

# PHILIP KUBICKI

## Replacing Tuner Retainer Block

- 1) Using a 5/64" Allen Wrench, remove the 4 Cover Plate Mounting Screws. They are the 2 small screws located on the top side of the Cover & the 2 small outer screws located on the rear side of the Cover.
- 2) Pull Frame away from Cover Plate.
- 3) Turn Tuning Knob while holding the Brass Shaft Slider with Roll Pins until the Slider is about 1/3 the way up the Shaft. Remove E-ring located in the slot in the Tuning Shaft just under the Bearing. Repeat until all Knob/Shafts have their E-rings removed.
- 4) Turn Housing Cover over and using a 5/64" Allen Wrench, remove the two screws holding the Retainer Block.
- 5) Lift up on the Tuning Knobs so the Brass Crash Nuts on the end of the Tuning Shafts come out of the Retainer Block. The Bearing fit is close so take care to pull the Shaft out at the same angle it is installed. The Bearing is also held in place with super glue so try not to push on it or it will break loose. If this happens, it can be glued back in, but the old glue must be carefully removed first so the bearing flange can sit flat in the Cover Plate Hole. NEVER try to apply super glue to the Bearing while the Shaft is installed or you will permanently glue the Shaft to the Bearing!
- 6) Remove Retainer Block and install the new one, flat side down and with the slope facing into the Housing Cover. Lower each Tuning Shaft into its hole to hold the Block in place.
- 7) Use your fingers to hold Retainer Block in place and turn over Housing Cover so you can mark where to drill the mounting screw holes through the Housing Covers mounting screw holes. Before marking, make sure there is no sideways or forward/backward pressure being applied to any of the Tuning Shafts.
- 8) Remove Retainer Block and thru drill the marked holes with a 7/64" drill. The drilled hole needs to be perpendicular to the surface of the Retainer Block.
- 9) Form the threads in the new holes by screwing the Retainer Block Mounting Screws into the Block then removing them. This reduces the chances of the Allen Wrench slipping out and scratching the Housing Cover when installing the mounting screws since you won't be cutting the new threads at the same time.
- 10) Reinstall Tuning Knob/Shaft, lubricate each Shaft and reinstall Shaft Sliders. Run them up the shaft enough to allow Crash Nut installation. Apply Medium Strength Thread Locker to Crashnut Threads before reinstalling. Reinstall E-rings into the slots in the Tuning Shafts, located just under the Bearing.
- 11) Run the Brass Sliders up against the bearings then with the Roll Pins facing out of the Housing Cover (towards the Bridge), thread a plain .017 - .020 gauge guitar string through the Roll Pin holes to keep the Brass Sliders properly aligned and facing forward. Turn the assembly upside down so gravity can hold the Forks in place. Slowly insert the Forks between the Roll Pins then remove the guitar string.
- 12) Reinstall the 2 top and 2 back Housing Cover Mounting Screws with 5/64" Allen Wrench.