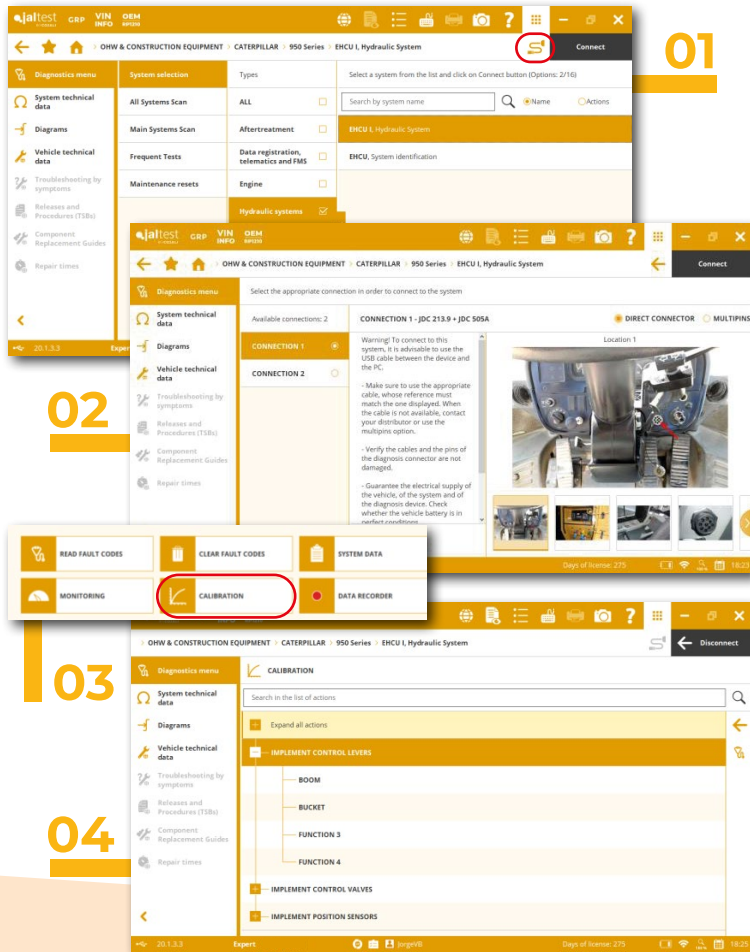


Caterpillar 950 Series Attachment Calibration with Jaltest



One of the most frequent actions working with Wheel Loaders are the attachment calibrations. Jaltest Diagnostics, the all makes, all models and all systems diagnostics tool, allows us to do these calibrations under the same software than diagnosis, other bidirectional actions and OEM technical information for each HD Vehicle.

The following Jaltest screenshots show a Caterpillar 950 Wheel Loader attachment calibration through very simple steps.

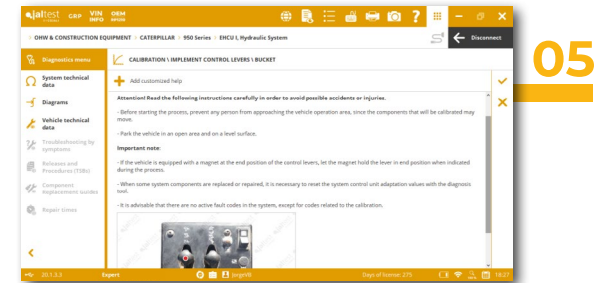
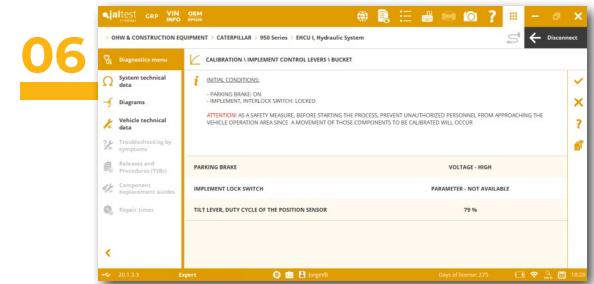
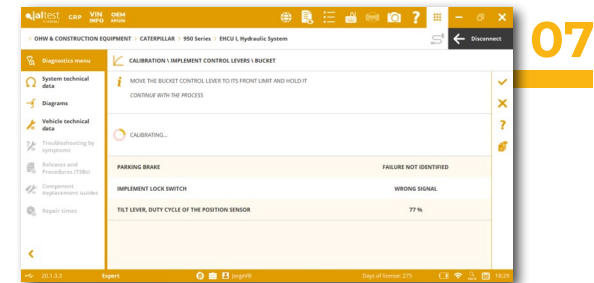
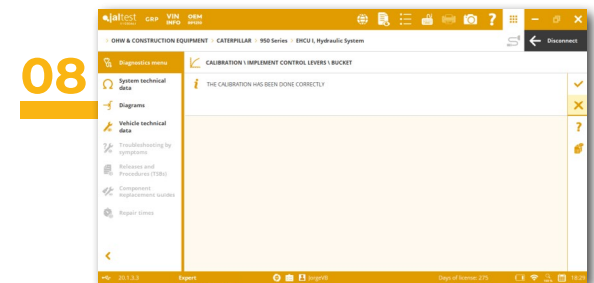
First of all, we have to select the ECU that we want to connect with (pic1). Jaltest helps you with this connection, showing you how to hook up, cables needed and the location within the vehicle (pic 2).

Once we have connected to the Attachment System, we will see the main Jaltest Diagnostics Menu (pic 3). There we can check and clear faults, monitoring live data, doing bidirectional actions, etc. By clicking on Calibration, we will be able to calibrate the control levers, the valves and position sensors of this Wheel Loader attachment (pic 4).

Selecting one option: Bucket Implement Control Lever, Jaltest will guide us during the whole calibration process:

- Before starting: Asking for expert mode and showing Safety Instructions (pic 5); Initial Requirements, like the parking brake on or interlock switch locked (pic 6).
- During the whole process, telling you where you have to position the control lever any time (pic 7) and letting you know when the calibration has finished (pic 8).

Among many other actions, with Jaltest Diagnostics you will be able to check attachment diagrams through Diagrams with real photos or OEM technical information of every single component of each system at System Technical Data.



For more information visit:
www.jaltest.com

click on images to enlarge



01

GRP

VIN
INFO

OEM
RP1210

> OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCUI, Hydraulic System

Connect

Diagnostics menu

System technical data

Diagrams

Vehicle technical data

Troubleshooting by symptoms

Releases and Procedures (TSBs)

Component Replacement Guides

Repair times

System selection

Types

Select a system from the list and click on Connect button (Options: 2/16)

All Systems Scan

ALL

☐

☒ Name

☐ Actions

Main Systems Scan

Aftertreatment

☐

EHCUI, Hydraulic System

Frequent Tests

Data registration, telematics and FMS

☐

EHCUI, System Identification

Maintenance resets

Engine

☐

Hydraulic systems

☒

Instrument cluster

☐

Transmission

☐

20.1.3.3

Expert

jorgeVB

Days of license: 275

100 %

18:22

For more information visit:
www.jaltest.com



02

GRP

VIN
INFO

OEM
RP1210

OHV & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCU I, Hydraulic System

Diagnostics menu

System technical data

Diagrams

Vehicle technical data

Troubleshooting by symptoms

Releases and Procedures (TSBs)

Component Replacement Guides

Repair times

Select the appropriate connection in order to connect to the system

Available connections: 2

CONNECTION 1

CONNECTION 2

CONNECTION 1 - JDC 213.9 + JDC 505A

☒ DIRECT CONNECTOR

☐ MULTIPINS

Warning! To connect to this system, it is advisable to use the USB cable between the device and the PC.

- Make sure to use the appropriate cable, whose reference must match the one displayed. When the cable is not available, contact your distributor or use the multipins option.

- Verify the cables and the pins of the diagnosis connector are not damaged.

- Guarantee the electrical supply of the vehicle, of the system and of the diagnosis device. Check whether the vehicle battery is in perfect conditions.

Location 1

20.1.3.3

Expert

JorgeVB

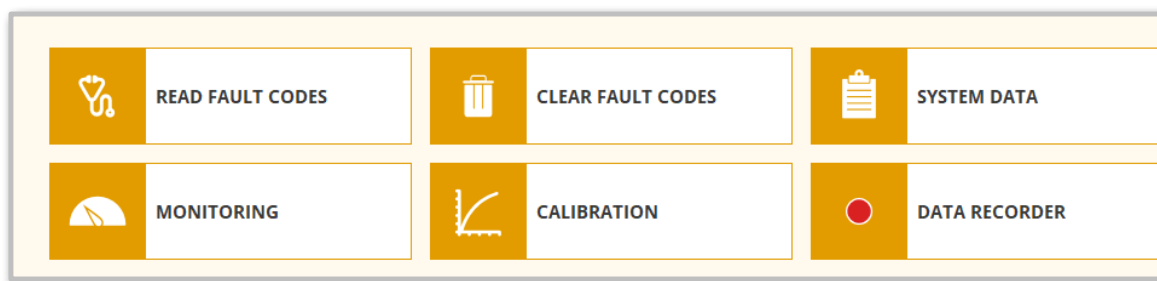
Days of license: 275

18:23

For more information visit:
www.jaltest.com



03



For more information visit:
www.jaltest.com

The screenshot displays the jaltest diagnostic software interface. The top navigation bar includes the jaltest logo, vehicle information (GRP, VIN, OEM RP1210), and various tool icons. The breadcrumb trail indicates the path: > OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCUI, Hydraulic System. A 'Disconnect' button is visible in the top right corner.

The left sidebar contains a 'Diagnostics menu' with the following options: System technical data, Diagrams, Vehicle technical data, Troubleshooting by symptoms, Releases and Procedures (TSBs), Component Replacement Guides, and Repair times.

The main area is titled 'CALIBRATION' and features a search bar labeled 'Search in the list of actions'. Below the search bar, there is a list of actions:

- Expand all actions
- IMPLEMENT CONTROL LEVERS (expanded, showing a tree view):
 - BOOM
 - BUCKET
 - FUNCTION 3
 - FUNCTION 4
- IMPLEMENT CONTROL VALVES
- IMPLEMENT POSITION SENSORS

The bottom status bar shows the version (20.1.3.3), user (Expert), user profile (jorgeVB), license status (Days of license: 275), and system status (100%, 18:25).

For more information visit:
www.jaltest.com

GRP
VIN INFO
OEM RP1210

> OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCU I, Hydraulic System

Diagnostics menu

System technical data

Diagrams

Vehicle technical data

Troubleshooting by symptoms

Releases and Procedures (TSBs)

Component Replacement Guides

Repair times

CALIBRATION \ IMPLEMENT CONTROL LEVERS \ BUCKET

Add customized help

Attention! Read the following instructions carefully in order to avoid possible accidents or injuries.

- Before starting the process, prevent any person from approaching the vehicle operation area, since the components that will be calibrated may move.
- Park the vehicle in an open area and on a level surface.

Important note:

- If the vehicle is equipped with a magnet at the end position of the control levers, let the magnet hold the lever in end position when indicated during the process.
- When some system components are replaced or repaired, it is necessary to reset the system control unit adaptation values with the diagnosis tool.
- It is advisable that there are no active fault codes in the system, except for codes related to the calibration.

20.1.3.3
Expert

JorgeVB
Days of license: 275

100 %

18:27

For more information visit:
www.jaltest.com

GRP
VIN INFO
OEM RP1210

> OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCU I, Hydraulic System

Diagnostics menu

System technical data

Diagrams

Vehicle technical data

Troubleshooting by symptoms

Releases and Procedures (TSBs)

Component Replacement Guides

Repair times

CALIBRATION \ IMPLEMENT CONTROL LEVERS \ BUCKET

INITIAL CONDITIONS:

- PARKING BRAKE: ON
- IMPLEMENT, INTERLOCK SWITCH: LOCKED

ATTENTION! AS A SAFETY MEASURE, BEFORE STARTING THE PROCESS, PREVENT UNAUTHORIZED PERSONNEL FROM APPROACHING THE VEHICLE OPERATION AREA SINCE A MOVEMENT OF THOSE COMPONENTS TO BE CALIBRATED WILL OCCUR

PARKING BRAKE	VOLTAGE - HIGH
IMPLEMENT LOCK SWITCH	PARAMETER - NOT AVAILABLE
TILT LEVER, DUTY CYCLE OF THE POSITION SENSOR	79 %

20.1.3.3
Expert

jorgeVB
Days of license: 275

100 %

18:28

For more information visit:
www.jaltest.com

GRP
VIN INFO
OEM RP1210

> OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCUI, Hydraulic System

Disconnect

Diagnostics menu

System technical data

Diagrams

Vehicle technical data

Troubleshooting by symptoms

Releases and Procedures (TSBs)

Component Replacement Guides

Repair times

CALIBRATION \ IMPLEMENT CONTROL LEVERS \ BUCKET

MOVE THE BUCKET CONTROL LEVER TO ITS FRONT LIMIT AND HOLD IT
CONTINUE WITH THE PROCESS

CALIBRATING...

PARKING BRAKE

FAILURE NOT IDENTIFIED

IMPLEMENT LOCK SWITCH

WRONG SIGNAL

TILT LEVER, DUTY CYCLE OF THE POSITION SENSOR

77 %

20.1.3.3
Expert

jorgeVB
Days of license: 275

100 %

18:29

For more information visit:
www.jaltest.com

The screenshot displays the jaltest diagnostic software interface. The top navigation bar includes the jaltest logo, vehicle identification fields (GRP, VIN INFO, OEM RP1210), and various tool icons. The breadcrumb trail indicates the path: > OHW & CONSTRUCTION EQUIPMENT > CATERPILLAR > 950 Series > EHCUI, Hydraulic System. A 'Disconnect' button is visible in the top right corner.

The left sidebar contains a 'Diagnostics menu' with the following options: System technical data, Diagrams, Vehicle technical data, Troubleshooting by symptoms, Releases and Procedures (TSBs), Component Replacement Guides, and Repair times.

The main workspace is titled 'CALIBRATION \ IMPLEMENT CONTROL LEVERS \ BUCKET'. It displays a message: 'THE CALIBRATION HAS BEEN DONE CORRECTLY' with an information icon (i) on the left and a checkmark icon (✓) on the right. Below this message is a large empty area. To the right of this area are three icons: a checkmark (✓), a cross (✗), and a question mark (?).

The bottom status bar shows the version '20.1.3.3', the user 'Expert', the user profile 'jorgeVB', and the license status 'Days of license: 275'. System icons for battery, Wi-Fi, and signal strength are also present, along with the time '18:29'.

For more information visit:
www.jaltest.com