

NASSA TC LOGGER-USB

TEST STAND

The type of Test Stand used with the TC LOGGER USB System is completely up to the individual. For Propellant Characterization and Flight motors up to 54mm in diameter NASSA has developed a simple stand. The drawings are simple and straight forward with minimal dimensions and virtually self defined.

All metal parts were obtained from ON-LINE METALS (www.onlinemetals.com) and are listed:

ITEM	DESCRIPTION
Mild Steel A513 Type 5 DOM Tube 3" x 0.313" x 2.376" Cut to 5"	Steel Tube to hold Motors on the Stand.
MILD STEEL A36 Hot Rolled Plate 0.25" Cut to 12" x 17"	Steel Base Plate
MILD STEEL A36 Hot Rolled Steel 0.25" Cut to XX"	Steel Plate has to be cut diagonally to create the vertical wedge attaching the holder Tube to the Base Plate.

The 12" x 17" plate is the base. Drill four 1/2" holes in each corner for anchoring.

Draw a centerline the length of the 17".

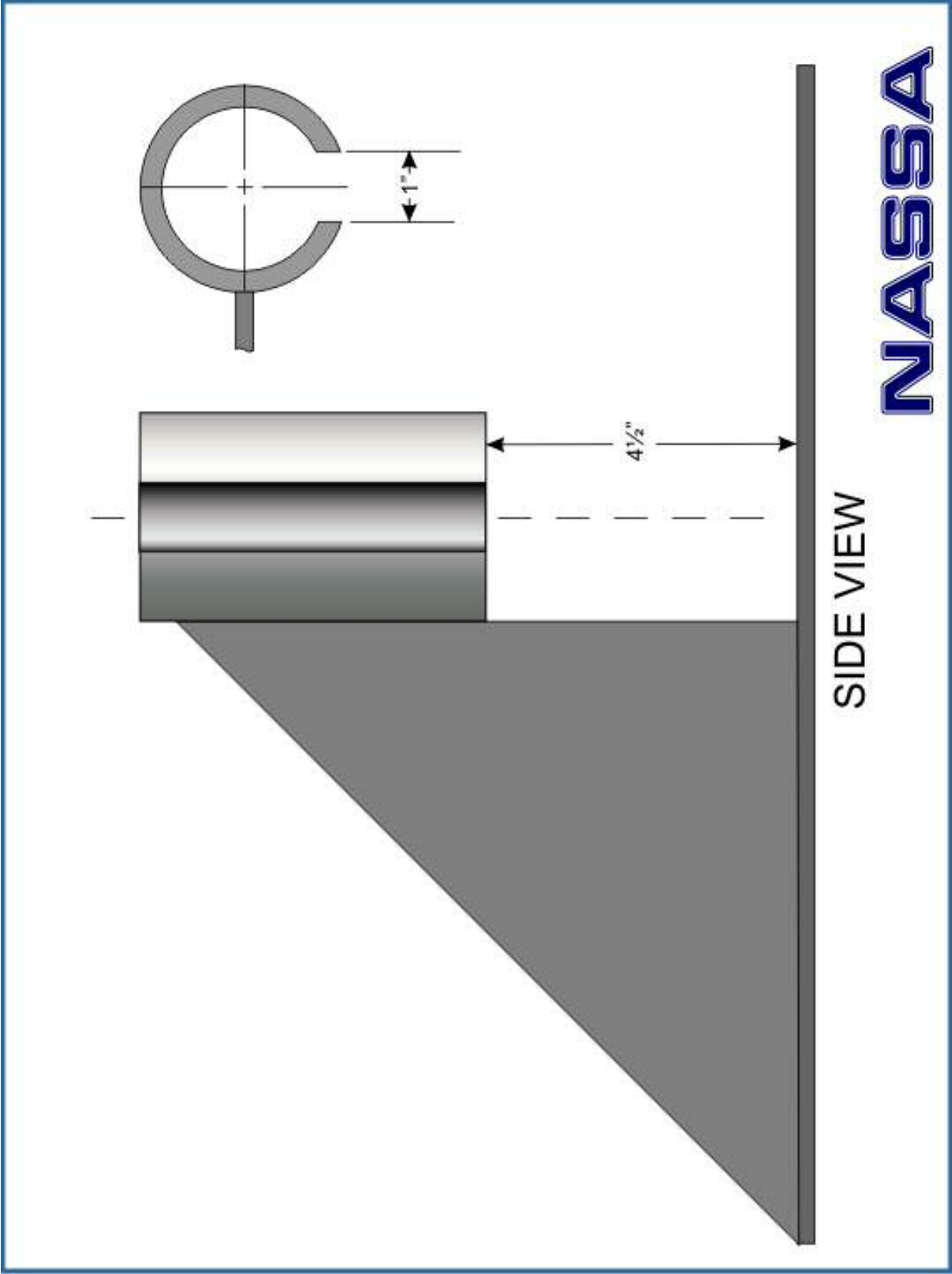
Cut the 9" x 9" plate in half on a diagonal to make the wedged vertical stand. Weld this wedge to the Base Plate as shown in the drawings.

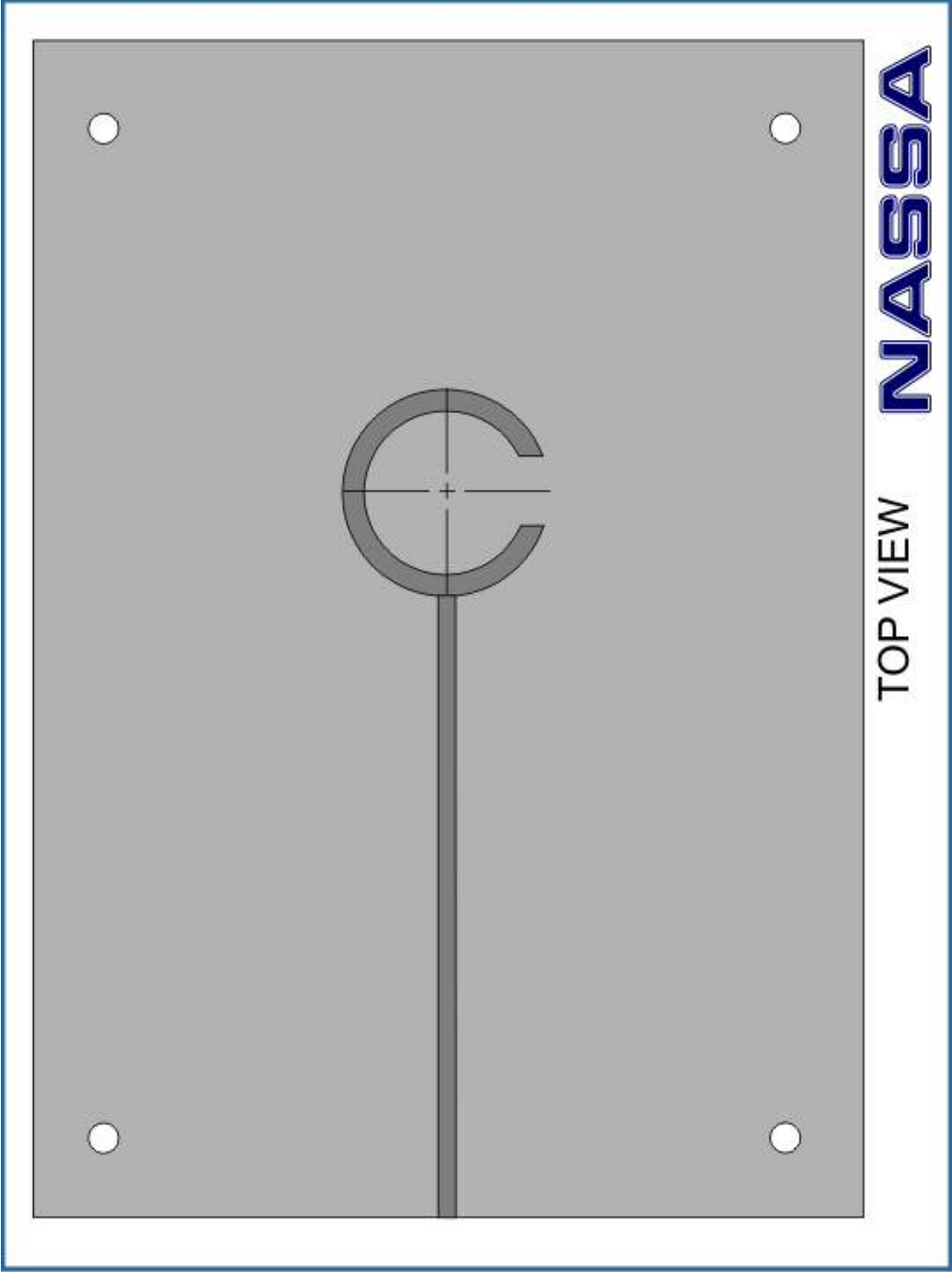
Cut a 1" opening in the 3" Steel Tube. This is to accommodate the Pressure Transducer plumbing when placing the Test Motors in and out of the tube. It is much easier to attach the Pressure Hose to the Case when it's not in the Holder Tube.

Weld the Holder Tube 4 ½" from the Base Plate. This permits plenty of room for any Load Cell used.

Align Load Cell to be used so contact point is centers under the Holder Tube. Drill required holes and bolt Load Cell in place. A square piece of ¼" steel plate should be used under the Load Cell where it bolts to the Base Plate. This will permit clearance for the Load Cell to operate properly.

Review the drawing and all will be clear. If not you shouldn't be doing this!





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TOP VIEW