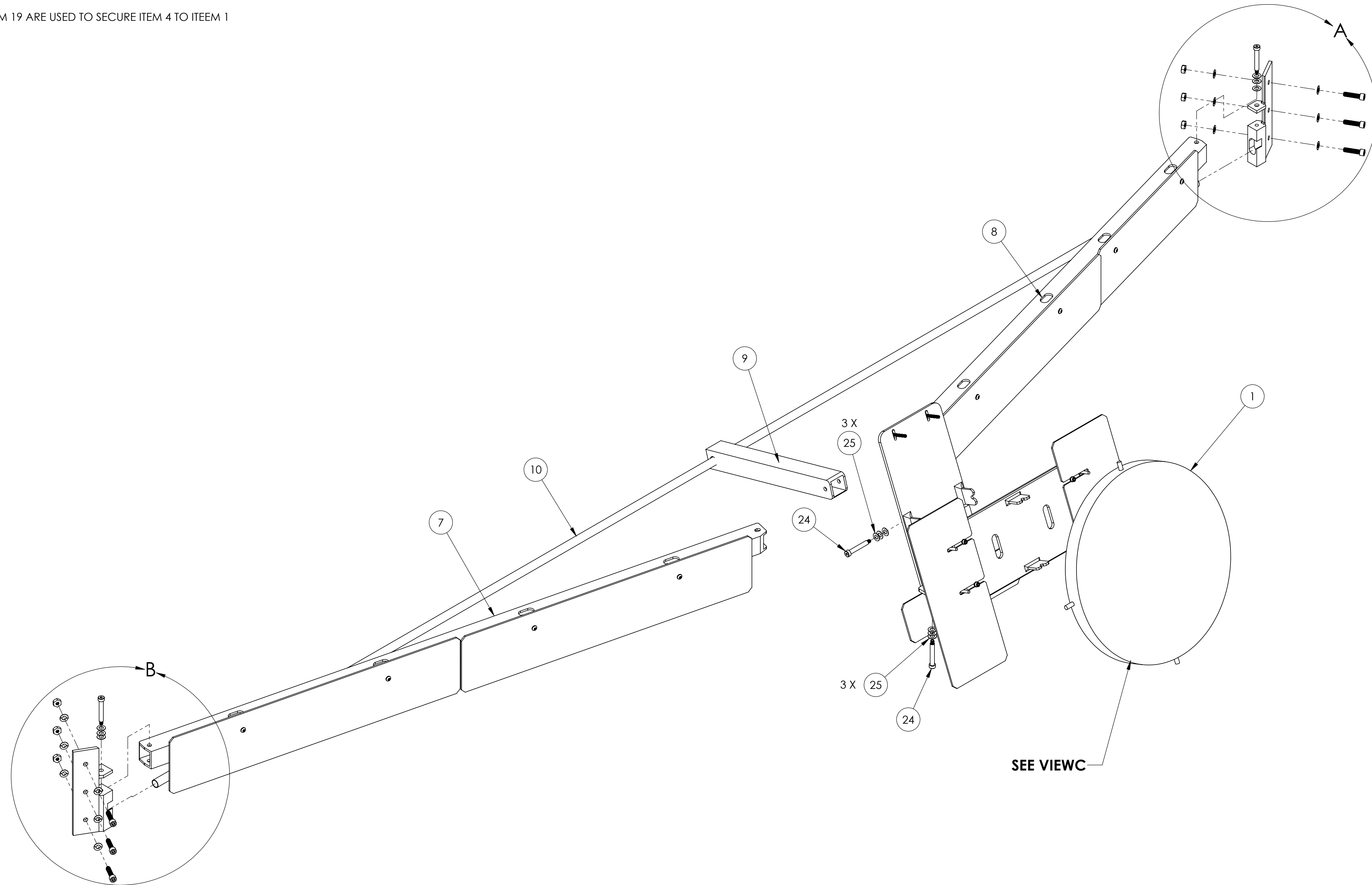


- NOTES CONTINUED:
- 5 NUTS ARE USED TO SECURE ASSEMBLY TO INTERIOR FLANGES OF THE BSC WELDMENT
 - 6 MACHINED FEATURES OF ITEM 2 MUST BE ALIGNED WITH THE FLANGES OF ITEM 4
 - 7 MACHINED FEATURES OF ITEM 2 MUST BE ALIGNED WITH FLANGES OF ITEM 3
 - 8 ITEM 23 ARE USED TO SECURE ITEM 3 TO ITEM 1
 - 9 ITEM 19 ARE USED TO SECURE ITEM 4 TO ITEM 1

| REV. | DATE | DCN # | DRAWING TREE # |
|------|-------------|-------|----------------|
| v1 | 01-OCT-2010 | - | - |
| - | - | - | - |
| - | - | - | - |



| ITEM NO. | PART NUMBER | DESCRIPTION | MATERIAL | REQ | SPARE | TOTAL |
|----------|-------------|---|-----------------------------|-----|-------|-------|
| 25 | WFV-25 | WASHER,FLAT,VENTED, .26ID X.47ODX .032TK. UC COMPONENTS | 18-8 SSSTL | 27 | 3 | 30 |
| 24 | SHCV-4436 | SSHD, #10-32 UNC-A X 1.5 LG, VENTED. UC-COMPONENTS | 18-8 SSST | 5 | 1 | 6 |
| 23 | C-820 | SSHC, #8-32 UNC-2A X 1-1/4LG,VENTED.UC-COMPONENTS | 18-8 SSSTL | 4 | 2 | 6 |
| 22 | BU-812-NC | SBHS, #8-32, .75LG,MoS2 COATED. UC-COMPONENTS | 18-8 SSSTL | 8 | 2 | 10 |
| 21 | NF-832 | FLANGE ,NUT,HEX,#8-32 . UC-COMPONENT | 18-8 SSSTL | 8 | 2 | 10 |
| 20 | - | SSHC, #8-32 UNC-2A X 1/2 LG, VENTED. UC-COMPONENTS | 18-8 SSSTL | 6 | 2 | 8 |
| 19 | C-812 | SSHC, #8-32 UNC-2A X 3/4 LG, VENTED.UC-COMPONENTS | 18-8 SSSTL | 4 | 2 | 6 |
| 18 | WFV-08 | WASHER, FLAT, VENTED, #8.U-C COMPONENTS | 18-8 SSSTL | 22 | 4 | 26 |
| 17 | N-2520 | NUT, HEX, 1/4-20, UC-COMPONENTS | 18-8 SSSTL | 6 | 2 | 8 |
| 16 | C-2016-N | SSHC, 1/4-20 UNC-2A X 1LG VENTED. UC-COMPONENTS | 18-8 SSSTL | 6 | 2 | 8 |
| 15 | D1002502 | TCS UHV H2 STRUCTURE BAFFLE STANDOFF | VITON | 4 | 1 | 5 |
| 14 | D1002484 | TCS UHV SM SHORT STRUCTURE BAFFLE PLATE | TEMPERED GLASS | 1 | 1 | 2 |
| 13 | D1002482 | TCS UHV SM STRUCTURE BAFFLE PLATE | TEMPERED GLASS | 3 | 1 | 4 |
| 12 | D1002479 | TCS UHV SM BAFFLE PLATE, AZ | TEMPERED GLASS | 2 | 1 | 3 |
| 11 | D1002480 | TCS UHV SM EL BAFFLE PLATE | TEMPERED GLASS | 1 | 1 | 2 |
| 10 | D1002334 | TCS UHV COARSE ADJUST PIVOT ROD | AISI 316 ANNEALED SSSTL BAR | 1 | | 1 |
| 9 | D1002333 | TCS UHV BACK BRACE, BSC7 & BSC8 | 6063-T5 | 1 | | 1 |
| 8 | D1002327 | TCS UHV SHORT SUPPORT, BSC7 & BSC8 | 6063-T5 | 1 | | 1 |
| 7 | D1002317 | TCS UHV LONG SUPPORT, BSC7 & BSC8 | 6063-T5 | 1 | | 1 |
| 6 | D1002315 | TCS UHV BRACKET, SHORT SIDE, BSC7 | AISI 304 | 1 | | 1 |
| 5 | D1002287 | TCS UHV BRACKET, LONG SIDE, BSC7 | AISI 304 | 1 | | 1 |
| 4 | D1002312 | AZ FINE ADJUST PIVOT PLATE | 6061-T6 (SS) | 1 | | 1 |
| 3 | D1002311 | EL FINE ADJUST PIVOT PLATE | 6061-T6 (SS) | 1 | | 1 |
| 2 | D1002313 | ALIGO TCS UHV FINE ADJUST PIVOT ROD | AISI 304 | 2 | | 2 |
| 1 | D1001727 | ALIGO TCS H2 IN-VAC MIRROR | Copper | 1 | | 1 |

| NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) | |
|--|-----------|
| 1. INTERPRET DRAWING PER ASME Y14.5-1994. | |
| 2. REMOVE ALL SHARP EDGES, R.02 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. | |
| DIMENSIONS ARE IN INCHES | |
| TOLERANCES: | |
| .XX ± | |
| .XXX ± | |
| ANGULAR ± ° | |
| MATERIAL | N/A |
| FINISH | N/A μinch |

LOGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: **ADVANCED LIGO** SUB-SYSTEM: **AOS**

NEXT ASSY: **D0900405**

PART NAME: **TCS CO2P IN-VAC STEERING OPTICS ASSY, H2, BSC7**

| | | | | | |
|----------|-------------|-------------|-------------|-----------------|--------------|
| DESIGNER | M. JACOBSON | 18 MAY 2010 | SIZE | DWG. NO. | REV. |
| DRAFTER | A. COLE | 01-OCT-2010 | D | D1001742 | v1 |
| CHECKER | M. JACOBSON | 01-OCT-2010 | | | |
| APPROVAL | C. TORRIE | 01-OCT-2010 | SCALE: NONE | PROJECTION: | SHEET 1 OF 4 |

D1001742, TCS CO2P IN-VAC STEERING OPTICS ASSY, H2, BSC7, PART PDM REV. X-023, DRAWING PDM REV. X-009

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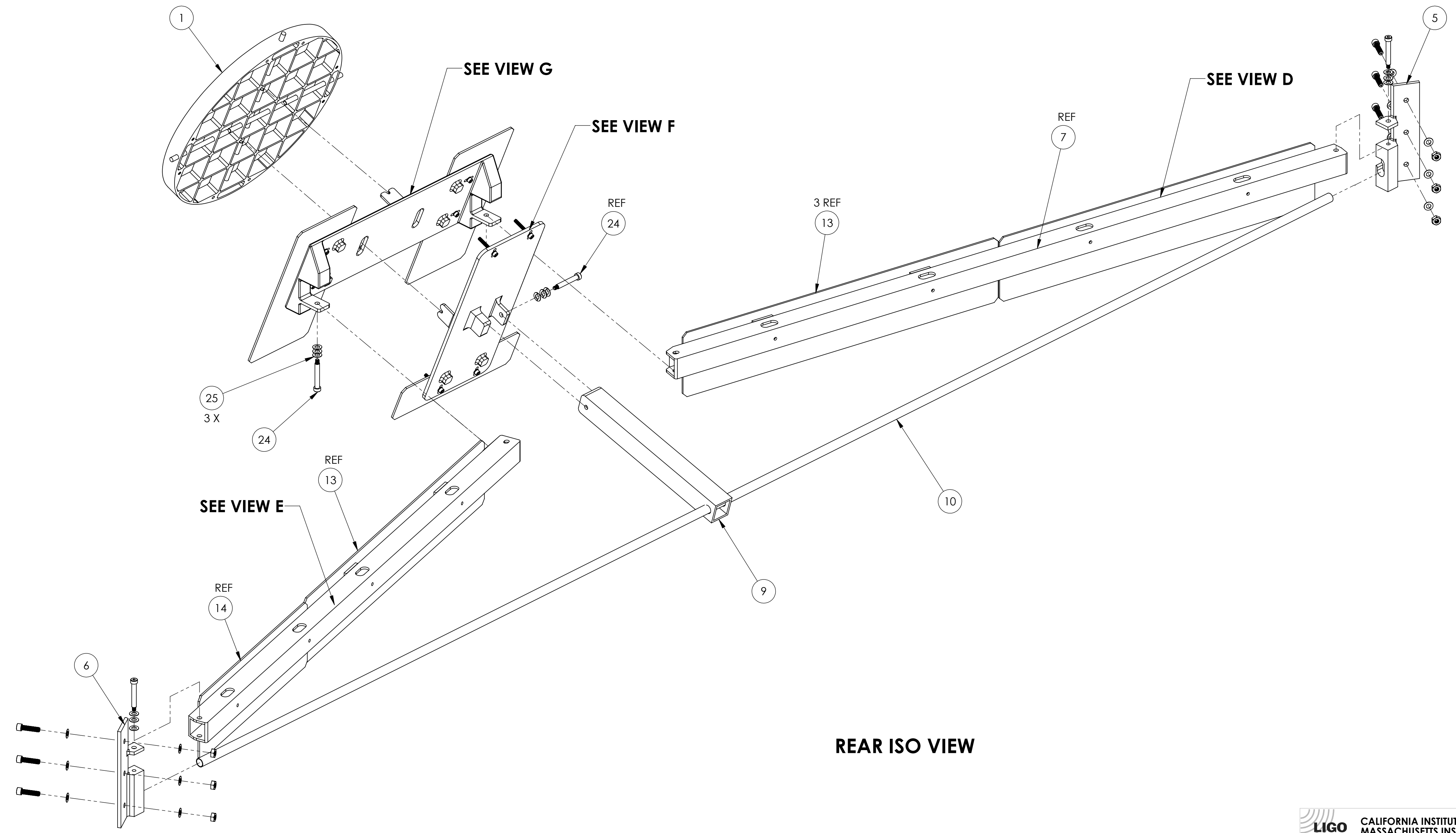
E

D

C

B

A



REAR ISO VIEW

| | |
|---|--------------|
| LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY | |
| SIZE DWG. NO. | REV. |
| D D1001742 | v1 |
| SCALE: NONE PROJECTION: | SHEET 2 OF 4 |

D1001742_ICS COPR IN VAC STEERING OPTICS ASSY_HZ_BECT PART PDM REV X-023 DRAWING PDM REV X-009

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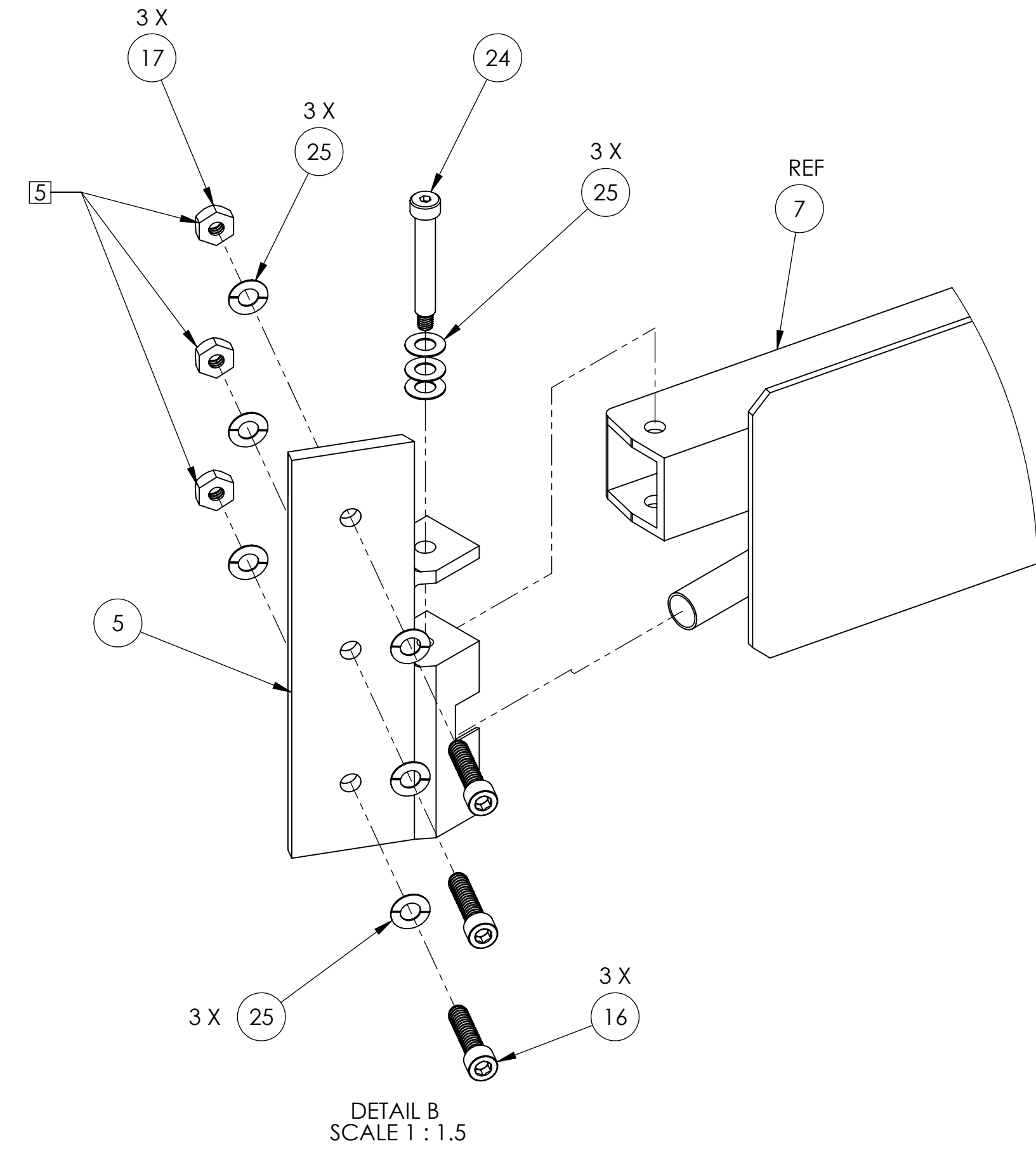
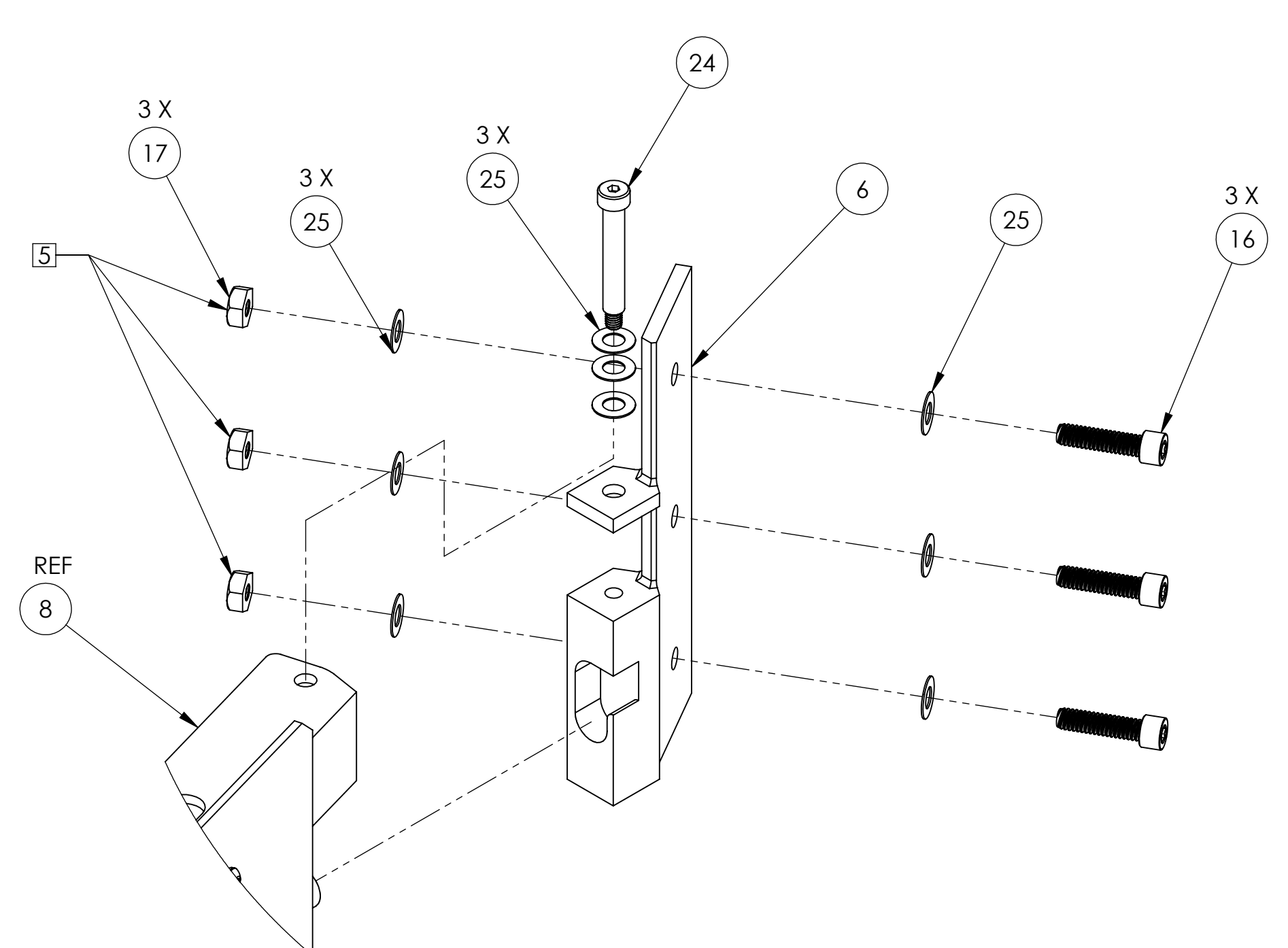
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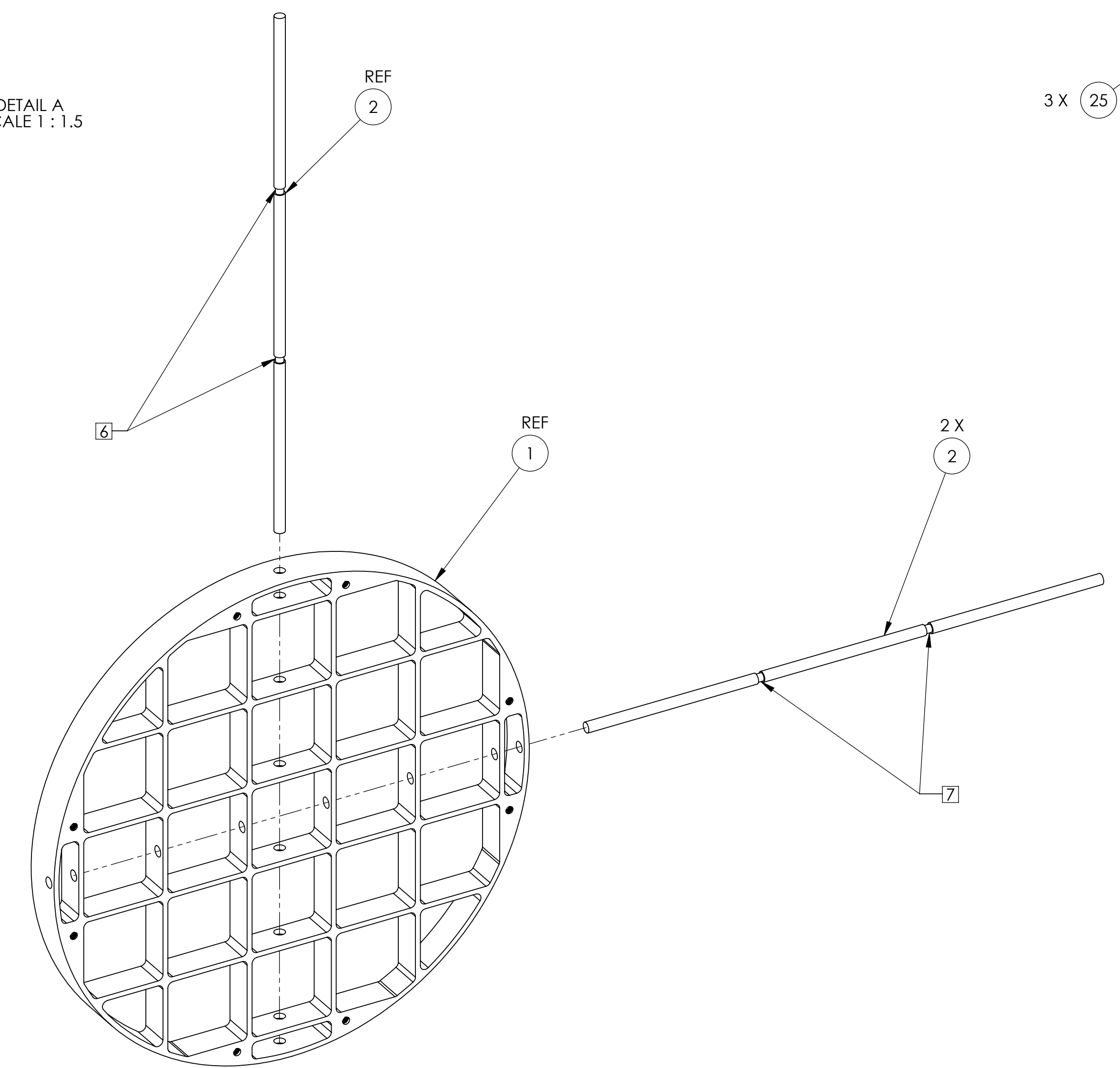
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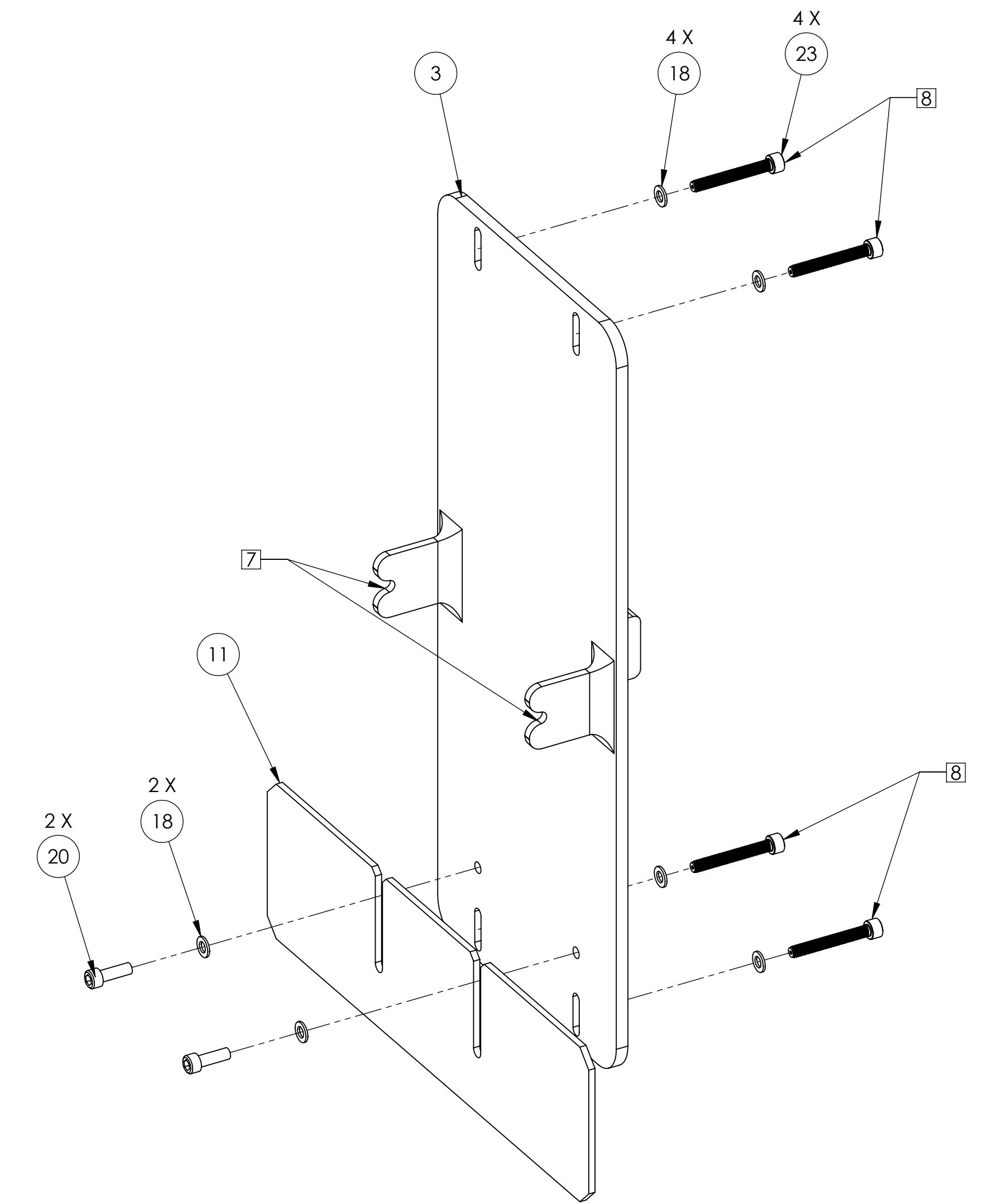


DETAIL A
SCALE 1 : 1.5

DETAIL B
SCALE 1 : 1.5



VIEW C



VIEW F

| | |
|---|--------------|
| CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY | |
| SIZE DWG. NO. | REV. |
| D D1001742 | v1 |
| SCALE: NONE PROJECTION: | SHEET 3 OF 4 |

D1001742_ICS COPR IN VAC STEERING OPTICS ASSY_HZ_BSC7_PART PDM REV: X-023 DRAWING PDM REV: X-009

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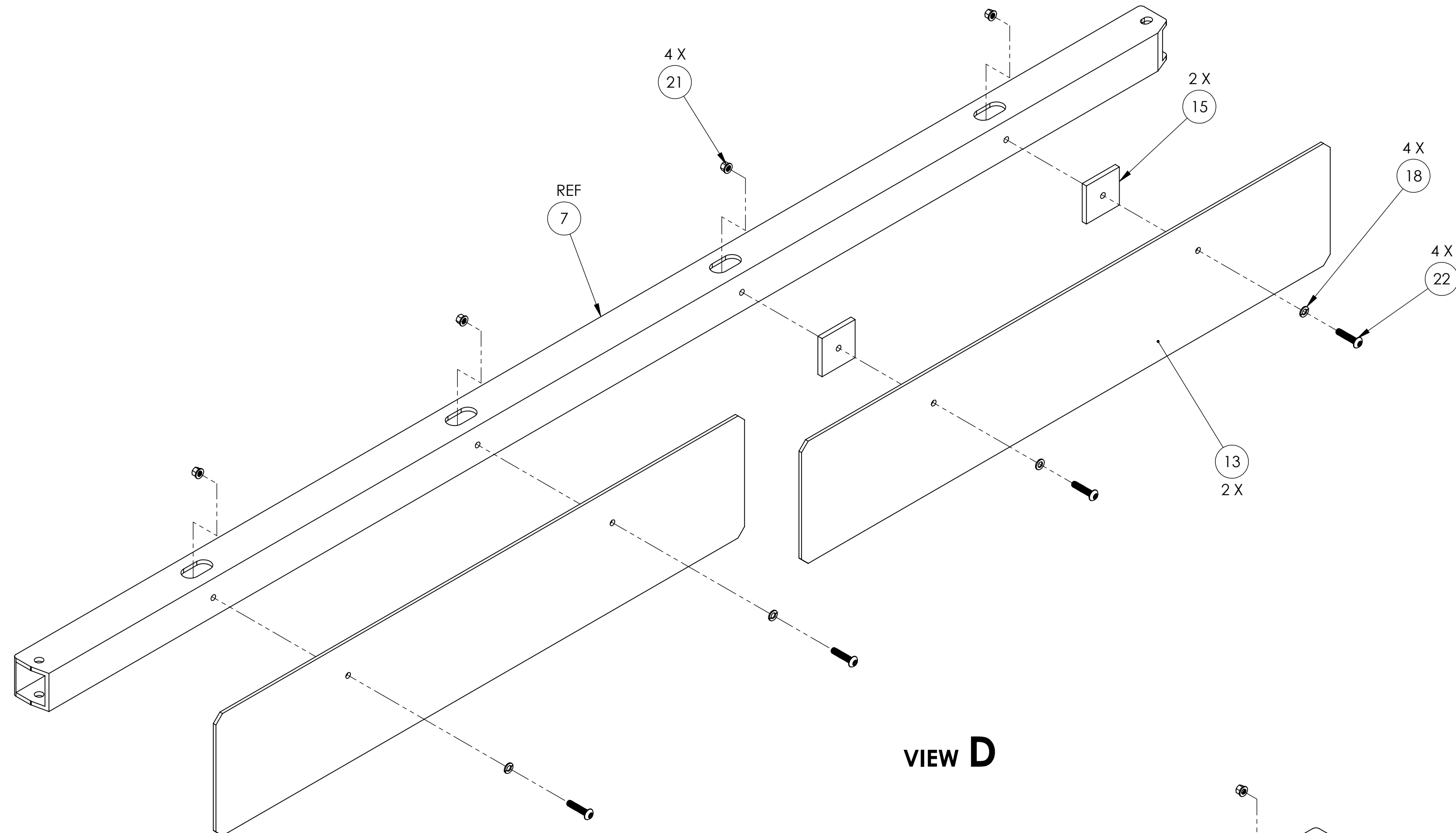
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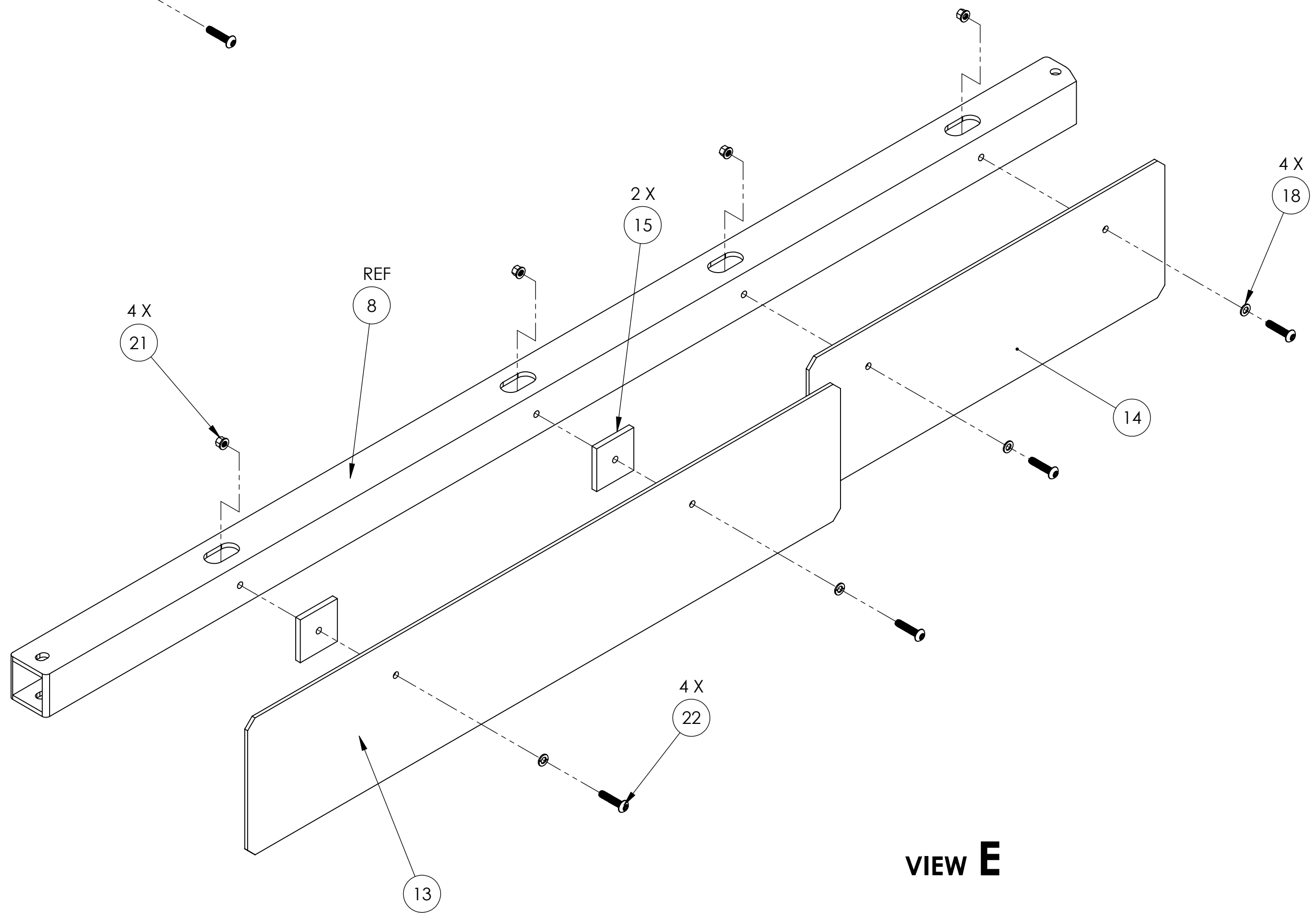
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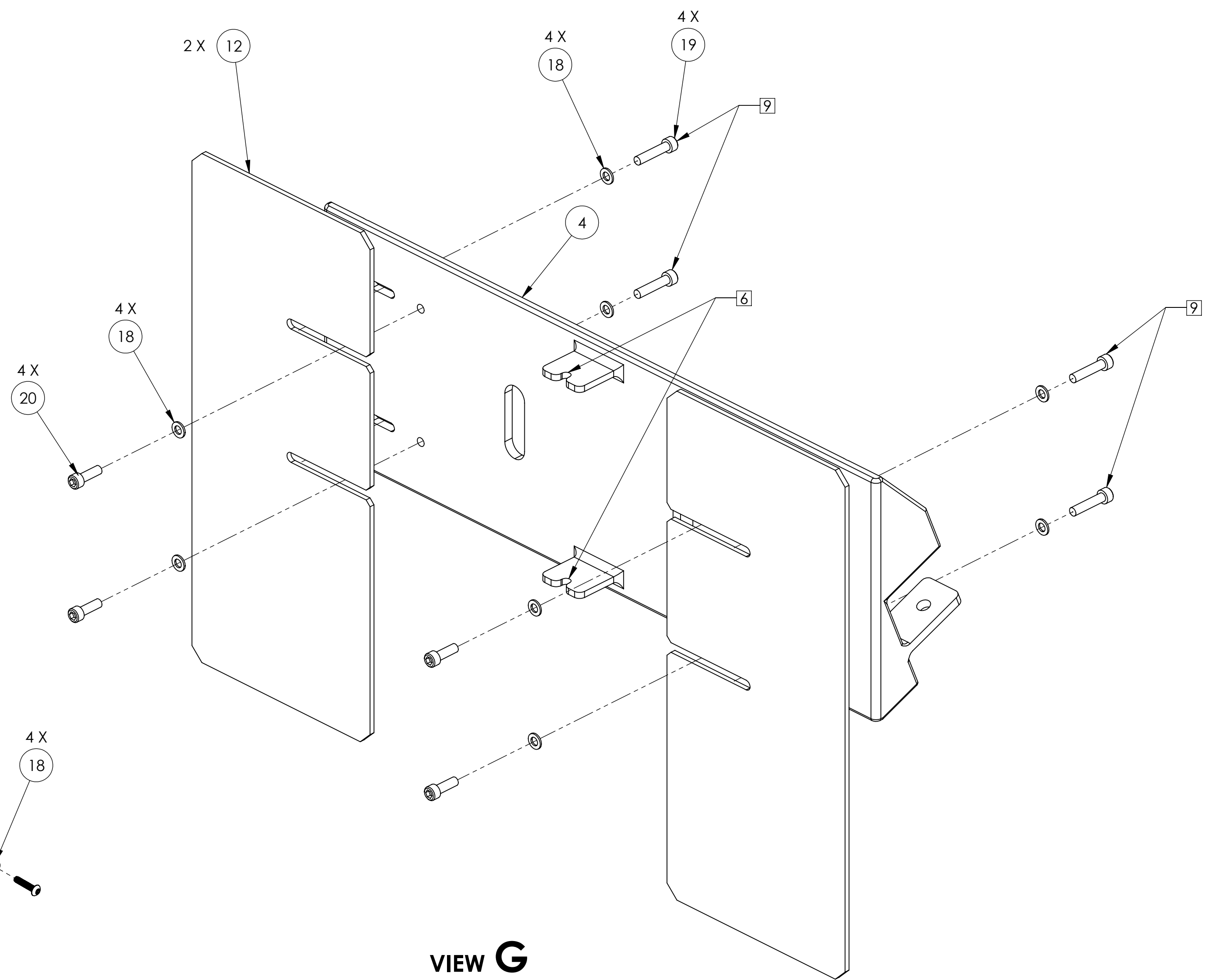
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VIEW D



VIEW E



VIEW G

| | |
|---|--------------------|
| LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY | |
| SIZE DWG. NO. | REV. |
| D | D1001742 v1 |
| SCALE: NONE PROJECTION: | SHEET 4 OF 4 |

D1001742, ICS COOP IN VAC STEERING OPTICS ASSY, HZ, SECT, PART PDM, REV, X-007, DRAWING PDM, REV, X-009

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