

## Installation Instructions TK-2/3 and TKS-2/3

The Trem King® TKS-2 is designed to fit tele style guitars with a slanted bridge pickup mounted in the bridge plate. The TKS-2 has a Modern tele bridge footprint.

The TKS-3 is used for tele styles with a humbucker at the bridge and other solid body styles that use bridge humbuckers or body mounted bridge pickups.

Both the TKS-2 and TKS-3 require a flat place to mount and routing thru the body with a spring cavity.

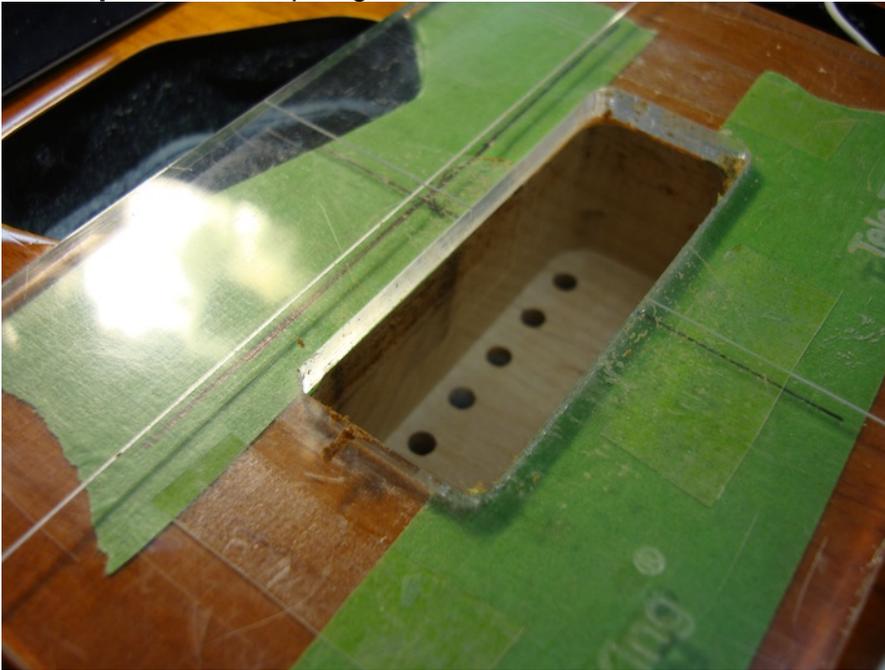
Both models function the same.

### MEASURE TWICE, CUT ONCE

1. Remove existing bridge, pickup, control plate, ferrules in back of guitar and pickguard if it is in the way.
2. Locate Center Point of guitar body and Scale Length of guitar. Mark both on low stick tape on body of guitar.
3. Locate Tele Top Rout template along centerline and scale length line on body.



4. **Cut Top Rout.** Use plunge router with bit # 45491,  $\frac{3}{4}$ " bit to start the rout.



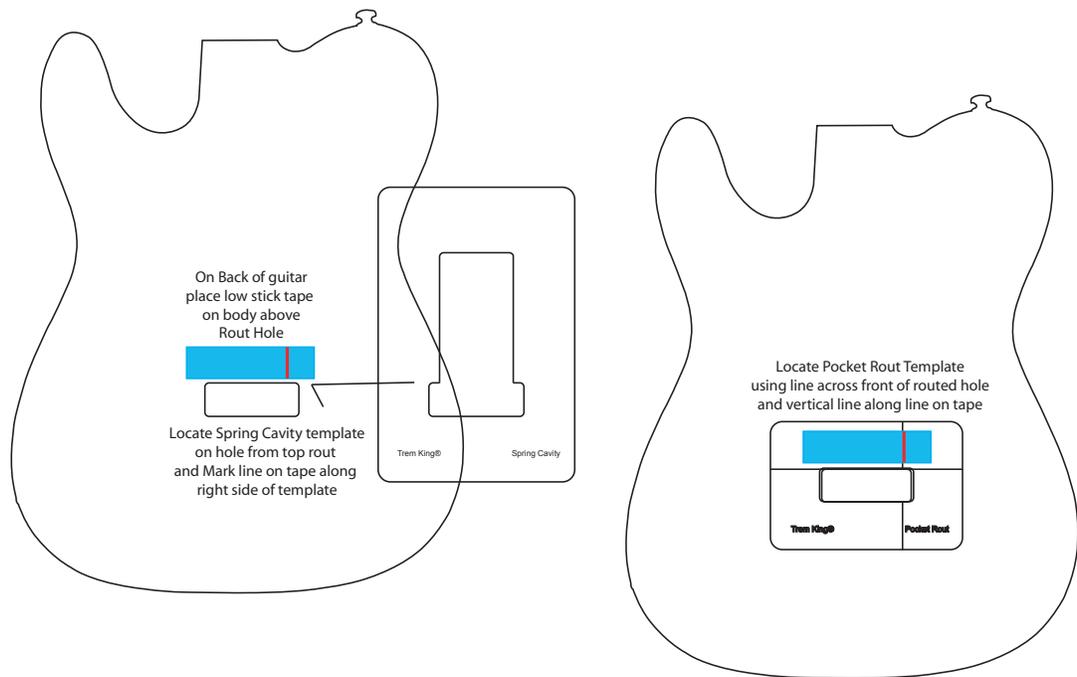
5. After using template as guide for initial rout, plunge as deep as the  $\frac{3}{4}$ " bit will go.
6. Change to bit #45461, 1-1/4" bit and complete routing thru body.



7. Remove template but leave tape with centerline and scale length. Drop TKS-2/3 unit in and make sure it centers.  
NOTE: For TKS-2, install bridge pickup into bridge slot. Feed wiring thru hole into control cavity and carefully place unit in hole to make sure it all fits. Use straight edge to make sure it is straight. Tip on back of bridge should be centered with centerline on guitar. Sometimes the pickup cavity needs a touch here or there to fit properly. Adjust if necessary. Remove TK unit after checking.

8. **Cut pocket rout.** We have found that cutting the pocket rout at this point makes a much cleaner spring cavity cut. Use bit #45236, 1" diameter; 3/4" tall with six (6) washer # 67206 on shank of bit. Set initial depth of router to 0.422" and lock in place. This leaves a 'lip' around the cavity but still allows necessary movement of the tone block.
9. Place strip of low stick tape across front (closest to the neck) of the hole thru the body.
10. Locate Spring Cavity template on hole in back of guitar.
11. Mark Right Side of Spring Cavity on tape.
12. Using horizontal and vertical line on Pocket Rout template, locate on back of guitar.

TK/TKS-2/3 Pocket Rout Template Placement



13. Using method in #8 above, cut pocket rout completely around the template.  
Check the cut.
14. Plunge 1/4" deeper and rout completely around the template again.
15. Check work. Remove template

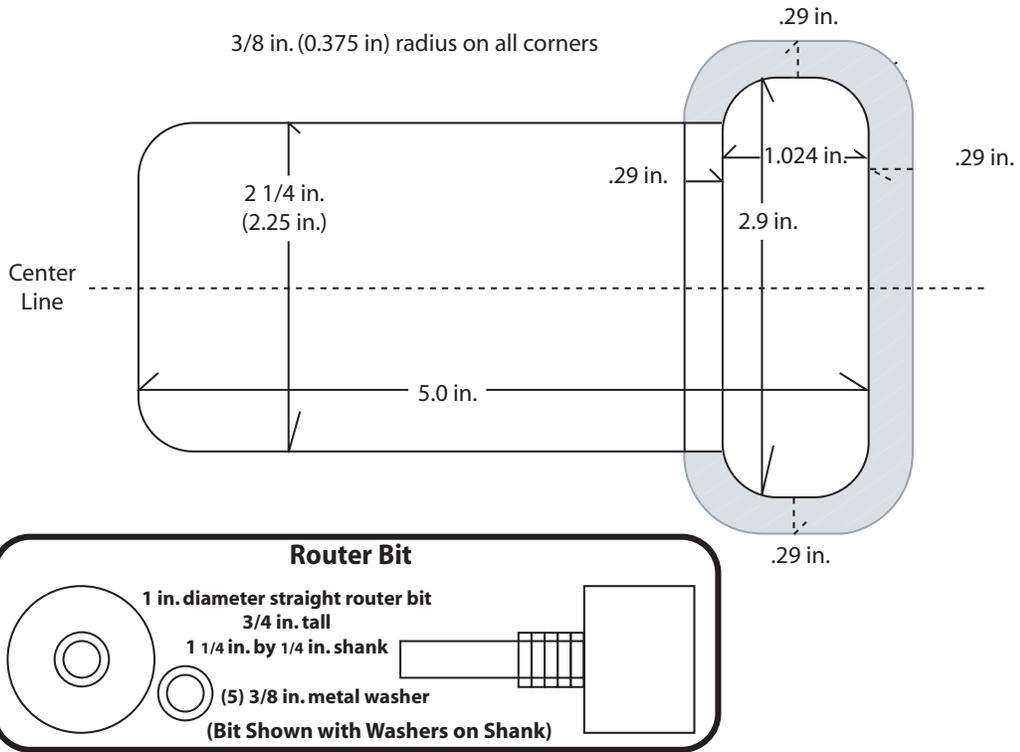
- 16. Cut Spring Cavity.** Locate Spring Cavity template around hole from top rout. Use bit # 45491,  $\frac{3}{4}$ " to rout a  $\frac{3}{4}$ " deep spring cavity.



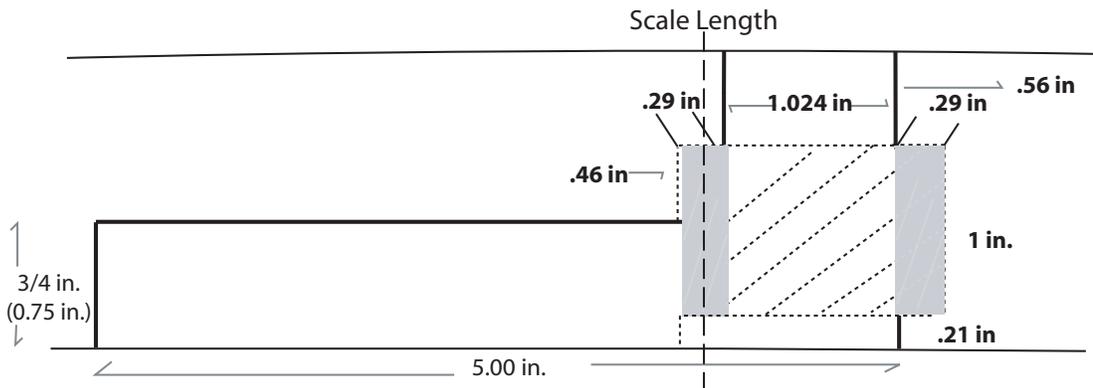
- 17.** Check work. Remove template and tape.
- 18.** Seal all raw wood areas with sealer of your choice. We use poly. Let dry overnite.
- 19.** Place Trem King unit into top of guitar to make sure it fits and tone block can swing both directions. Using the centerline and intonation lines you marked on low stick tape, make sure the TK unit is centered and at the correct distance from the nut and the bridge pickup fits correctly.
- 20.** Measure the distance from the nut to the front of the bridge plate in the center, and both sides. If it is the same, the bridge is straight.
- 21.** Place a straight edge along the centerline of the guitar down the fret board from the nut to the bridge. The centerline of the Trem King is the center between the 'd' and 'g' saddles. Align with the centerline of the guitar. Remove if all looks good.

**NOTE:** At this point with the TK unit in your hand, insert the whammy bar into the tone block making sure it is all the way down in the hole. Use allen wrench to tighten two (2) set screws on back of tone block for whammy bar. Tighten to you preference. Also, make sure the Grip Tip is tight. Check both the rubber tip and the metal end for tightness. Remove whammy bar.

# Spring Cavity Rout Dimensions For Trem King Installation for TKS-2 and TKS-3



## Side View of Guitar



## Measure Twice, Cut Once

22. With the TK unit placed in the top of guitar and aligned properly, mark screw holes on top of guitar.
23. Remove Trem King.
24. Use 1/16" bit to drill holes 1/2" (or less) deep #6 woodscrews on top of guitar.
25. Mount Trem King unit to top of guitar using #6 x 1 in. countersunk wood screws. Screws should correspond with the color of your Trem King – chrome, black, and gold.
26. Turn guitar over. Drill spring claw holes 1/2 - 1" deep holes using a 1/8" extended drill bit. Drill holes approximately 1/4 in. from bottom of cavity. The hole in the middle should line up with the center of the tone block. One hole on either side for the tone block springs that should line up with the hook or hole for tone block springs. If retro fitting, plug any old holes that interfere before drilling new holes.

**NOTE:** by using this long drill bit, you get a straighter angle into the body for the spring claw screw holes.

Install two (2) #8 x 1 1/2 in. Button Head philips wood screws with spring claws on them. One (1) claw for the tone block spring and one (1) claw for the tension bar spring.

**NOTE:** If using 11 gauge or less strings, only one (1) spring claw will be mounted for the tone block spring and one spring claw for the tension bar. The tone block spring can be mounted on either the bass or treble side of the tone block. If using 12 gauge or higher strings, install two (2) spring claws for the tone block and one (1) for the tension bar.

27. Solder Ground wire to spring claw for tone block. You cannot use the middle spring claw because it does not ground.

**Note:** If your Tension Bar spring has not been inserted, do the following. Press the 90° end of the Tension Bar Spring through the hole in the center of the Tension bar. Place the tip that comes out the bottom side into a vise and tighten. Then 'roll' the tension bar away from you, bending the tip over so that the spring will not come out of the bar during use.



28. Mount tension bar behind the tone block. Then pull the spring loop up and attach it to the middle spring claw. The leather of the tension bar should rest on small pieces of leather on the right and left arms and the tone block.
29. The tone block spring can be mounted by hooking it to the tone block, but only hooked onto the spring claw after the low e, a, d and g strings have been put on.
30. Before stringing instrument, check all other components of guitar. Make sure:
  - a. All neck bolts are tight
  - b. Neck is straight
  - c. Tuning gear are tight – top nut, screw (if any) on back and button
  - d. Check nut – we recommend Graphtec nut material. However, high percentage graphite, bone and other materials work well. Inexpensive nut material tends to not work as good and may cause tuning problems. Most roller nuts will work fine.
  - e. String trees –If the headstock angle is not enough to pull the strings down snug, you will have to use a string tree. If you must use a string tree, we also recommend Graphtech trees.
31. String guitar, loading strings up through tone block. Be sure each string comes out between the proper saddles.

**Trick:** Tighten middle screw and claw (for tension bar) almost all the way into the body. Leave the other screw with claw about ½ in. out of body. Tune without using Whammy bar and let set for 24 hrs. This will compress the leather allowing stable tuning the next day.

**DISCLAIMER:** Alterations or modification to the Trem King voids manufacturer warranty and invalidates returns. If you are unsure of your ability to fit the unit we will be happy to recommend a qualified luthier or guitar tech.

**SUPPORT AVAILABLE:** The Trem King vibrato is a new, patented design that differs in installation, set-up and adjustment. Feel free to contact us with questions @ (803)546-6400.

Onward,

Rusty Bickford

Trem King® Fixed Bridge Vibrato