MsPac-Man Cocktail Table (ASSEMBLY INSTRUCTIONS)

(Photo of Cabinet built by Chris Moore)

Introduction

These plans were created by a couple of guys who frequent the RGVAC (Rec.games.video.arcade.collecting) Google newsgroup. Both measured actual cabinets and referred notes. Here is a little information about both of them.

Kyle Lindstrom

I first got involved into classic video arcade game collecting during the mid 90's. It all started when I noticed an auction on Ebay for a few video games in a town an hour away from me. I contacted the seller and found out that he not only had a few games on ebay but he had a small warehouse of games he was going to sell. I took a trip on the following weekend to check out what he had. When walking into his warehouse the first game that caught my eye was a Ms Pacman cocktail. I really wanted to buy it but I had just gotten married and my cash flow was low. I settled for a Donkey Kong Jr upright for $200. A little touch up paint and a cap kit in the monitor and the game was in great shape. Now I was hooked, I had to have more games. I saved up some cash and then contacted a local vendor. I ended up buying a mint Donkey Kong cocktail for $300, a Non-working Asteroids upright in awesome shape for $25, and Narc for $100. This hobby was now starting to become addicting so I made sure to always have some extra cash just in case I found some more games to buy.

Now here is where the story gets interesting. A friend mentioned that another local vendor has been renting a couple of storage units from his brother for the past ten years and that they were stuffed full of games. He said he would get some more information and get back to me. A few weeks later he called to tell me the vendor is tired of paying for the storage units and wants to get rid of everything in them. Their plan was to rent a big dumpster to haul most of it away. He also mentioned that I probably could buy everything for $500. I was so excited and couldn't sleep until I could meet with the vendor. A long story short I ended up buying everything they had in storage for $500. I ended up with 76 items, 11 pins, 36 video games, 20 dartboards and the rest were jukeboxes. In the deal I got (4) Mspacman, Tapper, Rootbeer Tapper, Galaxian, Pole Position, (2) Arkanoid, and long list of others. The best part was the pinball machines, Lethal Weapon 3, Funhouse, Diner, Game Show, Pinbot, Spy Hunter, and the list goes on. The final price per game worked out to $6.58 cents each! It took me about 3-4 months to sell off the stuff I didn't want or have room for and moved the rest to my house. Currently the games in my collection are as follows, Centipede (Multipede kit), Dig Dug, Kangaroo, Tapper, Rootbeer Tapper, Galaxian, Galaga, Burgertime, Donkey Kong Jr, Ms pacman, Golden Tee 98, Donkey Kong cocktail, Pacman cocktail (16-1 Multi-pac), Space Invaders cocktail project and Galaga cocktail cabinet that was converted to another game. My pinball machine collection includes Lethal Weapon 3, Funhouse, Diner, Game Show, Spy Hunter, Kings of Steel, Dragon, and Target Alpha. Now add a Rockola Jukebox, video slot, and a full size dartboard and my basement arcade is pretty full. Well enough about me, here is some information written by Chris Moore who helped me create these plans.

Chris Moore background:

I got involved in the arcade hobby about 2 years ago when a good friend introduced me to Thomas Campbell. Shortly after that I was invited to a party in the "basement" which was loaded with 15 + full size arcade games. Well, that's all it took. I have a small collection that includes, Galaga, Tempest, Ghosts 'N Goblins, DDK, MultiWilliams, Multipede, Bud Tapper CT and of course the Ms. Pac-Man CT.

I'm not so good with the electronics but I like to do cabinet restoration. So when I got this crappy Ms. Pac-Man CT, I decided to fix it up. The project got a little out of hand, and before I knew it, I was making it over from scratch. I documented the process so others could do the same. Good luck!

Special thanks to:

Kyle Lindstrom for taking a few notes and pictures and turning them into this amazing set of plans; Thomas C. for finding the laminate; Troy from Arcade Unlimited for selling me the original cabinet; Jason Bajic for letting me use the wood shop; Kerry Stair of Mantis Amusements; Steven Gregory of ArcadeShop; Bob Roberts for TONS of advice; and my wife Lisa for putting the high score on all my machines.

Note:

The cabinet that Chris made, (shown on page 1) was constructed by using 3/4" Birch Plywood and then applying a laminate on the outside. This was a lot of work but the result was one of the nicest reproduction Ms Pacman cabinets that I have ever seen. If you are interested in how Chris constructed his cabinet he can be reached at the email listed on page 4 of these plans.

Ms Pacman Cocktail contents

       This set of plans consists of three parts, Assembly Instructions, Part Details, and Actual Construction photos. Please read all of the instructions prior to cutting the parts so you get a good idea of how the cabinet is constructed. These plans can be used for making a Ms Pacman or a Galaga cocktail cabinet. The only difference between will be the control panel tops. The monitors are also attached to the top differently in many machines, but this doesn't effect the basic cabinet construction. The cabinet parts are small enough that most of them can be cut from one sheet of 4 x 8 plywood. Depending upon the components that you install (i.e. fan, toggle switches, speakers) there will be variations in the cutouts on the sides and bottom of the cabinet. The cutouts shown are for original Ms Pacman parts and after market equipment may not fit correctly. Weather using new or after market parts you will need to purchase the components and make the cutouts to fit each (coin door, fan, speakers, and vent covers). Note: When ordering a speaker make sure it is shielded speaker to prevent interference with the monitor.

       These plans are not for the beginning woodworker. There are many difficult cuts and a lot of areas that you will need to use a router. If you have never used a router please have someone assist you. To build a complete cabinet with control panels you will need the following tools and items.

Tools :   Skill saw (Guide is suggested for straight cuts)
Jig saw
Power Drill
Screwdrivers
Bar Clamps
Sander
T-molding cutter
Router (Plunge router is suggested)
Table saw
Square

Parts:

(1)	4 x 8 x 3/4" Thick sheet of Oak Veneer plywood (cabinet)
(1)	2 x 3 x 1" Thick sheet of standard plywood, Top (Item 10)
(1)	1" x 1" x 18" long Piece of pine, Top mount (Item 14)
(1)	1" x 2 1/2" x 12" long Piece of pine, Corner Gusset (Item 13)
(4)	Leg levelers with mounts
(1)	3/4" x 3/4" x 16" long Piece of pine, Corner supports, (Item 11)
(4)	Tee Nuts for mounting the leg levelers
(2)	Lock down clips to lock the hinged top to the cabinet
(2)	Full back to back wrap around Hinges for 3/4" door
(2)	1/8" x 3 1/8" x 9 3/16" Piece of white Plastic/Plexiglass for behind control panels
(3)	Speaker covers
(1)	Speaker (Shielded)
(4)	Glass clips. Can be purchased from (www.twobit.com), (www.arcadeshop.com)
(2)	Control panels for Ms Pacman, Detail is supplied so you can make your own
(2)	Control panel Bottoms for Ms Pacman, Detail is supplied so you can make your own
(1)	Coin door
(1)	Carpenters Wood glue
(1)	1" Wide T-molding, Black, (10 Feet) (www.T-molding.com)
(1)	3/4" Wide T-molding, Black Leather texture, (7 Feet) (www.T-molding.com)
(1)	Cooling fan and fan guard, (www.Happcontrols.com)
	Various #8 Wood screws for assembly

Control panels tops and bottoms can be purchased from various suppliers. My suggestions for purchasing are www.Arcadeshop.com , and www.Mantisamusements.com

Purchase your control panel tops and bottoms before cutting out the control panel sides and the cutout in the cabinets for the control panels. These parts vary from vendor to vendor and this will avoid any problems at assembly.

If you have any questions or need any help constructing your cabinet I can be reached at

lindstromk@hotmail.com

If you want to talk to Chris Moore who helped make these plans and who has built on of the nicest Ms Pacman cabinets that I have seen, can be reached at the address below. The Construction photo section of these plans consists of actual photos taken by Chris and he built his Ms Pacman cabinet.

cnlmoore@hotmail.com

Please insert Cocktail plans in the subject line so the emails do not end up in Junk mail. Also specify the type of cabinet you are making, Pacman, Ms Pacman or Galaga.

Thanks to Philippe Bourdon from Arcaderenovations.com for the scan of the Ms Pacman marquee.

Thanks to Mike Haaland for posting my cocktail plans. www.mikesarcade.com.

Thanks to www.arcadecontrols.org for also posting my cocktail plans.

If you are looking for other arcade artwork check out (www.arcaderenovations.com , www.Azarcadegames.com, www.arcadeshop.com) All are great people to work with.

For purchasing arcade parts, information on wiring a cabinet, repairing monitors, etc www.therealbobroberts.com

A special thanks to Dave Beaudoin for helping proofread the plans and converting them to .pdf

Assembly Instructions

Thoroughly read the instructions and review the detail drawings before starting construction of your cabinet.

Before cutting out any parts note the direction of the wood grain. Cutting one piece with the wood grain in the wrong direction will really ruin your day. Start the assembly process once all of the parts have been made for the project and the T-Molding groves are cut. Test fit all the pieces to ensure that all the parts fit properly before gluing. It would be a good idea to sand all the pieces and then paint the black on the parts prior to assembly. If you want you may also stain and finish the pieces prior to assembling the cabinet. Below are pictures showing where to paint the black prior to assembly. Paint approximately a 4" wide strip on the inside edges of the Rear Top (Item 4). Also paint black the bottom side of the Top (Item 10).

5
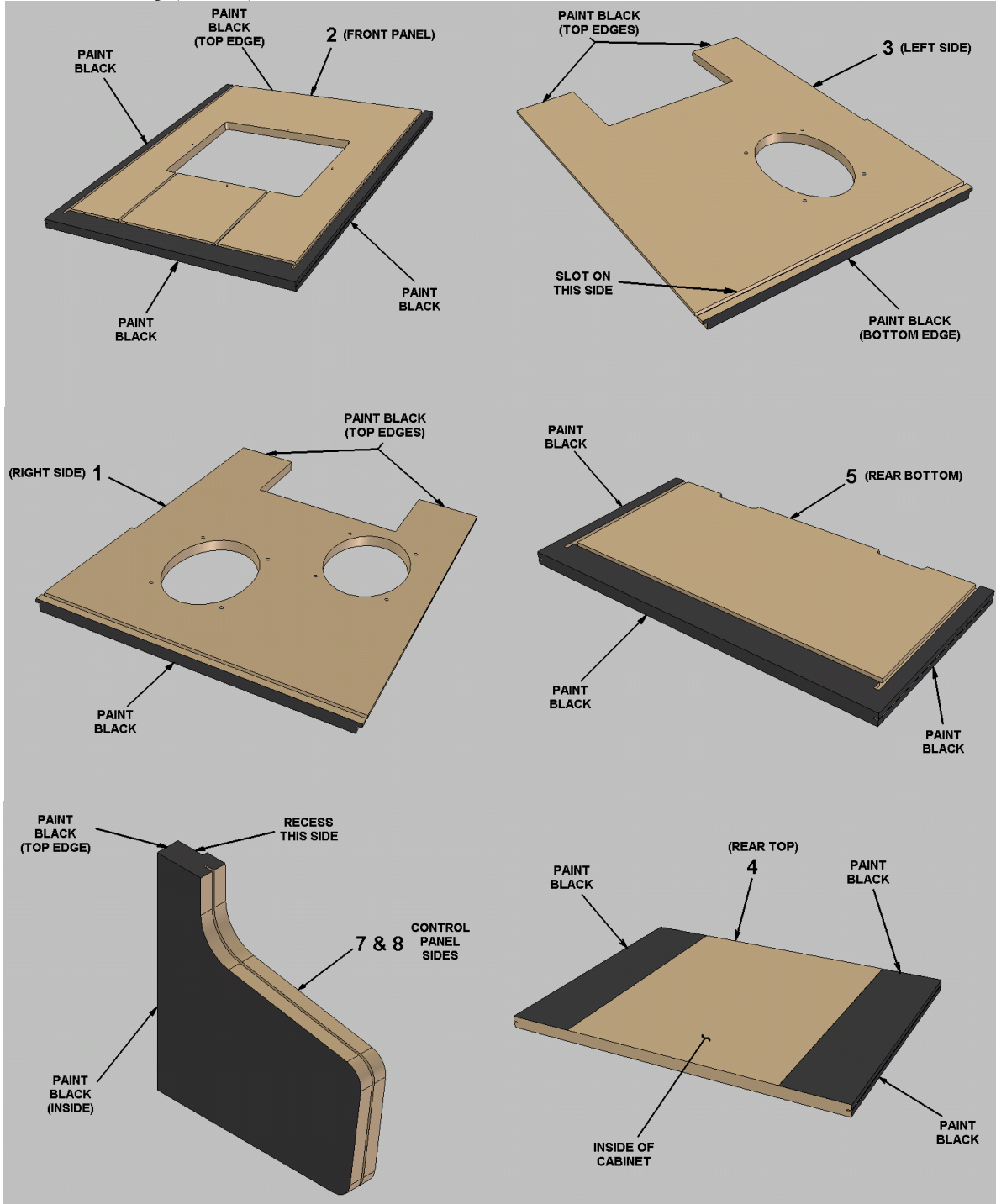
Step 1

The first part of the assembly process is to assemble the Front (Item 2), Bottom (Item 6) and Left side (Item 3) of the cabinet. Use glue in the slots on the front and bottom to attach them together as shown in Figure 1. Add glue to the slot on the front (Item 2) and the slot on the Left side (Item 3). Slide the Left side (Item 3) in place as shown in Figure 2. The top edge of Item 3 will be flush with the top edge of Item 2. The bottom edge of the Item 3 will be flush with the bottom of Item 6. Now install the Corner Gussets (Item 13) using 1"wood screws. The top gusset should be 1/2 " from the top of the cabinet. The bottom Corner Gusset (Item 13) will be 5" from the bottom of the cabinet. Glue the small Corner Supports (Item 11) in the corners as shown. The location of the corner supports are not specific, just place them so they look nice.
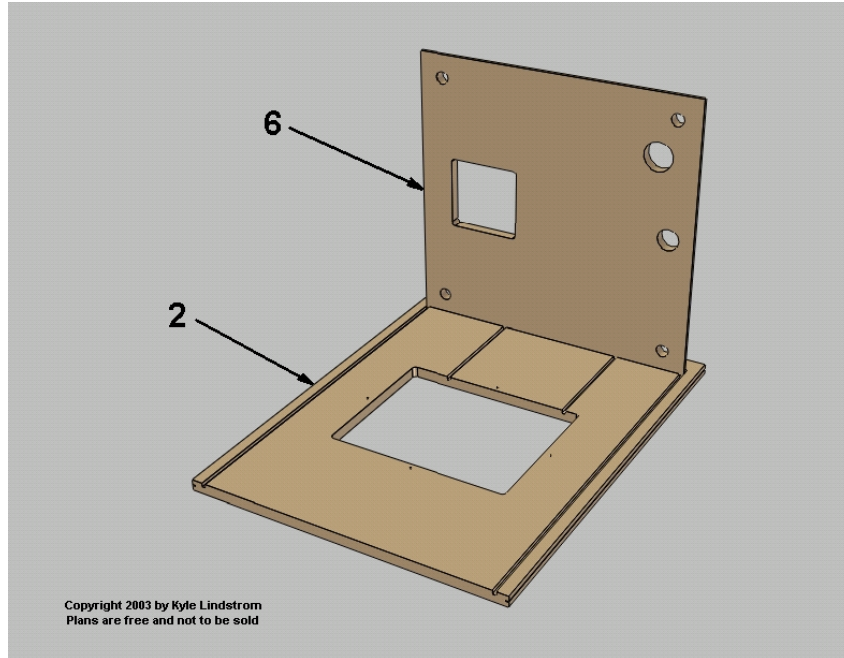
Figure 1
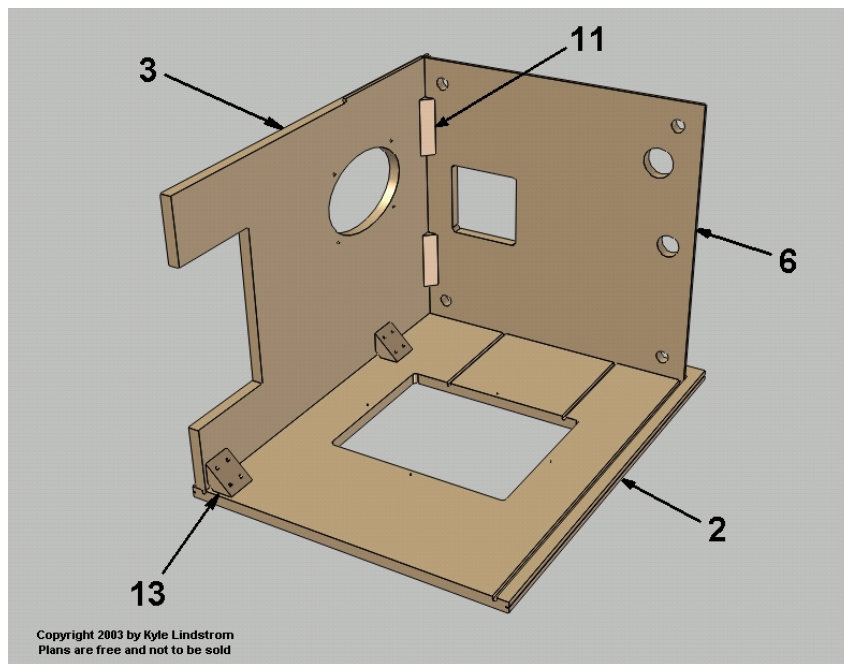
Figure 2

Step 2

Next you will attach the Right Side (Item 1) of the cabinet the same way you installed the left side. Place glue in the slots on the right side and cabinet front. Slide the right side in place by lining the slots on the bottom and the front with the slots and tabs on the right side. Once the right side is in place you can install the Corner Gussets (Item 13), and the Corner Supports (Item 11) just like you did on the left side of the cabinet.
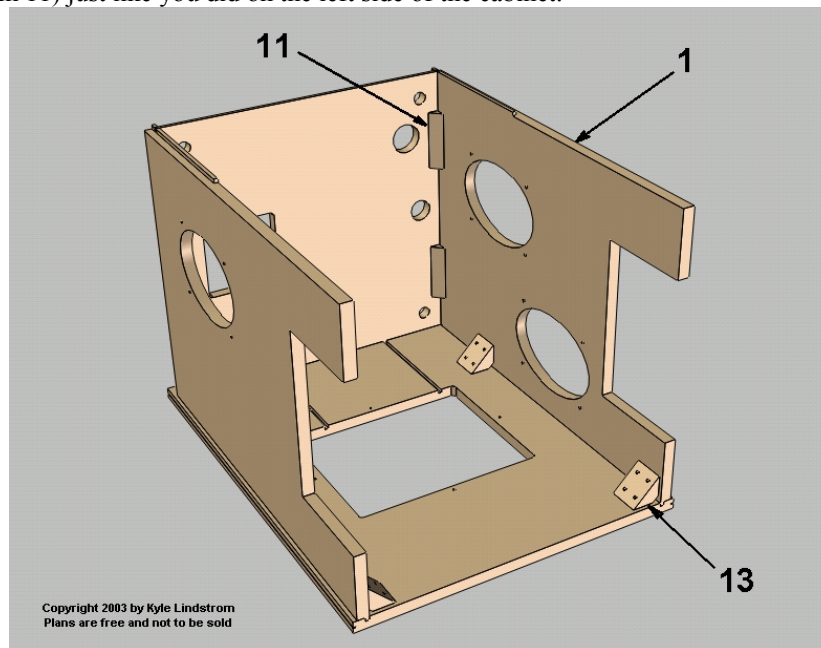
Figure 3

Step 3

The next step is to install the rear bottom of the cabinet (Item 5). Put glue in the slots on Item 5 and install it to the cabinet. The bottom of Item 5 should be at the same level as the front of the cabinet. Use bar clamps between the front and rear of the cabinet to hold it in place. Now install the corner gussets Item 13 in the rear of the cabinet using 1" wood screws as shown below. The gussets should be 2 inches from the top of Item 5. See Figures 4 and 5.
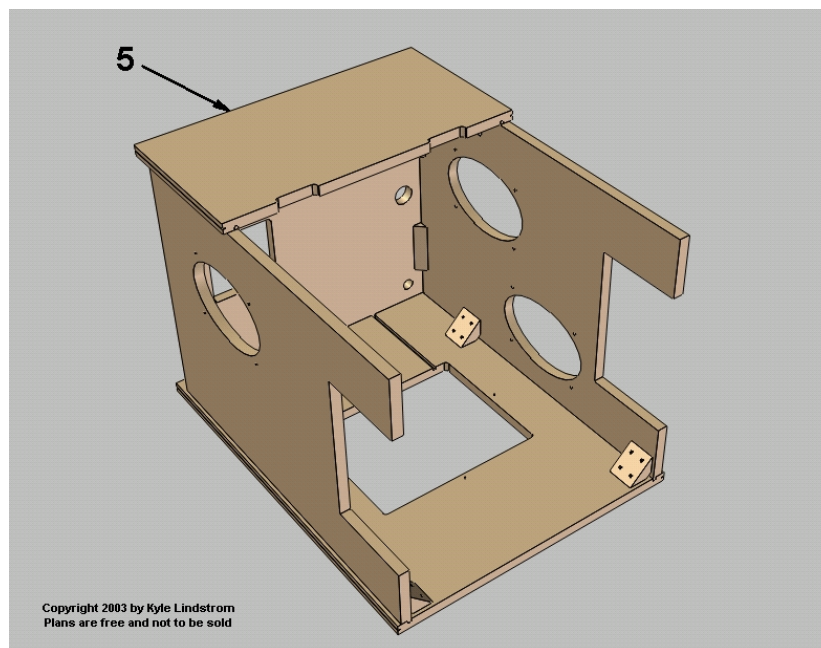
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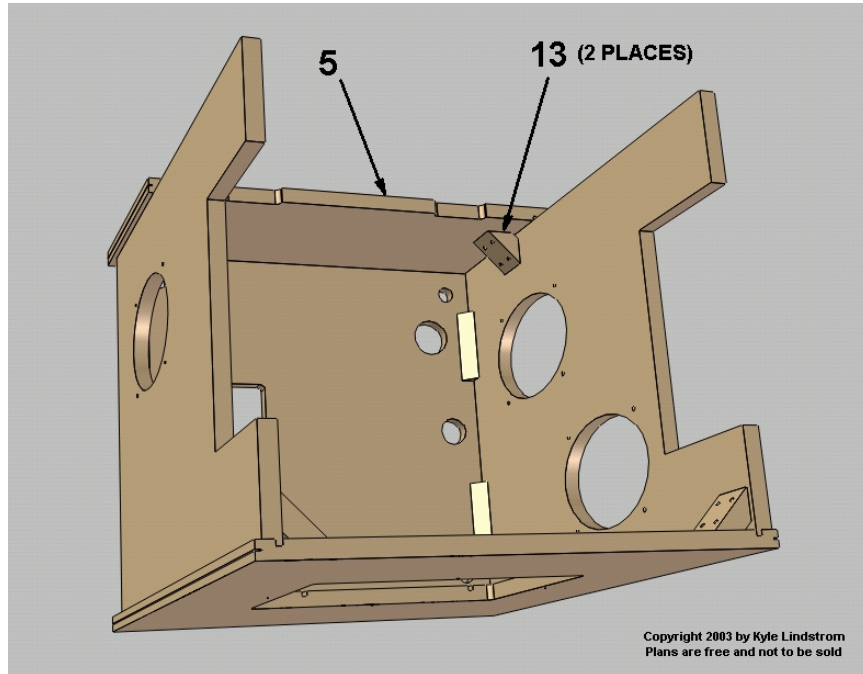
Figure 5

Step 4

Now the basic structure of cabinet is completed so set it aside for a day for the glue to dry. Next you will make and install the coin box. The coin box is made from Item 9 and two of Item 12. Glue the coin box together as shown below. The 3 pieces should all be flush on the bottom. Item 9 will be 1/4 " higher than Item 12 on the top. Use nails to secure the glued joints of the coin box in needed.
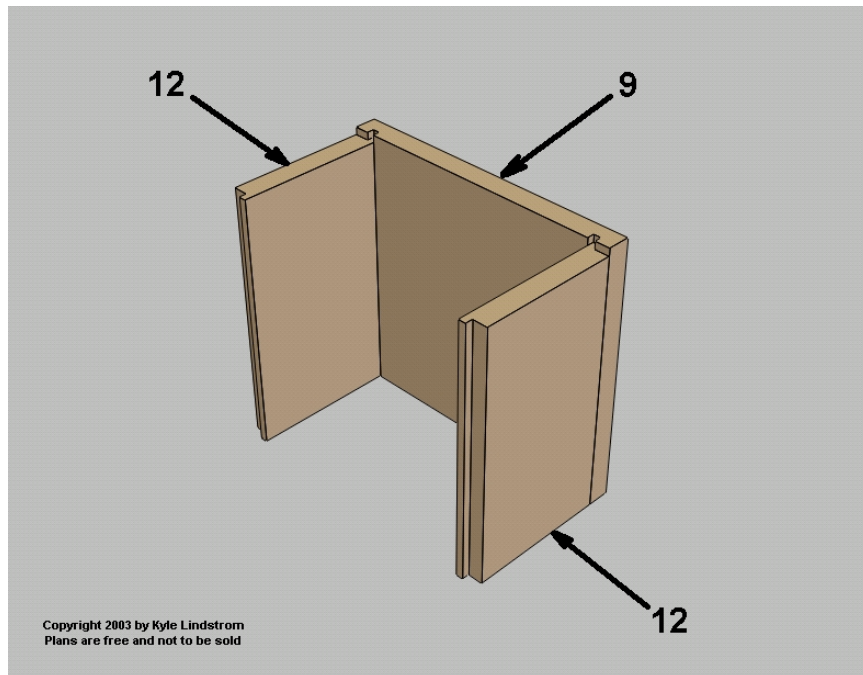
Figure 6

Step 5

Once the coin box is assembled, you can install it into the cabinet using glue. Nails can also be used to secure the coin box in place. The coin box will fit into the slots on the front panel and will extend into the opening of the coin door as shown in figure 8.
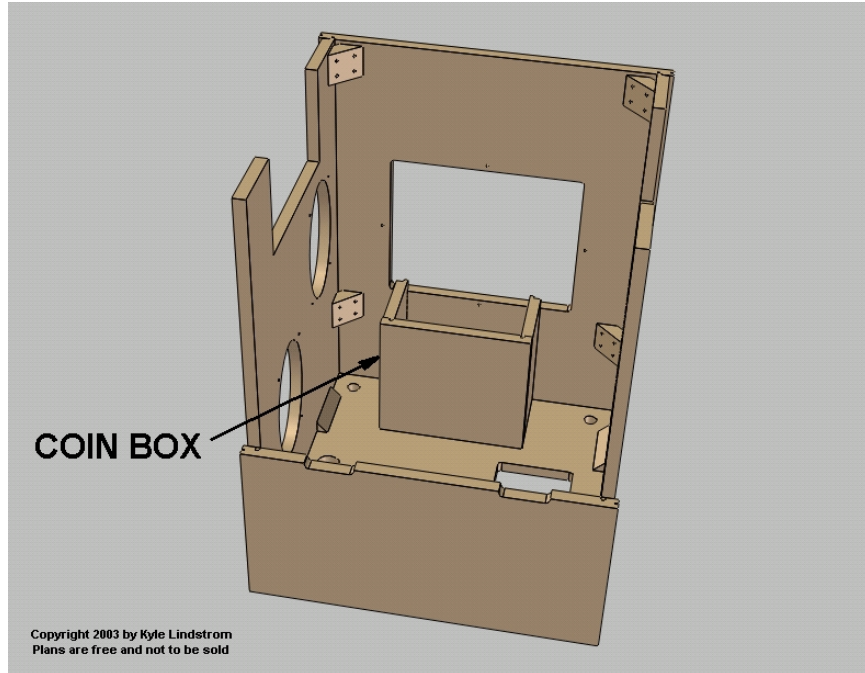
Figure 7
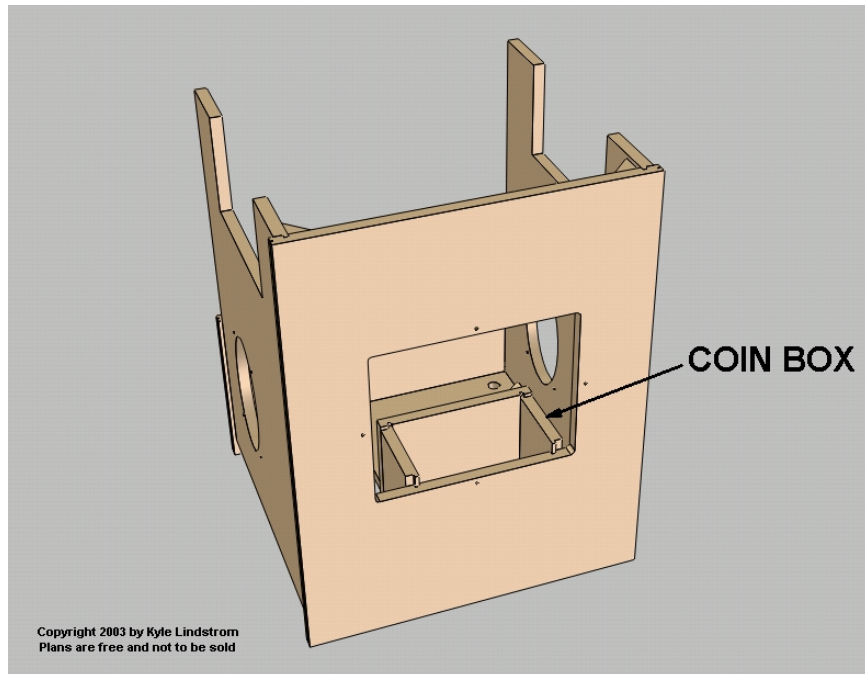
Figure 8

Step 6

The next step is to install the Rear Top (Item 4) of the cabinet. It's secured in place using 2 full back-to-back wrap around hinges for a 3/4" door. The thickness of these hinges will vary so purchase your hinges before cutting the relief cutouts in the Rear Back (Item 5). The depth of the cutouts will vary from no cutouts to 3/8" deep cutouts. The Rear Top (Item 4) is made longer than needed because of this. When installing the hinges make sure to align the outer edges of the Rear Top (Item 4) with the Rear Bottom (Item 5) of the cabinet. Once the hinges are installed make sure they operate properly. With the Rear top in the closed position mark locations on it so that it will be flush with the sides of the cabinet. Remove the Rear Top and cut off the excess material. Reinstall the Rear Top to the cabinet.
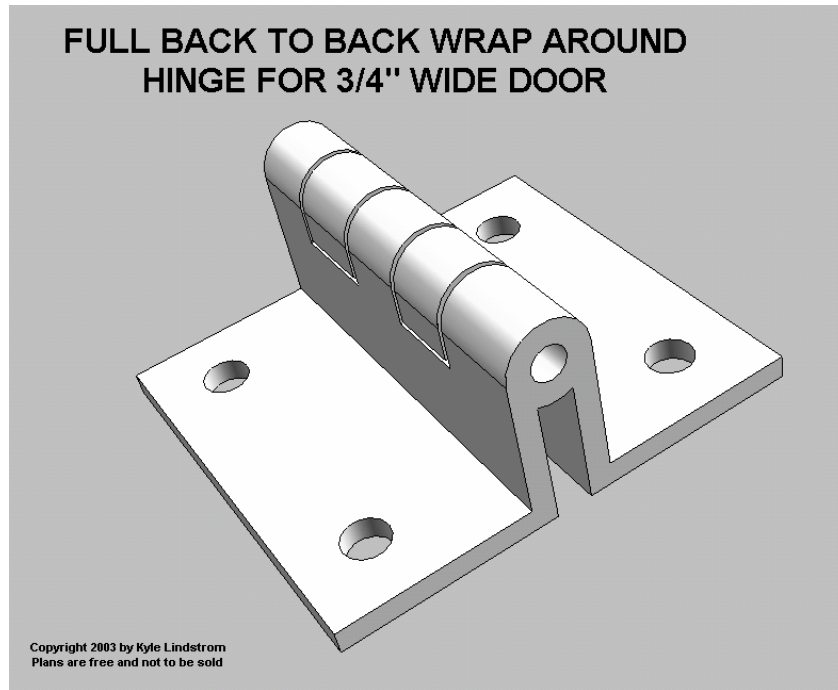
Figure 9
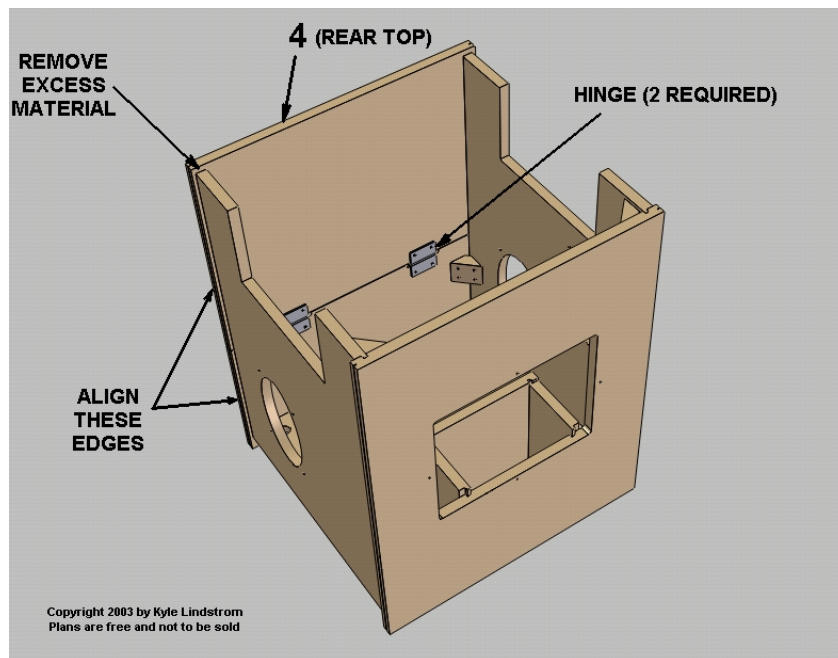
Figure 10

Step 7

Now attach the Top Mount (Item 14) to the Rear Top (Item 4) of the cabinet using 4 countersunk woodscrews. The Top Mount will be flush with the top of Item 4 and will be centered between the sides of the cabinet as shown.
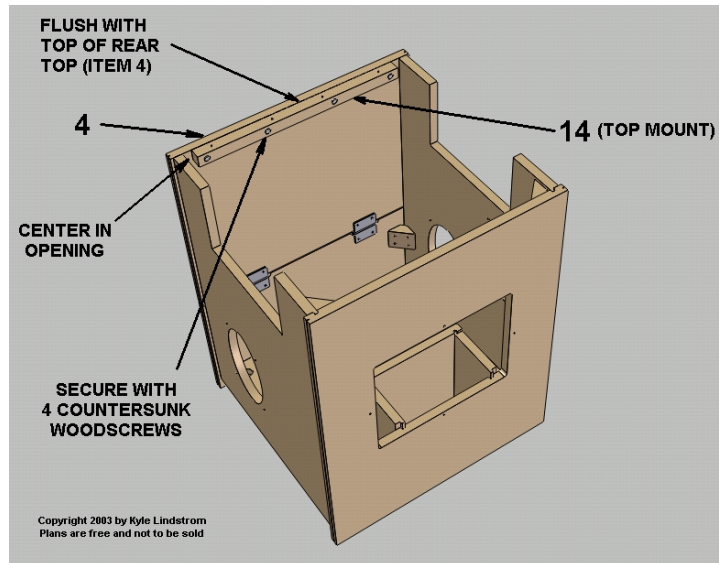
Figure 11

Step 8

The next step is to install the Top (Item 10) to the hinged Rear Top (Item 4). Clamp the Rear Top in the closed position using a bar clamp. Next place the top (Item 10) on to the top of the cabinet. Center the top so the left and right sides have the same overhang and the front and rear have the same overhang. Once it is centered, trace the Rear Top location to the underside of the top (Item 10) to mark its location. Remove the top and place upside down. Remove the hinge(s) from the rear lower panel of the cabinet so the rear top panel is removed. Place the rear panel in the location you just marked earlier on the underside of the top. Glue and screw the rear panel to the top using (4) 1 1/2" long wood screws. Set this top assembly aside to dry and so it can be installed later in the assembly process. Figure 12 shows how the top should be placed and centered on the cabinet. The grooves around the cutout in the top (Item 10) should be facing upward. Figure 13 shows how the top rear panel attaches to the top.
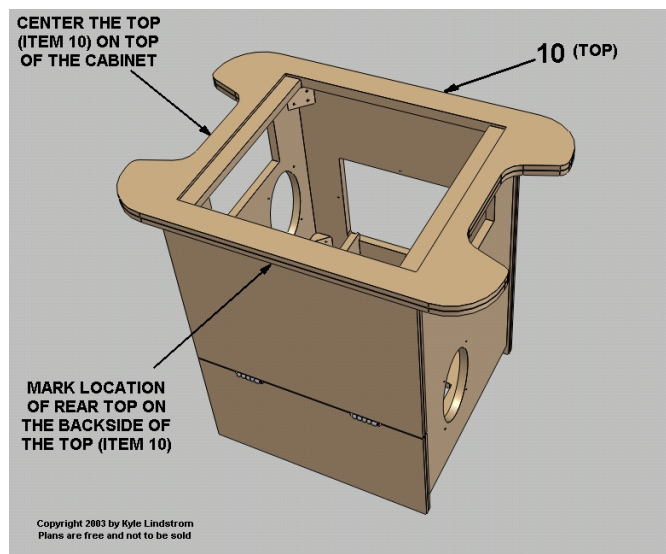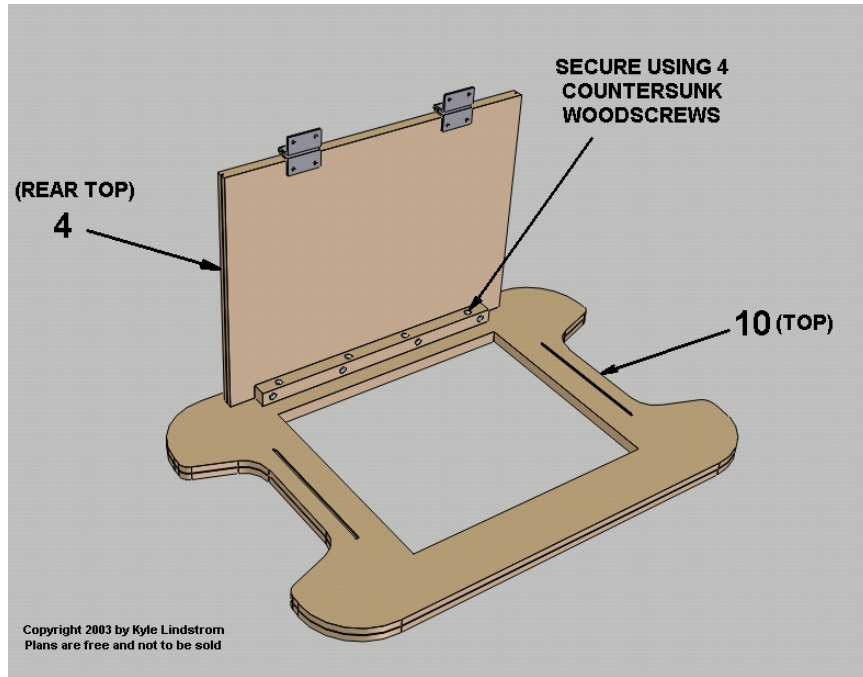

Figure 12

Figure 13

Step 9

With the top assembly finished and removed from the cabinet now is the time to install the control panel. The two control panels are identical. They will first be assembled separately and then installed onto the cabinet. Each control panel frame consists of (1) Left Side (Item 7), (1) Right Side (Item 8) and (1) Control Panel Bottom (Item 15).
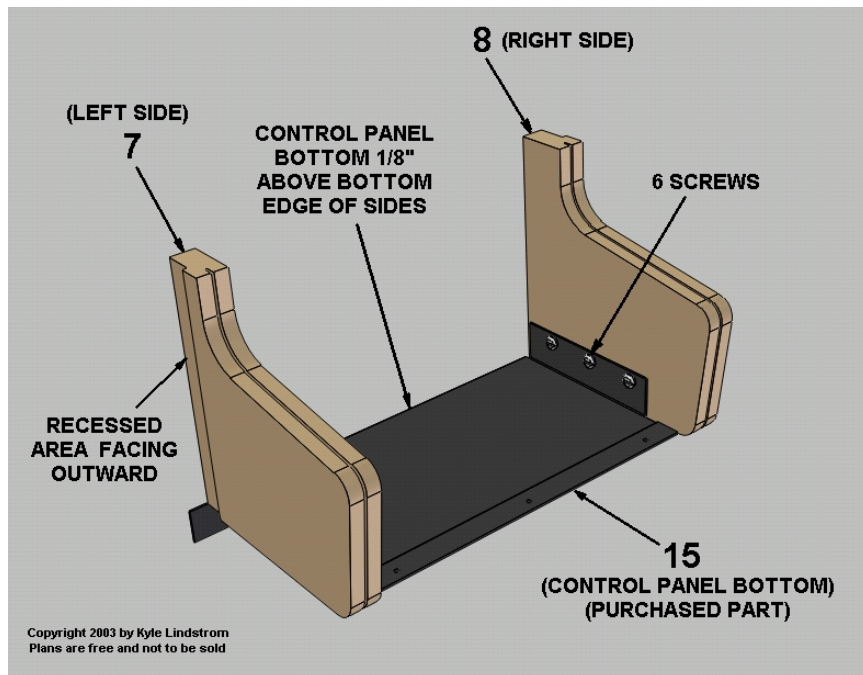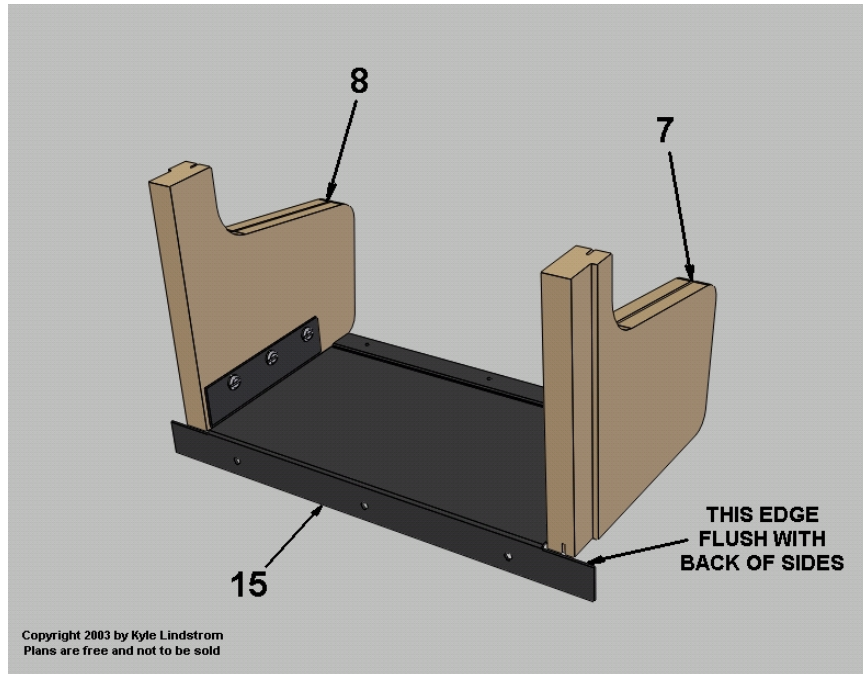

Figure 14

Figure 15

Step 10

Once the control panel frames are assembled the control panel Tops (Item 16), "Z" Brackets (Item 17) and the white Plexi-glass Backs (Item 18) can be installed. Install the control panel Top to the control panel bottom with 3 screws, Figure 16. Now install the white Plexi-glass to the back of the control panel top. The plexi-glass should extend 1/8" above the top of the control panel sides and goes between the control panel top and the "Z" Brackets as shown in Figure 17.
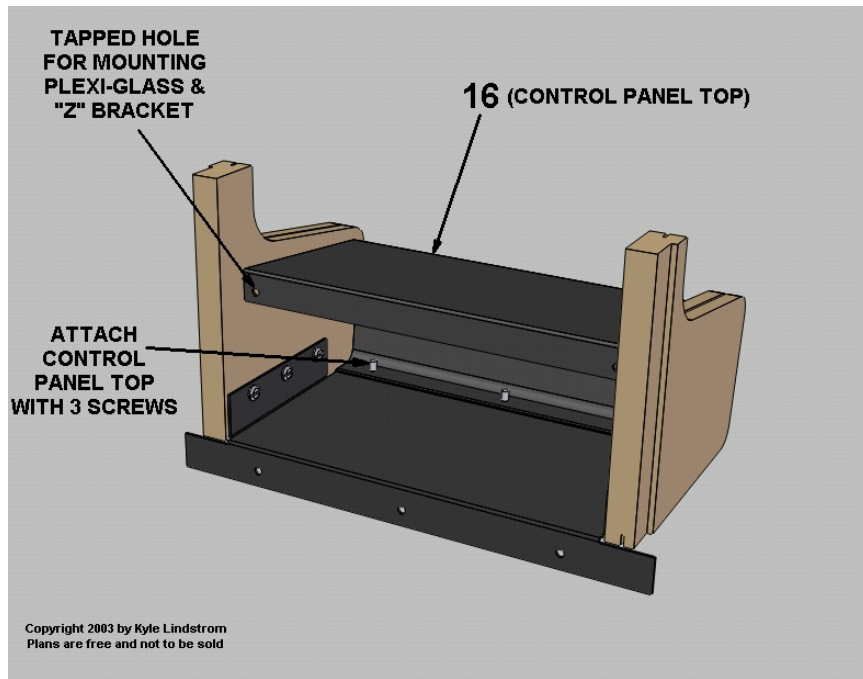

Figure 16
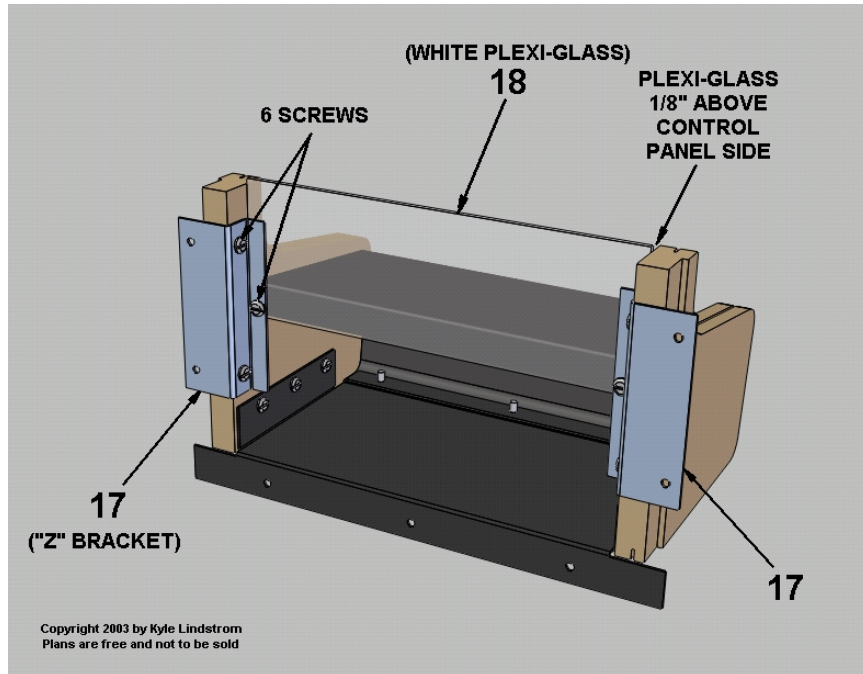
Figure 17

Step 11

With the control panels assembled they can be installed into the cabinet with 7 screws per side. The control panels will slide into the cutouts on the sides of the cabinet. Note the control panels are screwed in place and no glue is used.
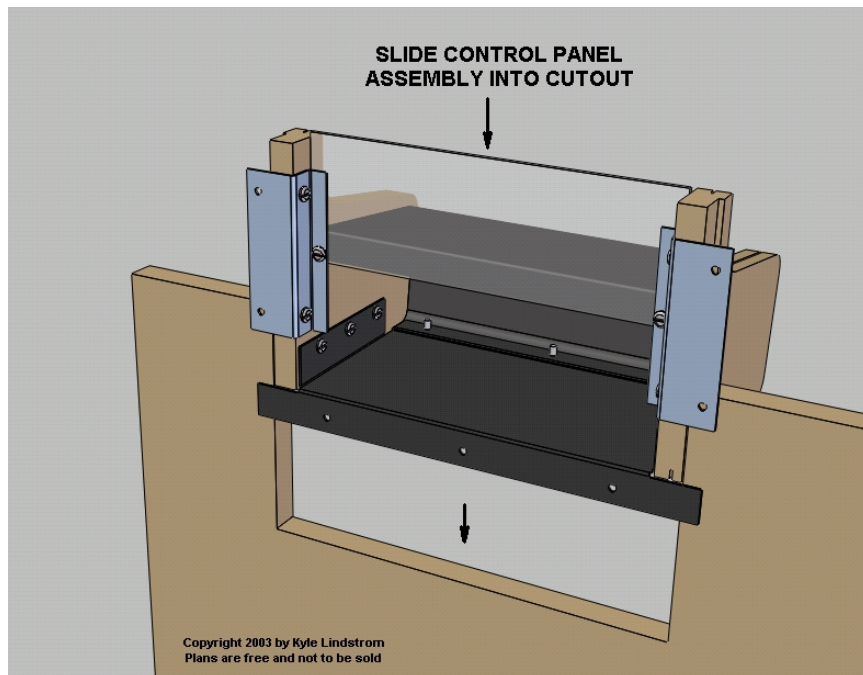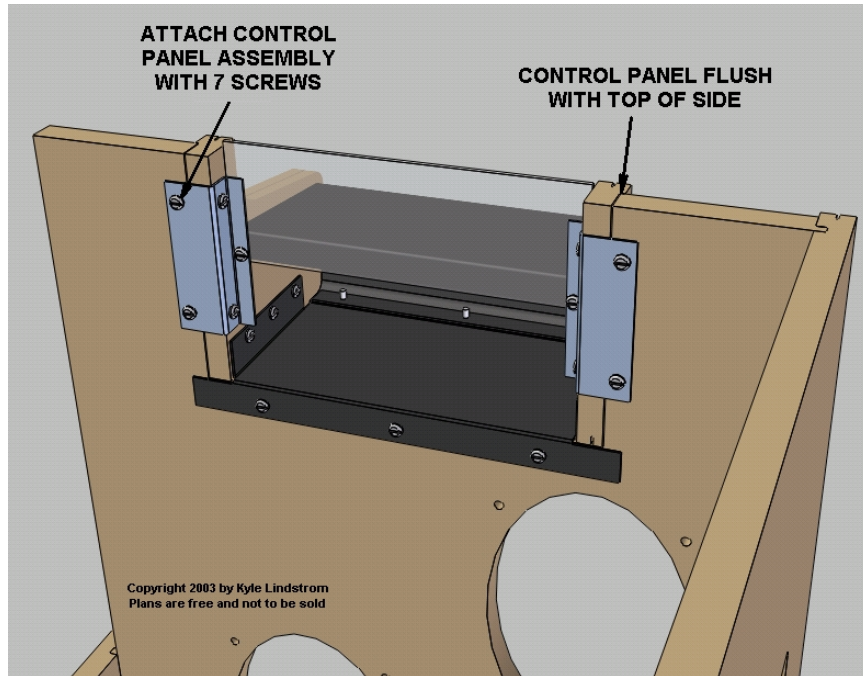

Figure 18

14

Figure 19

Step 12

The construction of the cabinet is basically done. One last step is to install the leg levelers and mounts on the bottom of the cabinet. The levelers will be centered in the 4 holes on the bottom of the cabinet. When installed the levelers should extend past the bottom of the cabinet so that it rests on the levelers and not the front and rear of the cabinet. If you already put a finish on your cabinet before assembling you can now install the T-molding. Once the T-molding is installed you can reattach the Top Assembly to the cabinet.
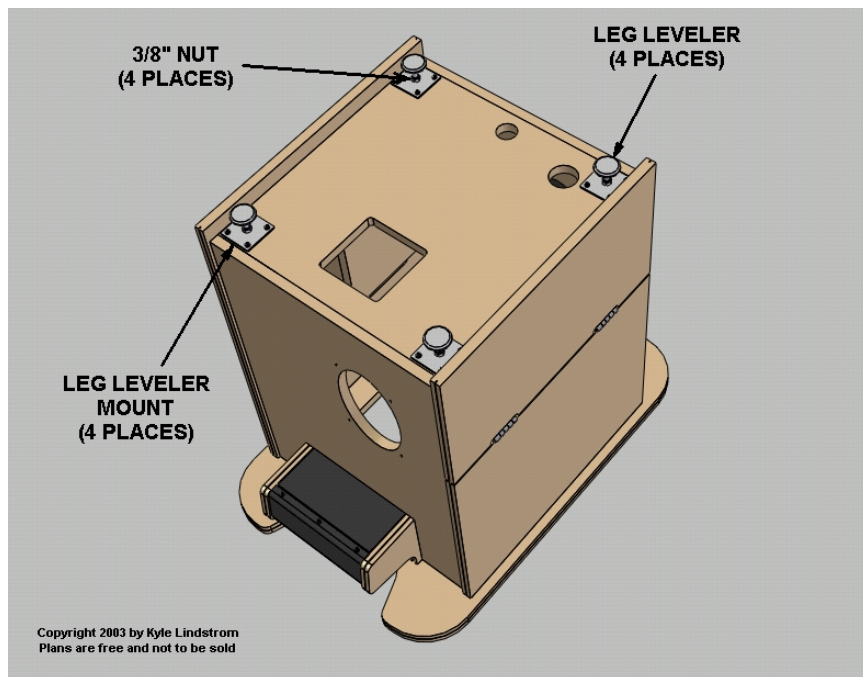

Figure 20

To finish the cabinet you can install a coin door, speakers, speaker covers, a glass top with clips, and other misc. parts. Here are a few pictures of what the finished cabinet will look like. I hope you enjoyed the plans. Let me know how your cabinet turned out.
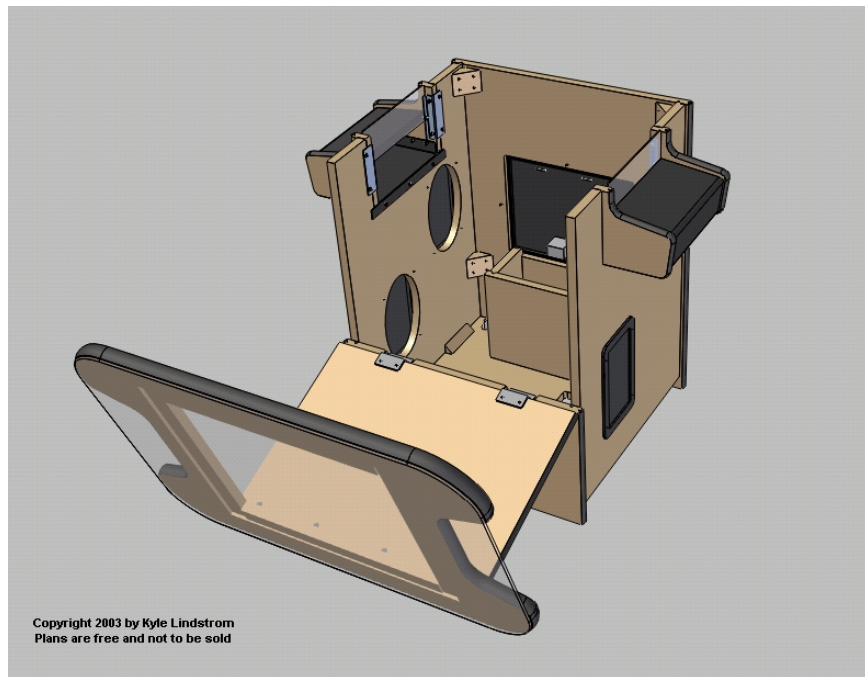

Figure 21

Figure 22

Figure 23