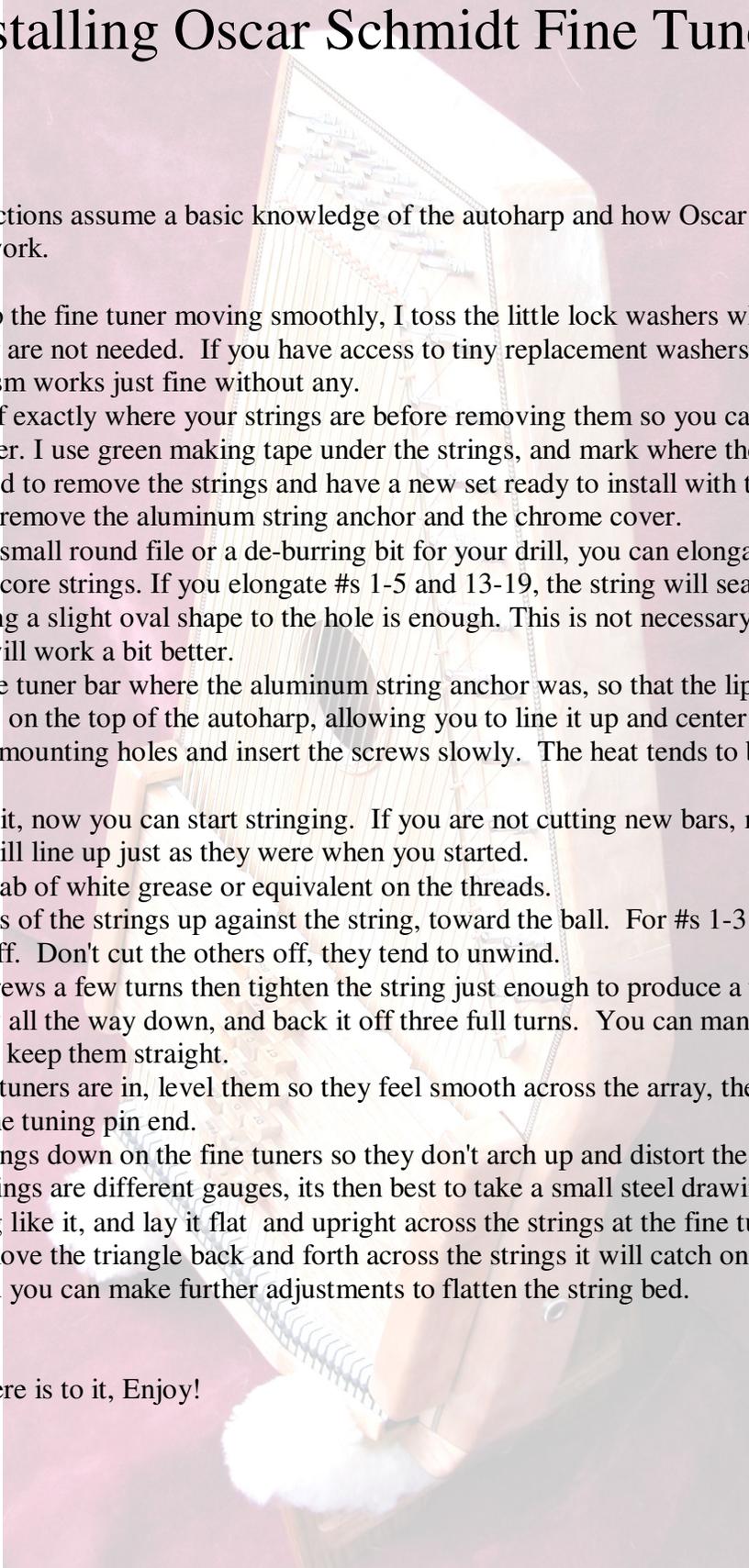


# Installing Oscar Schmidt Fine Tuners



These instructions assume a basic knowledge of the autoharp and how Oscar Schmidt fine tuners work.

First, to keep the fine tuner moving smoothly, I toss the little lock washers which come with it. They are not needed. If you have access to tiny replacement washers, fine. But the mechanism works just fine without any.

Make note of exactly where your strings are before removing them so you can line up the new fine tuner. I use green making tape under the strings, and mark where they are.

You will need to remove the strings and have a new set ready to install with the new fine tuners. Also remove the aluminum string anchor and the chrome cover.

Tip: With a small round file or a de-burring bit for your drill, you can elongate the holes for the large core strings. If you elongate #s 1-5 and 13-19, the string will seat much better. Giving a slight oval shape to the hole is enough. This is not necessary, but your fine tuners will work a bit better.

Place the fine tuner bar where the aluminum string anchor was, so that the lip of the fine tuner bar sits on the top of the autoharp, allowing you to line it up and center it.

Pre-drill the mounting holes and insert the screws slowly. The heat tends to break off the screws.

That's about it, now you can start stringing. If you are not cutting new bars, make sure the strings will line up just as they were when you started.

I put a tiny dab of white grease or equivalent on the threads.

Bend the tails of the strings up against the string, toward the ball. For #s 1-3 and 13-17 cut the tail off. Don't cut the others off, they tend to unwind.

Insert the screws a few turns then tighten the string just enough to produce a tone. Then set the screw all the way down, and back it off three full turns. You can manipulate the cams a bit to keep them straight.

After all the tuners are in, level them so they feel smooth across the array, then tune the 'harp from the tuning pin end.

Press the strings down on the fine tuners so they don't arch up and distort the string bed. Since the strings are different gauges, it's then best to take a small steel drawing triangle or something like it, and lay it flat and upright across the strings at the fine tuner end.

When you move the triangle back and forth across the strings it will catch on those that are high, and you can make further adjustments to flatten the string bed.

That's all there is to it, Enjoy!