
***Instructions and warnings for safe use of the
accessory***



Operating instructions for the user

Introduction

Most of the accidents linked to use, maintenance and repair are due to failure to apply and follow the elementary safety standards. These accidents can be avoided by identifying the risks to which the user will be exposed and by taking the necessary precautions.

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

- ✓ Operations or movements not described in the Use and Maintenance Manual must be avoided; the person using methods other than those recommended must first ensure his own safety, the safety of others and correct handling of the equipment;
- ✓ The Manufacturer has designed the accessory accurately, with the help of appropriate tools and technologies to ensure its safety; however, it is difficult to assess all the work situations the fork carriage 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 on the matter of health and occupational safety in force in the country in which the equipment is used, associated with responsible use of the equipment, with the capacity of foreseeing and preventing potential danger situations generated by special logistic, climatic, visibility and health conditions of the conductor.
- ✓ **Failure to comply with the safety regulations listed in the Use and Maintenance Manual for the use and maintenance and repair of the accessory can result in serious accidents, sometimes even mortal.**



List of main risks and recommendations regarding the use of the fork carriage:

- ✓ Read the Use and Maintenance Manual carefully.
- ✓ Before using the fork carriage, ensure its compatibility with the forklift truck with which it is to be used.
- ✓ Operating temperature: **min -15°C; max +45°C;**
- ✓ Comply with the data indicated on the load charts. Do not attempt to lift weights exceeding those permitted on the load charts attached to the vehicle, under any circumstances whatsoever.
- ✓ If the lifting capacity of the accessory is different from that of the crane, take the lesser of the two as the maximum limit.
- ✓ **It is strictly forbidden to tamper with the safety devices provided on the accessory.**
- ✓ The fork carriage must not be modified to increase its lifting capacity.
- ✓ Keep the load low and with the telescopic boom completely retracted.
- ✓ Adjust the forklift truck speed to the ground conditions.
- ✓ Without load applied travel with the telescopic boom completely lowered and retracted.
- ✓ Avoid sudden movements while handling the load.
- ✓ **Do not use the forks near electricity lines; always keep at a safe distance of at least 5m from the lines, especially when they are powered or when their status is not known.**
- ✓ **Prevent the possibility of outsiders 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 forks are used.**
- ✓ Only transport loads that are properly balanced.
- ✓ The accessory must be lowered to the ground in a hazard-free area devoid of obstacles.
- ✓ Never leave the forklift truck parked with a raised load.
- ✓ Check the condition of the ground before using the crane with the accessory.
- ✓ The operator must stop using the forks if visibility and lighting conditions are poor.



Do not use the forks in specially adverse weather conditions (rain storms in the presence of lightning).



Conditions for using the forks in case of wind

- ✓ The forks also be used as if wind is present, provided it does not exceed Grade 6 of the Beaufort Scale (speed 49 km/h; 22 nodes; 13.8 m/s);
- ✓ For visual identification of this speed, refer to the Beaufort Scale below for empiric evaluation of the wind speed.



BEAUFORT WIND SCALE					
Force	wind type	speed (km/h)	speed (nodes)	speed (m/s)	wind effects
0	Calm	0-1	0 < 1	> 0.3	smoke rises vertically; sea surface mirror-like.
1	Light air	1-5	1 – 3	0.3 - 1.5	wind causes smoke to drift; ripples on water.
2	Light breeze	6-11	4 – 6	1.6 – 3.3	leaves rustle; small wavelets.
3	Gentle breeze	12-19	7 – 10	3.4 – 5.4	leaves and twigs constantly moving; large wavelets. crests begin to break.
4	Moderate breeze	20-28	11 – 16	5.5 – 7.9	the wind raises dust, dry leaves, small tree branches constantly moving; small waves becoming longer.
5	Fresh breeze	29-38	17 – 21	8 – 10.7	small trees in leaf begin to sway; small waves are formed in internal waters; waves become moderately longer.
6	Strong breeze	39-49	22 – 27	10.8 – 13.8	larger tree branches moving, whistling heard in telegraph wires; whitecaps on the sea surface and spray.
7	Near Gale	50-61	28 – 33	13.9 – 17.1	whole trees moving, resistance felt when walking against wind; sea heaps up, white foam streaks of breakers.
8	Gale	62-74	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	Strong Gale	75-88	41 – 47	20.8 – 24.4	shingles and tiles blown away; high waves, dense streaks of foam and spray, raised by wind reduce the visibility.
10	Storm	89-102	48 – 55	24.5 – 28.4	seldom experienced on land, trees uprooted, considerable damage to dwellings; very high waves with long overhanging crests.
11	Violent storm	103-117	56 – 63	28.5 – 32.6	rare, very severe devastation; enormous high waves, which can conceal medium sized ships; visibility reduced.
12	Hurricane	beyond 118	68 +	32.7 +	destruction of buildings, constructions etc.; foam and sprays in the seas reduce visibility to a very great extent.

Instructions for using the forks

Positioning and hooking the fork carriage to the boom

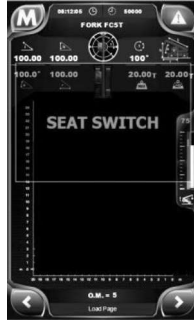
- ✓ Only personnel qualified and trained for driving the forklift truck and using the various accessories provided on it must be allowed to connect the fork carriage to the vehicle.
- ✓ The accessory connecting operations must be performed by an operator provided with appropriate personal protection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



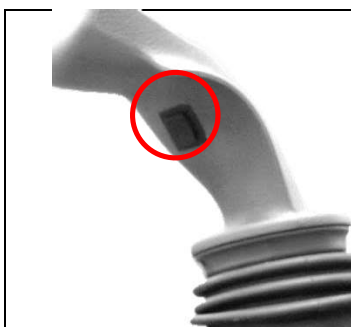
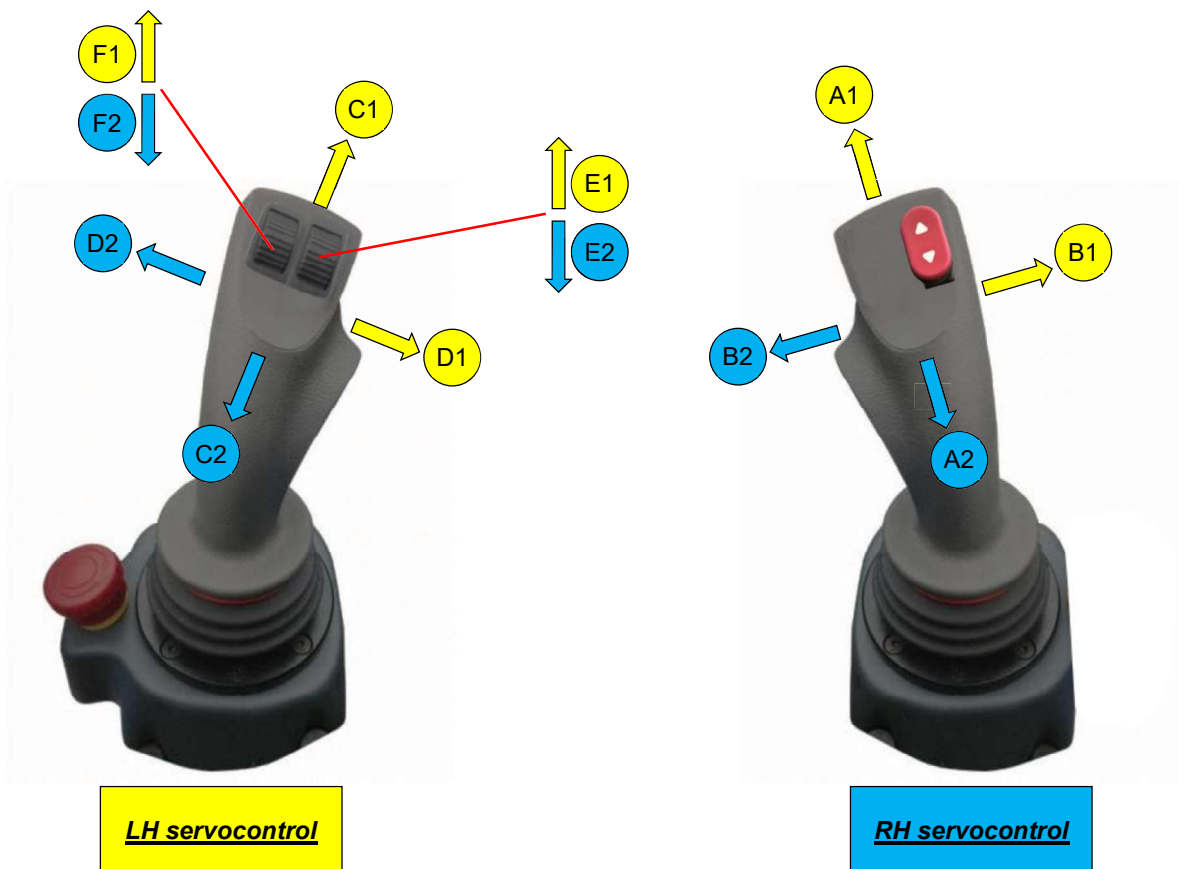
<ul style="list-style-type: none"> ✓ position the fork carriage on a stable level surface; ✓ bring the head of the telescopic boom perpendicular to the accessory in a position suitable to be able to enter the hooking seat; 	
<ul style="list-style-type: none"> ✓ Insert the quick-coupling pins in the seat in the accessory, ✓ slew the quick-fit coupling until it is coupled perfectly with the accessory, 	
<ul style="list-style-type: none"> ✓ insert the locking pin and secure it using the shear pin 	
<ul style="list-style-type: none"> ✓ 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 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. 	
<p style="background-color: red; color: yellow; padding: 5px;">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.</p>	
<p>For accessory models equipped with forks hydraulic positioner</p> <ul style="list-style-type: none"> ✓ insert the quick-release couplings of the hydraulic system of the accessory in the connectors present at the head of the telescopic boom; ✓ <u>to make the operation easier, discharge the hydraulic circuit of the truck by acting on the joystick roller, inside the cab, with the engine switched On without pressing the enable button.</u> 	

Controlling the commands of the accessory from the RTH cab

The accessory, like the entire vehicle, can only be operated by the operator sitting correctly in the cab. If this condition is not present, all the commands imparted are inhibited and this fault is signaled by means of a flashing light on the control panel on the side of the seat.



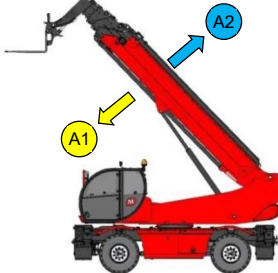
Description of the control from the cab

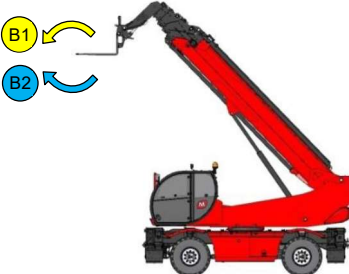


Inside the grip of each servo control there is a button with the **“movement enable”** function: press this button to impart a command to the forklift truck or accessory attached. Absence of the procedure is displayed on the control panel.

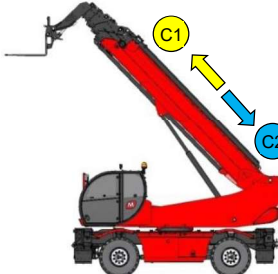


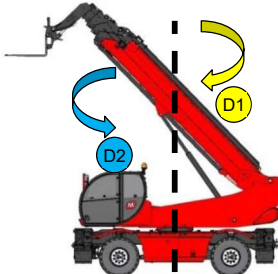
RH servocontrol

<p>A1: tilt the lever forwards to lower the telescopic boom.</p> <p>A2: tilt the lever backwards to raise the telescopic boom.</p>	
----------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

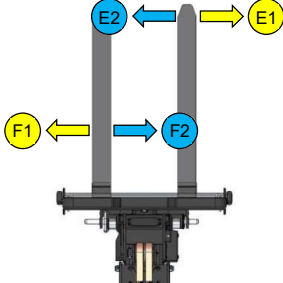
<p>B1: tilt the lever to the RH to slew the accessory downwards.</p> <p>B2: tilt the lever to the LH to slew the accessory upwards.</p>	
---------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

LH servocontrol

<p>C1: tilt the lever forwards to activate extension of the telescopic boom.</p> <p>C2: tilt the lever back to retract the telescopic boom.</p>	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

<p>D1: tilt the lever to the RH to rotate the forklift truck turret clockwise.</p> <p>D2: tilt the lever to the LH to rotate the forklift truck turret counter-clockwise.</p>	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Movements for accessories provided with hydraulic KIT

<p>E1: turn the roller forwards to move the RH fork outwards</p> <p>E2: turn the roller backwards to move the RH fork inwards</p> <p>-----</p> <p>F1: turn the roller forwards to move the LH fork outwards</p> <p>F2: turn the roller backwards to move the LH fork inwards</p>	
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Description of the accessory controls by radio control



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

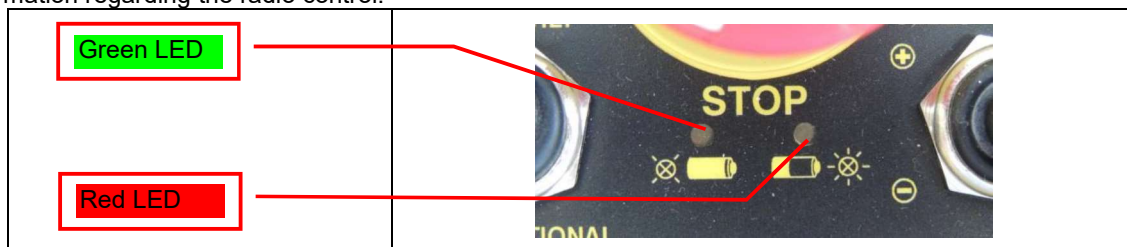
Plates

There are three plates on the transmitter unit:

- ✓ Radio control identification plate:
positioned in S-KEY and indicating the serial number of the radio control;
- ✓ Transmitter unit identification plate:
positioned in the battery compartment and indicating the year of manufacture and identification number of the transmitter unit;
- ✓ Technical data plate:
positioned in the battery housing and indicating 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 the control panel

The control panel has two LEDs; the green one to the LH and red one to the RH, and these provide 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 ^a	meaning
Off	the transmitter unit works correctly
flashing	the battery is going flat
is On for 2 seconds ^b	the transmitter unit does not work correctly
flashes once ^b	when switched on the transmitter unit detects that the STOP button is activated or is faulty

^a the red LED lights up and is accompanied by a warning sound

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

Controls present on the radio control

1		5
2		6
3		7
4		8
<ol style="list-style-type: none"> 1. RPM switch 2. tilt-optional switch 3. joystick 4. load chart indication LED 5. emergency stop button; 6. Hare/Tortoise button 7. OPT-SELECT button for selecting operation of accessories with greater degree of freedom; 8. joystick. 9. button for frequency connection, 10. radio control switch, 11. emergency pump activation button, 12. socket for overhead platform wiring connector, 		





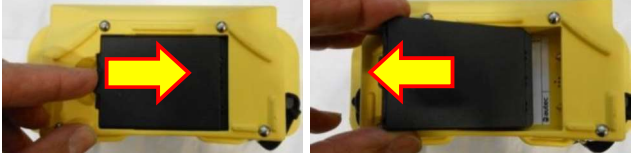

1	RPM switch	
The switch makes it possible to increase or decrease the I.C. engine speed		
2	tilt-optional switch	
✓ tilt position	the button enables slewing of the accessory	
✓ optional position	inhibited	
3	LH joystick	
lever tilted to the LH: sideshift of the telescopic boom to the LH lever tilted to the RH sideshift of the telescopic boom to the RH		
lever tilted upwards telescopic boom extension command lever tilted downwards telescopic boom retraction command		

4	Load diagram indication LED	
The colour LEDs are activated according to the load acting on the accessory and its position, simulating the forklift truck load chart;		
<ul style="list-style-type: none"> ✓ The green LEDs identify a situation under control; ✓ The yellow LED identifies a pre-alarm situation; ✓ The red LEDs identify an alarm situation because of excessive loads. 		
5	Emergency button	
In an emergency situation, the movement of the truck can be stopped immediately by pressing the red button at the centre of the radio control.		
<ul style="list-style-type: none"> ✓ press the emergency button; 		
to make the emergency button operative, it must be reset;		
<ul style="list-style-type: none"> ✓ turn the button clockwise to reset it and make it operative again after use; 		
6	Hare/Tortoise switch	
<ul style="list-style-type: none"> ✓ Hare position 	The movements activated from the forklift truck by means of the control panel are made at standard speed	
<ul style="list-style-type: none"> ✓ Tortoise position 	The movements activated from the forklift truck by means of the control panel are made at a speed half that of the hare position	
7	OPT/SELECT switch	
Controls the optional functions of the accessory: <u>switch for using the fork carriage.</u>		
8	RH joystick	
lever tilted to the LH <ul style="list-style-type: none"> ✓ TILT/OPTIONAL switch in TILT position: slewing the accessory upwards; ✓ TILT/OPTIONAL switch in OPTIONAL position: the forks come close; lever tilted to the RH <ul style="list-style-type: none"> ✓ TILT/OPTIONAL switch in TILT position: slewing the accessory downwards; ✓ TILT/OPTIONAL switch in OPTIONAL position: the forks move apart; 		
lever tilted upwards <ul style="list-style-type: none"> ✓ telescopic boom descent lever tilted downwards <ul style="list-style-type: none"> ✓ telescopic boom ascent; 		

Checking the state and replacing the batteries



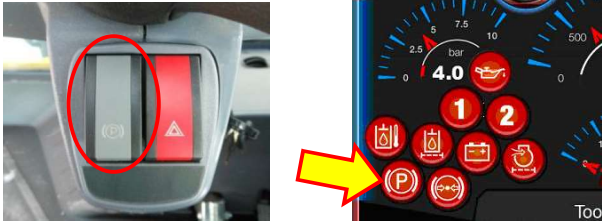



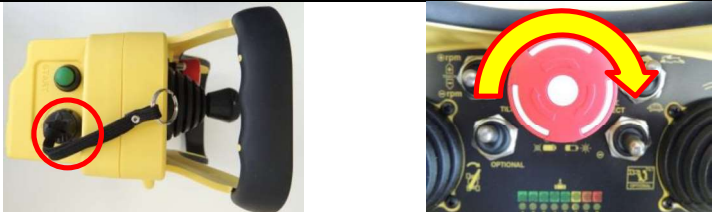

The control panel can work for transmissions via radio only if powered by special rechargeable batteries included in the supply.

The batteries must be recharged at suitable frequency depending on the number of hours the panel is used. Use only original batteries from the panel manufacturer.

indication of the status of the batteries		
In the centre of the control panel, there are two symbols indicating the state of the battery charge flanked by a green LED (batteries charged) and a red LED (batteries flat).		
	<p>✓ battery charged symbol and green LED indicator</p>	
	<p>✓ battery flat symbol and red LED indicator</p>	
Changing the radio-control batteries		
<p>✓ push the battery to the opposite side of the cavity then lift and take it out,</p>		
<p>✓ place the flat battery in the battery charger.</p>		

Activation procedure for using the radio control panel

With the accessory already connected to the forklift truck, proceed as follows:

<ul style="list-style-type: none"> ✓ start up the vehicle and confirm the accessory, 	
<ul style="list-style-type: none"> ✓ position the vehicle on stabilizers; 	
<ul style="list-style-type: none"> ✓ check to make sure the reverse gear lever is in the NEUTRAL position, ✓ apply the vehicle's parking brake by pressing the button under the steering wheel, ✓ check to make sure the indicator concerned lights up, 	
<ul style="list-style-type: none"> ✓ activate the forklift truck connection with the radio control by pressing the button provided for the purpose on the "Stabilisers page" or "Commands page" 	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Stabilisers page</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Commands page</p> </div> </div>
<ul style="list-style-type: none"> ✓ switch on the radio control by turning the key on the LH, ✓ make sure the red emergency button is not locked in the safety position: check by rotating it clockwise. 	
<ul style="list-style-type: none"> ✓ press the green button (once) for recognition of the radio-control by the system; ✓ when the connection has been made the vehicle horn makes a warning sound; 	
<p>The radio-control is now operative.</p>	

When the connection between the radio control and forklift truck is interrupted by pressing the red emergency button (of the vehicle or of the radio control) to reactivate it:

- 1- reset the red mushroom-shaped button by rotating it counter-clockwise,
- 2- press the green button of the radio-control once to reactivate the radio control/forklift truck carriage connection, signalled acoustically by means of the vehicle horn,
- 3- press the green button of the radio control again to activate the I.C. engine of the vehicle, signalled acoustically by means of the vehicle horn.

The radio-control is now operative.