Haunt 31



http://haunt31.com/electric chair.htm1





This is the "chair" New for '04, I saw a similar model for nearly \$10,000. It had a dummy in it that thrashed widely when activated. I figured I could not only make this cheaper, but I wanted to make it so YOU can ride.... Three months, and sever hundred dollars later.... YOU can ride the "Chair"

This really won't be a full "how-to" as this project is too complicated, but I will try to show what materials and methods were used.



The arm and leg straps are cow collars available at Farm & Fleet. I used a dremel and ground off the buckle so that nobody could get hurt.





The chair is made from cedar boards. I used 4"x4" posts for the main structure and 2"x4" boards for the seat structure. All the back and seat boards are cedar decking. I bolted all connections and sanded the chair as if it was a piece of fine furniture.





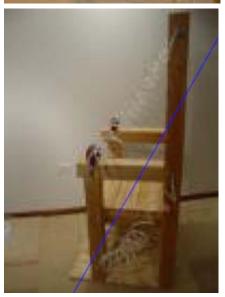
I then used 3/8" plumbing compression fittings and washers to make the part you see to the right. It is used to hold the coiled glow wires that lead to your hands and feet. I drilled three holes in each washer and placed it onto the fittings.







I took 3/8" poly plumbing tubing, coiled it around a 2" pvc pipe and placed it in boiling water for about 20 minutes.



I then tossed the entire thing in the snow to cool. The tubing in the photo's to the left was right out of the package (not boiled yet).



I wanted to see if the idea would look good before spending much time on it. The ends of the tubing slip into the compression fittings made above and then are tightened down using screws through the holes in the washers.



Driving to work one day I located some electrical insulators.



They were stuck in a pile from a roadside clean-up crew so I stopped and did the happy dance.



Here is the "chair" with the straps, insulators, and coiled wires installed. Inside each coil I have installed 10' of glow-wire. When activated, the arm and leg coils glow red.



Between the insulators, I added a thick wire bent in the shape of an electrical arc. I then added another glow-wire (blue).



The wire and the glow-wire are inside clear tubing.



Remember, I want YOU to "ride" the chair. I have shocked myself MANY MANY times and figured vibration was the closest thing to a real shock.



I needed a way to insulate the vibrating chair and keep it in one spot. I took 3/4" plywood and added 1/2" bolts, BIG washers, and rubber bushings. This serves as a platform for the chair and for the electrical components.





Here is the fake control box. I took a standard electrical throw switch and added a pneumatic cylinder to it to "throw" the switch.



Also added a flashing beacon to tell you when the chair is on.



Here is the mounting of the cylinder. It is a double acting cylinder. The solenoid is inside the box.





Here is the vibrator guts. It is a pneumatic "ball" vibrator. It runs at 5.6cfm but will vibrate in excess of 300 lbs. It is pretty loud when running, so I put it under the chair and surrounded it with insulation.







The chair takes A LOT of air. To keep the compressor from running non-stop, I installed a reserve tank under the chair. There actually are three of these out in the yard this year as well. I still want a bigger compressor but for now these work GREAT.



Here are two of the proximity switches that "sense" that someone is in the chair. One is in the seat, one is in the back.



All the electronics feed the center behind the chair. I use a Micro-logix 1000 PLC to control the chair. It took nearly four hours to program the sequence and to de-bug. To adjust you simply plug in your laptop computer and adjust the program.







Though it appears messy, this is actually quite organized. The PLC runs several outlets that I plug everything into. This way, the chair is then easily taken apart in sections and stored. Below the PLC box is the storage tank, 12 vdc power supply, fog machine, and outlets.



Here is the finished chair. The sequence is as follows: First the spot light that shines on the chair turns off.

Next the beacon rotates. Seconds later, the throw switch throws and the top arc flickers. Next the glow wires on the arms and legs glow, the chair begins to vibrate, a strobe light flashes, and the fog machine pumps fog under the chair and around the occupant. If at any time the person riding gets up, the chair resets and the spot turns on and the chair re-sets.

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