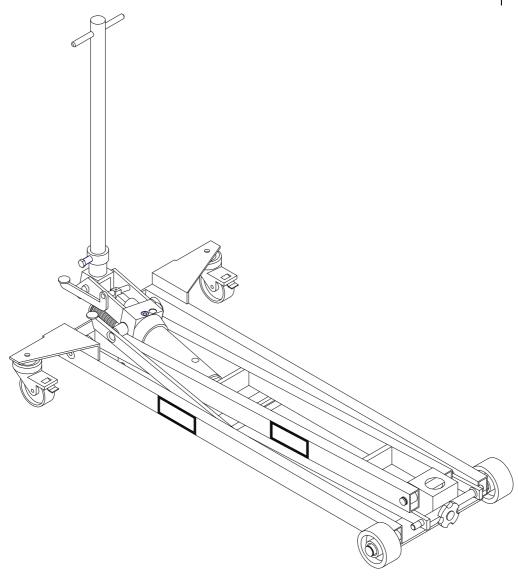


# HYDRAULIC TRUCK LIFT FOR VESPA







ARTICLE SXV-17

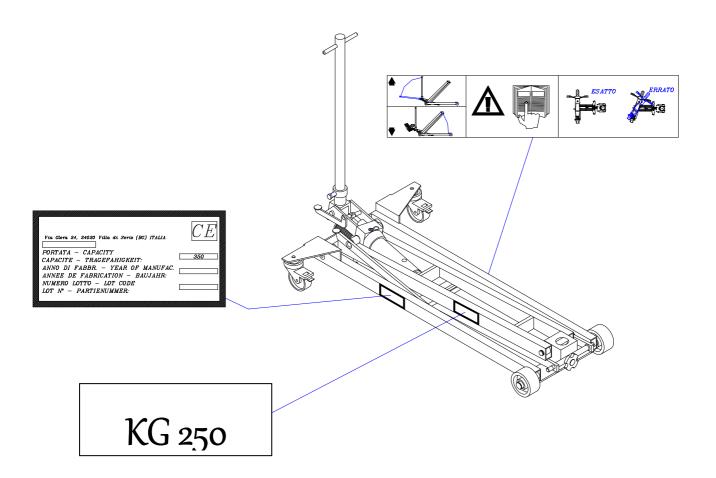
INSTRUCTIONS FOR ASSEMBLY USE AND MAINTENANCE, SPARE PARTS HANDBOOK

Before using the lift, apply the adhesive labels enclosed with the present handbook to the lift, according to the arrangement given in the diagram below.



Failure in placing labels will entail the expiration of the conditions of guarantee and of the manufacturer responsibilities for any damage resulting from using the lift.

In case one or more machine labels are damaged, missing or have become unreadable, ask for replacement by mentioning the position number. Place the new label in its correct position as indicated below.



While reading the present handbook, please pay attention to the following danger signals:







**DANGER** 

**ATTENTION** 

**CAUTION** 

This signal indicates the presence of dangerous conditions and situations. The DANGER signals are of three levels.

DANGER	į	The failure to comply with this signal may entail risks which are very dangerous to health; death, permanent damages.
ATTENTION	<u></u>	The failure to comply with this signal may entail risks with are very dangerous to health: death, permanent damages.
CAUTION	<u></u>	The failure to comply with this signal may entail accidents or damages to the machine

TERMINOLOGY AND DEFINITIONS (enclosure i, directive 98/37/CE)

- "Operator": the person or the people who are charged to set up, to set at work, to adjust, to perform routine maintenance, to clean, to repair and to transport the lift.
- "Exposed person": any person who is fully or in part in a dangerous area.
- "Dangerous or at risk area": any area inside and/or near a machine where the presence of an exposed person is a risk for the safety and the health of this person.
- "Qualified personnel": person charged from the manufacturer to perform special maintenance which requires a preparation and competence in the field of mechanics, electrotechnics, electronics, hydraulics and pneumatics. The qualified personnel knows the risks which are present during maintenance.
- "User": anyone who buys or holds in any form (hire...) The lift in order to use it within bounds established by the manufacturer.

# Instruction handbook

# **INDICE GENERALE:**

- 1.0 GENERAL
- 2.0 INTENDED USE
  - 2.1 Schematic drawing of the product and dimensions of models
  - 2.2 Table of dimensions
  - 2.3 Identification of the machine
  - 2.4 Ce certification
- 3.0 GENERAL SAFETY REGULATIONS
  - 3.1 Clothes
- 4.0 TRANSPORT
- 5.0 UNPACKING
- 6.0 MAIN TECHNICAL FEATURES
- 7.0 SETTING THE LIFT AT WORK
- 8.0 OPERATION
  - 8.1 Upstroke
  - 8.2 Downstroke
- 9.0 ROUTINE MAINTENANCE
- 10.0 TROUBLE-SHOOTING TABLE
- 11.0 SETTING ASIDE THE LIFT
- *12.0 SCRAPPING THE LIFT*
- 13.0 OPERATING TEST
- 14.0 HYDRAULIC DIAGRAM
- 15.0 TABLE OF SPARE PARTS
- 16.0 ACCESSORIES BY REQUEST

#### 1.0 GENERAL

The present handbook contains all the information you must know in order to use safely, to clean, to grease and to take care of the maintenance of the hydraulic truck lifts produced by:

#### OMCROP s.r.l. Via Glera 24, 24020 Villa di Serio (BG) Italia.

Please, read carefully the notices and instructions contained in the present handbook, since they provide important information for a SAFE USE AND MAINTENANCE.

The present handbook makes up a whole with the product.

*In case of loss or damage ask further copies of this handbook to:* 

OMCROP s.r.l. Via Glera 24, 24020 Villa di Serio (BG) Italia.



**ATTENTION** 

OMCROP S.R.L. SHALL NOT BE HELD RESPONSIBLE FOR ANY DIRECT OR INDIRECT DAMAGES TO PEOPLE, ANIMALS OR THINGS ENSUING FROM THE FAILURE TO COMPLY WITH THE INSTRUCTIONS WRITTEN IN THIS HANDBOOK.

# 2.0 INTENDED USE

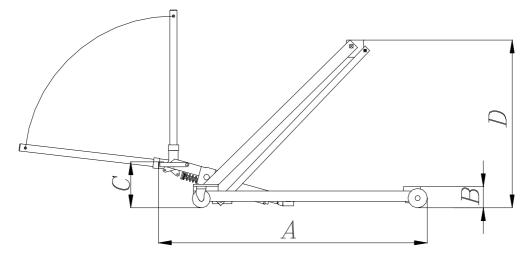
The truck-mounted lift has been designed to be used as a lift for motor-bikes whose weight does not exceed the maximum weight indicated on the manufacturer's nameplate and listed in the table of available models(table 2).



**ATTENTION** 

The uses which are not indicated in this handbook are to be considered improper and peremptorily forbidden. The manufacturer shall not be held responsible for any direct or indirect damages to people, animals or things ensuing from an improper use of the lifter.

# 2.1 SCHEMATIC DRAWING OF THE PRODUCT AND DIMENSIONS OF MODELS (TABLE 1)



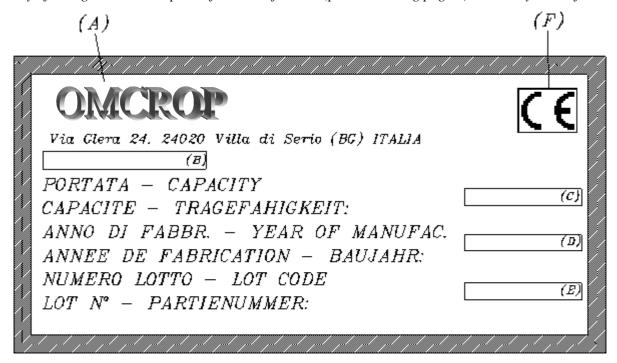
# 2.2 TABLE OF DIMENSIONS (TABLE 2)

ART.	Capac. On plate (kg)	Max width (mm)	A (mm)	B (mm)	C (mm)	D (mm)
SU 04	250	670	1250	150	300	950

*N.B.* The characteristics and the information listed in the table are approximate. The manufacturer reserves the right to bring changes without prior notice, exception made for safety devices.

#### 2.3 IDENTIFICATION OF THE MACHINE

Every lift has got a standard plate of the manufacturer (pos. 3 drawing page 2) in which you can find:



- A) Trade name and address of the manufacturer.
- B) Model of the lifter.
- C) Capacity.
- D) Year of manufacturing.
- E) Lot code.
- F) Ce mark.

# 2.4 CE CERTIFICATION

The lift was planned and built in compliance with the regulations of 98/37/CE directive(machines). Before throwing the lift on the market, the manufacturer has prepared the technical booklet and the enclosure v, checking that the lift has all the essential safety and health qualifications written in the enclosure v of the 98/37/CE directive.

In order to check that the lift has all the essential safety and health qualifications, the manufacturer has referred to and taken into consideration the following regulations:

REGULATION	YEAR	TITLE
EN 292-1	1992	SAFETY OF THE MACHINE: Basic conceptions; general principles of planning – terminology, basal methodology
EN 292-2	1992	SAFETY OF THE MACHINE: Basic conceptions; general principles of planning— detailed lists and technical principles
EN 294	1992	SAFETY OF THE MACHINE: Safety distances to prevent the upper limbs from reaching dangerous
EN 349	1993	SAFETY OF THE MACHINE: Minimum distances to prevent the crushing of human body parts
EN 414	1993	SAFETY OF THE MACHINE: Rules for the planning and the presentation of safety regulations
EN 982	1996	SAFETY OF THE MACHINE: Qualifications of safety for the fluidic energy system and for its components – hydraulics
EN 1050	1997	SAFETY OF THE MACHINE: Principles for the evaluation of risks
EN 10025	1995	Hot-rolled products of unalloyed steels for not structural uses
N 1494	2000	Moving and mobile jacks and associated lifting sets

The manufacturer, having acted in compliance with the above mentioned regulations, throw the lift on the market together with:

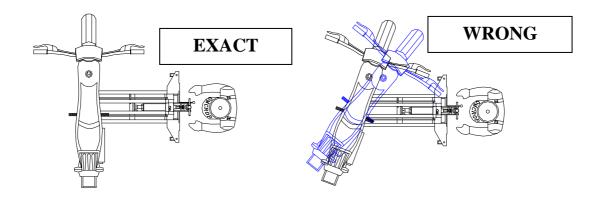
- Instruction handbook
- CE mark
- CE declaration of conformity

# 3.0 GENERAL SAFETY REGULATIONS TABLE 3



OBSERVE STRICTLY THE FOLLOWING GENERAL SAFETY AND ACCIDENT PREVENTION REGULATIONS:

**DANGER** 



- Before lifting the vehicle, lay the vehicle on the special plate using the supplied belts.
- Check that, after the lifting, the mechanical safeties insert correctly.
- Check that, during the lift's movements, no object stands within the uplifted vehicle's area.
- When lifting the vehicle, do not place any shims between the vehicle and the lift plate
- Only specially trained and healthy authorised personnel can use the lifter.
- Only trained and authorised personnel who has completely read and understood the instructions written in this handbook can use the lifter.
- Before using the lift you must make sure that the exposed people are not near the dangerous parts of the machine.
- You must not remove nor alter safety devices.
- Before using the lift you must make sure that safety devices work perfectly. Otherwise you must not use the lift.
- During normal operation, you must check that no hazardous conditions arise to the disadvantage of the exposed people. In case of hazardous conditions arising against the exposed people you must immediately stop the lift and get people out of the way.
- When you detect unusual noises or operating failures, you must immediately disable all active drives and look for the sources of the detected failures. In case of doubts, you must avoid any improper operations and address to the manufacturer for technical service.
- Every and any tampering or alteration of the lift entails the immediate expiration of the guarantee and the manufacturer shall not be held responsible for any direct or indirect damages caused by the above actions.
- During all the operations of loading, unloading, movements and setting at work, you must use lifting and movement machines with a capacity suited to the mass (weight) of the lift, using lifting devices and accessories (nylon belts...) that have characteristics and state of use perfectly suited to the aim.
- During maintenance we advise you to use only original OMCROP spare parts. The manufacturer shall not be held responsible for any damages ensuing from the use of accessories that are not original. The use of accessories that are not original entails the expiration of the guarantee.
- Take special care in correctly positioning the lift plate on the lifting points indicated by the vehicle manufacturer. Place the lift perpendicularly to the vehicle to be uplifted.
- Make sure that the ground on which the lift works is sufficiently planar so that work safety is never compromised when using the equipment. Never use the lift on inclined grounds.

### 3.1 CLOTHES

In order to use the lift safely you must wear clothes that are suitable to the machine and the place where you work:

• Do not wear long and flapping clothes, ties, scarves and similar clothes that could get entangled in the mobile parts of the lift.

- Long hair must be put up, the ends of the sleeves must be narrow, avoiding wearing watches, rings, necklaces and other objects that may cause damages to the person.
- Wear proper gloves and safety shoes that protect from labour accidents. If in the place where you work there is a level of noise not lower than 85 db (a), wear devices that protect hearing.
- In any case refer to safety regulations of the work environment that are in force in the country where the machine works.

#### 4.0 TRANSPORT

The truck-mounted lift is packed with the operating rod completely dismantled, placed horizontally on the truck and packed in the same protective material (blister, card-board).

The packed equipment must be transported taking care that all the normal applicable safety precautions for handling heavy and projecting parts are taken.

Use a fork-lift truck or a hoisting device for hanging and handling the neck.

*In case trucks are piled up, never exceed a pile of 5 trucks.* 



BEFORE TRANSPORTING THE EQUIPMENT YOU MUST FASTENED IT IN ORDER TO AVOID DISPLACEMENTS ON THE MEANS OF TRANSPOR.

**CAUTION** 

#### 5.0 UNPACKING

- After removing the packing, check that the lift and the control device have been integrally and safely delivered. Incidental lacks must be referred to the manufacturer within 8 days from the delivery. In case of doubts, do not use the truck-mounted lift and address to the manufacturer.
- Check that the lift is fitted with sticking labels as shown on page 2 of this handbook. In cases when labels are supplied in an envelope with the lift, take care to place them on the lift as indicated on page 2 of this handbook.
- Failure in placing labels use and warning labels is a violation of the European safety regulations.
- The packing elements are a potential source of hazards. They must be kept out of the children's reach. They must be put in the special collection areas.

#### 6.0 MAIN TECHNICAL FEATURES

- Operation through manual start of the pump. The starting strain is always lower than 400 n.
- Limit switch at the end of the lifting arm's movement, with mechanical stop at the end of the travel.
- Maximum pressure valve acting on the pump and checking that the lifted load falls within the limits provided by the manufacturer.
- Safety valve meant to hold the lowering speed constant within the limits established by the regulations in force, whatever the lifted weight is.
- Check valve allowing the uplifted vehicle to maintain a stable position and hinder any undesired movement of the load.
- *Mechanical safeties.*

#### 7.0 SETTING THE LIFT AT WORK

After freeing the machine components from their wrapping, check that they are integral and that no anomaly has occurred.

- A) Loosen the fastening screw (pos.1) located on the rod-supporting bush of the lift.
- *B)* Fit the drive rod(pos.2) into the special bush located on the back part of the lift.
- *C)* Insert the rod into the proper hole and fasten it using the screw.
- D) Screw on the previously loosened screw.
- *E)* Insert the plate into the special bush and screw it manually.



The manufacturer shall not be held responsible for any damages ensuing from the failure to comply with the above instructions. This action may entail the expiration of the guarantee.

#### **ATTENTION**

#### 8.0 USE

Do not work under the lifted vehicle unless the operator has previously placed the stands meant to support the vehicle in case the lift yields.

The stands shall be of excellent quality and have a sufficient capacity to support the weight of the uplifted vehicle.

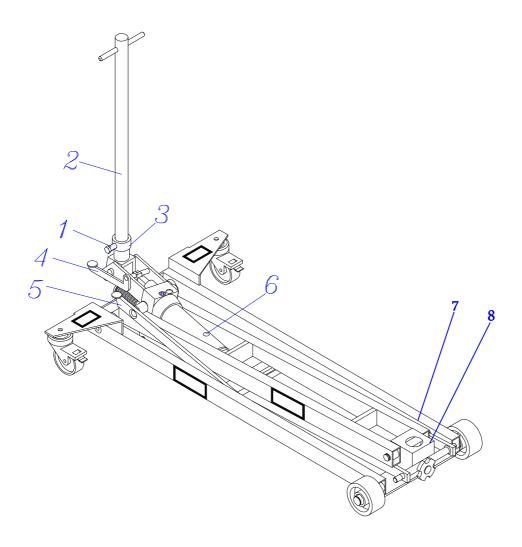
THE MANUFACTURER SHALL NOT BE HELD RESPONSIBLE FOR ANY DIRECT OR INDIRECT DAMAGES ENSUING FROM THE FAILURE TO COMPLY WITH THE INSTRUCTIONS OF THIS HANDBOOK.

#### 8.1 - UPSTROKE

- Place the lift under the load to be lifted, so that the plate is in the right position before starting lifting the load.
- Move the drive rod (pos.2) alternatively forward and backward so that the oil can flow to the piston.
- During the lifting run, by stopping the pumping action the lifting arm stops in the position it has so far reached, and the check valve stabilises its position.
- Stop lifting only when the mechanical safeties insert.(pos.5), only then it is possible to work safely.
- The lift arm stops at the highest point automatically.
- If the stop is too long and the cylinder yields, the lift arm can be lowered some millimetres at the most till it leans on the mechanical safeties.
- Do not insist on acting on the drive rod once the lifting run is over.

# 8.2 – DOWNSTROKE

- Press the pedal (pos.4) to start the lowering run and to lift the mechanical safeties (pos.5). By releasing the pedal, the movement stops immediately and the pedal reaches back its initial position.
- The lowering speed is automatically adjusted so that it remains within the limits prescribed by the regulations in force.



# 9.0 ROUTINE MAINTENANCE

The routine maintenance includes all the operations of cleaning, oiling, greasing and adjustment that must be carried out periodically at pre-established intervals in order to assure the correct working of the functionalities of the lift and the perfect efficiency of the safety devices.

All those operations that are not included in here must be considered as extraordinary and must be carried out only by the manufacturer himself.



# THE OPERATIONS DESCRIBED IN THIS PARAGRAPH MUST BE CARRIED OUT ONLY BY QUALIFIED PERSONNEL.

# **ATTENTION**

To ensure a correct and efficient operation of the lift, please follow the instructions listed below and perform all the cleaning and routine maintenance.



All the cleaning and maintenance operations must be carried out in the outmost safety conditions. Therefore, before starting them, the lift must not be running.

#### **ATTENTION**

For any oil addition, to be done whenever the lifting arm does not reach the rated height, follow the instruction given below:

- First, lift the lifting arm when this is at half its run, unscrew the cylinder plug. (pos. 6).
- Pour in oil until the cylinder chamber is filled up.
- Use "AGIP ACER 22" hydraulic oil.
- Screw the plug on the cylinder chamber.
- Lowering the lifting arm, after pouring in oil, the surplus of oil will be ejected through an appropriate closing plug with drain hole.

Repeat the operation in case the arm still does not reach the rated height.

Periodically grease the pins and the junctions between the lifting arm and the base frame.

Keep the lift wheels always clean.

*Grease the bearings of the pivoting wheels and check that they are always in good service conditions.* 

Regularly clean the equipment, especially as regards the plate-supporting joints in order to allow for a correct and constant balancing.

Check the correct working of the mechanical safeties.

KEEP ALWAYS PERFECTLY CLEAN ALL THE PARTS AND COMPONENTS OF THE LIFT.

# 10.0 TROUBLE-SHOOTING TABLE

Trouble:	Possibile cause	Remedies	
The lift does not lift the rated weight	<ul><li>1 Maximum pressure valve dirty or damaged</li><li>2 Lowering control valve open or dirty.</li><li>3 Cylinder gaskets worn out.</li></ul>	centre of your authorized dealer 2 Dismount the body valve, clean it	
Following the pumping action the arm rises, but it also fails down to the previous position soon after	1 Oil shortage in the tank.  2 Check valve dirty or damaged.	1 Add oil into the tank through the special plug hole as indicated in the routine maintenance chapter. 2 Remove the valve and clean it with compressed air and petrol. Handle it with care	
The lift arm rises just a little after each pumping.	<ul><li>1 The pumping gaskets have yielded.</li><li>2 Shortage of oil in the tank.</li></ul>	1 Remove the pumping body that houses the gaskets and replace the latter. 2 Add oil into the tank through the special plug hole as indicated in the routine maintenance chapter.	
The lift arm does not remain in position.	<ul><li>1 The cylinder gaskets have yielded.</li><li>2 The lowering valve is dirty or damaged.</li></ul>	1 Remove the piston-pump unit and replace the cylinder gaskets. Otherwise, send the unit to your authorized dealer for repair. 2 Remove the valve body and clean it with compressed air and petrol. Mount the valve again by handling with care.	
Excess speed during the lowering run.	1 The lowering control valve is damaged or need recalibration	I Remove the lowering valve from the pump body, clean it and check it for efficiency. Replace it if damages are found.	

If, after all these remedies, you do not obtain any results, please call the manufacturer avoiding any other intervention.

For any assistance, please address to authorized centres only and ask for original components. You can find the component list in this handbook.

N.B. The maximum pressure valve is sealed by the manufacturer. In cases of failure that are assumed to be due to the malfunction of this valve, send the equipment or the cylinder-pump unit to the maintenance centre of your authorized dealer.

# 11.0 SETTING ASIDE THE LIFT

In case the machine is set aside for long periods it is necessary to protect all the parts that may be damaged by dust deposits and atmospheric agents.

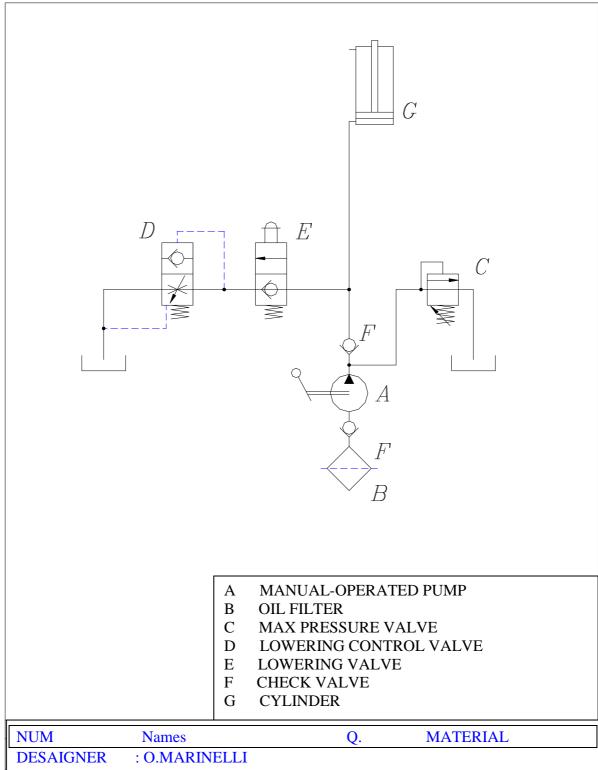
#### 12.0 SCRAPPING THE LIFT

- If the lift is at the end of its life or if it is no more to be used, it must be rendered inoperative by removing the hydraulic oil contained in the tank and in the drive cylinder.
- If the list is cast off, it must be disposed of a special waste. Therefore it must be dismantled and divided into homogenous parts, which will undergo disposal in compliance with the local regulations in force.

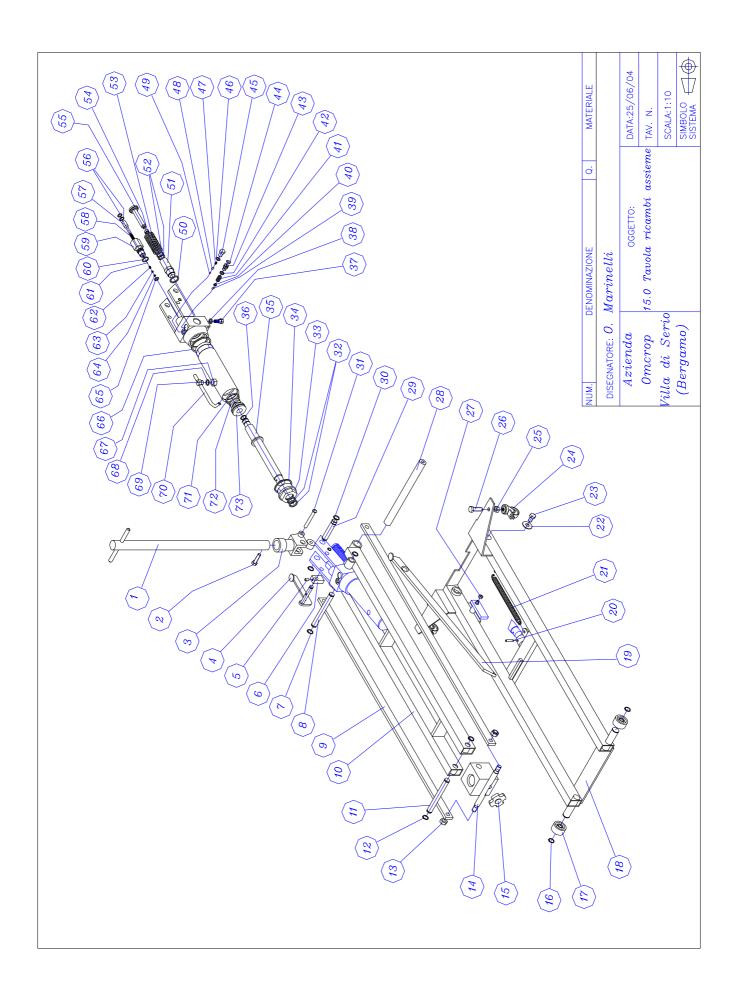
#### 13.0 OPERATING TESTS

Before packing, the lift undergoes operating tests as follows:

- *Operating test over lifting arm and components in general.*
- Checking aimed at ensuring that no yields nor oil leaks may occur.
- Operative test over lowering control valves.
- Check and calibration over max.pressure valve.
- Check aimed at ensuring that the mechanical safeties work.



NUM	Names	Q.	MATERIAL
DESAIGNER	: O.MARINELLI		
Company OMCROP srl Villa di Serio	TAB.14 OBJECT HYDRAULIC DIAGRAM		DATE 25/06/04 TABLE N. 1 SCALE 1:1
Bergamo Italy			SYSTEM SYMBOL



# 15.0 TABLE OF SPARE PARTS

73	Gasket holder and guide	1
72	Piston gasket	1
71	O-Ring	1
70	Oil draining-pipe	1
69	Drain and oil inlet valve	1
68	Drain valve gasket	1
67	Nut closing drain valve	1
66 65	O-Ring	1
	Copper gaskets	1
64	Drain valve cap	1
63	Ball guide	1
62	Spring	1
61	Ball	1
60	O-Ring	1
59	Drain valve body	1
58	Spring	1
57	Drain valve drive spin	1
56	O-Rings	2
55	Pumping small piston	1
54	Small piston gaskets	1
53	Piston return spring	1
52	O-Rings for small cylinder	2
51	Small cylinder	1
50	O-Ring	1
49	Suction valve ball	1
48	Check valve ball	1
47	Ball-presser spring	1
46	Plug gaskets	1
45	Plug for ball set	1
44	Plug	1
43	Dowel of maximum pressure	1
42	O-Ring	1
41	Spring	1
40	Ball presser	1
39	Maximum pressure ball	1
38	O-Ring	1
37	Oil filter	1
36	O-Ring	1
35	Piston	1
34		
	O-Ring	1
33	Piston Plug O-Rings	1
32	H I PINGS	2
		1
31	Pin for small piston	1
31 30	Pin for small piston Snap ring	2
31 30 29	Pin for small piston Snap ring Pivot for operating rod	2 1
31 30	Pin for small piston Snap ring	2

26	Pivoting wheel fastening screw	2
25	Pivoting wheel fastening nut	2
24	Pivoting wheel	2
23	Pivot fastening screw Ø 25	2
22	Washer	2
21	Arm return spring	1
20	Piston fastening	1
19	Mechanical safeties	1
18	Truck	1
17	Fast wheel	2
16	Snap ring	2
15	Plate	1
14	Plate-holder	1
13	Board fastening nut	2
12	Snap ring	2
11	Pivot	2
10	Lifting arm	1
9	Connecting rod	2
8	Pivot for stopping	1
7	Snap ring	2
6	Drain valve presser	1
5	Valve presser dowel	1
4	Pedal	1
3	Handle hub	1
2	Handle setscrew	1
1	Handle	1
NUM	NAMES	Q

# 16.0 ACCESSORIES BY REQUEST

In order to improve the work of the lift and meanwhile to render its use safer and more functional, omcrop supplies by request a series of accessories suitable to the models of the lift described in this handbook.

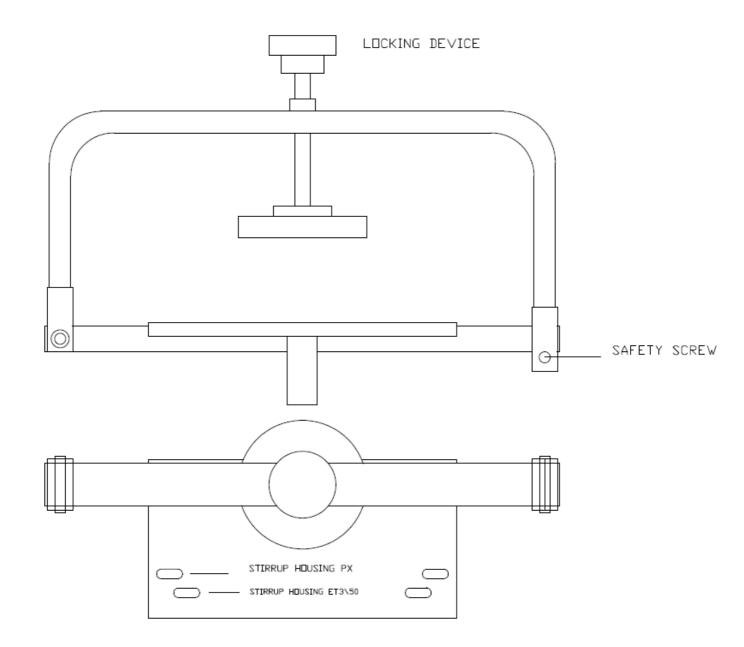
You can find the accessories for any model of lift in OMCROP catalogue.

The accessories that our company proposes to his customs, in order to use better the lift, are three plates:

- Plate for quad
- Plate for motocross
- Plate for" vespe" 50 special and "PX"
- Plate for scooter

# PLATE FOR VESPA

- Insert in the plate the stirrups suitable to the kind of Vespa you want to lift
- Unscrew the safety screw
- Lift the upper part
- Place the lifter under the Vespa
- Lower the upper part and close it fixing the safety screw
- Screw the fastening device and make sure the motorbike is steady and well fixed.
- Lift the motorbike till it reaches the desired height



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