

This first page shows how to separate parts of the old wiring from the guitar in such a way that preserves the option to revert your guitar back to its original state - in case you want to sell it or want to use the LesLee unit in another Les Paul®, SG® Telecaster Deluxe® or Telecaster Custom® type guitar. We will remove the output jack and the two tone pots. This leaves you with the two volume pots and the the 3-way toggle switch installed only. On page the new output jack and the new pots for master tone and LesLee® speed will be installed. Please study the step-by-step guide in this manual before you proceed with the installation. And if you lack the experience with guitar electrics and using a soldering iron, please find a local guitar service point or a skilled friend who can do the installation for you.



## installation manual • Gibson SG®

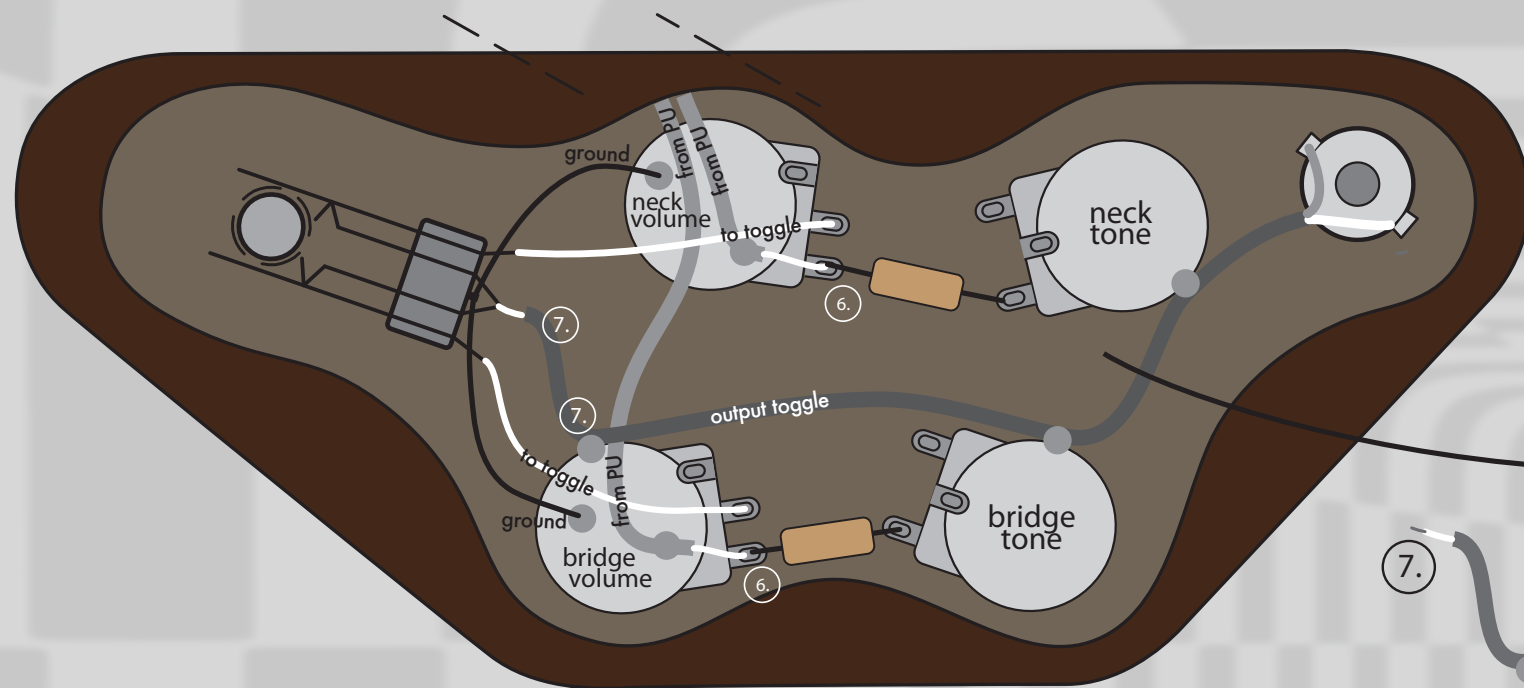
### needed tools:

- cross head screw driver
- soldering iron, best with temperature control
- included birch-ply 1/2" wrench

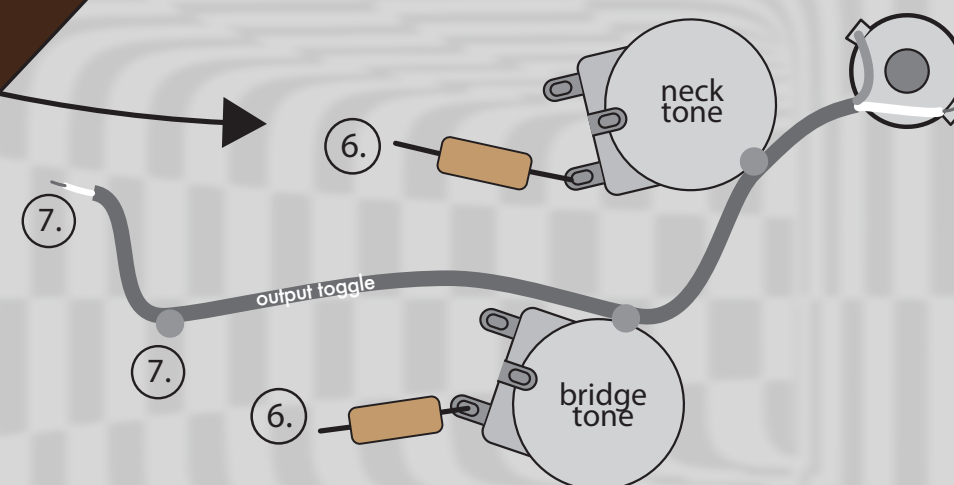
To obtain the birch-ply wrench please unmount it from the unit



### control cavity with original wiring

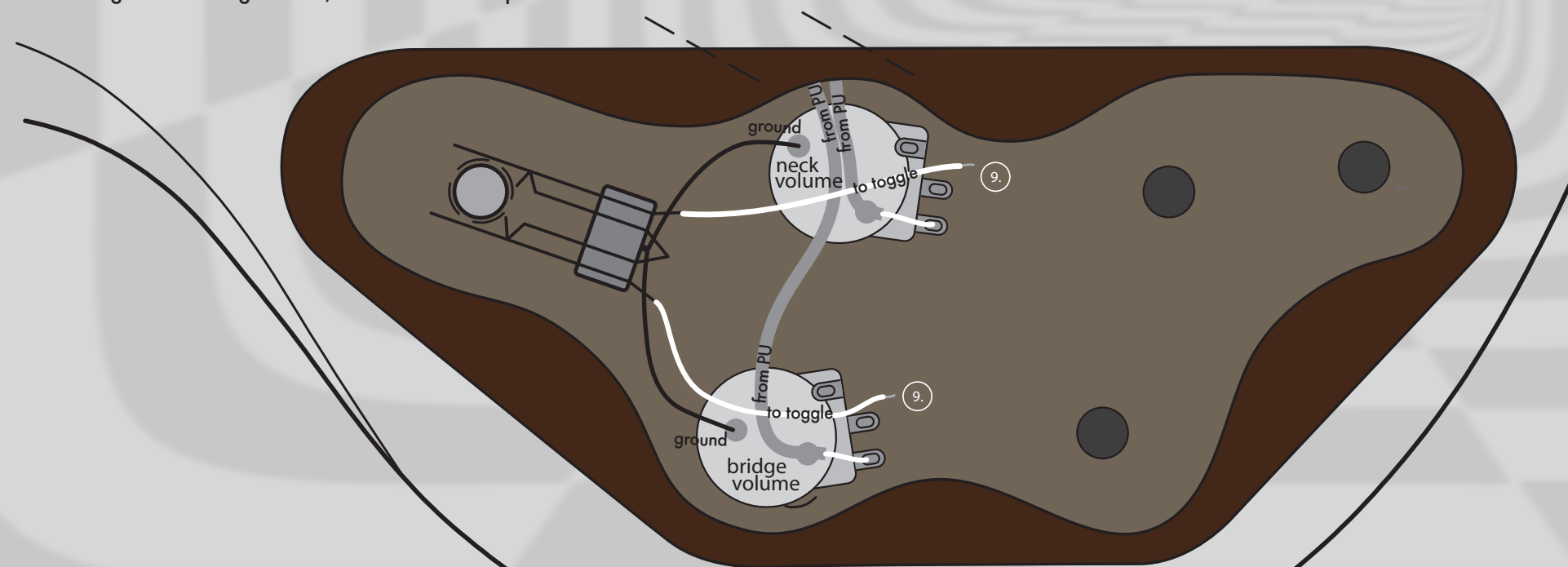


### unmounted original wiring components



Throughout the decades Gibson® has used several variations of the shown wiring layout. The wires can have different colors, there can be additional ground wires connecting the volume pots with the tone pots, the shield of the toggle output wire might or might not be soldered to the pot casings, etc. But as long as you follow the same logic with the signal flow, the unit will work just fine.

1. Lay your guitar on a table with the neck pointing to your left. Support the body and neck preventing the headstock from touching the table. You can use folded blankets or towels or a few cushions to do so.
2. Remove both tone knobs, unscrew the nuts at the pots and at the output jack and remove the washers. You can use the birch ply 1/2" wrench.
3. Flip the guitar and lay it into the cushioning with the back facing upward.
4. Unscrew and remove the cover of the control cavity.
5. Make a few photographs of your wiring to document the original state of your guitar.
6. **Unsolder the tone capacitors from both volume pots.**
7. **At the bridge volume pot casing unsolder the shield of the toggle output wire. Now unsolder the hot output wire at the toggle switch (mid lug).**
8. Lift the two tone pots with the capacitors and output jack out of their holes and store the removed wiring components to preserve the option of reverting your guitar to its original state.
9. **Unsolder the wires from both middle lugs of the volume pots.** (output wires of the volume pots going to the toggle switch)



### partially stripped control cavity

done strippin'! 

1

flip to continue on page two

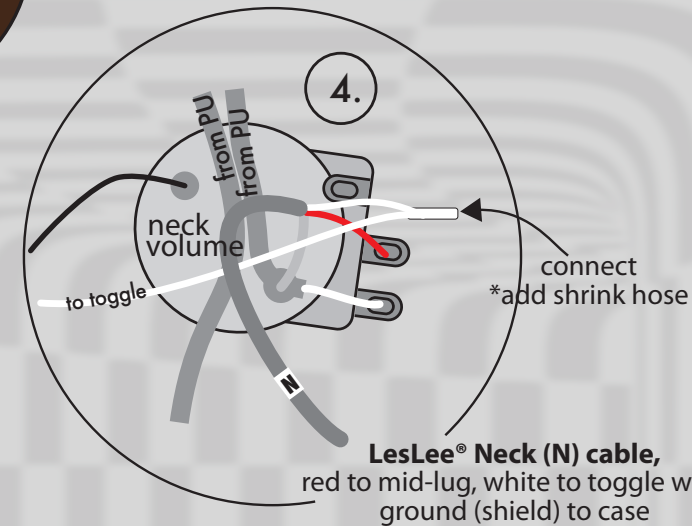
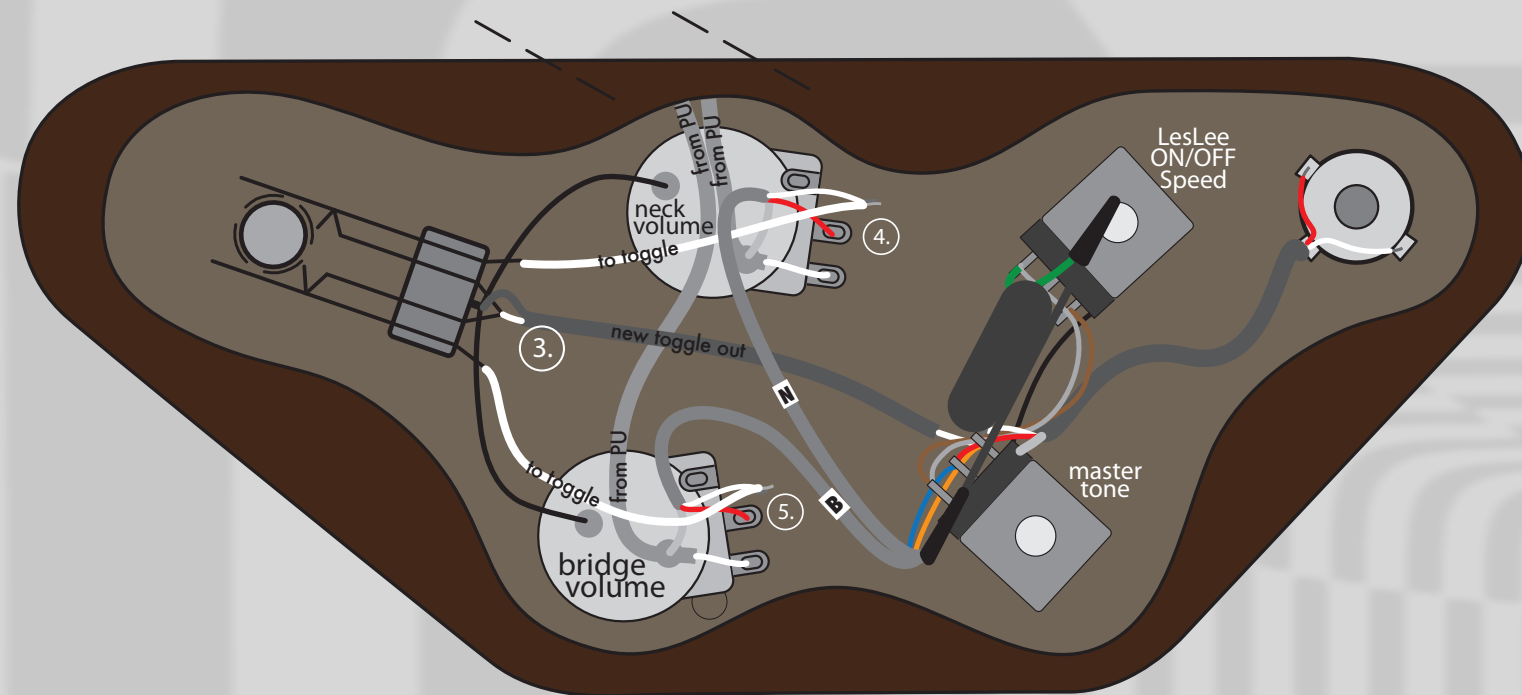


Page two guides you through the steps of installing Pickup LesLee® into the stripped control cavity. The unit comes with all components wired to simply be mounted. Those are the stereo output jack and the new master tone pot and the speed pot. The wires for inputs and return signals of the pickups will need to be connected to the right lugs and wires. Please follow the step-by-step guide on the right side of this page to proceed with the installation.



## installation manual • Gibson SG®

### connecting the input/return and output cables

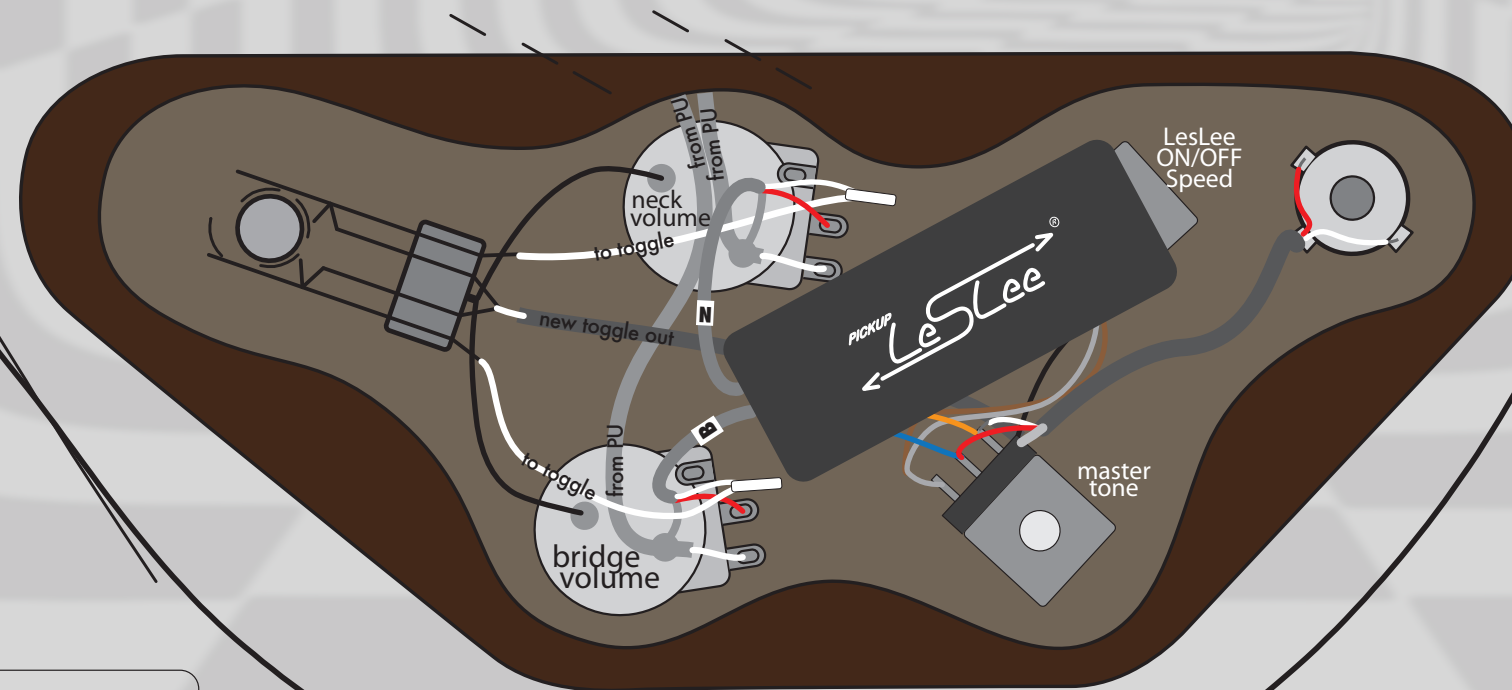


LesLee® Neck (N) cable, red to mid-lug, white to toggle wire, ground (shield) to case

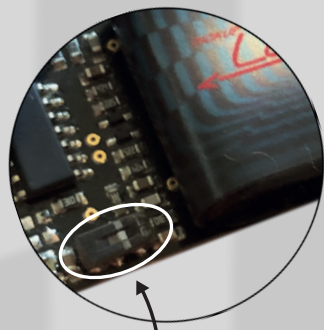


1. Start with setting the **output jack** & the **two pots of the LesLee unit** into their holes with the motherboard facing upward. Add the washers and nuts.
2. The unit comes with one single-core shielded cable (toggle out) and two double-core shielded cables, each marked with little stickers "N" for neck and "B" for bridge.
3. First solder the single-core toggle-out cable to the **mid lug** of the toggle switch, **the shield** is soldered to the **ground lug** of the toggle switch.
4. Next let's connect the cable marked "N" for neck. **The shield is soldered to the casing of the neck volume pot. Then solder the red wire to the middle lug of the pot and the white wire to the disconnected wire that goes to the toggle switch.** Use the small piece of white shrink hose that comes with the unit (in the accessory bag) and shrink it onto the soldered connection with a few strokes of the side of your soldering iron. See 4.
5. **Repeat the same procedure with the cable marked "B" at the bridge volume pot.**
6. On the motherboard switch the tiny **maintenance switch to ON**. To do so flip the board upward a bit and use a pin or ball pen to move the slider on the switch to ON. **See picture 6.**
7. Now you're ready to bend the unit back in place and screw the cover back on.
8. Since the SG® unit uses the MEC potentiometers seen the extra thin body of a SG®, you will need to find **knobs with set screws** to fit these pots. Easiest is to get a set of witch hat knobs with set screws.

### fully mounted LesLee unit in control cavity



6.



OFF ON

You find the **maintenance switch** near the bottom of the motherboard to the left of the supercap. You can use a pin or ballpen to switch it from OFF to ON. **Remember to always switch it OFF whenever you work on the wiring in the future.**

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On **left-handed guitars** the motherboard will run along the shorter diagonal of the cavity pointing at the neck volume pot. And the former bridge tone will be speed On-Off and the former neck tone is the master tone.



Please proceed to the user manual to start using LesLee®.

done!