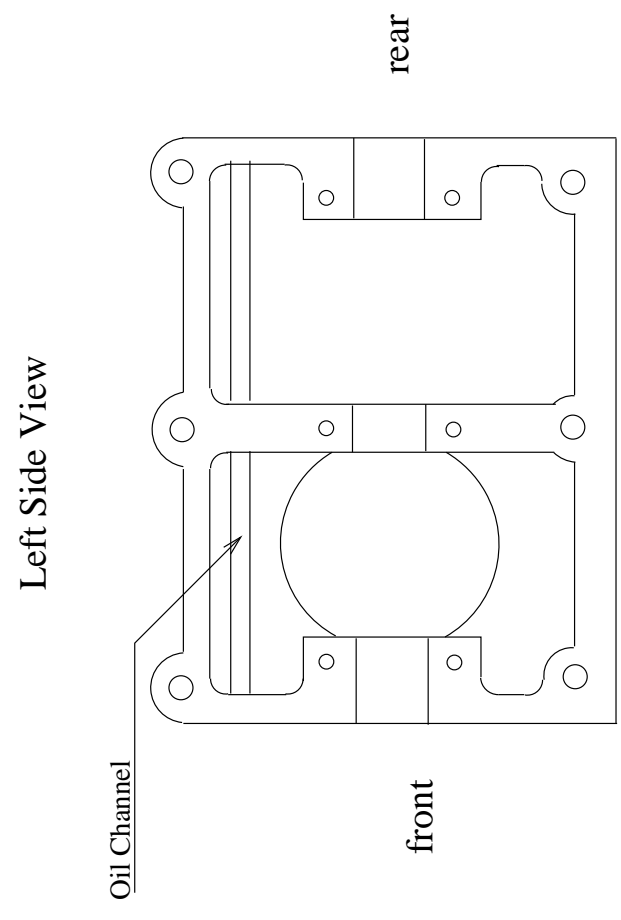
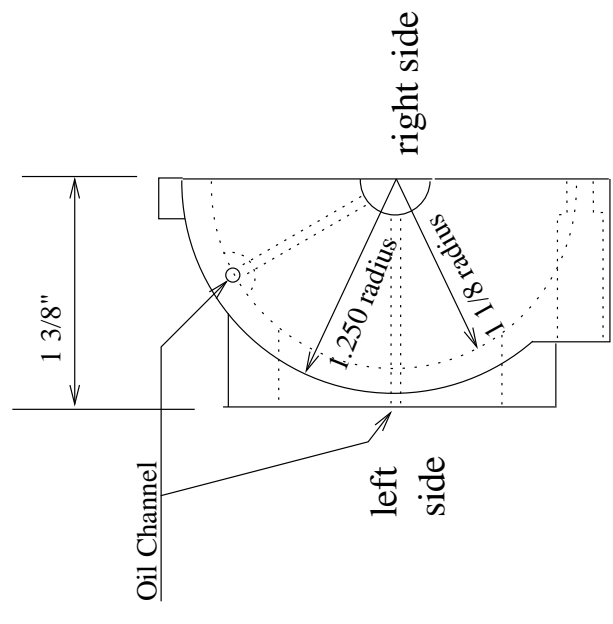
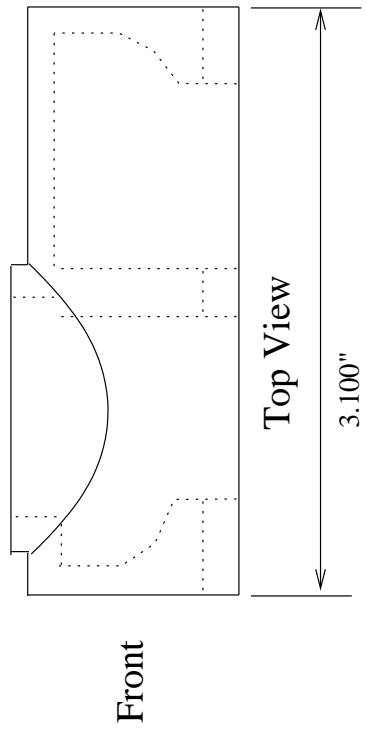
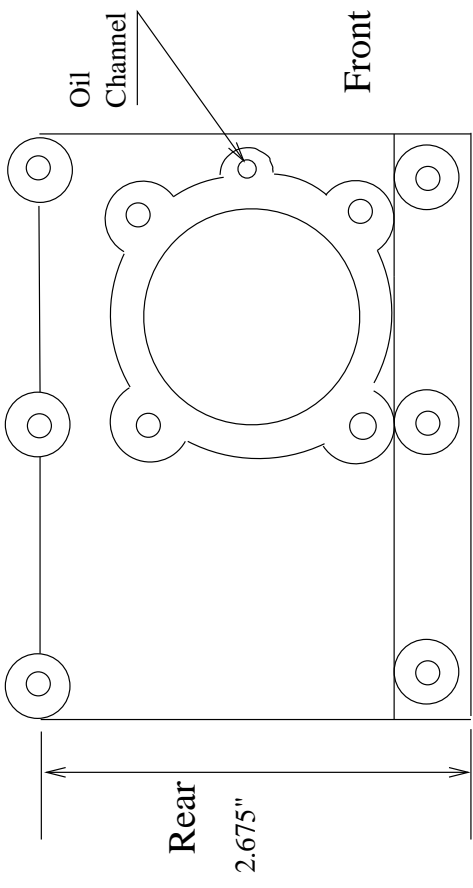


This is the Saito timing
 Saito FA200Ti cam timing:
 opens closes
 intake : 40 btdc 60 abdc
 exhaust : 75 bbdc 25 atdc
 65 deg. overlap

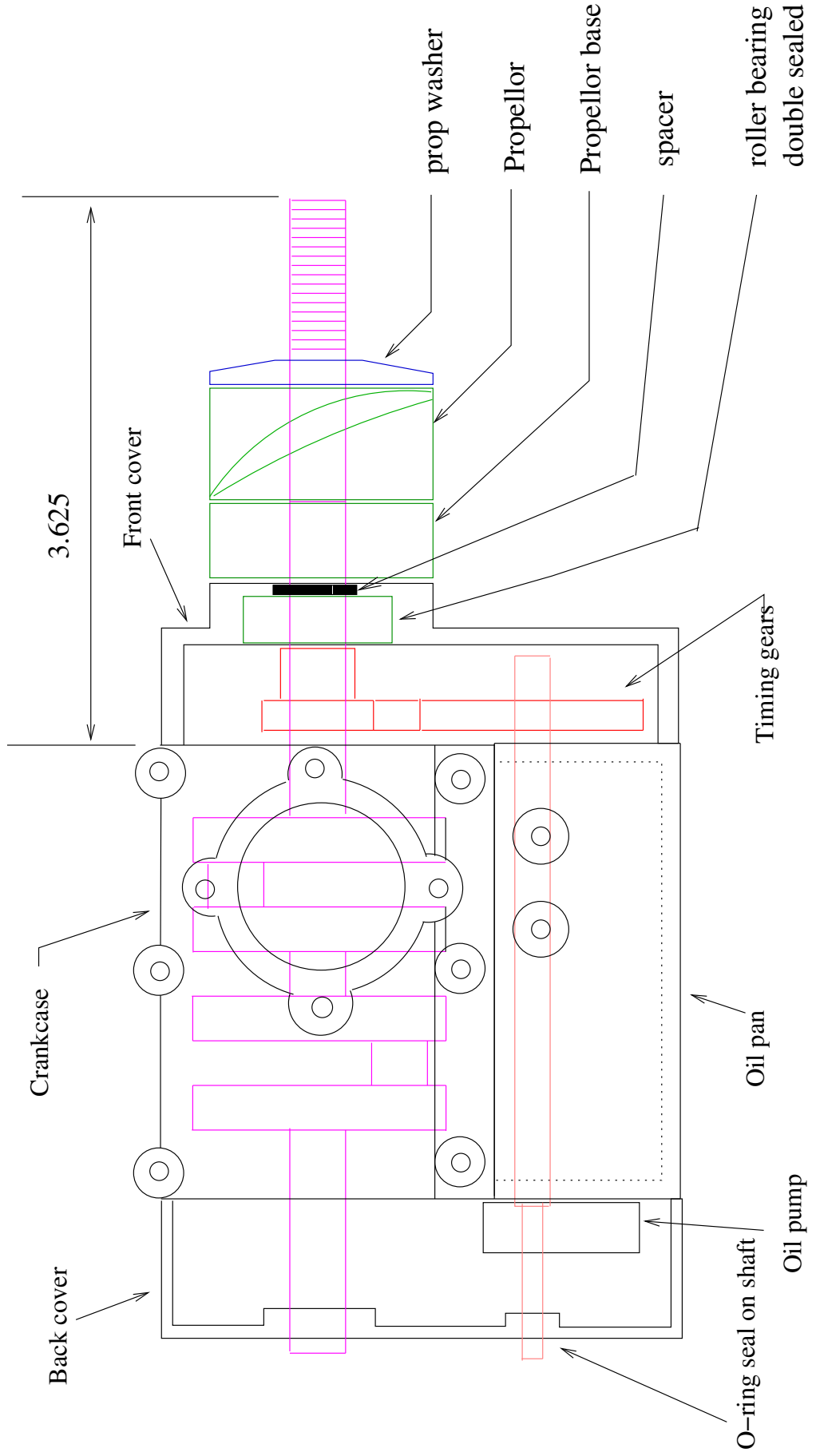
View from front of camshaft
BECO 2.0 Cam. lobe timing

Intake Lobe on Cam
Exhaust Lobe on Cam



Right Side View

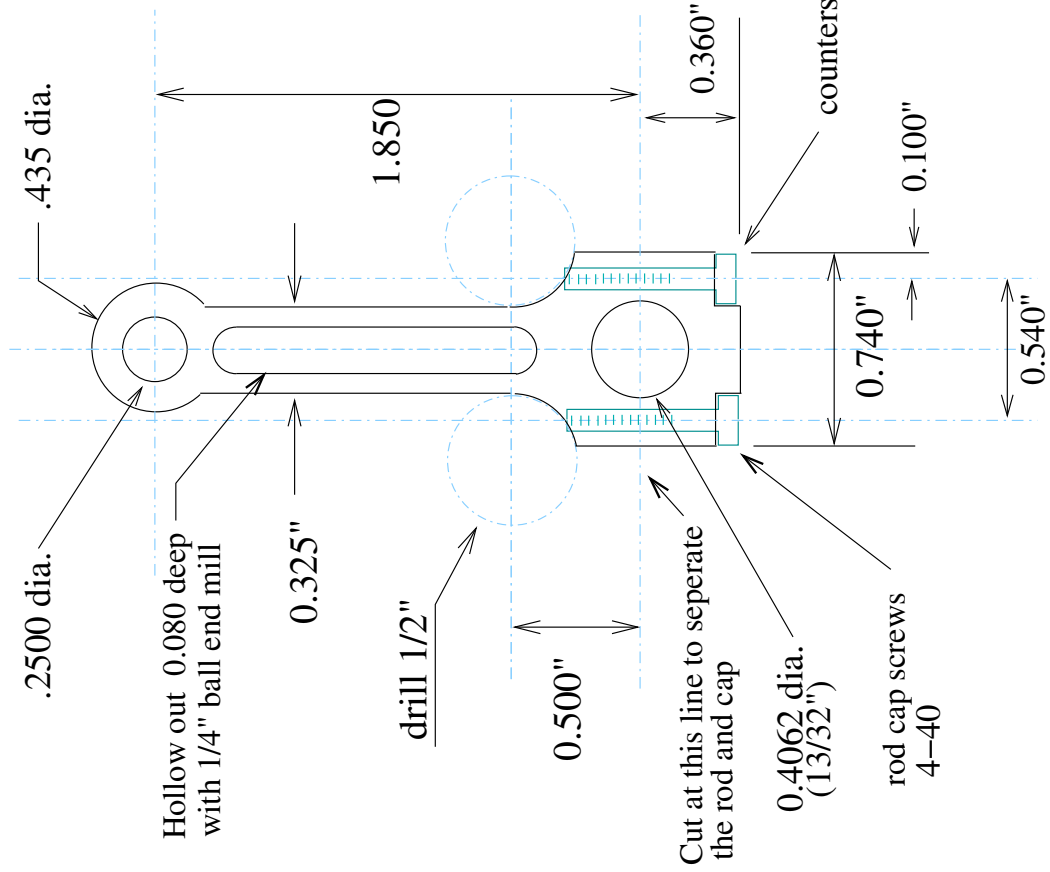
Front View



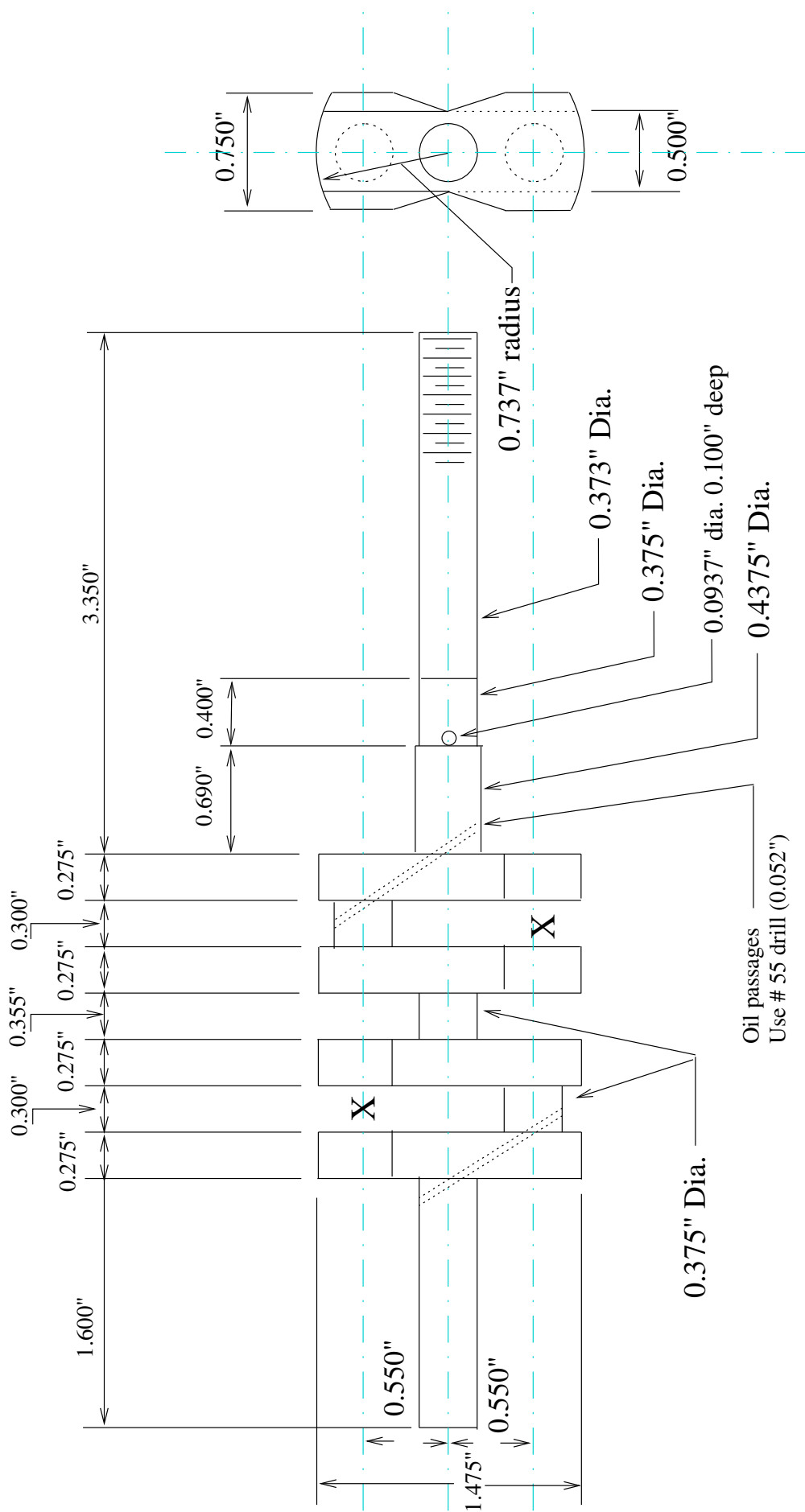
Step by step directions for making a rod

Material: 6061 aluminum, 1/4" thick

- 1 – Cut a blank 0.75 wide by 3 inches long from 0.250 thick plate.
Mount the blank in the mill vise – vertical.
- 2 – drill 2 holes for the rod cap screws 3/4 inch deep.
Countersink .100" with a 3/16 endmill.
- 3 – cut the cap off from the rod.
- 4 – mill the ends of the rod and cap flat and **SQUARE!**
(this step is not necessary if the cap is cut accurately.)
- 5 – size cap to 0.360" and tap threads (4–40) in the rod.
- 6 – drill out the rod cap for screw clearance (7/64).
- 7 – attach rod cap to rod blank and mount flat in the mill.
- 8 – drill and ream the hole for the big end.
- 9 – drill and ream the hole for the small end.
- 10 – drill the holes for the sholder radius', use a 1/2" endmill.
- 11 – cut (using an end mill) the straight sides.
- 12 – put the rod on the rotary table and round the small end.

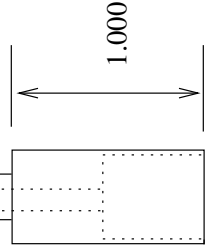


This drawing not drawn to scale



Crank shaft is turned from 3/4 X 1-1/2 HRS flat bar
 Turn crank journals first, then main shaft and journals.
 Put bolts at X while turning main shaft to hold from flexing.
 Crankshaft Stroke = 1.100
 Use with a bore of 1.100 to get a 2 cubic inch engine

0.125 drill through for valve stem
raised 0.050" to fit inside valve spring



outside dia. same as
valve dia + 0.015

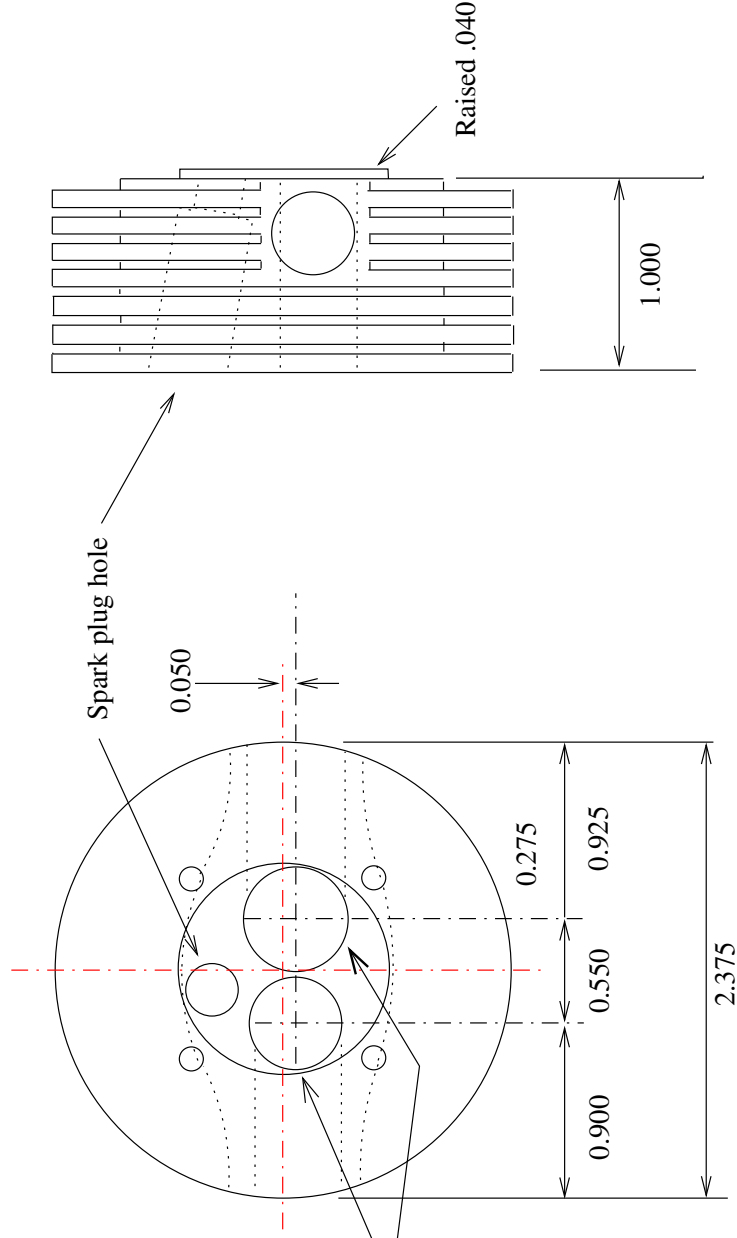
Bore to same as port bore

Valve Guide detail

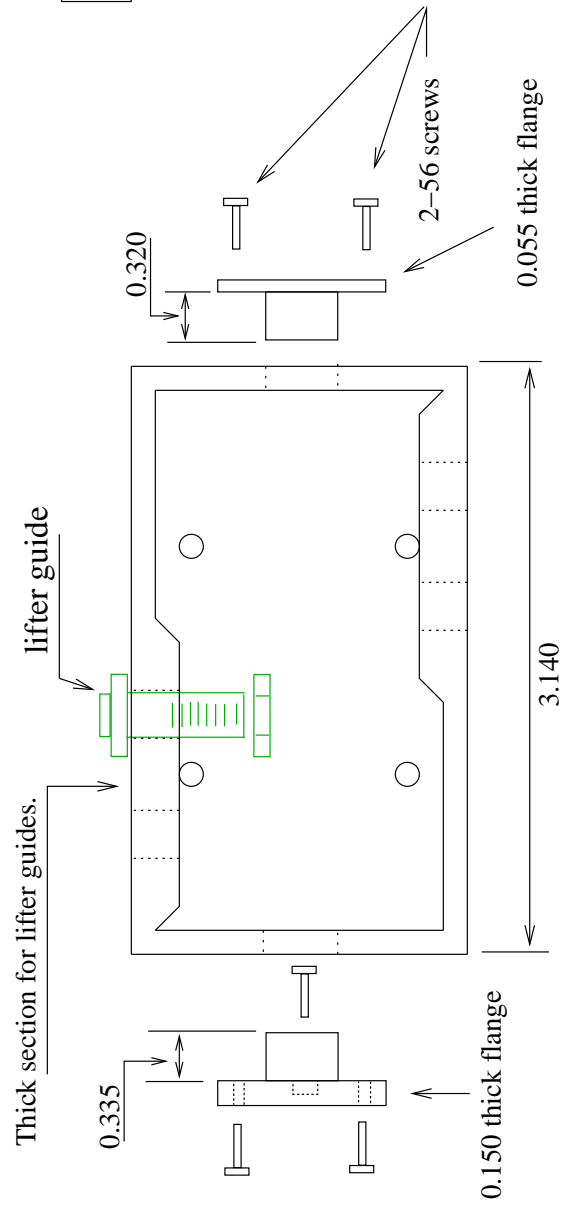
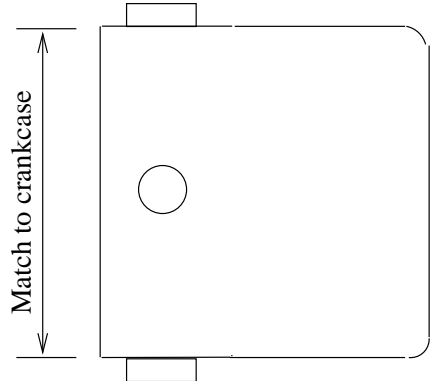
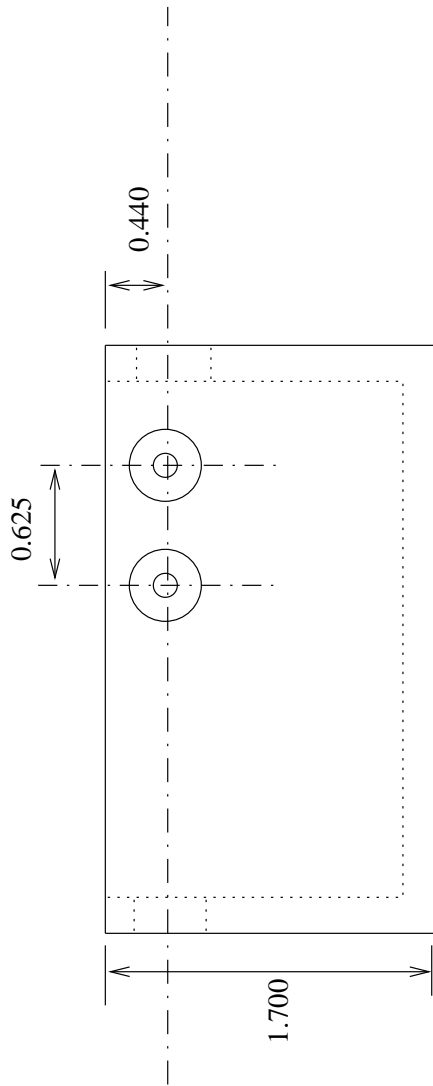
Cylinder head is made from 2.5" 6061 aluminum bar stock
Cooling fins are evenly spaced. Cut with 1/16" wide cutter.
Spark plug threads are 1/4-32

Note: Make left and right side heads
intake to rear, exhaust to front.

ex. valve dia: 0.488 Port bore: 0.438
in. valve dia: 0.550 Port bore 0.500



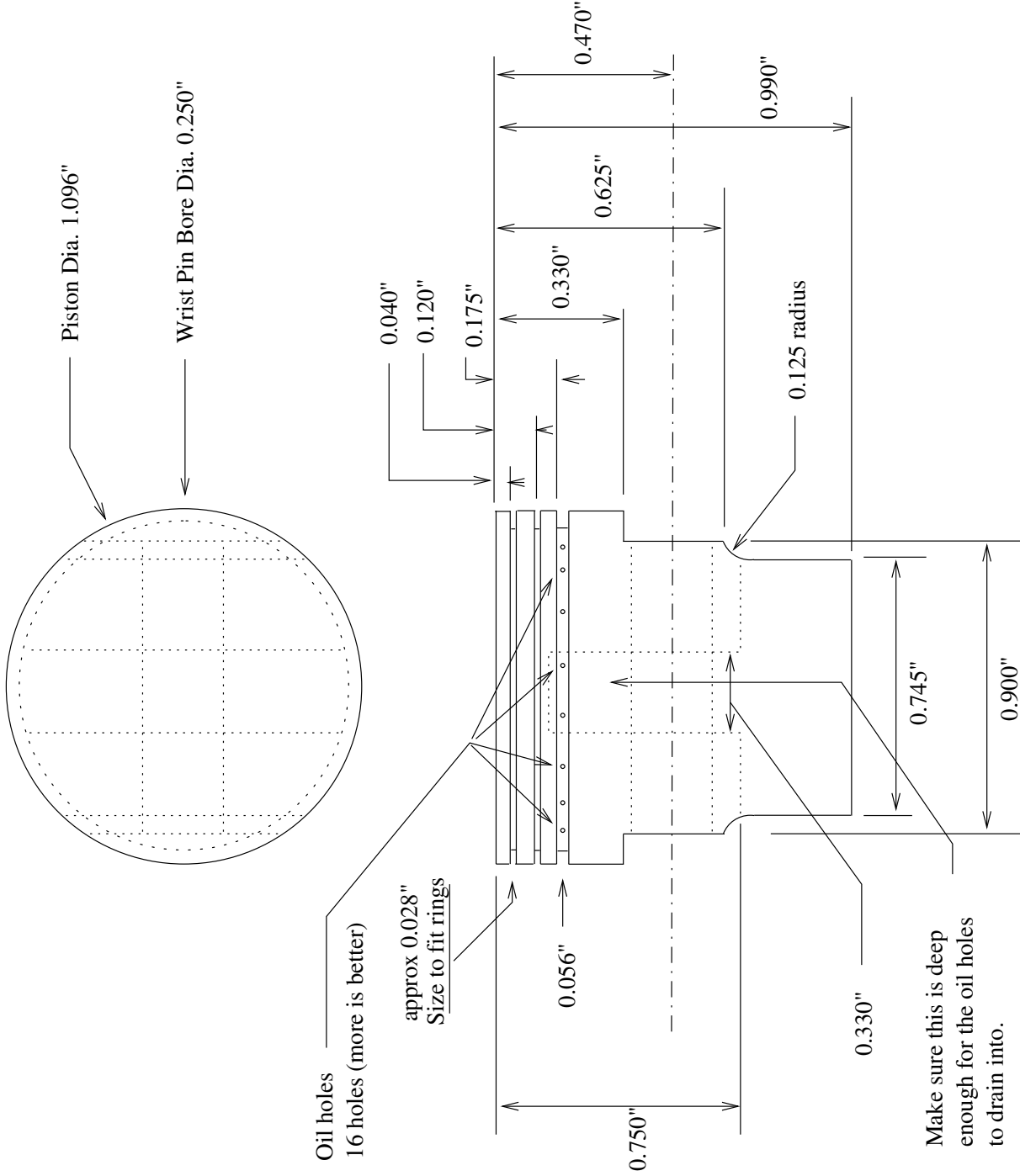
Bore through for valve guide



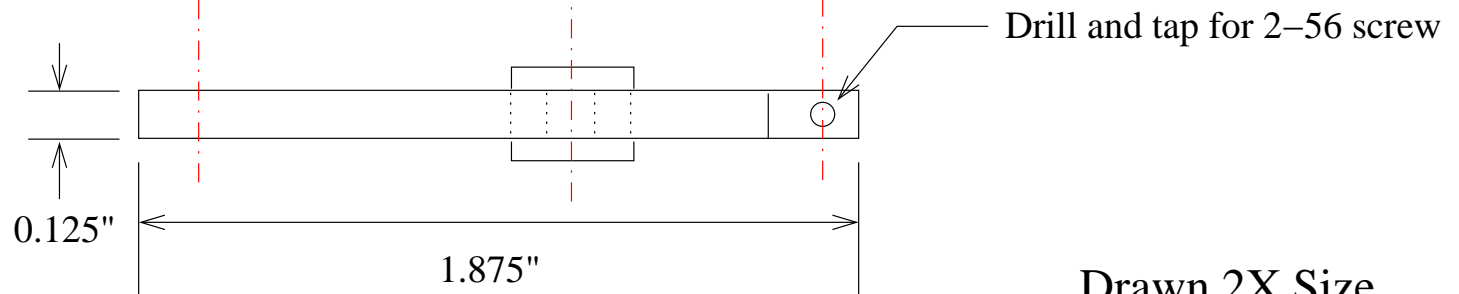
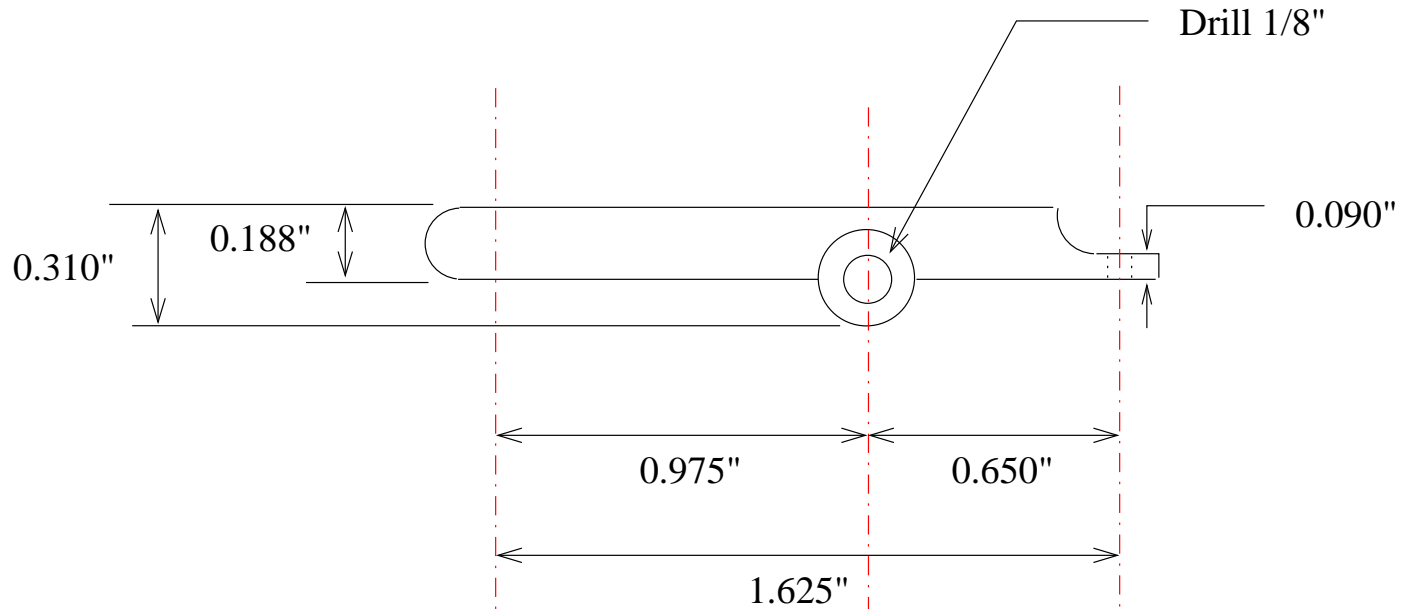
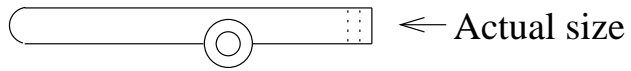
Oil Pan 11-9-00 All dimensions are inches unless noted.

Drawn by Glen Bond

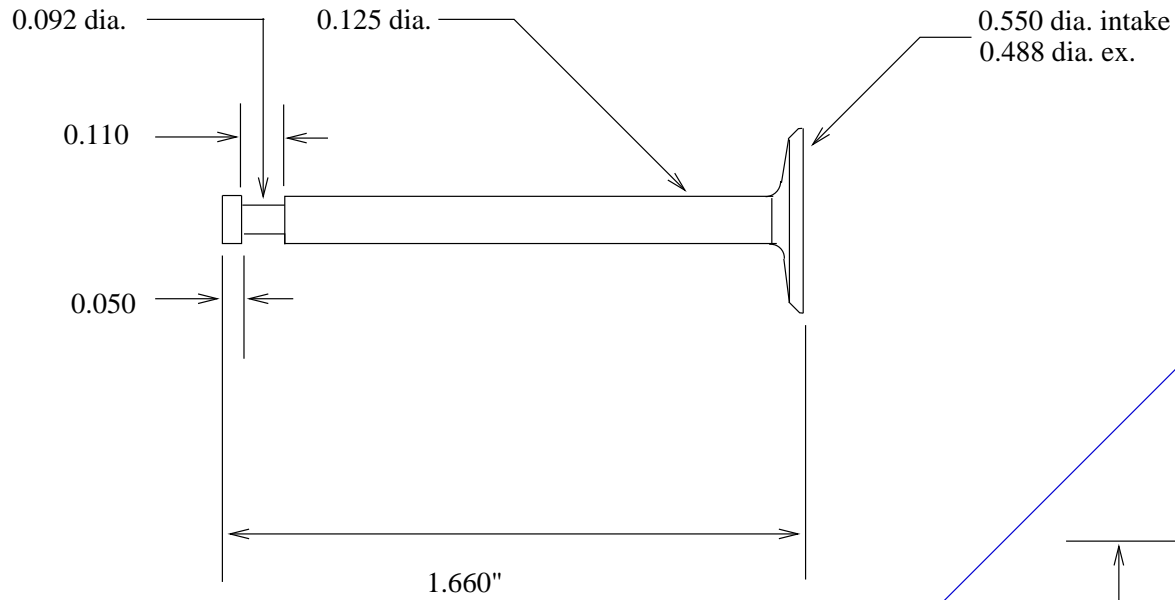
Drawn with XFig 3.2 protocol: 3.2 on a Linux 2.2.13 system



This drawing is 2X size



Drawn 2X Size



Intake valve Drawn 2X Size

