

**ATTENTION ATTENTION! ~ PLEASE...
DO NOT SUBMIT THESE PLANS TO FESTIVALS!**



We at the DSC love you and want you to make things that go boom... but here is the scoop!

May 2012 ~ We recently learned that our cannon plans are so popular, many festivals are seeing these plans submitted over and over for all sorts of flame effects. While these plans are a great place to start, the festivals usually require plans that are EXACTLY what you are making.

How can you easily make your own fire effect plans?

- 1) I am going to make an illustrator file with “parts” so you can put together your own plans. *
- 2) I am a graphic designer and can be hired to make them for you. Contact me with your ideas / variations and I can give you an idea of costs.

scottyc@spontaneousfire.com * Send me request & I will email you the AI file when it's ready.

Thanks - Scotty C!

These are good things to know & understand:

All fittings, piping, valves and connectors must also be designed and rated for the pressures and fuel type used. The use of lead soldered fittings is prohibited in the fuel systems of any Flame Effect. The use of improper fittings can lead to leaks and failures in the fuel system resulting in fires and or injury.

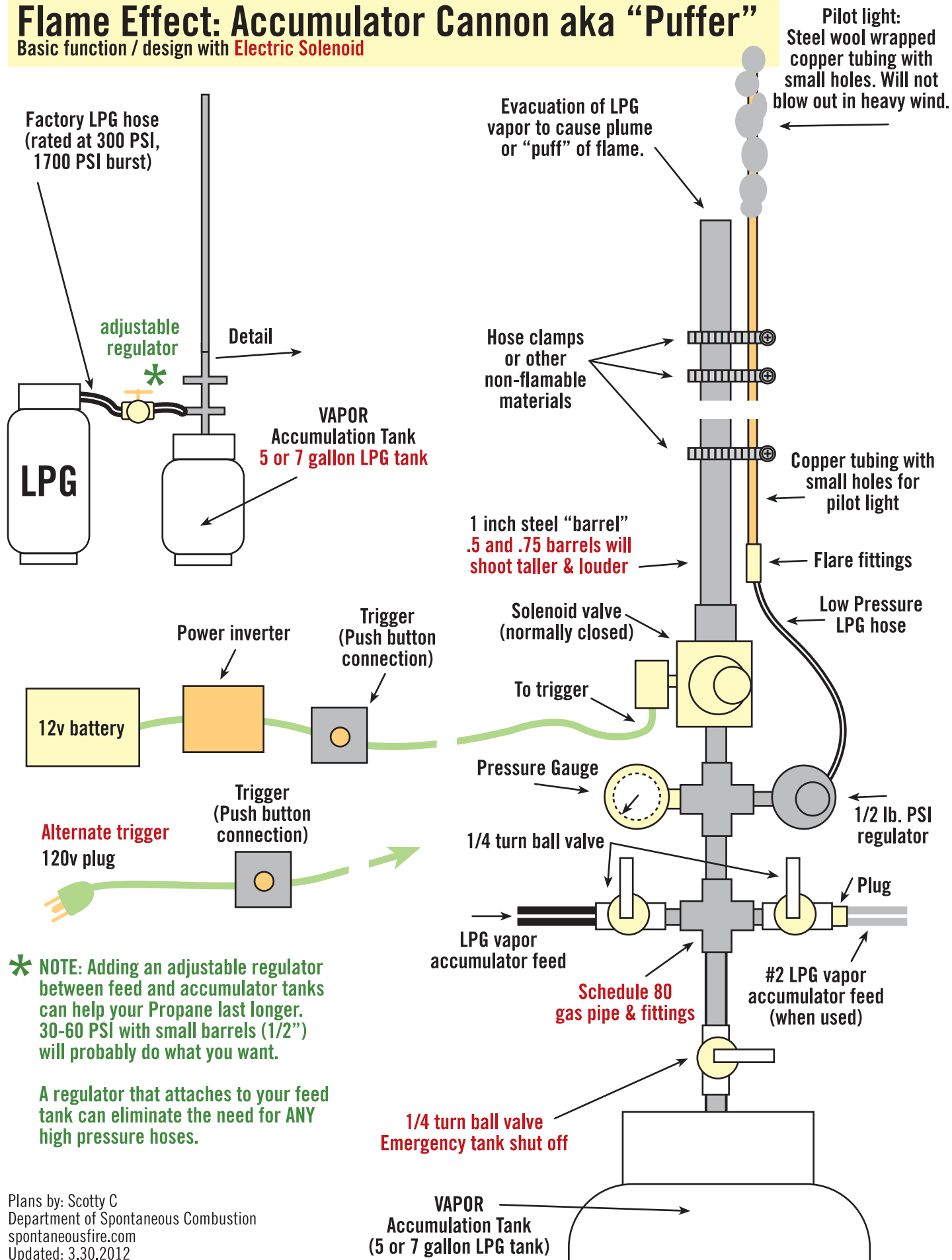
If you are using ***unregulated propane*** (full tank pressure) schedule 80 piping and couplings are required. To simplify if you are using a regulator on your fuel supply to your LP gas flame effect and will be operating at a pressure below 150 PSI you can use steel pipe that is rated Schedule 40 after the regulator. Any pipe or fittings before the regulator must be Schedule #80 or rated for 250psi or above. If you are operating your effect without a regulator or you plan to operate your effect at a pressure over 125psi you will need to step up to the thicker walled Schedule #80 pipe that is rated to 250psi or above.

And perhaps this

Accumulators, pressure vessels must be rated for the operating pressures at which your Flame Effect is operating. Any welding or alteration tanks used as accumulators or pressure vessels must be fabricated by an American Society of Mechanical Engineers (ASME) certified welder, and must be re-stamped and certified as such. Catastrophic failure of accumulators or pressure vessels can result in leaks or explosions. In Flame Effects where the gas supply pressure is higher than the rated operating pressure of the accumulators or pressure vessels, a regulator must be properly installed on the supply side of the accumulator or pressure vessel. Also, an over-pressure device must be properly installed in the vapor space of the accumulator or pressure vessel. To simplify a propane tank used for an accumulator should not be welded or modified in any way as this will void and assumed integrity of the vessel. Modifications or fabrication of accumulators can be done if the work is done by a ASME certified welder and they can provide certification of its testing at a pressure 1 and 1/2 times the intended working pressure.

Flame Effect: Accumulator Cannon aka "Puffer"

Basic function / design with **Electric Solenoid**

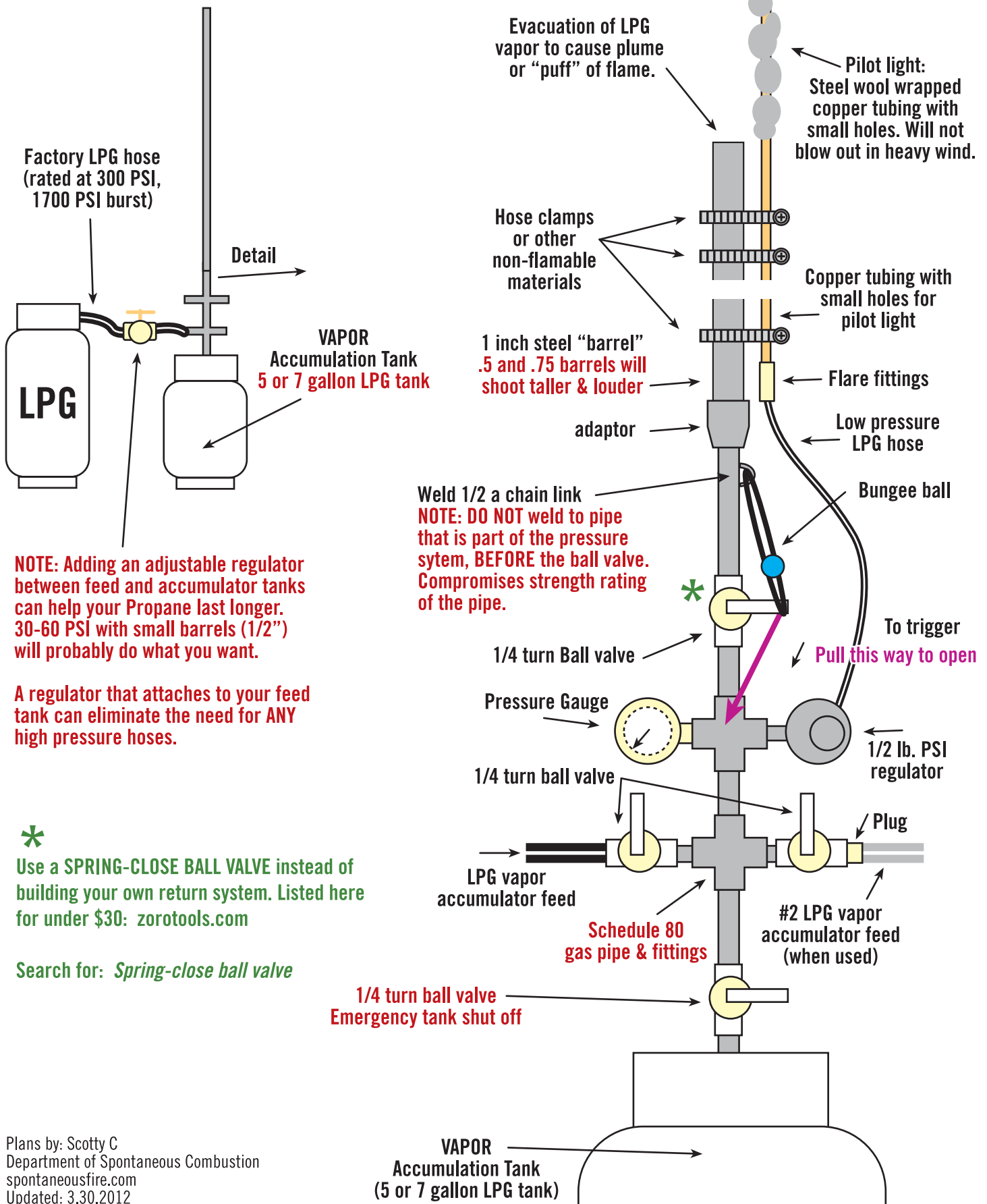


* **NOTE:** Adding an adjustable regulator between feed and accumulator tanks can help your Propane last longer. 30-60 PSI with small barrels (1/2") will probably do what you want.

A regulator that attaches to your feed tank can eliminate the need for ANY high pressure hoses.

Flame Effect: Accumulator Cannon aka "Puffer"

Basic function / design with **Manual Ball Valve**



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A regulator that attaches to your feed tank can eliminate the need for ANY high pressure hoses.

* Use a **SPRING-CLOSE BALL VALVE** instead of building your own return system. Listed here for under \$30: zorotools.com

Search for: *Spring-close ball valve*