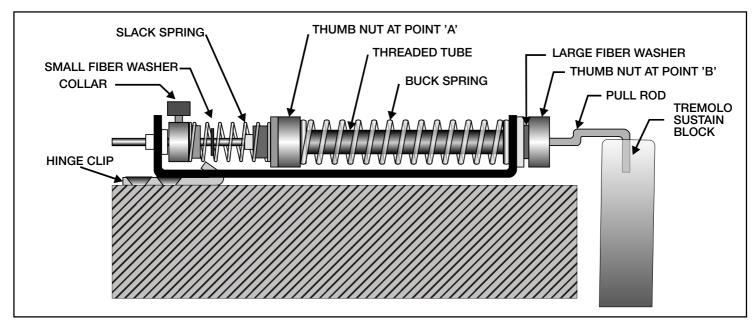
TREMSETTER INSTALLATION

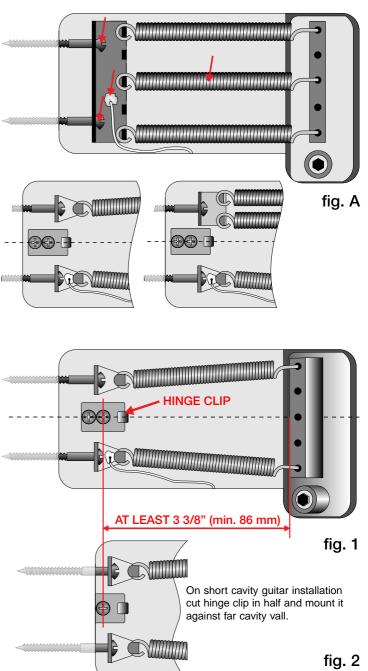
(Please read through instructions completely before beginning your installation.)



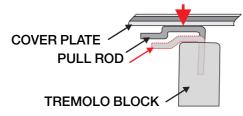
Before you start, have your guitar in tune and set up exactly how you like it, with your tremolo floating in its proper position (the tremolo floating position varies with the type of guitar your playing. Example: Floyds like to have the bottom edge of the tremolo level with the top surface of the guitar, while Fenders are on a slight angle with the back edge of the bridge about 1/8" (3 mm) off the face of the guitar. You may want to refer to your manufacturer's original set up specifications.

Now proceed with step 1.

- 1) Unsolder ground lead and remove your original claw and center spring. Install the new individual claw hooks (supplied in the Hipshot kit) using original screws. If you play with heavy gauge strings, you may want a three-spring set-up, using the double spring claw supplied (see fig. A). (*First I suggest you try the two single spring claw set-up.*) Resolder the ground lead to the new claw hooks and readjust spring tension so that the tremolo floats in desired position when the strings are in tune.
- 2) While holding the sustain block to full "string raise" position (this means pulling your strings all the way up with your tremolo bar), carefully measure at least 3 3/8" (min. 86 mm) from the edge of sustain block (see fig. 1). Mark in line with the center springhole position, using a sharp tool such as an awl or center punch. Mount the hinge clip using flat head screws provided. On some short cavity guitars, there may not be room to mount the hinge clip unless you cut the clip in half and mount it with a single screw (see fig. 2).
- 3) Loosen the setscrew on the Tremsetter's brass collar (see fig. 3). Do not let the pull rod accidentally slide out of the bracket, the unit can fall apart and parts become lost. Carefully slide the pull rod through the Tremsetter just far enough so that it clears the back face of the tremolo cavity. Install the Tremsetter by snugging the square hole of the Tremsetter bracket against the hooked end of the hinge clip. Line the Tremsetter up straight with the guitar and gently press the pull rod into the back face of the cavity wall so that it leaves a small mark.



Drill a ${}^{3}/{}_{16}$ " (5 mm) dia. clearance hole about ${}^{1}/{}_{2}$ " (13 mm) deep for the pull rod into the back cavity wall of your guitar (I found using a 6" (15 cm) long drill bit makes the job easier and cleaner. This longer drill bit can be purchased in most hardware stores for \$3 or \$4. Be careful not to mar the back of your guitar with the drill). Insert the hooked end of the pull rod into the center spring hole on the sustain block. Sometimes it may be necessary to slightly adjust the shape of the hook using a long nosed pliers. See that the tremolo swings freely and that the pull rod does not rub against the sides of the pull rod clearance hole.



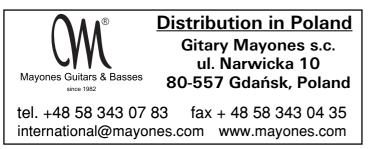
It may be necessary to adjust shape of pull rod if Trem-Setter hits the cover plate when tremolo swings to "string raise" position.

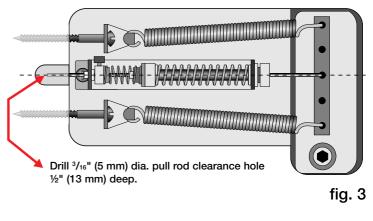
4) Now lay the guitar face down on your lap with the neck going off to your left, being sure you do not touch the tremolo or tremolo arm. The tremolo must be able to swing free. Equally loosen the two-spring adjustment screws ¹/₂ to 1 full turn. With the brass collar's set screw loose, push the brass collar to your right against the end of the threaded tube (see fig. 4) so that a small gap of about $\frac{1}{16}$ " (1,6 mm) appear at point B. Now tighten the setscrew and let go of the brass collar. What should happen is this; when you push the brass collar to your right to open a gap of $\frac{1}{16}$ " (1,6 mm) at point B, you compressed both the slack spring and the buck spring (see fig.). Now, you tighten the brass collar set screw which "locks" it to the pull rod. When you let go of the brass collar, the buck spring expands, forcing the gap at point B to close. Also, it pulls the sustain block back to its original position. (Remember you loosened the two spring screws $\frac{1}{2}$ to $\frac{3}{4}$ of a turn (step 3). When you did this, the sustain block moved to the right by about $\frac{1}{16}$ (1,6 mm). Now the Tremsetter pulls the sustain block back to the left to its original position.

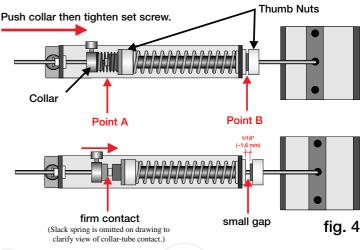
Check that the collar is in firm contact with the end of the tube at point A (Fig.4), and that the thumbnut is in firm contact with the face of the busing at point B. When the tremolo is in "neutral pitch" position, there must be contact at these two points.

Point A may be difficult to check as the view may be obscured by the small slack spring. If there is firm contact at point A, the collar and the rest of the Tremsetter assembly will move together as you start to lower the strings with the tremolo arm. If there is a gap, the brass collar will move before the rest of the assembly. To eliminate a gap at point A, evenly loosen the outer two tension springs until the gap disappears. If there is a gap at point B, evenly tighten the two outer tension springs until the gap disappears.

Gently rock the tremolo back and forth from "string raise" position to "String lower" position, checking for good contact at points A and B when the tremolo is in neutral position. Now fine tune the guitar and recheck for good contact at points A and B.







TREMSETTER ADJUSTMENT

To increase tremolo stability, tighten the Tremsetter thumbnuts towards each other (Fig. 4). This will compress the buck spring, which effectively counters the additional forces introduced during string bending, vibratos, fine tunings, muting, etc. You will notice that your tremolo arm pressure increases as you tighten the buck spring. Fine tune the precise feel of your arm; find the setting that feels comfortable at the tremolo arm and also gives you adequate bridge stability.

Once adjusted, the Tremsetter will greatly improve your guitar's stability. The tremolo will always come back to exact original "zero" position regardless of the condition of the knife edges and pivot posts. All of the energy you put into your strings stays in the strings. Energy is not wasted in sagging the bridge forward.

As a result, your guitar will have greater sustain, and chords stay in tune better even during radical string bends. Vibratos are sharper and you can bend notes farther. You can rest your hand on the bridge for muting, bridge harmonic, etc., and the guitar stays in tune. Fine-tuning is quicker and more accurate, and tuning one string does not affect the others. Also, less tunings are required when you change strings. In general, your guitar is more responsive and more stable.

If you have any questions or problems please do not hesitate to call or write me – and thanks so much for using Hipshot Music Products.

David Borisoff

