

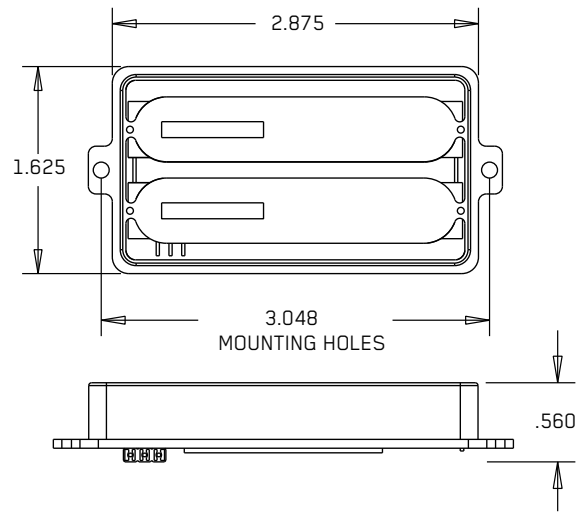
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INSTALLATION INFORMATION

EMG MODEL: EMG-ACB BANJO PICKUP



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 can be positioned for additional tone. 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 featuring ultra-low noise and low current drain. The pickup is powered by two CR2032 Lithium Batteries for 6 volt operation. Everything needed is included with the pickup, so the installation is simple and 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 neck, the output will increase. If you wish, the pickup can be spaced further away from the strings to set the desired output.

Acoustic (Microphonic) Level:

The amount of microphonic sensing can be modified 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, as it's not solid enough to dampen microphonics.

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 for the pickup to work, but it is simply an addition to the sound of the instrument.

SPECIFICATIONS:

Logo Color	Gold
Magnet Type	Alnico/Steel
Resonant Frequency (kHz)	16.8
Typical Output Noise (dBV)	-120
Output Impedance (kΩ)	2.00
Current Draw @6V (mA)	0.32

MODEL:

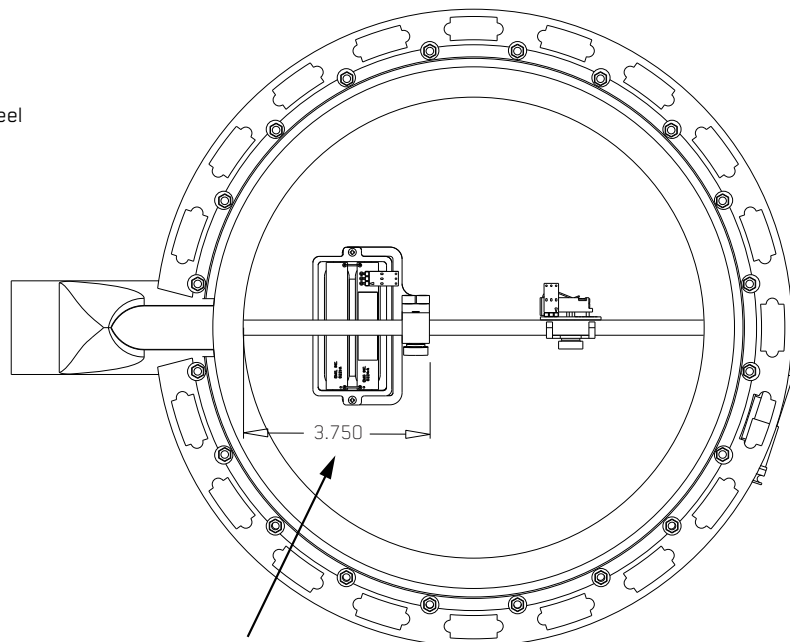
EMG-ACB
Gold
Alnico/Steel
16.8
-120
2.00
0.32

TOOLS REQUIRED:

#1 PHILLIPS HEAD SCREW DRIVER

INCLUDED :

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



The "Sweet" Spot

From both sound trials and experiments it's been determined that a distance of 3.750 inches (95mm) is about the best spot for the pickup.

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.

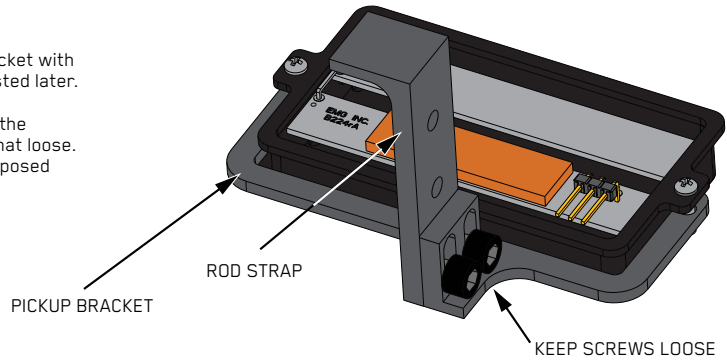
Installation Instructions:

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.

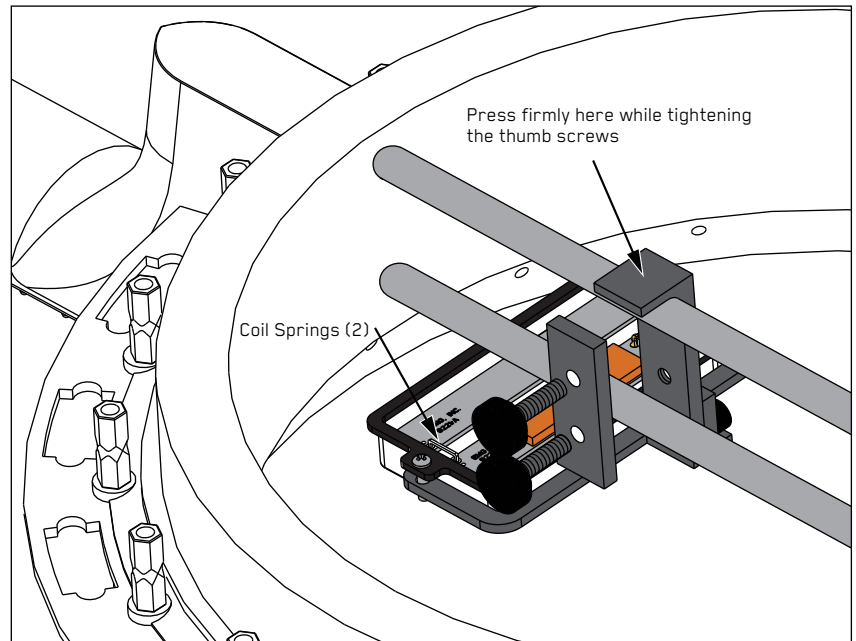
Using the 9/64 Hex wrench included, attach the Rod Strap to the pickup bracket as shown keeping the two hex screws somewhat loose. Be sure the 3 pin connector is in the position shown so the exposed magnetic poles will be under the lower strings.



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.

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



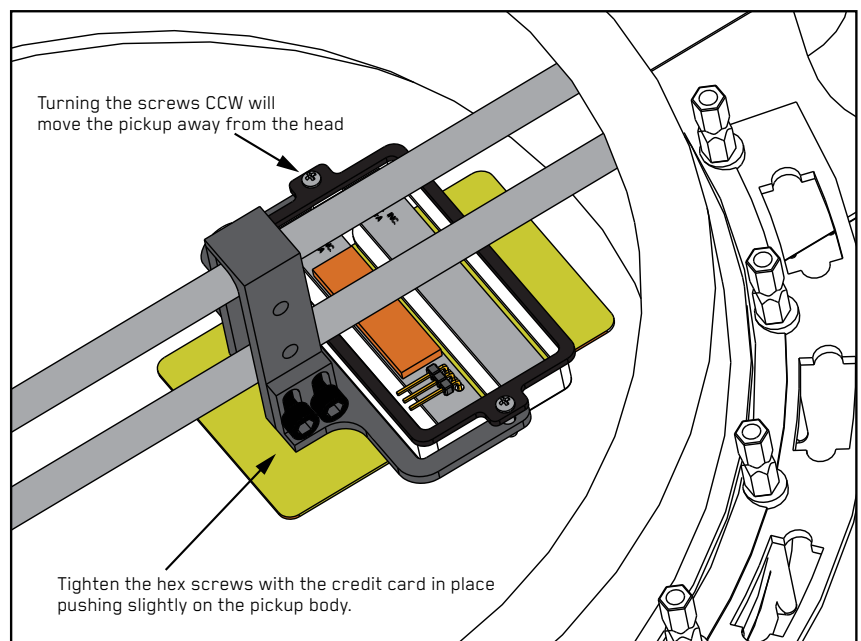
3) Tighten and Adjust

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 minimal friction. Remove the card.

If you find that the pickup signal is too hot, you may re-adjust with a thicker spacer. Simply loosen the two hex screws, insert a larger spacer, and retighten the hex screws. The finely-adjusted phillips screws should still be ok.

Banjo heads are not always level so the adjustment of the pickup may not be level either.

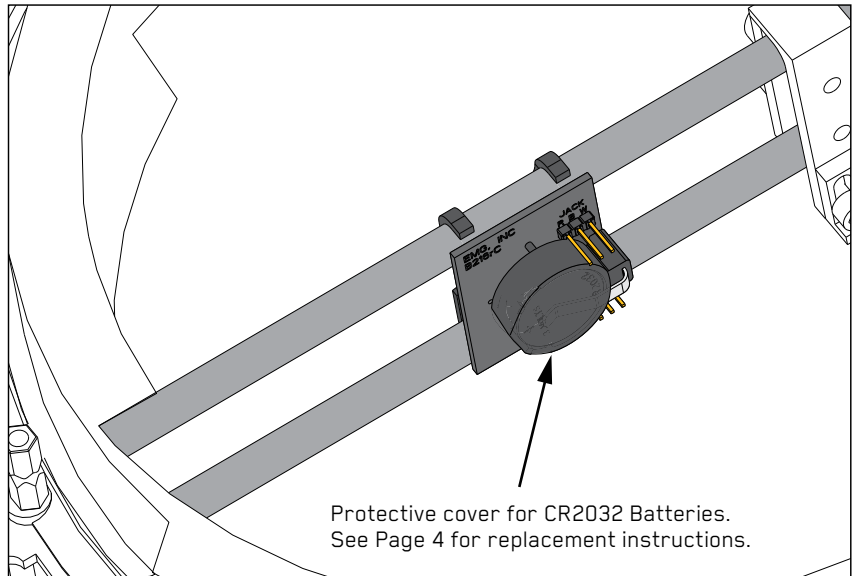
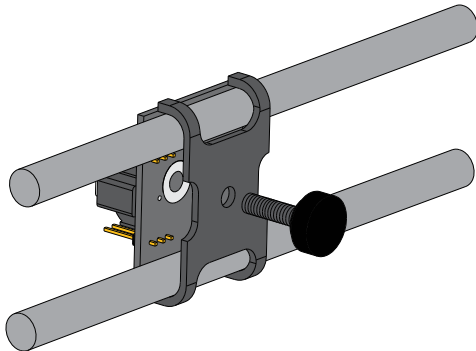


Installation Instructions:
EMG Model: BANJO PICKUP

4) Battery Holder and Battery Installation

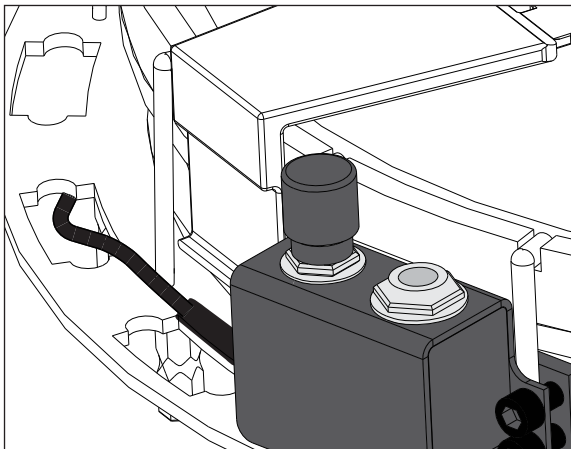
Two CR2032 Batteries are already installed on the battery board. Battery replacement procedure is shown on Page 4.

Install the Battery Holder as shown on the rods.



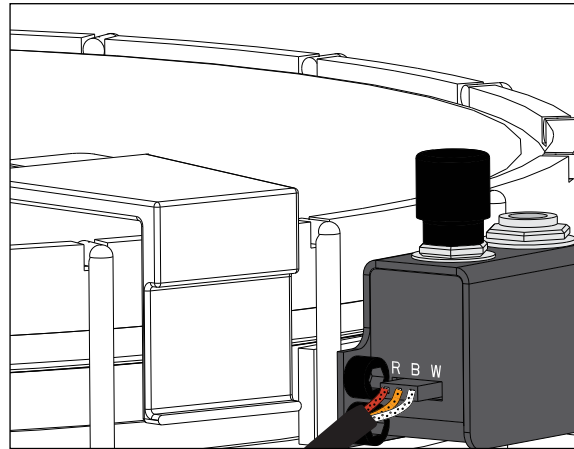
5) Output Jack/ Volume Installation

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



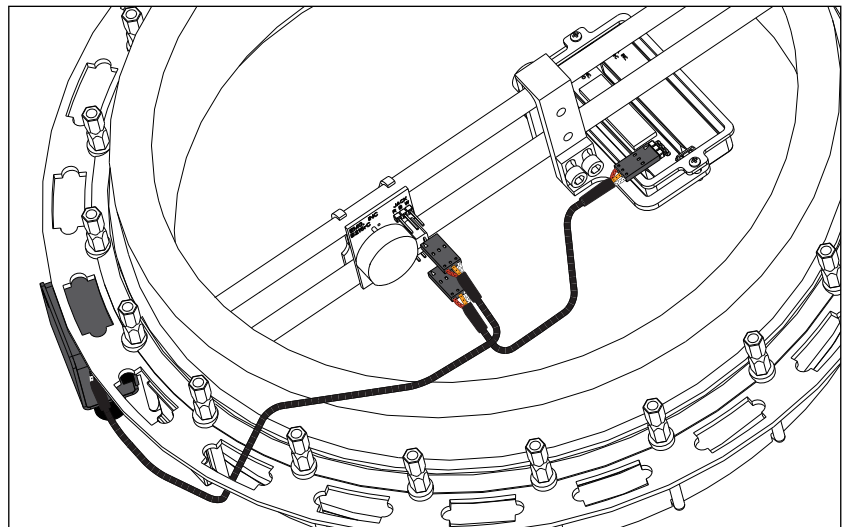
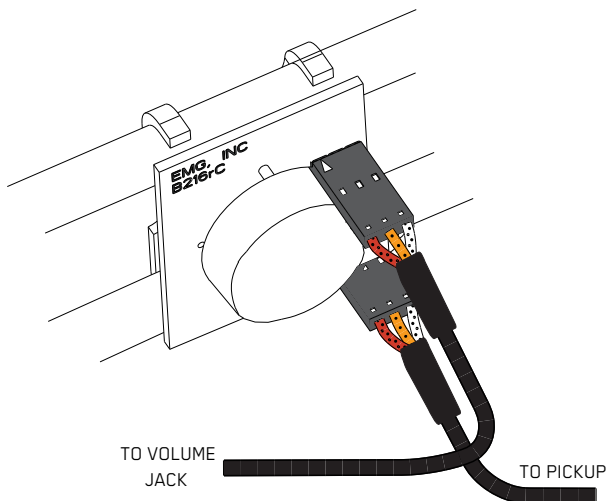
6) Output Cable

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:

EMG Model: BANJO PICKUP

8) Adding the Steel Strip

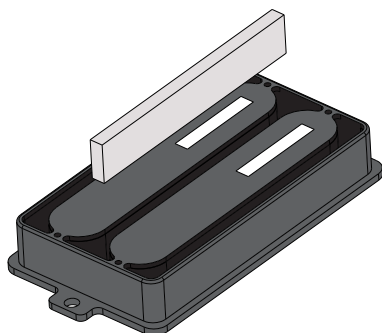
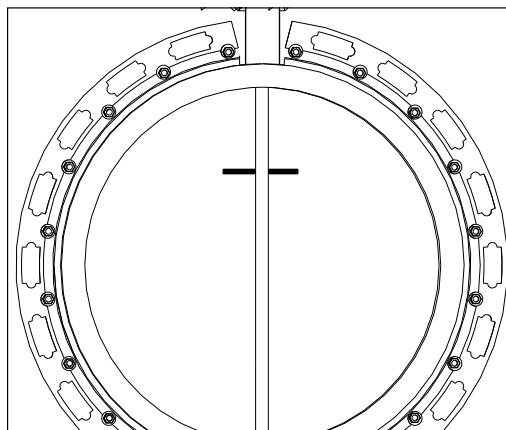
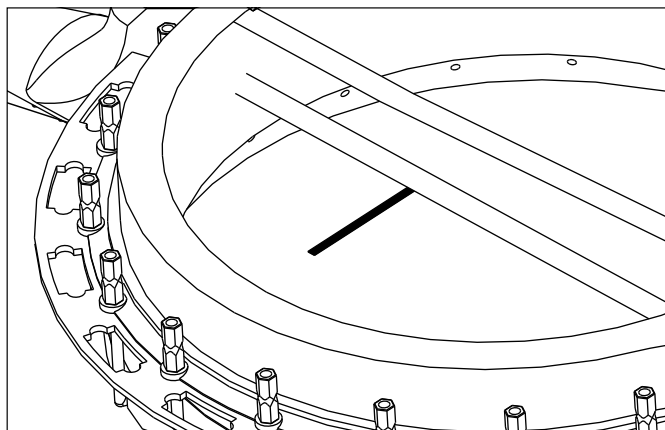
The included steel strip can be installed on either the inside or the outside of the head. In order to work correctly, it should be oriented as shown below. It has a pressure sensitive adhesive on one side for attachment to the head. The adhesive is not strong, so the steel can be moved if desired.

It's not necessary to use the steel strip in order for the pickup to work, it simply a way to get additional sound from the banjo head.

Be sure the volume is turned down or amplifier turned off when you apply or move the steel.

To determine if you want to use the steel strip, place it on the top of the banjo head and position it over the top of the pickup to see what it does for the sound. 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. If desired, additional pieces of steel can be added (e.g. one over each coil). We have found that "a little goes a long way" and the steel should ideally be placed between the coils, or else a short distance from the coil closest to the neck.

Once you have decided on the position of the steel strip, make a measurement or mark the head with a pencil before securing it to the banjo head. Depending on the placement of the steel inside in the head, you might have to detach the pickup by loosening the thumb screws, attaching 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.

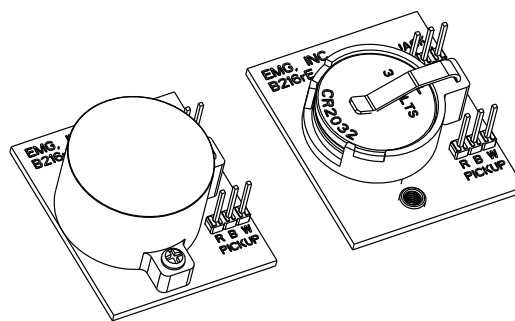


9) Installing the Acoustic Plug(s) to limit feedback

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.



10) Battery Replacement

Using a Phillips head screwdriver, remove the battery cover.

Remove and immediately recycle or dispose used batteries according to local regulations.

DO NOT dispose of batteries in household trash or incinerate.

WARNING! Keep new and used batteries out of reach of children. Seek immediate medical attention if a battery is ingested.

Replace batteries (CR2032 Type) with both positive sides facing up as shown in the diagram. Re-install the battery cover and return battery board to the neck block.

COMPLIANCE



EMG Pickups and Accessories comply with the following regional certifications.

Region	Certification
Europe	CE, WEEE, REACH, RoHS
North America	RoHS
USA (California)	California Prop 65
UK	UKCA

ELECTRONIC PRODUCTS AND BATTERY DISPOSAL



All electrical and electronic products and batteries must be collected separately by a local collection system.

Do not dispose of these items with your normal household waste.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please recycle the product(s) responsibly.