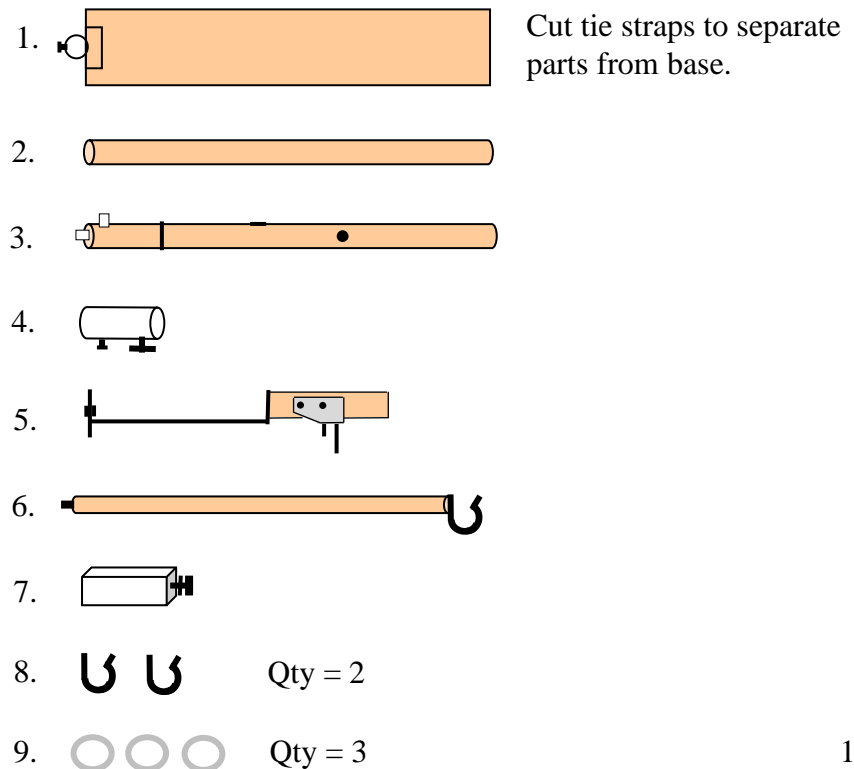


See www.chrals.com for support.

Parts in Box

1. Base
2. Bottom support dowel
3. Top support dowel with hose clamp screw
4. White coupler with knob and screw
5. Pivot bracket assembly with hose clamp screw & washer
6. Hose hanging dowel with end clamp
7. Weight with knob and washer
8. Hose clamps (2)
9. Silicone bands (3)



Assemble rotary arm

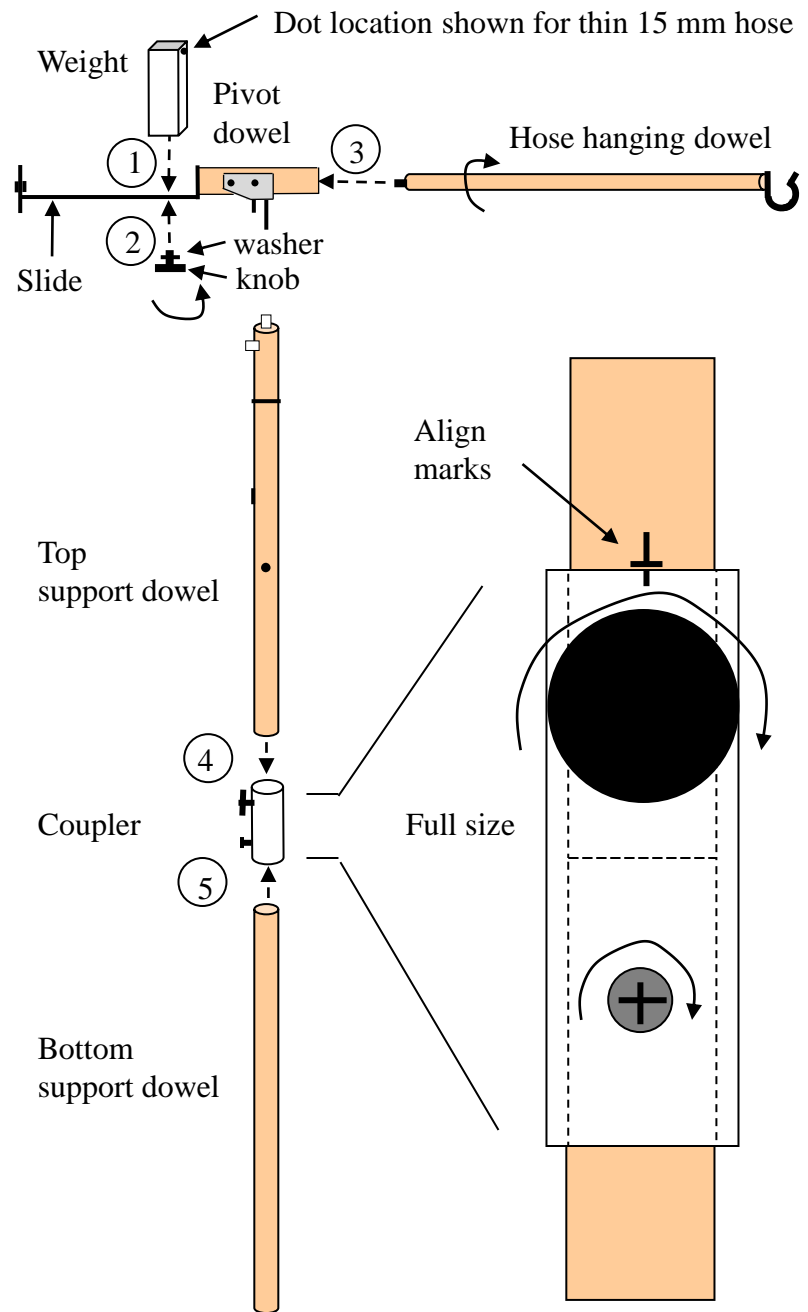
There are two ways to install the weight: dot end up or dot end down. If you are using thin 15 mm hose or oxygen tubing, the dot end should be up (far from slide). For standard 19 mm hose, covered hose, or heated hose the dot end should be down (close to slide). Thin 15 mm hose is recommended for the best performance due to flexibility and light weight if compatible with your CPAP machine.

See the last page if you are using oxygen tubing.

1. Unscrew the knob with washer from the weight and place the weight onto the slide close to the pivot dowel with dot facing pivot dowel (see above paragraph for up/down dot placement).
2. Insert thumb screw with nylon washer from bottom of slide through the long slot into the threaded hole on the bottom of the weight and twist until tight. The side of weight should align with the edge of slide.
3. Insert hose hanging dowel end screw into threaded hole of pivot dowel and twist dowel clockwise until tight.

Assemble support dowels

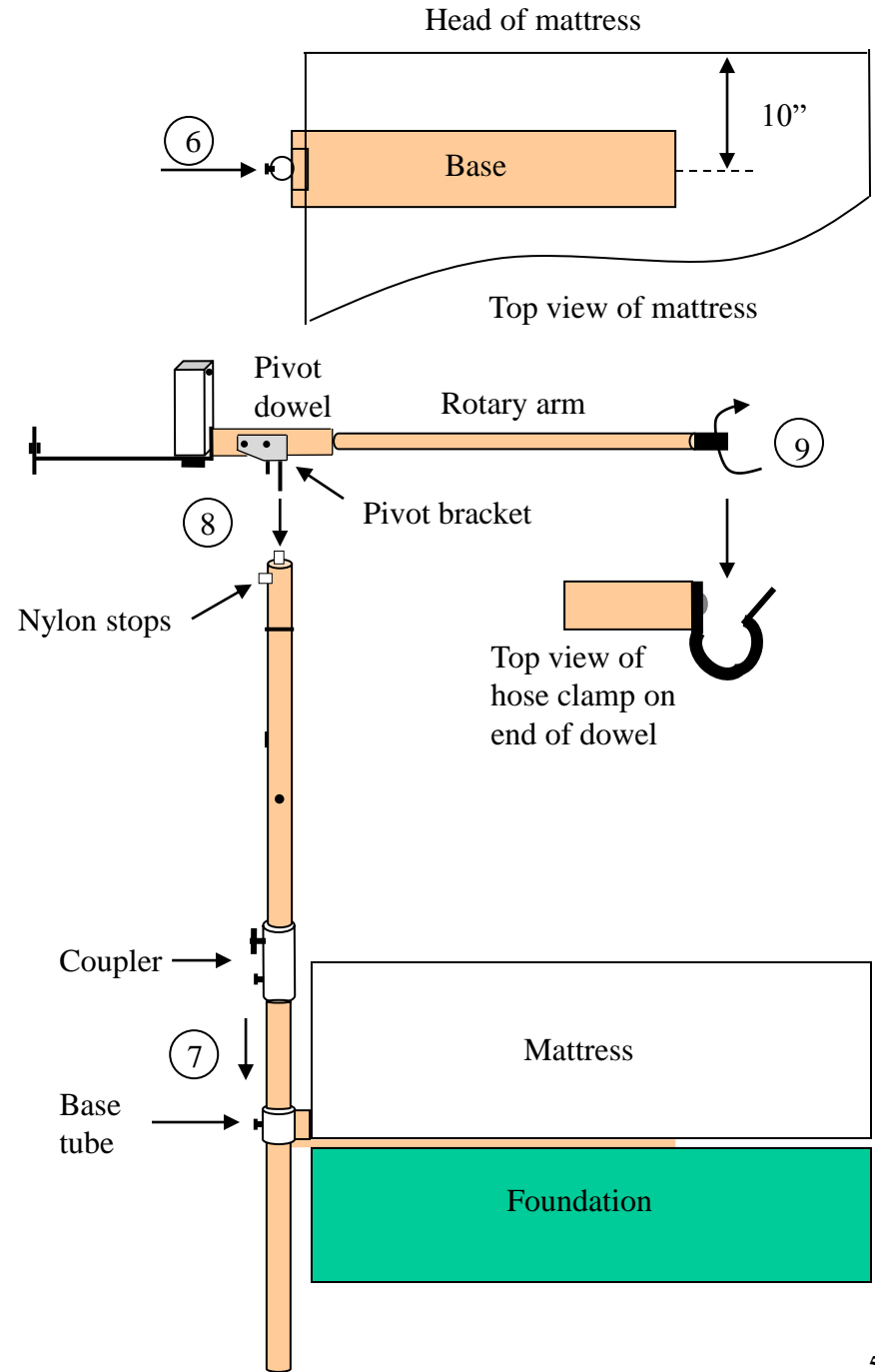
4. Loosen the knob on the white coupler and insert top support dowel about half way into the white coupler end with the knob. Align the inverted “T” mark on the dowel to the mark on the coupler and tighten the knob until the dowel is secure. The screw should slightly penetrate the wood to firmly hold the dowel in place.
5. Insert either end of the bottom support dowel into the white coupler until it hits the other dowel. Tighten the screw with a flat blade or phillips screw driver (not provided). The screw should slightly penetrate the wood to firmly hold the dowel in place.



Figures shown are for mounting on left side of bed with view from foot of bed, but unit can be mounted on right side of bed. The instructions apply for either side of the bed.

Install under mattress

6. Slide base board under side of mattress about 10" from head of mattress or if nightstand is in the way, a foot or so from nightstand (temporarily).
7. Loosen the screw in the base tube and insert bottom dowel down into base tube so that coupler is level with top of mattress and knob faces away from bed. (Mattress height above floor must be 17" or more so dowel does not touch floor. If not, you can use a saw to cut the dowel shorter). Tighten base tube screw with a flat blade or phillips screw driver. The screw should slightly penetrate the wood to firmly hold the dowel in place.
8. Hold rotary arm horizontal extending over bed with pivot bracket against pivot dowel and drop long screw into nylon tube on top of the top support dowel. The shorter stop screw should be between the two nylon stops on the support dowel.
9. Hold the hose hanging dowel near the hose clamp at the end of the dowel and twist the clamp with other hand until it is horizontal and extends out toward the foot of the bed with insertion opening facing the head of mattress. Allow the arm to pivot to the vertical storage position where the arm is held in place by a magnet.

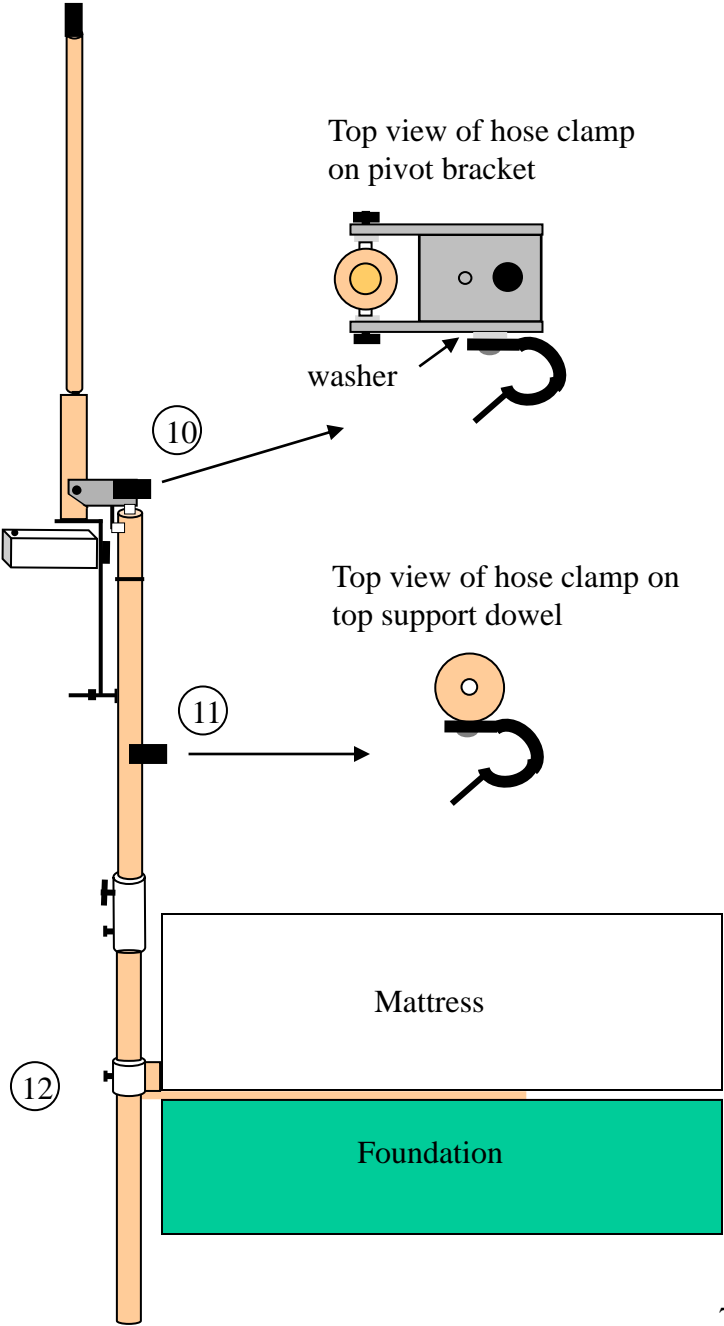


Installing hose clamps

The two lower hose clamps are oriented in the same way with the insertion opening facing away from the bed and the clamp extending out toward the foot of the bed.

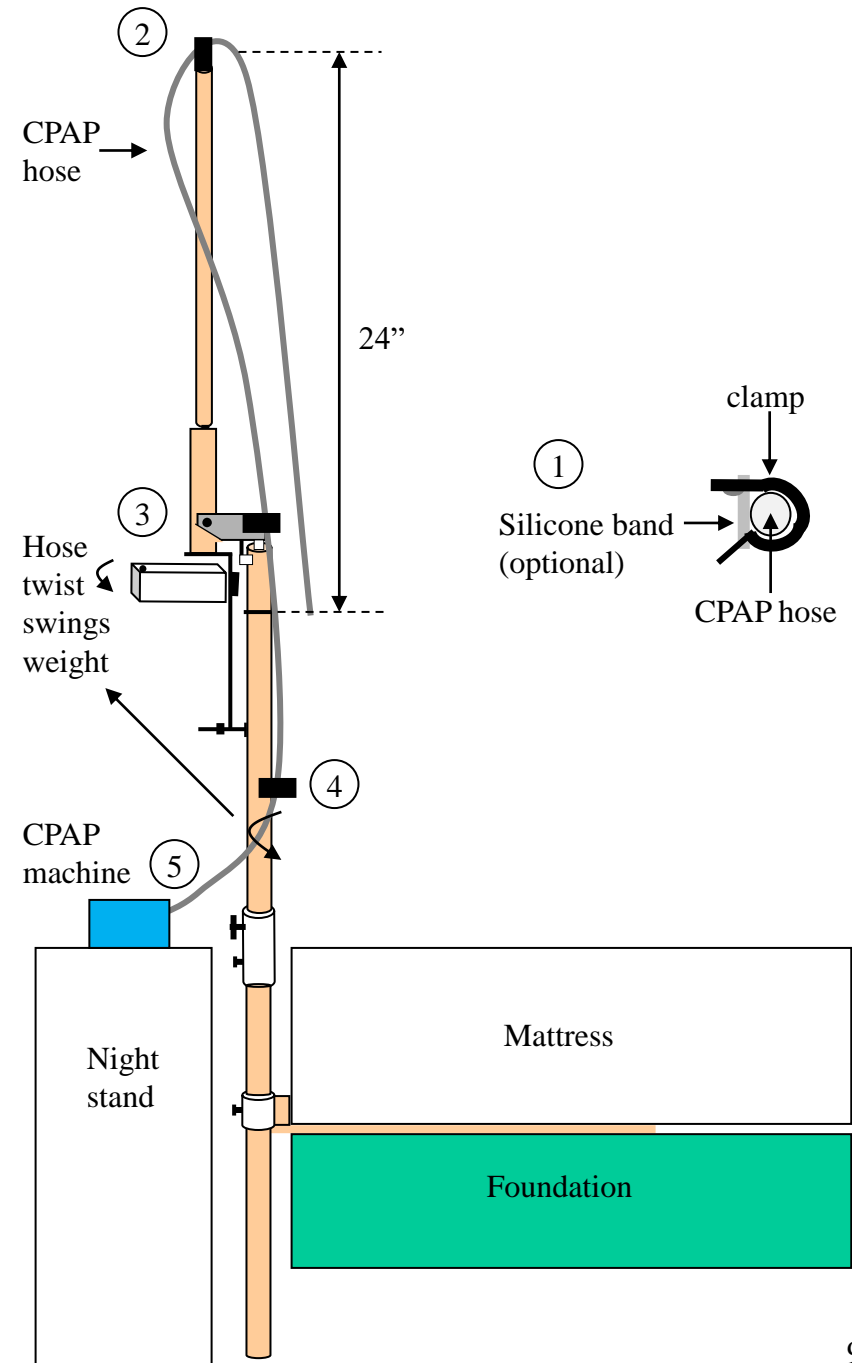
- 10. Remove the screw and washer from the side of the pivot bracket and screw one clamp into the threaded hole on the side of the pivot bracket facing the foot of the bed. The nylon washer goes between the clamp and the pivot bracket to provide a gap for an optional silicone band.
- 11. Remove the screw on the side of the top support dowel and screw the second clamp into the hole on the side of the top support dowel facing the foot of bed.
- 12. If required, move base to 10" from head of mattress by lifting mattress slightly and sliding base over.

Assembly is now complete! Mounting the hose comes next.



Mounting hose

1. The hose is held in place by 3 rubber lined clamps. Silicone bands are required to hold a covered hose in the clamps, but optional for an uncovered hose. Silicone bands will help to tighten the clamps around the hose and prevent the hose from twisting in the lower two clamps. This ensures that the hose twist force consistently pushes the arm toward a selected position. If you use the silicone bands, place each silicone band onto the clamp next to the clamp screw before inserting the hose and then stretch it around the hose and over the clamp tab with a hole.
2. Grab the hose about 2 feet from one end and lift it up near the top clamp. Open the clamp by pulling the tab with the fingers of one hand and push the hose into the clamp with the other hand. The end of the hose where the mask connects should hang over the edge of bed at the black stripe around the top support dowel (24" hanging length).
3. Guide the longer hose hanging from the other side of the top clamp to the pivot bracket clamp. Open the clamp and push the hose into the clamp allowing for some slack between the two clamps so the arm moves easily to the vertical storage position.
4. Guide the hose to the bottom clamp. Open the clamp and push the hose into the clamp. While holding the clamp slightly open, twist the hose below the clamp with your other hand to move the weight so that it points straight out from the side of the bed (perpendicular to the side of the bed). Now release the clamp. This is the typical setting to ensure that the hose twist force gently pushes the arm to be over the sleeper's head. This can be adjusted as desired to push the arm more toward the head or the foot of bed.
5. Connect the hose to the CPAP machine. If hose is too short, use a short extension hose plus coupler or 8 ft hose.



Adjusting arm lift force

1. Move the arm to a horizontal position by pulling the hose down and away from support dowel.

For hose hanging with mask disconnected (preferred)

- 2a. Loosen the thumb screw on the weight slightly and slide the weight away from the pivot dowel until the end of hanging hose floats just above the mattress (move the pillow away). Now move the weight about a half inch back toward the pivot dowel and tighten thumb screw. This last move increases down force when the hose is not hanging vertically, like for the side sleeping position.

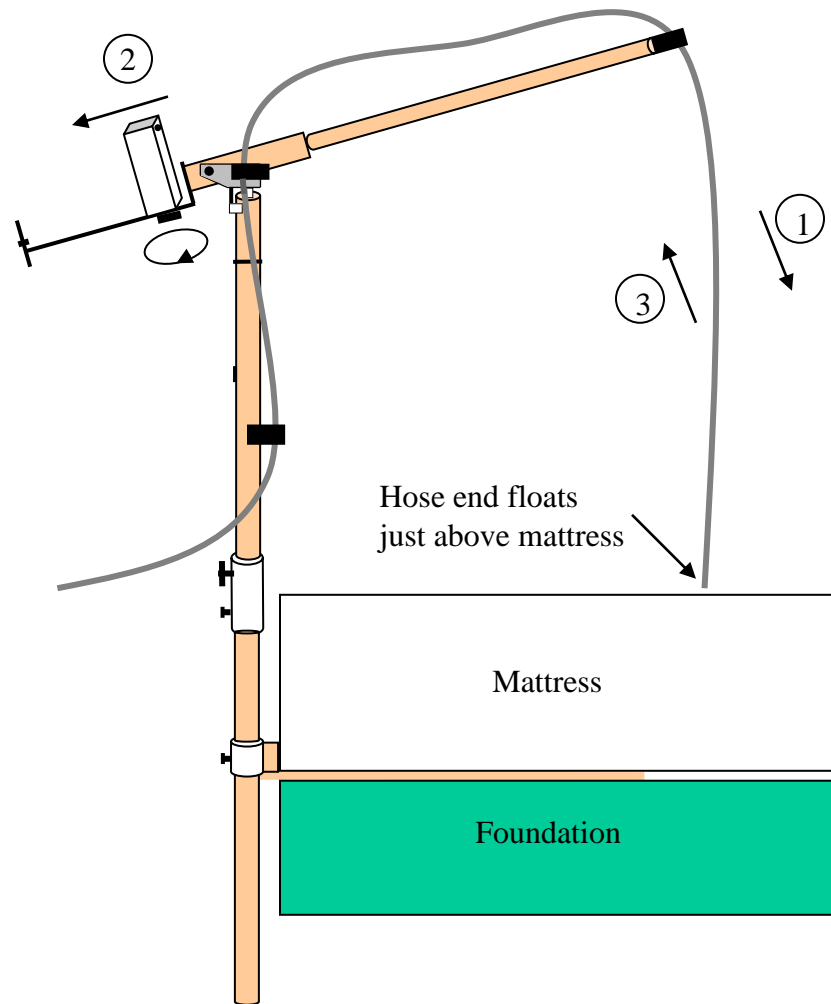
For hose hanging with mask connected

- 2b. Loosen the thumb screw on the weight slightly and slide the weight away from the pivot dowel until the hose is lifted and mask is lightly resting on the mattress with a right angle bend in the hose near the mask (move the pillow away). Tighten the thumb screw.

For oxygen tubing

- 2c. Typically no weight adjustment is needed for oxygen tubing. The mask/cannula should lightly rest on the mattress with a right angle bend in the tubing near the mask or cannula neck cinch (move the pillow away).
3. Return arm to the storage position, by pushing the hanging hose up until arm is vertical and magnetically latched.

The CHRALS S12 is now setup for your first night of restful sleep. During the first few nights of use you may want to readjust the arm lift force to minimize the hose pull/push on the mask while still lifting the hose out of the way. A pencil mark on the edge of the slide helps to relocate the weight position. Also if the weight angle with arm vertical changes with time, you may want to add silicone bands to the lower two clamps to prevent the hose from twisting in the clamps.



Hiding the unit during the day

If desired you can store the unit under the pillows when not in use during the day. Loosen the coupler knob, lift up the support dowel with hose still attached, and lay unit flat on bed. You may need to disconnect the hose from the CPAP machine. Cover with pillows and bed spread. When replacing the unit be sure to align the dowel mark with the coupler mark before tightening the knob.

Assembly instructions for oxygen tubing use

Follow the same assembly instructions 1 – 12 starting on page 2 except as noted below.

Add step 0 before step 1:

0. Remove the nut, large washer, and screw from the end of the slide using a pliers or #8 nut size wrench.

Modify step 7 as follows:

7. Same except knob on white coupler should face away from bed but angled about 45 degrees toward head of bed to ensure arm pulls oxygen tubing toward foot of bed. The arm swing limit stops make this happen.

Mounting oxygen tubing

1. Place a silicone band on each of the 3 clamps as shown in figure 1 below.
2. Drape the tubing over the top of the top clamp in front of the tab so that the mask connection or cannula neck cinch hangs over the bed at a length about 4" below the black stripe around the top support dowel (28" hanging length). Secure the tubing by pulling the silicone band around the tubing and over the tab as shown in figure 2.
3. Guide the longer tubing hanging from the other side of the top clamp to the pivot bracket clamp next to the tab. Secure the tubing by pulling the silicone band around the tubing and over the tab, allowing some slack between the two clamps.
4. Guide the tubing to the bottom clamp next to the tab. Secure the tubing by pulling the silicone band around the tubing and over the tab.
5. Connect the tubing to the oxygen supply unit.



Figure 1

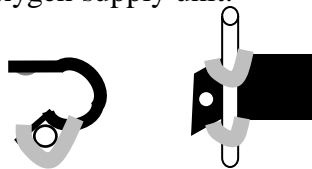


Figure 2