

Chair-E-it Backpack Construction – Part 1

Designed by Al Geist

Part 1 covers making and attaching the key backpack conversion piece – the buttonhole string.

Materials: A Sling-light chair <http://www.slinglight.com/> or the Crazy Creek equivalent <http://crazycreek.com/product/specials/66/>
A drill and 9/64” bit

One Phillips head deck screw (The head shape is perfect to make the button)

One 6+ foot piece of strong cord. (I used a piece of Kevlar cord, but Nylon will do)

Step 1. Remove the cord that runs from the bottom tube to the “V” brace. Note that it holds the brace 24” from the bottom tube

Step 2. Drill 9/64” hole thru the back of the bottom of the “V” brace (see figure 1)

Step 3. Screw Phillips head deck screw into hole to thread the aluminum, then remove

Step 4. Measure then cut off the point of the screw so that the screw will hit the far side of the “V” brace and tighten just as no threads are showing when screwed in (see figure 2)

Step 5. Double the 6 foot cord and tie the two ends together. Tie the doubled cord to the bottom tube with a simple girth hitch. The cord is going to hook onto the screw as shown in figure 3. Move the “V” brace 14” from bottom tube. Place the cord through the “V” and tie a knot in the doubled cord so it will hook on the screw and hold the brace right at 14”, now tie a second knot about 3/4” closer to the bottom tube to form the first button hole in the cord as shown in figure 4. The reason for the button hole rather than just a single knot is to prevent the cord from coming off the screw when moving the chair around –voice of experience. Now move the brace 24” from the bottom tube and tie another button hole in the cord. Finally move the brace 31” from the bottom cord and tie a third button hole in the cord.



Figure 1. Drill 9/64” hole



Figure 2. Tighten deck screw



Figure 3. Cord runs through the “V” not under it in order to prevent damage to cord.

Figure 4. Two knots form a buttonhole that hooks over the screw head. There are three buttonholes in the cord at 14”, 24”, and 31”.



Hook the cord in the 24” buttonhole. This is the standard chair mode as shown in figure 5. Cot mode looks basically the same except the cord is hooked in the 31” buttonhole, which lays the chair back more. The person in the cot should slide as far forward in the sling as they can, which pulls the sling flatter making a better bed. Now to convert to backpack mode, hook the cord in the 14” buttonhole. Take the tube holding the front of the sling and push it back towards the “V” brace. It will swing all the way around until the cord stops it. It will look like figure 6. Note how the sling now forms a back cushion and the lower part of the sling and the lower bar form a platform to hold whatever you want to carry. For Philmont I placed my 50L dry sack on the platform.



Figure 5. Cord hooked at 24” buttonhole is chair mode

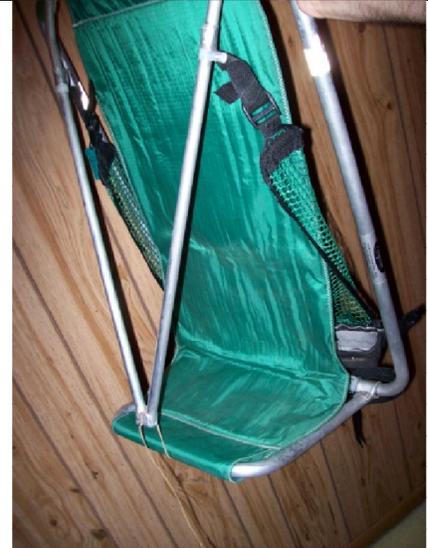


Figure 6. 14” buttonhole is backpack mode

You can see the Chair-e-it shoulder straps in figures 5-6. In part 2, I will describe the theory behind lightweight shoulder straps built from hex-mesh with no padding. Can that really be comfortable? Won't heavy backpack loads kill your shoulders? I actually tested Chair-e-it with both mesh and standard padded shoulder straps. The answer is the mesh straps can be more comfortable than standard padded shoulder straps even under heavy loads if built correctly. Part 2 will explain why. Part 2 will also give the details of the construction of the shoulder straps and how they attach to the Chair-e-it.