

Joysticks

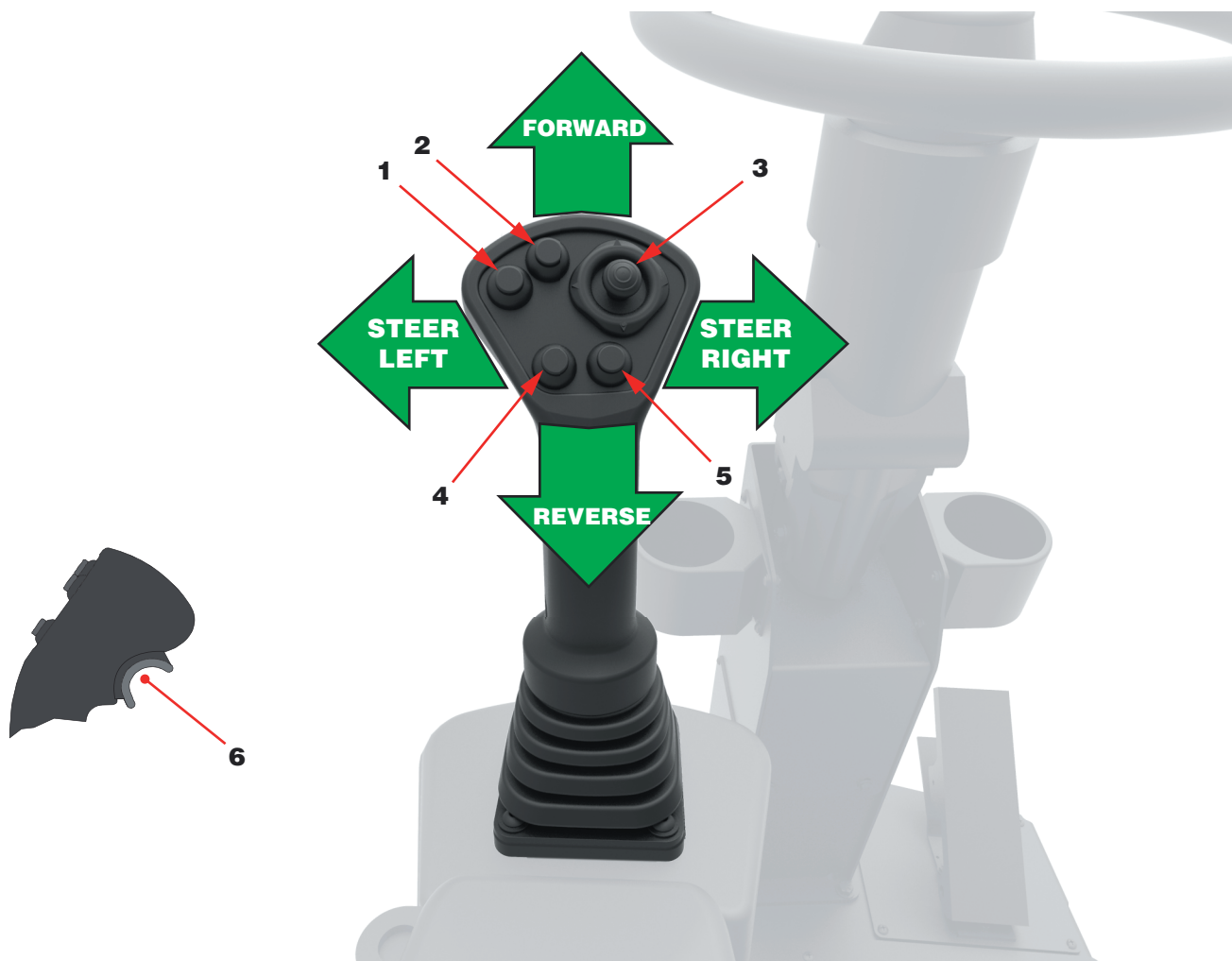


Figure 2-4-1 Left Hand Joystick

Left Hand Joystick

See Figure 2-4-1.

By default, the left hand joystick controls the transmission direction and steering direction:

- Push joystick forward to place the transmission into forward.
- Pull joystick back to place the transmission into reverse.
- Push joystick right to steer right.
- Push joystick left to steer left.

NOTE: Steering wheel overrides joystick steering.

The joystick's main axes may be reconfigured:

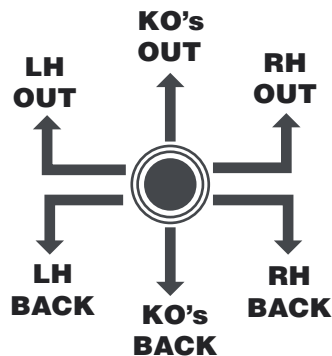
- The X-Axis may be reconfigured for:
 - » Kickoff Out (left)
 - » Kickoff In (right)
- The Y-Axis may be reconfigured for:
 - » Holddown Close
 - » Holddown Open

See Section 7-2 in the service manual for instructions.

The joystick also includes several buttons, a micro-joystick, and a trigger. Refer back to Figure 2-4-1.

1. **Auto Level** - Button #1 is set to activate the Auto-Level function. When activated, the carriage will automatically adjust position so that the tines are roughly parallel to the ground.
2. **Wiper Delay** - If the Wiper Delay Mode is set to "Button" (see the Machine Preferences screen, detailed in your service manual), this button may be used to set the delay interval. Set the overhead switch to the "Delay" setting, press the button once, and the wipers will sweep across the windshield once and pause. Press the button a second time to activate the wipers again. This will set the delay interval, and the wipers will continue to activate at that interval until turned off or reset to a new interval. The interval may be set between 2 seconds and 2 hours. If the interval needs to be reduced, press the button and the interval will reset to a shorter time. If the interval needs to be increased, press and hold the button until you hear a beep. This will reset the timer to over 2 hours. Then you can press the button to reset to timer as needed. If "Pulse" is selected as the Wiper Delay Mode, the wipers will actuate only when this button is pressed.

3. **Kickoff** - The micro-joystick is configured to control the kickoff function. Push the micro-joystick forward to push both kickoffs out, pull it back to retract both kickoffs. Push the micro-joystick left or right, then forward or back to control the kickoff arms individually.



4. **Shift Down** - Press this button to shift the transmission into a lower gear when operating in manual mode.
5. **Shift Up** - Press this button to shift the transmission into a higher gear when operating in manual mode.
6. **Unused** - As a standard the trigger is unused but may be configured using the functions listed on the next page.

Left Hand Joystick Options

The previous describes the default configuration for the LH joystick. The joystick may be custom configured by the maintenance department. See Section 7-2 in the service manual for instructions. Additional functions that are available include:

- **Declutch** - Button #2 may be set to toggle the Declutch function (see description for Declutch on page 2-4-5).
- **Load Holding** - Either Button #1 or Button #2 may be set to activate the Load Holding function. When activated, the hold-down arms will continue to apply pressure as required, even after the HD function has been released.
- **Tine Memory** - Either Button #1 or Button #2 may be set to activate the Tine Memory function. When so configured, press the button for 1 second or longer to establish a position that the carriage will return to. Once established, when the button is quick-pressed (less than 1 second), the carriage will automatically return to the position that was previously established (for example, the carriage may be set to return to a position with the tines close to the ground for retrieval of scaled logs).
- **Throttle Set** - Button #1 may be set to activate the Throttle Set function. See Section 2-2 for details.
- **Steering** - The micro-joystick may be configured so that left-right motion is used for joystick steering.
- **Imp L/R** - The micro-joystick may be configured to isolate implement control to either the left side or the right side.
- **Gear Selection** - The micro-joystick may be configured to shift the transmission up or down.
- **Auto/Man Trans** - This button toggles the transmission mode between automatic and manual shifting. When in automatic mode, the operator's control panel will indicate "AUTO" near the gear range indicator. The machine will automatically select the appropriate gear based on current driving conditions. When in manual mode, the operator determines the current gear selection using the buttons on the joystick (items 4 and 5).
- **LH Implement** - Press and hold the LH implement button while operating the joystick to control the left kickoff or holddown arm only.
- **RH Implement** - Press and hold the RH implement button while operating the joystick to control the right kickoff or holddown arm only.
- **Trigger** - The transmission direction may be set with the trigger:
 - Roll the trigger up to place the transmission in Reverse.
 - Place the trigger in the center position to place the transmission in Neutral.
 - Roll the trigger down to place the transmission in Forward.
- **Neutral** - Press to shift the transmission into Neutral.
- **Comp. Brake** - Press the button to engage the converter and send a compression brake signal to the engine when the converter requirements are met.

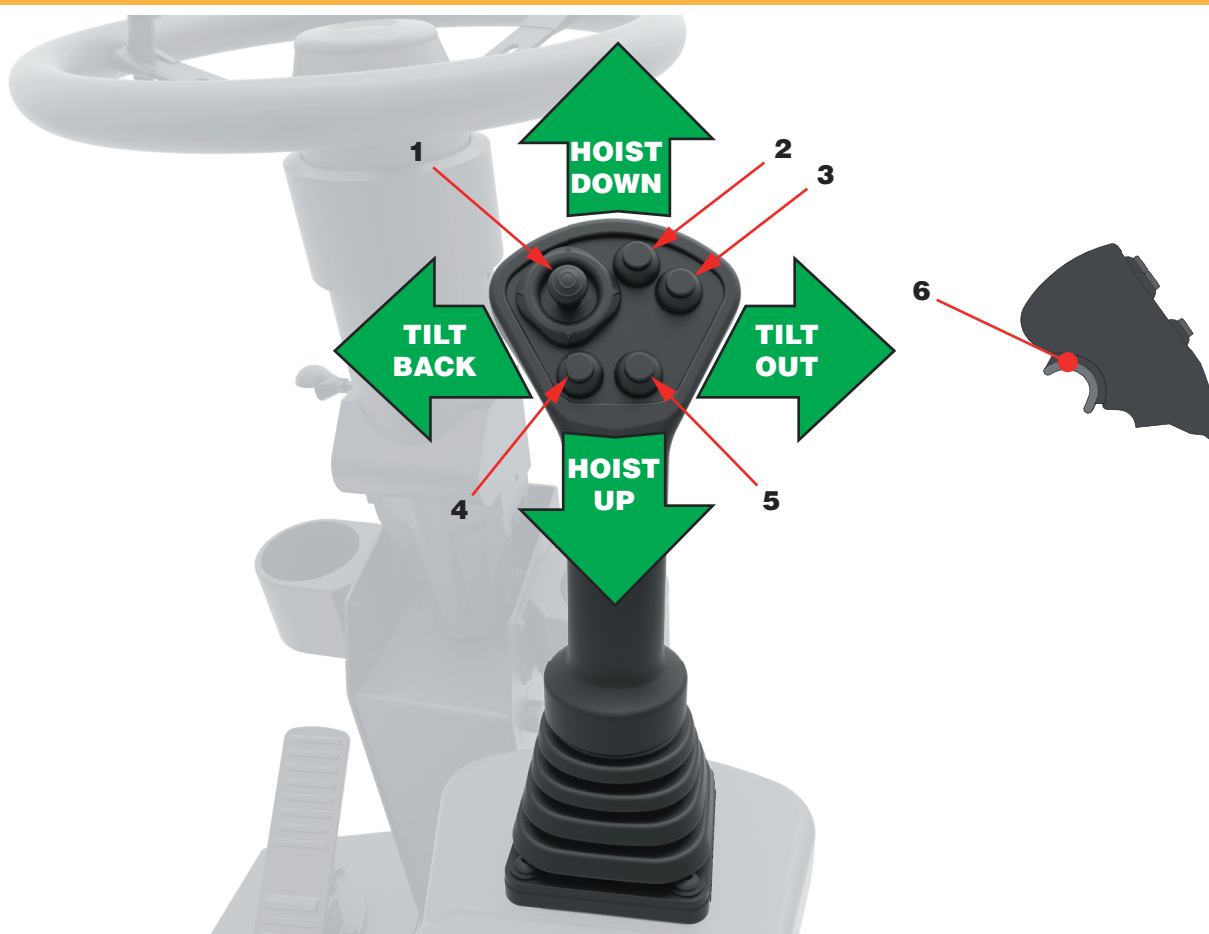


Figure 2-4-2 Right Hand Joystick

Right Hand Joystick

See Figure 2-4-2.

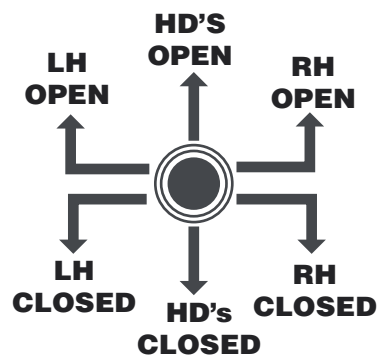
Move the right hand joystick to control the hoist and carriage.

- Push joystick forward to lower the boom/carriage.
- Pull joystick back to raise the boom/carriage.
- Push joystick right to tilt the carriage out.
- Push joystick left to tilt the carriage back.

The X and Y axes may be swapped from the default, so that tilt is controlled on the Y-Axis, and hoist is controlled on the X-Axis.

The joystick also includes several buttons, a micro-joystick, and a trigger.

1. **Hold Down** - The micro-joystick is configured to control the hold down function. Push the micro-joystick forward to open both holddowns, pull it back to close both holddowns. Push the micro-joystick left or right, then forward or back to control the holddown arms individually.



2. **Throttle Set** - The trigger sets the throttle based solely on the position of the throttle pedal. This will override any throttle setting previously set on the operator's control panel. See Section 2-2 for details of that method of setting the throttle. When depressed, any previously set throttle setting will be cancelled, and the throttle pedal will be recalibrated to the full range; 750 (idle) to 2205 (high free idle). When this button is then released, the throttle will be set based on the position of the throttle pedal at the moment the button is released. The throttle pedal is recalibrated; the range will now be between the set point (the new lowest RPM) and high free idle (~2205 RPM). Pressing and releasing this button with your foot off the throttle pedal is a good way to set the throttle back to idle (this recalibrates the throttle pedal back to the full range) if a higher throttle setting is engaged.
3. **Declutch** - This button toggles the Declutch function. When Declutch is turned ON and the service brakes are applied, the declutch system automatically shifts the transmission into neutral and the Declutch icon on the operator's control panel illuminates. When the service brake is released, the transmission will reengage, and the Declutch icon will dim. Declutch allows you to perform all hydraulic functions at any RPM smoothly, without causing converter stall or other unnecessary strains on the brake or drivetrain components. If downgrades are encountered, this function may be turned OFF, and the transmission will remain in gear when the brakes are applied. This function should be left ON for normal operations
4. **LH Seat Rotate** - Press this button to rotate the seat platform to the left.
5. **RH Seat Rotate** - Press this button to rotate the seat platform to the right.
6. **Unused** - As a standard the trigger is unused but may be configured using the functions listed below.

Right Hand Joystick Options

The above describes the default configuration for the RH joystick. The joystick may be custom configured by the maintenance department. See Section 7-2 in the service manual for instructions. Additional functions that are available include:

- **FNR - Mom** - The micro-joystick may be set so that pressing the joystick up puts the transmission in Forward and pressing the joystick down puts the transmission in Reverse. The transmission may be put back into Neutral by either pressing the micro-joystick in the same direction of travel for 1/2 second or longer, or by fully pressing the brake.
- **Auto Level** - Either the Trigger, Button #2 or Button #3 may be set to activate the Auto-Level function. When activated, the carriage will automatically adjust position so that the tines are roughly parallel to the ground.
- **Load Holding** - Either the Trigger, Button #2 or Button #3 may be set to activate the Load Holding function. When activated, the hold-down arms will continue to apply pressure as required, even after the HD function has been released.
- **Camera** - Either Button #2 or Button #3 may be set to cause one of the cameras to go full screen on the monitor. See Section 7-2 in the service manual for instructions on how to set which camera is associated with this button.
- **Tine Memory** - Either the Trigger, Button #2 or Button #3 may be set to activate the Tine Memory function. When so configured, press the button for 1 second or longer to establish a position that the carriage will return to. Once established, when the button is quick-pressed (less than 1 second), the carriage will automatically return to the position that was previously established (for example, the carriage may be set to return to a position with the tines close to the ground for retrieval of scaled logs).
- **Shift Down** - Button #2 may be set to downshift.
- **Shift Up** - Button #3 may be set to upshift.

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- **Auto/Man Trans** - This button toggles the transmission mode between automatic and manual shifting. When in automatic mode, the operator's control panel will indicate "AUTO" near the gear range indicator. The machine will automatically select the appropriate gear based on current driving conditions. When in manual mode, the operator determines the current gear selection using the buttons on the joystick (items 1 and 2).
 - **Brake Steering/Throttle** - Use this micro-joystick to apply the brakes to one side of the machine or the other, and to adjust the throttle.
 - Push the micro-joystick to the left to apply the brakes on the left side of the machine, causing the machine to turn left.
 - Push the micro-joystick to the right to apply the brakes on the right side of the machine, causing the machine to turn right.
 - Push the micro-joystick up to increase the throttle.
 - Push the micro-joystick down to decrease the throttle.
 - **Comp. Brake** - Press the button to engage the converter and send a compression brake signal to the engine when the converter requirements are met.
 - **Wiper Delay** - If the Wiper Delay Mode is set to "Button" (see the Machine Preferences screen, detailed in your service manual), this button may be used to set the delay interval. Set the overhead switch to the "Delay" setting, press the button once, and the wipers will sweep across the windshield once and pause. Press the button a second time to activate the wipers again. This will set the delay interval, and the wipers will continue to activate at that interval until turned off or reset to a new interval. The interval may be set between 2 seconds and 2 hours. If the interval needs to be reduced, press the button and the interval will reset to a shorter time. If the interval needs to be increased, press and hold the button until you hear a beep. This will reset the timer to over 2 hours. Then you can press the button to reset to timer as needed. If "Pulse" is selected as the Wiper Delay Mode, the wipers will actuate only when this button is pressed.