



SCHWINTEK BED TILT  
**INSTALL MANUAL**

LIPPERT  
COMPONENTS™

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## Prior to Installation

### Tools Needed

1. Screw gun
2. Tape measure
3. Electric drill

## Installation

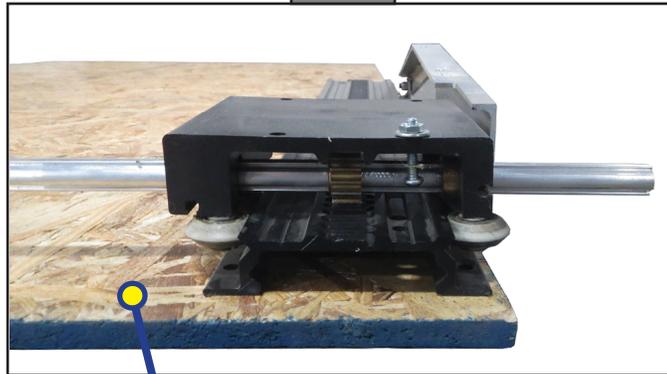
### Racks

1. Mount racks onto a solid surface (Fig. 1) under the bed with #10 screws (a minimum requirement), filling every hole in the rack (Fig. 2).

**NOTE:** Make sure racks are parallel to each other.

2. The back of the rack should be  $\frac{1}{2}$ " away from the outside wall of the bed slide to ensure there is enough space for the bed tilt to fully operate (Fig. 3).

Fig. 1



Solid Surface

Fig. 2

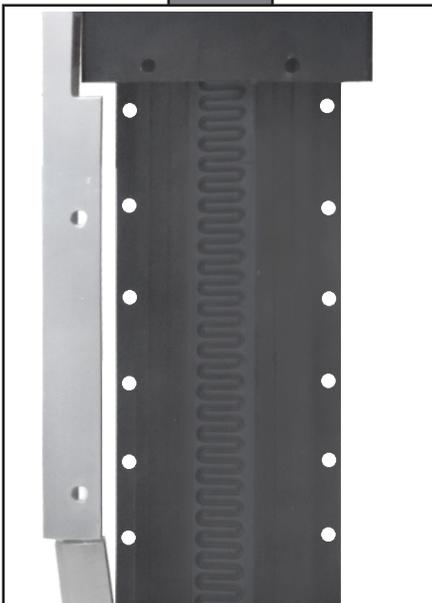


Fig. 3



Mount  $\frac{1}{2}$ "  
away from  
outside wall

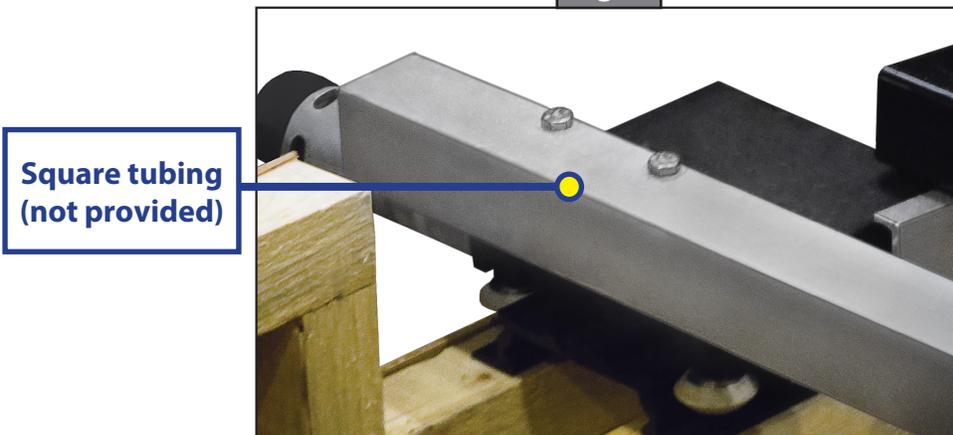
## Bed Support

**NOTE:** It is recommended to mount 2 x 2 square aluminum tubing across the bed tilt in order to stabilize assembly (Fig. 4).

**NOTE:** The tubing is not provided.

1. Bolt head (Fig. 5A) and foot (Fig. 5B) plywood pieces to the mechanism to provide the platform for the mattress (Fig. 5 & 6).

Fig. 4



2. Measure the space between the head and foot. There should be a minimum 3 ½" gap between the two pieces of plywood when the bed tilt is extended to ensure that they do not touch when retracted (Fig. 5).

Fig. 5

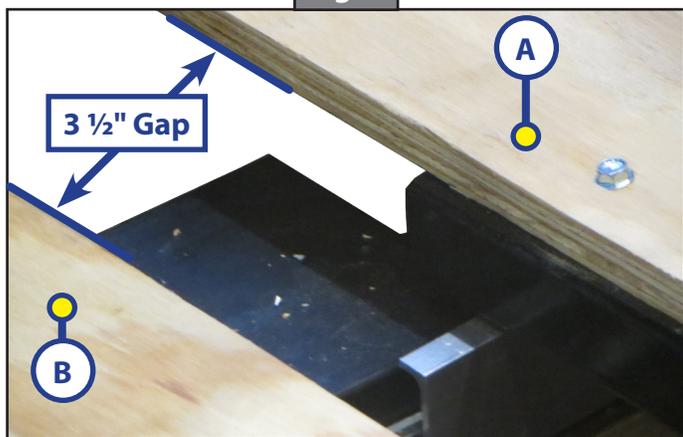
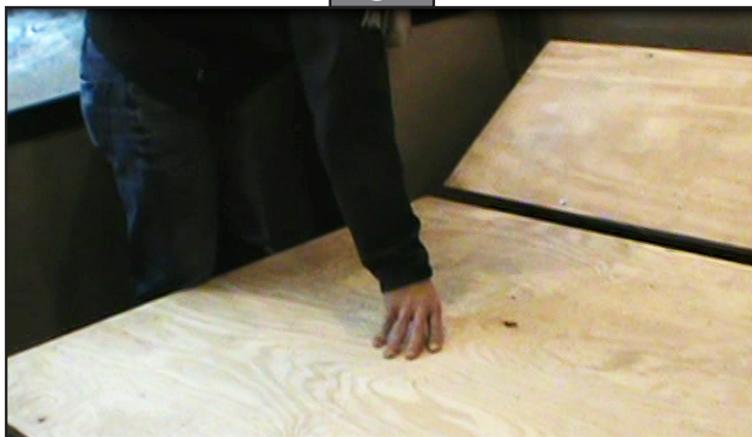


Fig. 6



3. Place the mattress on top of the plywood once it is secure (Fig. 7).
4. Place strap over the mattress to secure it in place.

Fig. 7



## Calibration

**NOTE:** The controller is not shipped in calibration mode. To enter calibration mode from normal mode, hold down the configuration button for five seconds (Fig. 8A).

### To calibrate the stops:

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

**NOTE:** If an error occurs during this configuration, the Red and Green LEDs will quickly alternate flashing.

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

Fig. 8 - Controller

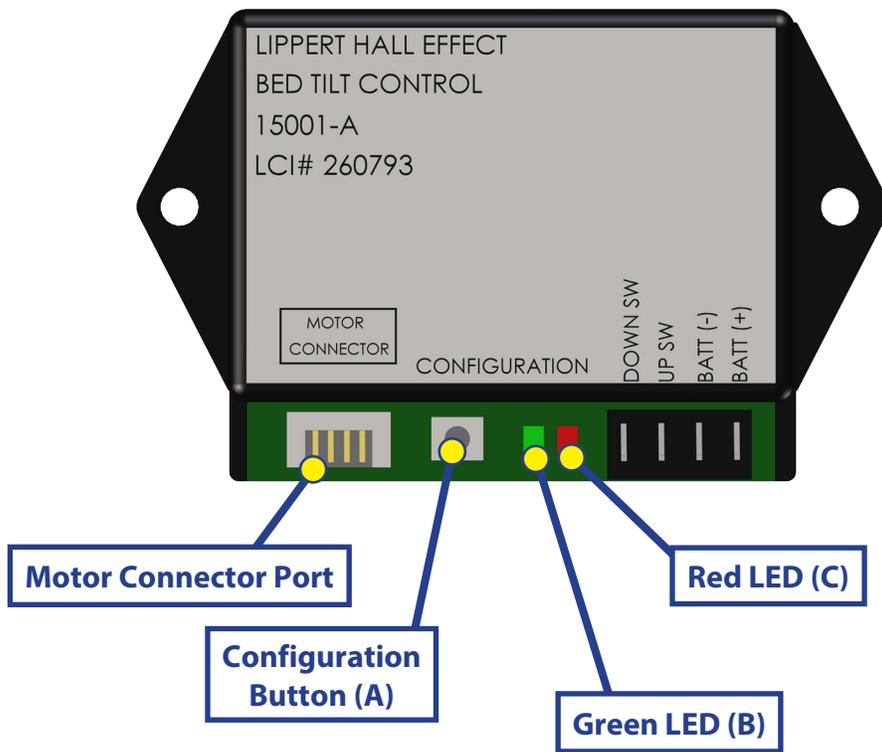
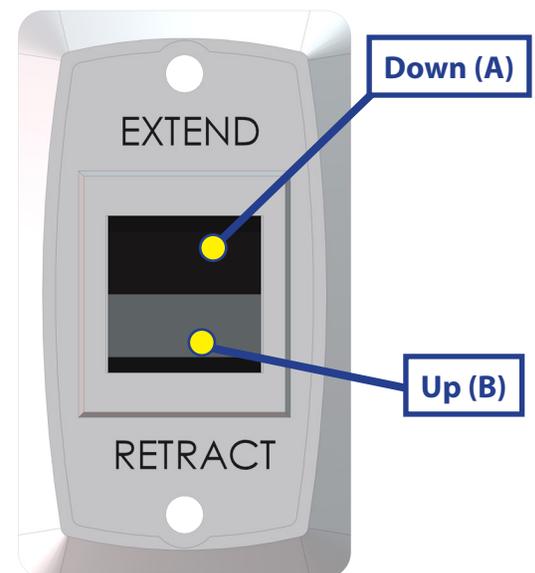
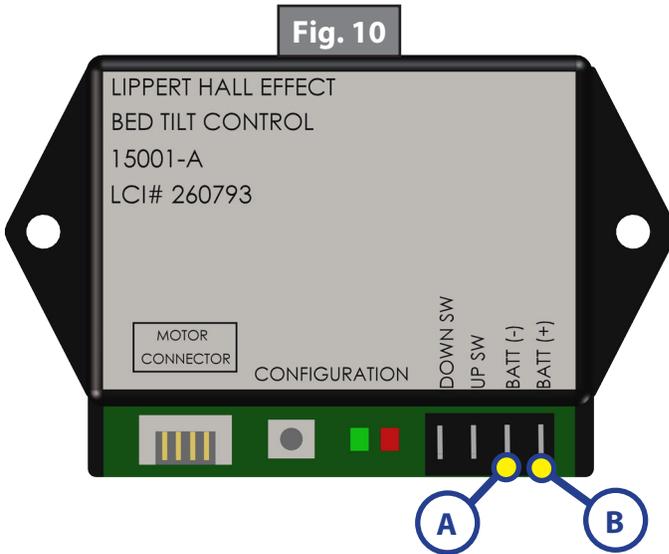


Fig. 9 - Switch



## Troubleshooting

1. Locate controller (Fig. 10).
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 for 12VDC in to controller (Fig. 10A, B).
  - B. Check for 12VDC at switch connection on both extend and retract (Fig. 11).
  - C. Check the battery for 12VDC.
5. If error codes are present, refer to the Error Code Chart below.



## Error Code Chart

For motor-specific faults, the green LED will blink. The red LED will blink from 2 to 9 times depending on the error code.

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



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