Shed Problem on Older Compact Gilmore Looms

If you have an older Compact series Gilmore loom with shed problems when using a tight warp you might find the below information helpful. A very important thing to do is check the height of the vertical leg on the back of your loom. If it is close to 32” high then read this article. If the overall height of the vertical back leg of your Compact loom is 30 1/2” your loom is a newer version or has already been modified and this article will not be useful to you.

If you run a string from the top of the Breast Beam through the frames to the Back Top Beam, then slide a heddle against this string, you will see that the heddle “eye” will fall lower than the string. This design allows the loom frames to help create the weaving shed on a jack loom.

Some weavers have found that their older Gilmore Compact loom loses some of its shed when using a very tight warp. Often this problem seems related to the amount of difference between the heddle eye and straight across the Breast and Top Beams described in the prior paragraph. When you lift some of the frames in your weaving pattern the remaining or unlifted frames tend to be lifted by their tight warp fibers enough to cancel out the shed. It has been found that lowering the Back Top Beam approximately 1 1/2” is an ideal solution to this problem. This lower Back Top Beam is incorporated into the newer Gilmore looms. (note: It is not advisable to lower the beam more than 1 1/2” as other problems will occur)

The ideal solution is to cut the back loom legs down 1 1/2” and re-drill the axle holes for the arms that hold the Back Top Bar. Some older looms have been modified at the Gilmore shop this way. But it is not recommended that others try to cut the hard maple legs, re-cut the top angles, and re-drill the axle holes properly so the Arm Block fits tightly against the leg.

There is another solution that seems to work very well for those that cannot get the leg lowered properly. It is explained below.

1. The Back Top Beams is attached to “Arms” that swing the Beam up in a vertical position or swing it down to rest in a horizontal position. These Arms are attached by a bolt that has 2 nuts locked against each other. The first thing you will want to do is unlock these nuts and remove the bolts from both Arms, thus freeing the Back Top Beam/Arms assembly from the legs. (see Photo captioned “Top Back Beam and Arms unbolted” below)

2. Take the assembly from above and put the right side to the left and left to the right with the beam still out to the back of the loom. Basically flipping it 180 degrees. (see Photo captioned “Top Back Beam Flipped Over” below) This puts the Back Top Beam upside down. Re-bolt the Arms back in this position. Tighten the nuts down so the arms are not too loose and re-lock the nuts against each other.

3. Flipping the Beam basically puts it 1 1/2” lower and has been found to eliminate most all of the shed loss due to a tight warp. There might, or might not be, a loss in the ability of the Back Top Beam and its arms to rotate vertically upward as needed to make the loom narrower for a doorway. But it can always be unbolted again if necessary.
Top Back Beam in its original position

Top Back Beam and Arms unbolted

Top Back Beam Flipped Over

Top Back Beam Bolted Back In