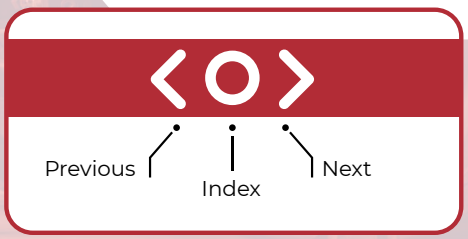
JALTEST MHE USE CASES

CV COMMERCIAL | AGV AGRICULTURAL | OHW OFF-HIGHWAY | MHE MATERIAL HANDLING | marine VESSELS

jaltest DIAGNOSTICS

Index

Easy document navigation



Introduction

Over time it can be noticed that the existence of multiple brands of **material handling equipment and lift platforms** with a wide range of solutions is growing day by day. This variety reinforces the need for a multi-brand diagnostics tool with sufficient capacities to face all the daily challenges of a technician in a specialised workshop (advanced functionalities, technical information and troubleshooting guides, among many other tools).

Today, most vehicle systems are equipped with electronic control and a large number of cables, sensors, actuators and control units, which are present in them from end to end.

Furthermore, the anti-pollution regulations and the efficiency imposed on new vehicles do not allow control without the aforementioned electronic components. Therefore, it is essential to have diagnostics tools, such as Jaltest, which are capable of dealing with failures and facilitating the technician tasks.

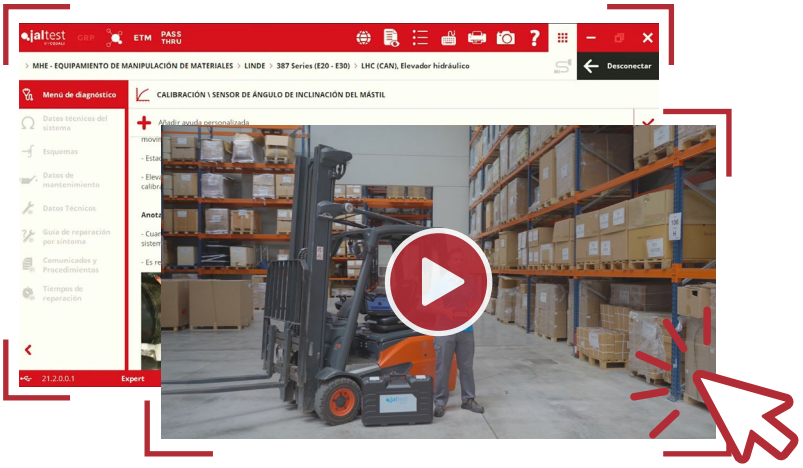
The purpose of this document is to show the reader the latest technologies in **material handling equipment and lift platforms** and how Jaltest makes diagnostics and repair easier.

1 - Calibration of the mast tilt angle sensor. Linde E20 Series 387

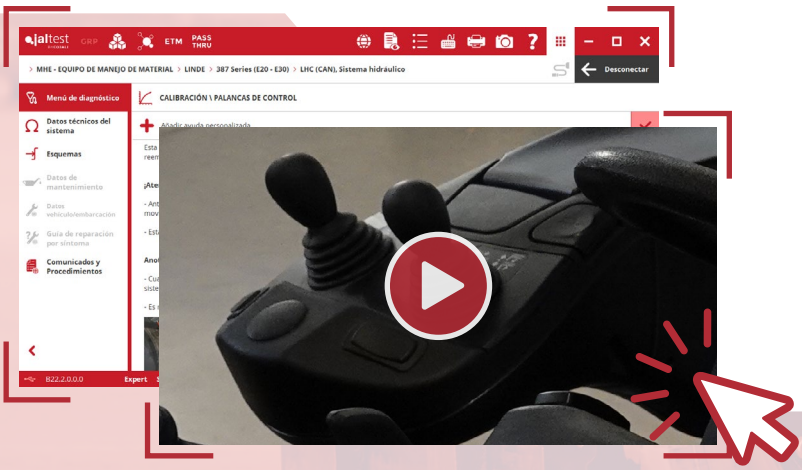
This calibration must be performed when the mast tilt position sensor has been damaged or replaced. The sensor can be damaged for several reasons, such as:

- Dramatic temperature changes.
- Wear from use.
- Collision with external elements..

This calibration can only be performed with the diagnostics tool.
The final user will not be able to use the mast unless the corresponding calibration has been performed. The mast will be locked, unable to perform tilting functions.



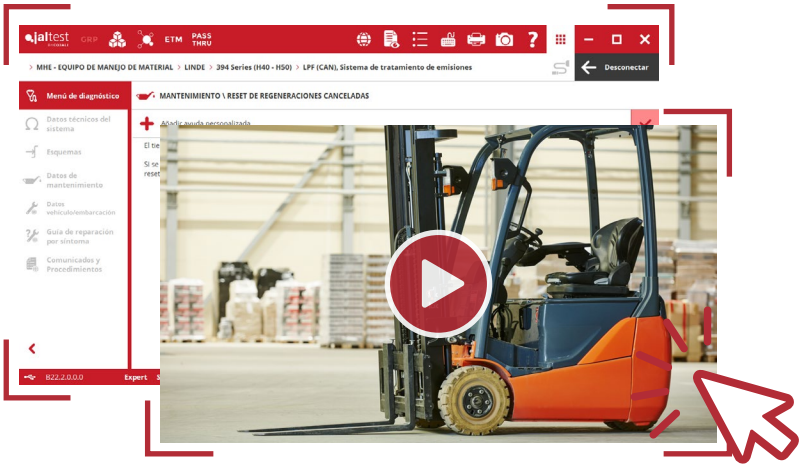
2 - Calibration of the control levers. Linde E16-02 Series 386



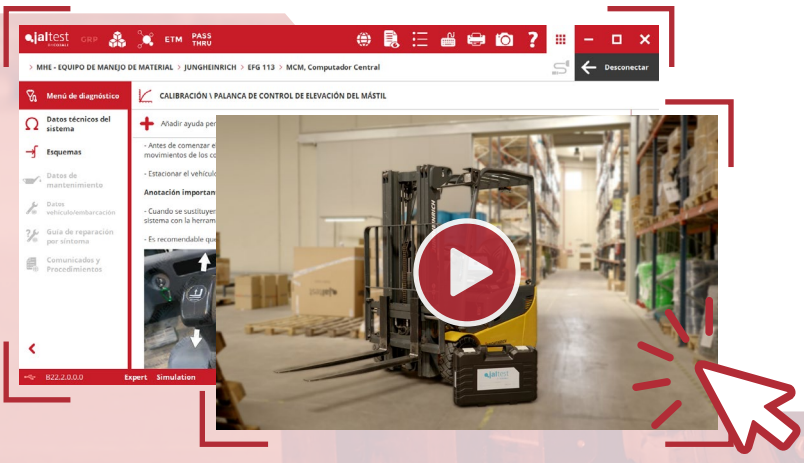
This calibration must be performed when the signal of any control lever is incorrect or a component has been replaced.
This calibration can only be performed with the diagnostics tool.
Not performing the corresponding calibration in the machine leads to the limitation of the hydraulic system functions, thus preventing the mast from raising and tilting.

3 - Reset of cancelled regenerations of the LPF system. Linde H40 Serie 394

This maintenance service is required when the regeneration of the particulate filter has been cancelled up to 5 times. Once the limit number of cancellations has been exceeded, the machine is limited and a reset needs to be performed before launching the regeneration. When the counter has exceeded its maximum number, the engine is totally limited and it does not exceed any engine rate above 1,000 rpm. This operation can only be performed with the diagnostics tool.



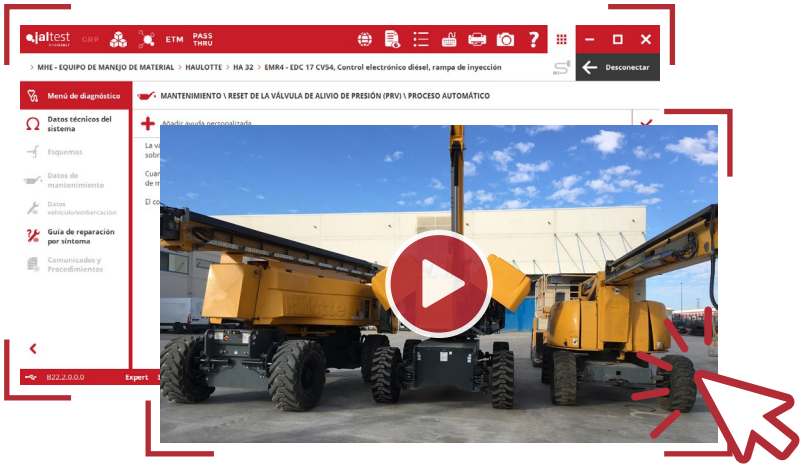
4 - Calibration of the mast raising control lever. Jungheinrich EFG 113



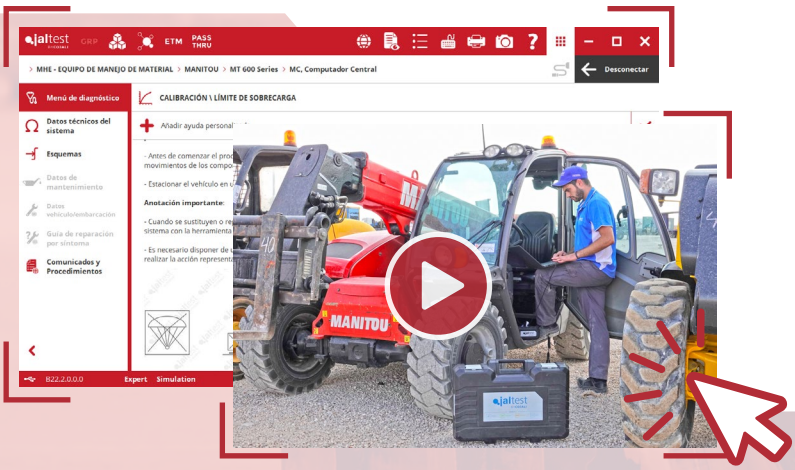
This calibration must be performed whenever the component is replaced or the lever potentiometer is manipulated.
This calibration can only be performed with the diagnostics tool.
Not performing the corresponding calibration affects the correct performance of the hydraulic functions for mast raising and lowering, thus limiting the mast regulation and control functionalities.

5 - Reset of the Pressure Relief Valve (PRV). Haulotte HA 32

These machines have a Deutz engine with a common-rail injection system. In the rail there is a mechanical valve with an opening counter. When the valve has reached the maximum number of openings, the engine limits its power and the valve must be repaired or replaced. Eventually, after performing the applicable repairs, it must be performed the counter rest to restore the engine power.



6 - Calibration of the overload sensor. Manitou MT600 Series



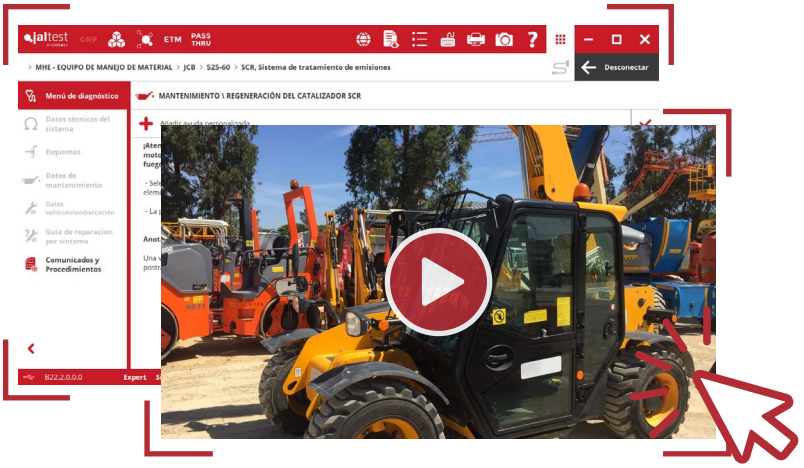
These machines are equipped with an overload sensor that limits the lifting tasks of the machine depending on its load. This sensor must be calibrated whenever it is damaged or replaced. The sensor can be damaged for several reasons, such as:

- Dramatic temperature changes.
- Wear from use.
- Collision with external elements.

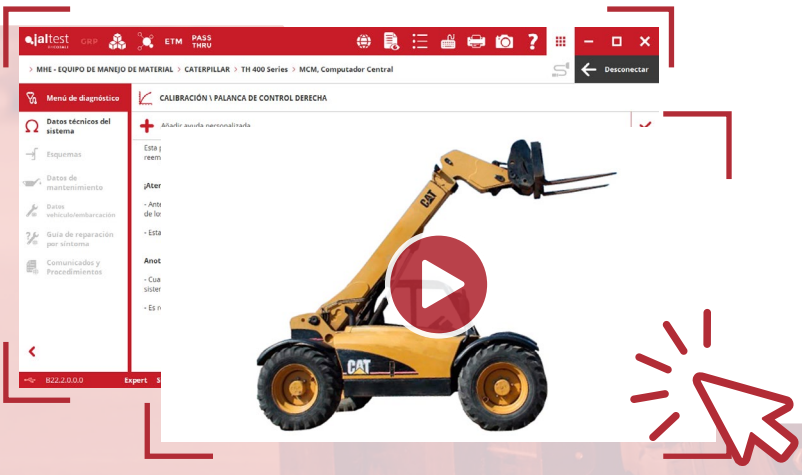
Therefore, the boom will be locked unless this calibration is performed, thus preventing the machine from operating.

7 - Regeneration of the SCR catalytic converter. JCB 525-60

When using the machine at a low idle speed, the SCR catalytic converter is obstructed and it is limited to 1,000 rpm until the regeneration is performed.



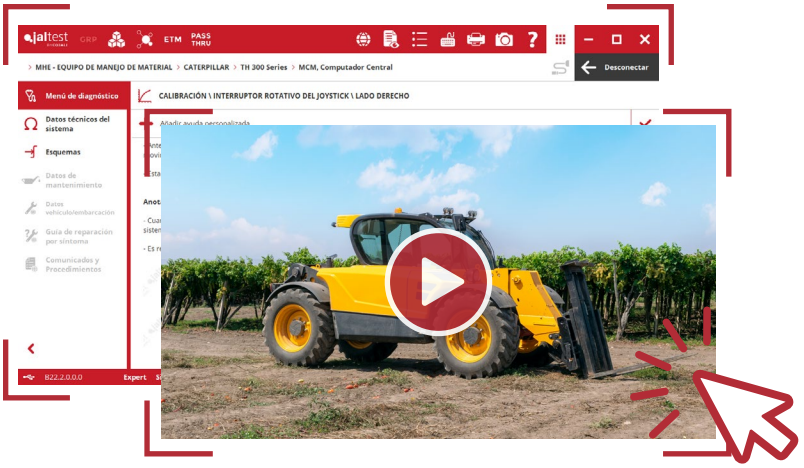
8 - Calibration of the control lever. Caterpillar TH 300 Series



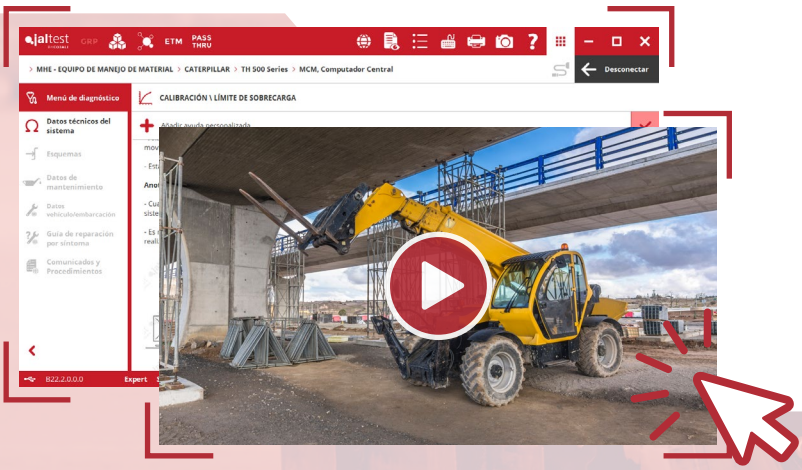
In Caterpillar telescopic handlers, the operator must perform this calibration after replacing the boom control lever, in order to record all the position values of the control lever. Otherwise, it will not be possible to make use of the hydraulic functions of the machine.

9 - Calibration of the joystick rotary switch. Caterpillar TH 600 Series

The calibration of the joystick rotary switch must be performed when the component is replaced or in case of detecting faulty performance. The joystick has two rotary buttons (right and left) that can only be calibrated with the diagnostics tool. Not performing the corresponding calibration leads to the limitation of the hydraulic functions configured for these switches.



10 - Calibration of the overload sensor. Caterpillar TH 500 Series



These machines are equipped with an overload sensor that limits the lifting tasks of the machine depending on its load. This sensor must be calibrated whenever it is damaged or replaced. The sensor can be damaged for several reasons, such as:

- Dramatic temperature changes.
- Wear from use.
- Collision with external elements.

Therefore, the boom will be locked unless this calibration is performed, thus preventing the machine from operating.

jaltest
BY COJALI

Cojali S.L.
Avenida de la Industria 3
13610 Campo de Criptana · Spain

Tel.: +34 926 270 621
customerservice@jaltest.com

cojali.com
jaltest.com

2022 EN