

1-831-372-6562  
241 Chestnut St  
Pacific Grove CA 93950-3130  
Sept 30 01

Dear Jim,

By the time you purchase enough to build one, you will probably have enough to build another.

I think it would be a good idea to contact the club to see if they would sell you one or two cases.

If you decide to build, read the instructions very carefully and study them.

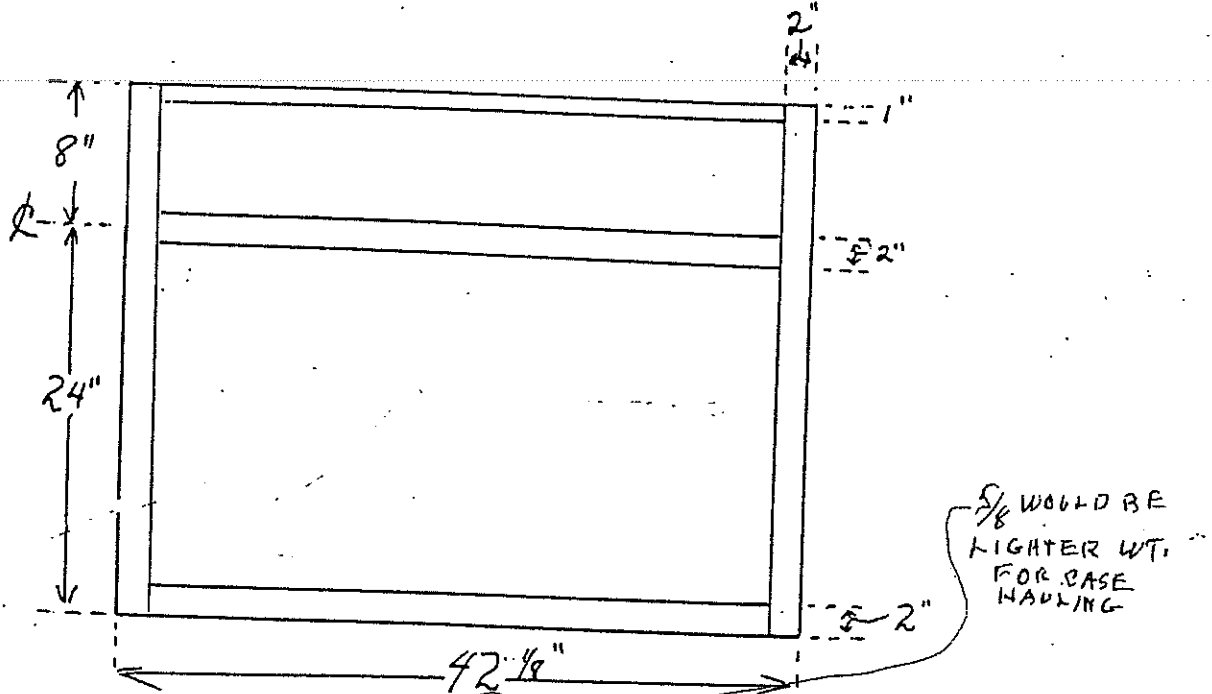
Good luck and best wishes.

Most Sincerely,  
J. C. Keator

42 inch fold up federation type case

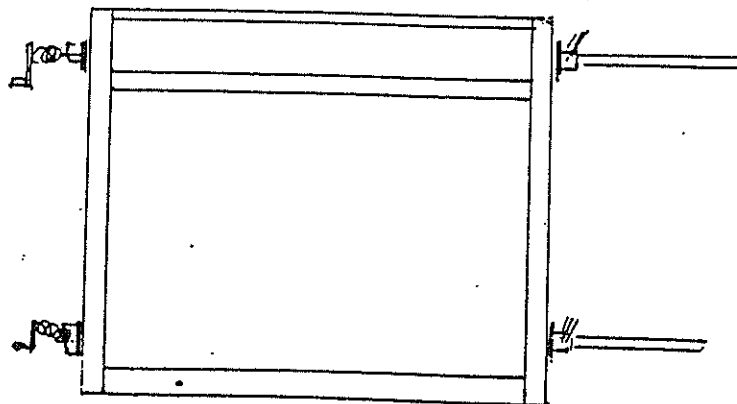
Select your 1/8 or the slightly heavier metric ply. Pick a pattern that is suitable for the inside of case so you will not have to line the sides and back. Saves a lot of problems. Try to find a light colored pattern, NO RAGS use plain shena OR HARDWOOD

These two stay straighter than the hard woods. SAME AS FRONT  
 The front could be 1/8 hardwood light and clear finished. (no lines)  
 (Pick your ply good on both sides for best looking outsides.)



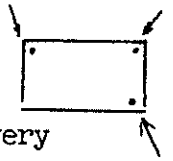
The frame is made from #2 pine (3/4) stock. Pick out your piece yourself because the top piece is usually a reject. Select a long piece with small and few knots as possible. Rip it into the 1" and 2" pieces. Measure the various lengths between the knots, cut a little longer to allow for trimming. Set a stop on your crosscut gage and cut the lengths exactly. Place the sticks in place, turn the sides inside up and drill with 30d finish nail. This method helps to keep the nails from splitting the side pieces and keeps them better aligned.

Turn them back properly and clamp up with two pipe clamps and nail with 30d galv. finish nails for dowels. Set 3/4 inch  
 or 20 Check carefully to make it perfectly square!!!



USE A NEW SHARP BLADE

Cut your 1/8" ply front perfectly square about 1/8 larger than the frame. Generoulsy glue all the face frame and place the ply over it. Tack with 3. tiny finish nails to prevent it from slipping.



Place on a flat surface and weigh down heavily being sure that every bit of the ply is in good contact with the frame. This is important.

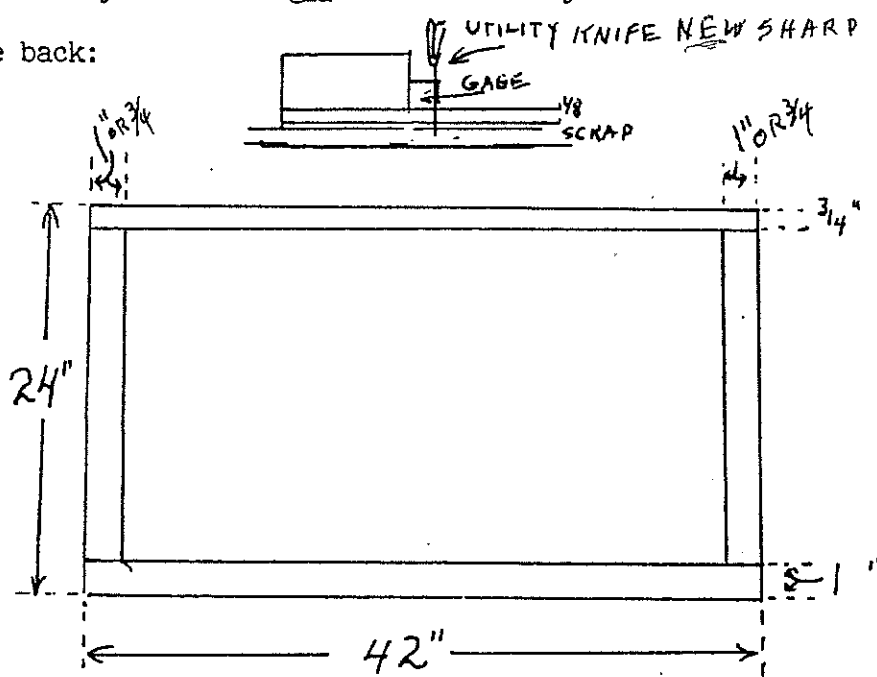
Next day, make a 5/16th inch gage to guide the blade of your utility razor blade knife and cut carefully to the corners and remove the center. It will take three or four strokes to cut through. You should have a piece of scrap under where you are cutting because the point of the knife will have to go through the ply to make a nice cut. Sand the edge gently to smooth it up. Trim the outside carefully to the exact size of the frame.

Touch up the outside and you are ready to finish. I like light varnish.

Cut your 3/4 inch stops and finish them too.

When the finish is dry, maybe you have put on two coats for better wear, cut the double strength glass neatly. Insist that the glass man cut it to fit. He will usually cut it too loose. If you are making several, it is better to buy a case of glass and cut it yourself. Much cheaper.

Now the back:

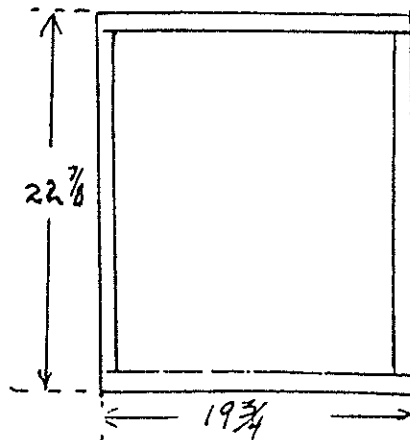


Glue and assemble in clamps. Drill nailholes in outer stick to prevent splitting and nail up with 6d finish, setting 1/4" deep.

Square carefully and put on the 1/8 ply being sure if there are lines to have them symetrical. Having a narrow line on one side and a wide one on the other, looks terrible and throws off the entire case. Try to get ply with out lines if possible. Nail with tiny finish nails.

Now the sides:

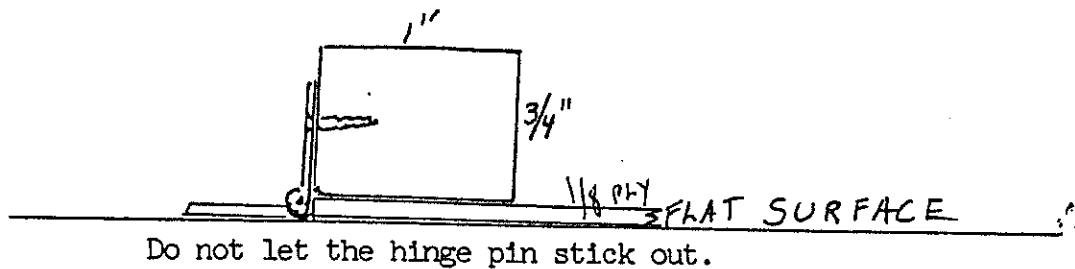
Make two



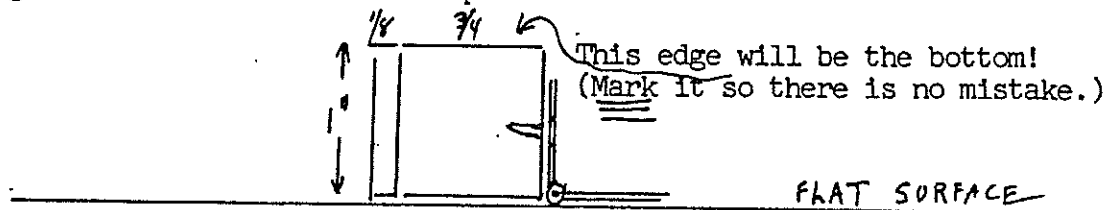
1" FRAME  
COULD BE 3/4 X 3/4 OR 3/4 X 5/8

#3

Be sure your sides are square.  
Cut your piano hinge to total length and apply according to drawing.  
The hinge pin must be flush with the face of the side.



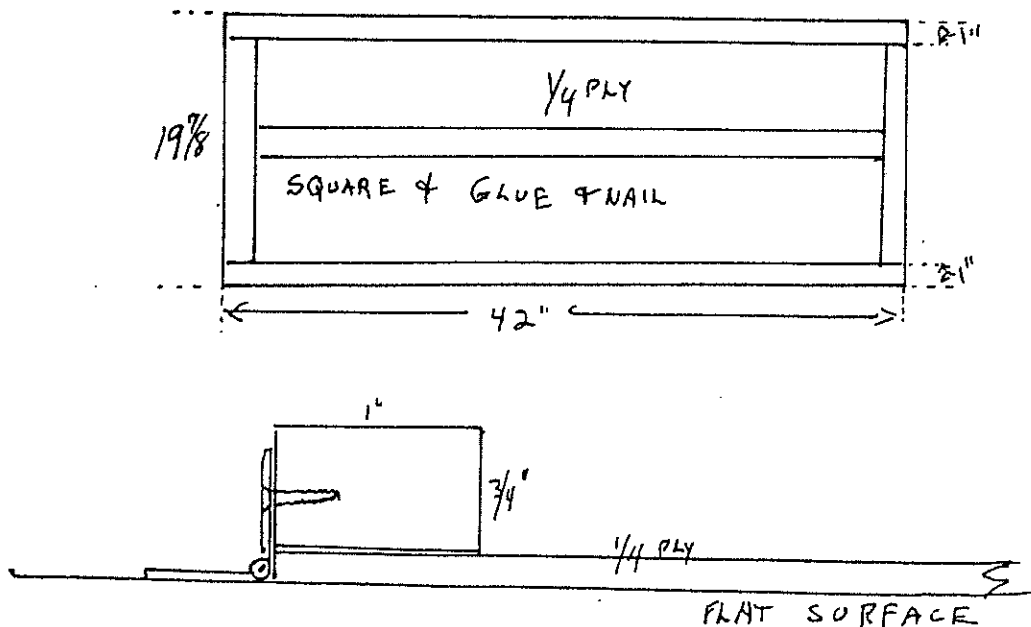
Now the bottom spacer. This time, only mark the screw holes with the tool later described. This spacer allows the bottom to fold up over the sides. Center the holes carefully because this controls the bottom being level with the filler strip.



The filler strip and the piece of spacer are 42 inches long and are now fastened carefully to the bottom edge of the back. Use cement coated nails and nail from the back. A little glue would help.

Assemble the sides to the back. Place them carefully down close and almost touching the bottom strip. Leave a card thickness between. Check to see after two screws have been placed in the hinge properly so that when the side swings out it comes flush with the outside edge of the back. If it is not perfectly flush, remove the screws and put in two other ones and check again.

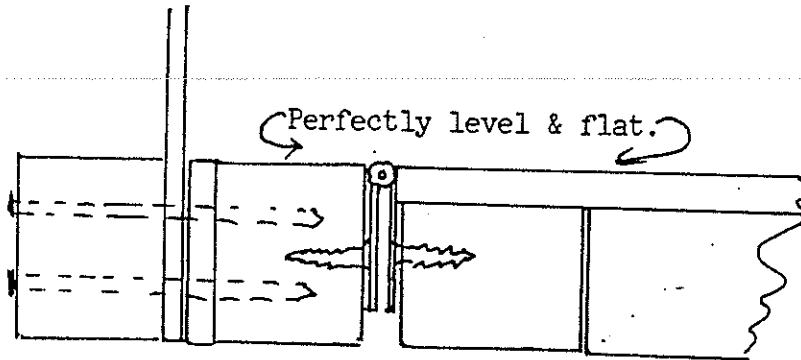
Build the bottom using 1/4 inch ply for strength.  
bottom:



#4

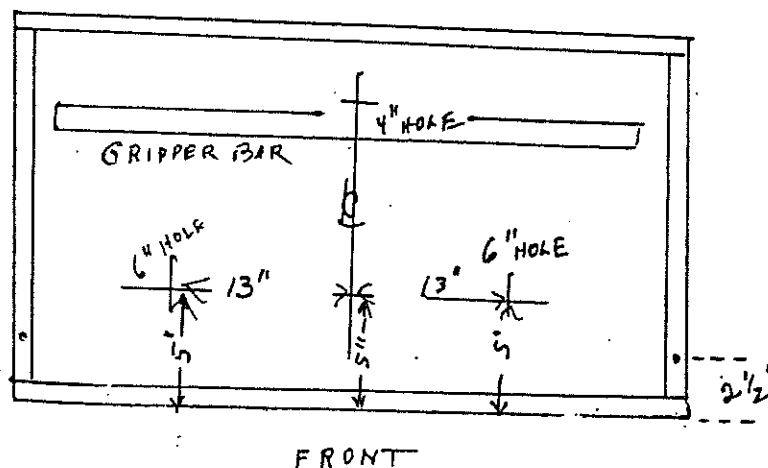
Attach the bottom:

Fold in the sides and place back down on the table. Adjust the bottom carefully over the prepared screw holes in the bottom spacer. Put two screws in and try for level when folded down. If correct, fold up and insert the rest of the screws.



Now check your front to see that all sides, bottom and top are flush on the front side. If not, trim a feather off the long side.

Frame the top with 1 inch strips and 1/8 inch ply. Glue & nail with tiny finish nails. Lay out the light holes and cut out with a jig saw. If it is necessary to have a cooling fan, get a very small type used to cool hi-fi amplifiers and build a box to hold it. Locate the fan hole as per drawing.



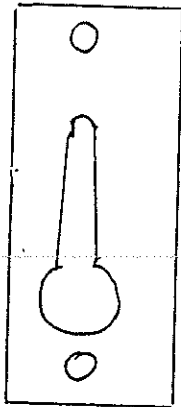
Place the top on the opened case and screw three double swing hinges to the back. These are the kind of hinges used on room divider screens.

Position the open case carefully and drill holes for the bolts that will hold it together. Some people use pins but that is not a very stable case, and can be opened by anyone easily. Drill top and bottom the same and put a "tee" nut on the bolt and tighten it down and finally strike it with a hammer to set it firmly. This type of nut stays there always ready to be used. Check the size you can find and drill to match.

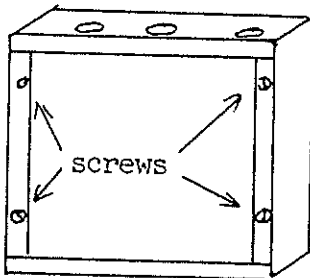
## Mounting the front.

With the four bolts tightened down, put the case on its back on the floor. Measure 4 inches up from the bottom and 4 inches down from the top and using your screw starter start 4 screws size to fit your keyholes.

MEASURE ACCURATELY  
(round heads) (screws placed on each side)



bottom



Full size detail of a "keyhole" (Called a hanger.)

Put a square of duct tape in about the location of where the head of the screw will strike the front. Position your front carefully flush on the bottom and with 1/16th overhang on each side (to hide the crack). Give each screw location a smart rap to mark the exact location to place the keyhole.



Place the keyhole over the mark so that screw will be in the top of the notch when the front is lowered. Start the screws removed <sup>AND REMOVE TAPE</sup> and chisel out the place for the screw head to slide into position. When there is sufficient room replace the keyhole. You will note that the round hole is at the bottom and the notch is at the top! Be sure to put the screws in their started hole.

Check out your screw to find the correct size to fit loosely in the keyhole. This method of fastening the front on is very neat. There are no ugly screw heads showing on the beautiful case front. To lock the case, hide a barrel bolt in the top corner that can be pushed into a small hole in the front. The keyhole may be hard to find but keep trying!  
--(See note on page 8 about a better way to lock the case.)

Lights:

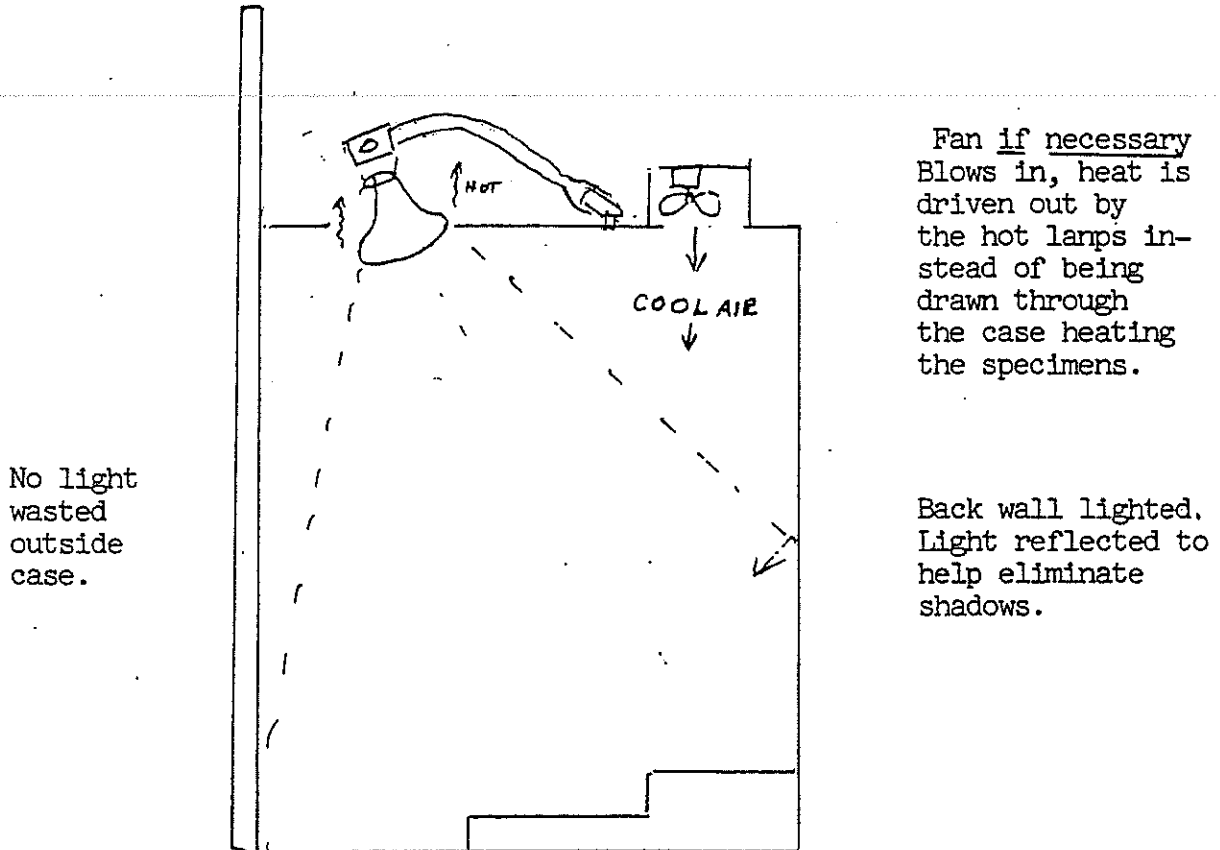
BUY 3 CLIPON LIGHTS. POSITION OVER THE LIGHT HOLE TO FIND THE LOCATION OF A  $5/8 \times 3/4$ " STRIP FOR THE CLIPS TO CLIP ON AND FASTEN IT IN PLACE MAKE A SMALL SLOT IN THE TOP FOR THE LOWER CLIP TO GRAB. IF NECESSARY.



Fasten the EMI to the boxes furiously tight so they won't loosen! The 3 wire utility # 14 with three prong plug attached will pass the inspection. The brackets are fastened on with wing nuts so they can be reversed in case it is necessary to change ends so the cord can reach a plug on the other side of the case. We usually use a 6' cord. *S. J. Keator Better*

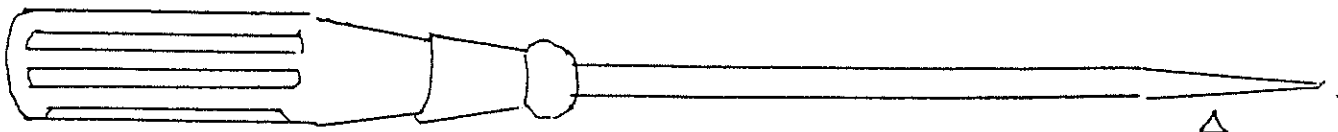
The plug is wired direct and the switch connects the lights. The lights can be turned off which leaves the fan running to cool the case for safety of some minerals, before the case is opened.

Side view of case lighted:



This is my screw starter for making holes: Find a medium small screwdriver that has passed its usefulness and file a slender three cornered point. This handy tool will center a screw hole perfectly. Don't throw it away, you will find a million uses for it. It is my patent. I'll bet I've made a hundred. Everyone wants one. You can drill a hole quicker than you can hunt up a drill. When it is dulled, it can be sharpened quickly & easily.

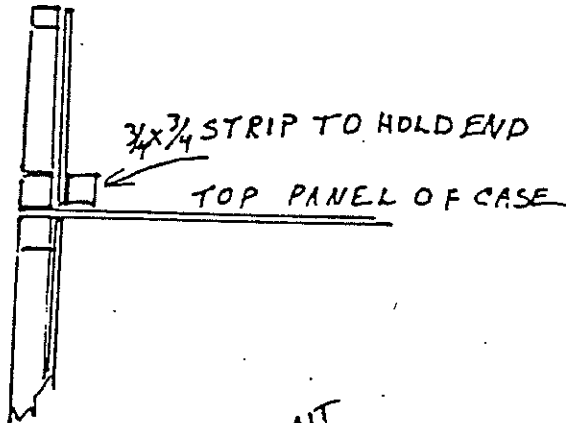
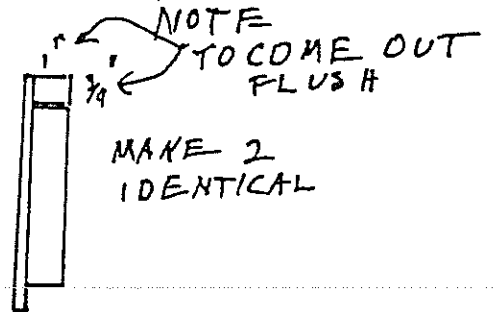
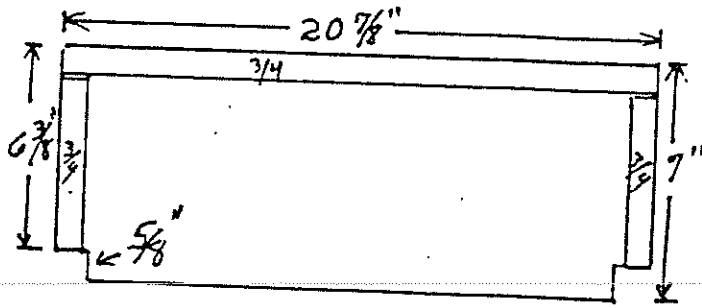
This plan was developed for two little ladies. It is light enough for them to handle and fits in their car. If you want a 48" case it would be easy to adapt these plans by making the back, top, and bottom 48" and the sides correspondingly wider. Naturally, the top and bottom must be wider too so the front is all flush.



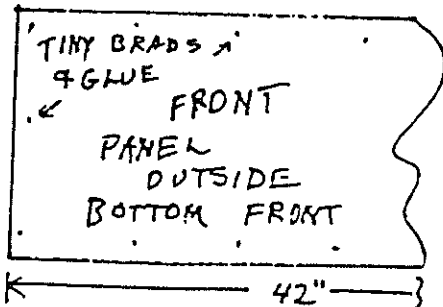
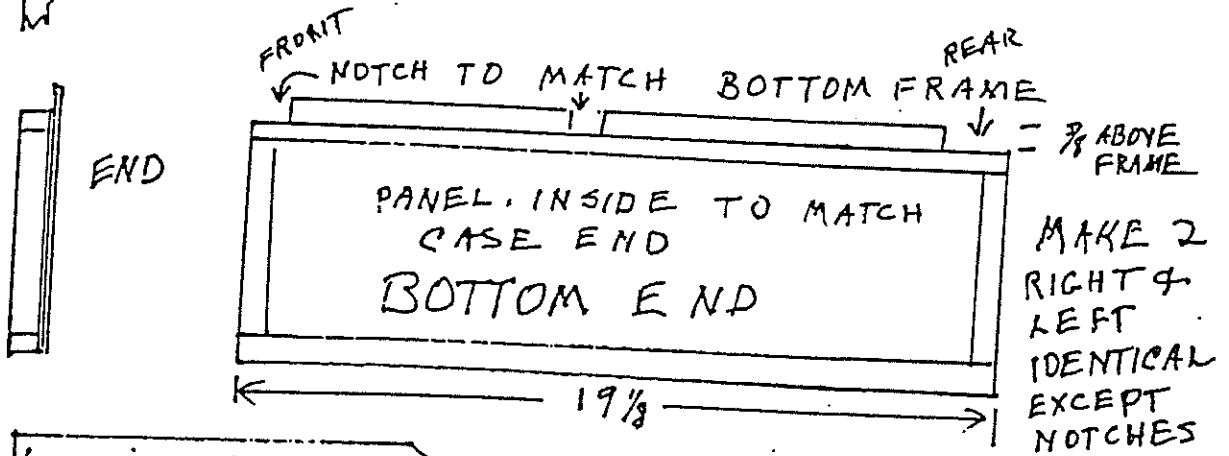
Any questions? ask:

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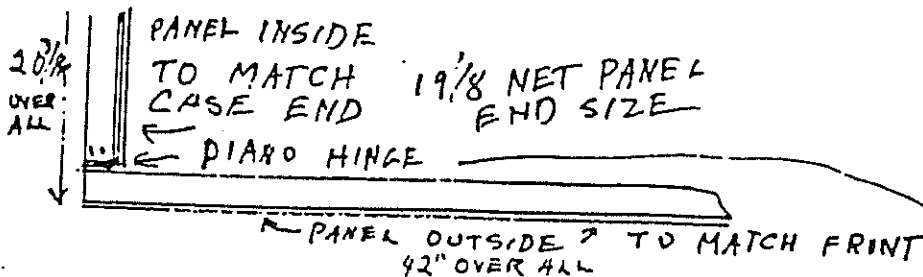
#7 Base and top light fixture shield



BASE IS NOT NEEDED IF TABLES ARE TALL (40 INCHES OR SO)



NOTE BASE SETS 3/8" OUT IN FRONT OF CASE BODY





If you wish a lock, try this:

WARDED BARREL KEY

DOOR/DRAWER LOCK

Set a bit sideways to screws can reach  
the narrow front frame.

Probably you will have to put a block in the frame  
of the front for the lock strike.

