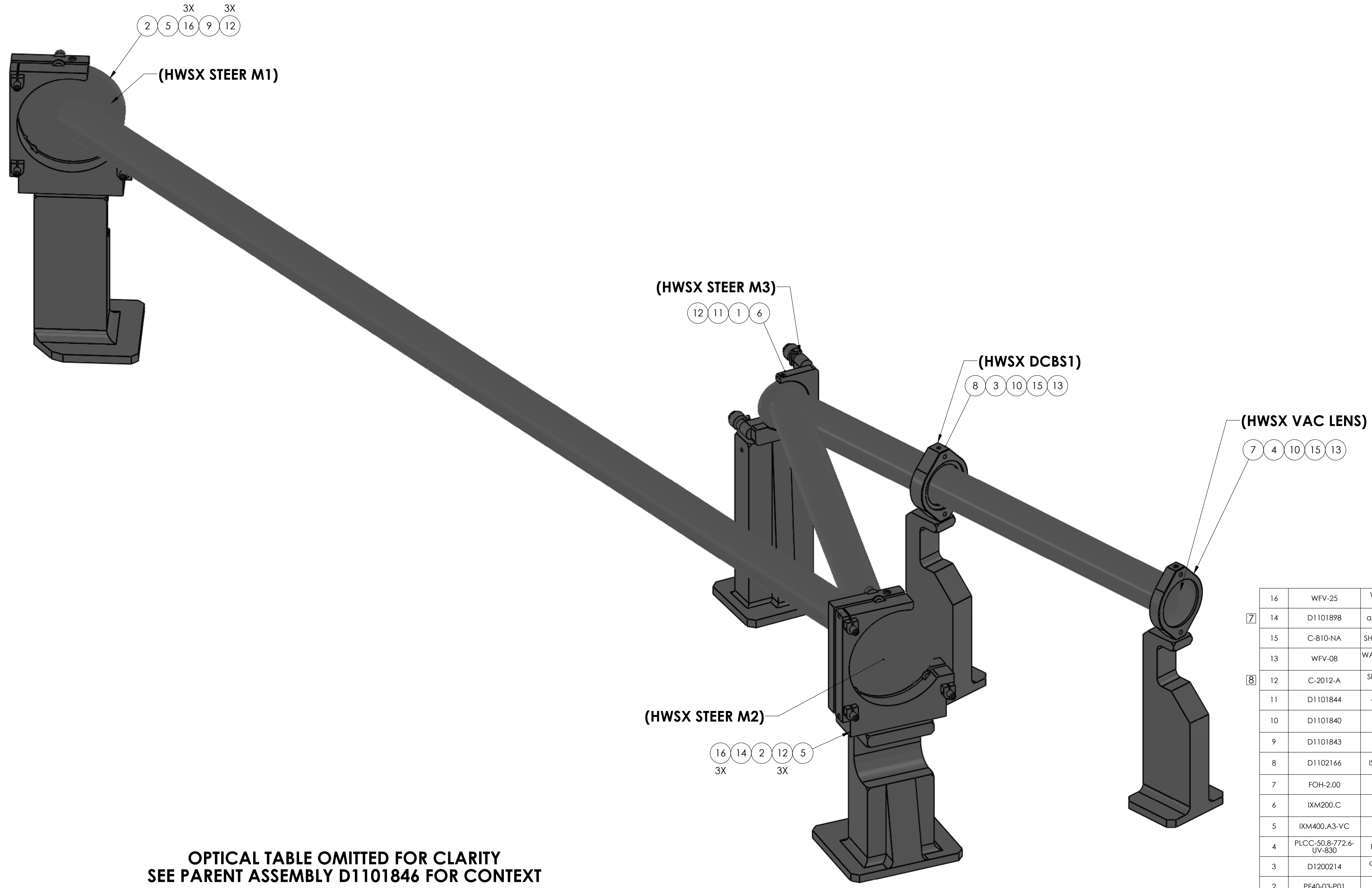


NOTES CONTINUED:
 5. SEE SHEETS 2 AND 3 FOR LAYOUT DIMENSIONS
 6. ALL DIMENSIONS ARE WRT HAM4 0,0,0 LOCAL CS.
 7. #8-32 TORQUE TO 20 in-lb, MAX
 8. 1/4-20 TORQUE TO 65 in-lb, MAX

| REV. | DATE | DCN # | DRAWING TREE # |
|------|-----------|-------------|----------------|
| v1 | 02-MAY-12 | E1100986-v1 | E1100987-v1 |
| v2 | 07-FEB-13 | E1300117-x0 | - |
| - | - | - | - |



**OPTICAL TABLE OMITTED FOR CLARITY
 SEE PARENT ASSEMBLY D1101846 FOR CONTEXT**

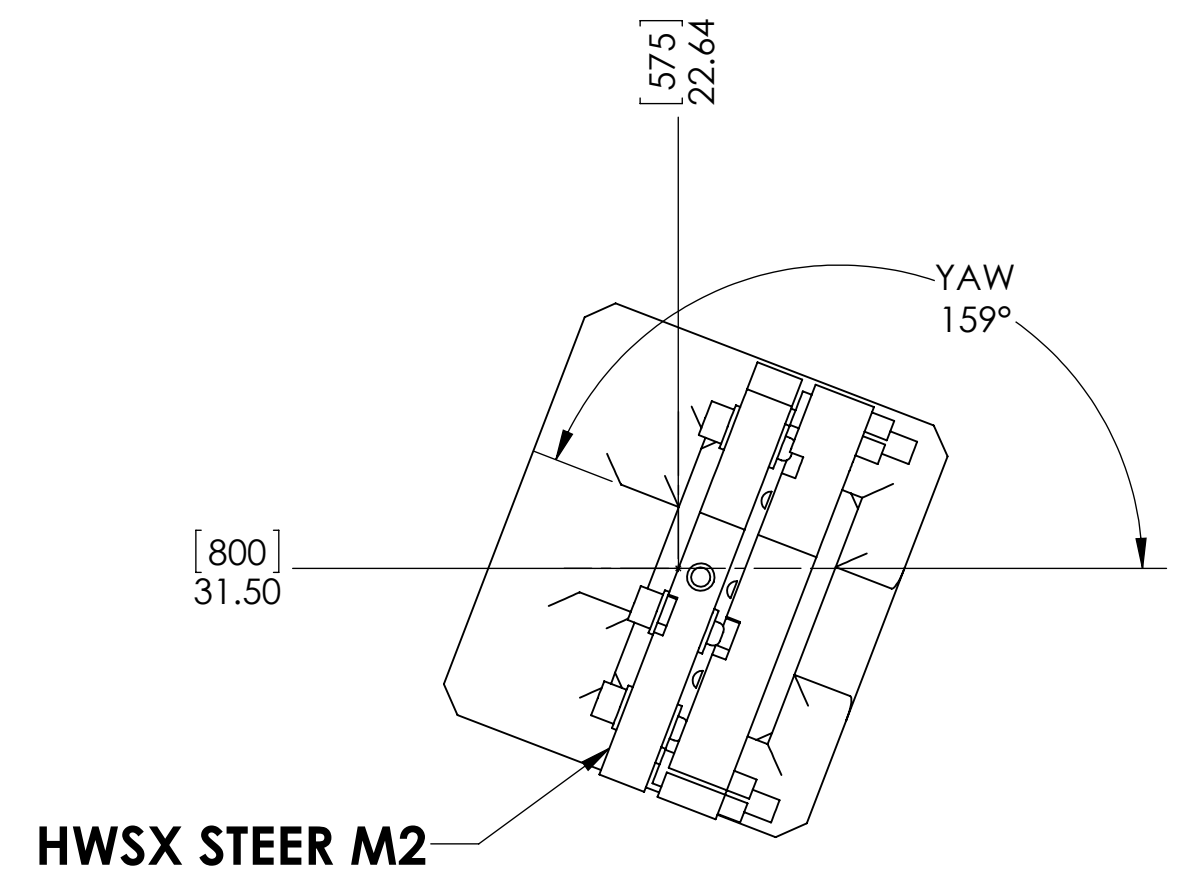
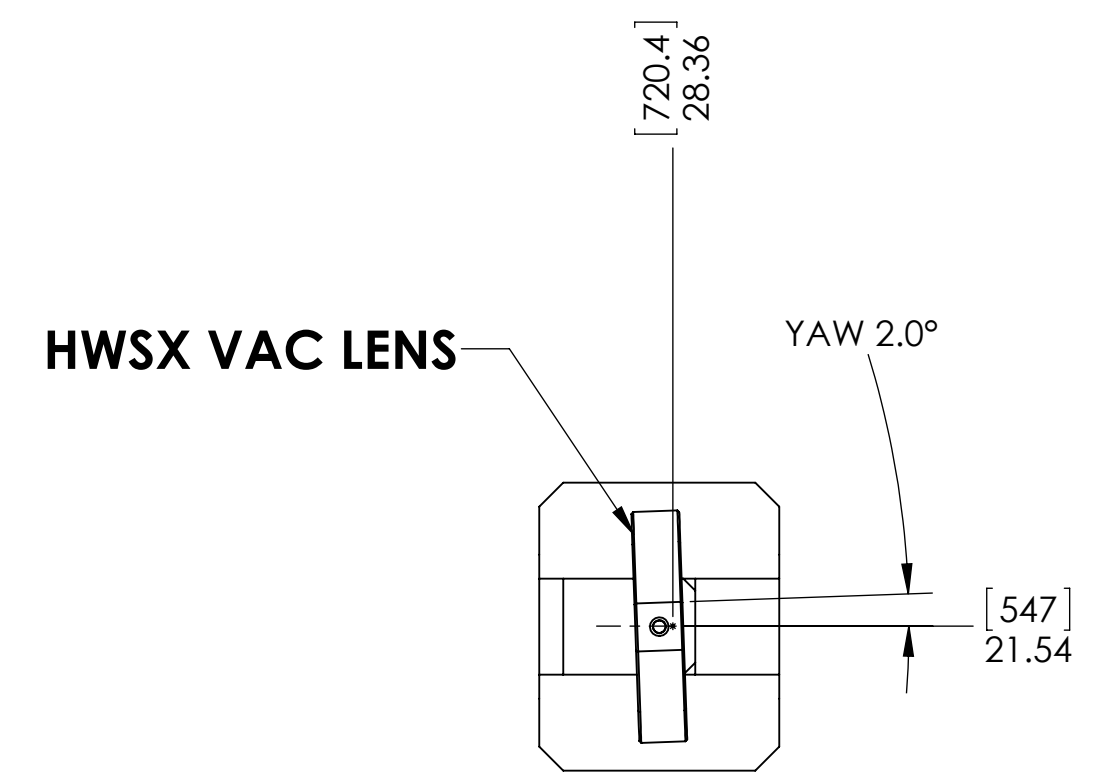
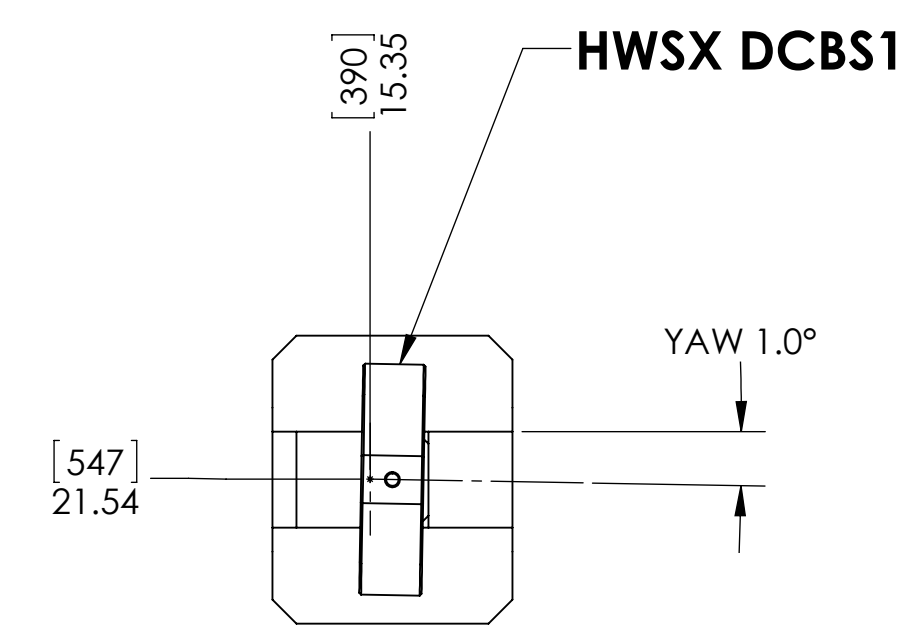
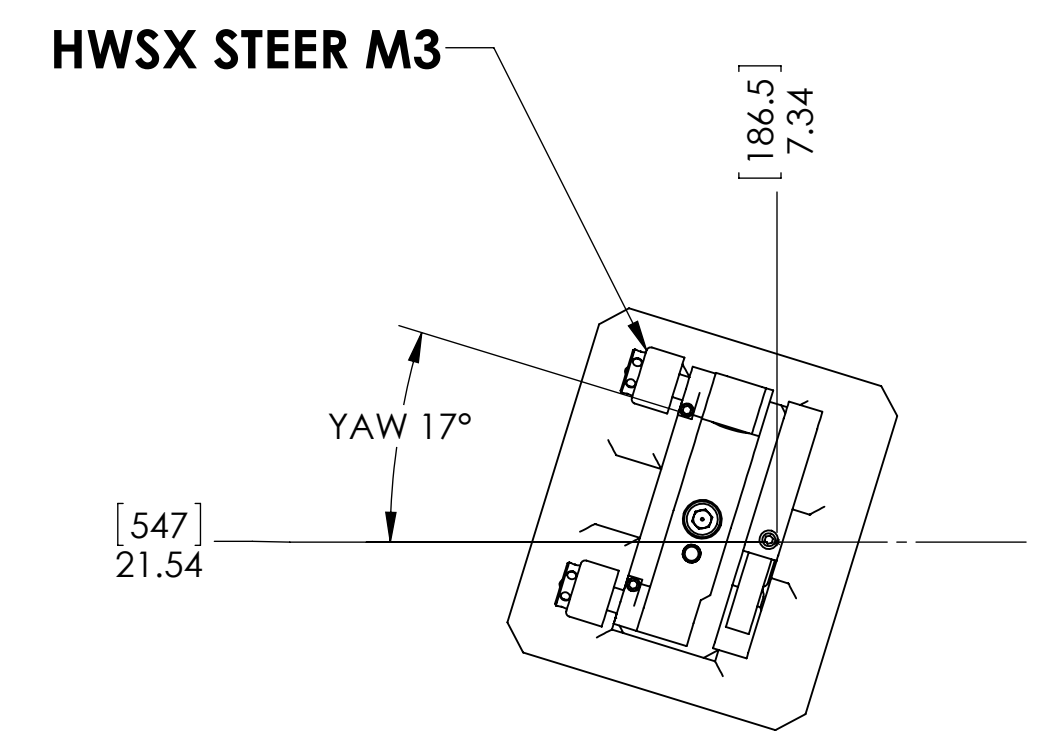
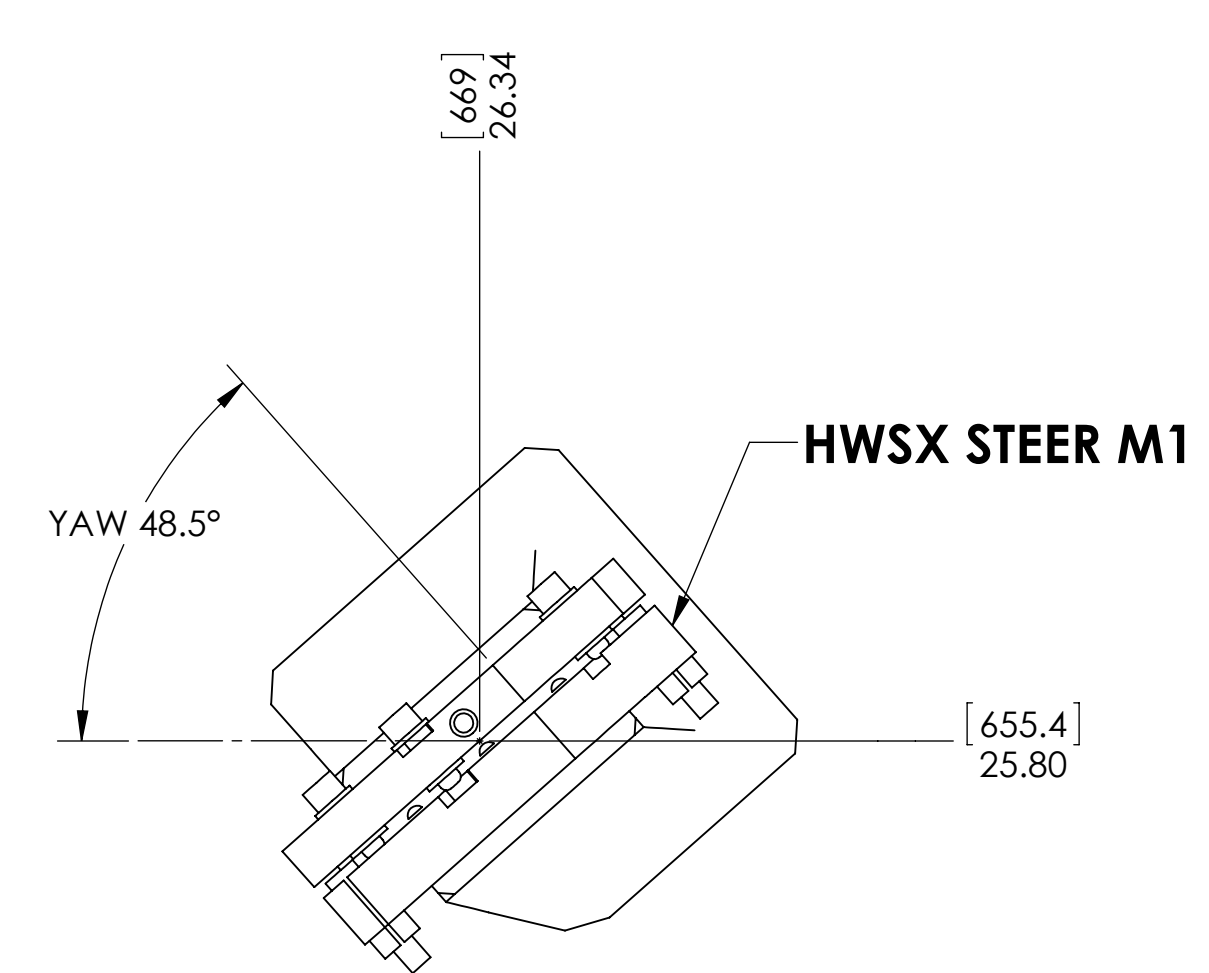
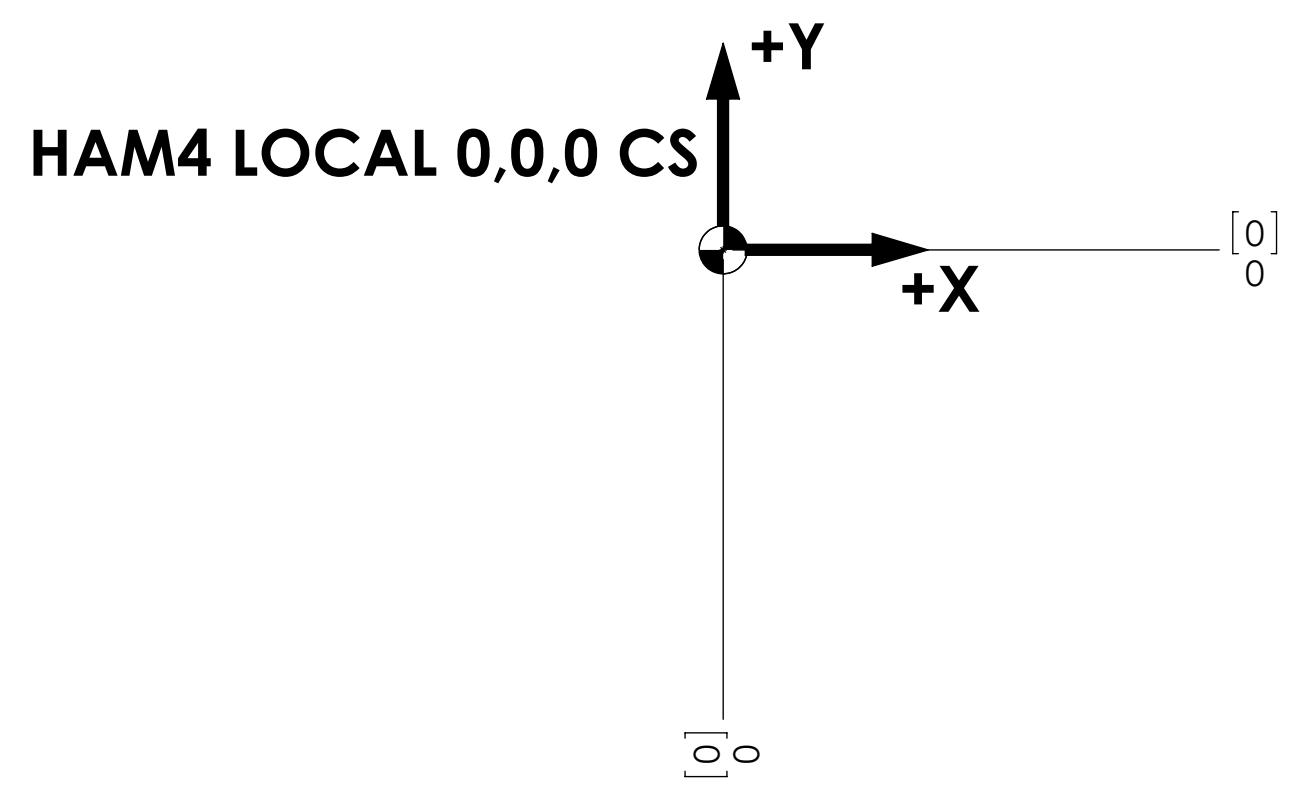
| ITEM NO. | PART NUMBER | DESCRIPTION | MATERIAL | REQ | SPARE | TOTAL |
|------------|------------------------|---|----------------------------|-----|-------|-------|
| 16 | WFV-25 | WASHER, VENTED FLAT, .255 ID X .468 OD X .031TK. UC-COMPONENTS | Stainless Steel (ferritic) | 2 | 2 | 4 |
| 14 | D1101898 | ALIGO PEDESTAL HAM4 HWSX-M2 4IN MIRROR MOUNT | 6061 Alloy | 1 | 0 | 1 |
| 15 | C-810-NA | SHCS 8-32 X .625 LONG, SILVER PLATED, UC-COMPONENTS | 18-8 SSSL, Au PLT | 2 | 2 | 4 |
| 13 | WFV-08 | WASHER, VENTED FLAT, #8 .169ID X .304OD X .032THK. UC-COMPONENTS | Alloy Steel (SS) | 2 | 2 | 4 |
| 12 | C-2012-A | SHCS, 1/4-20 UNC-2A X 3/4LG, VENTED, SILVER PLATED. UC-COMPONENTS | 18-8 SSSL, Au PLT | 7 | 3 | 10 |
| 11 | D1101844 | ALIGO, PEDESTAL, HAM4, HWSY, 2IN MIRROR MOUNT | 6061 Alloy | 1 | 0 | 1 |
| 10 | D1101840 | ALIGO PEDESTAL HWSX 2IN OPTIC MOUNT | 6061 Alloy | 2 | 0 | 2 |
| 9 | D1101843 | ALIGO, PEDESTAL HAM4 HWSX 4IN MIRROR MOUNT | 6061 Alloy | 1 | 0 | 1 |
| 8 | D1102166 | ISC Fixed Optic Holder- custom size for LIGO . Siskiyou | 6061 Alloy | 1 | 0 | 1 |
| 7 | FOH-2.00 | FIXED OPTIC HOLDER. SISKIYOU | 6061 ALLOY | 1 | 0 | 1 |
| 6 | IXM200.C | MOUNT, 100TPI, 2IN OPTIC CUTAWAY, RH. SISKIYOU | 6061 Alloy | 1 | 0 | 1 |
| 5 | IXM400.A3-VC | LIGO 4IN OPTIC MOUNT, SISKIYOU | 6061 Alloy | 2 | 0 | 2 |
| 4 | PLCC-50.8-772.6-UV-830 | LASER QUALITY CONCAVE LENSE. CVI MELLES GRIOT | Glass | 1 | 0 | 1 |
| 3 | D1200214 | ALIGO TCS HWS DICHOIC BEAM SPLITTER. PRECISION PHOTONICS | Glass | 1 | 0 | 1 |
| 2 | PF40-03-P01 | 4IN METALLIC MIRROR, THORLABS | N-BK7 w-PROT. AU PLT | 2 | 0 | 2 |
| 1 | PF20-03-P01-10 | 2IN METALLIC MIRROR, THORLABS | N-BK7 w-PROT. AU PLT | 1 | 0 | 1 |
| PARTS LIST | | | | | | |

| | | | | | | | |
|---|--|---|--|---|--|--|--|
| DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0° | | NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) 1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. | | CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY | | PART NAME ALIGO TCS HWS OPTO MECHANICAL LAYOUT, ITMX, L1 | |
| MATERIAL N/A | | FINISH N/A μinch | | NEXT ASSY D1101846 | | SYSTEM ADVANCED LIGO | |
| | | | | SUB-SYSTEM AOS | | DESIGNER A. BROOKS 02 DEC 2010 | |
| | | | | DRAFTER A. COLE 28-NOV-11 | | SIZE DWG. NO. D D1101847 | |
| | | | | CHECKER M. JACOBSON 07-FEB-13 | | REV. v2 | |
| | | | | APPROVAL A. BROOKS 07-FEB-13 | | SCALE: 1:4 PROJECTION: SHEET 1 OF 3 | |

D1101847_ALIGO_HWS_OPTO_MECHANICAL_LAYOUT_ITMX_PARR_FDM_REV_3_109_DRAWING_PDM_REV_X-038

8 7 6 5 4 3 2 1

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

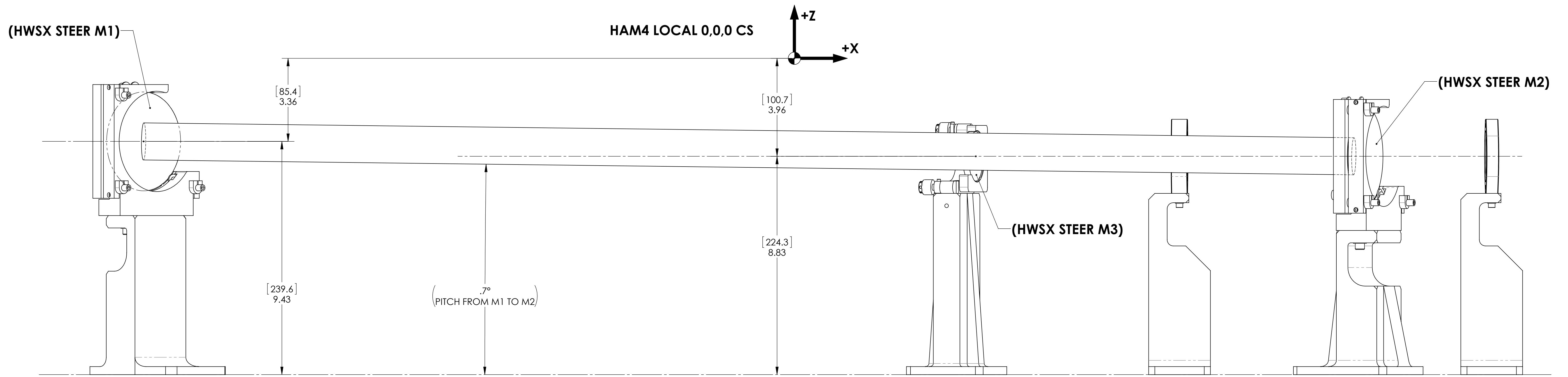
| | | |
|------------|-------------|--------------|
| SIZE | DWG. NO. | REV. |
| D | D1101847 | v2 |
| SCALE: 1:4 | PROJECTION: | SHEET 2 OF 3 |

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| | | |
|------------|-------------|--------------|
| SIZE | DWG. NO. | REV. |
| D | D1101847 | v2 |
| SCALE: 1:4 | PROJECTION: | SHEET 3 OF 3 |

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