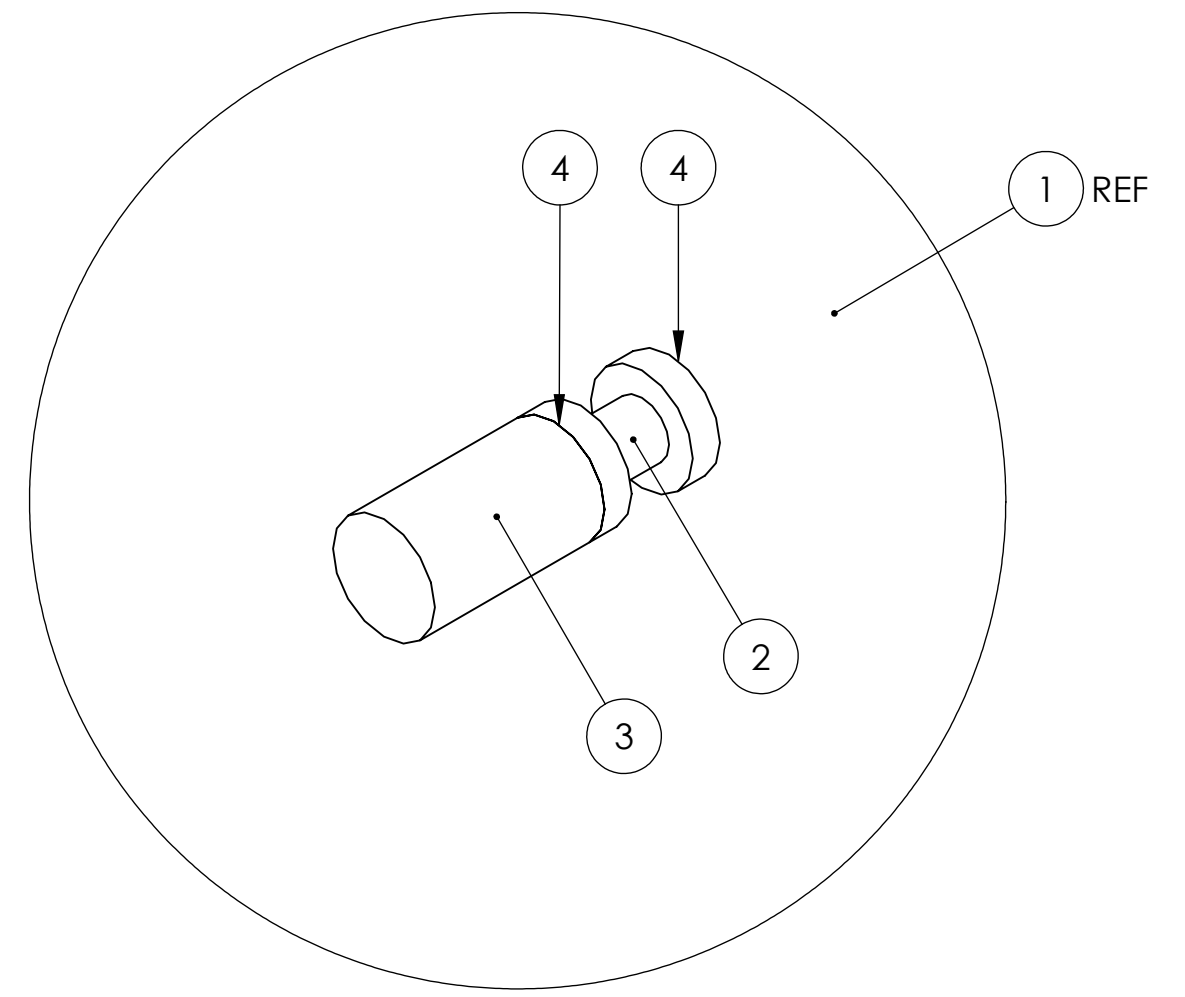
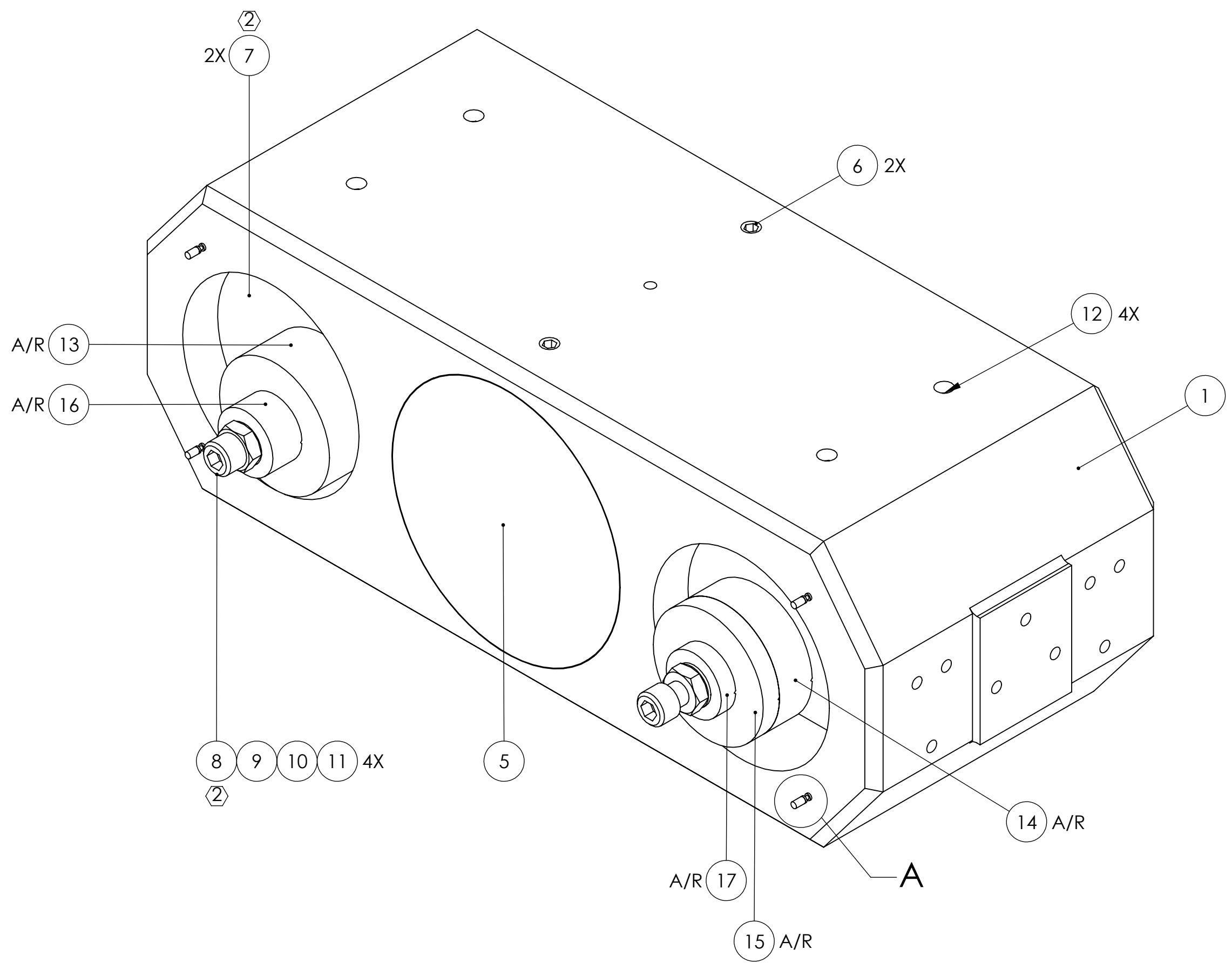


| REV. | DATE        | DCN #    | DRAWING TREE # |
|------|-------------|----------|----------------|
| v1   | 24 JUN 2009 | E0900176 | E080191        |
| v2   | 03 SEP 2009 | E0900277 | E080191        |
| v3   | 18 MAY 2010 | E1000166 | E080191        |



DETAIL A  
SCALE 10 : 1  
4X



| ITEM NO. | PART NUMBER | DESCRIPTION   | MATERIAL             | REQ | SPARE | TOTAL |
|----------|-------------|---|----------------------|-----|-------|-------|
| 17       | D1001230    | ADDITIONAL MASS DISK, 10g   | 304, 316 OR 302 SSSL | A/R | 0     | 0     |
| 16       | D1001229    | ADDITIONAL MASS DISK, 20g   | 304, 316 OR 302 SSSL | A/R | 0     | 0     |
| 15       | D0901405    | ADDITIONAL MASS DISK, 50g   | 304, 316 OR 302 SSSL | A/R | 0     | 0     |
| 14       | D070333     | ADDITIONAL MASS DISK, 100g  | 304, 316 OR 302 SSSL | A/R | 0     | 0     |
| 13       | D080263     | ADDITIONAL MASS DISK, 150g  | 304, 316 OR 302 SSSL | A/R | 0     | 0     |
| 12       | -           | SCREW, SOCKET SET, 1/4-20 UNC-2A X 0.5 LONG                         | Ag-PLATED 300 SSSL   | 4   | 1     | 5     |
| 11       | -           | JAM NUT, 1/4-20   | 300 SSSL             | 4   | 1     | 5     |
| 10       | -           | WASHER, FLAT, VENTED, 1/4 (U-C COMPONENTS P/N WFV-25 OR EQUIVALENT) | 300 SSSL             | 4   | 1     | 5     |
| 9        | -           | SCREW, SOCKET HEAD CAP, 1/4-20 UNC-2A X 1.5 LONG, FULLY THREADED    | 300 SSSL             | 4   | 1     | 5     |
| 8        | 3585-4EN250 | SCREW-LOCK HELICOIL, 1/4-20 X 0.25 LONG                             | NITRONIC 60          | 4   | 2     | 6     |
| 7        | D030156     | SIDE OFFSET   | 6061-T6 Al           | 2   | 0     | 2     |
| 6        | -           | SCREW, SOCKET SET, 1/4-20 UNC-2A X 0.25 LONG                        | Ag-PLATED 300 SSSL   | 2   | 1     | 3     |
| 5        | D080181     | INT. MASS CHANGER ASSY  | N/A                  | 1   | 0     | 1     |
| 4        | -           | UHV-COMPATIBLE ADHESIVE (CERAMABOND #835M OR EQUIVALENT)            | -                    | A/R | 0     | 0     |
| 3        | D0901927    | SINTERED SmCo MAGNET, $\phi$ 0.075 X 0.125 LONG                     | SmCo 2:17            | 4   | 1     | 5     |
| 2        | D970075     | DUMBELL STANDOFF  | 6061-T6 Al           | 4   | 1     | 5     |
| 1        | D070336     | MAIN SECTION  | 304, 316 OR 302 SSSL | 1   | 0     | 1     |

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- PARTS TO BE ASSEMBLED ACCORDING TO E080208 HLTS ASSEMBLY SPECIFICATION, USING D0901461 HLTS INTERMEDIATE MASS MAGNET PLACEMENT FIXTURE.
- HELICOILS TO BE INSTALLED INTO ITEM NO. 7 BY LIGO PERSONNEL PRIOR TO ASSEMBLY AND AFTER ALL PARTS ARE CLEANED AND BAKED.

|          |     |        |                |
|----------|-----|--------|----------------|
| MATERIAL | N/A | FINISH | N/A $\mu$ inch |
|----------|-----|--------|----------------|

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO      SUB-SYSTEM: SUS

NEXT ASSY: HLTS SUSPENSION ASSY

PART NAME: INTERMEDIATE MASS ASSY

|          |            |             |            |             |              |
|----------|------------|-------------|------------|-------------|--------------|
| DESIGNER | D. BRIDGES | 02 AUG 2010 | SIZE       | DWG. NO.    | REV.         |
| DRAFTER  | D. BRIDGES | 03 AUG 2010 | c          | D070334     | v3           |
| CHECKER  | M. MEYER   | 03 AUG 2010 |            |             |              |
| APPROVAL |            |             | SCALE: 1:1 | PROJECTION: | SHEET 1 OF 1 |