CAT

### Cat<sup>®</sup> Simulators Hydraulic Excavator Controls Calibration



Productivity Safety Cost Effective Smart Training Flexible Performance Increase Skills Qualify Operators

# Hydraulic Excavator Controls Calibration

#### **Initial Steps**

1. Connect all Hydraulic Excavator simulator components to your computer as outlined in the "Hardware Assembly Instructions" on page 6.

2. Install the Hydraulic Excavator Simulator Software on your computer.

3. For Windows XP or Vista Operating Systems: From your Windows Desktop, Click "Start" – "Control Panel" – "Game Controllers." *Note:* On some computers, this may appear as "Game Options."



*Note:* For Windows 7 Operating Systems: From your Windows Desktop, Click "Start" — "Devices & Printers." Right click on "CH OEM 2 AXIS 1 BUTTON JOYSTICK."

4. After clicking this icon, two identical entries will appear in the "Game Controls" Window:

- CH OEM 2 AXIS 1 BUTTON JOYSTICK
- CH OEM 2 AXIS 1 BUTTON JOYSTICK

The Hydraulic Excavator Simulator calibration procedure will use these two calibration functions.

*Note:* Follow each set of steps in the sequence shown to calibrate the two simulator joysticks (input devices). The first device to calibrate is the Left Joystick. These functions are calibrated under the first "CH OEM 2 AXIS 1 BUTTON JOYSTICK." Start this process by following the first eight steps:

- 1. Select and double click on the first "CH OEM 2 AXIS 1 BUTTON JOYSTICK" line.
- 2. Click on the "Properties" panel.
- 3. Select the "Settings" tab.
- 4. Click on the "Calibrate" Button.
- 5. The "Welcome to the Device Calibration Wizard" will appear.
- 6. Click "Next."
- 7. Click "Next" again.
- 8. Click on the "Display Raw Data" button.

Calibrate the Left Joystick

The first device to be calibrated is the Left Joystick.

- 9. Watch the display while moving the Left Joystick left to right and forward and backward.
- 10. The "+" cursor should move the full range to all sides inside the box.

- 11. Release (Center) the Left Joystick the "+" cursor should stop in the box center.
- 12. Click "Next."
- 13. Click "Next" again.
- 14. Click "Finish."

The final device that you will calibrate is the Right Joystick. This function is calibrated under the second "CH OEM 2 AXIS 1 BUTTON JOYSTICK" line. Start this process by following these eight steps:

- 1. Select and double click on the second "CH OEM 2 AXIS 1 BUTTON JOYSTICK" line.
- 2. Click on the "Properties" panel.
- 3. Select the "Settings" tab.
- 4. Click on the "Calibrate" Button.
- 5. The "Welcome to the Device Calibration Wizard" will appear.
- 6. Click "Next."
- 7. Click "Next" again.
- 8. Click on the "Display Raw Data" button.

#### Calibrate the Right Joystick

The last device to be calibrated is the Right Joystick.

9. Watch the display while moving the Right Joystick left to right and forward and backward.

10. The "+" cursor should move the full range to all sides inside the box.

11. Release (Center) the Right Joystick – the "+" cursor should stop in the center of the box.

12. Click "Next."

13. Click "Next" again.

#### End Procedure

14. Click "Finish."

15. Click "Ok" on the "Properties" Panel – this locks the calibrations set for functions.

16. Click "Ok" on the Game Control Panel to close out the calibration procedures.

The Left Joystick and Right Joystick are calibrated. The calibration procedure is performed only once unless a simulator component is replaced. You are ready to use your Hydraulic Excavator Simulator. Click on the Hydraulic Excavator icon on the Windows Desktop to start your simulation software.

If the Simulator software license has not been activated, follow the instructions provided in the first window that appears after you have clicked on the Hydraulic Excavator icon. The "License Code" that is shown in this first screen is required for license activation.

## Client Services Support

Cat Simulators come with support services for the first year (nominal subscription fee applied after the first year). Technical support is included (in English) Monday-Friday 6 a.m. to 7 p.m. CST. The support staff will answer any questions, trouble-shooting needs, warranty requests or relicense and transfer needs.

- Call 1.877.434.7467 (inside the U.S.); 1.309.266.2640; or e-mail support@catsimulators.com
- On-site set up and installation of the simulator is available. Call for quote.
- Simulator instruction is available by a trained simulator operator on-site or over the Internet. Call for quote.

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