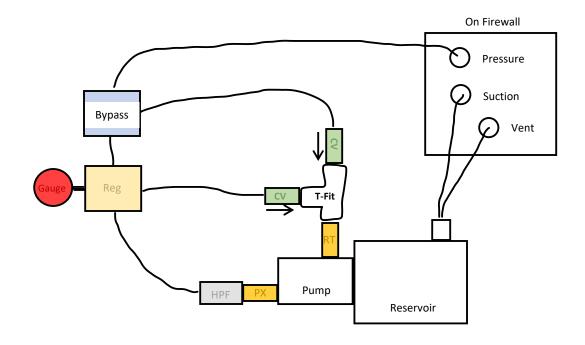
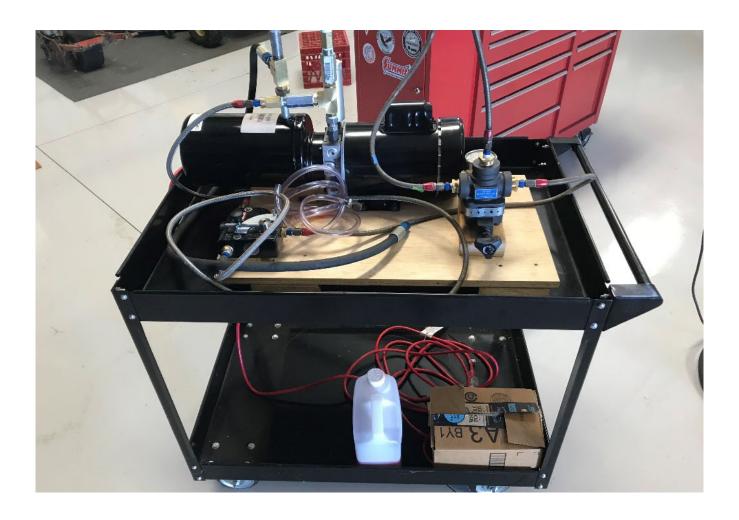
Basic Schematic:





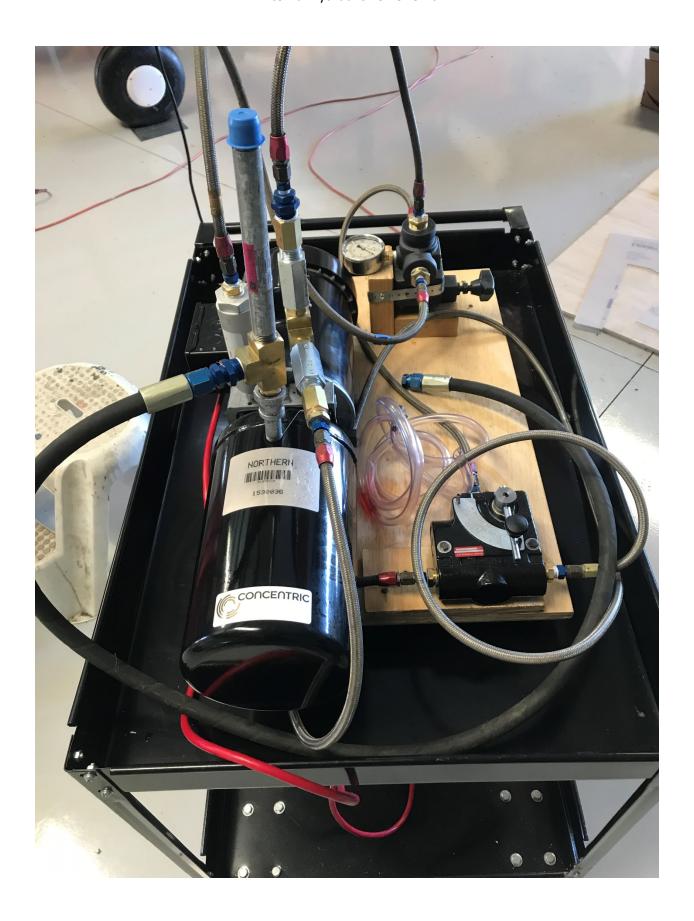
	Item	Source	Part Number	Price ea.
ď	Hydraulic Pump & Reservoir 1 HP, 1.25 gpm, 2000 psi 115 VAC	Northern Tool	1530036	479.99
	Pressure and Return fittings: 9/16-18SAE to ½"MIP (2 required)	Amazon (also have similar fitting at Northern Tool)	6401-06-08-O	7.00
	High Pressure Filter 25 micron, 3000 PSI Filter Element	Grainger	36L334 36L342	46.50 15.60
	Adjustable Relief Valve (regulator)	Northern Tool	202520	94.99
	Flow Control Valve (bypass or control valve)	Northern Tool	PFC51-1/2	99.99
	Pressure Gauge	Northern Tool	53678	19.99
\Longrightarrow	Check Valve (2 required)	Northern Tool	2038	29.99
4	½ FIP T-Fitting (Brass)	Amazon	(various)	-

Parts not detailed, are the various unions, reducers, hoses and other connectors that I used for my installation, as I wanted to use old hydraulic hoses and fittings removed from the aircraft. I used an assorted mix of AN fittings and brass fittings (from Home Depot or Amazon) to interconnect the various components. You may choose your own options for this.

I also installed a switch on the pump electrical cover when I wired it up, so I can turn it on and off easily.

***Note:

- Ensure you hook up hose to vent line off firewall (I used clear tubing so I could see fluid moving), and route to reservoir, other wise when the system is running, you will vent the fluid out onto the floor of the hangar. When running the pump, you are basically filling the reservoir and allowing it to overflow. This is normal and causes no damage. When you are finished using, ensure you unhook suction line right away to avoid siphoning of oil out of aircraft reservoir and that way you know your aircraft power pack (reservoir) is full.
- Make sure your hoses from the unit are long enough for when the aircraft is jacked up!





Use of Unit

- Takes about 5 minutes to hook up; undo lines at firewall and hook up 3 hoses from unit
- Unit has ample pressure and power; can control pressure from regulator/bypass (reference pressures in the Cessna Manual)
- Start the unit with the flow control in FULL BYPASS, then move lever to establish flow
- Unit does not provide pressure until you make selection in aircraft just like the pump works in the aircraft.
- While it took some time to build the hydraulic unit, it makes swinging the gear so easy that I can now do it all by myself (Jacking the aircraft by myself is time consuming, a second person reduces that time exponentially). Time to complete thorough gear swings including jacking up and down 3 hours! (for info, I have a stand under each boom, and nose jack for stability only aircraft is solid on these jacks and the Bogart jack pads).