### MATERIALS NEEDED

- 1. A length of aluminum angle extrusion (1 x 1/8in thick). You can get this at Home Depot or the like. 43 1/2 in. is needed for one flat top, so the 8 foot length available is the most economical. This will allow enough aluminum for 2 mods.
- 2. <u>2 Large flat head bolts with nuts and cup washers to fit.</u> The size is your preference, but make sure they are heavy duty. These will secure the ends of the aluminum to the top lid.
- 3. <u>12 small round head bolts and nuts.</u> These bolts will secure the hinges on top of both the leg compartment and the lid case. Make sure they fit the hinge holes you are using.
- 4. <u>2 extra hinges, and 2 extra latches.</u> These are in addition to the hardware currently on your Rhodes. The extra latches secure the main lid to the bottom case near the side handles, and the hinges fit on top connecting the leg compartment to the main lid (after they are cut).
- 5. Tolex. You will need to strip the current tolex off your top before starting, and retolex it when the cut is done. If you don't care about having bare wood, you can forgo this step, just cut the top with the tolex intact, and paint the exposed surfaces black. The finished product will not look as pleasing but it will save time. You may need to re-glue the edges down in places, though. NB: I leave the interior black tolex of the lid and compartment intact, and just do the sides and top.

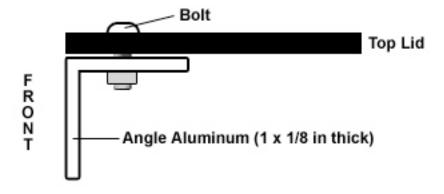
### **TOOLS NEEDED**

- 1. A table saw and/or a hand saw.
- 2. A drill with various size bits. Make sure the bit sizes match the bolt diameters.

### PROCEDURE

The goal of this mod it to have the leg compartment cut away from the rest of the lid for easy removal. This also make for a large, flat surface to place other keyboards on. Since the top lid is made of 1/4in masonite, it needs to be reinforced, hence the addition of an aluminum rail along the bottom, flush with the separation cut. The aluminum is extremely strong, but soft enough to drill and cut easily. It is connected to the top at each end, and is also strengthened by the addition of the hinges being bolted through. The leg compartment does not need to be reinforced. Here is a side view cutaway of the finished product.

# DYNO FLAT TOP SIDE VIEW CUTAWAY



### STEP 1

Remove the tolex and hardware from the lid (skip this step if you choose). Leave the interior leg compartment tolex on, as it will not affect the cut. This is a good time to sand everything down, and fill in cracks with wood filler if necessary.

#### STEP 2

Measure approximately 7 1/8 in. from the FRONT of the lid (where the leg compartment is) along the top side on each end and make a mark with a pencil. This is the guideline where you will cut the lid into two pieces. Use straight edge and pencil to connect these marks and make a guideline the full length of the lid. Since all Rhodes are a bit different, make sure this measurement lines up with the front corner of the plastic harp lid – on the sides, use a T square or other instrument to transfer the line straight down (please remember that the lid is angled on the bottom, sloping upward from front to back – your cut is straight down the sides perpendicular to the top).

## STEP 3

Make your first cut down the length of the top. Either use a table saw and set your fence so the blade lines up with your 7 1/8 marks, or staple a straight edge to the top and use a hand saw to make the cut. If you use a handsaw you will need make sure the straight edge is the correct distance from the guideline so the blade lines up with the marks. DO NOT TRY TO FREE HAND THIS CUT.

### STEP 4

You now have a still intact lid with a cut along the top length. The blade will not have cut the lid completely apart because it is not long enough to slice all the way down the sides. Stand the lid up on one of the side and use the handsaw to finish the cut (making sure it is square). You can freehand this one, just be careful and deliberate with your stroke. The cut should only be a few inches. Do the same with the other side, holding the both pieces as this final cut will separate the lid.

#### STEP 5

Retolex both pieces (if needed) and put corner hardware back on (and the original latch pieces that were on the lid. The folds at the corners will be a bit hard to visualize, but take your time and do it the best way you can. The same principles of the standard side corner folds apply, just with different dimensions.

### STEP 6

Cut the aluminum to length. It should be around 43 1/2 in. long, but measure the inside distance from side to side on your lid to make sure. The aluminum should extend to each end with no discernable gaps.

### STEP 7

With the aluminum flush to the lid cut, drill the end bolt holes – FROM THE BOTTOM, IE. DRILL INTO THE ALUMINUM FIRST AND CONTINUE THROUGH THE WOOD. You can clamp the aluminum to the lid for stability if you like. Make sure your bit fits the size of the bolts you have. Attach the aluminum securely to the lid with bolts, using a nut and cup washer. Don't over-tighten the bolts as the cup washer will sink in to the soft masonite.

## STEP 8

Line up the "hook" piece of the hinges on the TOP of the lid. The hooks should hang over the sides. Mark the holes, remove the hinge pieces, and drill the 6 holes needed for the hinge bolts – FROM THE TOP OF THE LID THROUGH TO THE ALUMINUM. Attach the hinge pieces with the bolts and nuts.

### STEP 9

Attach the original back hinge piece to the lid, and attach it to the Rhodes body. Then drill for, and attach a new latch to each side, just in front of the handles. These latches keep the lid secure to the body.

## STEP 10

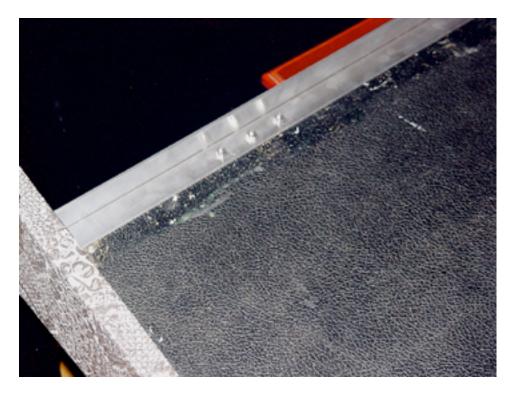
Attach the "loop" hinge pieces to the leg compartment. I would place the compartment on the body and latch it down (with the original hardware), then dry fit the hinge piece. Mark holes, then drill straight through. Use the remaining bolts and nuts to attach the hinge pieces.

(continued)

This may be hard to visualize at first, so I have included some pics of various Dynos.



Front view of the mod, showing the end bolt and hinge.



Underside of the lid, showing a hinge piece bolted through the aluminum.



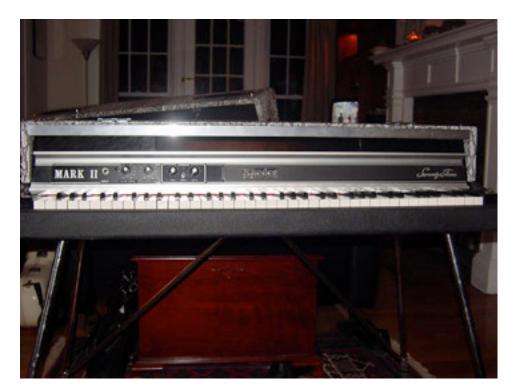
View of the Leg compartment (dusty).



View of the extra hinge.



Close up of the end bolt.



Full frontal – Dyno My Snakeskin (w/Pro EQ and Chorus modified nameplate).

By John Della Vecchia (March 1, 2003)