VINTAGE VIBE WURLY AMP KIT
- 140 SERIES -
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.

You may notice some variation between your unit and that pictured in the installation instructions. Wherever a difference may be relevant we have done our best to make note of it within the text.

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.
Installation of this product is performed at your own risk. Working on electronic equipment poses an inherent risk to oneself, others and personal property. Vintage Vibe assumes no liability for the consequences of the attempted installation of this product.

TABLE OF CONTENTS:

**Instructions and wiring kit apply to models 140, 140A, 140B, 145A and 145B. The kit is also suitable for models 146 and 146B; however, the disassembly may be slightly different and is not covered herein. There are no provisions or instructions for complimentary console models 720, 720A, 720B, 726 or 726B*

VINTAGE VIBE – 140 SERIES 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.

   Lid Mounted Controls:

   Cheek Block Mounted Controls:

2. Tremolo Depth 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.

   Lid Mounted Controls:

   Cheek Block Mounted Controls:

3. Tremolo Rate 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.

Lid Mounted Controls:

Cheek Block Mounted Controls:

4. Stock / Variable Tremolo Toggle Switch:
   The switch will toggle between variable rate mode when the switch is thrown to the right and a fixed rate matching that of the classic Wurlitzer models when the switch is thrown to the left.

5. Speaker Cut Toggle Switch:
   This switch will toggle the speaker output on and off. This can be useful during some recording and live performance situations. The speaker is “cut” when the switch is thrown down.

* The position of this switch has no impact on signal at the headphone jack.

6. Headphone Jack:
   1/4" stereo headphone jack.

   **When a pair of stereo headphones are plugged into the Headphone Jack, the output signal to the speakers is cut.*

   **Do NOT plug anything other than a pair of Stereo Headphones (16Ω MIN) into the Headphone Jack. Do not attempt to interface it with any other piece of equipment, DI, etc. To shut off the speakers, simply engage the Speaker Cut switch.*

7. Aux Output Jack:
   1/4" unbalanced jack that outputs line level signal for interfacing with an amplifier, PA, DI, recording console, etc.

8. Effects Loop Send & Return:
   1/4" unbalanced jacks that allow for 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 be affected accordingly.

   **The Effects Loop is pre-tremolo and is unaffected by the volume control; the level has been preset to appropriately interface with effects units.*

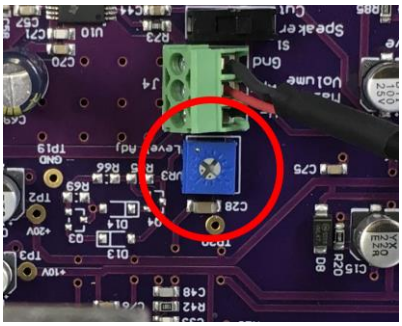
9. AC Inlet
   Connect the unit to a grounded AC receptacle using a power cord with an IEC-C13 end.

10. Fuse Holder
    The fuse is located at the mains AC inlet to the power supply. If a fuse should blow, replace it ONLY with one of the same type and rating: 1/2A Slow Blow for 120VAC units and 1/4A Slow Blow for 240VAC units.

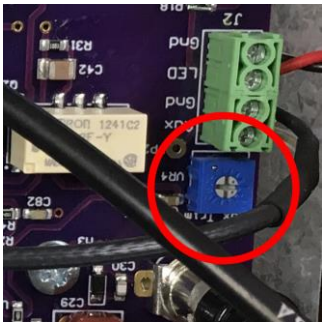
11. Power Switch
    Turns the AC power to the amplifier on and off.

** For the least turn-on and turn-off noise, it is recommended to set the Master Volume control fully counter clockwise before turning the unit on or off.*

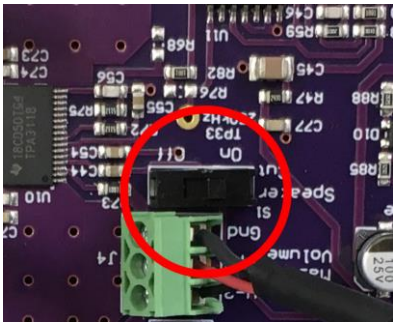
12. Level Adjust Trim:
    This trimmer, located on the amplifier PCB (VR3), sets the overall signal level available at the Master Volume control. It should be adjusted so that, when the Master Volume is set fully clockwise, playing at hardest dynamics does not produce distortion from the speakers.



13. 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).



14. Speaker Cut – Slide Switch:
    This slide switch found on the amplifier PCB (S1) will effectively mute the Speaker / Headphone output signal. Due to the inclusion of a toggle switch on the back panel of the enclosure, there is no need to access this slide switch and it has therefore been glued in the ON position.



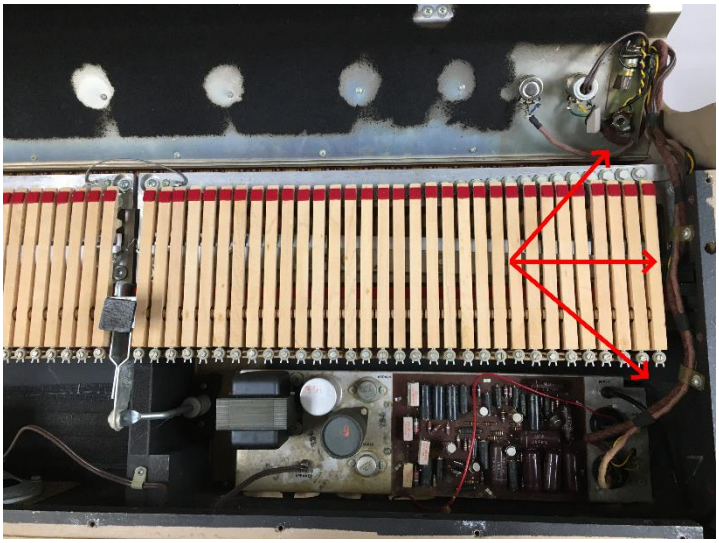
VINTAGE VIBE 140 SERIES WURLY AMP – DISASSEMBLY INSTRUCTIONS

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

2. Remove all screws securing the lid to the piano chassis.

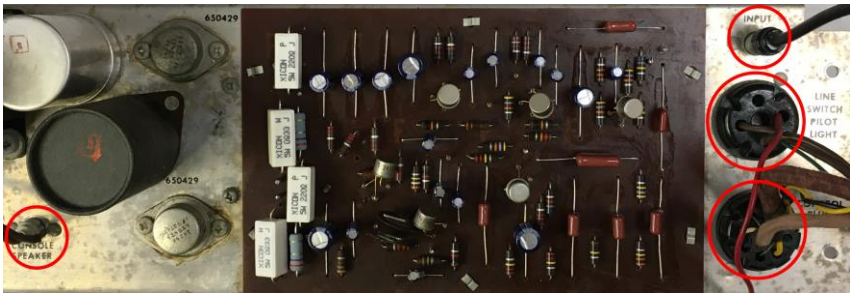
3. Lift the lid from the piano to access the stock amplifier unit.

   **For pianos with lid-mounted controls, be careful not to try to remove the lid entirely as it is still connected to the amplifier via the control wiring harness.*



4. Unplug all connectors from the amplifier chassis.
   - Reedbar RCA
   - Speaker RCA
   - Wiring Harnesses

   140:



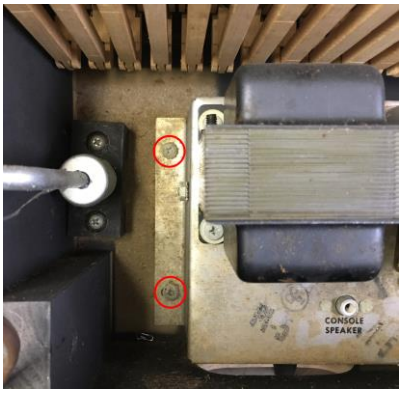
** If present, you will also need to unplug the "Battery Pack" octal plug from the rear of the instrument. This plug will prevent removing the amplifier chassis.*

   140B:

   145:

5. Remove the four screws (two on each end) that secure the amplifier chassis to the cabinet.

LEFT

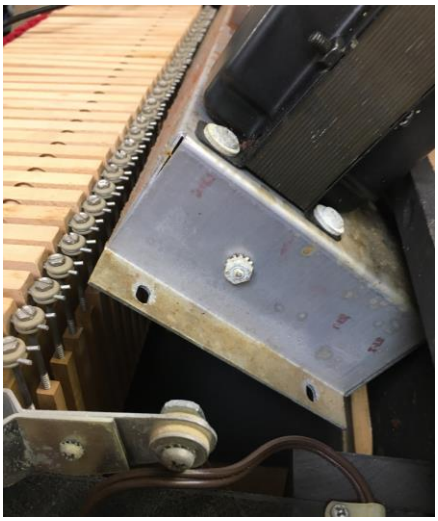


RIGHT

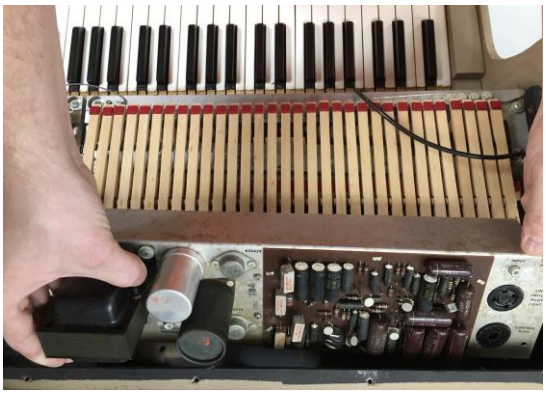
6. Remove the amplifier chassis from the cabinet.

   - The fuse holder can interfere with this process; remove it temporarily from the rear of the instrument.

   - Tilt the amplifier chassis back toward the rear of the case so that its front edge will be able to clear the damper arms.



- Carefully lift the chassis out of the cabinet, making sure to avoid damaging any damper arms. Set it safely aside.



VINTAGE VIBE 140 SERIES WURLY AMP – SPEAKER & REEDBAR RCA CABLE INSPECTION & PREPARATION

1. Measure the length of the center pins of your Speaker cable and Reedbar RCA plugs.

If the pin extends past the shroud by more than 3/8” it may not plug fully into the new amplifier’s RCA sockets.

Speaker Cable:
This is a common occurrence and we have included a similar style plug that it can easily be replaced with.

- Desolder the speaker cable from the stock plug, clip about 1/8” length off of the tip/pin wire so it will fit in the shorter plug.

- Insert the tip/pin wire into the plug and solder cleanly to the tip of plug.

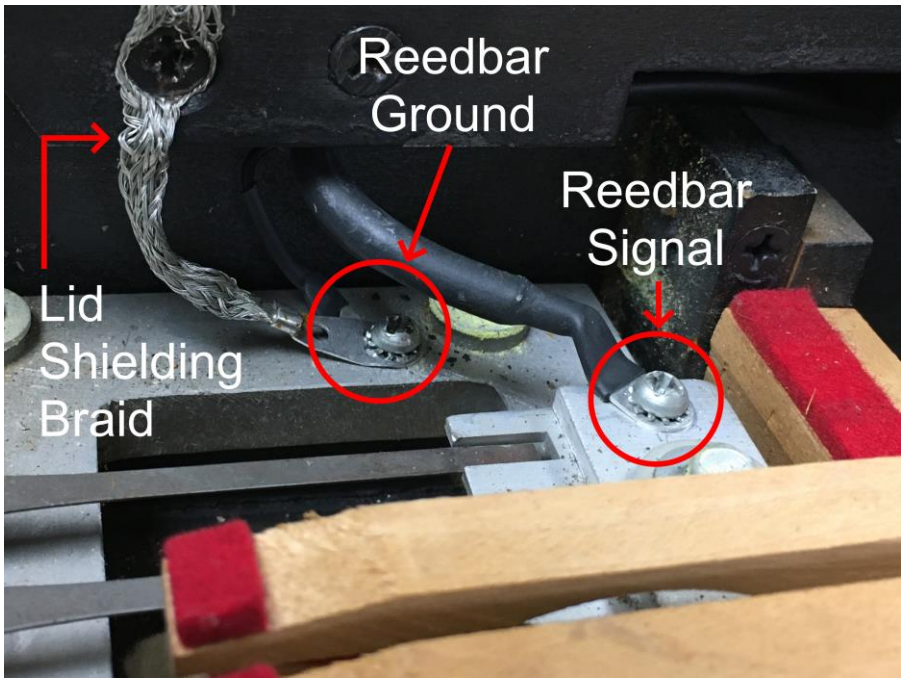
- Solder the remaining wire to the side of the shroud as shown below.

- Ensure the solder joints are sound and that there is no short circuit between the pin and shroud.

Reedbar Cable:
We have included a properly fabricated and tested Reedbar cable with your kit that we recommend you utilize. However, if your stock cable is functioning properly and the plug tip does not extend more than 3/8” past the shroud, there is no necessity to replace it.

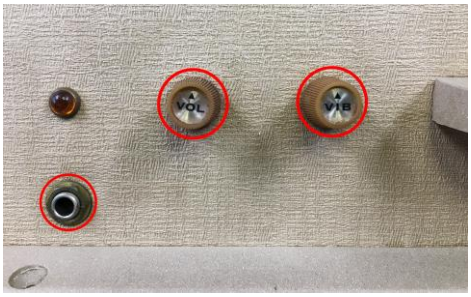
- Take note of how your current Reedbar Cable is routed and installed in the cabinet. You will simply replace it with the new one.

** If your piano has cheekblock mounted controls, there will be a braided wire screwed to the reedbar at the same location as the Reedbar Cable’s shield. This braided wire is used to provide a ground reference to the lid and is crucial for achieving the quietest performance possible with 140 series instruments.*



VINTAGE VIBE 140 SERIES WURLY AMP INSTALLATION INSTRUCTIONS
Models with Lid Mounted Controls

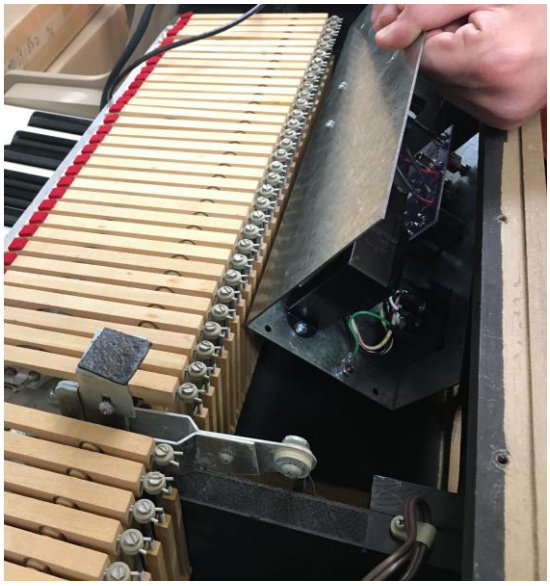
1. Remove the control harness
   - Remove the control knobs
   - Remove the nuts and washers from the potentiometers and headphone jack



   - Temporarily remove the indicator bulb from its bayonet socket to allow access to the lamp bezel and flat nut.
   - Carefully remove the flat nut so as to prevent damaging the lamp bezel.

   - Set the lid aside and remove the control harness from the cabinet.

2. Place the new amplifier chassis into the rear of the piano being careful to avoid damaging any damper arms.

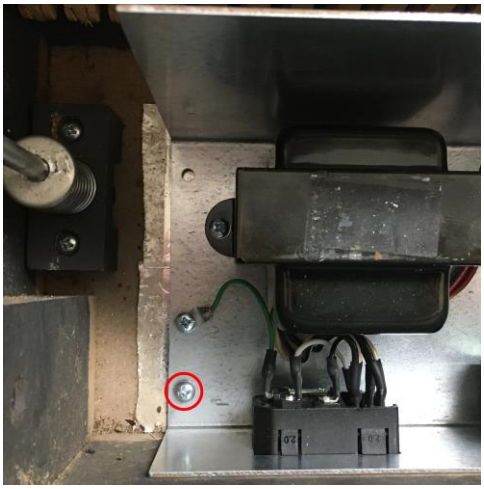


3. Use the artwork on the rear of the chassis to center the chassis within the two rear panel cutouts as much as possible.

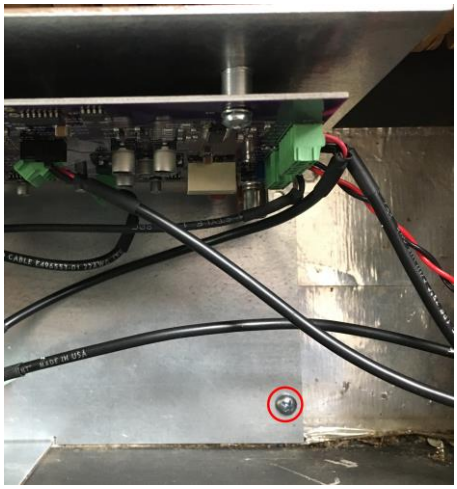
** We found a good deal of variation in the sizes of the cutouts, the distances between them and their height from the base of the cabinet. We made strides to design the chassis to directly fit as many cabinets as possible; however, it may be necessary to enlarge the cutouts to provide adequate access to all the jacks and switches.*

4. Temporarily secure the chassis to the cabinet using 2X #8 1/2" sheet metal screws (one on each end).

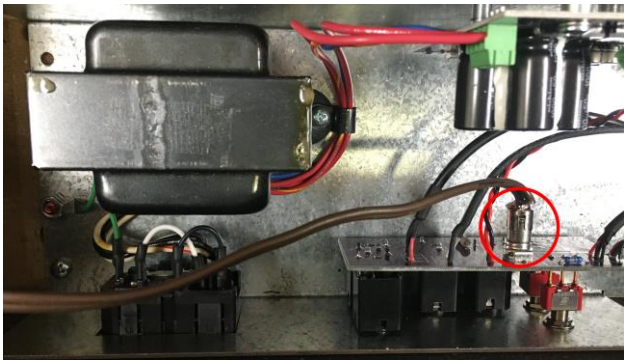
LEFT:



RIGHT:



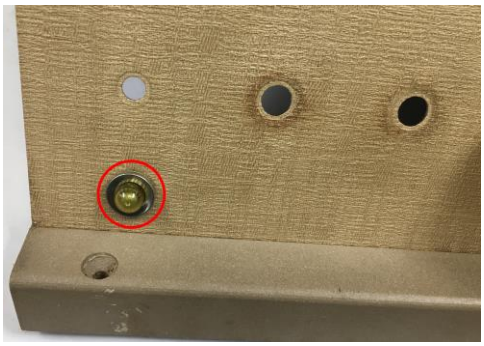
5. Plug the Speaker Cable RCA plug into the corresponding socket on the Jack/Switch PCB (J5).

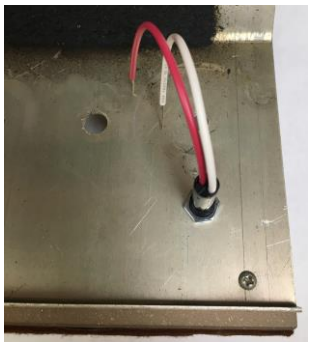


** Minimum speaker load is 4Ω.*

6. Plug the Reedbar Cable RCA plug into the corresponding socket on the main amplifier PCB (J6).

7. Install the included panel mount LED indicator through the lower left hole on the front of the lid and secure it in place with the lockwasher and nut.





NOTE: The following steps require the lid to be in close proximity to the piano. Be extremely careful that the wiring harness not be pulled or yanked away from the instrument as this could cause damage.

8. Route the LED wires through the un-cinched zip-tie at the end of the potentiometer PCB.

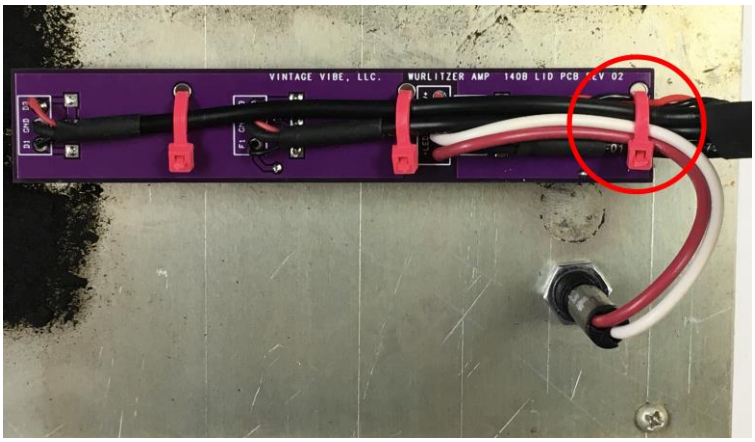
9. Solder the LED wires to the potentiometer PCB.

PCB	LED Assembly
LED +	Red Wire
LED -	White Wire

10. Install the potentiometer PCB assembly into the lid with the volume control in the leftmost hole. Secure the potentiometers in place with their corresponding flat washers and nuts.

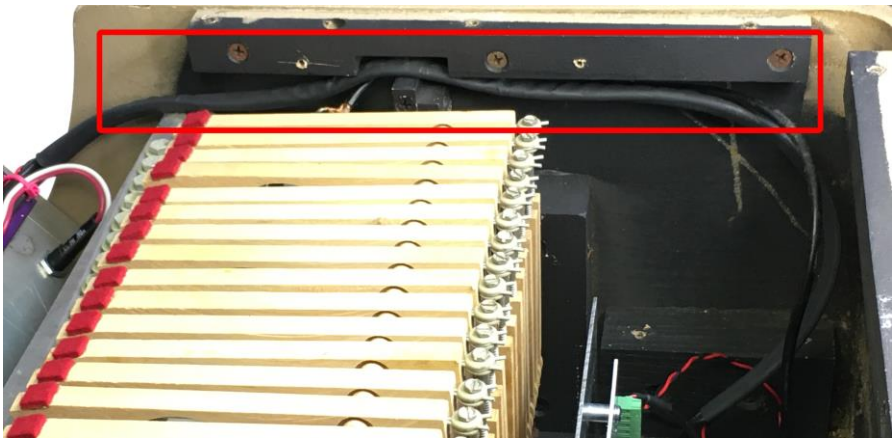
    ** Note: The Volume potentiometer has a smaller diameter bushing than the others and therefore it uses a smaller washer and nut.*

11. Cinch the untightened zip tie at the potentiometer PCB and clip the excess length.



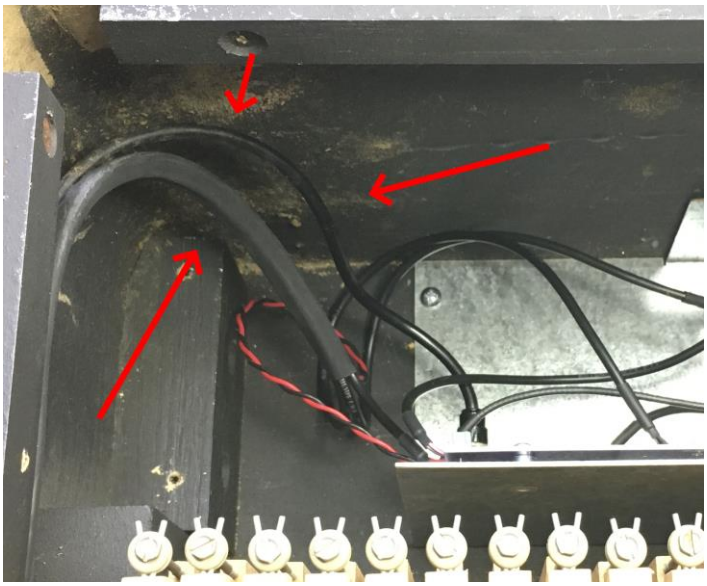
12. Place the front lip of the lid into its place on the piano leaving it hinged open.

13. Route the wiring harness through the recessed slot at the left of the piano alongside the Reedbar RCA cable.



** Ensure there is adequate strain relief at the PCB and that the cabling does not interfere with any of the dampers.*

Gently stow any additional wire length into the rear left of the piano cabinet.



14. Position the lid into place and temporarily install *ALL* of the lid mounting screws.

Move on to the Final Steps / Set Up Section

VINTAGE VIBE 140 SERIES WURLY AMP INSTALLATION INSTRUCTIONS
Models with Cheek Block Mounted Controls

1. Remove the control harness
   - Remove the control knobs
   - Remove the nuts and washers from the potentiometers and headphone jack

IF the indicator bulb is a neon type and molded into the bezel as shown in the picture above:

- Carefully desolder or clip the wires going to the power indicator bulb (leave adequate length should you ever choose to reinstall your original harness and amplifier)
- VERY carefully remove the indicator bezel / bulb from the cheekblock.

** Please take note of "VERY" as these bezels are quite fragile.*

IF the indicator bulb is an incandescent type installed into a bayonet:

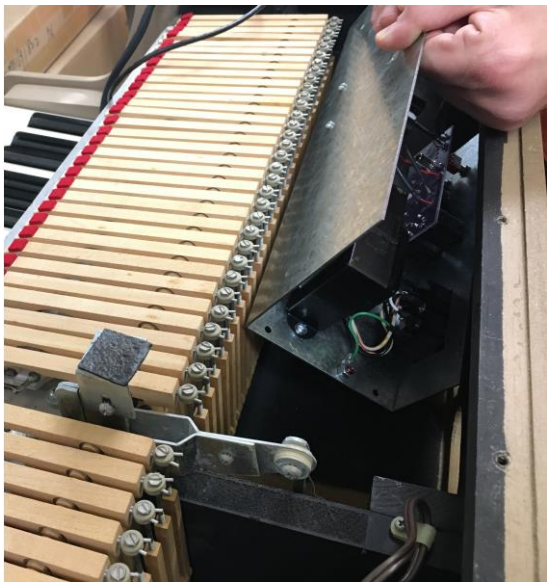
- Unscrew the lamp bayonet assembly from the cheekblock

- Carefully remove the bezel from the cheek block. It will either be press-fit which can be easily pressed out from the inside:

Or, it will be held in place by a flat nut that can be carefully removed.

- Set the cheek block aside and remove the control harness from the cabinet.

2. Place the new amplifier chassis into the rear of the piano being careful to avoid damaging any damper arms.

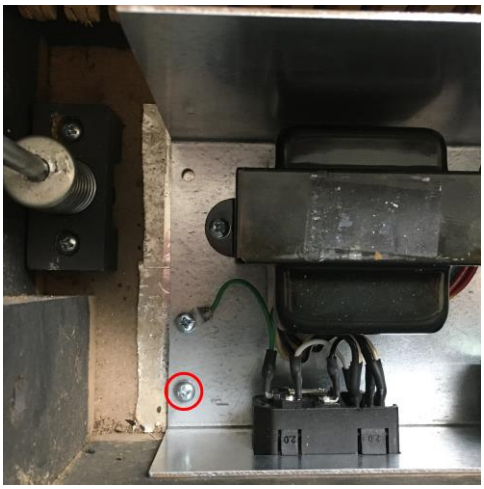


3. Use the artwork on the rear of the chassis to center the chassis within the two rear panel cutouts as much as possible.

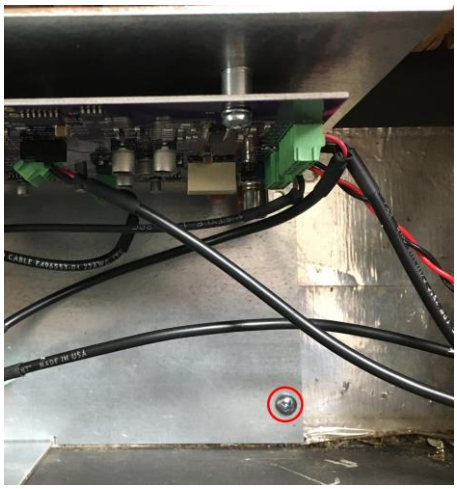
** We found a good deal of variation in the sizes of the cutouts, the distances between them and their height from the base of the cabinet. We made strides to design the chassis to directly fit as many cabinets as possible; however, it may be necessary to enlarge the cutouts to provide adequate access to all the jacks and switches.*

4. Temporarily secure the chassis to the cabinet using 2X #8 1/2" sheet metal screws (one on each end).

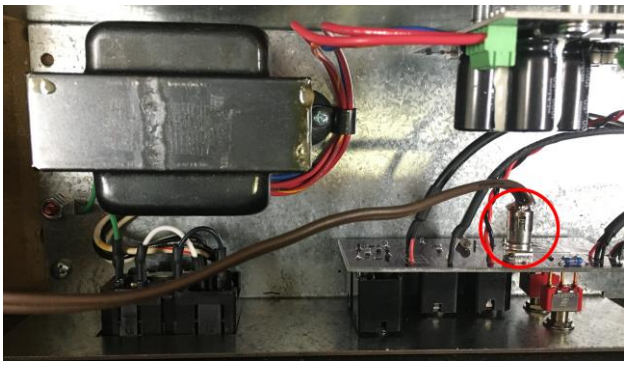
LEFT:



RIGHT:

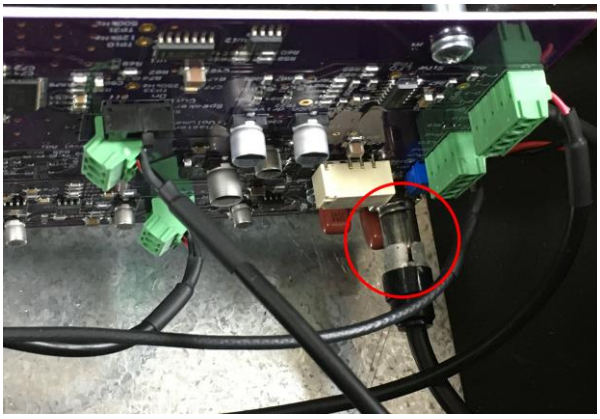


5. Plug the Speaker Cable RCA plug into the corresponding socket on the Jack/Switch PCB (J5).



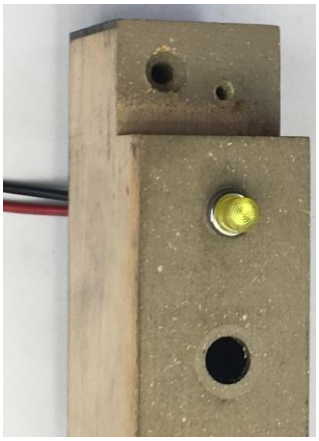
** Minimum speaker load is 4Ω.*

6. Plug the Reedbar Cable RCA plug into the corresponding socket on the main amplifier PCB (J6).



7. Install the included panel mount LED indicator through the lower top hole in the cheek block and secure it in place with the flat nut.

   ** If your original indicator was the incandescent type, you may need to enlarge the mounting hole with a 5/16" drill bit to accept the new indicator assembly.*



NOTE: The following steps require the cheek block to be in close proximity to the piano. Be extremely careful that the wiring harness not be pulled or yanked away from the instrument as this could cause damage.

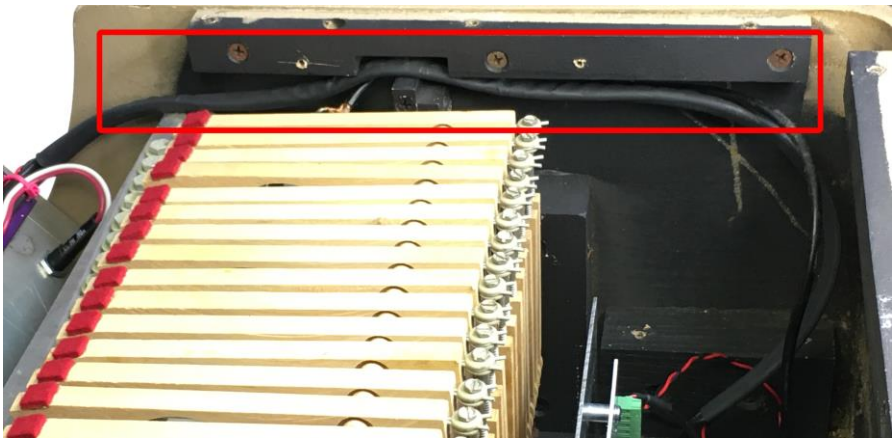
8. Solder the LED wires to the potentiometer PCB.

PCB	LED Assembly
LED +	Red Wire
LED -	Black Wire

9. Install the potentiometer PCB assembly into the cheek block with the volume control in the lowermost hole.
   - Fold the cable assembly forward so it does not press against the LED indicator housing.
   - Secure the potentiometers in place with their corresponding flat washers and nuts.

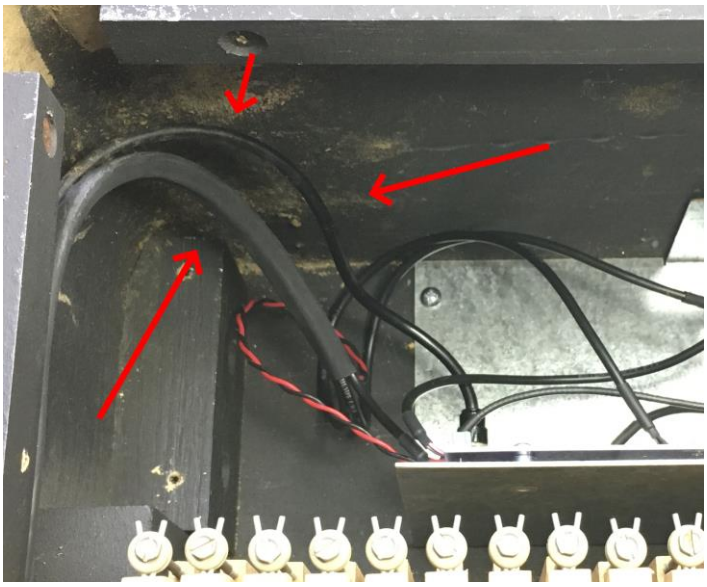
10. While holding the wiring harness within the slotted cutout at the rear of the cheek block (as shown above), slide the cheek block back into its place in the piano.

11. Route the wiring harness through the recessed slot at the left of the piano alongside the Reedbar RCA cable.



** Ensure there is adequate strain relief at the PCB and that the cabling does not interfere with any of the dampers.*

Gently stow any additional wire length into the rear left of the piano cabinet.



12. Position the lid into place, ensuring that the lid shielding braid wire is making good contact with the lid and temporarily install *ALL* of the lid mounting screws.

Move on to the Final Steps / Set Up Section

Final Steps / Set Up

1. Plug unit in at wall outlet and power on.

2. Test all of the controls, switches and jacks accessible at the outside of the instrument to ensure their functionality (see “Controls / Features” section).

   ** Units are tested prior to shipping to ensure full functionality. This is for you to be certain your installation has been done properly.*

Once you have confirmed full functionality of the amplifier you may wish to adjust the overall and aux output levels. Before shipping, the Level Adjust trimmer (VR3) is set to 2 O’clock and the Aux Output trimmer (VR4) is set to 12 O’clock. These levels should be more than adequate for their intended uses.

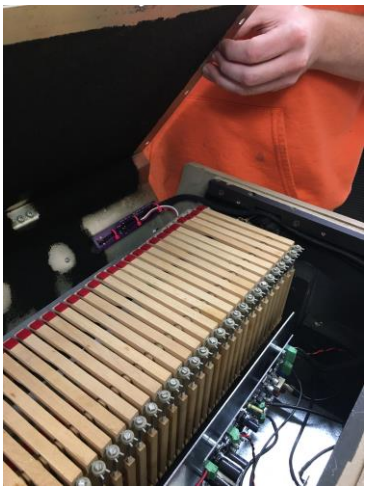
However, should you choose to make adjustments the following final installation steps also include instruction on making those adjustments; skip them if you are happy with the levels as they are.

3. Turn the unit OFF and unplug it from the wall outlet and that all voltage has been drained from the amplifier.

4. Remove all screws securing the lid to the piano cabinet.

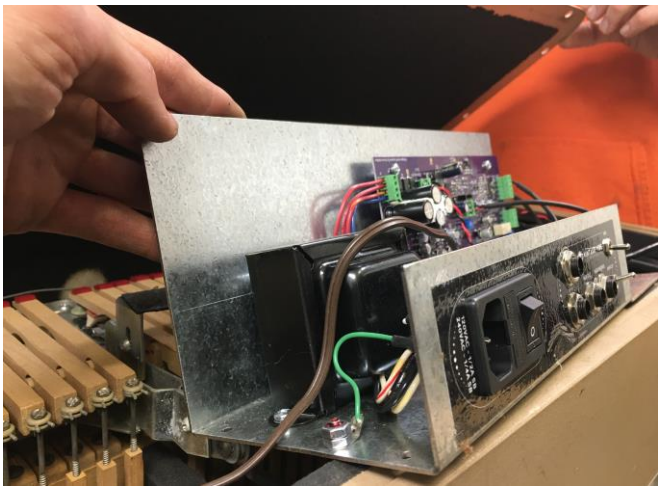
5. Remove the two screws temporarily securing the amplifier to the chassis cabinet.

   **NOTE: The following is a little bit more challenging with pianos that have lid mounted controls as the lid cannot be fully separated from the wiring harness. However, the steps are quite accomplishable without issue; we do recommend having a second person on-hand to tilt the lid toward the keys and hold it in place while you perform the operation.*

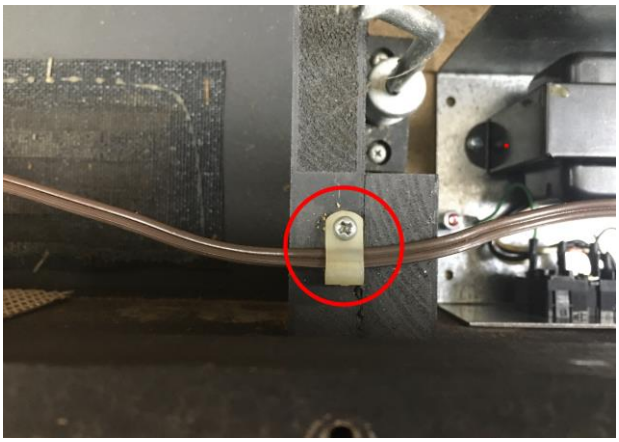


6. Carefully lift the chassis out of the cabinet to allow access to the trimmer controls. It may be helpful to gently rest the front edge of the chassis on the back lip of the instrument; however, make sure to hold the chassis with one hand at all times.

   ** "Carefully" is key; ensure that you do not cause damage to any wiring or your installation to this point.*



   ** Depending on the length of your speaker cable, it may be necessary to unscrew its cable mounting clamp in order to lift the chassis onto the rear of the cabinet.*



7. Level adjustments:

   - First set Level Adjust trimmer (VR3) so that, when the Master Volume is set fully clockwise, playing full chords at hardest dynamics does not produce distortion from the speaker.

   - Then set Aux Output trimmer (VR4) for desired output level to interface with an amplifier, PA, DI, etc.

8. Return the amplifier chassis to its previously determined place in the cabinet.

   IF you made level adjustments, you will want to re-install the lid and evaluate those adjustments. You may then need to repeat steps #6-8 again until you are satisfied with your level settings.

   IF you are not making adjustments or have finished making adjustments, secure the chassis to the cabinet with all 4X #8 1/2" sheet metal screws.

9. Reinstall the lid. On models with cheek block mounted controls, ensure that grounding braid wire is secure and making good contact with the lid.
   - Install ALL of the lid screws.

10. Install the knobs onto the potentiometers and secure them in place by tightening their respective set screws.