

http://www.geocities.com/hallohall180/HEARSEMAIN.html

THE HEARSE MAIN



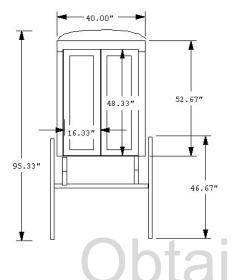
Well, if your feeling ambitious and you have a lot of room to store your props you may want to make one of these. This was done for the 2003 walk and took me the whole off season to make.

It does not break down into a smaller pieces so I have it stored next to the OK coral behind our shed. I cover it with a tarp and the driver goes inside, then I covered the seat with a piece of plywood and it made

it through the winter just fine. Again this was not a cheap prop to make but was VERY impressive in the front of the haunted walk.

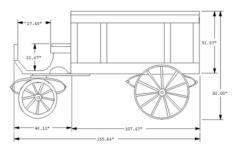
The driver gives his warning not to go inside the gate and after a short pause the coffin in back shoots up a dead corpse and it screams while a strobe light goes off. I'll try and cover the highlights of the build and stuff that I would do different if I did it again. If your ready onward we go.....

HEARSE CONSTRUCTION



Here are the general dimensions for the hearse size, yes it really is that big. I made it in two parts the back part is for the coffin and the front seat section was added to it after it was made.

The wheels I made out of two sheets of 3/4 inch CDX plywood that was glued and screwed together and then cut out as one piece** The axles for the wheels are made of 3/4 inch black pipe that are bolted to pipe flanges in the wheels.



The first thing I did was make a base frame for the back half out of 2×4 's. I made it like a wall section putting cross pieces 24 inches on center and doubling it up where the back axle was going to attach to the bottom.

As you can see from the picture I don't have a lot of room in my shop for something so big so I put casters under the corners of this frame so I could roll it around to work on each side. Now I topped the frame with 3/4 inch chip board to lessen the weight I should have used 1/4 inch. Then I screwed 2 x 4 up rights to the base and then cross pieces on top to make frames for the windows. The front was a piece of the 3/4 inch chip board screwed to the up rights.

Now I nailed on different sizes of 3/4 inch pine boards to finish off the outsides. The bottom strip is a 1 x 10 and the top is a 1 x 6 as are the middle up rights. The moldings are half rounds that run up the middle parts and the one on the bottom was made on the router table out of a 2 x 2 and then cut in half and nailed to the 1 x 10.



The next part was to make the skulls on the outside tops. I used the plastic overlay from a create-a-face package as the mold and filled them with plaster before the plaster got hard I stuck a 3/8 x 6 inch long carriage bolt into the back of it and let it set up.

After I pulled it from the mold and let them dry for 3 days I painted them yellow and added the black lines and eye sockets then I drilled into the eyes for LED's

and hot glued them in. I made two layers of a cloudy acetate plastic to go overthe eye sockets and hot glued those in as well so the light would be defused when they were lit.

Now I drilled 3/8 inch holes into the tops of the partitions and put the skulls on with a washer and nut. I ran the wires for the eyes through separate 1/4 inch holes to the inside. The lanterns on the front were from Meandrous and I put extended posts on them so they stuck out farther to clear the roof. Inside I used a flame bulb. All the wires were run inside of the hearse along the up rights and then were led up to the front then through the front wall where the seat was going.



The next thing I did was to put the roof on I made some supports out of 1 x 6 pine and cut them into half moon shapes and notched the ends to fit on to the 2 x 4 top structure.

Cut the front wall to shape and use this for the pattern to make the rest of the supports. I spaced them 16 inches on center and glued and nailed them down on the ends to the top frame.

Next I used 1/4 inch waffer board on top and nailed this to the cross supports, you will need more that one piece to cover it so make sure that one of the supports will lay where the edges of the two sheets meet.

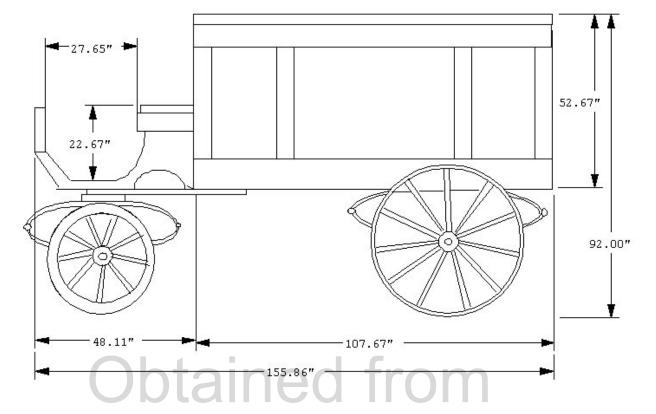
After I had this part done I moved on to the front section. I cut it out of 1/4 inch CDX plywood and used 3/4 X 3/4 inch nailing strips to put it together at all of the joints. For the curved floor I used a piece of 1/4 inch wafer board and saw kurfed the back of it so it would be able to make the bend. Then I nailed it to the same strip material so it would curve. The top of the seat is made of 3/4 inch plywood and is removable, under this is a platform for all of the electrical wires and switches.

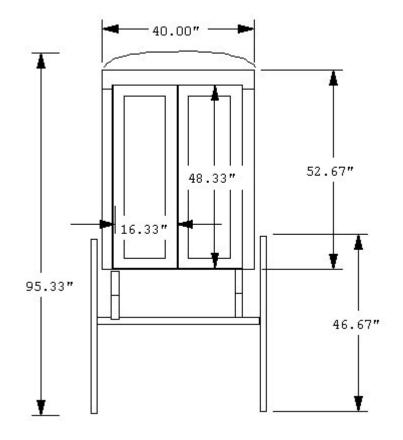
This would be where you hook up the leads from the back half of the hearse. The driver is mounted to this removable part so it can be brought in the house. The two hand rails were made out of 3/8 inch copper tube and screwed to the top of the seat. The whole thing was then painted with an exterior gray paint from Wal-Mart and the insides were painted black.

The trim was painted with a gold enamel and then clear coated. I installed windows made of weather proofing plastic to the inside of the back section (the heat shrink type) by first putting down the double face tape, then the plastic and then a $3/4 \times 3/4$ inch pine frame on the top that was screwed into the outside pine boards.

Then I used a hair dryer to shrink the film tight, worked great and looks like glass at a fraction of the cost! The front half and the back half are joined with screws through the front wall and into 2×4 studs on the inside of the seat back, an extra 2×6 was installed under the bottom and lag bolted to the back frame for extra support. The whole thing was then wheeled outside and raised up on saw horses so I could get the wheels on.

Tained





HEARSE CONSTRUCTION 2



For the front wheels I made a 2×4 cross piece and then cut out two 18 inch circles of $\frac{3}{4}$ plywood.

In between these two plywood disks I mounted a 12 inch lazy Susan bearing so the front could be turned.

This was screwed to the 2 x 6 under carriage and the 2 x 4 cross piece. The front wheels were then screwed to the 2 x 4 with pipe flanges and 8 inch black pipe that runs down to the axle.

For the axle to turn I used a 3/4 inch to a 1 inch T and ran the axle through that. The end caps on the outside of the wheels are plastic flower pots that are screwed on the center of the wheels. The back wheels are mounted the same way but screwed to the doubled up 2 x 4 in the back.







THE HEARSE DRIVER



To start the driver I used a 4th class bucky skeleton and a pair of the eyes that they sell from anatomical chart company.

Since all I really needed for him to do was move his mouth and swing his head from side to side I only needed two servos to run him. These were installed just like the ones in the organist head but I didn't put any LED's in the eye sockets.

The false eyes that I used were epoxied onto 6 inch pieces of wire and drilled into the socket backs and epoxied so they floated in the sockets instead of just gluing them to the bottoms of the openings. Now take the pelvis bone and with the seat top attached position him where you need it to look natural and screw down through this bone into the seat top.

I found that I also needed to put a wood spacer under the tail bone so he sat more natural and then I used a piece of wire from his spine by the shoulder blades to the seat top to steady the whole upper body.

Now that you have him sitting, it is time to corpse him out. There are many ways to do it, the best way I like is to use liquid latex and cheese cloth.

After it dries and enough coats of latex are applied it really looks like old skin.

For the muscles around the eye I used the latex straight from the jar and made a patch on some plastic of about 4 coats.

Then I peeled off some strips and rolled them into long strands, using more latex I glued them onto the eye and bone of the socket.

After this was dry I painted it red and high lighted them with white paint. To apply the cheese cloth to

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the rest of the bones lay down a coat of latex then put the cheese cloth over that and keep putting on coats of latex until you have the desired look (use a hair dryer to speed up the drying process). The rest of the body skin was painted with different colors of green craft paint.

For the hair I use pieces from an old Halloween wig I had and used latex on these to fix them to the head.

The hat I purchased from a party supply store in town for \$2.00 these are top hats for wedding table decorations.

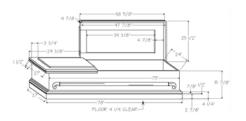
The under side did not fit his skull so I made a foam insert and glued it to his skull and the inside of the top hat.

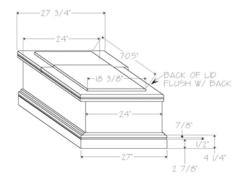
Then I used ribbon around the outside of the top hat and secured it with tape. The computer speaker for his voice was hot glued to the inside of the rib cage and can not be seen because of the skin over his ribs, but makes it like his voice is coming out of his mouth.

After I had him painted I coated the whole thing with clear coat and added a plastic cape around his neck. His voice is activated from the OOPic computer controller by way of another servo under the seat that runs a loop tape and controls the coffin in back. So all told you still need three servo motors. The reason I did it this way is the hearse is about 75 feet away from our house and it is now a self contained unit only needing 110 volt power and an air line to run it.

THE HEARSE COFFIN

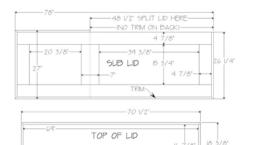
Here is the details of the coffin in the back of the hearse. The coffin is heavy when it is done but looks very nice in the back of the hearse. On to the build......



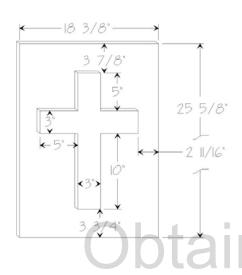


The hearse coffin was built off of plans from the Monster list, I can't remember who's site it was but when I find the link I'll post it here.

The plans were modified for my use in the hearse to use the 30 inch rod-less pneumatic ram I scored on E-Bay.

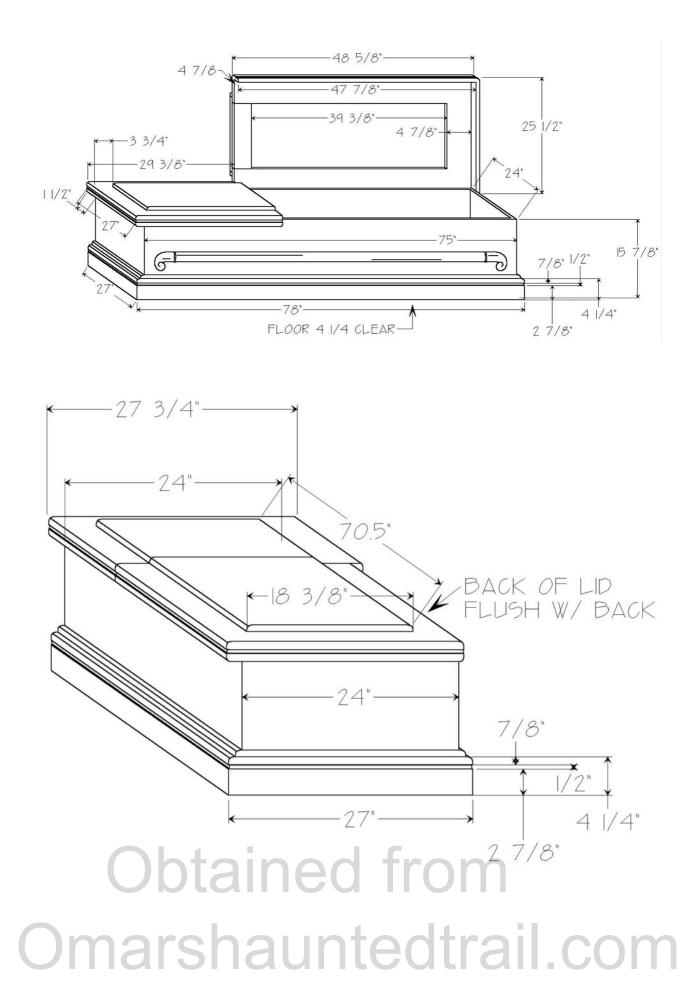


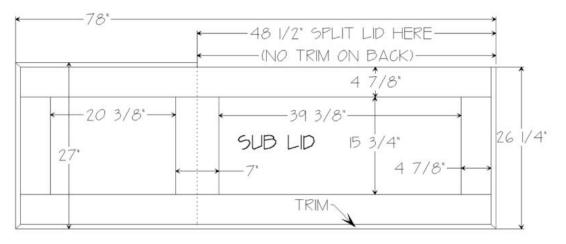
I started out making the coffin to the size on the drawings out of oak plywood. I had just enough scrap walnut to do the cross on the top with. I did the edges of the plywood with 1 1/4 inch wide solid oak stock with no inlay, this cut down the cost.



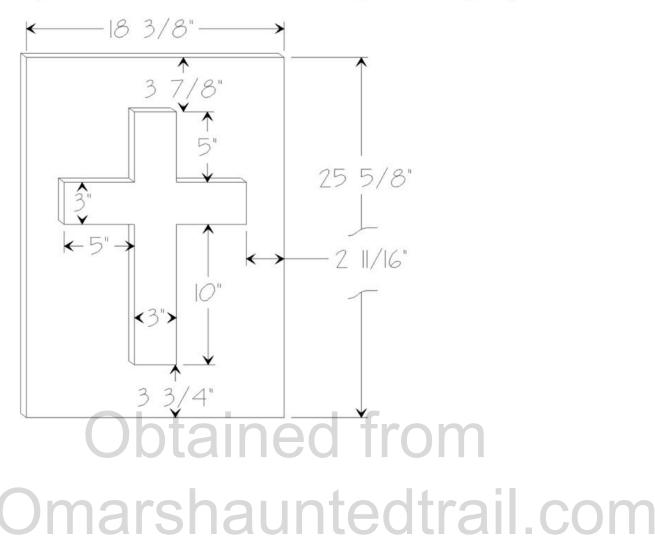
The base molding was made from oak case molding and a piece of the 1 1/4 inch molding was put over that to build it out. (The top is made in one piece and then cut into two pieces so the middle rail starts out as one wide piece). The handles are curtain rods and wall brackets turned upside down and were screwed to the rods and painted gold and then clear coated.

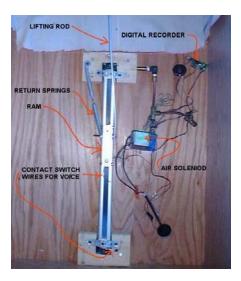
The inside was covered with a white cloth I got from Wal-Mart off the bargain pile for \$12.00 for 9 yards! I also used this for the window curtains in the hearse. I just hot glued it on around the inside of the coffin base.



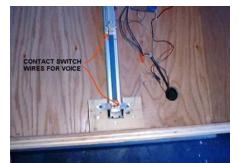




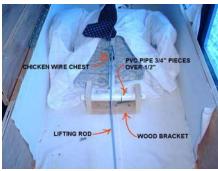




The next thing to make was the body, I used PVC pipe and made a tilting half body that flipped on the bottom by way of a "T" made out of PVC pipe and held in place by a wood bracket.



I cut some chicken wire to make a chest and part arms and used wire ties to hold it onto the PVC frame work. On the top I used a bucky skull with eyes and then did the liquid latex and cheese cloth to finish off the skull.



I dressed him in an old shirt and tie and attached a 1 inch wide piece of aluminum stock to the frame and down to the sliding block on the ram. At the end of the ram I made a switch out of two pieces of wire that activated the scream from the digital chip recorder from Radio Shack. The speakers are under the hearse and are cheap powered computer speakers from big lots.





