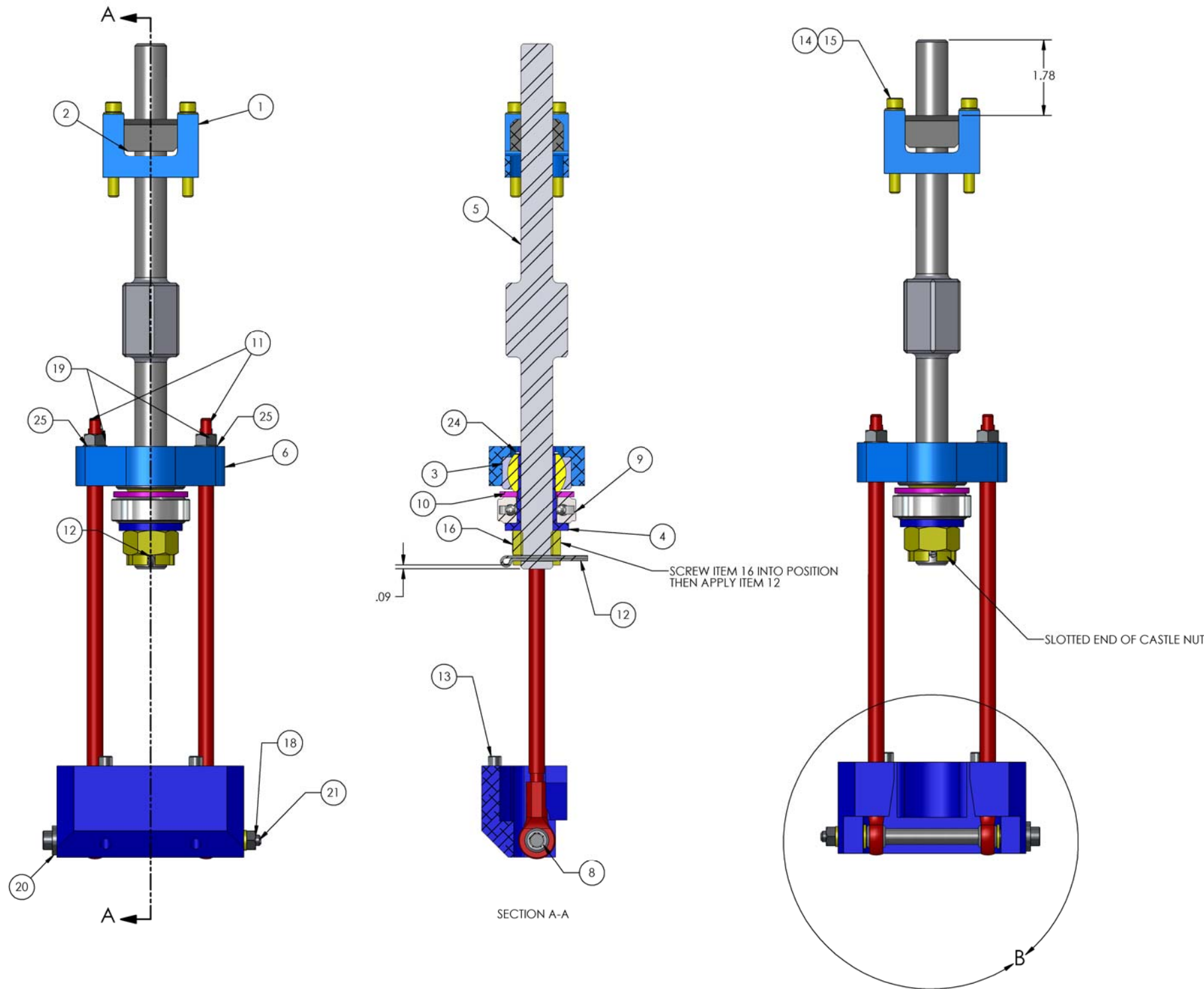


NOTES CONTINUED:
 5. VENDOR REFERENCES ARE PROVIDED AS EXAMPLES OF PARTS
 ALL REQUIRED SPECIFICATIONS, EQUIVALENTS ARE ALWAYS
 ACCEPTABLE UNLESS OTHERWISE SPECIFIED.

REV.	DATE	DCN #	DRAWING TREE #
v1	19 Feb. 2010	E0900391	E1000025
v2	22 June 2010	E1000224	E1000025

SHOWN IN LOADED POSITION



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ
25	McMaster_98017A689	Washer .56 od x .32 ld x .02-.04 thk	300 SSSL	2
24	McMaster_91590A131	RETAINING RING	15-7 MO SS	1
23	McMaster_98017A690	Washer .57 od x .32 ld x .05-.07 thk	300 SSSL	2
22	McMaster_59915K483	Ball Joint Rod End 5/16-24 thd x 5/16 ld 7/8 od 1.38 lg	302 SSSL	2
21	McMaster_90298A603	Shoulder Screw 5/16 shoulder 4.5 lg 1/4-20 thd	18-8 SS	1
20	McMaster_98370A017	Washer .68 od x .344 ld x .11-.14 thk	18-8 SS	1
19	McMaster_91845A030	Hex Nut 5/16-18	18-8 SS	2
18	McMaster_91845A029	Hex Nut 1/4-20	18-8 SS	1
17	McMASTER_90945A761	WASHER .26 ID X .47 OD X .06-.07 THK (NAS 620-C416)	300 SSSL	1
16	MSC_67484246	CASTLE NUT, 3/4-16	18-8 SSSL	1
15	HOLOKROME_78070	Screw shcs 1/4-20 UNC-3A X 2" lg.	300 SSSL	4
14	UCC WFV-25	Flat Washer, Vented .255 ID, .46 OD, .032 THK	18-8 SSSL	4
13	McMaster_90145A583	Dowel Pin 5/16 x 1" lg	18-8 SS	2
12	McMaster_98401A479	Cotter Pin .125 dia x 1.75 lg	18-8 SS	1
11	D0902188	SPRING PRELOAD TOOL ROD, BLADE PULLER ASSY, STAGE 1-2, aLIGO BSC ISI	304 SSSL	2
10	McMaster_98019A524	Washer 1.75 od x .94 ld x .10-.14 thk.	300 SSSL	1
9	Stock Drive Products_59912Y-TB093184	Thrust Bearing 1.844 od x .938 ld x .625 thk	Chrome Stainless Steel	1
8	D0902189	SPRING PRELOAD SPACER, BLADE PULLER ASSY, aLIGO BSC ISI	6061 Alloy	1
7	D0902192	SPRING PRELOAD END BRACKET, BLADE PULLER ASSY, STAGE 1-2, aLIGO BSC ISI	6061-T6 Al	1
6	D0902187	SPRING PRELOAD CONNECTION BLOCK, BLADE PULLER ASSY, STAGE 1-2, aLIGO BSC ISI	304 SSSL	1
5	D0902193	SPRING BLADE PULLER BOLT, BLADE PULLER ASSY, STAGE 1-2, aLIGO BSC ISI	420 SSSL	1
4	D0902186	CENTERING WASHER, BLADE PULLER ASSY, STAGE 1-2, aLIGO BSC ISI	6061-T6 Al	1
3	Aurora_Bearing_AWC-14T	Spherical Bearing 1.625 od x .875 ld	N/A	1
2	D0902190	SPRING PRELOAD PIVOT, BLADE PULLER ASSY, aLIGO BSC ISI	NITRONIC 60	1
1	D0902191	SPRING PRELOAD SADDLE, BLADE PULLER ASSY, aLIGO BSC ISI	NITRONIC 60	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 ± n/a	
.XXX ± n/a	
ANGULAR ± n/a	
MATERIAL	N/A
FINISH	N/A μinch

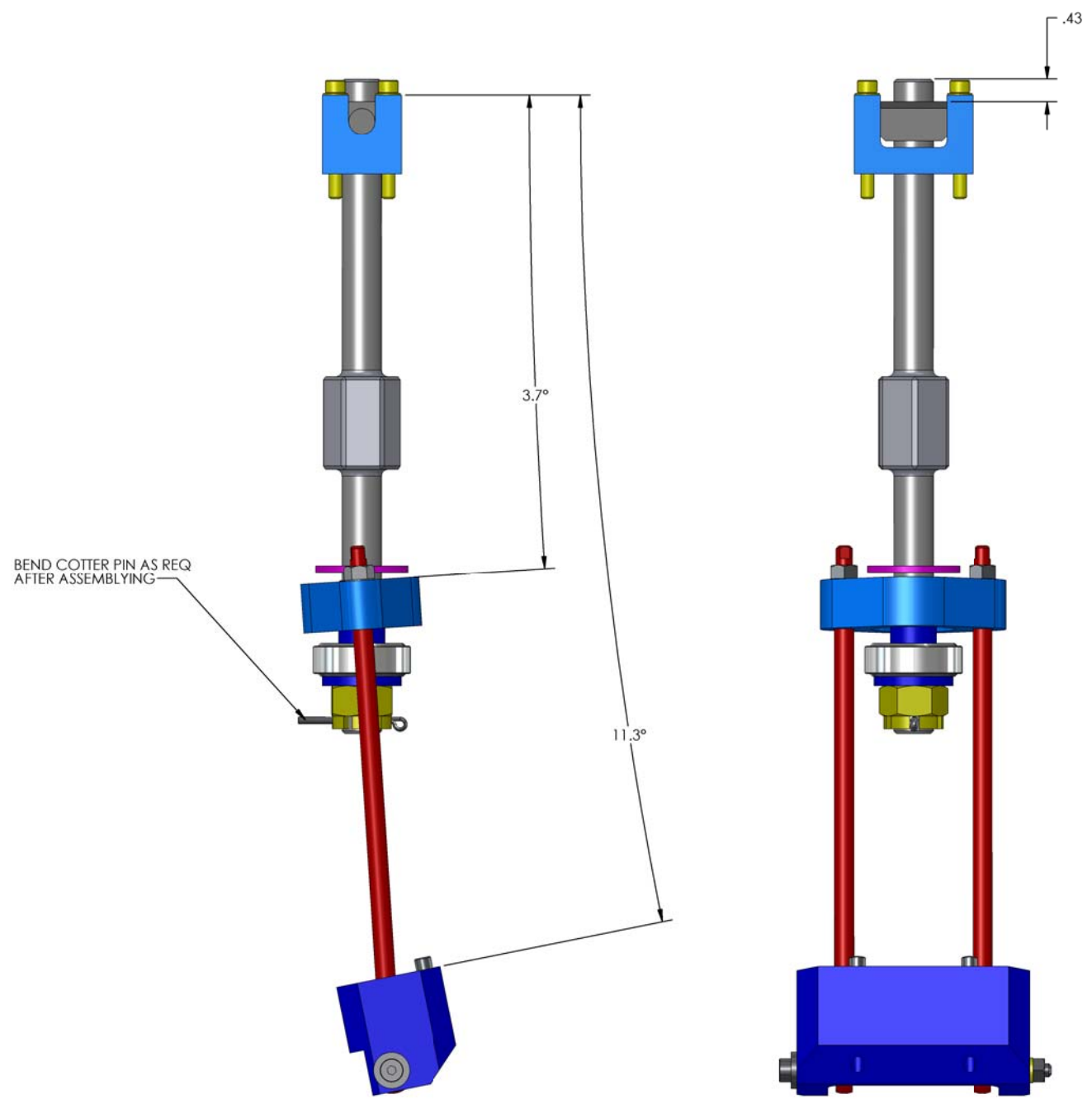
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME PULLER BLADE ASSEMBLY, STAGE 1-2, aLIGO BSC ISI	
SYSTEM ADVANCED LIGO	SUB-SYSTEM SEI	DESIGNER C. RAMET 19 Feb. 2010	SIZE D
NEXT ASSY D0901182	DRAFTER J. HILLARD 19 Feb. 2010	CHECKER F. MATHICHARD 19 Feb. 2010	DWG. NO. D0902454
	APPROVAL K. MASON 19 Feb. 2010	SCALE: 1:1.5	PROJECTION:
		REVISION v2	SHEET 1 OF 2

D0902454 Blade Puller Assembly, Stage 1-2, aLIGO BSC ISI, PART FDM REV. 3-03, DRAWING FDM REV. X-009

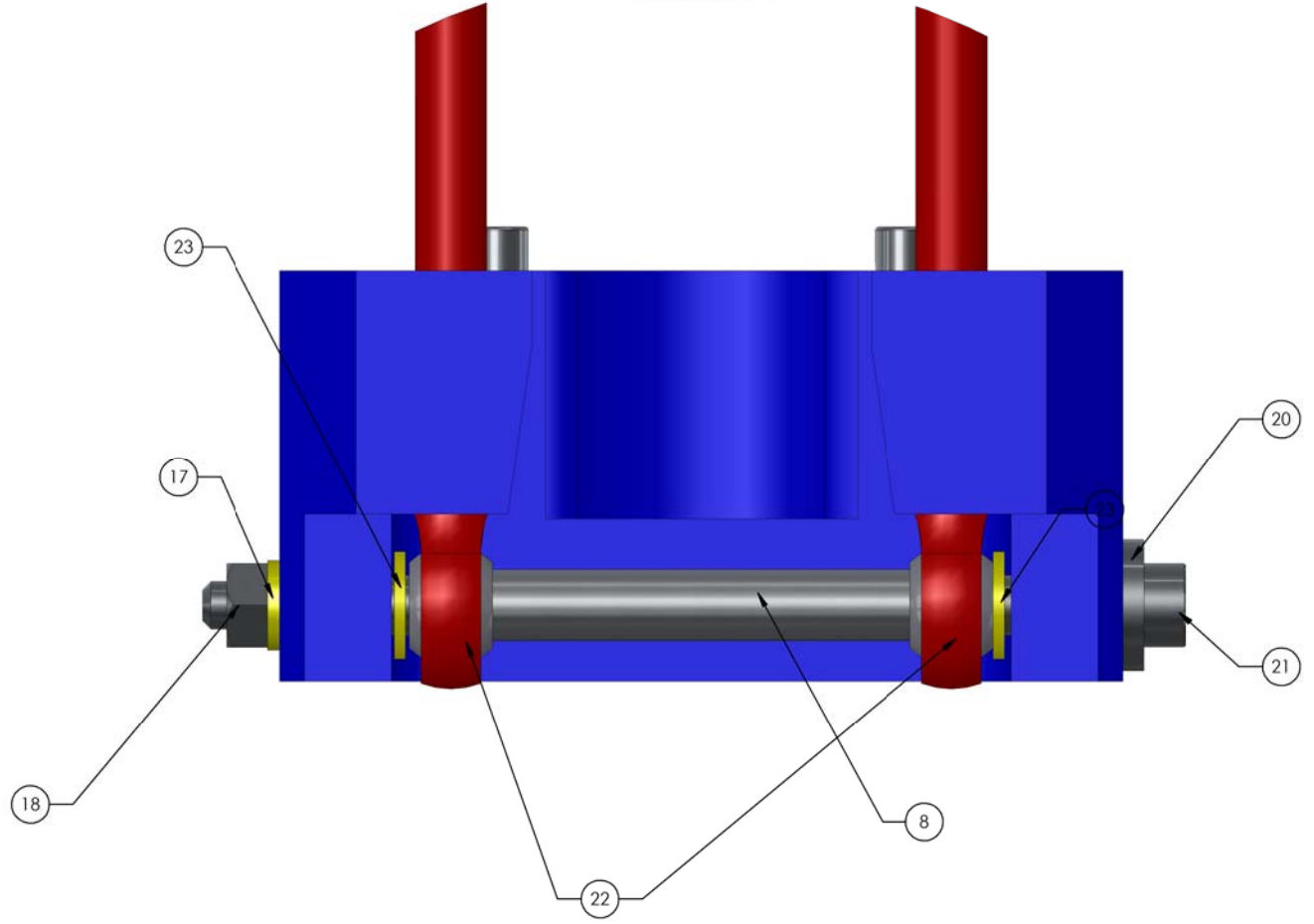
8 7 6 5 4 3 2 1

H G F E D C B A

SHOWN IN UNLOADED POSITION



DETAIL B
SCALE 2 : 1



LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D0902454	v2
SCALE: 1:1.5	PROJECTION:	SHEET 2 OF 2

D0902454 Blade Puller Assembly, Stage 1-3, d:\UCO\BIC\BIC_PARE\FDM\REV\3-CAD_DRAWING\FDM\REV\X-009

8 7 6 5 4 3 2 1

H G F E D C B A