



The Best Technology in the Field

A.I. GUARD FOR POWER HARROWS



Codice	Q00A00172/1	 	GB	USE AND MAINTENANCE MANUA
Da matr:				
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INSTRUCTIONS TRANSLATED FROM THE ORIGINAL

**Read this manual thoroughly before using the machine.
Being well informed is essential for safe machine usage.
This manual should be kept for the whole working life of the
machine.**

Thank you for choosing us. You have purchased an excellent quality product that is guaranteed by decades of experience. On leaving the factory, each machine is accurately inspected to guarantee the absence of defects. Should any material defect be found in spite of inspection, please contact your dealer immediately. Please contact us if you need further information or if something needs to be clarified. Our aim is to constantly improve the product and keep it top level.



AS THE TRIANGLE INDICATES DANGER, PLEASE BE CAREFUL WHEN IT APPEARS!

THE TERM MACHINE IS USED TO INDICATE THE COMMERCIAL NAME OF THE PRODUCT TO WHICH THIS MACHINE REFERS



All information contained in this manual is informative and does not bind the producer. The information contained herein can be changed without forewarning

N.B.: view of the machine ALPEGO normally considers the machine as being viewed from the rear to identify better the particulars and to better assemble the parts that must respect the position "right or left" as in description (e.g.: right or left cardan joint, right or left tine, etc.)

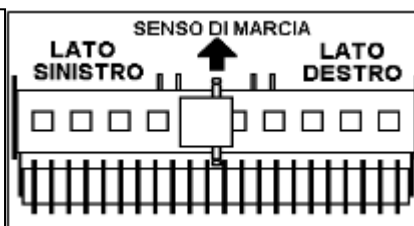


Table of contents

1. GENERAL INFORMATION.....	1
1.1. OBJECT OF THE MANUAL	1
1.2. DOCUMENTS ACCOMPANYING THE MACHINE	1
1.3. WARRANTY	1
2. ELECTRICAL SYSTEM	2
2.1. DESCRIPTION.....	2
2.2. POWER SUPPLY	3
3. ALPEGO COMMAND MONITOR	4
3.1. MOUNTING THE MONITOR	4
3.2. DESCRIPTION OF THE MONITOR	5
3.3. MAIN PAGE	6
3.4. MEANING OF TEMPERATURE LEVELS	6
3.5. MENU.....	7
3.6. DIAGNOSTIC AND DEVICE INFORMATION	8
3.6.1. DISPLAY SETTINGS, DATE AND TIME	9
4. MAINTENANCE	10
4.1. GREASING AND OIL CHANGE	10
5. ALARMS.....	11

1. GENERAL INFORMATION

1.1. OBJECT OF THE MANUAL

This manual has been drawn up by the manufacturer of the machine and it is an integral part of the documentation accompanying the machine.

The manual defines the purposes to which the machine has been produced specifying its correct usage and the limits of the same.

The constant application of the data contained in the present manual guarantees the safety of the persons using the machine, economy of operation and a longer duration of the machine.

The present manual has been divided into different paragraphs in order to facilitate the search of the various items and the consultation of the initial index.

The figures included in this manual are supplied for information even if they may greatly differ from your machine, the safety and the information, anyhow, are always guaranteed.

1.2. DOCUMENTS ACCOMPANYING THE MACHINE

The following documents should be supplied with the machine:

- User and maintenance manual
- Spare parts catalogue

1.3. WARRANTY

When delivered, make sure that the machine and any accessories were not damaged during transport. Any complaints should be presented in writing within 6 days from the date of delivery.

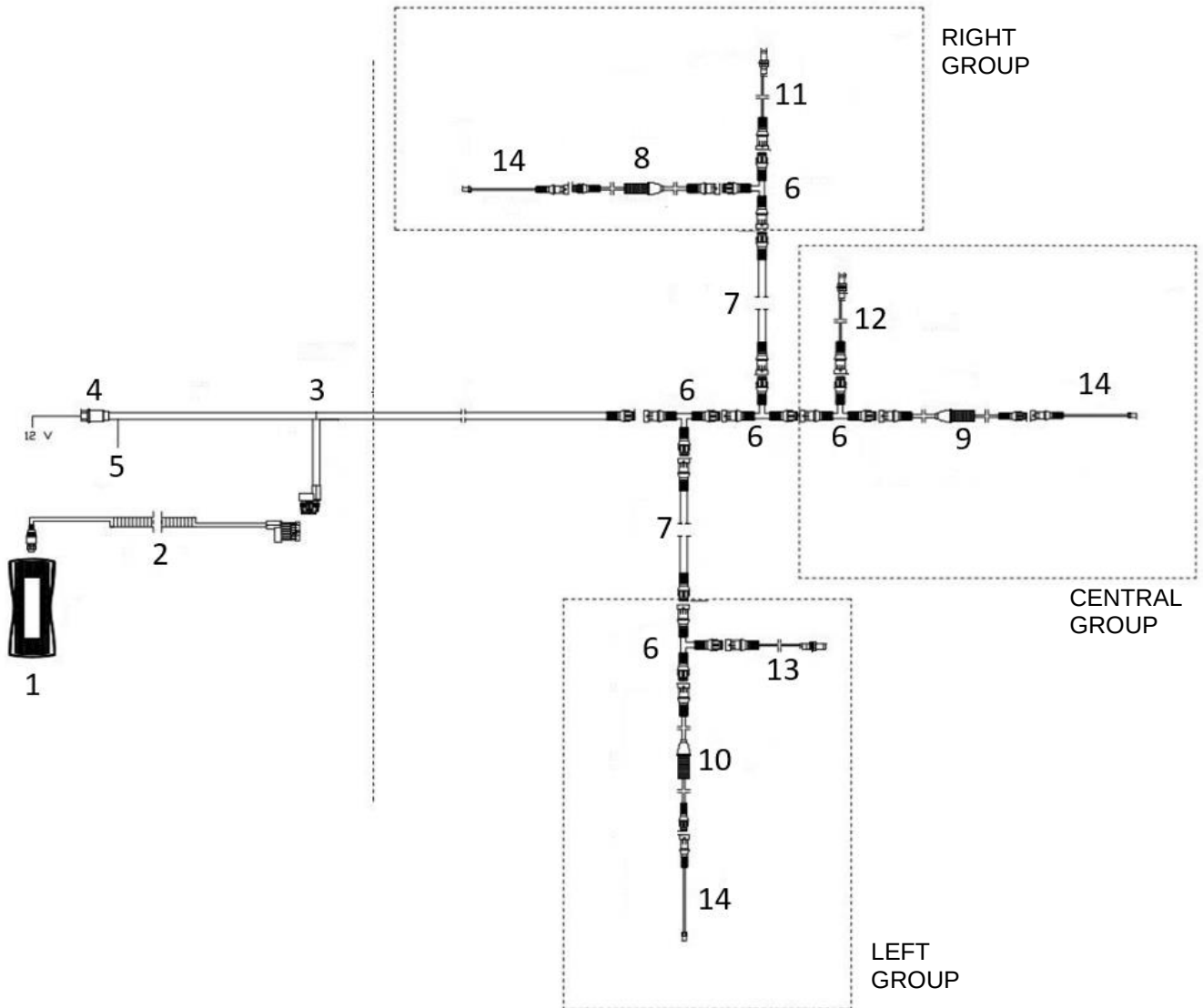
GUARANTEE FORFEITURE

The guarantee is rendered null and void immediately if:

- there is a manoeuvring error
- If the universal joint has not been sufficiently maintained
- If the maximum power limit allowed is exceeded (see technical data on the table 2.3)
- the instructions described in this manual are not followed
- original spare parts are not used
- any modification is made to the machine without having obtained authorisation from the manufacturer

2. ELECTRICAL SYSTEM

2.1. DESCRIPTION



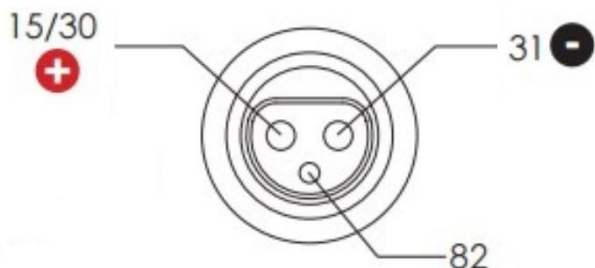
1. Alpego Command Monitor
2. Spiral cable Command
3. Power cable
4. 3-pole power socket 12V DC
5. 3A fuse
6. Can bus splitter
7. Can Bus extension cable of 2 meters
8. Digitizer for right temperature sensor TD
9. Digitizer for central temperature sensor TC
10. Digitizer for left temperature sensor TS
11. Right cardan RPM sensor CD
12. Central cardan RPM sensor CC
13. Left cardan RPM sensor CS
14. temperature probe



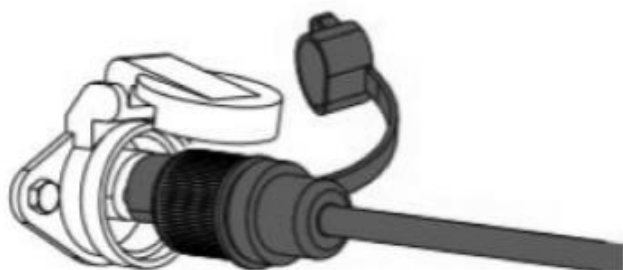
sensors and digitizers, even if they look the same, can NOT be interchanged, it would cause malfunctions

2.2. POWER SUPPLY

The power is supplied via the tractor's 3-pole 12V socket



Terminal	Wire color	Function
15/30	Brown	+12 V
31	Blue	Negative
82	-	-



DO NOT modify the internal connection of the socket, a reverse voltage can cause damage to the system and the Command monitor

The fuse in the power cable serves to protect the system and the devices connected from overloads

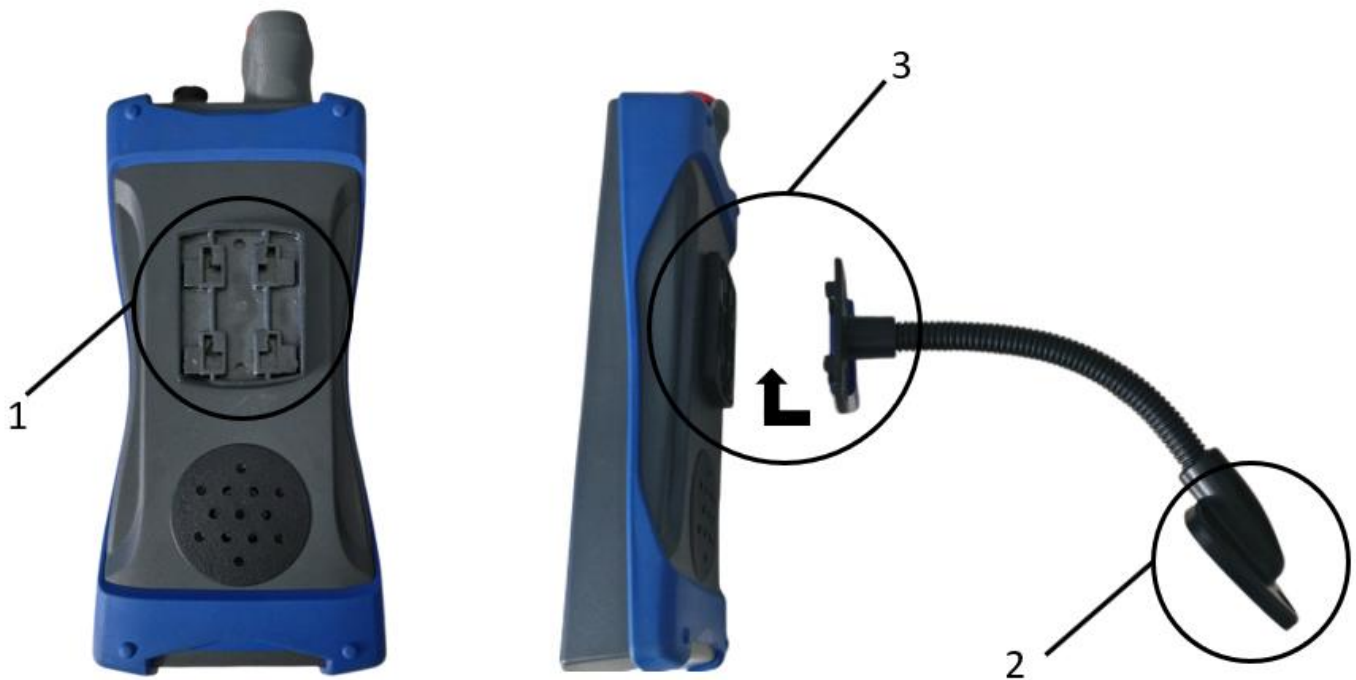
In case of failure, replace the fuse with the same type of fuse.



DO NOT install fuses with a capacity higher than 3A, this could cause serious damage to the system.

3. ALPEGO COMMAND MONITOR

3.1. MOUNTING THE MONITOR



1. Attach the adhesive base to the monitor as shown in the photo (respect orientation)
2. Secure the support in the tractor cabin
3. Attach the monitor to the mounting bracket



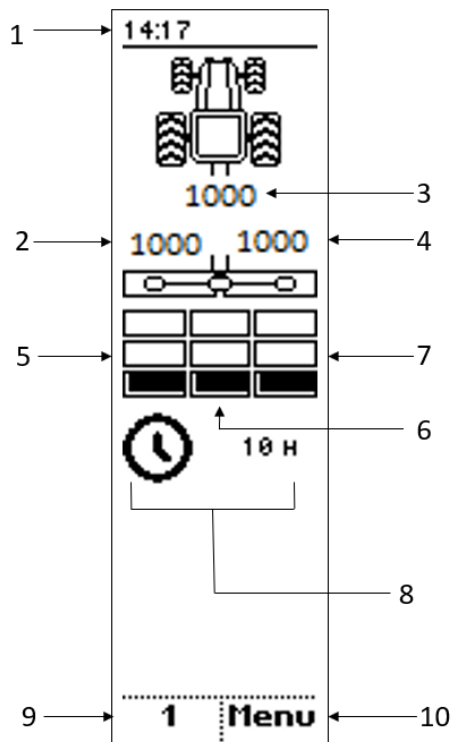
To guarantee the control functions provided by the A.I. GUARD is necessary to switch on the system every time the machine is used.

3.2. DESCRIPTION OF THE MONITOR



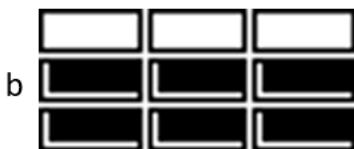
1. 8-pole connector for connection to the system
2. Power button
3. Function keys
4. Emergency button

3.3. MAIN PAGE



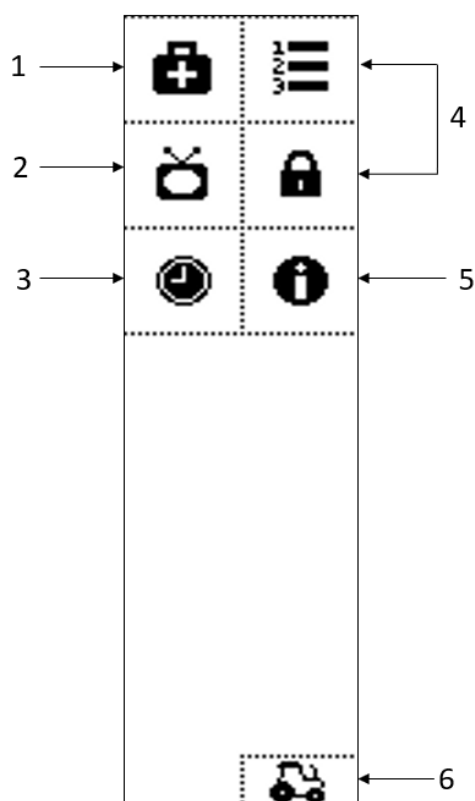
1. Time
2. RPM left cardan
3. RPM central cardan
4. RPM right cardan
5. Left temperature level
6. Central temperature level
7. Right temperature level
8. Machine total hours
9. Page
10. Open the device menu

3.4. MEANING OF TEMPERATURE LEVELS



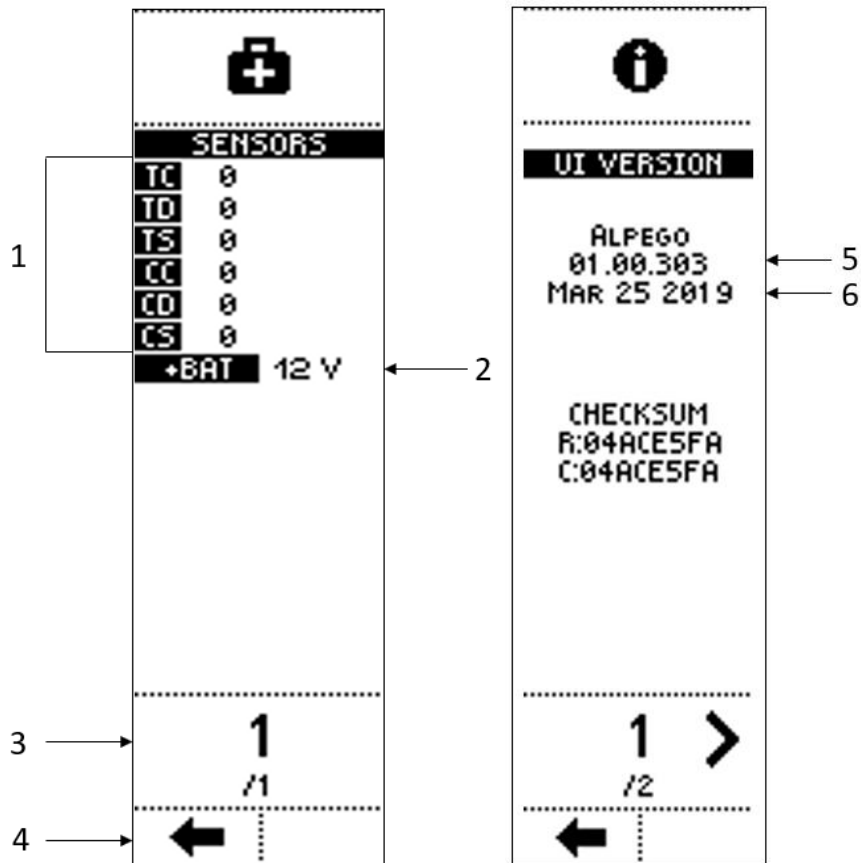
- a) Machine stop or first minutes of work
- b) Standard work level
- c) Temperature above the standard values (see alarms in chapter 5)

3.5. MENU



1. Diagnostic (3.5.1)
2. Display settings (3.5.2)
3. Date and time (3.5.2)
4. Settings reserved for technical personnel
5. Device information (3.5.1)
6. Return to the main screen

3.6. DIAGNOSTIC AND DEVICE INFORMATION



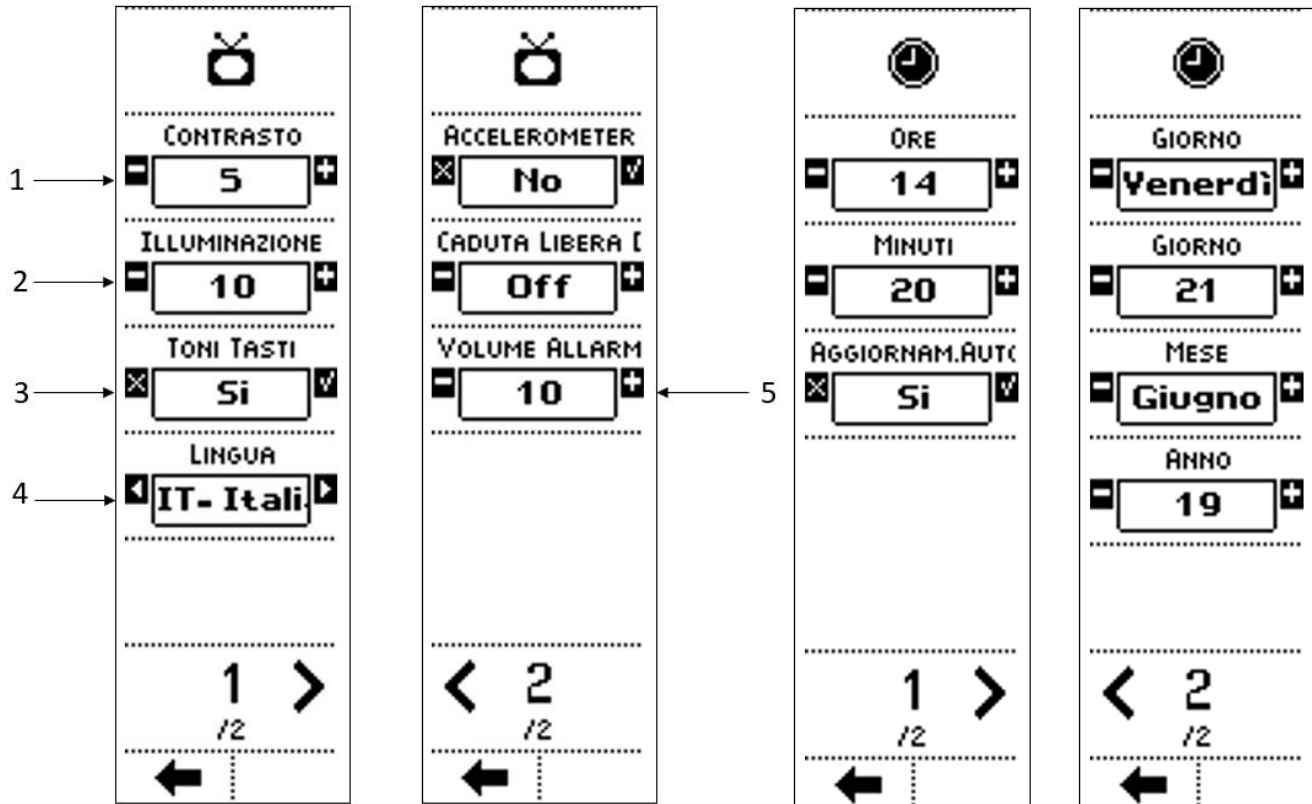
1. Sensors status*
2. Battery voltage
3. Page number
4. Back to the menu
5. Software version
6. Date of the software

*The values displayed in correspondence of the sensors are not equivalent to the actual values of temperature and rpm but refer to a status value



For a correct operation of the system, the battery voltage has not to be below 12V

3.6.1. DISPLAY SETTINGS, DATE AND TIME



1. Contrast adjustment
2. Brightness adjustment
3. Enable or disable the sound when keys are pressed
4. Language
5. Volume of the alarms

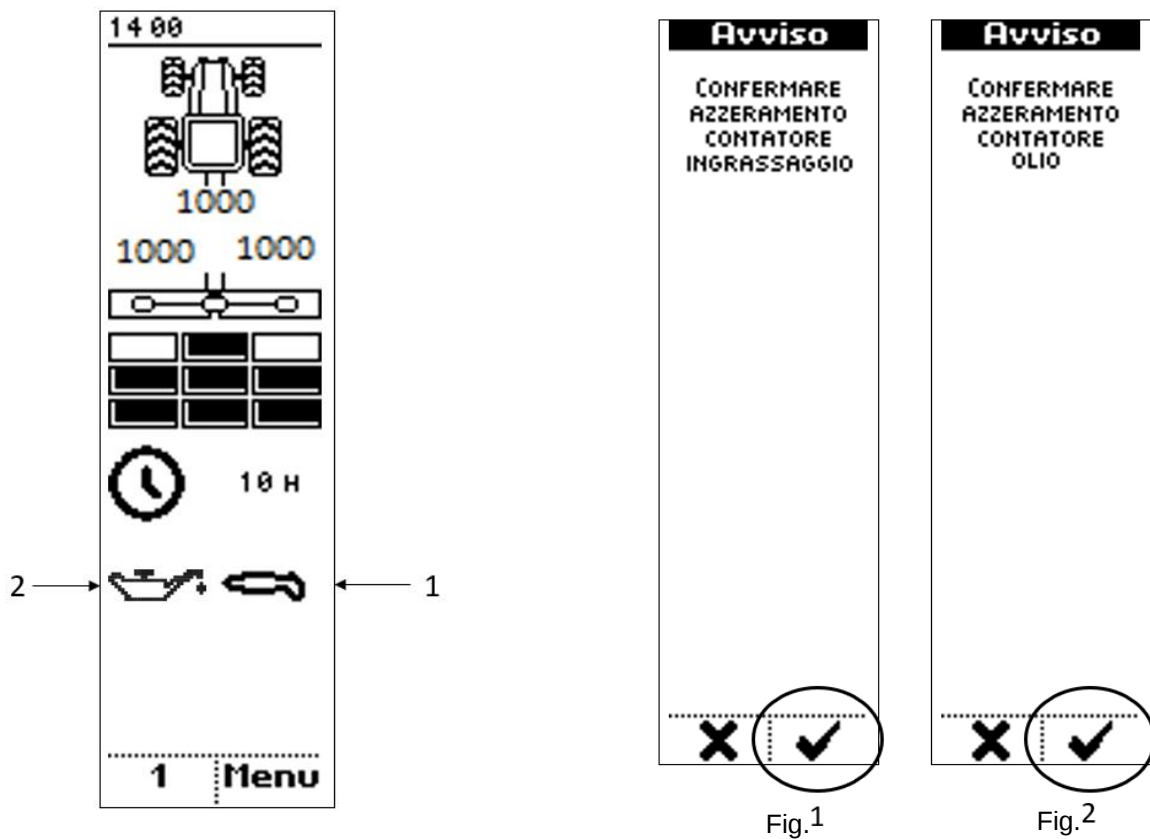
4. MAINTENANCE

4.1. GREASING AND OIL CHANGE

As the working hours progress, the system periodically generates alarms (oil change and greasing).

Both alarms once displayed on screen and confirmed remain visible as an icon (1-2)

To cancel the icon and then reset the count, press the function key for about 10 seconds and give a confirmation (Fig. 1 - 2)



1. GREASING

Reminder is reactivated every 10 working hours (after resetting)

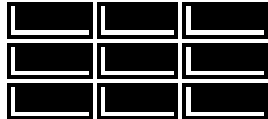
Check in the manual the greasing intervals for each part (rollers, cardans, etc...) and the type of lubricant to be used

2. OIL CHANGE

Reminder active after 30 hours the first time, after the first reset every 400 hours.

Check in the manual the type of lubricant to be used

5. ALARMS

ALARM	DESCRIPTION	CORRECTIVE ACTION
TEMPERATURE ABOVE THE STANDARD VALUES 	The temperature of one or more transmission group is above the standard values	• Make sure you have performed the necessary maintenance (oil change or level check) • Decrease the work load of the machine (working speed, working depth etc ...)
RMP CENTRAL CARDAN OUT OF RANGE	The RPM of the central cardan is out of the expected range N.B. This alarm has a delayed activation of 30 seconds to allow the maneuvers at the end of the field with PTO detached.	Make sure that the PTO speed is set correctly on the tractor • Check the position of the sensor with respect to the magnetic stop on the rotating shaft (maximum distance 4mm)
RMP LEFT/RIGHT CARDAN OUT OF RANGE	The RPM of the left/right cardan is out of the expected range	• It is a signal of a wrong transmission ratio, check the gears (just for power harrows with central gearbox) • Check the position of the sensor with respect to the magnetic stop on the rotating shaft (maximum distance 4mm)
LEFT/RIGHT CARDAN BLOCKED	Signal that a lateral limiter has intervened	• Lift the machine to reduce the load and allow the limiter to re-engage (with automatic limiter) or replace the bolt (with shear-bolt limiter)) • Check that there are no foreign bodies blocking the rotation of the power harrow (stones, metal parts, etc.) • Check the position of the sensor with respect to the magnetic stop on the rotating shaft (maximum distance 4mm)

GREASE THE MACHINE 	Greasing maintenance alarm	See chapter 4 - maintenance
OIL CHANGE 	Oil maintenance alarm	See chapter 4 - maintenance
NO COMMUNICATION	The monitor command does not find any device in the system	Check wiring connection
NO DEVICE (+ DEVICE NAME)	The command does not find a particular device in the system	Check that the device not found by the monitor is connected correctly. Each device (sensor or digitizer) is specific for a function (right / left / central), <u>it is not possible to exchange devices between them.</u>
POWER ALARM	For 3 times the startup did not complete properly due to a power failure. In practice: the power supply falls before the work page appears. At the fourth time the command starts but without enabling the devices on the system, (an alarm of "No Communication" is also generated) At the fifth time a normal start is retried.	Check that the power supply is not lower than 12 V (See chapter 3.5.1 - diagnostics)
CAN BUS OFF	Possible monitor Command failure	Contact the service

USATE SEMPRE RICAMBI ORIGINALI
EMPLOYEZ TOUJOURS LES PIÈCES DE RECHANGE ORIGINALES
IMMER DIE ORIGINAL-ERSATZTEILE VERWENDEN
ALWAYS USE ORIGINAL SPARE PARTS
USAR SIEMPRE REPUESTOS ORIGINALES



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