Taal: Engels

Handleiding

Silver X-2503RV

SI 1601202B

MSH equipment
Appelmarkt 7
1681 PE Zwaagdijk-Oost
Tel: 0228-561100
Fax: 0228-561112
Mail: info@msh-equipment.nl
Website: www.msh-equipment.nl

GIULIANO S.p.A.
AUTOMOTIVE EQUIPMENT

CE

DICHIARAZIONE CE DI CONFORMITA'
CE DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE CE
CE - ÜBEREINSTIMMUNG

GIULIANO S.p.A. - Via Guerrieri, 6 - 42015 Correggio (RE) ITALY
dichiara sotto la propria esclusiva responsabilità che il prodotto:
declare on our own responsibility that the product:
Déclare sous son propre responsabilité que le produit:
erklärt unter ihrer eigenen Verantwortung, daß das Erzeugnis:

X 2503

SOLLEVATORE AUTO SOTTOSCOCCA
ELÉVATEUR DE VÉHICULES AVEC PRISE SOUS-COQUE
VEHICLE WHEEL-FREE LIFT
KFZ-HEBEBÜHNE MIT UNTERAUFBAU-HEBEPUNKTEN

Targhetta

al quale questa dichiarazione si riferisce, corrisponde al modello esaminato ed E' CONFORME ALLE SEGUENTI DIRETTIVE:
to which declaration refers, corresponds to the examined model and it is IN CONFORMITY WITH THE FOLLOWING DIRECTIVES:
au quel cette déclaration se rapporte, correspond au modèle examiné et QU'IL EST CONFORME AUX DIRECTIVES SUIVANTES:
darauf diese Erklärung Bezug nimmt, dem geprüften Modell entspricht und mit den folgenden Bestimmungen übereinstimmt:

2006/42/CE - 91/368/CEE - 93/68/CEE- 2006/95/CE - 2004/108/CE

ed alle Norme:
as well as to the following norms:
ainsi qu'aux normes suivantes:
und folgender Vorschrift gemäß:

EN 12100 - EN 60204 - EN 1493

Il firmatario della presente dichiarazione è la persona autorizzata a costituire il fascicolo tecnico
The signer of this declaration of conformity is the person authorized to provide for the technical file literature
Le signataire de cette déclaration de conformité est la personne autorisée à produire le dossier technique
Der Unterzeichner dieser CE-Übereinstimmung ist dazu ermächtigt, das technische Aktenbündel vorzulegen
El firmante de esta declaración es la persona autorizada para elaborar el expediente técnico

Organismo notificato per la Certificazione:
Competent Body advised for certification
Organisme préposé à la Certification
Zustellerorgan:

CETE APAVE NORD OUEST
76132 Mont - St. - Aignan Cedex
Près Rouen - 2, rue des Mouettes

Numero dell'attestato di certificazione CE
EC identification number
Numéro de l'attestation CE:
CE Zeugnisnummer:

X 2503 **0877/5042/150/02/10/0198**

Correggio, 09/02/2010

Il modello della presente dichiarazione è conforme nella Norma EN ISO/IEC 17050-1
The model of present declaration is in conformity with directive EN ISO/IEC 17050-1
Le modèle de cette déclaration est conforme à la Norme EN ISO/IEC 17050-1
Das Modell dieser Erklärung übereinstimmt mit der Bestimmung EN ISO/IEC 17050-1
El modelo de esta afirmación está en consonancia con la norma EN ISO/IEC 17050-1

p. GIULIANO S.p.A.
Il Presidente G.Maselli

GIULIANO S.p.A.
AUTOMOTIVE EQUIPMENT

CE

DICHIARAZIONE DI CONFORMITA' ATEX
ATEX DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE ATEX
ATEX - ÜBEREINSTIMMUNG

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dichiara sotto la propria esclusiva responsabilità che il prodotto:
declare on our own responsibility that the product:
Déclare sous son propre responsabilité que le produit:
erklärt unter ihrer eigenen Verantwortung, daß das Erzeugnis:

SOLLEVATORE AUTO SOTTOSCOCCA
ELÉVATEUR DE VÉHICULES AVEC PRISE SOUS-COQUE
VEHICLE WHEEL-FREE LIFT
KFZ-HEBEBÜHNE MIT UNTERAUFBAU-HEBEPUNKTEN

X 2503

Targhetta

al quale questa dichiarazione si riferisce, corrisponde al modello esaminato ed E' CONFORME ALLE SEGUENTI DIRETTIVE:
to which declaration refers, corresponds to the examined model and it is IN CONFORMITY WITH THE FOLLOWING DIRECTIVES:
au quel cette déclaration se rapporte, correspond au modèle examiné et QU'IL EST CONFORME AUX DIRECTIVES SUIVANTES:
darauf diese Erklärung Bezug nimmt, dem geprüften Modell entspricht und mit den folgenden Bestimmungen übereinstimmt:

94/9/CEE (ATEX)

ed alle Norme:
as well as to the following norms:
ainsi qu'aux normes suivantes:
und folgender Vorschrift gemäß:

EN 1127-1 / EN 13463-1 / EN 13463-5

secondo la seguente marcatura:

II 2 GD c IIB T6 T85°C

ai sensi dell'art. 8 b) ii della Direttiva 94/9/CEE, la documentazione tecnica è stata trasmessa ad I.C.E.P.I. srl, Organismo Notificato CE n.ro 0066, che ne ha accusato il ricevimento.

Numero dell'attestato: DFT04805A

Correggio, 04/07/2005

Il modello della presente dichiarazione è conforme nella Norma EN ISO/IEC 17050-1
The model of present declaration is in conformity with directive EN ISO/IEC 17050-1
Le modèle de cette déclaration est conforme à la Norme EN ISO/IEC 17050-1
Das Modell dieser Erklärung übereinstimmt mit der Bestimmung EN ISO/IEC 17050-1
El modelo de esta afirmación está en consonancia con la norma EN ISO/IEC 17050-1

p. GIULIANO S.p.A.
Il Presidente G.Maselli

1.	**INTRODUCTION**	page 9
1.1	Lift identification	page 9
1.2	Intended use	page 10
1.3	Description of versions	page 10
2.	**GENERAL**	page 11
2.1	General SAFETY rules	page 11
2.2	Hazard and forbidden operations warnings	page 12
2.3	Safety devices	page 13
2.4	General rules for LOADING	page 14
3.	**TRANSPORT AND MOVING**	page 15
3.1	Description of the main parts of the lift (mod. X2503 C)	page 16
3.2	Description of the main parts of the lift (mod. X2503 C RV)	page 17
4.	**INSTALLATION**	page 17
4.1	Equipment and tools required	page 17
4.2	Space required	page 17
4.3	Installation site	page 17
4.4	Anchoring to floor and levelling	page 19
4.5	Power connection	page 19
4.6	Hydraulic connection	page 20
4.7	Oil tank	page 20
4.8	Pneumatic connection	page 20
4.9	Electrical connections	page 20
4.9.1	X 2503 C/C RV	page 20
4.9.2	X 2503 C/C RV	page 22
4.9.3	X 2503 C/RV with pedal unit	page 24
4.10	Electrical connection to the feeding network	page 26
4.11	Check of motor run direction	page 26
4.12	Air bleeding from the hydraulic system	page 26
4.13	Final procedures	page 26
5.	**DESCRIPTION OF THE CONTROLS**	page 27
5.1	Control unit	page 27
6.	**USE**	page 28
6.1	General precautions for use	page 28
6.2	Lifting and lowering	page 28
6.3	Use of the adjustable support	page 28
6.4	Use of additional stops	page 29
7.	**RESITING**	page 29

8.	**LIFT STORAGE**	page 29
9.	**SCRAPPING**	page 30
10.	**OIL TREATMENT**	page 30
10.1	General precautions	page 30
10.2	First aid instructions	page 30
10.3	Used oil treatment	page 30
10.4	Oil spreading or leaks	page 30
11.	**FIRE-FIGHTING MEANS**	page 30
12.	**ORDINARY SERVICE**	page 31
12.1	General maintenance precautions	page 31
12.2	Maintenance operations	page 31
13.	**DIMENSIONAL DIAGRAMS**	page 32
14.	**TECHNICAL DATA**	page 33
15.	**PROCEDURE FOR CHECKING THE MAX. PRESSURE**	page 36
16.	**LUBRICATION POINTS**	page 37
OPTIONAL ACCESSORIES		page 39
ELECTRIC, PNEUMATIC AND HYDRAULIC DIAGRAMS		page 42
RECORD OF INTERVENTIONS		page 47

USER'S RECORD

Customer's stamp

Type .....

Serial Number .....

Customer .....

Date of installation .....

The herebelow listed persons have been qualified to use the machine after installation.
The course for use and maintenance has been carried out by a qualified technician or by a saler duly authorized by the manufacturer.

Date	Name	Signature
Date	Name	Signature
Date	Name	Signature

Stamp and name of the technician

Date

Technician's signature

Cut out and send, duly filled and signed, to:

GIULIANO S.p.A. - Lifting Division
Via Costituzione, 69
42015 - Correggio (RE) - ITALY

RECORD OF INSTALLATION

Customer's stamp

Type .....

Serial Number .....

Customer .....

Date of installation .....

We hereby declare that the above mentioned machine has been installed correctly.

The pre-estabilisced functions have been checked as well as the correct operating of all safety devices.
We consider therefore the machine as set at work in all respects.

_ _ _ _ _ _ _ _
Date of installation

_ _ _ _ _ _ _ _
The authorized technician

_ _ _ _ _ _ _ _
The customer

RECORD OF INSTALLATION

Customer's stamp

Type .....

Serial Number .....

Customer .....

Date of installation .....

We hereby declare that the above mentioned machine has been installed correctly.

The pre-estabilisced functions have been checked as well as the correct operating of all safety devices.
We consider therefore the machine as set at work in all respects.

_ _ _ _ _ _ _ _
Date of installation

_ _ _ _ _ _ _ _
The authorized technician

_ _ _ _ _ _ _ _
The customer

1. INTRODUCTION

Read this guide very carefully before using the machine.

Keep this guide as well as all the supplied technical literature in a safe place close to the lift in order to help the users to consult it whenever necessary.

The technical literature is an integral part of the machine and it must always follow the product, even in case of sale.

The herewith given instructions are addressed to an adult public having a certain degree of knowledge in the matter. We have therefore avoided describing each single operation. Always avoid carrying out operation beyond your own ability. In case of need of assistance, contact the dealer

Follow the directions given by this guide carefully.
Any other use not described is to be considered as improper and irrational, and thus it will be under the whole responsibility of the operator.

When achieving 22.000 working cycles (and in any case not longer than 10 years from installation and setting at work date) the lift must be inspected in all its parts.

1.1_Lift identification

Aid the after-sales service by always specifying MODEL (Type), SERIAL NUMBER and any installed accessories. These details are shown on the labels stuck, one on the lift runway and the other on the control unit. Here below their FAC-SIMILE position is given.

*Plate with serial number present only in case of Atex version

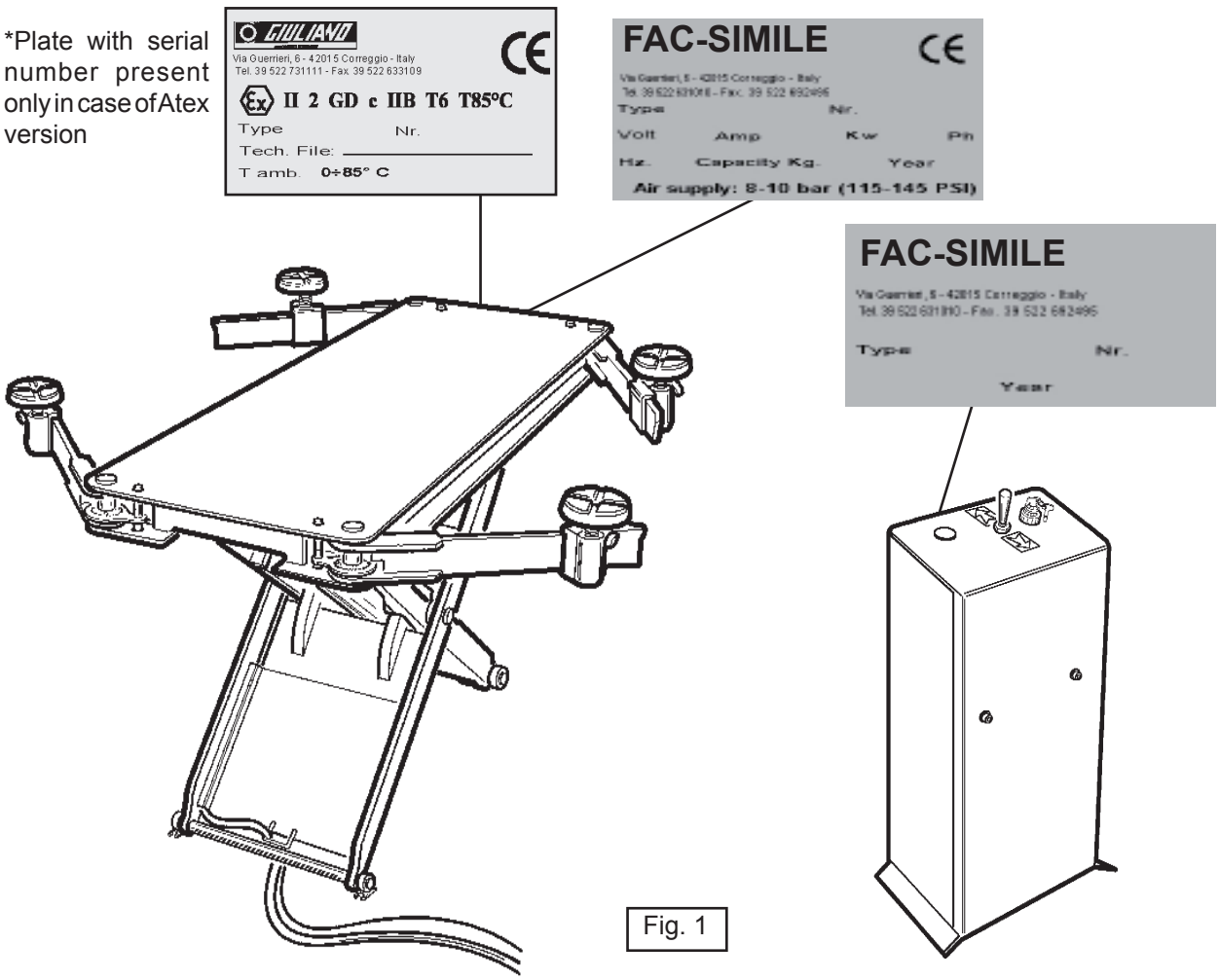


Fig. 1

1.2_Intended Use

X2503 is a lift with underbody lifting system suitable for vehicles weighing max. 3000 kg. up to 1050 mm. height. The machine has been studied for being installed on the floor or recessed into a pit, so as not to hinder excessively the working area when not in use.
Its configuration as well as the possibility of adjusting the vehicle grip makes it particularly suitable for repairing damaged bodies or for body ordinary service.
It is possible to use the lift inside painting booths up to 85°C. The machine has been studied in conformity with Directive 94/9/CE (ATEX) and listed in class 3 (suitable for area 2).
For more details, see the data nameplate.
The “ATEX” specific version includes both a control unit to be used inside the risk-area and an electric unit to be installed outside the risk-area.

1.3_Description of versions

X 2503

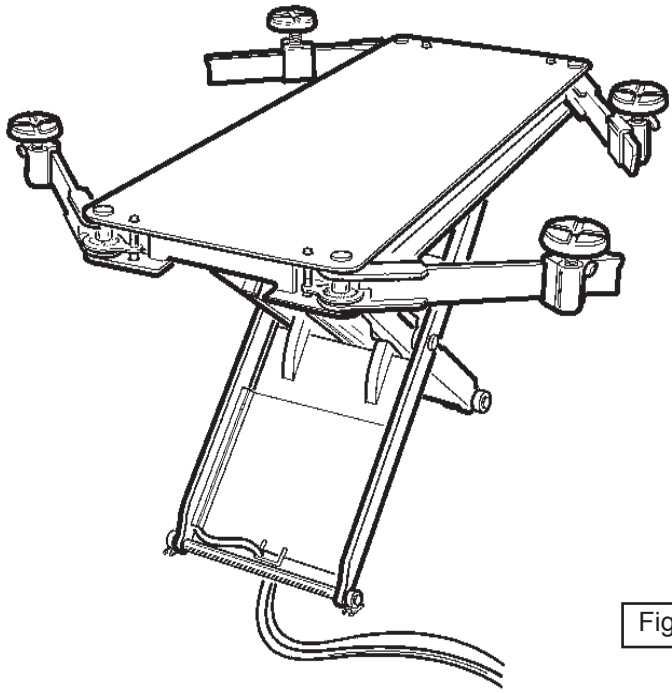


Fig. 2

X 2503 RV

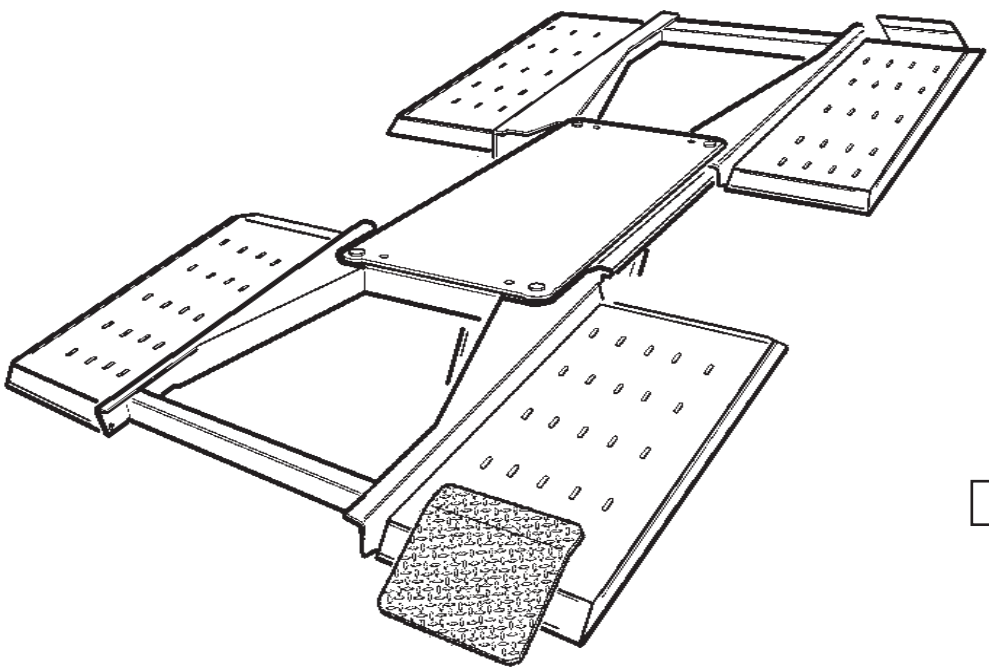


Fig. 3

2. GENERAL

2.1_General SAFETY rules

Lift range **X2503** is suitable for lifting 4-wheeled vehicles having max. 3000 kg. total weight, up to a max. height of **1050 mm**.

This appliance must only be used for the purpose for which it is expressly designed.

Any other use must be considered wrong and so unreasonable. It is forbidden to lift vehicles with a load distribution different from the admitted one and to lift vehicles from one side. It is mandatory to use the proper fastening devices.The manufacturer must not be considered responsible for any damages caused by wrong uses of the equipment..

The machine must be used by previously authorized and trained adult staff only.
In order to prevent unauthorized persons from using the lift, it is possible to padlock the main switch on the control unit.

Any tampering or modification, if not previously authorized by the constructor, relieves this one of eventual damages referred to the mentioned actions.

In particular, any remove or tampering of the safety devices constitutes a breach of the European Safety Regulations.
This operation is only allowed for maintenance reasons and only if carried out by authorized qualified staff.

The lift's max. loading capacity of 3000 kg. must never be exceeded. Particular attention must be paid to any eventual additional load inside the vehicle.

The lift is equipped with instruction and warning stickers designed and produced to last over time.
In case they get damaged or destroyed the user must apply to the dealer or the constructor for replacing them.

Any work on the electrics, however small, must be carried out by qualified staff according to the current national regulations.

Any topping up made by using a hydraulic fluid having different features from those given in this guide can seriously compromise the machine's working.

Only use the Original spare parts listed in the Spare Parts catalogue delivered with this guide. The constructor cannot be held responsible for any claim caused by the use of non-original spare parts.
The lift may be fitted with accessories, which must be those approved by the constructor. The constructor cannot be held responsible for any injury or damage deriving from unapproved accessories.

For a safe use refer to chap. 6

DO NOT use the lift in windy places.

DO NOT use the lift for sand-blasting or washing.

The outdoor installation requires special treatments. If necessary, contact the constructor for relevant information.

It is forbidden to use the lift in areas that are at risk of explosion, according to the Directive 94/9/CE (Atex), unless it has been properly updated, declared and marked by means of relevant accessories and specific documentation.

2.2_Hazard and forbidden operation warnings

The safety symbols here below are present on the lift with the purpose to draw the operator's attention to dangerous or unsafe situations. The labels must be kept clean and they must be immediately replaced if detached or damaged. Read the meaning of the safety symbols carefully and memorize it.

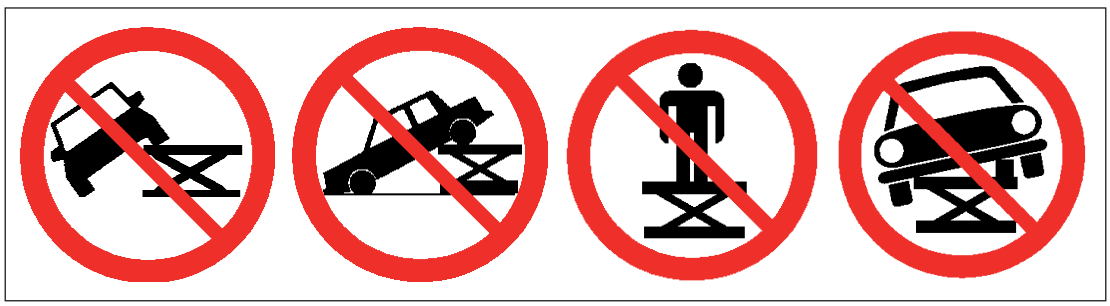
Cod. 3023114

Never stay under the lift during lifting/lowering phase

Carry out maintenance regularly as indicated in the instructions book.

Attention: danger of crushing feet

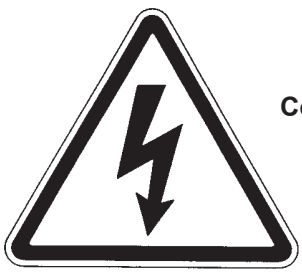
Cod. 3023115



It is forbidden to lift the vehicle from one side only as it may tip over

Never stand on the lift runways when raised.

Never lift the vehicle without making sure that it is securely positioned on the rests.



Cod. 3005410

Live electrical panel

MAX. 3000 KG.

Cod. 3005404 - Max load

Cod. 3005378 - Brief instructions for use

Cod. 30026950 - Emergency stop

Fig. 4

2.3_Safety devices

Mechanical safety system (racks)
It prevents accidental or uncontrolled lowering of the lift in case of a failure of the hydraulic power unit or a leak from the hydraulic hoses.

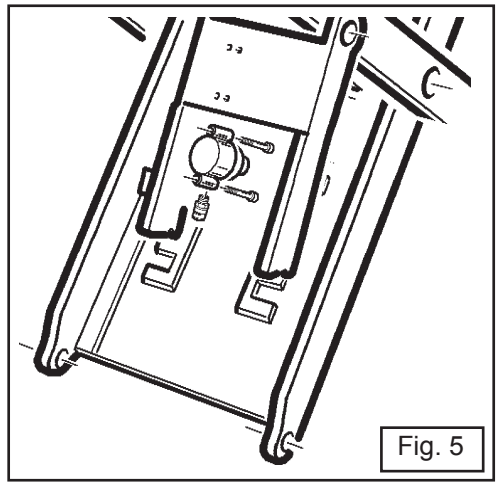


Fig. 5

Anti-crushing acoustic device (buzzer)

During lowering phase an acoustic device will enter in function so warning the user and by-standers of crushing danger.

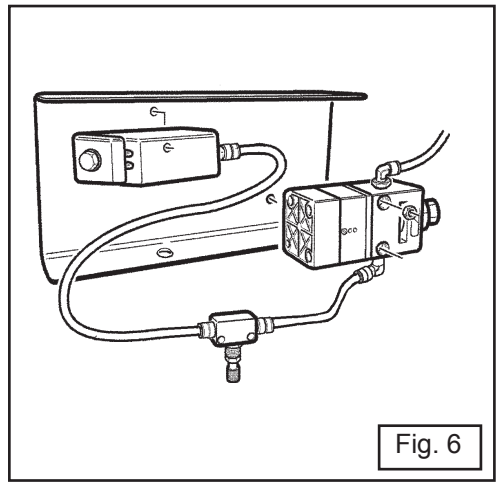


Fig. 6

Pressure relief valve
It bounds the lifted load to the fixed loading capacity.

Stop safety valve in the cylinder
In case of accidental fall, the stop safety valve, placed inside the cylinder, gets engaged and slows down the machine lowering action.

Motor cutout
In case of electrical overload it stops the motor rotation.

Main switch (ref. C – Fig.7)
Set it to “0” to switch the system OFF

Air plug (Ref. B – fig. 7)
When closed it cut the air feeding out.

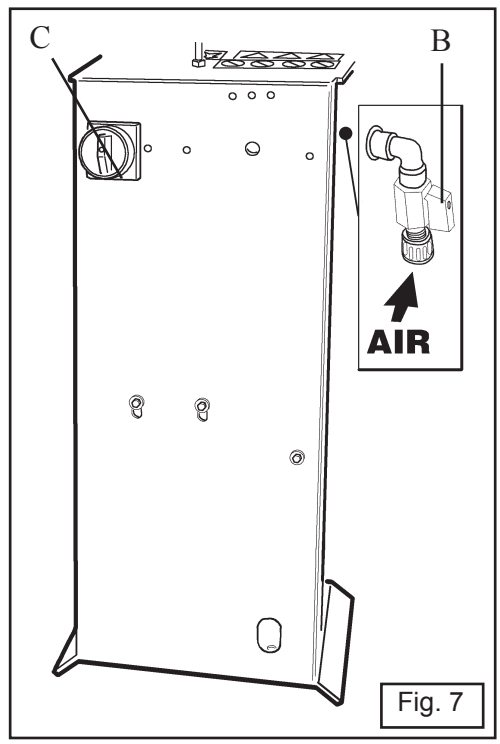


Fig. 7

2.4_General rules for LOADING

- Never exceed the max. loading capacity of 3000 kg.
- Pay particular attention to have the rubber pads correctly positioned at the vehicle lifting points.
- Always refer to the loading plan admitted by EN 1493/98 given by the charts and diagrams here below in order to distribute the load correctly.
- Vehicle reversible positioning admitted (EN 1493/98)
- The admitted max. loading capacity **must be never exceeded.**
- Always make sure that, when working on lifted vehicles, any possible removal of vehicle's parts does not affect the loading distribution beyond the estimated limits.

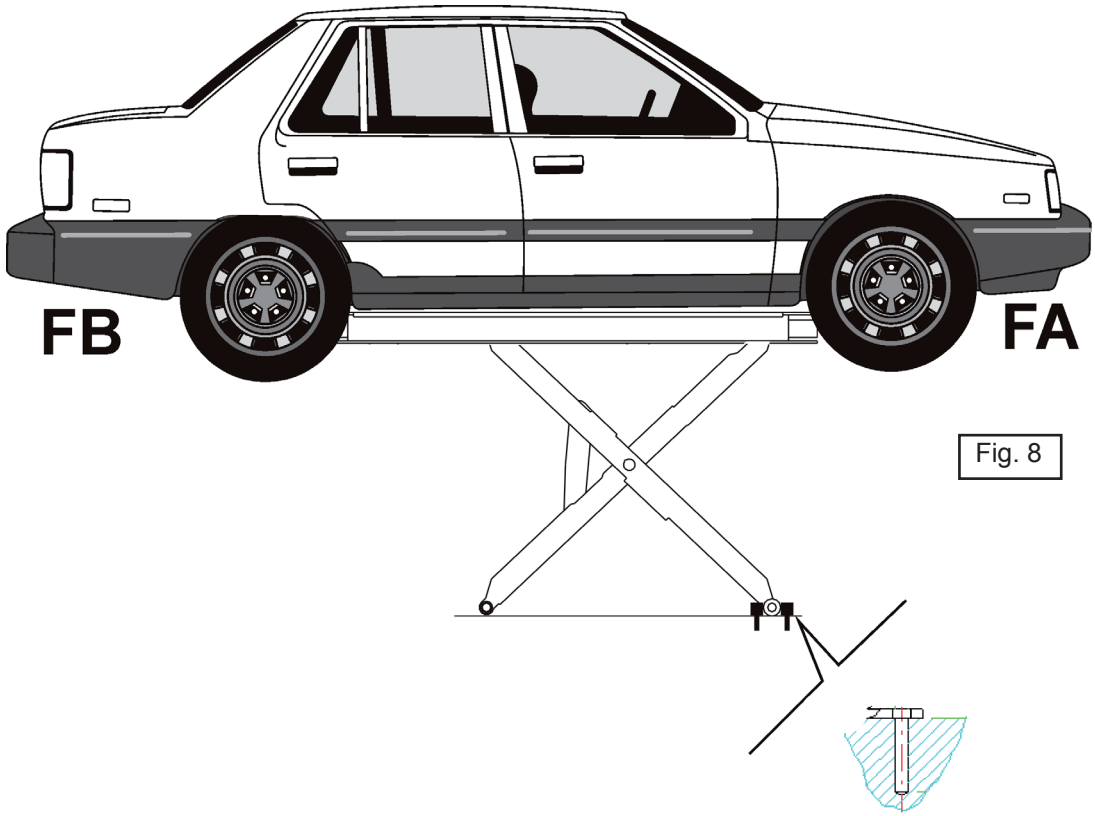


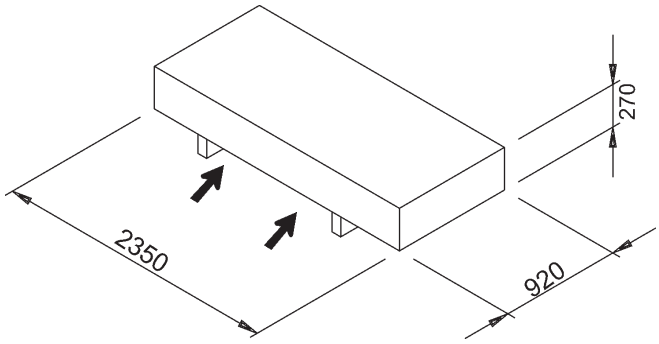
Fig. 8

Total load 3000 kg	
FA	**FB**
1600	1200
1200	1800

3. TRANSPORT AND MOVING

The lift is delivered inside a standard package, as shown below:

LIFT PACKAGE



CONTROL UNIT PACKAGE

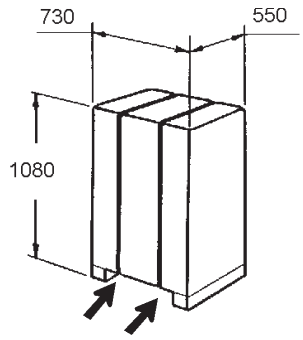


Fig. 9

In all circumstances each package unit must be moved by means of a fork-lift truck of adequate capacity (650 kg.) and lifted at the points shown by the diagram.

In case of storage make sure that the place has the following requisites:

- relative humidity 95% max.
- temperature: -5°C min.; +60°C max.

After having removed the package, check the lift for damage or missing parts. If in doubt, do not use the machine and contact the dealer.

3.1_Description of the main parts of the lift (mod. X 2503 C)

1) Platform
2) Lifting frame
3) Limit stop/ramp
4) Vehicle additional fastening device
5) Elettro-hydraulic control unit

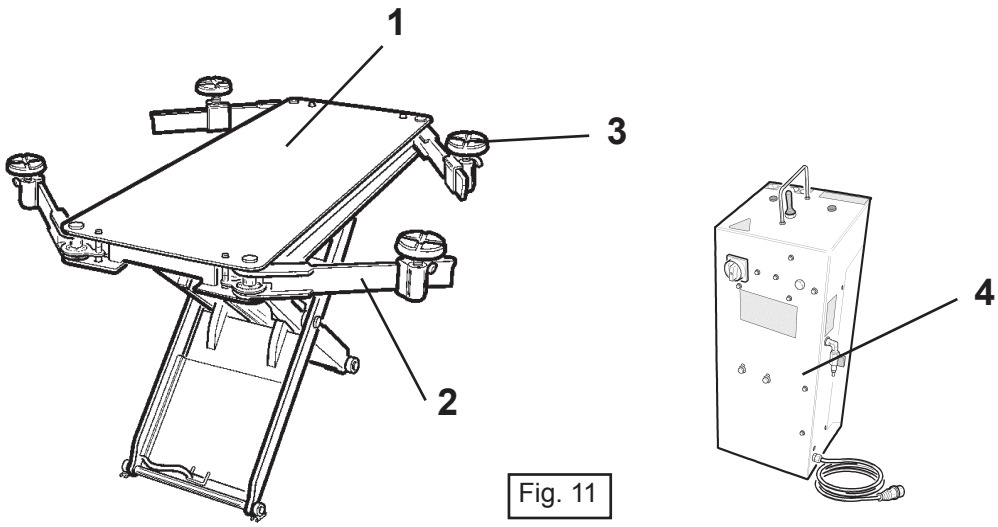


Fig. 11

3.2_Description of the main parts of the lift (mod. X 2503 C RV)

1) Platform
2) Lifting frame
3) Limit stop/ramp
4) Vehicle additional fastening device
5) Elettro-hydraulic control unit

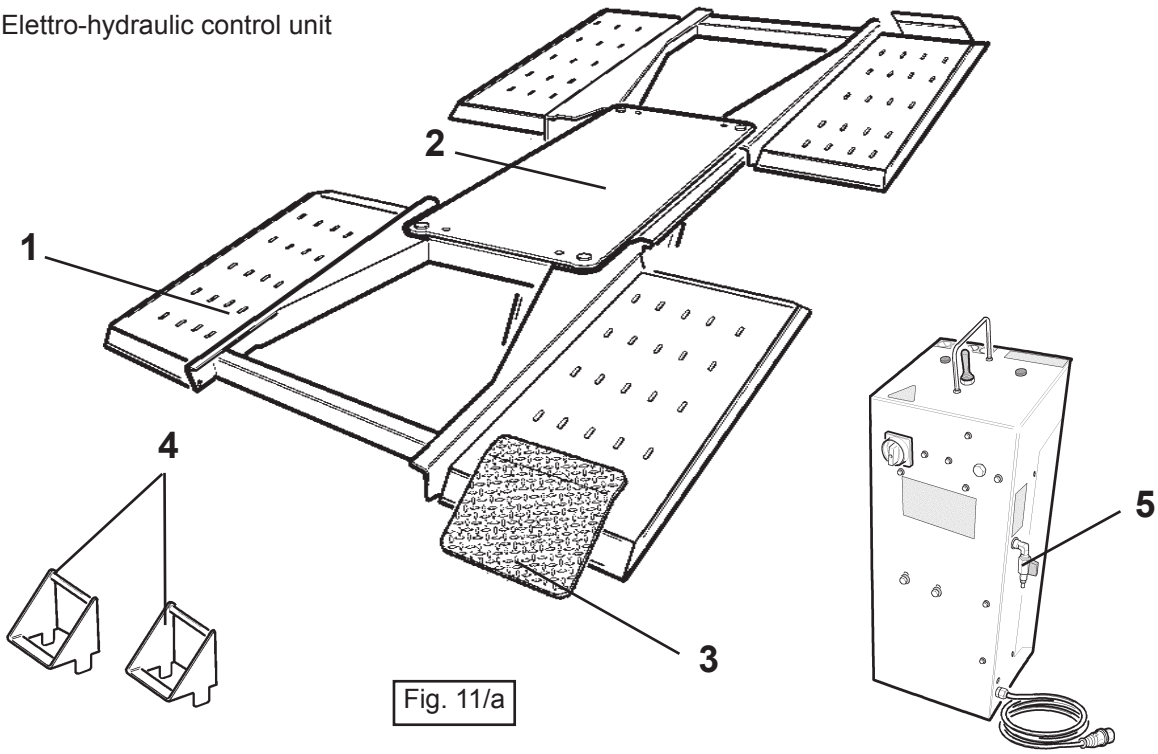


Fig. 11/a

4. INSTALLATION.

4.1_Equipment and tools required

- Hand-drill with widia bit; Diameter: 10 mm. Length: 200 mm min.
- Spirit-level
- Plug for electrical connection, to current regulations, 16 Amp min. (for the electro-hydraulic version)
- 7 lt. hydraulic fluid
- Electrical cable for connection to the supply mains, 1 mm^2 min. (wire gauge), required if the supplied one is not enough.

4.2_Space required

At the installation site there must be place enough to grant a trouble free access of the vehicle, both when driving-on the lift and when driving-out. Also the ceiling must be high enough to grant a complete lifting of the machine with vehicle placed on it.

There is no specific position for the control unit, but it must be placed in a way that the operator can watch the lift when working at a distance complying with the regulations in force (min. suggested distance: 1,5 meters).

4.3_Installation site

• The lift must be installed in a place with temperature between 10° and 85° C. For lower temperatures it's necessary to have an air dehumidification system installed.

See par. 1.2 "Intended use" and 2.1 "General safety rules"

• The lift must be installed on a level concrete floor at least 20 cm. thick, with a minimum concrete quality of B25 following DIN 1045 requirements (foundations). See the chart here below for reference.

FOUNDATIONS DIMENSIONS IN CM			Quality of concrete	Min. pressure resistance of surface
LENGHT	WIDTH	THICKNESS	B25	425 Kg / cm
1600	800	20		

If a floor of this type is not available on site, fastening points under the anchor holes of the lift must be provided in a way that the max. reaction on each bearing point is **1200 daN** (4 bearing points).

The lift installation surface must be levelled in all directions.

In case of embedded into the floor installation, it is necessary to prepare a pit according to the relevant dimensional drawings.

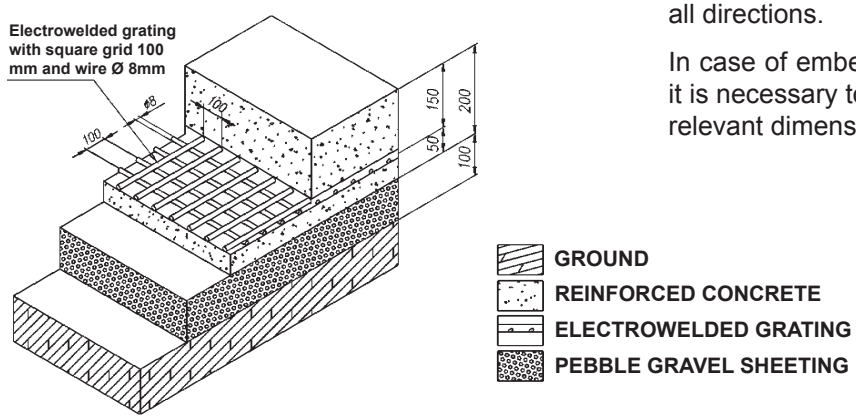
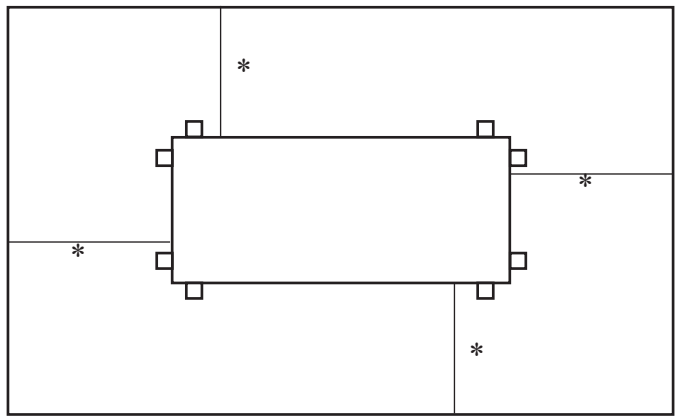


Fig. 12

- The free place around the lift must comply with the regulations in force in the installation Country.



NOTE: The lift must be anchored to the floor in all circumstances by means of the anchor bolts supplied.

If there is an additional floor covering, or if shims or wedges are necessary for levelling, longer anchor bolts must be used.

Make always sure that the bolts extend at least 125 mm into the concrete slab (Fig. 13)

Fig. 13 - Anchor bolts in the concrete slab

A Standard anchoring directly to concrete

B Additional covering on concrete (if any)

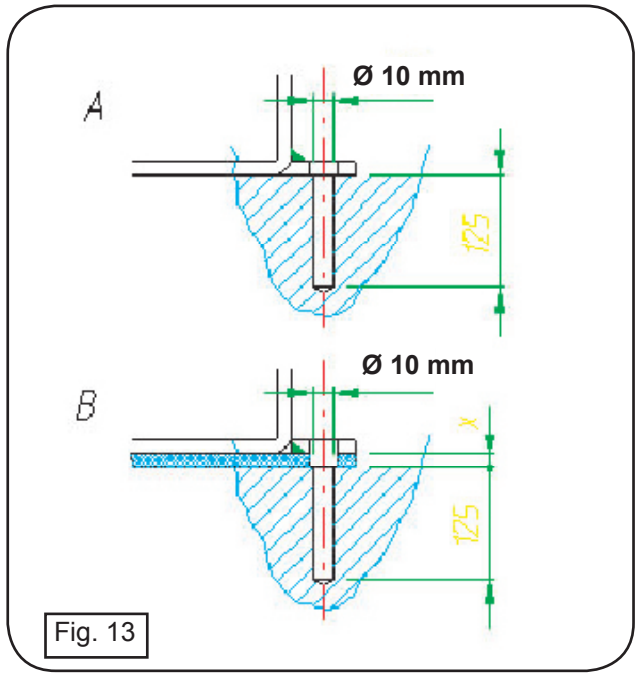


Fig. 13

4.4_Anchoring to floor and levelling

• With a widia bit Ø10 drill the floor passing through the holes present in each base.

• Set an anchor bolt into each hole.

• Use the spirit level for levelling; if necessary, place shims between floor and baseframe.

• Tighten the anchor bolts.

• Check levelling again.

• If the lift is equipped with additional steel plate (see accessories), this shall be fixed to ground together with the lift by means of the holes and the anchor bolts, both standard and additional. (fig. 14).

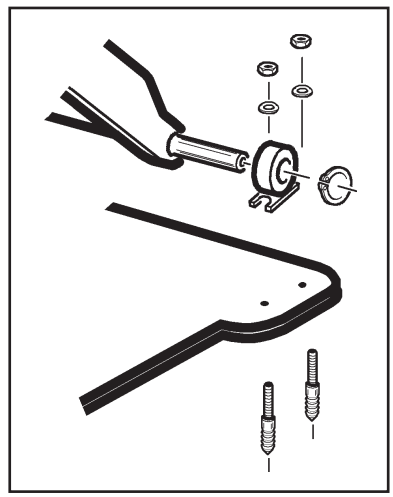


Fig. 14

4.5_ Power connection

ATTENTION: Any work on the electrics, even if very small, is reserved to authorized staff only.
Connect the machine to the power supply, **which must be equipped with line fuses, good earthing as per national law in force and with an automatic circuit breaker (differential) set at 30 mA.**
NOTE: the final user must take care of installing the electrical plug (at least 16A) in conformity with both machine features and law in force.

Standard voltage of the lift is AC 400V 50Hz, unless otherwise requested by customer.

The outlet must be protected against Overvoltage by means of fuses or by an automatic magneto-thermal switch, with nominal values as per the chart below:

FEEDING	FUSE NOMINAL VALUE
230 V - 3Ph - 50/60 Hz	10 Am
400 V - 3Ph - 50/60 Hz	10 Am

The user must take care to lay the feeding cable from the outlet to the control unit according to the national current regulations and the local central station directives.

The compressed air circuit (6-10 bar) connection must be available on installation site.

The hydraulic unit contains hydraulic fluid, which is highly polluting for the environment.
During the filling phase it's therefore important to take care not to disperse it.

4.6_Hydraulic connection

Position the control unit in a comfortable place.

Connect the pipes according to the lift version (see par. 4.9)

4.7_ Oil tank.

Remove the transport seal cap (fig. 37 page 32)

Fit the vent cap for working.

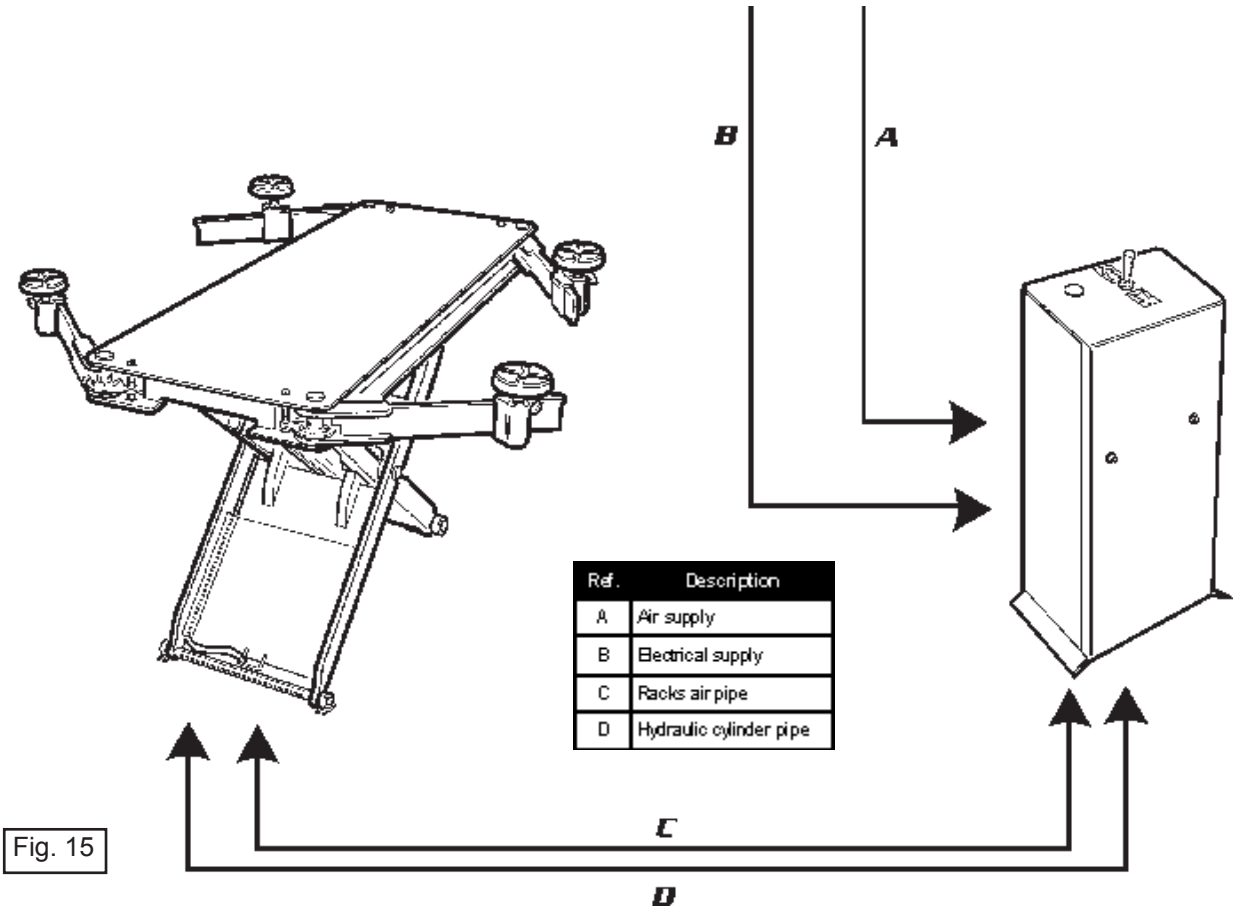
4.8_Pneumatic connection

Connect the air feeding network to the proper union (6 bar working pressure).
N.B.: the air feeding network must be equipped with a lubrication filter and condensate drainage system.

If the air system pressure is higher than 10 bar it is necessary to install a pressure limiter set at max. 10 bar (outlet value) or same value as shown in the technical data chart. Setting value can have a tolerance of max. 10%.

4.9_Electrical connections

4.9.1_X 2503 C / C RV



Ref.	Description
A	Air supply
B	Electrical supply
C	Racks air pipe
D	Hydraulic cylinder pipe

Fig. 15

Hydraulic connection between Lift and Control Unit

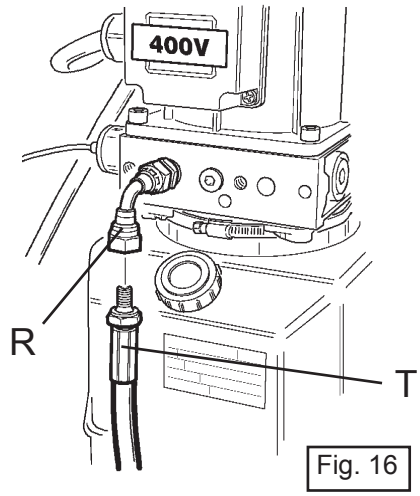


Fig. 16

Connect pipe **"T"**, coming from the lift, to 90° elbow **"R"**. Properly tighten the union by means of a second wrench to hold pipe **"T"** tight.

Pneumatic connection between Lift and Control Unit

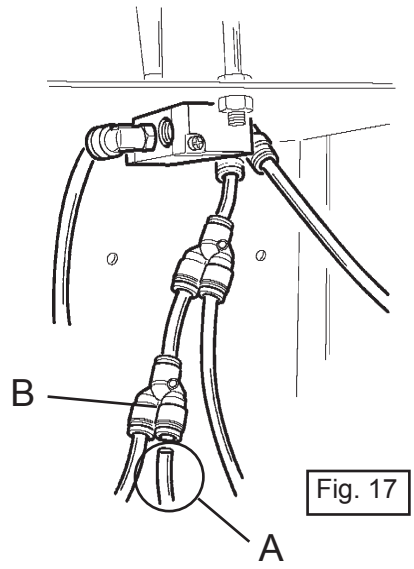


Fig. 17

Set the rilsan hose **"A"**, coming from the lift, into the Y-union **"B"** of control valve.
Make sure to have set the hose properly as to prevent any possible air leakage that could compromise the correct functioning of the lift.

Pneumatic connection between Control Unit and Compressed Air Source

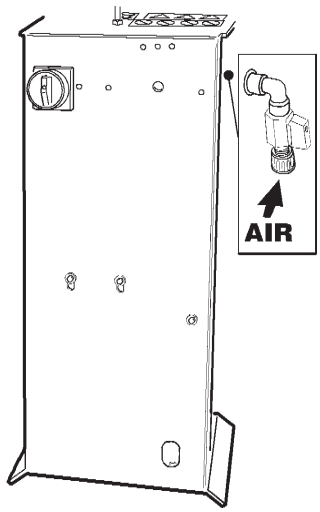


Fig. 18

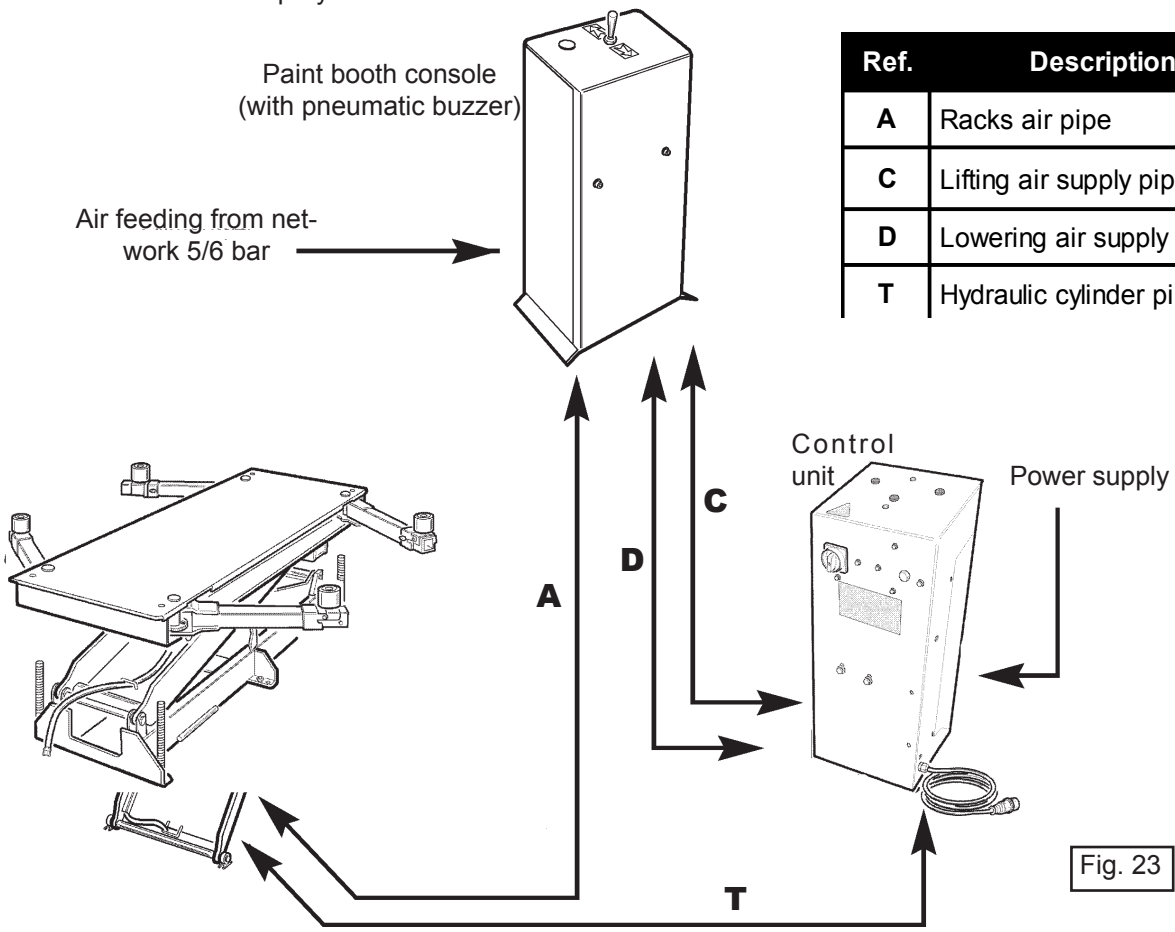
By means of a proper connection, feed the air circuit with **6** bar max. pressure through the connection shown in picture.

23_X 2503 C/ C RV with Paint Booth Console (optional accessory)

In case of use in working areas classified according to the Directive 94/9/CE(Atex) and in spraybooths, the lift has to be made in specific version.

This version includes one control unit to be installed inside the spray booth and one electro-hydraulic unit to be installed outside the spray booth and far from that risk-area

.



Ref.	Description
A	Racks air pipe
C	Lifting air supply pipe
D	Lowering air supply pipe
T	Hydraulic cylinder pipe

Fig. 23

Hydraulic connection between Lift and Control Unit

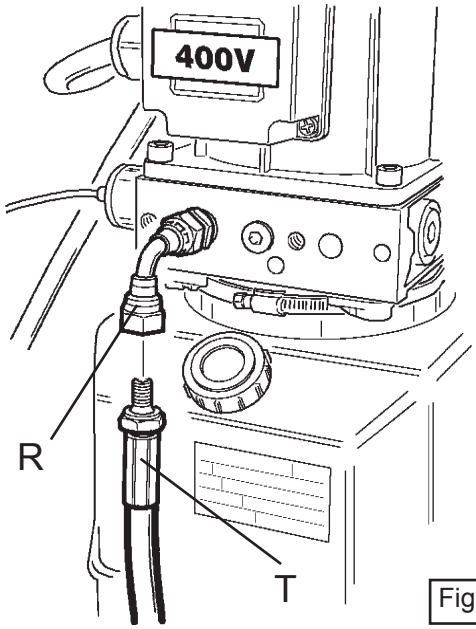


Fig. 24

Connect pipe **"T"**, coming from the lift, to 90° elbow **"R"**. Properly tighten the union by means of a second wrench to hold pipe **"T"** tight.

Pneumatic connection between Lift and Paint Booth Console

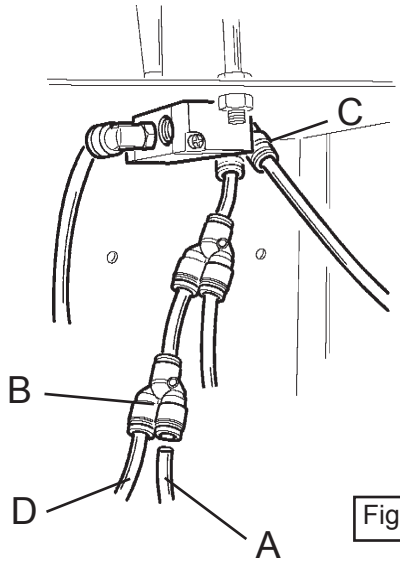


Fig. 25

Set the rilsan hose **"A",** coming from the lift, into the Y-union **"B"** of control valve.

Make sure to have set the hose properly as to prevent any possible air leakage that could compromise the correct functioning of the lift.

Pneumatic connection between Hydraulic Control Unit and Paint Booth Console

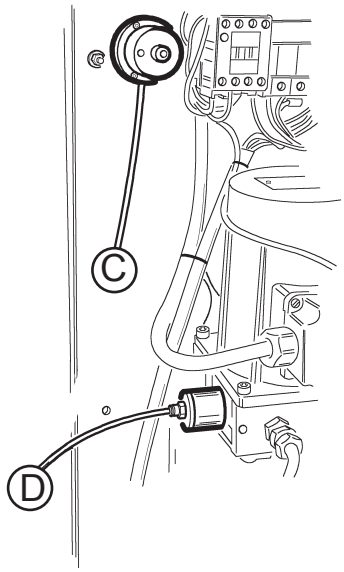


Fig. 26

Set the hose **"D"** into the lowering air valve of the hydraulic unit (ref. **D** fig. 26)

Fix the hose **C**, coming from the electro-hydraulic control unit (from the protection box on the control unit), to the lifting/lowering control valve (ref. **C** fig.25)

Make sure to have set the hose properly as to prevent any possible air leakage that could compromise the correct functioning of the lift.

Pneumatic connection between Paint Booth Console and Compressed Air Source

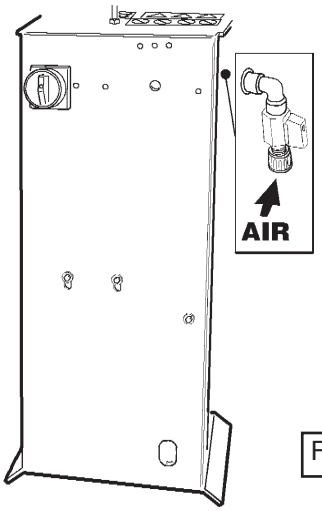
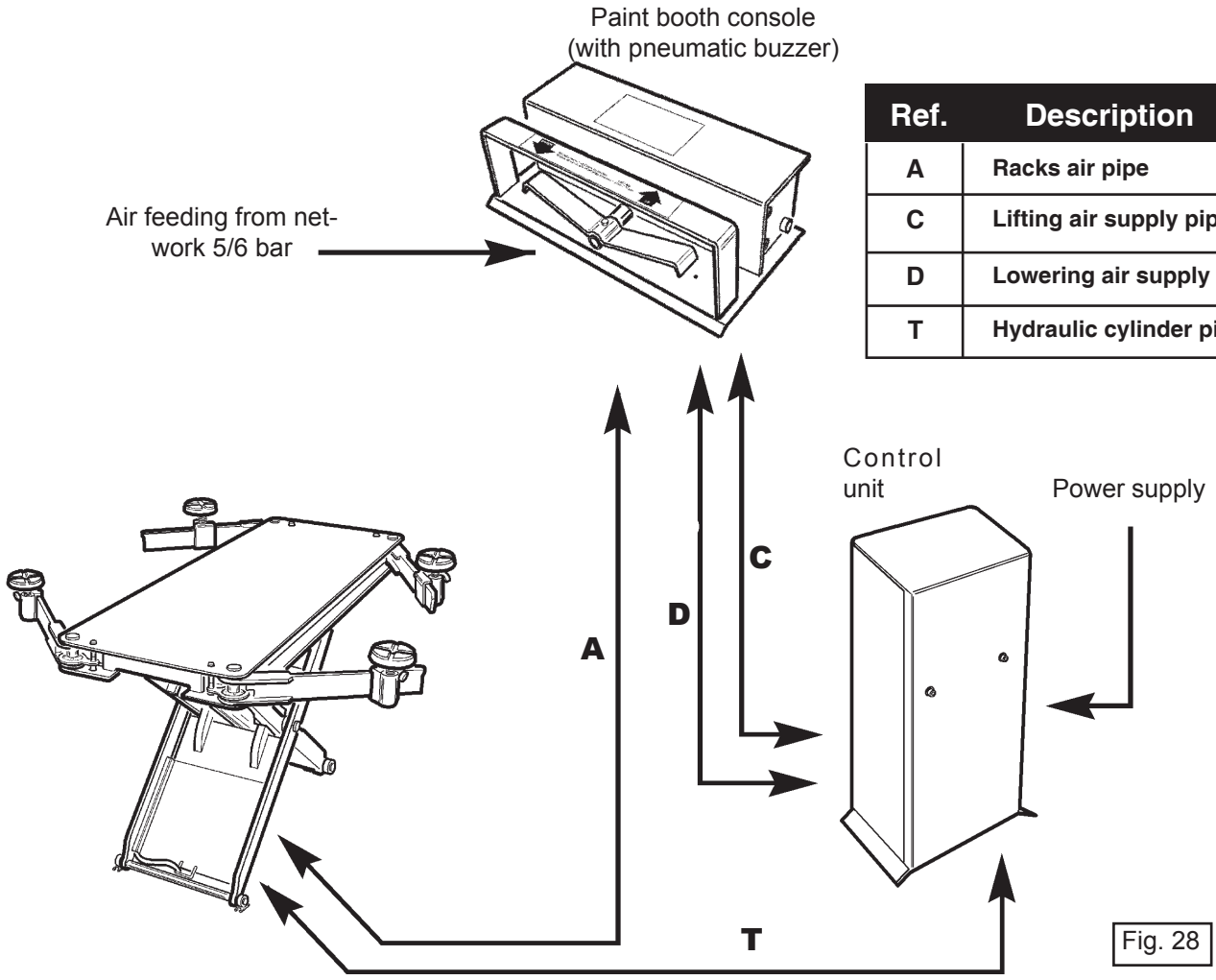


Fig. 27

Con un attacco a resca alimentare il circuito pneumatico ad una pressione massima di **6** bar connettendosi all'attacco mostrato in figura.

4.9.3_X 2503 C RV with pedal unit (optional accessory)

In case of use in working areas classified according to the Directive 94/9/CE(Atex) and in spraybooths, the lift has to be made in specific version.
This version includes one control unit to be installed inside the spray booth and one electro-hydraulic unit to be installed outside the spray booth and far from that risk-area



Ref.	Description
A	Racks air pipe
C	Lifting air supply pipe
D	Lowering air supply pipe
T	Hydraulic cylinder pipe

Fig. 28

Hydraulic connection between Lift and Control Unit

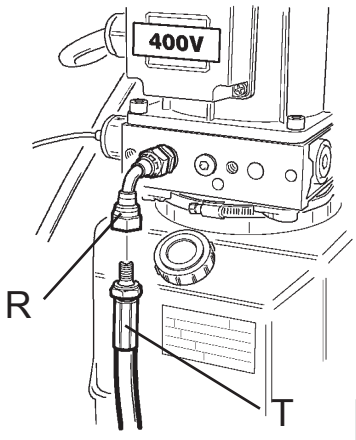


Fig. 29

Connect pipe **"T"**, coming from the lift, to 90° elbow **"R"**. Properly tighten the union by means of a second wrench to hold pipe **"T"** tight.

Pneumatic connection between Control Unit and Pedal Unit

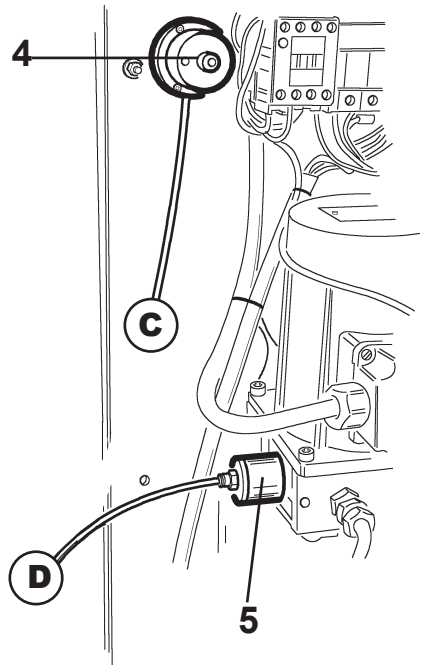


Fig. 30

Connect pipe **C**, coming from the manostat (fig.30), to union **1** of pedal unit (Fig.31)

Connect pipe **D**, coming from the lowering air valve (fig. 30), to union **2** of pedal unit (Fig. 31)

Make sure to set the pipes correctly to avoid any possible air leak, so compromising the correct functioning of the lift as well as the load safety.

Pneumatic connection among Lift, Pedal unit and Control unit

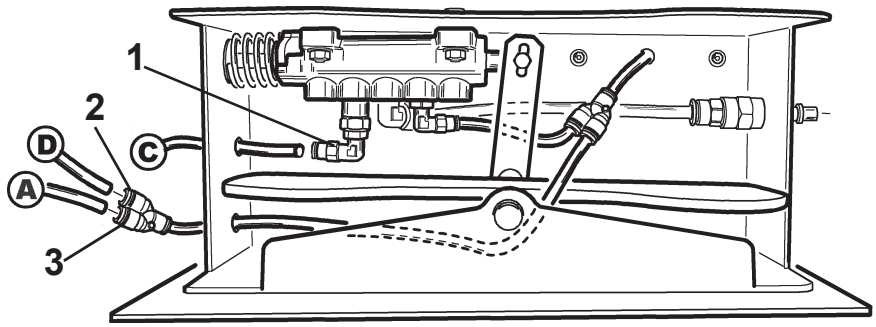


Fig. 31

Connect pipe **A**, coming from the lift, to union **3** of pedal unit (Fig. 31)

Make sure to set the pipes correctly to avoid any possible air leak, so compromising the correct functioning of the lift as well as the load safety.

Pneumatic connection between Pedal unit and Compressed Air Source

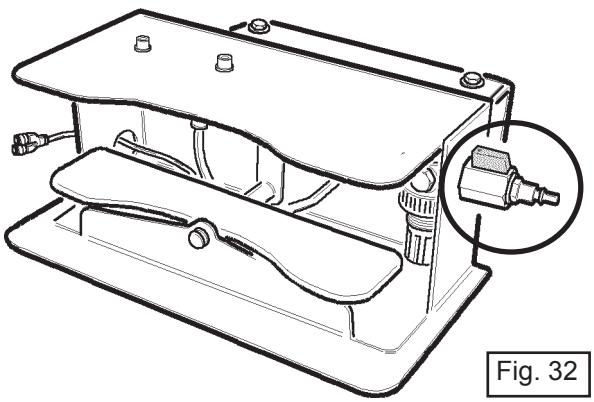


Fig. 32

By means of a proper connection, feed the air circuit with 6 bar max. pressure through the connection shown in picture.

4.10_Electrical connection to the feeding network (C/ C RV)

Check the feeding network voltage, which must correspond to the lift voltage given on the terminal board cover of the electrical motor.

Pull the electrical cable out from the control unit. Set the cable end into the plug (min. 16 Amp.), also using the earth wire (yellow-green).

Check the connection by fitting the plug into the feeding network outlet, and then turn the main switch to pos. **"1"**

4.11_Check of motor run direction (C/ C RV).

Any operation on the electrics, even if very small, is reserved to authorized staff only.

Remove the control unit back panel (if any)

Press the UP selector once briefly; the drive shaft must turn and the lift must go up (fig. 33 page 28).

Otherwise, disconnect the plug, reverse the wires inside, and repeat the check operation.

Reinstall the control unit back panel (if any)

4.12_Air bleeding from the hydraulic system

Let the lift go up completely by turning the "UP" selector **"A"** (fig. 33 page 28) for 3-4 seconds, in order to aid bleeding of the remaining air from the hydraulic circuit.

Let the lift go down completely and repeat the operation 2-3 times.

4.13_Final procedures

Both static and dynamic load tests with overload are made by the constructor before delivering the machine.
The user can make only the tests of ground resistance and those of nominal load (possible difference of ± 10% due to valve setting is acceptable).

Once the lift has been installed, the following tests must be carried out before using it for work:

Check of lift levelling	page 18 (§ 4.4)
Check of electric connections	page 19 (§ 4.9)
Check of safety devices	page 12 (§ 2.3)

5. DESCRIPTION OF THE CONTROLS

5.1_Control unit (C – C RV)

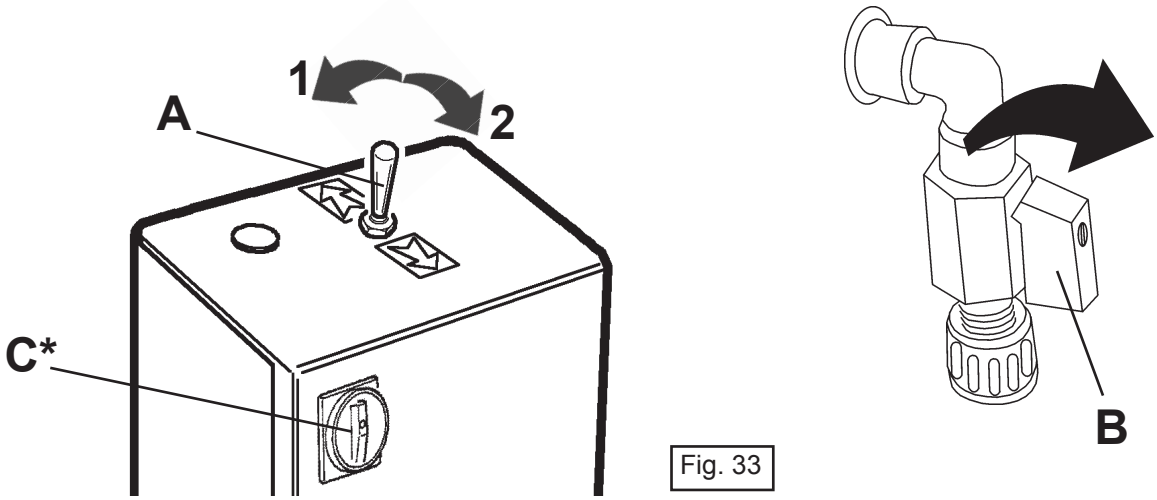


Fig. 33

1) Description of the control panel (fig. 33)

A) Lift control lever: if pushed to pos. “1” the lift goes up; if pushed to pos. “2” the lift goes down

B) For any emergency operation, close the air tap (turning it in the direction shown by the arrow) to cut air feeding.

C) Main switch. In pos. “0” switches the system OFF (not available in M version)

2) Description of the pedal unit (Fig.34)

A) Act on pedal A to lift the machine

B) Act on pedal B to lower the machine

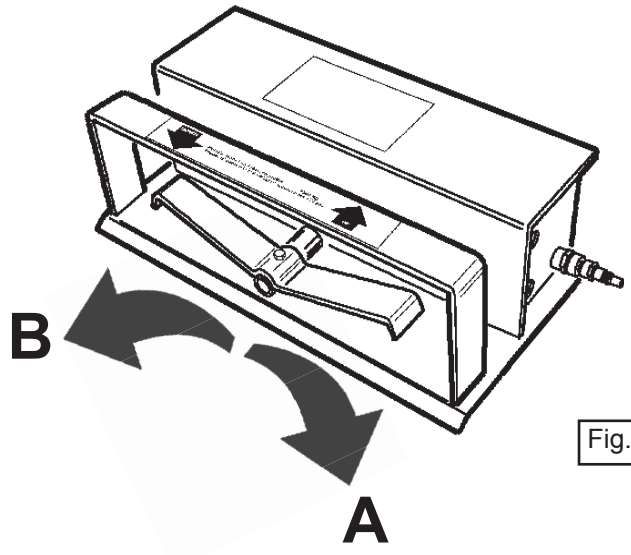


Fig. 34

6. USE.

6.1_General precaution for use

Nobody must stay on or below the lift or inside the vehicle during lifting or lowering.

No tools or other items must be left where they can prevent the runways from being lowered to the final position on the ground.

In case of malfunction, turn the main switch to “0”. The lift must be inspected, and restored to normal operation, by skilled personnel only.

Use by unauthorized staff is strictly forbidden in all circumstances.

6.2_Lifting and lowering

Drive the vehicle onto the lift.

Set the lifting arms in the position given by the vehicle manufacturer.

Press the UP button (**A1** fig. 33 or **A** fig 34)

Always watch both lift and vehicle during lifting/lowering phase

Press the DOWN button (**A2** fig. 33 or **B** fig. 34) to lower the lift.

6.3_Use of the adjustable support (fig. 35)

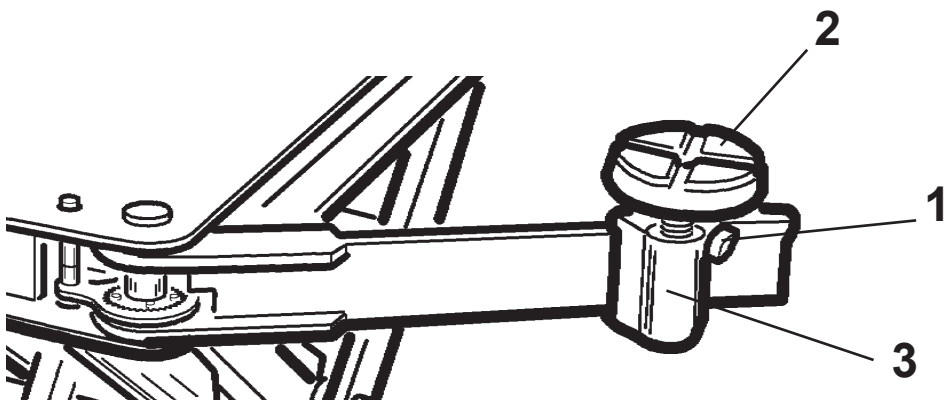


Fig. 35

A) Set the vehicle on the lift in a way it is well centred as regards the drive direction

B) Set the arms by the vehicle lifting points given by the manufacturer.

C) Set the adjustable support (3) horizontally along the vehicle width in the points given by the manufacturer.

D) Tighten the arm fastening screw (1) to prevent the support from sliding.

E) Adjust the pad (2) height to the necessary level

F) Make sure that the vehicle is stable and safe before starting the lifting phase

6.4_Use of additional stops (C RV Version)

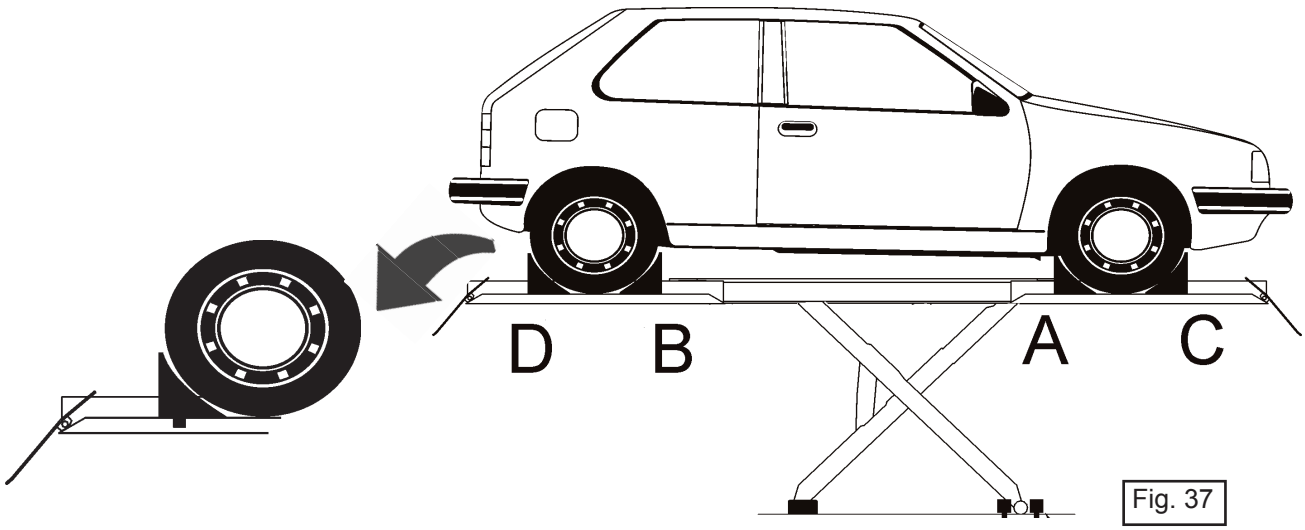


Fig. 37

For vehicles having a particularly short wheel base some stops in addition to the 2 standard delivered ones are available. These can be positioned, according to the need, next to the wheels to prevent the vehicle from moving. The combinations can be:

A+B
C+A
B+D
C+D

The additional stops shall be set on the way surface, in the proper slots, making sure that the dap joint gets correctly inserted.

7. RESITING

Before repositioning the lift, it is necessary to dismantle it, disconnecting all power supply sources, and then reinstall it in the new area following the instructions given in Chapter nr. 4: INSTALLATION.

All the connections to energy sources as well as the connection and the inspection of the safety systems must be carried out by skilled staff only.

8. LIFT STORING

<u>If the lift is to be out of use for a long period, proceed as follows:</u>

Disconnect the energy sources

Empty the tanks containing operating fluids

Protect any parts which might be damaged by dust

Grease any parts which might be damaged by drying out.

<u>When the lift is put back into service:</u>

Fill the tanks with the operating fluids.

Let any damaged parts be replaced by skilled staff, referring to the parts list.

9. SCRAPPING

If the appliance is not to be used any more, owners are advised to make it unusable by removing the power supply connections, emptying the tanks and disposing of the liquids in accordance with the national laws in force.

The materials by which the lift is made fall into different waste categories; the parts should be subdivided into the various categories (electrical components, plastic parts, scrap iron) and disposed off through the collection centres provided, in accordance with the national laws in force.

10. OIL TREATMENT

Oil is highly polluting!! Do not throw or disperse in the environment.

10.1 General precautions

- Avoid direct and prolonged contact with your skin.
- Avoid any vaporization of oil in the atmosphere.
- Avoid oil splashes.
- Wear suitable clothes, gloves and protective glasses against possible splashes.
- DO NOT use greasy rags.
- DO NOT eat of smoke with greasy hands

10.2 First aid instructions

- In case of ingestion DO NOT induce vomiting but immediately apply to the closest Medical Centre also bringing the features of the swallowed oil.
- In case of contact with eyes, rinse out generously with water until the irritation gets soothed. Then apply to the closest Medical Centre.
- In case of contact with skin, rinse out with water and neutral cleansing soap. DO NOT use solvents or irritating products.

10.3 Used oil treatment

DO NOT disperse the used oil in the environment. Collect it in a suitable tank and dispose of it through specialized centres or authorized collection points.

10.4 Oil spreading or leaks

First eliminate the cause of the leak and embank the oil coming out by means of absorbing materials. Clean carefully the dirty area with degreasing detergents in order to avoid any possible dangerous slip. Dispose of waste-materials in accordance with the National laws in force.

11. FIRE-FIGHTING MEANS

The here below given indications are the standard ones. Features and use range of each extinguisher must be demanded to the constructor.

	WATER extinguisher	FOAM extinguisher	POWDER extinguisher	CO_2 (carbon dioxide) extinguisher
DRY materials	OK	OK	OK	OK
INFLAMMABLE liquids	NO	OK	OK	OK
ELECTRICAL equipment	NO	NO	OK	OK

12 .ORDINARY SERVICE

12.1_General maintenance precautions

Before carrying out any repairs or maintenance, it is necessary to disconnect the lift from the power supply and from the compressed air connection. Also make sure that the mobile parts are well locked.

Regular maintenance in accordance with the instructions given is essential for correct operation of the lift.

All the maintenance operations made on the lift must be reported in the RECORD OF INTERVENTIONS at page 67.

Failure to perform regular maintenance may impair the lift's operation and reliability, placing operator, vehicle and third persons at risk.

Maintenance must never be performed by unauthorized staff.
It is forbidden to perform any kind of operation intended to change the setting value of both the pressure relief valve and the pressure limiter. The constructor declines all responsibility for damages caused by tampering with above mentioned devices.

The working area must always be kept clean.

Do not use compressed air, diluents or water jets to clean the lift from dirtiness.

When possible, prevent any formation of dust.

12.2_Maintenance operations

The following procedures must be performed at regular intervals, depending on how often the lift is used:

- Check oil level once a week and make sure it doesn't decrease under the optimal level marked on the tank and in any case not under the minimum level; otherwise fill it up with oil till optimal level and in any case not over the max. level.

NOTE: oil check must always be perfomed with lowered lift

Change the hydraulic power unit oil every 1800 working hours and in any case not less than once a year, as follows:

Lower the lift completely; unscrew the tank cap (**B**) shown in fig. 37, and collect the oil that comes out into a container of adequate capacity (at least 10 lt.) Once finished, screw the cap again.

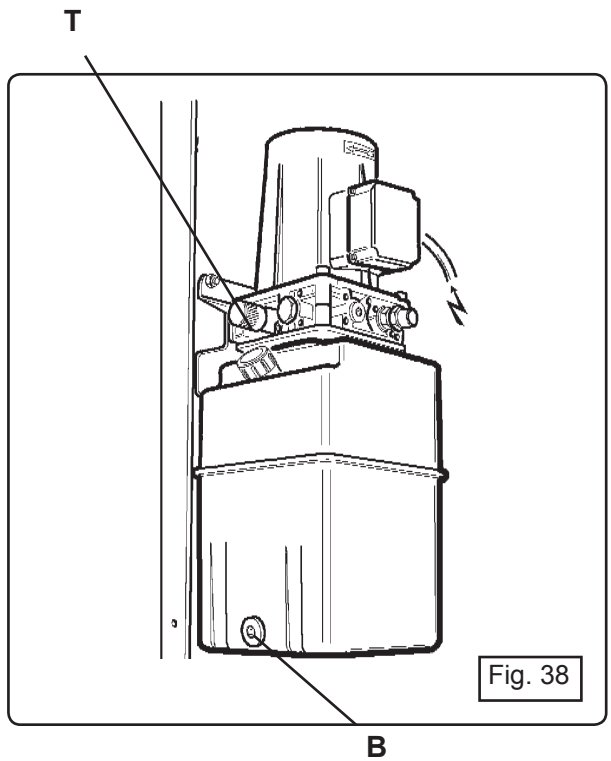


Fig. 38

Unscrew the upper cap (**T**) and fill the tank with 7 lt. of new oil or oil having similar features.

For oil treatment refer to chap.10 OIL TREATMENT

Check all the hydraulic mains for damage.

Lubricate all bearing points with commercial oil (see diagram at page 40)
Check all safety devices.

Faulty parts must always be replaced by skilled staff, with components ordered from the spare parts catalogue.

If the user replaces any part, despite this advice, he must have the lift checked and put back into operation by an expert. The constructor declines all responsibility for damages caused by the non-observance of what stated above.

13. DIMENSIONAL DIAGRAMS

STANDARD VERSION

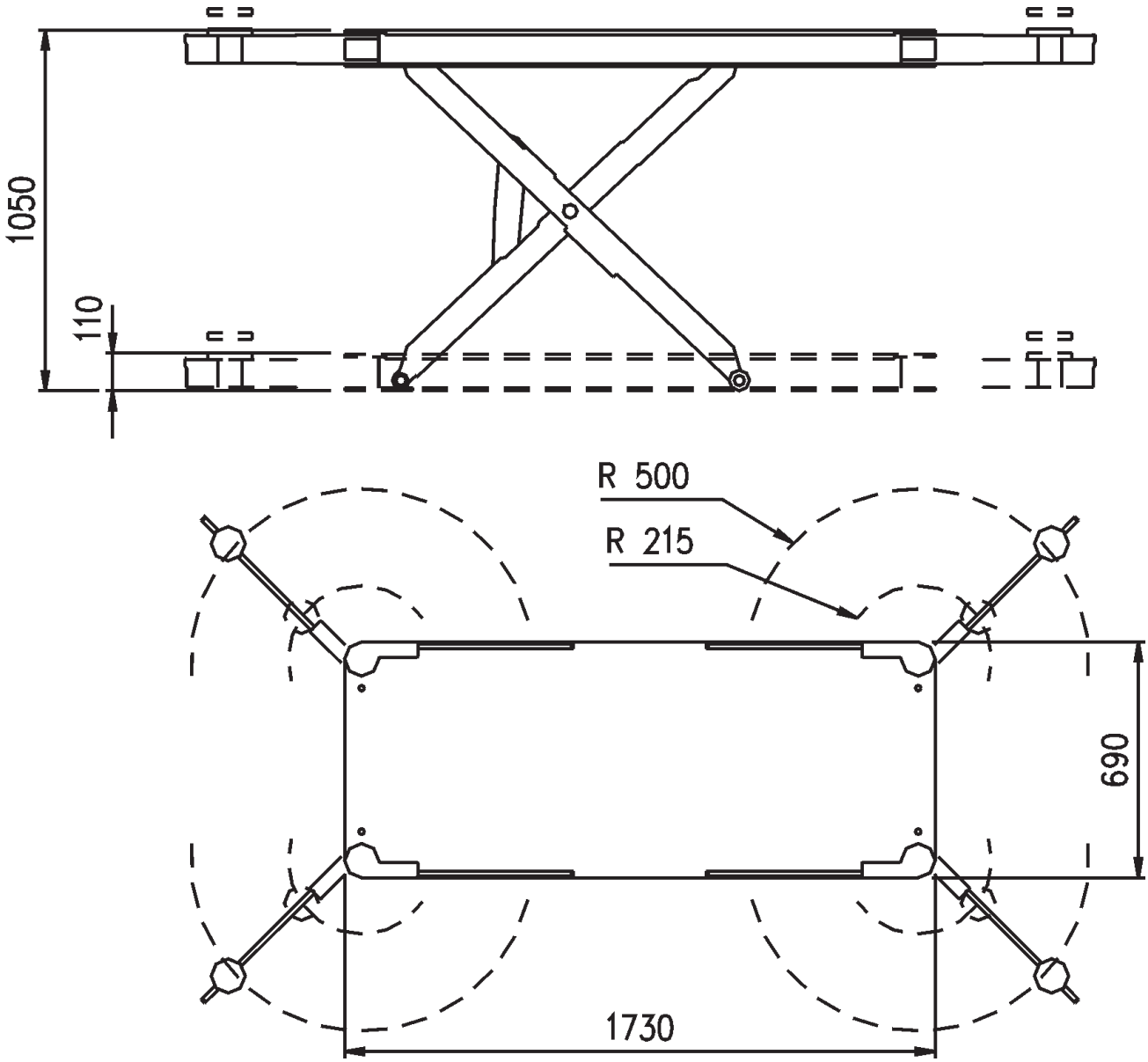


Fig. 38

RV VERSION

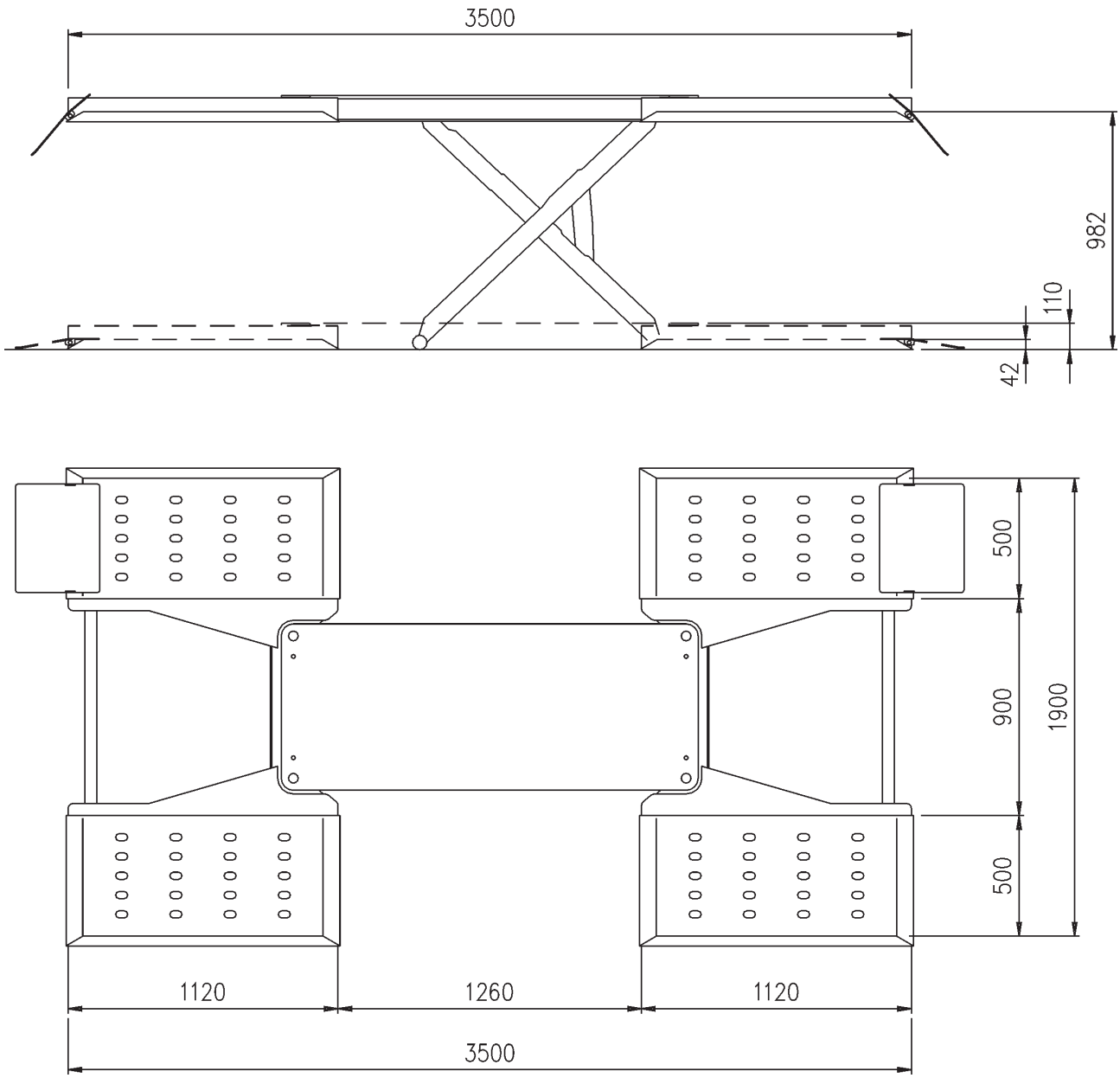


Fig. 39

14. TECHNICAL DATA

DONNEES TECHNIQUES / TECHNICAL DATA / TECHNISCHE ANGABEN / DATI TECNICI	
Capacité de charge maxi / Max. loading capacity. / Max. Tragfähigkeit / Portata massima.	3000 kg
Temps de montée / Lifting time / Hebezeit / Tempo di salita	29 s (C - C RV)
Temps de descente / Lowering time / Senkzeit /Tempo di discesa	22 s
Dimensions / Dimensions / Abmessungen / Dimensioni	voir schémas ci-joints see enclosed diagrams siehe beiliegende Pläne Vedi schemi allegati
Dimensions pupitre de commande / Dimensions of control unit / Abmessungen von Steuerpult / Dimensioni centralina di comando	300 x 240 x 820 h.(mm)
Fusibles de ligne / Line fuses / Leitungssicherungen / Fusibili di linea	10A AM
Huile hydraulique - Viscosité / Hydraulic fluid - Viscosity / Hydrauliköl-Viskosität / Olio idraulico - viscosità	ISO-L-HV VG46
Huile hydraulique - Quantité / Hydraulic fluid - quantity / Hydrauliköl - Füllmenge / Olio idraulico - Quantità	7 l
Capacité du réservoir / Real capacity of oil tank / Öltank - Aufnahmefähigkeit / Capacità effettiva serbatoio olio	7 l
Capacité circuit hydraulique / Hydraulic circuit capacity / Hydraulikkreis - Aufnahmefähigkeit / Capacità circuito idraulico	6 l
Pression hydraulique de service maxi/ Max. hydraulic operating pressure / Max. Betriebsdruck / Pressione idraulica max d'esercizio	320 bar (C) 360 bar (C RV)
Réglage clapets de sécurité / Relief valves setting / Sicherheitsventile - Eichung / Taratura valvole di sicurezza	320 bar (C) 360 bar (C RV)
Pression de l'air en entrée / Intake air pressure / Druckluft - Anschlußdruck / Pressione aria ingresso	6 - 8 bar (C - C RV)
Moteur électrique standard / Standard electric motor / Standard-Elektromotor / Motore elettrico standard	1,8 kW - 3ph - 400V
Autres moteurs / Other motors / Andere Motoren / Altri motori	Sur demande - On demand - Auf Wunsch - A richiesta
Livello rumore in condizioni di lavoro / Noise level in working conditions / Niveau de bruit en service / Geräuschpegel bei Betrieb	< 70 dBA

SEZIONE RISERVATA A TECNICI
E MANUTENTORI SPECIALIZZATI

PART RESERVED TO AUTHORIZED EXPERTS AND MAINTENANCE TECHNICIANS

PARTIE RESERVEE AUX TECHNICIENS ET AU PERSONNEL D'ENTRETIEN AUTORISE'

KAPITEL FÜR DIE AUTORISIERTEN WARTUNGSTECHNIKER

15. PROCEDURE FOR CHECKING THE MAX. PRESSURE

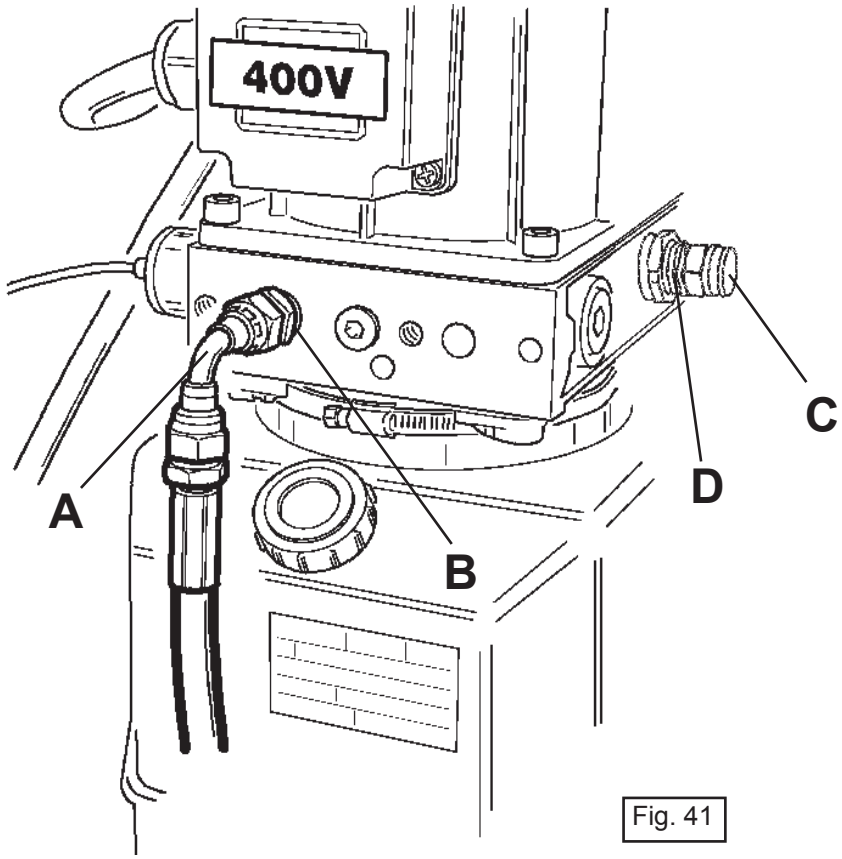


Fig. 41

1) Let the lift descend completely on ground.
2) Turn the main switch OFF to cut power
3) Remove the 90° elbow **A** together with the lift hydraulic hose.
4) Unscrew nipple **B**
5) Fit a manometer having proper scale base and 1/4" thread into the now free seat.
6) Remove cap **C** from the pressure relief valve
7) Loosen nut **D** that locks the valve
8) By means of a screwdriver loosen or tighten the valve in order to reduce or increase pressure.
9) Tighten nut **D** to lock the valve back.
10) Tighten cap **C**.
11) Remove the manometer
12) Set the nipple **B** back on, tightening it properly.
13) Set the 90° elbow back on, tightening it properly.

16._PUNTI DI LUBRIFICAZIONE/LUBRICATION POINTS/ POINTS DE LUBRIFICATION/SCHMIERPUNKTE

Per garantire una vita duratura alla macchina occorre operare una lubrificazione accurata, ogni 500 cicli di lavoro, con grasso MOS2 adatto per cuscinetti a rotolamento e boccole. Per una corretta lubrificazione seguire i punti indicati qui di seguito o sulla decalcomania riportata sulla centralica della macchina.

To grant the machine a long working life it is important to grease carefully every 500 working cycles, by means of MOS2 grease suitable for rolling bearings and bushes. For a correct lubrication, take care to grease the points shown herebelow or on the sticker placed on the control unit.

Pour garantir une longue durée à la machine, il faut graisser soigneusement tous les 500 cycles de travail par de la graisse MOS2, indiquée pour roulements à billes et douilles. Pour une lubrification correcte, suivre les points indiqués ci-après ou sur la décalcomanie appliquée sur le pupitre de commande.

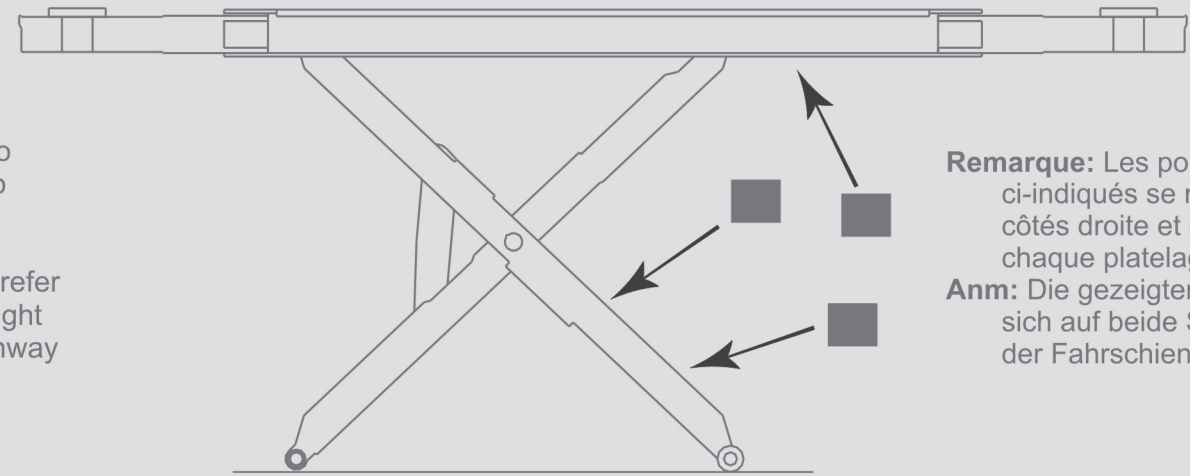
Um eine lange Dauer der Maschine zu versichern, ist es wichtig, eine sorgfältige Schmierung je. 500 Arbeitzyklen mit MOS2 Schmierstoff (geeignet für Kugellager und Büchsen) auszuführen. Zur korrekten Schmierung, die folgenden Punkte beachten, die auch auf dem Anziehbild auf Steuerpult stehen.

PUNTI DI LUBRIFICAZIONE/LUBRICATION POINTS
POINTS DE GRAISSAGE/SCHMIERPUNKTE
LUBRIFICARE LA MACCHINA OGNI 500 CICLI DI LAVORO
GREASE THE MACHINE EVERY 500 WORKING CYCLES
GRAISSER LA MACHINE TOUS LES 500 CYCLES DE SERVICE
DIE MASCHINE JE. 500 ARBEITSGÄNGE SCHMIEREN

▲ Grasso spray/
Spray Grease
Graisse spray/
Schmierspray

● Grasso a pompa/
Pump Grease
Graisse à pompe/
Schmierpumpe

■ Grasso a pennello/
Brush Grease
Graisse à pinceau/
Schmierpinsel



N.B. I punti indicati sono riferiti al lato destro e sinistro di ogni corsia del ponte.
Note: The given points refer to both left and right sides of each runway

Remarque: Les points ci-indiqués se réfèrent aux côtés droite et gauche de chaque platelage du pont/
Anm: Die gezeigten Punkte beziehen sich auf beide Seiten (links und rechts) der Fahrschienen.

Si consiglia di usare grasso al Litio o al Calcio EP/
It is advisable to use Lithium or EP Calcium grease.

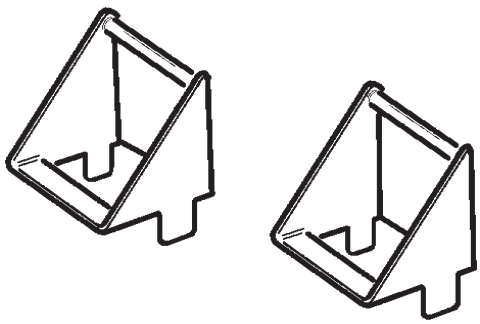
Il est conseillé d'utiliser de la graisse au lithium ou au calcium EP/
Es wird empfohlen, einen Lithium o. EP Kalziumschmierstoff zu verwenden.

ACCESSORI A RICHIESTA

OPTIONAL ACCESSORIES

ACCESSOIRES EN OPTION

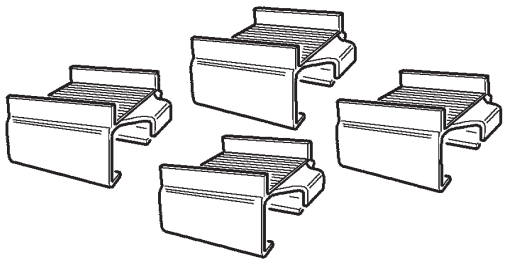
SONDERZUBEHÖR AUF WUNSCH



282/04

Cod. 9426548

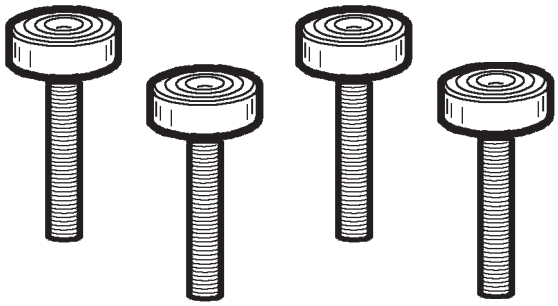
Set ferma ruota supplementari
Jeu de butées de roue additionnelles
Kit of additional wheel limit stops
Satz von zusätzlichen Radendanschlagleisten



256/02

Cod. 9425721

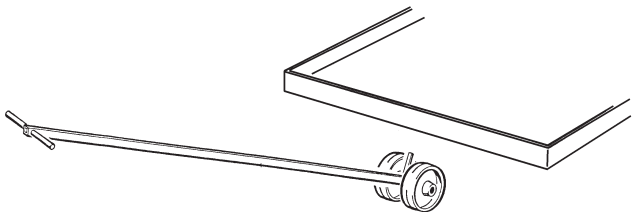
Kit Tamponi antiscivolo
Jeu de tampons anti-dérapants
Anti-skid pads
Rutschsichere Unterlagen



TV - 35

Cod. 9424232

Kit 4 tamponi a vite, regolabilein altezza (max. h. 200 mm)
Modello: X 2503 C
Jeu de 4 tampons à vis, réglables en hauteur (h. maxi. 200 mm.) Modèle X2503 C
Kit of 4 screw pads, adjustable in height (max. h. 200 mm.) Model X2503 C
Satz von 4 Schraubeunterlagen, hocheinstellbar (max. H. 200 mm.) Modell X2503 C

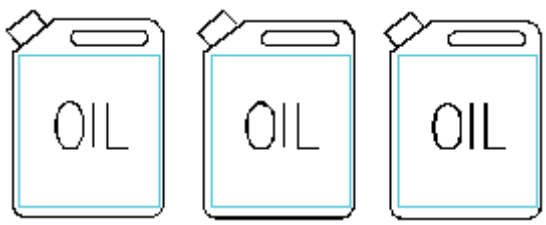


278/04

Cod. 9426544

Kit trasporto per X 2503 - C
Jeu de déplacement pour X2503 - C
Transport kit for X2503 - C
Verlegungssatz für X2503 - C

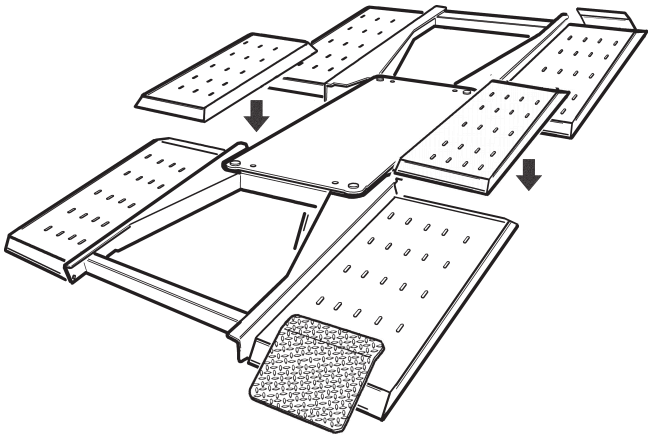
Consultare il manuale d'uso specifico prima di utilizzarlo



OL - 03

Cod. 9405345

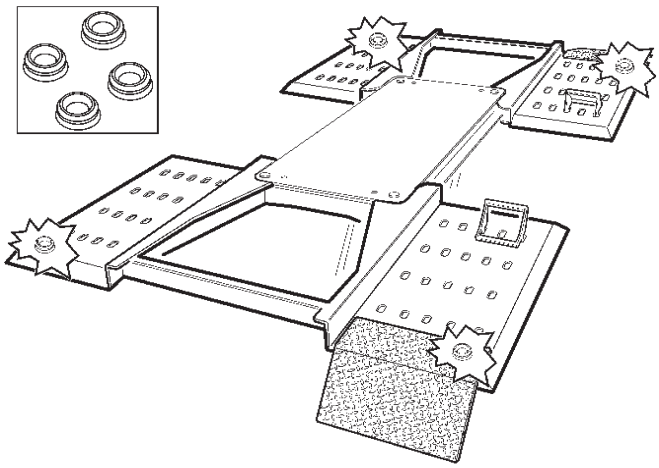
Kit di olio idraulico 15 l
Hydraulic fluid kit, quality 15 l
Kit huile hydraulique, qualité 15 l
Hydrauliköl, Qualität 15 l



288/04

Cod. 9426932

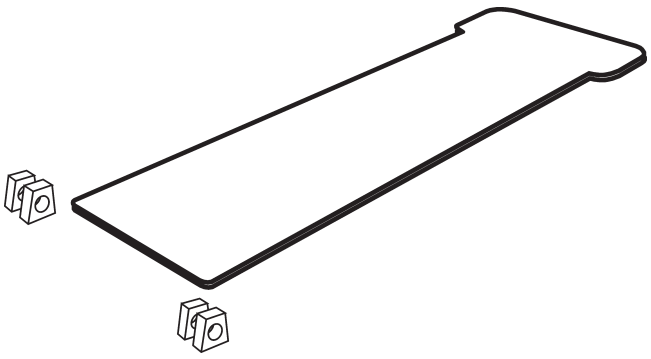
Kit corsie intermedie X 2503 RV per transito.
Jeu de chemins de passage intermédiaires X2503 RV
Kit of middle runways X2503 RV
Satz von Mittefahrschienen X2503 RV



290/04

Cod. 9426937

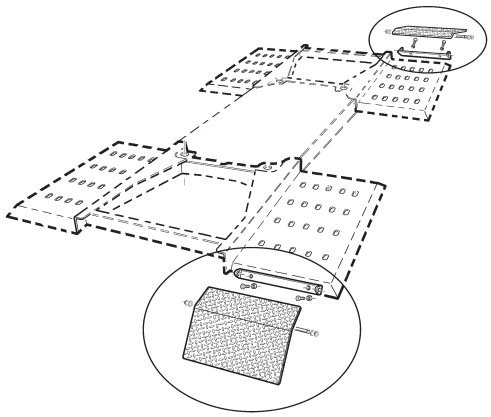
Kit spessori in gomma 3 mm per telaio RV (4 pezzi)
Jeu de cales en caoutchouc 3 mm. pour cadre RV (4 pièces)
Kit of 3 mm. rubber shims for RV frame (4 pcs.)
Satz von Distanzstk. 3 mm. für Rahmen RV (4 Stk.)



289/04

Cod. 9426931

Kit lamiera per pavimento + pattini
Jeu de tôle pour sol + 4 patins
Kit of floor cover sheet + 4 slides
Bodenschutzblech + 4 Gleitschuhe



291/05

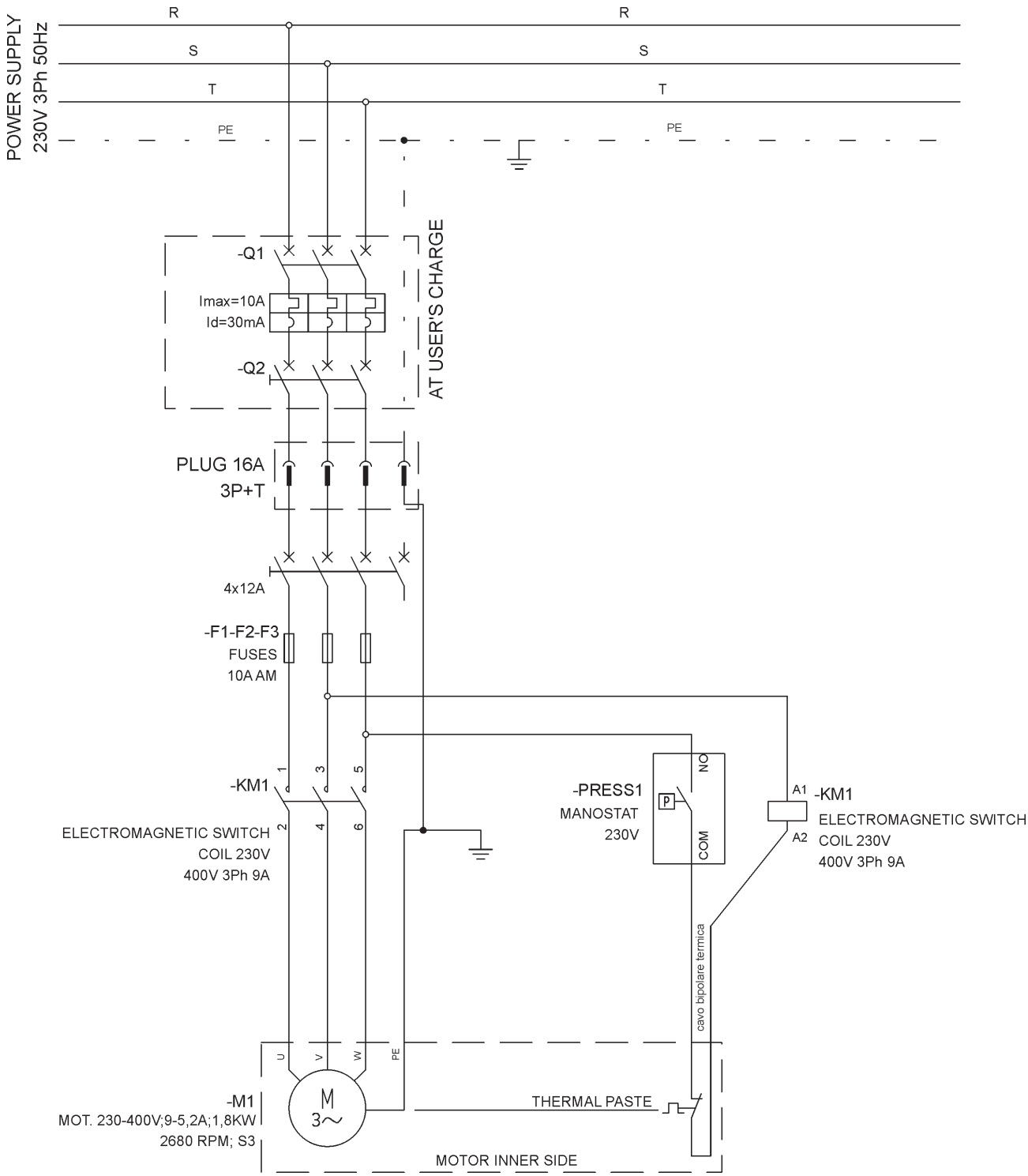
Cod. 9427061

Kit 2 ponticelli anti-caduta supplementari (2 in dotazione al sollevatore)
Jeu de 2 barres de connexion/butées de roue additionnelles (2 en dotation au pont)
Kit of 2 additional limit stop/connecting beams (2 are standard delivered with the lift)
Satz von 2 zusätzlichen Endanschlag/Verbindungsplatten (2 standard mitgeliefert)

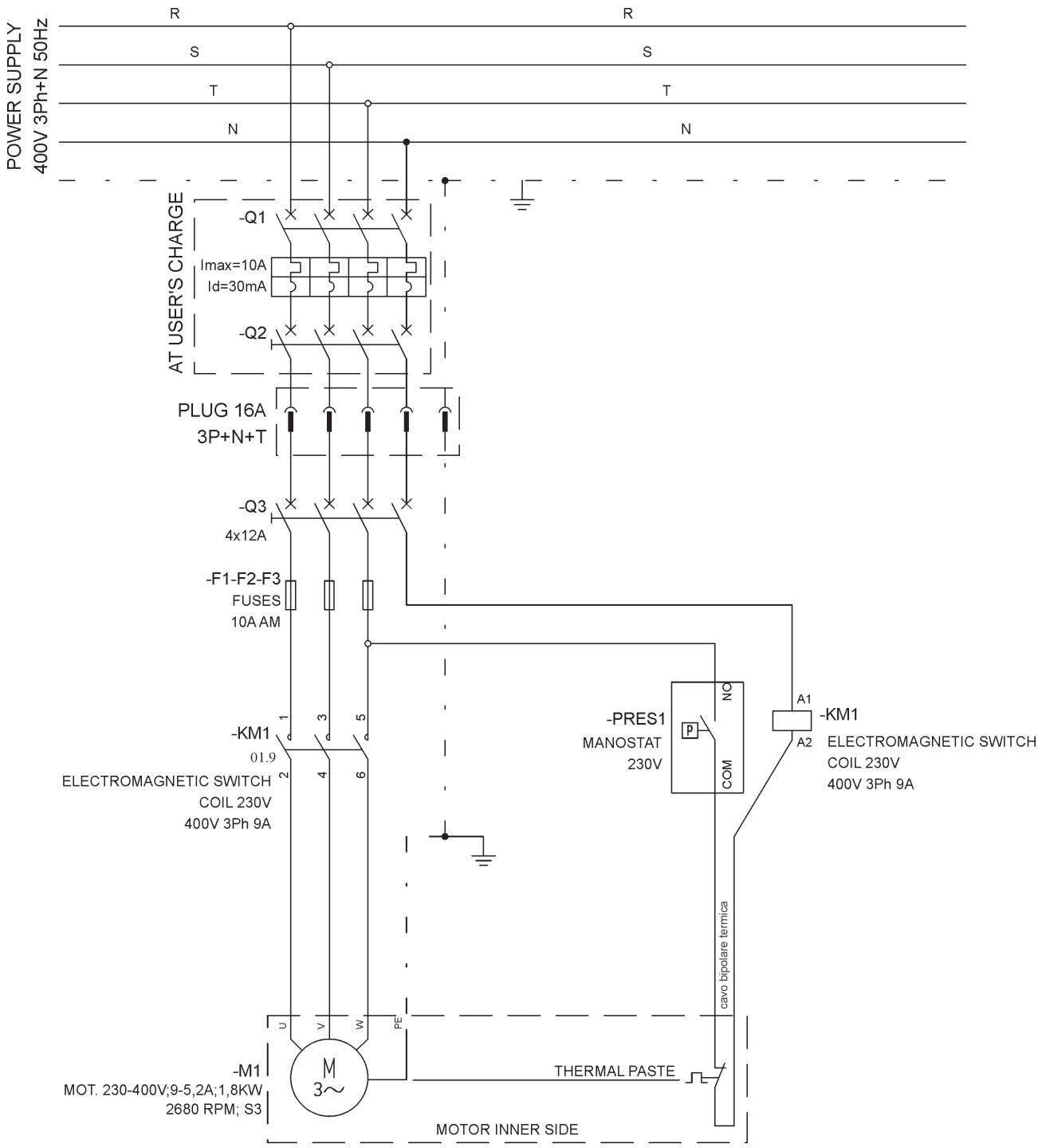
X 2503 C

X 2503 C RV

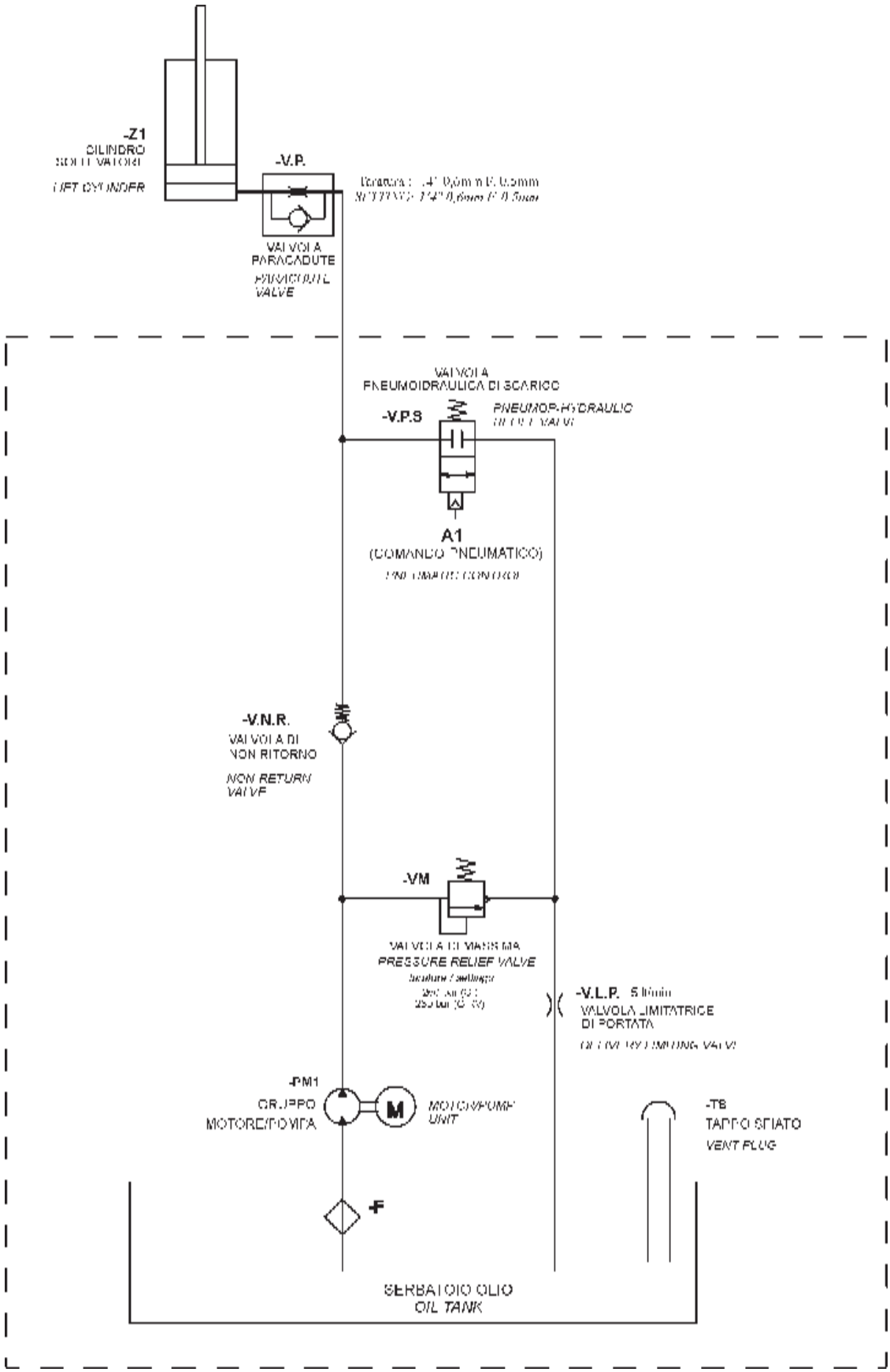
POWER SUPPLY DIAGRAM, 230 V 3 ph



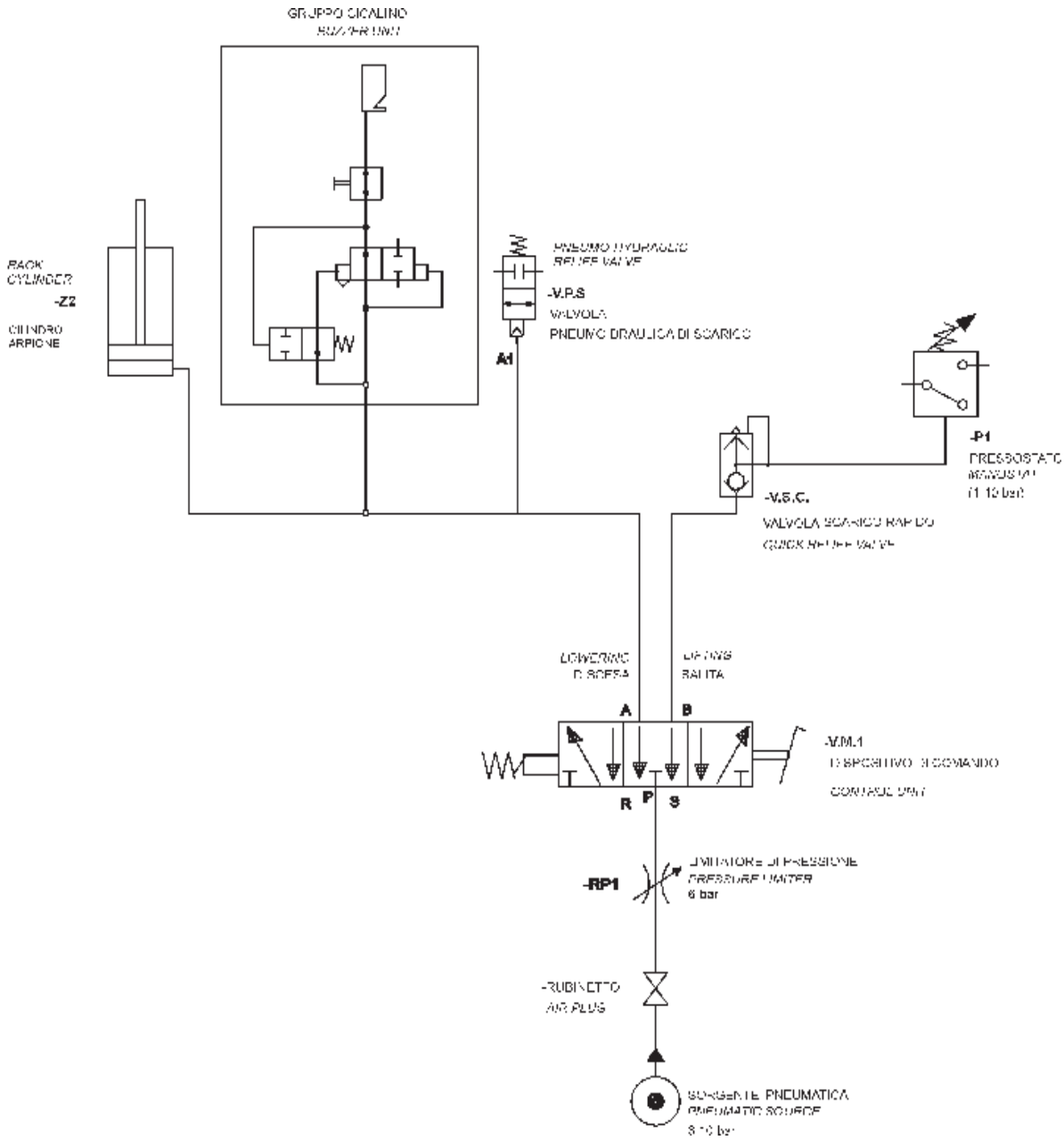
POWER SUPPLY DIAGRAM 400 V 3 ph



HYDRAULIC SYSTEM DIAGRAM



PNEUMATIC SYSTEM DIAGRAM



REGISTRO DEGLI INTERVENTI

RECORD OF INTERVENTIONS

REGISTRE DES INTERVENTIONS

WARTUNGSREGISTER

REGISTRO DI CONTROLLO DEGLI INTERVENTI/CHECK RECORD OF INTERVENTIONS/REGISTRE DE CONTROLE DES INTERVENTIONS/WARTUNGSREGISTER

In questo registro devono essere annotati tutti gli interventi effettuati sulla macchina nel corso del tempo, al fine di avere sempre la situazione aggiornata sullo stato di efficienza della macchina stessa.
Si ricorda che gli interventi di pulizia e lubrificazione sono a cura dell'utente, seguendo le istruzioni riportate nel presente manuale.
Gli interventi che richiedono la sostituzione di qualsiasi parte sono strettamente riservati a personale autorizzato e appositamente istruito.

All the operations made on the machine in the course of time must be reported herebelow so as to have an updated situation of the efficiency of the machine.
The user must carry out both cleaning and greasing operations according to the instructions given in this manual.
Any operation concerning the replacement of parts is strictly reserved to authorized and trained staff.

Dans le registre ci-dessous il faut noter toutes les interventions effectuées sur la machine au cours du temps, afin d'avoir toujours la situation concernante l'état d'efficacité de la machine même. Les interventions concernantes le nettoyage et le graissage doivent être effectuées par l'utilisateur selon les indications données dans ce livret; tandis que les interventions concernantes le remplacement de n'importe quelle partie de la machine doivent être effectuées exclusivement par du personnel autorisé et exercé en dessein.

In dieses Register sollen alle Wartungsarbeite an Hebebühne im Zeitlauf eingetragt werden, um den zeitnahen Zustand der Leistungsfähigkeit der Maschine immer zu haben.
Es wird darauf aufmerksam gemacht, daß die Reinigungs- u. Schmierhandlungen vom Bediener den in diesem Buch enthaltenen Hinweisen gemäß ausgeführt werden sollen.
Der Ersatz von Teilen soll auschließlich von erfahrenem Fachpersonal vorgenommen werden.

Data Date Date Datum	Intervento Operation Intervention Wartungsarbeit	Eventuali pezzi sostituiti Part eventually replaced Replacement eventuel de pieces Ggf. ersetzte	Note Remarks Remarques Anm.	Firma Signature Signature Unterschrift

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