SETTING HAMMERED DULCIMER BRIDGES

If for some reason your dulcimer is difficult to tune, you probably need to check the set of the bridge. For hammered dulcimers to tune up easily, the treble bridge needs to be set in precisely the right place. Even 1/64" off can make the instrument hard to tune and unpleasant to play. Or it may be playable, but not sound as sweet as it should.

It's unavoidable. Sometimes a dulcimer will leave the factory with the treble bridge not perfectly set in exactly the right place. There are many reasons this might happen, and try as we might, one or two seem to slip past us. Also, dulcimers always change shape slightly over time due to the tremendous tension of the strings, and this can throw the tuning off .But it's the most easily corrected problem if you know what to do. The following information holds true for all hammered dulcimers no matter who made them.

You'll need a good chromatic electronic tuner with a VU meter. If you don't already have one, you need one just to keep your instrument in tune. They have become indispensable, and are fairly cheap. Your dulcimer dealer can help you find the right one. A tuner clip pickup is also helpful.

Procedure

First, have your dulcimer approximately in tune, so the whole thing is about at the right tension. Next, tune the bottom marked course on the treble bridge so the note on the right side is exactly what it is supposed to be. This will be A if your instrument is a 16/15 (or 15/14) or D if your instrument is a 13/12 (or 12/11). Plunk one of the two strings making up that course on the right side of the bridge with your fingernail while damping the other string and both of the strings on the other side of the bridge with other fingers. This will give you a good accurate reading of what note that string is making with no interference from other strings. Wait for the needle on the tuner's motor to settle so that you know that the string is exactly in tune. Now plunk the same string on the left side of the bridge while damping the three other components of that course. Look at the meter, is that note exactly in tune? If it is, then good. If it is sharp, then the string length on the left side of the bridge is too short, and the bridge will have to be moved to the right slightly. If the note on the left side of the bridge is flat, then the bridge will have to be moved to the left slightly. Before you move it, tune the note down one step, and then back up to the right note, and check your readings on both sides of the bridge just to make sure.

If the bridge needs to be moved, carefully put your fingers down through the strings in the area of the notes you tested and move the bridge just slightly, a hairs breadth or more will probably do it. Now tune your test note down a step and back up to the note it is supposed to be. This equalizes the tension on both sides of the bridge. Never check a note without first doing this first. Now check your notes on both sides of the bridge remembering to damp the strings you

don't want to hear. Is the note on the left side of the bridge closer to in tune now? Keep moving the bridge and rechecking the notes of your test string on both sides until they are both in perfect tune.

Now move to the top marked course on the bridge and repeat the procedure. This will be F on the right side of the bridge, and C on the left. The only differences will be that smaller moves of the bridge will make larger changes in the relative notes, and it will be harder to move the bridge due to the greater down pressure of the strings.

Once you have the bottom marked course and top marked course adjusted exactly, the rest of the bridge should be in a STRAIGHT line between these points. You can sight down along the top of the bridge or hold a straight edge ruler along side the bridge. You can also use your test procedure to check points all along the bridge, but if you have the top and bottom points set properly, and the bridge perfectly straight, the other notes will be set properly also. Now if you plunk a string on both sides of the bridge at the same time you'll hear a sweet ring which you probably didn't hear before. It is the harmonics of the string on both sides working in unison, and it’s what makes the hammered dulcimer sound so wonderful.

If you are having trouble with your hammered dulcimer, but this procedure seems too much for you, get a friend to help you who is well versed in musical things. It is really fairly easy once it is understood.