

Calibration

Following are calibration instructions for Lippert Hall Effect Bed Tilt Control. The controller is not shipped in calibration mode.

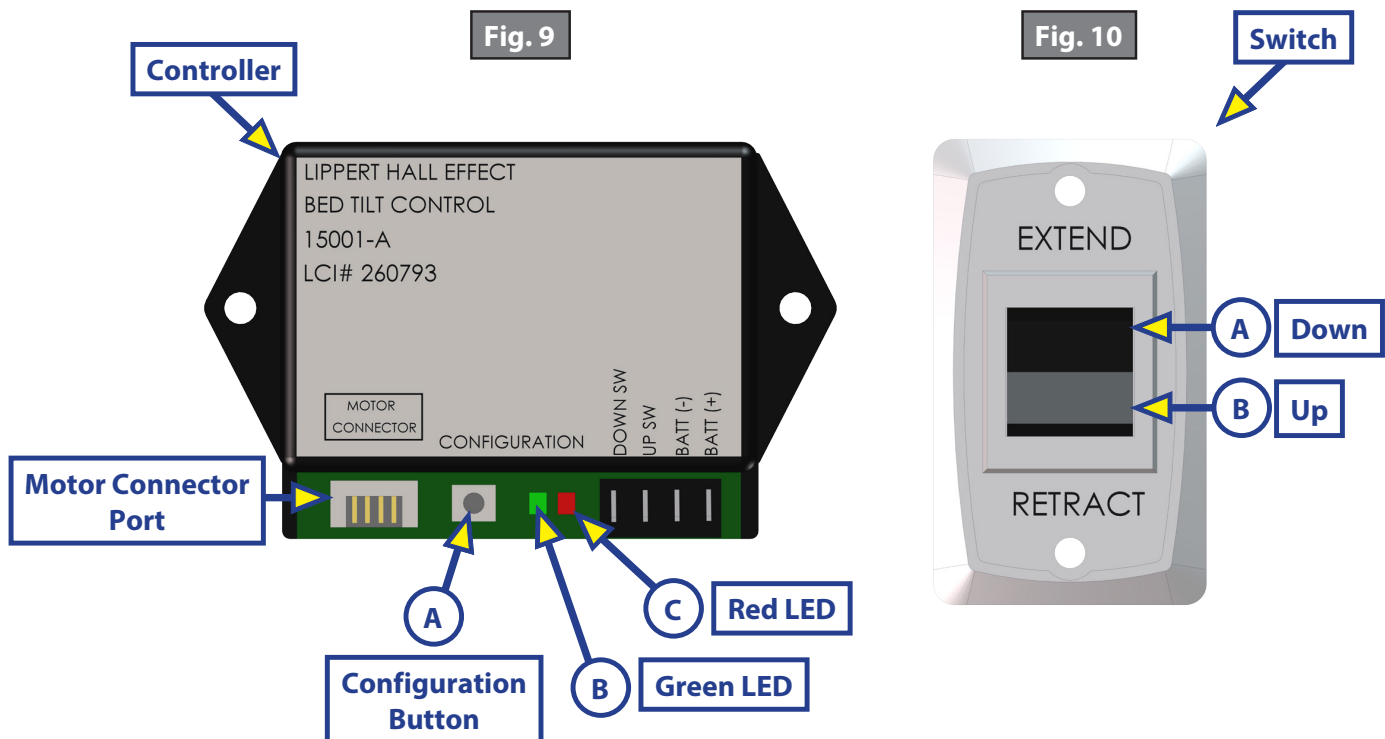
To enter calibration mode from normal mode, hold down the configuration button for five seconds (Fig. 9A).

To calibrate the stops:

1. Flashing red LED (Fig. 9C) indicates that the upward limit needs to be set.
2. Use the wall switch (Fig. 10B) to move the unit to the desired top position.
3. When at the desired top position, press the configuration button (Fig. 9A).
4. The top limit is set.
5. Flashing green LED (Fig. 9B) indicates that the downward limit needs to be set.
6. Use the wall switch (Fig. 10A) to move the unit to its desired downward position.
7. When at the desired downward position, press the configuration button (Fig. 9A).
8. The downward limit is set.
9. Once the downward limit is set, both red (Fig. 9C) and green (Fig. 9 B) LEDs will blink simultaneously for a moment.
10. Both limits have been set successfully.

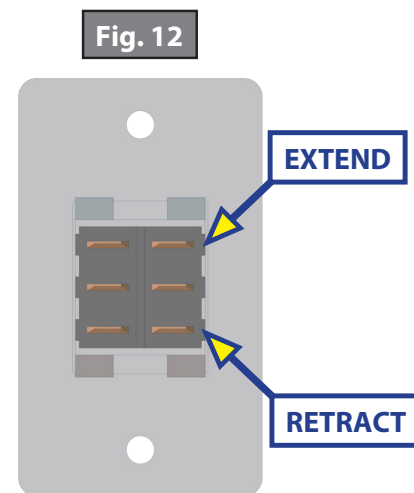
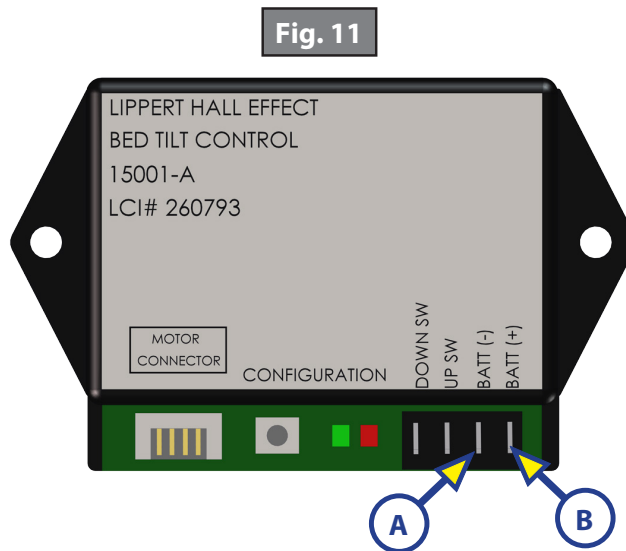
NOTE: If an error occurs during this configuration, the red and green LEDs will quickly alternate flashing.

11. To reset the stops, press and hold the configuration button for five seconds. This will allow the system to enter calibration mode.



Troubleshooting

1. Locate controller (Fig. 11).
2. Activate switch.
3. Look for the status LEDs on the controller to light while switch is activated.
4. If status LEDs do not light, and no error codes are present, check the following:
 - A. Check the battery for 12V DC.
 - B. Check for 12V DC in to controller (Fig. 11A and 11B).
 - C. Check for 12V DC at switch connection on both extend and retract (Fig. 12).
5. If error codes are present, refer to Error Code Chart.



Error Code Chart

For motor-specific faults, the green LED will blink once and the red LED will blink from two to nine times depending on the error code. Once the error code has been cleared, the control may flash both the red and green LEDs together. Press and release the mode button to calibrate the upward and downward stops.

Red LED Error Code	Name	Description
2	Motor Short Circuit	Motor or wiring to motor has shorted out.
3	Low Battery	Battery capacity low enough to drop below 6 volts while running.
	Battery Drop Out	Voltage below 8 volts at start of cycle.
4	High Battery	Voltage greater than 18 volts.
5	Excessive Motor Current	High amperage.
8	Hall Signal Not Present	Encoder is not providing a signal, which is usually a wiring problem.
	Wire Short Between Controller and Motor	
9	Hall Power Short To Ground	Power to encoder has been shorted to ground, which is usually a wiring problem.

When an error code is present, the board needs to be reset. Energizing the extend/retract switch resets the board. Energize the extend/retract switch again for normal operation.