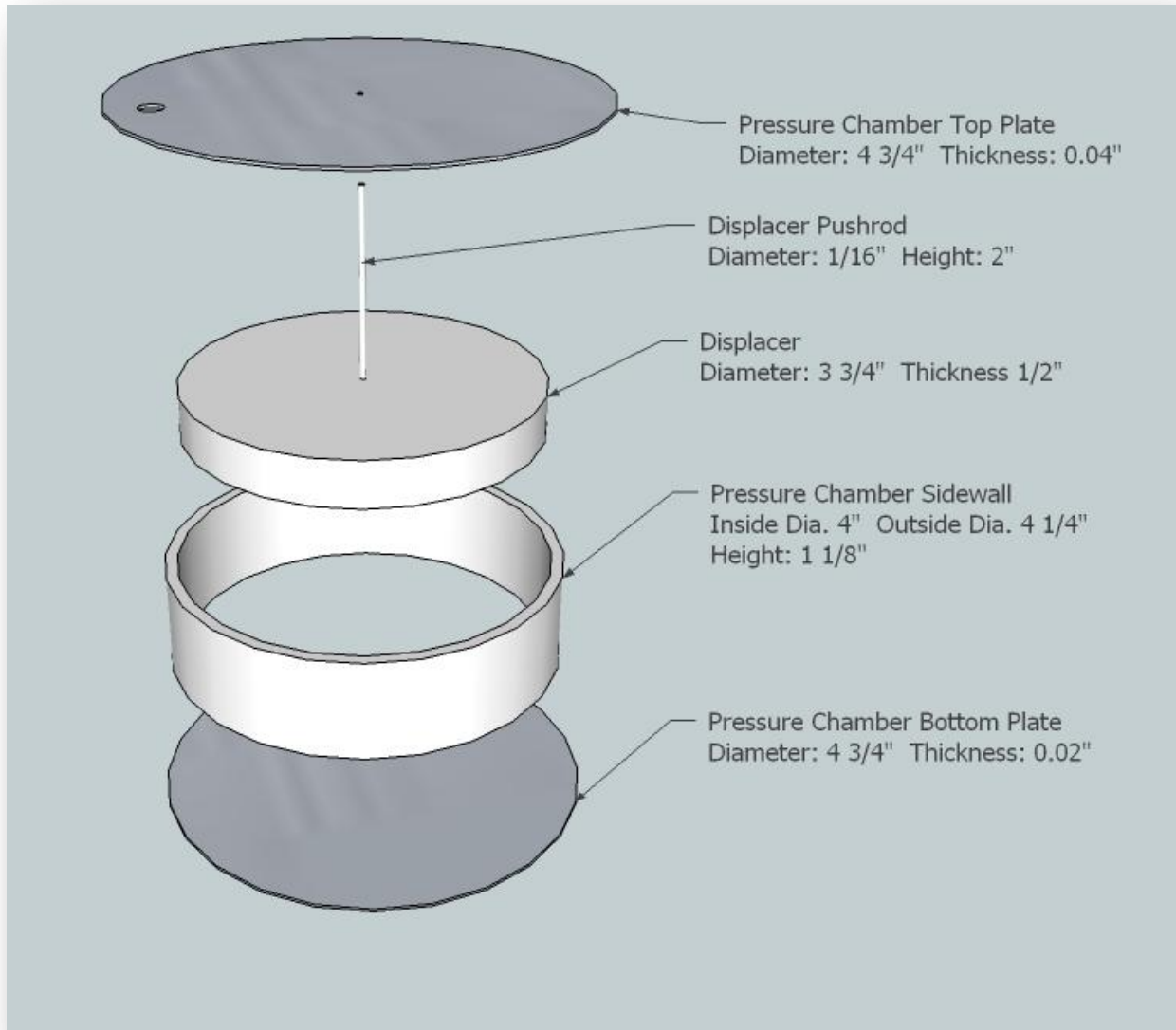


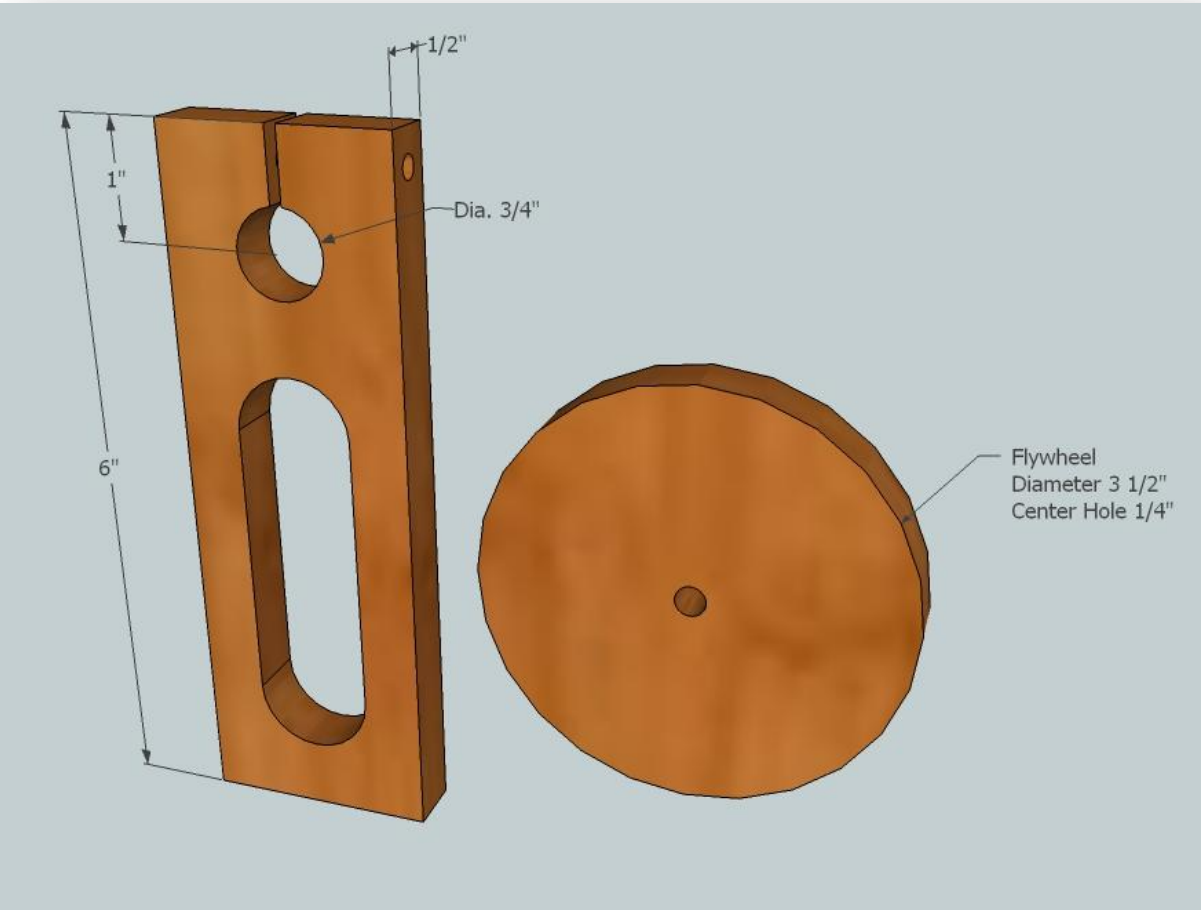
Coffee Cup Stirling Engine by Jim Larsen

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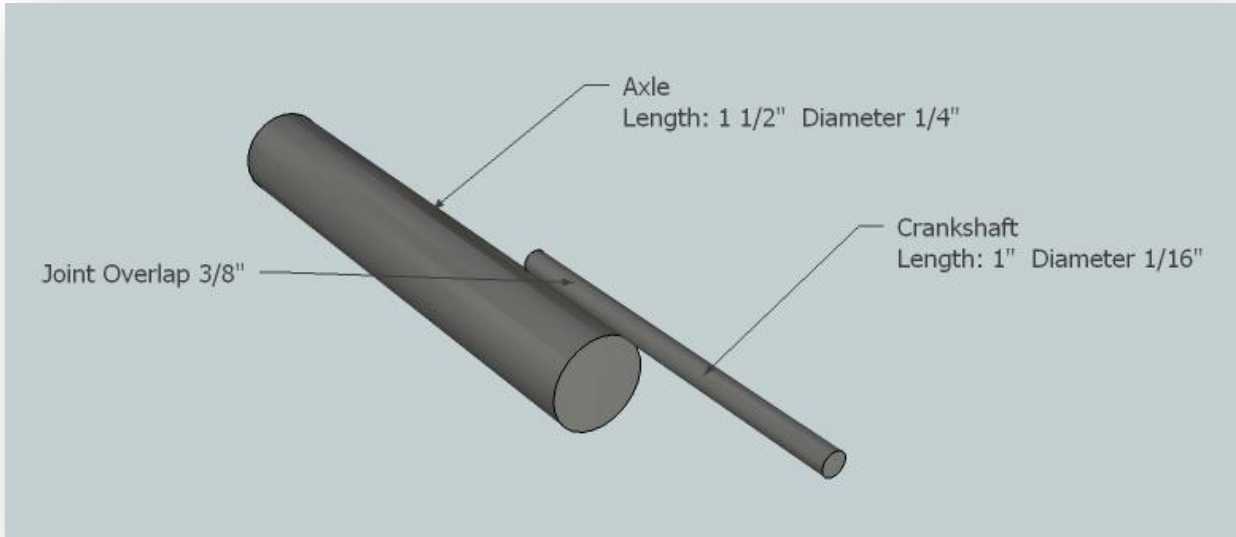
Pressure Chamber Exploded View:



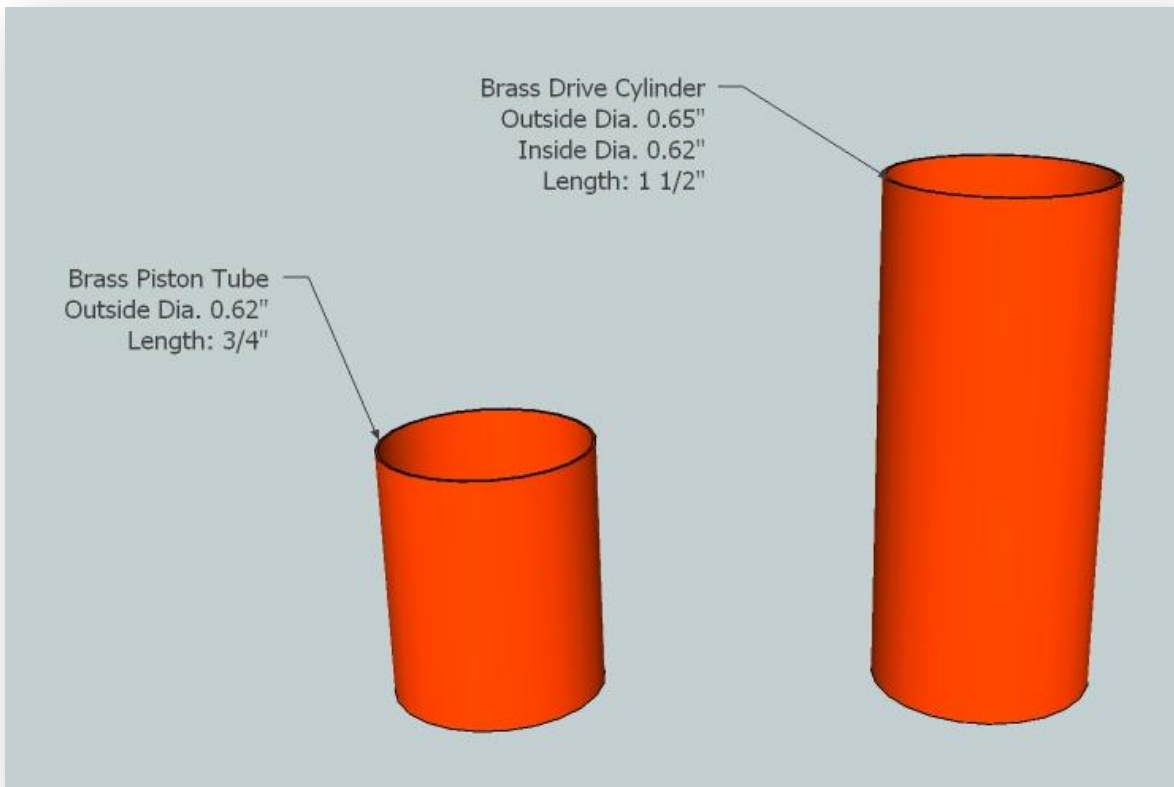
Wooden Parts: Stand and Flywheel:



Axle Detail:



Drive Piston Dimensions:



Assembly Notes:

The vertical distance traveled by the displacer is 0.45". The displacer is situated so that it does not touch the top or the bottom of the pressure chamber. It has about 1/16" of clearance at the top and the bottom as it travels.

The displacer has about 1/8" of clearance between it and the pressure chamber sidewall.

The vertical distance traveled by the drive piston is 0.20".

The crankshaft for the drive piston is offset 90 degrees from the crankshaft for the displacer. As the axle rotates, the displacer will be 90 degrees ahead of the piston.

The seal around the displacer pushrod requires lubrication with light oil before each operation. This lubricates and helps maintain pressure.

The piston also needs lubrication with very light oil before each running for the same reason.

The hole in the vertical wood stand is cut to match the bearing. Size your hole to match the outside diameter of your bearing.