

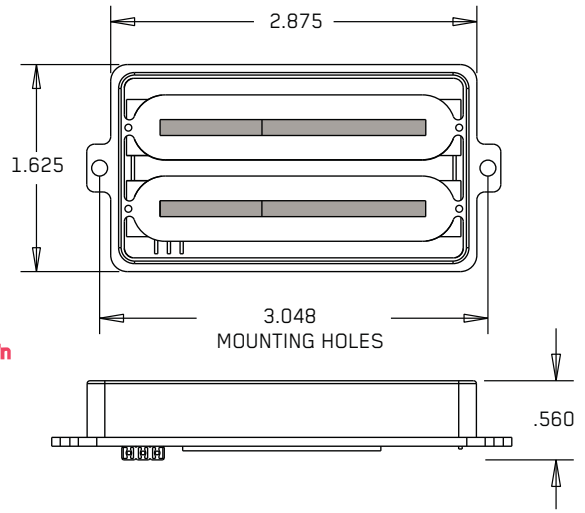


BANJO 4 / 6 STRING INSTALLATION

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4 and 6 string balancing note:
The magnetic poles of the 4/6 ACB Pickup are flat and cover the entire length of the pickup as shown in the diagram to the right.



INSTALLATION INFORMATION EMG MODEL: EMG-ACB BANJO PICKUP & VOLUME

GENERAL OPERATION

The EMG-ACB Banjo Pickup is the first of its kind to use 3 different pickup elements. First, the pickup is electro-magnetic so it senses the string motion. Second, it has 3 acoustic chambers that allow sound waves inside the banjo that add a microphonic element to the sound. Third, it uses a steel sensing element on the head of the banjo that can be positioned for additional tone. The EMG Banjo pickup is active and contains a high quality preamp that features ultra-low noise and low current drain. The Pickup is powered by two Lithium Batteries (6 Volts). Everything needed is included with the pickup, so the installation is simple, and above all, flexible.

Magnetic Output Level:

The output level of the pickup will depend on the placement along the coordinator rods. The output level of the pickup has been set to work at the "Sweet Spot" shown below. If you slide the pickup closer towards the fingerboard the output will increase. If you wish, the pickup can be spaced further away from the strings to set the output where you desire.

Acoustic (Microphonic) Level:

The amount of microphonic sensing can be controlled if you experience feedback when playing at high volume levels. The 3 acoustic chambers surrounding the coils are .125 wide and can be filled with the "acoustic plugs" included. If you experience feedback, plugging the center slot usually does the trick. Do not use foam, it's not a solid enough material.

Banjo Head Steel Strip Level:

Included with the pickup is .002 thick strip of steel shim-stock, used by the pickup to "sense" the head of the banjo. It can be installed on either the inside or the outside of the head. It has a pressure sensitive adhesive on one side for attachment to the head. It's not necessary to use the steel strip in order for the pickup to work, it is simply an addition to the sound of the instrument.

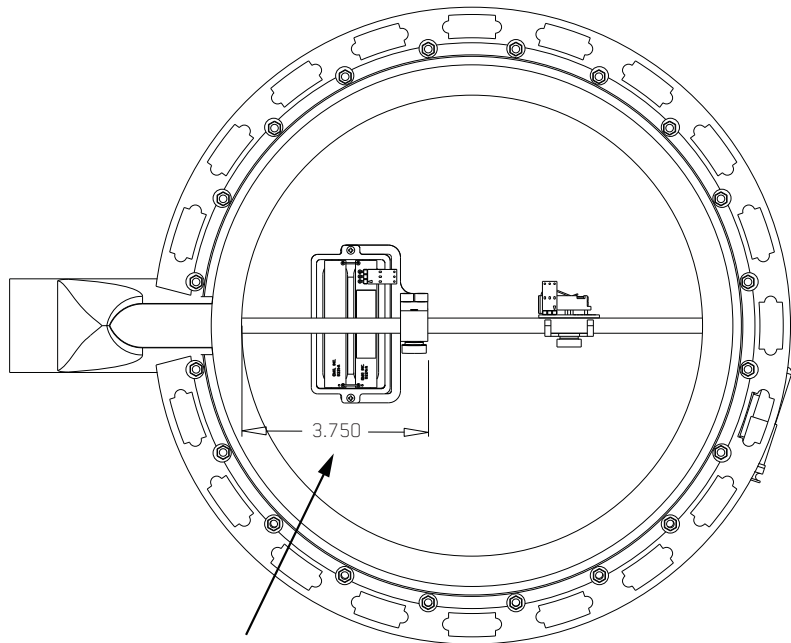
SPECIFICATIONS:

Logo Color
Magnet Type
Resonant Frequency (KHz)
Output Voltage (String)
Output Noise (60 Hz)
Output Impedance (Kohm)
Current (@6V (Microamps)
Battery Life (Hours)
Maximum Supply (Volts DC)
*P.D. (Placement Dependent)

MODEL:
EMG-ACB
Gold
Alnico
2.00
*P.D.
-120
2.00
340
600
18

TOOLS REQUIRED:
#1 PHILLIPS HEAD SCREW DRIVER

INCLUDED :
(2 ea.) CR2032 LITHIUM BATTERIES
9/64 ALLEN HEX WRENCH



WARRANTY

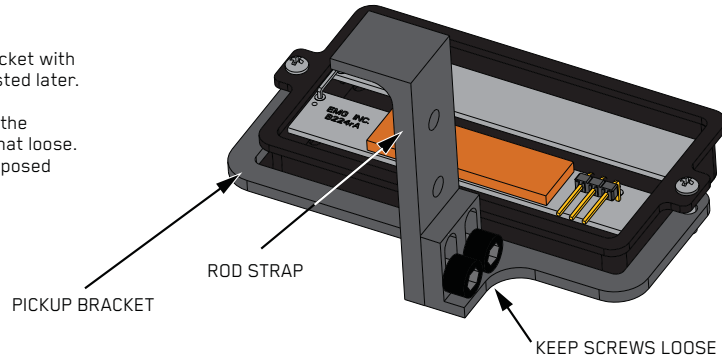
All EMG Pickups and accessories are warranted for a period of two years. This warranty does not cover failure due to improper installation, abuse or damage. If upon examination the pickup is determined to be defective, a replacement will be made. Warranty replacement products are covered by this same warranty. This warranty covers only those pickups and accessories sold by authorized EMG Dealers. This warranty is not transferable.

Installation Instructions:
EMG Model: BANJO PICKUP

1) Attach the Rod Strap

The ACB Pickup is supplied already mounted in the Pickup Bracket with the two phillips head screws fully tightened. They will be adjusted later.

Using the 9/64 Hex wrench included, attach the Rod Strap to the pickup bracket as shown keeping the two hex screws somewhat loose. Be sure the 3 pin connector is in the position shown so the exposed magnetic poles will be under the lower G and D Strings.

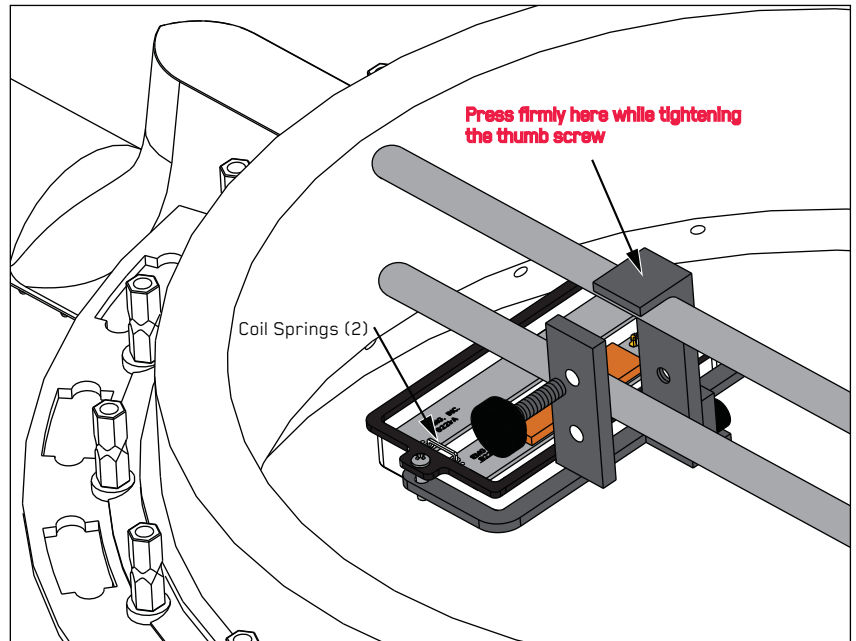


2) Install the Pickup

Press firmly on the Rod Strap while tightening the two thumb screws so the strap is sitting flat on the top rod. The pickup should still be loose on the hex screws.

The Banjitar only uses the top thumb screw, the bottom thumb screw is not installed.

There is a coil spring on each end of the pickup, be sure they do not touch the black housing of the pickup

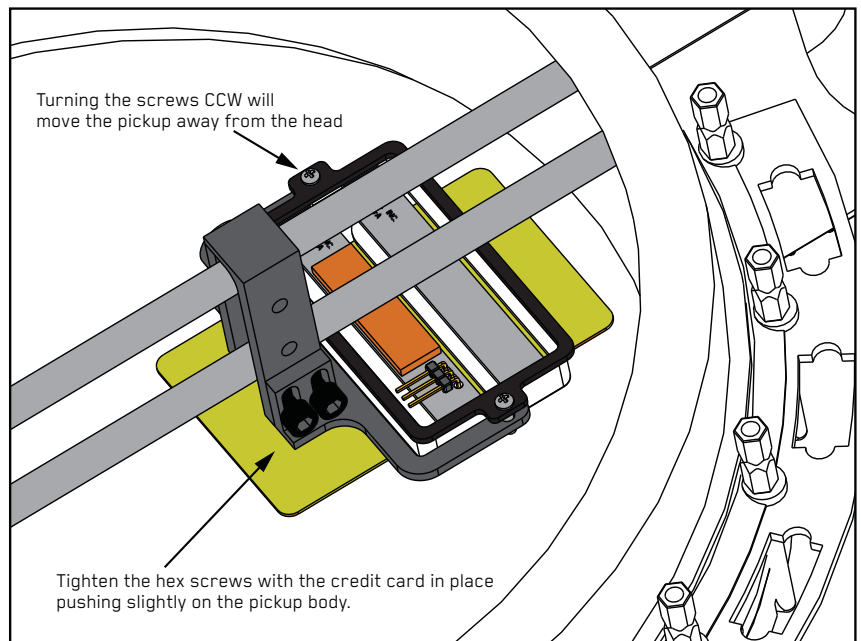


3) Tighten and Adjust

Place a credit card or similar spacer, about .030in (1mm) thick between the pickup and the head of the banjo. Press slightly on the pickup body and tighten the two hex screws on the Rod Strap using the 9/64 hex wrench. Be sure the pickup mounting hasn't moved on the rods.

The credit card should have some friction against the head. Slowly turn the phillips head screws counter-clockwise (CCW) until the credit card can be slid under the pickup with a minimum of friction. Banjo heads are not always level so the adjustment of the pickup may not be level either. Remove the card.

Once the pickup is in place and you find you might want to use a thicker spacer, simply loosen the two hex screws, put in the larger spacer and retighten the hex screws. The fine adjust phillips screws should still be ok.

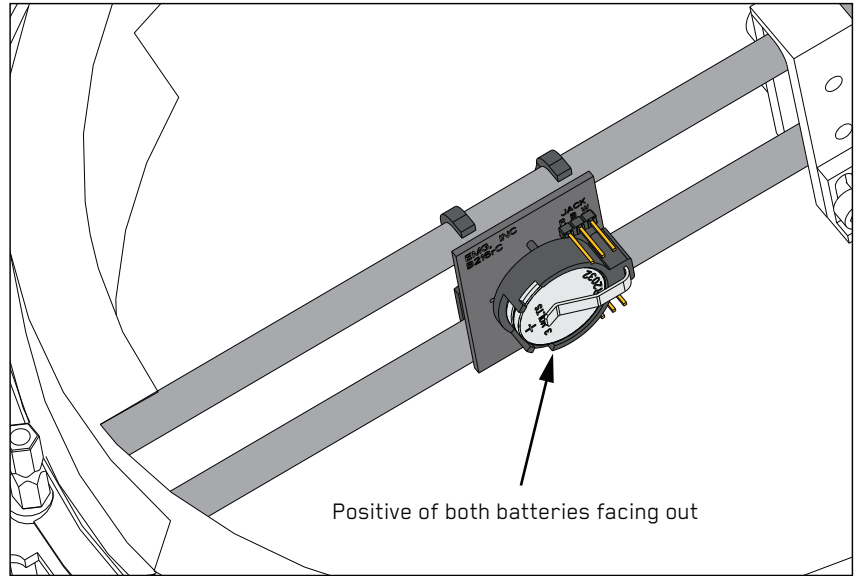
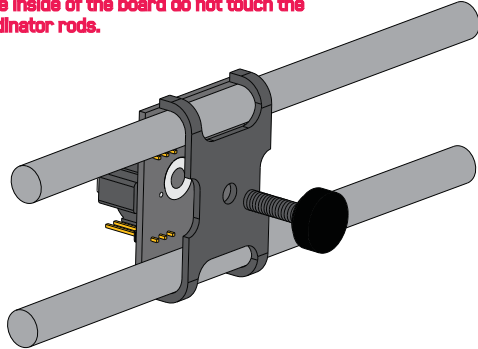


Installation Instructions:
EMG Model: BANJO PICKUP

4) Battery Holder and Battery Installation

Install the Battery Holder as shown on the rods and install two CR2032 batteries. Be sure the positive side of both batteries are facing the Battery Holder spring terminal.

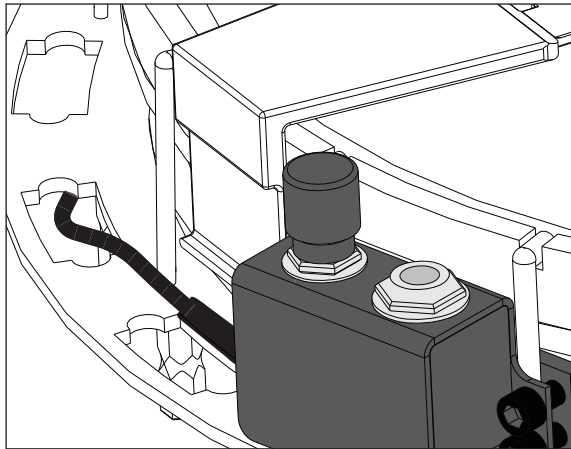
The Banjitar coordinator rods are typically closer together than the typical banjo, be sure the battery connections on the inside of the board do not touch the coordinator rods.



5) Output Jack/ Volume Installation

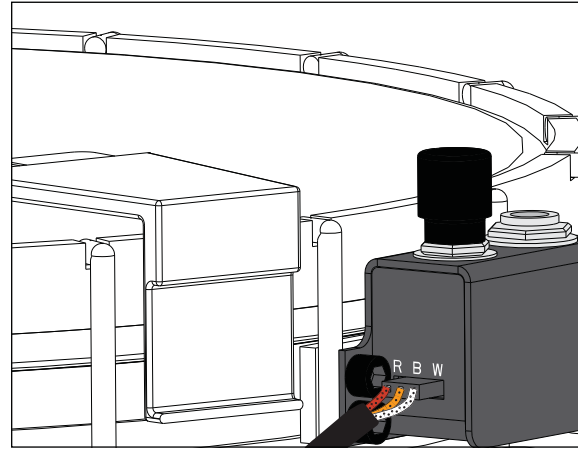
Install the Output Jack assembly as shown below. Slide the threaded strip behind the lugs and tighten using the four screws provided.

The threaded strip for the Banjitar is thinner (.300) and only has two holes, but is plenty strong to hold the volume/output jack unit.



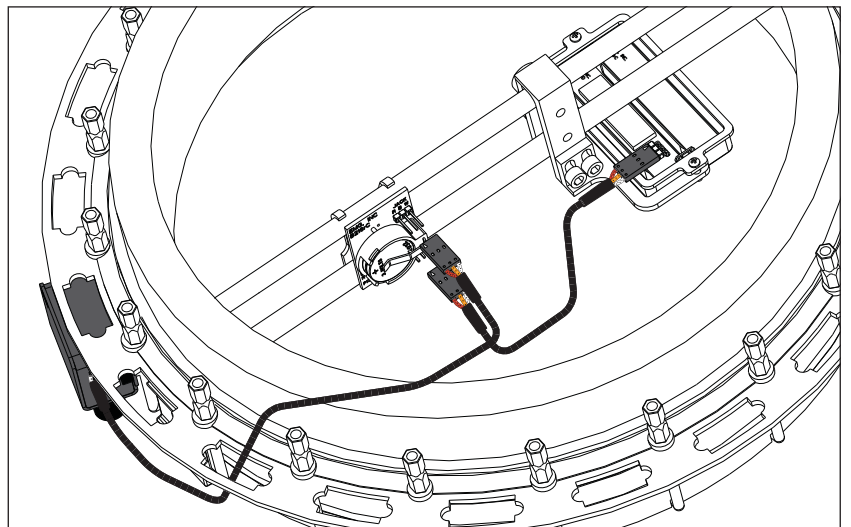
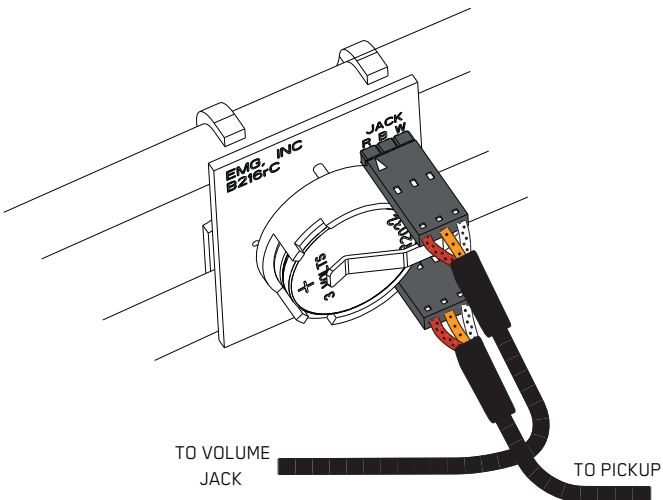
6) Output Cable

Plug in the output cable as shown below. Be sure the wire colors match the legend on the box. R(Red), B(Braid), W(White).



7) Wire it up

Route the cables as shown by paying attention to the color codes marked on the pickup and battery holder PC Boards.



Installation Instructions:
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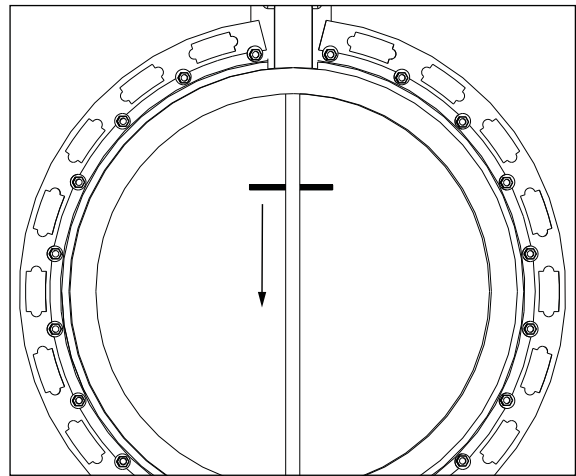
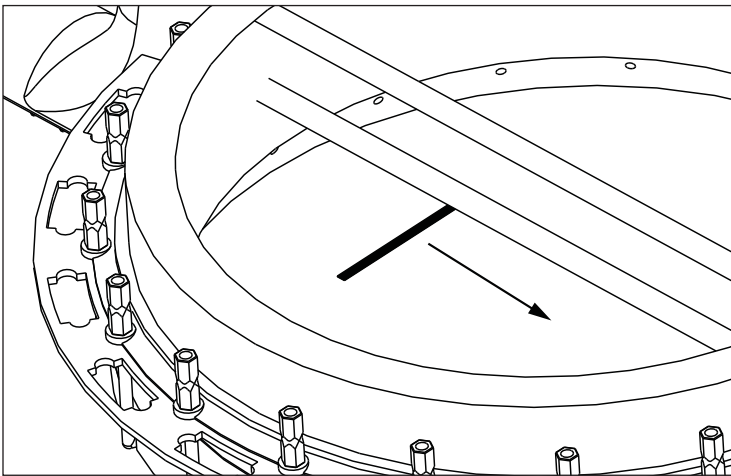
8) Adding the Steel Strip

The steel strip included can be installed on either the inside or the outside of the head. It has a pressure sensitive adhesive on one side for attachment to the head. The adhesive is not strong, so the steel can be moved if desired. In order to work correctly, it should be installed in the direction shown in the diagrams.

It's not necessary to use the steel strip in order for the pickup to work, it is simply an adjunct to get sound from the banjo head. **Be sure the volume is turned down or off when you apply the steel or move it.**

To determine if you want to use the steel strip, it's easiest to place it on the top of the banjo head, move it around over the top of the pickup, see what it does for the sound and choose if you want to use it or not. The pickup has two coils, so you can place the steel directly over either coil, between the coils, or whatever distance/direction from the pickup suits your taste. Additional pieces of steel can also be added, perhaps one over each coil, the option is yours. We have found that "a little goes along way" and that the steel should be either between the coils, or short distance from the coil closest to the fingerboard.

Once you have decided to use the steel strip and know where you want to place it, make a measurement, or mark the head with a pencil or other method and move the steel to the inside of the banjo to hide it. Depending on the placement of the steel inside, you might have to detach the pickup by loosening the thumb screws, placing the steel, then re-placing the pickup. It might be necessary to use an additional small strip of masking tape or other light adhesive to keep the steel in place.



9) Installing the Acoustic Plug(s) (limiting feedback)

Three acoustic plugs are included with the pickup. They work by limiting the coil movement and remove the low frequency response of the pickup.

If you have a feedback problem; Start by installing a single plug between the two coils, this will have the most effect. If you find this limits the feedback enough, then consider permanently mounting it with some adhesive. If you still experience feedback, install the another plug and try again. Then a third if needed.

The plugs should be used only in high gain environments. When recording, the best "acoustic" tone from the banjo will be achieved when the plugs are not installed.

