

## Hospital Bed



A hospital bed is a great choice for anyone dealing with weakness and/or mobility restrictions. A hospital bed usually allows for various user positions (elevated head of bed or foot of bed), ability to adjust height of the bed, and bed rails that can be raised or lowered. The hospital bed improves the ability and safety with transfers to/from bed, reduces physical burden on a caregiver, and improves bed mobility of the user. The bed can improve comfort, improve circulation and reduce chances of pressure sores. Hospital beds can come with a variety of options and add-ons, and they have manual adjustments or are fully electric designs.

### Typical Hospital bed Set-up

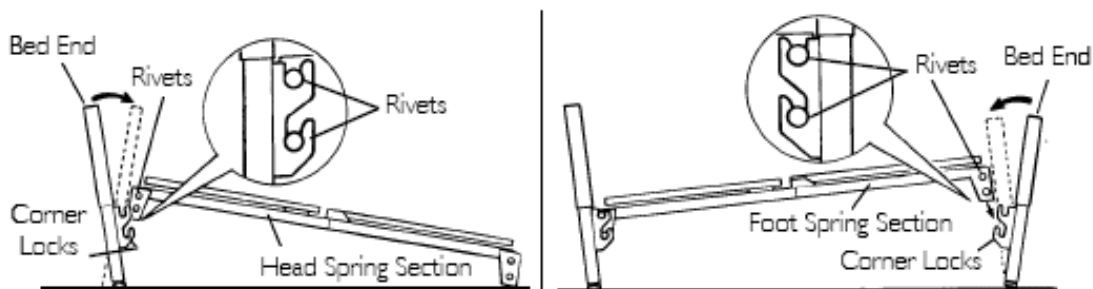
#### Head & Footboard Assembly – 3 Step

The head and footboard pieces may be referred to as universal bed ends, and depending on the brand and model, the headboard may be the same as the footboard, but not always. Some bed ends have an extended output shaft, others have a 'flush' shaft. Some fully electric models will have a spring-loaded coupler shaft on the headboard.

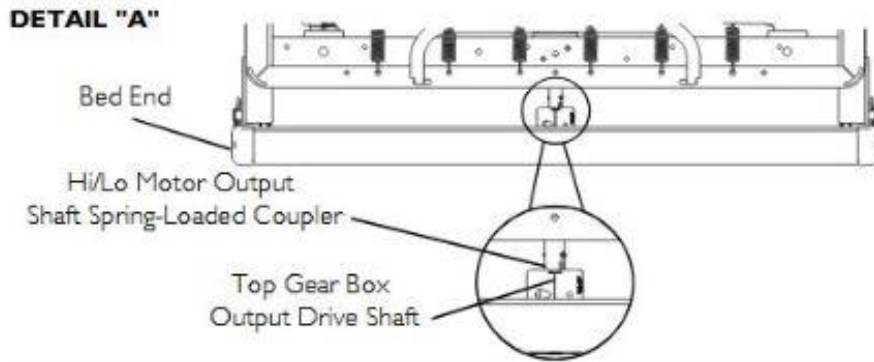
To assemble;

- Stand one bed end as close to the head spring section as possible, with the corner locks facing the bed.
- Each person should grasp one end of the head spring section, on the side, with the other hand holding the top of the bed end. Raise the bed until the rivets on the corner plates of the spring section are high enough to place into the corner locks on the bed end.
- It may be easier to tilt the bed end toward the head spring section to place the rivets into the corner locks.
- Return the universal bed end to its full upright position. The head spring rivets will lock into place
- Repeat the same procedure for other bed end.

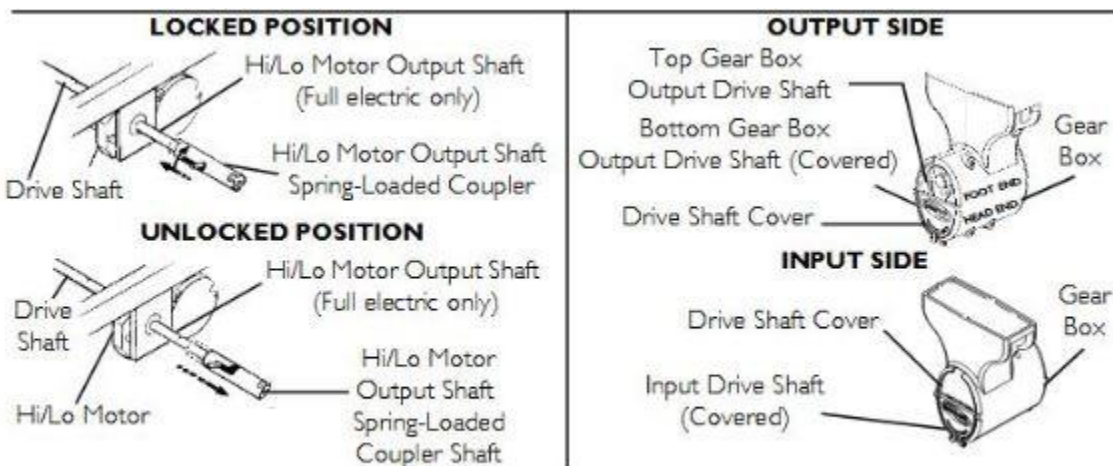
TWIN XL is the size of bed sheets that fit a hospital bed mattress



Notice at the foot-end of the bed (the end with the motor assembly), the footboard may have a gear box with a spring-loaded coupler in the center where the drive motor engages the footboard. (this is on fully-electric beds only) This must be connected so that the drive-shaft from the motor matches up with the receiver in the footboard. This drive rod is spring-loaded. It should be compressed and released into the footboard to engage. The photo marked Detail "A" shows the engaged unit. The first photo on the next page shows how to engage it.



In semi-electric beds, some bed ends have an extended output shaft, others have a 'flush' shaft. If the gear box has two options for shafts, one will be marked as FOOT END, the other for HEAD END, with a plastic cover. This universal bed end allows you to assemble the bed, then choose the correct output.



**FIGURE 4.10** Assembling the Drive Shaft

Below are a couple of photos showing the connections between the drive shaft (and on fully-electric models, the motor) and the head and foot board.



13. Release the spring loaded shaft on the hi/low motor and insert the shaft into the gear box on the footboard.



14. Make sure the slot on the spring loaded shaft engages the roll pin on the gear box.

### **Attaching the Hi/Low Drive-Shaft (long squared tube)**

The high/low drive-shaft raises/lowers the entire bed for both the fully electric and the semi-electric design. This long spring-loaded rod connects from the motor, located at the foot-end of the bed, to the receiver built into the headboard (for fully-electric), or connects both the headboard and footboard (for semi-electric). This drive-rod is spring loaded and must be slightly compressed and released to secure to the drive shaft. Before beginning, make sure that the drive shaft is extended to the proper length, as they are universal. To do this, you may have to depress the rounded button and pull/push the shaft.

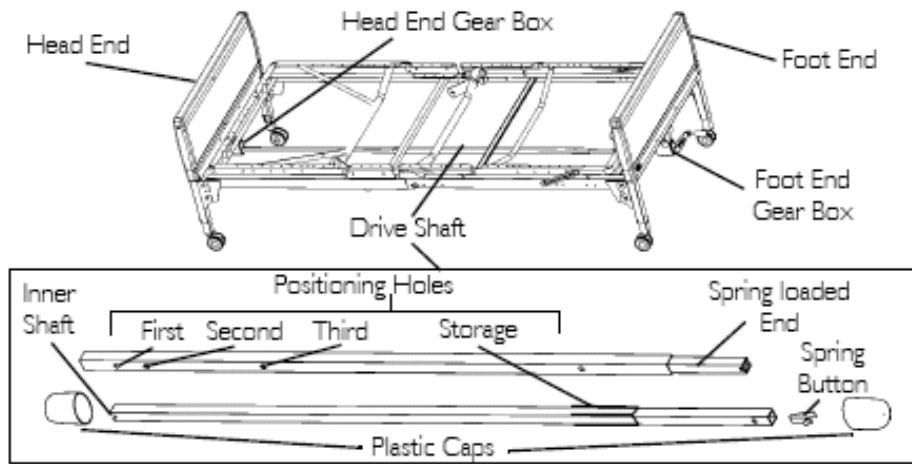
Although it does not matter which end you connect first, (for proper functioning of the bed), we have found that it is easier to do it this way;

Using with the non spring-loaded end, insert the drive shaft into the motor (for fully electric) or the footboard (for semi-electric). Make sure the drive shaft is above the metal cross brace of the lower bed.

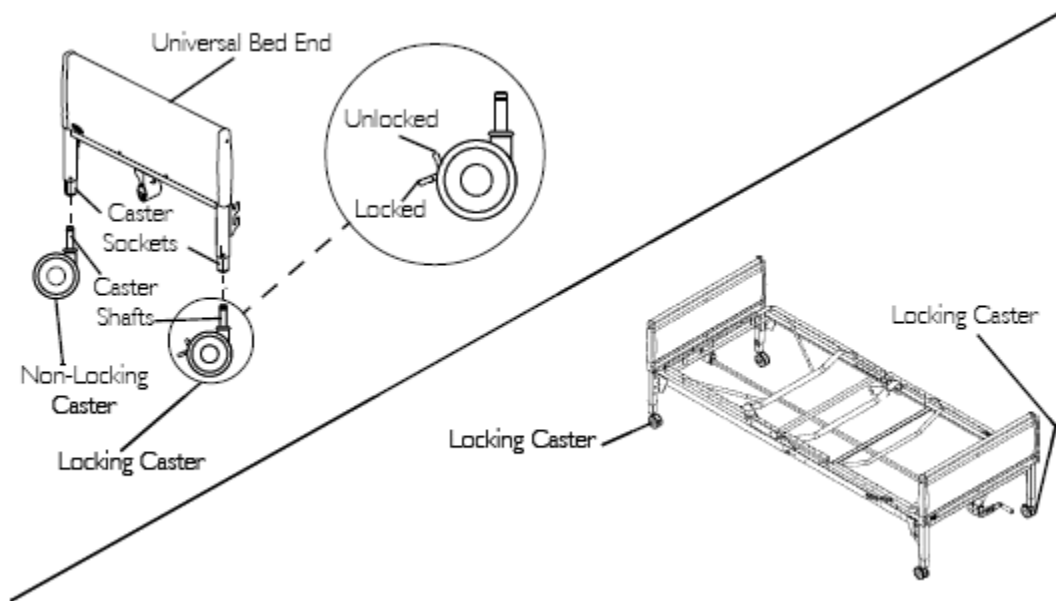
Lifting the head spring section out of the way, step into the bed frame. Pull back on the spring-loaded end to insert it into the drive shaft. You may need to twist it to 'catch' the cross bar.

\*The drive shaft is adjustable and may need to be adjusted to engage properly.

\*\*The receivers on most head/foot boards allow them to be universal. They are marked as such. Please make sure you have attached the drive shaft into the correct receiver.



For reference: The bed can be locked once it is rolled into place.



## Testing

Plug-in the bed and try each individual control button on the hand pendant. If one of the functions is not working properly, troubleshooting is straightforward. If not, check the plug-in connection to the motor.

The foot-end raise/lower function is usually the least troublesome since it is already pre-assembled.

The head-end raise/lower function will perform properly if the "head spring pull tube" is connected properly. If not, check the plug-in connection to the motor.

The bed hi/low function is usually where self-installers have a problem since the drive shaft/rod must connect properly into the footboard. If the bed won't raise/lower correctly, check the drive rod connections and make sure the center of the shafts are locked into the rod and not just free-spinning. If the head end of the bed is raising/lowering, but the foot end is not, (or vice versa) you will need to inspect the connection at the gear box, making sure they are properly inserted.