

# MC-150 Kit Instructions

Instruction manual for assembly, finish, and setup  
Written and photographed by Richie Dotson

## Tools and supplies needed:

- 3 sheets 220 grit sand paper
- 3 sheets 400 grit sand paper
- 1 sheet 600 grit wet dry sand paper
- 1 wooden sanding block (approximately. 1" x 2" x 3")
- 1 safety razor
- 1 metal ruler
- 2 - 4" spring clamps
- 1 - 9" spring clamp or cam clamp
- 1 small, smooth faced hammer
- 1 hardwood or corian block (approximately. "1/2" x 1/2" x 3)
- 1 fine, 6" flat file
- 4 cotton rags (approximately. 1'x1')
- 1 bowl, able to hold at least 1 cup of liquid
- 3 drops of dishwashing liquid
- 1 pair of rubber dish gloves
- 1 8 oz container of alcohol based stain (optional)
- 1 roll of 1" masking tape
- 4 spray cans of lacquer or polyurethane
- 3 pads of 0000 steel wool
- 1 bottle of "Meguiar's Mirror Glaze #4"
- 1 bottle of "Meguiar's Mirror Glaze #7"
- 1 hand held power drill
- 1 awl
- 2 pencils
- 1 small pair vice grips
- 1 small square
- 1 metric wrench set
- 1 very small allen wrench
- 1 tape measure
- 1 small tube of crazy glue
- 1 small, round file
- 1 medium size phillips screwdriver
- 1 set of needle files
- 1 X-acto knife
- 1 padded neck support block or bag of buckshot
- 1 1/4" deep well socket

## Your kit contains the following items:

- 1 Maple Neck
- 1 11" wood rim
- 1 11" notched tension hoop
- 1 Flat head alloy tone ring (Optional bell brass available)
- 1 Resonator (not included in the open back kit)
- 1 11" Remo frosted banjo head
- 1 Arm Rest
- 2 Coordinator rods with hanger bolts (one longer than the other)
- 1 "L" shaped tailpiece bracket (may be attached to coordinator rods)
- 1 5th string nut
- 4 Guitar style tuners (planetary tuners optional)
- 1 Geared 5th string tuning machines
- 24 Shoe style lugs with bolts and washers
- 24 Hooks and nuts
- 1 Nut, pre notched
- 4 Resonator plates
- 4 Brass inserts (brass anchors that are threaded on the inside)
- 4 Resonator bolts (knurled on the outside with a Phillips screwdriver receiver on top)
- 1 5 string bridge
- 1 Gary Price style Tailpiece
- 1 Set of strings
- 22 Pre-cut (ready to install) frets
- 1 Truss rod cover (including three screws)

Open the banjo kit and inventory all the parts. These were checked more than once at the factory so they are all there. Locate them all in order to familiarize yourself with them as you go. Use caution when using a knife of any kind to release the tape that binds some of the parts as damage could occur to some of the parts.

## **Important Notes**

### Safety

Wear safety glasses, hearing protection, gloves and approved respiratory protection whenever they apply while building this kit!

## **Experience**

Your MC-150 Banjo Kit contains all the material necessary to construct a high quality banjo minus the [tools and materials listed above](#). Because skill levels vary from person to person, the results you get may also. Think of this kit as a model. If you do not understand any portion of these instructions seek help, Preferably a person who is familiar with the construction of this style of banjo.

## **The Importance of Reading the Instructions**

Read these instructions through at least once and understand them before you begin the assembly of your banjo kit. This will save time, material, and money.

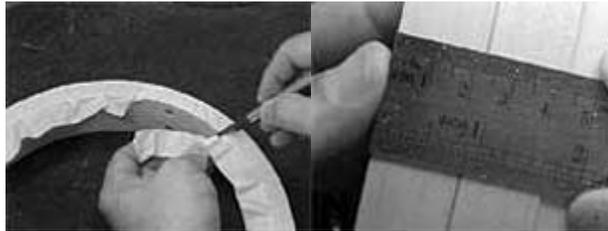
## A Note About the Photos

All the photographs in this series can also be viewed in a larger format by clicking on them. They will open up in a new window, so there isn't any need to right click.

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## Preparing the Rim

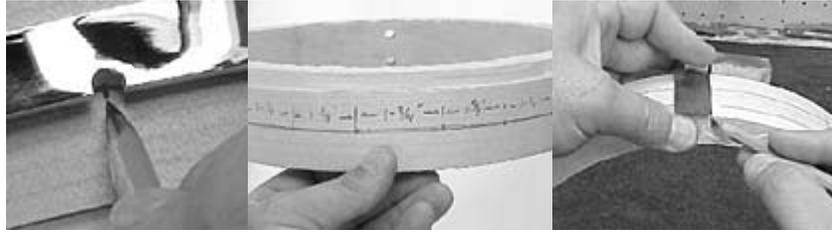


Start by taping off the wood rim with masking tape and trimming off the excess. The lip on which the tone ring will set should be masked off and protected. Next, if it has a pencil line on the outside of your wood rim you are in great shape. If not, you will need to add one. The measurement from the bottom of the wood rim (the area opposite the machined area on which the tone ring will rest) is  $7/8$ ". Mark a line on your wood rim all the way around the outside maintaining the  $7/8$ " from the bottom.

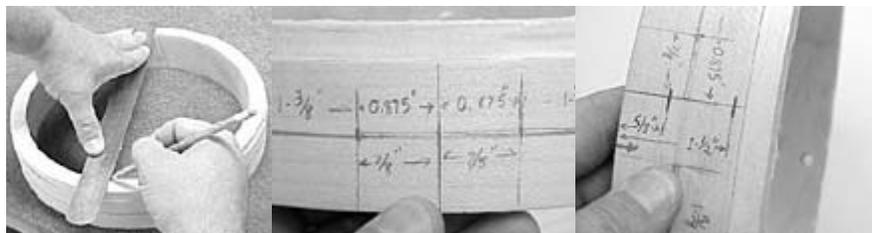


Using a small square and a pencil, mark a line that centers the two coordinator rod holes already drilled into the wood rim. Next, find the neck notch on the tension hoop, measure and mark the center of the notch with a fine point permanent marker. With the wood rim laying face down (machined area is the face) and the notches on the tension hoop also facing down, line up the mark you made on the tension hoop with the line you made that centers the holes in the wood rim and clamp the tension hoop onto the wood rim using the two 4" spring clamps. Now, align the centerline that travels the whole way around the

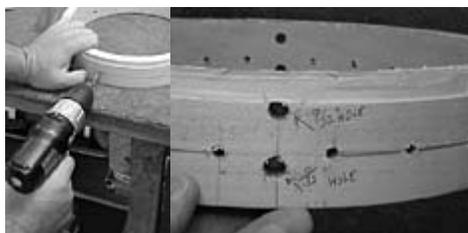
tension hoop so that it is in the center of the tension hoop notches. Check the clamps to make sure they will not move before proceeding.



With the notches lined up with the mark going around the outside of the wood rim and the whole thing clamped and double checked, mark the center of each notch in the tension hoop as illustrated. NOTE: Use a pencil as ink may not clean or even sand off the wood rim as easily. You can see in the 2nd photo above that the marks directly across from the existing holes in the wood rim are at a wider spacing. You will see later. NOTE: The measurements displayed on the wood rim in this instruction are for demonstration only and are not necessary during the assembly of your banjo kit. Using the small square, transfer all the tension hoop notch locations to the top of the tape.



Using the lines you transferred, locate the line directly across from it. Draw a straight line connecting them on the tape using a straight edge. Begin with the lines on either side of the holes in the wood rim and work your way around until complete. Next, directly across from the pre-existing holes in the wood rim where the marks we made are a bit wider, find the center of that space and mark it. It should be (or be really close to)  $7/8$ " from either side of the marks to the center. The following step is important. The measurements I came up with will be close but may not exactly match yours, so measure carefully. Measure the distance from the bottom (no tape) of the wood rim to the center of the pre-existing holes and transfer these measurements to the line we just made in the previous step as illustrated.



Using brad point drill bits is advised for the drilling of the wood rim. Drill all the holes along the wood rim's centerline with a  $13/64$ " drill bit. Aim the drill like a pistol across to

the adjacent mark. The more accurate you are the better the end result. Drill the last marks in the following manner; drill the top hole with a 9/32" drill bit and the bottom hole with an 11/32" drill bit. These holes are for the coordinator rods.

## **Sand and Stain**

Now the neck, resonator and wood rim can be sanded. Always sand with the grain. Start with 220, then go to 400 grit. Sand everything thoroughly and keep the paper moving. Be sure to removed all scratches and rough areas. Do not sand the lip on which the tone ring will rest. After the sanding, dampen a cotton rag in clean, warm water to the point of near saturation and swab the entire surface of the neck (minus the fingerboard) and the outside of the resonator, plus the wood rim without wetting the area where the tone ring rests. Let dry for one hour then sand again using the above mentioned sanding method. Repeat the wetting (grain raising). After drying for 24 hours, sand once more with 400 grit paper. All the surfaces are now ready for staining and finishing.



I highly recommend a pre-mixed alcohol based stain or an aniline stain that can be mixed with either water or denatured alcohol. After the grain raising has been performed the water based stain works great without raising the grain. Follow the directions on the container if you choose to mix your own. These type stains allow any kind of finish to be applied to them once dry.

## **Fretting the Neck**



This is the neck block I use while assembling this banjo kit. It is made from a scrap piece of wood and has low pile carpet glued to it. The cut out for the neck needs to be a little larger than the size of the banjo neck. Make this or have a bag of buckshot standing by before you begin the assembly of the kit.



Using a wooden sanding block sand the fingerboard lightly with 220 paper. Then, using the back of a small, thin blade (I like the X-Acto knife) carefully clean out any glue or debris that may be in the fret slots. Line up the frets from the shortest to the longest using a straightedge as a guide.



Start the first fret (shortest) by first supporting the neck with cradle you built. All the frets are have a slight radius to them and this is normal. Line the fret ends up with the edge of the binding or until the fret is spaced in such a way that equal amounts are hanging over either side of the neck. Gently tap the fret started on one side then the other until it is partially seated. Place the wood or corian block atop the fret and hold it in the center of the fret and parallel to the fingerboard. Hammer it home gently but firmly. You will get the feel of it after the first couple of frets. Use a light hammer or one with a plastic face for this. Using a 6" or 8" smooth mill Bastard file, file the ends of the frets smooth. I recommend you use a piece of 80 grit paper placed face up on a hard surface and bevel the leading edge of the file at a 15 or so degree angle. A belt sander is great for this. Hold the file at a 30 degree angle from the binding and file the edges of the frets along the length of the fingerboard. Care should be taken to work as shown in the photo. DO NOT file them to the side. Care needs to be taken in the area of the 5th string hump. Here, and only here, can you file the 4th and 3rd frets perpendicular to the fingerboard. Too much of an angle will cause the outside strings to "roll" off the edge of the fret when playing. After the filing, finish the edges by hand by gently sanding with 220 then 400 grit paper and finishing up with 0000 steel wool.



Using a safety razor blade carefully scrape away stain from the binding. Work carefully as scratches left by the blade will show in the finish. Tape off the fingerboard leaving a little space at the end of the frets on either side. We will scrape this away later. Put a piece of tape on the truss rod inside the opening, too.

When the neck is ready to be finished (it is not at this point) you can attach a piece of scrap wood using the lag screws passed through holes drilled into the piece of scrap which will also serve as a handle for finishing. They will need to be secured with the proper size nuts (not provided.)

## **Preparing Finish**

### **Lacquer, Spray rig:**

If you have a spray gun and an air compressor it is assumed you already know how to set the spray and volume of your unit. I recommend a quality lacquer, not the kind found in most paint supply places but one better suited for constant touching. Such a lacquer is available from Stewart MacDonald Guitar Shop Supply in Athens Ohio. They are available on the web and offer a free catalog. If you are lucky enough to have a hardwood supply store near you see if they carry the Behlin brand of lacquer. You may also ask someone who builds or repairs instruments what they recommend. If you go to a Paint store and buy whatever is available. It will work, but the results may be disappointing.

You may need is a can of retarder. Humidity effects a sprayed lacquer finish. This manifests itself through "blush". This is a cloudy or milky, opaque film which appears on the surface of the part being sprayed. It usually gets worse as the humidity gets higher and is more evident around corners and points where finish accumulates. Anything above 70% is considered high humidity for this type of finishing. High heat also causes problems. So will cool weather. Retarder will help all these conditions by slowing the drying time of the lacquer enough so the problems caused by humidity and temperature differences are minimized. Lacquer thinner is something else you will need. This is a solvent that mixes with the finish and will allow it to flow through your spray rig without

clumping or splattering. It also allows the finish to flow smoothly over the surface being sprayed. It slows drying time very little as it dissolves quickly leaving the solids behind.

### **Mixing Lacquer:**

In a quart sized rig, mix the lacquer and thinner in equal parts. Add approximately two ounces of lacquer retarder to the mix if needed. Use on a piece of stained scrap to check the results. If blushing occurs, add a bit more retarder until you have controlled the problem. Adjust your mix according to the size spray gun you have. This will get you pretty close.

### **Lacquer, spray can:**

Lacquer is available in a ready-to-use spray can, also. I recommend either the Behlin brand or the spray cans available through Stewart MacDonal. If you use this method as the means by which to finish your banjo kit, you will also need to purchase at least one can of blush retarder, also available in a spray can. Lacquer from these sources is generally soft, slower to dry, and make terrible finishes.

### **Polyurethane, spray can:**

Polyurethane is a great choice for the banjo's finish, too. It is durable and easy to work with and will wear extremely well. Use ONLY polyurethane in a spray can. Spray goes on evenly when applied correctly and finished out smoothly. Brushed on finishes can be used, but are very difficult to manage where a musical instrument is concerned. No special retarders or thinners are needed if you chose polyurethane.

### **The Differences Between Finishes:**

Lacquer dries very fast. Usually between one and three hours, depending on the mix, brand, etc. Polyurethane requires about 24 hours. Lacquer is clear when it dries and yellows over a period of time, but does so slowly. Polyurethane is ever so slightly amber in color when it dries. It isn't very noticeable at first but yellows over a shorter period of time compared to lacquer. Polyurethane is a bit more flexible. Coats of Lacquer melt themselves into previous coats creating a molecular bond with each successive coat.

Polyurethane will do this only if the previous coat is tacky. Dry polyurethane will have to be sanded between coats. When spraying the finish of your choice, ALWAYS practice on a like piece of scrap wood. I recommend that piece be stained in a similar way. This will prevent mistakes.

### **Applying The Finish**

Apply the finish evenly by holding the spray tip approximately eight to ten inches (8" - 10") away from the surface and keep it moving. Be careful around edges and corners. Only apply a thin coat that flows into itself. The coat you apply should not be so thin that

the surface looks like sandpaper, but shouldn't be so thick that it runs. If you are using the caned finish, keep a can of blush retarder handy. If blushing occurs, apply a light coat of the retarder to the freshly sprayed surface. This should take care of the problem. If it doesn't, let the piece dry completely. Sometimes this will help eliminate or reduce the blushing. NEVER spray lacquer on a rainy day, even indoors. Most of the first coat will be soaked up by the part you are finishing. This is normal.

Apply one thin coat, set the piece aside in a clean, dry, safe location and allow it to dry. It will take many coats for you to achieve a nice finish build-up. If you are using Lacquer, apply three thin coats, one after the other about 15 minutes apart then set aside to dry. If you are using Polyurethane, DO NOT sand this first coat. Let it dry about two hours and apply a second coat. Then let it dry two more hours and apply another coat, then set it aside to dry for 24 hours.

After the initial coat is dry, whatever finish you have chosen to work with, DO NOT SAND IT YET. Apply three more coats in the same manner as when you started. After this is dry take a look at the surface. IF the finish appears to have stooped soaking into the wood, you are ready to perform a LIGHT "scuff" sanding. If it hasn't, apply three more coats.

To scuff sand, use 220 grit sand paper and sand with the direction of the grain very lightly. You aren't trying to achieve a smooth finish at this point. You are simply roughing up the surface so the next series of coats can be applied. Be very careful. Sanding through the finish and the stain is difficult to mask. Apply three more coats, let dry as before, repeat the scuff sanding process and apply three more coats. By this time you should have a nice build up of finish to work with.

After this initial build-up is accomplished, you may now sand the surface smooth. This is done with the use of 220 grit sandpaper and working in the direction of the grain. This time instead of scuff sanding, you will be attempting to remove most of the irregularities from the surface of the finish. This step is important for the following coats of finish. It will help insure a smooth, mirror like finish toward the end of the process. Sand only lightly and by hand. If you feel the entire surface can't be smoothed without breaking through the finish, stop and apply more finish in groups of three coats until the finish is thick enough to be smoothed.

Don't sand one spot too long. Clean or change the sandpaper often so you don't leave streaks that result from the paper getting gummed up. Take your time and be as careful to sand evenly as possible. It may not be a good idea to try to level all the spots out on this first round of level sanding. Use your own judgment and play it safe. The best way to tell if you have completely smoothed the surface is to stop periodically and wipe off your work with a clean, cotton cloth. If you see shiny spots, the finish needs either more sanding, or more finish in order to fill the low spots. After this, apply three more coats of finish and take a look at the results. You should see a more even coat this time. After you are confident that the surface has been smoothed and the top coats are looking pretty

uniform, apply two more rounds of finish, three coats at a time. Allow the parts to dry for a couple of days.

Switch to 400 grit and perform the same level sanding again. After that level sanding, and if the finish is smooth, switch to .0000 steel wool and steel wool the entire surface. Clean off all the sand paper and steel wool dust very thoroughly. Apply three more coats and set aside for two (2) days to cure for lacquer, or five (5) days if you are using polyurethane.

## Wet Sanding



The next step in the finishing process is wet sanding. You will need a bowl of warm water with a couple of drops of dish washing detergent added and some small (approximately. 2" x 4") pieces of 600 grit, wet or dry sand paper. Working with the grain, as always, wet the paper and sand the entire surface of the piece until the entire finished surface is dulled (no shiny spots left). Keep the surface wet while sanding. The small amount of soap will lubricate the sand paper and the water will float away pieces of finish. Change your paper often and keep the paper moving. Be careful around the edges, especially when working on the headstock. Check your progress by wiping the surface dry and looking for shiny spots or areas you may have missed.



After the wet sanding is complete, and the entire finished surface is completely dulled, you will need to polish the finished surfaces. You will need 1 bottle of "Meguiar's Mirror Glaze #4" and 1 bottle of "Meguiar's Mirror Glaze #7". These are available through most automotive supply stores, or you can purchase them through Stewart MacDonalds Guitar Shop Supply.

Start with the #4 polish. Use this polish liberally and with a clean, cotton rag. T-shirts work very well for this. Work the polish in lightly and take care to polish the whole surface. Work in small circles and don't press too hard. This will take a while, but the idea is to polish the finish to a shine using this product. It will become pretty shiny with the number 4, but will only reach a certain point. Remember to take your time and be

sure the whole finished area is done carefully and evenly. This step is very labor intensive and will require patience and time. After every spot on the finish looks the same as the rest, and there aren't any scratches or dull places left, wipe the piece completely clean, being sure you get EVERYTHING, then you can move on to the #7.

You can't mix these two polishes or the results will be poor. With a clean, fresh piece of T-shirt, use the number 7 polish. You can apply a little more pressure to it than you did to the #4, but not too much. After a while, clean your work and look at the results.

The results of the final finish depend on your patience and skill. You should now apply a coat of automotive wax to the final finish in order to help protect it. Remember, this finish is delicate and should be handled with the utmost care when assembling and setting up your instrument. Set it all aside for a couple of days to let it cure even more before assembling the banjo.

## Assembly



Align the tone ring onto the wood lining it up with the two holes that were already drilled in the wood rim. If the hole in the tone ring doesn't match perfectly, that is okay. Locate the inserts and install them with a light hammer.



Locate the shoe brackets, screws and washers (there are 24 of each) and install them pointy side up. Take care not to over tighten. Place the head onto the pot assembly and align the center of the tension hoop notch over the two holes in which the inserts were installed.



Install the 24 hooks and nuts and as shown starting on 4 imaginary compass points then filling the rest in and tighten the head down keeping the tension hoop parallel to the tone ring. Tightening each nut the same 1/4 turn even though they don't "feel" evenly tensioned this will help insure the head IS of an even tension. Tighten the head until it is reasonably close to the tension you would like it to be when the banjo is assembled.

The next steps are critical to the success of the banjo kit: Clamp the neck into place as shown. Several styles of clamps are available but I like this quick release one. It doesn't get in my way and the hard rubber pads keep it from slipping on this delicate clamping job. You will have to sharpen a wooden pencil to a point that closely fits the inserts and mark the location of the lag bolts (hanger bolts) onto the surface of the banjo heel that butts up against the wood rim. Double check your neck to make sure it isn't too low or too high. The frets **MUST** clear the tension hoop notch once the head is at the desired tension or the banjo will not play correctly. Check the neck once more to make sure the clamp has not slipped and then with the banjo on it's belly, mark only the lag bolt located nearest the tone ring with the pencil.

Remove the clamp and drill a 13/64" pilot hole for the lag bolts in the center of the pencil mark. Make sure the hole goes straight into neck both up and down and left to right (you should use a partner as an extra set of eyes to help with this alignment) and make sure the neck is clamped fingerboard down on a solid working surface when drilling. Use a piece of tape on your drill bit as a depth gauge so as not to drill too far past where the lag screw wood threads end.

Now, screw the pointed end of the lag bolt into the neck just up to the tops of the threads. You can use two 10 mm nuts (not included) tightened together on the bolt threads so a wrench can be used to screw the bolt into the heel (this is known as double nutting) or you may carefully use a set of Vice Grips. If you chose Vice Grips, place them securely in the area of the lag bolt **BETWEEN** the wood threads and the bolt threads. Care should be taken not to damage either set of threads. Once this first lag bolt is attached place the neck back on the rim and attach a 10 mm nut and washer on the lag bolt from the inside of the wood rim and temporarily tighten the neck securely to the pot. Again, sight down the neck to insure the neck is aligned parallel to the head. Now, mark the location of the remaining lag bolt. Remove the neck and drill the hole for the second lag bolt. Attach the second lag bolt and temporarily reattach the neck with two nuts on your lag bolts. Sight down the neck again to make sure the neck aligns squarely with the head.



The lag bolts (hanger bolts) can be gently aligned by threading one of the coordinator rods onto them one at a time and giving them a little tension in whichever direction is needed. Caution should be taken very seriously for obvious reasons should this step be necessary. once it fits the pot The neck is now ready for finishing and polishing . Use a piece of scrap wood with holes drilled in it through which the lag bolts can be placed and secured as a handle during spraying. At this time finish the neck using the methods described earlier.

For Resonator Models Only: Attach the resonator plates by removing the 3rd and 4th nuts from the "J" hooks counting on either side of the resonator notch and the space directly across from the resonator notch (where the tailpiece will go). You will have 4 resonator plates evenly spaced attached to the pot when finished. Place the nuts back to the same tension as the others when complete. Center the plates in their slots.



Now is a good time to install the neck hardware. The hole for the 5th string machine is already drilled but caution should be used because finish buildup and other factors may have reduced the size of the opening. It may be necessary to clean out the opening using a sharp knife. Do not remove any wood. You should be able to push the shaft of the tuner by hand about 3/4 of the way to the end of the taper NOT to the whole housing. Place the 5th string peg into place with the tuning shaft pointing up so it rises above the plane of the fingerboard, gently tap the machine into the taper after having removed the button. Slip a small deep well socket over the buttonless shaft and do not hammer with great force as you will risk damage to the tuner and the neck. Hammer the machine into the neck only up to the point where the taper stops. The peghead machines are placed onto the headstock with the wood screw receiver pointing toward the neck. If they are pointing up your tuners will turn backwards. Make sure they are aligned properly and straight, mark the location of the wood screws with an awl and remove the tuners.



Use a piece of masking tape on the 1/16" drill bit used for pre drilling the holes for the screws used to fasten the headstock machines. This will help insure you don't drill through the peghead.

Set the nut into place and mark the location of the line made by the top of the frets. I do this by cutting or sanding a pencil in half lengthwise so I have a flat half pencil. Laying it across several frets will enable you to draw a line across the face of the nut at the crown level of the frets. Just above this line is where the strings should come down to. By using a set of needle files you can lower the string notch already started in the nut down to where it is barely above the pencil line. If you go down to the pencil line you risk generating a "buzz" when your strings are played. If you go past the line you WILL generate a buzz! While deepening the fret slots work carefully and slowly while maintaining a constant angle back toward the headstock. Use sandpaper to dress the nut after the notches have been adjusted. After the nut is completed put it in place with one drop of wood glue. Just enough to hold it into place.



Slip the neck into place by guiding the lag screws through the holes where the inserts were placed. Start installing the top rod (on the bottom here because the banjo is upside down) The top rod has the small male threads on one end and is shorter than the bottom rod. Place the washer and the nut over the male threads then guide it through the hole as shown and attach the other end of the rod to the top lag screw as shown.



The bottom coordinator rod attaches in the same way. The bottom rod is longer and the shaft goes all the way through the hole in the wood rim first before you will be able to attach it to the bottom lag bolt. Don't worry, it isn't possible to do it backwards. I use this

old screwdriver to tighten the coordinator rods onto the neck's lag screws. It fits the holes in the coordinator rod set perfectly. It also has a bend in the tip to get more rotation out of each turn. Tighten the rods down firmly up against the lag bolts. There is no need to over tighten. Just bring it up snug to the inserts. Next attach the tailpiece bracket as shown. Bring this nut down just snug then tighten the nut on this rod on the inside of the wood rim snugly. Tighten the rod nearest the tone ring (top) only a little past finger tight. Again, don't over tighten them.



Carefully drill a 1/8" hole about 1/4" deep just behind the 5th fret in line with where the 5th string should be (centered approximately 3/16" from the edge of the neck. Mark about 1/16" above the fret line onto the 5th string nut and cut the nut off at that point. File a notch in the center of the nut for a string guide and, using only a drop of white glue, line up the slot for the string and glue it into place. Do NOT file the slot down to the line this time. Let the string ride a little above the fret level. Attach the tailpiece and the 1st and 5th strings onto the instrument and slip the bridge into place. If your kit has a resonator, place the pot into the resonator at this time and mark the location where the thumb screws will be by using the awl. Be as accurate as possible during this step and make sure the pot doesn't slip as you are making your marks.



Locate the inserts, drill out the holes to a depth that is slightly more than is needed for the insert to seat. Drill the holes to the exact size of the outside diameter of the insert. Hammer the inserts into the rim of the resonator until they are flush.

Remove the tape from the fingerboard and with a safety razor blade scrape the fingerboard free from any finish. Don't scrape away the corner. Keep the blade flat against the fingerboard. Now you can attach the armrest.

String the banjo up and see how she performs. To find the correct location of the bridge, measure from the leading edge of the nut to the top center of the 12th fret. Transfer that same measurement from the center of the 12th fret to the leading edge of your bridge with about 3/16" added in for compensation. Install the resonator and get to pickin'!

## Setup and Adjustment

Should the string action be too high or too low the coordinator rods may need to be adjusted or a shim installed to correct it. Your banjo should play well as soon as you put it together but a good general setup is always in order. In general terms, tightening the bottom rod will lower the action. Tightening the top rod will raise the action. Loosening a tight bottom rod will also raise the action. Care should be taken if you need to adjust the action in this way. It should not be used to influence the action at the 12th fret more than 1/16" and remember that you can only take the action down so low before the banjo will buzz anyway.

Adjusting the truss rod may be needed as the banjo settles as well as tightening the banjo head to taste. The banjo neck should have a slight forward bow in it in order for the banjo to play well so don't try to get the neck perfectly straight.

The frets may need dressing as well. Should the frets buzz in places use your smooth mill file to level them. work the file along the tops of all the frets working in the direction of the headstock. With the file laying across many frets at once you only need to file gently and only until you see the tiniest amount of shavings beside each fret. After the filing work with the grain of the fingerboard and holding the paper by hand sand with 220 then 400 grit paper and then 0000 steel wool to round over the tops of the frets. Be sure if this step is necessary that you sand evenly and lightly. It doesn't take long to recrown the frets.

When in doubt take the banjo to a good repair person! A little money spent here will save you in the long run if you are unsure of your setup skills.

There you have it! This banjo will last a lifetime and is a high quality piece of musical art and you can proudly say "I built it myself!"

Thank you for choosing a Gold Tone Banjo Kit!

Sincerely,  
Richie Dotson

I truly hope you enjoy this banjo. I know I do. It is a, solid, great sounding, beautiful instrument that is well built and will last for years to come.

Richie Dotson