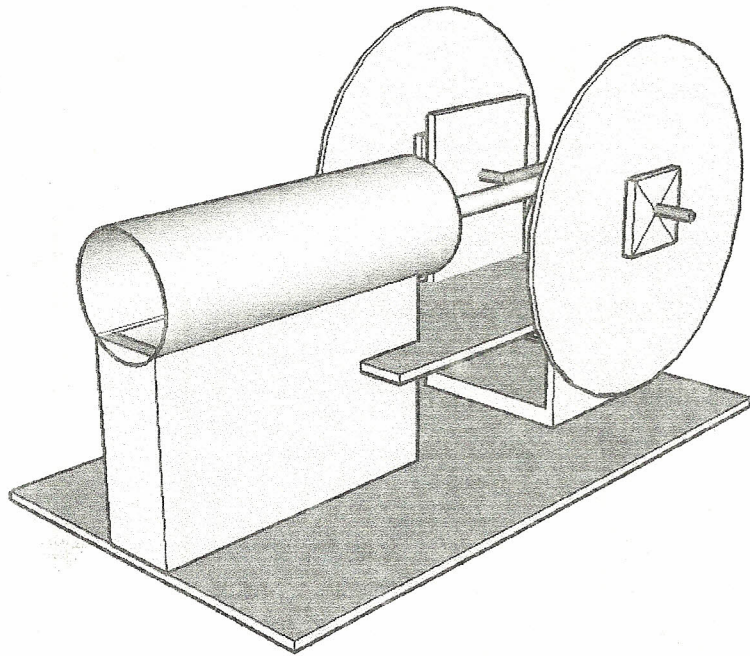


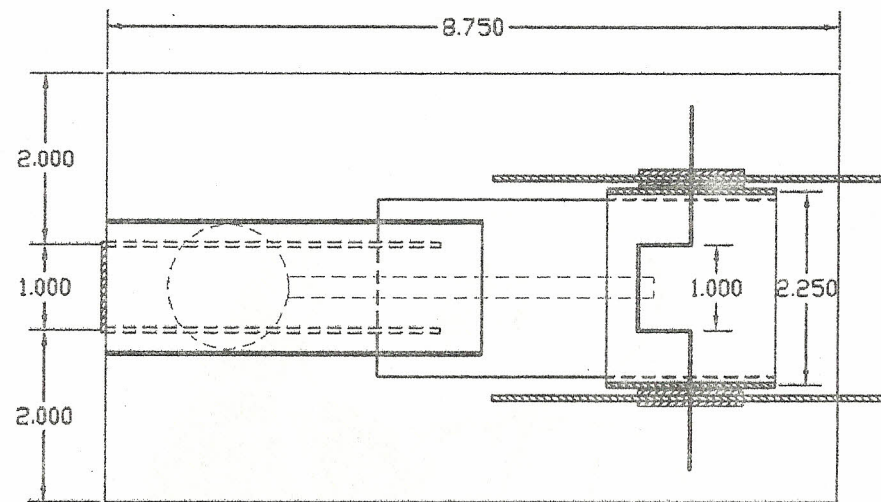
MODEL ENGINE INSTRUCTIONS



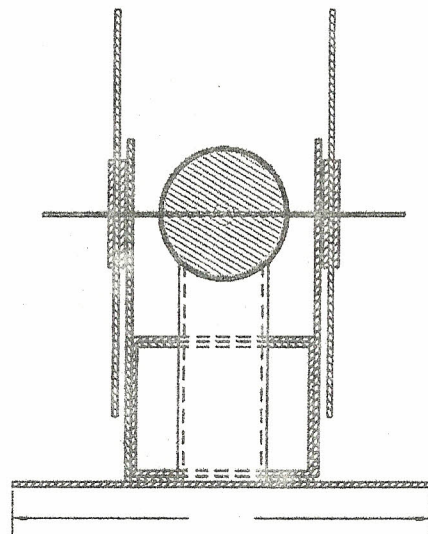
Model Engine

Drn By: JDM

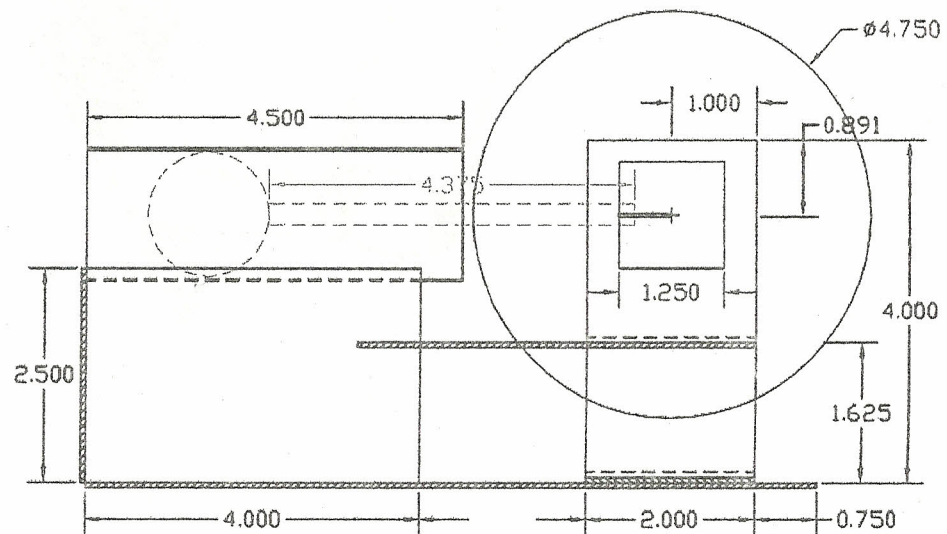
10/27/08



Top View



Side View



Front View

Model Engine Parts List

Engine Base: 5" x 8 $\frac{3}{4}$ "

Cylinder Support: 9" x 2 $\frac{1}{2}$ "

Crankshaft Support: 2" x 10 $\frac{1}{4}$ "

Crank Bearing: 1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " (need 2)

Spacer Plate: 5" x 2 $\frac{1}{4}$ "

Crankshaft: 7" (wire)

Flywheel Spacers: 1" x 1" (need 4)

Flywheel: CD (need 2)

Piston: Ping pong Ball

Connecting Rod: $\frac{1}{4}$ " Dowel, 4 $\frac{1}{4}$ " Long

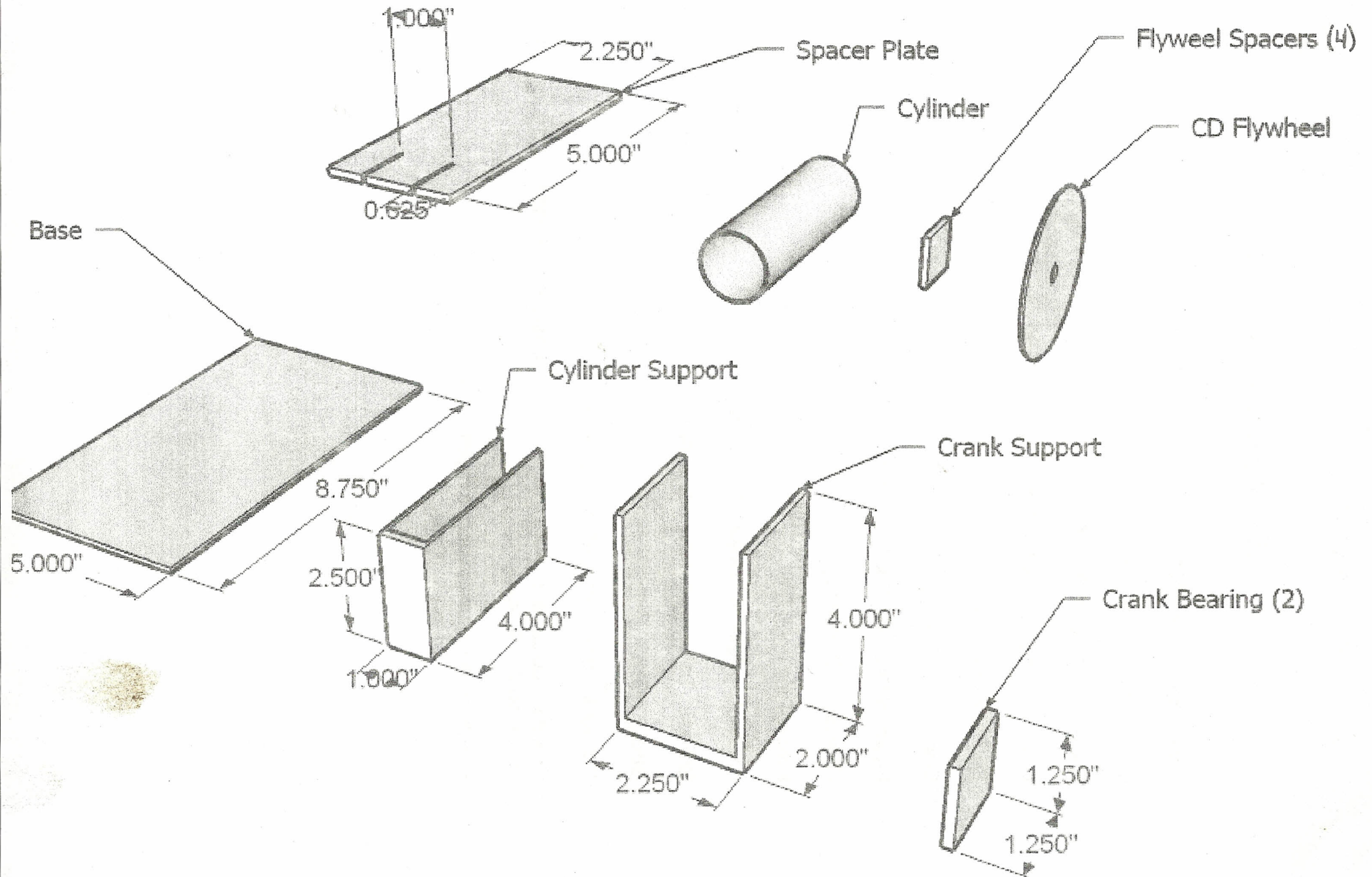
Cylinder: Toilet Paper Roll, 4 $\frac{1}{2}$ " Long

DIRECTIONS:

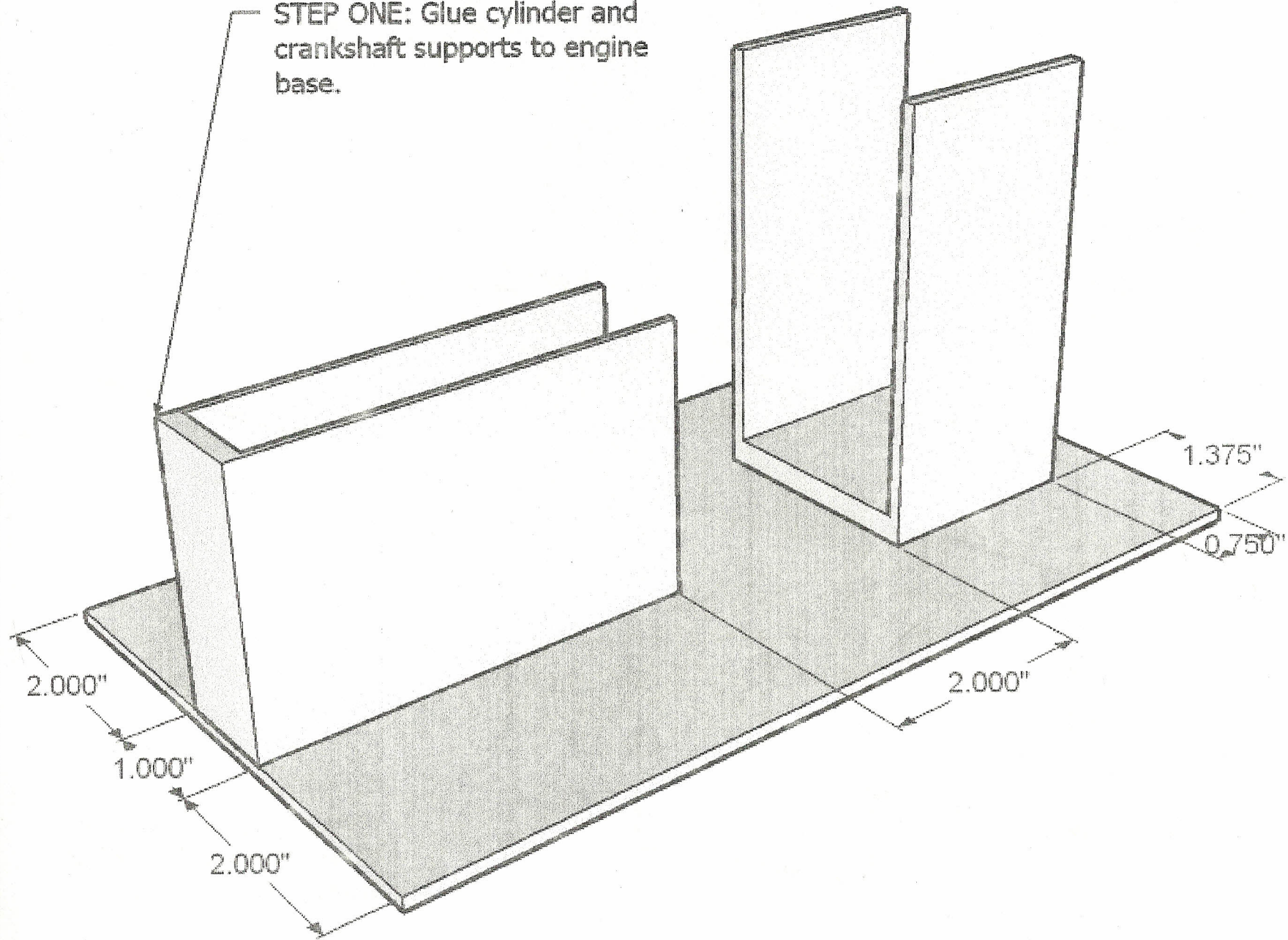
Cut out the pieces of cardboard listed above.

Cylinder Support and Crankshaft Support: Measure and bend the cardboard as shown on the illustration.

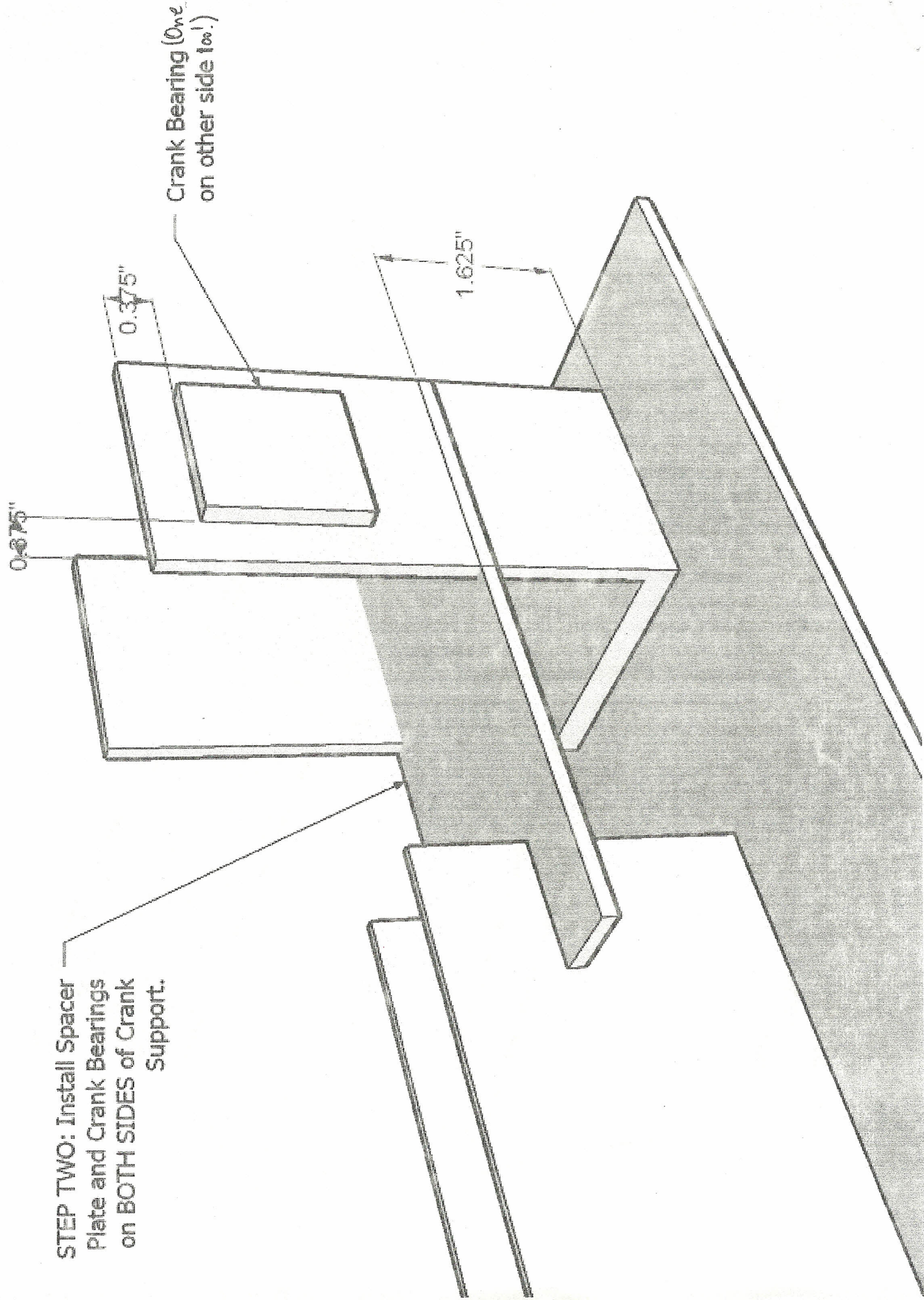
Assemble and glue the pieces together as shown.



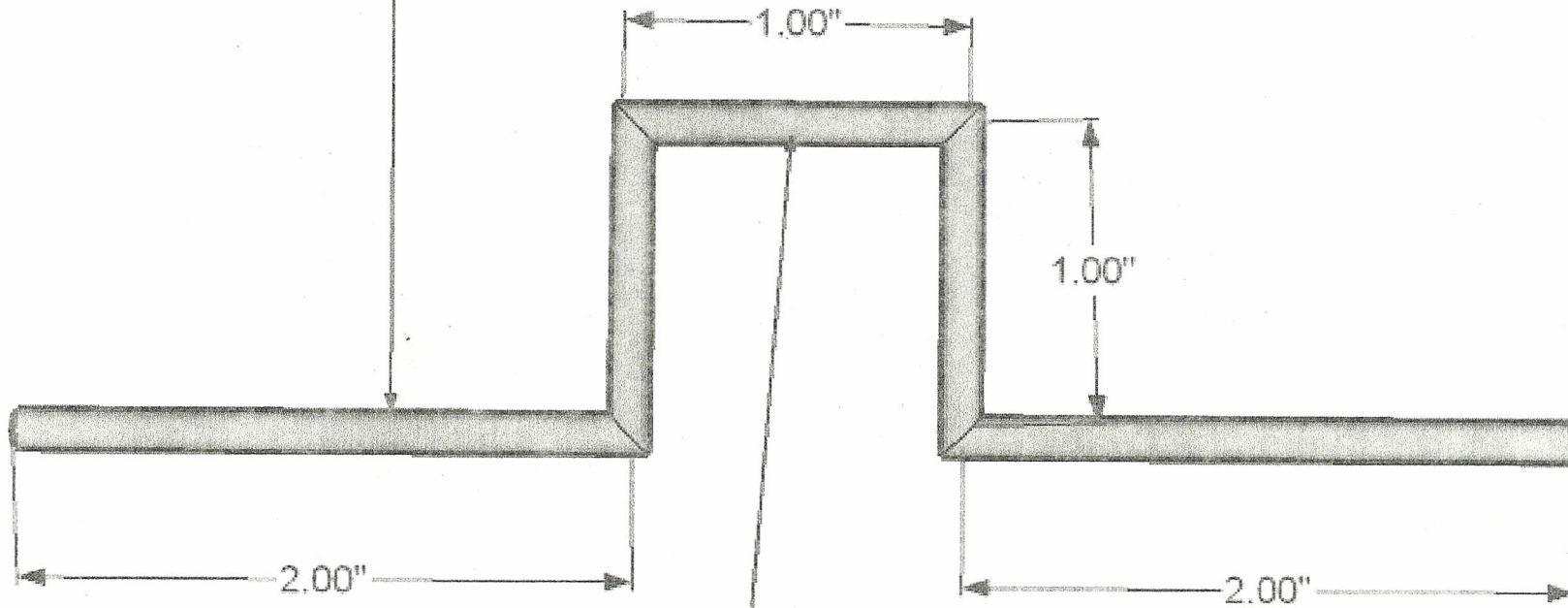
STEP ONE: Glue cylinder and crankshaft supports to engine base.



**STEP TWO: Install Spacer
Plate and Crank Bearings
on BOTH SIDES of Crank
Support.**



STEP THREE: Build the crankshaft by bending a 7" long piece of wire as shown. ***NOTE*** You must put the connecting rod in before you finish!!!



CONNECTING ROD GOES HERE!

STEP FOUR: Glue the Piston onto the connecting rod.

