Vintage LP Basic (assembled)

Please Read All Instructions Before Beginning.

Tools you will need:

- Soldering Iron (35 watt preferably)
- Solder
- Wet Sponge
- Wire Clippers
- Wire Strippers
- 3/8 Drill Bit
- 5/32 Drill Bit
- Variable Speed Dremel Rotary Tool
- Fine surfaced, Cone Shaped Rotary Stone bit. NOTE: a variable speed Drill and step drill bit can be used in place of the Rotary Tool and Stone bit.
- Phillips Screwdriver
- Pliers
- Cloth (an old T-shirt will work fine)
- Scissors
- 1/2 nut driver, socket or wrench
- 2 foot or more piece of string or un-broken solder
- Electrical or masking tape
- Small bowl to hold screws and knobs

ATTENTION: At the very least basic soldering skills are needed to install this kit. If you do not have these skills or are not confident enough in your skills to install this kit than please take it to someone who does, such as a certified guitar technician.

Soldering tips:

Remember to clean the tip of your soldering iron before soldering each connection, a dirty or bad solder joint can add excessive noise into your guitar, especially when using distortion. Be sure to apply a small amount of solder to your iron before trying to heat a connection, this will help your iron transfer heat better and the solder will flow faster

Removing Current Wiring:

Step 1. Place your guitar face down on a firm yet soft surface (a couple of bath towels will do) to keep the face of your guitar from getting scratched.

Step 2. With the Phillips screwdriver remove the two cavity covers on the back of your guitar and place the screws in a small bowl so they will not get lost. You should see something similar to fig. 1.

Step 3. Identify the wires coming from the Switch Cavity (Fig. 2) and where they come out in the Control Cavity (circled in Green) and where they connect to the pots (circled in Yellow) (see fig.3).

Step 4. With the soldering iron heat the wires where they connect to the pots and remove them.

Step 5. With the screwdriver remove the output jack plate from the body of the guitar (see fig. 4)

Step 6. With the soldering iron heat the wires where they connect to the output jack and set the jack aside.

Step 7. With the cloth remove the knobs on the guitar. Work the cloth under knob and then wrap it completely around the base of the knob and pull up. (see fig. 5)

Step 8. Identify the bridge and neck pickup wires coming into the control cavity (in fig. 6 the bridge is the black wire that connects to the bridge volume pot circled in green and the neck is the red wire that connects to the neck volume pot circled in yellow.) Take a piece of tape and wrap it around the bridge pickup wire so that you will not become confused which is which when they are disconnected. With your soldering Iron Heat these connections till the solder flows and then remove them from the pots.

Step 9. Locate the bridge ground and trace it, it is usually soldered on the back of a pot (see fig. 7). The wire is usually black or bare and comes through the body cavity from somewhere other than the rest of the wires. Heat the solder till it flows and then remove the wire from the pot.

Step 10. You should now be able to remove the old wire assembly from the control cavity (see fig. 8).

Modifications before Installation

If your guitar is an actual Gibson made in the USA then these steps will not be necessary.

Step 11. Some modifications must be made for the new parts to fit in your guitar. First you need to make the pot holes larger. Remove 1 of the washers from one of the pots on your new wire assembly. This will be your guide and your safety net while modifying these holes without damaging your finish. Center the washer over one of the pot holes, then take your electrical tape and tape it securely to the body of your guitar (see fig. 9).

Now take your Rotary tool and carefully widen the face of the hole. BE CAREFUL AND TAKE YOUR TIME or you will chip your finish. I prefer the fine stone bit and rotary tool because it makes a smooth cut and is less likely to grab and chip the finish. As you widen the hole you will hear it start to hit the washer and you will know that you have gone far enough. You are only trying to open up enough to get past the finish, do not attempt to go all the way through with the stone bit. If you are using a drill and step bit do not tape the washer to the guitar because the bit may grab the washer and scratch your finish. Use the drill free hand but be slow and careful, taking 5 to 15 minutes to do this step right will save you many days of disgust for your impatience and lots of money to repair your finish (see fig. 10).

Now take a 3/8 drill bit and turn it by hand to finish widening the hole all the way through. I do this instead of using a drill motor to keep the inside of the cavity from chipping (see fig. 11).

Repeat this step to the other 3 holes. Once again take your time so you do not damage your finish and it should come out looking fine (see fig. 12).

Step 12. Now remove the output jack from the jack plate, this should need a 1/2 wrench or nut driver. Once you have removed the jack you may find that the hole is oblonged and that the Epiphone jack has two flat sides. This hole needs to be opened up for the new jack to fit through it. Take the 3/8 drill bit and by hand and open up the hole on the jack plate (see fig. 13).

You can use the cutting edge of the drill bit to clean up the burrs on the cut edges of the plastic. Hold the face of the bit at an angle against the cut edge lightly and slowly move the bit along the edge and it will remove the burrs and leave a much smoother edge. If you try this with a sharp knife or razor blade it may cut to deep into the plastic and leave a bad edge.

Step 13. A cream switch tip should have come with your switch but it does not match your other trim then use the old switch tip by following these instructions. If your old switch tip is from a Switchcraft switch then it should fit without modification. Now take the

cap off of your old 3-way toggle switch and with the 5/32 drill bit widen the hole by hand until it is deep enough for it to fit on the new 3-way switch snuggly (see fig. 14). You will want to make it deep enough that you need to twist it on at the end so that it will cut some threads into the cap. The alternative is that you can purchase a cap that matches the color of your old cap and will fit the Switchcraft switch.

Installing Your New Kit:

Step 14. Remove the new wire assembly from the assembly plate. Use the 1/2 wrench to remove the nuts and washers, place it against a flat, solid surface with the components and wires facing up and then push down on the board to remove the components from the board (see fig. 15).

Step 15. Place the locking washers from the pots over the pot holes on the inside of the control cavity and then place the assembly into the control cavity of the guitar. Be careful as you push the pots through the new holes so you do not chip the finish on the outside. Once the pots are in, feed the Output Jack through the end of the guitar (see fig. 16). Now put the washers and nuts back onto the pots and tighten them down to hold the pots in place. You will need to hold the pots in place in the cavity with your fingers as you tighten the nuts so they do not change their facing position drastically. DO NOT OVER TIGHTEN THE NUTS! You can crack your finish if you tighten the nuts too much.

Step 16. Soldering points. You are now ready to solder your wires to the pots. Please refer to Fig. 17 to see the locations of the numbers in this step.

NOTE: When soldering to the back of the pot first put a small bead of solder on the pot, then place the tinned wire on top of the bead of solder, and then using the tip of the iron heat both the wire and the bead of solder at the same time until the solder flows together and covers the wire. Remove the iron and hold the wire in place until the solder cools and hardens (feel free to blow on it). This will make it quick and hassle free to attach the wire to the pot. You do not want the iron on the components for too long or you will burn up the pot.

NOTE: Notice that the pins of the pots (points 2b, 3b, 5 & 6) are covered in solder (the hot point of the output jack is covered as well). When attaching wires to these points place the tip of the wire against the soldering point, touch the soldering iron to the wire and soldering point at the same time and push gently. When the solder heats up and flows the tip of the wire will push through the hole of the soldering point, remove the soldering iron quickly and the solder will cover the pin and wire and make a solid connection. If you hold the heat too long than the solder will run down the pin and you will need to apply more solder. Once the solder is cooled and the wire is held in place make sure that the wire coming out of the pin is not touching any other connection, trim with wire clippers if necessary.

NOTE: Remember that the metal braiding on the outside of the wires is all connected to ground so they cannot touch any other connections or else your signal will die. Move them around, cut them back, push the braid back or wrap them in electrical tape if you need to, do whatever it takes to keep them from touching anything except the back of the pots or the metal braid ONLY of the other wires.

- Solder the bridge ground wire (Fig. 7) to point 1 located on the neck tone pot.
- Take the neck pickup wire (Fig.6 circled in yellow) and solder the bare ground to point 2a and the hot lead to point 2b.
- Take the bridge pickup wire (Fig.6 circled in green) and solder the bare ground to point 3a and the hot lead to point 3b.
- Take the black wire from the Switch wire harness and solder it to the back of the pot at point 4. Solder both the inner wire and the outer braid to the pot. This will ground the wire harness and the rest of the circuit when the output jack is hooked up.
- Take the neck wire from the Switch wire harness and solder it to the pin at point 5

- Take the bridge wire from the Switch wire harness and solder it to the pin at point 6
- Take the output wire from the Switch wire harness and feed solder it to the hot pin of the output jack.

Step 27. Replace all the cavity covers and screw them down. Now plug it in and take it for a spin. If something is not working properly go over the instructions and your connections again carefully and see if you can find the problem. Be sure that the Braided wire is not touching anything other than ground. If you cannot find the problem email us at customerservice@bcsguitars.com and we will get a technician to call you as soon as they are available and try to help you trouble shoot the problem.

Your connections are now finished, refer to Fig. 18 and it should look something like that.

Fig.1 Control Cavity

Fig.2 Switch Cavity

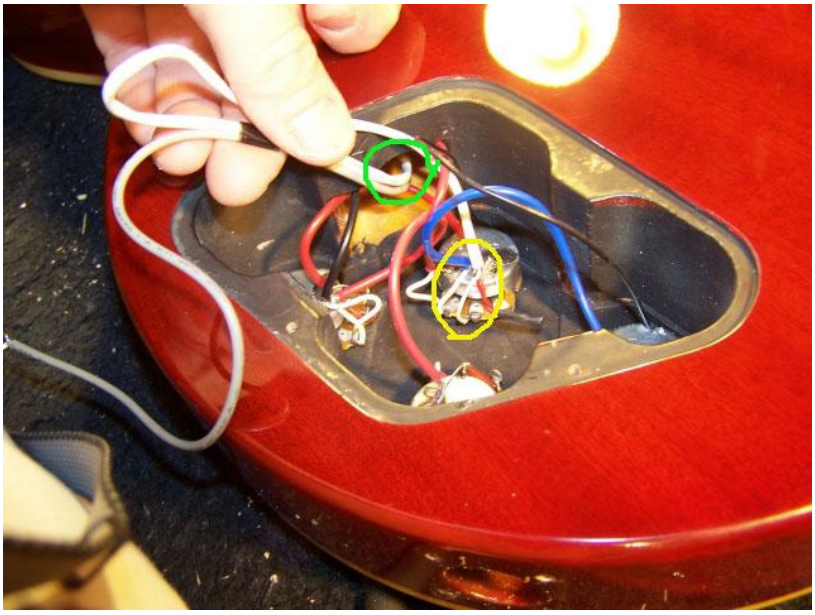

Fig. 3 Trace the Switch wires.

Fig. 4 Removing the Output Jack.

Fig. 5 Removing the knobs.

Fig. 6 Tracing the pickup wires. The bridge is in the green circle and the neck is in the yellow.

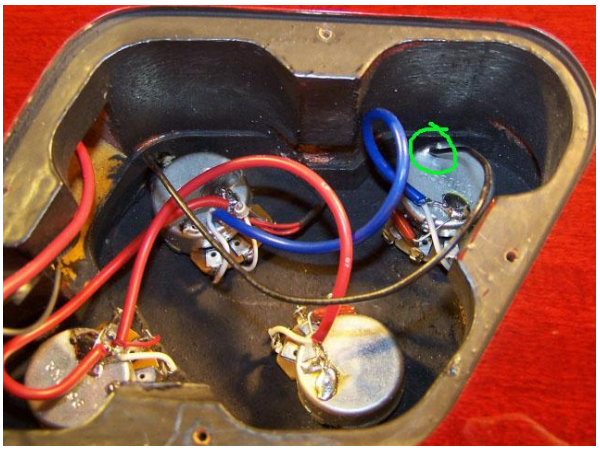

Fig. 7 Bridge ground wire

Fig. 8 Remove the old wire assembly

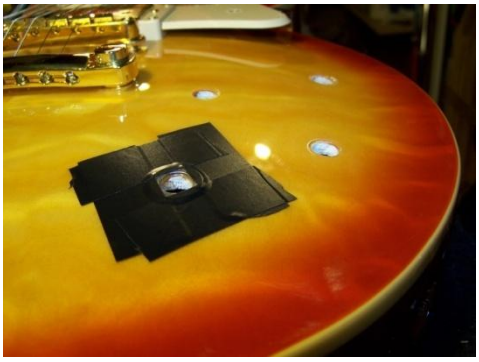

Fig. 9 Use a washer as your guide

Fig. 10 Widen the top of the hole

Fig. 11 3/8 drill bit by hand to finish

Fig. 12 Patience will bring good results

Fig. 13 Open up the jack plate so that the new jack will fit through it.

Fig. 14 Modify your old switch cap or buy a new one

Fig. 15 Remove the wire assembly from the assembly board

Fig. 16 Insert the new wire assembly

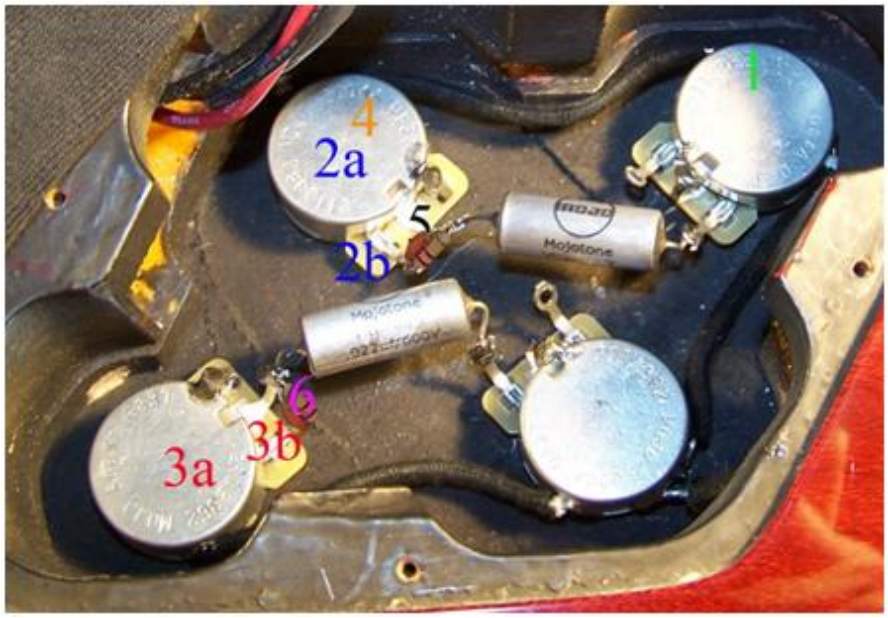

Fig. 17 Soldering points

Fig. 18 Finished