



## CAJON KIT Assembly Instructions



### MAIN CAJON PARTS LIST

- 1 Top - 1/2" material (square)
- 1 Bottom - same as top
- 2 Sides - 1/2" material (rectangle)
- Front - 1/8" material
- Back - 1/4" material with hole
- 4 rubber feet with screws

### OPTIONAL PARTS FOR SNARE

- 1 metal snare w/4 tiny mounting screws
- 2 Long frame pieces
- 2 short frame pieces
- 1 small Snare mounting block
- 14 wood screws, 1" long

## BEFORE YOU BEGIN

\_\_\_A. Inventory and inspect all your parts carefull. If anything is missing or defective, please call us right away.

**651-439-9120**

\_\_\_B. It is a good idea to read through the entire assembly instructions before you start, just to get an overview of the project. We also have assembly videos online -

<https://www.harpkit.com/cajon-kit.html>

\_\_\_C. **Tools and supplies you will need**

- Woodworking glue (Elmer's or Titebond)
- Tape - strapping tape is best but masking tape works too
- Sandpaper - 100 and 180 grits
- Sanding block (piece of 1 by 4 lumber with sandpaper glued on)
- 10 pound weight
- Finish (paint, varnish, lacquer, polyurethane, etc.)

### Optional Tools that will speed things along but aren't absolutely necessary

- Hand plane
- A few clamps (for Snare Option)
- Electric hand drill
- Electric hand sander
- Router with 1/4" and 1/8" round over bits

## GLUE THE SIDES TO THE TOP AND BOTTOM

\_\_\_1. Begin by laying out the Top, Bottom, and 2 Side pieces on a flat and level surface. (fig. 1) Gather up your woodworking glue, a wet rag and some tape.

\_\_\_2. Test fit the Sides to the Top and Bottom. The two sides should fit nicely in the dado cut on the top and bottom. (fig. 2)

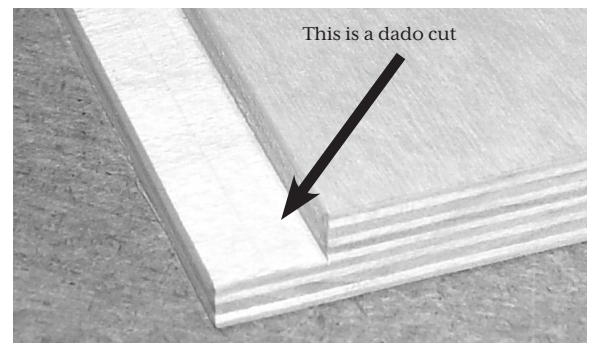


Take a good look at the Sides and decide which face you would like to show on the outside of the box!

\_\_\_3. Now you can glue the Sides to the Top. Put some glue in the dado cuts on the Top and Bottom piece. Make sure to get glue on both surfaces in the Dado cut!



**FIG. 1**



**FIG. 2**

- 4. Assemble the Sides and the Top and the Bottom using tape to hold all the pieces together. (fig. 3) Run a piece of tape from one Side to the other to help pull them in tight against the the inner ledge of the Dado cuts. Then put a piece of tape every inch or so where the Sides meet the Top and Bottom.

*Be careful to keep this frame square, with all of the edges flush! Let dry for at least one hour.*



If you get glue on your fingers - wipe it off with your wet rag before handling the wood. Otherwise you are going to have little glue fingerprints all over the box. They are easy to miss when sanding, but they show up clearly after the finish has been applied. :(



FIG. 3

#### OPTIONAL SNARE ASSEMBLY

*If you did not purchase the snare cajon, skip to step II.*

- 4. If you purchased the optional snare parts, you can glue and clamp the hardwood frame pieces to the shell of the cajon. The pieces are cut to fit inside the box. (fig 4) Notice that they are not intended to be a tight fit. They only serve as extra material for receiving mounting screws for the front panel.

Whichever side of the box you glue these frame pieces on will be the front of the cajon. Be careful to glue these pieces so that they are flush with edges of the box, as shown.

- 5. Glue the short snare mounting block in place against one of the shorter frame pieces, near one corner of the box. (fig. 5) This will determine the top of the box. Be careful to leave the angled side facing out. Study the picture carefully (fig. 6) -- notice that the block is not placed all the way into the corner of the box.

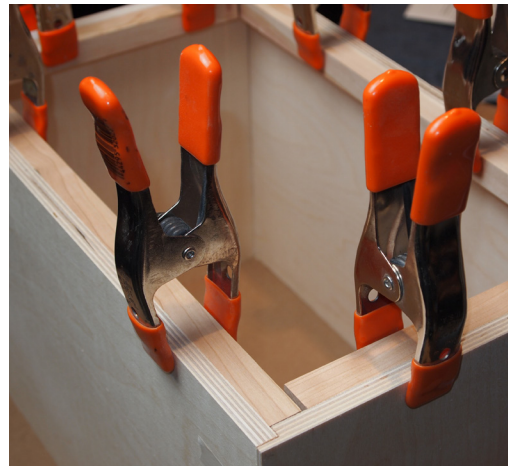


FIG. 4



FIG. 5



FIG. 6

\_\_\_6. **Level the corners**

Before you fasten the Front and Back to the box, you need to be sure that the corners where the Sides meet the Top and Bottom are flush.

Use a coarse (100 grit) sanding block to level the corners and remove any dried glue that might interfere with the fit of the Front and Back panels. (fig. 7)

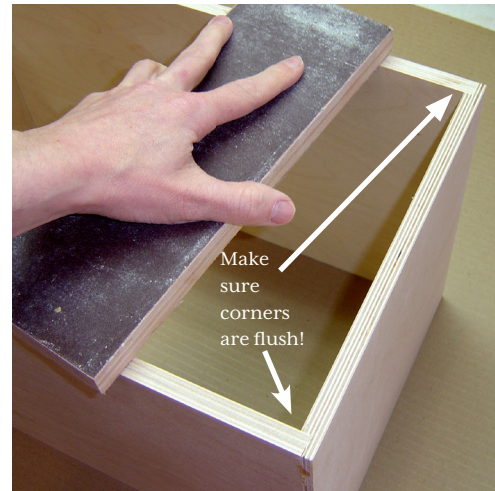


FIG. 7

\_\_\_7. Cut the snare in half with a wire cutter and attach the snares to the snare mounting block using the four tiny screws provided. (fig. 8)

\_\_\_8. If you are building the Snare Cajon, DO NOT GLUE THE FRONT. Instead, your front piece should have 14 screw holes pre-drilled around the edge. Lay out the front piece so that the short side, with only two pre-drilled holes, is on the same end as the snares. This will be the top of the cajon.

Center the front carefully so that there is equal overhang all the way around. Use tape to hold it temporarily in place.



FIG. 8

\_\_\_9. With the front piece taped in place - drill two pilot holes on opposite sides of the front. (fig. 9) Put in two of the 1" screws to keep the front from moving while you drill the rest of the pilot holes.

Remember - DO NOT GLUE THE TOP IN PLACE. Just fasten it with the screws provided.(fig. 10)



FIG. 9

\_\_\_10. With the front screwed in place, sand the outside edges flush and round them over.

For the final sanding it is best to remove the front so you don't sand the dark color off the wood screws. When sanding the box be careful not to round over the front edges.

One nice feature of the screw-on front is that it makes it quite easy to do a traditional 2-tone finish. Take the front off and stain the rest of the body a nice dark color and leave the front un-stained. After the stain has dried, screw the front in place and apply clear finish.



FIG. 10

\_\_\_11. Welcome back my non-snare cajon building friends. Follow closely now. Go back and perform Step 6. Then move on to Step 12. Got it?

## GLUE ON THE FRONT AND BACK.



Carefully look at the Front piece and decide which face you would like showing. The Back piece has a hole cut in it and one edge of the hole is rounded over. That side should face out. If you want the other side to face out, that's OK - you will just need to round over the other edge of the hole with coarse sandpaper.

- \_\_\_12. Apply a bead of glue around the entire surface of the edge and set either the Front or Back on the edge and tape in place. (fig. 11)



Reminder - Do not glue on the front if you are building the snare cajon!

- \_\_\_13. Place tape every 1-2 inches making sure to tape the corners well. (fig. 12)

These pieces are cut pretty close to size so pay careful attention that the panel covers the entire surface of the frame all the way around the box.

- \_\_\_14. Flip the box over and glue the last piece in place.

- \_\_\_15. When this is taped in place you can set a scrap piece of wood on this piece and set your weight on top of that. (fig. 13) Let dry at least one hour.

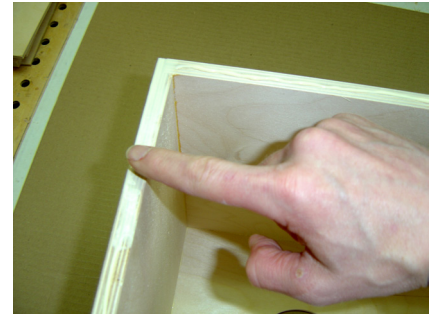


FIG. 11



FIG. 12

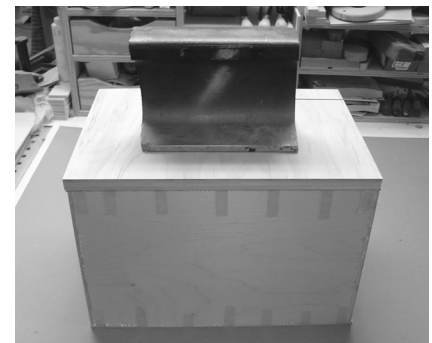


FIG. 13

## SAND AND FINISH

- \_\_\_16. Once the box has dried, you'll need to remove the excess overhanging wood on the Front and Back. An electric sander with 50 grit sandpaper will do this job nicely. If you don't have an electric sander, a coarse sanding block will work with time and effort.

- \_\_\_17. When the edges are all flush you can round over all the corners. Here again an electric sander works well, or you can use a router with an 1/8" round over bit on the front piece because that is 1/8" material. Use a 1/4" round over bit on all the other edges.

- \_\_\_18. Now sand the entire cajon with 180 grit sandpaper. Take your time here and make sure you sand off all the glue spots and any machine marks.

## GENERAL FINISHING GUIDELINES

You can finish this instrument in a variety of ways. Traditionally, the front is a different color than the rest of the cajon. You can leave the front natural and stain the rest of the instrument. Or you can stain the entire instrument a single color. Or you can simply apply a clear varnish to the entire box, leaving the natural wood color.

**POLYURETHANE VARNISH** -- Any regular varnish will work fine on this project, but we think a wipe-on (gel) polyurethane is the easiest to apply because it does not drip or sag -- just wipe on a thin coat and wipe off the excess. Our complete finishing kit includes a half-pint can of satin gel polyurethane (instructions printed right on the can), plus sandpaper sheets, and foam applicator for the first coat. The advantages of this finish are its simple application, minimal odor, good durability, and deep, soft luster.

**LACQUER** -- Many professional instrument makers use lacquer for their finish. The most readily available lacquer is called Deft Clear Wood Finish. It is best to purchase a can of liquid to brush on as a sealer coat first, and then use an aerosol can of the same product to spray on the final coats. The advantage of this finish is its quick drying time, but the disadvantage is the strong odor of the toxic lacquer fumes.

- \_\_\_19. Install the 4 rubber feet on the bottom of the cajon. (Figure 4) This is easiest if you can pre-drill a 1/16" pilot hole. But you can also just muscle in the screw if you make a nice deep punch mark ahead of time.

