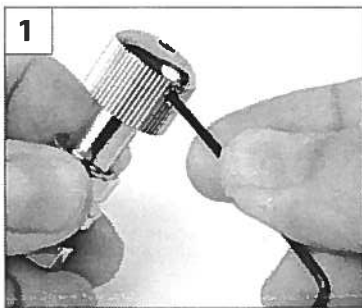
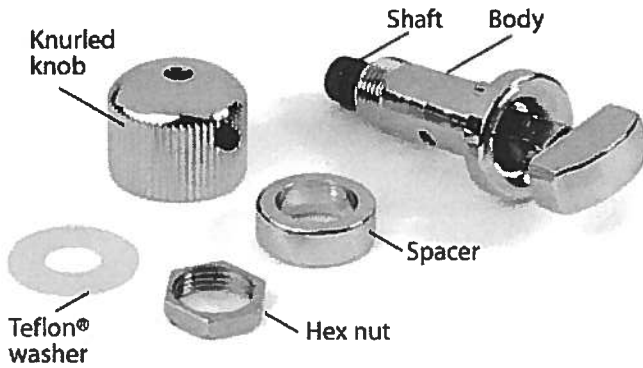


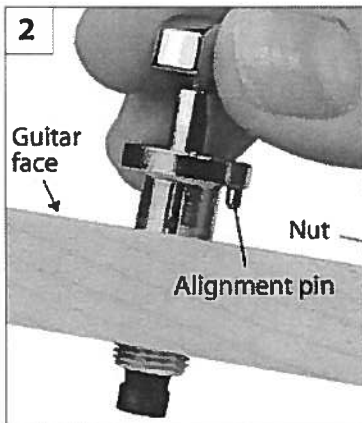
Steinberger Gearless Tuners

Installation



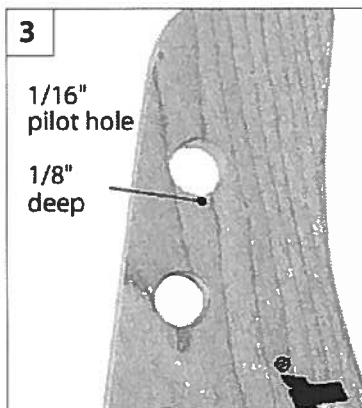
1. Loosen the 2 hex set screws that hold the knurled tuning knob to the tuner shaft and remove the knob.

Remove the white Teflon washer, the hex nut and the spacer from the shaft.

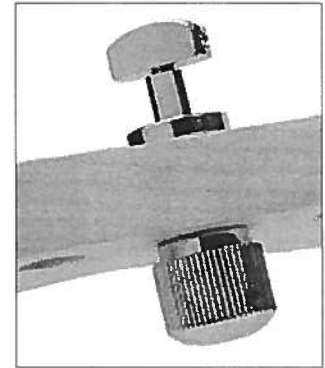
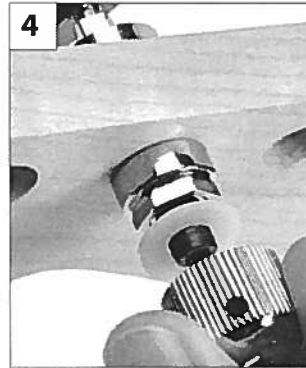


2. Insert the tuner shaft through the 3/8" (10mm) tuner hole on your guitar from the face (front side) of your headstock. Note there is a pointed alignment pin on the lip of the tuner. This pin **MUST** be turned towards the nut.

Orient the pin and push down on the tuner to accurately make a small location mark on the face of the headstock next to the tuner hole.

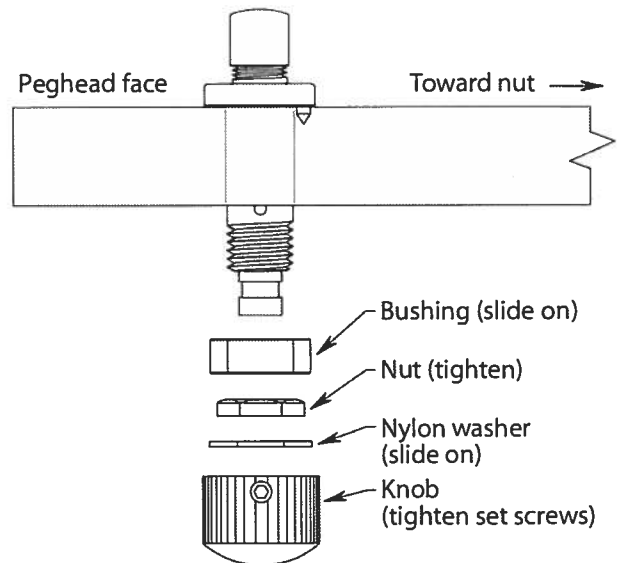


3. Remove the tuner and drill a 1/16" pilot hole 1/8" deep. The fit will be snug, but will be pulled in tight when installation is complete.



4. Insert the tuner from the face side of the headstock, fitting the alignment pin into the pilot hole. From the back of the headstock, install the spacer and then the hex nut. Tighten the hex nut very carefully: use only enough force to pull the tuner flush to the peghead. **The tuner body is delicate, and over-tightening will break it.**

Install the white Teflon® washer and put the knurled tuning knob on the shaft. Gradually tighten the two set screws that hold the knob in place (these screws fit into the groove at the end of the tuner shaft). Tighten one screw slightly, then the other, then the first again—alternating between the two as you tighten them. As you do this, wiggle the knob to be sure the screws remain seated in the groove. This way, the knob will stay properly centered on the tuner shaft. **Don't over-tighten these set screws;** if they are too tight, their



pressure will distort the shape of the shaft and prevent it from turning freely.

The tuners are lubricated. However, if needed, you can remove the knurled tuning knob and put a SMALL amount of graphite lubricant on both sides of the washer to ensure smooth operation.

To Install Strings

1. Unscrew the tuning knob (larger knob on back of the headstock) clockwise all the way, so the string hole is fully exposed.
2. Unscrew the clamping knob (smaller knob on the front of the headstock) counterclockwise until the string hole is fully open.

3. Insert the string through the string hole in the tuner. Pull the string tight.

4. Clamp the string in the tuner by turning the clamping knob clockwise as HARD as you can by hand.

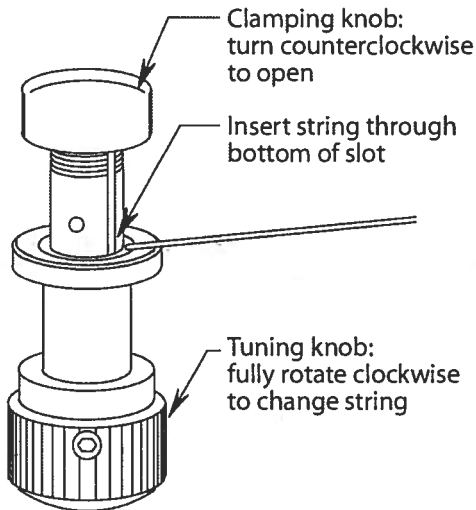
Because the high E string can stretch so much, tilt the tremolo forward a bit and pull the string tight before clamping. This should be done on the high E only.

The clamping knob should be VERY tight to assure stable tuning.

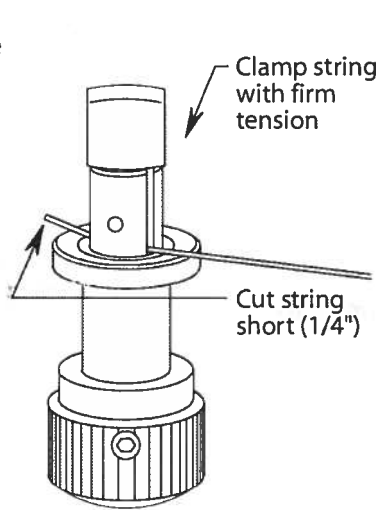
5. Cut the string approximately 1/4" from the tuner post.

6. Tune the string with the tuning knob.

Fully open, ready for string



String clamped and cut



String pulled down for tuning

