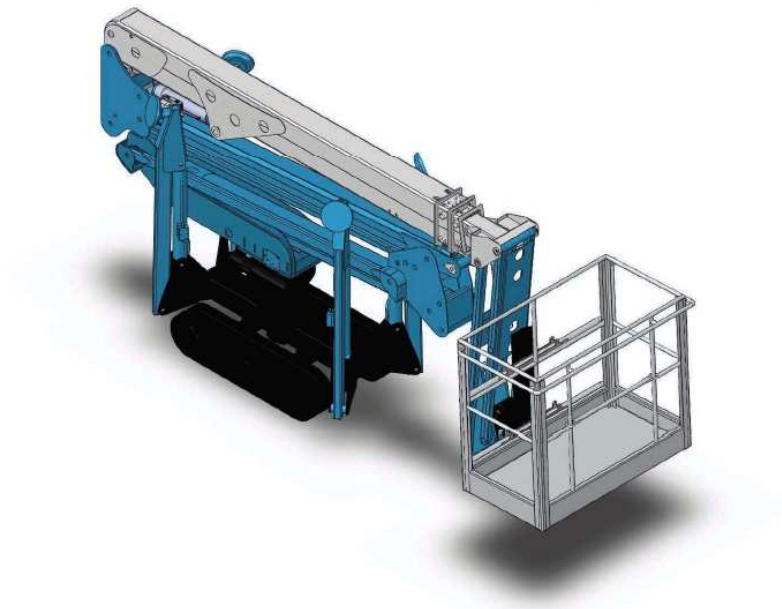


**RUTHMANN**  
professionals at work

## ***AERIAL WORK PLATFORM***

**Model:**

- SA18
- SA18HB



### **WARNING**

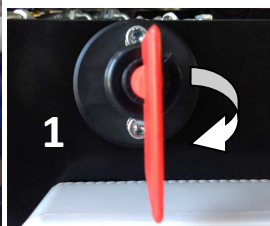
This QUICK USE MANUAL has been written with the purpose of making the first approach simpler to the RUTHMANN Bluelift products. In this manual RUTHMANN ITALIA S.r.l. are exemplified with images and short message the different phases of use of the aerial work platform from the engine starting to the stabilization and lifting.

It is important remember that this manual is not substitutive of the "USE AND MAINTENANCE MANUAL" issued with the aerial work platform. An improper use of the machine can cause serious injuries or death. The operators and maintenance staff must read the Use and Maintenance manual before using the machine and before making any maintenance operation.

Keep this manual near the machine so that it can be consulted at any time or periodically by people who need to be familiar with it.

## ORIGINALE

## 1. STARTING



For starting the platform:

- turn the red key (1) to connect the battery
- put the starting key (2) on "ON".



For activating the remote control:

- check that the red emergency button is not pushed
- Turn the selector (3)
- Push the green button (4) for linking the remote control to platform; **a long sound confirms the link of remote control with the machine.**

If the remote control is active and linked to platform, the below led blinks slowly and green:



If the led blinks quickly and green, it means that the remote control is active but not linked to platform.

If led blinks quickly and alternatively green/red, it means that the level of remote control battery is low or a joystick or switch is in error.

If the aerial platform has a Honda iGX390 engine or HATZ 1B40 Diesel engine as optional, it is enough turn the engine ignition key on position 1 (see picture) and start the engine by the specific switch on remote control

HONDA iGX390



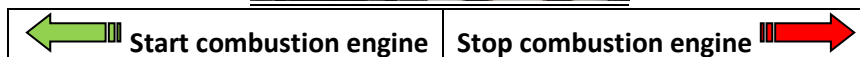
HATZ 1B40 Diesel (optional)



## CARING FOR THE ENVIRONMENT

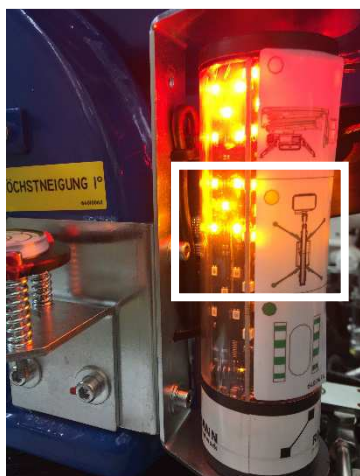
**We recommend that you take the engine speed to the maximum only if necessary; in general, it is sufficient to maintain an average engine speed.**

## ORIGINALE



The orange led on chassis is on when the control of lower part of platform is activated and there are the following conditions for controlling the outriggers:

- boom in rest position,
- the crawler/outriggers functions are active on remote control,
- there isn't any malfunctioning of platform that could block all outrigger functions (.. as breakdown of a microswitch on stabilizer). In case of a malfunctioning the led is off and an alarm message appears on the display of remote control. If the malfunctioning causes the block of only a part of lifting movements, the white led continues to be on. If led is off and there isn't any alarm message on display, the operator has to check the previous conditions.



The **ORANGE LED is ON** when the control of lower part of platform is activated and there are the following conditions for controlling the outriggers:

- boom in rest position,
- the crawler/outriggers functions are active on remote control,
- there isn't any malfunctioning of platform that could block all outrigger functions (.. as breakdown of a microswitch on stabilizer). In case of a malfunctioning the led is off and a alarm message appears on the display of remote control. If the malfunctioning causes the block of only a part of lifting movements, the white led continues to be on. If led is off and there isn't any alarm message on display, the operators has to check the previous conditions.

## MOVING the MEWP (TRANSLATION)



Operate the two levers from the remote control backwards and forwards simultaneously to obtain translation movement in one direction or the other; by operating the levers individually, the machine may be steered – this steering may be accentuated by carrying out a counter-rotation of the other track.

The handles on remote control contains a safety touch sensor. Only if the operator has the remote control in his hands, the touch sensors activate the crawler driving function and the green led "Crawler Activate" is on:

## ORIGINALE



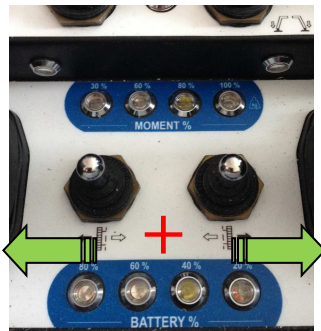
The SA18/SA18HB is fitted with the **TRACK DOUBLE SPEED SYSTEM**: after 5 second that you are moving the track in forward or backward direction, the system starts the double speed on the track, only if the machine is on a plane floor. When the inclination of the floor changes (ex. on a ramp or on a slope) or the operator turns the platform left or right direction, automatically the system reduces the speed.

**NOTE: Operate at safety distance from the machine.**

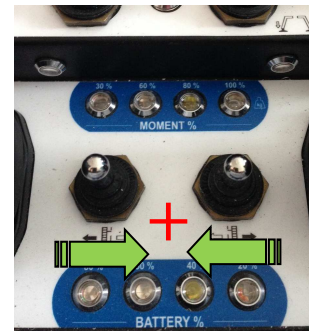
## WIDTH ADJUST CRAWLER SYSTEM (OPTION)

The model SA18/SA18HB could be supplied with a CRAWLER WIDTH ADJUSTING SYSTEM as option. It is possible to modify the width of the crawler moving from a minimum width of 0,78 m to a maximum width of 1,1 m. Move leftward or rightward the specific switches in the same time for extending/reduce the track width.

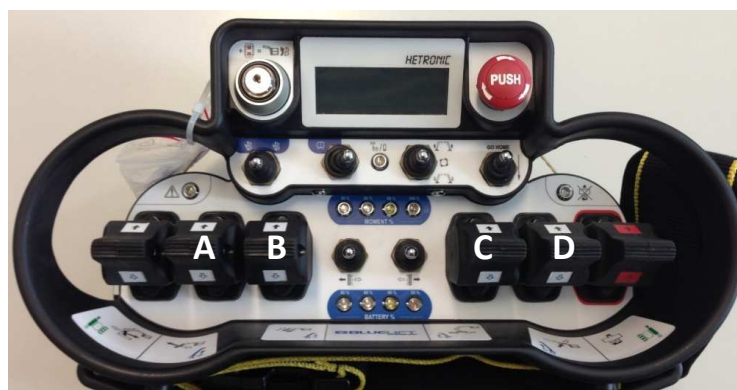
**- EXTEND THE TRACK WIDTH:**



**- REDUCE THE TRACK WIDTH:**



## MACHINE STABILIZATION



The control of outriggers is proportional and the speed of movement could modulate by the pressure on corresponding joystick. If two or more stabilizers are activated in the same time, the system operates with the maximum speed.

Moving down the switch of the stabilizers (A, B, C, D) from the radio-control, the stabilizers go down lifting the carriage from the field. When the stabilizers are on the ground, the corresponding pictographs appear on display to indicate that they are operating correctly. If there is the image, the stabilizers are firmly on the ground; if one of these pictographs is not on display, this indicates that the stabilizer is not positioned correctly.



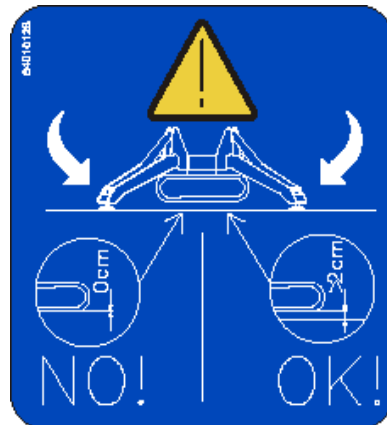
## ORIGINALE



**There are three phases to stabilize the machine correctly:**

1. Lower the four stabilizers towards the ground
2. Simultaneously lift the two stabilizers that are on the downhill side
3. Simultaneously lift the two stabilizers on the opposite side until the machine is level

**N.B:** Verify the right levelling of machine looking the optical level placed on the turret.



**WARNING: It is important lift the crawlers from the field also for few centimetres**

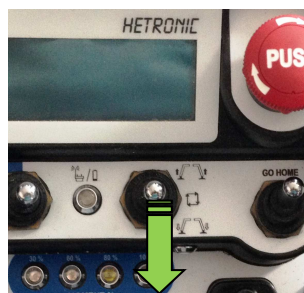
For a correct stabilization, you should always lift the tracks from the ground even if for few centimeters. When the platform is stabilized, the contact of the tracks with the ground results in a reduction of the stability of the platform.



**ATTENTION: THIS COULD BE CAUSE OF SERIOUS OR FATAL INCIDENT.**

### SELF STABILIZING - DESTABILIZING SYSTEM

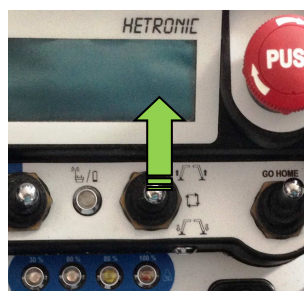
#### - Automatic Stabilization:



When the automatic stabilization is activated, the buzzer sends an intermittent sound until the moment in which the system calculates the good levelling position. In this situation, the buzzer sends a continuous sound. Continue the same procedure to reach the wanted levelling and height of carriage from the field.

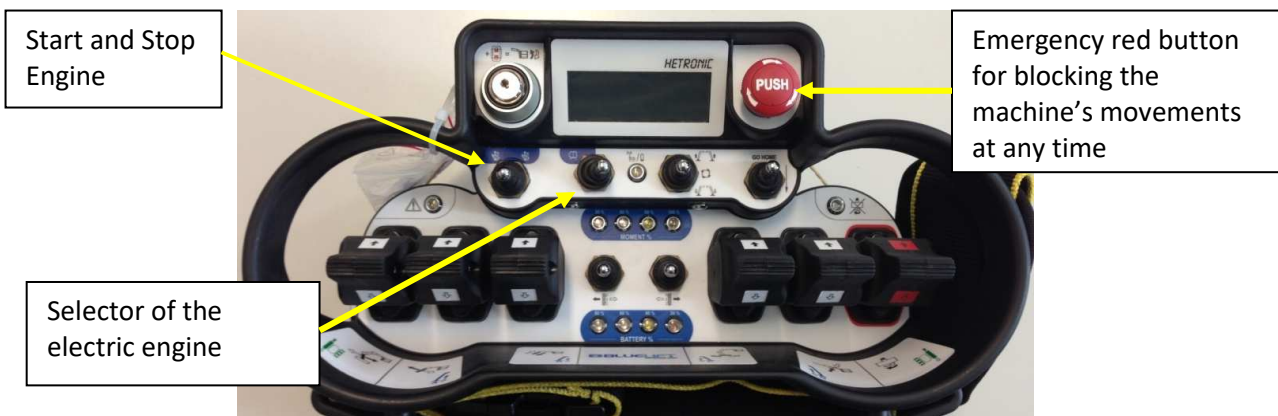
**NOTE:** Verify the right levelling of machine looking the optical level placed on the turret.

#### - Automatic Destabilization:



## ORIGINALE

## LIFTING MOVEMENTS from BASKET



Place the remote control on basket case. A magnetic sensor automatically switch the function of remote control from Chassis/outriggers controls to Boom Lifting controls. On the display appears the following message "BOOM FUNCTION"



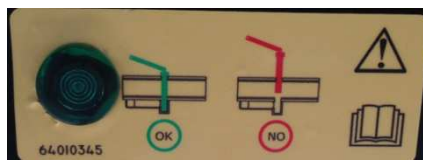
The **RED LED is OFF** when the control of upper part of platform is activated and there are the following conditions for lifting the booms:

- platform is stabilized and chassis is levelled,
- the lifting functions are active on remote control,
- there isn't any malfunctioning of platform that could block all boom functions (.. as breakdown of a safety sensor). In case of a malfunctioning, the led is off and a alarm message appears on the display of remote control. If the malfunctioning causes the block of only a part of lifting movements, the white led continues to be on. If led is off and there isn't any alarm message on display, the operators have to check the previous conditions.



Before operating the machine, ensure that basket is fixed with the safety pivots.

If both pivots are correctly placed, the green lamp is on and the platform is active. If they are not correctly placed, the green lamp is OFF and the platform is not active.




## ORIGINALE



IT IS STRICTLY FORBIDDEN TO USE THE PLATFORM IF THE BASKET IS NOT SECURED WITH ALL SAFETY PIVOTS.

Below, you can read the different functions of each joystick:

					
1	Joystick	Control lower boom	↓ lowers	↑ lifts	
2	Joystick	Control main boom	↓ lowers	↑ lifts	
3	Joystick	Control outreach	↓ extract	↑ retract	
4	Joystick	Control turret rotation	↓ anticlockwise rot.	↑ clockwise rot.	
5	Joystick	Control jib	↓ lowers	↑ lifts	
6	Joystick	Control basket rotation	↓ anticlockwise rot.	↑ clockwise rot.	

#### "MAX OUTREACH" LED



These led indicate the progressive outreach

**When the operator reach the maximum outreach, all leds are on flashing and simultaneously starts a sound alarm**

#### AUTOMATIC CENTER POSITION OF TURRET

Before closing the machine for the transport, it is necessary to put the turret in the centre position. When operator turns the turret and it arrives closed to the centre position, the software stops automatically the rotation for few second, giving the signal that it is possible to lower booms for rest. Otherwise if you want to continue the rotation, move the joystick rightward or leftward.

When the turret is in centre position, on the display of remote control is showed the below pictograph:



When the boom is in rest position but the turret is not in center position, the white led is on and the orange led flashes.

#### AUTOMATIC START & STOP of engine



On the Bluelift Spiders, it is possible to active the **Automatic Function of "Start & Stop" of the petrol engine** for optimizing the consumption of the petrol and the pollution.

During your working, if you don't make any movement after 30-40 sec. the system switch off the engine automatically; but it is enough to move again a joystick on the basket control box for starting again the engine.

If you switch off the engine by the ON/OFF switch placed on the remote control, you deactivate this function.



## ORIGINALE

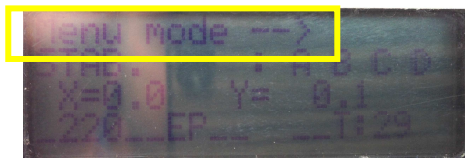
When this function is active, on the display of the radio control there is the message "S & S":



The procedure for activating/deactivating this function is:



**1- push for 3 sec both black buttons** on the left side of the radio control for going in "MENU MODE":



**2- push the green button** on the right side of remote control for entering in the menu;



**3- push one of this black button** until you see the page START&STOP

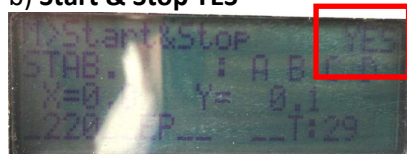


**4- push the green button** on the right side of remote control for entering activating or deactivating the Automatic START&STOP:

a) **Start & Stop NO**



b) **Start & Stop YES**



**5- push again for 3 sec both black buttons** on the left side of the radio control for returning on the standard visual display:





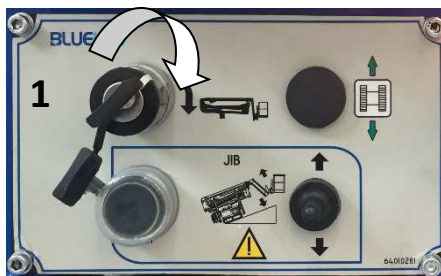
## ORIGINALE

## LIFTING MOVEMENTS from GROUND and BASKET LEVELING PROCEDURE

On each Bluelift model, it is possible to control the lifting movement from remote control on ground only for emergency procedure and without people on basket.

Procedure:


1 - turn the key-operated spring selector switch (1) down on boom imagine for having the lift function on remote control from the ground



2 - on remote control appears the following message "BOOM FUNCTION"



3 - Operate the joystick from the remote control backwards and forwards for making the needed movement.

					
1	Joystick	Control lower boom	↓ lowers	↑ lifts	
2	Joystick	Control main boom	↓ lowers	↑ lifts	
3	Joystick	Control outreach	↓ extract	↑ retract	
4	Joystick	Control turret rotation	↓ anticlockwise rot.	↑ clockwise rot.	
5	Joystick	Control jib	↓ lowers	↑ lifts	
6	Joystick	Control basket rotation	↓ anticlockwise rot.	↑ clockwise rot.	



**ATTENTION: THE SPEED OF MOVEMENTS BY REMOTE CONTROL ON GROUND IS LOW.**

- Turn down again the key-operated spring selector switch (1) for returning the chassis/outriggers controls on the remote control.

**IMPORTANT: if you switch off the machine or push the emergency red bottom, when you restart again the platform, automatically the software activates the control of chassis/outriggers.**

## BASKET LEVELLING CORRECTION

After long periods of inactivity, it could be necessary to correct the position of the basket before starting to work. This procedure may be carried out without people and material in the basket.

If you need to correct the leveling of the basket, follow this procedure:

1. stabilize the platform
2. turn the key-operated spring selector switch (1) down on boom imagine for having the lift function on remote control from ground

## ORIGINALE



3. lift the main boom for having approximately an angle of 2°
4. Turn the Basket leveling Key selector placed on remote control and simultaneously move up or down the basket joystick (red) until you have corrected the level of the basket



**!!! DURING THIS PROCEDURE THE MOVEMENT IS VERY SLOW!!!**



**ATTENTION: CARRY OUT THE CORRECTION OF THE BASKET LEVELLING WITH CARE AND WITHOUT PEOPLE AND MATERIAL IN THE BASKET.**



**ATTENTION: IT IS OBLIGATORY TO LEVEL THE BASKET BEFORE TO USE THE PLATFORM.**



**ATTENTION: NOT MOVE ANY BOOMS IF THE BASKET IS NOT WELL LEVELLED; THIS COULD CAUSE DAMEGES ON LEVELLING CYLINDERS.**

## 2. OPERATION WITH ELECTRIC MOTOR

Before using the machine with the electric motor do the following:

- 1) Check that the required voltage and frequency are correct (220V – 50Hz) (optional 110V);
- 2) Check that the power supply cable is in good condition;
- 3) If you use an extension cord, ensure that it is suitable, in good condition and that its cross-section is greater than that of the power supply cord to prevent it from overheating;
- 4) Place an earthing device into the ground and connect it to the frame of the machine or connect the machine to a suitable earth network if you are working inside buildings.

To connect to the mains use a three-way cable with a cross-section of 3\*1.5mm<sup>2</sup> that is not greater than 10m in length. For a cable with a cross-section of 3\*2.5mm<sup>2</sup> you can use a 20m cable.

Procedure:

- 1- Fit the plug into the socket (1)



## ORIGINALE

- 2- On display of remote control appears the symbol 220. This confirm that platform is connected to the 220V main network



- 3- Select the electric pump by specific switch on remote control



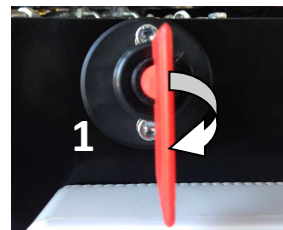
- 4- On display of remote control appears the symbol EP.  
This confirms that the electric motor is selected.



- 5- Act on the joystick of function that you would like to operate and automatically the electric pump starts

When the start battery of combustion engine has a value lower of 12V, on the display of remote control appears the message "12 V BATTERY EMPTY" and so it is necessary to recharge the battery.

If the 220V plug is fitted into the socket, turn the red key (1) down to connect the battery and the starting key (2) on OFF; the system recharges the start battery.



### 3. OTHER FUNCTION FROM REMOTE CONTROL

- A - **COURTESY LIGHTS:** push the below button for activating the curtesy lights on remote control



- B - **SELECTION OF LANGUAGES:** it is possible to choose the language of messages that should appear on display. The possible languages are English (EN), Italian (IT), German (DE), French (FR) and

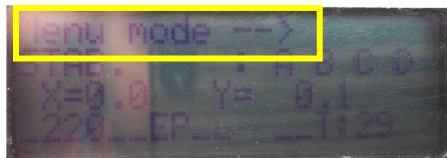


## ORIGINALE

Spanish (ES). For selecting the languages follow this procedure:



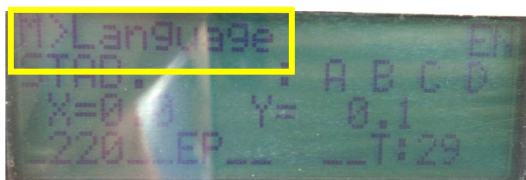
**1- push for 3 sec both black buttons** on the left side of the radio control for going in "MENU MODE":



**2- push the green button** on the right side of remote control for entering in the menu;



**3- push one of this black button** until you see the page LANGUAGE



**4- push the green button** on the right side of remote control for selecting one of the 5 Language (EN, IT, DE, FR, ES):



**5- push again for 3 sec both black buttons** on the left side of the radio control for returning on **the standard visual display**

## USE OF RADIO CONTROL BY CABLE



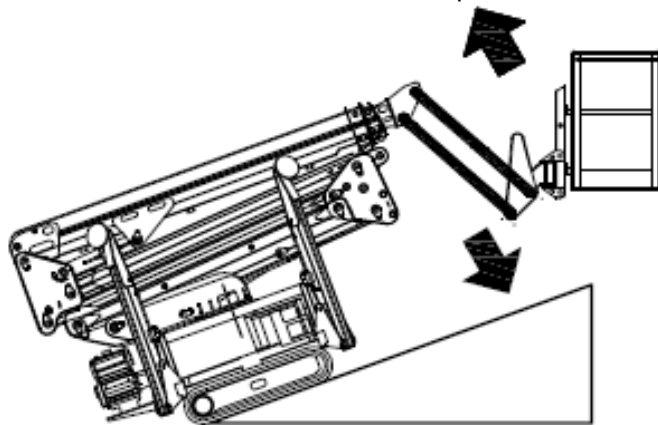
If you are working in a job area closed to an airport or where it is not allowed to use the radio frequencies, it is possible to connect the radio control to the platform by a cable.

Moreover this benefit is helpful also when the battery level is low and you don't have the charged battery; in this situation it is enough to connect the radio control by cable and use the platform normally. Then recharge the battery with its battery-charger.

#### 4. LIFTING AND TRANSPORTING THE MACHINE

##### A) LOADING/UNLOADING USING RAMP

- Block the vehicle using the parking brake
- Check that there are no people nearby
- Place the pair of adequately-sized ramps in line with the machine's tracks (check capacity)
- Check that the gradient of the ramps is not greater than 20% and that they are clean and free of grease, mud, snow or ice
- Control the forward movements slowly and only with the cage facing in the opposite direction to the direction of motion, as shown in the figure below
- We recommend that the areas indicated with the arrows be tightly bound using appropriately-sized bands when the machine is loaded onto motor vehicles for transport.



**COME ON THE RUMP ALWAYS THE MEWP IN THE SENSE INDICATED IN THE DRAWING, INDEPENDENTLY IF YOU LOAD OR UNLOAD THE MEWP. CAGE UP AND ENGINE DOWN**

During the driving on ramp, if it is necessary it is possible lift only the Jib boom in order to avoid useless and dangerous contacts of the basket with the ramp.



**Procedure:** - push continually the button 1 and move upward and downward the switch 2



**ATTENTION:** Use the specific anchor point to securely fasten the platform on trailer or truck, using a nylon straps and not chains.

**MAXIMUM PULL-OUT STRENGTH OF THE NYLON STRAPS IS 50 daN.**

**Do not over tighten the straps when securing the aerial platform to the transport vehicle. They can produce enough force to damage machine components.**



## ORIGINALE



**ATTENTION: SECURE THE PLATFORM TO THE TRANSPORT VEHICLE WITH STRAPS OF ADEQUATE LOAD CAPACITY ATTACHED TO THE CHASSIS TIE DOWN POINTS.**

## B) UNLOADING USING CRANE



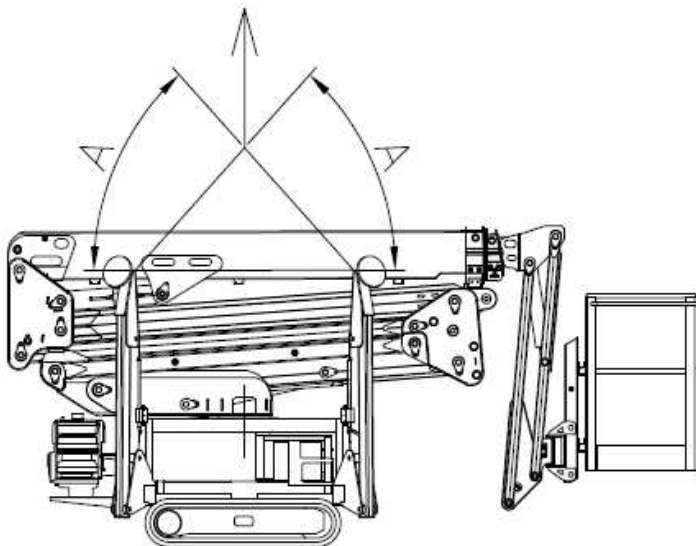
**ATTENTION: LIFTING BY CRANE IS FOR TRANSPORT PURPOSE ONLY.**

See "Specifications" for weight of machine and be certain that the crane is of adequate capacity to lift the machine.

- Check that the capacity of the lifting equipment is suitable to lift the mass of the MEWP
- Equip yourself with bands, cables and chains which are suitable to lift the machine, considering the angle opening "A", which must be GREATER OR EQUAL TO 60° (the angle between the diagonal cable and the horizontal line of the machine)
- Lift the stabilizers completely
- Hook the tie rods to the stabilizers in line with the plates using the ringbolts provided

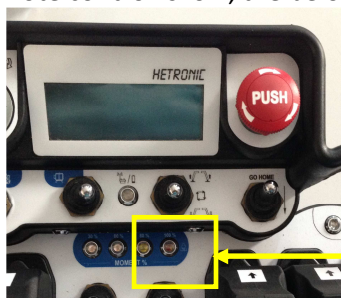


**ATTENTION: it is forbidden to lift the machine by hooking it to points that have not been marked.**



### RADIO REMOTE CONTROL: BATTERY CHARGER

The radio remote control is supplied with two battery and one battery charger. When the battery of radio remote control is low, the below led blinks quickly and alternatively green/red:



**Green/Red blinking:**  
lower level, change the battery!

In the basket is placed the battery charger including a spare battery:



## ORIGINALE

**“WARMING MESSAGE” / “ALARM MESSAGE”**

During the use of platform on first line of screen could appears a “Warming Message” following a not correct use or a “Alarm Message” on malfunctioning of platform devices:

**WARMING MESSAGE**

- |   |  |
|---|--|
| 1 'Please lift the upper boom'          | 5 'Platform automatic closing'             |
| 2 'Automatic opening of the jib'        | 6 'Center basket for automatic closing!'   |
| 3 'Open the jib or lift the upper boom' | 7 'Only 3 outriggers on the ground!'       |
| 4 'Lift the lower or the upper boom'    | 8 'Re-press pedal / close emergency cover' |

**ALARM MESSAGE**

- |   |  |
|---|--|
| 1 'Angle sensor A is not transmitting!'       | 16 'Joystick 3 gangplank damaged!'           |
| 2 'Angle sensor B is not transmitting!'       | 17 'Joystick 4 gangplank damaged!'           |
| 3 'Differential angle sensors on the X axis!' | 18 'Joystick 5 gangplank damaged!'           |
| 4 'Differential angle sensors on the Y axis!' | 19 'Joystick 6 gangplank damaged!'           |
| 5 'Overload on load cell channel 1!'          | 20 'Pins lock stabilizers not fixed!'        |
| 6 'Overload on load cell channel 2!'          | 21 'Chains of telescope broken!'             |
| 7 'Differential on load cell!'                | 22 'High lateral chassis inclination!'       |
| 8 'Pressure sensor A is not transmitting!!'   | 23 'Malfunction switches closed arm!'        |
| 9 'Pressure sensor B is not transmitting!!'   | 24 'Malfunction switches jib!'               |
| 10 'Pressure sensor C is not transmitting!!'  | 25 'Booms not completely closed'             |
| 11 'Pressure sensor D is not transmitting!!'  | 26 'Outreach more than the maximum allowed!' |
| 12 'Differential pressure sensors A-B!'       | 27 'Raise the tracks from the ground!'       |
| 13 'Differential pressure sensors C-D!'       | 28 'Error on stabilizers switch!'            |
| 14 'Joystick 1 gangplank damaged!'            | 29 'Error on relief pressure switch!'        |
| 15 'Joystick 2 gangplank damaged!'            | 30 'Error on stabilizers pressure switch!'   |

**FAQ:****- You cannot move the stabilizers:**

- 1- The turret is not in the centre position
- 2- the “key selector for controlling the boom lift from remote control” is active; turn the key down.
- 3- you have not closed completely the booms: the micro to read the boom closing is not active.

**- You cannot move the crawlers:**

- 1- verify that all stabilizers don't touch the field
- 2- verify on remote control that there isn't any symbol A, B, C, D on also if stabilizer is up (microswitch blocked)

**- You cannot active the lifting movements from the basket:**

- 1- the emergency cover is open: micro is active.