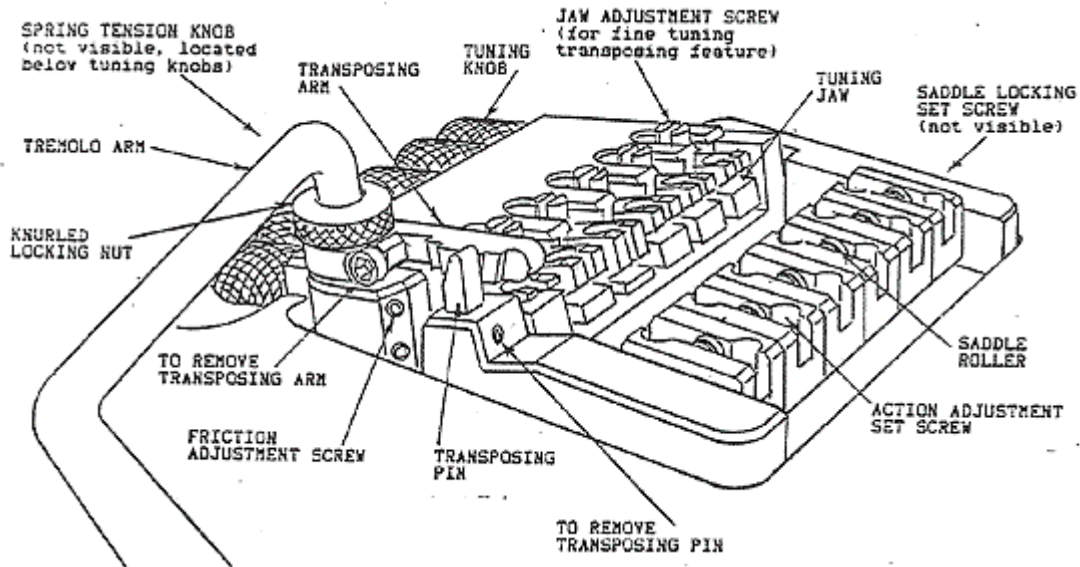




The Steinberger Transposing Tremolo Detailed Instructions



Understanding these instructions is essential in order to get the full benefit of this sophisticated mechanism.

1. INSTALLING TREMOLO ARM: To install, spin arm clockwise into threaded hole, a minimum of four full turns. When arm is screwed in almost to desired position. Tighten knurled locking nut firmly down. Tighten both arm and nut together for about 1/8th turn more to lock into position.

To remove or re-adjust arm, spin arm counter-clockwise until small transposing arm contacts back of pin. Continue turning until arm is free.

To adjust rotational friction of transposing arm, turn set-screw located diagonally under arm on tuner housing.

2. TO USE TREMOLO: Rotate arm into playing position and use normally.

3. TO TRANSPOSE: Drop arm down, then turn clockwise to engage D, C, and B tunings. Pull arm up and turn clockwise to engage F# and G tunings. To disengage, rotate arm counter-clockwise.

4. TO TUNE: First lock tremolo in center E position by rotating arm clockwise. Then tune individual strings with small knobs as you would normally. **ALWAYS LOCK TO TUNE!**

5. TO ADJUST TREMOLO RETURN: After unit is tuned, as in step 4 above, rotate arm counter-clockwise to disengage center lock. If tremolo moves and does not remain in tune, turn SPRING TENSION KNOB at bottom of guitar to adjust to pitch as required. Tremolo should not move or change pitch when going in and out of locked position. Additional tremolo positions of Eb and F are possible by further adjustment of the spring tension knob.

6. ACTION AND INTONATION: First unlock the saddles with side set screw.

Adjust action (vertical movement) with individual saddle set screws.

For bridge intonation (horizontal movement), push saddles manually, if intonation is sharp at the 24th fret, push saddles back (toward tuning knobs). If intonation is flat at the 24th fret, push saddles forward (toward headpiece).

ALWAYS LOCK side set screws when bridge adjustment is completed. (1 1/2mm allen wrench required).

7. TO ADJUST TRANSPOSING FEATURE: The TransTrem(™) should transpose all strings in tune. Starting from regular E tuning, the pattern should be as follows:

Transposing Chart

String	Down 3 steps	Down 2 steps	Down 1 step	Center Notch	Up 1 step	Up 2 steps
1st or E	B	C	D	E	F#	G
2nd or B	F#	G	A	B	C#	D
3rd or G	D	Eb	F	G	A	Bb
4th or D	A	Bb	C	D	E	F
5th or A	E	F	G	A	B	C
6th or E	B	C	D	E	F#	G



Adjust TransTrem with these intervals

If a string does not maintain tune according to this chart, the tuner jaw must be adjusted up or down. Use the key provided, a small screwdriver, or a coin to adjust the screw located just behind each jaw. Turn clockwise to move jaw down, counter clockwise to move jaw up, according to the following procedure:

- 1) Set transposing arm up 1 step and tune with knobs according to chart. (Example: "E" string should be "F#" in the 1st step up position).
- 2) Transpose to 2nd step down and check new pitch with chart. (Example: "E" string should be "C" in 2nd step down position).
- 3) Adjust jaw height in the lower position only. If pitch is flat, lower jaw by turning the screw (located just behind the jaw) clockwise. If pitch is sharp, raise jaw by turning the screw counter-clockwise.
- 4) Repeat steps 1 through 3 until pitch is correct in both positions. Always use the knobs only to tune in the up position, and the jaw screws only to adjust the pitch in the lower position. All other transposing positions should be automatically in tune when the 1st up and 2nd down positions are properly adjusted.

NOTE: CALIBRATED transposing strings are required for best results. Improperly calibrated strings will not track well with each other, so the tuning will not be accurate in all positions. This process is greatly facilitated by use of a chromatic electronic tuner. With an electronic guitar tuner with only 6 intervals, find on your transposing chart the steps for each string that are tuned to E, A, D, G, or B and use these intervals to set transposing feature. (For best accuracy, use steps that are furthest apart) While this adjustment may be a bit confusing at first, it is really very easy once you get use to it.

8. TO REPLACE STRINGS: To remove, loosen tuning knob until string is loose and ball can slide up and out of jaw. ("B" and "G" string balls are deep in saddles and restricted from upward movement by a small lip. Simply move ball back in jaw and lift to remove).

To install strings, align string ball with hole in jaw, and push ball down as far as it will go. (On "B" and "G" strings, balls must be pushed below small internal lip, and should then pull up on lip for most stable operation). After rough tuning, push tremolo all the way up and down several times to set strings, then fine tune and adjust transposing feature as needed.

NOTE: The TransTrem will work with all double ball strings, as well as conventional single ball strings using a STRING ADAPTOR available from Steinberger. However, the best results will be achieved with CALIBRATED double ball strings designed for the TransTrem, with either threaded ball or non-threaded ball. The transposing arm is easily removable by loosening screw on side of arm. The transposing pin is removed by loosening set screw.