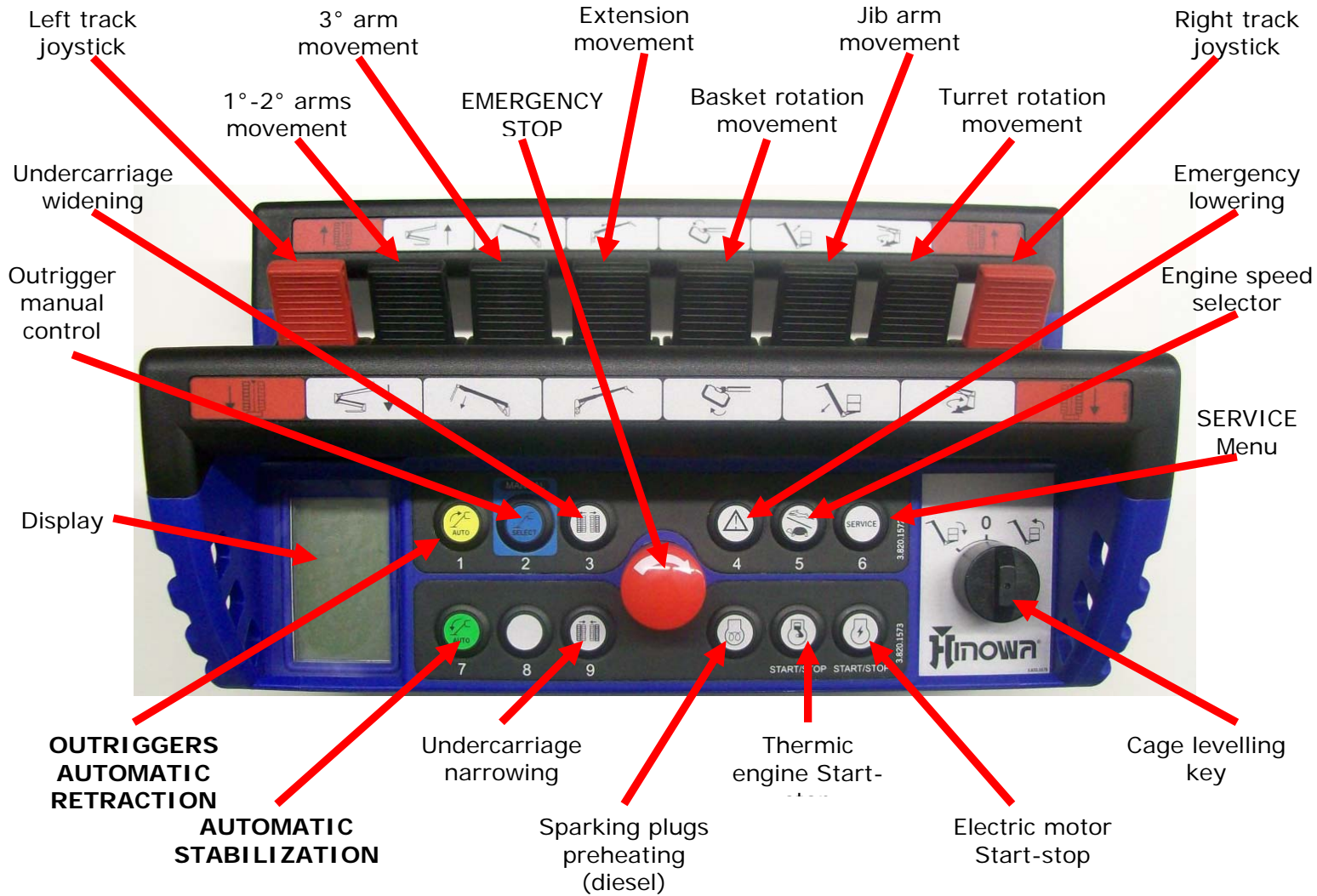




Miniexcavators – Undercarriages - Minidumpers – Skid Steer Loaders – Aerial Platforms

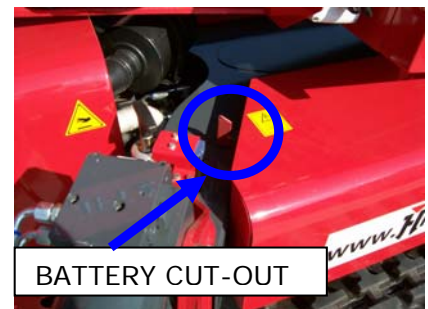
ATTENTION: THIS BOOKLET DOESN'T SUBSTITUTE THE OPERATION AND MAINTENANCE MANUAL. IT'S NECESSARY TO READ CAREFULLY AND UNDERSTAND THE OPERATION AND MAINTENANCE MANUAL BEFORE CARRYING OUT ANY MANOEUVRE WITH THE MACHINE.

QUICK INSTRUCTIONS FOR HINOWA LIGHTLIFT 23.12 3S



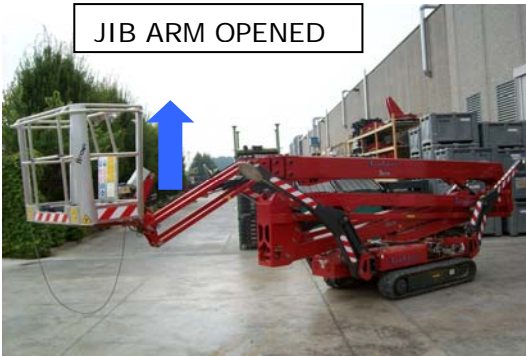
To start the machine the engine key switch has to be in "ON" position and all the emergency stops have to be released. The battery cut-out has to be in horizontal position. The engine or electric motor (if the machine is connected to the 220V plug) ignition has to be carried out by pressing motor ignition button (see picture above).

N.B: In the diesel version, before pressing the ignition button, press button no. 6 – sparking plugs preheating – and wait for 10 seconds.



TRACKS OPERATION

To operate the tracks the machine has not to be aligned but the outriggers have to be lifted from the ground. It is also possible to open the JIB arm (last arm, see picture below) and afterwards move the tracks, but the operator has to be on the ground with remote control in hand and the cage has to be without load. With JIB arm closed, the tracks may be controlled from the basket as well.



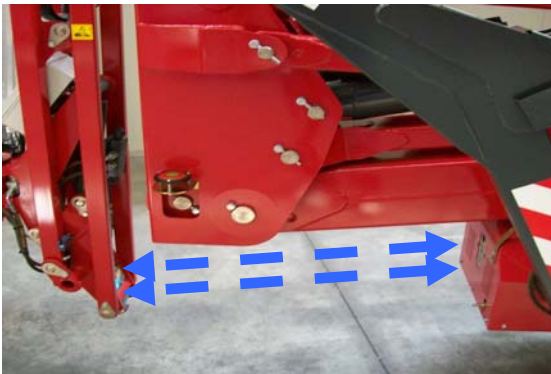
IT IS POSSIBLE TO MOVE THE TRACKS ALSO WITH JIB ARM OPENED

WITH JIB OPENED, THE OPERATOR HAS TO DRIVE THE MACHINE FROM THE GROUND (HE CANNOT BE IN THE BASKET)

To move the tracks (with all outriggers lifted from the ground) operate on the joystick of the desired track. To open the JIB operate on the JIB movement. The JIB has to be closed if the outriggers have to be moved.

OUTRIGGERS OPERATION

It is possible to move the outriggers only if the machine is perfectly closed and aligned. In this case the "machine closed and aligned" signal is ON (see picture below). To operate the ground part the remote control does not have to be in its support in basket, but the operator may hold it in his hand from the ground.



MACHINE CLOSED AND ALIGNED SIGNAL ON DISPLAY



OUTRIGGERS BLOCK:

The outrigger has to be opened in order to move it. To open the outrigger it is necessary to lift the mechanical block in the picture (pull upwards the handle) and rotate manually the outrigger at the same time.

To operate the aerial part the machine has to be stabilized:



AUTOMATIC STABILIZATION:

to stabilize the machine automatically, it has to be aligned (all arms closed, JIB included) and the 4 outriggers have to be unblocked (see outriggers unblock). Afterwards hold down button no. 7 (green one) on the remote control. At this point, the machine will automatically start the stabilization procedure. The aerial part may be moved when the OK signal appears on the display. (see picture on the side).



OUTRIGGERS MANUAL OPERATION:

It is also possible to operate the outriggers manually, by pressing button no. 2 (blue one) and following the instructions on the display (not recommended procedure).

OUTRIGGERS AUTOMATIC RETRACTION:

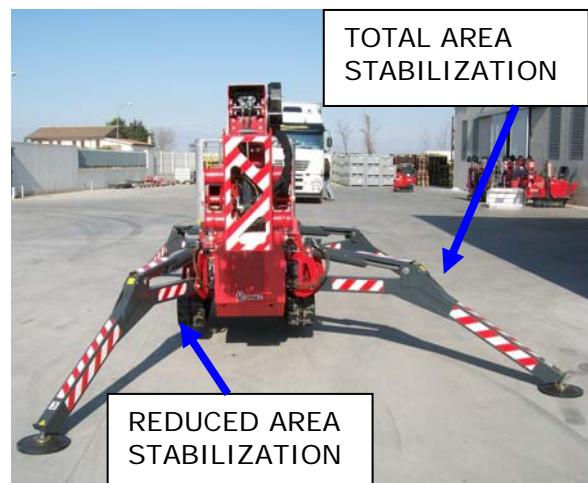
To put again the platform in transportation configuration the aerial part has to be completely closed and aligned (see aerial part movements paragraph). In this situation it is enough to hold down button no. 1 (yellow one).

DOUBLE STABILIZATION AREA

It is possible to use the machine in reduced stabilization area, i.e. every outrigger may be opened only partially. According to the position of the outriggers, for stability reasons, the aerial part working area is limited. The icon of variable area active will appear only opening partially the outrigger.



If while working you try to go out from the admitted working area you will see on the display the icon "ROTATE"; this indicates the correct direction to move the aerial part.



MOVING THE AERIAL PART

The aerial part can only be moved when the operator is on the cage and the remote control is on its housing on the cage. When the machine is stabilized simply press the joystick on the remote control to move the arms or to rotate the turret. To work with 200 kg the jib arm must be closed. If the jib arm is open the maximum allowed weight in the cage is 120 kg.

If the weight on the cage exceeds the allowed one the movements will automatically block. It will be enough then to remove some weight from the cage to start working again.

When work is done close carefully all the arms of the machine until end running and perfectly align the turret using the arrows as point of reference.

The outriggers can then be lifted automatically (yellow button) and the tracks moved.

PEDAL OPTION:

For some markets (for law reasons) the machine is equipped with pedal on the cage. On this version it is enough to press the pedal and in the meantime to press the joystick on the remote control to move the aerial part.

LIST OF ICONS ON THE DISPLAY



Weight selected
120 kg







































Weight selected
200 kg



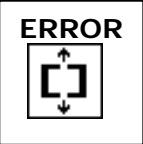

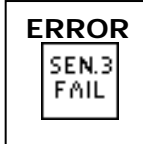


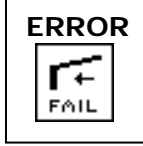
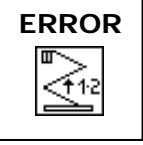
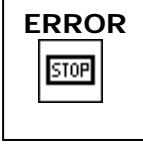
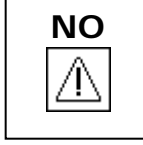
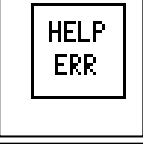
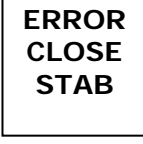
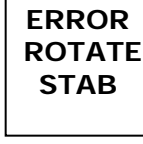
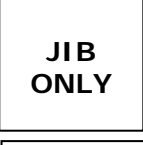
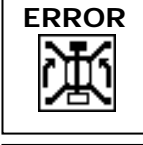
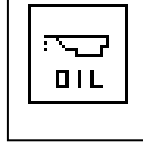
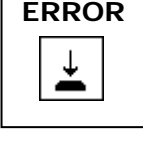

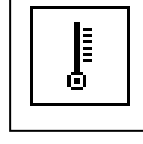
Thermic engine
selected



Electric motor
selected

	Thermic engine running		Electric motor running		Machine closed and aligned		Machine stabilized
	Minimum speed		Standard speed		Maximum speed		Emergency stop pressed
	Emergency lowering		Battery voltage low		Press pedal (option)		Select a control
	Overload in basket		Weigh in basket too low		Rotate to the right or left only LL23.12		Lift 1° and 2° arms Only LL23.12
	Safety bypass active		1° cylinder sensor missing Only LL 23.12		2° cylinder sensor missing Only LL 23.12		Cables sensor missing Only LL 23.12
	Remove weight or remote control from basket		Inclination too high		Reduced area active Only LL23.12		Jib only possible movement NO LL14.72
	Close aerial part		Rotate outrigger Only LL23.12		Lift outrigger		Control error menu
	Machine in forbidden area Only LL23.12		Close manually		Ball-bearing ring signal missing Only LL 23.12		CAN BUS signal missing
	Cables sensor anomaly Only LL23.12		RPM signal missing		Board or software wrong		Close the jib arm. (only LL2312)

SELF DIAGNOSYS : LIST OF POSSIBLE ERROR MESSAGES ON THE DISPLAY

	Close and align the machine		Error in sensor on 1° and 2° arms cylinder Only LL23.12		Error in sensor on 3° arm cylinder Only LL23.12
	Close the JIB to work with 200kg		Overload in basket		Error in sensor on extension arm Only LL23.12
	It is necessary to lift 1-2 arms Only LL23.12		An emergency stop is pressed		Movement without emergency lowering
	Control Error menu See par. N° 9.4.3		Lift the outriggers to move the tracks Only LL23.12		Open the outrigger to move it Only 23.12
	It is possible to move only the JIB		It is necessary to rotate the turret Only LL23.12		Oil pressure missing = engine turns off Only LL23.12 Diesel
	Press the pedal Option		It is necessary to close the jib arm Only LL23.12		Engine temperature too high = Motor remains at min. Only LL23.12 Diesel