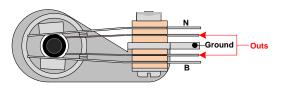
K-GMOD-7 - SG Standard Wiring Kit Ground the bridge ground wire and the pickup wire shields to potentiometer bodies. Bridge Ground Wire 0 **NECK** (10) TONE \bigcirc .022 MF±10% BRIDGE 10W BRIDGE VOLUME TONE From Neck From Bridge **Pickup Pickup** Pickup's hot SG Standard Assembly conductor Final Wiring Pickup's ground conductor (outer shield) Copyright © 2020 by modelectronics.com K-GMOD-7 **Wiring Diagram**

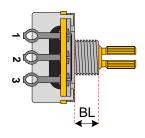
K-GMOD-7 PARTS LIST

Gibson style pickup selector switch – L-type W-SC-W01 (1)



Potentiometers with Audio Taper (3/8" Bushing Length)

R-VC500KA-SP (4)



1/4" Mono Jack (Output Jack)

W-SC-11 (1)



220kΩ Resistor 1/4 W

R-C220K (2)

470pF Ceramic Disc Capacitor

C-CD470-500

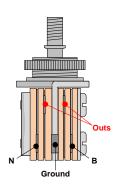


0.022µF Mod Oil Capacitor (2)

C-MOD022-600



(Capacitor may appear smaller in drawings to more easily show connections)



Bus Wire (20 AWG), Tin Plated, Lead Free

S-W3817 (12")

Shielded Wire

S-W901 (12")

Stranded Cloth Wire Pretinned - White

S-W902W (12")

Stranded Cloth Wire Pretinned - Black

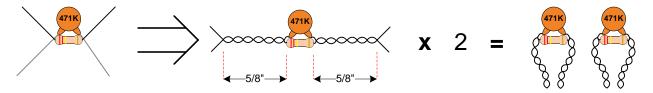
S-W902B (12")

Vintage Style Spaghetti Insulation

(12")S-M401W

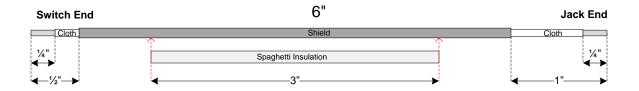
Prepare 2 Cap & Resistor Sub-Assemblies For Each Assembly

Wind the leads of a 220K resistor and a 470pF capacitor together in parallel. Make two sets of these parallel component assemblies. (Cut the wound lead ends so that the lead lengths are about 5/8").

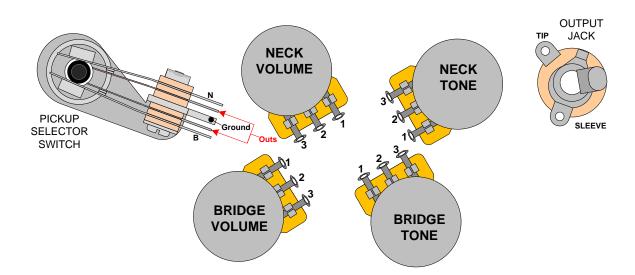


Prepare a 6" piece of shielded wire by:

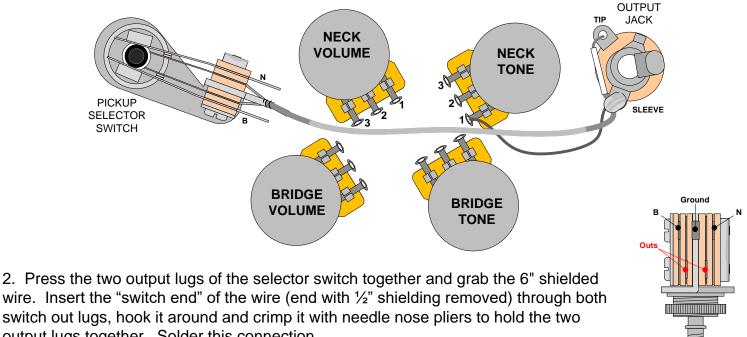
- Cut a 3" piece of spaghetti insulation and slide it over the shielded wire.
- Remove ½" of shielding from one end and 1" of shielding from the other end.
- Neatly trim the frayed ends of the shield.
- Strip a 1/4" of cloth on **both ends**



- Strip the ends of two 2" pieces of black wire.
- Strip the ends of two 2½" pieces of black wire.
- Strip the ends of two 2" pieces of white wire.

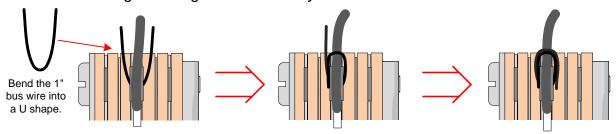


- 1. Mount the components to their respective mounting holes with the same orientation as shown here.
 - 4 x 500KA pots
 - 1 x 3-way switch
 - 1 x output jack

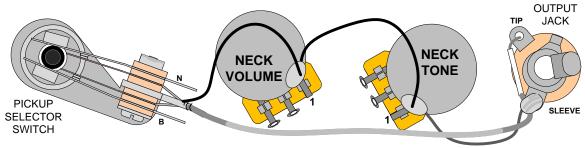


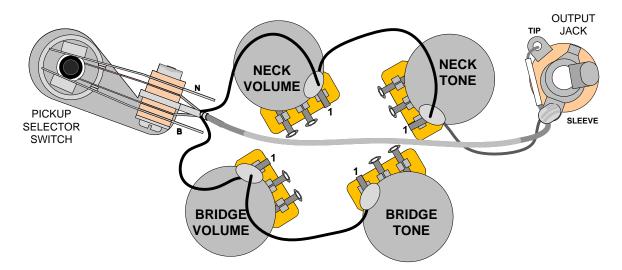
wire. Insert the "switch end" of the wire (end with ½" shielding removed) through both switch out lugs, hook it around and crimp it with needle nose pliers to hold the two output lugs together. Solder this connection.

3. Cut a 1" piece of bus wire, insert it through the switch's ground lug, and use it to tie the shielded wire to the ground lug. Do not solder yet.

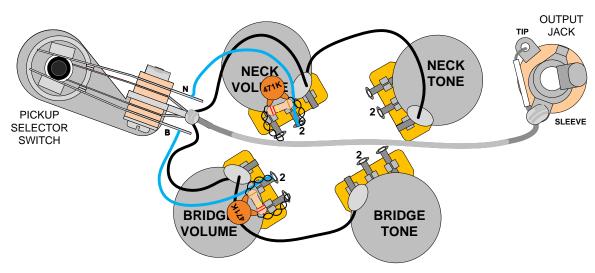


- 4. Route this wire along the bottom of the cavity and connect the other end to the output jacks's tip lug.
- 5. Cut a 1" piece of bus wire, insert it through the output jack's sleeve lug, and use it to tie the shielded wire to the sleeve lug near the end of the shield. (Be sure that you have routed the shielded wire in such a way that it will not interfere with an inserted 1/4" plug at the output jack). Apply solder to the sleeve lug, bus wire and shield for both a good mechanical hold and electrical continuity between the output jack's sleeve and the shielded wire's shield.
- 6. Grab one of the 2½" pieces of black wire and connect one end to the neck tone pot's lug 1. Solder this wire to lug 1. Now, press this pot's lug 1 against its own body and solder the lug along with the wire to the pot body.
- 7. Grab one of the 2" pieces of black wire and connect one end to the neck volume pots lug 1 along with the other end of the black wire connected to the neck tone pot lug 1. Solder these wires to neck volume lug 1. Now, press this pot's lug 1 against its own body and solder the lug along with the two wires to the pot body.

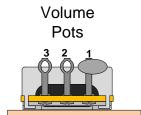




- 8. Grab the other 2" piece of black wire and connect one end to the switch's ground lug along with the other end of the black wire connected to neck volume lug 1. Solder these wires along with the buss wire and shield to the switch ground lug.
- 9. Grab the remaining 2½" piece of black wire and connect one end to the bridge volume's lug 1 along with the other end of the black wire connected to the switches ground lug. Now, press this pot's lug 1 against its own body and solder the lug along with the two wires to the pot body.
- 10. Connect the other end of the wire connected to the bridge volume's lug 1 to the bridge tone pot's lug 1. Press this pot's lug 1 against its own body and solder the lug along with the black wire to the pot body.

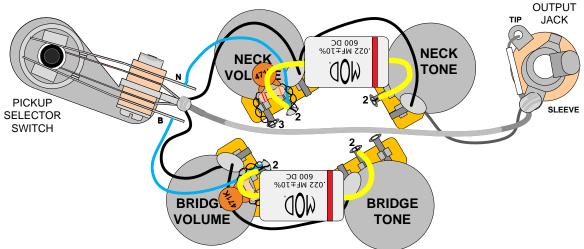


11. Insert the leads of the parallel component sub-assemblies through both volume pot lugs 2 and 3, but do not solder either connection yet. Make sure that they are positioned in such a way that the leads do not short against the back of the pots or any other connection.



12. Locate the two 2" pieces of white wire. Connect one wire from switch terminal "N" to neck volume pot lug 2. Connect the other wire from switch terminal "B" to bridge volume pot lug 2. You can bend back the switch lugs a bit to avoid shorting to the ground lug. Do NOT solder at the volume pot lug 2, yet.

4



- 13. Connect the $.022\mu F$ caps from tone pots lug 2 to volume pots lug 2 for both neck and bridge components.
- First position the capacitors to get an idea of the lead length required. From the remaining spaghetti insulation, cut four pieces just short of each of those lengths. Slide the insulation onto the leads of the caps.
- It's a good idea to leave some slack in these leads rather than pulling them
 as tightly as possible since you may want to reposition them once they are
 in place.
- If the lugs on each volume pots' lug 2 won't fit the .022uF capacitors' leads then simply wrap each cap's lead around the outside of the lug as seen on the right.
- Solder the connections at lug 2 on each volume pot now.

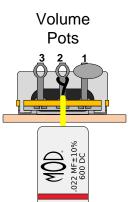
Resistance Test (perform before attaching final connections.

- 1. Turn all of the potentiometer shafts to their full volume positions (i.e. full clock-wise rotation when viewed from the shaft side of the pots).
- 2. Connect an ohm meter to the output jack's tip and sleeve terminals and measure resistance.
- 3. With the pickup selector switch in its middle position the resistance should be about $250k\Omega$.
- 4. With the pickup selector switch in either up or down positions the resistance should be about $500k\Omega$.

In any selector switch position, if the resistance measurement is closer to 0Ω , then you have likely detected the presence of a short. Check that no leads are accidentally touching one another or the back of a pot.

In any selector switch position, if the resistance measurement show OL, then a bad connection is a likely candidate such as a misplaced component or wire.

14. See final wiring drawing to complete the wiring. Once all wires are in place, double check that all connections are soldered.



K-GMOD-7 Mounting Board Layout (Optional)

Use this template to construct a mounting board if you would prefer to complete most of the wiring outside of the guitar's cavity. A sturdy piece of cardboard can work well for a one time use board but use hardboard or wood if you would like a reusable board.

