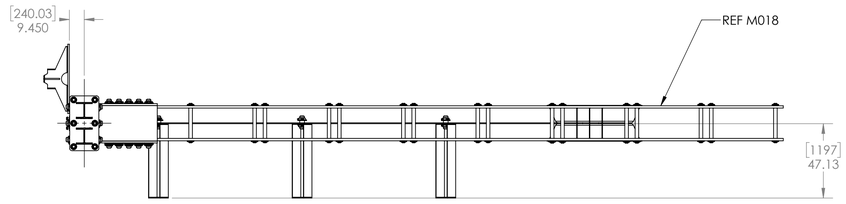
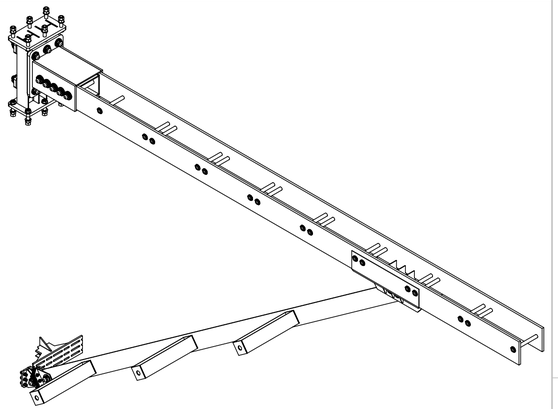
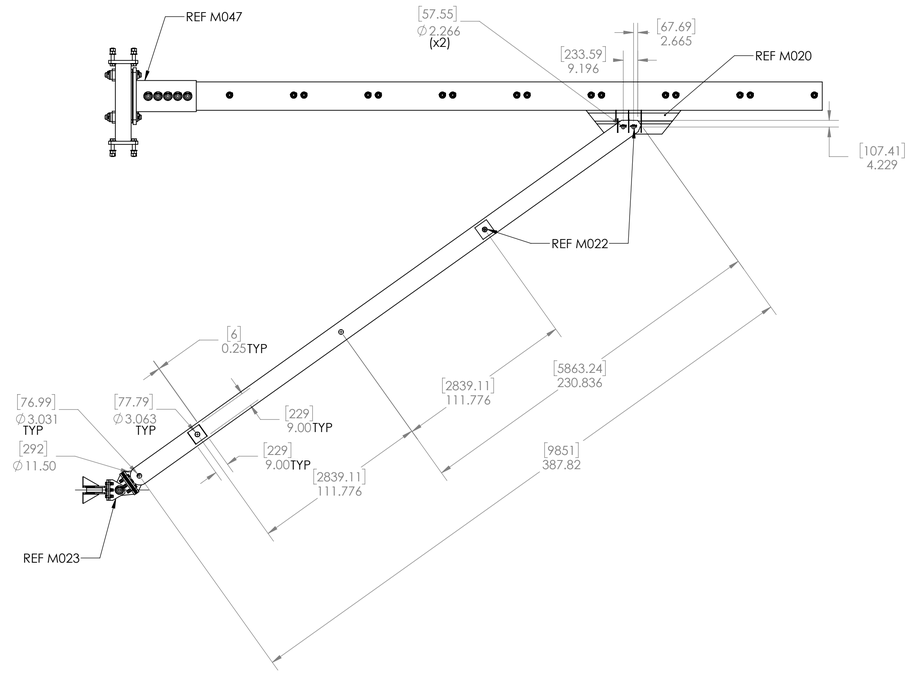
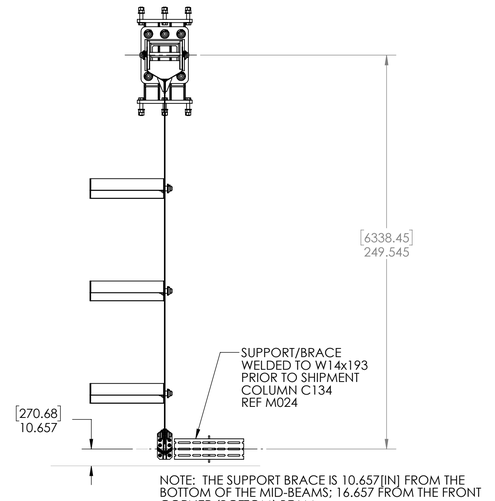
ITEM NO.	PART NUMBER	DESCRIPTION	WEIGHT	QTY.
1	Connect beam i 20200619 2 top			2
2	Rod connect 11 20200909 2 top			12
3	Clevis key 1a 20200904 2 top			36
4	Bent pin 2 20200904 2 top			36
5	98450A774			62
6	Clevis wash 1a 20200904 2 top			36
7	Clevis block 1 20200907 2 top			36
8	Connect sup i 20200622 2 top			1
9	Connect sup i 20200622 2 top			1
10	Rod connect 13 20200909 2 top			4
11	Rod connect 12 20200909 2 top			2
12	Connect beam iv 20201125 2 top			1
13	Brace angle 1 20201124 2 top			4
14	Brace angle wash 1 20201124 2 top			4
15	Brace angle plate 1 20201124 2 top			3
16	Brace angle 2 20201124 2 top			1
17	92620A966			6
18	94895A038			24
19	98023A038			24
20	Rod connect 19 20201124 2 top			2
21	Clevis key 3 20200915 2 top			16
22	Bent pin key 2 20200910 2 top			26
23	Clevis block 3 20200915 2 top			16
24	Clevis wash 8 20201124 2 top			4
25	91257A962			6
26	Brace angle plate shim 1 20201126 2 top			1
27	Brace angle plate shim 1 20201126 2 top			1
28	Brace angle plate shim 1 20201126 2 top			2
29	Brace angle plate shim 1 20201126 2 top			1
30	Brace angle plate shim 1 20201126 2 top			1
31	Brace angle plate shim 1 20201126 2 top			1
32	Plate arm angle sup up 1 20210112 2 top			3
33	Plate arm angle sup up 2 20210113 2 top			6
34	Rod connect 14 20200910 2 top			5
35	Clevis key 2 20200910 2 top			10
36	Clevis wash 2 20200910 2 top			15
37	Clevis block 2 20200910 2 top			10
38	Rod connect 15 20200915 2 top			6
39	Clevis wash 3 20200915 2 top			12
40	Clevis wash 5 20200920 2 top			6
41	Plate base arm main coup 1 20200919 2 top			1
42	Plate arm main coup 1 20200919 2 top			2
43	Plate arm main coup 2 20200919 2 top			2
44	Plate arm main coup 3 20200919 2 top			2
45	Plate arm main coup 4 20200919 2 top			2
46	W10x49 arm conect 10 20200919 2 top			1
47	Brace rib W10x49 10 20200919 2 top			12
48	W10x49 arm conect 10 20200919 2 top			1
49	Brace sup plate W10x49 10 20200919 2 top			2
50	Brace plate W10x49 10 20200919 2 top			2
51	91268A982			12
52	Plate washer i 20200728 2 top			24
53	93827A301			24
54	Shim arm main coup 1a 20200919 2 top			1
55	Shim arm main coup 1b 20200919 2 top			2
56	Shim arm main coup 1c 20200919 2 top			1
57	Shim arm main coup 1d 20200919 2 top			1
58	Shim arm main coup 1e 20200919 2 top			1
59	Shim arm main coup 1f 20200919 2 top			1









NOTE: THE SUPPORT BRACE IS 10.657[IN] FROM THE BOTTOM OF THE MID-BEAMS; 16.657 FROM THE FRONT CORNER (BOTTOM) BEAM.

NOTE/S:
DEFINITION:
INT = INTERSECTION
NO SHARP EDGES/CORNERS
W14/W10, ASTM A913 G65, Sy 65[KSI]
W6-BEAMS, Sy 42[KSI] (PERF A572 G42)
C6-BEAMS, Sy 36[KSI]
AL, T6061-T6, Sy 40[KSI] MIN
AL, ALLOY, Sy 40[KSI] MIN
PLATE/S AISI 1045, Sy 75[KSI] (MIN)
ALUMINIZATION TYPE II (PREF)
GALVINIZE ASTM A123 G100 ACCPTABLE
MASKING OF MATING SURFACES
OIL-SHEEN, SAE 50+, PRIOR TO ASM
NO AGGLOMERATION OF OIL
AL/ALLOY TO STEEL INTERFACE, POLYMER FILM OR OTHER
MINIMIZE/NEUTRALIZE IONIC EXHANGE
BOLT/S ASM G8
CLASS B, AS-BUILT
CAD/DATA IS MASTER

EXAMPLE AMBIENT TEMP [F]	EXAMPLE AMBIENT TEMP [C]	T6061-T6 DL PER 1000[IN]	T6061-T6 DL PER 1000[mm]
45.00	7.22	-0.183	-4.658
59.00	15.00	0.0	0.0
86.00	30.00	0.354	8.994

EXAMPLE:
LET DIM = 47.125[IN] (T6061-T4)
dL = 0.000013 [86 - 59]47.125
dL = 0.0167[IN] [0.4254[mm]]

AT 86[F] THE DIMENSION OF THE PART IS 47.125 + 0.0167 =47.142[IN]

GALVONIC PROTECTION REQUIRED:
ALUMINIZE TYPE II PREFERED
GALVINIZE G100 ACCEPTABLE
THERMAL SPRAY AS/FOR ASSEMBLED

UNLESS OTHERWISE SPECIFIED:
TOLERANCES:
DIMENSIONS TAKEN AT 59[F]
DIMENSIONS TAKEN AT 15[C]
FRACTIONAL ±0.13[IN]
ANGULAR: 0.3[DEG]
TWO PLACE DECIMAL ±0.05[IN]
THREE PLACE DECIMAL ±0.005[IN]
VERIFICATION OF COMPONENTS MUST BE PERFORMED WITH TEMPERATURE COMPENSATION
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5

PARALLEL PLANES MAX 0.002[IN]
FLATNESS MAX 0.002[IN]
FINISH: AS REQUIRED

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

GAUGE/S:
DRAWINGS ARE AT 59[F] (15[C]); REFER TO MATERIAL SUPPLIER FOR THERMAL EXPANSION COEFFICIENT (CTE)
dL[ENG] = (DIM)*(CTE)-(A)]*[TEMP-59]
dL[S] = (DIM)*(CTE)-(A)]*[TEMP-15]
***TOLERANCES DO NOT CHANGE

CREO DESIGNS, ENG DPT

TITLE: GLORIOUS CROSS
INT - C139 UPPER-MID BEAM ANGLE/BRACES

SIZE	DWG. NO.	REV
D	M - 046	1

SCALE: 1:32 | SHEET 1 OF 1