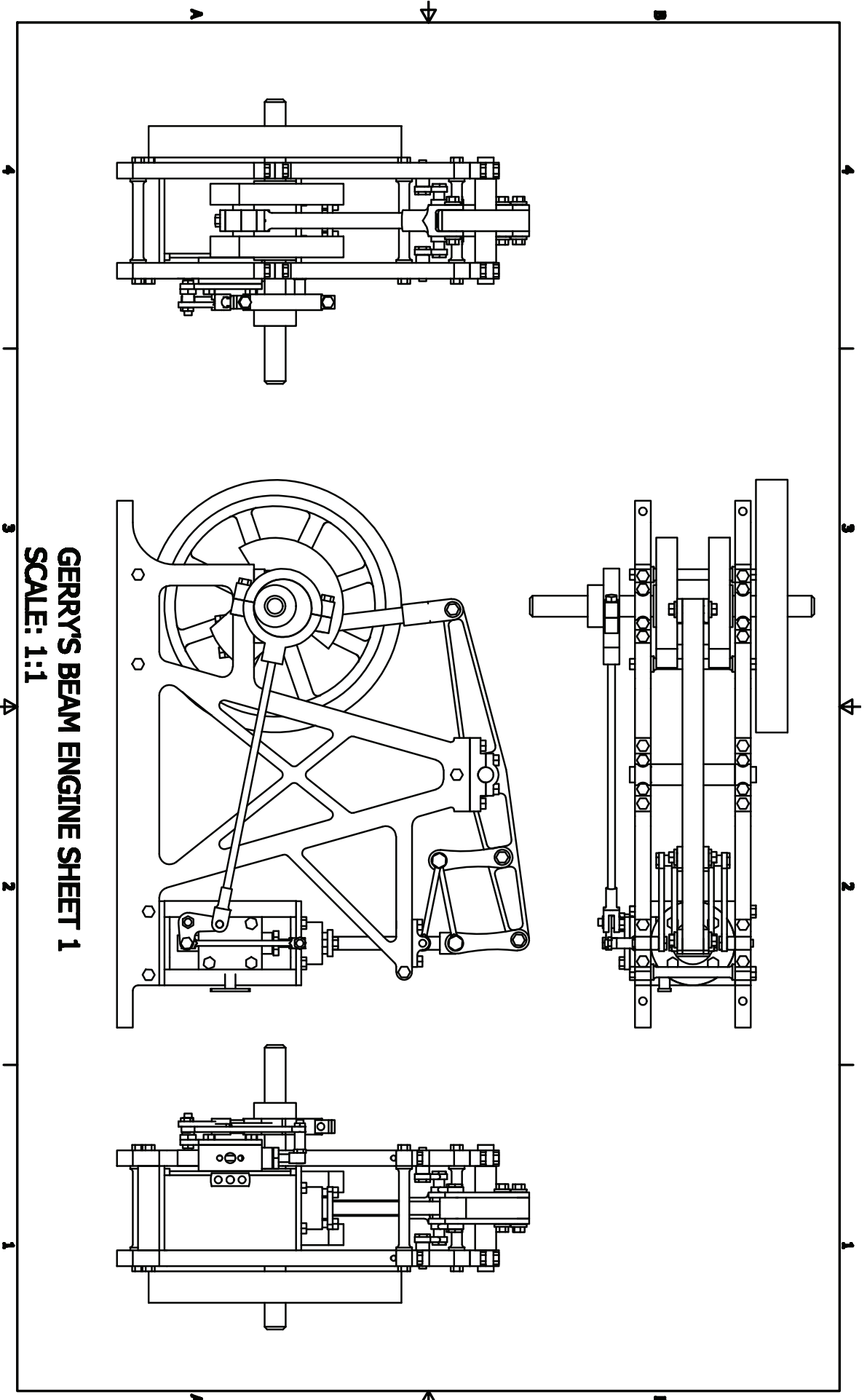
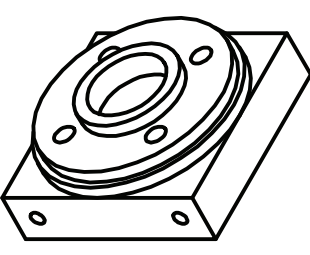
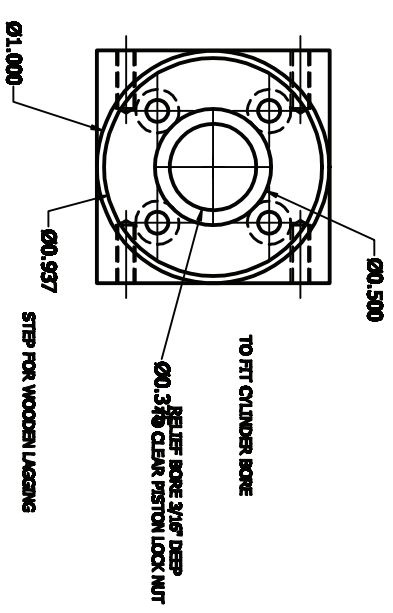
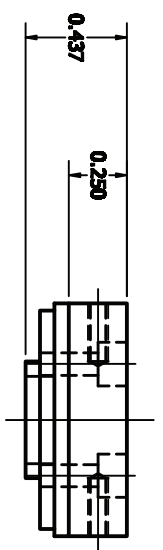
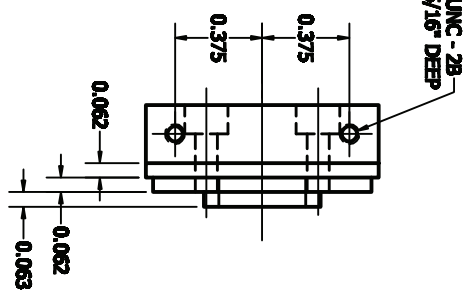
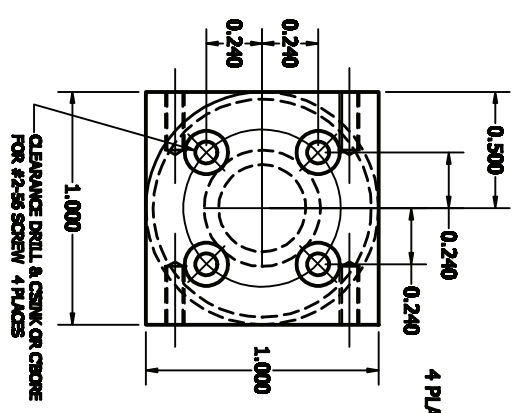


NOTE: PIVOT SHAFT SHOULD BE MACHINED FOR LIGHT PUSH FIT IN BEAM
 CENTER BEAM ON PIVOT SHAFT AT ASSEMBLY & SECURE
 WITH LOCTITE OR A BRASS PIN CROSSDRILLED THRU
 BEAM & PIVOT SHAFT.

GERRY'S BEAM ENGINE SHEET #17
 EXPLODED VIEW DRAWING TO SHOW THE INNOCENT HOW ALL THE LITTLE
 FIDDLEY BITS AND ODD THINGIES ARE MEANT TO FIT TOGETHER

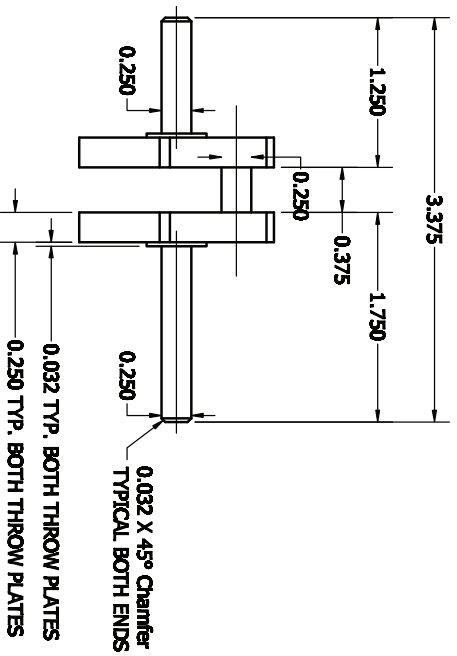
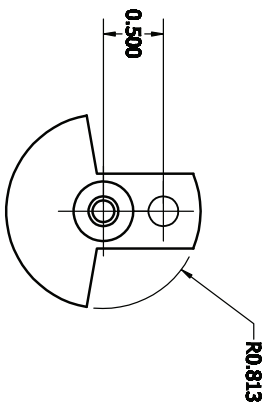


GERRY'S BEAM ENGINE SHEET 1
SCALE: 1:1



BOTTOM CYLINDER HEAD 1 REQUIRED
MATERIAL: FREE MACHINING BRASS
SCALE: 2:1

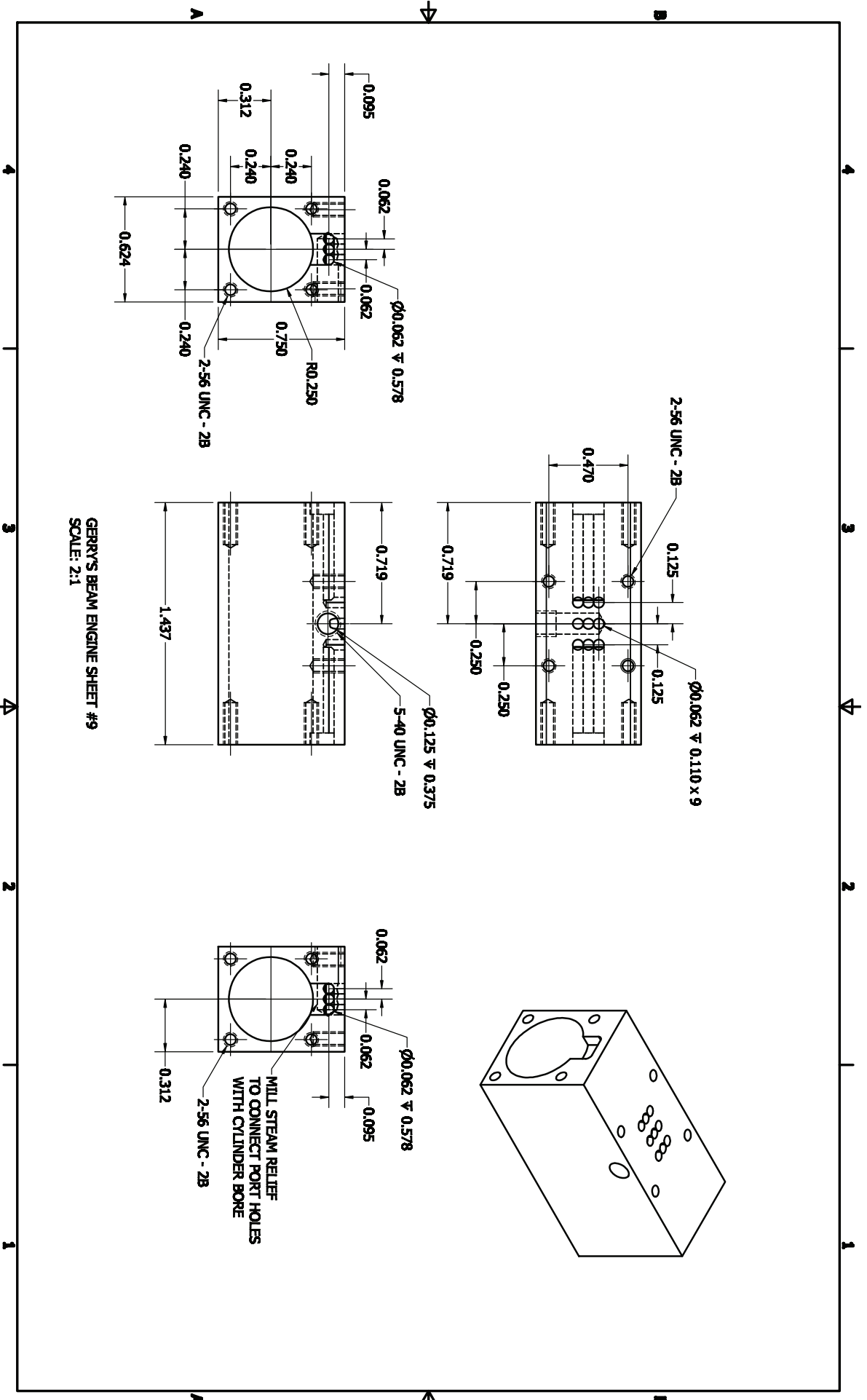
- PROCESS USING LASER BURNED THROW PLATES:
1. ROUGH TURN O.D. OF THROW PLATES
 2. DRILL & REAM CENTER HOLES 1/4"
 3. PIN BOTH PLATES TOGETHER WITH SHORT 1/4" DRILL ROD
 4. DRILL & REAM .500 OFFSET CRANK THROW HOLES AS PAIR
 5. LOCATE THROW PLATES ON 3.375" LONG CENTER SHAFT, ALSO FIT IN THROW SHAFT
 6. SILVER SOLDER THROW PLATES ON SHAFT & ALSO SILVER SOLDER THROW SHAFT.
 7. USE ABRASIVE SAW TO CUT OUT CENTER OF MAIN SHAFT
 8. FINISH TURN O.D. OF THROW PLATES, FACE OUTSIDE SURFACES, AND TURN SHOULDERS.



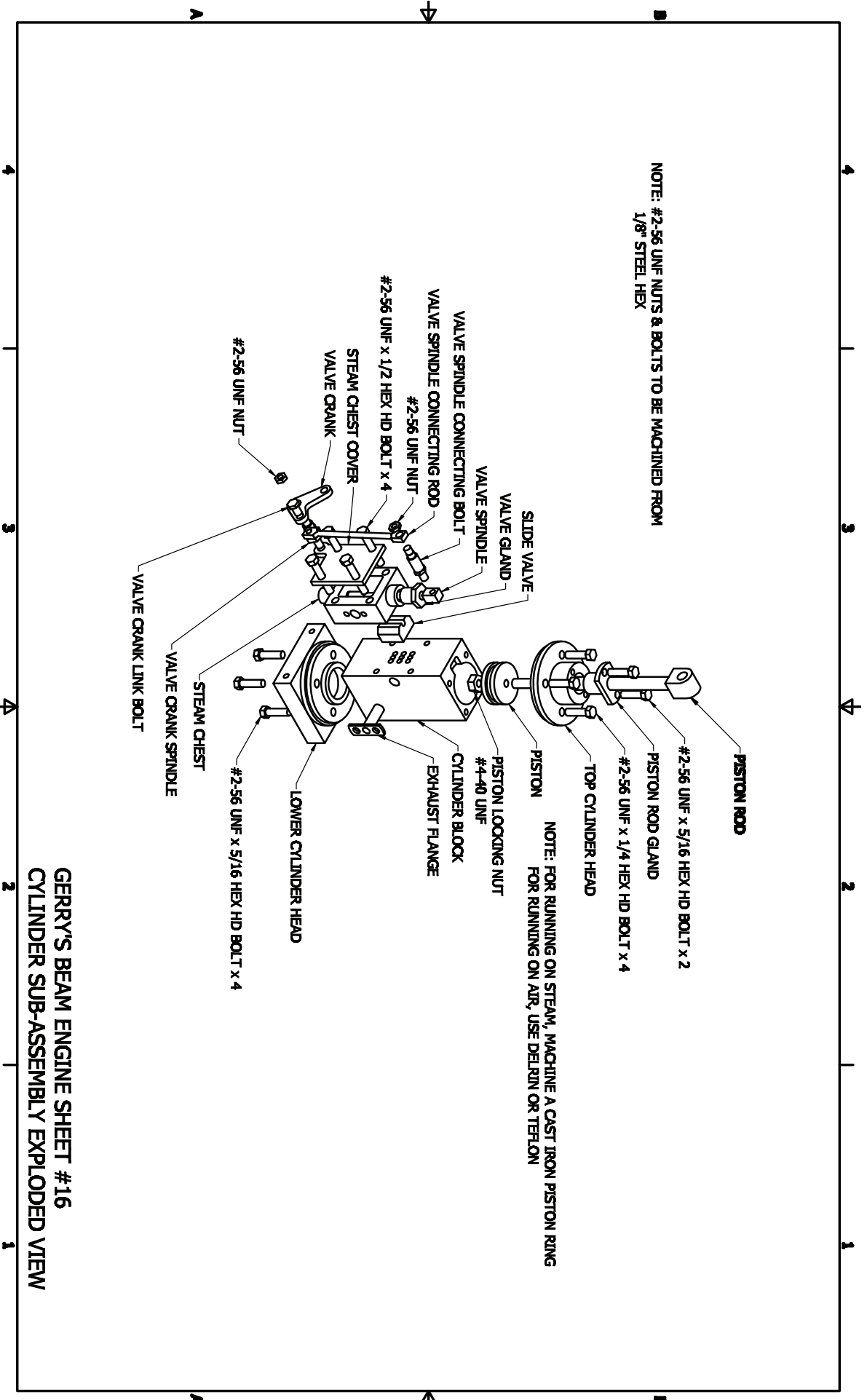
CRANKSHAFT ASSEMBLY DETAIL
 1 REQUIRED
 MATERIAL: LASER CUT STEEL PLATE & 1/4" DIA. DRILL ROD

DRAWING SCALE 1:1

GERRY'S BEAM ENGINE SHEET #5



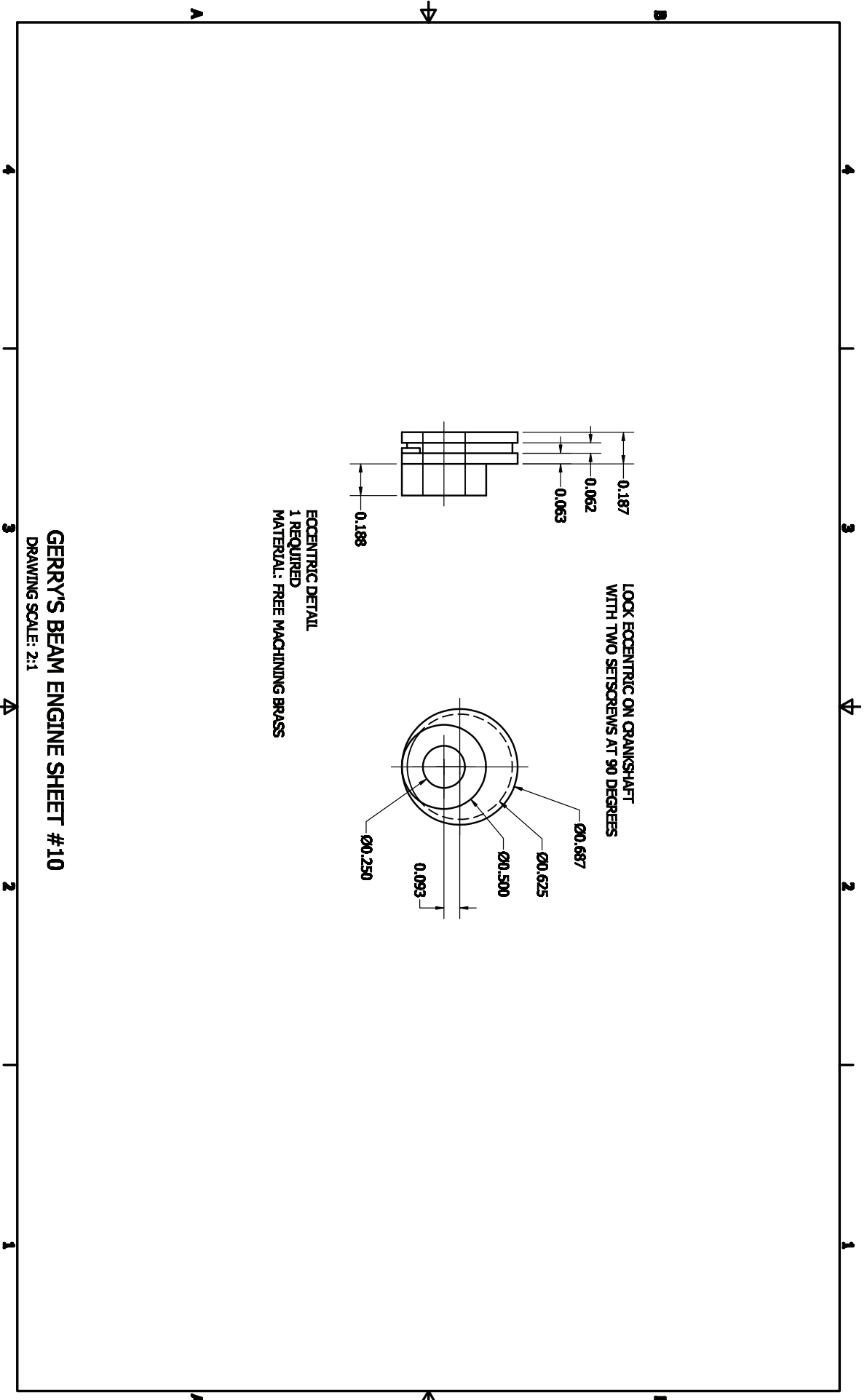
GERRY'S BEAM ENGINE SHEET #9
SCALE: 2:1



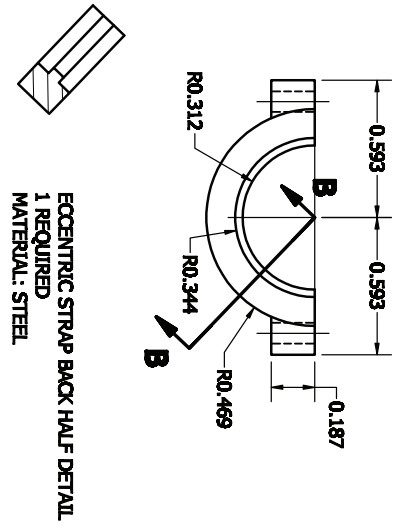
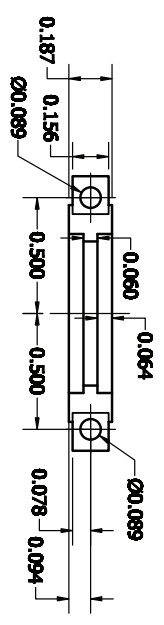
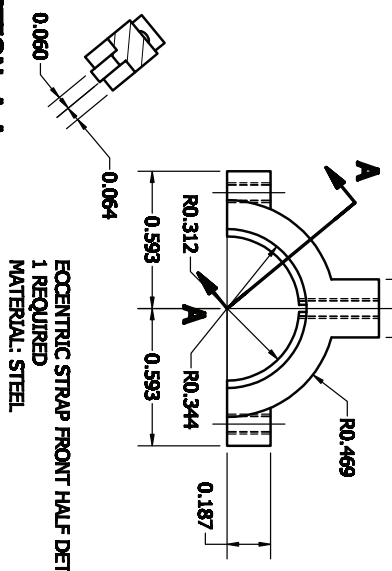
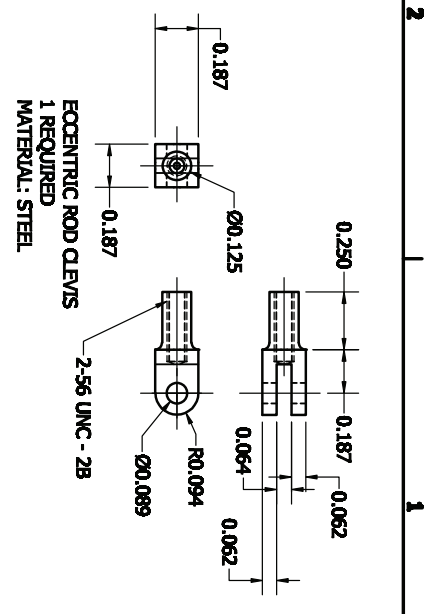
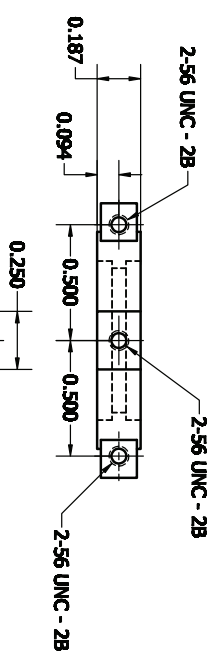
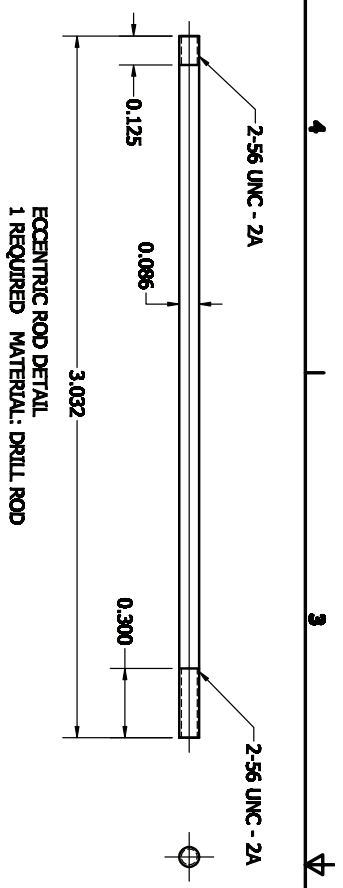
NOTE: #2-56 UNF NUTS & BOLTS TO BE MACHINED FROM
1/8" STEEL HEX

NOTE: FOR RUNNING ON STEAM, MACHINE A CAST IRON PISTON RING
FOR RUNNING ON AIR, USE DELRIN OR TEFLON

GERRY'S BEAM ENGINE SHEET #16
CYLINDER SUB-ASSEMBLY EXPLODED VIEW



GERRY'S BEAM ENGINE SHEET #10
 DRAWING SCALE: 2:1



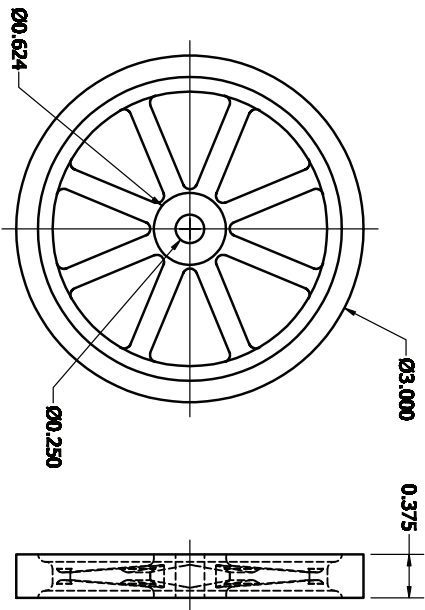
SECTION A-A
SCALE 2 : 1

GERRY'S BEAM ENGINE SHEET #11

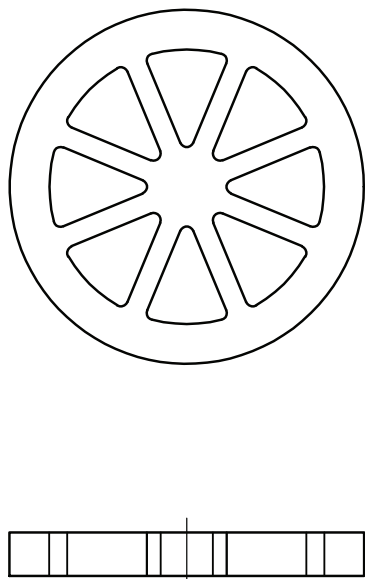
SHEET SCALE: 2:1

SECTION B-B
SCALE 2 : 1

NOTE: RIM RELIEF & HUB TAPERS TO BE MACHINED TO SUITE YOUR TASTES. FILETS CAN BE FILED ON THE SPOKE EDGES AS WELL DEPENDING ON YOUR SKILLS & HOW BLUNTY YOU WANT IT TO BE. REALLY THE ONLY IMPORTANT DIMENSION IS TO MAKE THE BORE FIT THE CRANKSHAFT. ALSO I WOULD RECOMMEND TWO SETSCREWS AT 90 DEGREES APART.



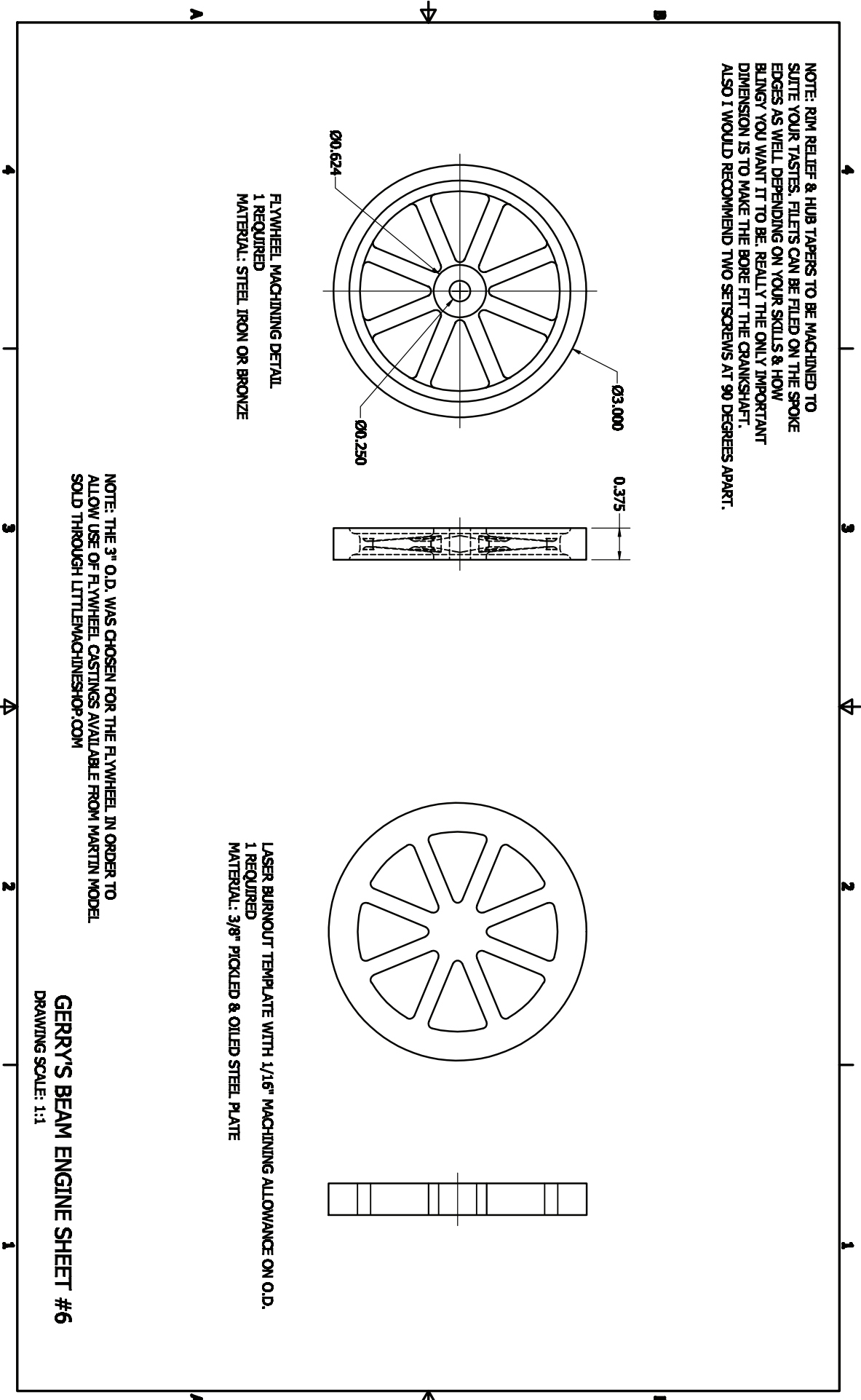
FLYWHEEL MACHINING DETAIL
 1 REQUIRED
 MATERIAL: STEEL, IRON OR BRONZE

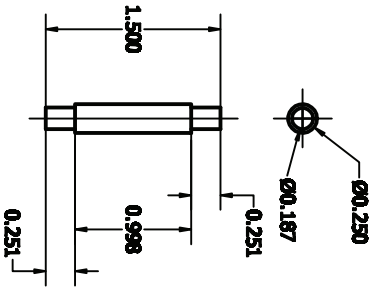


LASER BURNOUT TEMPLATE WITH 1/16" MACHINING ALLOWANCE ON O.D.
 1 REQUIRED
 MATERIAL: 3/8" PICKLED & OILED STEEL PLATE

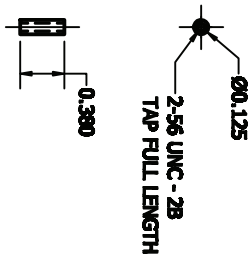
NOTE: THE 3" O.D. WAS CHOSEN FOR THE FLYWHEEL IN ORDER TO ALLOW USE OF FLYWHEEL CASTINGS AVAILABLE FROM MARTIN MODEL SOLD THROUGH LITTELMACHINESHOP.COM

GERRY'S BEAM ENGINE SHEET #6
 DRAWING SCALE: 1:1

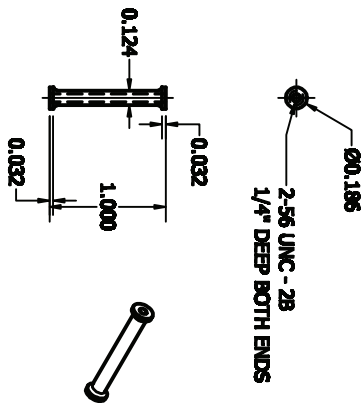




BEAM PIVOT SHAFT
 1 REQUIRED
 MATERIAL: 5/16" DIA. DRILL ROD
 LOCATE BEAM CENTRAL ON THIS
 SHAFT & PIN IN PLACE



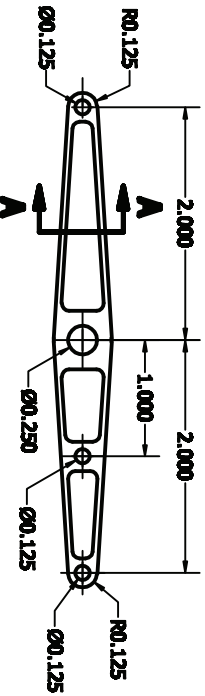
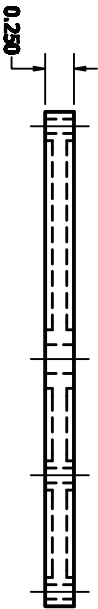
BEAM END BUSHING
 2 REQUIRED
 MATERIAL: FREE MACHINING BRASS



FRAME SPREADER BAR
 3 REQUIRED
 MATERIAL: 3/16" DIA. DRILL ROD



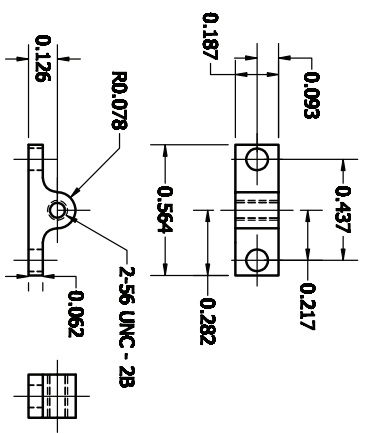
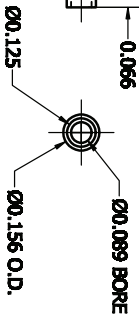
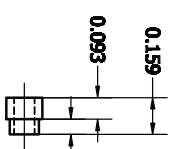
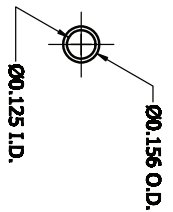
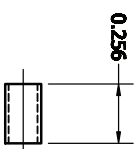
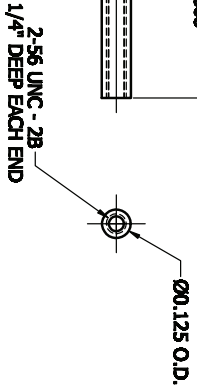
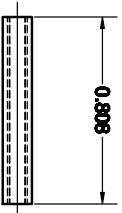
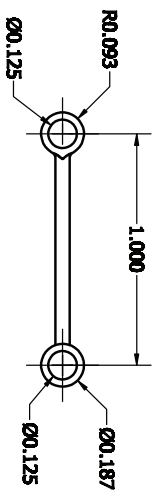
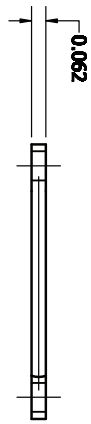
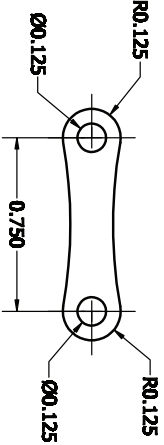
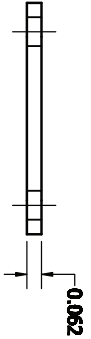
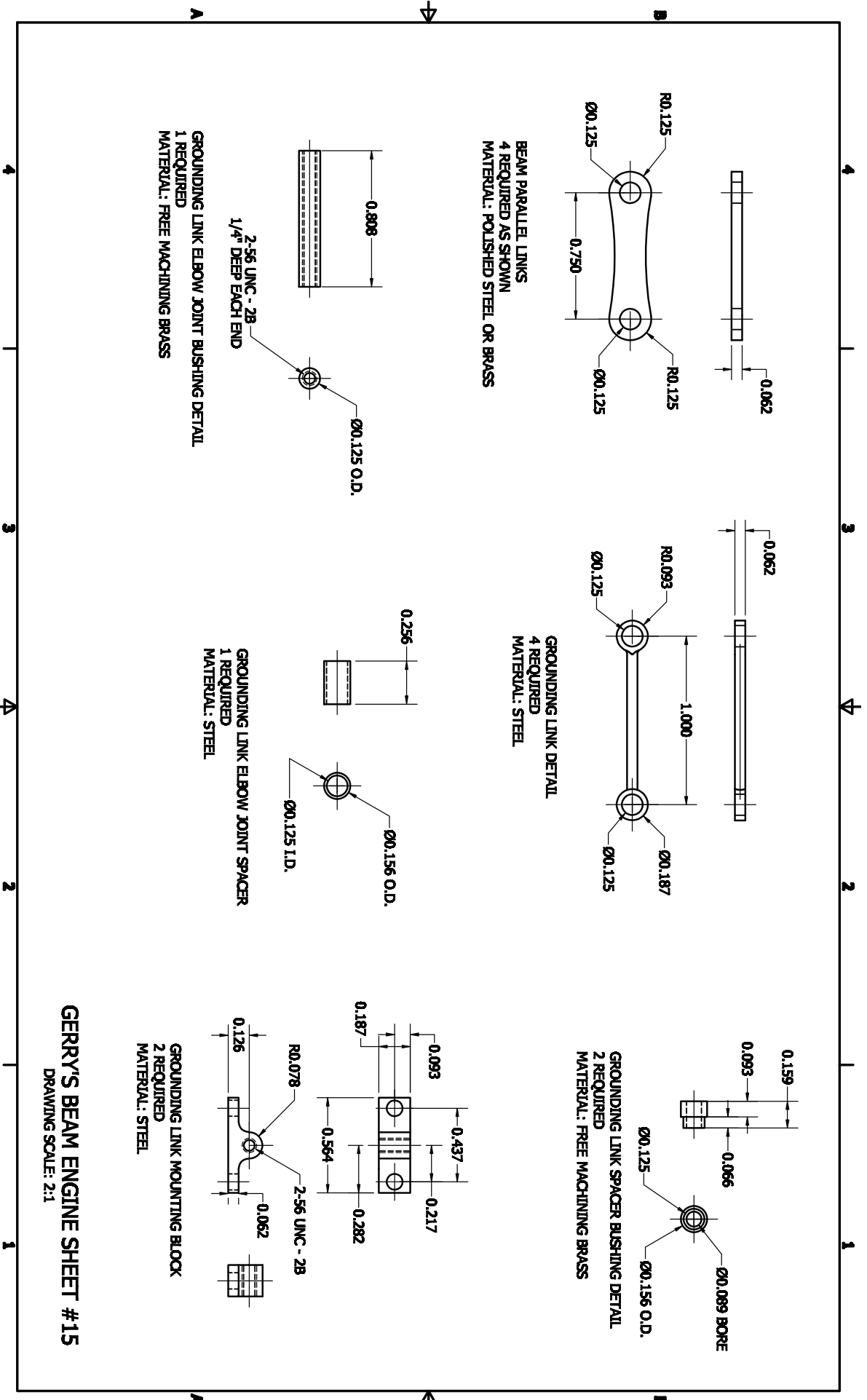
SECTION A-A
 SCALE 1 : 1

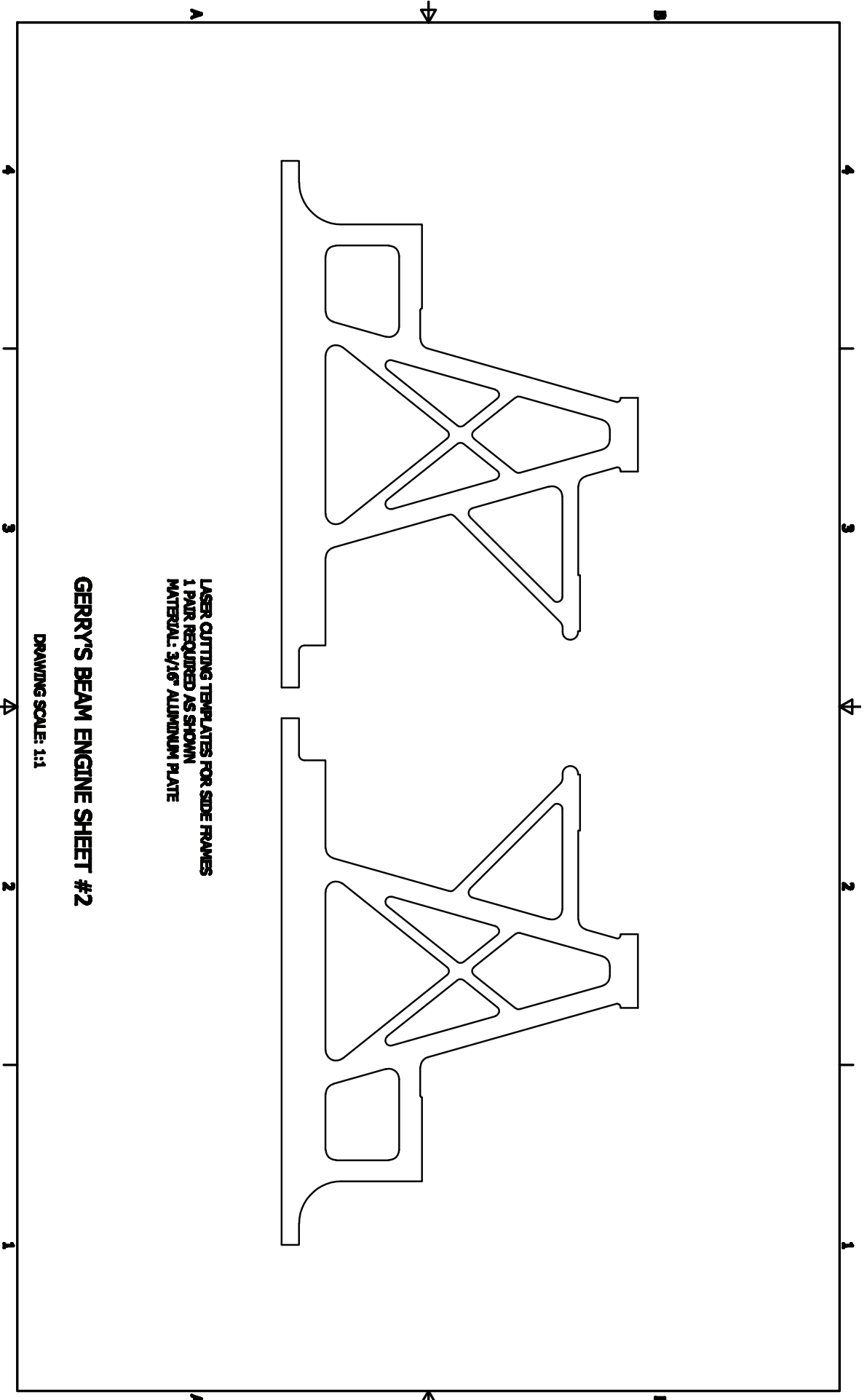


ROCKING BEAM DETAIL
 1 REQUIRED
 MATERIAL: LASER CUT 1/4" ALUMINUM PLATE
 ALTERNATE: LASER CUT 1/4" P & O STEEL PLATE
 MILLED RELIEFS SHOWN IN BEAM ARMS
 ARE OPTIONAL "BLING"

GERRY'S BEAM ENGINE SHEET #4

SCALE FOR THIS SHEET: 1:1



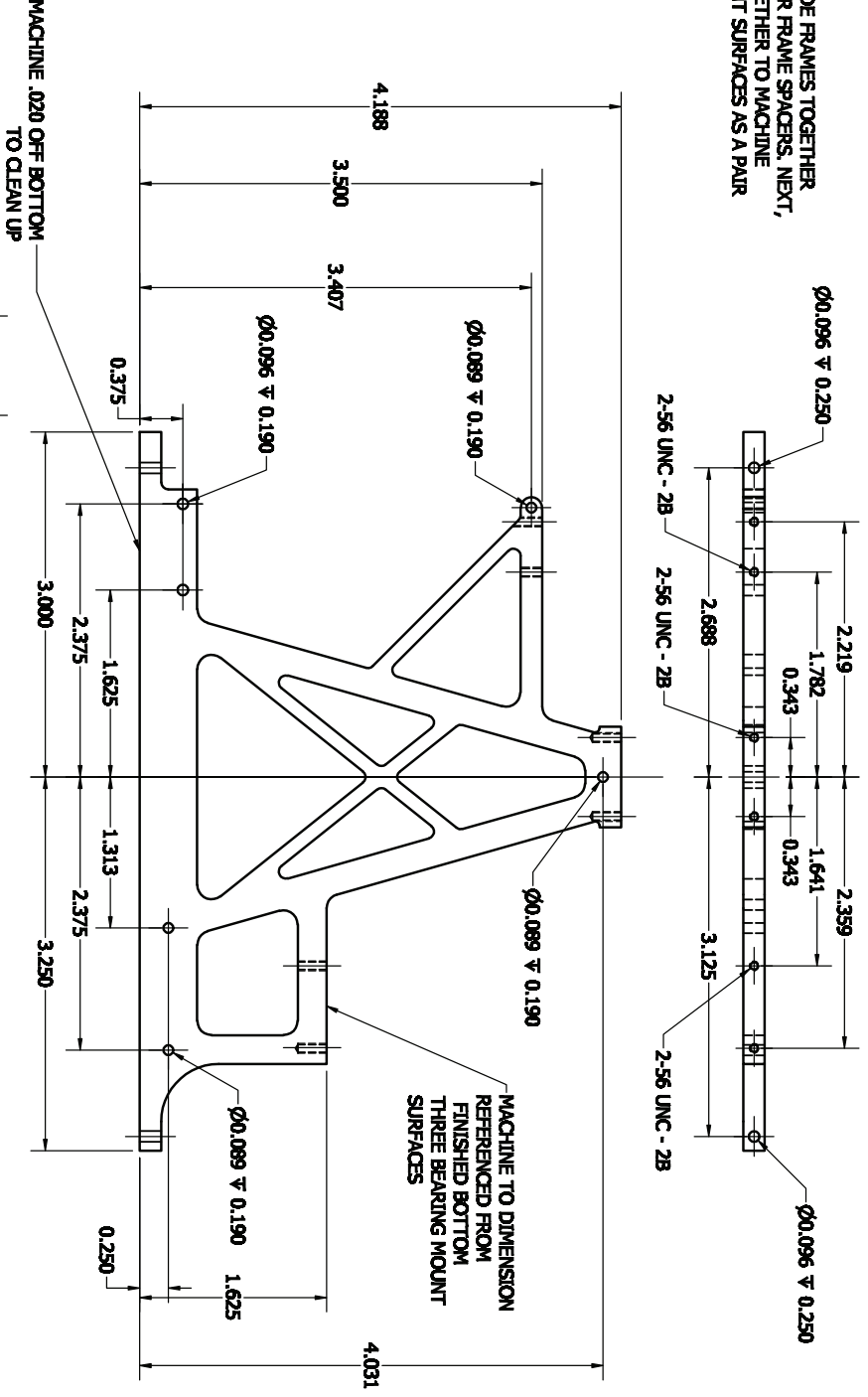


LASER CUTTING TEMPLATES FOR SIDE FRAMES
1 PAIR REQUIRED AS SHOWN
MATERIAL: 3/16" ALUMINUM PLATE

GERRY'S BEAM ENGINE SHEET #2

DRAWING SCALE: 1:1

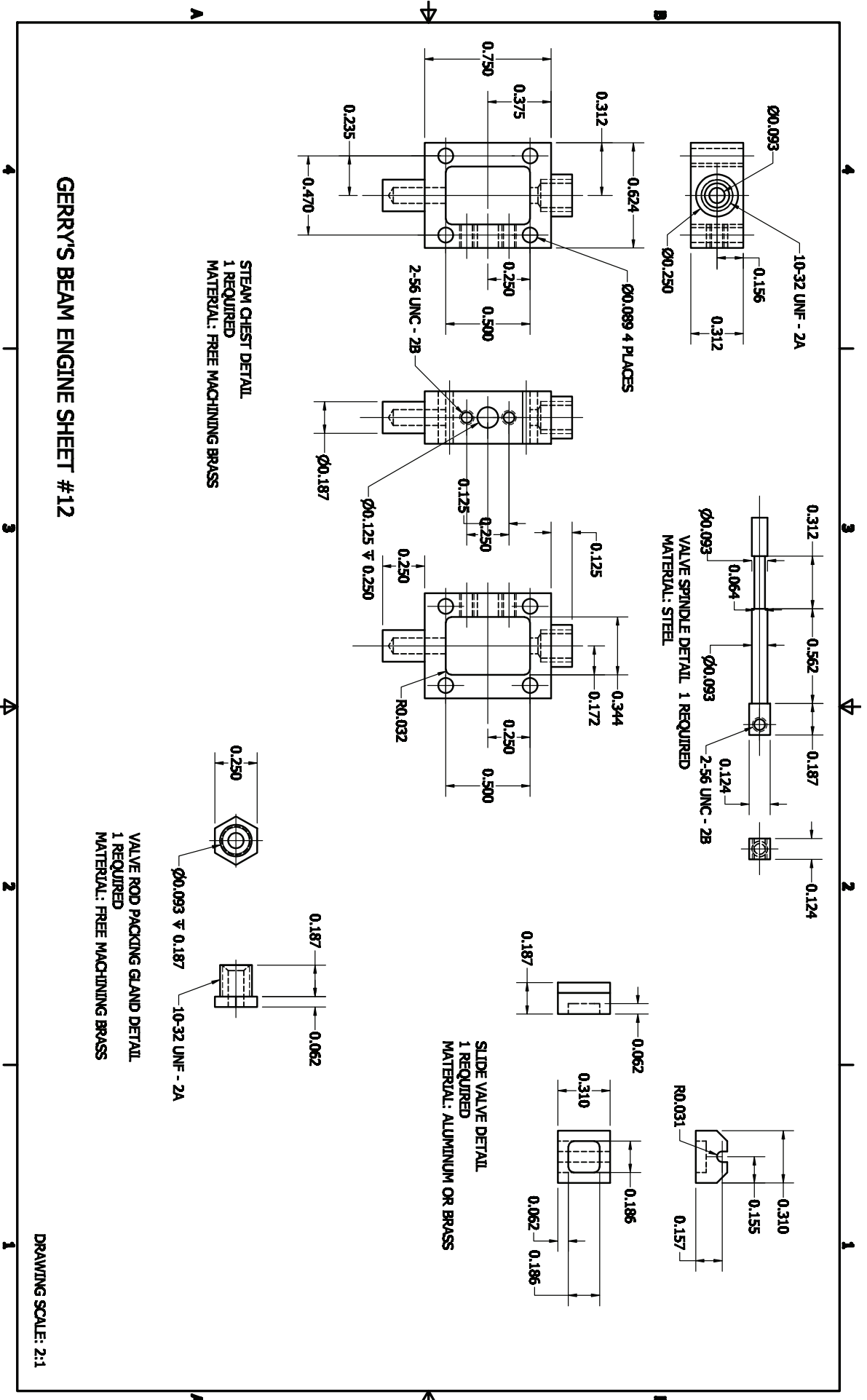
CLAMP TWO SIDE FRAMES TOGETHER
 THEN DRILL FOR FRAME SPACERS, NEXT,
 PIN SIDES TOGETHER TO MACHINE
 BEARING MOUNT SURFACES AS A PAIR



SIDE FRAME MACHINING DETAIL
 2 REQUIRED
 MATERIAL: LASER CUT ALUMINUM PLATE

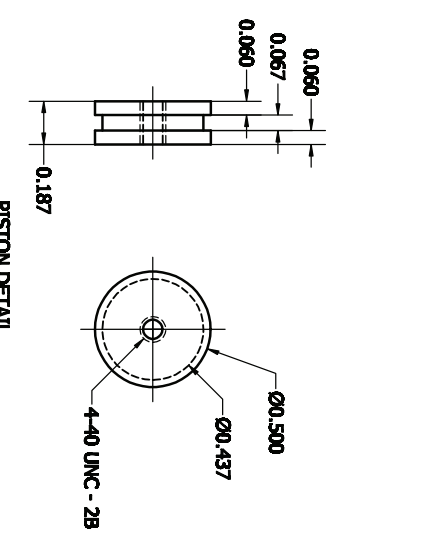
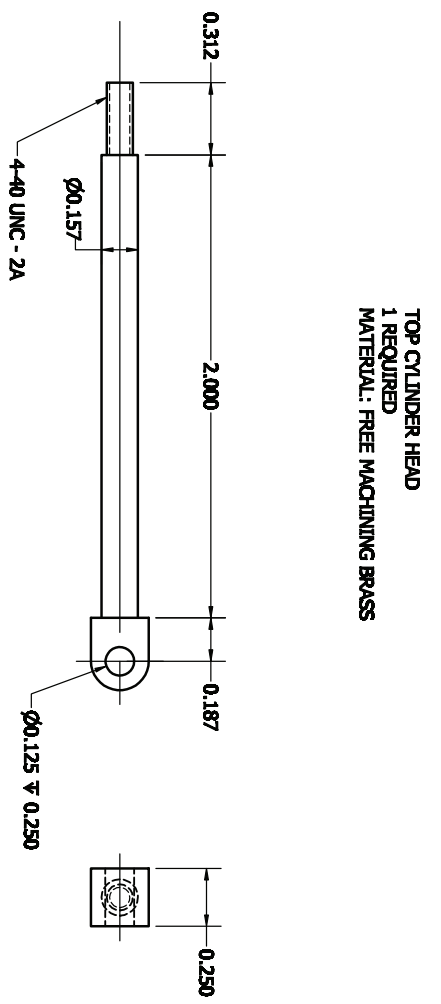
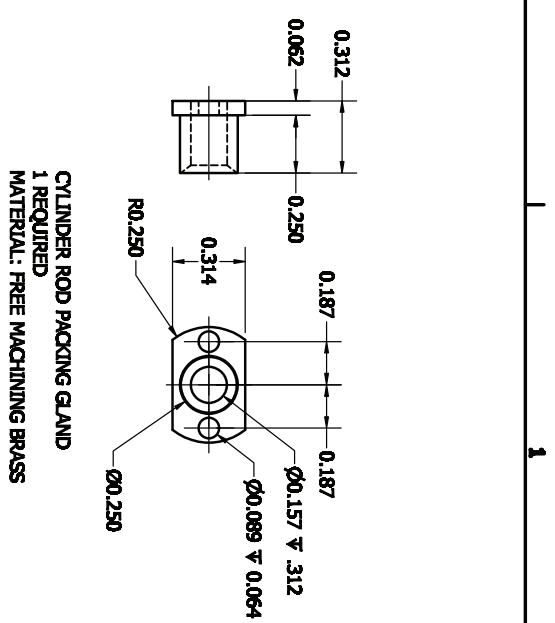
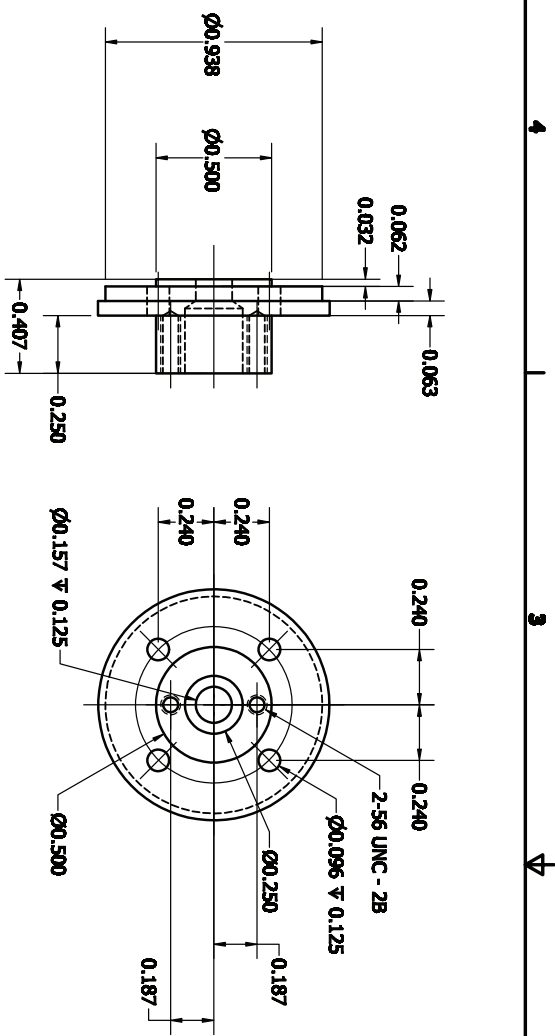
GERRY'S BEAM ENGINE SHEET #3
 SCALE: 1:1

4 3 2 1 4 3 2 1

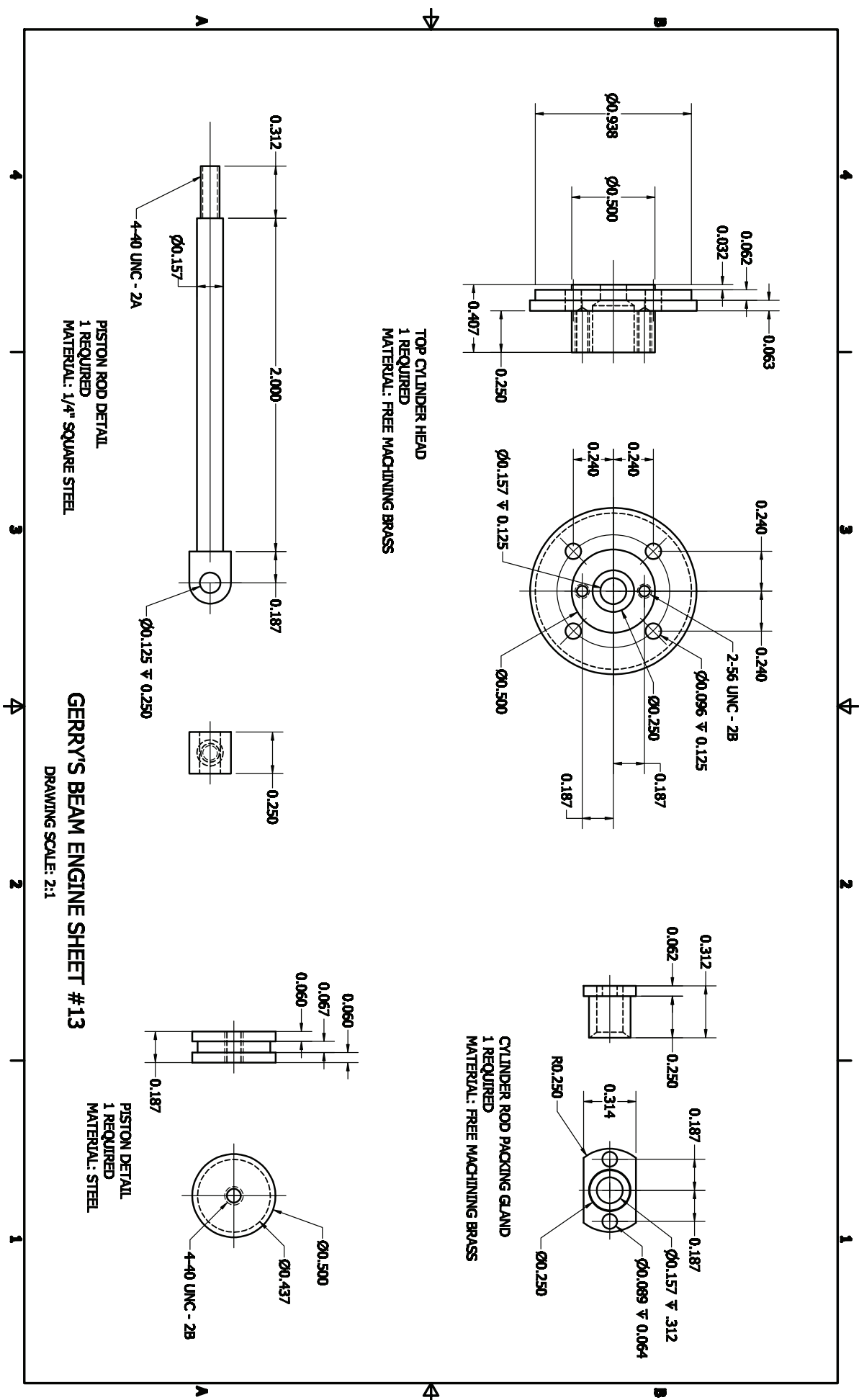


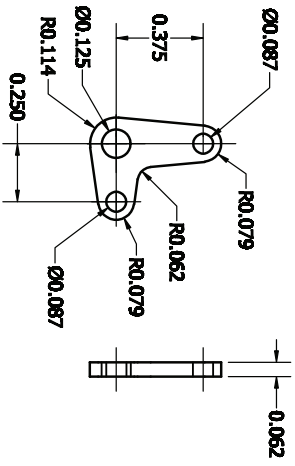
GERRY'S BEAM ENGINE SHEET #12

DRAWING SCALE: 2:1

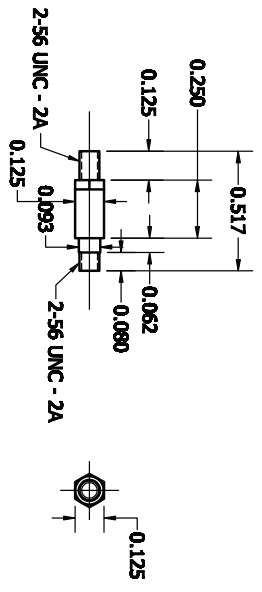


GERRY'S BEAM ENGINE SHEET #13
 DRAWING SCALE: 2:1

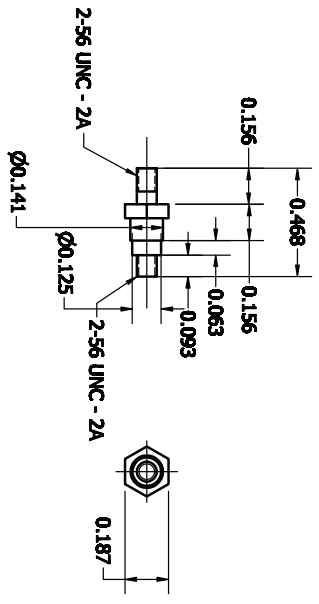




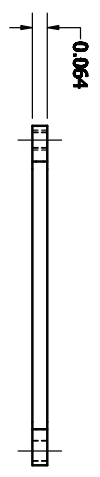
VALVE LINK BELLCRANK
 1 REQUIRED
 MATERIAL: 16 GA. STEEL



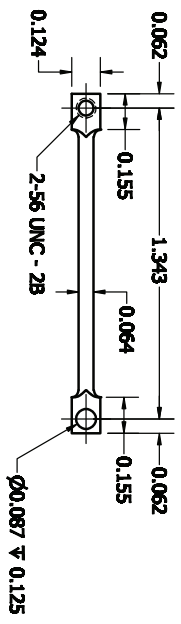
VALVE STEM OFFSET POST
 1 REQUIRED
 MATERIAL: 1/8" STEEL HEX
 SILVER SOLDER TO VALVE ROD END



BELLCRANK MOUNTING POST
 1 REQUIRED
 MATERIAL: 3/16" STEEL HEX

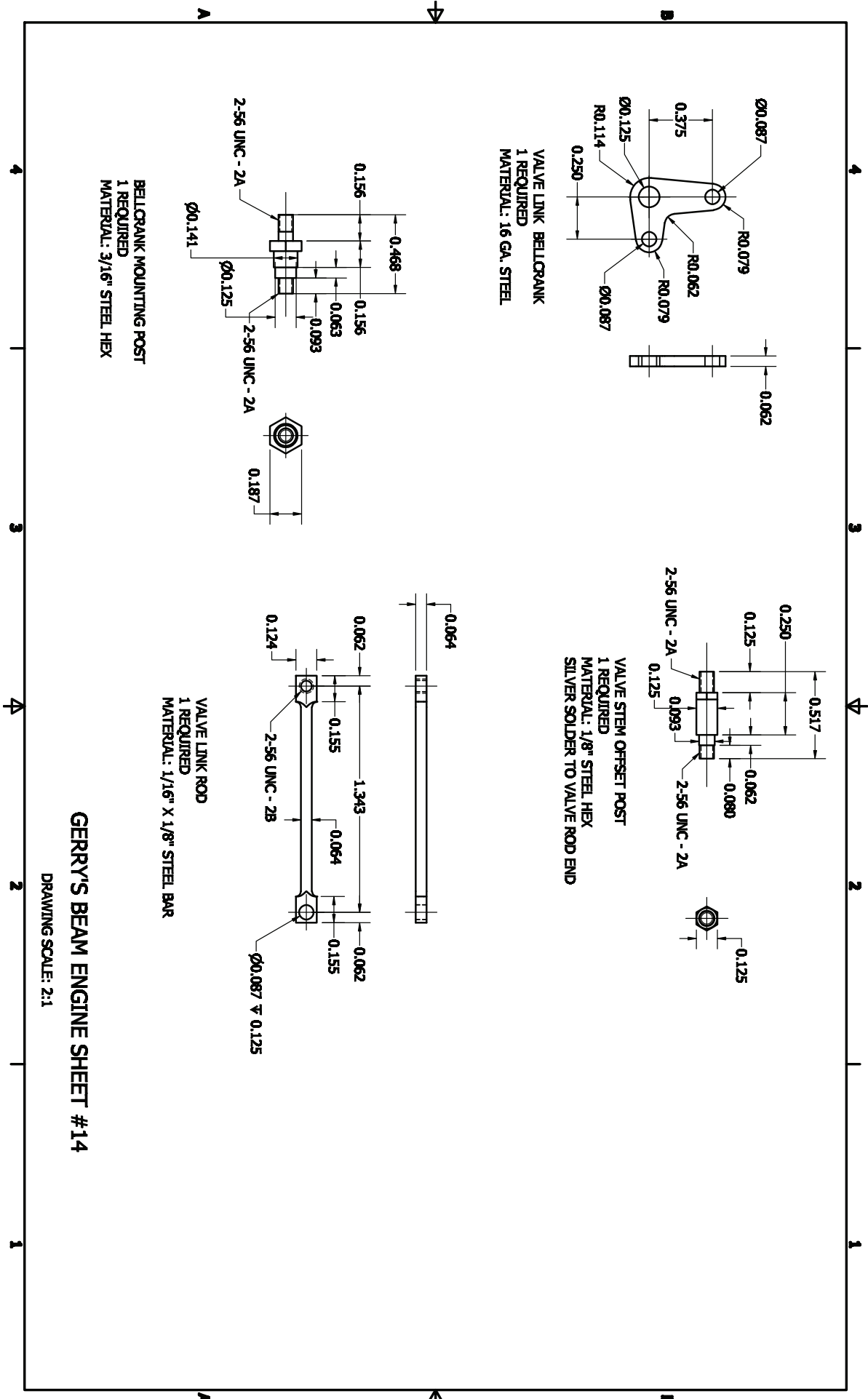


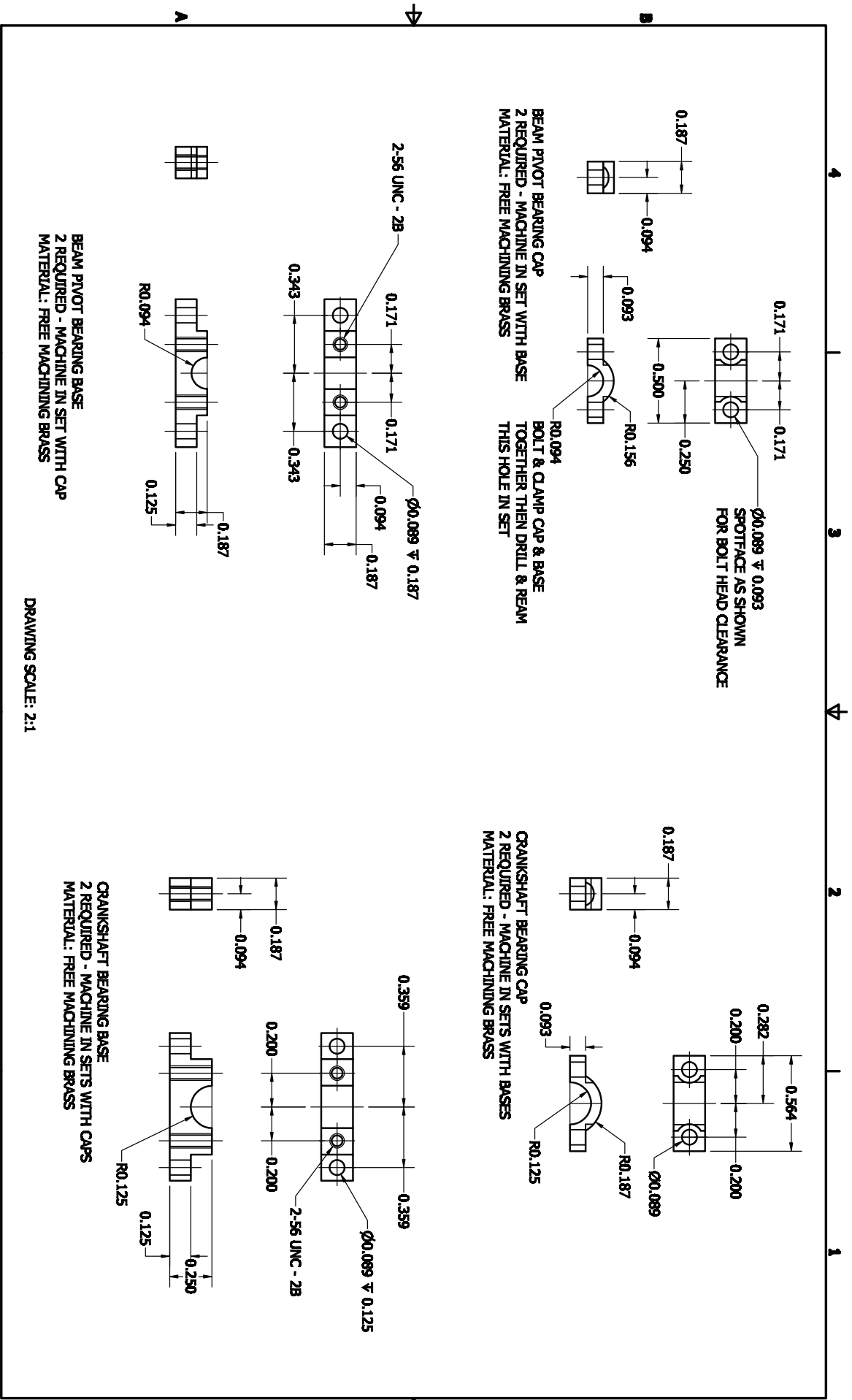
VALVE LINK ROD
 1 REQUIRED
 MATERIAL: 1/16" X 1/8" STEEL BAR

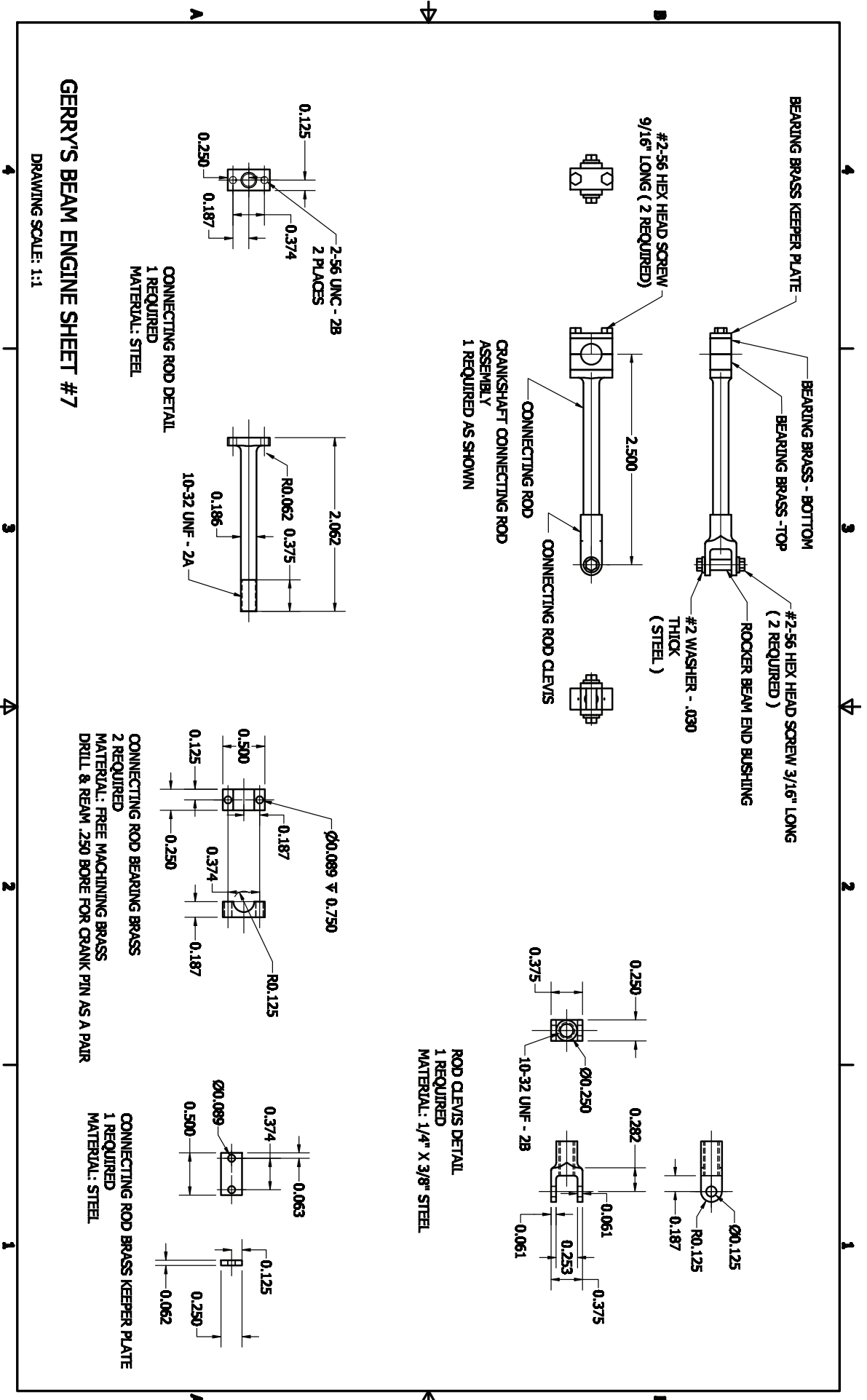


GERRY'S BEAM ENGINE SHEET #14

DRAWING SCALE: 2:1

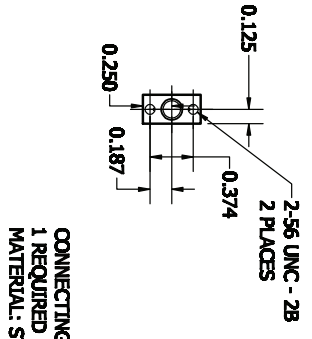




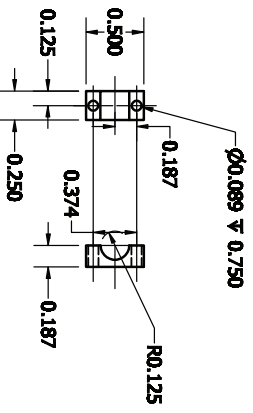
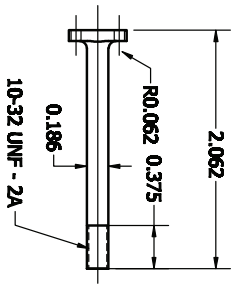


GERRY'S BEAM ENGINE SHEET #7

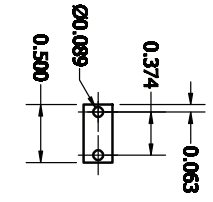
DRAWING SCALE: 1:1



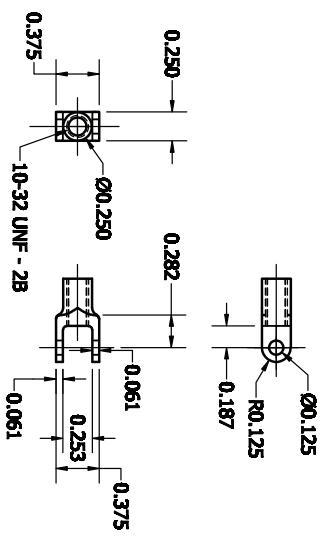
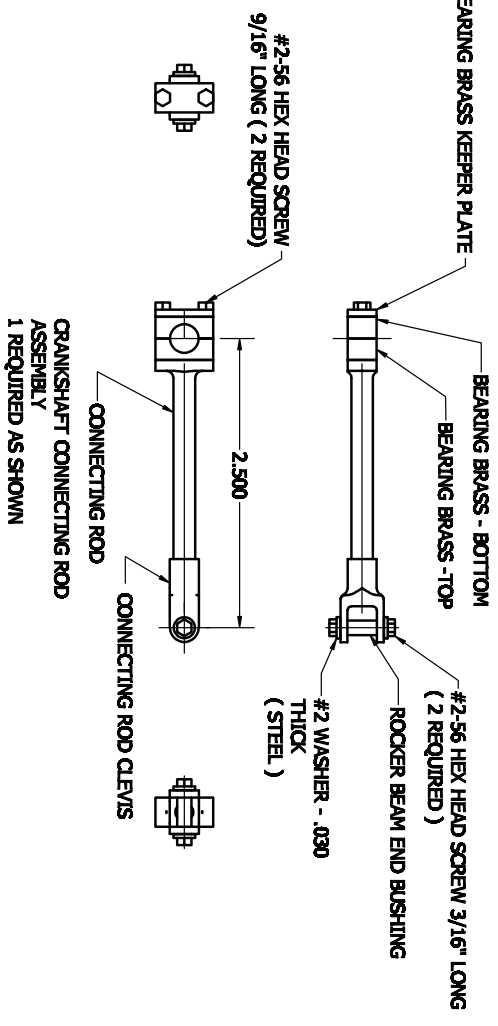
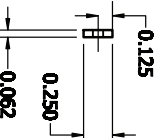
CONNECTING ROD DETAIL
1 REQUIRED
MATERIAL: STEEL



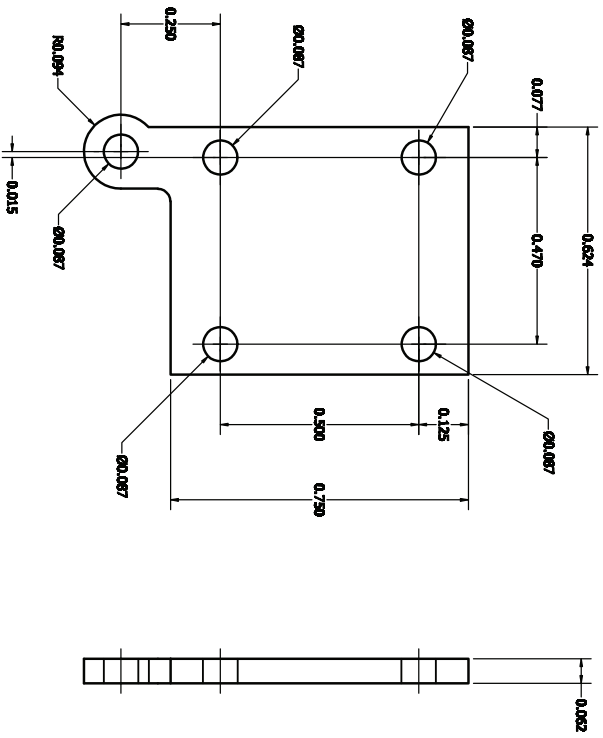
CONNECTING ROD BEARING BRASS
2 REQUIRED
MATERIAL: FREE MACHINING BRASS
DRILL & REAM .250 BORE FOR CRANK PIN AS A PAIR



CONNECTING ROD BRASS KEEPER PLATE
1 REQUIRED
MATERIAL: STEEL



ROD CLEVIS DETAIL
1 REQUIRED
MATERIAL: 1/4" X 3/8" STEEL



STEAM CHEST COVER
MATERIAL: 1/16" BRONZE OR BRASS
1 REQUIRED

DESIGN	1/22/2010	TITLE	STEAM CHEST COVER 1/16"
DESIGNED BY		DATE	1/22/2010
CHECKED BY		SCALE	AS SHOWN
APPROVED BY		REV	0
DATE		DESCRIPTION	
1/22/2010	C	STEAM CHEST COVER 1/16"	REV
SHEET 1 OF 1			