Automatic Warp Tension Instructions for the AVL Home Loom

The Automatic Warp Tension tie-up is an optional item that can be added to the AVL Home Loom. The following instructions will explain how to:

- prepare the loom for the tie-up
- install the tie-up onto the loom
- adjust and operate the tie-up

But first, a brief description of how the Automatic Warp Tensioning system works.

The warp tensioning system that comes standard on the AVL Home Loom works in a similar fashion as friction brakes on most looms, in that its function is to prevent the warp beam from rotating, thereby establishing a warp tension as the warp is advanced a certain amount after the beam stops turning. The Automatic Warp Tensioning system works similarly, with the exception that there is no need for a brake pedal. The warp can be advanced at any time simply by using the Cloth Beam Handle at the front of the loom. When properly adjusted, the warp beam will automatically "give" and the warp can be advanced the desired amount.

There are several reasons why this system will be a welcome addition to your Home Loom. First, it is easy to operate as there is no brake pedal to deal with each time you advance the warp. Second, and actually the most important advantage of the Automatic Warp Tensioning system, is that it allows for a nearly constant level of warp tension during the entire weaving process. The tension will remain constant during weaving and also during the process of beating and advancing the warp. The result of all of this will be a superior weave with a far more consistent cloth structure.

Preparing the Loom

NOTE:
1. This tie-up can be installed with or without a warp on the loom.
2. The friction brake tie-up is shown in figures 3 and 4 of the Home Loom manual.

Remove the existing tie-up cable from the loom.

Installing the Tie-Up

The new tie-up can now be installed onto the loom. Again, you will find it helpful to refer to figure 3 in the manual.

1. Attach the large spring to one end of the tie-up cord.
2. Attach the other end of the large spring to the J-bolt on the Folding Leg of the loom (the same eyebolt that the other tie-up was attached to).
3. Wrap the cord around the wooden Warp Beam Drum, almost three times, starting from the outer side of the drum. After the third wrap, direct the cord down from the front of the drum to the steel brake lever below.
4. Attach the clip end of the tie-up cord to the end of the steel brake lever.
Using the Tie-Up

Your new tension system should now be in place on the loom and ready to use. The amount of warp tension can be altered by adjusting the cord that is attached to the back end of the brake pedal. Pulling on these two white adjusting cords will increase the warp tension. You should adjust the tie-up so that you get the desired warp tension as you advance the warp from the front of the loom. As you continue to advance beyond this point, the tie-up will automatically let go of the beam and the warp will advance forward. If the tie-up does not release the beam soon enough, simply loosen the adjusting cord. It is good practice to tie a simple knot or bow tie around the plastic cord clamp once you have set the tension. This way you will be certain that the cord will not slip and your tension will remain constant.

You may have noticed that the new tie-up is attached to the Brake Pedal. Please note that there is no need to use the pedal during the weaving or warp advancing process. The only time that you may find it helpful to use the pedal is if you ever have to wind some of the warp back onto the beam.

In order to make it easier to turn the beam while winding a warp onto the beam, you should completely loosen the tie-up adjustment cords. If the tie-up still grips the beam too tightly, you can temporarily remove one wrap from the wooden drum. A small amount of drag can be helpful while winding on, but too much drag is a waste of effort.