

How to replace **two regular Strat pickups** with the
'Kinman' NoSoldering Harness for Stratocasters with 'splitting' bridge humbucker.

Tuesday, 3rd May 2005. Rev-2 © Chris Kinman

Confidential

This is solely for Kinman customers.

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NOTE-1: Read this completely first before beginning the project.

NOTE-2: The **lower pot** labelled *Tone* is my K7 control (NoLoad type) that, when set to '0', connects the neck pickup to whatever else is selected by the 5 position switch. This increases the available combinations of the pickups from 5 to 7. (ie bridge + neck & all 3 together) When set to 10 there is no connection via this pot whatsoever. For full details view my K7 selection chart on this webpage

NOTE-3: The **middle pot** is a Master Tone pot.

NOTE-4: The **volume pot** has a bypass filter fitted (see bottom photo). If you feel the sound is too bright when the volume is rolled down the filter can be disconnected simply by cutting or de-soldering the wires that connect from the series Cap/Resistor to the pot terminals.

NOTE-5: The knobs should be an easy slide fit on the Pot shafts. Open the split shaft with extreme care only if the knob is loose. If excessive force is used one half of the split shaft will break off. Also If the knob fits too tightly it will damage the pot when pulling the knob off. **Knobs** should only be **removed** from the **Push/push pot** when it's in the **'out' position**. Pulling the knob off in the 'in' position will break the switching catch.

Tools needed:

- Smallish/Medium X head screwdriver to remove and replace the pickguard mounting screws.
- Small blade screwdriver to tighten the terminal block connections.
- **USA Models:** 1/2" (or 13mm) tube spanner (or nut driver) to tighten the pots and jack socket.
- **Non USA models:** In addition to above you will need an 11mm tube spanner (or other nut driver) to remove the original pots. The pot holes in the pickguard may have to be enlarged from 5/16" (8mm) to 3/8" (9.5mm) for the Kinman pots by using a 9mm (approximately) diameter round file or tapered reamer;

CAUTION: do not drill as it is dangerous to enlarge existing holes in a pickguard using a power drill because the drill will bite into the plastic and spin the pickguard causing personal injury.

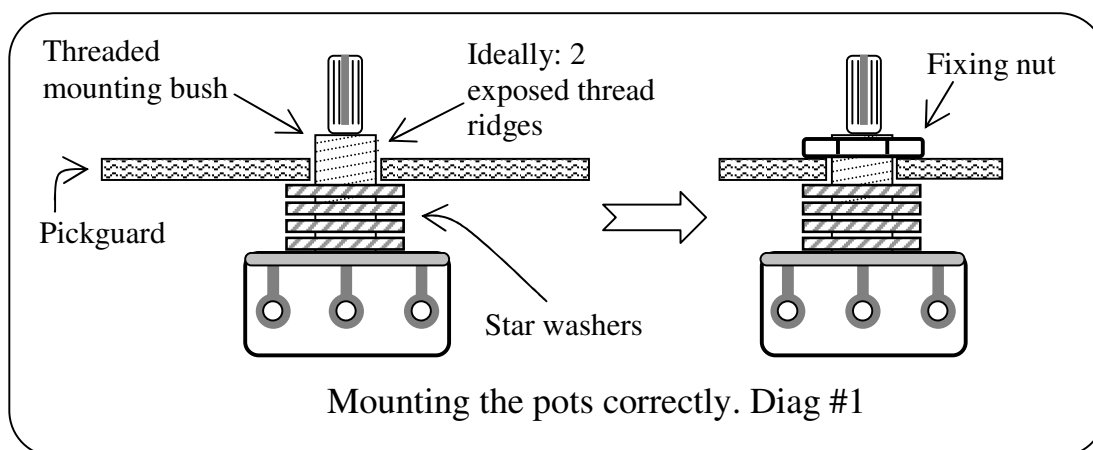
- 1) Remove the strings and then the pickguard. Place the pickguard upside down adjacent to the guitar right beside it, close enough so the output socket cable does not pull on it's connections.
- 2) Cut or break the ground wire(s) (coming from the spring claw at the rear of the guitar -and/or- from the central ground point, as the case may be) away from the casing of the volume pot by working the wire(s) around and around at the solder point until it breaks. Then strip the insulation back about 1/4" (6mm) so it or they are ready to insert into one of the screw terminal mounted on the cover of the NEW volume pot.
- 3) Remove the Output socket from the recessed steel plate. Cut or break the output socket off the end of it's two wires by working the wires around and around at the solder points until they break.
- 4) Record the connections of then De-solder or cut the bridge humbucker wires.
- 5) De-mount the two original Single coil pickups and controls from the pickguard and withdraw the wiring harness complete. Leave the bridge humbucker mounted.

The pickguard and guitar should now have no remaining connections to the original pickup or controls and you will now be ready for the Kinman install.

- 6) Unpack and remove the replacement pickups and wiring harness from the Red plastic shipping plate. Mount the pickup to the pickguard with **exactly the same orientation as received on the shipping plate** using the Red silicone rubber tubes as springs around the screws. Use the Kinman mounting screws. Then fit all the controls into the holes and spaces in the pickguard left by the original parts, as well as the output

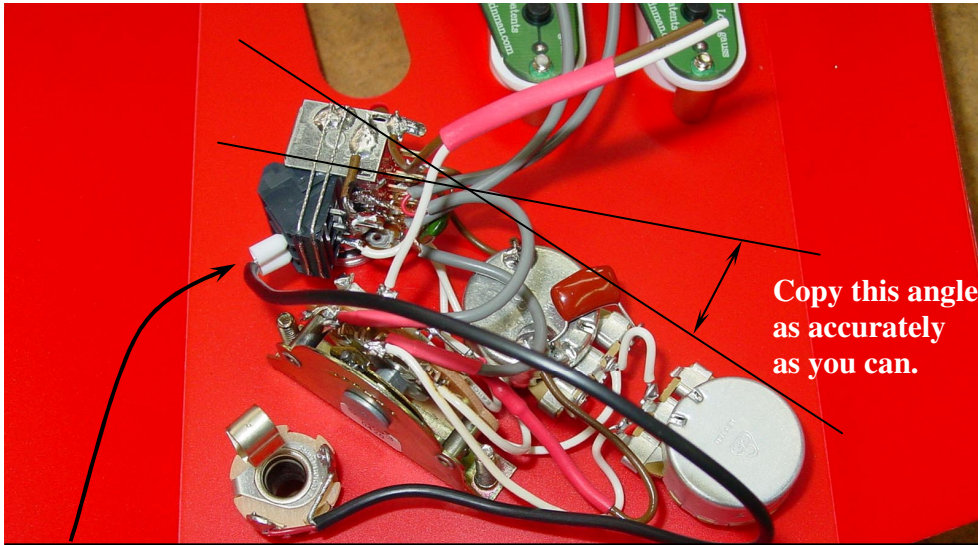
socket on it's recessed plate. If the Star washer has not been assembled to the socket it may be necessary to the fit one supplied.

- NOTE: The Star washer should **not** be fitted on the outside underneath the nut, but only on the inside between the recessed plate and the socket.
 - **Make sure** the socket is tightened in the position where the *hot* leaf-spring terminal is centred on the recessed mounting plate, otherwise it might contact the wall of the cavity and cause a partial short via the wood resulting is BAD sound.
 - On some copy guitars it may be necessary to enlarge the cavity to avoid the short mentioned above.
 - If the pot holes are too small see *Tools needed >Asian models* at top of page.
- 7) Check the pot bushings to ensure there are at least 2 thread ridges exposed above the pickguard. If too little thread form is available for the nut it is advisable to remove one Star washer from the pot bushing to allow sufficient grip by the fixing nut. But be aware that excessively exposed thread-form results in the skirt of the knobs being too far from the pickguard.



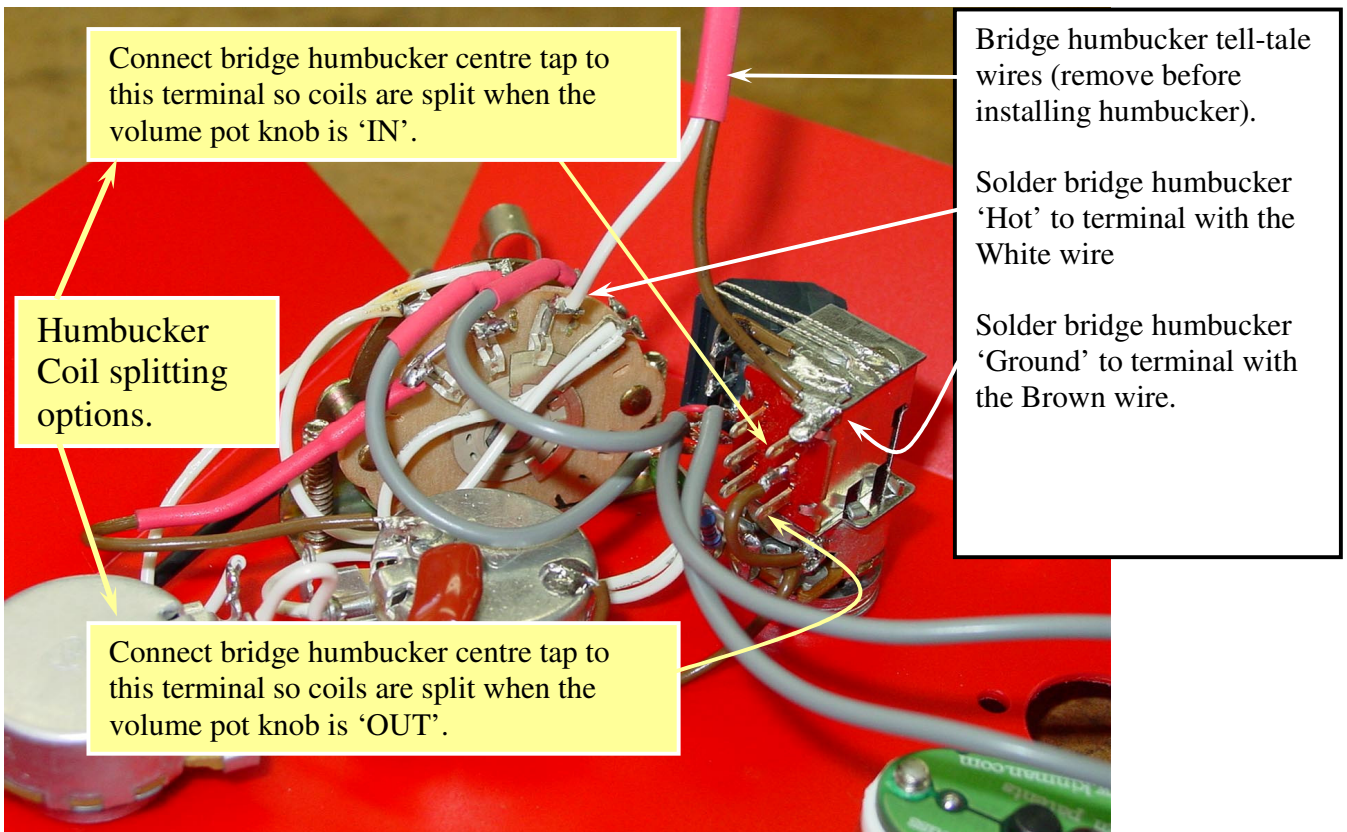
- 8) Lightly tighten the pot nuts, then adjust the rotational position of the pots as shown in the next photo and tighten the nuts firmly. If the pot terminals poke out they might cause a short circuit by contacting any shielding on the cavity wall. Tighten firmly with a 1/2" (13mm) tube spanner (do not tighten excessively).

Aligning the Volume pot Photo #1



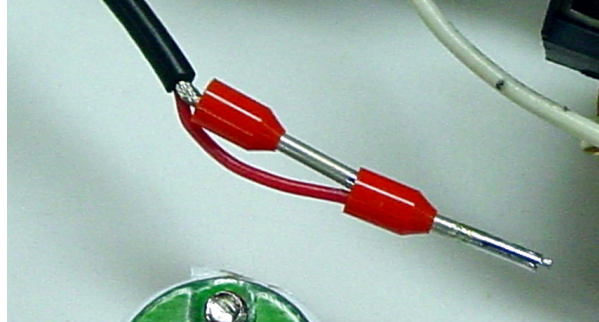
Orient the volume pot as shown in this photo so the White output plugs don't interfere onto the cavity walls of the body. Orient the other 2 x pots so they are inline with each other. If any of their terminals contact the cavity wall the resulting short circuit may cause a performance problem.

Bridge pickup connections Photo #2

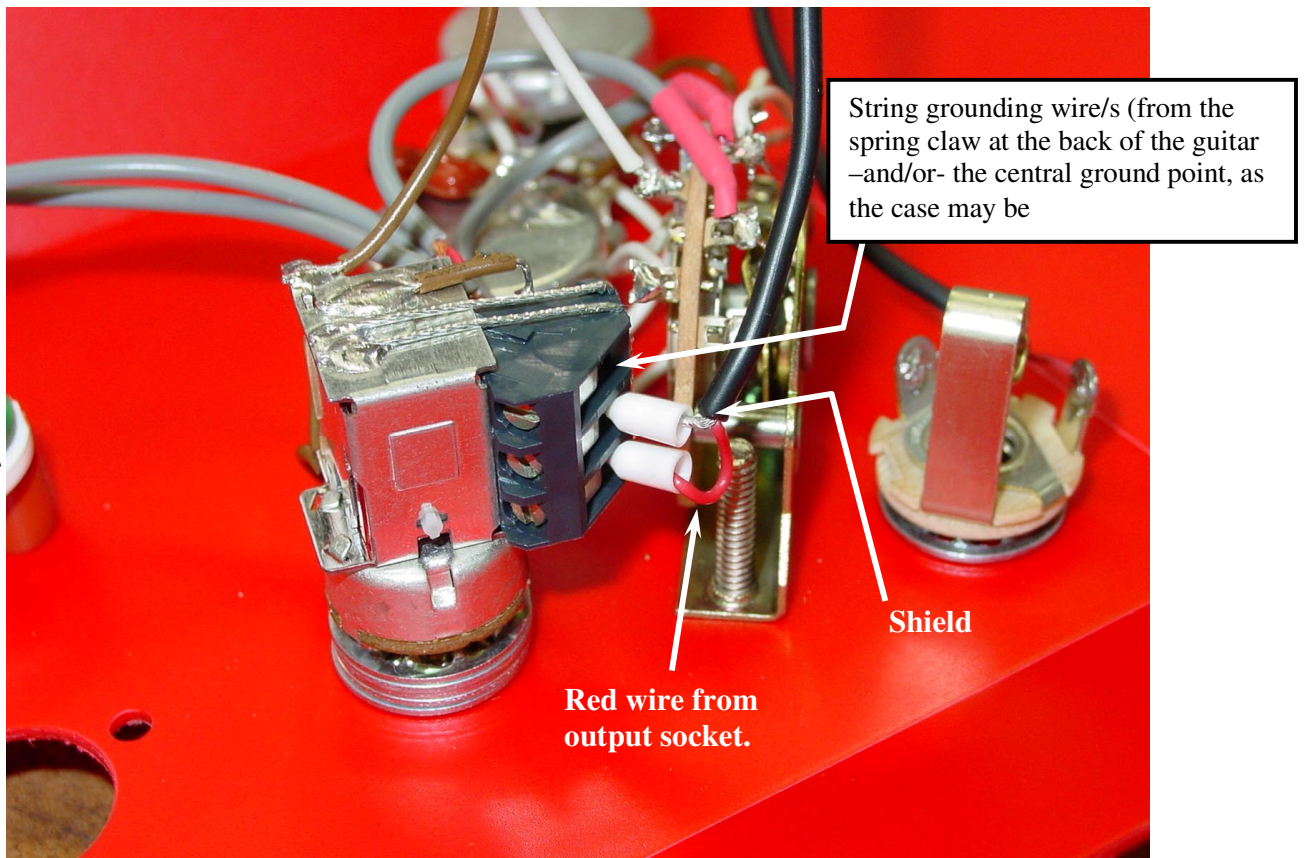


- 9) The Brown and White wires with the Red heat shrink covering are there to indicate where to solder the bridge humbucker. Solder the bridge humbucker Hot and Ground wires as shown in the above photo. If there is a Phase conflict between the humbucker and single coils simply reverse these connections.

- 10) You have a choice to have the bridge humbucker split when the Volume knob is 'OUT or 'IN'. Follow the connections of your choice in the above photo.
- 11) Mount the output plate and thread the cable through the connecting tunnel into the main control cavity. The two plugs on the cable should be piggy backed, one inside the back of the other, as depicted in the photo below. This arrangement makes it easier to thread through the connecting tunnel.



- 12) Undo the 3 screws on the connector block to open the terminal ports and insert the two Plugs and ground wire(s) into their respective screw terminals as shown in the photo below. The output Red wire is plugged into lower terminal port closest to the pickguard. The output Shield is plugged into the middle terminal port and the string grounding wire/s (from the spring claw at the back of the guitar –and/or- the central ground point, as the case may be) into the remaining terminal upper, furthest away from the pickguard. Tighten the screws firmly but not too tightly.



NOTE: I do not advocate Star grounding as a necessity; in fact it can cause headaches. With that in mind all shielding and ground wires should be somehow connected (either directly or indirectly) to the right hand Connector-block port. This included the control cavity shielding (if present), output cavity shielding (if present), and the strings - direct from the bridge as in the case of hardtails or via the spring claw on vibrato models. Since it is *not* recommended to insert many wires into the connector-block ports all these items can be connected together at another point and a single wire leading from that point can be terminated into the right hand port of the connector-block. Failure to ground any shielding will result in unwanted noise.

- 13) Assemble the pickguard to body taking care not to cross thread the screws in the wood, and proceed to restring and adjust the pickup heights..... Please visit www.kinman.com >Tone Workshop >Tone for detailed info on how to get the best out of your pickups and guitar. There is a wealth of information in this section of my Website that will fascinate and delight you for many hours.