

Peavey 5150 Combo HEAD CONVERSION MOD

By MRJ

This mod is in no way endorsed by Peavey or EVH. It will definitely void any warranty you may have on your amp, and if done improperly, could permanently damage your amp! Please proceed at your own risk. I assume no responsibility for any damage to your amp, or tools, or injury resulting from anything to do with this mod. I am just illustrating how it can be done.

BE CAREFUL!

Before you begin...

First of all, I would suggest that this mod only be done to more beat up 5150 Combo's, since you may not be able to get the amp to *look* as good as it did previous to the mod. It depends upon your skill level with woodworking and with re-tolexing amps how well this project will turn out cosmetically. If you have done that type of amp work before, chances are it will come out looking great.

I decided to try this mod on my second 5150 combo, which I purchased in damaged condition. It was very cheap, and it was not in the greatest cosmetic condition to begin with, so I wasn't particularly worried about messing it up if something went horribly wrong. I first saw this mod on one 5150 Combo that was up for sale on Ebay a few years ago. Given the fact that I have had to lug around my first 5150 Combo (~90 pounds), I thought cutting the thing in half would be a great way to make it more portable, and also much more versatile in a larger guitar rig.

I assume that all 5150 and 6505 Combos are identical in construction, but just in case yours is slightly different, make sure you use common sense and double check my instructions against your own amp. (For example, I wouldn't want some owner of a newer 6505 to just assume that his is built the same way as mine, and go cutting into it only to find an extra brace which might make the mod impossible to finish...)

Supplies and Tools

- Your 5150 or 6506 Combo
- Jig Saw (with at least a 1.5" deep cutting blade or longer) or Table Saw
- Utility Knife
- Screwdrivers of various sizes
- Drill, and various sized drill bits
- 1 1/4" Drywall Screws
- A 29 5/8" x 11 3/4" x 3/4" piece of wood or plywood
- Replacement Tolex
- Tolex adhesive
- Soldering Iron
- Electrical Solder
- A speaker cable (these are thicker than just an instrument cable.)
- A mono 1/4" phone jack (same kind you plug your guitar into)
- Small metal plate (not more than 1/8" thick)
- Staple gun

Taking Apart The Amp

To do this mod, EVERYTHING has to be removed from the amp cabinet. **UNPLUG THE AMP AND LET IT SIT FOR AT LEAST 20 MINUTES BEFORE YOU START.** (This is to drain the capacitors so you don't get shocked accidentally.)

Start by removing the screws on the rear panel. Pull the panel off and run the cord back thru it so it is completely detached from the amp. Remove all of the screws from the speaker cabinet rear panel as well and set aside that panel as well.

Remove the "Peavey" nameplate from the bottom right corner of the amp. Carefully remove all 7 tubes and make sure you lay them out (in a safe place) in the correct order so that they can be re-installed later easily. Try to pull them straight out without moving them side to side too much. (Note: Your 5150 might have metal preamp tube covers that need to be removed before the preamp tubes.) Unscrew the power cord clamp that is mounted to the side wall of the head cab. While you're in with the tubes, unplug the speaker cord from the underside of the amp, cut off the plug, and then thread the cut cord down into the speaker cabinet.



Now, remove the 4 screws on the top of the amp (near the corners) that hold the amp chassis in place. Catch the amp as it is lowered down, and pull it straight out carefully. Put it in a safe place for now.

Turn the amp over on its face. Remove the rubber feet if you plan on putting them on your new 5150 Combo Head, or leave them if you plan on using other feet on the head. Remove the bottom 4 metal corners (they will be used on the new Head too.)

Take out the speaker mounting panel screws and then lift the entire 2 speaker assembly upwards, with the top side leading, and slide it thru the provided channels. BE CAREFUL NOT TO DAMAGE THE SPEAKERS!





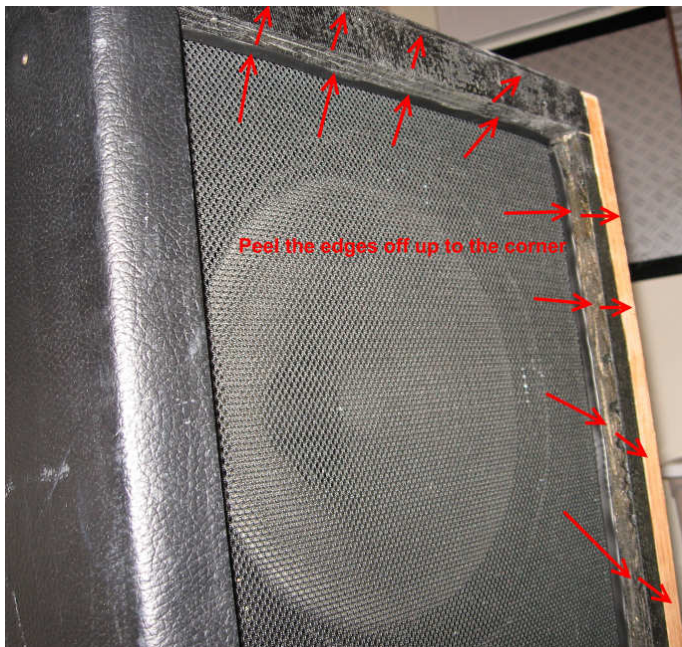
Once the speaker panel is gone, remove the many staples holding the plastic trim piece in around the front of the speaker cab, and remove the trip piece. This is **EXTREMELY** tedious and nasty work, but you have to do it.

Remove the screws from inside the amp chassis cabinet that hold the amp's grill panel on, and remove the entire panel. (The picture shows the chassis still in place but yours should be removed at this stage.)



Cutting The Amp In Half

Peel the Tolex up from around the top and 2 sides of the speaker cab, and peel it off of the amp's face. (Don't peel it around to the sides yet.) Remember, this Tolex will be reused on the 5150 Combo Head later, so make sure you do not tear it. The edges can be a little rough, but it should come up fairly cleanly.



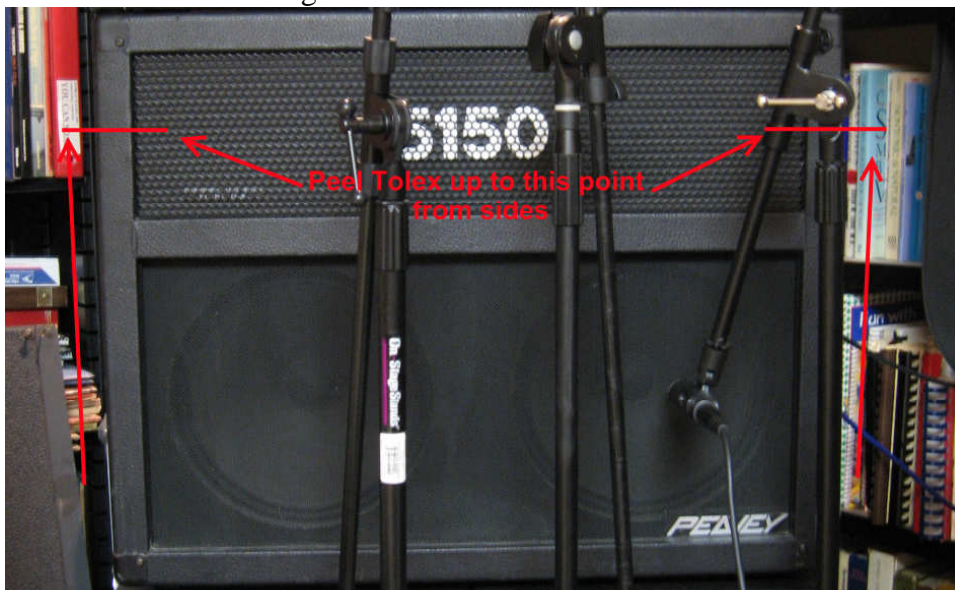
Turn to the back of the amp, and peel the Tolex the same way you did on the front.



Then put the amp on its side, take a utility knife and cut a seam in the Tolex along the bottom edge of the amp (do this on both sides.)



Pull up the Tolex on both sides of the amp and peel it all the up to approximately the level that the tubes hang at



You should now have flaps of tolex hanging from the top of your amp, and you are ready to start the tricky part – cutting. Before cutting, I would recommend using some masking tape or painters tape to tape the flaps of tolex upward – towards the top of the head – so that they don't get accidentally cut or tangled in the saw.

I used a jig saw for this, but a table saw would make this much easier. All you have to do is locate the piece of wood that separates the head and cab area on the inside of the amp. (Shown between the dotted lines below.)



The bottom of this piece is your cutting line for the entire mod. Just use the jig saw or table saw to cut *just* under the edge of where that board meets the sides all the way around, and it will turn out perfect. If your saw lightly scrapes the bottom side of the board shown above, that is ok – and will lead to a smooth re-tolox later on. (Note: when you cut through the front of the amp, you will be going through a lot of wood, and you will end up cutting the wide piece between the amp's faceplate and speaker grill in half.)

After the amp is split, round the bottom corners on the new head cab using really course sand paper or a file so that the metal corners will mount to the head cab properly.

Now that your amp is in 2 pieces, you can cut the new top piece for the speaker cab. You can use wood or plywood, but it should be $\frac{3}{4}$ " thick, and should be cut to approximately these dimensions: 29 $\frac{5}{8}$ " long x 11 $\frac{3}{4}$ " wide. That should fit (about) perfectly on the top of your speaker cab. You will also need to round all of the corners to match the contour of the existing edges of the 5150.

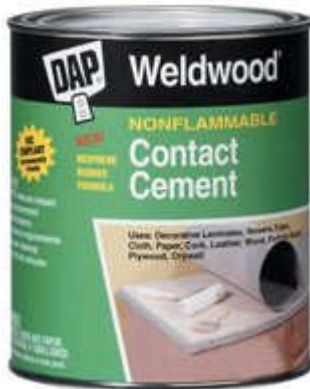
Once that piece of wood is cut, rounded, and test-fit, apply lots of wood glue to the edges of the cab it makes contact with. Drill and countersink holes all around the edges of the new piece of wood, and drive drywall screws down into the cab to anchor the new top piece.



At this point, you should let the wood glue dry for a day, and then the speaker cab will be ready to be re-tolexed.

Re-building the Amp

Now you can start undoing the damage you just inflicted on your amp. Sand the bottom edges of your new head cab (where you just cut it) so they are smooth. This is where you will need your tolex adhesive ready. I used DAP Weldwood non-flammable contact cement. Any tolex adhesive should work though.



Apply an even coat of the contact cement (using a wide foam brush) on the side of the amp up to where the tolex has been peeled back, and around to the bottom of the head. Wrap the hanging piece of side tolex tightly around the bottom and press it down. Use a staple gun to tack each piece down as you go so that it will remain stretched over the amp cab.



Once the 2 side pieces are glued down, there will be some excess tolex. The blue above illustrates how you should trim the side pieces of tolex with a utility knife IMMEDIATELY AFTER it has been glued down (that way it will come up easily).

Now that you have the sides done, apply glue to the area where the front and back flaps will be folded over, and press them down.



This is the last layer of tolex on the bottom, to really put a bunch of staples around the edges to hold everything in place.

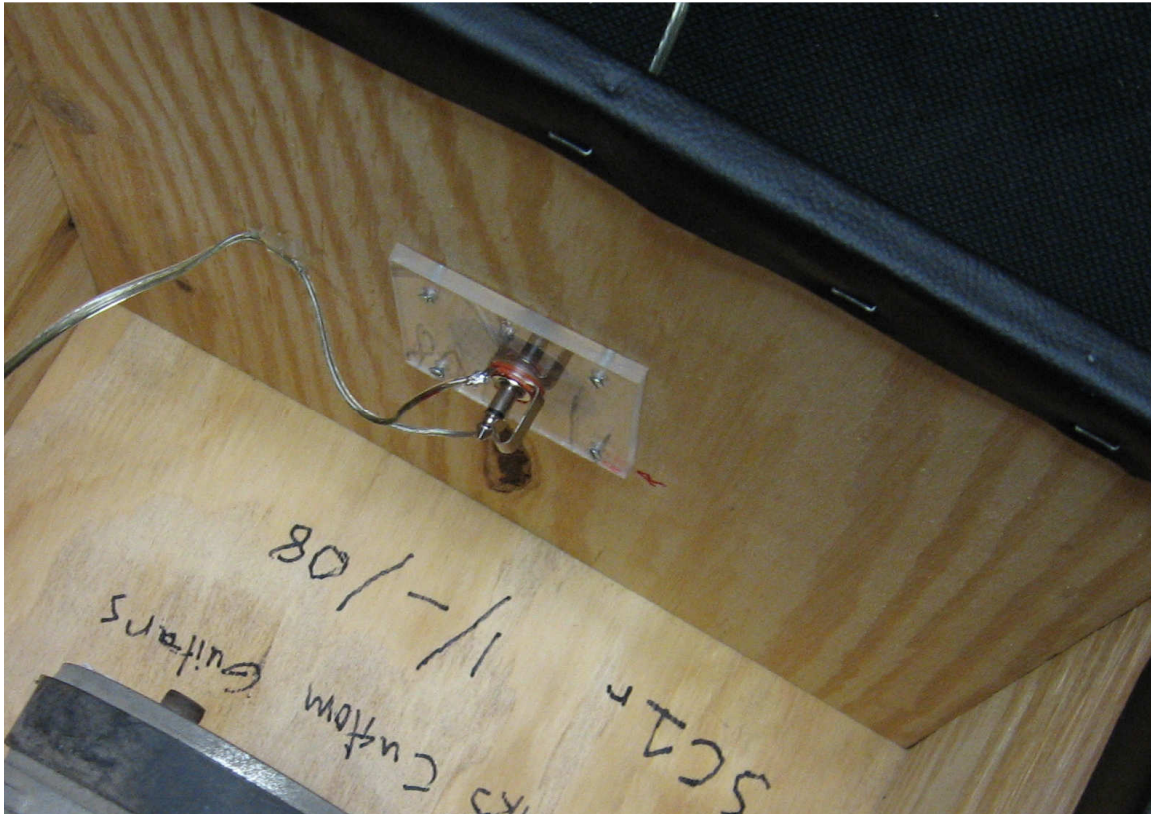
It is not the most professional looking thing in the world, but hey, it is the bottom of your head and no one will see it.

Once the glue is dry, drill the holes for the feet and remount them using drywall screws. You can also put the metal corners that you stole off of the speaker cab on to the head. **PRE-DRILL THOSE HOLES TOO!**

You can now re-assemble your new head (put the 5150 faceplate back on, slide the chassis back in and tighten the anchor screws **REALLY WELL**, put the tubes back in, and put the back panel on the amp, etc. etc.) It is now done! **Just don't EVER fire it up without plugging it into an 8 or 16 ohm speaker cab first!**

You can also buy some new tolex and metal corners and redo your speaker cab. (I don't have detailed instructions for that because I have not gotten around to it, but it shouldn't be too hard to figure out.) Basically, you just apply glue and tolex like you did on the head, but you will have to cut out and measure your own pieces since it is new tolex. Once that is dry, re-staple that plastic trim piece (that you painstakingly removed earlier) back to the inside of the speaker grill opening where it originally was. From there, you can re-install the speakers, the Peavey logo, and put on new metal corners and feet on if you bought them.

Even though I haven't re-finished my cab with tolex, what I have done is make an input jack for it. You can use the speaker cable wire that you cut off earlier and solder it to your mono jack. One wire gets soldered to the signal tab, the other gets soldered to the ground tab. Then, you can make a jack panel to mount the jack on so that it is sturdy.



Above is an example of a jack panel that I did for another speaker cab. To do this, cut a 1.5" or bigger hole (using a hole saw) in the back speaker cab panel of the 5150. Using a square piece of sturdy plastic (I used 1/4" thick plexiglass), cut out a square that will fit over the circular hole. Secure it to the wood panel using 4 screws in the corners. Then drill a hole in the middle of the plastic so that the mono jack can fit through (just find a drill bit that is slightly bigger than the jack, since some have different outside diameters).

Tighten the mono jack nut down and re-install the rear panel. There should be enough slack in the speaker cord for you to be able to reach in and hold the jack as you tighten it, so that the back panel can still be taken off and put back on without ripping the speaker cord out.

The 5150 has a lot of power, so do yourself a favor, and get a heavy gauge **SPEAKER CABLE**. **DO NOT** slack and use an instrument cable between your amp and cab.

Have fun!!!