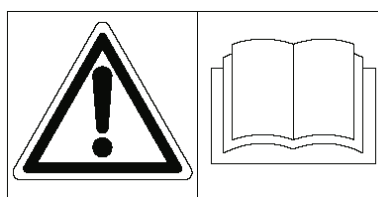
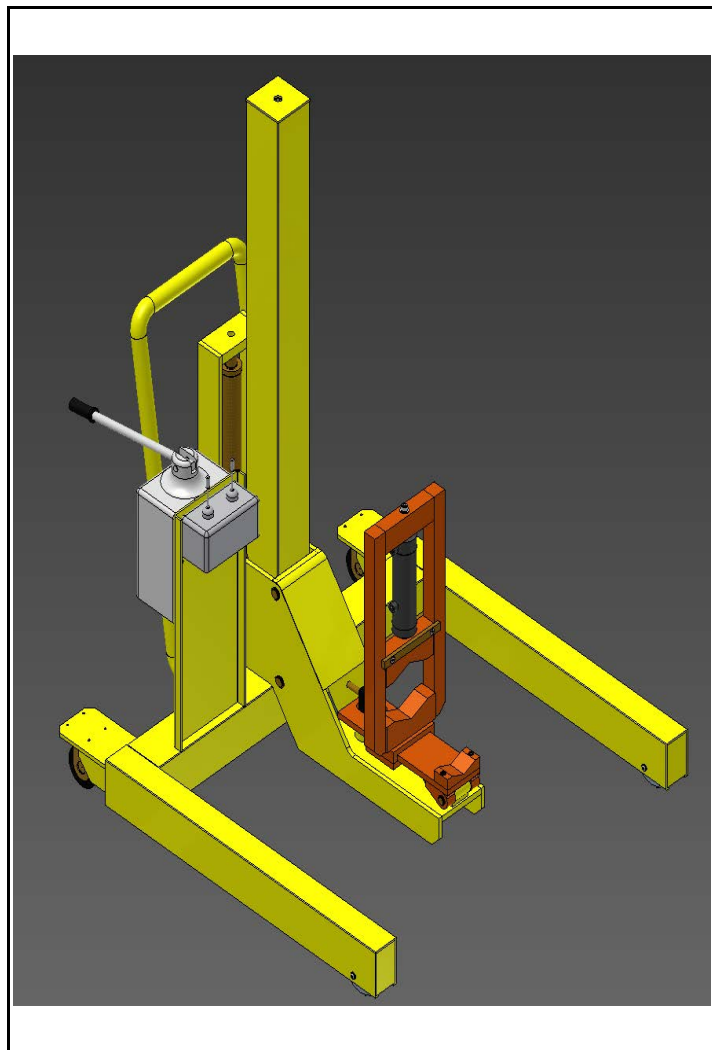


MAINTENANCE AND OPERATING INSTRUCTIONS

MANUAL SHAFT MOVEMENT TROLLEY

Mod. AMK401M01234



Carefully read the instructions contained in this booklet
before operating the system.

Service and warranty: ***SVECOM P.E.***

Special maintenance: ***SVECOM P.E.***

This manual is considered an integral part of the unit and must accompany it when transported or resold.
It is the responsibility of the user to keep it complete and in good condition.

All rights for the total or partial translation, reproduction and adaptation, by whatever means (including photostat copies, film and microfilm) are reserved and are prohibited without the prior written consent of ***SVECOM P.E.***



SVECOM P.E.

Via della Tecnica

36075 MONTECCHIO MAGGIORE

VICENZA - ITALY

Tel. 0444 / 499344 - Fax 0444 / 499338

CONTENTS

CE DECLARATION OF CONFORMITY	5
1.0 STANDARDS AND GENERAL PRECAUTIONS	6
1.1 SAFETY	6
1.2 SAFETY STANDARDS	7
1.3 SAFETY NOTICES, LOCATION, DESCRIPTION	8
2.0 PREAMBLE	9
3.0 INTRODUCTION	10
4.0 MACHINE PRESENTATION	11
4.1 COMPOSITION	11
4.2 FUNCTIONING	12
4.3 ACCIDENT-PREVENTION PROTECTION SCREENS	12
4.4 WORK POSITIONS	12
4.5 TECHNICAL SPECIFICATIONS	13
4.6 HYDRAULIC COMPONENTS	15
5.0 TRANSPORT - UNLOADING - UNPACKING	16
5.1 TRANSPORT - UNLOADING	16
5.2 LIFTING	16
5.3 PACKAGING DETAILS	17
5.4 UNPACKING	17
6.0 ENVIRONMENTAL OPERATING CONDITIONS	17
7.0 INSTALLATION	17
7.1 GENERAL PRINCIPLES	17
7.2 MACHINE ASSEMBLY	18
7.3 CONTROLS	18
7.4 HYDRAULIC SYSTEM CONNECTION	18
8.0 MAINTENANCE	19
8.1 ADJUSTING THE HORIZONTAL POSITION OF THE VICE UNIT	19
9.0 ADJUSTMENTS	20
8.1 GREASING POINTS	20
9.0 DEMOLITION AND DISPOSAL	21

WARRANTY

SVECOM P.E. guarantees the Hoist and its accessories for a period of 12 months from the date of purchase. This warranty implies the repair or replacement free of charge of any parts which, after a careful examination by the Manufacturer's Technical Service, are declared to be defective, excepting the electrical parts.

This warranty is limited exclusively to material defects and ceases to have effect if the parts involved have been tampered with or in any case dismantled by non-authorised personnel.

The warranty excludes responsibility for damage caused directly or indirectly to persons, animals or things as a result of machine failure or malfunctioning. The costs relating to the replacement of lubricants, transport, customs duties, VAT and all others not specified in the supply contract are to be borne by the purchaser.

The replacement or repair of materials under warranty does not imply the extension of the warranty period.

The purchaser may in any case only make claims under warranty if he has respected the conditions relative to the performance of the warranty, as specified in the supply contract.

If the parties do not intend to seek arbitration for any conflicts arising from the supply contract or any other circumstances in which the decision of an arbitration panel is requested, the arbitrary jurisdiction lies exclusively with the Court of Vicenza.

EXCLUSION FROM WARRANTY

Upon delivery it is necessary to verify that the machine has not suffered damage during transport and that all accessories supplied are present and complete.

Any claims must be made within 8 days of the delivery of the Hoist.

Further to the conditions specified in the supply contract, the warranty is void:

- ◆ If there is an error in handling caused by the operator.
- ◆ If the damage is due to insufficient maintenance.
- ◆ If the maximum ratings are exceeded.
- ◆ If, following repair work carried out by the user without the prior consent of **SVECOM P.E.**, or as a result of the fitting of non-original spare parts, the Hoist has been modified and the damage is due to such modifications.
- ◆ If the instructions described in this manual are not respected.



CE DECLARATION OF CONFORMITY

IN ACCORDANCE WITH 2006/42/CEE AND SUCCESSIVE AMENDMENTS

WE

SVECOM P.E. Srl

36075 MONTECCHIO MAGGIORE (VICENZA)
ITALIA

DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCT

MANUAL SHAFT MOVEMENT TROLLEY

MODEL: AMK401M01234

Factory No: 15C4976

TO WHICH THIS DECLARATION REFERS, CONFORMS
TO THE ESSENTIAL HEALTH AND SAFETY REQUIREMENTS SPECIFIED IN ANNEX "I"
OF THE DIRECTIVE 2006/42/CE AND ITS SUCCESSIVE AMENDMENTS
AND IN THE FOLLOWING LEGISLATIVE PROVISIONS:

- DIRECTIVE 2006/42/CEE (MACHINE SAFETY)
- DIRECTIVE 89/336/CEE AND ITS SUCCESSIVE AMENDMENTS
(ELECTROMAGNETIC COMPATIBILITY)

TO VERIFY THE CONFORMITY TO THE LEGISLATIVE PROVISIONS THE FOLLOWING
DOCUMENTS ON STANDARDS AND TECHNICAL SPECIFICATIONS HAVE BEEN USED:

UNI EN ISO 12100-1/2005, UNI EN ISO 12100-2/2005, UNI EN ISO 13857, EN 414/2002,
EN 50081-2/1993,
EN 50082-1/1991, EN 55014/1993, EN 60204-1/1998,
EN ISO 3746/1996, ISO 3898, UNI 10011, UNI 10021

SVECOM P.E. Srl

Sig. Marin Giancarlo

.....
(Firma del legale rappresentante)

Montecchio Maggiore...11-12-2015...
(Data)

1.0 STANDARDS AND GENERAL PRECAUTIONS

1.1 SAFETY

This manual is addressed to operators with an average educational preparation.
Before beginning any operations make sure you have read and understood this manual.
If in doubt please ask for clarification from qualified personnel.

"QUALIFIED PERSONNEL" is defined as those persons who have attended a specialist training course and who are experienced in the installation, set-up and maintenance of the systems.

"OPERATOR" refers to the person or persons responsible for the installation, operation, adjustment, maintenance, cleaning, repair and transportation of the machine.

"DANGER ZONES" refer to the zones inside or in the proximity of the machine where the presence of an exposed person constitutes a risk to the health and the safety of such person.

"EXPOSED PERSON" refers to any person who enters partly or wholly into a danger zone.

Failing to observe or neglecting the safety standards may be the cause of accidents during machine operation and maintenance.

For any doubts and clarifications please do not hesitate to contact **SVECOM P.E.**

Do not effect any modifications and do not carry out any maintenance operations which are not described herein.

If set-up incorrectly, the machine may remain operative and become dangerous over time.

The qualified personnel must also have knowledge of the principles of first aid in the case of accidents.

In all cases the behaviour of the personnel charged with the operation, maintenance, cleaning, inspection etc. of the machine must conform strictly to the accident-prevention standards in the country where the machine is operated.

Before beginning work the operator must be fully aware of the position and function of all of the machine's controls and features.

SVECOM P.E. is not responsible for damage to persons or things resulting from the inattentive reading or putting into practice of the contents of this manual.

1.1.1 Placement corresponding to points of use

Do not disregard the "DANGER- WARNING - CAUTION" notices reported in this manual and on the unit.

In order to attract attention and provide safety messages, the dangerous operations are preceded by symbols and notes which highlight the danger and explain the behaviour required to avoid such danger.

These symbols and notes are identified by the words:



DANGER: imminent danger which may cause serious injury.



WARNING: risk behaviour which may cause serious injury.



The notes preceded by this symbol are of a technical nature and facilitate operation.

1.2 SAFETY STANDARDS

Following is a list of the safety standards to be respected before, during and after the operation of the machine.

Pollution

- ◆ It is strictly prohibited to discharge products, production waste (shavings or scrap) or any polluting substances (cleaning solvents) into the sewerage system (washbasins, toilets, bathtubs etc.), into water courses, onto the ground or into the environment.
- ◆ Such products or substances are to be collected in suitable containers, stored or recycled, and under no circumstances left in the environment.

Protective clothing

- ◆ Always wear overalls or other protective clothing with elastic wristbands.
- ◆ If materials or substances which are dangerous to the health are used or processed, use suitable protective garments and devices, such as gloves, glasses, masks, headphones, aprons and shoes.

Prohibited clothing

- ◆ Do not wear clothing with loose sleeves, ties, scarves, rings, bracelets and chains or garments or similar objects which may become caught in the moving parts and cause serious injury.

Accidents: third parties

- ◆ During the operation of the unit make sure that no unauthorised persons approach the unit or its controls without due care.
- ◆ No unauthorised persons may enter the work areas and above all the area surrounding the operative units (even when not in operation).
- ◆ In the case of the presence of third parties (unauthorised persons or colleagues) near the unit, the operator must guarantee their safety and warn them of the dangers.

Prevention: checks

- ◆ Before carrying out any operation, check that the unit is in the rest position (non operative) and that the protection and safety devices are enabled.

Prohibited: warning

- ◆ Do not place hands or other parts of the body into the unit during the operating cycle and where this warning is signalled.

Obligation: accessories

- ◆ Where required use suitable protective glasses and gloves.

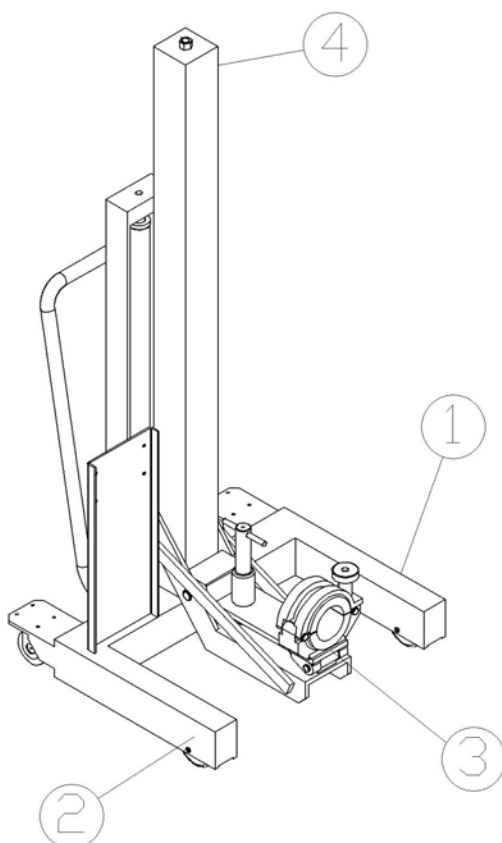
Prevention: cleaning

- ◆ Keep the work and surrounding areas clean and tidy. The following must not be present: grease, oil, water and other objects or materials which may be obstructive or dangerous.
- ◆ Do not use the machine incorrectly: the machine must be used only for the purposes for which it was designed. All other uses are considered dangerous and the manufacturer declines all responsibility for such use.








1.3 SAFETY NOTICES, LOCATION, DESCRIPTION

The machine is fitted with safety notices.

These signs are solidly attached at the focal points of the danger zones and are required for safety reasons. The locations (Figure 1) are reported here.



Only for reference

REF.	GRAPHIC SYMBOL	TYPE	DESCRIPTION
1	 	WARNING	Beware of suspended loads, keep a safe distance.
2	 	WARNING	Beware of heavy bodies on lower limbs
3	 	WARNING	Beware of the crushing of upper limbs.
4		OBLIGATION	Use indicated anchoring points for lifting.

2.0 PREAMBLE

This manual is considered an integral part of the unit and must accompany it when transported or resold.

It is the responsibility of the user to keep it complete and in good condition.

The manual contains the instructions for the operation and maintenance of the **CARRIAGE MOD. AMK 0000 00 538** produced by **SVECOM P.E.**, as well as its specifications.

The manual contains all the information necessary for the correct installation of the machine, as well as a description of the functioning of the machine.

Furthermore, it contains all information necessary for the carrying out of adjustments and maintenance operations.

For these purposes advice will be provided on what to **DO** and **NOT DO** regarding:

- ◆ transportation
- ◆ unpacking
- ◆ the environmental conditions for operation
- ◆ the adjustment and set up of the machine
- ◆ guidelines which should be followed for correct and incorrect use
- ◆ maintenance

All operations involving transportation, installation, use, routine and special maintenance are to be carried out exclusively by specialist and competent operators.

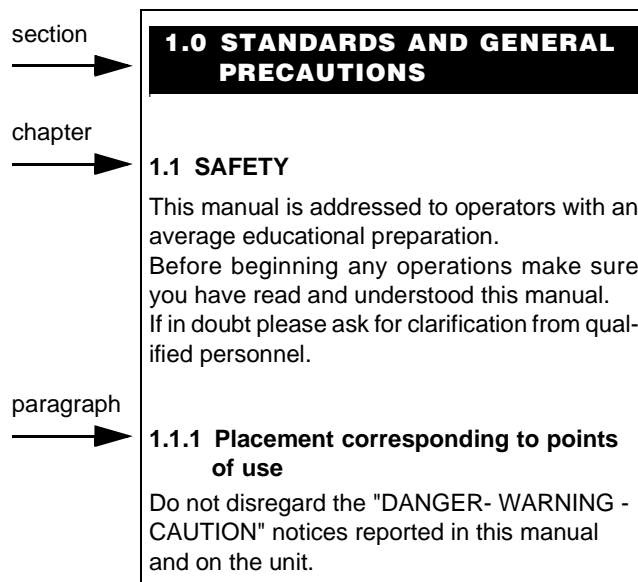
OPERATOR refers to the person or persons responsible for the installation, operation, adjustment, maintenance, cleaning, repair and transportation of the machine.



All operations for the use and maintenance of the machine not reported in this manual are contained in the relative enclosed publications.

3.0 INTRODUCTION

The text of the manual is divided by subject into sections, chapters and paragraphs. Here are some examples of how to identify these divisions.



- ◆ For the explanation of the "**DANGER - WARNING - CAUTION**" symbols and notices, see "**1.1.1 Placement corresponding to points of use**".
- ◆ The number of the reference figure is reported in the title, and the specific reference number is reported in the text in brackets.

Example:

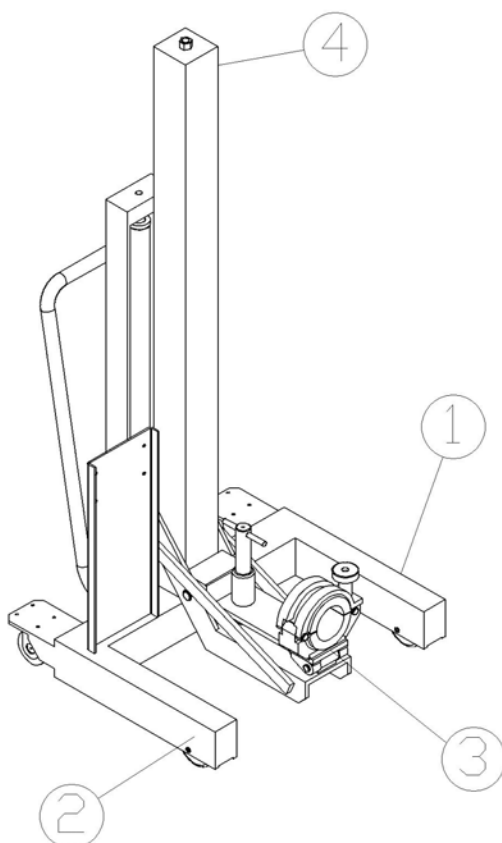
9.3 CONTROLS (Fig. 16)

- ◆ general magnetic thermal relay switch (1).
- ◆ The terms left, right, forward, back, front, rear, up and down, unless otherwise specified, refer to the operator located in the normal position to operate the controls (e.g. for a car, the operator would be seated in the driver's seat facing the steering wheel; for a machine with built-in control panel, the operator would be positioned facing the control panel itself).








1.3 SAFETY NOTICES, LOCATION, DESCRIPTION

The machine is fitted with safety notices.

These signs are solidly attached at the focal points of the danger zones and are required for safety reasons. The locations (Figure 1) are reported here.



Only for reference

REF.	GRAPHIC SYMBOL	TYPE	DESCRIPTION
1	 	WARNING	Beware of suspended loads, keep a safe distance.
2	 	WARNING	Beware of heavy bodies on lower limbs
3	 	WARNING	Beware of the crushing of upper limbs.
4		OBLIGATION	Use indicated anchoring points for lifting.

4.2 FUNCTIONING (Fig. 3)

The functioning of the machine is hydraulic.

The oil under pressure is conveyed from the control unit to the hydraulic cylinder controlling the movements.

Figure 3 illustrates the machine's axes of movement.

4.3 ACCIDENT-PREVENTION PROTECTION SCREENS

The machine is fitted with accident-prevention protection screens conforming to the relevant standards.

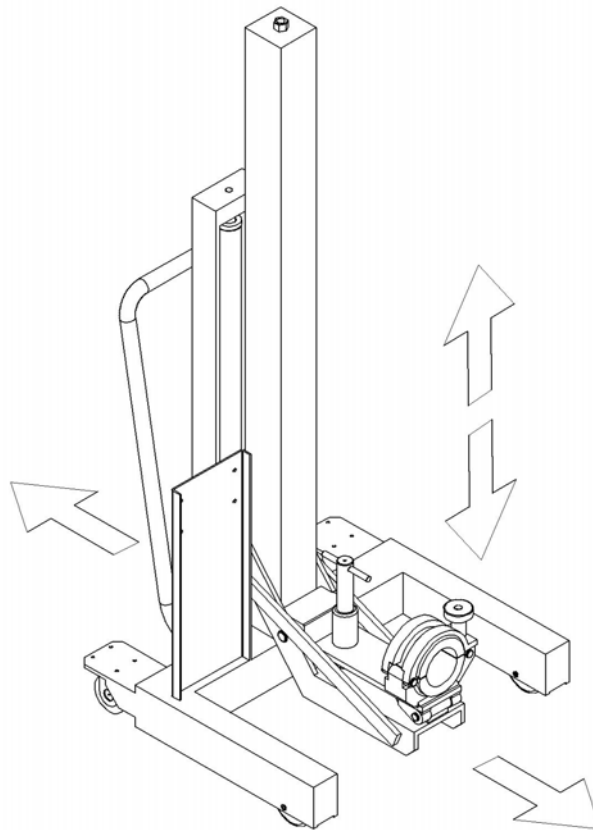
Blocking mechanism of the platform when it's in alignment stop position, of the transversal movement.

4.4 WORK POSITIONS

The operator's work position is behind the machine.

4.4.1 Lighting and health conditions at the work position

In line with the provisions for lighting in the work environment, the place where the machine is installed must not have shadowed areas, annoyingly bright lights or dangerous stroboscopic effects due to the lighting present.



Only for reference

4.5 TECHNICAL SPECIFICATIONS

4.5.1 Machine identification (Fig. 4)

A metal plate visibly attached to the rear side, specifies:

- ◆ The name and address of the manufacturer
- ◆ Model
- ◆ Factory no.
- ◆ Year of manufacture
- ◆ Maximum load (CMU) in daN
- ◆ Pneumatic circuit pressure

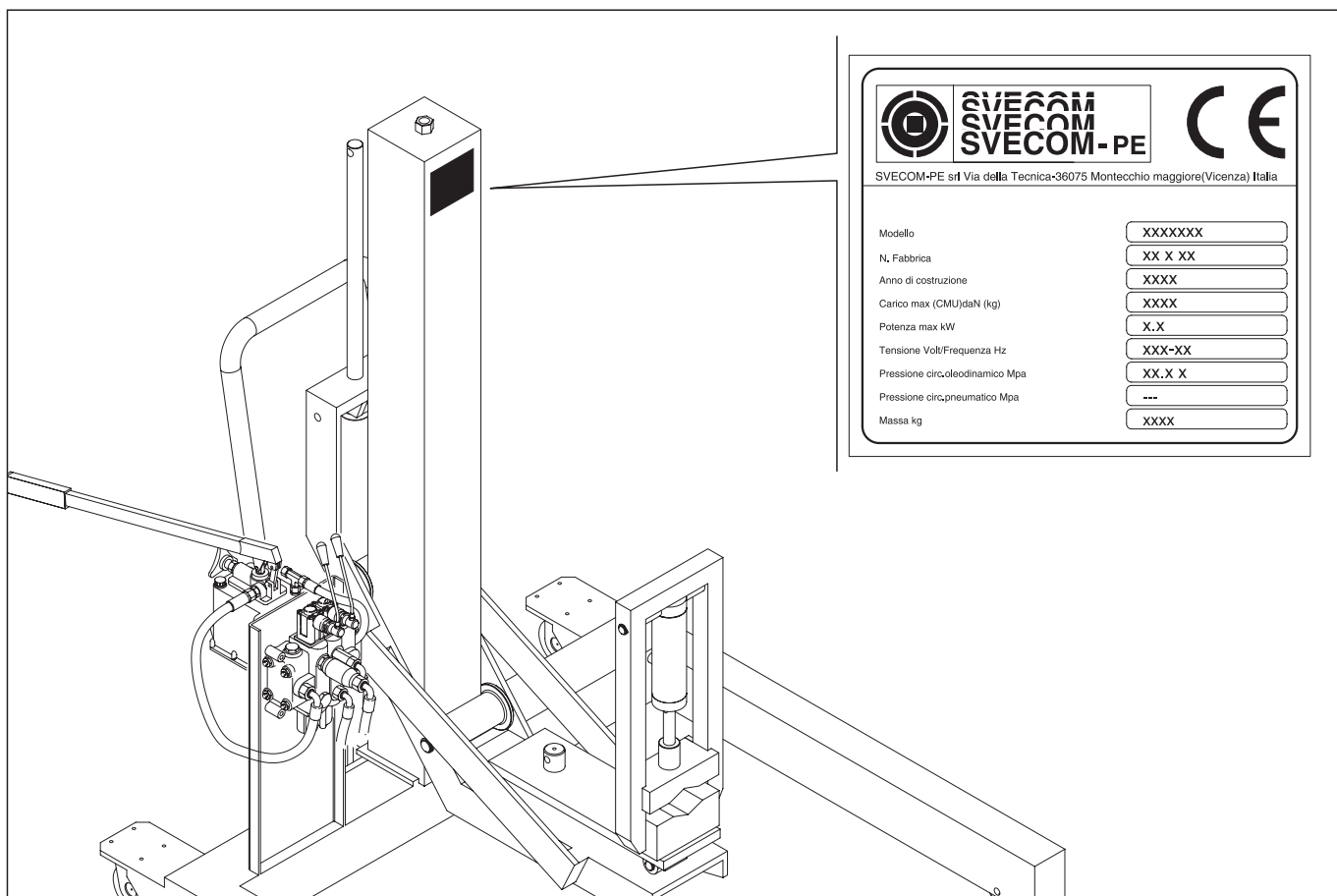
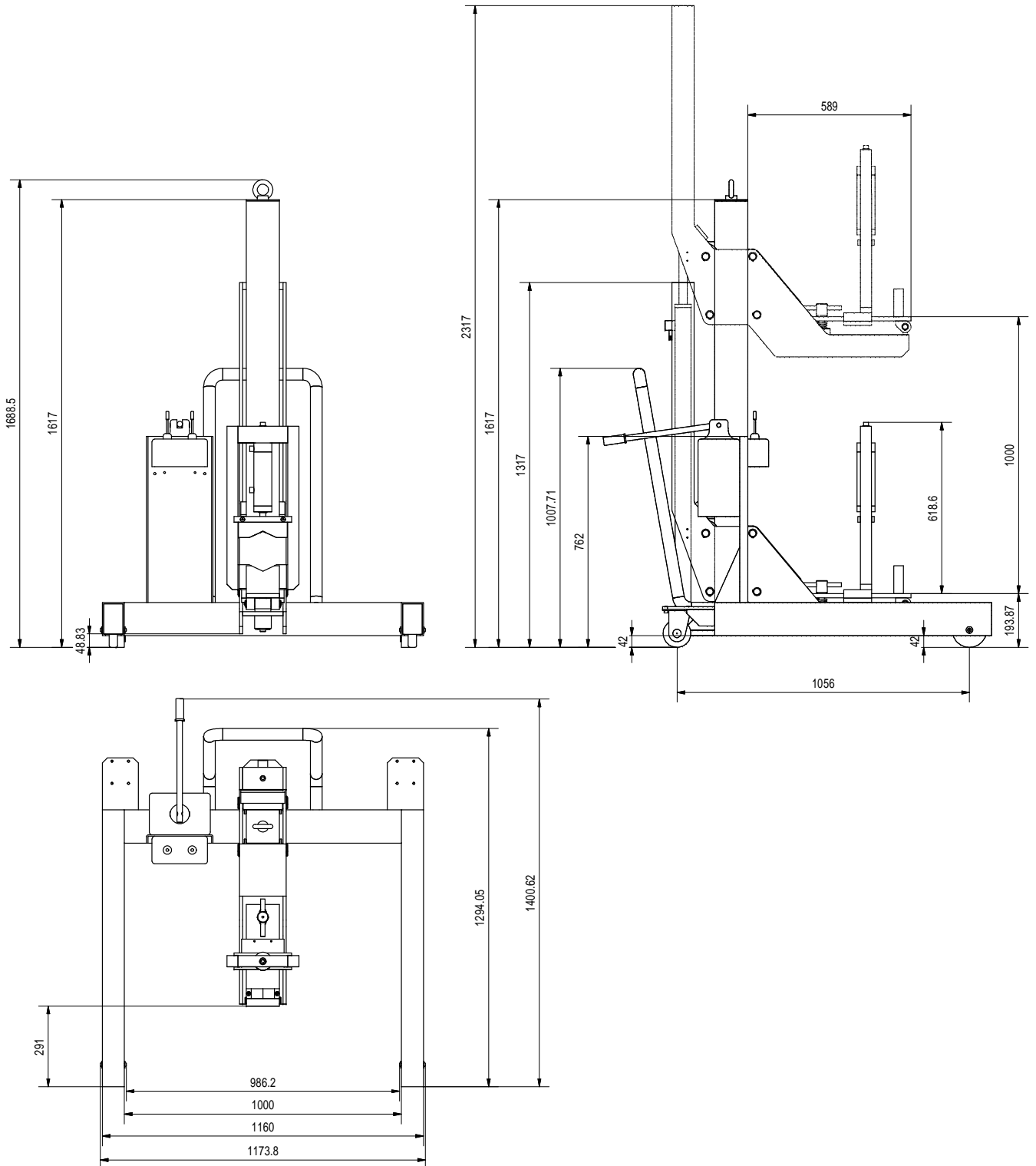


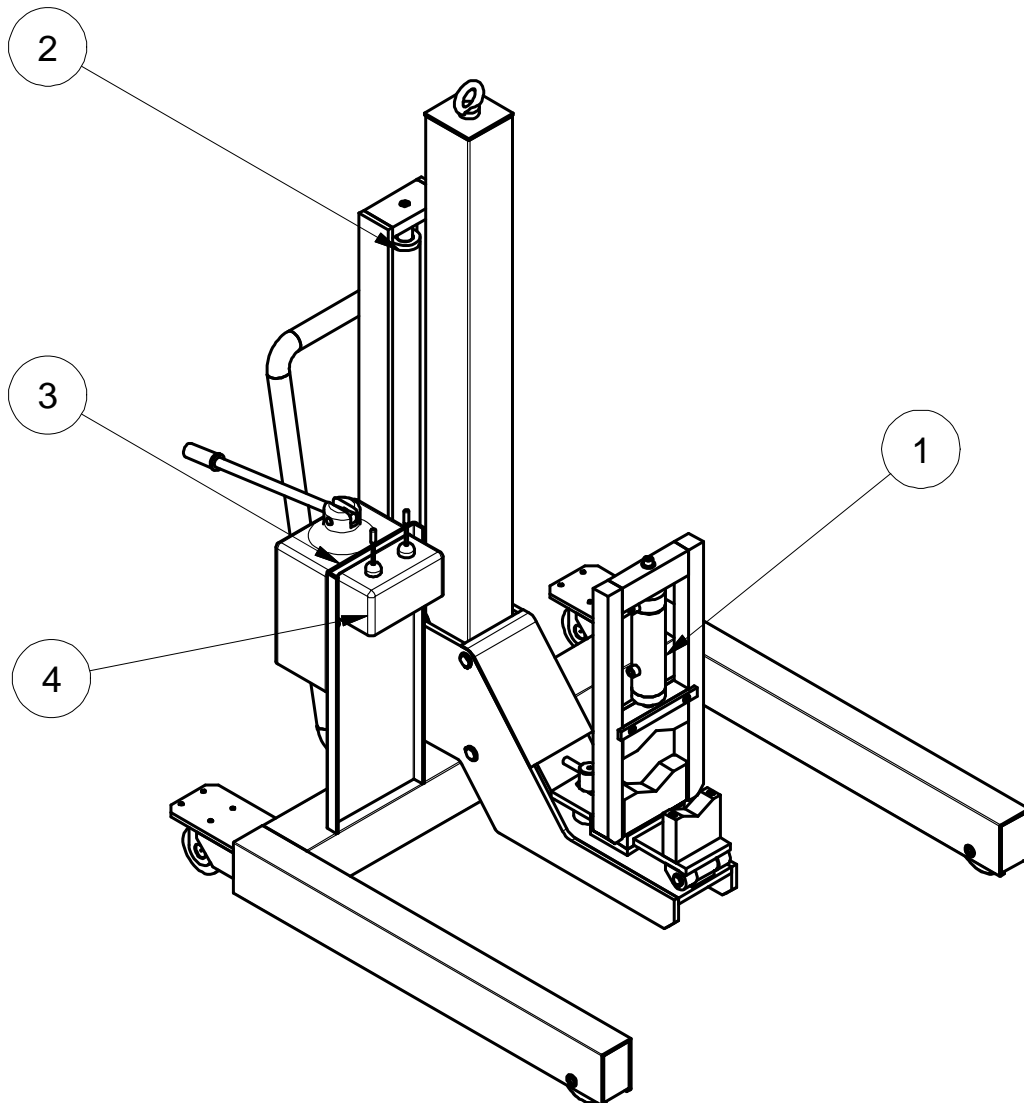
Fig. 4

4.5.2 Overall dimensions (Fig.5)

Refer to the figure for the dimensions.



4.6 HYDRAULIC COMPONENTS



- 1) Clamp cylinder
- 2) Lifting cylinder
- 3) Hydraulic pump
- 4) Hydraulic distributor

5.0 TRANSPORT - UNLOADING - UNPACKING

5.1 TRANSPORT - UNLOADING



WARNING: Do not underestimate the weight of the machine. The dimensions or the volume of the machine and its individual parts may deceive.

Check that the capacity of the crane or the equipment used for this purpose is suitable for the weight and the volume of the machine.



CAUTION:

DO NOT place the machine on top of other materials or vice-versa during transport and storage.

When moving the machine be careful not to entangle, bend or compress flexible tubing.

Place the machine stably and take steps to prevent it being subject to, or causing, knocks or accidental contact with other materials or things.



WARNING: Before beginning the unloading of the machine, check the integrity of the packaging.

The loading and unloading of the vehicle must be carried out:

- using a crane
- using a fork-lift

5.2 LIFTING (Fig. 7)

When the machine is mounted on the pallet it is necessary to use a fork truck to move.



DANGER: When lifting and moving the machine in the air (packaged or not), do not pass or rest the suspended load above persons or things.



CAUTION: Do not drop the machine or bring it to rest forcibly. The knocks it sustains may cause damage.

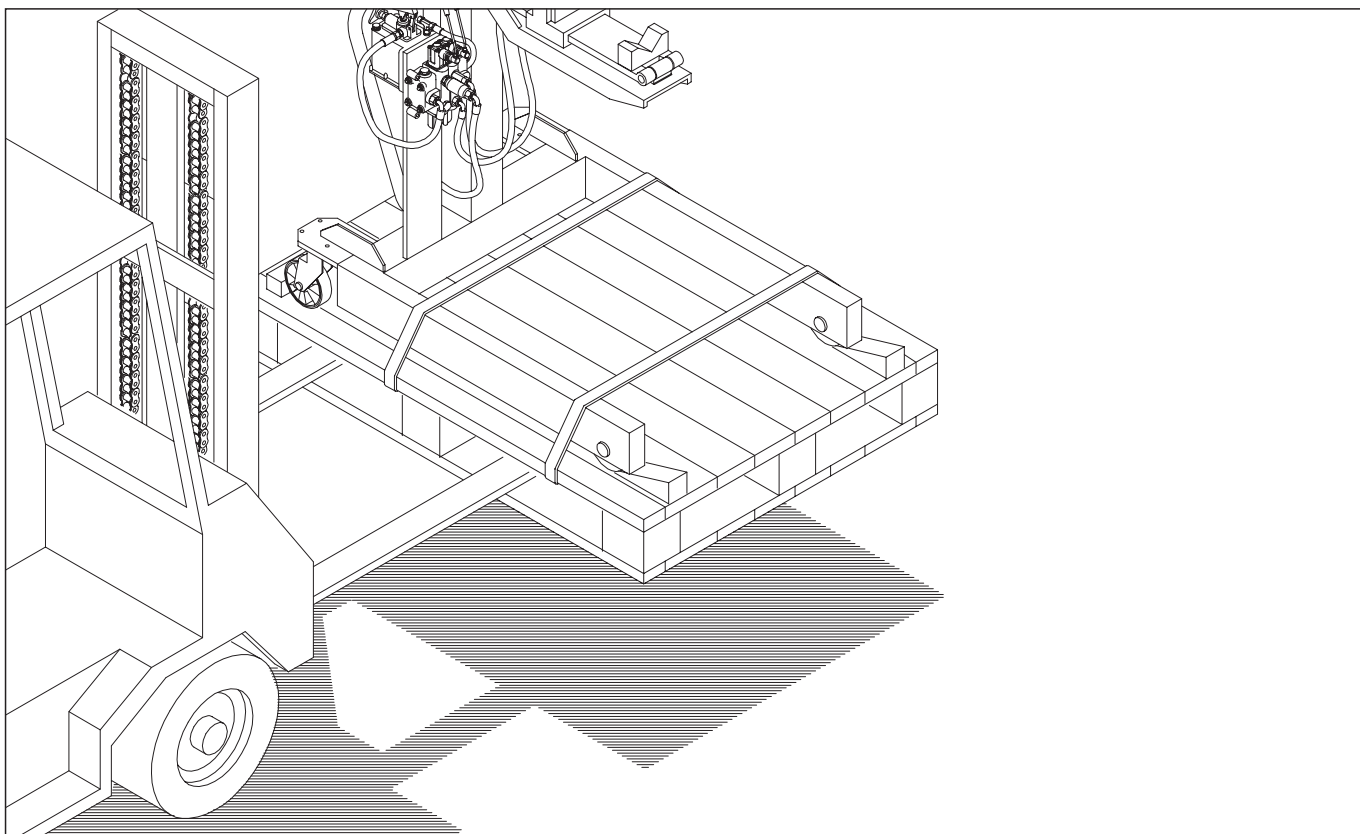


Fig. 7

5.3 PACKAGING DETAILS

The machine is sent wrapped in a sheet of protective nylon, mounted on the pallet, fixed with wooden wedges and iron hoop.

5.4 UNPACKING

- ◆ After having unpacked the machine, check its integrity, making sure that there are no visibly damaged parts.
- ◆ In case of doubt do not use the machine. Contact professionally qualified personnel (the distributor of the machine).
- ◆ The components of the packaging (plastic bags, polystyrene foam, nails, wood screws, etc.) must not be left in the reach of children and must be disposed of properly, as they represent a potential source of danger or pollution. Place the above-mentioned materials in the proper disposal containers according to the local laws in force.

6.0 ENVIRONMENTAL OPERATING CONDITIONS

No special environmental conditions are required other than those specified by the standards relating to work and safety.



WARNING:

A restricted, poorly-ventilated or poorly-heated environment may be the cause of accidents.



WARNING: The lighting in the work environment must have a normal value and not create operating difficulties.

Direct light onto the unit must not create shadowed zones or annoying reflections.

The conditions and dimensions of the environment where the machine is positioned must be such that the operator can work in optimum conditions.

7.0 INSTALLATION

7.1 GENERAL PRINCIPLES

Choose a suitable environment by adhering to the indications described in section "6.0 ENVIRONMENTAL OPERATING CONDITIONS".



CAUTION: The non-vertical or unstable positioning of the machine may compromise its performance and affect the quality of work.

Check that the operator can observe the entire machine from the control position and the surrounding environment.

7.2 MACHINE ASSEMBLY

The machine is shipped already assembled.

Suitable equipment (for example a fork-lift) must be used to place in the work position.

7.3 CONTROLS (Fig. 8)

- 1) Pump working lever for cradle lifting
- 2) Handgrif for cradle down control
- 3) Clamp unit downstroke control handwheel

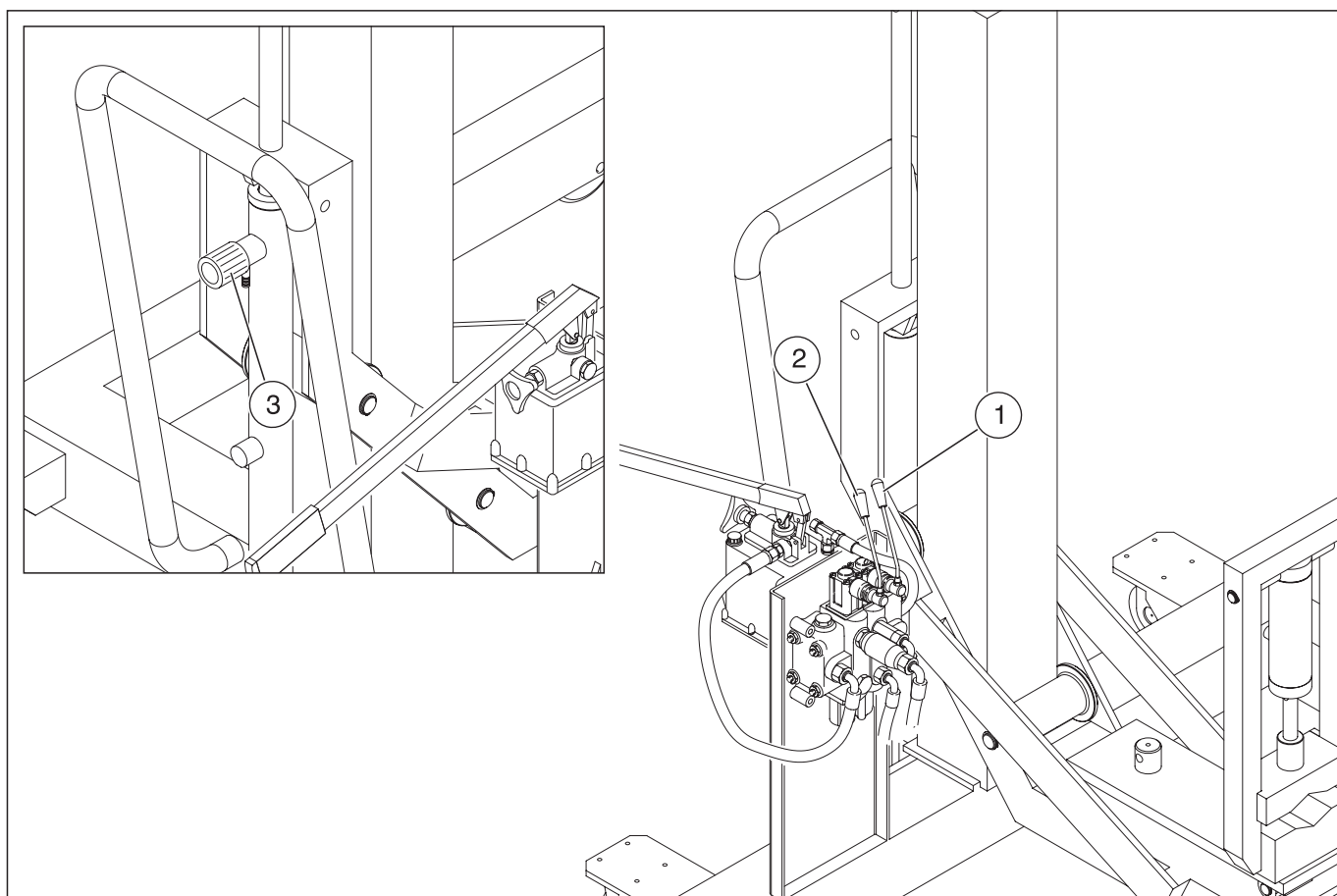


Fig. 8

7.4 HYDRAULIC SYSTEM CONNECTION

The machine is supplied with all hydraulic connections operative.

8.0 ADJUSTMENTS

8.1 ADJUSTING THE HORIZONTAL POSITION OF THE VICE UNIT (Fig. 9)

Position a suitably-precise level gauge on the shaft locked in the clamp unit and check for perfect horizontal alignment. If the shaft appears to be inclined at all, obtain perfect horizontal alignment by using the adjustment screw (1).

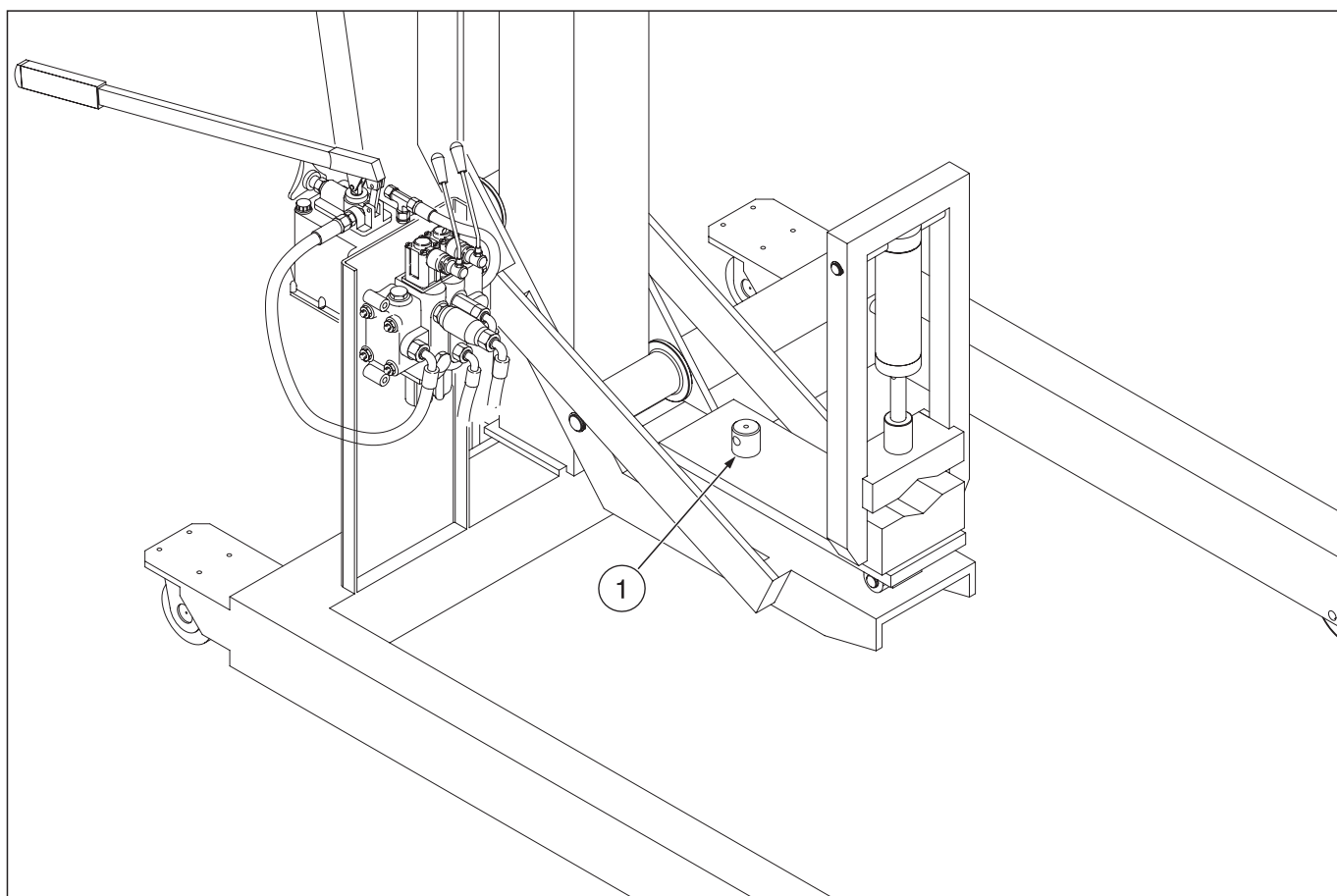


Fig. 9

9.0 MAINTENANCE



It is strictly prohibited to discharge products, production waste or any polluting substances into the sewerage system, into water courses, onto the ground or into the environment.

Do not discharge oil into the environment.

It should be taken in a sealed container to the service station from where the oil is normally purchased or to an oil recycling centre.

Routine maintenance operations are simple and are listed as follows:

- ◆ Checking of the oil level in the hydraulic control unit
- ◆ Cleaning of the carriage slide guides
- ◆ Greasing

Periodically check the oil level in the hydraulic control unit tank, using the level indicator (1-Fig.10). If the level is near the minimum, top up the level using oil of the same type, through the same plug.

N.B. Recommended oil: AGIP OSO32 or equivalent



Do not mix oils of different types and characteristics.

If you wish to use a oil with equivalent properties yet of a different brand, it is recommended to replace the existing oil completely, using a suitably capacious container and unscrewing the discharge plug.



The discharged oil must not be disposed of into the environment, but rather must be handled by firms specialising in oil disposal (see used oil consortia).

9.1 GREASING POINTS

Periodically lubricate the bearings of the carriage guide wheels and all the points equipped with grease nipple. Grease the clamp with a brush, using ALVANIA EPS (ISO XM2) grease or an equivalent product.

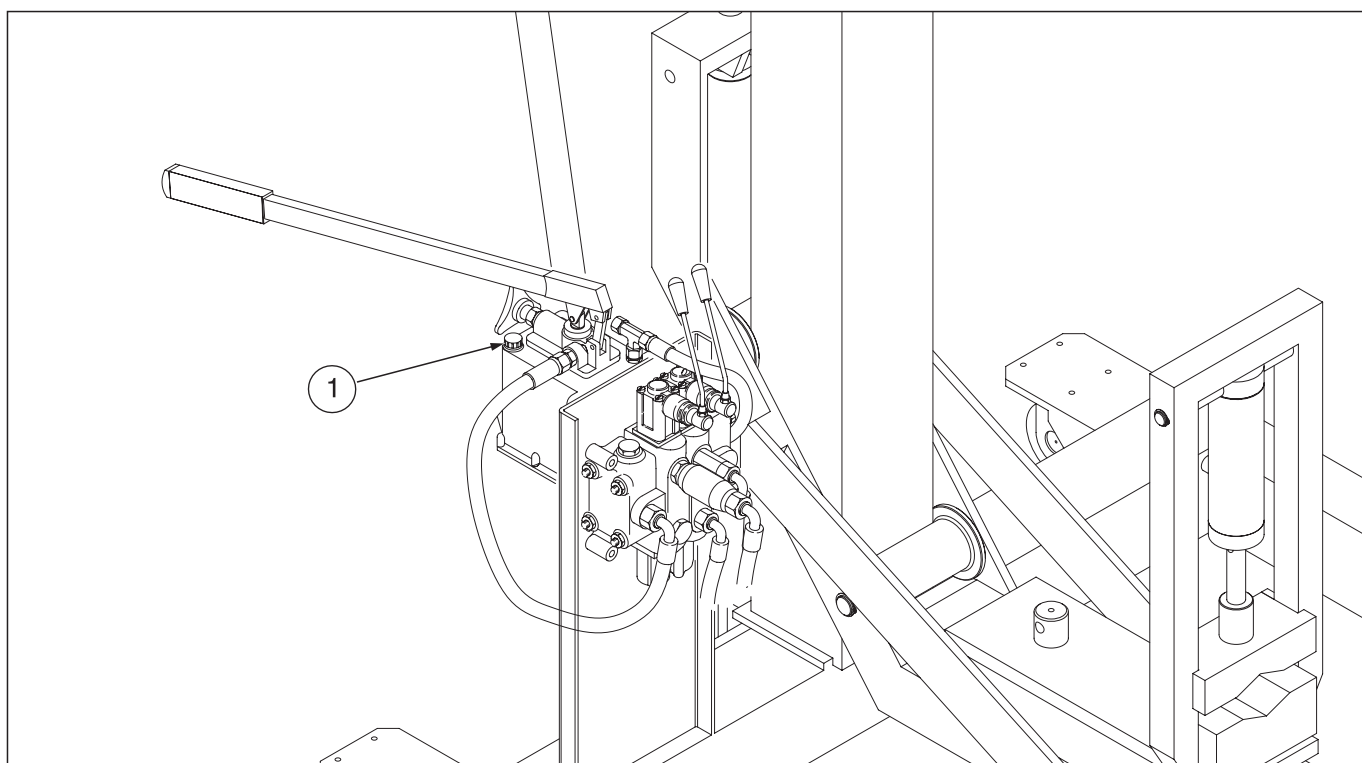


Fig. 10

10.0 DEMOLITION AND DISPOSAL

Use a firm specialising in the disposal of industrial waste, separating the following materials:

- ◆ Flexible rubber pipes
- ◆ Used oils

To be disposed of according to the directive CEE 78/319 relating to the disposal of toxic and noxious waste.

Metals of various types.:

- ◆ To be disposed of according to the directive CEE 75/442 relating to the disposal of generic waste.



SVECOM P.E.
Via della Tecnica
36075 MONTECCHIO MAGGIORE
VICENZA - ITALY
Tel. 0444 / 499344 - Fax 0444 / 499338