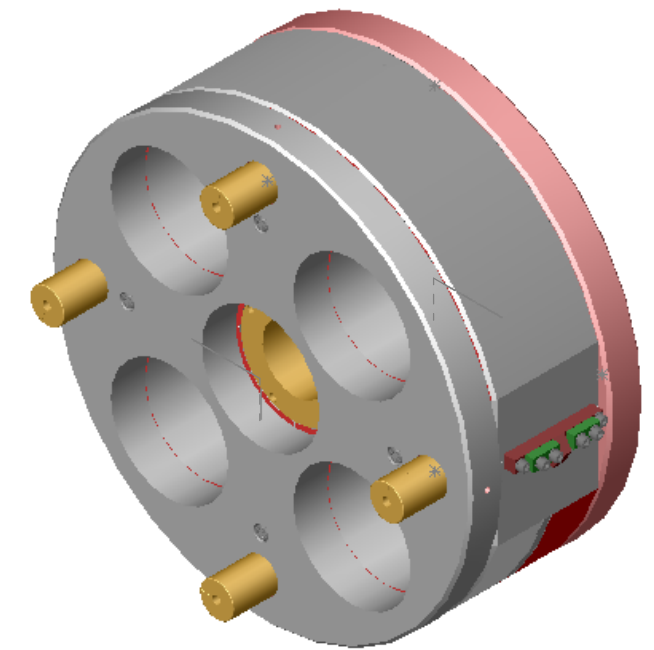
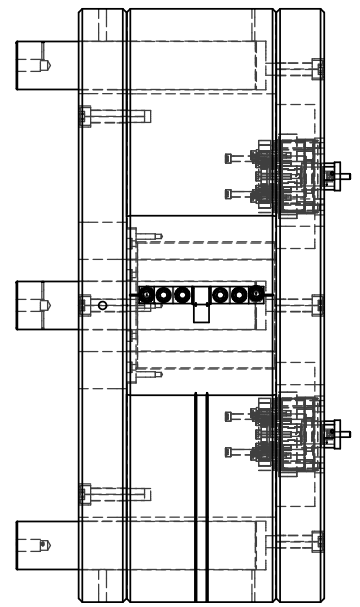
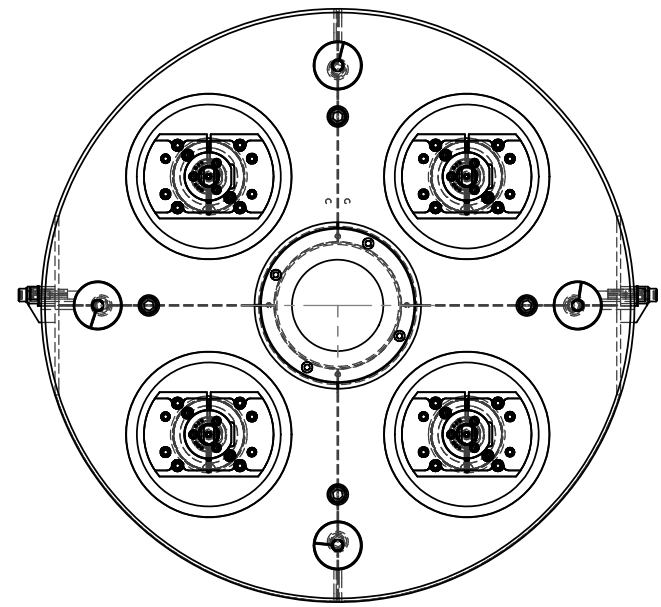
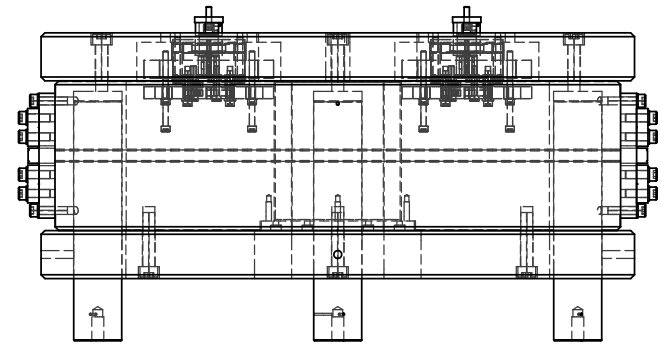


8 7 6 5 4 3 2 1

| REV. | DATE | DCN # | DRAWING TREE # |
|------|---------------|------------|----------------|
| A | FEB 17th 2006 | E060057-00 | E060059-A |
| | | | |
| | | | |

D
C
B
A



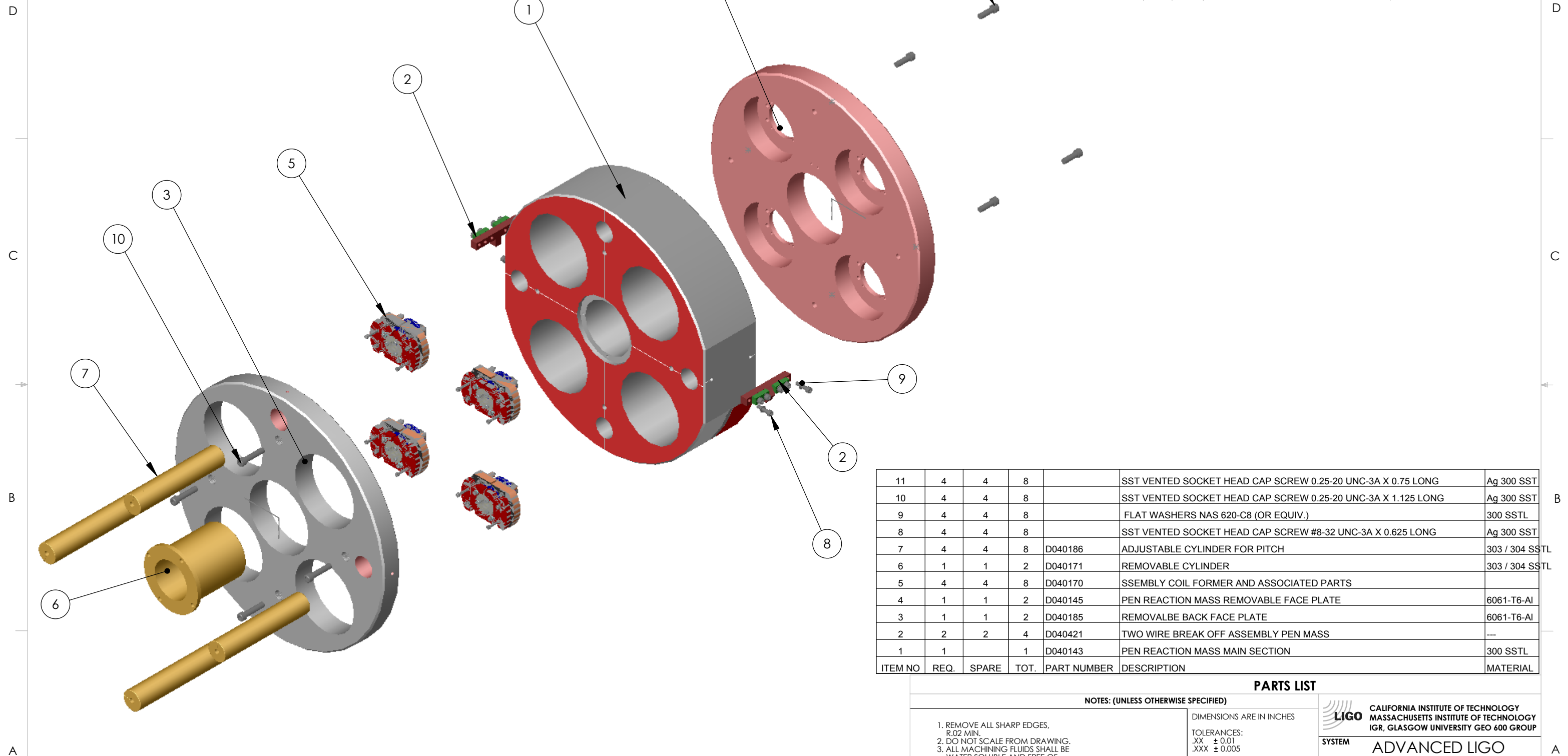
D
C
B
A

A

8 7 6 5 4 3 2 1

| NOTES: (UNLESS OTHERWISE SPECIFIED) | | | PARTS LIST | |
|--|--|--|---|--|
| 1. REMOVE ALL SHARP EDGES, R.02 MIN. 2. DO NOT SCALE FROM DRAWING. 3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL) | | | DIMENSIONS ARE IN INCHES | |
| | | | TOLERANCES: .XX ± 0.01 .XXX ± 0.005 | |
| | | | ANGULAR ± 0.5 ° | |
| | | | MATERIAL -- | |
| FINISH -- | | | LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY IGR, GLASGOW UNIVERSITY GEO 600 GROUP | |
| DRAWN NAME DATE | | | SYSTEM ADVANCED LIGO | |
| CHECKED CIT 30 APRIL 04 | | | SUB-SYSTEM SUS | |
| APPROVED | | | NEXT ASSY ETM CONT | |
| | | | PART NAME PEN REACTION MASS ASSEMBLY | |
| | | | SIZE DWG. NO. D040142 | |
| | | | REV. A | |
| | | | SCALE: NTS PROJECTION: SHEET 1 OF 2 | |

| REV. | DATE | DCN # | DRAWING TREE # |
|------|---------------|------------|----------------|
| A | FEB 17th 2006 | E060057-00 | E060059-A |
| | | | |
| | | | |



| ITEM NO | REQ. | SPARE | TOT. | PART NUMBER | DESCRIPTION | MATERIAL |
|---------|------|-------|------|-------------|--|----------------|
| 11 | 4 | 4 | 8 | | SST VENTED SOCKET HEAD CAP SCREW 0.25-20 UNC-3A X 0.75 LONG | Ag 300 SST |
| 10 | 4 | 4 | 8 | | SST VENTED SOCKET HEAD CAP SCREW 0.25-20 UNC-3A X 1.125 LONG | Ag 300 SST |
| 9 | 4 | 4 | 8 | | FLAT WASHERS NAS 620-C8 (OR EQUIV.) | 300 SSTL |
| 8 | 4 | 4 | 8 | | SST VENTED SOCKET HEAD CAP SCREW #8-32 UNC-3A X 0.625 LONG | Ag 300 SST |
| 7 | 4 | 4 | 8 | D040186 | ADJUSTABLE CYLINDER FOR PITCH | 303 / 304 SSTL |
| 6 | 1 | 1 | 2 | D040171 | REMOVABLE CYLINDER | 303 / 304 SSTL |
| 5 | 4 | 4 | 8 | D040170 | SSEMBLY COIL FORMER AND ASSOCIATED PARTS | |
| 4 | 1 | 1 | 2 | D040145 | PEN REACTION MASS REMOVABLE FACE PLATE | 6061-T6-Al |
| 3 | 1 | 1 | 2 | D040185 | REMOVALBE BACK FACE PLATE | 6061-T6-Al |
| 2 | 2 | 2 | 4 | D040421 | TWO WIRE BREAK OFF ASSEMBLY PEN MASS | --- |
| 1 | 1 | | 1 | D040143 | PEN REACTION MASS MAIN SECTION | 300 SSTL |

PARTS LIST

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. REMOVE ALL SHARP EDGES, R.02 MIN.
2. DO NOT SCALE FROM DRAWING.
3. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± 0.01
 .XXX ± 0.005
 ANGULAR ± 0.5 °



SYSTEM **ADVANCED LIGO**
 SUB-SYSTEM **SUS**
 NEXT ASSY **ETM CONT**

MATERIAL --
 FINISH --

PART NAME
PEN REACTION MASS ASSEMBLY

| | NAME | DATE |
|----------|------|-------------|
| DRAWN | CIT | 30 APRIL 04 |
| CHECKED | | |
| APPROVED | | |

SIZE DWG. NO. **B D040142** REV. **A**
 SCALE: NTS PROJECTION: SHEET 2 OF 2