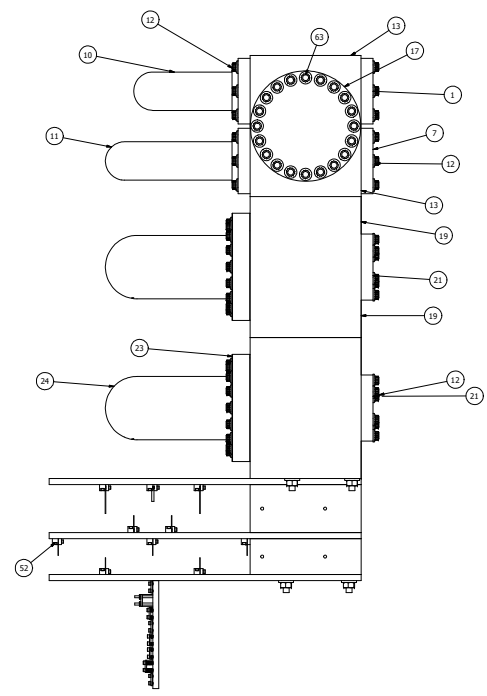
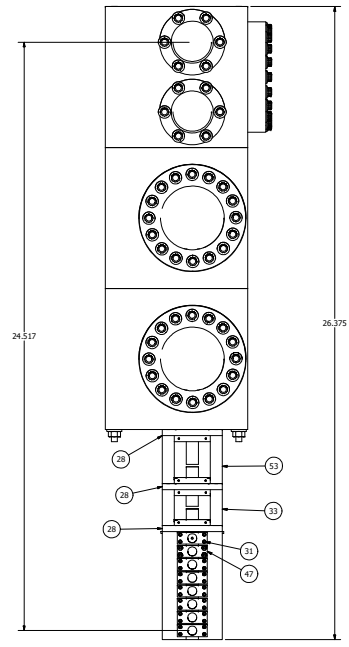
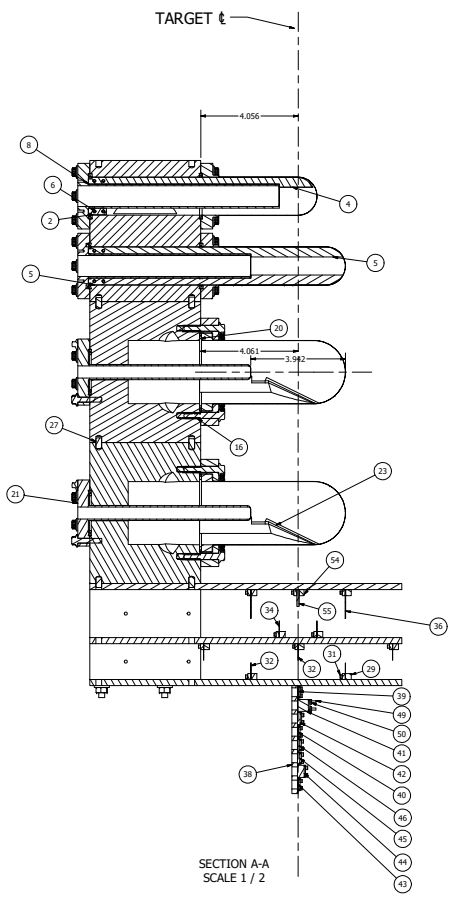
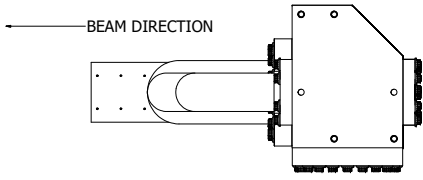
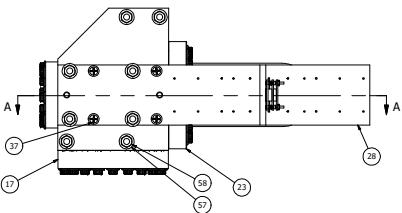


ZONE		REV	DESCRIPTION	DATE	APPROVED
All	A		Update Loops 2 and 3 Block Add thicker CF gaskets	10/17/2016	
All	B		Updated BOM	10/27/2016	



ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	VENDOR
1	1	TGT-301-1001-0016	1.6" CF Gen 2 4 cm Entrance Window	ASTM B209 7075-T651	
2	2	TGT-301-1001-0021	1.6" CF Gen 2 Flow Diverter Mount Thru	Aluminum 6061	
3	2	TGT-301-1001-0020	1.6" CF Gen 2 Flow Diverter Mount Tapped	Aluminum 6061	
4	2	TGT-301-1001-0017	1.6" CF Gen 2 4 cm Flow Diverter	ASTM B209 AL6061-T6	
5	2	TGT-301-1001-0018	1.6" CF Gen 2 10 cm Flow Diverter	ASTM B209 AL6061-T6	
6	6	HSHCS 4 - 40 UNC - 5/16	HSHCS 4 - 40 UNC - 5/16	Aluminum 1100-O	ILAB
7	1	TGT-301-1001-0015	1.6" CF Gen 2 10 cm Entrance Window	ASTM B209 7075-T651	
8	4	TGT-540-1000-0003-B-125	Al Gasket 2.75 CF Mod 0.125 Thick	Aluminum 1100-O	
9	1	TGT-540-1000-0003-B-125	4.625 CF Gasket Aluminum 0.125 Thick	Aluminum 1100-O	ILAB
10	1	TGT-301-1001-0014	1.6" CF Gen 2 4 cm Exit Window	ASTM B209 7075-T651	
11	1	TGT-301-1001-0013	1.6" CF Gen 2 10 cm Exit Window	ASTM B209 7075-T651	
12	36	711-1000	12 @ CS 1/4-28 x 1.0	ANP SST 300	ANP
13	1	TGT-301-1001-0005	1.6" CF Gen 2 Cell Block	ASTM B209 7075-T651	
14	80	1191-4CN500	Helicoil 1/4-28 x 0.5 SST 304	Stainless Steel AISI 304	Various
15	12	1191-4CN375	Helicoil 1/4-28 x 0.375 SST 304	Stainless Steel AISI 304	Various
16	52	1191-4CN750	Helicoil 1/4-28 x 0.75 SST 304	Stainless Steel AISI 304	Various
17	1	TGT-301-1001-0026	Custom 4.625 CF Blank	ASTM A240 304/304L	
19	2	TGT-301-1001-0003	2.6 CF Cell Block	ASTM B209 7075-T651	
20	2	GA-0295AL	4.5 CF Aluminum Gasket	Aluminum 1100-O	Lesker
21	2	TGT-301-1001-0022	2.6 in CF 10 cm Entrance Window	ASTM B209 7075-T651	
22	2	TGT-301-1001-0023	10 cm Flow Diverter Beam Ring	Aluminum 6061	
23	4	TGT-301-1001-0005	Heavy 4.5 CF Ring for 1/4 Hardware	ASTM B209 AL 7075-T651	
24	2	TGT-301-1001-0002	2.5" HDCF Cells 10 cm Exit	ASTM B209 AL 7075-T651	
25	8	2 - 56 UNC - 1/2 H HCS	HSHCS 2-56 x 0.5 Long	SST 18-8	
26	32	711-1750	12 @ CS 1/4-28 x 1.75	ANP SST 300	ANP
27	6	90145A890	1/4 Dowel Pin 7/16 Long	SST 18-8	McMaster Carr
28	3	TGT-301-1005-0002	Dummy/Optics Target Slid	Aluminum 6061	McMaster Carr
29	7	TGT-301-1005-0003	Target Foil Clamp	Aluminum 6061	
30	10	TGT-301-1005-0005	Dummy and Optics Foil Clamp	Aluminum 6061	
31	42	98511A123	2-56x0.25 HSHCS Aluminum (Blue Anodized)	Aluminum 6061	McMaster Carr
32	8	TGT-301-1005-0012	Carbon Optics Target Foil	Carbon Graphite Rigid	
33	2	TGT-301-1005-0001	Solid Target Spacer Block 1.5 in.	ASTM B209 AL 6061-T651	
34	2	TGT-301-1005-0014	4 cm Dummy Target Foil	ASTM B209 AL 7075-T651	
35	2	TGT-301-1005-0004	Target Foil Mount	Aluminum 6061	
36	2	TGT-301-1005-0013	10 cm Aluminum Dummy Target Foil	ASTM B209 AL 7075-T651	
37	12	97124A542	10-32 x 3/4 FHP2	Aluminum 6061	McMaster Carr
38	1	TGT-301-1005-0006	Solid Target Ladder	ASTM B209 AL 7075-T651	
39	1	TGT-301-1005-0010	Carbon Hole Target Foil	Carbon Graphite Rigid	
40	1	TGT-301-1005-0011	Carbon Target Foil 0.5%	Carbon Graphite Rigid	
41	1	TGT-301-1005-0016	Carbon Target Foil 0%	Carbon Graphite Rigid	
42	1	TGT-301-1005-0015	Carbon Target Foil 1.5%	Carbon Graphite Rigid	
43	1	TGT-301-1005-0009	BeO Target Foil	BeO	Goodfellow
44	1	TGT-301-1005-0019	Bc Target Foil 2%	Beryllium	Material
45	1	TGT-301-1005-0018	1184C Target Foil 1.2%	Boron Carbide	American Elements
46	1	TGT-301-1005-0017	B4C Target Foil 1.2%	Boron Carbide	American Elements
47	8	TGT-301-1005-0007	Solid Target Clamp	ASTM B209 AL 6061-T651	
48	4	98511A133	2-56x0.5 HSHCS Aluminum (Anodized Blue)	Aluminum 6061	McMaster Carr
49	4	9325A412	2-56 Aluminum Threaded Rod 1 inch	Aluminum 6061	McMaster Carr
50	4	90670A150	Hex Nut 2-56	Aluminum 6061	McMaster Carr
51	2	98511A110	AL HSHCS 1/4-28 x 0.375 Blue	Aluminum 6061	McMaster Carr
52	22	TGT-301-1005-0020	2-56x0.5 HSHCS Aluminum (Anodized Blue)	Aluminum 6061	McMaster Carr
53	2	TGT-301-1005-0021	Solid Target Spacer Block 2 in.	ASTM B209 AL 6061-T651	
54	1	TGT-301-1005-0022	Target Foil Clamp	Aluminum 6061	
55	1	TGT-301-1005-0023	Center Dummy Carbon Target Foil	Carbon Graphite Rigid	
56	4	ThreadRod-0.25x12.625	Threaded Rod 1/4-28 x 12.625 Long	SST 18-8	
57	8	ASTM F438 - 1/4	Washer A	SST 18-8	
58	8	ANSI B18.2 - 1/4 - 28	Hex Nut 1/4-28	SST 18-8	
59	4	ThreadRod-0.25x5.125	Threaded Rod 1/4-28 x 5.125 Long	SST 18-8	
62	2	GA-0295AL	Al Gasket 2.75 CF	Aluminum 1100-H14	
63	20	711-1500	12 @ CS 1/4-28 x 1.5	SST 450	ANP

- NOTES:
- ASSEMBLE USING 0.125" THICK AL CF GASKETS
 - TORQUE ALL 1/4-28 FLANGE HARDWARE TO 204 in-lbf
 - LEAK TEST ALL CELL/BLOCK ASSYS IN COLD TEST SYSTEM TO 50 PSI MIN 100 PSI MAX



IN ACCORDANCE WITH ILAB ESHQ MANUAL SHE SIGNATURES MAY BE REQUIRED. DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.

MATERIAL: N/A

FINISH: N/A

DEBUR AND BREAK ALL SHARP EDGES ACCEPT AS NOTED

Do Not Scale Drawing

APPROVALS: D. Hawkins, 8/5/2016

THIRD ANGLE PROJECTION

JEFFERSON LAB TARGET GROUP
THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY
NEWPORT NEWS VIRGINIA
U.S. DEPARTMENT OF ENERGY

Half C Cryogenic Target
Fall 2016 Configuration
Target Stack

SIZE: E
DWG NO: TGT-301-1001-0110
SCALE: 1/2

REV: A

SHEET 1 OF 2

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
All	A	Update Loops 2 and 3 Block Add thicker CF gaskets	10/17/2016	
All	B	Updated BOM	10/27/2016	

