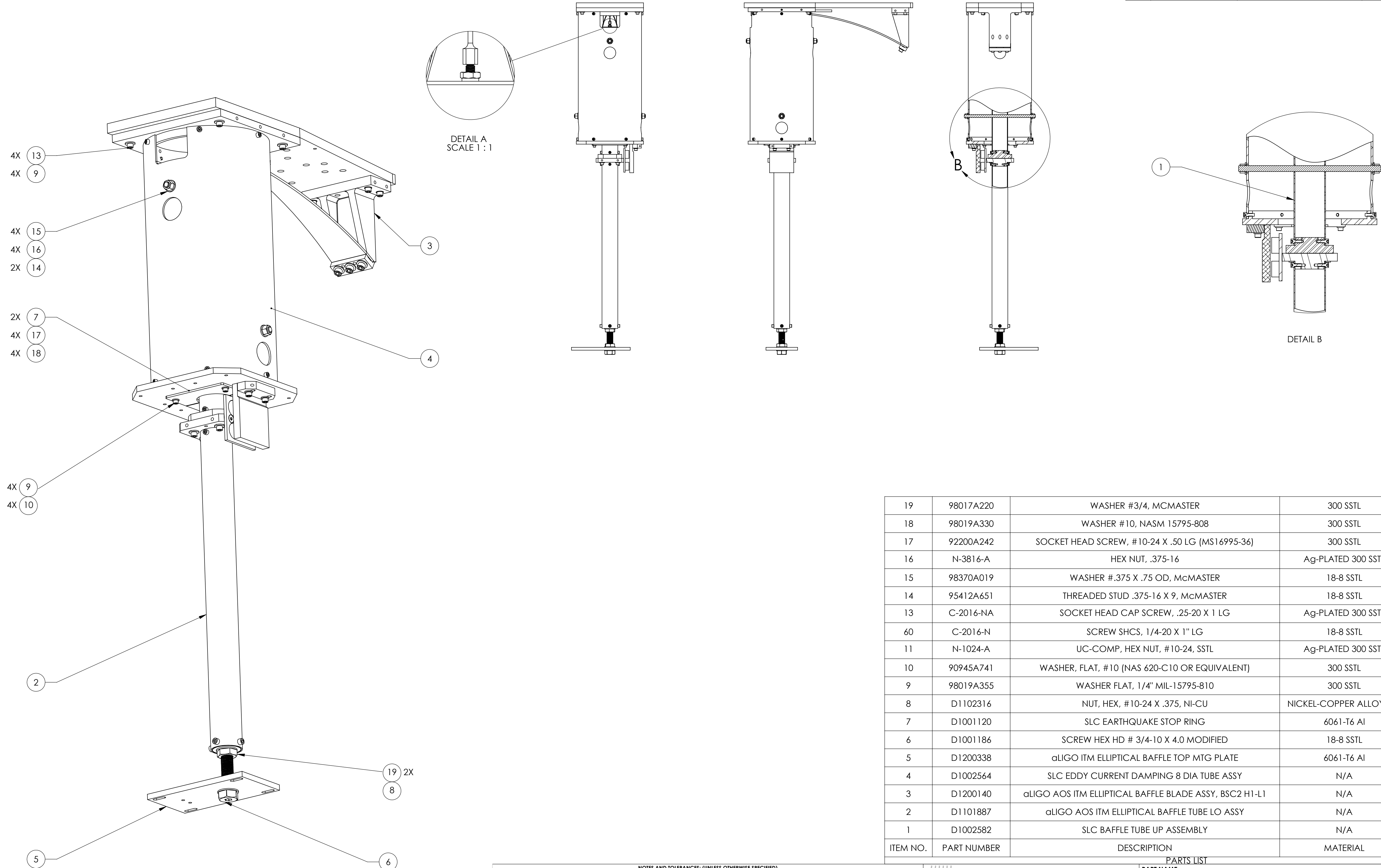


NOTES CONTINUED:

- 5. APPROXIMATE WEIGHT = 54.752 LBS.
- 6. TORQUE SHCS TO VALUES SPECIFIED IN LIGO-T1 100066.

REV.	DATE	DCN #	DRAWING TREE #
v1	04 OCT 2011	E1101007	E1101041
-	-	-	-
-	-	-	-



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	TOTAL
19	98017A220	WASHER #3/4, MCMMASTER	300 SSSL	3	3
18	98019A330	WASHER #10, NASM 15795-808	300 SSSL	4	4
17	92200A242	SOCKET HEAD SCREW, #10-24 X .50 LG (MS16995-36)	300 SSSL	4	4
16	N-3816-A	HEX NUT, .375-16	Ag-PLATED 300 SSSL	4	4
15	98370A019	WASHER #.375 X .75 OD, MCMMASTER	18-8 SSSL	4	4
14	95412A651	THREADED STUD .375-16 X 9, MCMMASTER	18-8 SSSL	2	2
13	C-2016-NA	SOCKET HEAD CAP SCREW, .25-20 X 1 LG	Ag-PLATED 300 SSSL	4	4
60	C-2016-N	SCREW SHCS, 1/4-20 X 1" LG	18-8 SSSL	4	4
11	N-1024-A	UC-COMP, HEX NUT, #10-24, SSSL	Ag-PLATED 300 SSSL	1	1
10	90945A741	WASHER, FLAT, #10 (NAS 620-C10 OR EQUIVALENT)	300 SSSL	1	1
9	98019A355	WASHER FLAT, 1/4" MIL-15795-810	300 SSSL	8	8
8	D1102316	NUT, HEX, #10-24 X .375, NI-CU	NICKEL-COPPER ALLOY 400	2	2
7	D1001120	SLC EARTHQUAKE STOP RING	6061-T6 Al	2	2
6	D1001186	SCREW HEX HD # 3/4-10 X 4.0 MODIFIED	18-8 SSSL	1	1
5	D1200338	αLIGO ITM ELLIPTICAL BAFFLE TOP MTG PLATE	6061-T6 Al	1	1
4	D1002564	SLC EDDY CURRENT DAMPING 8 DIA TUBE ASSY	N/A	1	1
3	D1200140	αLIGO AOS ITM ELLIPTICAL BAFFLE BLADE ASSY, BSC2 H1-L1	N/A	1	1
2	D1101887	αLIGO AOS ITM ELLIPTICAL BAFFLE TUBE LO ASSY	N/A	1	1
1	D1002582	SLC BAFFLE TUBE UP ASSEMBLY	N/A	1	1

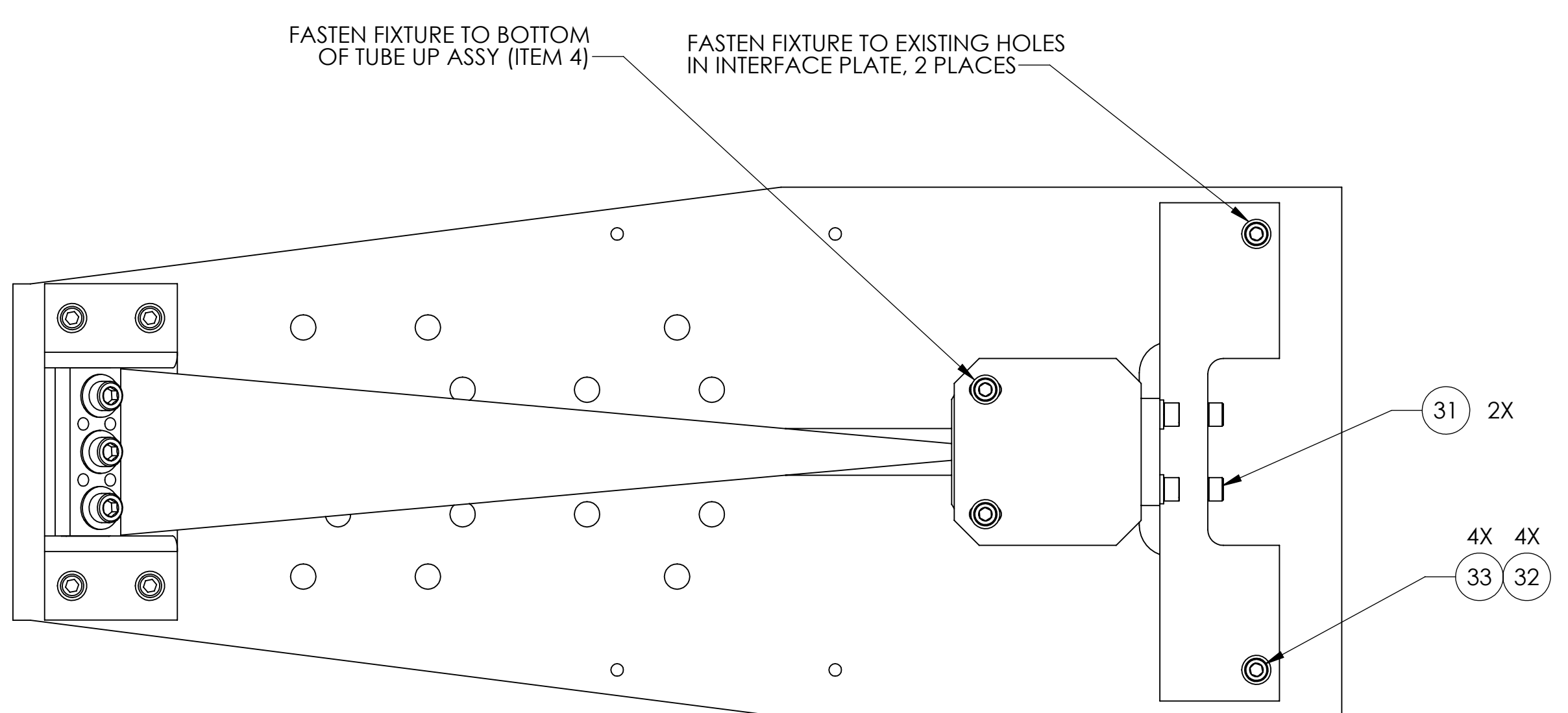
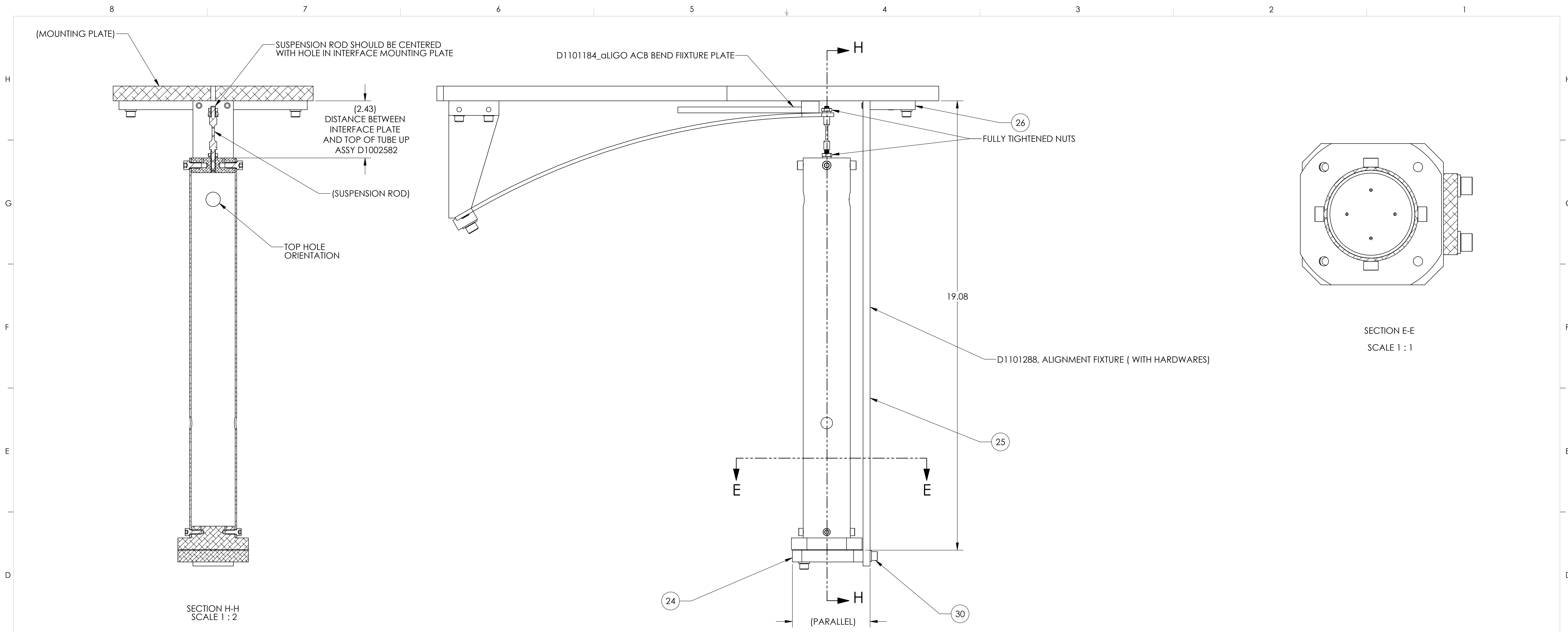
**NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)**

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 .XX ± .02  
 .XXX ± .005  
 ANGULAR ± 1.0°

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		<b>PART NAME</b> αLIGO AOS ITM ELLIPTICAL BAFFLE SUSPENSION ASSY, H1/L1	
<b>SYSTEM</b> ADVANCED LIGO	<b>SUB-SYSTEM</b> AOS	<b>DESIGNER</b> J. TERRAZAS	<b>DATE</b> 04 OCT 2011
<b>CHECKER</b> H. KELMAN	<b>APPROVAL</b> M. SMITH	<b>SIZE</b> D	<b>DWG. NO.</b> D1101885
<b>MATERIAL</b> N/A	<b>FINISH</b> N/A μinch	<b>SCALE</b> 1:3	<b>PROJECTION</b> 
<b>NEXT ASSY</b> D1003238	<b>REV.</b> v1	<b>SHEET</b> 1 OF 3	

D1101885-αLIGO AOS ITM ELLIPTICAL BAFFLE SUSPENSION ASSY, PART PDM REV. X:055, DRAWING PDM REV. X:031



UPPER TUBE ALIGNMENT TOOLING

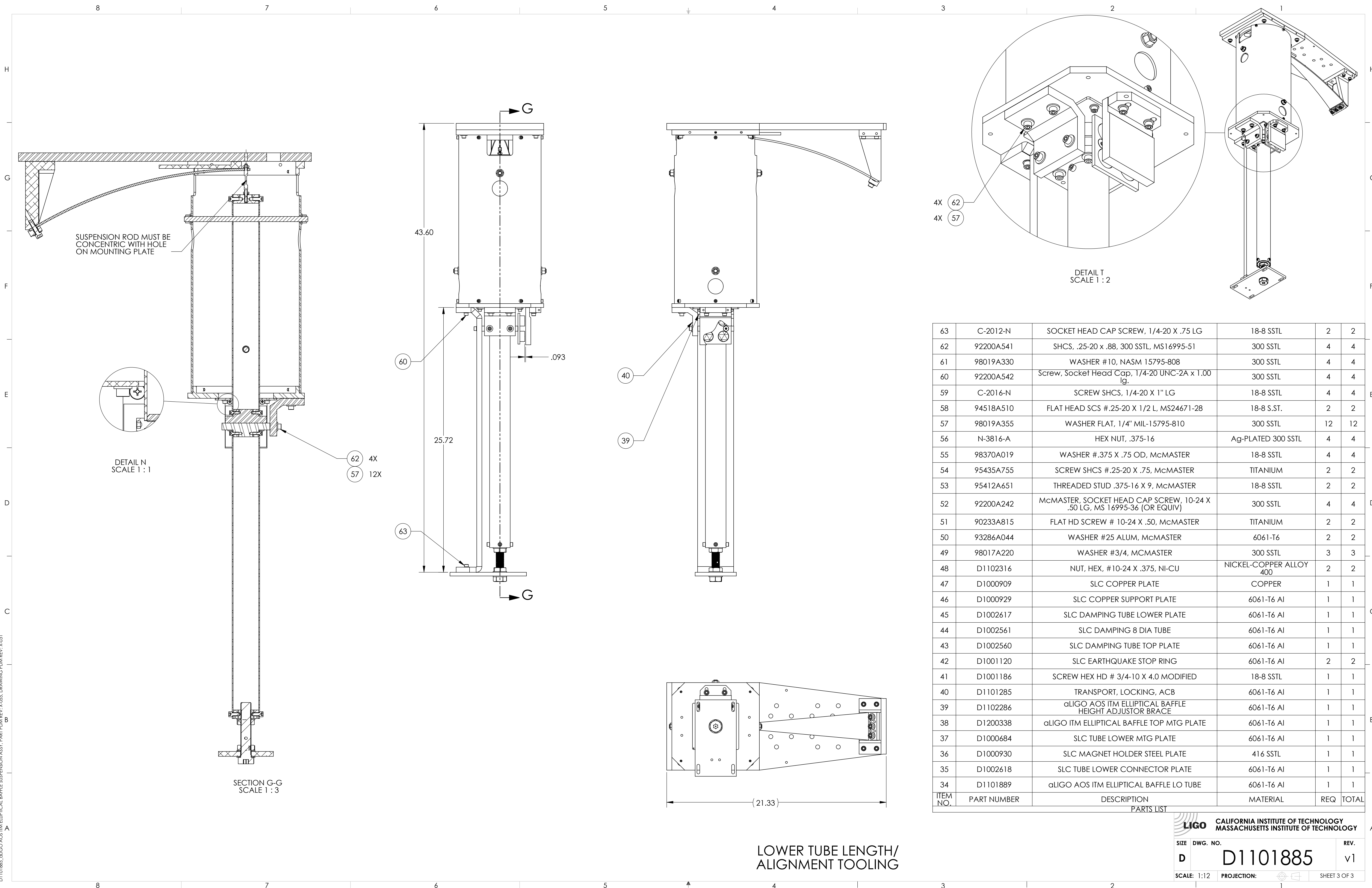
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	TOTAL
33	C-2016-NA	SOCKET HEAD CAP SCREW, SHC, 1/4-20 x 1" L	Ag-PLATED 300 SSSL	4	4
32	WF-25	WASHER, FLAT, 1/4 (NAS 620-C416 OR EQUIVALENT)	300 SSSL	6	6
31	C-2018-N	SOCKET HEAD CAP SCREW, SHC, 1/4-20 x 1.125" L	18-8 SSSL	2	2
30	C-2012-N	1/4"-20 X 0.75" SHCS	18-8 SSSL	2	2
29	NAS 620-C416L	1/4 FLAT WASHER, .260 ID x .47 OD X .02 THK	300 SSSL	4	4
28	92200A537	SOCKET HEAD CAP SCREW, .25-20 UNC X .50 LG, (MS 16995-48 OR EQUIV)	300 SSSL	4	4
27	92200A242	SOCKET HEAD SCREW, #10-24 X .50 LG (MS16995-36)	300 SSSL	4	4
26	D1101289	SUPPORT, TUBE UP	6061-T6 Al	1	1
25	D1101404	STIFFENER, TUBE UP	6061-T6 Al	1	1
24	D1101290	BRACE, TUBE UP	6061-T6 Al	1	1
23	D1002581	SLC SUSPENSION ROD SUPPORT	6061-T6 Al	1	1
22	D1002610	SLC TUBE UP CONNECTOR PLATE	6061-T6 Al	1	1
21	D1002612	SLC UPPER TUBE	6061-T6 Al	1	1
PARTS LIST					

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

SIZE DWG. NO. **D1101885** REV. **v1**

SCALE: 1:12 PROJECTION: SHEET 2 OF 3

D1101885\_gLIGO ACB TELELLIPTICAL BAFFLE SUSPENSION ASSY, PART PDM REV: X.055, DRAWING PDM REV: X.031



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	TOTAL
63	C-2012-N	SOCKET HEAD CAP SCREW, 1/4-20 X .75 LG	18-8 SSSL	2	2
62	92200A541	SHCS, .25-20 x .88, 300 SSSL, MS16995-51	300 SSSL	4	4
61	98019A330	WASHER #10, NASM 15795-808	300 SSSL	4	4
60	92200A542	Screw, Socket Head Cap, 1/4-20 UNC-2A x 1.00 lg.	300 SSSL	4	4
59	C-2016-N	SCREW SHCS, 1/4-20 X 1" LG	18-8 SSSL	4	4
58	94518A510	FLAT HEAD SCS #.25-20 X 1/2 L, MS24671-28	18-8 S.ST.	2	2
57	98019A355	WASHER FLAT, 1/4" MIL-15795-810	300 SSSL	12	12
56	N-3816-A	HEX NUT, .375-16	Ag-PLATED 300 SSSL	4	4
55	98370A019	WASHER #.375 X .75 OD, McMASTER	18-8 SSSL	4	4
54	95435A755	SCREW SHCS #.25-20 X .75, McMASTER	TITANIUM	2	2
53	95412A651	THREADED STUD .375-16 X 9, McMASTER	18-8 SSSL	2	2
52	92200A242	McMASTER, SOCKET HEAD CAP SCREW, 10-24 X .50 LG, MS 16995-36 (OR EQUIV)	300 SSSL	4	4
51	90233A815	FLAT HD SCREW # 10-24 X .50, McMASTER	TITANIUM	2	2
50	93286A044	WASHER #25 ALUM, McMASTER	6061-T6	2	2
49	98017A220	WASHER #3/4, McMASTER	300 SSSL	3	3
48	D1102316	NUT, HEX, #10-24 X .375, NI-CU	NICKEL-COPPER ALLOY 400	2	2
47	D1000909	SLC COPPER PLATE	COPPER	1	1
46	D1000929	SLC COPPER SUPPORT PLATE	6061-T6 Al	1	1
45	D1002617	SLC DAMPING TUBE LOWER PLATE	6061-T6 Al	1	1
44	D1002561	SLC DAMPING 8 DIA TUBE	6061-T6 Al	1	1
43	D1002560	SLC DAMPING TUBE TOP PLATE	6061-T6 Al	1	1
42	D1001120	SLC EARTHQUAKE STOP RING	6061-T6 Al	2	2
41	D1001186	SCREW HEX HD # 3/4-10 X 4.0 MODIFIED	18-8 SSSL	1	1
40	D1101285	TRANSPORT, LOCKING, ACB	6061-T6 Al	1	1
39	D1102286	αLIGO AOS ITM ELLIPTICAL BAFFLE HEIGHT ADJUSTOR BRACE	6061-T6 Al	1	1
38	D1200338	αLIGO ITM ELLIPTICAL BAFFLE TOP MTG PLATE	6061-T6 Al	1	1
37	D1000684	SLC TUBE LOWER MTG PLATE	6061-T6 Al	1	1
36	D1000930	SLC MAGNET HOLDER STEEL PLATE	416 SSSL	1	1
35	D1002618	SLC TUBE LOWER CONNECTOR PLATE	6061-T6 Al	1	1
34	D1101889	αLIGO AOS ITM ELLIPTICAL BAFFLE LO TUBE	6061-T6 Al	1	1
PARTS LIST					

LOWER TUBE LENGTH/  
ALIGNMENT TOOLING

CALIFORNIA INSTITUTE OF TECHNOLOGY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
 SIZE DWG. NO. **D1101885** REV. **v1**  
 SCALE: 1:12 PROJECTION: SHEET 3 OF 3

D1101885\_αLIGO AOS ITM ELLIPTICAL BAFFLE SUSPENSION ASSY. PART PDM REV. X:055. DRAWING PDM REV. X:031