Finished Cheyenne Harp

MUSICMAKERS

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CARE AND FEEDING OF THE CHEYENNE HARP

TUNING TIPS: It is best to tune the harp with all sharping levers flipped down (disengaged), so there will be no interference from the levers. Please note that this means you may be tuning some strings to flats instead of natural notes. If you have levers on the B strings, for example, you should tune those strings to B-flat when the lever is flipped down. You will then flip these levers up when playing in the key of C.

BUZZING STRINGS: If the buzzing sound occurs only when the SHARPING LEVER is flipped up (engaged), then you may need to tighten the LEVER more firmly against the NECK of the harp.

If the buzzing occurs when the LEVER is flipped down (disengaged), the string may be vibrating against some part of the SHARPING LEVER itself. If you have Camac or Truitt brand levers, look very closely at the position of the string as it passes through the LEVER mechanism. You can change the position of the string by raising or lowering the BRIDGE PIN on which the string rests above the SHARPING LEVER. (Make sure the string is resting in the groove of that PIN.) Use the 5/64" Allen wrench to turn the BRIDGE PIN in or out, watching how that moves the string in relation to the SHARPING LEVER.

If the problem is not located around the SHARPING LEVER, you may have a loose end of string or other loose material that is rattling inside the soundchamber. Put your hand inside the harp and touch the knotted ends while plucking the harp to see where the problem is located. Oftentimes you can solve it by simply trimming off a loose end of string or by twisting the knotted end in a different direction.

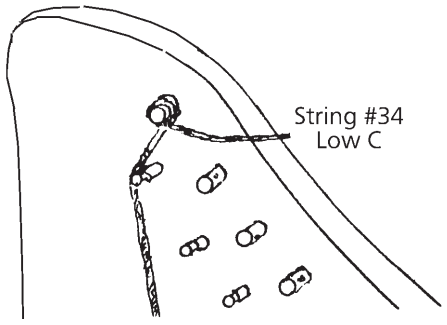
HARP REPAIRS: If you ever need to repair or refinish the wood parts of your harp, you will be glad to know that the NECK/PILLAR assembly can be removed from the soundchamber to facilitate repair work. Simply loosen the strings and unhook them from the TUNING PINS. Then remove LAG BOLT under the BASE of the harp to allow the NECK/PILLAR to come free from the harp body. Don't hesitate to contact us if you have questions or problems.

REPLACING STRINGS

Stringing a harp is somewhat of an art. We recommend that you read through these two pages completely before beginning, so you know what to expect. Occasionally a person will call us in a panic because their harp either a) won't stay in tune, or b) keeps breaking its strings. Careful installation will do much to eliminate these problems. We string this model harp regularly and tune it up to concert pitch right away with rarely a broken string, but it takes a little patience and concentration.

The strings are numbered from 1 (for the smallest) to 36 (for the longest), and they are color-coded to help guide you as you play. "C" strings are all red, and "F" strings are blue.

If replacing the entire string set, we recommend starting at the bass (longest) end of the harp with string #36, a long red string that is very thick. Push the plain end of the string through the lowest hole in the SOUNDBOARD from back to front. Pull it all the way until the knotted end contacts the REINFORCEMENT BAR inside the harp.



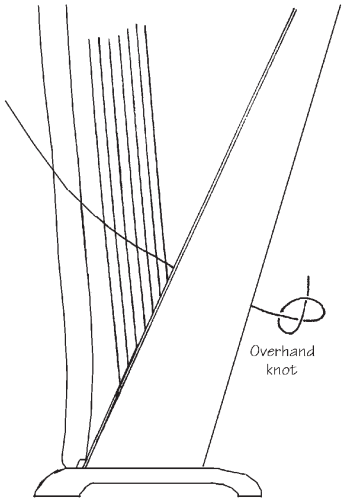
Thread the other end of the string through the last TUNING PIN near the point of the NECK, pulling it through the pin, but leaving enough slack below the pin to allow several windings before coming taut.

Use the TUNING WRENCH to turn the pin clockwise (from the viewpoint of the tuning wrench on the backside of the NECK) and guide the windings neatly around the TUNING PIN. As the string begins to tighten, place it in the groove of the BRIDGE PIN as shown.

CAUTION!

These WOUND STRINGS can break if you over-tighten them. Some people break the first one they install because they don't expect it to come up to pitch so quickly. Take care to avoid that costly mistake. It is very helpful to pluck the string as you tighten it, so you can hear the pitch go up as you increase the tension.

Thread the other 11 wound strings in the same way, taking care to keep them in the correct order. When you are satisfied with installation of these strings, use a wire cutter to clip off the excess tails, close to the TUNING PINS. These sharp ends can be hazardous! Cut them short so they won't poke you or catch on your clothing.



The remaining 24 strings are plain (monofilament) nylon that have no knots tied in them yet. Begin with the thickest string (A3 -- .055" diameter). You may insert these nylon strings from the front of the harp, if that is easier, and then reach inside the back to find the end. Tie a simple overhand knot at the end, as shown.

NOTE: Pull straight through the hole, not at an angle, to avoid scratching the nylon against the brass eyelet.

Thread the other end of the string through the next tuning pin, pulling it through the hole until there is only a little slack in the string below the pin. How much slack? About 2-4 inches.

You'll catch on—too much slack makes for bulky accumulations on the tuning pin. Too little slack means you won't have enough to even wrap once around the pin. Ideally, you want to have 3 to 4 wraps of string around each tuning pin for security.

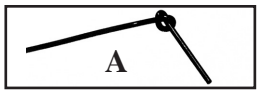
Helpful Hint: Do not accumulate a lot of windings of string around the tuning pins, especially with the thicker (low) strings. They become bulky and cumbersome. If you have that problem, turn the pin backwards to unwind the string, then pull more of the string through the hole and tighten it up again.

Once the string is satisfactorily installed, you may clip off the excess nylon close to the pin (leave ¼" stub of nylon), and tune the string up to its proper pitch (no, it won't stay in tune yet, but it helps to begin stretching it right away).

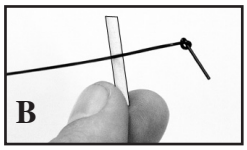
The three .050" strings require a bulkier overhand knot. Just push the short end back into the knot to make it bulkier, or you could accomplish the same thing by pushing a scrap of .060" string into the overhand knot before pulling it tight.

All the rest of the strings (sizes .045" .040", .036", .032", .028" and .025") will need to be tied to a short dowel to keep them from pulling through the holes in the soundboard. Here's how to tie them:

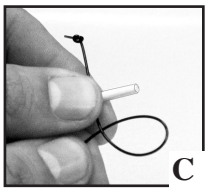
Step A. Begin with the same overhand knot near the end.



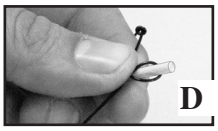
Step B. Hold the dowel perpendicular to the string, forming a "T".



Step C. Form a loop in the string.



Step D. Slip the loop over the end of the dowel.

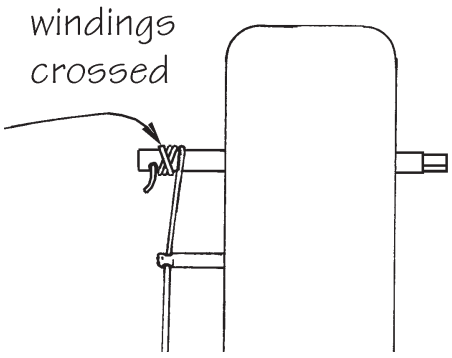


Step E. Form a second loop in the same way, and slip that over the dowel.

Step F. When both loops are on the dowel, pull the knot tightly against the middle of the dowel. If you hold the dowel and pull on the string, the overhand knot will slide up against the dowel and stop. Then the knot is secure.

IMPORTANT: It is necessary to also anchor the tops of these strings (and all the lighter ones) securely to the tuning pins, as follows:

Guide one or two windings of string on the TUNING PIN, then guide the next winding over the others so the string helps "pinch" itself tightly to the PIN as you tune it up to pitch. If you don't do this, you will surely experience string slippage and breakage, especially in the upper half of the instrument.



When all the strings are installed, tune the entire harp up to pitch so the instrument begins to adjust itself to the tension.

The strings can all be tuned to the natural C major scale (white keys on the piano). All the red strings will be C notes and the blue ones F notes. Middle C is string number 22 from the top. The lowest note is two octaves below middle C.

The Cheyenne Harp

STRING CHART

String	Note	Guage	Code	Color	Vibrating Length	Loveland Lever
1	C7	.025	CHEY-C7	red	4"	00
2	B6	.025	CHEY-B6	clear	4-1/2	00
3	A6	.025	CHEY-A6	clear	5-1/8	00
4	G6	.025	CHEY-G6	clear	5-5/8	00
5	F6	.028	CHEY-F6	blue	6-1/4	0
6	E6	.028	CHEY-E6	clear	6-3/4	0
7	D6	.028	CHEY-D6	clear	7-1/4	0
8	C6	.028	CHEY-C6	red	8	0
9	B5	.028	CHEY-B5	clear	8-3/4	0
10	A5	.032	CHEY-A5	clear	9-1/4	2
11	G5	.032	CHEY-G5	clear	10	2
12	F5	.036	CHEY-F5	blue	10-3/4	4
13	E5	.036	CHEY-E5	clear	11-1/2	4
14	D5	.040	CHEY-D5	clear	12-1/2	5A
15	C5	.040	CHEY-C5	red	13-1/2	5A
16	B4	.040	CHEY-B4	clear	14-3/4	5
17	A4	.040	CHEY-A4	clear	16	5
18	G4	.045	CHEY-G4	clear	17-1/2	7
19	F4	.045	CHEY-F4	blue	19	7
20	E4	.045	CHEY-E4	clear	20-1/2	7
21	D4	.050	CHEY-D4	clear	22-1/8	7
22	Mid C4	.050	CHEY-C4	red	24	7
23	B3	.050	CHEY-B3	clear	25-3/4	7
24	A3	.055	CHEY-A3	clear	27-5/8	9
25	G3	.045/.008 NN	CHEY-G3	clear	29-1/2	9
26	F3	.045/.010 NN	CHEY-F3	blue	31-1/2	9
27	E3	.050/.010 NN	CHEY-E3	clear	33-1/2	9
28	D3	.050/.013 NN	CHEY-D3	clear	35-1/2	12
29	C3	.050/.015 NN	CHEY-C3	red	37-1/2	12
30	B2	.055/.015 NN	CHEY-B2	clear	39-1/4	12
31	A2	.055/.018 NN	CHEY-A2	clear	41-1/4	12
32	G2	.026/8/.020 SFN	CHEY-G2	clear	43	9
33	F2	.024/5/.008 SFB	CHEY-F2	blue	44-7/8	7
34	E2	.024/6/.008 SFB	CHEY-E2	clear	46-3/4	7
35	D2	.024/6/.010 SFB	CHEY-D2	clear	48-5/8	9
36	C2	.026/6/.012 SFB	CHEY-C2	red	50-1/2	9

Includes 20 wooden dowels for upper string knots.