

# Adjusting the Trem King

## Radius and Intonation

### Adjust Radius and Intonation of saddles:

1. Remove vibrato arm.
2. Make sure tone block and tension bar are resting together with right and left arms.
3. Tune to desired pitch.
4. Remove Harness Bar.
5. Use allen wrench provided to set individual saddles to desired height to match radius of fretboard.
6. Re - Tune guitar to desired pitch.
7. Intonate saddles by adjusting saddle adjustment screws.

**Tip:** make sure all intonation screws are firmly against the bridge plate after finding the correct intonation spot. Use a small hammer to gently tap the screwdriver while it is positioned on the screw.

8. Replace Harness Bar.
9. Re-check intonation.

### Adjustment of Springs for Tension Bar and Tone Block:

NOTE: These instructions assume you are using 10 gauge or less strings and there is one (1) spring on the Tone Block and one (1) spring on the Tension bar.

1. Insert Vibrato Bar into Tone Block.
2. Tune guitar to desired pitch.
3. With back plate removed and looking at the spring cavity, press the Vibrato Bar all the way down to the body.
4. SLOWLY let the Vibrato Bar come up until it stops by itself and you can remove your hand without the Vibrato Bar moving any more.
5. **Note the position of the Tension Bar** - it should be firmly against the right and left arms and the Tone Block.
6. Then, still looking at the spring cavity, SLOWLY start pulling the Vibrato Bar away from the body. ONLY the Tone Block should move. Did the Tension Bar move? It should not. If the Tension Bar moved, tighten the screw on the claw for the Tension Bar. If that spring is all the way in, tighten the spring on the Tone Block a quarter turn at a time.
7. Repeat until the Tension Bar does not move after coming to rest on the right and left arms as Tone Block moves away.
8. Then do the reverse; pulling up from the body and SLOWLY let the bar back down until it comes to rest by itself.
9. **Note position of Tone Block** - it should be firmly against the Tension Bar. If it is not, LOOSEN the screw for the tone block spring. Loosening this spring lets the **string** pressure pull the Tone Block back to the Tension Bar.
10. Repeat until the Tone Block comes to rest firmly against the Tension Bar and does not move as Tension Bar moves away.

**Tip:** Use the Vibrato Bar during tuning. Tune to the desired pitch on the string, then push the Vibrato Bar down a little and let it come back up, keep tuning to pitch and pushing the bar down until after pushing the bar down, the string is still on pitch. Go to the next string and repeat process. After repeating the process, re-check previously tuned string to make sure it is in tune. It should be. Continue until all strings are tuned and stay in tune when using the Vibrato Bar.

**NOTES:**

In order for the unit to return to the neutral point, you must achieve a balance of string and spring pressure.

Light oil, like sewing machine oil is good on the saddle pins and the nut. I would NOT use liquid graphite. It gets sticky and gummy.

Make sure vibrato arm is all the way down in the hole and the set screw is tight. REF: #9

If just one or two strings are going out of tune, it is something other than the vibrato. Check tuning gear, NUT slot, string tree, neck bolts, and anything else that might be out of alignment.

Tuning gear are notorious for becoming loosened. Check the screw in the button of the tuner, the screw on the back of the headstock (if there is one) and the nut on the top of the headstock that holds the tuner down.