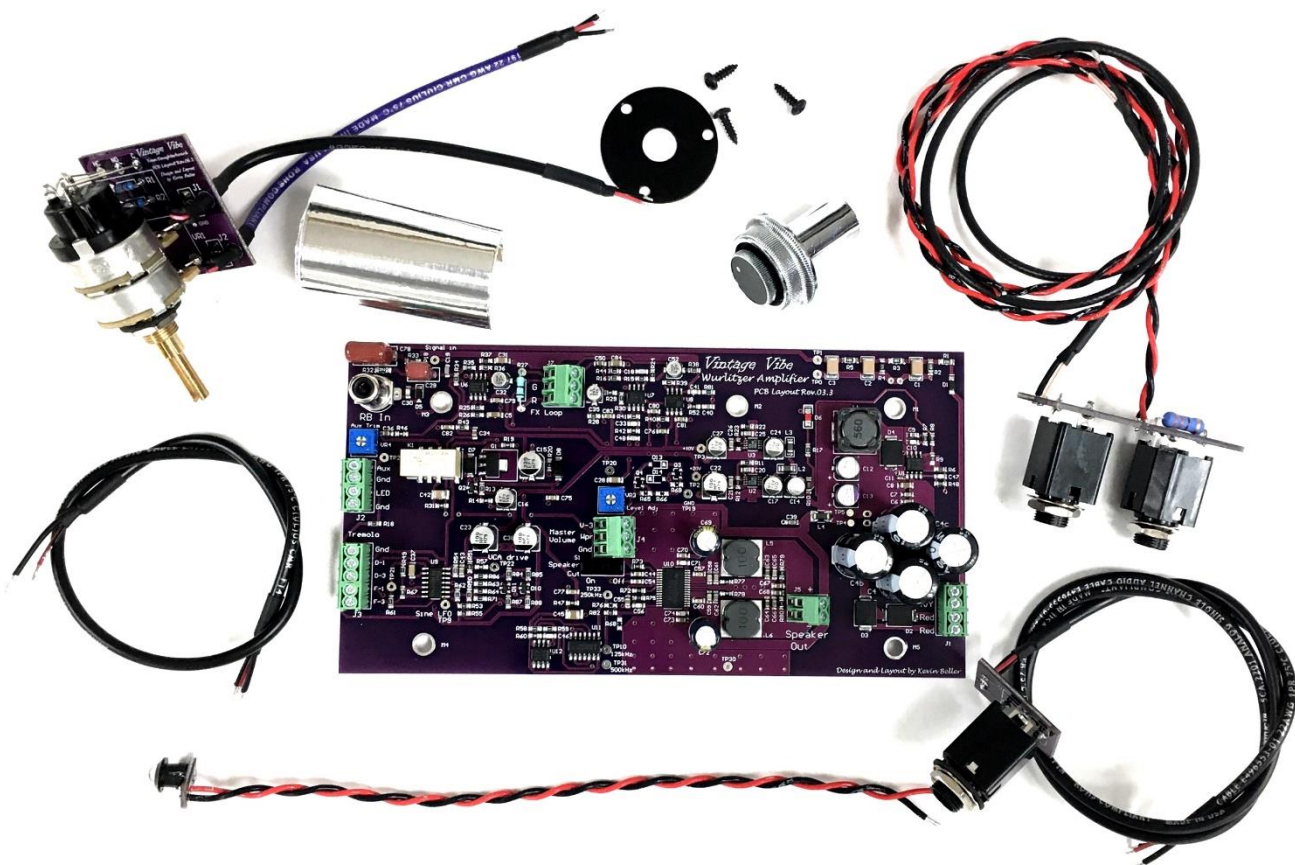




VINTAGE VIBE WURLY AMP KIT INSTALLATION / INSTRUCTION MANUAL



We highly recommend reading through the installation instructions in their entirety before beginning an install. This will provide an overview of what is involved and perhaps offer some tips / ideas that you may find helpful.

If, after reviewing the material, you are not confident in your ability to successfully perform the installation, we recommend that you contact Vintage Vibe to discuss having us perform the service for you or a technician that you deem to be qualified.

Note:

Improper installation or use will void any and all warranty.

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**Instructions and wiring kit apply to console models (203, 206, 206A, 207, 207A, 210, 210A, 214, 214A and 270) where the piano has been separated from the console (or, "chopped") and if speakers are present, they are model 200A type and have been installed in the lid. There are no provisions or instructions for utilizing the console portions of these models.*

VINTAGE VIBE – WURLY AMP – CONTROLS / FEATURES

1. Volume:

Your stock volume potentiometer will serve as the Master Volume control for both the Speaker / Headphone Output and Aux Output.



2. Outer Tremolo Knob:

Controls the depth of the tremolo. When set fully counter clockwise the effect is bypassed. The effect becomes deeper as the knob is turned clockwise.



3. Inner Tremolo Knob:

Controls the rate of the tremolo when in variable mode. When set fully counter clockwise the effect will be at the lowest rate setting. When turned clockwise the rate increases.



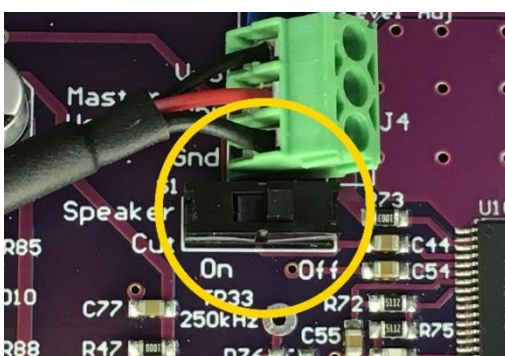
4. Stock / Variable Tremolo Switch:

The inner tremolo knob also serves as an On-On push-button switch. Pushing the switch will toggle between variable rate mode and a fixed rate matching that of the classic Wurlitzer models.



5. Speaker Cut:

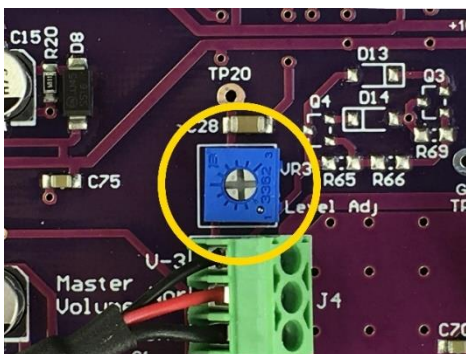
This slide switch found on the amplifier PCB (S1) will effectively mute the Speaker / Headphone output signal. This can be useful during some recording and live performance situations.



* If no connection between speakers or a headphone jack are made to the amplifier this switch should be set to the Off position.

6. Level Adjust Trim:

This trimmer, located on the amplifier PCB (VR3), sets the overall signal level available at the Master Volume control. It should be adjusted so that, when the Master Volume is set fully clockwise, playing at hardest dynamics does not produce distortion from the speakers.



7. Aux Output Trim:

This trimmer, located on the amplifier PCB (VR4), sets the overall output level available at the Aux Output jack prior to any Master Volume adjustment. Set desired output level for interfacing to an amplifier, PA, DI, etc. This trimmer should be adjusted only after having first set the Level Adjust Trim (VR3).



8. FX Loop (Optional):

The FX Loop allows the insertion of effects into the signal path within the amplifier circuitry. The result is that the signals at the Aux Output and Speaker/Headphone Output will both be affected accordingly.

The FX Loop jack is a 1/4" TRS normally closed insert jack. When no cable is inserted the Send and Return are connected and signal passes through normally.

When a 1/4" TRS cable is inserted, this connection is broken and the signal flow is as follows:

Tip = Send
 Ring = Return
 Shield = Ground

Utilizing either a Y/Insert Cable or appropriate breakout box, connect your desired effects.

The FX loop is located prior to the tremolo circuitry.

VINTAGE VIBE WURLY AMP INSTALLATION INSTRUCTIONS

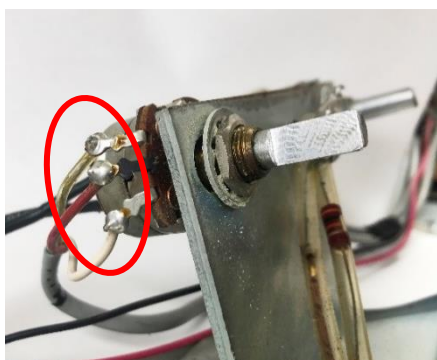
Models 200/200A and Chopped Consoles

1. Ensure that the piano is unplugged from the wall outlet and that all voltage has been drained from the stock amplifier. Remove electronics rail from piano.

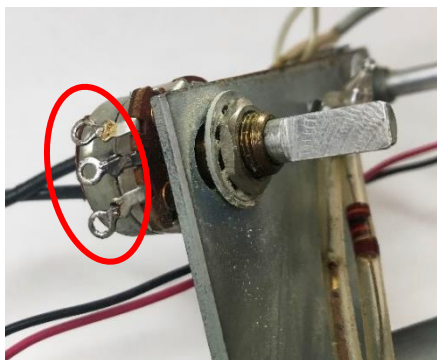
*For 200A pianos, save the screw that secured the AC inlet “earth ground” wire to the rail as you will need to re-install this at the end of the installation.
2. Detach power transformer secondary wires (blue, red, red, red/yellow) from stock amplifier PCB. If clipping, do so close to PCB.

*For 200A models, the green ground wire connecting the stock amplifier PCB to the rail will not be utilized in the new installation.
3. Desolder wires from Volume Potentiometer lugs 1, 2 and 3.

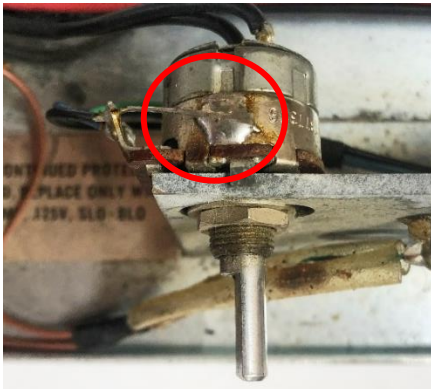
BEFORE:



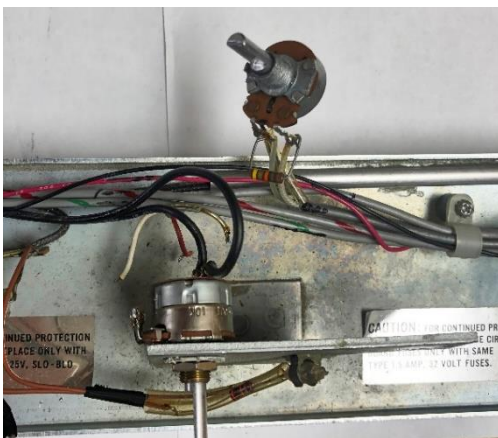
AFTER:



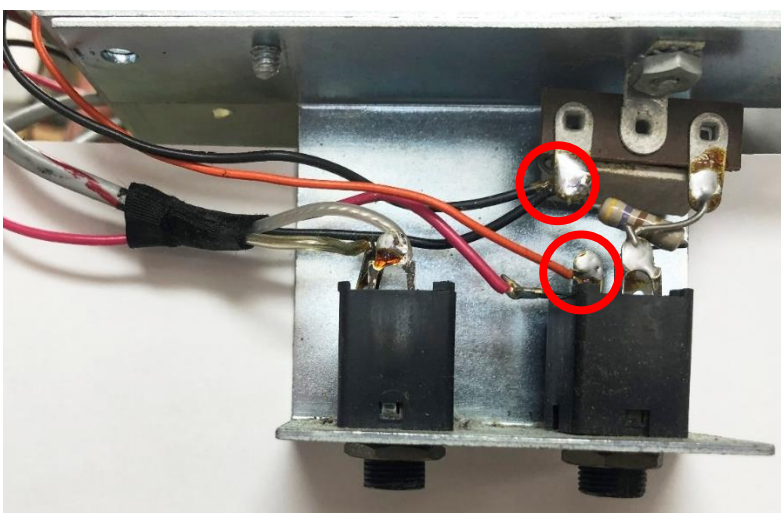
*If there is a jumper between the potentiometer shell and lug 1, remove it.



4. Remove Vibrato Potentiometer (200/200A) or Rotary Switch (Chopped Console) from the control bracket.

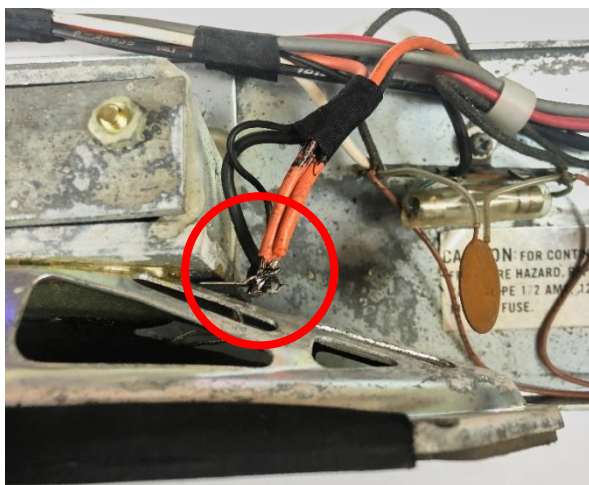


5. - Desolder or clip the Orange wire at the Headphone Jack.
- Desolder or clip the Black wire at the Headphone Jack terminal strip.



*The opposite ends of these wires will be coming from:

200: Left Speaker



200A: Speaker Molex Connector



6. 200 Model Only:
 - There will be two black wires soldered to one of the terminals on the Right Speaker. Determine which wire's other end terminates at the stock amplifier PCB and desolder or clip it from the speaker terminal.

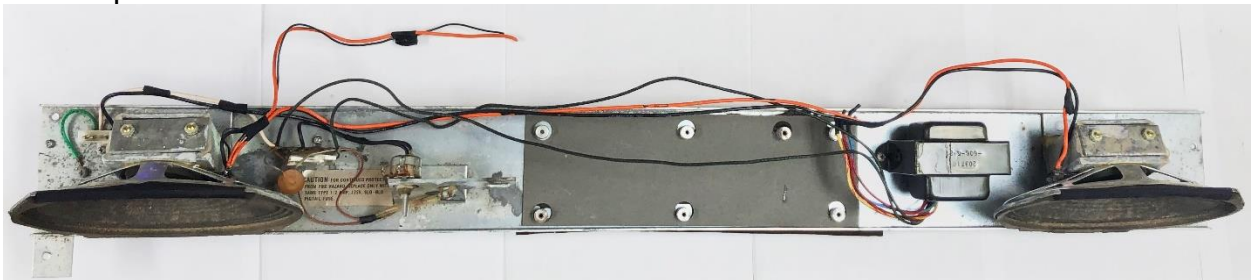
*There should still be an Orange Wire and a Black Wire connected between the two speakers.

7. - Remove Aux Output Jack, Headphone Jack and Headphone Jack terminal strip from jack bracket.
- Re-secure jack bracket (and Speaker Molex Connector for 200A models) using existing screw and nut.
8. 200A Model Only:
- Remove Aux Output Trimpot from piano base.



9. - Temporarily remove cable clamps from rail to remove Jack and Potentiometer wiring.
- Reinstall cable clamp and AC terminal strip.
10. Remove stock amplifier PCB.

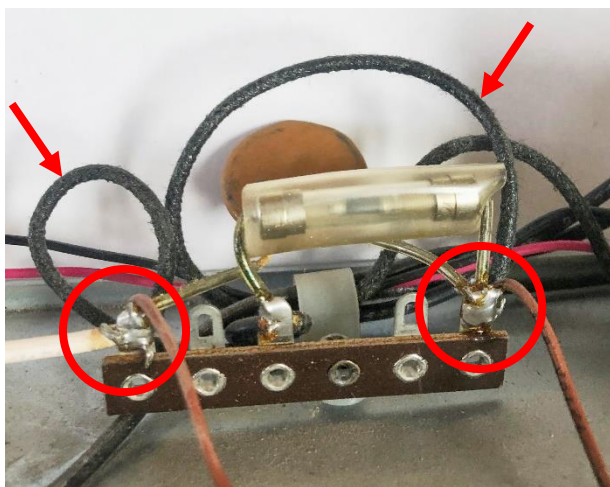
200 Amplifier:



200A Amplifier:

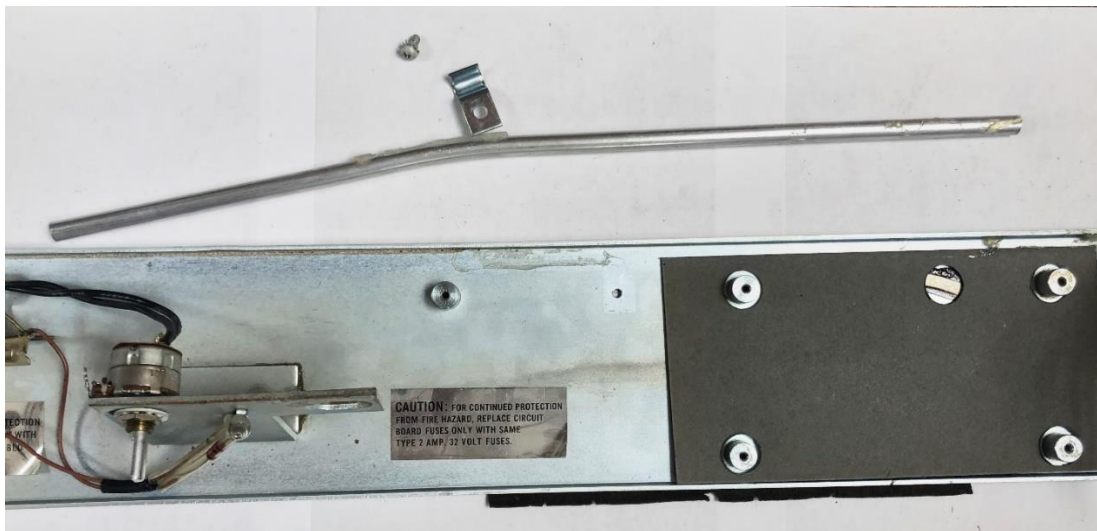


11. Dress power transformer primary wires.
 - Desolder primary wires from AC terminal strip.



200A Model Only:

- Remove wires from tube.
- Unscrew metal bracket and remove tube (the tube is also spot glued to the rail).

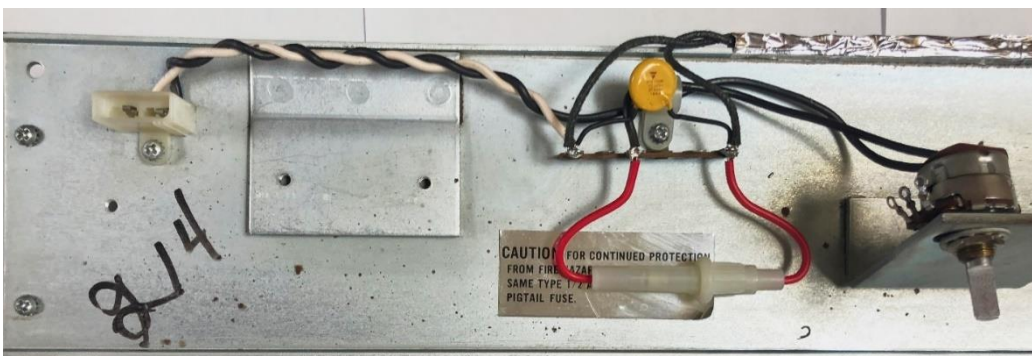


- While exercising appropriate caution, remove excess glue from rail with a razorblade.
- Twist primary wires and run them to the AC terminal strip along the back edge of the rail.
- Secure the wires to the rail with the included foil shielding tape. Trim excess tape as necessary.



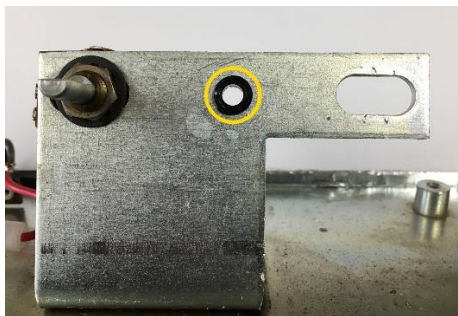
- Resolder primary wires to the correct lugs of the AC terminal strip.

*If installing fuse mod – replace existing fuse at terminal strip with new fuse holder.



12. If installing LED indicator:

- Desolder or clip the neon bulb leads from the AC terminal strip.
- Remove the neon bulb and retaining clip from the control bracket (twist and pull).
- Remove any remaining glue.
- Drill out the revealed hole with a 1/4" bit and remove any burrs.
- Install LED Bezel through the front of the control bracket.



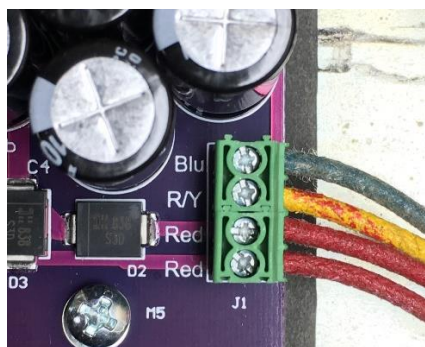
13. Install new Vintage Vibe Wurlly Amp PCB on rail using existing screws.

200 Amplifier Rail: 5 screws

200A Amplifier Rail: 4 screws



14. Connect Power Transformer secondary wires to PCB connector J1:

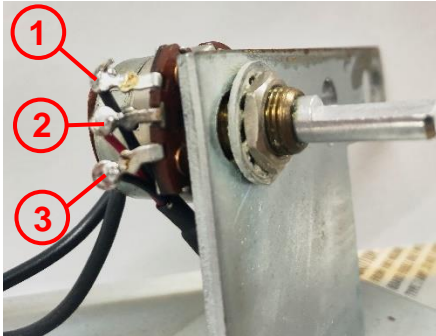


PCB: J1	Transformer
Blu	Blue Wire
R/Y	Red/Yellow Wire
Red	Red Wire
Red	Red Wire

15. Install Volume Potentiometer Cable:
 - One end of the cable has wires of uneven length.

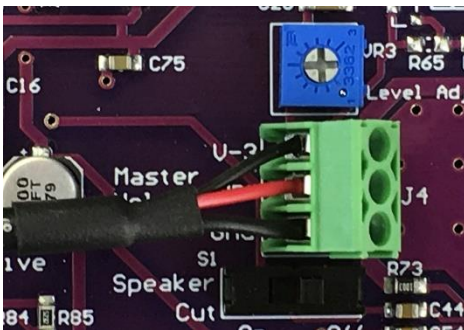


- Solder this end to the Volume Potentiometer:



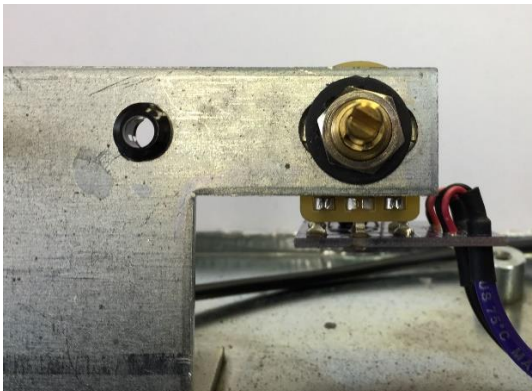
Potentiometer	Cable
Lug #1	Heatshrinked Shield
Lug #2	Red Wire
Lug #3	Black Wire

- Connect the other end of the cable to PCB connector J4:

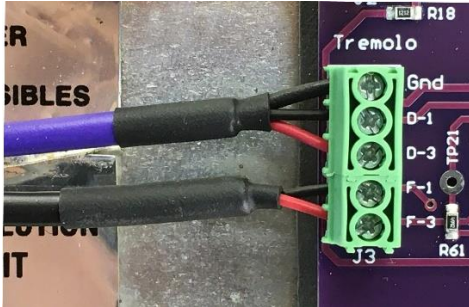


PCB: J4	Cable
V-3	Black Wire
Wpr	Red Wire
Gnd	Heatshrinked Shield

16. Install Tremolo Potentiometer PCB and Cabling:
 - Install Tremolo Potentiometer PCB using included lock washer and nut.



- One of the cables coming from the tremolo PCB will have a purple outer jacket and the other will be black. Connect the wires to PCB connector J3:



PCB: J3	Purple Cable
Gnd	Heatshrinked Shield
D-1	Black Wire
D-3	Red Wire

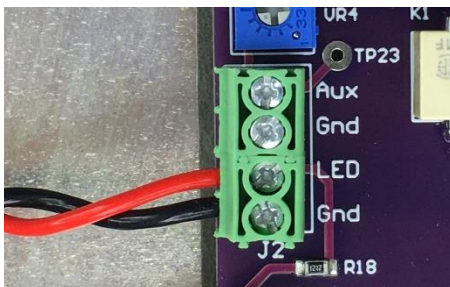
PCB: J3	Black Cable
F-1	Black Wire
F-3	Red Wire

17. If installing LED indicator:

- Install LED into bezel from rear (ensure PCB solder pads do not touch bracket)



- Connect wires to PCB connector J2:



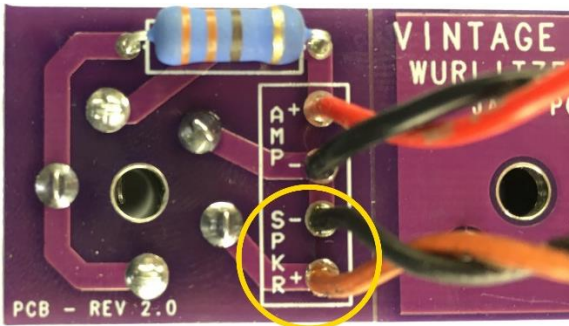
PCB: J2	Wiring
LED	Red Wire
Gnd	Black Wire

Models 200 and 200A Aux Output, Headphone/Speaker

***Do NOT plug anything other than a pair of Stereo Headphones (16Ω MIN) or a dummy plug (TS or TRS) into the Headphone Jack. Do not attempt to interface it with any other piece of equipment, DI, etc. To shut off the speakers, either engage the Speaker Cut switch on the amplifier PCB (S1) or insert a TS or TRS plug into the Headphone Jack. Do not utilize a cable for this task.**

***Minimum Speaker Load is 4Ω**

1. Install new Aux Output / Headphone Jack PCB Assembly:
 - Solder existing speaker wires to new Jack PCB:



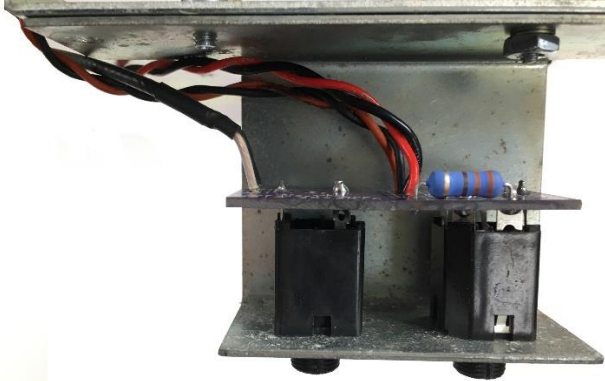
200:

Jack PCB	Wires from Left Speaker
SPKR+	Orange Wire
SPKR-	Black Wire

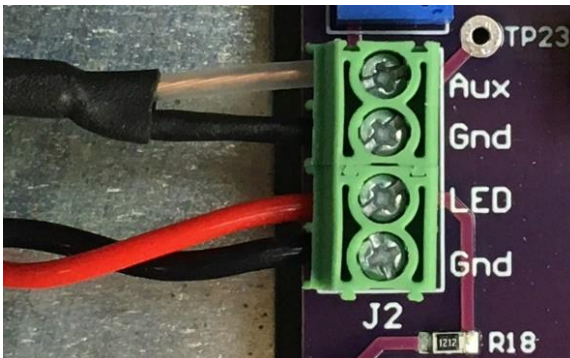
200A:

Jack PCB	Wires from Speaker Molex Connector
SPKR+	Orange Wire
SPKR-	Black Wire

- Install Jack PCB into bracket using included hardware. Do NOT over-torque.
- Route cabling around rear of rail and through cable clamp at AC Terminal Strip.

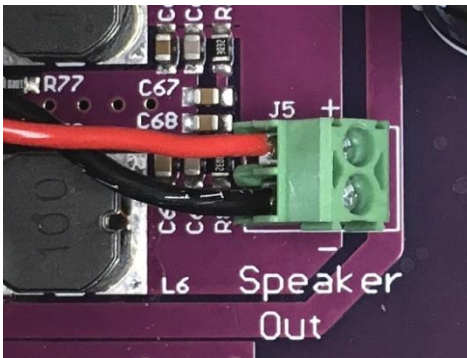


- Connect Aux Output cable to PCB connector J2:



PCB: J2	Cable
Aux	Clear Wire
Gnd	Heatshrinked Shield

- Connect Red and Black wires from Aux Output / Headphone Jack Assembly PCB to Amplifier PCB connector J5:



PCB: J5	Wires from Jack PCB
Speaker Out +	Red Wire
Speaker Out -	Black Wire

2. Reinstall remaining cable clamp with all wires through it except for those coming from the Tremolo PCB.



3. Reinstall rail into piano.
4. 200A Model Only:
 - Route Green ground wire from the AC inlet through the two cable clamps, behind the PCB and reinstall it at the threaded hole near the power transformer using the original hardware.



5. 200A Model Only:
 - Connect speaker wiring Molex plug and socket.

If Installing FX Loop Option refer to that section now. Otherwise refer to the Final Steps / Set Up section.

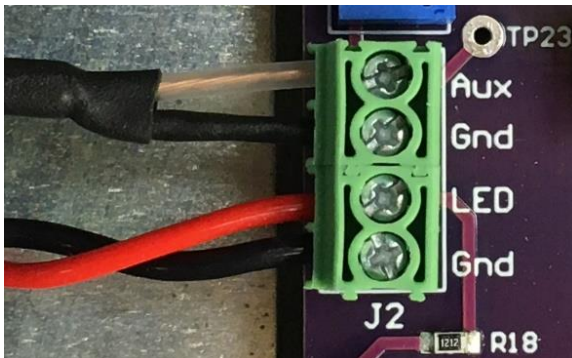
Chopped Console Aux Output, Headphone/Speaker

**Instructions and wiring kit apply to console models (203, 206, 206A, 207, 207A, 210, 210A, 214, 214A and 270) where the piano has been separated from the console (or, "chopped") and if speakers are present, they are model 200A type and have been installed in the lid. There are no provisions or instructions for utilizing the console portions of these models.*

***Do NOT plug anything other than a pair of Stereo Headphones (16Ω MIN) or a dummy plug (TS or TRS) into the Headphone Jack. Do not attempt to interface it with any other piece of equipment, DI, etc. To shut off the speakers, either engage the Speaker Cut switch on the amplifier PCB (S1) or insert a TS or TRS plug into the Headphone Jack. Do not utilize a cable for this task.**

***Minimum Speaker Load is 4Ω**

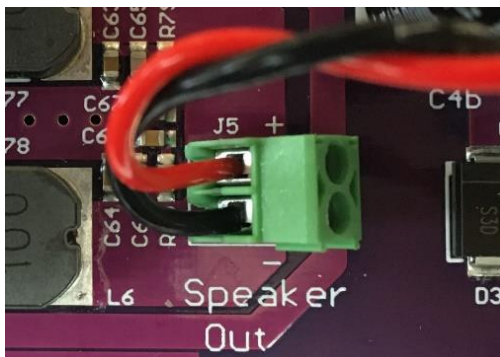
1. - Route Aux cable from left end of rail through cable clamp at AC Terminal Strip.
- Connect Aux Output cable to PCB connector J2:



PCB: J2	Cable
Aux	Clear Wire
Gnd	Heatshrinked Shield

2. The Headphone Jack PCB will have two sets of Red/Black wires coming off of it. One set will include Molex connectors, the other will not.

- Connect the pair of wires with no Molex connectors to PCB connector J5:



PCB: J5	Wires from Jack PCB
Speaker Out +	Red Wire
Speaker Out -	Black Wire

- Disconnect the Molex connectors from the other pair of wires.
- Solder the free ends of the wires to the Right Speaker Lugs:



Wires from Molex Connector	Speaker Lugs
Red Wire	Positive Lug (dotted)
Black Wire	Negative Lug

3. Reposition rail into piano.
4. - Install new Aux Output Jack assembly into the plate at front left cheek block of the piano using provided lock washer, finish washer and nut. Do NOT over-torque.
- Use provided 1/8" cable clamp to hold wire in place with front left rail mounting screw.



5. - Install new Headphone Jack assembly into the plate at front right cheek block of the piano.
- Use provided 1/4" cable clamp to hold wires in place with front right rail mounting screw.



*This may not be present on all student model pianos. Refer to FX Loop Option section for instructions on installing additional jack plates. When drilling your hole make sure you've provided adequate space for not only the jack plate but also the Headphone Jack PCB to be installed as shown above AND that your hole does not infringe on the leg plate.

6. Finish rail installation.
7. Connect speaker wiring Molex plug and socket.

If Installing FX Loop Option refer to that section now. Otherwise refer to the Final Steps / Set Up section.

Final Steps / Set Up

1. Re-install electronics rail into piano.
2. Plug RCA cable from harp into amplifier PCB connector J6.
**If replacing RCA cable with new, refer to that section now.*
3. Ensuring that volume potentiometer On/Off switch is set to OFF position, and unit is unplugged from the wall outlet, plug-in the AC Molex connector on the rail.
4. Unit is shipped with speaker cut switch set to OFF. If speakers / headphone output are to be utilized, set speaker cut switch to ON.
5. Plug unit in at wall outlet and power on.
6. Level Adjust (VR3) and Aux Output (VR4) trim pots are shipped set at 50% level.

- First set Level Adjust trimmer so that, when the Master Volume is set fully clockwise, playing full chords at hardest dynamics does not produce distortion from the speakers.

*If neither the headphone jack PCB nor speakers are being wired to the Speaker Out (PCB connector J5) as part of the installation, set the Level Adjust trimmer to the fully clockwise position.

- Then set Aux Output trimmer for desired output level to interface with an amplifier, PA, DI, etc.

RCA Cable Replacement

Installation of your new RCA cable will depend on whether your Wurlitzer was originally outfitted with a 200 or 200A amplifier unit.

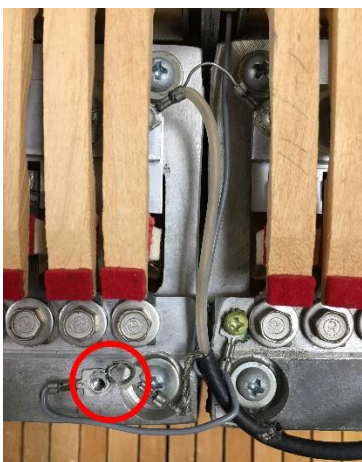
200A:

1. Install the new cable to the mounting bracket using the screws you removed when uninstalling the preamplifier PCB.

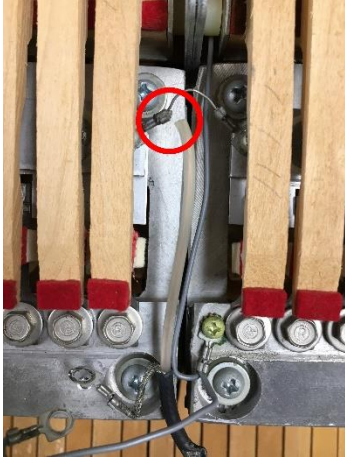


200:

1. Remove screw securing coax cable shield and ground jumper wire to harp.



2. Clip coax conductor wire away from terminal lug. Do NOT cut jumper wire.



3. Add the new cable's conductor terminal lug to the harp at the same location as the existing jumper wire lug.



4. Screw down the new cable's shield terminal lug along with the ground jumper lug removed earlier.



FX Loop Installation

1. Determine location for FX Loop Jack PCB installation:

200A – without additional drilling required:

-Install where Aux Output Trim pot was previously located. Dress the wires through the two cable clamps on the rail and connect the cable to PCB connector J7 as shown below.



200 – additional drilling required:

- Install at 200A Aux Output Trim pot location as shown above.

200/200A – additional drilling required:

- Install at right side of piano in mirrored location of 200A Aux Output Trim pot.



- Install in front left or right cheek block cavity.

Chopped Consoles – additional drilling required:

- Install at right side of piano in mirrored location of 200A Aux Output Trim pot (see picture above).

- Install in right cheek block cavity if not installing headphone jack.



2. Measurement

- For cheek blocks where the holes are not pre-drilled, you can set the jack plate within the cheek block cavity toward the rear and mark the center hole.

*When setting the location for your through hole, make sure you've provided adequate space for not only the jack plate but also the FX Loop PCB to be installed without interfering with the leg plates.

- For Aux Output Trim or Mirrored Location. Looking at the bottom of the piano, measure in 1 5/8" from the outside of the desired side of installation and 6 1/4" from the rear edge of the piano. Mark this position for drilling.

3. Drilling - Use a 3/4" paddle or forstner bit.

Cheek block location:

- Drill from the top down until the center tip of the paddle/forstner bit breaks through the bottom of the piano base. Then drill from the bottom up using that hole as your center point. This will minimize chip-out.

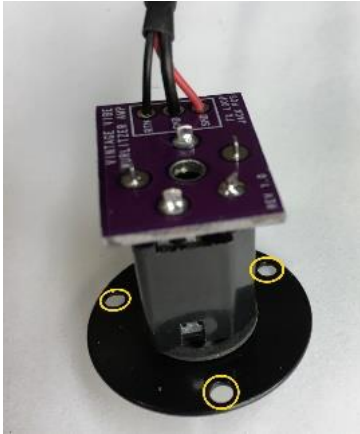
Aux Output Trim or Mirrored Location:

- Clamp an appropriately sized scrap piece of wood to the inside of the piano at the location where the hole will be drilled. This is to help minimize chip-out.
- Drill from the bottom up using your previously marked location as the center point.

4. Touch-Up Painting:

- Paint your newly drilled hole flat black. Allow to dry.

5. With FX Loop Jack PCB installed into plate so that none of the mounting holes are obscured by the PCB:



Cheek block location:

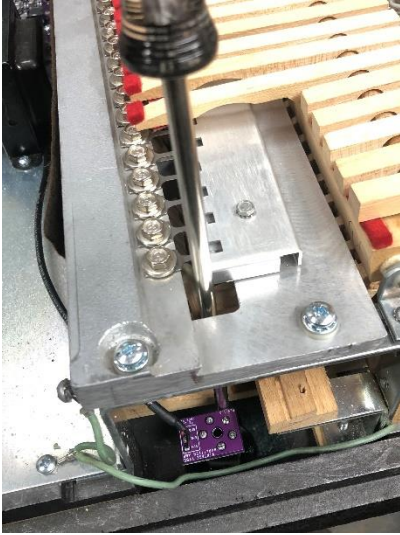
- Hold Jack PCB and Plate assembly in location so that the jack is centered over the hole in the piano base.
- Mark your hole locations with an awl to provide a footprint guide.
- Install the three mounting screws provided.

Aux Output Trim or Mirrored Location:

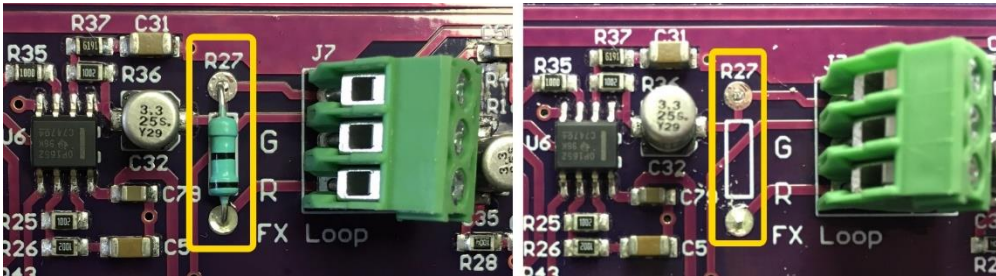
- Hold Jack PCB and Plate assembly in location so that the jack is centered over the hole in the piano base.
- Mark your hole locations with an awl to provide a footprint guide.
- Install the three mounting screws provided. Two of the screws can be installed with the screwdriver entering from the side,



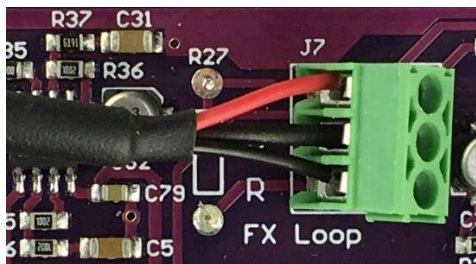
the remainder will require the screwdriver enter through the harp from above.



8. - Route the FX Loop cable in the best manner possible to reach PCB connector J7. Utilize any cable clamps along the way.
- Desolder* or clip the leads of R27 to remove it from the PCB.
- *If desoldering, be careful not to damage the PCB as this would void any warranty.

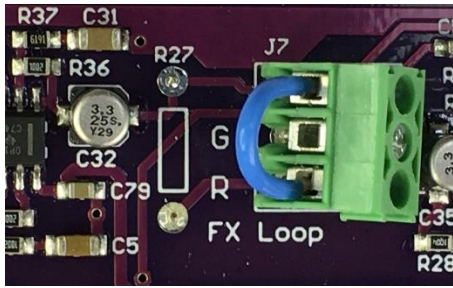


- Connect cable to PCB connector J7.



PCB: J7	Cable
Top	Red Wire
Middle (G)	Heatshrink Shield
Bottom (R)	Black Wire

9. If you wish to remove the FX loop at any time, simply install a short jumper wire between the Top and Bottom terminals of PCB Connector J7. This will complete the loop and restore normal operation.



Additional Notes:

1. It is highly recommended for the best performance and lowest possible noise that reed bar shields be utilized in conjunction with the Vintage Vibe Wurly Amp. Reed bar shields were only installed at the factory into "A" suffix model units: 200A, 206A, 214A, etc. If your piano does not have reed bar shields, they can be purchased from the Vintage Vibe website.
2. If Headphone Jack installation is not desired but use of the speakers is, the speakers or speaker Molex connector can be connected directly to PCB connector J5. Ensure the correct polarity between the speakers and the PCB connector. It is recommended to use a minimum of 20AWG cable.

*For 200/200A models, simply break-off the Headphone Jack portion of the Jack PCB.

3. If speakers are not be utilized in the installation but headphone use is desired, the Headphone Jack can be installed per the standard instructions with the omission of wiring at the Headphone Jack PCB "SPKR+" and "SPKR-" solder pads.
4. For model 200/200A installations where the Headphone Jack is not being installed, that unused jack bracket location can be utilized for installing the FX Loop assembly PCB.
5. For Chopped Console model installations where the Headphone Jack is not being installed, the front right cheek block location can be utilized for installing the FX Loop assembly PCB.