

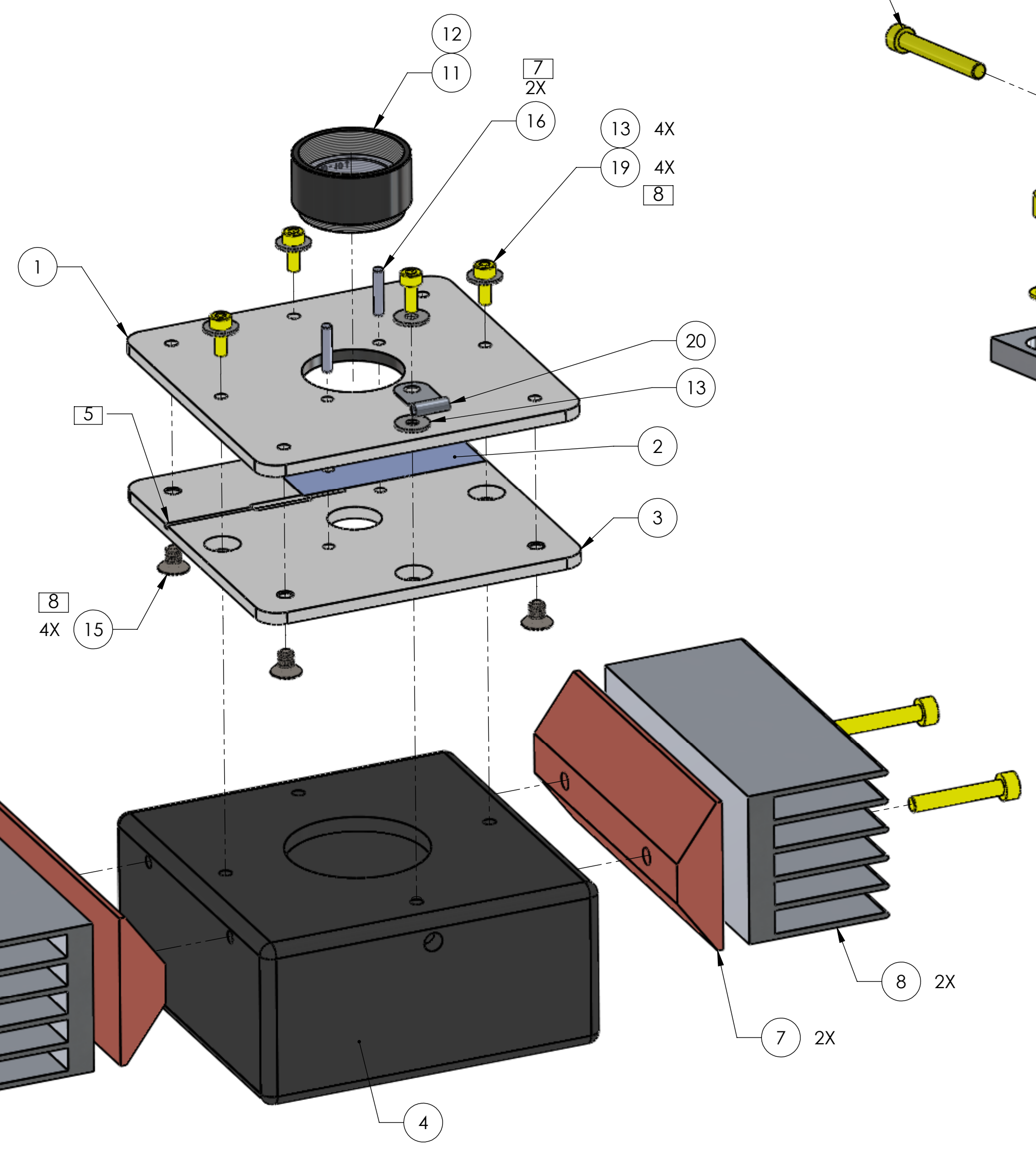
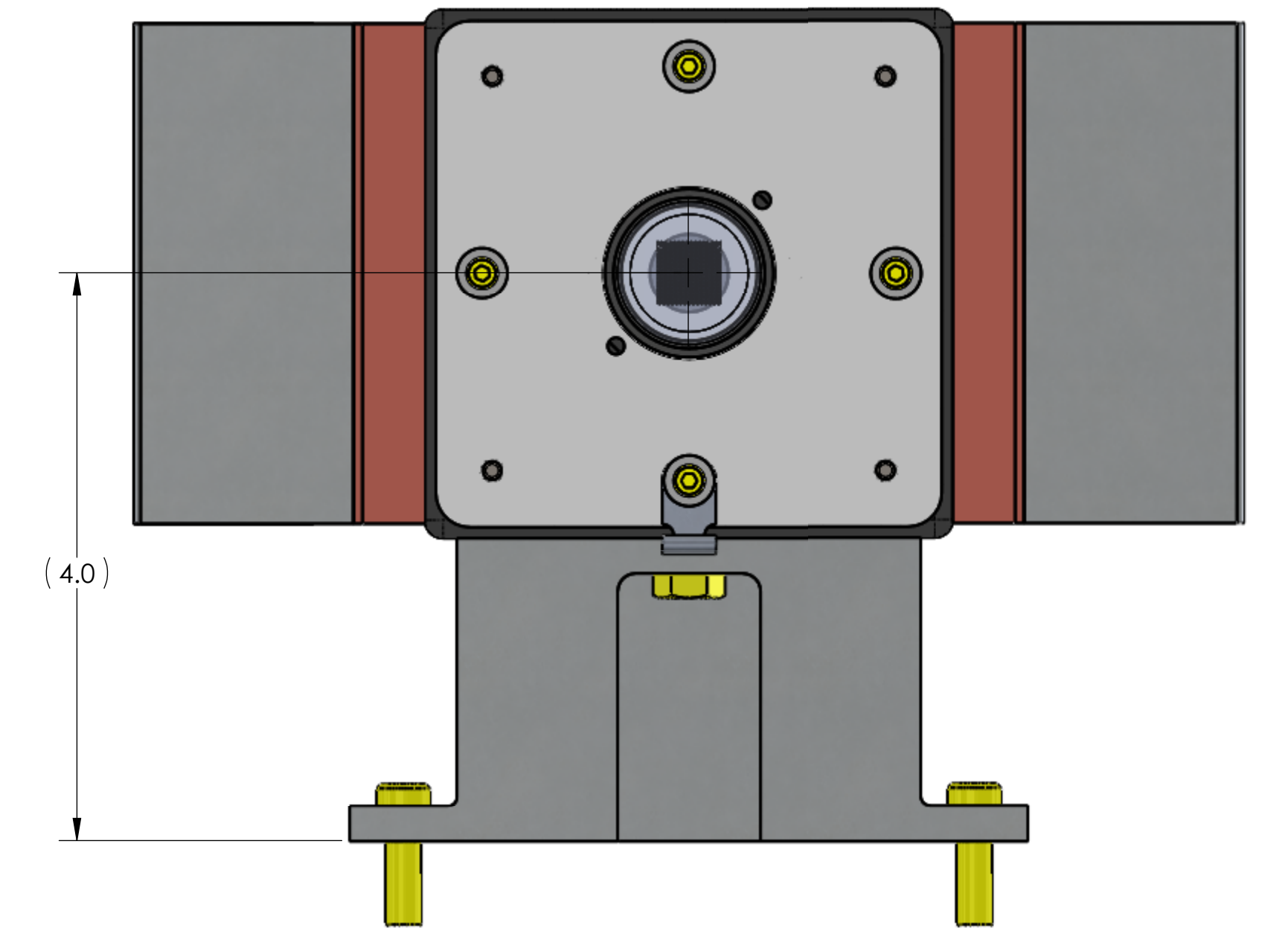
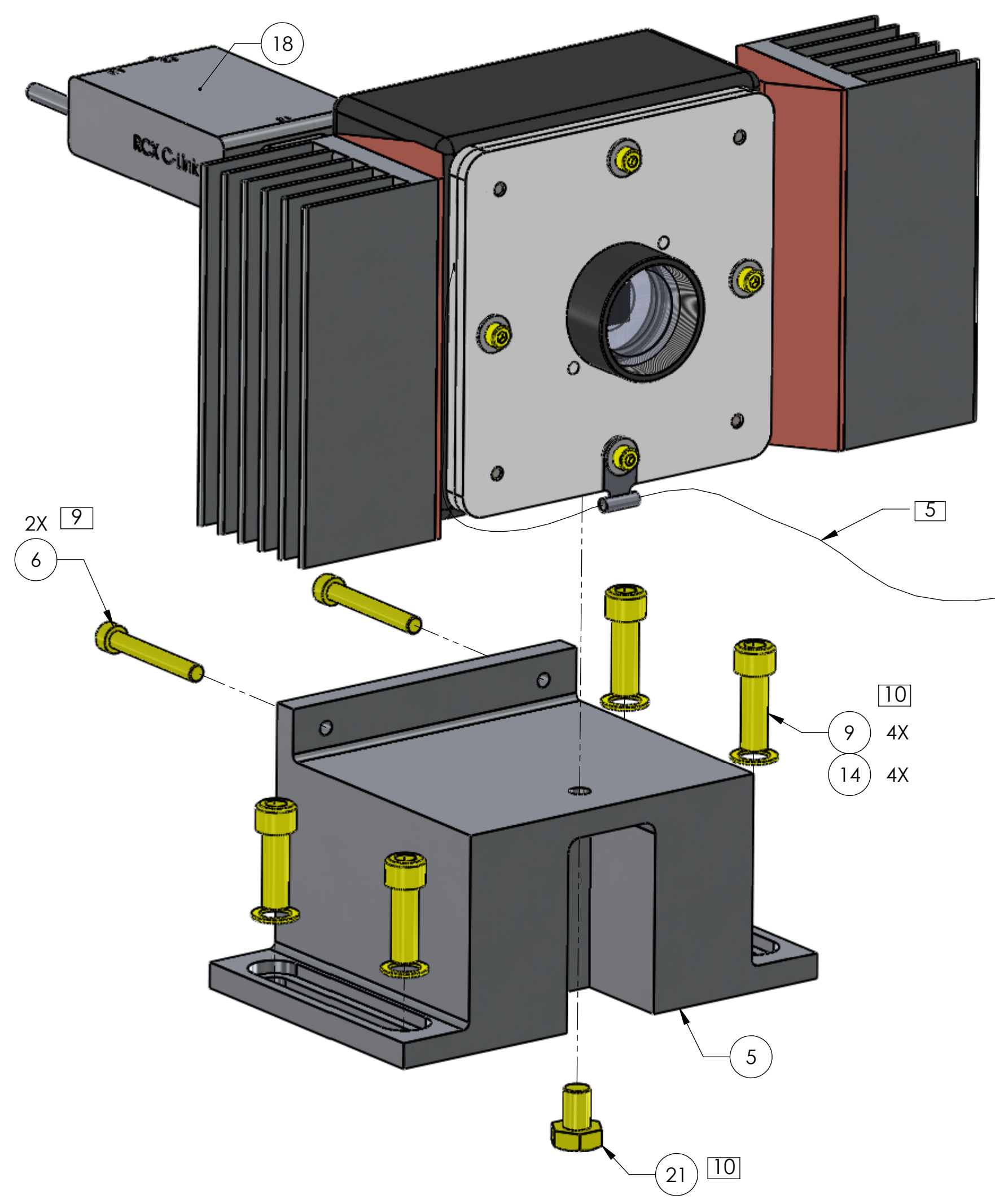
REV.	DATE	DCN #	DRAWING TREE #
v2	28-FEB-2011	E1100147-v1	E1100148-v1
v3	31-MAY-2011	E1100490-v1	E1100148-v2
v4	06-JUL-2012	E1200579-x0	E1200580-v1
v5	11-FEB-2013	E1200579-v1	E1200580-v2
v6	22-NOV-2013	E1200579-v2	E1200580-v4
v7	14-JAN-2014	E1400016-v1	E1200580-v5

ASSEMBLY NOTES:

- [5] PRESS RTD CONDUCTOR WIRE INTO GROOVE. USE FLAG RING TERMINAL (ITEM 20) FOR WIRE STRAIN RELIEF
- [6] HEAD PROFILE OF STANDARD SHCS MUST BE TURNED DOWN BY POST-MACHINE PROCESS FOR PROPER FIT BETWEEN FINS. M4 MAX TORQUE IS 30 IN-LB [3.4 N-M]
- [7] TAKE CARE TO ALIGN ITEMS 1, 2, 3 USING DOWEL PINS (ITEM 16)
- [8] SECURE PLATE STACK (ITEMS 1, 2, 3) USING FHSCS (ITEM 15) BEFORE INSTALLING ONTO CAMERA FACE, USING ITEMS 19

INSTALLATION NOTES:

- [9] #8-32 MAX TORQUE IS 20 IN-LB [2.3 N-M]
- [10] 1/4-20 MAX TORQUE IS 75 IN-LB [8.7 N-M]



ITEM NO.	PART NUMBER	QTY
1	D1000658_aLIGO TCS HARTMANN SENSOR PLATE CLAMP	1
2	D1000669_TCS HARTMANN SENSOR PLATE	1
3	D1000708_aLIGO TCS HARTMANN SENSOR CAMERA SPACER PLATE	1
4	D1000709_CAMERA, DALSA PANTERA 1M60	1
5	D1000715_HARTMANN SENSOR CAMERA MOUNT	1
6	SST SOCKET HEAD CAP SCREW #8-32 UNC-2A X 1.25 LONG	2
7	D1000729_HARTMANN SENSOR HEAT SPREADER	2
8	D1000736_HARTMANN SENSOR HEAT SINK	2
9	SST SOCKET HEAD CAP SCREW 0.25-20 UNC-2A X 0.75 LONG	4
10	MODIFIED SST SOCKET HEAD CAP SCREW M4 X 25 LONG	4
11	ThorLabs_SM1L05 Lens Tube	1
12	ThorLabs_FB840-10 BandPass Filter	1
13	M4 (.8 MM THICK) FLAT WASHER	5
14	0.25in, MS 15795-854 FLAT WASHERS (OR EQUIV.)	4
15	FHSCS M4 X 6 MM LONG, MCMMASTER 92125A186	4
16	DOWEL PIN, METRIC, 2.5 MM OF X 12 MM LONG, STAINLESS STEEL	2
17	D1200568_HARTMANN PLATE RTD CABLE ASSEMBLY	1
18	RCX C-LINK, EDT	1
19	SSTL M4 X 12MM LONG, DIN 912 (OR EQUIV)	5
20	FLAG RING TERMINAL (MCMMASTER CARR PN 73125K68)	1
21	SST HEX HEAD SCREW, 1/4-20 x 0.5 LONG	1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
1. INTERPRET DRAWING PER ASME Y14.5-1994.	
2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.	
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 [MM]	
TOLERANCES:	
.XX ±	
.XXX ±	
ANGULAR ± °	
MATERIAL	N/A
FINISH	N/A μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SYSTEM	SUB-SYSTEM
ADVANCED LIGO	AOS
NEXT ASSY	D1300300, D1300302

PART NAME				HARTMANN SENSOR, ASSEMBLY			
DESIGNER	ADELAIDE	04-JAN-2010	SIZE	DWG. NO.	REV.		
DRAFTER	M. JACOBSON	24 MAR 2010	D	D1000657	v7		
CHECKER	P. VEITCH	06-JUL-2012	SCALE: 1:1	PROJECTION:	SHEET 1 OF 1		
APPROVAL	A. BROOKS	14-JAN-2014					

D1000657_HARTMANN SENSOR, PART PDM REV: X-079; DRAWING PDM REV: X-023