



Instructions for:

Pinchback Reproductions

Step by step instructions on attaching antlers to a Reproduction deer skull with pedicles.

Assuming that you start with a set of antlers on the skullcap you will need the following materials and tools to complete this project:

duct tape	medium grit sand paper	safety glasses for eye protection
magic marker	paint gun or paint brush	2 lag bolts 1/4 x 3 inches
epoxy	saw for removing the antlers	drill bit size: 9/64 & 3/16
drill	7/8 inch paddle bit for Large Skull	2 ft by 2 ft piece of plywood
latex gloves	dremel for grinding or small hand file	#2 Phillips screw driver
hangers & screws	Krylon #3510 or #2422	2-dry wall screws 2 inches long

How to measure for correct size: Measure the pedicles of your deer and get a width measurement that will match one of the Pinchback Reproductions skull measurements in inches: small 3/4, medium 1, large 1 1/4, and x-large 1 1/2.

1. Using duct tape, bridge the left G-2 tip with the right G-2 tip using a single piece of duct tape, keep the duct tape tight so it does not sag. After attaching the duct tape to the antler tips, fold the duct tape over itself between the points so that it will not stick to anything. Bridge the tips of the main beam with another piece of duct tape and fold the duct tape over itself. You need a minimum of two duct tape bridges from the left to the right antler. The Z Method: place the third-piece of duct tape on the right tip of the main beam and the other end on the left G-2. Be sure to record all three measurements: example 14-21-12 thus forming a Z.
2. Using a magic marker on the duct tape bridges; mark the center of the skull on each of the duct tape bridges. This will be used later for alignment.
3. Cut the antlers from the skullcap, just below the antler burrs.
4. To get the best results, start by removing the pedicle part of the bone still attached to the antler, then continue 1/4 of an inch deep, staying in the center, pass the burr part of the antler. This depression should fit over the reproduction skull pedicle creating a seamless or invisible seam, a dremel works well for this step. Measure the reproduction's pedicle and make the depression that size: example 1 1/4 pedicle will fit a 1 1/4 depression.
5. Trial fit the antlers over the reproduction skull. Pay attention to the antlers' alignment with the front of the pedicles. The duct tape should hold the original spread in place, align the centerline on the tape with the center of the reproduction skull.
6. Do not be concerned if the original antlers bases are wider or narrower than the reproduction pedicles, you are matching them to a different skull. Watch for alignment between the antlers and the front of the reproduction skull.
7. Mark and drill a 1 1/2 inch deep hole with a paddle bit, in the top of each of the pedicles on the reproduction skull. A 7/8 inch paddle bit works well for the large reproduction skull.
8. Mark and drill 1 hole 1 1/2 inch deep using the 3/16 drill bit into each of the antler burrs from the under side. This hole should run with the center of the main beam. This should line up with the hole you drilled into the pedicle area of the reproduction skull.
9. Screw the 1/4 x 3-inch lag bolt, 1 1/2 inch deep, into the under side of antlers checking the alignment and clearance. These bolts can be bent to align the antlers to the reproduction skull. You should have 1 1/2 inch of the lag bolt sticking out of the bottom of the antlers. After a trial fit is successful you will need to drill a 9/64 inch hole 1 inch deep along side the lag bolts in the antlers and screw a 2 inch drywall screw into the 1 inch deep hole. This will keep the antler from twisting. Keep this drywall screw in line with the lag bolt that fits the skull.

10. Center and attach the reproduction skull to a 2 ft x 2 ft sheet of plywood. Mark the plywood with a centerline and align the skull to it. Cut a hole at the top of the plywood so you can hang it on the wall. Wear latex gloves to measure and mix enough of the epoxy A and epoxy B to fill both the holes that you made with the paddle bit in the top of the pedicle area of the reproduction skull. Mix the two together and place into the pedicle holes.
11. Force the antler bolts and screws into the epoxy and align the antlers to the reproduction skull. Do not be concerned if some of the epoxy is forced out of the hole during the alignment.
12. Use duct tape to support the antlers while the epoxy hardens. Place one end of duct tape under the plywood and the other to the antler tip. Use 4 pieces, 2 towards the back of the plywood and 2 towards the front. If additional pieces of duct tape are needed for balance and alignment use them now.
13. Use duct tape to bridge around the bases of the antlers. This step is important as it will keep the antlers in place and prevent them from sliding to one side. Align the antler bases with the front and inside of the reproduction skull pedicles. Concentrate on having a good alignment between the antlers and the front of the reproduction skull. Repack the epoxy from the backside around the pedicle bases forcing out any air pockets. Clean off any excess epoxy using water and a paintbrush or Q-Tip, this is the attachment part.
14. Hang on the wall to check the angle and alignment of the antlers to the skull. Check the alignment of the marks on the duct tape bridges to see if they align with the centerline of the skull. Allow the epoxy time to harden. Minimum of 8 hours.
15. After epoxy has hardened, you can if needed add additional epoxy to correct the shape of the reproduction skull and pedicles, wear latex gloves to mix the epoxy. Use the backside of the pedicle area for reshaping to match the contour of alignment of the antlers to the skull.
16. After the epoxy hardens, lightly sand the area using medium grit paper. Concentrate on the contour of the pedicles and the union of the antlers to the skull.
17. Paint the epoxy and reproduction skull with paint. The paint I like to use is Krylon Satin Ivory #3510 or Krylon Fusion Satin Dover White #2422, apply the first two coat lightly to prevent the skull from yellowing. For additional products and information visit our website. Two wood blocks are embedded in the back of the reproduction skull for anchor points. The use of a hanger or optional board will be easier with these wood blocks.

We have found that the 1/4 lag bolt is easier to attach to the antler than the 1/4 inch square stock. Pre-drill your antler with a 3/16 inch drill bit 1 1/2 inches deep, then with a deep barrel socket screw the 1/4 inch lag bolt 1 1/2 inches into the antler, be sure to mark the lag bolt with a magic marker showing the end of the pilot hole. Drill the square hole out in the Counterfeit skull using a 3/8 drill bit on the medium skull, be sure to mark your drill bit 1 1/2 inches deep so not to drill into the brain area that is hollow. The lag bolt head will need to be cut off to fit into the 3/8 inch hole. On a larger skull a 3/4 inch hole can be drilled and the skull and the bolt head can stay on the lag bolt, be sure not to drill into the brain area and just go 1 1/2 inch into the skull from the top of the pedicles. We use a liquid soap and denature alcohol as a release in our molding process, a simple rinse with water will clean the skull so it can be painted.