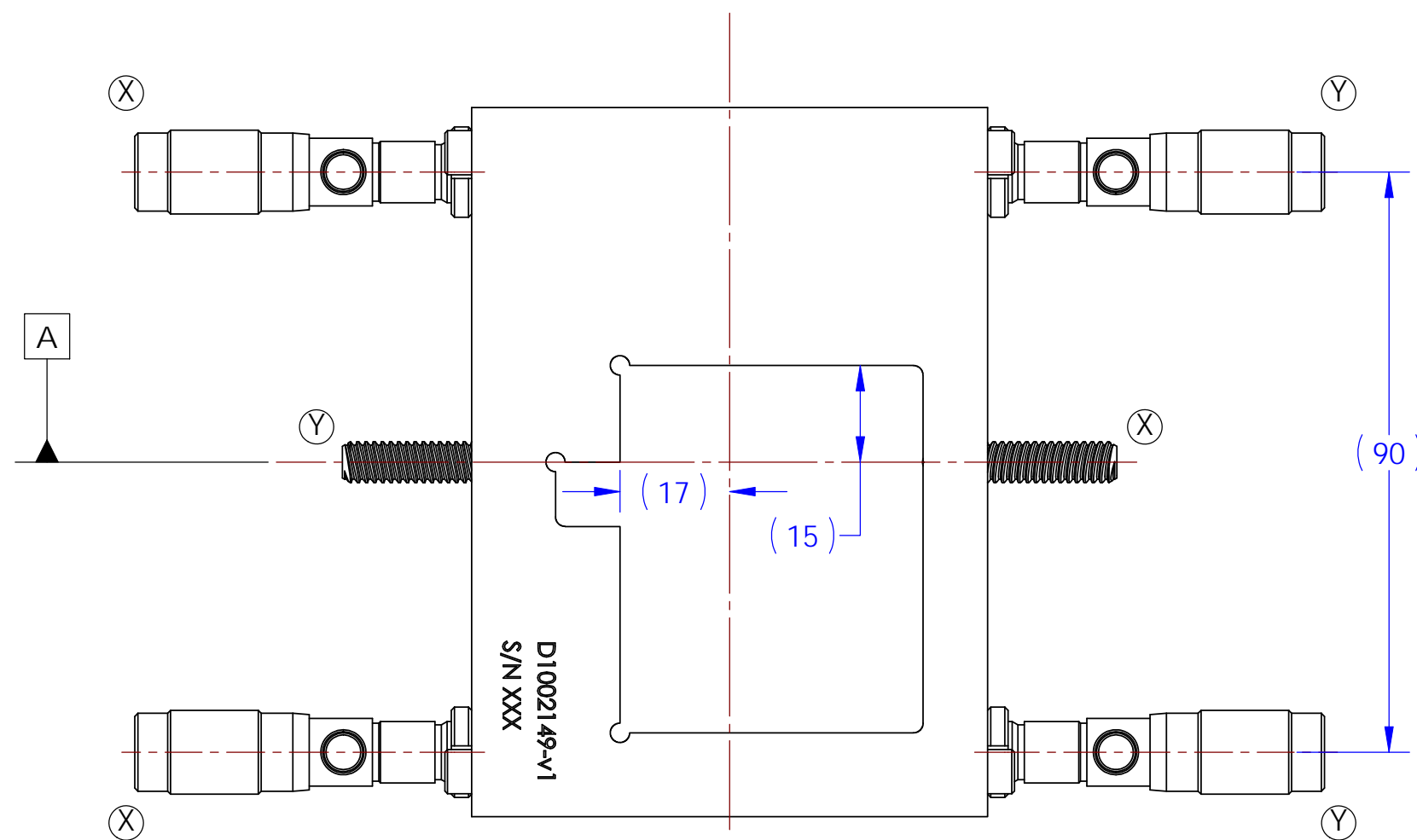
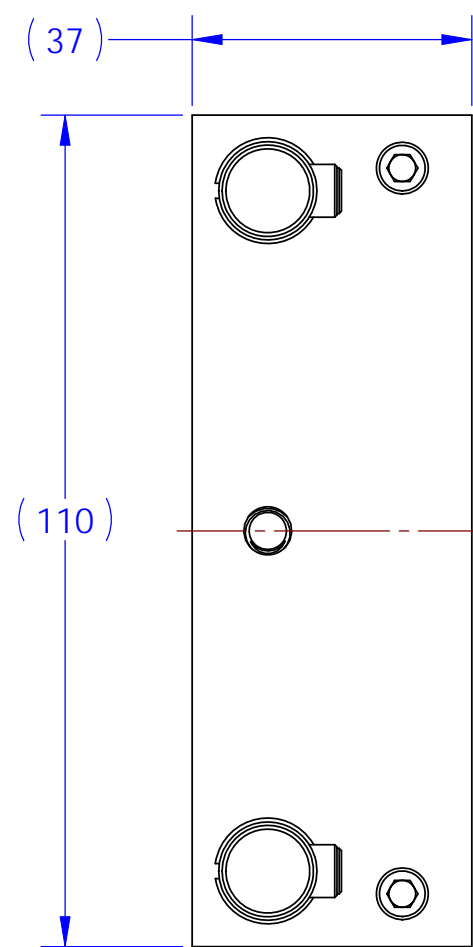
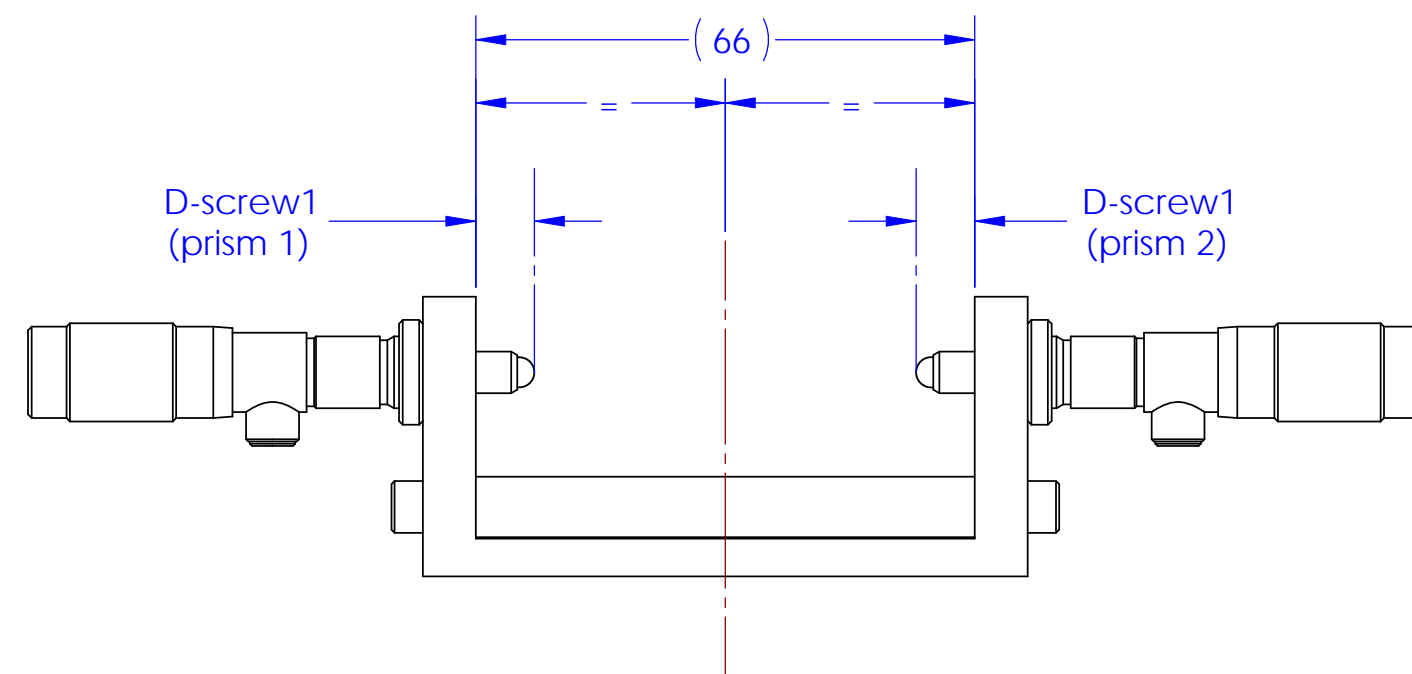
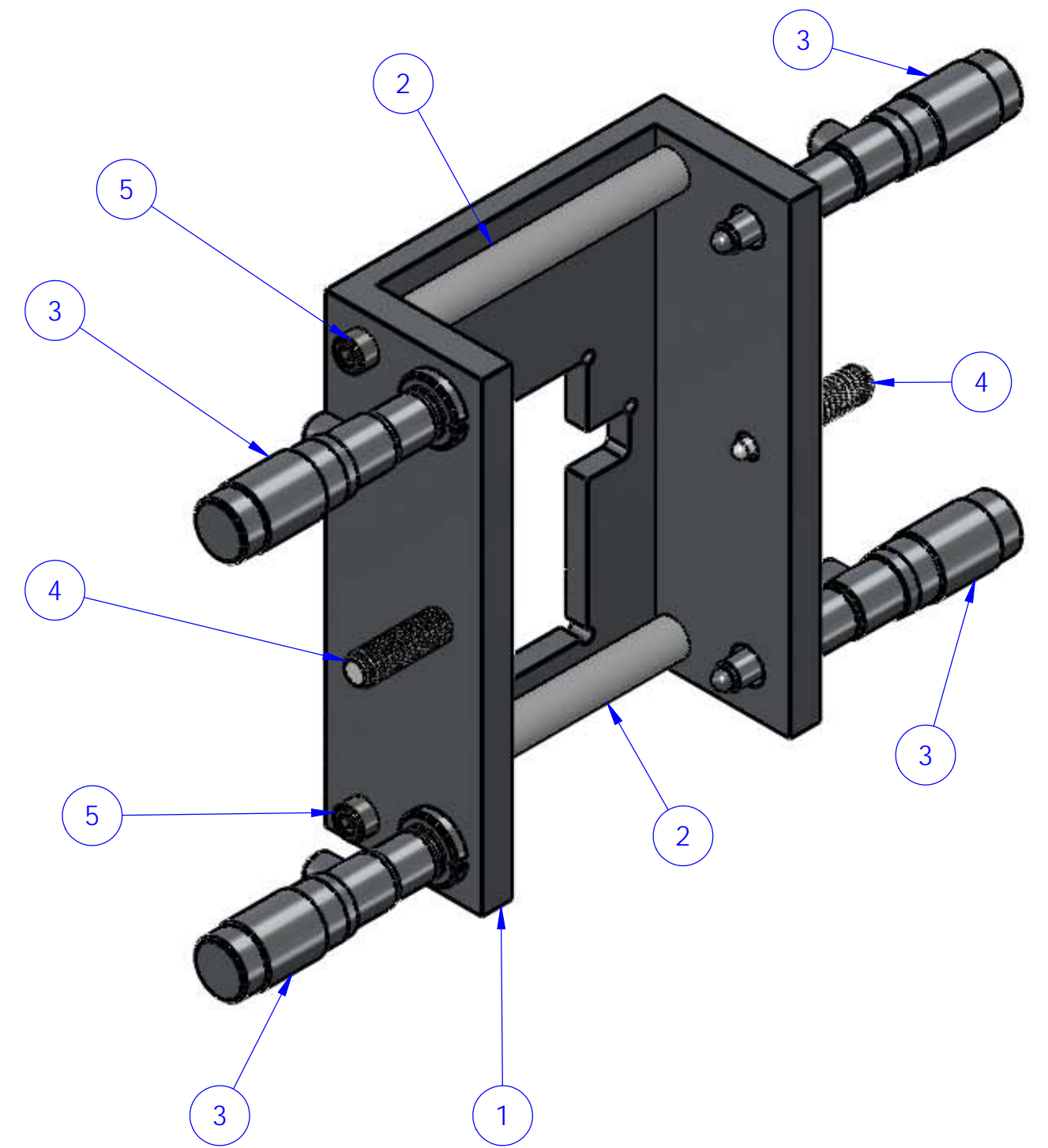


NOTES CONTINUED:

⑤ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXXX-VY, TYPE-XX, S/N XXX



| REV. | DATE | DCN # | DRAWING TREE # |
|------|------|-------|----------------|
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |



PRISM BONDING JIG SET-UP PROCEDURE:-

1. MEASURE ACTUAL INTERNAL WIDTH OF BASEPLATE (66 NOMINAL) AND SUBTRACT ACTUAL WIDTH OF MASS (60 NOMINAL) IN ORDER TO CALCULATE D-screw 1 VALUE (3 NOMINAL), WHICH WILL BE USED TO LOCATE THE CENTRELINE OF THE PRISM BONDING JIG ASSEMBLY, WITH THE CENTRE OF MASS.

2. LOCATE THE BONDING JIG ASSEMBLY ONTO THE MASS, ALWAYS CONTACTING THE MICROMETERS WITH THE FRONT FACE.

3. ALIGN THE CENTRAL DATUM AXIS OF THE PRISM BONDING JIG ASSEMBLY (DATUM A) WITH THE FIDUCIAL LINE ON THE MASS AND FIX JIG BY TIGHTENING THE SPRING PLUNGER.

IMPORTANT NOTE:- AT ANY ONE TIME, ONLY THE TWO MICROMETERS ACTING ON THE FRONT FACE OF THE MASS AND THE SPRING PLUNGER ON THE OPPOSITE SIDE SHOULD BE IN CONTACT WITH THE MASS FACES, NO OTHER POINTS OF CONTACT ARE REQUIRED.

I.E. WHEN SETTING UP ON ONE SIDE ONLY POSITIONS MARKED 'X' SHOULD BE UTILISED AND WHEN SETTING UP ON THE OPPOSITE SIDE ONLY POSITIONS MARKED 'Y' SHOULD BE UTILISED.

| ITEM NO. | PART NUMBER | DESCRIPTION | MATERIAL | REQ | SPARE | TOTAL |
|----------|-------------------------|---------------------------------------|---|-----|-------|-------|
| 5 | McMaster-Carr 92185A194 | 8-32 UNC x 0.5" Socket Head Cap Screw | 316 STAINLESS STEEL | 4 | - | 4 |
| 4 | McMaster Carr 8688A151 | 1/4-20" ROUND NOSED SPRING PLUNGER | 316 STAINLESS STEEL | 2 | - | 2 |
| 3 | -- | Newport HR-13 micrometer | Lockable Micrometer (Newport Cooperation) | 4 | - | 4 |
| 2 | D1002151 | Bonding Jig Support Cylinder | PTFE (general) | 2 | - | 2 |
| 1 | D1002149 | BS/FM prism bonding baseplate | 6061-T6 Al | 1 | - | 1 |

PARTS LIST

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:
 .X ± 0.1
 .XX ± 0.05

ANGULAR ± 0.2°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.5 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: N/A
 FINISH: N/A μm

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: aLIGO SUS

SUB-SYSTEM: BS/FM

NEXT ASSY: D1002147

PART NAME

Prism bonding fixture

DESIGNER: M.V. VEGGEL 12/08/2010
 DRAFTER: R.JONES OCT 10
 CHECKER: M.V. VEGGEL 21 OCT 10
 APPROVAL:

SIZE: c
 DWG. NO.: D1002148

SCALE: 1:2

PROJECTION:



SHEET 1 OF 1