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BEFORE OPERATING THE MACHINE, THE OPERATOR MUST READ AND UNDERSTAND ALL INSTRUCTIONS OF THIS MANUAL. THE MANUAL MUST BE CAREFULLY KEPT INSIDE THE MACHINE TILL ITS DISMISSION.

# Presentation

Dear customer,

We will, first of all, thank you for the confidence you gave us purchasing your new "Self-moving Compact wheel loader, articulated frame, equipped with multipurpose quick coupler, MULTIONE 2 Series".

We are sure your expectations will be satisfied since the technological level reached by our products and thank to a continuous engagement that stimulates us daily to increase to be able to face the continuous, technological, productive and trade transformations.

We are sure we can also face any your future working requirement, we are pleased to remain at your disposal and offer you all our experience and knowledge for the best solution of any your query.

# 1 DOCUMENT IDENTIFICATION

### 1.1 Designation

The following document is called "operating manual" (later on manual). It has been edited in accordance with the essential requirements of security 1.7.4 of the Enclosure I of the machine Directive 2006/42/CE.

### **▲** ATTENTION

THIS MANUAL MUST BE ALWAYS AT AUTHORIZED OPERATORS' DISPOSAL AND BE NEARBY THE MACHINE WELL KEPT AND PRESERVED.



THIS MANUAL MUST BE COMPULSORILY DELIVERED TOGETHER WITH THE MACHINE IN CASE IT WILL BE TRANSFERRED TO ANOTHER USER.

WE ADVISE YOU TO COPY OUT THE IDENTIFICATION DATA OF THE DOCUMENT: CODE, ISSUE AND REVISION (SEE COVER) TO REQUEST AGAIN COPY OF THE MANUAL TO THE MANUFACTURER IN CASE OF LOSS OR DETERIORATION OF IT.

THIS MANUAL REFLECTS THE STATE OF THE TECHNOLOGY AND KNOW-HOW AT THE MOMENT OF THE MACHINE MARKETING AND IT CANNOT BE CONSIDERED INADEGUATE ONLY BECAUSE, ACCORDING TO NEW EXPERIENCES, CAN BE UPDATED LATER

### 1.2 Identification

The manual is identified though the following data reported in the table on the cover and in annotation:

- · Abbreviation of the language.
- Original instructions or translation of them.
- Symbol ISO 7000.
- · Identifying code (ID).
- Issue.
- Revision (or revision date).

EN	TRANSLATION OF THE ORIGINAL INSTRUCTIONS		
<b>FT</b> •1	Code	Issue	Revision
	CM170003EN	16.02.17	05 (31.05.19)

This manual is the "Translation of original instructions" identified as follows:

ISTRUZIONI ORIGINALI		
Codice	Emissione	Revisione
CM170003	12.01.17	05 (31.05.19)



# 1.3 Glossary

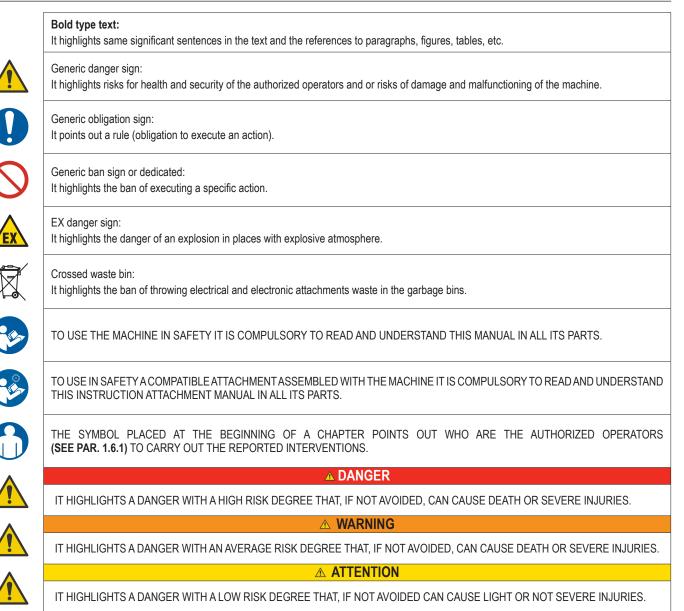
Term	Definition
Basic machine (later machine)	Self-moving Compact wheel loader, articulated frame, equipped with multipurpose quick coupler, planned to carry out various functions using interchangeable attachments.
Original interchangeable attachments(later attachment)	According to the article 2, b) of the Machine Directive 2006/42/CE it is a machine specified as: device that after the starting up of a machine or of a tractor, is assembled with the machine or with the tractor by the same authorized operator in order to modify the function or introduce a new function, to the extent that this attachment is not a tool. Produced by the Manufacturer and commercialized by the Manufacturer or by his authorized dealers (see par. 6.3).
Original option(later original)	Attachment produced by the Manufacturer and commercialized by the Manufacturer or his authorized dealers (see par. 6.2).
Compatible attachment	Attachment suitable to be assembled on a specific basic machine (see par. 6.3.1).
Assembly	Attachment assembly onto the basic machine, including the mechanic, hydraulic and electrical (if required) connection.
Authorized dealer(later dealer)	He is a dealer authorized by the Manufacturer who the Customer must address to, for assistance and emergency maintenance or for the purchase of attachments or original interchangeable attachments.
ROPS (Roll Over Protection Structure)	Metal structure that protects the operator in charge seated at the driving seat in case of the machine rolling.
FOPS (Falling Objects Protective Structure)	Structure protecting the operator in charge sitting at the driving seat in case of falling objects.
Assembly factory	Options assembly by the manufacturer before the machine delivery.
Assembly after market	Options assembly later, after the machine purchase.

# 1.4 Abbreviations

ca.	Circa about	Ν.	Number
Chap.	Chapter	Pag.	Page
PPE	Personal Protective Equipment	Par.	Paragraph
Right	Right	Pos.	Position
eg.	Example	Ref.	Reference
FIG.	Figure/s	Left	Left
hrs	Time	TAB.	Table
MAX.	Maximum	See	See
MIN.	Minimum	Q.ty	Quantity
min	Minutes	Etc.	Etcetera



### 1.5 Consultation notes





### 1.6 Receivers of the document

This manual is addressed only, to the operators authorized to use and to maintenance of the machine according to the specific technical-professional competencies required for the type of intervention.

### 1.6.1 Authorized operators



△ WARNING AUTHORIZED OPERATORS MUST CARRY OUT ONLY THE INTERVENTIONS OF THEIR SPECIFIC COMPETENCE ON THE MACHINE.

THE AUTHORIZED OPERATORS, BEFORE EXECUTING ANY INTERVENTION ON THE MACHINE, MUST MAKE SURE OF BEING IN FULL POSSESSION OF THEIR PSYCO-PHYSICAL FACULTIES, THAT TO GUARANTEE ALWAYS THE OBSERVANCE OF THE SAFETY CONDITIONS.

6	OPERATOR IN CHARGE He is a professionally trained operator who, in full obedience of the legislation in force in the country of use, is qualified to the driving of the machine and to carry out only: • The regulations. • The normal use. • The normal maintenance. All the operations must be executed in the absolute observance of the instructions reported in this operating manual.
	AUTHORIZED TECHNICIAN He is a qualified technician, placed at disposal by the dealer, who has got a specific knowledge of the machine and he is qualified to carry out the requires technical assistance, normal and extraordinary maintenance and/or operations not reported in this instruction manual.

TAB. 1

### 1.7 Warranty

As regards the warranty conditions see par. 11.6.

If found that the parties do not intend to submit the controversies rising from the supply contract, to an arbitral judgement or in any other case where it is required the verdict of an organ of the ordinary Court, only the law Court in Vicenza will have territorial jurisdiction.





# 2 MACHINE IDENTIFICATION

# 2.1 Copy of CE accordance statement

CE ACCORDANCE STATEMENT			
Manufacturer	MULTIONE SRL SOCIETÀ UNIPERSONALE via Palù, 6/8 36040 Grumolo Delle Abbadesse (VI) Italy	Tel. +39 0444 264600         Fax +39 0444 389260           info@multione-csf.com         www.multione.com	
	We declare that the machine is so ident	ified	
Designation	Self-moving Compact wheel loader, articulated frame, eq	uipped with multipurpose quick coupler, MULTIONE	
Model	M1 2.3		
Serial number			
	It is conform to the instructions of the following	g directives	
2006/42/CE	Directive 2006/42/EC of the European Parliament and of Directive 95/16/EC (recast).	the Council of 17 May 2006 on machinery, and amending	
2014/30/EU	Directive of the European Parliament and of the Council the Member States relating to electromagnetic compatibil	of 26 February 2014 on the harmonisation of the laws of lity (recast).	
	Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.		
	Notified organisation	VERICERT SRL - Certificazioni e Verifiche Via S. Cavina n. 19 - 48100 Ravenna - Italy NOTIFIED ORGANISATION N. 1878	
2000/14/CE	Evaluation procedure	In-house control of the production with evaluation of the technical documentation and recurrent controls.	
	Model	M1 2.3	
	Guaranteed sound power level (LwA)	100 dB	
	Sound power level measured (LwA)	97 dB	
	Net installed power	19,8 kW @ 3600 rpm	
	Test engine rpm	3000 rpm	
	Main regulations harmonized among those	applied	
EN 12100-1-2:2003 / A1:2009	Safety of machinery. Basic concepts, general principles for	or design	
EN 474-1:2006 / A1:2009	Earth-moving machinery - Safety - Part 1: General require	ements	
EN 474-3:2006 / A1:2009	Earth-moving machinery - Safety - Part 3: Requirements for loaders		
	Person authorized to keep updated the Technic	cal Booklet	
Name and roll	Carraro Giuseppe - Technical Manager		
Person authorized to draw up the statement			
Name and roll	Carraro Giuseppe - Technical Manager		
Place	Grumolo delle Abbadesse (VI) Italy	Date///	
Signature	Ornoueg		

### 2.2 Designation

The machine in question is so named:

Self-moving compact wheel loader, articulated frame, equipped with multipurpose quick coupler, MULTIONE - 2 Series

N.B. The model of the machine is reported on the statement CE of conformity and on the marking CE applied to the machine.

# 3 IMPORTANT INFORMATION ABOUT SAFETY

### 3.1 General instructions



IT IS COMPULSORY TO CONTROL CONSTANTLY THE PROPER FUNCTIONING OF ALL SHELTERS AND THE PROTECTION DEVICES INSTALLED ON THE MACHINE.

**A DANGER** 

IT IS COMPULSORY TO SUBSTITUTE AT THE RIGHT TIME POSSIBLE SHELTERS AND NOT WORKING WELL AND/OR DAMAGED PROTECTION DEVICES.

#### **A DANGER**

IT IS FORBIDDEN TO SUBSTITUTE ANY SHELTER, PROTECTION DEVICE OR ANY COMPONENT WITH NON ORIGINAL SUBSTITUTES.

IT IS FORBIDDEN TO TAMPER, EXCLUDE AND/OR TAKE AWAY ANY SHELTER OR PROTECTION DEVICE PLACED ON THE MACHINE. PARTICULARLY THE ROPS STRUCTURE CANNOT IN ANY CASE BE DRILLED, WELDED OR MODIFIED, IN CASE OF DAMAGE IT

CANNOT BE REPAIRED BUT IT MUST BE SUBSTITUTED BY AN ORIGINAL SUBSTITUTE.

WHAT IS ABOVE IS VALID UNLESS THERE IS A DIFFERENT WRITTEN DISPOSITION BY THE MACHINE MANUFACTURER.

### 3.2 Residual risks

We inform the operator in charge that though the manufacturer has adopted all possible technical structural precautions to make the machine sure, possible residual risks remain. They are described in succession.

### **A DANGER**

TO MINIMIZE THE EXPOSITION TO RESIDUAL RISKS IT IS COMPULSORY TO RESPECT THE SAFETY SIGNS (SEE PAR. 4.7) AND WEAR THE INDIVIDUAL PROTECTION (SEE PAR. 4.9) REPORTED IN THIS MANUAL.

### **A WARNING**

THE RESIDUAL RISKS REPORTED IN SUCCESSION CONCERN THE MACHINE WITHOUT ASSEMBLED EQUIPPING. WE REFER TO THE EQUIPPING INSTRUCTION MANUAL FOR THE DESCRIPTION OF THE RESIDUAL SPECIFIC EQUIPPING RISKS.

THERE IS THE RESIDUAL RISK OF INJURIES IN CONSEQUENCE OF FALL OF OBJECTS OR MATERIAL FROM THE POSSIBLE ATTACHMENT ASSEMBLED TO THE MACHINE. CONSULT THE ASSEMBLED EQUIPPING INSTRUCTION MANUAL TO VERIFY THE PRESENCE OF THIS RISK.

### **A RESIDUAL RISK N. 1**



THERE IS DANGER OF BURN FOR CONTACT IF THE AUTHORIZED OPERATOR GET INTO CONTACT WITH THE HOT PARTS SUCH AS MULTICONNECTOR, HYDRAULIC CYLINDERS, HYDRAULIC PIPES, PARTS OF THE ENGINE THAT, OWING TO PROLONGED USE OF THE MACHINE CAN REACH HIGH TEMPERATURES.

IT IS COMPULSORY TO RESPECT THE ASSEMBLY PROCEDURES, ATTACHMENT DISASSEMBLY (SEE CHAP. 8) AND ORDINARY MAINTENANCE PROCEDURES (SEE CHAP. 9) DESCRIBED IN THIS MANUAL.





**A RESIDUAL RISK N. 2** 

THERE IS THE DANGER OF INJURIES OWING TO CONTACT WITH MOBILE PARTS IN MOTION IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS MANUAL AND, PARTICULARLY, STRETCHES OUT HIS UPPER LIMBS OUTSIDE THE DRIVING SEAT DURING THE ORDINARY WORKING OF THE MACHINE.

IT SI COMPULSORY TO RESPECT THE PROCEDURES OF ASSEMBLY, DISASSEMBLY OF THE EQUIPPING (SEE CHAP. 8), THE ORDINARY MAINTENANCE PROCEDURES (SEE CHAP. 9) AND THE INSTRUCTIONS FOR A RIGHT POSITION TO ASSUME DURING THE USE (SEE PAR. 8.3.1.1) DESCRIBED IN THIS MANUAL.

# **A RESIDUAL RISK N. 3**

THERE IS THE DANGER OF CRUSHING FOR A POSSIBLE FALL OF THE Attachment IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS MANUAL.

IT IS COMPULSORY TO RESPECT THE EQUIPPING DISASSEMBLY PROCEDURES (SEE CHAP. 8) DESCRIBED IN THIS MANUAL.

### **A RESIDUAL RISK N. 4**

THERE IS THE DANGER OF CRUSHING FOR ROLLING OVER OF THE MACHINE IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS MANUAL AND, PARTICULARLY, IF HE DOES NOT FASTEN HIS SAFETY-BELT.

IT IS COMPULSORY TO RESPECT THE PROCEDURES OF THE ORDINARY USE OF THE MACHINE (SEE CHAP. 8) DESCRIBED IN THIS MANUAL.

## **A RESIDUAL RISK N. 5**

THERE IS THE DANGER OF INJURIES TO HEARING IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS MANUAL AND IF HE DOES NOT WEAR ANTI-NOISE HEADPHONES.

IT IS COMPULSORY TO WEAR PERSONAL PROTECTION DEVICES INDICATED IN THIS MANUAL (SEE PAR. 4.9).

## **A RESIDUAL RISK N. 6**



THERE IS THE DANGER OF CRUSHING DURING THE STEERING PHASE OF THE MACHINE IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS MANUAL, PARTICULARLY, OPERATES THE CONTROL BUTTONS FROM A PLACE DIFFERENT FROM THE DRIVING ONE AND HE DOES NOT CONTROL THE PRESENCE OF PEOPLE, ANIMALS AND OR THINGS NEARBY THE MACHINE.

IT IS COMPULSORY TO OPERATE THE CONTROL BUTTONS ONLY AND EXCLUSIVELY FROM THE DRIVING SEAT AND MAKE SURE THAT WITHIN A RADIUS OF TEN METRES, THERE ARE NO THINGS, ANIMALS OR PEOPLE WHOSE SAFETY CAN BE ACCIDENTALLY COMPROMISED.

## **A RESIDUAL RISK N. 7**

THERE IS THE DANGER OF FEET CRUSHING DURING THE STEERING PHASE OF THE MACHINE IF THE AUTHORISED OPERATOR DOES NOT RESPECT THE INSTRUCTIONS REPORTED IN THIS INSTRUCTION MANUAL.

IT IS COMPULSORY TO MOVE THE MACHINE WITH THE CABIN DOOR CLOSED (IF THERE IS ONE) AND WITHOUT STRETCHING OUT HIS UPPER LIMBS OUTSIDE THE DRIVING SEAT.

## 3.3 Transport and lifting

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THE MACHINE WITH THE ENGINE SWITCHED OFF IS LOCKED IN AN HYDRAULIC WAY AND IT CANNOT BE MOVED. IT IS FORBIDDEN TO TOW THE SWITCHED OFF MACHINE BY ANY MEAN OF TRANSPORT.



### 3.4 Maintenance



# ATTENTION TO CARRY OUT THE MAINTENANCE OPERATION ON THE MACHINE: THIS MUST BE IN THE "SAFETY CONDITION" (SEE PAR. 9.2).

**▲ DANGER** 

# **A DANGER**

IT IS FORBIDDEN TO THE AUTHORISED OPERATORS TO LEAVE UNATTENDED THE MACHINE DURING THE MAINTENANCE OPERATIONS WITHOUT MAKING SURE TO HAVE ARRANGED ANY PRECAUTION SUITABLE TO AVOID TO START ACCIDENTALLY THE MACHINE OR SOME OF ITS PARTS.



▲ DANGER

DURING ALL MAINTENANCE OPERATIONS THAT SHOULD BE CARRIED OUT ON THE MACHINE WITH ITS LIFTING ARM IT IS COMPULSORY TO INSERT THE LOCK BRACKET OF THE LIFTING ARM (SEE PAR. 9.3).

### **MWARNING**

THE AUTHORISED OPERATORS MUST CARRY OUT ONLY THE MAINTENANCE OPERATIONS REQUIRED ACCORDING TO THEIR SPECIFIC PROFESSIONAL COMPETENCE AND ON THE PERMISSION OF THE PERSON IN CHARGE.

LUBRICANT FLUIDS AND POSSIBLE OTHER FLUID COMING FROM MAINTENANCE MUST NOT BE UNLOADEN IN THE ENVIRONMENT. THESE PRODUCTS ARE CONSIDERED POLLUTING AND DANGEROUS AND THEY MUST BE COMPULSORELY TAKEN AWAY CHARGING AUTHORISED COMPANIES QUALIFIED FOR DIFFERENT PRODUCT TYPOLOGIES, IN THE ABSOLUTE RESPECT OF THE REGULATION IN FORCE IN THE COUNTRY WHERE THE MACHINE IS USED.

**ATTENTION** 



KEEP TO A SCRUPULOUS CLEANING OF THE MACHINE.



# 4 DESCRIPTION OF THE MACHINE

The machine has been planned and carried out to operate according to the type of attachment assembled in agricultural environment, green spaces, farming and gardening, building and road yards both in the private sector ant in the public one.

The machine is provided with a heat petrol engine that sets a series of hydraulic pumps.

These feed an hydraulic circuit at high pressure that enables:

1) The four wheels whose the machine is equipped (each is moved by an hydraulic engine).

2) The steering system, formed by a hydraulic cylinder which acts on the articulation of the central pivot steering of the frame.

3) A lifting arm (in the front part of the machine).

4) The attachment assembled in case on the machine.

The control panel is placed on the driving seat.

### 4.1 Main parts and their functions



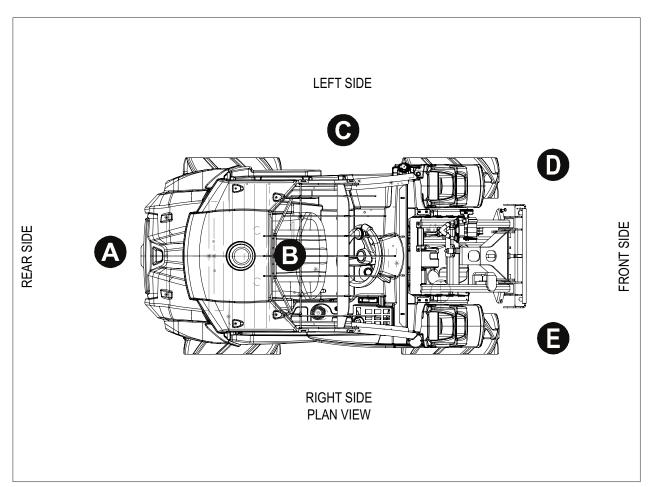


Ref.	Part	Function
1	Back-weights (Nr. 2) (optional)	Back-weights increases the stability of the machine.
2	Engine	It moves the hydraulic pumps.
3	Opening engine space compartment	It protects the engine and prevents the operators in charge to get in touch accidentally with the mobile parts and high parts.
4	Rear reflectors	They make the machine more visible.
5	Driving seat supplied with armrests and safety belt	It is for the operator to be seated and fastened to the machine.
6	ROPS	It protects the operator in case of rolling over of the machine.
7	Control panel	It assembles operating controls of the machine and of the possible attachment assembled to the machine.
8	Wheels	They support and allow the machine movement.
9	Quick coupler	It allows the mechanic connection to attachment.
10	Lifting arm	It raises possible attachment assembled of the machine.
11	Multiconnector	It allows the connection to the attachment hydraulic circuit.
12	Electrical supplying plug DC 12 V	It provides with the supplying of possible electrical devices placed on the assembled attachment.
13	Working lights	They provide more visibility in a situation of poor lighting.
14	Hydraulic circuit pipes	They allow the passage of the hydraulic oil for assembled equipping working.
15	Wheel	It allows to change direction during the translation of the machine.
16	Roof and FOPS structure	It protects the operator in charge from bad weather and from the direct exposure to the sunbeams, the FOPS structure (if there is see <b>par. 6.3.1</b> ) protects the operator against the object fall.
17	Document holder	Where operator manual and document are placed.
18	Fuel tank cap	It allows fuel supplying.
19	Hydraulic oil tank cap	It allows the oil control, by means of a graduated oil dipstick.
20	Pedals	They allow to determine the direction and speed.
21	Disconnecting battery key	It allows to disconnect the battery.
22	Central steering articulation	Moved by an hydraulic cylinder allows the steering of the machine.
·	·	

TAB. 2



# 4.2 Seats taken by authorised operators



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# FIG. 2

THE OPERATOR IN CHARGE DURING THE WORKING PHASES MUST REMAIN ON BOARD OF THE MACHINE (**SEAT B**) AND ONLY WITH THE MACHINE IN "SAFETY STATE" (**SEE PAR. 9.2 AND PAR. 9.3**) CAN OCCUPY THE OTHER WORKING PLACES SHOWN IN FIG. 2..

Operator in charge	Place	Description of the operation	
	A	Standing on the back side to operate required maintenance operations on the machine and on the engine (see chap. 9).	
	B	Seated at the driving seat in the right position of use and with the safety belt fastened during the ordinary working (see par. 8.3).	
6	C	<ul> <li>Standing on the left side of the machine:</li> <li>for the refuelling (see par. 8.3.9);</li> <li>to connect/disconnect the battery (see par. 7.1);</li> <li>to get on to the driving seat (see par. 8.3.1).</li> </ul>	
	D	Standing on the front left side of the machine to carry out the assembly and disassembly of the attachment (see par. 8.3.4 and par. 8.3.5).	
	Ø	Standing on the right front side of the machine to carry out the assembly and disassembly of the attachment (see par. 8.3.4 and par. 8.3.5).	



# 4.3 Control devices

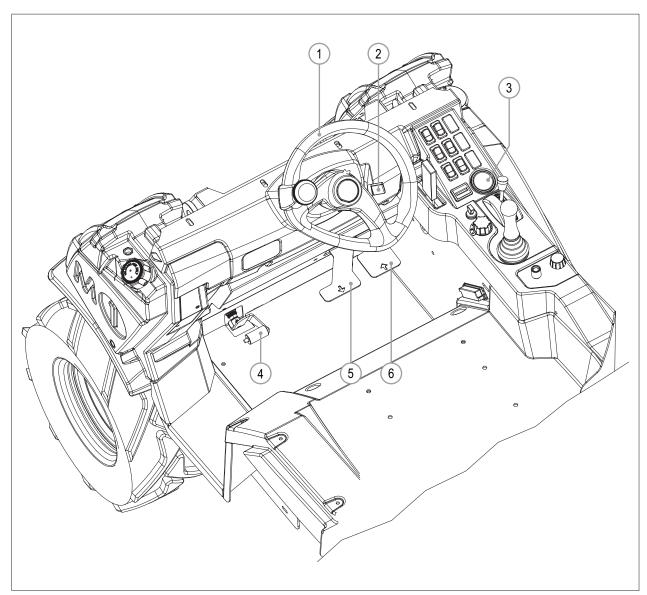


FIG. 3

Ref.	Part	Function		
1	Steering wheel	The wheel allows to change direction during the machine operating.		
		By Key on and turned to the right carries out respectively:		
		• Position "0": machine off.		
2	Ignition lock key	Position "1": power to control panel.		
		• Position. "2": starting the machine.		

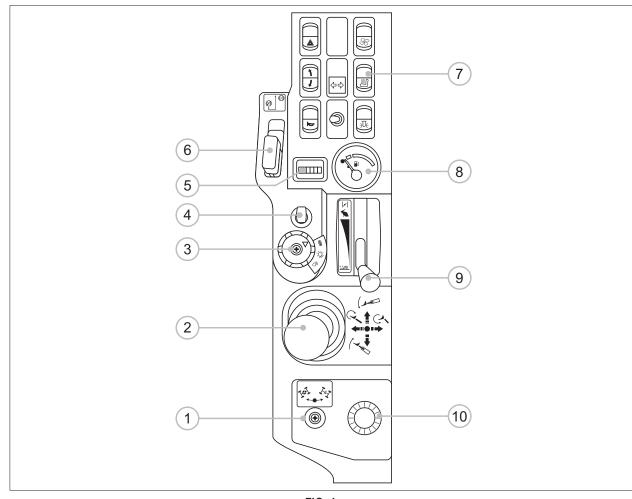




Ref.	Part		Function		
3	Control panel	See par. 4.3.1.			
	Pedal control of hydraulic flow of quick couplings (maintained action).	¢	• <b>Pressed down</b> ( <i>with the left foot</i> ): it actuated the operation of the attachment (eg.: closing forage forks).		
4		•	Position "central": off the interchangeable attachment.		
		÷	• Lift upwards (with the left foot): it reverses the operation of the attachment (opening forage forks).		
5	Proportional pedal reverse	Ţ	<b>Pressed down</b> ( <i>with the right foot</i> ) it allows backward movement of the machine and increases the speed in proportion to the applied pressure produced on the same.		
6	Proportional pedal forward	$\hat{\mathbf{T}}$	<b>Pressed downwards</b> ( <i>with the right foot</i> ): allows the forward movement of the machine and increases its speed in proportion to the pressure exerted on the same.		

TAB. 4

### 4.3.1 Control panel



Ref.	Name			Function
	Control knob DBS (Dynamic Block System)	It allows two wheels (same side front and rear) to have the same speed. It can be inserted on the machine in motion or stopped.		
1		X		ated clockwise "+": it turns the wheels all at the same speed and the traction of the car especially on slippery surfaces.
		별		<b>ned counterclockwise</b> "-": it rotates the wheels while steering and naging the work surface (eg.: grass).
		It controls the	movement of	the lifting arm and of the quick coupler.
		()===		• <b>Position "Forward"</b> (at maintained action): it lowers the lifting arm.
2	Multifunction joystick	(~	₹	• Position "Backward" (at maintained action): it raises the lifting arm.
		Ç,		• <b>Position "Right"</b> (at maintained action): it inclines the quick coupler forward.
		Q_	•	• <b>Position "Left"</b> (at maintained action): it inclines the quick coupler backward.
	Three-position head light switch (option)	0	• Positio	n "0": all lights off.
3		- <u>`</u> Ö҉-	• Positio	n "1": position light on.
		≣D	• Positio	n "2": low beam on.
			• Positio	n "Right": right turning light on.
4	Three-position turning lights switch (option)	•	• Positio	n "Central": turning lights off.
		<b>4</b> 1	• Positio	n "Left": left turning light on.
5	Counter	It reports the actual hours of power on the control panel.		



cont.

Ref.	Name		Function		
		It is used to block the machine during the parking and the waiting. The brake is of a Pin Lock type and it operates only on the front wheels. <b>N.B:</b> the brake is correctly inserted when the noise of the insertion click is heard <b>(see par. 8.3.8)</b> .			
6	Parking brake	Ø		Position "Forward": brake off.	
		P	4	Position "Backward to the right": brake engaged and locked.	
7	Button commands	See par. 4.3.2	See par. 4.3.2.		
8	Fuel gauge		<ul> <li>It indicates the level of the fuel in the tank.</li> <li>Green: fuel quantity.</li> <li>Red: reserve.</li> </ul>		
		Regola il numero di giri del motore.		notore.	
	Throttle			<b>a. "Starter</b> " ( <i>full forward</i> ): s starting of the engine in cold periods (see par. 8.3.2).	
9			Position	"Hare" (forward): it increases engine rpm.	
		-	Positior	"Turtle" (backward): it lowers engine rpm.	
	Heating temperature	It controls the			
10	control knob		tated clockwise it increases the temperature.		
	(option)	• Rotated Col	Interciockwi	se it decreases the temperature.	

**TAB.** 5

### 4.3.2 Button commands

### **ATTENTION**

THE DISPOSITION OF THE BUTTONS CAN VARY ACCORDING TO THE FITTING OUT.

Ref.		Name	Function	
			Three-position switch, it powers the socket on the lifting arm to operate any electric device on attachment assembled to the machine (eg.: chimney on the snow blower). The switch has three positions:	
1	1	Power switch DC12V	Position "Forward": it powers the socket (eg.: rotation of the snow blower to the right).	1
			Position "Central": it interrups the supply of the socket.	
			Position "Backward": it reverses the polarity of the socket (equivalent text) of the chimney of the snow blower to the left).	Y

cont.





Ref.		Name		Function
2	1	Sound warning signal	đ	Pressed, it activates the emergency sound warning signal.
3	×	Heating switch (option)	5	<ul> <li>3 position switch: it activates the heating of the cabin:</li> <li>Pos. "0" (starting position): heating off.</li> <li>Pos. "1"(pressed): heating on - first speed of the fan.</li> <li>Pos. "2" (pressed again): heating on - second speed of the fan.</li> </ul>
4		Working lights switch	TIP TIP	<ul> <li>2 position switch.</li> <li>Pos. "On": it turns on the headlights.</li> <li>Pos. "Off": it turns off the headlights.</li> </ul>
5	ttp	Heating seat switch (option)	ttt⊧ ∫	Pressed it activates the heating system of the seat.
6		Washer switch (option)	(	Pressed it activates the windshield washer.
7	۲ ۲	Light indicator switch (flashing) (option)		Pressed it activates the light indicator (flashing lights) on cab roof.
8		Emergency light switch (option)		It turns on the four directional lights simultaneously.
_	<b>4</b> 4	Direction lights and traffic	$\langle \varphi \varphi \rangle$	If ON indicates that the direction lights are ON.
9	EDE	lights light (option)	∋d d∈	If ON indicates that the traffic lights are ON.
10	P	Auxiliary working lights switch (option)	Ð	Pressed it activates the auxiliary working lights (front and rear).

**TAB. 6** 



### 4.3.3 Cabin commands

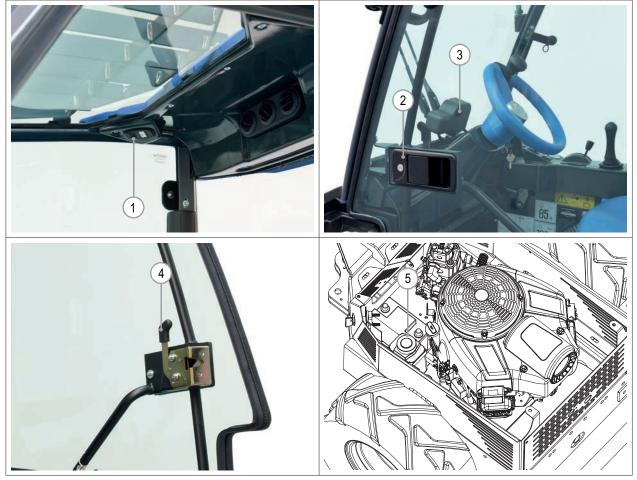


FIG. 5

Ref.	Name	Function
1	Cabin light switch	Two-position switch controls the light in the cabin: • Pos. "0": cabin light off. • Pos "1": cabin light on.
2	External door handle	External handle with lock and key. Pulling the lever allows the opening of the door of the cabin.
3	Wiper switch	Two-position switch controls the wiper: • Pos. "O (OFF)": wiper off. • Pos "I (ON)": wiper on.
4	Inside door handle	Inside handle, pulling the lever allows the opening of the door of the cabin.
5	Filler cap of windscreen washer tank	It allows refilling of the tank.

**TAB.** 7

### 4.4 Shelters and protection devices

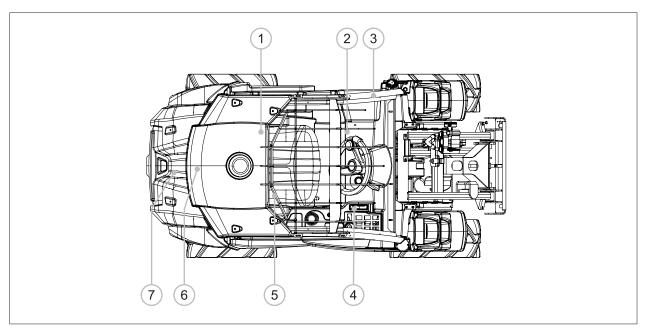


FIG. 6

Ref.	Device	Function
1	Safety belt	It is a retractor pretensioned belt type 2-lap anchor points, installed on the driving seat, which serves to retain the assigned operator on the driving seat. Its use is compulsory.
2	Non-slip strip	Placed on footboards avoid slipping of the feet.
3	ROPS	Metal structure that protects the operator in charge sitting in the driving seat, in case of rolling over of the machine "according to standard EN ISO 3471:2008".
4	Parking brake	Locks the machine during the break and parking of this.
5	FOPS	Structure that protects the assigned operator sitting at the driving seat in case of fall of objects (see par. 6.3.1) "according to standard EN ISO 3449:2008".
6	Lock lift arm bracket and steering lock bracket	The lock lift arm bracket allows to lock the lift arm in a raised position to operate maintenance (see par. 9.3). The steering lock bracket allows to lock the machine avoiding that steers accidentally during the transport (see par. 5.2.1).
7	Pressure relief valves	They are hydraulic valves installed in the hydraulic circuit of the machine and serve to ensure that the working pressure does not exceed the expected values (see par. 8.4).

TAB. 8



IT IS COMPULSORY, IN CASE OF FIRE, TO SUBSTITUTE ALWAYS THE ROPS, THE FOPS, AND SAFETY BELTS AND THEIR MOUNTING BOLTS.



### 4.5 Intended use

Range of applications	Agriculture, gardening nurseries and gardening, building, road yards and industry.		
Location of use Outside the buildings, in a sufficiently lit place suitable to the laws in the country of use in safety.			
Intended use	The intended use is determined by the type of assembled attachment.		
Operators in charge of use	ators in charge of use Only one authorised operator qualified with the described professional technical requirement (see par. 1.6.1).		

**TAB. 9** 

## 4.5.1 Use limits and technical data

### 4.5.1.1 Machine

Model		2.3
Code		C951027
Length MAX.	тт	2049
Width MAX.	тт	1035
Height MAX.	тт	1948
Steering radius	тт	700 / 1698
Speed MAX.	km\h	15
Machine weight without accessories	kg	700
Standard tyres		20x8.00-10
Tyre model		Tractor
Oil tank capability	litres	19
Working pressure	bar	180
Type of mineral hydraulic oil		VG 46
Hydraulic pumps	Ν.	3
Hydraulic flow	litres/min	42

TAB. 10

### 4.5.1.2 Engine

Model		2.3
Fuel		Petrol
Cylinders	Nr	2
Cooling		air
Power	kW/HP	18,6/25
MAX. speed	rpm	3600
Tank capacity	litres	36
Battery	Ah	40
Voltage (DC)	V	12

TAB. 11



FOR FURTHER TECHNICAL DATA REFER TO ENGINE MANUAL ENCLOSED.



# **ATTENTION**

TECHNICIAN DATA SUBJECT TO CHANGE WITHOUT NOTICE.

# 4.5.1.3 Dimensions

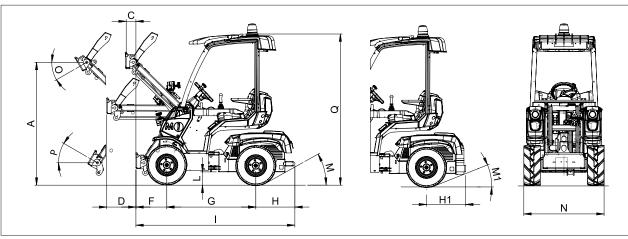


FIG. 7

Ref.	2.3	Ref.	2.3
Α	1584 mm / 62.3 in	L	171 mm / 6.7 in
С	125 mm / 4.9 in	M	29°
D	375 mm / 14.7 in	M1	21,5°
F	398 mm / 15.6 in		1035 mm / 40.7 in
G	1147 mm / 45.1 in	N	NOTE: This dimension may change depending on the tyres installed.
Н	504 mm / 19.8 in	0	40°
H1	504 mm / 19.8 in	Р	39°
I	2049 mm / 80.6 in	Q	1948 mm / 70.7 in

TAB. 12



### 4.5.2 Load diagram

### **A DANGER**

IT IS FORBIDDEN TO EXCEED THE LOAD CAPACITY OF THE MACHINE (SEE FIG. 8).

The load diagram shown in **FIG. 8** is obtained in accordance with standard ISO 14397-1:2007, and shows the load capacity of the machine in the different position of the lifting arm.

The upper curve (FIG. 8 - Ref. A) is referred to the machine with back-weights of 88 kg.

The lower curve (FIG. 8 - Ref. B) is referred to the machine without back-weights.

The load diagrams are intended with the machine stopped in the position of maximum steering, placed on solid and flat surface, with 75 kg. operator in the driving seat (see par. 4.2) and equipped with tyres Tractor model (see par. 4.5.1).

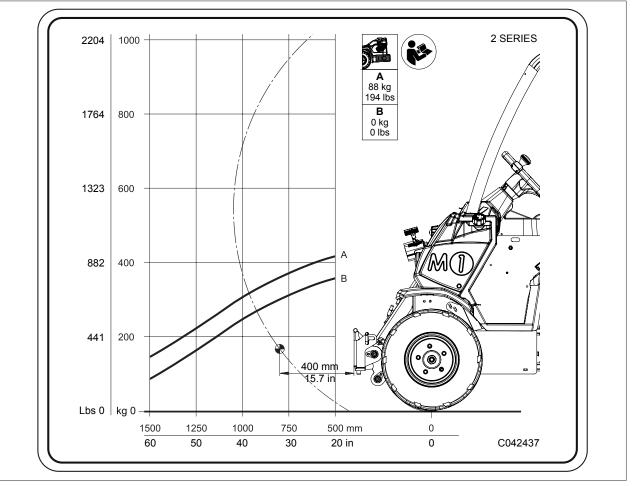
### **ATTENTION**

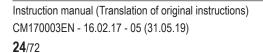
MOVING THE LOAD BARYCENTRE DETERMINES THE CHANGE OF LIFTING CAPACITY OF THE MACHINE.

THE LIFTING INDICATED CAPACITY IS COMPREHENSIVE OF THE WEIGHT OF THE ACCESSORY USED, SO THE NET LIFTING IS THE VALUE SHOWN IN THE GRAPHIC MINUS THE ACCESSORY WEIGHT.

WHEN WORKING ON UNEVEN OR SOFT GROUND WITH OBSTACLES IT IS COMPULSORY TO KEEP THE ATTACHMENT AS NEAR AS POSSIBLE TO THE GROUND AND REDUCE THE LOAD UNDER THE MACHINE'S LIFTING CAPACITY. THIS WILL MAKE THE MACHINE MORE STABLE.

In the diagram the load barycentre is reported at 400 mm from the universal quick attaching plate, in accordance with standard ISO 14397-1:2007. It can be noted that during movement of the arm the barycentre changes compared to the starting position and consequently the load capacity of the machine varies.



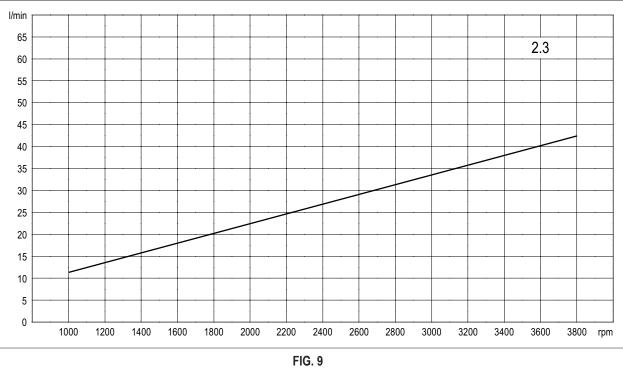






### 4.5.3 Hydraulic flow/engine speed diagram

The diagram in FIG. 9 represents the trend of hydraulic flow according to the engine's rpm.







CHECK THE MANUAL OF ATTACHMENT USED TO REACH THE CORRECT SETTING.



#### 4.6 Reasonable foreseeable misuse

	▲ DANGER	
	IT'S FORBIDDEN TO TAMPER WITH OR MODIFY IN ANY WAY THE MACHINE.	
	IT IS FORBIDDEN THE USE OF THE MACHINE FOR MISUSE, DIFFERENT FROM THOSE EXPECTED (SEE PAR. 4.5).	
	IT IS FORBIDDEN TO ASSEMBLE NON SUITABLE AND/OR NON ORIGINAL ATTACHMENTS TO THE MACHINE (SEE PAR. 6.3).	
	IT IS FORBIDDEN TO USE THE MACHINE TO CARRY AND/OR LIFT PEOPLE OR ANIMALS.	
	IT IS FORBIDDEN TO MOVE THE MACHINE KEEPING THE LIFTING ARM, ATTACHMENT AND POSSIBLE LOAD UP.	
	IT IS FORBIDDEN TO OPERATE THE MACHINE ON SLOPE GREATER THAN 15 DEGREES OR ON OVERLY UNSTABLE LAND.	
$\bigcirc$	IT IS FORBIDDEN TO GET OFF THE MACHINE WITHOUT HAVING PUT THE PARKING BRAKE ON, SWITCHED THE ENGINE OFF, REMOVED THE IGNITION KEY FROM THE CONTROL PANEL.	
	IT IS FORBIDDEN TO USE THE MACHINE WITHOUT FASTENING THE SAFETY BELT.	
	IT IS FORBIDDEN LEANING FROM THE MACHINE IN MOTION.	
	IT IS FORBIDDEN TO OPERATE THE CONTROLS OF THE MACHINE FROM A POSITION OTHER THAN THE DRIVING SEAT.	
	IT IS FORBIDDEN TO USE THE LIFTING ARM TO MOVE ANY OBJECT DIFFERENT FROM THE ATTACHMENT SUPPLIED BY THE MANUFACTURER.	
	IT IS FORBIDDEN TO MOVE THE MACHINE WITH THE DOOR OF THE CABIN (IF AVAILABLE) OPEN	
	IT IS FORBIDDEN TO USE THE MACHINE IN ENVIRONMENTS WITH THE PRESENCE OF HARMFUL SUBSTANCE FOR HEALTH AND FOR THE OPERATOR SAFETY.	
•	A DANGER	
	BEFORE PROCEEDING TO USE THE MACHINE MAKE SURE THAT IN THE RADIUS OF TEN METRES THERE ARE NO THINGS, ANIMALS OR PEOPLE WHOSE SAFETY MAY BE AFFECTED ACCIDENTALLY.	
^	▲ DANGER	
EX	IT IS FORBIDDEN TO USE THE MACHINE IN INTERIORS AND WITHOUT VENTILATION AND/OR IN PRESENCE OF FLAMMABLE OR EXPLOSIVE SUBSTANCES.	
$\frown$	<u>∧ WARNING</u>	
$\bigcirc$	IT IS FORBIDDEN TO TOW THE MACHINE OFF BY ANY MEAN.	
$\bigcirc$	IT IF FORBIDDEN THE USE OF THE MACHINE ON ROAD WITHOUT APPROVAL IN COMPLIANCE WITH THE LAWS IN FORCE IN THE COUNTRY OF USE.	
Q	IT IS FORBIDDEN TO TOW ANY ATTACHMENT AND/OR OTHER MEANS USING THE TOW HOOK, SUPPLIED ON REQUEST BY THE MANUFACTURER, ON PUBLIC ROADS ALSO USING MACHINES APPROVED FOR ROAD CIRCULATION. IT IS FORBIDDEN TO TOW TRAILERS EXCEEDING 750 kg WEIGHT BY THE TOW HOOK.	
•		
	THE MANUFACTURER ACCEPTS NO RESPONSABILITY FOR ANY DAMAGE TO PEOPLE, ANIMALS OR THINGS, BY THE INOBSERVANCE OF THE INSTRUCTIONS DESCRIBED IN THIS MANUAL.	



# 4.7 Safety signs



IT IS COMPULSORY TO KEEP WELL CLEAN SAFETY SIGN TO GUARANTEE A GOOD VISIBILITY.

IT IS COMPULSORY TO REPLACE DAMAGED SAFETY SIGN, REQUIRING IT TO THE MANUFACTURER AND/OR TO THE DEALER (SEE CODE WRITTEN ON THE LABEL AND IN **TAB. 13** AND **TAB. 14**).

**WARNING** 

IT IS ABSOLUTELY FORBIDDEN TO REMOVE AND/OR DAMAGE THE SAFETY SIGNS APPLIED TO THE MACHINE.

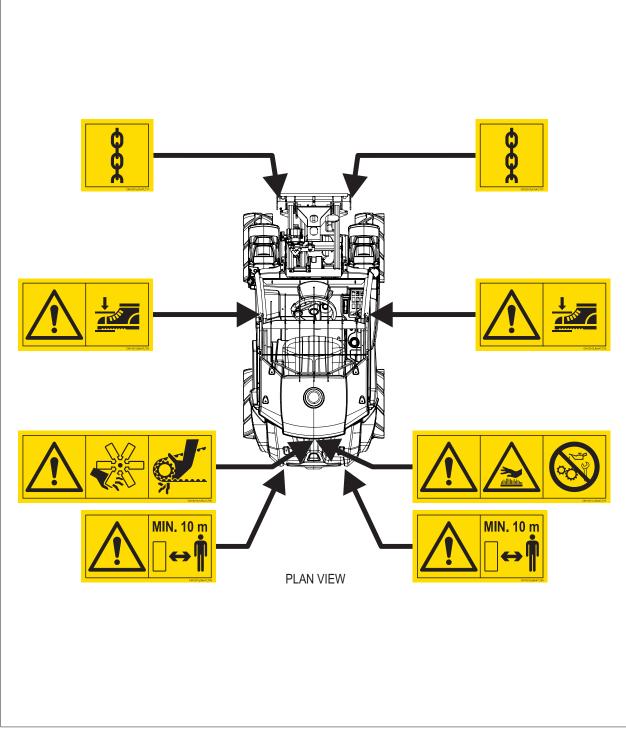
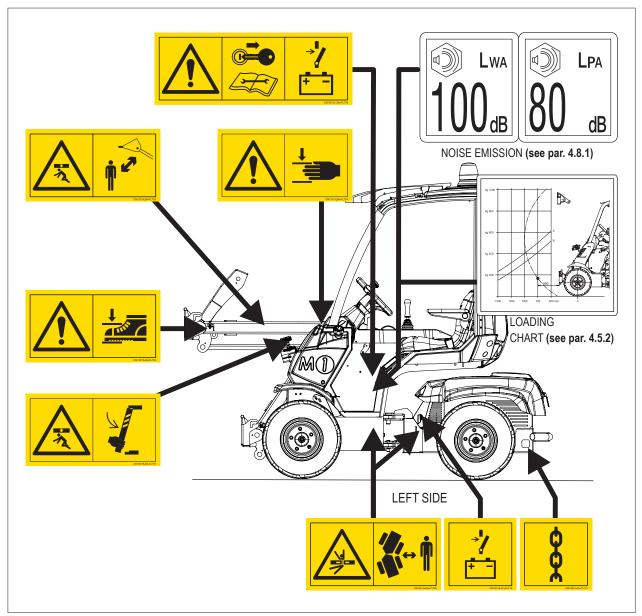


FIG. 10





### FIG. 11

Sign	Meaning
	ATTACHMENT POINTS They indicate the position of the attachment points of the straps for attachment of the machine during transport on a mean of transport. Code: CM12015.47X47.T17
	BATTERY DISCONNECTING KEY It indicates the position on the machine (FIG. 17 - Ref. 11). Code: CM12015.47X47.T18

cont.



Sign	Meaning
	DANGER OF CRUSHING Accidental fall of the lift arm. It is compulsory to insert the retention bracket in the lift arm during the maintenance of the machine (see par. 9.3). Code: CM12015.88X47.T01
	CRUSHING FOOT DANGER Accidental fall of the attachment or accessories. It is compulsory to wear the PPE provided <b>(see par. 4.9)</b> . Code: CM12015.88X47.T02
	CRUSHING DANGER Accidental collision with the machine and/or the attachment. It is compulsory to maintain a safe distance of at least 10 metres. Code: CM12015.88X47.T03
	DANGER OF CRUSHING HANDS Accidental fall of the attachment or of the accessories. It is compulsory to wear the PPE provided <b>(see par. 4.9)</b> . Code: CM12015.88X47.T04
	CRUSHING DANGER Accidental collision. It is compulsory to make sure there are no people, animals and/or things nearby the machine during the steering phase. Code: CM12015.88X47.T05
	DANGER MINIMUM SAFETY DISTANCE Maintain a minimum distance from the machine of 10 metres. Code: CM12015.88X47.T09
	DANGER OF INJURIES TO HANDS Danger of injuries to hands if they come into contact with moving parts in motion. Code: CM12015.129X47.T06
	DANGER OF BURNS AND PROHIBITION OF OPERATIONS WHEN THE ENGINE RUNNING Burn risk to contact hot parts. Code: CM12015.129X47.T07
	MUST READ THE INSTRUCTION MANUAL Remove the key from the control panel and disconnect the battery before any maintenance operation on the machine. Code: CM12015.129X47.T08

TAB. 13



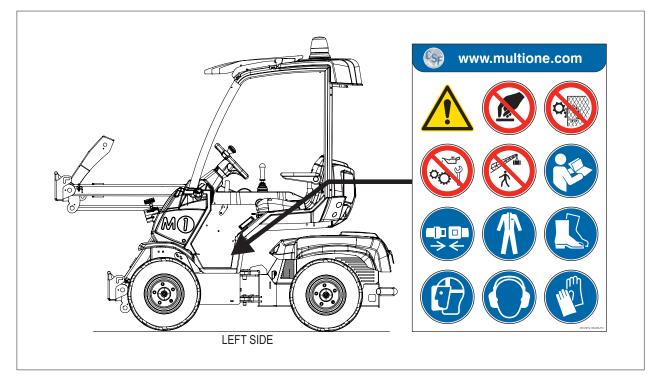


FIG. 12				
	Sign	Meaning	Sign	Meaning
		GENERAL DANGER		YOU MUST FASTEN YOUR SAFETY BELT
		IT IS FORBIDDEN TO TOUCH FOR NON AUTHORISED PEOPLE		YOU MUST PROTECT YOUR BODY
		IT IS FORBIDDEN TO REMOVE THE PROTECTION AND SAFETY DEVICES		YOU MUST PROTECT YOUR FEET
		IT IS FORBIDDEN TO CARRY OUT MAINTENANCE OPERATIONS WHEN THE MACHINE RUNNING		YOU MUST PROTECT YOUR FACE (Only for some attachment if this is specified on the same attachment through a special adhesive and on its instruction manual)
		IT IS FORBIDDEN TO PASS OR STAY IN THE RANGE OF THE MACHINE		YOU MUST PROTECT YOUR HEARING
		YOU MUST READ THE MANUAL		YOU MUST PROTECT YOUR HANDS

TAB. 14

### 4.8 Emissions

### 4.8.1 Sound level

The sound level detected by a running machine, without attachment and the following level were noticed.

Model		2.3
Engine rpm*		3000
Level A - weight emission sound pressure in the operator place (LpA) (without cabin)	db(A)	85
Level A - weight emission sound pressure in the operator place (LpA) (with cabin)	db(A)	85
Guaranteed sound power level (LwA)	db(A)	100
(*) as prescribed by the manufacturer for the static test (adjusted in relation to the translation test)		

TAB. 15



IT IS COMPULSORY TO USE NOISE-CANCELING HEADSETS. THERE IS RESIDUAL RISK N. 5 (SEE PAR. 3.2).

# 4.8.2 Vibrations

The vibration level has been detected with the machine running and the operator sitting in the driving seat.

Model		2.3
Rpm	rpm	3600
Vibrations	m/s²	0,3

TAB. 16

## 4.9 Personal protective equipment

Sign	PPE compulsory for all authorised operators	Sign	PPE compulsory for all authorised operators
	Hand protection (protective gloves from the mechanical risk and the risk of burns).		Face protection (protective mask from mechanical risk). (Only for some attachment if it is indicated on the attachment itself through a special adhesive and on instruction manual.
	Protection of the feet (shoes with reinforced toe and non-slip).		Auditory system protection (anti-noise headsets).
R	Body protection (protective clothing from mechanical risk).		
TAB. 17			
<u>∧</u> WARNING			



PLEASE REFER TO THE ASSEMBLED ATTACHMENT MANUAL TO MAKE SURE FOR POSSIBLE OTHER COMPULSORY PPE.



# 5 TRANSPORT AND HANDLING

### 5.1 Transport

Generally the machine is transported to the customer by the dealer with their own resources or through a "qualified transport company", that by means of own staff and suitable means for the operation, in compliance with the regulations, provides to guarantee the loading, transport and unloading operations with regard to the type of transport (by land, by sea, by air).

### 5.2 Handling

The machine, only when on, can be moved independently by means of the four wheels and their controls, on public roads even if approved in accordance with the legislation of the country of use.



**ATTENTION** 

TO CHECK FOR APPROVAL FOR ROAD USE PLEASE REFER TO THE REGULATIONS IN FORCE IN THE COUNTRY OF USE.

Otherwise to move and/or transfer the machine can be loaded up on a suitable means (eg. lorry, trailer, etc.), suitable for this use and with a sufficient load capacity, using the ramps (optional accessory).

- To load the machine on a mean of transport proceed as follows:
- 1) Place the mean of transport in such a way that the loading platform is level.
- 2) Check that the ramps have an adequate capacity, are surely fastened to the transport vehicle and not exceeding 30 degrees of tilt.
- 3) Turn on the machine (see par. 8.3.2).
- 4) It is recommended to back the machine onto the transport trailer and position it so that the heaviest weight (center of balance) is towards the front (hitch end) of the trailer (see FIG. 14).
- 5) Turn off the machine (see par. 8.3.7) and put it in "safe state" (see par. 9.2).
- 6) Insert the steering retention bracket (see par. 5.2.1).
- 7) Disconnect the batteries (see par. 7.1).
- 8) Ensure the machine to the platform of the transport vehicle with ropes, belts, wheel clamps suitable for use, using the attachment points (FIG. 13 Ref. 1) on the machine.

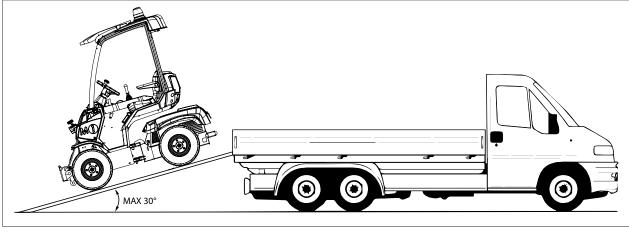
### **A WARNING**

IT IS COMPULSORY THAT, DURING THE OPERATIONS, IN THE RADIUS OF TEN METRES THERE ARE NO THINGS, ANIMALS OR PEOPLE WHOSE SAFETY MAY BE AFFECTED ACCIDENTALLY.



FIG. 13







### 5.2.1 Installation procedure of the steering lock bracket

When you must use the bracket proceed as follows:

- 1) Lower the arm and load the machine on the vehicle.
- 2) Turn off the machine (see par. 8.3.7).
- 3) Take the locking bar from its position under the driver seat.
- 4) Insert the bracket (FIG. 15 Ref. 1) into the two slits placed on the right side of the machine near the joint of the central steering. To let the locking bar placed into the right position, gently move the steering wheel with engine off, starting from straight position.



THERE ARE RESIDUAL RISKS N. 1 N. 2, N. 4 AND N. 5 (SEE PAR. 3.2).

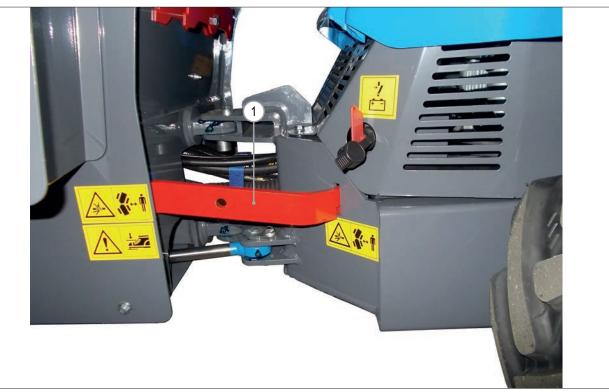


FIG. 15



# 5.3 Machine lifting procedure

### **A DANGER**

IT IS COMPULSORY TO INSTALL THE STEERING LOCK BRACKET (SEE PAR. 5.2.1) BEFORE LIFTING THE MACHINE.

IT IS COMPULSORY TO INSTALL THE TIE-DOWN BRACKETS (AVAILABLE AS OPTION) ON EACH WHEEL HUB OF THE MACHINE **(SEE FIG. 16)**.

IT IS COMPULSORY TO USE STRAPS, CHAINS AND HOOKS IN ACCORDANCE WITH THE USE, OF ADEQUATE CAPACITY AND IN GOOD CONDITION.

IT IS COMPULSORY TO USE CRANES AND LIFTING EQUIPMENT OF ADEQUATE CAPACITY AND OPERATED BY AUTHORIZED OPERATORS.

IT IS COMPULSORY TO LIFT THE MACHINE WITHOUT ANY PERSON ON BOARD AND WITHOUT ANY EQUIPMENT INSTALLED.

IT IS COMPULSORY TO ENSURE THAT IN THE AREA WHERE THE LIFTING OPERATIONS ARE CARRIED OUT THERE ARE NO PERSONS, ANIMALS OR OBJECTS WHOSE SAFETY CAN BE ACCIDENTALLY COMPROMISED.

To lift the machine proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Insert the steering lock bracket (FIG. 16 Rif. 3) (see par. 5.2.1).
- 3) Hook the lifting straps (FIG. 16 Rif. 1) to the tie-down brackets of the front and rear wheel hubs (FIG. 16 Rif. 2). To avoid damage to the machine during lifting, make sure that the lifting straps do not touch the machine at any point.
- 4) Before lifting the machine, check the load balancing.
- 5) Lift the machine slowly, avoiding oscillations or jolts.

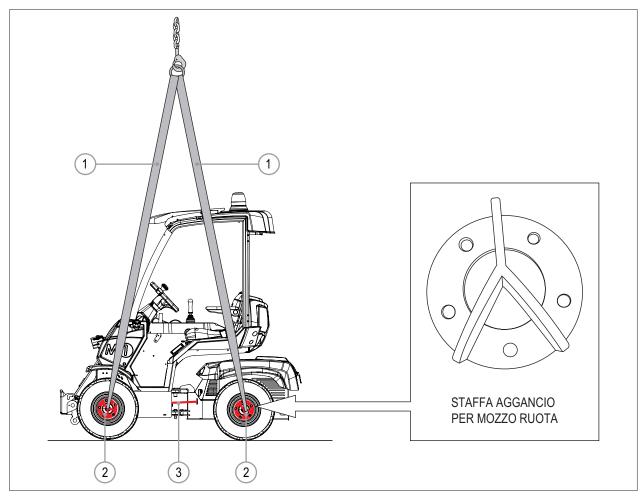


FIG. 16



#### 5.4 Storage

In case the machine must stay unused for long time it is necessary:

- 1) Park it in a secure environment protected from the weather, sunshine and dust and put it in a "safe state" (see par. 9.2).
- 2) Clean the machine.
- 3) Lubricate and grease the joints, levers and grease (see chap. 9).
- 4) Disconnect the electrical supply of the battery (see par. 7.1).

Store the battery according to the instructions given on the same.



#### 

WHEN THE MACHINE IS IN PARK IT IS COMPULSORY TO INSERT THE PARKING BRAKE (SEE PAR. 8.3.8), REMOVE THE IGNITION KEY FROM THE CONTROL PANEL AND STORE IT IN A SAFE PLACE.

# 6 ASSEMBLY AND INSTALLATION

#### 6.1 Assembly

The machine is supplied by the manufacturer ready to use without need of any installation or connection.

#### 6.2 Options

The machine can on request, be equipped with options. On the website www.multione.com it is possible to check the availability of options.

#### 

THE OPTION INSTALLATION, UNLESS OTHERWISE INDICATED, MUST BE CARRIED OUT BY AN AUTHORISED DEALER AND/OR BY A WORKSHOP AUTHORISED BY THE MANUFACTURER.

IT IS FORBIDDEN TO USE THE MACHINE, EVEN IF EQUIPPED WITH CABIN, IN ENVIRONMENTS WITH THE PRESENCE OF HARMFUL TO HEALTH AND SAFETY OF THE OPERATOR.

IT IS COMPULSORY THE USE OF THE CABIN IF THE MACHINE IS USED IN ADVERSE WEATHER CONDITIONS THAT MAY AFFECT THE SAFETY AND HEALTH OF THE AUTHORISED OPERATOR.

LOOK UP THE MANUFACTURER WEBSITE (WWW.MULTIONE.COM) AND HIS OWN DEALER TO CHECK THE COMPATIBILITY OF THE OPTIONS WITH THE MACHINE IN POSSESSION.

#### **▲** ATTENTION

IT IS FORBIDDEN TO TOW ANY ATTACHMENT AND/OR OTHER MEANS USING THE TOW HOOK, SUPPLIED ON REQUEST BY THE MANUFACTURER, ON PUBLIC ROADS EVEN IF WITH MACHINES APPROVED FOR THE ROAD CIRCULATION.

IT IS FORBIDDEN TO EXCEED THE LOAD LIMITS OF THE TOW HOOK.

IT IS FORBIDDEN TO INSTALL NOT ORIGINAL ACCESSORIES ON THE MACHINE.

#### 6.3 Attachments

#### 6.3.1 Available attachments

The machine has been planned to be used with multiple attachments assembled to the quick universal connection plate. You can examine the attachment list accessing the website: www.multione.com and clicking on the icon "attachment". The list is not reported in this document because the attachments are always continuously updated and expanded. Each attachment purchased directly from the manufacturer or from his authorised dealers it is implicitly authorised to be installed on the machine.



▲ DANGER

IT IS FORBIDDEN TO ASSEMBLE NOT SUITABLE AND NOT ORIGINAL ATTACHMENTS TO THE MACHINE.





## 

IT IS COMPULSORY TO ADDRESS THE TRUST DEALER TO MAKE SURE OF THE COMPATIBILITY BETWEEN THE ATTACHMENT AND THE MACHINE.

#### **ATTENTION**

THE MANUFACTURER ACCEPTS NO RESPONSABILITY FOR ANY DAMAGE TO PEOPLE, ANIMALS OR THINGS, BY THE INOBSERVANCE OF THE INSTRUCTIONS DESCRIBED IN THIS MANUAL.

#### 6.3.2 Assembly of the attachments

Procedures of assembly and disassembly are described in chap. 8.

#### 6.4 Back-weights

Procedures of assembly and disassembly are described in par. 11.4.



# 7 PRE-START INSPECTION



IT IS COMPULSORY, BEFORE THE FIRST STARTING OF THE MACHINE, TO EXECUTE THE FOLLOWING OPERATIONS.

Ref.	Operations		
1	Make sure the machine is undamaged in all its parts (see par. 9.7.3).		
2	Check the integrity of safety system (belt, ROPS, etc.) (see par. 9.7.3).		
3	Check the engine oil level (see chap. 9.8.1).		
4	Check the oil level of the hydraulic circuit (see par. 9.7.5).		
5	Restore the power supply circuit of the battery by acting on the battery disconnecting key (see par. 7.1).		
6	Check the nipples and if necessary provide with greasing (see par. 9.7.10).		
7	Get used to the controls and their functions (see par. 4.3).		

TAB. 18

#### 7.1 Connecting / disconnecting battery

To restore the electrical connection of the battery proceed as follows:

1) Remove the cap from the hole in the battery switch.

2) Insert the special key (FIG. 17 - Ref. 1) into the battery switch and turn it clockwise.

Disconnect the battery, proceed as follows:

1) Turn the special disconnecting battery key (FIG. 17 - Ref. 1), counter-clockwise and store it in a safe place.

2) Close the hole of the battery disconnecting key using the special cap.



FIG. 17



# 8 OPERATION

# 8.1 Adjustments

#### 8.1.1 Adjustment of the driving seat

The machine is equipped with a driving seat adjustable longitudinally.

- To adjust the position of the driving seat proceed as follows:
- 1) Sit on the seat.
- 2) Pull and hold the lever pulled (FIG. 18 Ref. 1) placed under the seat on the right side.
- 3) Slide the seat backward or forward until you find a position suitable to your height.
- 4) Release the lever and move slightly the seat until you hear a sound that indicates the block in place of the seat.

# **ATTENTION**

MODELS OF THE SEAT MAY VARY FROM COUNTRY TO COUNTRY AND IN ACCORDANCE WITH ANY SPECIFICATIONS AND OPTIONS.



FIG. 18





BEFORE USING THE MACHINE IT IS COMPULSORY THAT AUTHORISED OPERATORS READ AND UNDERSTAND ALL PARTS OF THIS MANUAL.

▲ DANGER

BEFORE TURNING ON THE MACHINE THE OPERATOR MUST ALWAYS CHECK THE HYDRAULIC OIL LEVEL (SEE PAR. 8.4.3).

#### 

IT IS COMPULSORY, BEFORE STARTING THE MACHINE, TO EXECUTE THE FOLLOWING CONTROLS.

Ref.	Operations			
1	Make sure the machine is undamaged in all its parts.			
2	Make sure the safety systems are intact (belt, ROPS, etc.).			
3	Check the fuel level on the gauge panel (see par. 4.3.1).			
4	Check the oil engine level (see chap. 9).			
5	Check the oil level of the hydraulic circuit (see chap. 9).			
6	Make sure all controls are in neutral position.			
7	Make sure the accelerator is POS. "Turtle" (see par. 4.3.1).			
8	Make sure the parking brake is on (see par. 8.3.8).			
9	Make sure it was carried out routine maintenance (see par. 9.5).			

TAB. 19

# 8.3 Normal operations

#### 8.3.1 Procedure to get on to the operating position of the machine



#### 

YOU MUST KEEP THE FOOTBOARDS CLEAN FROM DEBRIS AND MUD.

To get on the machine proceed as follows:

- 1) Hold with the left hand to the front upright of the roof.
- 2) Place your right foot on the left footboard where there is the non-slip strip.
- 3) Rise and sit on the seat.
- 4) Place your feet on the respective footboards at non-slip strips.
- 5) Fasten your safety belt.

#### 8.3.1.1 Correct posture of use

The optimum posture that the operator in charge must assume for a correct use of all the commands is as follows:

- Sitting on the seat with his back against the backrest and the seat belt fastened.
- · Facing towards the direction of travel.
- · Left hand on the steering wheel.
- Right hand free to operate all other commands.
- Left foot resting on the footboard in correspondence with the non-slip strip and ready to operate the hydraulic flow pedal of quick connections.
- Right foot resting on the footboard in correspondence with the non-slip strip ready to operate the proportional forward and reverse pedal.



#### 8.3.2 Starting up



#### BEFORE PROCEEDING TO STARTING OF THE MACHINE MAKE SURE THAT, IN THE RADIUS OF TEN METRES THERE ARE NO THINGS, ANIMALS OR PEOPLE WHOSE SAFETY MAY BE AFFECTED ACCIDENTALLY.

**A DANGER** 

#### **WARNING**

BEFORE STARTING THE MACHINE IT IS COMPULSORY TO HAVE CARRIED OUT ALL THE CONTROLS (SEE PAR. 8.2).

BEFORE STARTING THE MACHINE IT IS COMPULSORY TO CHECK ALL THE COMMANDS ARE IN NEUTRAL POSITION AND THAT THE PARKING BRAKE WAS INSERTED, PARTICULARLY CHECK THAT THE HYDRAULIC FLOW CONTROL PEDAL OF QUICK. CONNECTIONS (FIG. 19 - REF. 1) IS IN "CENTRAL" POSITION (ATTACHMENT OFF).

BEFORE STARTING THE MACHINE MAKE SURE THE PLANNED MAINTENANCE WAS CARRIED OUT, PARTICULARLY CLEANING OF THE MACHINE. MAKE SURE THERE ARE NO OBJECTS OR MATERIAL THAT PREVENT THE PROPER DRIVE CONTROL.

To start a cold engine proceed as follows:

1) Place the accelerator full forward (choke on) (FIG. 20 - Ref. 1).

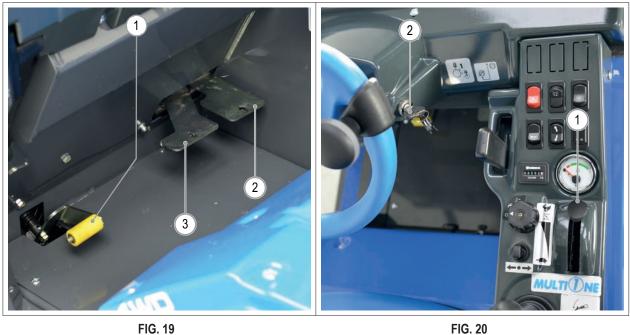
2) Turn the key (FIG. 20 - Ref. 2) in Pos. "2" for two seconds, if the engine does not start, release the key and start from step 1). 3) When the engine is started, lower gradually the starter control until the engine runs smoothly.

To start a hot engine proceed af follows:

- 1) Place the accelerator in the middle position.
- 2) Turn the key (FIG. 20 Ref. 2) in Pos. "2" for two seconds, if the engine does not start, release the key and start from step 1).

#### **ATTENTION**

BEFORE USING THE MACHINE, WE ADVISE TO EFFECTUATE SOME "USING TESTS" TO ACQUIRE A GRADUAL MASTERY OF THE FEATURES OF THE MACHINE.







To move the machine proceed as follows:

- 1) Turn on the machine (see par. 8.3.2).
- 2) Release the parking brake lever (see par. 8.3.8).
- 3) Increase engine rpm by actuating the accelerator control lever.
- 4) Press the proportional pedal relative to the direction of "Forward" (FIG. 19 Ref. 2) o "Reverse" (FIG. 19 Ref. 3).
- 5) Using the steering wheel set the direction of travel.



#### **A DANGER**

IT IS COMPULSORY TO MOVE THE MACHINE WITH THE CABIN DOOR CLOSED (IF AVAILABLE). OTHERWISE THE DOOR COULD BE IRREPARABLY DAMAGED BY THE MOVEMENT OF HALF-FRAMES DURING STEERING.

IT IS COMPULSORY TO REDUCE TRAVEL SPEED WHEN MAKING STEERING.

IT IS COMPULSORY TO ADJUST THE SPEED IN RELATION WITH THE GROUND ON WHICH THE MACHINE IS OPERATING. WHEN WORKING ON UNEVEN OR SOFT GROUNDS REDUCE THE SPEED AT HIS MINIMUM (MAX 3 KM/H) AND KEEP THE ATTACHMENT AND THE LOAD AS NEAR AS POSSIBLE TO THE GROUND.

#### **A DANGER**

IT IS FORBIDDEN TO MOVE THE MACHINE KEEPING LEFT THE LIFTING ARM, ATTACHMENT AND ANY LOAD.

IT IS FORBIDDEN LEANING FROM THE DRIVING SEAT WHEN THE MACHINE IS MOVING.

#### **A DANGER**

REMEMBER THAT, WHEN TURNING, THE DRIVER'S SEAT EXTENDS BEYOND THE TURNING RADIUS OF THE WHEELS. PAY ATTENTION TO THE PRESENCE OF OBSTACLES.

#### 8.3.3.1 Travel on slope

#### ▲ DANGER

BEFORE TRAVELLING ON SLOPE SEE THE "SLOPE GUIDE" AT PAR. 11.7.

DO NOT TRAVEL UP OR ACROSS A SLOPE STEEPER THAN 15° (SEE FIG. 21).

KEEP THE HEAVY END OF THE MACHINE TOWARDS THE UPHILL DIRECTION WHEN TRAVELLING UP OR DOWN A SLOPE.

TRAVEL ACROSS SLOPES WITH GREAT CAUTION.

EXERCISE EXTREME CAUTION WHEN CHANGING DIRECTION ON SLOPES.

CONTROL OF THE MACHINE MAY BE AFFECTED BY INSTALLED ATTACHMENTS.

REDUCE TRAVEL SPEED ON SLOPES.

WHEN DRIVING ON SLOPES, KEEP THE BOOM AND LOAD NEAR TO THE GROUND AS MUCH AS POSSIBLE. RISING THEN BOOM AND/OR THE LOAD WILL DECREASE THE MACHINE STABILITY CONSISTENTLY. USE GREAT CAUTION.

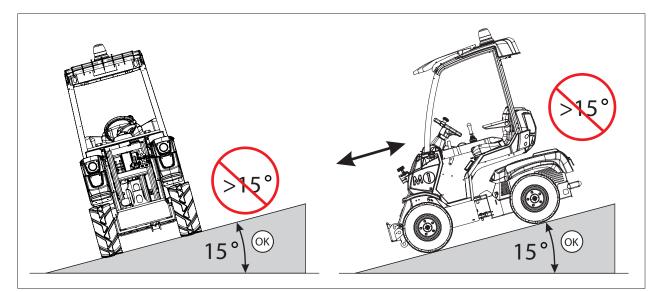


FIG. 21



#### 8.3.3.2 Moving on public roads

Check the machine is approved for use on public roads.

### **▲** ATTENZIONE



IT IF FORBIDDEN THE USE OF THE MACHINE ON ROAD WITHOUT APPROVAL IN COMPLIANCE WITH THE LAWS IN FORCE IN THE COUNTRY OF USE.

IT IS FORBIDDEN TO TOW ANY ATTACHMENT AND/OR OTHER MEANS USING THE TOW HOOK, SUPPLIED ON REQUEST BY THE MANUFACTURER, ON PUBLIC ROADS ALSO USING MACHINES APPROVED FOR ROAD CIRCULATION. IT IS FORBIDDEN TO TOW ANYTHING ON PUBLIC ROADS.

When handling the machine on public roads is required to lock the lift arm. The machine is equipped with two valves to interrupt the flow of hydraulic oil to the cylinder of the lifting arm.

- 1) Retract the arm.
- 2) Move the attachment, if mounted on the universal attachment plate at a height of 20 cm from the ground.
- 3) Turn off the machine (see par. 8.3.7).
- 4) Close the two valves to block the lifting arm, placed in the vicinity of the lifting cylinder of the arm. The valves are closed when the respective levers are perpendicular to the tube hydraulic oil.
- 5) Proceed to move on public roads.
- To unlock the boom proceed as follows:
- 1) Turn off the machine (see par. 8.3.7).
- 2) Open the two valves to unlock the lift arm. The valves are open when the levers are parallel to the respective tube hydraulic oil.

#### 8.3.4 Assembly of the attachment

#### ▲ DANGER

IT IS FORBIDDEN TO ASSEMBLY NON SUITABLE OR NON ORIGINAL ATTACHMENTS TO THE MACHINE.



IT IS COMPULSORY TO READ THE MANUAL OF ATTACHMENT INSTRUCTIONS BEFORE PROCEEDING THE ASSEMBLY, DISASSEMBLY AND USE OF THE ATTACHMENT.

#### **WARNING**



THERE ARE RESIDUAL RISKS N. 1 AND N. 3 (SEE PAR. 3.2).



#### 8.3.4.1 Mechanical attachment connection

To carry out the assembly of the attachment proceed as follows:

- 1) Make sure the attachment is positioned on firm and level ground.
- 2) Turn on the machine (see par. 8.3.2).
- 3) Push the multifunction joystick to the right in order to tilt forward the quick coupler.
- 4) Turn off the machine (see par. 8.3.7).
- 5) Get down from the machine and get the workplace D and E (see par. 4.2).
- 6) Lift and push back the two levers (FIG. 22 Ref. 3) placed on the quick coupler, in order to raise the hook plugs.
- 7) Get on the machine again and turn it on (see par. 8.3.2).
- 8) Operating carefully draw up the quick coupler to one of the attachment so as to go up the upper round profile (FIG. 22 Ref. 2) in their curved seats of the attachment (FIG. 22 Ref. 1).
- 9) Move slowly the multifunction joystick to the left, in this way the quick coupler leans backward, continue after lifting of a few centimetres the quick coupler and automatically the coupling system closes allowing the two plugs to fit in the seats of the attachment (FIG. 22 Ref. 4).
- 10) Check visually the two levers (FIG. 22 Ref. 5) are in low position. If not, it means the coupling was not successful.
- 11) Lift the attachment and lean forward moving the multifunction joystick to the **right** to check visually the two plugs of coupling are correctly inserted in the fitted seats of the attachment. If not, relocate the attachment on the ground and repeat the procedure from step 3).

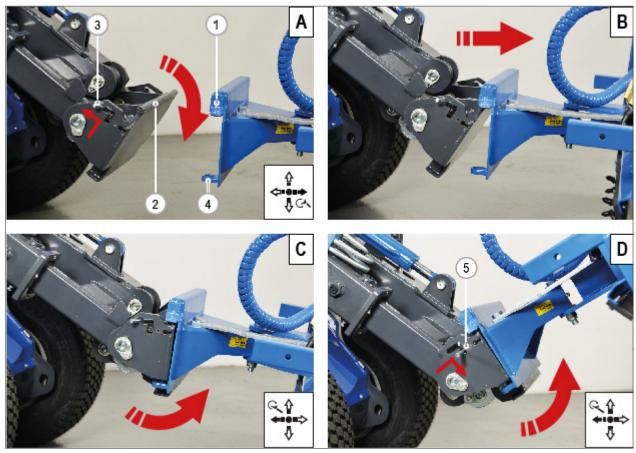


FIG. 22



#### 8.3.4.2 Hydraulic connection of the attachment (if necessary)



IT IS FORBIDDEN TO CARRY OUT THE CONNECTION OF THE HYDRAULIC PIPES WHEN THE ENGINE OF THE MACHINE IS WORKING UNTIL YOU HAVE DRIVEN THE EXHAUST DISPLAY DEVICE OF THE OIL PRESSURE OF THE HYDRAULIC SYSTEM AND HAVE COMPLETED THE PROCEDURE FOR ASSEMBLY.

**A DANGER** 

#### **WARNING**

BEFORE MAKING CONNECTIONS READ THE ATTACHMENT INSTRUCTION MANUAL.

#### 

THERE IS RESIDUAL RISK N. 1 (SEE PAR. 3.2).

Before making hydraulic connections between the machine and the attachment, if expected, you need to download the residual pressure in the hydraulic circuit of the machine. To make this proceed as follows:

1) Turn off the machine (see par. 8.3.7).

2) Operate the control pedal of the flow of the quick couplings (FIG. 23 - Ref. 1) both pressing and lifting it upward.

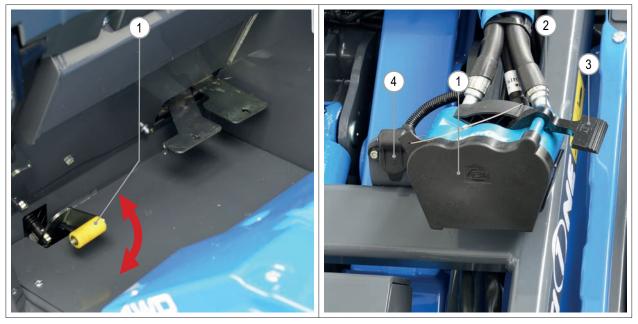




FIG. 24

#### **A WARNING**

CONNECTIONS MUST BE CARRIED OUT AFTER MECHANICALLY ATTACHED ATTACHMENT.

After releasing the residual pressure connect the hydraulic hoses of attachments as follows:

1) Remove the protective cover (FIG. 24 - Ref. 1) from the multi-connector.

- 2) Press the lock button (FIG. 24 Ref. 2) on the lock handle and raise the lock handle (FIG. 24 Ref. 3) to the unlocked position (FIG. 25 Ref. A).
- 3) Slide the adapter plate connected to the attachment hydraulic lines onto the multi-connector.
- 4) Pull the lock hand (FIG. 25 Ref. B) downwards, drawing the adapter plate into the connector (FIG. 25 Ref. C).

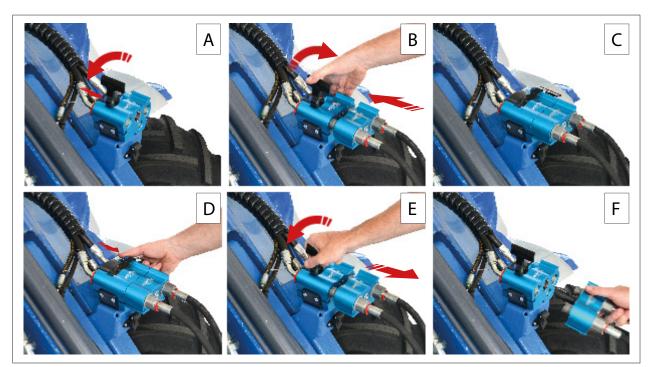
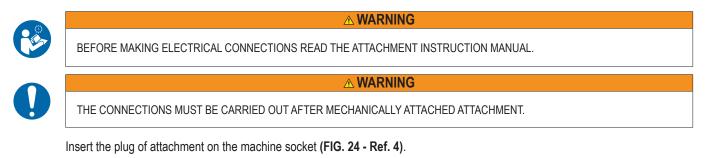


FIG. 25

#### 8.3.4.3 Electrical connection of the attachment (if necessary)



#### 8.3.5 Disassembly of the attachment



THERE ARE RESIDUAL RISKS N. 1, N.2 AND N.3 (SEE PAR. 3.2).

To disassembly the attachment proceed as follows:

1) Place the attachment on firm ground.

2) Turn off the machine (see par. 8.3.7).

3) Operate the control pedal of the flow of the quick couplings both pressing and lifting it upward.



#### 8.3.5.1 Electrical and hydraulic disconnection



CHECK THE ATTACHMENT INSTRUCTION MANUAL WITH REGARDS TO HYDRAULIC AND ELECTRICAL CONNECTIONS.

THE HYDRAULIC PIPES AND ELECTRICAL CABLE MUST BE DISCONNECTED BEFORE DISASSEMBLING MECHANICALLY THE ATTACHMENT.

**WARNING** 

- 1) Press the lock button (FIG. 24 Ref. 2) on the lock handle and raise the lock handle to the unlocked position (FIG. 25 - Ref.D and E).
- 2) Disconnect the attachment's hydraulic lines from the machine (FIG. 25 Ref. F).
- 3) Cover the multi-connector with the rubber cover (FIG. 24 Ref. 1).
- 4) Disconnect the electrical plug (if any).
- 8.3.5.2 Mechanical disconnection of the attachment with manual release system



THERE ARE RESIDUAL RISKS N. 1, N.2 AND N.3 (SEE PAR. 3.2).

To disconnect the attachment with manual release system proceeds as follows:

- 1) Lift and push back the two release levers (FIG. 22 Ref. 3) from the quick coupler in order to disengage the two plugs.
- 2) Turn on the machine (see par. 8.3.2).
- 3) Move to the right the multifunction joystick in order to rotate forward the guick coupler of the machine. If necessary translate backward a few cm.
- 4) Move "Forward" the multifunction joystick in order to lower the lifting arm and disassembly the attachment.

#### 8.3.6 Use of the attachment



TO USE THE ATTACHMENT PLEASE REFER TO THE INSTRUCTION ATTACHMENT MANUAL.

YOU MUST KEEP THE ATTACHMENT ASSEMBLED TO THE MACHINE MORE CLOSED AS POSSIBLE TO THE GROUND WHEN MOVING.

**WARNING** 

#### 8.3.7 Turning off the machine

- To turn off the machine proceed as follows:
- 1) Stop the machine without a steering.
- 2) Lower the lifting arm and/or put the possible assembled attachment on the ground.
- 3) Set to the MIN. the accelerator lever, Pos. "Turtle".
- 4) Insert the parking brake (see par. 8.3.8).
- 5) Release the pressure of the hydraulic system as described at par. 8.3.4.2.
- 6) Put in Pos. "Centre" the hydraulic flow control pedal (FIG. 23 Ref. 1).
- 7) Put the key in Pos. "0".
- 8) Remove the key from the control panel and store it in a safe place.



#### 8.3.8 Parking brake

To insert the parking brake proceed as follows:

- 1) Pull the parking brake lever (FIG. 26 Ref. 1) backward and lock it by pushing it to the Left.
- 2) Inserting the brake it is necessary to hear the click insertion.
- 3) Move slightly the machine back and forth to cause the blocking of the wheels.

To disengage the parking brake proceed as follows:

- 1) Unlock the the parking brake lever (FIG. 26 Ref. 2) by moving it to the right and forward.
- 2) Move slightly the machine back and forth to cause the unlocking of the wheels.



FIG. 26

#### 8.3.9 Refuelling

When the fuel level warning light comes (see par. 4.3.1) on it is necessary to supply proceeding as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Go onto place C (see FIG. 2).
- 3) Unscrew the tank cap counterclockwise (FIG. 27 Ref. 1).
- 4) Refuelling, if necessary use a funnel to avoid spilling fuel.
- 5) Completed filling screw the fuel cap clockwise.

#### **A DANGER**

IT IS FORBIDDEN TO MAKE REFUELLING OPERATIONS WHILE SMOKING AND/OR NEARBY IN PROXIMITY OF FLAMES.THERE IS FIRE AND/OR EXPLOSION DANGER.





FIG. 27



#### 8.4 Functions / exceptional situations

#### 8.4.1 Instability of the machine

It may happen that by performing a curve at high speed or by lifting a heavy load the machine is to be in a state of instability. To avoid this situation proceed as follows:

1) Steer the machine only at low speed and with the load as close as possible to the ground.

2) Do not lift heavy loads by buckets or other attachment for lifting (see par. 4.5.2).

#### 8.4.2 Overpressure in the hydraulic circuit

The machine is equipped with a system of hydraulic valves that limit the oil pressure within the circuit to avoid any damage. In particular difficulty running it may happen to hear a hissing sound. This indicates that the valves were brought into service. If the condition of effort should go on and this may result in damage so you will need to decrease the stress for the machine by reducing the speed of work and/or the number of the engine rpm.

#### 8.4.3 Loss of control

In case the amount of oil inside the hydraulic circuit decreases considerably due to a fault with relative loss it may happen that the machine enters into neutral and loses the effect of engine brake given by the hydraulic circuit. In this condition the control of the machine can be compromised. To avoid this situation proceed as follows:

1) Before any starting check the presence of possible loss.

2) Check the hydraulic oil level and if necessary top up (see chap. 9).

**A DANGER** 



IN CASE OF EMERGENCY SITUATION OPERATE THE PARKING BRAKE TO STOP THE MACHINE.

HYDRAULIC OIL UNDER PRESSURE CAN PENETRATE BODY TISSUE CAUSING SERIOUS INJURY AND POSSIBLE DEATH. WHEN TROUBLESHOOTING A HYDRAULIC SYSTEM FOR LEAKS, ALWAYS USE CARDBOARD OR WOOD AS A DETECTOR. DO NOT USE YOUR BARE HANDS.



#### 8.4.4 Emergency exit of the cabin

In case of need to open the emergency door on the machines supplied with cabin proceed as follows:

1) Pull the red ring on the handle to open of the Right window of the machine and identified by a special adhesive (FIG. 28 - Ref. 1).

2) Push out the Right window to open fully.

#### 8.4.5 Block machine with the lift arm raised



ATTENTION: THIS IS AN EMERGENCY PROCEDURE AND THEREFORE THE AREA MUST BE CONTROLLED AND FORBIDDEN.

In case of malfunction of the machine with lifting arm raised, it is not safe lower it because there would be a considerable imbalance of the machine. As it is a multifunction machine, the risk of tipping the machine would be relevant and unmanageable. To return the attachment and the eventual load on the ground proceed as follows:

**A DANGER** 

- 1) Insert the parking brake.
- 2) Remove the key from the control panel.
- 3) Secure the area around the machine.
- 4) Using a special machine (eg. forklift) download the suspended load.
- 5) Lower the lifting arm.

#### 8.4.6 Towing the machine on



**▲ WARNING** 

IT IS FORBIDDEN TO TOW THE MACHINE OFF BY ANY MEALS OF TRANSPORT.

If the machine remains locked, it is possible to tow it for a short trip (MAX. 20 mt), only if on, by a suitable towing vehicle. To make this proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Connect to the attachment points of the machine (FIG. 29 Ref. 1) the ropes and/or chains of towing.
- 3) Turn on the machine (see par. 8.3.2) and, as far as possible, facilitate towing operations.



FIG. 29



#### 8.4.7 Jump start

If the machine battery (FIG. 30 - Rif. 1) is disabled it is possible to start the engine using an booster battery and the booster cables (FIG. 30 - Rif. 2) or a booster.



#### 

IT IS COMPULSORY TO WEAR GLASSES AND PROTECTIVE GLOVES.

IT IS COMPULSORY TO CHECK IF THE BATTERY AND THE CABLES ARE DAMAGED.

IT IS COMPULSORY THAT THE BOOSTER BATTERY HAS THE SAME VOLTAGE AND AMPERAGE OF THE MACHINE BATTERY.

#### **A DANGER**

IT IS FORBIDDEN TO MAKE A JUMP START WHILE SMOKING AND/OR IN PROXIMITY OF FLAMES. DANGER OF FIRE AND/OR EXPLOSION.

Proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Open the engine cover (see par. 9.4).
- 3) Connect positive (+) booster cable to disabled machine battery positive(+) post (FIG. 30 Rif. 3).
- 4) Connect other end of positive(+) booster cable to booster battery positive(+) post (FIG. 30 Rif. 4).
- 5) Connect negative (-) booster cable to booster battery negative (-) post (FIG. 30 Rif. 5).
- 6) Connect other end of negative (-) booster cable to a metal part of machine frame or engine, away from battery (FIG. 30 Rif. 6).
- 7) Make sure the cables do not interfere with mobile parts of the engine.
- 8) Switch on the engine and run machine for several minutes (see par. 8.3.2).
- 9) Once the engine is running disconnect the cables in the reverse order, negative cable first.
- 10) Close the engine cover.

#### 

WHEN YOU PROCEED TO DISCONNECT THE BOOSTER CABLES PAY ATTENTION TO THE MOVING PARTS OF THE ENGINE (FAN, BELTS, ETC ...).

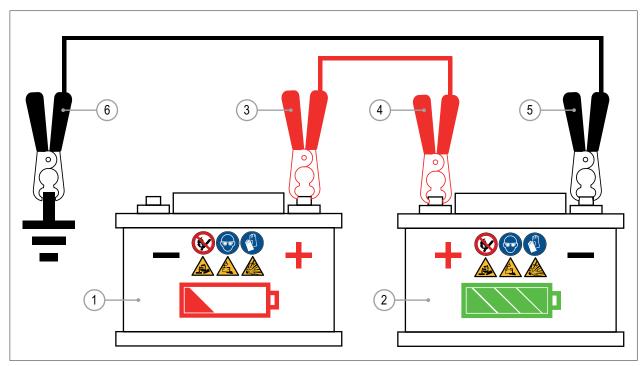


FIG. 30



# 9 MAINTENANCE

#### 9.1 General warnings

See par. 3.4.

#### 9.2 Safety status of the machine

The machine in safety state when:

- 1) The machine is stopped not steered on firm and level ground.
- 2) The lifting arm is lowered and the eventual attachment on the ground.
- 3) The engine is off (see par. 8.3.7).
- 4) The controls are in the neutral position.
- 5) The parking brake is inserted (see par. 8.3.8).
- 6) Remove the key from the control panel and store it in a safe place.

#### 9.3 Installation safety block on the lifting arm

When performing maintenance on the machine and you need to raise the lifting arm it is necessary to insert the retention bracket. Proceed as follows:

- 1) Start on the machine (see par. 8.3.2).
- 2) Raise completely the lifting arm.
- 3) Turn off the machine (see par. 8.3.7) keeping the arm raised.
- 4) Remove the safety stop placed under driver seat (FIG. 31 Ref. 1).
- 5) Insert the bracket to block the lifting arm (FIG. 31 Ref. 2).
- 6) Fix the bracket with the appropriate knob (FIG. 31 Ref. 3).

7) Lower slowly the lifting arm to bring the elements of the cylinder in support on the bracket.



FIG. 31



#### 9.4 Opening engine cover

- To open the cover proceed as follows:
- 1) Remove the key from the battery disconnection switch (see par. 7.1).
- 2) Unscrew the four knob holding the engine hood (FIG. 32 Ref. 1).
- 3) Raise the engine cover and place it on a stable level surface.

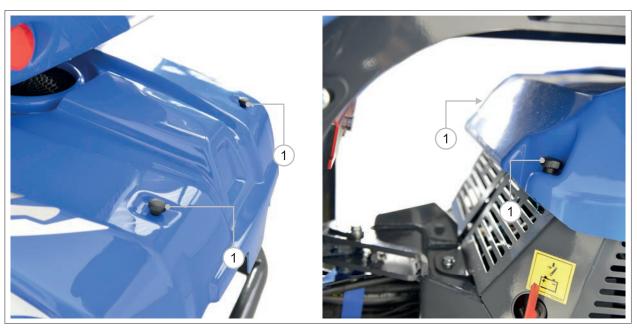


FIG. 32

Frequency Operating point		Type of intervention	
	Machine	Cleaning (see par. 9.7.1)	
	Joints, levers and lubricators	Greasing (see par. 9.7.10)	
Every day	-	Oil level check (see par. 9.8.1)	
	Engine	Air filter cleaning (see par. 9.8.3)	
	Shelters and protective devices	Integrity check (see par. 9.7.3)	
	Tyres	Check the pressure (see par. 9.7.2)	
Fuerrunek	Hydraulic circuit	Oil level check (see par. 9.7.5)	
Every week	Joints, levers and lubricators	Greasing (see par. 9.7.10)	
	Engine	Air filter cleaning (see par. 9.8.3)	
When needed Electrical circuit		Fuse replacement (see par. 9.7.9)	

# 9.5 Ordinary maintenance table

TAB. 20



# 9.6 Extraordinary maintenance



PLEASE CONTACT YOUR LOCAL DEALER AND/OR AN AUTHORISED WORKSHOP FOR EXTRAORDINARY MAINTENANCE.

Frequency Operating point		Type of intervention	
		Change the oil filter	
	Hydraulic circuit	Check pressure	
After the first 50 hours		Adjust pressure	
After the first 50 hours	Engine	Exhaust system cleaning	
	Bolts, nuts, screws etc.	Check the tightness	
	Battery	Charge control	
Even: 100 hours	Fazine	Change the oil	
Every 100 hours	Engine	Change the oil filter	
		Change the oil	
Fuerra 200 hauna	Hydraulic circuit	Change the oil filter	
Every 200 hours		Adjust pressure	
	Engine	Change air filter	
Fuerra 400 hauna	Engine - pumps belt	Replace belt	
Every 400 hours	Hydraulic circuit	Change the suction oil filter	
	Hydraulic circuit	Check pressure	
		Adjust pressure	
		Replace oil filter	
		Change the oil	
		Change oil	
Every year		Change oil engine filter	
		Change fuel filter	
	Engine	Change air filter and pre-filter	
		Change engine spark plugs	
		Check intake and exhaust valves	
		Cooling system cleaning	
Every 5 years	Safety belt	Change	

TAB. 21



### 9.7 Machine maintenance

#### 9.7.1 Cleaning of the machine

The cleaning of the machine is essential to ensure reliability and efficiency. The accumulation of dust and dirt can cause malfunctions and damages.

At the end of the workday, especially if the machine is being used in dusty conditions, proceed to clean:

- The cooling radiator of the hydraulic system should be cleaned using a jet of compressed air at low pressure and a soft brush to remove dirt.
- The outer surfaces of the machine can be washed with a pressure washer and a clean cloth.
- · Clean the inside of the cabin with appropriate mild detergent and a clean cloth.

#### 



IT IS FORBIDDEN TO USE HIGH PRESSURE WATER JETS.

#### 9.7.2 Check tyres pressure

Inflate the tyres to the correct pressure ensures reliability and more safety when using the machine. Before inflating check the integrity of the tyre and wheel, if they are damaged, replace them. The inflation pressure is indicated in **par. 11.5**.



**A DANGER** 

NEVER EXCEED THE VALUE OF INFLATION PRESSURE RECOMMENDED ACCORDING TO THE TYRE MODEL.

#### 9.7.3 Check structural integrity and tightening bolts

- ROPS and FOPS: verify that the structure is not deformed, that it doesn't have any cracks, rust or parts without paint. Verify that the attachment points and related bolts are intact.
- · Safety belts: check the attachment points and relative bolts are intact and the coupling system is not damaged.
- · Bolts wheels: check that the bolts are tightened.

#### 9.7.4 Battery check



THE BATTERY ACID IS HIGHLY POISONOUS AND CAN CAUSE BURNS AND IRRITATION. ALWAYS WEAR PERSONAL PROTECTIVE ATTACHMENT (GLOVES, GOGGLES, PROTECTIVE SUIT).

**WARNING** 

The battery is located inside the engine compartment on the right side (FIG. 33 - Ref. 1).

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Open the engine cover (see par. 9.4).
- 3) Remove the key of the battery switches.
- 4) Checks:
- The battery is intact and not leaking.
- Check power cable connections for signs of leaking, corrosion, or damage.
- Check to make sure the battery is securely attached to the machine frame.



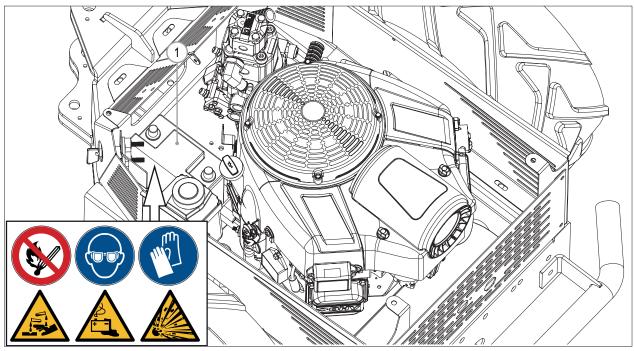


FIG. 33

#### 9.7.5 Hydraulic oil level

To check the hydraulic oil level proceed as follows:

- Put the machine in "safety state" (see par. 9.2).
   Unscrew the screw (FIG. 34 Ref. 2) to open the cover (FIG. 34 Ref. 1) located in the footrest.
- 3) Remove the cap of the hydraulic oil tank (FIG. 34 Ref. 3).
- 4) Using the dip stick, check the hydraulic fluid level in the tank. The level should be in the normal operating range between the two notches on the dip stick.
- 5) If needed, add the appropriate type of hydraulic fluid: 0280 PAKELO HYDRAULIC EP AL ISO 46.

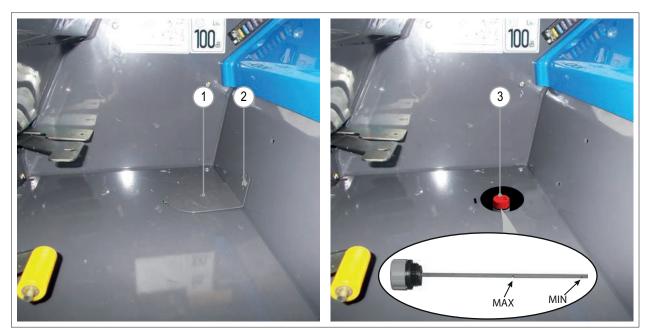


FIG. 34



#### 9.7.6 Hydraulic oil filter change

- To change the hydraulic oil filter proceed as follows:
- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Remove the cover of oil tank cap (see par. 9.7.5).
- 3) Remove the footrest (FIG. 35 Ref. 1) by loosening the screws that secure it to the frame (see FIG. 35).
- 4) Remove the oil filter cover (FIG. 35 Ref. 2) by loosening the screws that secure it.
- 5) Remove the spring (FIG. 35 Ref. 5), and the filter element (FIG. 35 Ref. 6) from the plastic sleeve (FIG. 35 Ref. 7).
- 6) Replace the filter element with a new original part.

7) Reinstall the spring and inspect the filter cover O-ring for any signs of wear or damage. This O-ring is located in a groove at the top of the filter body (FIG. 35 - Ref. 4). Replace the O-ring in case of wear or damage.

- 8) Reinstall the filter cover (FIG. 35 Ref. 2) and secure it.
- 9) Check the hydraulic oil level and, if needed, proceed to refill (see par. 9.7.5).
- 10) Reinstall the footrest and the oil tank cap cover.

#### **ATTENTION**

THE USED FILTER MUST BE DISPOSED OF IN ACCORDANCE TO THE LAWS IN FORCE IN THE COUNTRY WHERE THE MACHINE IS USED.

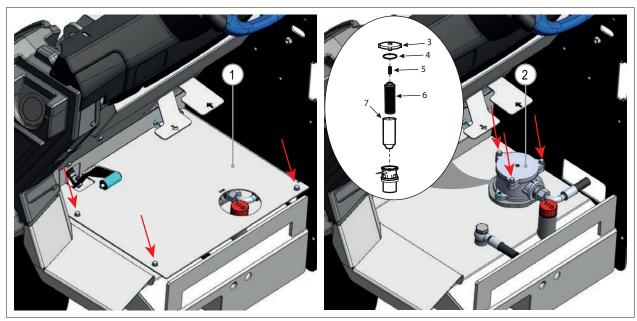


FIG. 35



#### 9.7.7 Suction oil filter change

- To change the hydraulic oil filter proceed as follows:
- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Open the engine cover (see par. 9.4).
- 3) Drain all hydraulic oil from the oil tank (see par. 9.7.8).
- 4) Remove the clamp (FIG. 36 Ref. 3) that fix the suction filter (FIG. 36 Ref. 1).
- 5) Loosen the clamps (FIG. 36 Ref. 2) of the hydraulic hoses.
- 6) Replace the suction filter (FIG. 36 Ref. 1) with a new original part.
- 7) Insert the hydraulic hoses and fix them with the clamps (FIG. 36 Ref. 2).
- 8) Fix the suction filter with the clamp.
- 9) Reinstall the engine cover (see par. 9.4).
- 10) Proceed with the oil change (see par. 9.7.8).

#### 

THE USED FILTER MUST BE DISPOSED OF IN ACCORDANCE TO THE LAWS IN FORCE IN THE COUNTRY WHERE THE MACHINE IS USED.

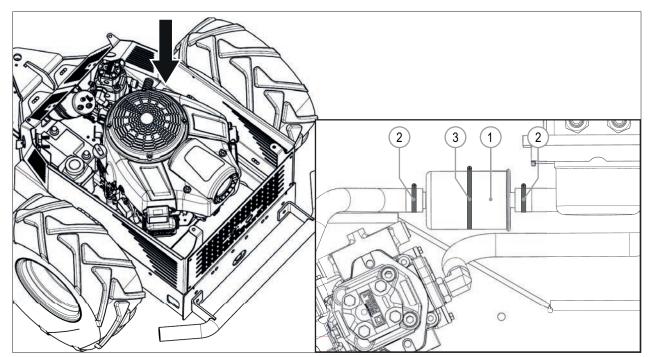


FIG. 36



### 9.7.8 Hydraulic oil change

- To change the hydraulic oil proceed as follows:
- 1) Put the machine in "safety state" (see par. 9.2)...
- 2) Place under the hydraulic oil tank a suitable sized container with a capacity of at least 30 I.
- 3) Remove the hydraulic tank drain plug (FIG. 37 Ref. 1), located under the machine near the right front wheel, and drain all hydraulic oil from the machine into the container.
- 4) When all of the hydraulic fluid has drained out of the tank, reinstall and secure the drain plug. Make sure to inspect the drain plug O-ring (FIG. 37 Ref. 2) for signs of wear or damage. Replace the O-ring if any signs of damage are noted.
- 5) Change the oil filter (see par. 9.7.6).
- 6) Remove the cap of hydraulic oil tank (see par. 9.7.5).
- 7) Refill the hydraulic oil tank with recommended hydraulic oil 0280 PAKELO HYDRAULIC EP AL ISO 46.
- 8) Check the hydraulic oil level (see par. 9.7.5).
- 9) Turn on the machine (see par. 8.3.2) for a few of minutes, in this way the oil flows inside the circuit oil.
- 10) Turn off the machine (see par. 8.3.7).
- 11) Check again the hydraulic oil level (see par. 9.7.5).

#### **ATTENTION**

THE USED OIL AND FILTER MUST BE DISPOSED OF IN ACCORDANCE TO THE LAWS IN FORCE IN THE COUNTRY WHERE THE MACHINE IS USED.



FIG. 37



#### 9.7.9 Fuses



IF A FUSE BLOWS, DETERMINE THE CAUSE BEFORE REPLACING IT WITH A NEW ONE.

To replace the fuses proceed as follows:

1) Remove the cover located on the right inner side of the machine (see FIG. 38).

2) Replace the blown fuses with new ones with the same amperage rating (which is shown on the top of the blown fuse).

3) Reinstall the cover.

Standard Fuses			
Ref.	Function	Rating	
1	Dashboard power supply	15A	
2	Oil cooler - Front electric plug	20A	
3	Working light - Heating system - Horn	15A	
4	Cabin light	5A	
5	Optional	3A	
6	Optional	3A	
7	Road lights kit	15A	
8	Optional	20A	



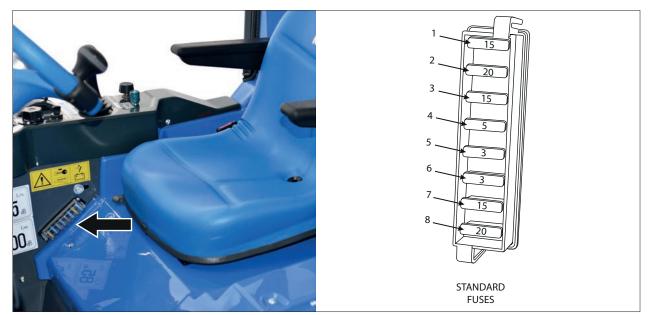


FIG. 38

**A DANGER** 

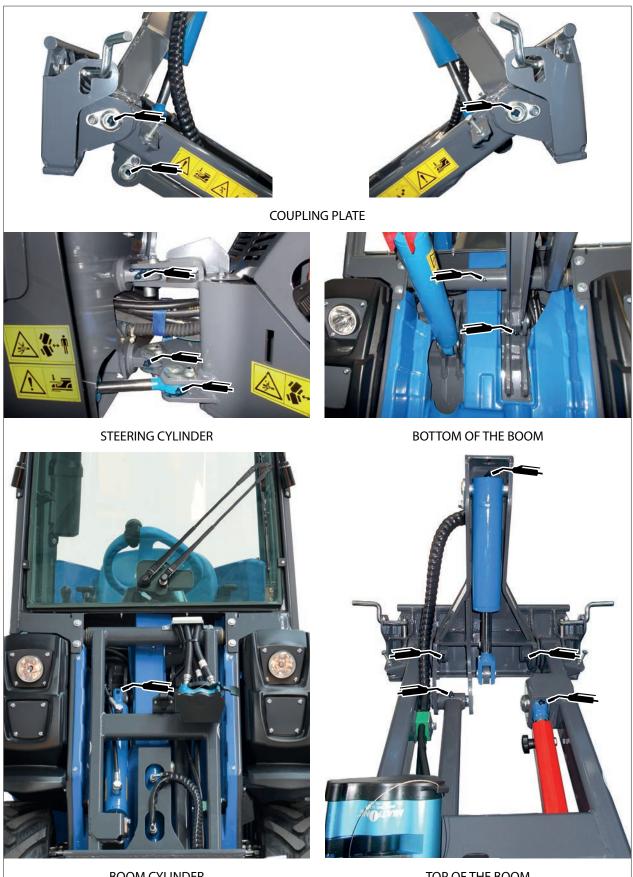
## 9.7.10 Greasing points



IT IS MANDATORY TO INSTALL THE ARM SAFETY BLOCK WHEN PERFORMING MAINTENANCE WITH THE ARM RAISED.

The **FIG. 39** shows the location of greasing points. Clean the greasing points with a cloth and apply grease type **0088 PAKELO BEARING EP GREASE NLG I 0**.





**BOOM CYLINDER** 

TOP OF THE BOOM

FIG. 39



# 9.8 Engine maintenance



SERVICE AND MAINTENANCE INSTRUCTIONS FOR THE ENGINE CAN BE FOUND IN THE ENGINE'S MANUAL SUPPLIED WITH THE MACHINE.

#### 9.8.1 Check engine oil level

To check the engine oil level proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Wait until the engine has cooled down.
- 3) Open the engine cover (see par. 9.4).
- 4) Open the cap of the engine oil filler (FIG. 40 Ref. 1)
- 5) Look for both the full and add oil lines (FIG. 40 Ref. 3) of dipstick (FIG. 40 Ref. 2). The correct oil level is between those two lines.
- 6) If the refill is needed, add oil (FIG. 40 Ref. 4). It is important to add the correct type of engine oil as stated in the engine manual.
- 7) Make sure to reinstall and secure the oil filler cap.
- 8) After filling the oil, wait a few minutes and check the oil level again

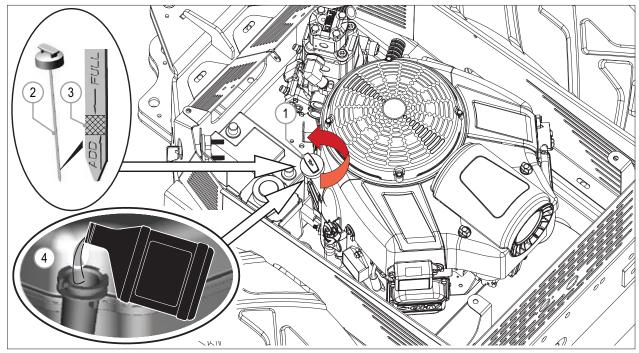


FIG. 40



# 9.8.2 Engine oil and filter replacement



ENGINE OIL AND FILTER REPLACEMENT PROCEDURE CAN BE FOUND IN THE ENGINE'S MANUAL SUPPLIED WITH THE MACHINE.

The position of the oil drain plug (FIG. 41 - Ref. 1) and of the oil filter (FIG. 41 - Ref. 2) is shown in FIG. 41.

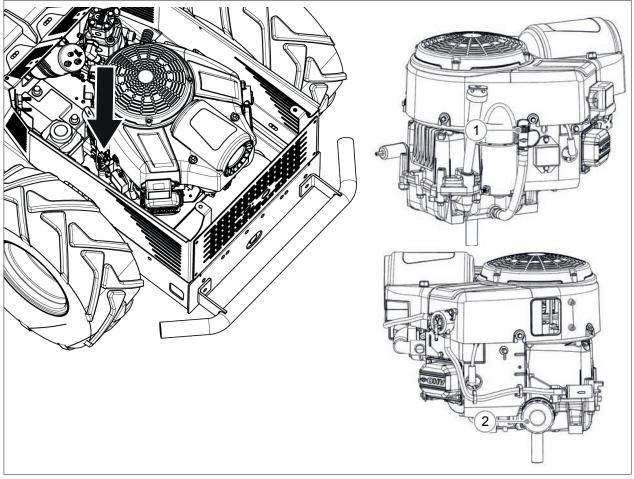


FIG. 41

#### **▲ ATTENTION**

THE PRE-FILTER IN SOME MODELS MAY NOT BE PRESENT.

To check the air filter, proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Wait until the engine has cooled down.
- 3) Open the engine cover (see par. 9.4).
- 4) Remove the air filter cover (FIG. 42 Ref. 1) by loosening the two fasteners (FIG. 42 Ref. 2).
- 5) Unhook the retaining clip (FIG. 42 Ref. 3).
- 6) Remove the air filter (FIG. 42 Ref. 4).
- 7) Remove the filter element (FIG. 42 Ref. 6) from the pre-filter (FIG. 42 Ref. 5).
- 8) Check the filter element (FIG. 42 Ref. 6), if cleaning is needed do it with low pressure air jets or replace with new genuine spare part.
- 9) Check the pre-filter (FIG. 42 Ref. 5), if cleaning is needed wash in liquid detergent and water. Then allow it to thoroughly air dry.
- 10) Reinstall the filter element in the pre-filter.
- 11) Reinstall the air filter and secure it with the retaining clip (FIG. 42 Ref. 3).
- **12)** Reinstall the air filter cover and secure it with the two fasteners

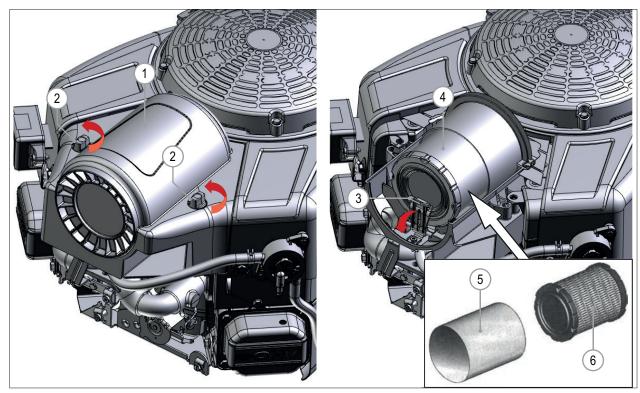


FIG. 42



# 9.9 Troubleshooting

Problem	Possible cause	Solutions
Engine does not crank	Battery switch off	Turn on battery switch.
	Discharged battery, low battery voltage	Check and charge the battery.
	Blown fuse	Check fuses. If the fuse blows again, find out the cause. Contact service.
	Battery cables poorly connected or disconnected.	Check battery cables and posts, clean and retighten if necessary.
Engine cranks but does not start, or starts and stops immediately	No fuel or wrong type of fuel	Drain the tank and fill the tank with correct type of fuel. Drain water from the fuel filter. Prime the fuel system.
	Engine does not get fuel, clogged fuel filter or fuel line.	Prime the fuel system. Make sure that the fuel hoses and fuel filter are clean and have not been frozen. Replace fuel filter, clean fuel lines.
	Cold temperature of the environment	Hold ignition key in glow position for longer. If glow indicator lamp is lit, allow it to turn off before starting. Switch on the engine for at least 5 seconds.
	Battery discharged or damaged	Charge the battery or replace if damaged.
Engine overheats	Overload	Use attachment at lower engine rpm, check attachment for faults.
Hydraulic system overheats	Clogged oil cooler.	Clean cooler and fan.
	Fan faulty	Check and clean, repair if necessary.
	Hydraulic system overloaded	Use attachment at lower engine rpm, check attachment for faults.
The loader does not move even after the parking brake has been released	Bad connection on the wiring of the parking brake switch, blown fuse, or faulty switch.	Check wires, fuse, and switch, repair if necessary. Contact service.
	Low hydraulic charge pressure.	Contact service for pressure check.

# 10 SPARE PARTS



THE ORIGINAL PARTS FOR ANY CHANGES MUST BE REQUIRED ONLY TO THE DEALER OR AUTHORISED SERVICE CENTRE, COMMUNICATING MACHINE MODEL, SERIAL NUMBER AND YEAR OF MANUFACTURE.

#### 10.1 Filter code

Type of filter	2.3
Fuel filter	C036645
Engine oil filter	C036634
Air filter cartridge	C036636
Hydraulic oil filter	C036601
Suction filter	C036611

**TAB. 24** 



# 11 ANNEXES

# 11.1 Road light kit (option)

Road light kit includes (see FIG. 43):

- · Headlights (high beams, low beams, position and direction).
- Rear lights (position, stop and direction).
- Orange light indicator (placed above the driving seat).
- · Side rearviews mirrors.

The lights of the road kit are activated by the appropriate controls placed on the driving seat (see par. 4.3.2).

**ATTENTION** 

THE ROAD LIGHT KIT IS REQUIRED FOR THE MACHINE TO BE DRIVEN.





#### 11.2 Parallelogram

The parallelogram is a device which, when applied to the lifting arm allows the attachment assembled to the machine to the same angle as at the departure, whatever the position of the lifting arm is.

# 11.3 Cab (option)

The machine can be equipped with two different models of cab:

- smart cab, made in plexiglass and without door;
- luxury cab (see FIG. 44), made in glass with door and heating system.



FIG. 44.



# 11.4 Back-weights (option)

The back-weights set adds approximately 88 kg of weight to the rear end of the machine, increasing the overall working capacity of the machine.

To install the back-weights proceed as follows:

- 1) Put the machine in "safety state" (see par. 9.2).
- 2) Secure the back-weight bracket (FIG. 45 Ref. 1) to the bumper using the bolts and washers (FIG. 45 Ref. 2 and Ref. 3).
- 3) Using a lifting device, position one of the back-weights (FIG. 45 Ref. 4) on the bracket.
- 4) Secure the back-weight using the bolt (FIG. 45 Ref. 5).
- 5) Repeat the procedure for the second half of the back-weights (FIG. 45 Ref. 6).
- 6) To remove the back-weights, reverse Steps 2) 4).

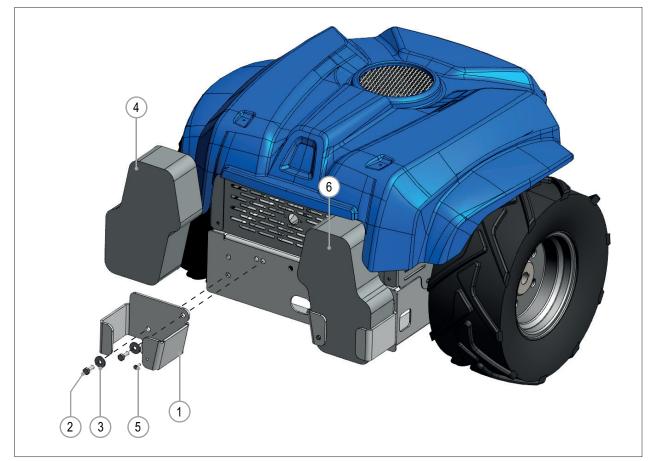


FIG. 45



# 11.5 Tyres pressure



MANY MODELS AND SIZES OF TYRES CAN BE MOUNTED ON THE MACHINE. THE MAX LOAD OF THE TYRES CHANGES ACCORDING TO THE MODEL, SIZE AND MANUFACTURER. REFER TO YOUR MULTIONE DEALER TO KNOW THE MAX LOAD OF THE TYRES YOU WANT TO MOUNT IN YOUR MACHINE.



**A WARNING** 

ALWAYS CHECK THE DATA IMPRESSED ON THE TYRE (MODEL, SIZE, MANUFACTURER) BEFORE INFLATING.

The table below shows the MAX pressure and the suggested pressure of the tyres according to manufacturer, size and model. Not all tyres listed are compatible with the machines covered by this manual, refer to your dealer MultiOne for compatibility.

Manufacturer	Size	Model	MAX. pressure	Suggested pressure
Kenda	26x12,00-12	Skid	4,4 bar	3,5 bar
Kenda	20x8,00-10	Turf	1,5 bar	1,2 bar
Kenda	20x8,00-10	Tractor	1,5 bar	1,2 bar
Kenda	23x10,50-12	Turf	2,2 bar	1,7 bar
Kenda	26x12,00-12	Turf	3,4 bar	2,7 bar
Kenda	23x8,50-12	Turf	2,3 bar	1,8 bar
Kenda	365x70-18	Skid	3,8 bar	3 bar
Starco	26x12,00-12	Tractor HD	2,1 bar	1,6 bar
Starco	31x15,50-15 (400/50-15)	Tractor HD	3 bar	2,4 bar
Starco	23x10,50-12	Skid/Tractor	2,5 bar	2 bar
Starco	23x8,50-12	Skid/Tractor	3,4 bar	2,7 bar
Trelleborg	26x12,00-12 (320/60-12)	Tractor	2,5 bar	2 bar
Trelleborg	23x8,50-12	Tractor	2,5 bar	2 bar
Trelleborg	21x8,00-10	Tractor	2,5 bar	2 bar
Titan	29x12,50-15	Turf	1,3 bar	1 bar
Mitas	27x8,50-15	Skid	4,2 bar	3,3 bar
Mitas	10,50-18	Skid	3,5 bar	2,8 bar
Mitas	12,50-18	Skid	3,5 bar	2,8 bar
Kingstire	18x9,50-8	Skid/tractor	1,6 bar	1,3 bar
Deestone	27x10,50-15	Skid	5,5 bar	4,4 bar
Starco	240/60-12	Garden Pro	2,4 bar	2 bar

#### 11.6 Warranty terms

#### 11.6.1 General rules

• The warranty duration is indicated on the table below and starts from the date of delivery to the final user or not later than 18 months from the date of sale by MultiOne SRL.

Model or part	Warranty duration		
1 and 2 Series	500 hours or 24 months*		
4 and 5 Series	750 hours or 24 months*		
Others model	1000 hours or 24 months*		
Hydraulic pumps and wheel drive motors (of all models)	1000 hours or 36 months*		
(*) whichever reached is the first term			

• MultiOne SRL will repair or replace at its option, free of charge, all proven defects to defective materials or faulty workmanship, without being obliged to pay any compensation for direct or indirect damages or reimbursement of any kind or any nature.

#### 11.6.2 Scheduled maintenance

During the guarantee period, the final user, according to pre-established deadlines must carry out the scheduled maintenance. As regards the period of scheduled maintenance, please refer to the manual.

#### 11.6.3 Exclusion of warranty

They are excluded from warranty:

- 1) Consumable items such as oils, lubricants and filters.
- 2) Electrical system.

3) Rubber hoses, tyres, rims, brake, body, frame parts exposed to shocks, parts subject to wear, silencer, battery, buttons, levers, joystick (if available), lights, bulbs, seats, steering wheel, control panel, cylinder seals and all attachments.

Warranty replacement of defective parts will not be free in case of breakage of the piece not due to defects in material or workmanship, but to misuse or improper use of the machine or damage incurred by the request of the purchaser of excessive performance compared to that provided by MultiOne SRL.

#### 11.6.4 Warranty expiration

The warranty is not valid when:

- 1) The purchaser is not in compliance with contractually agreed payments.
- 2) The damage is due to negligence, carelessness, poor maintenance, non-conforming or improper use of the machine.
- 3) It is carried out any repair and/or modification on the machine without the written consent by MultiOne SRL.
- 4) The purchaser sets up to the machine equipments, attachments and related hydraulic arrangements not provided by MultiOne SRL.
- 5) The purchaser sets up to the machine, original equipment not properly maintained in working order to cause damage to the machine.
- 6) Electrical, mechanical and hydraulic modifications not authorised in writing by MultiOne SRL have been carried out.
- 7) Failure to perform scheduled maintenance operations.
- 8) Use of non-original spare parts.
- 9) Use of non suitable fuels, lubricants and solvents that cause damage to the machine.
- **10)** Use of the vehicle not conform to the manual.
- 11) Exceptional events.

#### 11.6.1 Notes

- The removal of safety devices, whose the machine is equipped, will invalidate automatically the guarantee and liability by MultiOne SRL.
- If through carelessness and negligence by the purchaser or other event independent by MultiOne SRL, this could not act promptly for repairs immediately after the occurrence of cracks or defects, the purchaser will be responsible for extra burden of breakage or defects resulting from further use of the machine.
- · MultiOne SRL decline any liability if, both for ordinary maintenance and in case of any malfunction and/or any breakage of

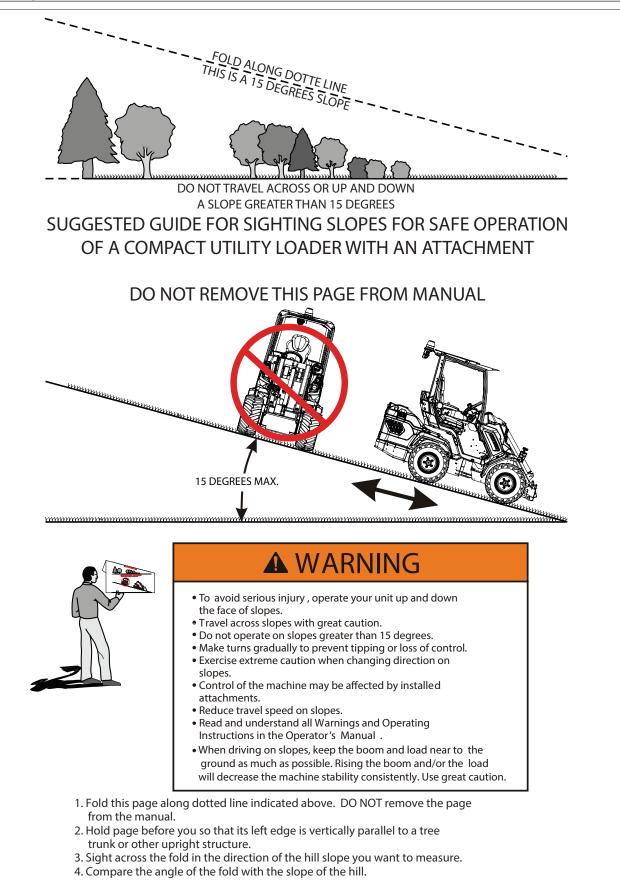


components, the machine could not be used and should verify the "non-production", including the possible supply of other alternative means, expenses and/or any other cost.

- We also inform you that all data will be treated according to the Legislative Decree n. 196/2003 "Code regarding the protection of personal data" (Consolidated act Privacy).
- In case of non-acceptance of the above conditions the customer may return the machine to the dealer free port within 8 days from the receipt of it, provided it is in like new conditions and without having been used in any way (the use of the machine implies full acceptance of the terms of this warranty). The dealer will arrange for the inspection of the machine and possibly to restore it charging the relative amount.



### 11.7 Slope guide





# SERVICES MADE

CUSTOMER: .....

MODEL:

SERIAL NUMBER: .....

DATE OF DELIVERY: .....

DATE	HOURS	REMARKS	STAMP / SIGNATURE
, ,			
////			
		l	



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