms used by the Manufacturer are listed and described below.

TERM	DESCRIPTION
Alarm	Reporting faults and malfunctions.
Anomaly	Report of a discrepancy between the command issued and the response from the sensors.
Stop	A deliberate action by the user intended to interrupt the machine's operating cycle.
Operator panel	Operator panel: Electronic display (human-machine interface) used for monitoring and adjusting production settings, operating parameters and alarm signals.

1.9.3. ABBREVIATIONS

The abbreviations used in this manual are listed and described below.

ABBREVIATION	DESCRIPTION
Cap.	Chapter
Par.	Paragraph
Fig.	Picture
Nr.	Number
Pos.	Position
Tot.	Total
Max.	Maximum
Min.	Minimum
L	Left
R	Right
P.P.E.	Personal protective equipment
HMI	Human-machine interface (operator panel)
SrP/CS	Safety-related parts of control systems
PFHD	Average probability of a dangerous failure per hour



1.9.4. UNIT OF MEASUREMENT

The units of measurement used in this manual are listed and defined below.

UNIT OF MEASUREMENT	DESCRIPTION
Kg	Mass
t	Mass
mm	Length
kW	Power
Nm	Torque
A	current draw
V	Electrical potential
Hz	Frequency
Bar	Pressure
NI/m	Air compressed consumption
l	Capacity
dB	Noise emission
°C	Temperature (Celsius)



1.10. PERSONAL PROTECTIVE EQUIPMENT

When working near the machine, follow the general health and safety guidelines. Use the personal protective equipment specified in each procedure.

The table sets out the complete list of personal protective equipment that may be required in the procedures set out in this manual.

SYMBOL	REQUIREMENT	DESCRIPTION
	COMPULSORY USE OF HEAD PROTECTION	This requires staff to wear a safety helmet.
	COMPULSORY USE OF PROTECTIVE GLOVES	This requires staff to wear protective or insulating gloves.
	COMPULSORY USE OF SAFETY GLASSES	This requires staff to wear protective eyewear.
	COMPULSORY USE OF SAFETY FOOTWEAR	This requires staff to wear safety shoes to protect their feet.
	COMPULSORY USE OF NOISE PROTECTION EQUIPMENT	This requires staff to wear ear defenders or earplugs to protect their hearing.
	COMPULSORY USE TO WEAR PROTECTIVE CLOTHING	This requires staff to wear specific protective clothing.

The clothing worn by those carrying out operations or maintenance must comply with the following:

- ◆ Basic safety requirements as defined by the **Regulation EU 2016/425**
- ◆ The laws in force in the country where the machine is installed





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2. IDENTIFICATION

2.10.0.1. MANUFACTURER IDENTIFICATION

Manufacturer	BADA Material Handling s.r.l.
Address	Via Albere, 3/Q 36060 Romano d'Ezzelino (VI) - Italia
Contacts	Tel. +39 0424 382080

2.1. MACHINE IDENTIFICATION

Machine	PANTOGRAPH PALLET TRUCK
Model	PTM 1.0 SCISSOR INOX - PTM 1.0 SCISSOR INOX ELECTRIC
Serial number	XXXX
Year of manufacture	2026

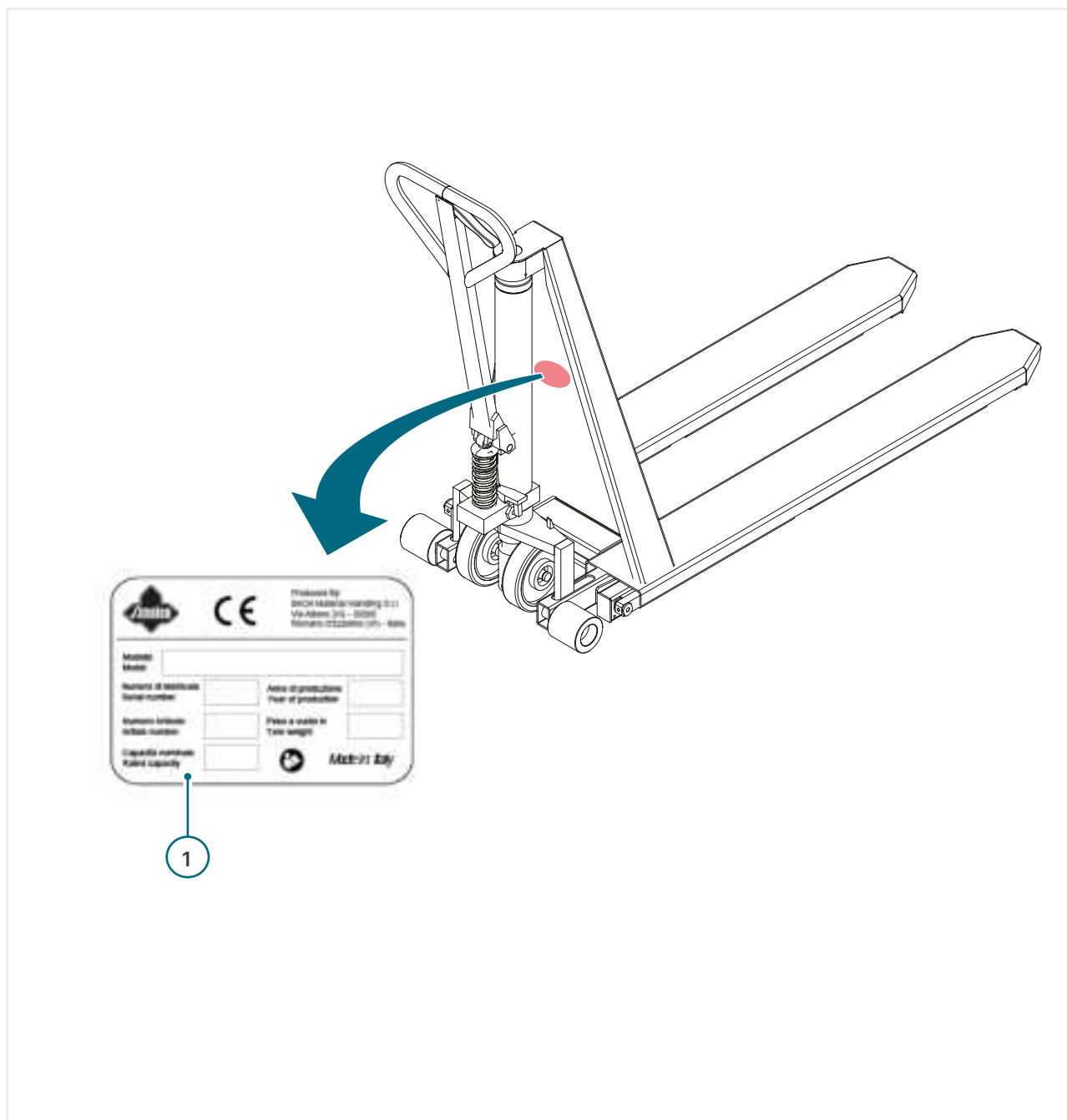


2.2. IDENTIFICATION PLATE

The **CE 1 identification plate** is located on the back of both models.

The identification plate bears the machine's identification details, which should be provided to **BADA Material Handling s.r.l.** if required.

- ◆ POSITIONING OF THE **PTM 1.0 SCISSOR INOX** MACHINE IDENTIFICATION PLATE:



INFORMATION

Do not remove the identification plate and/or replace it with another plate. Please contact the manufacturer if necessary.



CHAPTER 2 - IDENTIFICATION

2-3

2.3. COPY OF THE DECLARATION OF CONFORMITY



DICHIARAZIONE ORIGINALE "CE" DI CONFORMITA'
DECLARATION ORIGINALE "CE" DE CONFORMITE
"EC" ORIGINAL DECLARATION OF CONFORMITY



FABBRICANTE/SEDE LEGALE – SEDE:
Fabricant/Siège Statutaire - Siège: - Manufacturer/Legal Seat - Location:

BADA Material Handling s.r.l. a socio unico
Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY
Tel. : +39 0424 382080 – Mail: info@badamh.com – Web: badamh.com

DETENTORE DEL FASCICOLO TECNICO:
Titulaire du dossier technique: - Technical file holder:

BADA Material Handling s.r.l. a socio unico
Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY
Tel. : +39 0424 382080 – Mail: info@badamh.com – Web: badamh.com

DICHIARA CHE IL/LA (descrizione):
Déclare que le/la (description): - Declares that the (description):

TRANSPALLET MANUALE A PANTOGRAFO:
Transpalette manuel ciseaux: - Scissor lift hand pallet truck:

Modello: PTM 1.0 SCISSOR INOX
Modèle: - Model:

Numero articolo: 606098
Numéro d'article:
Article Number:

Numero di serie: 4143
Numéro de série:
Serial Number:

Anno di costruzione: 2026
Année de fabrication:
Year of Manufacture:

E' conforme a tutte le disposizioni della Direttiva Macchine: 2006/42/CE
Est conforme à toutes les normes de la Directive Machine:
It is in conformity with all the standards Machinery Directive:

Data e Luogo Dichiarazione: 25/06/2026
Date et Lieu de la Déclaration: Romano d'Ezzelino
Date and Place of the Declaration: (VI-ITALY)

Firma Responsabile Dichiarazione e Mansioni: Battocchio Luca
Signature du Responsable de la Déclaration et Fonctions:
Signature of the Responsible of the Declaration and Office:

.....
Responsabile tecnico
Directeur technique - Technical manager



Manufactured by:
BADA Material Handling s.r.l. a socio unico - Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY

DICHIARAZIONE ORIGINALE "CE" DI CONFORMITA'
DECLARATION ORIGINALE "CE" DE CONFORMITE
"EC" ORIGINAL DECLARATION OF CONFORMITY



FABBRICANTE/SEDE LEGALE – SEDE:
Fabricant/Siège Statutaire - Siège: - Manufacturer/Legal Seat - Location:

BADA Material Handling s.r.l. a socio unico
Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY
Tel. : +39 0424 382080 – Mail: info@badamh.com - Web: badamh.com

DETENTORE DEL FASCICOLO TECNICO:
Titulaire du dossier technique: - Technical file holder:

BADA Material Handling s.r.l. a socio unico
Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY
Tel. : +39 0424 382080 – Mail: info@badamh.com - Web: badamh.com

DICHIARA CHE IL/LA (descrizione):
Déclare que le/la (description): - Declares that the (description):

TRANSPALLET MANUALE A PANTOGRAFO A SOLLEVAMENTO ELETTRICO :
Transpalette manuel ciseaux (élévation électrique) : - Electric scissor lift hand pallet truck :

Modello: PTM 1.0 SCISSOR INOX ELECTRIC
Modèle: - Model:

Codice Articolo: 606097
Code article:
Article Number:

Numero di serie: XXXX
Numéro de série:
Serial Number:

Anno di costruzione: 2026
Année de fabrication:
Year of Manufacture:

E' conforme a tutte le disposizioni della Direttiva Macchine: 2006/42/CE
Est conforme à toutes les normes de la Directive Machine:
It is in conformity with all the standards Machinery Directive:

E' inoltre conforme alle direttive:
En outre conforme aux Directives:
Moreover it is in conformity with:

Compatibilità Elettromagnetica: EMC 2014/30/UE - EN 12895
Compatibilité Electromagnétique:
Electromagnetic Compatibility:

Data e Luogo Dichiarazione: 25/06/2026
Date et Lieu de la Déclaration: Romano d'Ezzelino
Date and Place of the Declaration: (VI-ITALY)

Firma Responsabile Dichiarazione e Mansione: Battocchio Luca
Signaure du Responsable de la Déclaration et Fonctions:
Signature of the Responsible of the Declaration and Office:

Responsabile tecnico
Directeur technique - Technical manager



Manufactured by:
BADA Material Handling s.r.l. a socio unico - Via Albere 3/Q Z.I. 36060 ROMANO D'EZZELINO (VI) – ITALY

PTM 1.0 SCISSOR INOX - PTM 1.0 SCISSOR INOX ELECTRIC

2.4. STANDARD DIRECTIVES

The machine does not fall within any of the categories set out in the list in Annex IV to the Machinery Directive 2006/42/EC. For the purposes of the declaration of conformity, the manufacturer has applied the conformity assessment procedure with internal checks on the manufacture of the machinery, as set out in Attachment VIII.

The manufacturer carried out a risk assessment before placing the machinery on the market.

Risk assessment enables verification of compliance with the essential health and safety requirements laid down in the Machinery Directive 2006/42/EC.

The technical construction file complies with the provisions of Annex VII to the Machinery Directive 2006/42/EC. It is available for inspection by the supervisory authorities upon receipt of a reasoned request, as provided for by the relevant legislation in force.

The manufacturer places the machine on the market, accompanied by:

- ◆ CE marking
- ◆ EC Declaration of Conformity (where applicable)
- ◆ User and Maintenance Manual (documentation drawn up in accordance with section 1.7.4 of the Machinery Directive 2006/42/EC).

The machine complies with the following Directives:

- ◆ Machinery Directive 2006/42/CE
- ◆ Electromagnetic Compatibility Directive 2014/30/EU

2.5. WARRANTY

INFORMATION



The full terms of the warranty and further details are set out in the sales contract. The terms set out in the commercial contract (if different) take precedence over the provisions of this paragraph.

The machine has been delivered, tested and is ready for use. Installation and initial commissioning are carried out by technicians authorised by **BADA Material Handling s.r.l.** . The duration of the warranty is set out in the sales contract. The warranty is **subject** to the following general terms and conditions:

- ◆ **Unpacking and installation** must be carried out by technicians authorised by the Manufacturer.
- ◆ The **initial start-up and successful testing** of the installed machine must be carried out in the presence of, and under the supervision of, technicians authorised by the manufacturer. The work sheet relating to the installation/commissioning of the machine must be filled in.
- ◆ **The machine must be used within the limits specified** in the contract and set out in the technical documentation.
- ◆ **Maintenance** must be carried out in accordance with the timescales and procedures set out in the manual, using original spare parts and ensuring that the work is carried out by qualified personnel.

The warranty **is void** in the event of:

- ◆ Failure to comply with the **security rules**;
- ◆ **Removal or tampering** with control and safety devices
- ◆ **Changes to the safety conditions** specified by the manufacturer in the management software for the machine.
- ◆ **Misuse of the machine**
- ◆ Use of the machine by **untrained and/or unauthorised personnel**, or failure to comply with the roles and responsibilities of the various operators, as set out in the manual
- ◆ **Modifications or repairs** carried out by the user without the manufacturer's written authorisation
- ◆ Partial or total **failure to follow** the instructions contained in this manual
- ◆ **Poor maintenance**
- ◆ Use of **non-original spare parts**
- ◆ **Exceptional events** such as flooding and fires (provided they were not caused by the car)





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3. SAFETY DEVICES

3.1. GENERAL SAFETY WARNINGS

This chapter informs authorised personnel about risks and hazards of particular significance, and about the general and specific precautions to be taken to eliminate or neutralise them.

This chapter contains information and instructions relating to:

- ◆ **Hazards** that may arise during the use and maintenance of the machine
- ◆ **Protective equipment, guards and safety devices** in use, and their correct use
- ◆ **Residual risks** and appropriate actions to take (general and specific precautions to eliminate or minimise them).

The instructions are summarised later in this manual, in the sections where the situations described arise.



Before operating the machine, please read this instruction manual to familiarise yourself with the machine's features, operating conditions and the hazards to be avoided. Failure to do so may result in a failure to recognise potentially hazardous situations, which could cause serious injury to exposed operators. If you are in any doubt as to the correct interpretation of the instructions, please contact the manufacturer for the necessary clarification.

DANGER



Electrical hazard

Do not open electrical panels, terminal blocks or junction boxes whilst the machine is powered.



Do not use the machine without guards and/or with safety devices disabled.



It is forbidden to climb onto and/or scale the machine's metal structures.



Access to work areas is prohibited to anyone not involved in operating the machine.



Do not remove, alter or disable the safety devices fitted to the machine.



Carry out maintenance and/or adjustment work only when the machine is at a standstill and with the main power switch is in the 0 – OFF position and padlocked.



Only qualified and trained staff may operate the machine. Staff must wear the personal protective equipment specified in the procedures set out in this manual.



INFORMATION

For the sake of clarity, some illustrations show parts of the machine with the guards removed.



INFORMATION

The use of non-genuine spare parts will invalidate the warranty and hold the Manufacturer harmless from any liability for injury to persons, animals or property, or for production downtime resulting from defects in the machine.

3.2. OBLIGATIONS AND PROHIBITIONS

3.2.1. OBLIGATIONS

Authorized personnel **must**:

- ◆ Check daily that all control and safety devices are working correctly
- ◆ Always carry out maintenance work whilst the machine is switched off
- ◆ Tie back long hair, avoid scarves or other items of clothing that could get caught, and dragged into the moving parts of the machine
- ◆ Always carry out work on the electrical switchboard, junction boxes, cables and all components of the electrical system with the main isolator in the **0 – OFF** position
- ◆ Ensure that no one is in hazardous areas whilst the machine is starting up
- ◆ Take the utmost care to avoid causing damage to property or injury to people whilst carrying out manual operations
- ◆ Comply with the regulations and instructions issued by the employer, managers and supervisors, for the purposes of collective and individual protection
- ◆ Use machinery, equipment, tools, hazardous substances and preparations, means of transport and other work equipment, as well as safety devices, correctly
- ◆ Use the protective equipment provided to them correctly.

3.2.2. PROHIBITIONS

Authorised staff **must not**:

- ◆ Remove or alter safety, signalling or control devices without authorisation
- ◆ Carry out, on their own initiative, operations or manoeuvres that fall outside their remit or that may jeopardise their own safety or that of other workers
- ◆ Wear bracelets, rings or necklaces that may dangle and become caught in moving machinery, posing a hazard to the operator
- ◆ Use products other than those specified
- ◆ Replace or adjust the speeds of the machine's components
- ◆ Change the machine's operating cycle
- ◆ Modify the electrical connections to bypass the internal safety devices
- ◆ Use the machine improperly, i.e. for purposes other than those specified in the section "**Intended use**"
- ◆ Use the machine outside the permitted environmental conditions.



3.3. NOISE

The machine has been designed and built to reduce airborne noise emissions at source.

During operation, staff are exposed to noise levels below 80 dB.

The actual noise level of the installed machine during operation differs from that measured at the manufacturer's premises. Noise is affected by:

- ◆ Type and characteristics of the installation site
- ◆ Other adjacent machines in operation

INFORMATION



It is the user's sole responsibility to implement the necessary preventive and protective measures in accordance with the legislation of the country in which the machine is installed and used.

3.4. VIBRATIONS

The machine does not transmit vibrations to the ground exceeding 2.5 m/s².

The vibrations emitted do not affect the stability or accuracy of any equipment located nearby.

Using the machine when it is in poor condition or employing the wrong tools may cause significant changes in vibration levels, jeopardising staff health and/or the successful completion of the work.



A mechanical fault may cause excessive vibration. Report the fault to the manufacturer so that it can be rectified.

3.5. ELECTROMAGNETIC COMPATIBILITY

The machine complies with the Electromagnetic Compatibility (EMC) Directive.

The machine contains electronic components that are subject to regulations on electromagnetic compatibility, which are governed by conducted and radiated emissions.

The emission levels comply with regulatory requirements thanks to the use of components that comply with the Electromagnetic Compatibility Directive, appropriate connections and the installation of filters where necessary.



Any maintenance work carried out on the electrical equipment in a manner that does not comply with the specifications, or incorrect replacement of components, may compromise the effectiveness of the solutions implemented.

3.6. SAFETY DEVICES

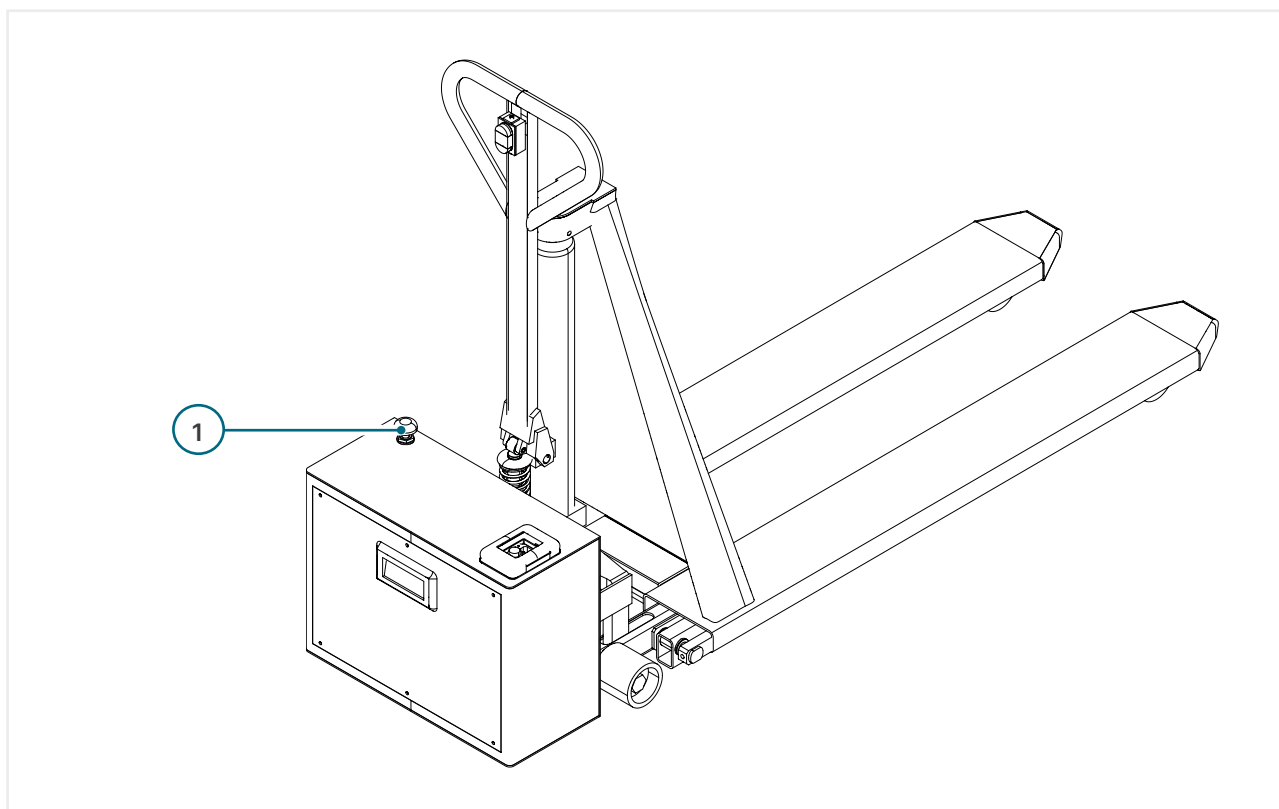
The safety devices fitted to the machine are:

- ◆ Main electrical disconnecting switch.

3.6.1. MAIN ELECTRICAL DISCONNECTING SWITCH

Main disconnecting switch 1 is located on the housing and is used to switch the power supply to the PTM 1.0 SCISSOR INOX ELECTRIC machine on and off.

Effect on the machine in the event of activation	Stops the machine immediately and disconnects the power supply.
Activation condition	The button is pressed manually and remains locked in the pressed position. Press in the event of: ◆ Hazard to the safety of authorised personnel ◆ Hazard to the machine itself.
Reset condition	Pull the button upwards to unlock it and return it to the raised position.



3.7. RESIDUAL RISKS

The essential safety requirements for the operator are ensured by the machine's design. However, residual risks remain, from which operators must be protected, particularly during the following stages:

- ◆ Transport and installation
- ◆ Normal functioning
- ◆ Adjustment and fine-tuning
- ◆ Maintenance and cleaning
- ◆ Dismantling and decommissioning

For each residual risk, a description is provided, along with an identification of the area or part of the machine where it remains (unless the risk applies to the entire machine). Procedural information is provided on how to avoid the risk and on the correct use of the personal protective equipment specified by the manufacturer.

RESIDUAL RISK	RISK DESCRIPTION AND PROCEDURAL INFORMATION
Risk of impact and crushing	During maintenance work whilst the machine is in operational shutdown mode, there remains a risk of impact and crushing due to maintenance work being carried out in areas and/or on parts of the machine that are not sufficiently lit. <u>To reduce the risk:</u> ◆ It is compulsory to carry a portable lighting system, taking care to avoid areas of shadow that might obstruct or reduce visibility of the area where work is to be carried out or the surrounding areas. ◆ Use battery-powered lighting or lighting fitted to columns and connected to the plant's mains supply ◆ Do not direct auxiliary lighting devices directly into the operator's eyes so as not to dazzle them ◆ Even where lighting devices are provided, the workplace must, as far as possible, have sufficient natural light and be equipped with devices that provide adequate artificial lighting to ensure the operator's safety. The average illuminance in the work area must be 500 lux.   Take care with your hands when using the machine.  To use the machine safely, you must read and understand the manual and the accompanying documentation in their entirety   Wear personal protective equipment (PPE): gloves and safety shoes.

RESIDUAL RISK	RISK DESCRIPTION AND PROCEDURAL INFORMATION
Risk of crushing and shearing	During operation, cleaning, maintenance and troubleshooting, there is a risk of crushing and/or shearing of the hands or feet. <u>To reduce the risk:</u> ◆ Follow the procedures and warnings set out in this manual    Take care with your hands when using the machine.  To use the machine safely, you must read and understand the manual and the accompanying documentation in their entirety.   Wear personal protective equipment (PPE): gloves and safety shoes.
Risk of crushing and shearing	During operation, cleaning, maintenance and troubleshooting, there is a risk of crushing and/or shearing of the hands or feet due to the machine potentially tipping over. <u>To reduce the risk:</u> ◆ Follow the procedures and warnings set out in this manual.    Take care with your hands when using the machine.  To use the machine safely, you must read and understand the manual and the accompanying documentation in their entirety.   Wear personal protective equipment (PPE): gloves and safety shoes.



RESIDUAL RISK	RISK DESCRIPTION AND PROCEDURAL INFORMATION
Electrical risk	During commissioning, operation, cleaning and maintenance, and fault-finding, there is a risk of electric shock when carrying out live electrical work. <u>To reduce the risk:</u> ◆ Follow the procedures and warnings set out in this manual ◆ Provide specific training for authorised staff on the hazards associated with electric current ◆ Check periodically that the electrical equipment used for the on-board and line-side systems is earthed and/or has double insulation as standard. ◆ Do not direct water onto electrical parts.  Electrical maintenance work must only be carried out by persons with PES (live-line) or PEI (low-voltage live-line) qualifications.
Risk of crushing, impact and shearing	During cleaning and maintenance, there is a risk of crushing, impact and/or shearing of the hands or feet against the machine's moving parts. <u>To reduce the risk:</u> ◆ Follow the procedures and warnings set out in this manual ◆ Provide specific training for authorised staff on the hazards associated with electrical current.  Take care with your hands when using the machine.  To use the machine safely, you must read and understand the manual and the accompanying documentation in their entirety  Wear personal protective equipment (PPE): gloves and safety shoes.

It is the user's responsibility to ensure that:

- ◆ **To analyse the risks that may arise during handling and installation within the premises** (the analyses carried out on the handling of the machine's parts were based solely on the machine's characteristics).
- ◆ **To raise awareness and provide training for staff authorised** to carry out operations at workstations and for staff responsible for operating the machine
- ◆ Put up visual safety signs in the workplace after assessing the risks in transit and control areas.

3.8. SAFETY PICTOGRAMS AFFIXED TO THE MACHINE

Safety pictograms (stickers, labels) are affixed to the machine. They aim at informing staff of any residual risks.



Do not remove the safety pictograms affixed to the machine and/or replace them with other plates.



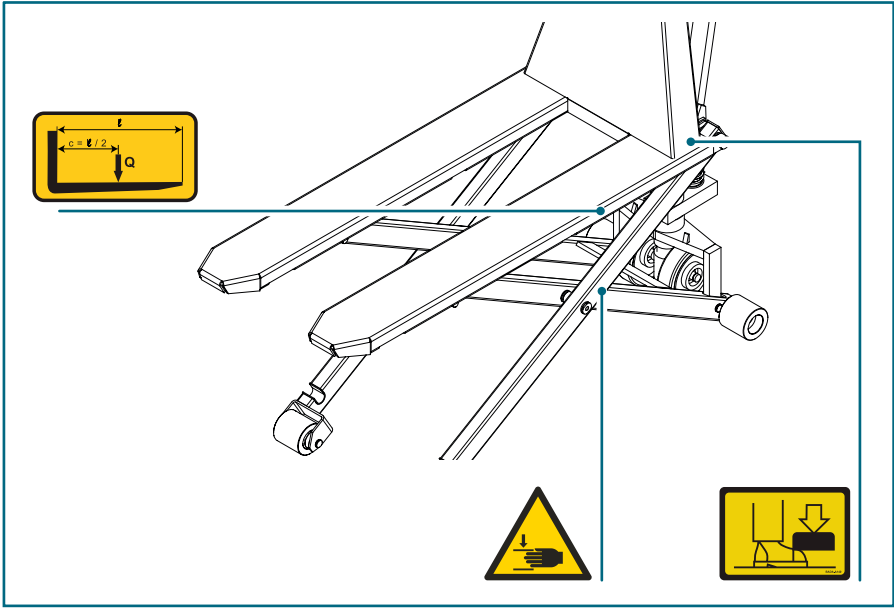
The user must replace any safety pictograms that have become illegible due to wear and tear.



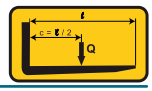
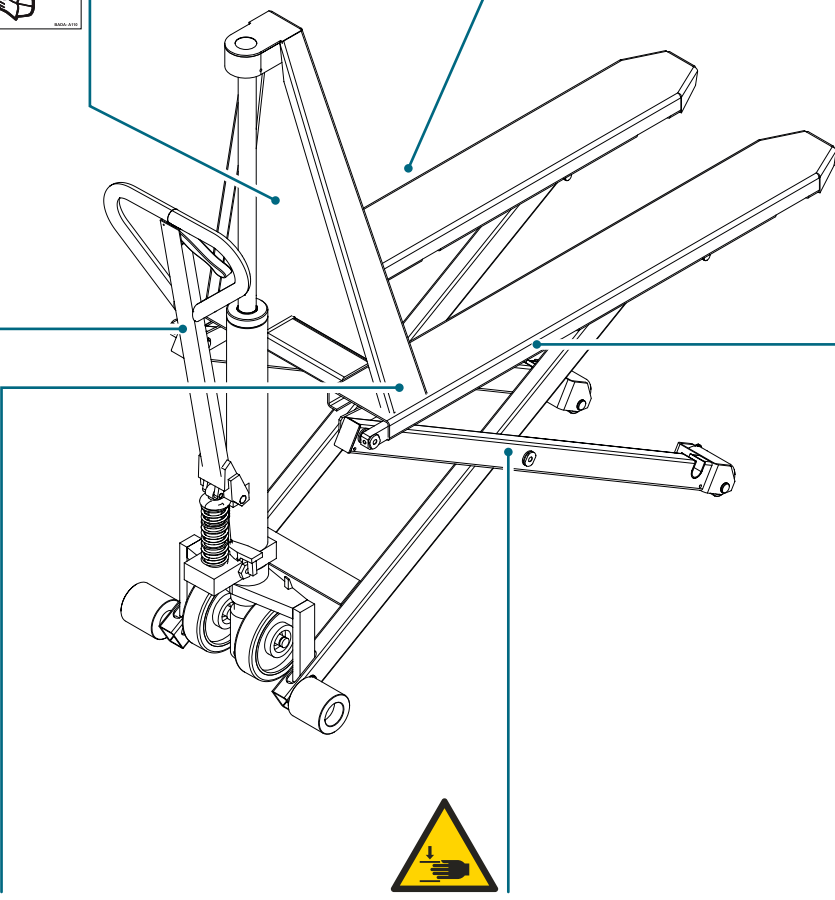
INFORMATION

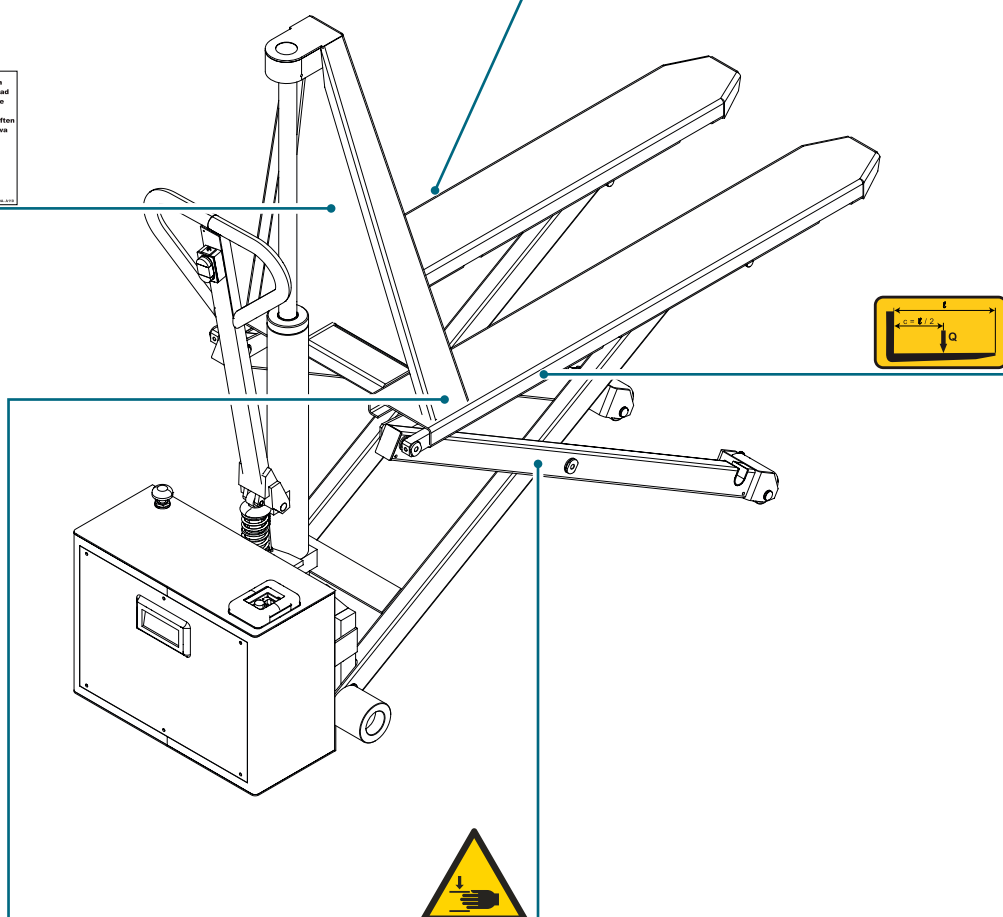
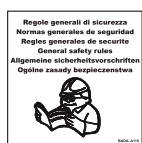
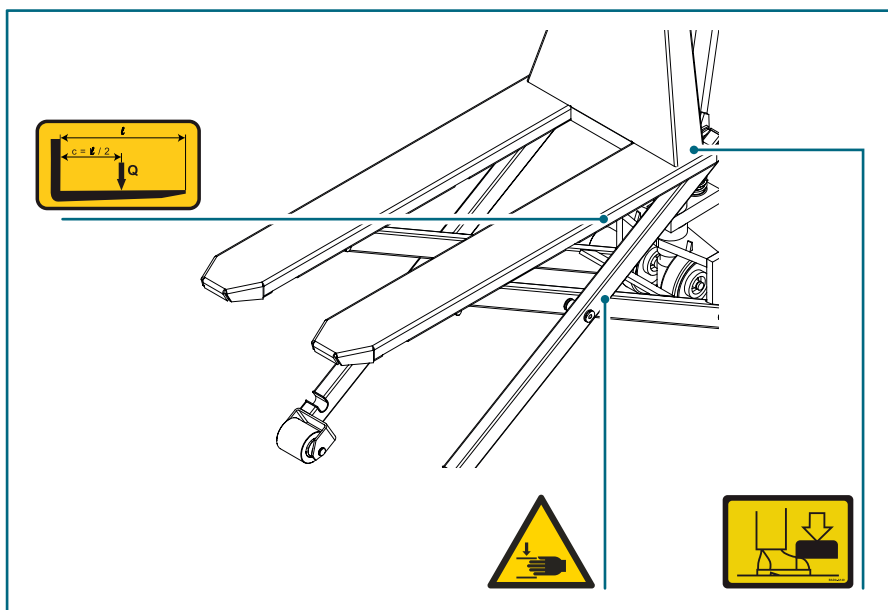
The manufacturer accepts no liability for the safety of the machine in the event of failure to comply with these instructions.

PICTOGRAM	DESCRIPTION
	Risk of hands being crushed
	Risk of feet being crushed
	Centre of gravity
	Use of the tiller
	Read the user and maintenance manual



Regole generali di sicurezza
 Normas generales de seguridad
 Regles generales de securite
 General safety rules
 Allgemeine sicherheitsvorschriften
 Ogólne zasady bezpieczeństwa







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4. MACHINE DESCRIPTION

4.1. INTENDED USE

The machine covered by this manual is intended for professional use for:

OPERATION	ALLOWED	NOT ALLOWED	WORK ENVIRONMENT
Transport and handling of:	◆ Items on pallets	Any product other than those permitted	Food, chemical, pharmaceutical and microelectronics industries

The machine is designed to:

- ◆ To meet the specific requirements set out in the contract of sale
- ◆ It must be used in accordance with its intended purpose and the instructions set out in this manual.

The machine operates safely if:

- ◆ It is used within the limits specified in this manual
- ◆ The operating procedures described in this manual are followed
- ◆ Routine maintenance is carried out in accordance with the timescales and procedures set out in this manual
- ◆ Extraordinary maintenance is carried out promptly when necessary
- ◆ Safety devices have not been removed and/or bypassed.



INFORMATION

The manufacturer accepts no liability for damage resulting from use other than that for which the product is intended.



4.2. REASONABLY FORESEEABLE MISUSE

Reasonably foreseeable misuse is listed below:

- ◆ Transportation of people
- ◆ Using the machine's components as a support
- ◆ Use of the machine to achieve production figures exceeding the prescribed limits
- ◆ Using the machine with a product of a different size to that described in the paragraph **"Characteristics of the finished product"**
- ◆ Use of the machine other than as described in the section **"Intended use"**.

Any use of the machine other than that for which it is intended must be authorised in writing by the manufacturer. Use without such written authorisation is to be regarded as misuse.

INFORMATION



The Manufacturer accepts no liability for any damage caused to property or persons as a result of improper use and considers any warranty on the machine supplied to be void.

4.3. TECHNICAL DATA

GENERAL DATA	
Operating temperature	-15°C ÷ +45°C

POWER SUPPLY BATTERY SPECIFICATIONS	
Cells per unit	6
Voltage per unit	12
Recommended maximum power supply	15 A
Supply voltage	14 VDC

4.3.1. MACHINE SPECIFICATIONS

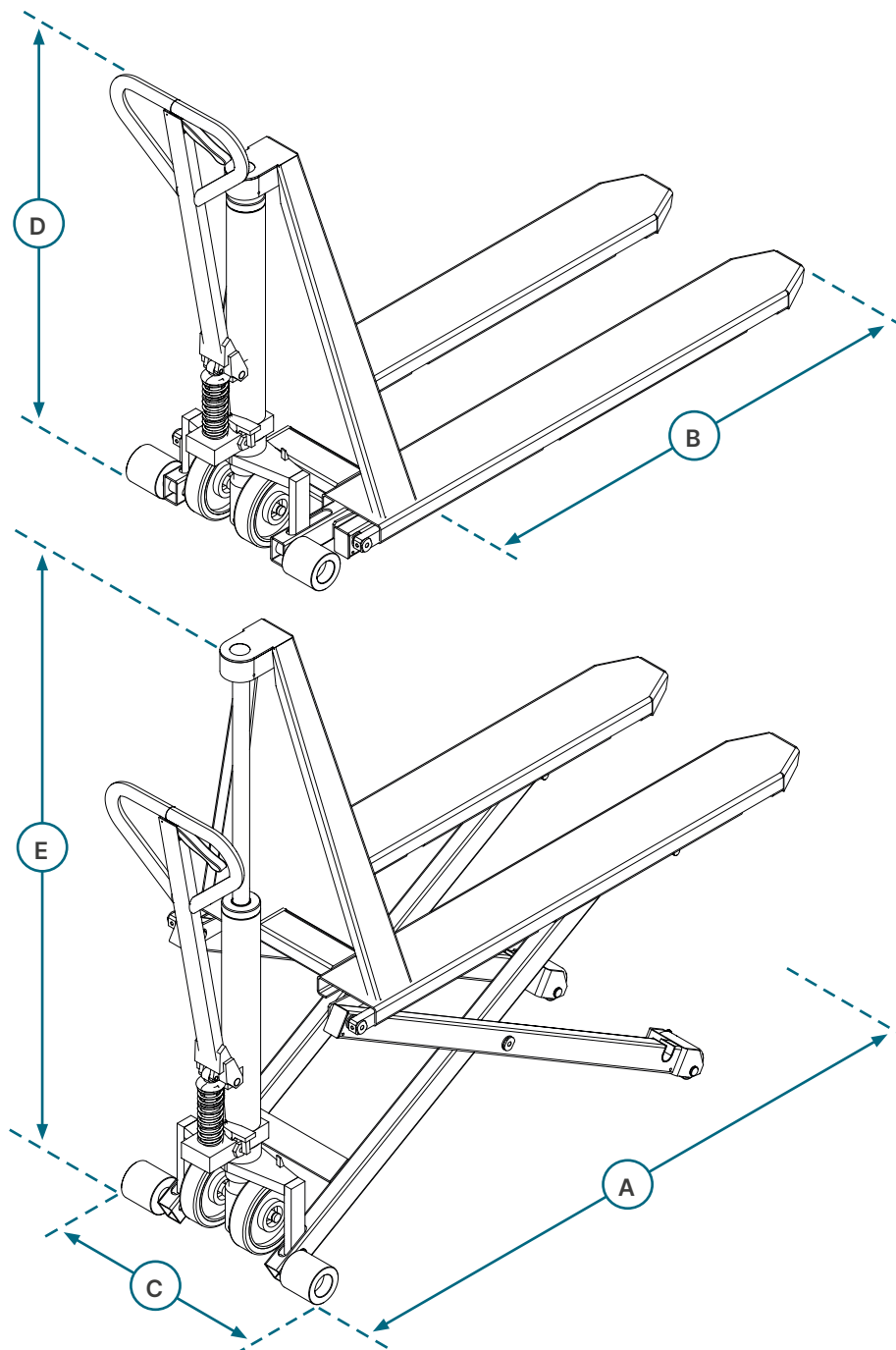
MACHINE SPECIFICATIONS	
Nominal flow rate	1000 Kg
Fork length	1150 mm
Outer fork width	550 mm
Lifting	115/800 mm



4.4. OVERALL DIMENSIONS

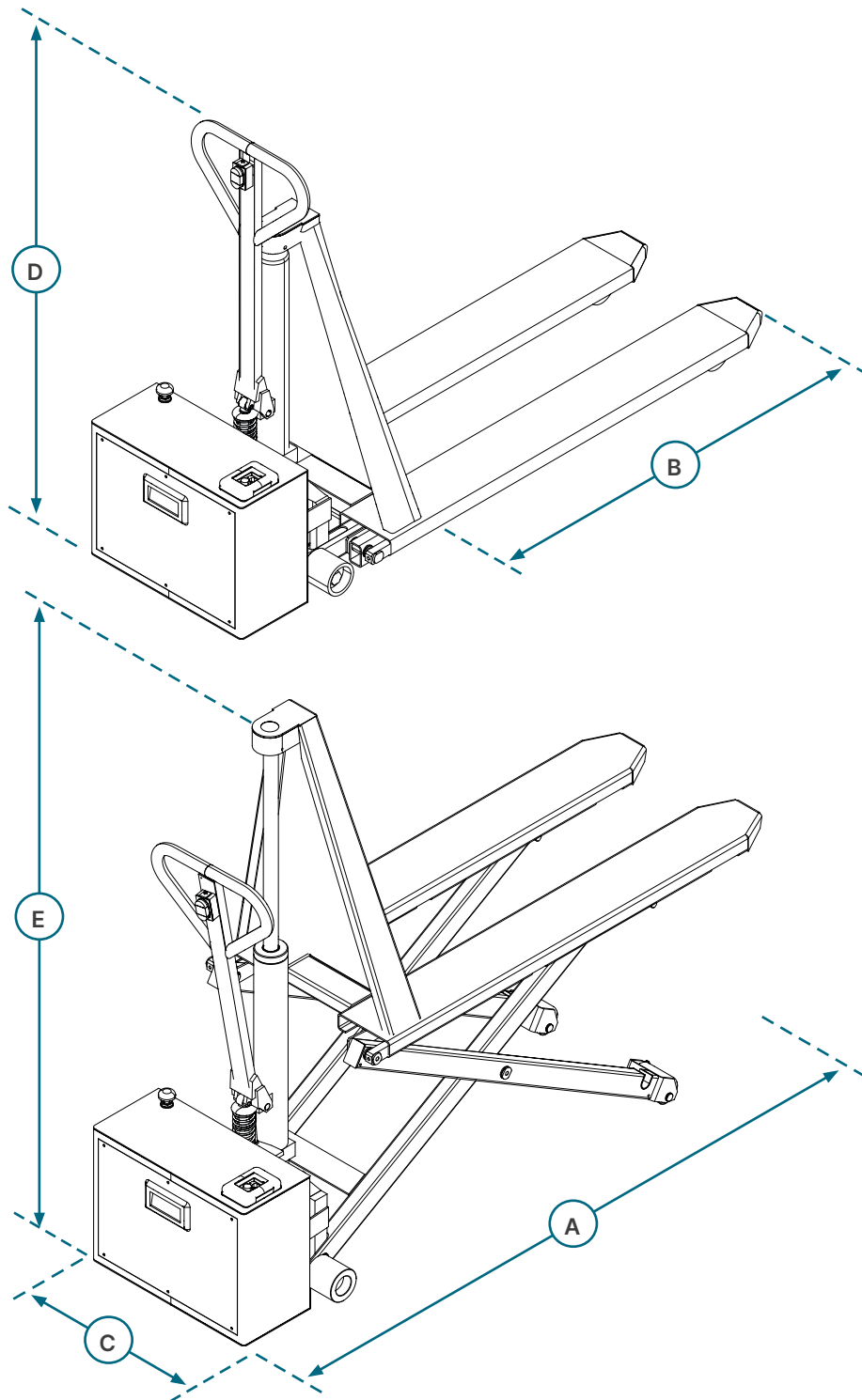
MAXIMUM OVERALL DIMENSIONS PTM 1.0 SCISSOR INOX

Machine length (A)	1609 mm
Fork length (B)	1150 mm
Width (C)	550 mm
Height position 0 (D)	1173 mm
Maximum height (E)	1442 mm



MAXIMUM OVERALL DIMENSIONS PTM 1.0 SCISSOR INOXE

Machine length (A)	1740 mm
Fork length (B)	1150 mm
Width (C)	550 mm
Height position 0 (D)	1100 mm
Maximum height (E)	1442 mm



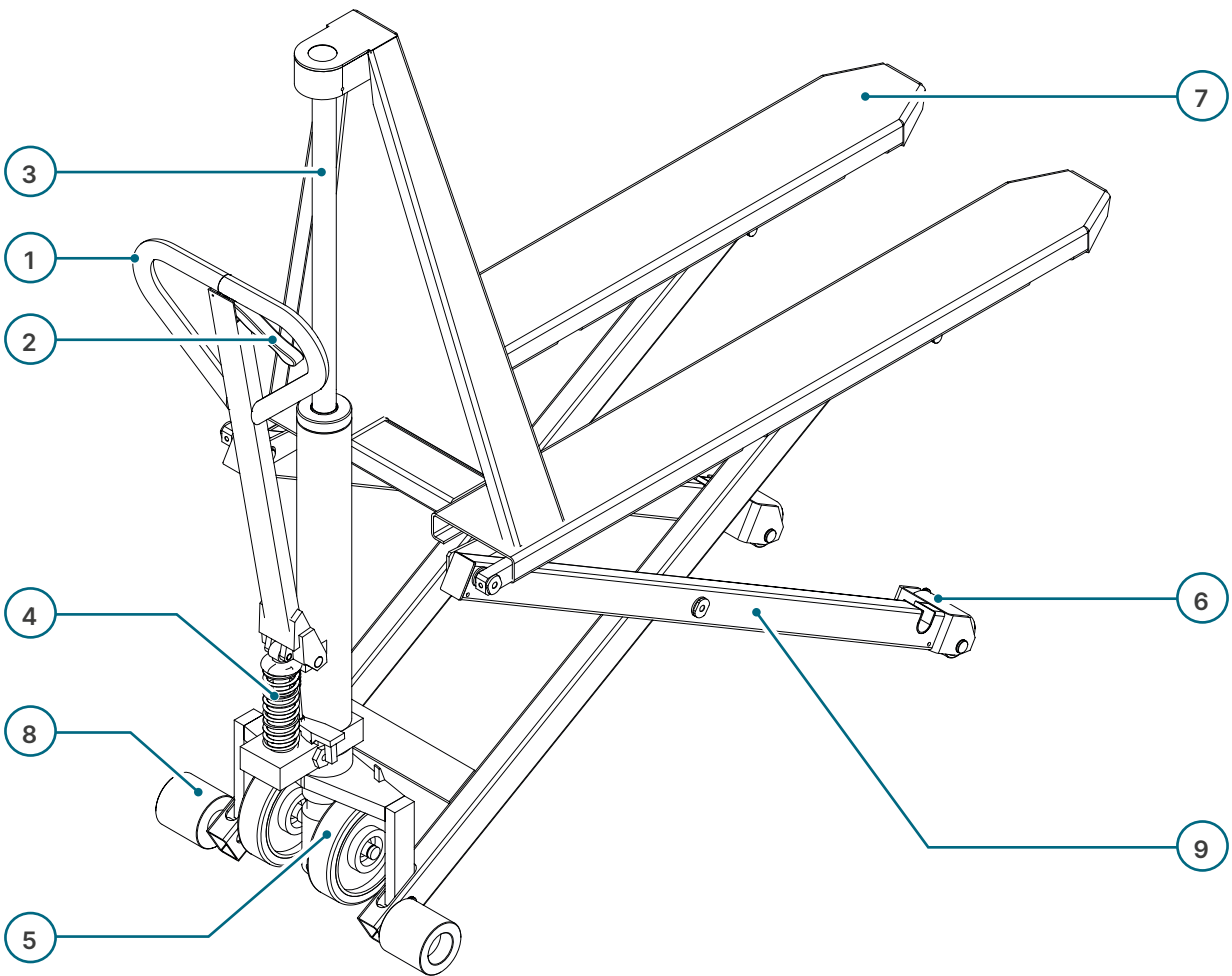
4.5. MAIN COMPONENTS

The machine **PTM 1.0 SCISSOR INOX** is made as follows:

POS.	ITEM	DESCRIPTION
1	TILLER	It allows to: ◆ move and steer the pallet truck ◆ activate the lifting of the loading forks
2	EASING LEVER	It has three operating positions: ◆ when pressed upwards, it lowers the loading forks; ◆ when left in position 0, it allows the tiller to be manoeuvred to move the pallet truck; ◆ when pressed downwards, it enables the tiller to raise the loading forks via a hydraulic system.
3	LIFTING PISTON	It enables the lifting of the loading forks.
4	PUMPING SPRING	Applies hydraulic pressure to allow the piston to raise the loading forks.
5	STEERING WHEELS	They enable to steer the movement of the pallet truck.
6	LOADING WHEELS	
7	LOADING FORKS	They enable the load to be raised and lowered
8	SIDE STABILISERS	When the loading forks are raised by more than 20 cm, the side stabilisers rest on the ground, preventing the pallet truck from moving.
9	LIFTING JACKS	Their function is to assist in the lifting of the loading forks.



Some of the images shown below depict the machine without perimeter guards for illustrative purposes.



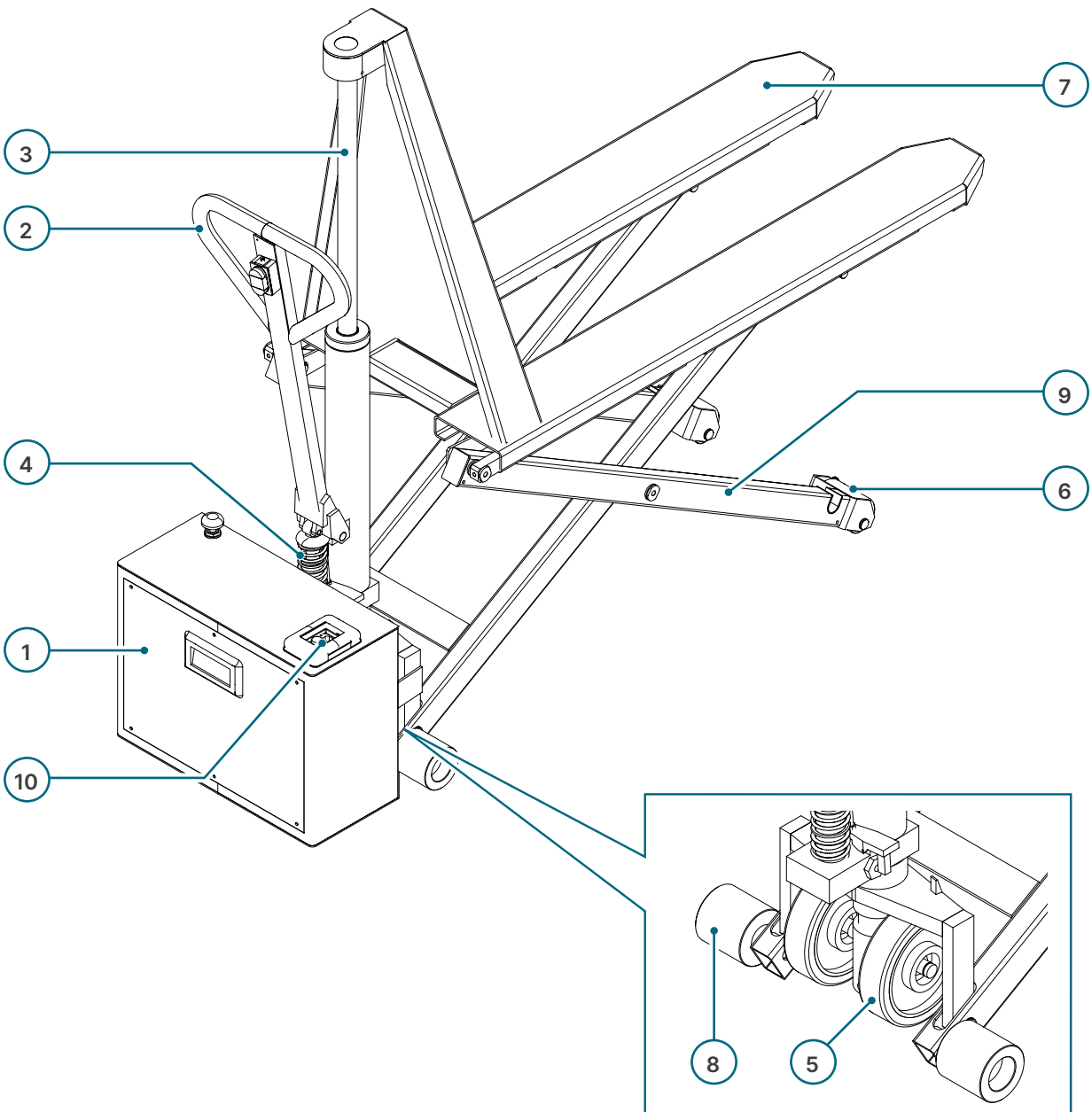
The machine **PTM 1.0 SCISSOR INOX ELECTRIC** is made as follows:

POS.	ITEM	DESCRIPTION
1	HOUSING	It houses the components required for the pallet truck to operate.
2	TILLER	It allows to move and steer the pallet truck.
3	LIFTING PISTON	It enables the lifting of the loading forks.
4	PUMPING SPRING	It allows the tiller to hold vertical position.
5	STEERING WHEELS	They enable to steer the movement of the pallet truck.
6	LOADING WHEELS	
7	LOADING FORKS	They enable the load to be raised and lowered
8	SIDE STABILISERS	When the load forks are raised by more than 20 cm, the side stabilisers rest on the ground, preventing the pallet truck from moving.
9	LIFTING JACKS	Their function is to assist in the lifting of the loading forks.
10	RECHARGEABLE BATTERY	It enables electricity to be supplied to the the pallet truck.



Some of the images shown below depict the machine without perimeter guards for illustrative purposes.

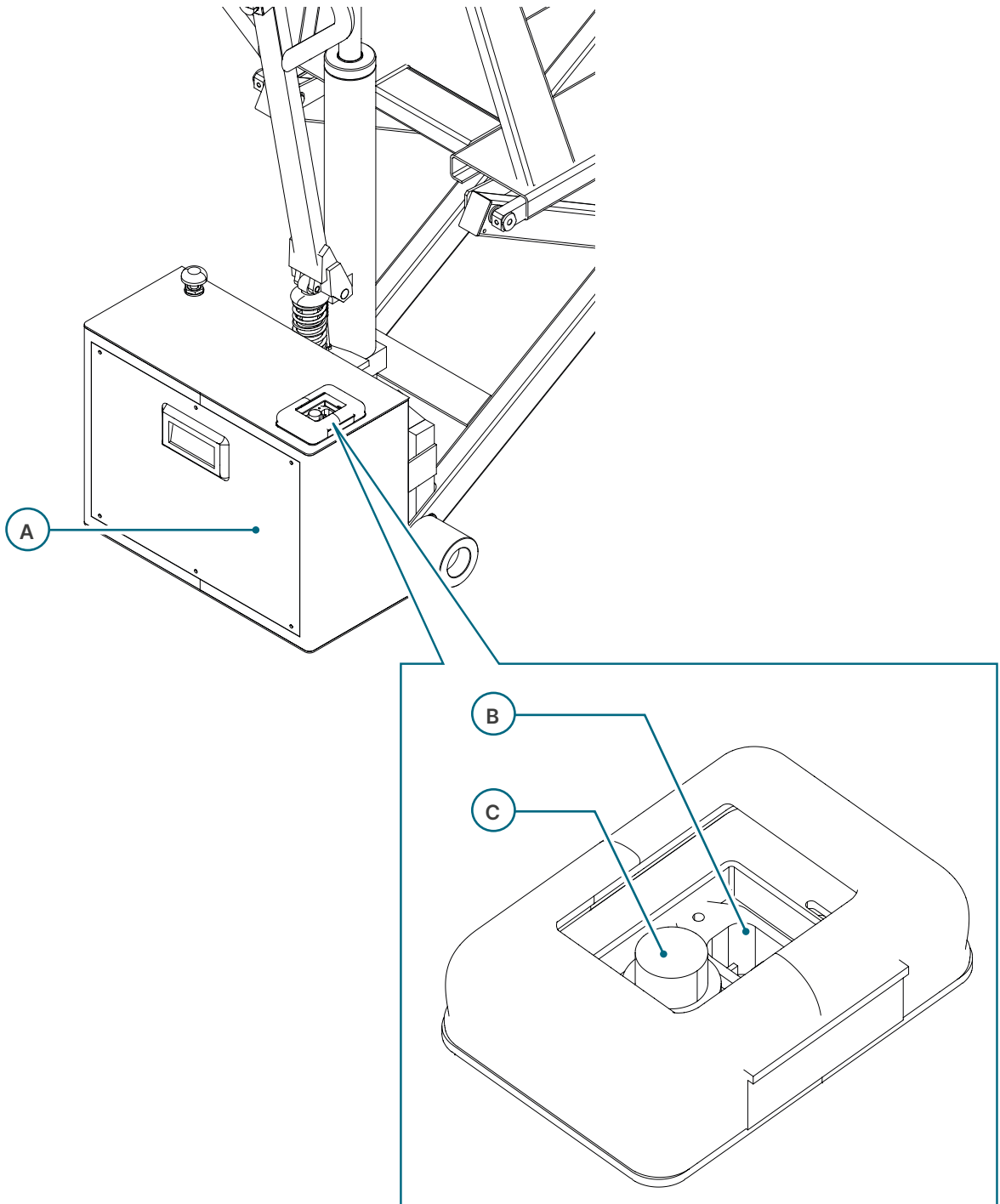




4.5.1. RECHARGEABLE BATTERY

The **PTM 1.0 SCISSOR INOX ELECTRIC** model is fitted with an internal rechargeable battery housed within the casing **A**:

- ◆ To recharge the battery, plug the cable supplied into the designated socket **B**.
- ◆ An indicator light **C** shows the battery's charge status and, whilst charging, indicates that the device is connected to the mains.





Before switching on the pallet truck for the first time, charge the battery until it is fully charged.



Use only the original charger supplied with the machine.



Under normal use, never leave the battery partially or completely discharged. Recharge it fully at least once a week.



In the event of prolonged periods of non-use, it is advisable to remove the battery (if permitted) and store it in a dry place, protected from sudden changes in temperature.





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5. TRANSPORT AND INSTALLATION

5.1. SAFETY WARNINGS FOR TRANSPORT AND INSTALLATION



INFORMATION

The Manufacturer accepts no liability for any damage caused to property or persons as a result of failure to comply with the instructions set out in this chapter.



WARNING

Danger: suspended loads.
Do not walk under suspended loads during transport and handling operations.



During transport and handling operations, check that there are no objects or uneven surfaces along the route to be taken, as these may cause accidents, resulting in injury to people or damage to property.



It is forbidden to climb onto and/or scale the machine's metal structures.



Transport, handling and installation must be carried out by authorised and qualified personnel.



Use only suitable and type-approved lifting equipment.
The lifting equipment must be suitable for the size and weight of the material to be handled.

In the event of obstructions and/or operational conditions that prevent the operator from having a clear line of sight, personnel must be present outside the lifting equipment's operating range to act as signallers.

5.2. PACKAGING

BADA Material Handling s.r.l. ships the machine from its production plant to the customer's site.

The machine is dispatched fully assembled, placed on a pallet and wrapped in protective heat-shrinkable film.

The shipping must be carried out using covered or tarpaulin-covered vehicles, depending on the type of load.

5.2.1. RECEIPT OF PACKAGED MACHINE GROUPS

Upon receipt of the machine, the Customer must check that there is no damage caused by the transport process or by the staff responsible for the specific operations.

If any damage is found:

- ◆ Leave the car as you found it
- ◆ Request an assessment of the damage from the relevant freight forwarder
- ◆ Report the damage found to the manufacturer.

5.2.2. REMOVAL OF PACKAGING

To **remove the packaging**:

STEP	ACTION
1	Place the machine near the chosen installation site.
2	Unpack the machine, which is delivered on a pallet , as follows: ◆ Remove the strapping ◆ Remove the heat-shrinkable film ◆ Remove any materials used to protect the load forks ◆ Remove any fixings from the wooden floor.

5.2.3. PACKAGING DISPOSAL

The packaging forms an integral part of the supply and will not be collected; the Buyer is therefore responsible for its disposal. Any disposal or destruction must be carried out in accordance with the regulations in force in the User's country, taking into account the nature of the materials.

5.3. TRANSPORT AND HANDLING

The handling operations described in this section must be carried out by personnel who are qualified for such operations and trained to carry out loading, unloading and handling operations safely using lifting equipment, and who are familiar with the rules on accident prevention.

5.3.1. TABLE SHOWING THE MACHINE GROUPS AND WEIGHTS

Please refer to the table below to see in which and how many separate parts the machine will be transported.

POS.	MACHINE	LIFTING DEVICE	DIMENSIONS (mm)	WEIGHT (kg)
1	PTM 1.0 SCISSOR INOX	Forklift truck and/or lifting crane	See the 'Overall Dimensions' table	116 Kg
2	PTM 1.0 SCISSOR INOX ELECTRIC	Forklift truck and/or lifting crane	See the 'Overall Dimensions' table	180 Kg

5.3.2. TRANSPORT AND HANDLING OPERATIONS

Carry out transport, lifting and handling operations slowly, in adequate lighting conditions and ensuring there is sufficient clear space in the installation area.



Use only suitable and approved lifting equipment that is compatible with the dimensions and weight of the component to be handled.



INFORMATION

For the transport and handling of components or machinery supplied by subcontractors, please refer to the relevant manuals provided.

For a description of transport and handling operations, please refer to the information sheets set out below.



TRANSPORT AND HANDLING SPECIFICATION SHEET WITH FORKLIFT TRUCK	
Personnel qualification	
Necessary PPEs	   

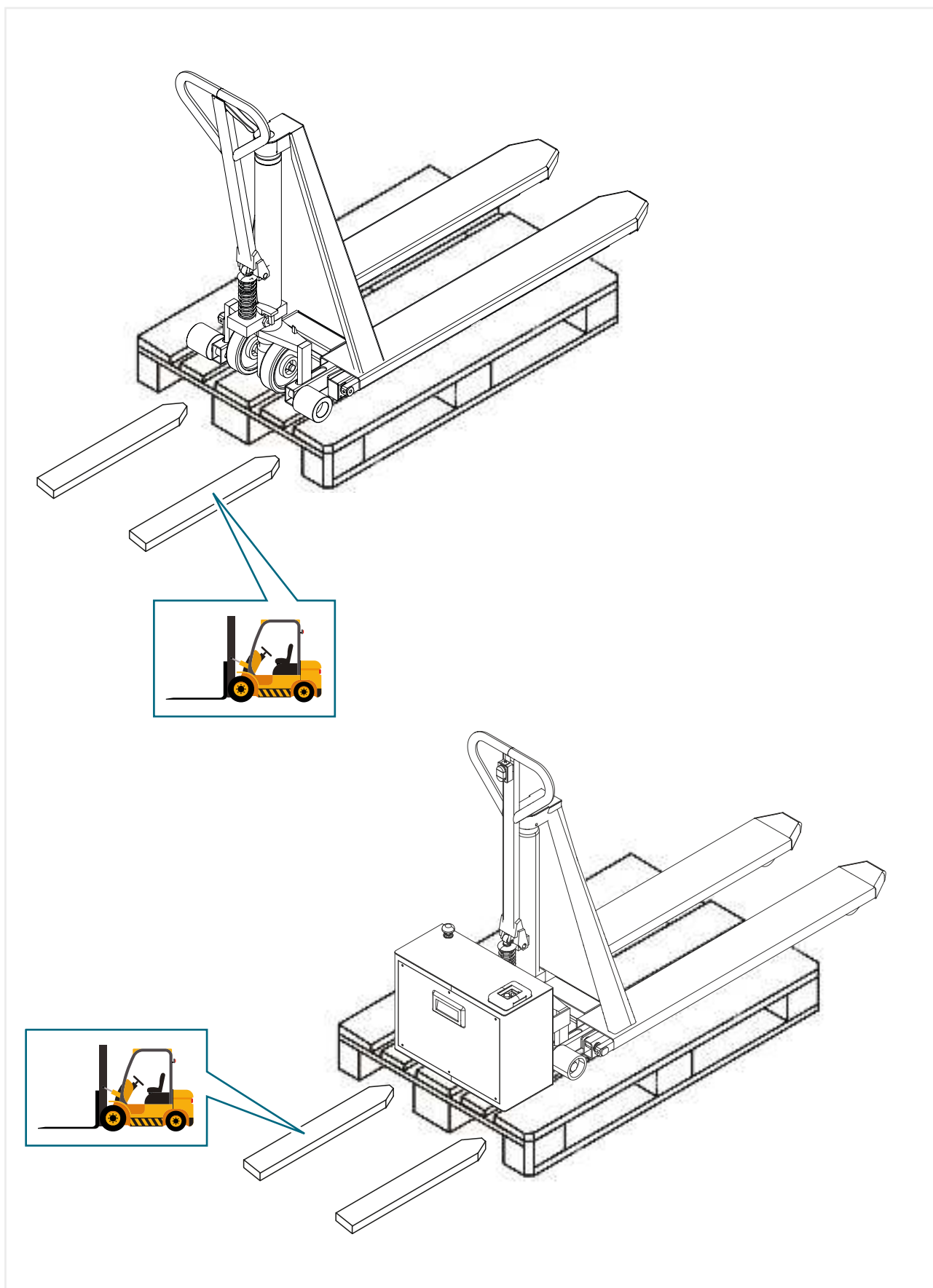


WARNING

Danger: suspended loads.
Do not walk under suspended loads during transport and handling operations.

To transport **using a forklift**:

STEP	ACTION
1	Position the forklift tines under the packaging containing the machine, as shown in the diagram.
2	Ensure that the forks extend beyond the front of the load by a sufficient length to eliminate any risk of the load tipping over.
3	Raise the forks until they come into contact with the load. Note: If necessary, secure the load to the forks using clamps or similar devices.
4	Slowly lift the load by a few tens of centimetres and check that it is stable, ensuring that the load's centre of gravity is positioned in the centre of the forks.
5	Tilt the forklift upright backwards (towards the driver's seat) to increase the overturning moment and ensure greater load stability during transport.
6	Adjust the travel speed according to the road surface and the type of load, and avoid sudden manoeuvres.



TRANSPORT AND HANDLING SPECIFICATION SHEET WITH A LIFTING CRANE	
Personnel qualification	
Necessary PPEs	   

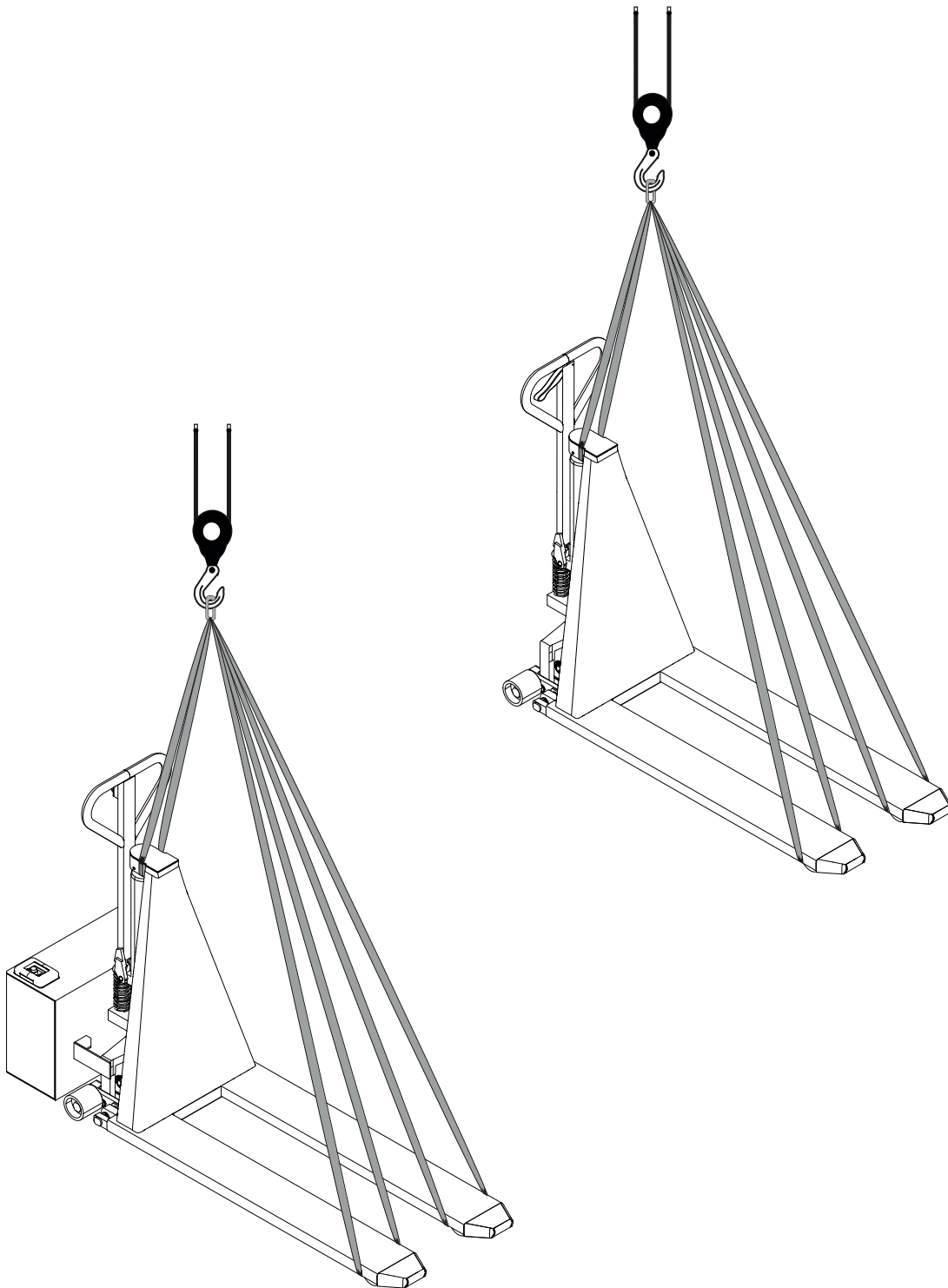


WARNING

Danger: suspended loads.
Do not walk under suspended loads during transport and handling operations.

To carry out the **transport with a lifting crane**:

STEP	ACTION
1	Attach the lifting ropes or chains as shown in the image below.
2	Lift the load slightly, ensuring that the angle formed by the chains or ropes used to lift the equipment does not exceed 60°.
3	Check that the load is correctly balanced by lifting it slightly off the ground and ensuring that it is horizontal.
4	Start the handling operation, taking care to adjust the speed according to the load to be transported and the route, minimising any swaying of the load as far as possible



5.4. STORAGE

If the machine is to be **left unused for a long period or stored after transport**, it is necessary to check that:

- ◆ The room temperature must be between -15°C and +45°C
- ◆ The relative humidity should be between 10% and 80%
- ◆ Do not expose it to direct sunlight.

The machine's components and accessories must be stored in a closed, dry and clean environment to ensure they are kept in perfect condition.



Do not store the machine's components in an unstable, tilted or upside-down position.

5.5. INSTALLATION



To install the machine correctly, follow the instructions set out in this manual.

5.5.1. ARRANGEMENTS TO BE MADE BY THE CUSTOMER

Unless otherwise agreed in the contract, the Customer is normally responsible for arranging:

- ◆ **Premises** (flooring and lighting)
- ◆ **Materials and equipment required for lifting** and positioning plant components



5.5.2. ALLOWED ENVIRONMENTAL CONDITIONS

The machine must be installed:

- ◆ In an **indoor environment, sheltered from the elements** such as rain, hail, snow, fog, airborne dust and combustible dust
- ◆ **Protected from aggressive agents** such as corrosive vapours or sources of excessive heat.

The machine must be installed in accordance with the environmental conditions set out in the table..

ALLOWED ENVIRONMENTAL CONDITIONS	
Room temperature	-15 ÷ 45 °C
Relative humidity	15 ÷ 80 %
Place of installation	Industrial – Indoor environment, sheltered from the elements
Workplace lighting	Minimum 350 lux
Support surface	Industrial flooring
Altitude	< 2000 m s.l.m.

The machine must not be installed under conditions other than those listed.

The installation environment must not contain:

- ◆ Exposure to corrosive fumes
- ◆ Exposure to excessive humidity (above 85 per cent) and rapid changes in relative humidity (greater than 0.005 p.u./h)
- ◆ Exposure to excessive dust
- ◆ Exposure to abrasive dust
- ◆ Exposure to oily vapours
- ◆ Exposure to explosive mixtures of dust or gas
- ◆ Exposure to abnormal vibrations, impacts or shocks
- ◆ Exposure to the elements beyond permitted limits or dripping
- ◆ Exposure to unusual transport or storage conditions
- ◆ Exposure to high or rapid temperature fluctuations (exceeding 5K/h)
- ◆ Presence of nuclear radiation.



⚠ ATTENTION

Risk of obstacle below.

Keep the machine's work area clear of objects.



⚠ ATTENTION

Slip hazard.

Keep the floor of the machine's working area clean.



INFORMATION

Installing the machine in environments that do not comply with the specifications will invalidate the warranty.

5.5.3. POSITIONING

Set aside an area suitable for the size of the machine and the lifting equipment used.

Keep a minimum distance from the walls so that you can work in an ergonomically comfortable position

Place the machine and/or its parts on a surface capable of supporting their weight.

Check that the floor on which the machine is to be placed is not sloping.



5.6. PREPARATION FOR COMMISSIONING

5.6.1. PRELIMINARY CHECKS

Before commissioning the machine, you must:

- ◆ Ensure that there are no foreign objects in the machine's operating areas
- ◆ Check that all bolts on moving parts or couplings are tight
- ◆ Check that there are no oil leaks
- ◆ Check that the safety devices are working correctly
- ◆ Carry out an initial clean of the machine by vacuuming up the dust and removing any foreign substances

6. COMMANDS AND USAGE

6.1. SAFETY WARNINGS FOR USE



Any use other than that specified by the manufacturer is prohibited, as it could pose unforeseen risks to people and/or the environment, and could also cause damage to the machine itself and/or to production.



Do not use the machine without guards and/or with safety devices disabled.



Persons not involved in operating the machine are not permitted to enter the work areas.



Do not use the machine under environmental conditions other than those specified in the section "Permitted environmental conditions".



The machine described in this manual must only be operated by suitably trained and qualified personnel.

INFORMATION



The Manufacturer accepts no liability for any damage caused to property or persons as a result of failure to comply with the instructions set out in this chapter.

INFORMATION



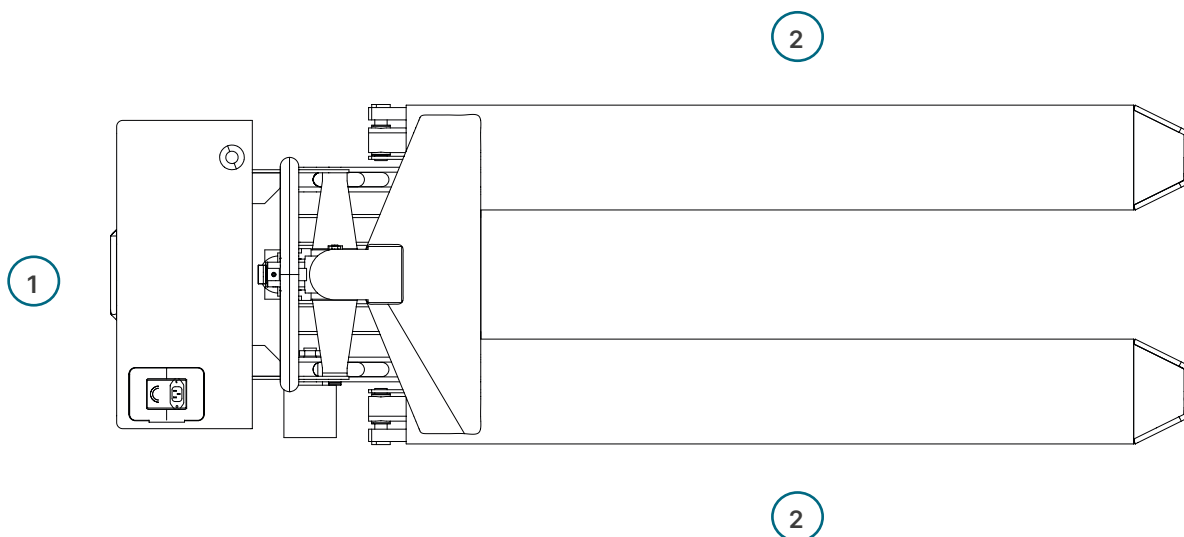
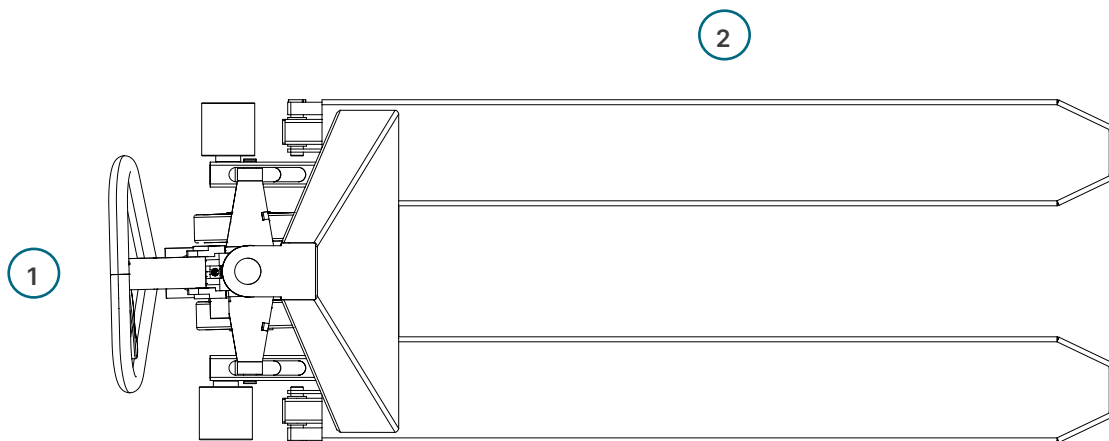
The machine does not use any hazardous fluids during its operating cycle.



6.2. OPERATOR POSITIONS

The operator responsible for operating the machine and/or handling the load must remain in or position themselves within the areas listed below and carry out the tasks for which they are responsible:

POS.	OPERATION
1	Machine control via the control panel
2	Manual load handling

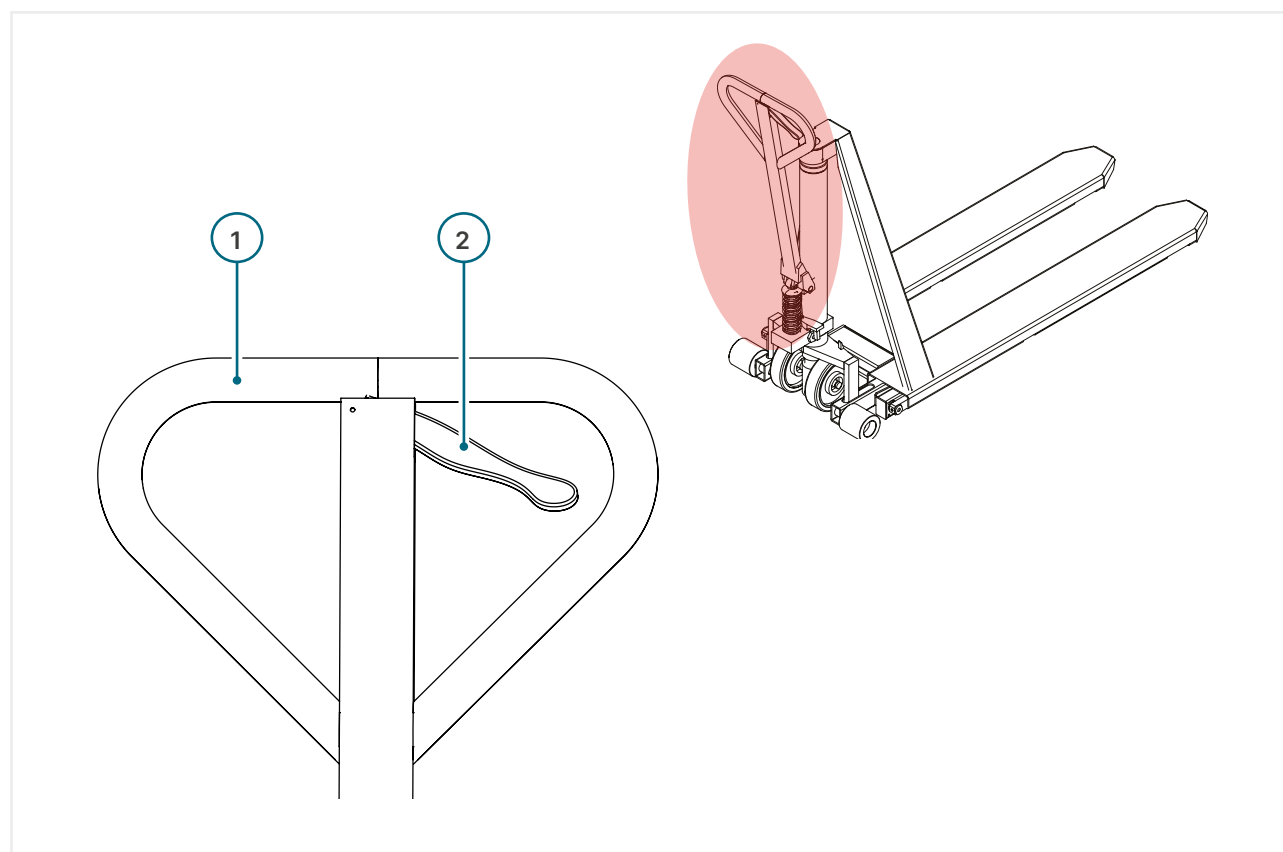


6.3. CONTROLS

6.3.1. POSITIONING AND DESCRIPTION OF CONTROL DEVICES

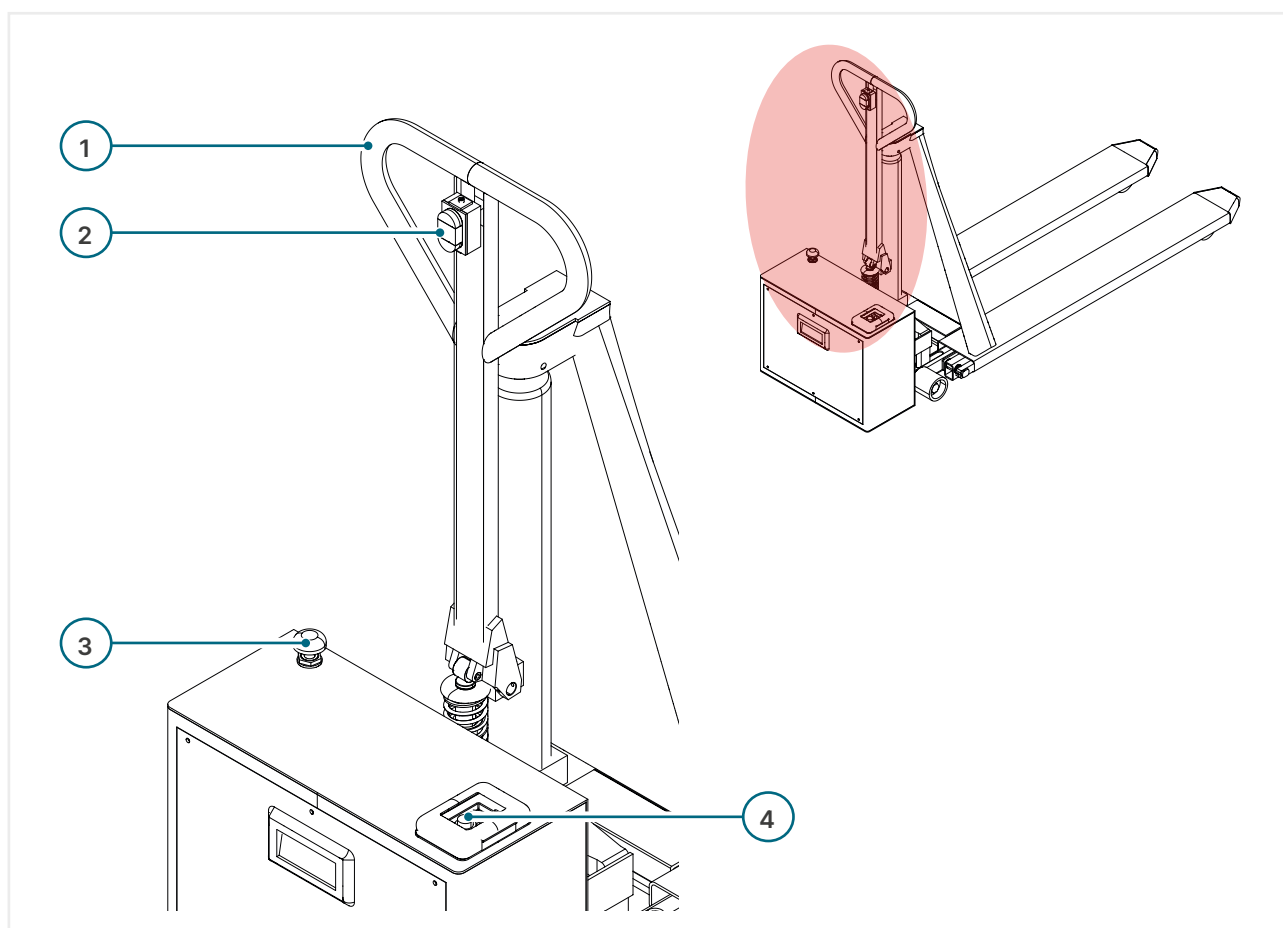
The **PTM 1.0 SCISSOR INOX** machine is fitted with the following control devices:

POS.	DEVICE	NOTES
1	TILLER	It enables the pallet truck to be manoeuvred and the loading forks to be raised.
2	EASING LEVER	It has three operating positions:: ◆ when pressed upwards, it lowers the loading forks; ◆ if left in position 0, it allows the tiller to be operated for manoeuvring the pallet truck ◆ when pressed downwards, it enables the tiller to raise the loading forks via a hydraulic system.



The **PTM 1.0 SCISSOR INOX ELECTRIC** machine is fitted with the following control devices:

POS.	DEVICE	NOTES
1	TILLER	It allows to steer the electrical pallet truck.
2	COMMAND BUTTONS	It enables the movement of the loading forks: ◆ If you press the up arrow, the lifting forks will raise the load ◆ When you press the down arrow, the lifting forks will lower the load.
3	MAIN ELECTRICAL DISCONNECTING SWITCH	Switches the power to the machine on or off. ◆ If released, the power supply is enabled ◆ If pressed, the power supply is disconnected.
4	BATTERY INDICATOR LIGHT	◆ RED LED Low battery ◆ YELLOW LED Battery at 50% charge ◆ GREEN LED: Battery 100% charged



6.4. OPERATION PROCEDURES



WARNING

Whilst the machine is in operation, ensure that there are no people in the work areas.



It is forbidden to leave the machine running whilst unattended.



Do not use the machine for purposes other than those for which it was designed.



Do not allow untrained staff to carry out any processing procedures, nor should anyone under the influence of alcohol or medication be permitted to do so.



Do not dispose of waste materials and processing residues into the environment. Dispose of the materials in accordance with the laws in force in the country where the machine is installed.

6.4.1. PRELIMINARY CHECKS

Before starting up the machine, the following checks must be carried out:

- ◆ Check that the safety devices are working correctly
- ◆ Check that the main disconnecting switch is not engaged
- ◆ Check that no unauthorised persons are present within the danger zones
- ◆ Check that the area around the machine is clear of clutter and/or obstacles.



6.4.2. SWITCHING ON AND USING THE MACHINE

To switch on the **PTM 1.0 SCISSOR INOX ELECTRIC** pallet truck:

STEP	ACTION
1	Release the main disconnecting switch.
2	Operate the tiller and/or the control buttons to manoeuvre the pallet truck.

6.4.3. SWITCHING OFF THE MACHINE

To switch off the **PTM 1.0 SCISSOR INOX ELECTRIC** pallet truck:

STEP	ACTION
1	Lower the loading forks completely.
2	Press the main disconnecting switch.



6.5. FAILURE CASES

The solution to most of the problems that may arise whilst the **PTM 1.0 SCISSOR INOX ELECTRIC** machine is in operation can be found by referring to this section.

FAULT DESCRIPTION	SOLUTION
THE LOADING FORKS DO NOT RISE	
Lack of oil	Fill in the tank
Low battery	Recharge the battery
Worn cylinder seals	Replace the seals
motor relay fault	Check and replace
Worn motor brushes	Replace the brushes and/or the motor
Damaged electrical plant	Check the electrical connections and the control buttons
THE LOADING FORKS DO NOT LOWER	
Faulty solenoid valve	Check and replace
Electrical plant fault	Check the electrical connections and the control buttons



If the problem is not listed above or if specialist assistance is required, please take the pallet truck to your nearest service centre.





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7. MAINTENANCE

7.1. SAFETY WARNINGS FOR MAINTENANCE

HAZARD



Risk of impact and crushing.

Do not carry out any maintenance, replacement or modification of mechanical parts whilst the machine is in operation.

ATTENTION



During maintenance work, unauthorised personnel must remain outside the work area.

ATTENTION



Before carrying out any maintenance work, put the machine into maintenance mode (see the section 'Putting the machine into maintenance mode'). Attach a sign to the machine stating 'Machine under maintenance – Do not switch on the power supply' near the main disconnecting switch.

WARNING



Risk of burns.

After use, some parts of the machine may be hot. Wait for them to cool down before carrying out any maintenance.



Do not use the machine without guards and/or with safety devices disabled.



Keep the work area clear of any equipment to ensure ideal safety conditions for operating the machine.



Carry out maintenance and/or adjustment work only when the machine is at a standstill and with main disconnecting switch in the 0 – OFF position.



Authorised staff must wear the personal protective equipment required for the task to be carried out. Please refer to this chapter for the PPE required in the specific procedures.



INFORMATION

The Manufacturer accepts no liability for any damage caused to property or persons as a result.



INFORMATION

Any maintenance work not covered in this manual must only be carried out with the prior authorisation of BaDa Material Handling s.r.l.

7.2. GENERAL INFORMATION ON MAINTENANCE

From an operational point of view, machine maintenance tasks fall into two main categories:

TYPE	DESCRIPTION
Ordinary maintenance	This includes the tasks that authorised personnel must carry out as a preventative measure to ensure the machine continues to operate properly over time (inspections and checks, lubrication, cleaning and scheduled replacement).
Extraordinary maintenance	It encompasses all the operations that authorised personnel must carry out whenever the machine requires it (overhauls, repairs, restoration to nominal operating conditions, or the replacement of a faulty, defective or worn-out component).

For a good maintenance:

- ◆ Use original spare parts
- ◆ Use suitable tools
- ◆ Follow the service intervals specified in this manual (for routine maintenance).



7.3. MAINTENANCE MODE

To put the machine in **maintenance mode**:

STEP	ACTION
1	Unload any goods on the forklift forks.
2	Disconnect the power supply using the main disconnecting switch.



7.4. ORDINARY MAINTENANCE

The tables in this section set out a series of checks and maintenance tasks to be carried out according to a specified schedule. The specified time frame applies under normal operating conditions, i.e. those in line with the intended conditions of use.

Follow the instructions in this section to ensure the machine operates correctly.

7.4.1. TABLE OF CONTROLS AND CHECKS

OPERATION	HOW OFTEN		
	3 MONTHS	6 MONTHS	12 MONTHS
Checking tyre wear.	■		
Inspection of bearings and anchorages.	■		
Checking the steering play.	■		
Check that the pipes and fittings in the hydraulic system are working properly.	■		
Checking the connections and cables in the electrical system.	■		
Check the command buttons.	■		
Inspection of the chassis' load-bearing components.		■	
Top up the lubricating oil.		■	
Check the maximum pressure valve on the hydraulic system.			■

Please follow the instructions below.



A daily check of the pallet truck can significantly reduce wear and tear. Paying particular attention to tyre wear is essential for maximum working comfort.
Check that all screws and bolts are tight on a daily basis.





ROUTINE MAINTENANCE CHECKLIST INSPECTING THE OPERATION OF THE BATTERY INDICATOR LIGHTS	
Personnel qualification	
Necessary PPEs	  
Necessary tools	◆ Screwdriver

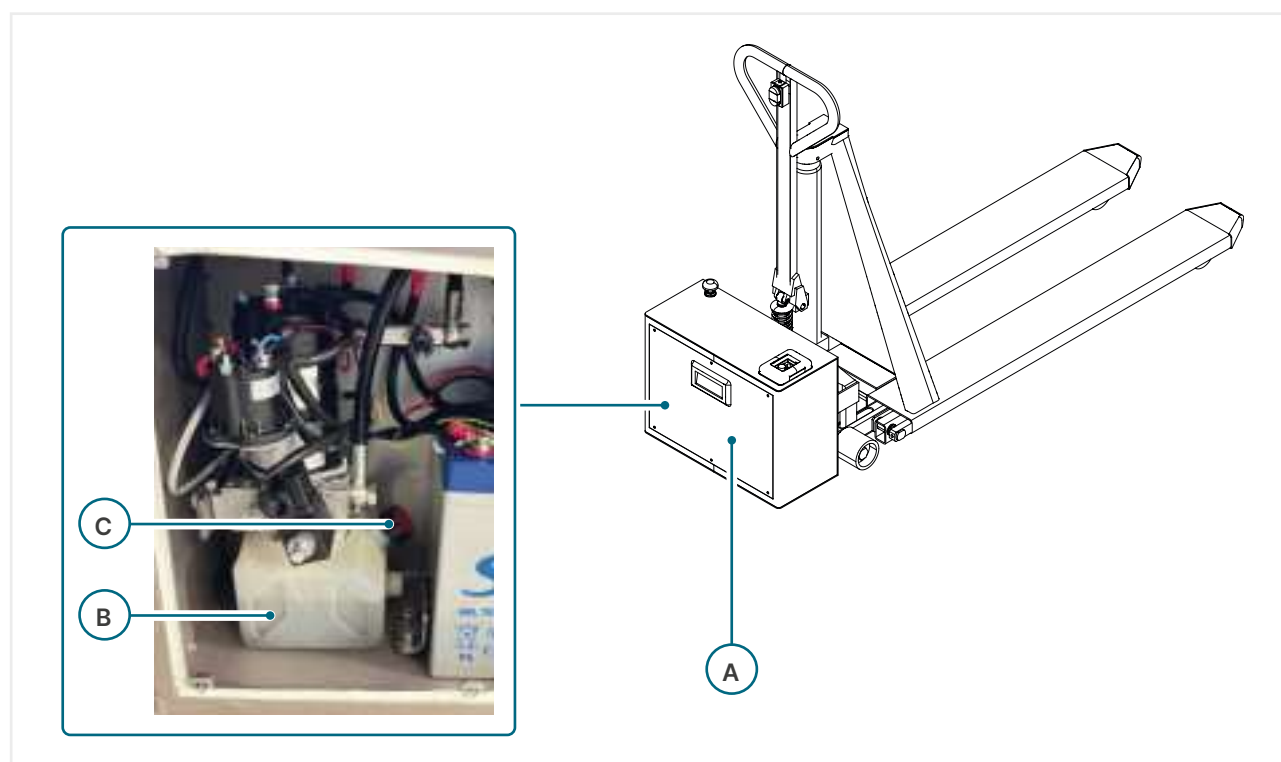
To check that the battery warning lights are working:

STEP	ACTION
1	Check that the battery indicator lights actually come on whilst the machine is running.
2	In the event of a fault, set the machine to 'Maintenance' mode (see the section 'Maintenance mode').
3	Check the electrical wiring.

ROUTINE MAINTENANCE CHECKLIST TOP-UP OF LIFTING OIL	
Personnel qualification	
Necessary PPEs	  
Necessary tools	-

To top up the hydraulic oil:

STEP	ACTION
1	Check that the machine is in ' Maintenance ' mode (see the section on ' Maintenance mode ').
2	Remove the fixed cover ' A ' from the housing using the fastenings.
3	Check the level of the lubricating oil in tank B .
4	Open cap C on the tank and top up the lubricating oil.
5	Close cap C on the tank.
6	Reposition the fixed guard A on the housing and secure it using the fastenings.



7.4.2. LUBRICATION

7.4.2.1. MANUAL LUBRICATION

The table in this paragraph sets out the lubrication tasks to be carried out at fixed intervals:

OPERATION	HOW OFTEN		
	3 MONTHS	6 MONTHS	12 MONTHS
Joint lubrication	■		
Complete oil change			■



Only carry out lubrication operations when the machine is at a standstill and the main power switch is switched off.



IMPORTANT!

Lubrication work must only be carried out by qualified and authorised personnel.

7.4.2.2. TYPE OF GREASE

The table below shows the recommended amounts of grease.

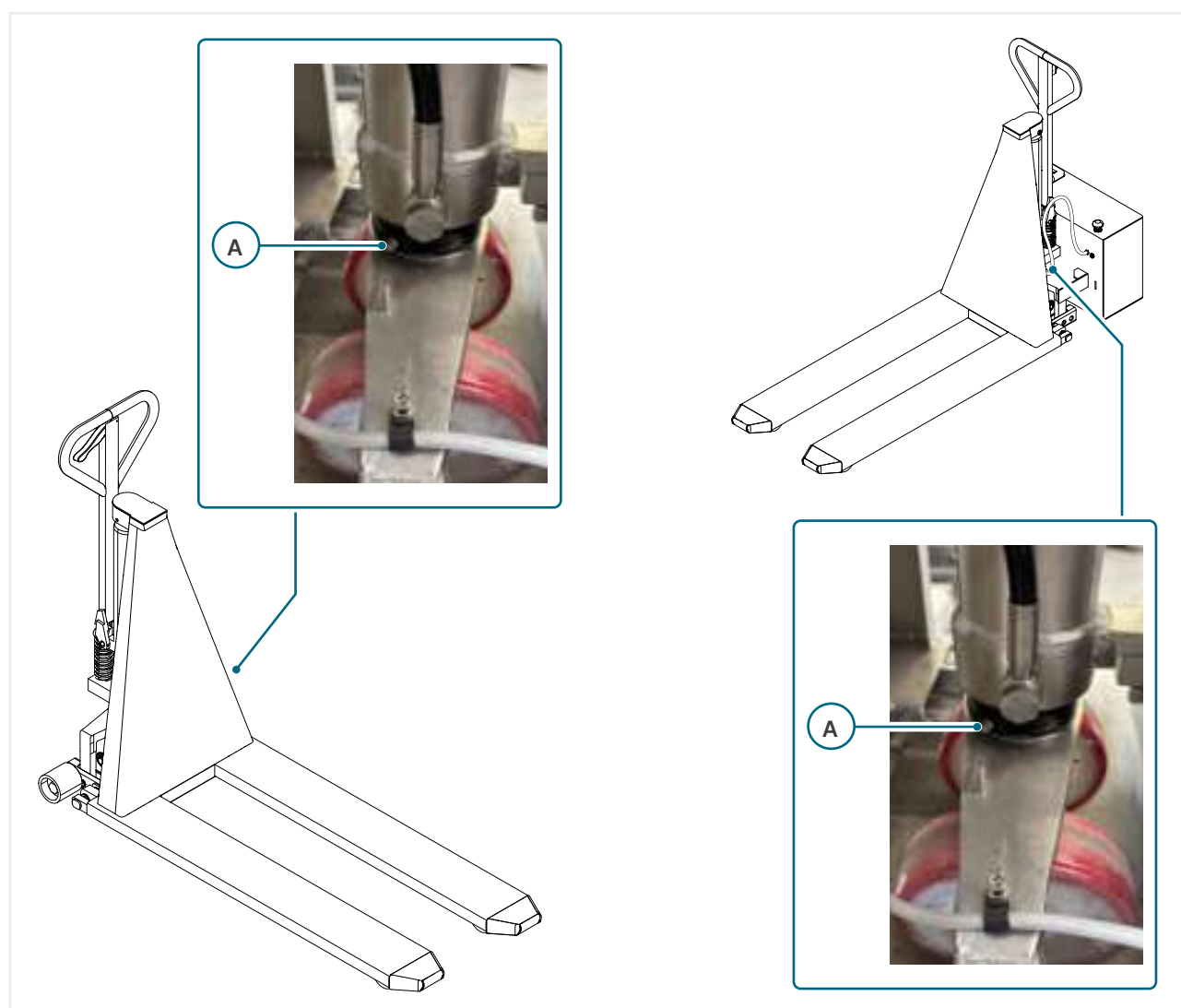
TYPE	BRAND
SILICON GREASE	Bauchem

LUBRICATION DATA SHEET JOINT LUBRICATION

Personnel qualification	
Necessary PPEs	  
Necessary tools	◆ Lubrication pump

To carry out the **joint lubrication**:

STEP	ACTION
1	Check that the machine is in ' Maintenance ' mode (see the section on ' Maintenance mode ').
2	Pump the specified grease into the lubrication nipple on steering wheels, " A " using just enough so that the grease does not leak out.



7.4.3. CLEANING

A thorough cleaning programme helps to maintain the level of cleanliness required to prevent damage to or malfunction of the machine. Dust and fragments of the product being processed, or other residues, may make the floor slippery, creating hazardous conditions.

Keep both the work surfaces and the floor clean at all times, removing any debris and equipment, dust, fragments and various residues, foreign bodies of all kinds.



Do not use compressed air to clean the machine.



Do not direct jets of water at electrical and pneumatic components (motors, control panels, electrical switchboard, etc.).



Do not use solvents or acid-based cleaning products, in order to maintain the machine in good condition.



Do not use solvents, petrol, alcohol, abrasives or specific cleaning products that may damage the various parts of the machine.



Use cleaning agents that are suitable for the environment in which the machine is used, and which meet all the safety requirements set out in the specific standards and regulations of the country where the machine is installed.



Comply with the regulations governing the treatment of wash water in force in the country where the machine is used.

CLEANING CHECKLIST GENERAL CLEANING OF THE MACHINE	
Personnel qualification	
Necessary PPEs	  
Necessary tools	◆ Detergents ◆ High pressure machine

For **the general cleaning of the machine**:

STEP	ACTION
1	Check that the machine is in ' Maintenance ' mode (see the section entitled ' Maintenance mode ').
2	If necessary, remove any residue from the handled product.
3	Wash the pallet truck using high-pressure washers and detergents suitable for stainless steel.



The manufacturer recommends carrying out a thorough cleaning of the machine both before it is put into operation and at the end of each shift, in order to remove any processing residues that could lead to the build-up of bacteria capable of contaminating the product being handled.

7.5. EXTRAORDINARY MAINTENANCE

In the event of exceptional circumstances requiring extraordinary maintenance work, authorised staff must:

- ◆ Check the condition of damaged or misaligned units
- ◆ Carry out the procedures described in this section.

If the procedures to be carried out are not covered in this manual, send the Manufacturer a report detailing the events that occurred,

the results of the inspection and any comments.

The Manufacturer or the authorised Service Centre will assess the situation. They will then agree with the Customer on the type of work to be carried out, choosing the most suitable solution from those listed below:

- ◆ The Manufacturer sends an authorised, trained and qualified technician to carry out the necessary work
- ◆ The Manufacturer authorises the Customer's staff to carry out the work, providing any additional instructions.

INFORMATION



Order spare parts from BADA Material Handling s.r.l.

The Manufacturer accepts no liability for the machine's operation if non-genuine spare parts are used. Any authorisation and/or instructions provided by the Manufacturer must always be communicated in writing.



8. DECOMMISSIONING, DEMOLITION AND DISPOSAL



8.1. SAFETY WARNINGS FOR DECOMMISSIONING, DEMOLITION AND DISPOSAL



It is the responsibility of the machine operator to ensure that waste is managed correctly.



Disconnect the machine from its power supply (electricity).



Only authorised personnel must carry out decommissioning, demolition and disposal operations. See this chapter for the qualifications required of authorised personnel for the specific procedures.



It is forbidden to climb onto and/or scale the machine's metal structures.



In accordance with the WEEE Directive 2012/19/EU, electrical components marked with the crossed-out wheeled bin symbol must be collected separately from other waste at the end of their useful life. Dispose of the components in accordance with the directive.

Decommissioning and putting out of use of the machine and equipment must be carried out in accordance with the regulations and rules in force in the country of installation. Decommissioning and putting out of use involve separating materials according to their nature (electrical components, ferrous parts, plastic parts, oils, etc.). Separating materials allows for the recovery and recycling of most of them.



Do not dispose of machine parts into the environment.

8.2. PUTTING THE MACHINE OUT OF USE

To put the machine out of use:

STEP	ACTION
1	Empty any remaining work-in-progress product from the machine.
2	Ensure that suitable, certified lifting equipment is available.
3	Use the appropriate personal protective equipment.
4	Disconnect any existing power supply (electric).
5	Drain out any liquids that may be present (oils, lubricants, etc.).

8.3. DISMANTLING FOR DEMOLITION

To **dismantle the machine for demolition**:

STEP	ACTION
1	Dismantle all the main parts of the machine into simple assemblies.
2	Sort the materials for separate collection.

8.4. 8.4.DISPOSAL

For correct disposal, please follow the national regulations of the country where the machine is installed.



9. ATTACHMENTS

9.1. LIST OF ATTACHMENTS

- ◆ Lubricant data sheets
- ◆ Spare Parts Manual
- ◆ Battery Charger User and Maintenance Manual





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