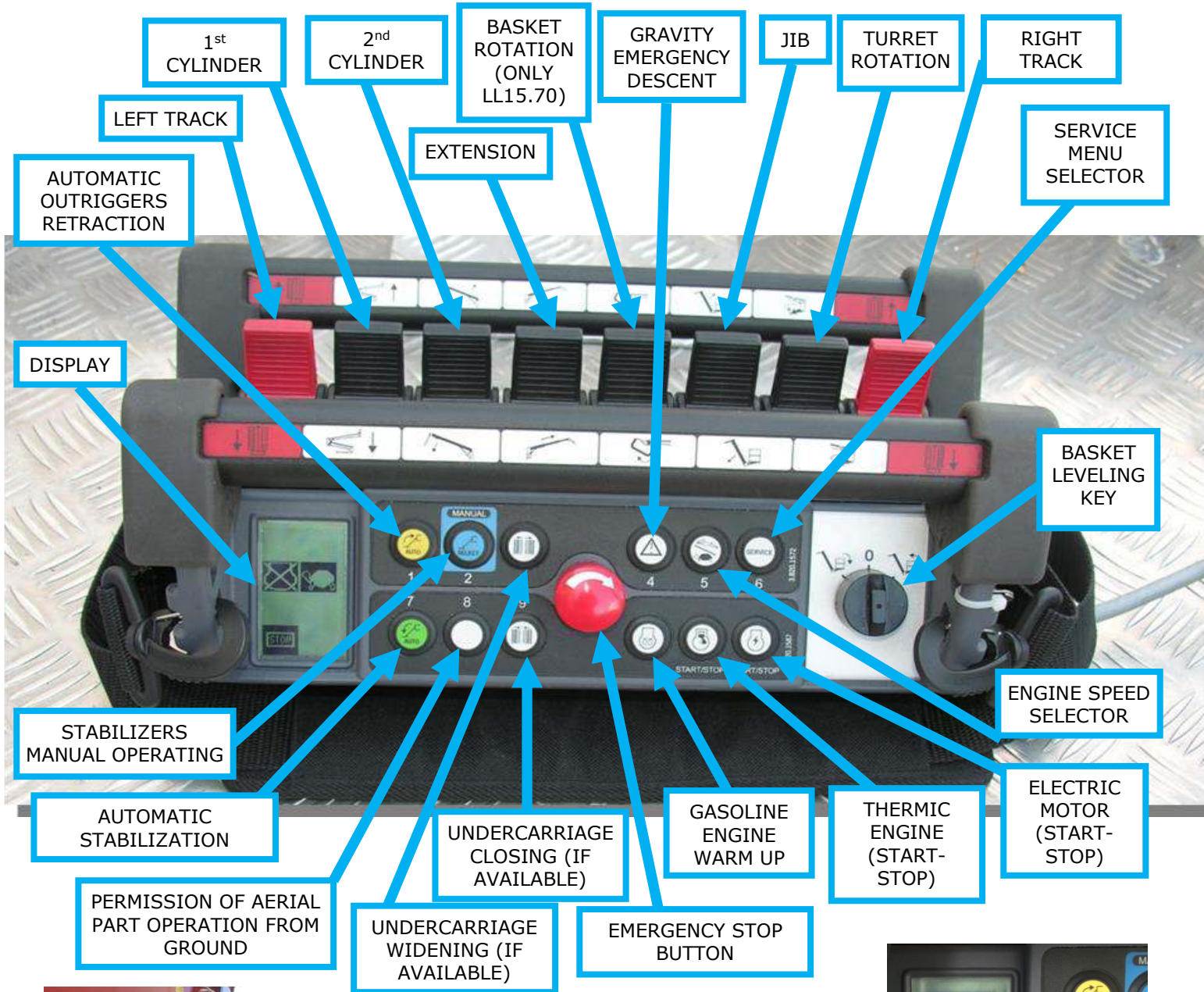


**Miniexcavators – Undercarriages - Minidumpers – Skid Steer Loaders – Aerial Platforms**

**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 15.70 & 13.70 PERFORMANCE**



**MAIN KEY**

To start the machine battery cutter and main key must be turned ON, than the remote control emergency STOP button must be pressed and released, as reminded by the icon here on the right side. While all the emergency stop buttons are released, engine or electric motor could be ignited by pressing the relevant buttons on the remote control (see picture above).



**PRESS AND RELEASE REMOTE CONTROL EMERGENCY STOP BUTTON**

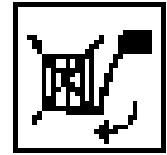
**Note1:** On gasoline machine when the engine is cold, once it's ignited, it's possible to warm it up pressing the "WARM UP" button on the remote control, engine will run faster for 20 seconds.

**TRACKS MOVEMENTS**

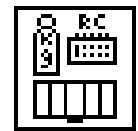


RAISE THE OUTRIGGERS FROM THE GROUND

All the outriggers must be raised from the ground to move the tracks, otherwise the icon here on the left side will be displayed. When jib is closed the tracks could be moved operating from the ground or from the basket, otherwise it's possible to move them even if jib is opened but in this case the basket must be unloaded from its support (LL1570), or be kept empty (LL1370) as reminded by the picture here on the right side. In this case, operator must drive from the ground keeping the remote control on his hands.



UNLOAD THE BASKET FROM ITS SUPPORT (LL1570)



BASKET MUST BE EMPTY (LL1370)

To move the tracks press the red joystick on the remote control. To open the jib (with basket off in the LL15) press the jib joystick. To change the speed it has to be used button n.5 of remote control.

**Note2:** Jib must be close to allow outriggers' movements.

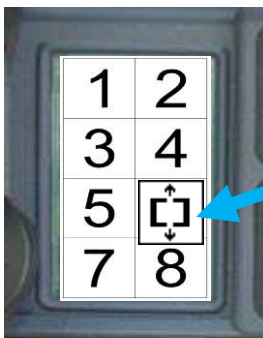
**Note3:** In particular conditions, tracks' speed could be automatically limited by speed control which prevent unsafe translations.

**OUTRIGGERS MOVEMENTS**

Machine must be perfectly closed and aligned to permit to move the outriggers, so all the arms and the jib closed and aerial part rotated as indicated by the alignment arrows (see picture here aside). The MACHINE CLOSED AND ALIGNED icon (see the picture below) indicates the closed and aligned condition. To move the outriggers the remote control could be in the basket support or operator can keep it in his hands also standing at the ground.



ALIGNMENT ARROWS



MACHINE CLOSED AND ALIGNED ICON ON THE DISPLAY

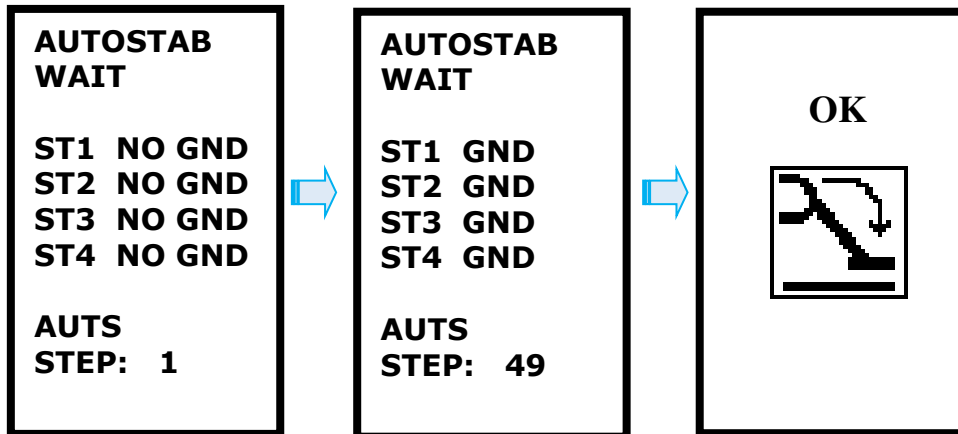


PHOTOCELLS SYSTEM DETECTS THE CLOSE AND ALIGNED CONDITION OF THE MACHINE

**AUTOMATIC STABILIZATION:**

To stabilize the machine automatically the machine must be closed aligned. Keeping pressed the green button (n.7) on the remote control the machine starts the automatic stabilization procedure. That procedure will be complete only when the display will show the OK with the MACHINE STABILIZED icon as

shown by the example that follows. The stabilization is the necessary condition to allow aerial part movements.



**MANUAL STABILIZATION:**

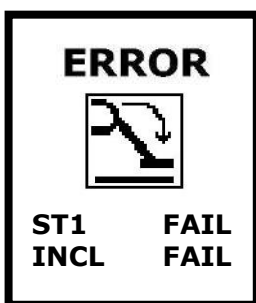
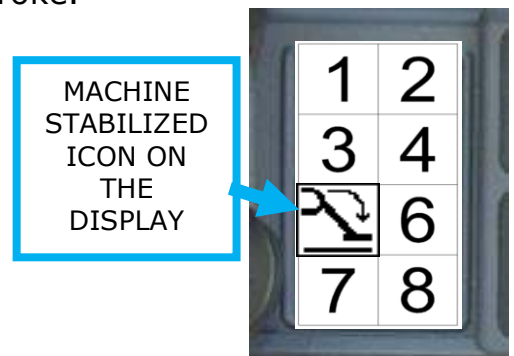
It's also possible to move the outriggers one by one pressing the blue button (number 2) and following the indications given on the display. Once all the outriggers are touching the ground, automatic stabilization remains the recommended procedure.

**AUTOMATIC OUTRIGGERS RETRACTION:**

To put the machine in transport configuration aerial part must be closed and aligned, then, keeping pressed the yellow button (number 1), all the outriggers should be completely lifted until the end of their stroke.

**AERIAL PART MOVEMENTS**




To move the aerial part the remote control must be positioned in its basket support. Aerial part movements are possible only when machine is stabilized and therefore when the MACHINE STABILIZED icon appears in position 5 of the display. If one stabilization condition is missing, when a joystick is moved the display indicates the missing condition with "FAIL" as follows.



- ST"X" FAIL indicates that outrigger n. "X" is not touching the ground.
- INCL FAIL means that the machine is not levelled within the inclination clearance.
- LOAD FAIL means that basket is overloaded (more than 230Kg into the basket so more than about 280 Kg read by the input menu).
- BASKET FAIL means that the remote control is not properly placed on its basket support (it does not feel the remote control support magnet).
- PEDAL (OPTIONAL) FAIL means that pedal option is activated and pedal is not properly pressed in order to allow the movement.
- AUTOST FAIL means auto-stabilization procedure not complete properly.

After work is finished close carefully and completely all the arms and perfectly align the turret looking at the yellow arrows. Than the outriggers could be lifted and the tracks moved.

**LIST OF DISPLAY ICONS**

	Safety state, press and release the remote control stop		Both motors not running		Machine closed and aligned		Close and align the machine
	Engine running		Electric motor running		Lift outrigger from the ground		Max tilt angle reached while driving
	Rotate aerial part on the opposite side		Lift 1 <sup>st</sup> -2 <sup>nd</sup> booms		Machine stabilized		Max tilt angle reached while stabilizing
	Minimum speed		Standard speed		Tracks' maximum speed		Unload the basket from its support
	Stop button pressed		Press pedal (option)		Only jib movement allowed		Engine preheating active
	Basket overload		Basket underload		Gravity emergency descent		Movement not allowed by gravity emergency descent
	12V Battery voltage low		Insert the controller into its place and stabilize the machine from the basket		Wrong remote control connection (on the basket, at the ground)		Error on board input or output
	Double line sensor error, check error menu		Software updating in progress		CAN BUS error, check CAN TIME OUT menu		Select which outrigger to move
	Safeties by-pass activated		Aerial part movements safeties by-pass activated		Undercarriage part movements safeties by-pass activated		Main key off
	Remote connection in progress		Software updates available		Automatic periodical service reminder		Skyguard bar pressed
	Tilt sensor calibration required		Load cell sensor calibration required		12V battery down or 3 <sup>rd</sup> boom cables sensor anomaly		Not allowed movement, open the 2 <sup>nd</sup> cylinder