

# Instructions and warnings for safe use of the platform.



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#### Introduction

Most of the accidents linked to use, maintenance and repair of the platforms are due to failure to apply and follow the elementary safety standards. By identifying the risks to which you will be exposed and by taking the necessary precautions, it will be possible to avoid these accidents.

Specifically, the user must strictly follow the indications given below:

All the operations or movements not described in the Use and Maintenance Manual must be avoided; the person using the vehicle for purposes other than those recommended, must first ensure his own safety, the safety of others and correct handling of the equipment;

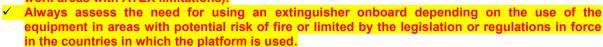
The Manufacturer has designed this platform and its accessories accurately, with the help of appropriate tools and technologies to ensure its safety; however, it is difficult to assess all the work situations the platform may be subject to in different operating conditions. Consequently, the conductor is responsible not only for following the indications given in this *Use and Maintenance Manual*, but also for adopting the methods for use taking into account the provisions and legislation in force in the country in which the equipment is used, on the matter of health and occupational safety, associated with responsible use of the equipment, capable of foreseeing and preventing potential danger situations generated by special logistic, climatic, visibility and health conditions of the conductor.

Failure to observe the safety regulations listed in the Use and Maintenance Manual for the use and maintenance and repair of the platform can result in serious accident, sometimes even mortal.



## List of main risks and recommendations regarding the use of the platform

- ✓ Read the Use and Maintenance Manual carefully.
- ✓ Do not use the platform in the vicinity of electric lines; always keep at a safety distance of at least 5m from the lines, especially when they are powered or when their status is not known.
- ✓ Before using the platform, check the entrance door to make sure it is closed properly.
- ✓ When standing on the platform at a height, the operator must use a safety belt and must hook it to the
  eyelet provided for the purpose.
- ✓ The platform must be lowered to the ground in a hazard-free area devoid of obstacles.
- ✓ The operator using the platform must be helped by a suitably trained person standing on the ground.
- ✓ The operator must stop using the platform if visibility and lighting conditions are poor.
- ✓ It is forbidden to overload the platform.
- ✓ It is forbidden to use the platform in potentially explosive atmospheres or where the use of explosion-proof machinery and components is prescribed (for example: refineries, oil ducts, or work areas with ATEX limitations).





- ✓ It is forbidden to hook a load to the platform or to the truck boom.
- ✓ It is forbidden to move the truck with one or more persons inside the platform.
- ✓ It is forbidden to operate the platform from the cab with one or more persons inside the platform. All movements of the platform must be carried out solely by an operator, carrying a radio control, standing on the platform.



- ✓ The platforms conform to standard EN 280\_2001; persons can enter and leave the basket only with the platform on the ground.
- √ when the platform is used at a height, it must not rest on any other surrounding structure (such as roofs, coverings, balconies, walls, etc...).
- It is strictly forbidden to tamper with the safety devices provided on the platform.
- ✓ The platform cannot be modified with accessories that increase wind resistance.
- ✓ During operations it is necessary to check constantly to make sure the wind speed never exceeds 45 km/h. In case of strong wind, retract the platform immediately as the vehicle structure will be overloaded.
- Do not use the platform in specially adverse weather conditions (rain storms in the presence of lightning).
- ✓ Carry out the maintenance operations as envisaged in the Manual.
- The forklift truck equipped with platform must be inspected periodically in compliance with legislation, provisions and regulations applicable in the country of use. The user alone is responsible for ensuring compliance with the legislation in force.



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## Instructions for using the extendable rotary platform

## Instructions plate

- ✓ a plate is affixed on the platform indicating the main instructions for use;
- the user must always keep the plate clean to ensure it can be consulted if necessary;

Symbol stickers regarding the risks and hazards present on board and during use

- the stickers present on the platform identify the main risks present during use.
- ✓ The user must always keep the stickers clean and visible.





## Potential risks in using the platform:

- ✓ crushing of the upper and lower limbs;
- shearing of the upper and lower limbs;
- √ danger of falling;
- √ danger of loss of equilibrium

# - WARNING -

Operators on the platform must be very careful when moving the platform: in order to avoid crushing of the upper limbs, they must not protrude hands and arms outside the platform.

Keep your hands resting on the handrail opposite the direction of the platform during its movement.

#### Sequence of operations necessary for opening the extendable platform

- The platform must be opened only when it is positioned on the ground on a stable horizontal surface.
- The platform opening operations must be performed by an operator using appropriate personal protection equipment.



✓ position the platform on a stable level surface;

✓ remove the two locking pins of the extendable sides present on the side walls of the platform;

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rotate the side walls through 90° to open them; keep the side walls open at 90° with respect to the original position; release the latch holding the platform floor, taking care to hold the surface vertically; √ hold the concealed handle present on the platform floor made of chequered plate by means of the hand, while holding the floor in the vertical position; lower the footboard all the way down. platform opening operation: completed;

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# Sequence of operations necessary for closing the extendable platform

- ✓ The platform must be opened only when it is positioned on the ground on a stable horizontal surface;
- ✓ The platform closing operations must be performed by an operator using appropriate personal protection equipment;
- Potential risks present in the operation:
  - Caution: risk of crushing upper and lower limbs.



✓ release the locking syste treading floor of the externance part of the platform;	em of the endable	
✓ lift and rotate the treadin by means of the concea handle provided on it;	g floor led	
✓ bring the treading floor to vertical position;	o the	
✓ block the treading floor of the position of the position of the check to ensure the treation of the retainer;  ✓ check to ensure the treation of the retainer;	ırpose; ding	

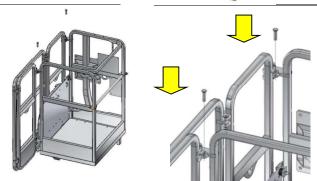
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close the surrounding structure of the extendable part of the platform;

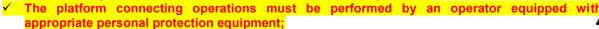


complete the closure of the surrounding structure of the extendable part of the platform inserting the two locking pins of the extendable side panels in the seats present on the side walls of the platform;



# Procedure for hooking the platform to the boom in positive position

✓ Only personnel qualified and trained for driving the forklift truck and using the various accessories provided on it must be allowed to connect the platform;





✓ position the platform on a stable level surface;



✓ bring the forklift truck near the platform, positioning the end part of the boom suitably to fit it in the hooking seat provided on the platform;



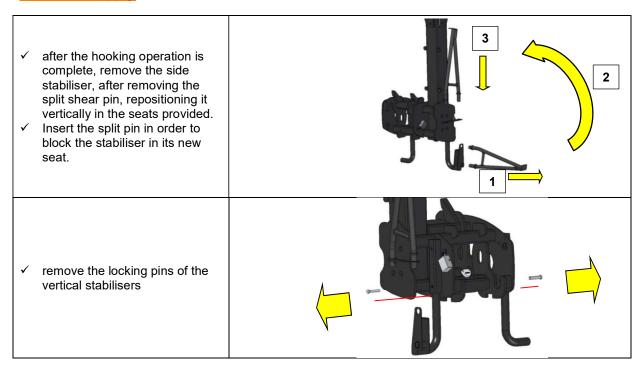
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✓ complete insertion of the terminal part of the boom into the seat for connection provided in the platform;
 ✓ align the hole present on the connecting flange of the boom with that present on the hooking structure of the platform;
 ✓ insert the retainer pin into the hole present on the connecting flange of the boom aligned with the hole present on the hooking structure of the accessory;

NOTE: the accessory locking shear pin must be that supplied for the purpose and restrained using the retainer chain. It is forbidden to use the shear pin included in the truck supply

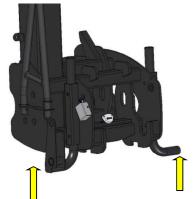




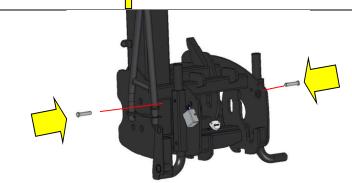
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✓ lift the stabilisers sliding them in their seats until the slots present on these are aligned with the slots of the blocking frame in order to insert the locking pins



✓ insert the locking pins of the vertical stabilisers



 proceed with hydraulic and electrical connection of the accessory.





✓ When the forklift truck starts up, the display shows the information regarding the accessory detected, with the descriptive text and photo.

If it is correct the operator

If it is correct, the operator must validate it by pressing the green button.

✓ Once the accessory is recognised, the software program for checking the safety parameters of the forklift truck is activated automatically.



If the accessory is not recognised, check the state of preservation of the signal transmitter present on the accessory and of the signal receiver present at the head of the boom. If there is no damage, contact the Magni Telescopic Handlers Assistance Service.

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# Procedure for hooking the platform to the boom in negative position

- ✓ Only personnel qualified and trained for driving the forklift truck and using the various accessories provided on it must be allowed to connect the platform;
- ✓ The platform connecting operations must be performed by an operator equipped with appropriate personal protection equipment;

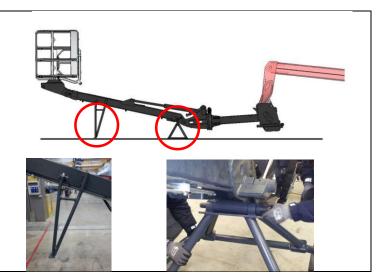


<b>✓</b>	Position the truck boom at rest, completely retracted and horizontal.	
<b>✓</b>	Extend the lift cylinder of the accessory until the latter is completely vertical.	
<b>✓</b>	Turn the accessory clockwise through 180° and align it to the telescopic boom of the forklift truck.	
<b>✓</b>	Slew the accessory in front.	

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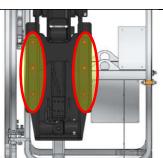


✓ At the ground, insert the two supporting bases to the TP structure and proceed with placing the accessory extending the telescopic boom in order to facilitate the successive unhooking steps.

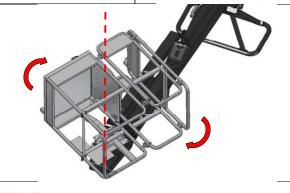


✓ To prepare the platform for negative use of the structure, unscrew the 6 screws present on the back near the coupling.





✓ Rotate the platform through 180°.



✓ Block the platform in position fitting the 6 locking screws removed earlier.



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- ✓ Remove the shear pin and then unhook the accessory without disconnecting the electrical/hydraulic connections.
- ▼ Take special care to avoid tearing the connections during the operations.

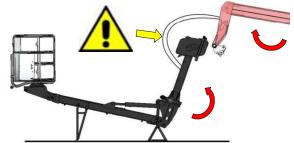






✓ Operate in steps and lift the accessory connector and forklift truck telescopic boom alternately taking special care to avoid tearing the connections during the operations.









✓ Reach the minimum height to allow hooking of the telescopic boom to the accessory then connect using the shear pin.









✓ When the hooking up operations are complete, remove the supporting bases of the accessory to avoid interference with the operating steps.



NOTE: the accessory locking shear pin must be that supplied for the purpose and restrained using the retainer chain.

<u>It is forbidden to use the shear pin included in the truck supply</u>

# Entry and exit of persons to and from the platform

Those operating onboard the platform must enter it through the safety gate provided for the purpose.

- ✓ lift the anti-fall bar present on the opposite side of the platform to allow entry of operators;
- ✓ release the bar so that it returns to its original position;



Potential risks present in the operation and checks to be conducted:

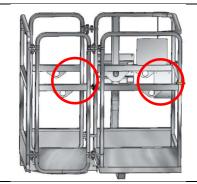
always check to ensure the correct position of the anti-fall bar after the operators have climbed on to the platform.

# Ensuring safety of those working onboard the platform

Those operating at a height inside the platform MUST use fall protection systems anchored to the platform structure.

The operators must anchor the end parts of the fall protection systems used to the various anchoring points present on the platform structure.

the operators must anchor the fall protection systems to the anchoring points present for the purpose on the platform structure;





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#### **Environmental conditions of use**

The platform must be used in the following environmental conditions:

- ✓ Operating temperature: min -15°C; max +45°C;
- It is forbidden to use the platform in potentially explosive atmospheres or where the use of explosion-proof machinery and components is prescribed (for example: refineries, oil pipelines, or in operating areas with ATEX limitations);



- ✓ Always assess the need for using an extinguisher on board, depending on the use of the platform in areas with potential risk of fire or limited by the legislation or regulations in force in the countries in which the equipment is used;
- ✓ The customer must assess the need for using the vehicle in heat or climatic conditions different from those specified above and contact our *Technical Assistance Service* for information or advice regarding all types of lubricants recommended for the different types of use.
- ✓ Check, in the platform lifting phase, to make sure the area has sufficient lighting;
- ✓ level the truck the maximum inclination of which must be within a maximum error less than ± 0.5° with respect to the horizontal line on the four sides;
- ✓ Ensure that there is no one near the machine or within the range of action of the machine;
- ✓ Ensure that there are no obstacles which can interfere with the platform;
- ✓ ensure that there are no overhead electricity lines in the work area and within the operating range of the platform;
- ✓ Make sure there are no electric cables deposited on the platform;
- ✓ Outsiders must be prevented from moving around in the work areas by means of warning signs and barriers in compliance with the regulations, provisions and laws on the matter of work safety established in the different countries in which the platform is used;
- ✓ prevent persons from passing under hanging loads;
- ✓ On sloping ground compensate the inclination of the working ground by means of stabilisers with level correctors specially provided to ensure a horizontal position of the platform.

## Instructions for maintenance of the platform

- ✓ Carefully read and understand all the Sections of this *Use and Maintenance Manual*;
- ✓ Position the platform on the ground and disconnect it from the forklift truck for carrying out all the maintenance operations;
- ✓ Use personal protective clothing and equipment for carrying out platform maintenance operations in accordance with the workplace safety laws in force in each country;
- Maintenance and maintaining the conformity of the forklift truck are binding for the operator's safety while driving and carrying out operations; the Manufacturer does not assume any responsibility in case of damage to persons or objects because of incorrect maintenance of the parts and apparatus which comprise the platform;
- ✓ Clean the platform and the parts concerned adopting all the precautions necessary to prevent liquids entering the electric and hydraulic connectors.
- ✓ Clean the platform to remove all trace of fuel, oil or grease.
- ✓ For all interventions that do not fall within routine maintenance, it is advisable to contact your agent or dealer
- ✓ Take special care during disposal of consumable materials and worn parts, checking to ensure it is done ecologically, with utmost safety.

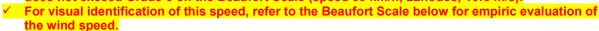






# Conditions of use of the platform in case of wind

✓ It is possible to use the platform as a drawbridge also in the presence of wind, as long as this does not exceed Grade 6 on the Beaufort Scale (speed 39 km/h; 22nodes; 10.8 m/s).





BEAUFORT WIND SCALE					
Force	speed (km/h)	wind type	speed (nodes)	speed (m/s)	wind effects
0	0-1	Calm	0 < 1	> 0,3	smoke rises vertically; sea surface mirror-like.
1	1-5	Light air	1 – 3	0,3 - 1,5	wind causes smoke to drift; ripples on water.
2	6-11	Light breeze	4 – 6	1,6 – 3,3	leaves rustle; small wavelets.
3	12-19	Gentle breeze	7 – 10	3,4 – 5,4	leaves and twigs constantly moving; large wavelets, crests begin to break.
4	20-28	Moderate breeze	11 – 16	5.5 – 7,9	the wind raises dust, dry leaves, small tree branches constantly moving; small waves becoming longer.
5	29-38	Fresh breeze	17 – 21	8 – 10,7	small trees in leaf begin to sway; small waves are formed in internal waters; waves become moderately longer.
6	39-49	Strong breeze	22 – 27	10,8 – 13,8	larger tree branches moving, whistling heard in the overhead wires; billows formed with white foamy crests and spray.
7	50-61	Near Gale	28 – 33	13,9 – 17,1	whole trees moving, resistance felt when walking against wind; sea heaps up, white foam streaks of breakers.
8	62-74	Gale	34 – 40	17,2 – 20,7	twigs breaking off trees, walking against wind becomes impossible, moderately high waves of greater length, edges of crests begin to break into spindrift.
9	75-88	Strong Gale	41 – 47	20,8 – 24,4	shingles and tiles blown off roofs, high waves, dense streaks of foam and spray, raised by wind may reduce visibility.
10	89-102	Storm	48 – 55	24,5 – 28,4	seldom experienced on land, trees uprooted, considerable damage to dwellings; very high waves with long overhanging crests.
11	103-117	Violent storm	56 – 63	28,5 – 32,6	rare, very severe devastation; enormous high waves, which can conceal medium sized ships; visibility reduced.
12	beyond 118	Hurricane	68 +	32,7 +	destruction of buildings, constructions etc.; foam and sprays in the seas reduce visibility to a very great extent.

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## Management of the platform controls

The extendable platform can be used after mechanically connecting the special connectors present on the boom and on the platform to the vehicle boom and making the electrical and hydraulic connections.

The platform, with personnel onboard, must only be used by means of the radio control positioned on the platform itself; all the movements performed from the driver's cab by the forklift truck driver are limited as regards height and extension of the boom to allow movements to allow connection of the accessory to the forklift truck boom when the latter is positioned on shelving or loading beds of transport vehicles.

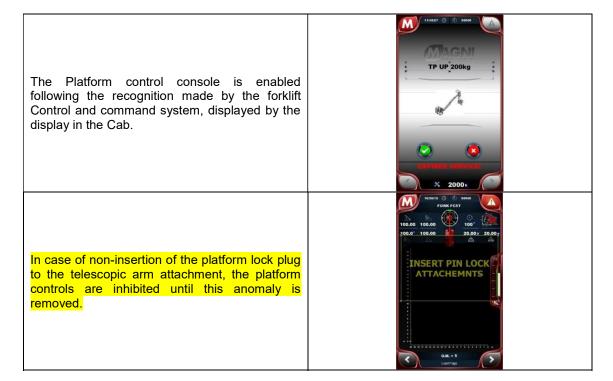
The limitations are as follows:

- ✓ maximum height of the end of the boom off the ground = 3 m;
- / maximum boom extension = 2 m;
- $\checkmark$  maximum angle of rotation of turret in relation to the axis =  $\pm$  5°.

Aspects concerning safe use of the platform:

- ✓ All the platform controls can be activated solely from the platform with the vehicle positioned on stabilizers;
- ✓ All the commands that can be activated from the cab can be used solely for movements involved in connection and disconnection of the platform;
- ✓ The platform cannot be used with personnel onboard if the forklift truck is not positioned on stabilizers.

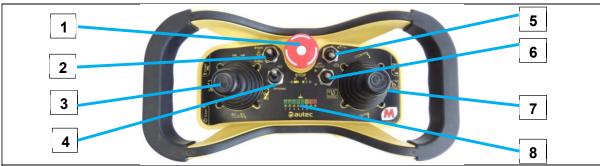
# **Enabling the platform commands**



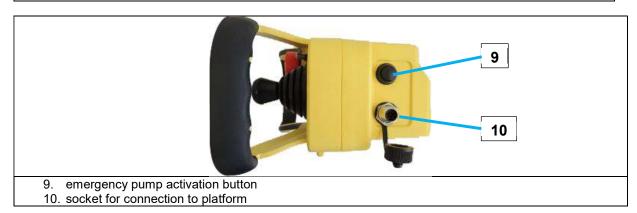
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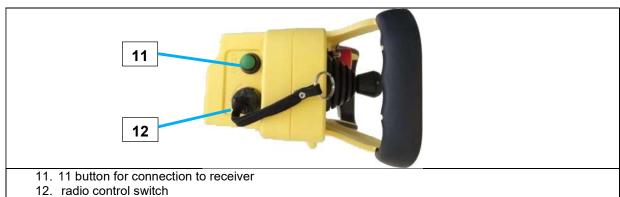


# Description of the platform control panel



- 1- EMERGENCY button
- 2- RPM button
- 3- Left joystick
- 4- TILT / OPTIONAL button
- 5- hare/tortoise button; its function is inhibited if the platform is present;
- 6- OPT.SELECT button for optional selection, fitted on the vehicle
- 7- Right joystick
- 8- load chart indication LED





## **Technical data**

Power supply (MBM06MH battery) Antenna Enclosure material Protection degree Dimensions Weight Autonomy (at 20 °C) NiMH 7.2 V internal PA 6 (20% fg) IP65 258 x 170 x 126 mm 1.3 kg 11 h

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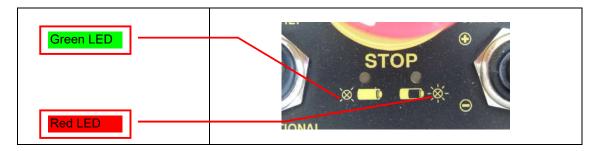
#### **Plates**

There are three plates on the receiver unit:

- Radio control identification plate: positioned in S-KEY and containing the serial number of the radio control;
- ✓ Transmitter unit identification plate positioned in the battery compartment and containing the year of manufacture and identification number of the transmitter unit;
- ✓ Technical data plate: positioned in the battery housing and containing the model, type and main technical data of the transmitter unit and the marking and brands of radio control, if any.

# Indicator lights present on control panel

The control panel has two LEDs; the green one to the LH and red one to the RH, and these provide certain information regarding the radio control.



The information provided is as follows:

the green LED is	meaning
Off	the transmitter unit is switched off
flashing slowly	the radio control is started up but there is no radio electric connection
flashes rapidly	the transmitter unit is ON and the radio-electric connection is present
the red LED is	meaning
Off	the transmitter unit works correctly
flashing	the battery is going flat
is On for 2 seconds	the transmitter unit does not work correctly
flashes once	when switched on the transmitter unit detects that the STOP button is activated or faulty
twice	when switched on the transmitter unit detects that a command between D2-D20 or SAFETY is active or is faulty
flashes three times	when switched on the transmitter unit detects that the battery is flat
flashes four times	when switched on the transmitter unit detects that a fault between A1-A8, L1-L8 e H1-H8 is active or is faulty

<sup>&</sup>lt;sup>a</sup> lighting of the red LED is accompanied by a warning sound

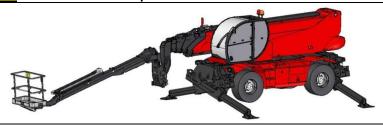
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b the signal is followed by the transmitter unit getting switched off



Activation procedure for using the FJS series radio control panel

- position the vehicle on stabilizers;
- ✓ level the truck with a maximum deviation of ±1° in relation to the horizon line on the four sides;



✓ apply the vehicle parking brake;





- start up the forklift truck and proceed with identification of the accessory;
- ✓ accessory selection buttons:







Every time the truck is switched on, to be able to proceed with the successive screen pages, the operator must always confirm the accessory mounted on the boom head: the operator must confirm the accessory using the **GREEN** " $\checkmark$ " button in order to synchronise the truck parameters and movements with the accessory mounted.

The same procedure is used to confirm absence of accessory.

If no accessory is fitted on the telescopic boom or if the accessory is identified incorrectly, the operator must select the **RED "X"** button on the display. In this condition the forklift truck operates in "transport" mode with limitations on boom and turret movements, until a solution is found for the problem.

 position the pushbutton panel on the support provided for the purpose on the platform;



 connect the connector present on the RH side of the pushbutton panel with the cable connector present on the platform;





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✓ switch on the radio control by means of the black switch present on the LH;



- connection of the radio control to the receiver present on the truck
  - a- press the green button (once) for identification of the radio-control by the system indicated by means of the vehicle horn;
  - press the green start button again to start up the forklift truck I.C. engine;



Once the sequence described has been performed correctly, the platform can operate with personnel on board.

## **Platform commands**

The joystick on the remote control handles:

- the left exclusively movements of the rotating part of the forklift and the telescopic arm,
- the right is the telescopic arm and the accessory mounted.

To select which moving structure it is necessary to act on the TILT / OPTIONAL selector: the TILT selection manages the commands to the trolley while the OPTIONAL selection manages the accessory commands.

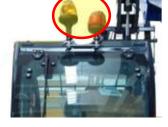
To control the different movements of the accessory, select the preset programs number 4, 5, 6 and 7 alternately using the appropriate selector **OPTIONAL SELECT**: forward to increase backwards to decrease





Above the numbered scale of the programs there is a colored LED scale which summarily shows the load status of the platform and the occurrence of the critical overload limit.

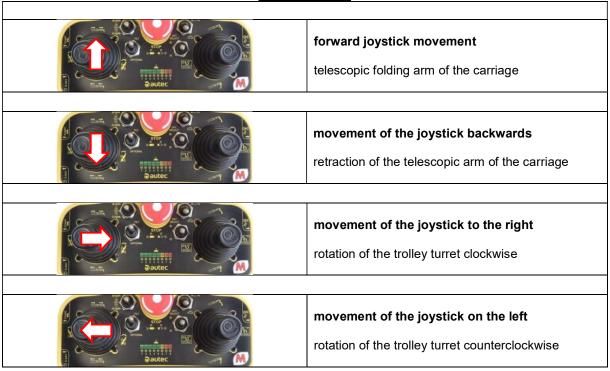
The exceeding of the maximum permissible load is signaled on the rack panel from the total lighting of the whole colored scale and externally from the machine by intermittent lighting of the red light placed above the cabin and assisted by the intermittent sound of the warning buzzer exceeding the load limits.



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# **Left Joystick**



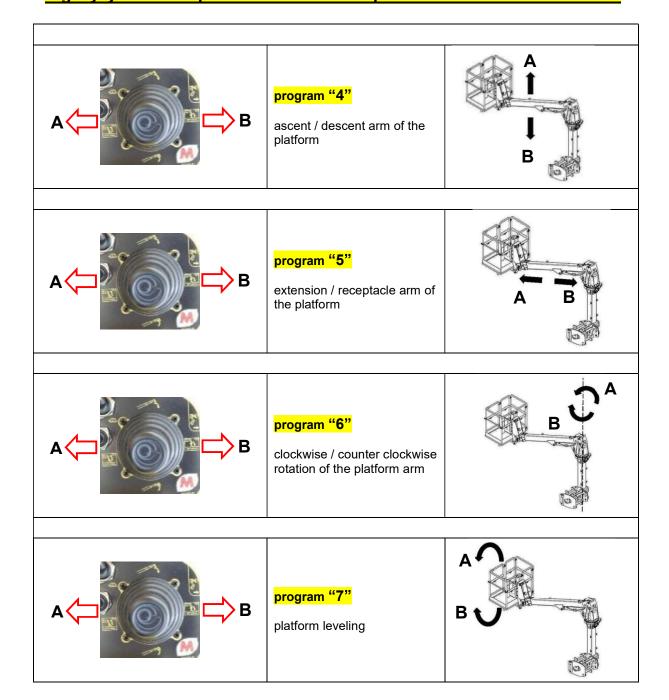
# Right Joystick - TILT selection

abutec M	forward joystick movement descent for the telescopic boom of the carriage
A DOMESTICATION OF THE PROPERTY OF THE PROPERT	movement of the joystick backwards climb for the telescopic boom of the carriage
Soutec	movement of the joystick to the right tilting equipment downwards;
Dautec Dautec	movement of the joystick on the left tilting equipment upwards;

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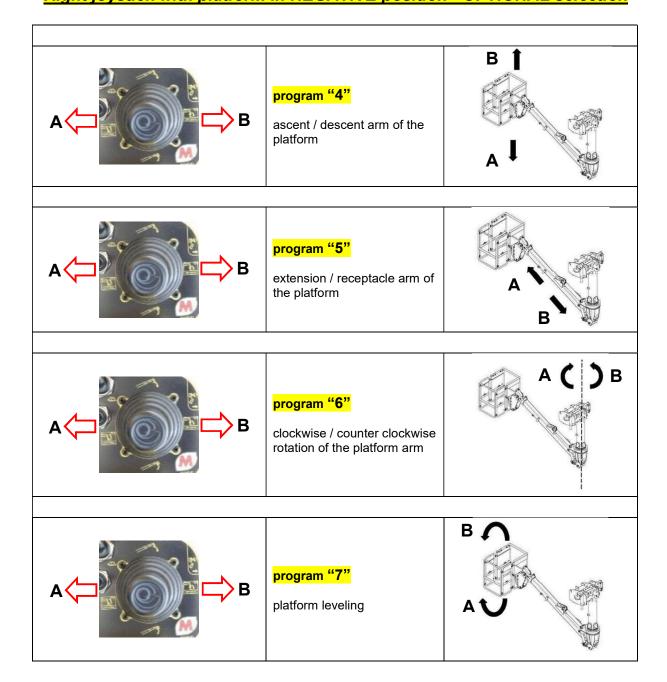
# Right joystick with platform in POSITIVE position - OPTIONAL selection



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# Right joystick with platform in NEGATIVE position - OPTIONAL selection



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# **Emergency button**

In situations of danger or occurrence, the operators present on the platform can use the red emergency button to stop all previously issued movements;

Press the emergency button: switch off the truck and block the movements.



## to make the emergency button operational, it is necessary to reset it;

- turn the button clockwise to reset it and make it operational again
- ✓ repeat the radio / trolley connection procedure as described above by pressing the green button for the first time to enable the connection; a second time to start the trolley's thermal engine.



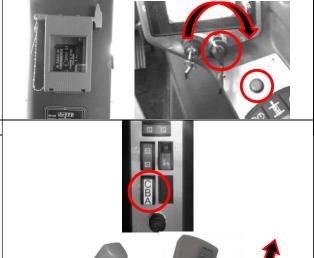
# Cabin command procedure

To enable the cabin controls, the radio remote control must be disconnected and the platform is not staffed on board unless the handling is due to emergency and recovery on board operators.

- take the recognizable key from the black plastic handle from the red box using the supplied hammer and insert it in the appropriate seat under the multifunction display, then rotate it and hold it in place,
- simultaneously press the red emergency button below;

# commands

- ✓ Use the "A-B-C" button on the right-hand panel to select the movement to be given to the platform:
- ✓ A for lifting / lowering,
- ✓ B for extension / return,
- ✓ C for rotation.
- ✓ The selected program is shown on the display with appropriate graphics
- Operate on the roller together with the pressed button to obtain the above movements



Once the emergency procedure has been completed, the operator must reposition the key inside the safety box and restore the protective glass.

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#### EMERGENCY PUMP USE

In the event of an emergency due to a problem with the heat engine or the hydraulic system, it is possible to allow the platform to descend to the ground by activating the emergency electric pump:



on the radio control



in the cabin

Once the emergency pump has been activated, the movement of the equipment is similar to that shown in the previous sections.

DO NOT USE THE EMERGENCY PUMP IF NOT FOR EXCLUSIVE MALFUNCTION OF THE HYDRAULIC SYSTEM.

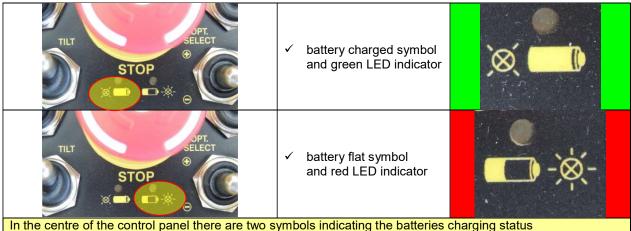
THE INSURED AND EXTENDED USE OF THE EMERGENCY POLPA CAUSES QUICK EXHAUSTION OF THE CHARGING LEVEL OF BATTERIES OF THE CART.

## Check status and battery replacement

The control console can only be used for radio transmissions if it is powered by the appropriate rechargeable batteries, which the appliance is equipped with.

It is necessary to recharge the batteries with an adequate frequency according to the hours of use of the console.

Only original batteries from the console manufacturer are permitted.



The centre of the control panel there are two symbols indicating the batteries charging status

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	ch	anging the radio-control batteries
✓	turn the radio-control over to access the battery (black) in the battery compartment;	
<b>✓</b>	push the battery to the RH of the radio-control pressing slightly and at the same time keeping a firm hold on the outer covering of the radio-control;	
✓	remove the flat battery from its seat;	
✓	place the flat battery in the battery charger.	

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