



CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DRWG NO. **E1100344** REV **v1**

OVERALL BILL OF MATERIALS

ASSEMBLY NO: D1003120

TITLE: BOM-aLIGO TMS TELESCOPE FRAME ASSEMBLY

| | | | | | | | | |
|---|------------|-----------|-----|--------------------------|----|-------|-----|------|
| | APPROVALS: | DATE: | REV | DCN NO. | BY | CHECK | DCC | DATE |
| DRAWN / AUTHOR: (REFERENCE CONTENTS) | CIT, JT | 15-Dec-11 | v1 | E1100351 | JT | | | |
| CHECKED: | | | | | | | | |
| APPROVED: | | | | | | | | |
| DCC RELEASE | | | | | | | | |

| ITEM NO | REQ | SPARE | TOT | PART NUMBER | REVISION | DESCRIPTION | MATERIAL |
|---------|-----|-------|-----|--|----------|--|-----------------|
| 1 | 1 | 0 | 1 | D1000070 | v2 | TRANSMON TELE END PLATE PRIMARY 3 TUBE | 6061-T6 Al |
| 2 | 6 | 0 | 72 | D1001108 | v1 | ALIGO ETM TELESCOPE TUBE LARGE WASHER | 304 SSSL |
| 3 | 3 | 0 | 3 | D1000243 | v1 | aLIGO ETM TELE TUBE AND INSERTS ASSEMBLY | N/A |
| 4 | 1 | 0 | 1 | D1000071 | v3 | TRANSMON TELE END PLATE ENTRY 3 TUBE | 6061-T6 Al |
| 5 | 6 | 2 | 8 | 90585A628 (McM-Carr, special order) or equiv | | FLAT HEAD SOCKET SCREW, 3/8-16 x 1-1/2 | 316 SSSL |
| 6 | 2 | 0 | 2 | D1002728 | v1 | ALIGO TMS PRIMARY MIRROR SIDE CLAMP LOWER | 6061-T6 Al |
| 7 | 13 | 3 | 16 | 90585A541 (McM-Carr) or equiv | | FLAT HEAD SOCKET SCREW, 1/4-20 x 7/8 | 316 SSSL |
| 8 | 3 | 0 | 3 | D1002732 | v2 | ALIGO TMS PRIMARY MIRROR CLAMP | 6061-T6 Al |
| 9 | 24 | 5 | 29 | 9713K61 (McM-Carr) or equiv | | DISC SPRING .255" ID, .500" OD, .018" THICK 47 Lb @ .008" DEFLECTION | 302 SSSL |
| 10 | 3 | 1 | 4 | U-C COMPONENTS C-2024-N or equiv | | SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.5 LG | 300 SSSL |
| 11 | 1 | 0 | 1 | D1002731 | v1 | ALIGO TMS PRIMARY MIRROR SIDE CLAMP UPPER | 6061-T6 Al |
| 12 | 1 | 1 | 2 | 94355A614 (McM-Carr, special order) or equiv | | SKT SET SCRW, FLAT PT, 1/4-28 X 1/2 | 18-8 SSSL |
| 13 | 1 | 1 | 2 | 99934A330 (McM-Carr) or equiv | | SKT SET SCRW, 6-32 X 1/8 L, SILVER TIP | 18-8 SSSL |
| 14 | 1 | 0 | 1 | D1000075 | v1 | ETM TELESCOPE PRIMARY PARABOLIC MIRROR, ADLIGO | ZERODUR |
| 15 | 25 | 5 | 30 | 96861A600 (McM-Carr) or equiv | | FLAT WASHER .255 ID, .468 OD, .032 THK, VENTED | 18-8 SSSL |
| 16 | 1 | 0 | 1 | D1000084 | v2 | aLIGO F1 MIRROR | N/A |
| 17 | 1 | 0 | 1 | D1000088 | v3 | ALIGO F2 MIRROR NEST | N/A |
| 18 | 1 | 0 | 1 | D1001600 | v3 | aLIGO TMS TELE SEC. MIRROR ASSEMBLY | N/A |
| 19 | 2 | 1 | 3 | 90585A245 (McM-Carr) or equiv | | FLAT HEAD SOCKET SCREW, 10-24 X 3/4 LG | 316 SSSL |
| 20 | 1 | 0 | 1 | D1001241 | v1 | ALIGO ETM TELESCOPE BEAM DUMP GLASS | BLACK GLASS |
| 21 | 9 | 3 | 12 | 9263K696 (McM-Carr) or equiv | | O-RING, 2.5MM WIDTH, 7MM I.D. APPROVED VITON ELASTOMER, SHORE A 70-75 | FUORO-ELASTOMER |
| 22 | 1 | 0 | 1 | D1000275 | v3 | ALIGO TRANSMON TELE BLACK GLASS PLATE | BLACK GLASS |
| 23 | 2 | 1 | 3 | U-C COMPONENTS C-2020-N or equiv | | SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.25 LG | 300 SSSL |
| 24 | 1 | 1 | 2 | 92510A780 (McM-Carr) or equiv | | SPACER, ALUMINUM .252 I.D., 1/2 O.D., 5/8 LG | 6061-T6 AL |
| 25 | 1 | 1 | 2 | U-C COMPONENTS C-2028-N or equiv | | SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.75 LG | 300 SSSL |
| 26 | 16 | 4 | 20 | MS15795-807 | | #8 FLAT WASHER | 300 SSSL |
| 27 | 10 | 3 | 13 | AS568A-106 | | O-RING, 3/32" WIDTH, 3/16" I.D. APPROVED VITON ELASTOMER, SHORE A 70-75 | FUORO-ELASTOMER |
| 28 | 2 | 1 | 3 | U-C COMPONENTS C-816-N or equiv | | SCREW, SOCKET HEAD CAP, #8-32 UNC-2A X 1 LG | 300 SSSL |
| 29 | 2 | 1 | 3 | U-C COMPONENTS C-820-N or equiv | | SCREW, SOCKET HEAD CAP, #8-32 UNC-2A X 1.25 LG | 300 SSSL |
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