PowerCube6 Fuel Tank

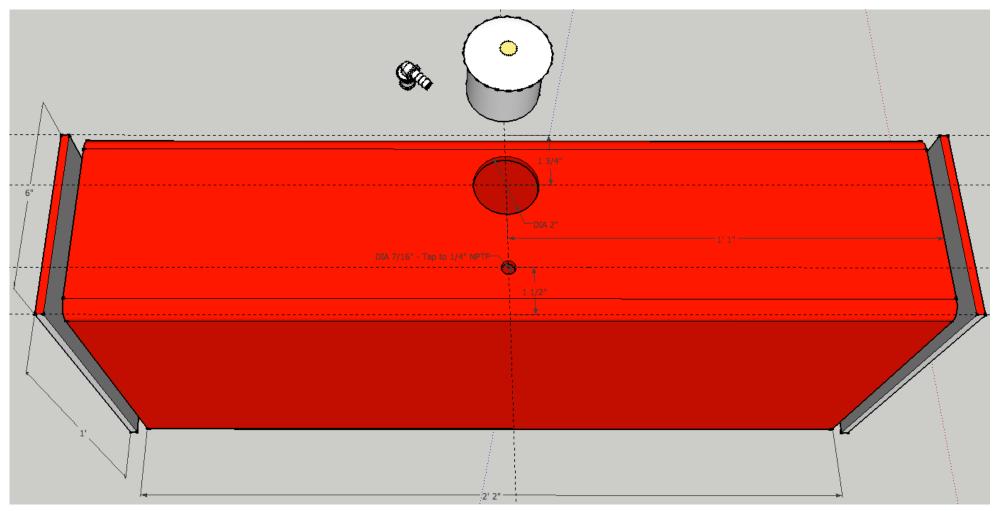
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Procedure for fabricating the fuel tank. Note that the preparation of the edges for welding is critical, as the welded seams must prevent fuel leaks.

Part List:

Rectangular tube: 1/4" x 6" x 12" - 26" long [2] Flat Steel: 1/4" x 6" x 12" Weld-in Fuel Filler Neck and Cap Small sheet plastic Fuel Pickup Adapter 1/4" rubber hose Soapy water

- 1. Grind the 1/4" x 6" x 12" plates, rounding the corners to 1/2" radius and beveling the edges for welding.
- 2. Grind the 1/2" x 6" x 12" Tube, beveling the edges for welding.
- 3. Cut the 7/16" and 2" holes in the tube as shown. The larger hole may be cut with an Oxy/Acetylene torch, then smoothed with a grinder. Note that the inside of the hole should be 2" in diameter.
- 4. Weld the plates to the ends of the tube
- 5. Tap the 7/16" hole for 1/4" NPTF threads, smooth the welds with the grinder.
- 6. Pressure test the tank by covering the filler neck with a plastic sheet, then securing the cap. Secure the smaller hole with a the fuel pickup and some 1/4" hose on the hose barb. Apply compressed air to the end of the rubber hose to pressurize the tank, then apply soapy water to all welds and check for bubbles.
- 7. Mark any bubbling spots with a felt-tip marker and re-weld
- 8. Re-test the tank and re-weld as necessary to stop all leaks



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