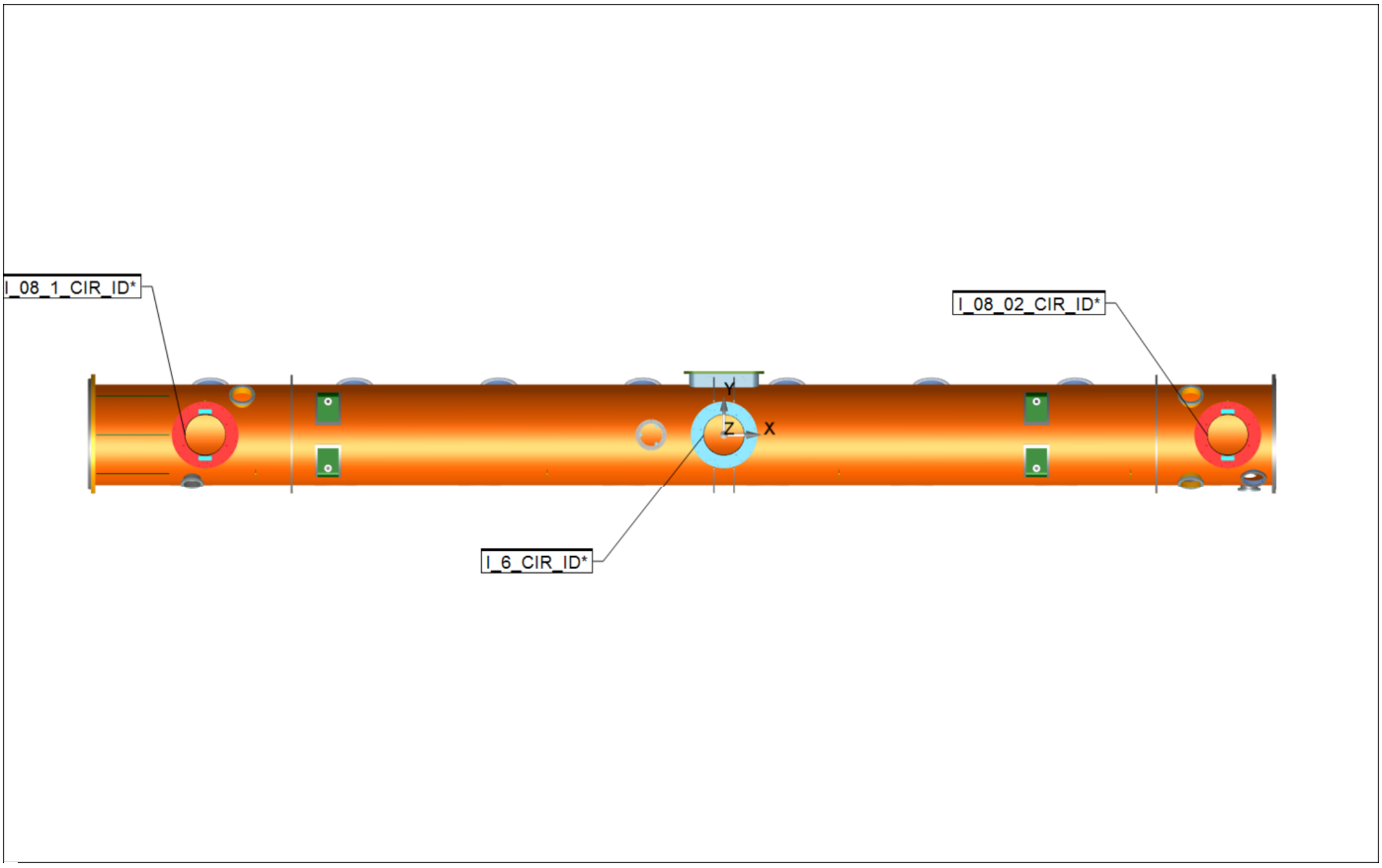
pc-dmis	PART NAME : F10026609-C		April 28, 2016	15:47
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

```
Drawing Number:  F10026609-C
Name:            WELDMENT,VESSEL LCLS-II, AFTER MACHINING
Description:     WELDMENT,VESSEL LCLS-II, AFTER MACHINING
Category:        WELDMENT
Project:         LCLSIICryomodule
Item:            F10026609-C
Inspected by:    R. Riley & O. Lira
Sample Number:   RFCG-VV-001-0
Routing Form:    99392
Date:            Apr/2016
```

```
*******************************************************************************
ALIGNMENT:
A circle is measured on the O.D.s of the upstream & the downstream flanges.
A line is constructed between the centers of these circles.
This line defines the -X- axis of the alignment, running from upstream
(negative -X-) to downstream (positive -X-).  This line defines the origin
(zero coordinate) of both the -Y- & the -Z- axis.  A plane is constructed from
points measured on the top of both end ports and the middle port.  The alignment
is rotated around the -X- axis until this port plane is normal to the -Z- axis.
(ie port plane controls rotation)  -X- zero is set to the I.D. on the middle port.
*******************************************************************************
****************************************
F10026609C
****************************************
```



========== Top Ports ==========

⌖	MM	LOC1 - I_6_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	2.000	2.000	0.000
Y	0.000	1.421	1.421	2.000	2.000	0.000
Z	530.000	523.989	-6.011	10.000	10.000	0.000
D	394.000	394.038	0.038	0.300	0.300	0.000
RN	0.000	0.065	0.065	0.600	0.000	0.000

	MM	LOC2 - I_08_1_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4980.000	-4978.709	1.291	2.000	2.000	0.000
Y	0.000	0.249	0.249	2.000	2.000	0.000
Z	530.000	525.765	-4.235	10.000	10.000	0.000
D	394.000	393.961	-0.039	0.300	0.300	0.000
RN	0.000	0.159	0.159	0.600	0.000	0.000

	MM	LOC3 - I_08_02_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4835.000	4834.717	-0.283	2.000	2.000	0.000
Y	0.000	1.519	1.519	2.000	2.000	0.000
Z	530.000	524.911	-5.089	10.000	10.000	0.000
D	394.000	393.865	-0.135	0.300	0.300	0.000
RN	0.000	0.282	0.282	0.600	0.000	0.000

	MM	LOC67 - I_08_1_PLNC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	525.812	-4.188	2.000	2.000	2.188

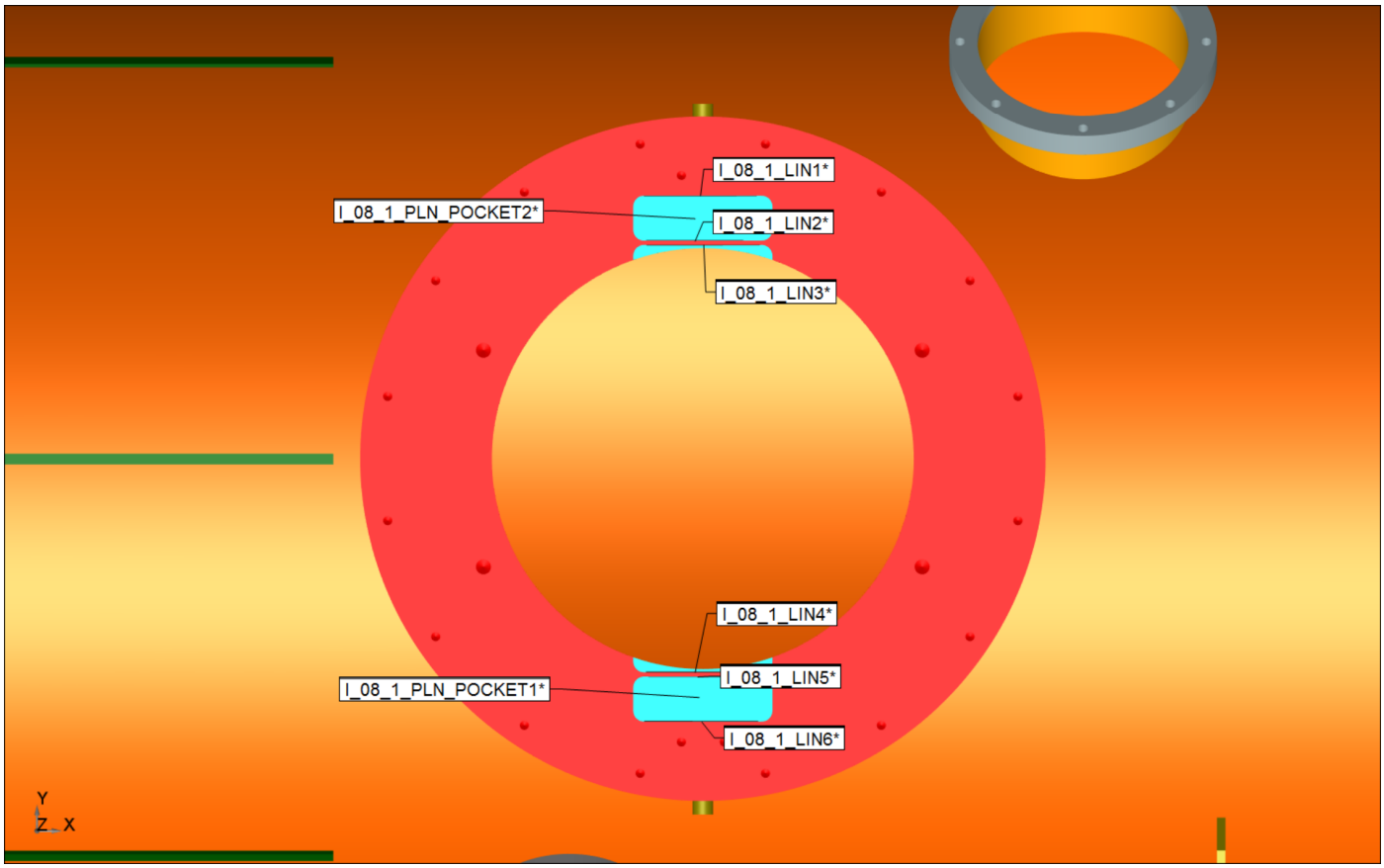
	MM	LOC68 - I_06_PLNC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	523.983	-6.017	2.000	2.000	4.017

	MM	LOC69 - I_08_2_PLNC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	523.849	-6.151	2.000	2.000	4.151

Profile of Datum -B- All Top Ports

	MM	FLAT1 - I_6N8_PORTPLNSC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	1.291	1.291	2.000	0.000	0.000

========== Top Port Cutouts ==========



The following line locations are to the vessel coordinates.
(as opposed to port coordinates)

⌖	MM	LOC4 - I_08_1_LIN1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	246.000	246.082	0.082	0.300	0.300	0.000	
ST	0.000	0.059	0.059	0.300	0.000	0.000	
⌖	MM	LOC5 - I_08_1_LIN2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	204.000	203.962	-0.038	0.300	0.300	0.000	
ST	0.000	0.043	0.043	0.300	0.000	0.000	
⌖	MM	LOC6 - I_08_1_LIN3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	200.000	200.023	0.023	0.300	0.300	0.000	
ST	0.000	0.039	0.039	0.300	0.000	0.000	
⌖	MM	LOC7 - I_08_1_LIN4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-200.000	-199.873	0.127	0.300	0.300	0.000	
ST	0.000	0.055	0.055	0.300	0.000	0.000	
⌖	MM	LOC8 - I_08_1_LIN5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-204.000	-203.769	0.231	0.300	0.300	0.000	
ST	0.000	0.036	0.036	0.300	0.000	0.000	
⌖	MM	LOC9 - I_08_1_LIN6					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-246.000	-245.888	0.112	0.300	0.300	0.000	
ST	0.000	0.114	0.114	0.300	0.000	0.000	
⌖	MM	LOC10 - I_08_2_LIN1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	246.000	248.510	2.510	0.300	0.300	2.210	
ST	0.000	0.067	0.067	0.300	0.000	0.000	
⌖	MM	LOC11 - I_08_2_LIN2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	204.000	206.342	2.342	0.300	0.300	2.042	
ST	0.000	0.055	0.055	0.300	0.000	0.000	
⌖	MM	LOC12 - I_08_2_LIN3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	200.000	202.519	2.519	0.300	0.300	2.219	
ST	0.000	0.181	0.181	0.300	0.000	0.000	
⌖	MM	LOC13 - I_08_2_LIN4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-200.000	-197.565	2.435	0.300	0.300	2.135	
ST	0.000	0.043	0.043	0.300	0.000	0.000	
⌖	MM	LOC14 - I_08_2_LIN5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
Y	-204.000	-201.485	2.515	0.300	0.300	2.215	
ST	0.000	0.035	0.035	0.300	0.000	0.000	

⌖	MM	LOC15 - I_08_2_LIN6				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-246.000	-243.610	2.390	0.300	0.300	2.090
ST	0.000	0.038	0.038	0.300	0.000	0.000

↔	MM	DIST1 - I_08_1_LIN3 TO I_08_1_LIN4 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	400.000	399.896	-0.104	0.300	0.300	0.000

↔	MM	DIST2 - I_08_1_LIN1 TO I_08_1_LIN2 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	42.000	42.103	0.103	0.300	0.300	0.000

↔	MM	DIST3 - I_08_1_LIN5 TO I_08_1_LIN6 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	42.000	42.095	0.095	0.300	0.300	0.000

↔	MM	DIST4 - I_08_2_LIN3 TO I_08_2_LIN4 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	400.000	400.084	0.084	0.300	0.300	0.000

↔	MM	DIST5 - I_08_2_LIN1 TO I_08_2_LIN2 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	42.000	42.168	0.168	0.300	0.300	0.000

↔	MM	DIST6 - I_08_2_LIN5 TO I_08_2_LIN6 (YAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	42.000	42.125	0.125	0.300	0.300	0.000

(to vessel alignment)

//	MM	PARL1 - I_08_1_LIN3 TO YPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.045	0.045	0.500	0.000	0.000

//	MM	PARL2 - I_08_1_LIN4 TO YPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.051	0.051	0.500	0.000	0.000

//	MM	PARL3 - I_08_2_LIN3 TO YPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.186	0.186	0.500	0.000	0.000

//	MM	PARL4 - I_08_2_LIN4 TO YPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.039	0.039	0.500	0.000	0.000

I_08_1_LIN3, I_08_1_LIN4, I_08_2_LIN3, & I_08_2_LIN4
Perpendicular 0.5 to B measure less than 0.05
on all 4 surfaces. Measured by hand. RR Apr/13/2016
(to vessel alignment)

//	MM	PARL5 - I_08_1_PLN_POCKET1 TO ZPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.042	0.042	0.100	0.000	0.000

//	MM	PARL6 - I_08_1_PLN_POCKET2 TO ZPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.047	0.047	0.100	0.000	0.000

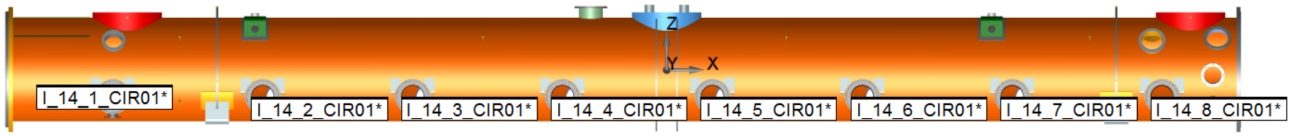
//	MM	PARL7 - I_08_2_PLN_POCKET1 TO ZPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.063	0.063	0.100	0.000	0.000

//	MM	PARL8 - I_08_2_PLN_POCKET2 TO ZPLUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.057	0.057	0.100	0.000	0.000

Top Port Cutout Depths

	I-08-1	I-08-2
+Y	23.01	23.05
-Y	22.99	23.04
+Y	60.01	60.08
-Y	60.01	60.05

========== Main Coupler Ports Side View: Coupler port centers, -X- & -Z- ==========



⌖	MM	LOC16 - I_14_1_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	-5113.000	-5113.211	-0.211				
Z	-245.100	-245.426	-0.326				
DF	213.000	212.895	-0.105	0.100	0.100	0.005	0.000
RN	0.000	0.050	0.050	0.200	0.000	0.000	
TP	RFS	0.776	0.776	0.500		0.276	0.000

⌖	MM	LOC17 - I_14_2_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	-3729.400	-3729.695	-0.295				
Z	-245.100	-246.098	-0.998				
DF	213.000	212.913	-0.087	0.100	0.100	0.000	0.000
RN	0.000	0.054	0.054	0.200	0.000	0.000	
TP	RFS	2.082	2.082	0.500		1.582	0.000

⌖	MM	LOC18 - I_14_3_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	-2345.800	-2345.932	-0.132				
Z	-245.100	-246.412	-1.312				
DF	213.000	212.963	-0.037	0.100	0.100	0.000	0.000
RN	0.000	0.031	0.031	0.200	0.000	0.000	
TP	RFS	2.637	2.637	0.500		2.137	0.000

⌖	MM	LOC19 - I_14_4_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	-962.200	-962.357	-0.157				
Z	-245.100	-246.599	-1.499				
DF	213.000	212.961	-0.039	0.100	0.100	0.000	0.000
RN	0.000	0.071	0.071	0.200	0.000	0.000	
TP	RFS	3.015	3.015	0.500		2.515	0.000

⌖	MM	LOC20 - I_14_5_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	421.400	421.194	-0.206				
Z	-245.100	-246.969	-1.869				
DF	213.000	212.896	-0.104	0.100	0.100	0.004	0.000
RN	0.000	0.145	0.145	0.200	0.000	0.000	
TP	RFS	3.761	3.761	0.500		3.261	0.000

⌖	MM	LOC21 - I_14_6_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	1805.000	1804.882	-0.118				
Z	-245.100	-247.679	-2.579				
DF	213.000	212.910	-0.090	0.100	0.100	0.000	0.000
RN	0.000	0.121	0.121	0.200	0.000	0.000	
TP	RFS	5.163	5.163	0.500		4.663	0.000

⌖	MM	LOC22 - I_14_7_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	3188.600	3188.593	-0.007				
Z	-245.100	-248.063	-2.963				
DF	213.000	212.942	-0.058	0.100	0.100	0.000	0.000
RN	0.000	0.071	0.071	0.200	0.000	0.000	
TP	RFS	5.926	5.926	0.500		5.426	0.000

⌖	MM	LOC23 - I_14_8_CIR01					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
X	4572.200	4572.177	-0.023				
Z	-245.100	-247.800	-2.700				
DF	213.000	212.918	-0.082	0.100	0.100	0.000	0.000
RN	0.000	0.191	0.191	0.200	0.000	0.000	
TP	RFS	5.401	5.401	0.500		4.901	0.000

========== Main Coupler Ports Section C-C: Face flatness & -Y- coordinate ==========

⌖	MM	LOC24 - I_14_1_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.951053	0.548947	0.125000	0.125000	0.423947
FL	0.000000	0.042345	0.042345	0.250000	0.000000	0.000000

AX	I	J	K
V	0.000356	-0.999997	0.002373

⌖	MM	LOC25 - I_14_2_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.738178	0.761822	0.125000	0.125000	0.636822
FL	0.000000	0.062864	0.062864	0.250000	0.000000	0.000000

AX	I	J	K
V	-0.000660	-0.999998	0.001837

⌖	MM	LOC26 - I_14_3_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.505488	0.994512	0.125000	0.125000	0.869512
FL	0.000000	0.027772	0.027772	0.250000	0.000000	0.000000

⌖	MM	LOC27 - I_14_4_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.243767	1.256233	0.125000	0.125000	1.131233
FL	0.000000	0.034743	0.034743	0.250000	0.000000	0.000000

⌖	MM	LOC28 - I_14_5_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.165338	1.334662	0.125000	0.125000	1.209662
FL	0.000000	0.018751	0.018751	0.250000	0.000000	0.000000

⌖	MM	LOC29 - I_14_6_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.287765	1.212235	0.125000	0.125000	1.087235
FL	0.000000	0.037645	0.037645	0.250000	0.000000	0.000000

⌖	MM	LOC30 - I_14_7_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-468.386787	1.113213	0.125000	0.125000	0.988213
FL	0.000000	0.059753	0.059753	0.250000	0.000000	0.000000

⌖	MM	LOC31 - I_14_8_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-469.500000	-467.589343	1.910657	0.125000	0.125000	1.785657
FL	0.000000	0.099233	0.099233	0.250000	0.000000	0.000000

Ø265 ± 0.3 measures GOOD with calipers

========== Main Coupler Ports Perpendicularity to part alignment ==========

//	MM	PARL9 - I_14_1_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.562	0.562	0.250	0.000	0.312

//	MM	PARL10 - I_14_2_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.465	0.465	0.250	0.000	0.215

//	MM	PARL11 - I_14_3_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.489	0.489	0.250	0.000	0.239

//	MM	PARL12 - I_14_4_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.345	0.345	0.250	0.000	0.095

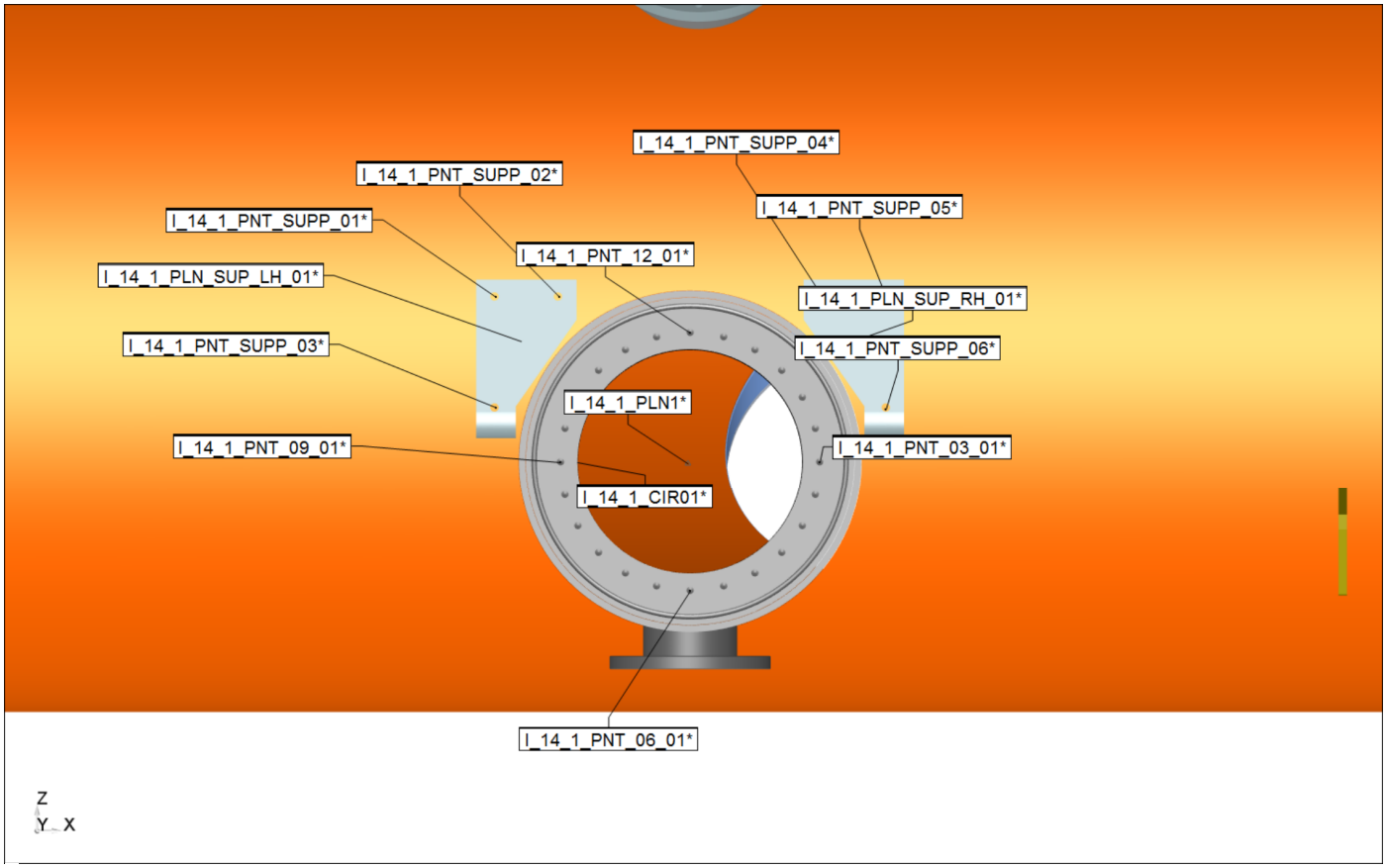
//	MM	PARL13 - I_14_5_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.144	0.144	0.250	0.000	0.000

//	MM	PARL14 - I_14_6_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.108	0.108	0.250	0.000	0.000

//	MM	PARL15 - I_14_7_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.528	0.528	0.250	0.000	0.278

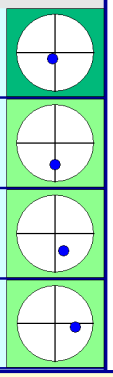
//	MM	PARL16 - I_14_8_PLN1 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.295	0.295	0.250	0.000	0.045

========== Main Coupler Ports Detail D: hole locations ===========
Rotation is unrestrained about -Y- axis



Rotation is unrestrained about -Y- axis

FCFLOC1 Position		MM			⌖ Ø.25 C1 D1		
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_1_PNT_12_01	0.000	0.042	0.042	0.250		0.000	0.000
I_14_1_PNT_03_01	0.000	0.137	0.137	0.250		0.000	0.000
I_14_1_PNT_06_01	0.000	0.123	0.123	0.250		0.000	0.000
I_14_1_PNT_09_01	0.000	0.137	0.137	0.250		0.000	0.000



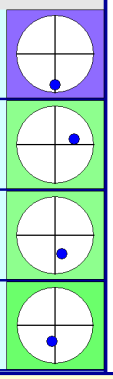
FCFLOC1 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.981	Fixed

FCFLOC1 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_1_PNT_12_01	X	0.000	-0.007	-0.007
	Z	122.500	122.480	-0.020
	PR	122.500	122.480	-0.020
	PA	90.000	90.003	0.003
I_14_1_PNT_03_01	X	122.500	122.501	0.001
	Z	0.000	-0.069	-0.069
	PR	122.500	122.501	0.001
	PA	360.000	359.968	-0.032
I_14_1_PNT_06_01	X	0.000	0.028	0.028
	Z	-122.500	-122.555	-0.055
	PR	122.500	122.555	0.055
	PA	270.000	270.013	0.013
I_14_1_PNT_09_01	X	-122.500	-122.432	0.068
	Z	0.000	-0.013	-0.013
	PR	122.500	122.432	-0.068
	PA	180.000	180.006	0.006

FCFLOC2 Position		MM			⌖ Ø.25 C2 D2		
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_2_PNT_12_01	0.000	0.197	0.197	0.250		0.000	0.000
I_14_2_PNT_03_01	0.000	0.128	0.128	0.250		0.000	0.000
I_14_2_PNT_06_01	0.000	0.129	0.129	0.250		0.000	0.000
I_14_2_PNT_09_01	0.000	0.103	0.103	0.250		0.000	0.000



FCFLOC2 Datum Shift

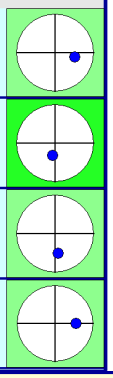
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.938	Fixed

FCFLOC2 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV

I_14_2_PNT_12_01	X	0.000	0.000	0.000
	Z	122.500	122.401	-0.099
	PR	122.500	122.401	-0.099
	PA	90.000	90.000	0.000
I_14_2_PNT_03_01	X	122.500	122.561	0.061
	Z	0.000	0.019	0.019
	PR	122.500	122.561	0.061
	PA	360.000	0.009	-359.991
I_14_2_PNT_06_01	X	0.000	0.023	0.023
	Z	-122.500	-122.560	-0.060
	PR	122.500	122.560	0.060
	PA	270.000	270.011	0.011
I_14_2_PNT_09_01	X	-122.500	-122.510	-0.010
	Z	0.000	-0.050	-0.050
	PR	122.500	122.510	0.010
	PA	180.000	180.024	0.024

FCFLOC3 Position	MM	⌖ Ø.25 C3 D3					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_3_PNT_12_01	0.000	0.131	0.131	0.250		0.000	0.000
I_14_3_PNT_03_01	0.000	0.081	0.081	0.250		0.000	0.000
I_14_3_PNT_06_01	0.000	0.128	0.128	0.250		0.000	0.000
I_14_3_PNT_09_01	0.000	0.137	0.137	0.250		0.000	0.000



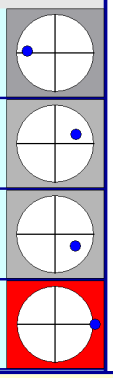
FCFLOC3 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.006	Fixed

FCFLOC3 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_3_PNT_12_01	X	0.000	0.064	0.064
	Z	122.500	122.486	-0.014
	PR	122.500	122.486	-0.014
	PA	90.000	89.970	-0.030
I_14_3_PNT_03_01	X	122.500	122.493	-0.007
	Z	0.000	-0.040	-0.040
	PR	122.500	122.493	-0.007
	PA	0.000	-0.019	-0.019
I_14_3_PNT_06_01	X	0.000	0.009	0.009
	Z	-122.500	-122.563	-0.063
	PR	122.500	122.563	0.063
	PA	270.000	270.004	0.004
I_14_3_PNT_09_01	X	-122.500	-122.431	0.069
	Z	0.000	0.000	0.000
	PR	122.500	122.431	-0.069
	PA	180.000	180.000	0.000

FCFLOC4 Position	MM	⌖ Ø.25 C4 D4					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_4_PNT_12_01	0.000	0.180	0.180	0.250		0.000	0.000
I_14_4_PNT_03_01	0.000	0.148	0.148	0.250		0.000	0.000
I_14_4_PNT_06_01	0.000	0.150	0.150	0.250		0.000	0.000
I_14_4_PNT_09_01	0.000	0.324	0.324	0.250		0.074	0.000



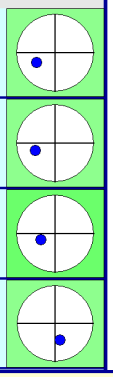
FCFLOC4 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.965	Fixed

FCFLOC4 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_4_PNT_12_01	X	0.000	-0.090	-0.090
	Z	122.500	122.506	0.006
	PR	122.500	122.506	0.006
	PA	90.000	90.042	0.042
I_14_4_PNT_03_01	X	122.500	122.568	0.068
	Z	0.000	0.030	0.030
	PR	122.500	122.568	0.068
	PA	0.000	0.014	0.014
I_14_4_PNT_06_01	X	0.000	0.065	0.065
	Z	-122.500	-122.537	-0.037
	PR	122.500	122.537	0.037
	PA	270.000	270.031	0.031
I_14_4_PNT_09_01	X	-122.500	-122.338	0.162
	Z	0.000	0.000	0.000
	PR	122.500	122.338	-0.162
	PA	180.000	180.000	0.000

FCFLOC5 Position	MM	⌖ Ø.25 C5 D5					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_5_PNT_12_01	0.000	0.133	0.133	0.250		0.000	0.000
I_14_5_PNT_03_01	0.000	0.133	0.133	0.250		0.000	0.000
I_14_5_PNT_06_01	0.000	0.101	0.101	0.250		0.000	0.000
I_14_5_PNT_09_01	0.000	0.111	0.111	0.250		0.000	0.000



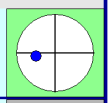
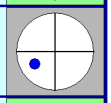
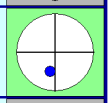
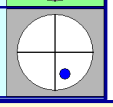
FCFLOC5 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.972	Fixed

FCFLOC5 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_5_PNT_12_01	X	0.000	-0.058	-0.058

	Z	122.500	122.468	-0.032
	PR	122.500	122.468	-0.032
	PA	90.000	90.027	0.027
I_14_5_PNT_03_01	X	122.500	122.438	-0.062
	Z	0.000	-0.024	-0.024
	PR	122.500	122.438	-0.062
	PA	0.000	-0.011	-0.011
I_14_5_PNT_06_01	X	0.000	-0.046	-0.046
	Z	-122.500	-122.520	-0.020
	PR	122.500	122.520	0.020
	PA	270.000	269.978	-0.022
I_14_5_PNT_09_01	X	-122.500	-122.485	0.015
	Z	0.000	-0.054	-0.054
	PR	122.500	122.485	-0.015
	PA	180.000	180.025	0.025

FCFLOC6 Position	MM	⌖ Ø.25 C6 D6						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_6_PNT_12_01	0.000	0.122	0.122	0.250		0.000	0.000	
I_14_6_PNT_03_01	0.000	0.154	0.154	0.250		0.000	0.000	
I_14_6_PNT_06_01	0.000	0.129	0.129	0.250		0.000	0.000	
I_14_6_PNT_09_01	0.000	0.154	0.154	0.250		0.000	0.000	

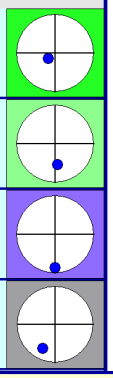
FCFLOC6 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.974	Fixed

FCFLOC6 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_6_PNT_12_01	X	0.000	-0.060	-0.060
	Z	122.500	122.490	-0.010
	PR	122.500	122.490	-0.010
	PA	90.000	90.028	0.028
I_14_6_PNT_03_01	X	122.500	122.434	-0.066
	Z	0.000	-0.040	-0.040
	PR	122.500	122.434	-0.066
	PA	0.000	-0.019	-0.019
I_14_6_PNT_06_01	X	0.000	-0.017	-0.017
	Z	-122.500	-122.562	-0.062
	PR	122.500	122.562	0.062
	PA	270.000	269.992	-0.008
I_14_6_PNT_09_01	X	-122.500	-122.468	0.032
	Z	0.000	-0.070	-0.070
	PR	122.500	122.468	-0.032
	PA	180.000	180.033	0.033

FCFLOC7 Position	MM	⌖ Ø.25 C7 D7					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_7_PNT_12_01	0.000	0.056	0.056	0.250		0.000	0.000
I_14_7_PNT_03_01	0.000	0.133	0.133	0.250		0.000	0.000
I_14_7_PNT_06_01	0.000	0.214	0.214	0.250		0.000	0.000
I_14_7_PNT_09_01	0.000	0.176	0.176	0.250		0.000	0.000



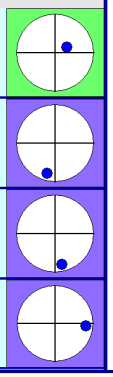
FCFLOC7 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	359.983	Fixed

FCFLOC7 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_7_PNT_12_01	X	0.000	-0.022	-0.022
	Z	122.500	122.483	-0.017
	PR	122.500	122.483	-0.017
	PA	90.000	90.010	0.010
I_14_7_PNT_03_01	X	122.500	122.509	0.009
	Z	0.000	-0.066	-0.066
	PR	122.500	122.509	0.009
	PA	0.000	-0.031	-0.031
I_14_7_PNT_06_01	X	0.000	0.000	0.000
	Z	-122.500	-122.607	-0.107
	PR	122.500	122.607	0.107
	PA	270.000	270.000	0.000
I_14_7_PNT_09_01	X	-122.500	-122.540	-0.040
	Z	0.000	-0.078	-0.078
	PR	122.500	122.540	0.040
	PA	180.000	180.037	0.037

FCFLOC8 Position	MM	⌖ Ø.25 C8 D8					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_8_PNT_12_01	0.000	0.083	0.083	0.250		0.000	0.000
I_14_8_PNT_03_01	0.000	0.204	0.204	0.250		0.000	0.000
I_14_8_PNT_06_01	0.000	0.204	0.204	0.250		0.000	0.000
I_14_8_PNT_09_01	0.000	0.201	0.201	0.250		0.000	0.000



FCFLOC8 Datum Shift

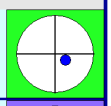
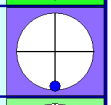
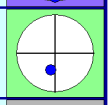
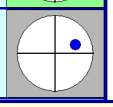
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.018	Fixed

FCFLOC8 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_8_PNT_12_01	X	0.000	0.038	0.038

	Z	122.500	122.518	0.018
	PR	122.500	122.518	0.018
	PA	90.000	89.982	-0.018
I_14_8_PNT_03_01	X	122.500	122.474	-0.026
	Z	0.000	-0.098	-0.098
	PR	122.500	122.474	-0.026
	PA	360.000	359.954	-0.046
I_14_8_PNT_06_01	X	0.000	0.022	0.022
	Z	-122.500	-122.599	-0.099
	PR	122.500	122.599	0.099
	PA	270.000	270.010	0.010
I_14_8_PNT_09_01	X	-122.500	-122.400	0.100
	Z	0.000	-0.008	-0.008
	PR	122.500	122.400	-0.100
	PA	180.000	180.004	0.004

Rotation is restrained by -Z- axis

FCFLOC1R Position	MM	⌖ Ø.25 C1 D1 Z						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_1_PNT_12_01	0.000	0.079	0.079	0.250		0.000	0.000	
I_14_1_PNT_03_01	0.000	0.221	0.221	0.250		0.000	0.000	
I_14_1_PNT_06_01	0.000	0.113	0.113	0.250		0.000	0.000	
I_14_1_PNT_09_01	0.000	0.147	0.147	0.250		0.000	0.000	

FCFLOC1R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_1_PNT_12_01	X	0.000	0.034	0.034
	Z	122.500	122.480	-0.020
	PR	122.500	122.480	-0.020
	PA	90.000	89.984	-0.016
I_14_1_PNT_03_01	X	122.500	122.501	0.001
	Z	0.000	-0.110	-0.110
	PR	122.500	122.501	0.001
	PA	0.000	-0.052	-0.052
I_14_1_PNT_06_01	X	0.000	-0.014	-0.014
	Z	-122.500	-122.555	-0.055
	PR	122.500	122.555	0.055
	PA	270.000	269.994	-0.006
I_14_1_PNT_09_01	X	-122.500	-122.432	0.068
	Z	0.000	0.029	0.029
	PR	122.500	122.432	-0.068
	PA	180.000	179.986	-0.014

FCFLOC2R Position	MM	⌖ Ø.25 C2 D2 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_2_PNT_12_01	0.000	0.331	0.331	0.250		0.081	0.000
I_14_2_PNT_03_01	0.000	0.260	0.260	0.250		0.010	0.000
I_14_2_PNT_06_01	0.000	0.250	0.250	0.250		0.000	0.000
I_14_2_PNT_09_01	0.000	0.166	0.166	0.250		0.000	0.000

FCFLOC2R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_2_PNT_12_01	X	0.000	0.133	0.133
	Z	122.500	122.401	-0.099
	PR	122.500	122.401	-0.099
	PA	90.000	89.938	-0.062
I_14_2_PNT_03_01	X	122.500	122.561	0.061
	Z	0.000	-0.114	-0.114
	PR	122.500	122.561	0.061
	PA	0.000	-0.053	-0.053
I_14_2_PNT_06_01	X	0.000	-0.110	-0.110
	Z	-122.500	-122.560	-0.060
	PR	122.500	122.560	0.060
	PA	270.000	269.949	-0.051
I_14_2_PNT_09_01	X	-122.500	-122.510	-0.010
	Z	0.000	0.082	0.082
	PR	122.500	122.510	0.010
	PA	180.000	179.961	-0.039

FCFLOC3R Position	MM	⌖ Ø.25 C3 D3 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_3_PNT_12_01	0.000	0.107	0.107	0.250		0.000	0.000
I_14_3_PNT_03_01	0.000	0.057	0.057	0.250		0.000	0.000
I_14_3_PNT_06_01	0.000	0.134	0.134	0.250		0.000	0.000
I_14_3_PNT_09_01	0.000	0.139	0.139	0.250		0.000	0.000

FCFLOC3R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_3_PNT_12_01	X	0.000	0.051	0.051
	Z	122.500	122.486	-0.014
	PR	122.500	122.486	-0.014
	PA	90.000	89.976	-0.024
I_14_3_PNT_03_01	X	122.500	122.493	-0.007
	Z	0.000	-0.027	-0.027
	PR	122.500	122.493	-0.007

	PA	0.000	-0.013	-0.013
I_14_3_PNT_06_01	X	0.000	0.022	0.022
	Z	-122.500	-122.563	-0.063
	PR	122.500	122.563	0.063
	PA	270.000	270.010	0.010
I_14_3_PNT_09_01	X	-122.500	-122.431	0.069
	Z	0.000	-0.013	-0.013
	PR	122.500	122.431	-0.069
	PA	180.000	180.006	0.006

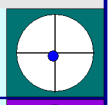
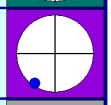
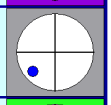
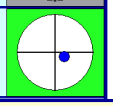
FCFLOC4R Position	MM	⌖ Ø.25 C4 D4 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_4_PNT_12_01	0.000	0.033	0.033	0.250		0.000	0.000
I_14_4_PNT_03_01	0.000	0.163	0.163	0.250		0.000	0.000
I_14_4_PNT_06_01	0.000	0.075	0.075	0.250		0.000	0.000
I_14_4_PNT_09_01	0.000	0.357	0.357	0.250		0.107	0.000

FCFLOC4R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_4_PNT_12_01	X	0.000	-0.015	-0.015
	Z	122.500	122.506	0.006
	PR	122.500	122.506	0.006
	PA	90.000	90.007	0.007
I_14_4_PNT_03_01	X	122.500	122.568	0.068
	Z	0.000	-0.045	-0.045
	PR	122.500	122.568	0.068
	PA	0.000	-0.021	-0.021
I_14_4_PNT_06_01	X	0.000	-0.009	-0.009
	Z	-122.500	-122.537	-0.037
	PR	122.500	122.537	0.037
	PA	270.000	269.996	-0.004
I_14_4_PNT_09_01	X	-122.500	-122.338	0.162
	Z	0.000	0.074	0.074
	PR	122.500	122.338	-0.162
	PA	180.000	179.965	-0.035

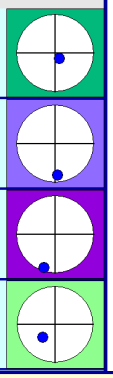
FCFLOC5R Position	MM	⌖ Ø.25 C5 D5 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_5_PNT_12_01	0.000	0.064	0.064	0.250		0.000	0.000
I_14_5_PNT_03_01	0.000	0.207	0.207	0.250		0.000	0.000
I_14_5_PNT_06_01	0.000	0.215	0.215	0.250		0.000	0.000
I_14_5_PNT_09_01	0.000	0.033	0.033	0.250		0.000	0.000

FCFLOC5R Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_5_PNT_12_01	X	0.000	0.001	0.001
	Z	122.500	122.468	-0.032
	PR	122.500	122.468	-0.032
	PA	90.000	90.000	0.000
I_14_5_PNT_03_01	X	122.500	122.438	-0.062
	Z	0.000	-0.083	-0.083
	PR	122.500	122.438	-0.062
	PA	0.000	-0.039	-0.039
I_14_5_PNT_06_01	X	0.000	-0.106	-0.106
	Z	-122.500	-122.520	-0.020
	PR	122.500	122.520	0.020
	PA	270.000	269.951	-0.049
I_14_5_PNT_09_01	X	-122.500	-122.485	0.015
	Z	0.000	0.006	0.006
	PR	122.500	122.485	-0.015
	PA	180.000	179.997	-0.003

FCFLOC6R Position	MM	⌖ Ø.25 C6 D6 Z						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_6_PNT_12_01	0.000	0.023	0.023	0.250		0.000	0.000	
I_14_6_PNT_03_01	0.000	0.230	0.230	0.250		0.000	0.000	
I_14_6_PNT_06_01	0.000	0.190	0.190	0.250		0.000	0.000	
I_14_6_PNT_09_01	0.000	0.070	0.070	0.250		0.000	0.000	

FCFLOC6R Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_6_PNT_12_01	X	0.000	-0.005	-0.005
	Z	122.500	122.490	-0.010
	PR	122.500	122.490	-0.010
	PA	90.000	90.003	0.003
I_14_6_PNT_03_01	X	122.500	122.434	-0.066
	Z	0.000	-0.094	-0.094
	PR	122.500	122.434	-0.066
	PA	0.000	-0.044	-0.044
I_14_6_PNT_06_01	X	0.000	-0.072	-0.072
	Z	-122.500	-122.562	-0.062
	PR	122.500	122.562	0.062
	PA	270.000	269.966	-0.034
I_14_6_PNT_09_01	X	-122.500	-122.468	0.032
	Z	0.000	-0.015	-0.015
	PR	122.500	122.468	-0.032
	PA	180.000	180.007	0.007

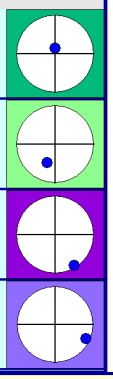
FCFLOC7R Position	MM	⌖ Ø.25 C7 D7 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_7_PNT_12_01	0.000	0.045	0.045	0.250		0.000	0.000
I_14_7_PNT_03_01	0.000	0.204	0.204	0.250		0.000	0.000
I_14_7_PNT_06_01	0.000	0.226	0.226	0.250		0.000	0.000
I_14_7_PNT_09_01	0.000	0.117	0.117	0.250		0.000	0.000



FCFLOC7R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_7_PNT_12_01	X	0.000	0.014	0.014
	Z	122.500	122.483	-0.017
	PR	122.500	122.483	-0.017
	PA	90.000	89.993	-0.007
I_14_7_PNT_03_01	X	122.500	122.509	0.009
	Z	0.000	-0.102	-0.102
	PR	122.500	122.509	0.009
	PA	360.000	359.952	-0.048
I_14_7_PNT_06_01	X	0.000	-0.036	-0.036
	Z	-122.500	-122.607	-0.107
	PR	122.500	122.607	0.107
	PA	270.000	269.983	-0.017
I_14_7_PNT_09_01	X	-122.500	-122.540	-0.040
	Z	0.000	-0.043	-0.043
	PR	122.500	122.540	0.040
	PA	180.000	180.020	0.020

FCFLOC8R Position	MM	⌖ Ø.25 C8 D8 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_8_PNT_12_01	0.000	0.036	0.036	0.250		0.000	0.000
I_14_8_PNT_03_01	0.000	0.132	0.132	0.250		0.000	0.000
I_14_8_PNT_06_01	0.000	0.233	0.233	0.250		0.000	0.000
I_14_8_PNT_09_01	0.000	0.221	0.221	0.250		0.000	0.000



FCFLOC8R Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_14_8_PNT_12_01	X	0.000	0.000	0.000
	Z	122.500	122.518	0.018
	PR	122.500	122.518	0.018
	PA	90.000	90.000	0.000
I_14_8_PNT_03_01	X	122.500	122.474	-0.026
	Z	0.000	-0.060	-0.060
	PR	122.500	122.474	-0.026

	PA	0.000	-0.028	-0.028
I_14_8_PNT_06_01	X	0.000	0.060	0.060
	Z	-122.500	-122.599	-0.099
	PR	122.500	122.599	0.099
	PA	270.000	270.028	0.028
I_14_8_PNT_09_01	X	-122.500	-122.400	0.100
	Z	0.000	-0.046	-0.046
	PR	122.500	122.400	-0.100
	PA	180.000	180.022	0.022

========== Main Coupler Supports Face flatness & -Y- coordinate ===========

⌖	MM	LOC32 - I_14_1_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.485	4.515	1.000	1.000	3.515
FL	0.000	0.057	0.057	1.000	0.000	0.000

AX	I	J	K
V	0.001	-1.000	0.002

⌖	MM	LOC33 - I_14_1_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.378	4.622	1.000	1.000	3.622
FL	0.000	0.043	0.043	1.000	0.000	0.000

AX	I	J	K
V	0.000	-1.000	0.001

⌖	MM	LOC34 - I_14_2_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-486.045	3.955	1.000	1.000	2.955
FL	0.000	0.037	0.037	1.000	0.000	0.000

AX	I	J	K
V	0.002	-1.000	0.000

⌖	MM	LOC35 - I_14_2_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-486.168	3.832	1.000	1.000	2.832
FL	0.000	0.079	0.079	1.000	0.000	0.000

AX	I	J	K
V	0.000	-1.000	0.001

⌖	MM	LOC36 - I_14_3_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.169	4.831	1.000	1.000	3.831
FL	0.000	0.036	0.036	1.000	0.000	0.000

AX	I	J	K
V	0.000	-1.000	0.002

⌖	MM	LOC37 - I_14_3_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.131	4.869	1.000	1.000	3.869
FL	0.000	0.032	0.032	1.000	0.000	0.000

AX	I	J	K
V	0.000	-1.000	0.002

⌖	MM	LOC38 - I_14_4_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-483.483	6.517	1.000	1.000	5.517
FL	0.000	0.024	0.024	1.000	0.000	0.000
AX		I		J		K
V		0.000		-1.000		0.002
⌖	MM	LOC39 - I_14_4_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-483.505	6.495	1.000	1.000	5.495
FL	0.000	0.025	0.025	1.000	0.000	0.000
AX		I		J		K
V		0.000		-1.000		0.001
⌖	MM	LOC40 - I_14_5_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-484.239	5.761	1.000	1.000	4.761
FL	0.000	0.059	0.059	1.000	0.000	0.000
AX		I		J		K
V		0.000		-1.000		0.001
⌖	MM	LOC41 - I_14_5_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-484.197	5.803	1.000	1.000	4.803
FL	0.000	0.035	0.035	1.000	0.000	0.000
AX		I		J		K
V		0.000		-1.000		0.001
⌖	MM	LOC42 - I_14_6_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.604	4.396	1.000	1.000	3.396
FL	0.000	0.031	0.031	1.000	0.000	0.000
AX		I		J		K
V		0.000		-1.000		0.001
⌖	MM	LOC43 - I_14_6_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-485.698	4.302	1.000	1.000	3.302
FL	0.000	0.043	0.043	1.000	0.000	0.000
AX		I		J		K
V		-0.001		-1.000		0.000
⌖	MM	LOC44 - I_14_7_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-486.779	3.221	1.000	1.000	2.221
FL	0.000	0.041	0.041	1.000	0.000	0.000
AX		I		J		K
V		0.001		-1.000		-0.002
⌖	MM	LOC45 - I_14_7_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-486.663	3.337	1.000	1.000	2.337
FL	0.000	0.024	0.024	1.000	0.000	0.000

AX	I	J	K
V	0.001	-1.000	-0.001

⌖	MM	LOC46 - I_14_8_PLN_SUP_LH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-484.910	5.090	1.000	1.000	4.090
FL	0.000	0.033	0.033	1.000	0.000	0.000

AX	I	J	K
V	0.001	-1.000	0.002

⌖	MM	LOC47 - I_14_8_PLN_SUP_RH_01				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	-490.000	-484.840	5.160	1.000	1.000	4.160
FL	0.000	0.042	0.042	1.000	0.000	0.000

AX	I	J	K
V	0.000	-1.000	0.002

========== Main Coupler Supports Parallelism to part alignment ==========

//	MM	PARL17 - I_14_1_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.225	0.225	1.000	0.000	0.000

//	MM	PARL18 - I_14_1_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.151	0.151	1.000	0.000	0.000

//	MM	PARL19 - I_14_2_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.134	0.134	1.000	0.000	0.000

//	MM	PARL20 - I_14_2_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.188	0.188	1.000	0.000	0.000

//	MM	PARL21 - I_14_3_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.217	0.217	1.000	0.000	0.000

//	MM	PARL22 - I_14_3_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.242	0.242	1.000	0.000	0.000

//	MM	PARL23 - I_14_4_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.155	0.155	1.000	0.000	0.000

//	MM	PARL24 - I_14_4_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.118	0.118	1.000	0.000	0.000

//	MM	PARL25 - I_14_5_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.100	0.100	1.000	0.000	0.000

//	MM	PARL26 - I_14_5_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.106	0.106	1.000	0.000	0.000

//	MM	PARL27 - I_14_6_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.060	0.060	1.000	0.000	0.000

//	MM	PARL28 - I_14_6_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.075	0.075	1.000	0.000	0.000

//	MM	PARL29 - I_14_7_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.220	0.220	1.000	0.000	0.000

//	MM	PARL30 - I_14_7_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.167	0.167	1.000	0.000	0.000

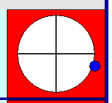
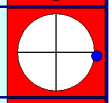
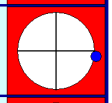
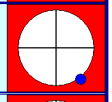
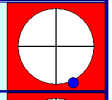
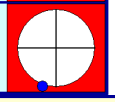
//	MM	PARL31 - I_14_8_PLN_SUP_LH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.324	0.324	1.000	0.000	0.000

//	MM	PARL32 - I_14_8_PLN_SUP_RH_01 TO YMINUS				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.159	0.159	1.000	0.000	0.000

```
========== Main Coupler Supports  Hole Positions to Coupler Port ===========
Rotation is constrained by -Z- axis
```

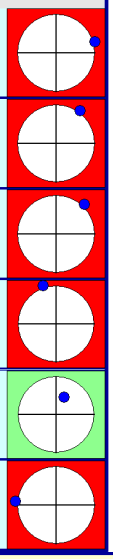
FCFLOC1_SUPP Position	MM	⌖ Ø.5 C1 D1 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_1_PNT_SUPP_01	0.000	2.870	2.870	0.500		2.370	0.000
I_14_1_PNT_SUPP_02	0.000	2.650	2.650	0.500		2.150	0.000
I_14_1_PNT_SUPP_03	0.000	2.853	2.853	0.500		2.353	0.000
I_14_1_PNT_SUPP_04	0.000	2.564	2.564	0.500		2.064	0.000
I_14_1_PNT_SUPP_05	0.000	3.348	3.348	0.500		2.848	0.000
I_14_1_PNT_SUPP_06	0.000	3.149	3.149	0.500		2.649	0.000

FCFLOC1_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
Set	X	0.000	0.877	0.877
	Z	121.400	120.678	-0.722
I_14_1_PNT_SUPP_01	X	-185.000	-183.567	1.433
	Z	156.400	156.329	-0.071
I_14_1_PNT_SUPP_02	X	-125.000	-123.675	1.325
	Z	156.400	156.430	0.030
I_14_1_PNT_SUPP_03	X	-185.000	-183.574	1.426
	Z	51.400	51.371	-0.029
I_14_1_PNT_SUPP_04	X	125.000	125.639	0.639
	Z	156.400	155.289	-1.111
I_14_1_PNT_SUPP_05	X	185.000	185.557	0.557
	Z	156.400	154.821	-1.579
I_14_1_PNT_SUPP_06	X	185.000	184.881	-0.119
	Z	51.400	49.830	-1.570

FCFLOC2_SUPP Position	MM	⌖ Ø.5 C2 D2 Z						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_2_PNT_SUPP_01	0.000	2.504	2.504	0.500		2.004	0.000	
I_14_2_PNT_SUPP_02	0.000	2.034	2.034	0.500		1.534	0.000	
I_14_2_PNT_SUPP_03	0.000	2.032	2.032	0.500		1.532	0.000	
I_14_2_PNT_SUPP_04	0.000	2.021	2.021	0.500		1.521	0.000	
I_14_2_PNT_SUPP_05	0.000	2.112	2.112	0.500		1.612	0.000	
I_14_2_PNT_SUPP_06	0.000	2.408	2.408	0.500		1.908	0.000	

FCFLOC2_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_2_PNT_SUPP_01	X	-185.000	-183.804	1.196
	Z	156.400	156.028	-0.372
I_14_2_PNT_SUPP_02	X	-125.000	-123.987	1.013
	Z	156.400	156.314	-0.086
I_14_2_PNT_SUPP_03	X	-185.000	-183.992	1.008
	Z	51.400	51.269	-0.131
I_14_2_PNT_SUPP_04	X	125.000	125.629	0.629
	Z	156.400	155.609	-0.791
I_14_2_PNT_SUPP_05	X	185.000	185.451	0.451
	Z	156.400	155.445	-0.955
I_14_2_PNT_SUPP_06	X	185.000	184.606	-0.394
	Z	51.400	50.263	-1.137

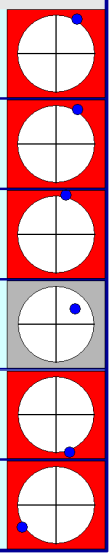
FCFLOC3_SUPP Position	MM	⌖ Ø.5 C3 D3 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_3_PNT_SUPP_01	0.000	1.112	1.112	0.500		0.612	0.000
I_14_3_PNT_SUPP_02	0.000	1.116	1.116	0.500		0.616	0.000
I_14_3_PNT_SUPP_03	0.000	0.923	0.923	0.500		0.423	0.000
I_14_3_PNT_SUPP_04	0.000	0.735	0.735	0.500		0.235	0.000
I_14_3_PNT_SUPP_05	0.000	0.254	0.254	0.500		0.000	0.000
I_14_3_PNT_SUPP_06	0.000	1.959	1.959	0.500		1.459	0.000



FCFLOC3_SUPP Summary FIT TO DATUMS=ON

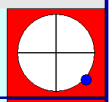
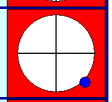
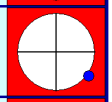
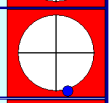
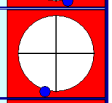
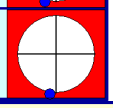
Feature	AX	NOMINAL	MEAS	DEV
I_14_3_PNT_SUPP_01	X	-185.000	-184.466	0.534
	Z	156.400	156.554	0.154
I_14_3_PNT_SUPP_02	X	-125.000	-124.667	0.333
	Z	156.400	156.848	0.448
I_14_3_PNT_SUPP_03	X	-185.000	-184.680	0.320
	Z	51.400	51.733	0.333
I_14_3_PNT_SUPP_04	X	125.000	124.883	-0.117
	Z	156.400	156.748	0.348
I_14_3_PNT_SUPP_05	X	185.000	185.052	0.052
	Z	156.400	156.516	0.116
I_14_3_PNT_SUPP_06	X	185.000	184.024	-0.976
	Z	51.400	51.489	0.089

FCFLOC4_SUPP Position	MM	⌖ Ø.5 C4 D4 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_4_PNT_SUPP_01	0.000	2.080	2.080	0.500		1.580	0.000
I_14_4_PNT_SUPP_02	0.000	2.167	2.167	0.500		1.667	0.000
I_14_4_PNT_SUPP_03	0.000	2.456	2.456	0.500		1.956	0.000
I_14_4_PNT_SUPP_04	0.000	0.326	0.326	0.500		0.000	0.000
I_14_4_PNT_SUPP_05	0.000	0.935	0.935	0.500		0.435	0.000
I_14_4_PNT_SUPP_06	0.000	0.987	0.987	0.500		0.487	0.000



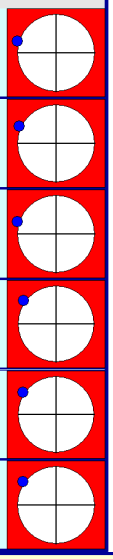
FCFLOC4_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_4_PNT_SUPP_01	X	-185.000	-184.458	0.542
	Z	156.400	157.287	0.887
I_14_4_PNT_SUPP_02	X	-125.000	-124.422	0.578
	Z	156.400	157.316	0.916
I_14_4_PNT_SUPP_03	X	-185.000	-184.700	0.300
	Z	51.400	52.591	1.191
I_14_4_PNT_SUPP_04	X	125.000	125.128	0.128
	Z	156.400	156.501	0.101
I_14_4_PNT_SUPP_05	X	185.000	185.158	0.158
	Z	156.400	155.960	-0.440
I_14_4_PNT_SUPP_06	X	185.000	184.588	-0.412
	Z	51.400	51.128	-0.272

FCFLOC5_SUPP Position	MM	⌖ Ø.5 C5 D5 Z

Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_5_PNT_SUPP_01	0.000	1.170	1.170	0.500		0.670	0.000	
I_14_5_PNT_SUPP_02	0.000	1.022	1.022	0.500		0.522	0.000	
I_14_5_PNT_SUPP_03	0.000	1.218	1.218	0.500		0.718	0.000	
I_14_5_PNT_SUPP_04	0.000	0.606	0.606	0.500		0.106	0.000	
I_14_5_PNT_SUPP_05	0.000	0.858	0.858	0.500		0.358	0.000	
I_14_5_PNT_SUPP_06	0.000	0.796	0.796	0.500		0.296	0.000	

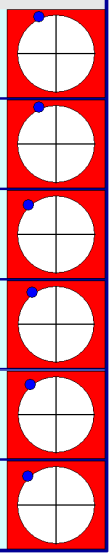
FCFLOC5_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_5_PNT_SUPP_01	X	-185.000	-184.566	0.434
	Z	156.400	156.008	-0.392
I_14_5_PNT_SUPP_02	X	-125.000	-124.638	0.362
	Z	156.400	156.040	-0.360
I_14_5_PNT_SUPP_03	X	-185.000	-184.510	0.490
	Z	51.400	51.038	-0.362
I_14_5_PNT_SUPP_04	X	125.000	125.087	0.087
	Z	156.400	156.110	-0.290
I_14_5_PNT_SUPP_05	X	185.000	184.879	-0.121
	Z	156.400	155.989	-0.411
I_14_5_PNT_SUPP_06	X	185.000	184.940	-0.060
	Z	51.400	51.007	-0.393

FCFLOC6_SUPP Position	MM	⌖ Ø.5 C6 D6 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_6_PNT_SUPP_01	0.000	1.661	1.661	0.500		1.161	0.000
I_14_6_PNT_SUPP_02	0.000	1.895	1.895	0.500		1.395	0.000
I_14_6_PNT_SUPP_03	0.000	1.179	1.179	0.500		0.679	0.000
I_14_6_PNT_SUPP_04	0.000	2.772	2.772	0.500		2.272	0.000
I_14_6_PNT_SUPP_05	0.000	3.302	3.302	0.500		2.802	0.000
I_14_6_PNT_SUPP_06	0.000	3.156	3.156	0.500		2.656	0.000



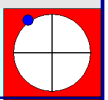
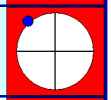
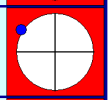
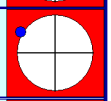
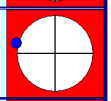
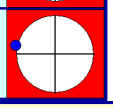
FCFLOC6_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_6_PNT_SUPP_01	X	-185.000	-185.794	-0.794
	Z	156.400	156.645	0.245
I_14_6_PNT_SUPP_02	X	-125.000	-125.856	-0.856
	Z	156.400	156.805	0.405
I_14_6_PNT_SUPP_03	X	-185.000	-185.562	-0.562
	Z	51.400	51.579	0.179
I_14_6_PNT_SUPP_04	X	125.000	123.871	-1.129
	Z	156.400	157.204	0.804
I_14_6_PNT_SUPP_05	X	185.000	183.626	-1.374
	Z	156.400	157.315	0.915
I_14_6_PNT_SUPP_06	X	185.000	183.714	-1.286
	Z	51.400	52.315	0.915

FCFLOC7_SUPP Position	MM	⌖ Ø.5 C7 D7 Z					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_14_7_PNT_SUPP_01	0.000	2.403	2.403	0.500		1.903	0.000
I_14_7_PNT_SUPP_02	0.000	2.147	2.147	0.500		1.647	0.000
I_14_7_PNT_SUPP_03	0.000	3.027	3.027	0.500		2.527	0.000
I_14_7_PNT_SUPP_04	0.000	1.758	1.758	0.500		1.258	0.000
I_14_7_PNT_SUPP_05	0.000	2.005	2.005	0.500		1.505	0.000
I_14_7_PNT_SUPP_06	0.000	2.272	2.272	0.500		1.772	0.000



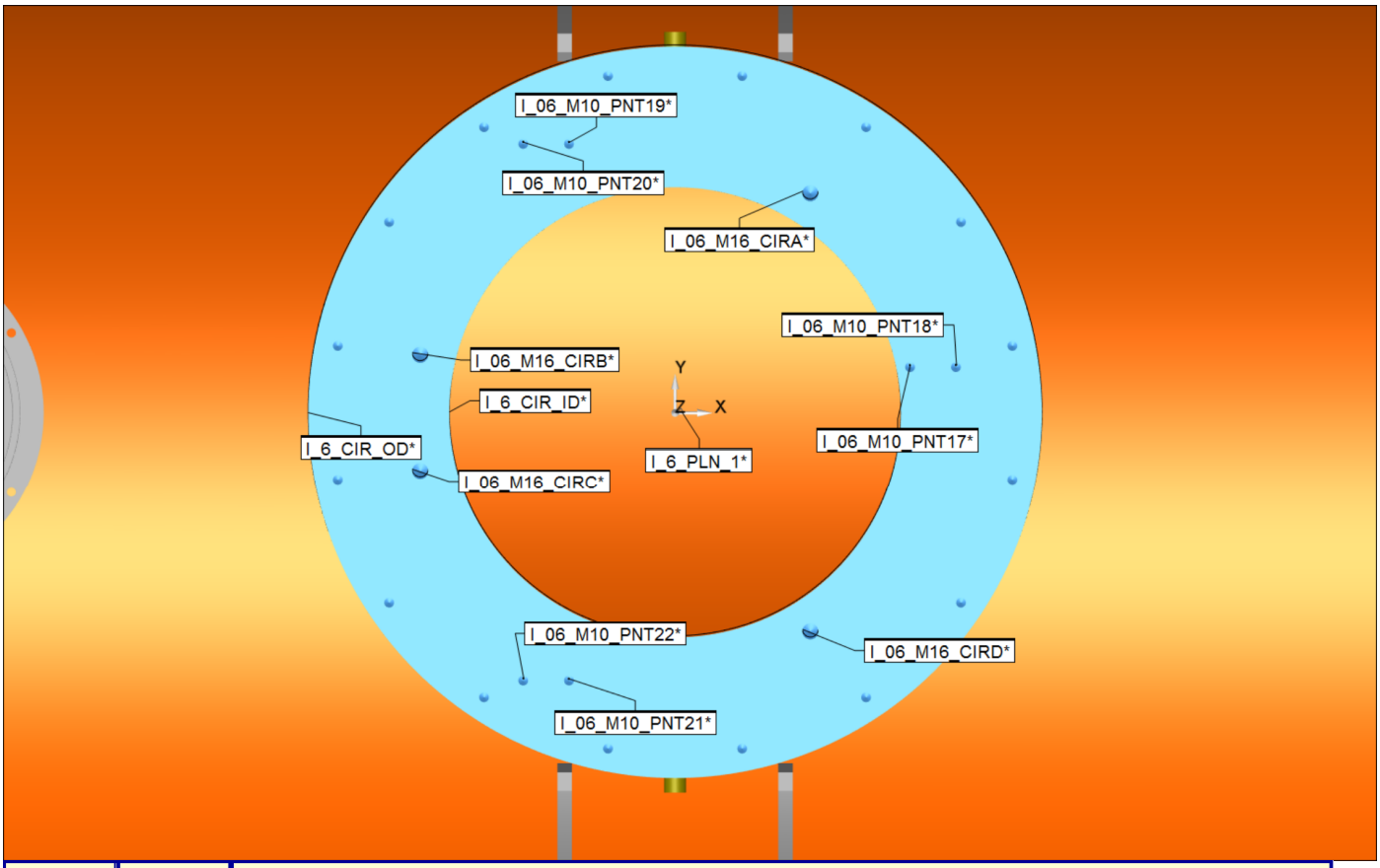
FCFLOC7_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_7_PNT_SUPP_01	X	-185.000	-185.510	-0.510
	Z	156.400	157.488	1.088
I_14_7_PNT_SUPP_02	X	-125.000	-125.457	-0.457
	Z	156.400	157.372	0.972
I_14_7_PNT_SUPP_03	X	-185.000	-186.038	-1.038
	Z	51.400	52.502	1.102
I_14_7_PNT_SUPP_04	X	125.000	124.473	-0.527
	Z	156.400	157.104	0.704
I_14_7_PNT_SUPP_05	X	185.000	184.346	-0.654
	Z	156.400	157.160	0.760
I_14_7_PNT_SUPP_06	X	185.000	184.203	-0.797
	Z	51.400	52.209	0.809

FCFLOC8_SUPP Position	MM	⌖ Ø.5 C8 D8 Z

Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_14_8_PNT_SUPP_1	0.000	3.206	3.206	0.500		2.706	0.000	
I_14_8_PNT_SUPP_2	0.000	3.553	3.553	0.500		3.053	0.000	
I_14_8_PNT_SUPP_3	0.000	4.935	4.935	0.500		4.435	0.000	
I_14_8_PNT_SUPP_4	0.000	3.038	3.038	0.500		2.538	0.000	
I_14_8_PNT_SUPP_5	0.000	3.103	3.103	0.500		2.603	0.000	
I_14_8_PNT_SUPP_6	0.000	4.535	4.535	0.500		4.035	0.000	

FCFLOC8_SUPP Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_14_8_PNT_SUPP_1	X	-185.000	-185.956	-0.956
	Z	156.400	157.686	1.286
I_14_8_PNT_SUPP_2	X	-125.000	-126.176	-1.176
	Z	156.400	157.731	1.331
I_14_8_PNT_SUPP_3	X	-185.000	-187.057	-2.057
	Z	51.400	52.763	1.363
I_14_8_PNT_SUPP_4	X	125.000	123.701	-1.299
	Z	156.400	157.188	0.788
I_14_8_PNT_SUPP_5	X	185.000	183.503	-1.497
	Z	156.400	156.809	0.409
I_14_8_PNT_SUPP_6	X	185.000	182.787	-2.213
	Z	51.400	51.895	0.495

========== F10018068-none Top Middle Port I-06 ==========



	MM	LOC48 - I_6_PLN_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	523.987	-6.013	2.000	2.000	4.013
FL	0.000	0.106	0.106	0.130	0.000	0.000

AX	I	J	K
V	0.000	0.000	1.000

	MM	LOC49 - I_6_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	2.000	2.000	0.000
Y	0.000	1.421	1.421	2.000	2.000	0.000
D	394.000	394.038	0.038	0.300	0.300	0.000
RN	0.000	0.065	0.065	0.600	0.000	0.000

	MM	LOC50 - I_6_CIR_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.006	-0.006	2.000	2.000	0.000
Y	0.000	1.320	1.320	2.000	2.000	0.000
D	640.000	640.127	0.127	2.000	2.000	0.000
RN	0.000	0.437	0.437	4.000	0.000	0.000

Rotation is constrained by -X- axis

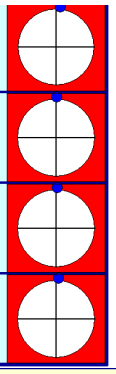
FCFLOC9 Position	MM	⌖ Ø.25 BM PM X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_06_M16_CIRA	0.000	1.081	1.081	0.250		0.831	0.000
I_06_M16_CIRB	0.000	0.826	0.826	0.250		0.576	0.000
I_06_M16_CIRC	0.000	0.942	0.942	0.250		0.692	0.000
I_06_M16_CIRD	0.000	1.064	1.064	0.250		0.814	0.000

FCFLOC9 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_06_M16_CIRA	X	118.000	117.889	-0.111
	Y	191.750	192.279	0.529
I_06_M16_CIRB	X	-222.300	-222.313	-0.013
	Y	50.800	51.213	0.413
I_06_M16_CIRC	X	-222.300	-222.277	0.023
	Y	-50.800	-50.330	0.470
I_06_M16_CIRD	X	118.000	118.006	0.006
	Y	-191.750	-191.218	0.532

FCFLOC10 Position	MM	⌖ Ø.25 BM PM X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_06_M10_PNT1	0.000	1.092	1.092	0.250		0.842	0.000
I_06_M10_PNT2	0.000	0.813	0.813	0.250		0.563	0.000
I_06_M10_PNT3	0.000	1.095	1.095	0.250		0.845	0.000
I_06_M10_PNT4	0.000	0.800	0.800	0.250		0.550	0.000
I_06_M10_PNT5	0.000	0.672	0.672	0.250		0.422	0.000
I_06_M10_PNT6	0.000	0.583	0.583	0.250		0.333	0.000
I_06_M10_PNT7	0.000	0.732	0.732	0.250		0.482	0.000
I_06_M10_PNT8	0.000	0.749	0.749	0.250		0.499	0.000
I_06_M10_PNT9	0.000	0.791	0.791	0.250		0.541	0.000
I_06_M10_PNT10	0.000	0.869	0.869	0.250		0.619	0.000
I_06_M10_PNT11	0.000	0.792	0.792	0.250		0.542	0.000
I_06_M10_PNT12	0.000	0.604	0.604	0.250		0.354	0.000

I_06_M10_PNT13 0.000	0.989	0.989	0.250		0.739	0.000
I_06_M10_PNT14 0.000	0.931	0.931	0.250		0.681	0.000
I_06_M10_PNT15 0.000	0.919	0.919	0.250		0.669	0.000
I_06_M10_PNT16 0.000	0.970	0.970	0.250		0.720	0.000

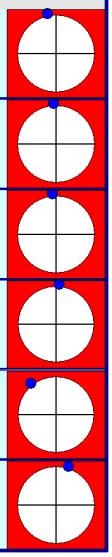


FCFLOC10 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_06_M10_PNT1	X	294.236	294.285	0.049
	Y	58.527	59.071	0.544
	PR	300.000	300.155	0.155
	PA	11.250	11.350	0.100
I_06_M10_PNT2	X	249.441	249.368	-0.073
	Y	166.671	167.071	0.400
	PR	300.000	300.162	0.162
	PA	33.750	33.821	0.071
I_06_M10_PNT3	X	166.671	166.618	-0.053
	Y	249.441	249.986	0.545
	PR	300.000	300.423	0.423
	PA	56.250	56.316	0.066
I_06_M10_PNT4	X	58.527	58.424	-0.103
	Y	294.236	294.622	0.386
	PR	300.000	300.359	0.359
	PA	78.750	78.784	0.034
I_06_M10_PNT5	X	-58.527	-58.649	-0.122
	Y	294.236	294.549	0.313
	PR	300.000	300.331	0.331
	PA	101.250	101.261	0.011
I_06_M10_PNT6	X	-166.671	-166.691	-0.020
	Y	249.441	249.732	0.291
	PR	300.000	300.253	0.253
	PA	123.750	123.722	-0.028
I_06_M10_PNT7	X	-249.441	-249.572	-0.132
	Y	166.671	167.013	0.342
	PR	300.000	300.299	0.299
	PA	146.250	146.210	-0.040
I_06_M10_PNT8	X	-294.236	-294.164	0.071
	Y	58.527	58.895	0.368
	PR	300.000	300.002	0.002
	PA	168.750	168.678	-0.072
I_06_M10_PNT9	X	-294.236	-294.096	0.140
	Y	-58.527	-58.157	0.370
	PR	300.000	299.791	-0.209
	PA	191.250	191.186	-0.064
I_06_M10_PNT10	X	-249.441	-249.291	0.150
	Y	-166.671	-166.263	0.408

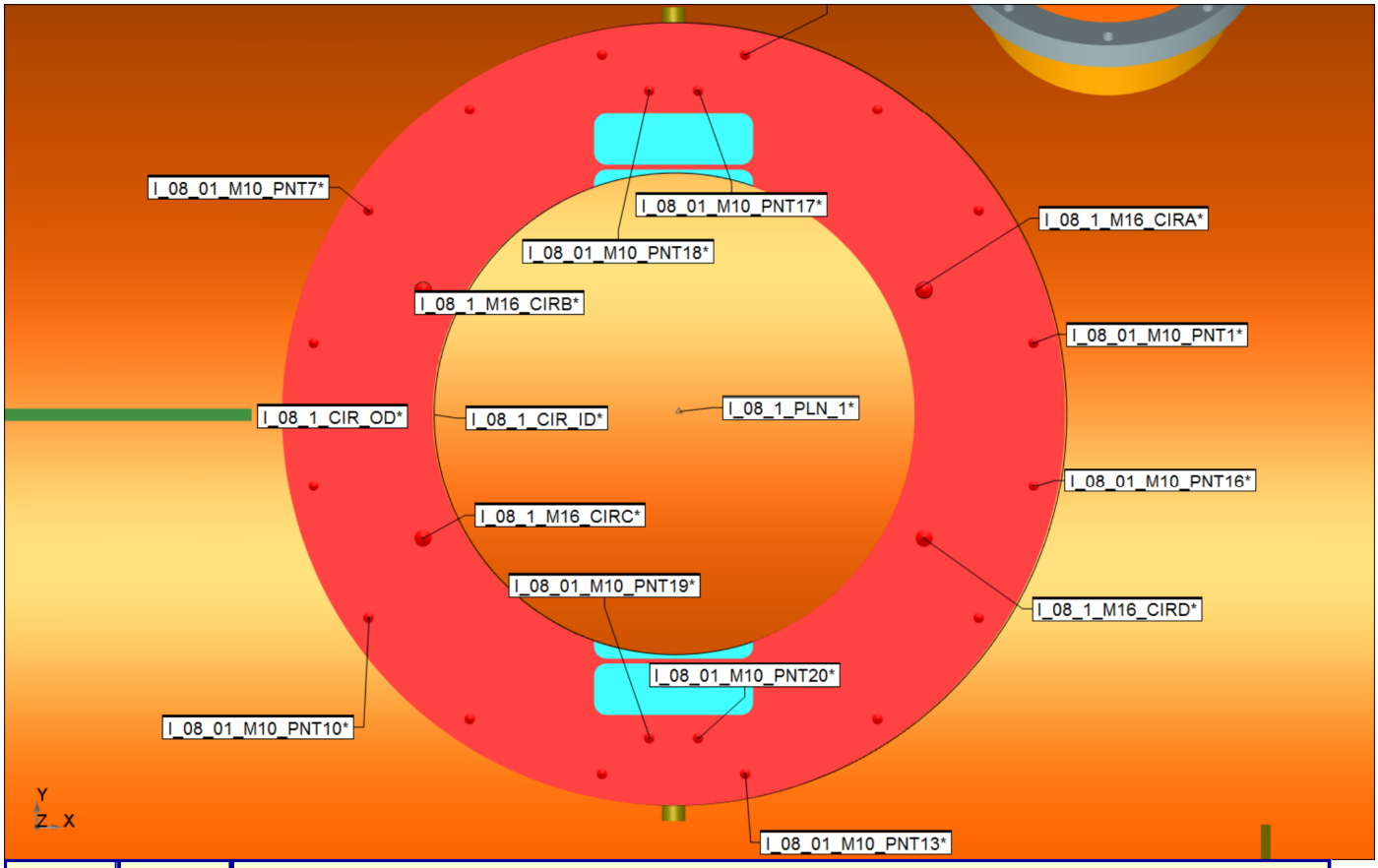
	PR	300.000	299.649	-0.351
	PA	213.750	213.701	-0.049
I_06_M10_PNT11	X	-166.671	-166.621	0.050
	Y	-249.441	-249.048	0.393
	PR	300.000	299.646	-0.354
	PA	236.250	236.216	-0.034
I_06_M10_PNT12	X	-58.527	-58.410	0.117
	Y	-294.236	-293.957	0.278
	PR	300.000	299.704	-0.296
	PA	258.750	258.762	0.012
I_06_M10_PNT13	X	58.527	58.578	0.051
	Y	-294.236	-293.744	0.492
	PR	300.000	299.528	-0.472
	PA	281.250	281.278	0.028
I_06_M10_PNT14	X	166.671	166.681	0.010
	Y	-249.441	-248.975	0.466
	PR	300.000	299.619	-0.381
	PA	303.750	303.801	0.051
I_06_M10_PNT15	X	249.441	249.453	0.012
	Y	-166.671	-166.212	0.459
	PR	300.000	299.755	-0.245
	PA	326.250	326.324	0.074
I_06_M10_PNT16	X	294.236	294.263	0.028
	Y	-58.527	-58.043	0.484
	PR	300.000	299.933	-0.067
	PA	348.750	348.842	0.092

FCFLOC11 Position	MM	⌖ Ø.25 BM PM X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_06_M10_PNT17	0.000	0.788	0.788	0.250		0.538	0.000
I_06_M10_PNT18	0.000	0.818	0.818	0.250		0.568	0.000
I_06_M10_PNT19	0.000	0.550	0.550	0.250		0.300	0.000
I_06_M10_PNT20	0.000	0.743	0.743	0.250		0.493	0.000
I_06_M10_PNT21	0.000	0.601	0.601	0.250		0.351	0.000
I_06_M10_PNT22	0.000	0.924	0.924	0.250		0.674	0.000



FCFLOC11 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_06_M10_PNT17	X	205.000	204.919	-0.081
	Y	40.000	40.386	0.386
I_06_M10_PNT18	X	245.000	244.978	-0.022
	Y	40.000	40.408	0.408
I_06_M10_PNT19	X	-92.500	-92.525	-0.025
	Y	234.800	235.074	0.274
I_06_M10_PNT20	X	-132.500	-132.474	0.026
	Y	234.800	235.171	0.371
I_06_M10_PNT21	X	-92.500	-92.689	-0.189
	Y	-234.800	-234.567	0.233
I_06_M10_PNT22	X	-132.500	-132.363	0.137
	Y	-234.800	-234.359	0.441

========== F10018083-none Top Port I-08-1 ==========



⊞	MM	LOC51 - I_08_1_PLN_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	525.764	-4.236	2.000	2.000	2.236
FL	0.000	0.218	0.218	0.130	0.000	0.088

AX	I	J	K
V	0.000	0.000	1.000

⊞	MM	LOC52 - I_08_1_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4980.000	-4978.709	1.291	2.000	2.000	0.000
Y	0.000	0.249	0.249	2.000	2.000	0.000
D	394.000	393.961	-0.039	0.300	0.300	0.000
RN	0.000	0.159	0.159	0.600	0.000	0.000

⌖	MM	LOC53 - I_08_1_CIR_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4980.000	-4978.668	1.332	2.000	2.000	0.000
Y	0.000	0.249	0.249	2.000	2.000	0.000
D	640.000	640.125	0.125	2.000	2.000	0.000
RN	0.000	1.368	1.368	4.000	0.000	0.000

Rotation is constrained by -X- axis

FCFLOC12 Position	MM	⌖ Ø.25 B1 P1 X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_08_1_M16_CIRA	0.000	2.550	2.550	0.250		2.300	0.000
I_08_1_M16_CIRB	0.000	2.638	2.638	0.250		2.388	0.000
I_08_1_M16_CIRC	0.000	2.477	2.477	0.250		2.227	0.000
I_08_1_M16_CIRD	0.000	2.455	2.455	0.250		2.205	0.000

FCFLOC12 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_08_1_M16_CIRA	X	204.800	203.529	-1.271
	Y	101.600	101.493	-0.107
I_08_1_M16_CIRB	X	-204.800	-206.086	-1.286
	Y	101.600	101.306	-0.294
I_08_1_M16_CIRC	X	-204.800	-206.015	-1.215
	Y	-101.600	-101.841	-0.241
I_08_1_M16_CIRD	X	204.800	203.573	-1.227
	Y	-101.600	-101.639	-0.039

FCFLOC13 Position	MM	⌖ Ø.25 B1 P1 X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_08_01_M10_PNT1	0.000	2.439	2.439	0.250		2.189	0.000
I_08_01_M10_PNT2	0.000	2.762	2.762	0.250		2.512	0.000
I_08_01_M10_PNT3	0.000	2.797	2.797	0.250		2.547	0.000
I_08_01_M10_PNT4	0.000	3.003	3.003	0.250		2.753	0.000
I_08_01_M10_PNT5	0.000	2.407	2.407	0.250		2.157	0.000
I_08_01_M10_PNT6	0.000	2.786	2.786	0.250		2.536	0.000
I_08_01_M10_PNT7	0.000	2.347	2.347	0.250		2.097	0.000
I_08_01_M10_PNT8	0.000	2.482	2.482	0.250		2.232	0.000
I_08_01_M10_PNT9	0.000	2.426	2.426	0.250		2.176	0.000

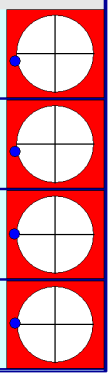
I_08_01_M10_PNT10 0.000	2.236	2.236	0.250	1.986	0.000	
I_08_01_M10_PNT11 0.000	2.132	2.132	0.250	1.882	0.000	
I_08_01_M10_PNT12 0.000	2.097	2.097	0.250	1.847	0.000	
I_08_01_M10_PNT13 0.000	2.558	2.558	0.250	2.308	0.000	
I_08_01_M10_PNT14 0.000	2.484	2.484	0.250	2.234	0.000	
I_08_01_M10_PNT15 0.000	2.224	2.224	0.250	1.974	0.000	
I_08_01_M10_PNT16 0.000	2.351	2.351	0.250	2.101	0.000	

FCFLOC13 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_08_01_M10_PNT1	X	294.236	293.016	-1.219
	Y	58.527	58.515	-0.012
	PR	300.000	298.802	-1.198
	PA	11.250	11.293	0.043
I_08_01_M10_PNT2	X	249.441	248.081	-1.360
	Y	166.671	166.432	-0.239
	PR	300.000	298.737	-1.263
	PA	33.750	33.857	0.107
I_08_01_M10_PNT3	X	166.671	165.319	-1.352
	Y	249.441	249.797	0.357
	PR	300.000	299.548	-0.452
	PA	56.250	56.503	0.253
I_08_01_M10_PNT4	X	58.527	57.030	-1.497
	Y	294.236	294.121	-0.115
	PR	300.000	299.599	-0.401
	PA	78.750	79.027	0.277
I_08_01_M10_PNT5	X	-58.527	-59.712	-1.185
	Y	294.236	294.024	-0.212
	PR	300.000	300.026	0.026
	PA	101.250	101.480	0.230
I_08_01_M10_PNT6	X	-166.671	-168.011	-1.340
	Y	249.441	249.062	-0.379
	PR	300.000	300.432	0.432
	PA	123.750	124.003	0.253
I_08_01_M10_PNT7	X	-249.441	-250.521	-1.080
	Y	166.671	166.213	-0.459
	PR	300.000	300.645	0.645
	PA	146.250	146.437	0.187
I_08_01_M10_PNT8	X	-294.236	-295.424	-1.189
	Y	58.527	58.171	-0.356
	PR	300.000	301.097	1.097

	PA	168.750	168.861	0.111
I_08_01_M10_PNT9	X	-294.236	-295.432	-1.197
	Y	-58.527	-58.727	-0.199
	PR	300.000	301.213	1.213
	PA	191.250	191.243	-0.007
I_08_01_M10_PNT10	X	-249.441	-250.538	-1.097
	Y	-166.671	-166.886	-0.214
	PR	300.000	301.032	1.032
	PA	213.750	213.668	-0.082
I_08_01_M10_PNT11	X	-166.671	-167.722	-1.051
	Y	-249.441	-249.618	-0.177
	PR	300.000	300.733	0.733
	PA	236.250	236.102	-0.148
I_08_01_M10_PNT12	X	-58.527	-59.575	-1.048
	Y	-294.236	-294.236	-0.001
	PR	300.000	300.207	0.207
	PA	258.750	258.554	-0.196
I_08_01_M10_PNT13	X	58.527	57.253	-1.274
	Y	-294.236	-294.348	-0.112
	PR	300.000	299.864	-0.136
	PA	281.250	281.007	-0.243
I_08_01_M10_PNT14	X	166.671	165.478	-1.193
	Y	-249.441	-249.787	-0.346
	PR	300.000	299.627	-0.373
	PA	303.750	303.524	-0.226
I_08_01_M10_PNT15	X	249.441	248.329	-1.112
	Y	-166.671	-166.669	0.002
	PR	300.000	299.075	-0.925
	PA	326.250	326.132	-0.118
I_08_01_M10_PNT16	X	294.236	293.062	-1.174
	Y	-58.527	-58.459	0.068
	PR	300.000	298.836	-1.164
	PA	348.750	348.719	-0.031

FCFLOC14 Position	MM	⌖ Ø.25 B1 P1 X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_08_01_M10_PNT17	0.000	2.540	2.540	0.250		2.290	0.000
I_08_01_M10_PNT18	0.000	2.743	2.743	0.250		2.493	0.000
I_08_01_M10_PNT19	0.000	1.981	1.981	0.250		1.731	0.000
I_08_01_M10_PNT20	0.000	2.131	2.131	0.250		1.881	0.000



FCFLOC14 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_08_01_M10_PNT17	X	20.000	18.750	-1.250
	Y	265.000	264.776	-0.224
I_08_01_M10_PNT18	X	-20.000	-21.347	-1.347
	Y	265.000	264.745	-0.255
I_08_01_M10_PNT19	X	-20.000	-20.991	-0.991
	Y	-265.000	-264.991	0.009
I_08_01_M10_PNT20	X	20.000	18.935	-1.065
	Y	-265.000	-264.975	0.025

========== F10018083-none Top Port I-08-2 ==========

⌖	MM	LOC54 - I_08_2_1_PLNC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	530.000	523.898	-6.102	2.000	2.000	4.102
FL	0.000	0.112	0.112	0.130	0.000	0.000

AX	I	J	K
V	-0.001	0.000	1.000

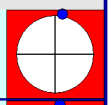
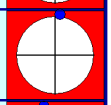
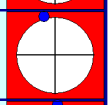
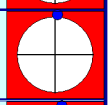
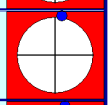
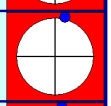
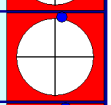
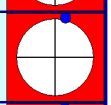
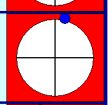
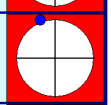
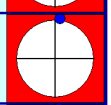
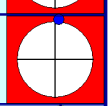
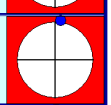
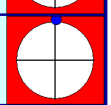
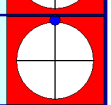
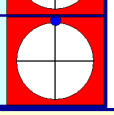
⌖	MM	LOC55 - I_08_02_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4835.000	4834.717	-0.283	2.000	2.000	0.000
Y	0.000	1.519	1.519	2.000	2.000	0.000
D	394.000	393.865	-0.135	0.300	0.300	0.000
RN	0.000	0.282	0.282	0.600	0.000	0.000

⌖	MM	LOC56 - I_08_02_CIR_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4835.000	4834.637	-0.363	2.000	2.000	0.000
Y	0.000	1.548	1.548	2.000	2.000	0.000
D	640.000	640.105	0.105	2.000	2.000	0.000
RN	0.000	0.524	0.524	4.000	0.000	0.000

Rotation is constrained by -X- axis

FCFLOC15 Position	MM	⌖ Ø.25 B2 P2 X					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_08_2_M16_CIRA	0.000	1.742	1.742	0.250		1.492	0.000
I_08_2_M16_CIRB	0.000	1.831	1.831	0.250		1.581	0.000
I_08_2_M16_CIRC	0.000	1.733	1.733	0.250		1.483	0.000
I_08_2_M16_CIRD	0.000	1.730	1.730	0.250		1.480	0.000

FCFLOC15 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_08_2_M16_CIRA	X	204.800	204.685	-0.115
	Y	101.600	102.463	0.863
I_08_2_M16_CIRB	X	-204.800	-204.813	-0.013
	Y	101.600	102.515	0.915
I_08_2_M16_CIRC	X	-204.800	-204.868	-0.068
	Y	-101.600	-100.736	0.864
I_08_2_M16_CIRD	X	204.800	204.683	-0.117
	Y	-101.600	-100.743	0.857

FCFLOC16 Position	MM	⌖ Ø.25 B2 P2 X						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_08_02_M10_PNT1	0.000	2.451	2.451	0.250		2.201	0.000	
I_08_02_M10_PNT2	0.000	1.548	1.548	0.250		1.298	0.000	
I_08_02_M10_PNT3	0.000	1.540	1.540	0.250		1.290	0.000	
I_08_02_M10_PNT4	0.000	1.636	1.636	0.250		1.386	0.000	
I_08_02_M10_PNT5	0.000	1.679	1.679	0.250		1.429	0.000	
I_08_02_M10_PNT6	0.000	1.623	1.623	0.250		1.373	0.000	
I_08_02_M10_PNT7	0.000	2.007	2.007	0.250		1.757	0.000	
I_08_02_M10_PNT8	0.000	1.773	1.773	0.250		1.523	0.000	
I_08_02_M10_PNT9	0.000	1.681	1.681	0.250		1.431	0.000	
I_08_02_M10_PNT10	0.000	0.812	0.812	0.250		0.562	0.000	
I_08_02_M10_PNT11	0.000	1.483	1.483	0.250		1.233	0.000	
I_08_02_M10_PNT12	0.000	1.750	1.750	0.250		1.500	0.000	
I_08_02_M10_PNT13	0.000	2.079	2.079	0.250		1.829	0.000	
I_08_02_M10_PNT14	0.000	1.652	1.652	0.250		1.402	0.000	
I_08_02_M10_PNT15	0.000	1.883	1.883	0.250		1.633	0.000	
I_08_02_M10_PNT16	0.000	1.739	1.739	0.250		1.489	0.000	

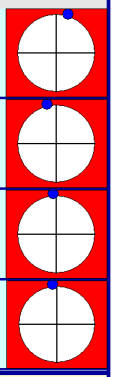
FCFLOC16 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_08_02_M10_PNT1	X	294.236	294.462	0.227

	Y	58.527	59.731	1.204
	PR	300.000	300.460	0.460
	PA	11.250	11.467	0.217
I_08_02_M10_PNT2	X	249.441	249.531	0.090
	Y	166.671	167.440	0.769
	PR	300.000	300.503	0.503
	PA	33.750	33.862	0.112
I_08_02_M10_PNT3	X	166.671	166.467	-0.204
	Y	249.441	250.183	0.743
	PR	300.000	300.504	0.504
	PA	56.250	56.361	0.111
I_08_02_M10_PNT4	X	58.527	58.583	0.056
	Y	294.236	295.052	0.816
	PR	300.000	300.811	0.811
	PA	78.750	78.770	0.020
I_08_02_M10_PNT5	X	-58.527	-58.384	0.144
	Y	294.236	295.063	0.827
	PR	300.000	300.784	0.784
	PA	101.250	101.192	-0.058
I_08_02_M10_PNT6	X	-166.671	-166.471	0.200
	Y	249.441	250.227	0.786
	PR	300.000	300.543	0.543
	PA	123.750	123.635	-0.115
I_08_02_M10_PNT7	X	-249.441	-249.279	0.162
	Y	166.671	167.661	0.990
	PR	300.000	300.417	0.417
	PA	146.250	146.076	-0.174
I_08_02_M10_PNT8	X	-294.236	-294.005	0.230
	Y	58.527	59.383	0.856
	PR	300.000	299.942	-0.058
	PA	168.750	168.581	-0.169
I_08_02_M10_PNT9	X	-294.236	-294.028	0.207
	Y	-58.527	-57.712	0.815
	PR	300.000	299.639	-0.361
	PA	191.250	191.105	-0.145
I_08_02_M10_PNT10	X	-249.441	-249.586	-0.145
	Y	-166.671	-166.292	0.379
	PR	300.000	299.910	-0.090
	PA	213.750	213.674	-0.076
I_08_02_M10_PNT11	X	-166.671	-166.578	0.093
	Y	-249.441	-248.705	0.736
	PR	300.000	299.337	-0.663
	PA	236.250	236.187	-0.063
I_08_02_M10_PNT12	X	-58.527	-58.448	0.079
	Y	-294.236	-293.364	0.871
	PR	300.000	299.130	-0.870
	PA	258.750	258.732	-0.018
I_08_02_M10_PNT13	X	58.527	58.676	0.149

	Y	-294.236	-293.207	1.029
	PR	300.000	299.020	-0.980
	PA	281.250	281.316	0.066
I_08_02_M10_PNT14	X	166.671	166.697	0.025
	Y	-249.441	-248.615	0.826
	PR	300.000	299.328	-0.672
	PA	303.750	303.842	0.092
I_08_02_M10_PNT15	X	249.441	249.442	0.001
	Y	-166.671	-165.730	0.941
	PR	300.000	299.479	-0.521
	PA	326.250	326.400	0.150
I_08_02_M10_PNT16	X	294.236	294.247	0.012
	Y	-58.527	-57.658	0.869
	PR	300.000	299.843	-0.157
	PA	348.750	348.913	0.163

FCFLOC17 Position	MM	⌖ Ø.25 B2 P2 X

Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_08_02_M10_...	0.000	1.929	1.929	0.250		1.679	0.000
I_08_02_M10_...	0.000	1.631	1.631	0.250		1.381	0.000
I_08_02_M10_...	0.000	1.980	1.980	0.250		1.730	0.000
I_08_02_M10_...	0.000	1.719	1.719	0.250		1.469	0.000



FCFLOC17 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_08_02_M10_PNT17	X	20.000	20.277	0.277
	Y	265.000	265.924	0.924
I_08_02_M10_PNT18	X	-20.000	-20.189	-0.189
	Y	265.000	265.793	0.793
I_08_02_M10_PNT19	X	-20.000	-20.071	-0.071
	Y	-265.000	-264.012	0.988
I_08_02_M10_PNT20	X	20.000	19.905	-0.095
	Y	-265.000	-264.146	0.854

========== F10020935-B CL Port I-09 ==========

⌖	MM	LOC57 - I_09_PLN

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	522.700	521.036	-1.664	0.300	0.300	1.364
FL	0.000	0.210	0.210	0.300	0.000	0.000

AX	I	J	K
V	0.004	-0.817	0.577

⌖	MM	LOC58 - I_09_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	5082.500	5081.946	-0.554	0.300	0.300	0.254
Y	-428.171	-427.672	0.499	2.000	2.000	0.000
Z	299.808	297.597	-2.211	2.000	2.000	0.211
PR	522.700	521.026	-1.674	0.300	0.300	1.374
PA	145.000	145.168	0.168	1.000	1.000	0.000
D	253.000	253.524	0.524	2.000	2.000	0.000
RN	0.000	0.129	0.129	4.000	0.000	0.000

========== F10023631-A & F10023623-A Pickup Wldmt & Hoist Ring I-10 ===========

⌖	MM	LOC59 - I_10_1_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-3800.000	-3799.164	0.836	2.000	2.000	0.000
Y	-320.000	-319.228	0.772	2.000	2.000	0.000
Z	524.050	520.848	-3.202	2.000	2.000	1.202
D	75.000	75.822	0.822	2.000	2.000	0.000
RN	0.000	0.186	0.186	4.000	0.000	0.000

⌖	MM	LOC60 - I_10_2_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-3800.000	-3799.943	0.057	2.000	2.000	0.000
Y	320.000	319.070	-0.930	2.000	2.000	0.000
Z	524.050	520.577	-3.473	2.000	2.000	1.473
D	75.000	76.038	1.038	2.000	2.000	0.000
RN	0.000	0.326	0.326	4.000	0.000	0.000

⌖	MM	LOC61 - I_10_3_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	3000.000	2999.315	-0.685	2.000	2.000	0.000
Y	-320.000	-318.546	1.454	2.000	2.000	0.000
Z	524.050	513.694	-10.356	2.000	2.000	8.356
D	75.000	76.113	1.113	2.000	2.000	0.000
RN	0.000	0.269	0.269	4.000	0.000	0.000

⌖	MM	LOC62 - I_10_4_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	3000.000	2999.659	-0.341	2.000	2.000	0.000
Y	320.000	318.764	-1.236	2.000	2.000	0.000
Z	524.050	520.609	-3.441	2.000	2.000	1.441
D	75.000	75.881	0.881	2.000	2.000	0.000
RN	0.000	0.213	0.213	4.000	0.000	0.000

1 1/2 - 6 Thread gage will go in I-10-1,
but not I-10-2, 3, or 4

3/8 - 16 Threaded Hole missing from all Pickup Weldments

========== Location of end flanges F10023636-n I-11 & F10023641-n I-12 ===========

⌖	MM	LOC63 - I_12_END_PLNC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-6105.000	-6101.220	3.780	2.000	2.000	1.780

⌖	MM	LOC64 - I_11_END_PLNC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	5300.390	5296.000	-4.390	2.000	2.000	2.390	
↔	MM	DIST7 - I_12_END_PLNC TO I_11_END_PLNC (XAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	11405.390	11397.220	-8.170	2.000	2.000	6.170	
⌖	MM	LOC65 - I_12_BACKPLNC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-6075.000	-6067.776	7.224	2.000	2.000	5.224	
FL	0.000	1.121	1.121	0.100	0.000	1.021	
⌖	MM	LOC66 - I_11_BACKPLNC					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	5260.390	5256.167	-4.223	2.000	2.000	2.223	
FL	0.000	1.493	1.493	0.600	0.000	0.893	
↔	MM	DIST8 - I_12_BACKPLNC TO I_11_BACKPLNC (XAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	11335.390	11323.943	-11.447	2.000	2.000	9.447	
↔	MM	DIST9 - I_12_END_PLNC TO I_12_BACKPLNC (XAXIS)					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
M	30.000	33.444	3.444	0.300	0.300	3.144	

Perpendicularity of End Flanges to -X- axis Datum -AE-

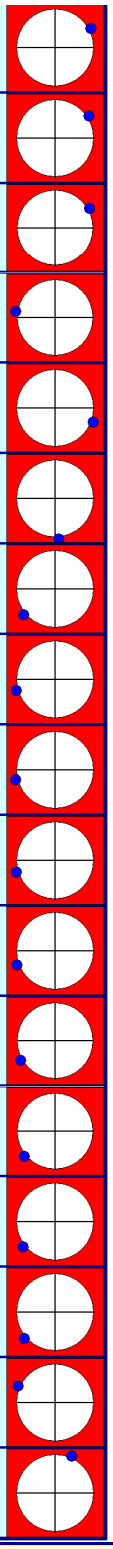
FCFPERP1	MM	⊥ 1 A					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_11_END_PL...	0.000	0.331	0.331	1.000	0.000	0.000	0.000
I_12_END_PL...	0.000	1.247	1.247	1.000	0.000	0.247	0.000

========== F10023641-n I-12 Bolt Hole Pattern ==========

Rotation is unrestrained about -X- axis

FCFLOC18 Position	MM	⌖ Ø.25 A					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_12_PNT_BC1	0.000	0.082	0.082	0.250		0.000	0.000
I_12_PNT_BC2	0.000	1.065	1.065	0.250		0.815	0.000
I_12_PNT_BC3	0.000	1.043	1.043	0.250		0.793	0.000
I_12_PNT_BC4	0.000	1.456	1.456	0.250		1.206	0.000
I_12_PNT_BC5	0.000	1.965	1.965	0.250		1.715	0.000
I_12_PNT_BC6	0.000	2.008	2.008	0.250		1.758	0.000
I_12_PNT_BC7	0.000	2.212	2.212	0.250		1.962	0.000
I_12_PNT_BC8	0.000	2.490	2.490	0.250		2.240	0.000
I_12_PNT_BC9	0.000	2.364	2.364	0.250		2.114	0.000

I_12_PNT_BC10 0.000	3.034	3.034	0.250	2.784	0.000	
I_12_PNT_BC11 0.000	3.019	3.019	0.250	2.769	0.000	
I_12_PNT_BC12 0.000	2.087	2.087	0.250	1.837	0.000	
I_12_PNT_BC13 0.000	2.979	2.979	0.250	2.729	0.000	
I_12_PNT_BC14 0.000	0.729	0.729	0.250	0.479	0.000	
I_12_PNT_BC15 0.000	0.723	0.723	0.250	0.473	0.000	
I_12_PNT_BC16 0.000	1.041	1.041	0.250	0.791	0.000	
I_12_PNT_BC17 0.000	1.648	1.648	0.250	1.398	0.000	
I_12_PNT_BC18 0.000	2.741	2.741	0.250	2.491	0.000	
I_12_PNT_BC19 0.000	3.616	3.616	0.250	3.366	0.000	
I_12_PNT_BC20 0.000	4.190	4.190	0.250	3.940	0.000	
I_12_PNT_BC21 0.000	4.195	4.195	0.250	3.945	0.000	
I_12_PNT_BC22 0.000	3.517	3.517	0.250	3.267	0.000	
I_12_PNT_BC23 0.000	1.904	1.904	0.250	1.654	0.000	
I_12_PNT_BC24 0.000	1.754	1.754	0.250	1.504	0.000	
I_12_PNT_BC1B 0.000	0.766	0.766	0.250	0.516	0.000	
I_12_PNT_BC2B 0.000	0.895	0.895	0.250	0.645	0.000	



FCFLOC18 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	0.000	Fixed	Fixed	359.768	Fixed	Fixed

FCFLOC18 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_12_PNT_BC1	Y	0.000	0.038	0.038
	Z	512.500	512.516	0.016
	PR	512.500	512.516	0.016
	PA	90.000	90.004	0.004
I_12_PNT_BC2	Y	-132.645	-132.154	0.491
	Z	495.037	495.244	0.207
	PR	512.500	512.573	0.073
	PA	75.000	75.059	0.059

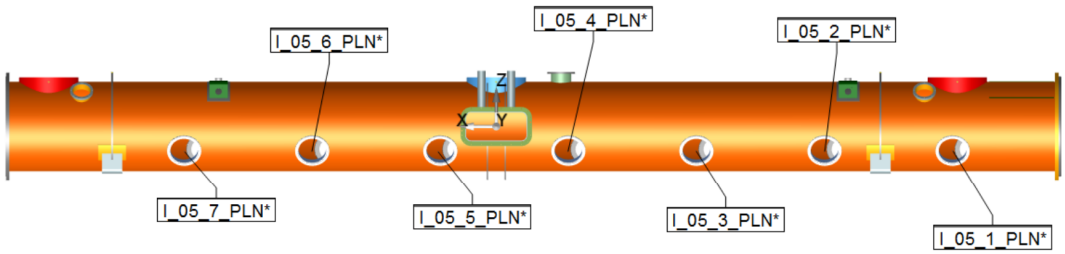
I_12_PNT_BC3	Y	-256.250	-255.729	0.521
	Z	443.838	443.810	-0.028
	PR	512.500	512.215	-0.285
	PA	60.000	60.049	0.049
I_12_PNT_BC4	Y	-362.392	-361.665	0.727
	Z	362.392	362.349	-0.043
	PR	512.500	511.956	-0.544
	PA	45.000	45.054	0.054
I_12_PNT_BC5	Y	-443.838	-442.857	0.981
	Z	256.250	256.194	-0.056
	PR	512.500	511.623	-0.877
	PA	30.000	30.049	0.049
I_12_PNT_BC6	Y	-495.037	-494.033	1.004
	Z	132.645	132.638	-0.007
	PR	512.500	511.529	-0.971
	PA	15.000	15.028	0.028
I_12_PNT_BC7	Y	-512.500	-511.402	1.098
	Z	0.000	0.129	0.129
	PR	512.500	511.402	-1.098
	PA	0.000	0.014	0.014
I_12_PNT_BC8	Y	-495.037	-493.830	1.207
	Z	-132.645	-132.340	0.304
	PR	512.500	511.255	-1.245
	PA	345.000	344.998	-0.002
I_12_PNT_BC9	Y	-443.838	-442.699	1.139
	Z	-256.250	-255.934	0.316
	PR	512.500	511.356	-1.144
	PA	330.000	329.967	-0.033
I_12_PNT_BC10	Y	-362.392	-361.048	1.344
	Z	-362.392	-361.689	0.703
	PR	512.500	511.052	-1.448
	PA	315.000	314.949	-0.051
I_12_PNT_BC11	Y	-256.250	-254.982	1.268
	Z	-443.838	-443.019	0.819
	PR	512.500	511.157	-1.343
	PA	300.000	299.923	-0.077
I_12_PNT_BC12	Y	-132.645	-131.738	0.906
	Z	-495.037	-494.520	0.517
	PR	512.500	511.767	-0.733
	PA	285.000	284.917	-0.083
I_12_PNT_BC13	Y	0.000	-1.471	-1.471
	Z	-512.500	-512.264	0.236
	PR	512.500	512.266	-0.234
	PA	270.000	270.164	0.164
I_12_PNT_BC14	Y	132.645	132.987	0.342
	Z	-495.037	-495.162	-0.125
	PR	512.500	512.710	0.210
	PA	255.000	254.967	-0.033

I_12_PNT_BC15	Y	256.250	256.280	0.030
	Z	-443.838	-444.198	-0.360
	PR	512.500	512.827	0.327
	PA	240.000	240.017	0.017
I_12_PNT_BC16	Y	362.392	361.988	-0.404
	Z	-362.392	-362.721	-0.329
	PR	512.500	512.447	-0.053
	PA	225.000	225.058	0.058
I_12_PNT_BC17	Y	443.838	443.047	-0.792
	Z	-256.250	-256.479	-0.229
	PR	512.500	511.929	-0.571
	PA	210.000	210.066	0.066
I_12_PNT_BC18	Y	495.037	493.709	-1.328
	Z	-132.645	-132.985	-0.340
	PR	512.500	511.306	-1.194
	PA	195.000	195.075	0.075
I_12_PNT_BC19	Y	512.500	510.772	-1.728
	Z	0.000	-0.532	-0.532
	PR	512.500	510.772	-1.728
	PA	180.000	180.060	0.060
I_12_PNT_BC20	Y	495.037	493.071	-1.966
	Z	132.645	131.920	-0.725
	PR	512.500	510.414	-2.086
	PA	165.000	165.021	0.021
I_12_PNT_BC21	Y	443.838	442.021	-1.817
	Z	256.250	255.201	-1.049
	PR	512.500	510.402	-2.098
	PA	150.000	150.000	0.000
I_12_PNT_BC22	Y	362.392	361.036	-1.357
	Z	362.392	361.274	-1.119
	PR	512.500	510.750	-1.750
	PA	135.000	134.981	-0.019
I_12_PNT_BC23	Y	256.250	255.502	-0.748
	Z	443.838	443.249	-0.589
	PR	512.500	511.616	-0.884
	PA	120.000	119.960	-0.040
I_12_PNT_BC24	Y	132.645	131.978	-0.666
	Z	495.037	494.467	-0.570
	PR	512.500	511.777	-0.723
	PA	105.000	104.944	-0.056
I_12_PNT_BC1B	Y	0.000	-0.350	-0.350
	Z	512.500	512.656	0.156
	PR	512.500	512.656	0.156
	PA	90.000	89.961	-0.039
I_12_PNT_BC2B	Y	-132.645	-132.460	0.184
	Z	495.037	495.445	0.408
	PR	512.500	512.846	0.346
	PA	75.000	75.032	0.032

========== F10023655-A (part of I-14) Flatness ==========

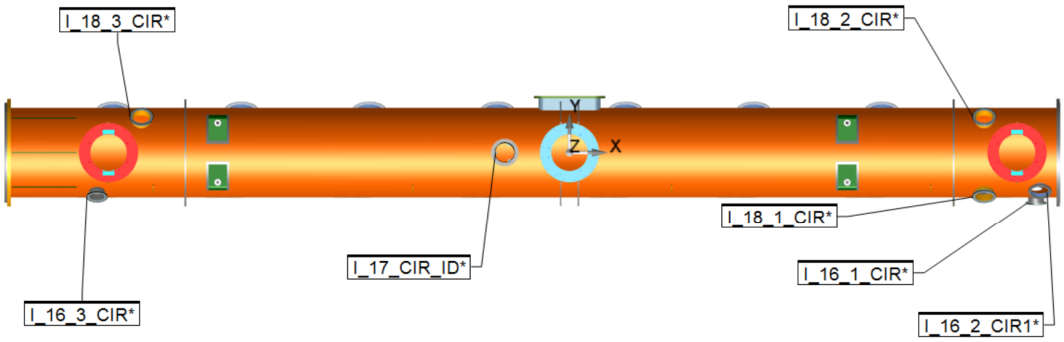
Weldment Instrumentation Ports were checked by hand with a parallel bar and shim stock.
All measured less than 0.3

========== F10026614-A I-5 Weldment Tuner Motor Ports ==========



⌖	MM	LOC70 - I_05_1_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	526.402	-3.598	2.000	2.000	1.598	
FL	0.000	0.668	0.668	0.300	0.000	0.368	
⌖	MM	LOC71 - I_05_2_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	527.389	-2.611	2.000	2.000	0.611	
FL	0.000	0.793	0.793	0.300	0.000	0.493	
⌖	MM	LOC72 - I_05_3_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	527.861	-2.139	2.000	2.000	0.139	
FL	0.000	0.664	0.664	0.300	0.000	0.364	
⌖	MM	LOC73 - I_05_4_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	527.990	-2.010	2.000	2.000	0.010	
FL	0.000	0.350	0.350	0.300	0.000	0.050	
⌖	MM	LOC74 - I_05_5_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	528.521	-1.479	2.000	2.000	0.000	
FL	0.000	0.839	0.839	0.300	0.000	0.539	
⌖	MM	LOC75 - I_05_6_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	530.000	529.842	-0.158	2.000	2.000	0.000	
FL	0.000	0.940	0.940	0.300	0.000	0.640	

MM	LOC76 - I_05_7_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	530.000	530.717	0.717	2.000	2.000	0.000
FL	0.000	1.656	1.656	0.300	0.000	1.356
MM	LOC77 - I_05_1_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4929.400	-4928.593	0.807	2.000	2.000	0.000
PA	210.000	210.008	0.008	1.000	1.000	0.000
D	370.002	370.738	0.736	2.000	2.000	0.000
RN	0.000	0.205	0.205	4.000	0.000	0.000
MM	LOC78 - I_05_2_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-3545.800	-3545.761	0.039	2.000	2.000	0.000
PA	210.000	210.059	0.059	1.000	1.000	0.000
D	370.002	370.765	0.763	2.000	2.000	0.000
RN	0.000	0.182	0.182	4.000	0.000	0.000
MM	LOC79 - I_05_3_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-2162.200	-2161.651	0.549	2.000	2.000	0.000
PA	210.000	210.060	0.060	1.000	1.000	0.000
D	370.002	370.968	0.966	2.000	2.000	0.000
RN	0.000	0.378	0.378	4.000	0.000	0.000
MM	LOC80 - I_05_4_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-778.600	-778.782	-0.182	2.000	2.000	0.000
PA	210.000	210.092	0.092	1.000	1.000	0.000
D	370.002	370.796	0.794	2.000	2.000	0.000
RN	0.000	0.305	0.305	4.000	0.000	0.000
MM	LOC81 - I_05_5_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	605.000	604.427	-0.573	2.000	2.000	0.000
PA	210.000	210.247	0.247	1.000	1.000	0.000
D	370.002	370.780	0.778	2.000	2.000	0.000
RN	0.000	0.445	0.445	4.000	0.000	0.000
MM	LOC82 - I_05_6_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	1988.600	1988.591	-0.009	2.000	2.000	0.000
PA	210.000	210.255	0.255	1.000	1.000	0.000
D	370.002	370.700	0.699	2.000	2.000	0.000
RN	0.000	0.202	0.202	4.000	0.000	0.000
MM	LOC83 - I_05_7_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	3372.200	3371.819	-0.381	2.000	2.000	0.000
PA	210.000	210.162	0.162	1.000	1.000	0.000
D	370.002	371.040	1.038	2.000	2.000	0.000
RN	0.000	0.387	0.387	4.000	0.000	0.000



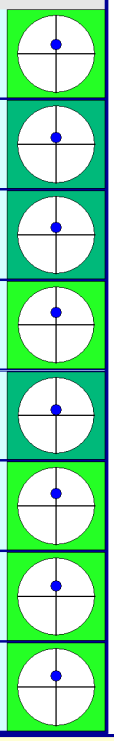
⊕	MM	LOC84 - I_16_1_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	551.900	549.958	-1.942	2.000	2.000	0.000	
FL	0.000	0.157	0.157	0.100	0.000	0.057	
⊕	MM	LOC85 - I_16_2_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	551.900	551.224	-0.676	2.000	2.000	0.000	
FL	0.000	0.188	0.188	0.100	0.000	0.088	
⊕	MM	LOC86 - I_16_3_PLN					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
PR	551.900	551.145	-0.755	2.000	2.000	0.000	
FL	0.000	0.091	0.091	0.100	0.000	0.000	
⊕	MM	LOC87 - I_16_1_CIR					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	5040.000	5038.744	-1.256	2.000	2.000	0.000	
PA	355.000	354.972	-0.028	1.000	1.000	0.000	
D	220.000	220.134	0.134	0.300	0.300	0.000	
RN	0.000	0.582	0.582	0.300	0.000	0.282	
⊕	MM	LOC88 - I_16_2_CIR1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	5040.000	5039.148	-0.852	2.000	2.000	0.000	
PA	320.000	319.985	-0.015	1.000	1.000	0.000	
D	220.000	219.925	-0.075	0.300	0.300	0.000	
RN	0.000	0.492	0.492	0.300	0.000	0.192	

⌖	MM	LOC89 - I_16_3_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-5105.000	-5104.359	0.641	2.000	2.000	0.000
PA	30.000	30.126	0.126	1.000	1.000	0.000
D	220.000	219.817	-0.183	0.300	0.300	0.000
RN	0.000	0.122	0.122	0.300	0.000	0.000

Rotation is unrestrained

FCFLOC19 Size	MM	8XØ10 2/2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_1_CIRBC1	10.000	10.033	0.033	2.000	2.000	0.000	2.033
I_16_1_CIRBC2	10.000	10.076	0.076	2.000	2.000	0.000	2.076
I_16_1_CIRBC3	10.000	10.071	0.071	2.000	2.000	0.000	2.071
I_16_1_CIRBC4	10.000	10.050	0.050	2.000	2.000	0.000	2.050
I_16_1_CIRBC5	10.000	10.234	0.234	2.000	2.000	0.000	2.234
I_16_1_CIRBC6	10.000	10.059	0.059	2.000	2.000	0.000	2.059
I_16_1_CIRBC7	10.000	10.084	0.084	2.000	2.000	0.000	2.084
I_16_1_CIRBC8	10.000	10.082	0.082	2.000	2.000	0.000	2.082

FCFLOC19 Position	MM	⌖ Ø.2 Ⓜ 61 62					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_1_CIRBC1	0.000	0.548	0.548	0.200		0.000	2.033
I_16_1_CIRBC2	0.000	0.396	0.396	0.200		0.000	2.076
I_16_1_CIRBC3	0.000	0.428	0.428	0.200		0.000	2.071
I_16_1_CIRBC4	0.000	0.712	0.712	0.200		0.000	2.050
I_16_1_CIRBC5	0.000	0.370	0.370	0.200		0.000	2.234
I_16_1_CIRBC6	0.000	0.721	0.721	0.200		0.000	2.059
I_16_1_CIRBC7	0.000	0.605	0.605	0.200		0.000	2.084
I_16_1_CIRBC8	0.000	0.665	0.665	0.200		0.000	2.082



FCFLOC19 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.655	Fixed

FCFLOC19 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_16_1_CIRBC1	PR	100.000	100.218	0.219
	PA	90.000	90.000	0.000
I_16_1_CIRBC2	PR	100.000	70.908	-29.092
	PA	135.000	90.000	-45.000
I_16_1_CIRBC3	PR	100.000	0.208	-99.792
	PA	180.000	90.000	-90.000
I_16_1_CIRBC4	PR	100.000	70.357	-29.643

	PA	225.000	270.000	45.000
I_16_1_CIRBC5	PR	100.000	99.834	-0.166
	PA	270.000	270.000	0.000
I_16_1_CIRBC6	PR	100.000	70.416	-29.584
	PA	315.000	270.000	-45.000
I_16_1_CIRBC7	PR	100.000	0.229	-99.771
	PA	0.000	90.000	90.000
I_16_1_CIRBC8	PR	100.000	70.909	-29.091
	PA	45.000	90.000	45.000

FCFLOC20 Size	MM	8XØ10 2/2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_2_CIRBC1	10.000	10.088	0.088	2.000	2.000	0.000	2.088
I_16_2_CIRBC2	10.000	10.063	0.063	2.000	2.000	0.000	2.063
I_16_2_CIRBC3	10.000	10.087	0.087	2.000	2.000	0.000	2.087
I_16_2_CIRBC4	10.000	10.113	0.113	2.000	2.000	0.000	2.113
I_16_2_CIRBC5	10.000	10.100	0.100	2.000	2.000	0.000	2.100
I_16_2_CIRBC6	10.000	10.079	0.079	2.000	2.000	0.000	2.079
I_16_2_CIRBC7	10.000	10.129	0.129	2.000	2.000	0.000	2.129
I_16_2_CIRBC8	10.000	10.070	0.070	2.000	2.000	0.000	2.070

FCFLOC20 Position	MM	⌖ Ø.2 Ⓜ 63 64					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_2_CIRBC1	0.000	0.772	0.772	0.200		0.000	2.088
I_16_2_CIRBC2	0.000	1.045	1.045	0.200		0.000	2.063
I_16_2_CIRBC3	0.000	0.996	0.996	0.200		0.000	2.087
I_16_2_CIRBC4	0.000	0.981	0.981	0.200		0.000	2.113
I_16_2_CIRBC5	0.000	0.729	0.729	0.200		0.000	2.100
I_16_2_CIRBC6	0.000	0.534	0.534	0.200		0.000	2.079
I_16_2_CIRBC7	0.000	0.508	0.508	0.200		0.000	2.129
I_16_2_CIRBC8	0.000	0.411	0.411	0.200		0.000	2.070

FCFLOC20 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.321	Fixed

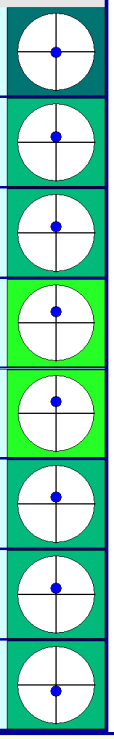
FCFLOC20 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_16_2_CIRBC1	PR	100.000	99.697	-0.303
	PA	90.000	90.000	0.000
I_16_2_CIRBC2	PR	70.711	70.341	-0.369
	PA	90.000	90.000	0.000
I_16_2_CIRBC3	PR	0.000	0.294	0.294

	PA	90.000	270.000	180.000
I_16_2_CIRBC4	PR	70.711	70.921	0.210
	PA	270.000	270.000	0.000
I_16_2_CIRBC5	PR	100.000	100.031	0.031
	PA	270.000	270.000	0.000
I_16_2_CIRBC6	PR	70.711	70.770	0.059
	PA	270.000	270.000	0.000
I_16_2_CIRBC7	PR	0.000	0.129	0.129
	PA	90.000	-90.000	-180.000
I_16_2_CIRBC8	PR	70.711	70.523	-0.188
	PA	90.000	90.000	0.000

FCFLOC21 Size	MM	8XØ10 2/2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_3_CIRBC1	10.000	10.130	0.130	2.000	2.000	0.000	2.130
I_16_3_CIRBC2	10.000	10.144	0.144	2.000	2.000	0.000	2.144
I_16_3_CIRBC3	10.000	10.073	0.073	2.000	2.000	0.000	2.073
I_16_3_CIRBC4	10.000	10.051	0.051	2.000	2.000	0.000	2.051
I_16_3_CIRBC5	10.000	10.137	0.137	2.000	2.000	0.000	2.137
I_16_3_CIRBC6	10.000	10.110	0.110	2.000	2.000	0.000	2.110
I_16_3_CIRBC7	10.000	10.152	0.152	2.000	2.000	0.000	2.152
I_16_3_CIRBC8	10.000	10.040	0.040	2.000	2.000	0.000	2.040

FCFLOC21 Position	MM	⌖ Ø.2 Ⓜ 65 66					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_16_3_CIRBC1	0.000	0.021	0.021	0.200		0.000	2.130
I_16_3_CIRBC2	0.000	0.345	0.345	0.200		0.000	2.144
I_16_3_CIRBC3	0.000	0.375	0.375	0.200		0.000	2.073
I_16_3_CIRBC4	0.000	0.639	0.639	0.200		0.000	2.051
I_16_3_CIRBC5	0.000	0.725	0.725	0.200		0.000	2.137
I_16_3_CIRBC6	0.000	0.388	0.388	0.200		0.000	2.110
I_16_3_CIRBC7	0.000	0.378	0.378	0.200		0.000	2.152
I_16_3_CIRBC8	0.000	0.361	0.361	0.200		0.000	2.040



FCFLOC21 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.162	Fixed

FCFLOC21 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_16_3_CIRBC1	PR	100.000	99.998	-0.002
	PA	90.000	90.000	0.000
I_16_3_CIRBC2	PR	70.711	70.871	0.160

	PA	90.000	90.000	0.000
I_16_3_CIRBC3	PR	0.000	0.149	0.149
	PA	86.609	90.000	3.391
I_16_3_CIRBC4	PR	70.711	70.409	-0.302
	PA	270.000	270.000	0.000
I_16_3_CIRBC5	PR	100.000	99.642	-0.358
	PA	270.000	270.000	0.000
I_16_3_CIRBC6	PR	70.711	70.519	-0.192
	PA	270.000	270.000	0.000
I_16_3_CIRBC7	PR	0.000	0.119	0.119
	PA	73.609	90.000	16.391
I_16_3_CIRBC8	PR	70.711	70.660	-0.050
	PA	90.000	90.000	0.000

========== F10030301-A I-18 Flange Instrumentation ==========

⊞	MM	LOC90 - I_18_1_PLN				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	551.950	548.253	-3.697	2.000	2.000	1.697
FL	0.000	0.272	0.272	0.100	0.000	0.172

⊞	MM	LOC91 - I_18_2_PLN				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	551.978	548.917	-3.061	2.000	2.000	1.061
FL	0.000	0.294	0.294	0.100	0.000	0.194

⊞	MM	LOC92 - I_18_3_PLN				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	551.978	550.076	-1.902	2.000	2.000	0.000
FL	0.000	0.208	0.208	0.100	0.000	0.108

⊞	MM	LOC93 - I_18_1_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4480.000	4478.741	-1.259	2.000	2.000	0.000
PA	30.000	30.078	0.078	1.000	1.000	0.000
D	250.000	249.552	-0.448	0.300	0.300	0.148
RN	0.000	0.294	0.294	0.600	0.000	0.000

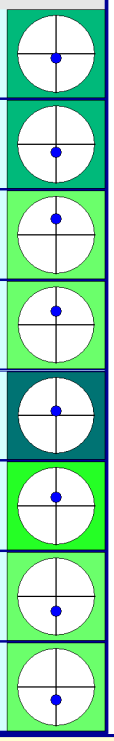
⊞	MM	LOC94 - I_18_2_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4480.000	4478.698	-1.302	2.000	2.000	0.000
PA	135.000	135.306	0.306	1.000	1.000	0.000
D	250.000	249.249	-0.751	0.300	0.300	0.451
RN	0.000	0.229	0.229	0.600	0.000	0.000

⊞	MM	LOC95 - I_18_3_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4625.000	-4624.528	0.472	2.000	2.000	0.000
PA	135.000	135.086	0.086	1.000	1.000	0.000
D	250.000	249.468	-0.532	0.300	0.300	0.232
RN	0.000	0.209	0.209	0.600	0.000	0.000

Rotation is unrestrained

FCFLOC22 Size	MM	8XØ10 2/2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_1_CIRBC1	10.000	10.054	0.054	2.000	2.000	0.000	2.054
I_18_1_CIRBC2	10.000	10.034	0.034	2.000	2.000	0.000	2.034
I_18_1_CIRBC3	10.000	10.056	0.056	2.000	2.000	0.000	2.056
I_18_1_CIRBC4	10.000	10.104	0.104	2.000	2.000	0.000	2.104
I_18_1_CIRBC5	10.000	10.234	0.234	2.000	2.000	0.000	2.234
I_18_1_CIRBC6	10.000	10.088	0.088	2.000	2.000	0.000	2.088
I_18_1_CIRBC7	10.000	10.089	0.089	2.000	2.000	0.000	2.089
I_18_1_CIRBC8	10.000	10.090	0.090	2.000	2.000	0.000	2.090

FCFLOC22 Position	MM	⌖ Ø.2 Ⓜ 81 82					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_1_CIRBC1	0.000	0.253	0.253	0.200		0.000	2.054
I_18_1_CIRBC2	0.000	0.458	0.458	0.200		0.000	2.034
I_18_1_CIRBC3	0.000	0.919	0.919	0.200		0.000	2.056
I_18_1_CIRBC4	0.000	0.816	0.816	0.200		0.000	2.104
I_18_1_CIRBC5	0.000	0.257	0.257	0.200		0.000	2.234
I_18_1_CIRBC6	0.000	0.525	0.525	0.200		0.000	2.088
I_18_1_CIRBC7	0.000	0.874	0.874	0.200		0.000	2.089
I_18_1_CIRBC8	0.000	0.770	0.770	0.200		0.000	2.090



FCFLOC22 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.561	Fixed

FCFLOC22 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_18_1_CIRBC1	PR	115.000	114.897	-0.103
	PA	90.000	90.000	0.000
I_18_1_CIRBC2	PR	81.317	81.290	-0.027
	PA	90.000	90.000	0.000
I_18_1_CIRBC3	PR	0.000	0.000	0.000
	PA	326.317	90.000	-236.317
I_18_1_CIRBC4	PR	81.317	81.196	-0.121
	PA	270.000	270.000	0.000
I_18_1_CIRBC5	PR	115.000	114.926	-0.074
	PA	270.000	270.000	0.000
I_18_1_CIRBC6	PR	81.317	81.188	-0.129
	PA	270.000	270.000	0.000
I_18_1_CIRBC7	PR	0.000	0.064	0.064
	PA	228.397	270.000	41.603

I_18_1_CIRBC8	PR	81.317	81.259	-0.058
	PA	90.000	90.000	0.000

FCFLOC23 Size	MM	8XØ10 2/2

Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_2_CIRBC_1	10.000	10.132	0.132	2.000	2.000	0.000	2.132
I_18_2_CIRBC_2	10.000	10.120	0.120	2.000	2.000	0.000	2.120
I_18_2_CIRBC_3	10.000	10.017	0.017	2.000	2.000	0.000	2.017
I_18_2_CIRBC_4	10.000	10.018	0.018	2.000	2.000	0.000	2.018
I_18_2_CIRBC_5	10.000	10.213	0.213	2.000	2.000	0.000	2.213
I_18_2_CIRBC_6	10.000	10.160	0.160	2.000	2.000	0.000	2.160
I_18_2_CIRBC_7	10.000	10.068	0.068	2.000	2.000	0.000	2.068
I_18_2_CIRBC_8	10.000	10.139	0.139	2.000	2.000	0.000	2.139

FCFLOC23 Position	MM	⌖ Ø.2 Ⓜ 83 z,u,v 84 x,y

Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_2_CIRBC_1	0.000	1.209	1.209	0.200		0.000	2.132
I_18_2_CIRBC_2	0.000	1.183	1.183	0.200		0.000	2.120
I_18_2_CIRBC_3	0.000	0.948	0.948	0.200		0.000	2.017
I_18_2_CIRBC_4	0.000	1.121	1.121	0.200		0.000	2.018
I_18_2_CIRBC_5	0.000	0.383	0.383	0.200		0.000	2.213
I_18_2_CIRBC_6	0.000	0.745	0.745	0.200		0.000	2.160
I_18_2_CIRBC_7	0.000	0.752	0.752	0.200		0.000	2.068
I_18_2_CIRBC_8	0.000	1.092	1.092	0.200		0.000	2.139

FCFLOC23 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	Fixed	0.132

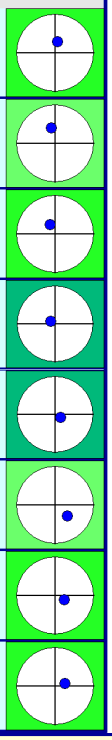
FCFLOC23 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
Set	PR	0.000	0.140	0.140
	PA	90.000	151.703	61.703
I_18_2_CIRBC_1	PR	115.000	114.492	-0.508
	PA	270.000	269.836	-0.164
I_18_2_CIRBC_2	PR	115.000	114.450	-0.550
	PA	315.000	314.892	-0.108
I_18_2_CIRBC_3	PR	115.000	114.576	-0.424
	PA	360.000	359.895	-0.105
I_18_2_CIRBC_4	PR	115.000	114.439	-0.561
	PA	45.000	45.000	0.000
I_18_2_CIRBC_5	PR	115.000	114.810	-0.190
	PA	90.000	90.012	0.012

I_18_2_CIRBC_6	PR	115.000	114.640	-0.360
	PA	135.000	134.953	-0.047
I_18_2_CIRBC_7	PR	115.000	114.709	-0.291
	PA	180.000	179.881	-0.119
I_18_2_CIRBC_8	PR	115.000	114.541	-0.459
	PA	225.000	224.853	-0.147

FCFLOC24 Size	MM	8XØ10 2/2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_3_CIRBC_1	10.000	10.069	0.069	2.000	2.000	0.000	2.069
I_18_3_CIRBC_2	10.000	10.061	0.061	2.000	2.000	0.000	2.061
I_18_3_CIRBC_3	10.000	10.058	0.058	2.000	2.000	0.000	2.058
I_18_3_CIRBC_4	10.000	10.060	0.060	2.000	2.000	0.000	2.060
I_18_3_CIRBC_5	10.000	10.108	0.108	2.000	2.000	0.000	2.108
I_18_3_CIRBC_6	10.000	10.093	0.093	2.000	2.000	0.000	2.093
I_18_3_CIRBC_7	10.000	10.181	0.181	2.000	2.000	0.000	2.181
I_18_3_CIRBC_8	10.000	10.103	0.103	2.000	2.000	0.000	2.103

FCFLOC24 Position	MM	⌖ Ø.2 Ⓜ 85 z,u,v 86 x,y					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_18_3_CIRBC_1	0.000	0.639	0.639	0.200		0.000	2.069
I_18_3_CIRBC_2	0.000	0.941	0.941	0.200		0.000	2.061
I_18_3_CIRBC_3	0.000	0.616	0.616	0.200		0.000	2.058
I_18_3_CIRBC_4	0.000	0.297	0.297	0.200		0.000	2.060
I_18_3_CIRBC_5	0.000	0.375	0.375	0.200		0.000	2.108
I_18_3_CIRBC_6	0.000	0.973	0.973	0.200		0.000	2.093
I_18_3_CIRBC_7	0.000	0.631	0.631	0.200		0.000	2.181
I_18_3_CIRBC_8	0.000	0.606	0.606	0.200		0.000	2.103



FCFLOC24 Datum Shift

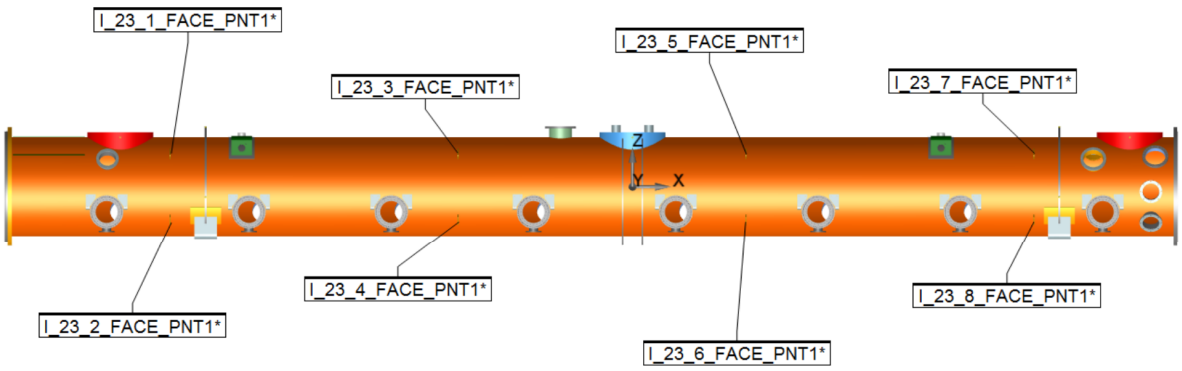
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	Fixed	359.470

FCFLOC24 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
Set	PR	0.000	0.128	0.128
	PA	132.725	39.043	-93.682
I_18_3_CIRBC_1	PR	115.000	114.688	-0.312
	PA	270.000	270.034	0.034
I_18_3_CIRBC_2	PR	115.000	114.597	-0.403
	PA	315.000	315.121	0.121
I_18_3_CIRBC_3	PR	115.000	114.861	-0.139
	PA	0.000	0.137	0.137

I_18_3_CIRBC_4	PR	115.000	114.953	-0.047
	PA	45.000	45.070	0.070
I_18_3_CIRBC_5	PR	115.000	114.911	-0.089
	PA	90.000	89.918	-0.082
I_18_3_CIRBC_6	PR	115.000	114.515	-0.485
	PA	135.000	134.983	-0.017
I_18_3_CIRBC_7	PR	115.000	114.714	-0.286
	PA	180.000	180.067	0.067
I_18_3_CIRBC_8	PR	115.000	114.740	-0.260
	PA	225.000	225.077	0.077

========== F10027597-A I-23 Plate Support ==========

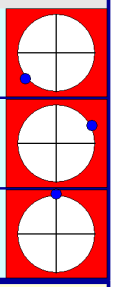


⌖	MM	LOC96 - I_23_1_FACE_PNT1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4492.062	-4488.219	3.843	2.000	2.000	1.843
⌖	MM	LOC97 - I_23_2_FACE_PNT1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4492.063	-4489.965	2.097	2.000	2.000	0.097
⌖	MM	LOC98 - I_23_3_FACE_PNT1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-1692.063	-1703.480	-11.417	2.000	2.000	9.417
⌖	MM	LOC99 - I_23_4_FACE_PNT1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-1692.063	-1692.388	-0.326	2.000	2.000	0.000
⌖	MM	LOC100 - I_23_5_FACE_PNT1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	1100.001	1101.215	1.214	2.000	2.000	0.000

MM	LOC101 - I_23_6_FACE_PNT1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	1100.001	1096.638	-3.362	2.000	2.000	1.362
MM	LOC102 - I_23_7_FACE_PNT1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	3900.001	3899.542	-0.458	2.000	2.000	0.000
MM	LOC103 - I_23_8_FACE_PNT1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	3900.001	3898.133	-1.868	2.000	2.000	0.000
MM	LOC104 - I_23_1_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	511.007	1.004	1.000	1.000	0.004
PA	40.000	39.122	-0.878	1.000	1.000	0.000
MM	LOC105 - I_23_2_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	511.256	1.253	2.000	2.000	0.000
PA	320.000	318.503	-1.497	1.000	1.000	0.497
MM	LOC106 - I_23_3_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	507.619	-2.384	2.000	2.000	0.384
PA	40.000	39.552	-0.448	1.000	1.000	0.000
MM	LOC107 - I_23_4_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	510.829	0.825	2.000	2.000	0.000
PA	320.000	318.378	-1.622	1.000	1.000	0.622
MM	LOC108 - I_23_5_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	504.627	-5.377	2.000	2.000	3.377
PA	40.000	38.259	-1.741	1.000	1.000	0.741
MM	LOC109 - I_23_6_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	511.157	1.154	2.000	2.000	0.000
PA	320.000	318.805	-1.195	1.000	1.000	0.195
MM	LOC110 - I_23_7_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	507.410	-2.593	2.000	2.000	0.593
PA	40.000	38.988	-1.012	1.000	1.000	0.012
MM	LOC111 - I_23_8_PNT2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	510.003	511.489	1.486	2.000	2.000	0.000
PA	320.000	318.995	-1.005	1.000	1.000	0.005

Position of Plate Support holes to themselves.
Holes have a .2mm to .4mm taper and measure near their max of 8.6

FCFLOC28 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_1_PNT1	0.000	0.259	0.259	0.250		0.009	0.000
I_23_1_PNT2	0.000	0.259	0.259	0.250		0.009	0.000
I_23_1_PNT3	0.000	0.259	0.259	0.250		0.009	0.000



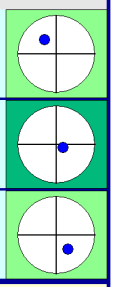
FCFLOC28 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	-4.204	-3.451	359.708	Fixed	Fixed

FCFLOC28 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_23_1_PNT1	Y	-368.187	-368.286	-0.099
	Z	354.635	354.552	-0.083
I_23_1_PNT2	Y	-390.685	-390.569	0.116
	Z	327.824	327.881	0.057
I_23_1_PNT3	Y	-413.182	-413.183	-0.001
	Z	301.012	301.141	0.129

FCFLOC29 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_2_PNT1	0.000	0.120	0.120	0.250		0.000	0.000
I_23_2_PNT2	0.000	0.049	0.049	0.250		0.000	0.000
I_23_2_PNT3	0.000	0.120	0.120	0.250		0.000	0.000



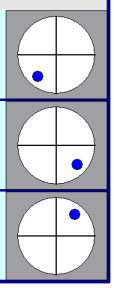
FCFLOC29 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	2.359	-4.611	359.069	Fixed	Fixed

FCFLOC29 Summary FIT TO DATUMS=ON

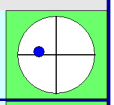
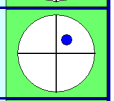
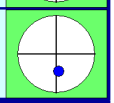
Feature	AX	NOMINAL	MEAS	DEV
I_23_2_PNT1	Y	-413.182	-413.221	-0.039
	Z	-301.012	-300.966	0.046
I_23_2_PNT2	Y	-390.685	-390.663	0.022
	Z	-327.824	-327.833	-0.010
I_23_2_PNT3	Y	-368.187	-368.149	0.039
	Z	-354.635	-354.681	-0.046

FCFLOC30 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_3_PNT1	0.000	0.184	0.184	0.250		0.000	0.000
I_23_3_PNT2	0.000	0.184	0.184	0.250		0.000	0.000
I_23_3_PNT3	0.000	0.184	0.184	0.250		0.000	0.000



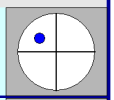
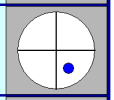
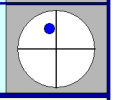
FCFLOC30 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	-0.963	-4.738	0.032	Fixed	Fixed

FCFLOC30 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_23_3_PNT1	Y	-368.187	-368.246	-0.059
	Z	354.635	354.564	-0.071
I_23_3_PNT2	Y	-390.685	-390.617	0.068
	Z	327.824	327.763	-0.061
I_23_3_PNT3	Y	-413.182	-413.123	0.059
	Z	301.012	301.083	0.071

FCFLOC31 Position	MM	⌖ Ø0.25 YZ						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_23_4_PNT1	0.000	0.109	0.109	0.250		0.000	0.000	
I_23_4_PNT2	0.000	0.109	0.109	0.250		0.000	0.000	
I_23_4_PNT3	0.000	0.109	0.109	0.250		0.000	0.000	

FCFLOC31 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	3.775	-5.638	359.132	Fixed	Fixed

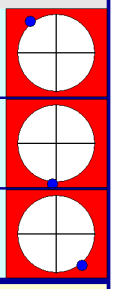
FCFLOC31 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_23_4_PNT1	Y	-413.182	-413.236	-0.054
	Z	-301.012	-301.002	0.010
I_23_4_PNT2	Y	-390.685	-390.652	0.034
	Z	-327.824	-327.780	0.043
I_23_4_PNT3	Y	-368.187	-368.179	0.008
	Z	-354.635	-354.689	-0.054

FCFLOC32 Position	MM	⌖ Ø0.25 YZ						
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
I_23_5_PNT1	0.000	0.141	0.141	0.250		0.000	0.000	
I_23_5_PNT2	0.000	0.141	0.141	0.250		0.000	0.000	
I_23_5_PNT3	0.000	0.141	0.141	0.250		0.000	0.000	

FCFLOC32 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	-6.569	-16.447	0.170	Fixed	Fixed

FCFLOC32 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_23_5_PNT1	Y	-368.187	-368.242	-0.055
	Z	354.635	354.679	0.044
I_23_5_PNT2	Y	-390.685	-390.646	0.039
	Z	327.824	327.766	-0.058
I_23_5_PNT3	Y	-413.182	-413.205	-0.023
	Z	301.012	301.079	0.067

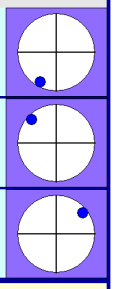
FCFLOC33 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_6_PNT1	0.000	0.383	0.383	0.250		0.133	0.000
I_23_6_PNT2	0.000	0.380	0.380	0.250		0.130	0.000
I_23_6_PNT3	0.000	0.383	0.383	0.250		0.133	0.000



FCFLOC33 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	1.963	-3.815	359.287	Fixed	Fixed

FCFLOC33 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_23_6_PNT1	Y	-413.182	-413.305	-0.123
	Z	-301.012	-300.865	0.147
I_23_6_PNT2	Y	-390.685	-390.703	-0.017
	Z	-327.824	-328.013	-0.189
I_23_6_PNT3	Y	-368.187	-368.064	0.123
	Z	-354.635	-354.781	-0.147

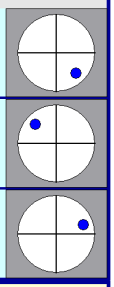
FCFLOC34 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_7_PNT1	0.000	0.217	0.217	0.250		0.000	0.000
I_23_7_PNT2	0.000	0.217	0.217	0.250		0.000	0.000
I_23_7_PNT3	0.000	0.217	0.217	0.250		0.000	0.000



FCFLOC34 Datum Shift						
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	-4.124	-9.240	0.085	Fixed	Fixed

FCFLOC34 Summary FIT TO DATUMS=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_23_7_PNT1	Y	-368.187	-368.239	-0.052
	Z	354.635	354.540	-0.095
I_23_7_PNT2	Y	-390.685	-390.764	-0.079
	Z	327.824	327.898	0.074
I_23_7_PNT3	Y	-413.182	-413.097	0.085
	Z	301.012	301.080	0.068

FCFLOC35 Position	MM	⌖ Ø0.25 YZ					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_23_8_PNT1	0.000	0.182	0.182	0.250		0.000	0.000
I_23_8_PNT2	0.000	0.182	0.182	0.250		0.000	0.000
I_23_8_PNT3	0.000	0.182	0.182	0.250		0.000	0.000



FCFLOC35 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	-0.545	-1.621	359.082	Fixed	Fixed

FCFLOC35 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_23_8_PNT1	Y	-413.182	-413.119	0.063
	Z	-301.012	-301.078	-0.066
I_23_8_PNT2	Y	-390.685	-390.752	-0.067
	Z	-327.824	-327.762	0.062
I_23_8_PNT3	Y	-368.187	-368.101	0.086
	Z	-354.635	-354.605	0.029

========== F10030268-A I-24 Socket Ball Tooling ===========

Measurements are for reference only. Most sockets will not accept a 1/4" pin nest.

Sockets were welded in plane after machinin & were distorted.

⌖	MM	LOC112 - I_24_1_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4980.000	-4979.066	0.934	2.000	2.000	0.000
Y	-332.700	-359.521	-26.821	2.000	2.000	24.821
Z	480.000	475.830	-4.170	2.000	2.000	2.170

⌖	MM	LOC113 - I_24_2_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4980.001	-4980.386	-0.385	2.000	2.000	0.000
Y	332.700	357.787	25.087	2.000	2.000	23.087
Z	480.000	476.229	-3.771	2.000	2.000	1.771

⌖	MM	LOC114 - I_24_3_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4150.000	-4151.351	-1.351	2.000	2.000	0.000
Y	-604.512	-603.887	0.625	2.000	2.000	0.000
Z	-105.661	-105.366	0.295	2.000	2.000	0.000
PA	350.000	350.103	0.103	1.000	1.000	0.000

⌖	MM	LOC115 - I_24_4_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-4150.000	-4150.393	-0.393	2.000	2.000	0.000
Y	0.000	8.638	8.638	2.000	2.000	6.638
Z	605.000	612.096	7.096	2.000	2.000	5.096
PA	90.000	90.808	0.808	1.000	1.000	0.000

⌖	MM	LOC116 - I_24_5_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-4.842	-4.842	2.000	2.000	2.842
Y	-332.700	-358.902	-26.202	2.000	2.000	24.202
Z	480.000	473.062	-6.938	2.000	2.000	4.938

⌖	MM	LOC117 - I_24_6_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-0.001	0.018	0.019	2.000	2.000	0.000
Y	332.700	333.409	0.709	2.000	2.000	0.000
Z	480.000	480.072	0.072	2.000	2.000	0.000

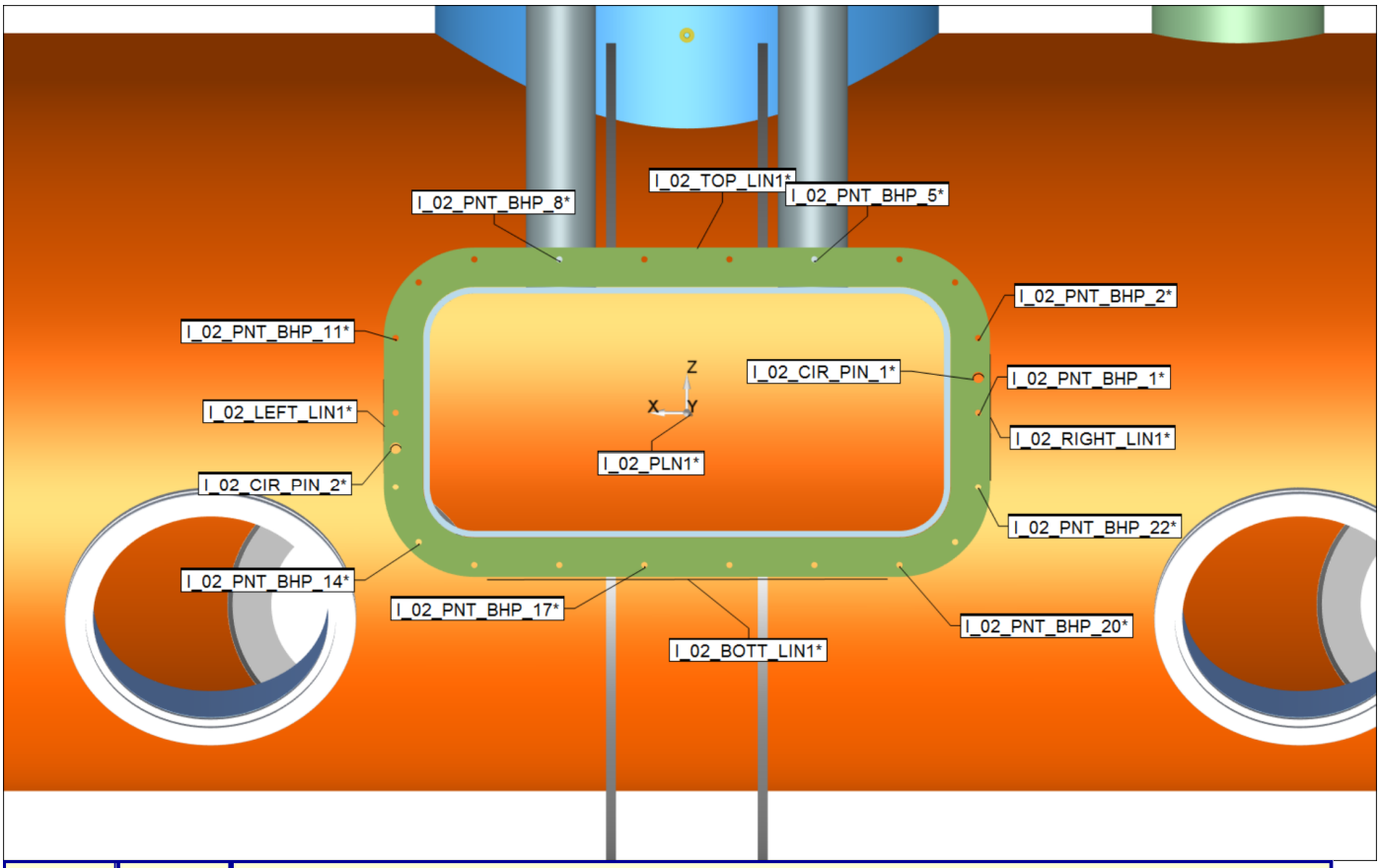
⌖	MM	LOC118 - I_24_7_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4150.000	4150.352	0.352	2.000	2.000	0.000
Y	0.000	-0.657	-0.657	2.000	2.000	0.000
Z	609.000	609.399	0.399	2.000	2.000	0.000
PA	90.000	89.938	-0.062	1.000	1.000	0.000

⌖	MM	LOC119 - I_24_8_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4150.000	4150.933	0.933	2.000	2.000	0.000
Y	-603.664	-603.676	-0.012	2.000	2.000	0.000
Z	-104.020	-103.642	0.378	2.000	2.000	0.000
PA	350.000	350.258	0.258	1.000	1.000	0.000

⌖	MM	LOC120 - I_24_9_PNT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4835.000	4835.350	0.350	2.000	2.000	0.000
Y	-356.000	-356.383	-0.383	2.000	2.000	0.000
Z	480.000	473.995	-6.005	2.000	2.000	4.005

⌖	MM	LOC121 - I_24_10_PNT[2]				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4834.999	4834.062	-0.937	2.000	2.000	0.000
Y	332.700	361.746	29.046	2.000	2.000	27.046
Z	480.000	473.442	-6.558	2.000	2.000	4.558

========== F10026618-B I-2 Side Port ==========



	MM	LOC122 - I_02_PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	610.000	608.093	-1.907	2.000	2.000	0.000
FL	0.000	0.164	0.164	0.100	0.000	0.064

2 constructed center lines from outside of side flange.

	MM	LOC123 - I_02_OD_Z_LINC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-2.471	-2.471	2.000	2.000	0.471

	MM	LOC124 - I_02_OD_X_LINC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.536	-0.536	2.000	2.000	0.000

	MM	DIST11 - I_02_TOP_LIN1 TO I_02_BOTT_LIN1 (ZAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	420.000	422.280	2.280	0.300	0.300	1.980

	MM	DIST12 - I_02_UP_ID__LIN1 TO I_02_DOWN_ID__LIN1 (ZAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	303.126	305.633	2.507	0.300	0.300	2.207

	MM	DIST13 - I_02_LEFT_LIN1 TO I_02_RIGHT_LIN1 (XAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	770.000	770.016	0.016	0.300	0.300	0.000

	MM	DIST14 - I_02_LEFT_ID__LIN1 TO I_02_RIGHT_ID__LIN1 (XAXIS)				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	653.126	652.935	-0.191	0.300	0.300	0.000

Dowel holes will accept a .561+ pin gage,
but not a .562+ pin gage. Diameter is good.

FCFLOC26 Size	MM	2XØ14.269 0.0065/0.0065					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_02_CIR_PIN_1	14.269	14.278	0.009	0.006	0.006	0.002	0.013
I_02_CIR_PIN_2	14.269	14.251	-0.018	0.006	0.006	0.011	0.000

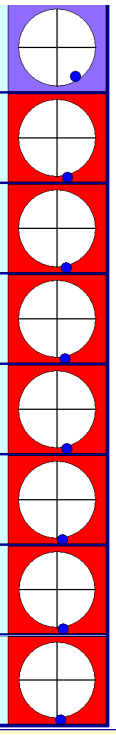
FCFLOC26 Position	MM	⌖ Ø.02 Ⓜ S1 S2 S3					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_02_CIR_PIN_1	0.000	1.632	1.632	0.020		1.599	0.013
I_02_CIR_PIN_2	0.000	0.266	0.266	0.020		0.246	0.000

FCFLOC26 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
I_02_CIR_PIN_1	X	-370.000	-370.097	-0.097
	Z	45.000	44.189	-0.811
I_02_CIR_PIN_2	X	370.000	369.909	-0.091
	Z	-45.000	-45.099	-0.099

FCFLOC27 Position	MM	⌖ Ø.25 S1 S2 S3					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_02_PNT_BHP_1	0.000	1.605	1.605	0.250		1.355	0.000
I_02_PNT_BHP_2	0.000	1.635	1.635	0.250		1.385	0.000
I_02_PNT_BHP_3	0.000	1.610	1.610	0.250		1.360	0.000
I_02_PNT_BHP_4	0.000	1.518	1.518	0.250		1.268	0.000
I_02_PNT_BHP_5	0.000	1.293	1.293	0.250		1.043	0.000
I_02_PNT_BHP_6	0.000	1.130	1.130	0.250		0.880	0.000
I_02_PNT_BHP_7	0.000	1.008	1.008	0.250		0.758	0.000
I_02_PNT_BHP_8	0.000	0.774	0.774	0.250		0.524	0.000
I_02_PNT_BHP_9	0.000	0.613	0.613	0.250		0.363	0.000
I_02_PNT_BHP_10	0.000	0.655	0.655	0.250		0.405	0.000
I_02_PNT_BHP_11	0.000	0.686	0.686	0.250		0.436	0.000
I_02_PNT_BHP_12	0.000	0.134	0.134	0.250		0.000	0.000
I_02_PNT_BHP_13	0.000	0.146	0.146	0.250		0.000	0.000
I_02_PNT_BHP_14	0.000	0.201	0.201	0.250		0.000	0.000

I_02_PNT_BHP_15 0.000	0.222	0.222	0.250	0.000	0.000	
I_02_PNT_BHP_16 0.000	0.561	0.561	0.250	0.311	0.000	
I_02_PNT_BHP_17 0.000	0.866	0.866	0.250	0.616	0.000	
I_02_PNT_BHP_18 0.000	1.041	1.041	0.250	0.791	0.000	
I_02_PNT_BHP_19 0.000	1.242	1.242	0.250	0.992	0.000	
I_02_PNT_BHP_20 0.000	1.476	1.476	0.250	1.226	0.000	
I_02_PNT_BHP_21 0.000	1.784	1.784	0.250	1.534	0.000	
I_02_PNT_BHP_22 0.000	1.827	1.827	0.250	1.577	0.000	

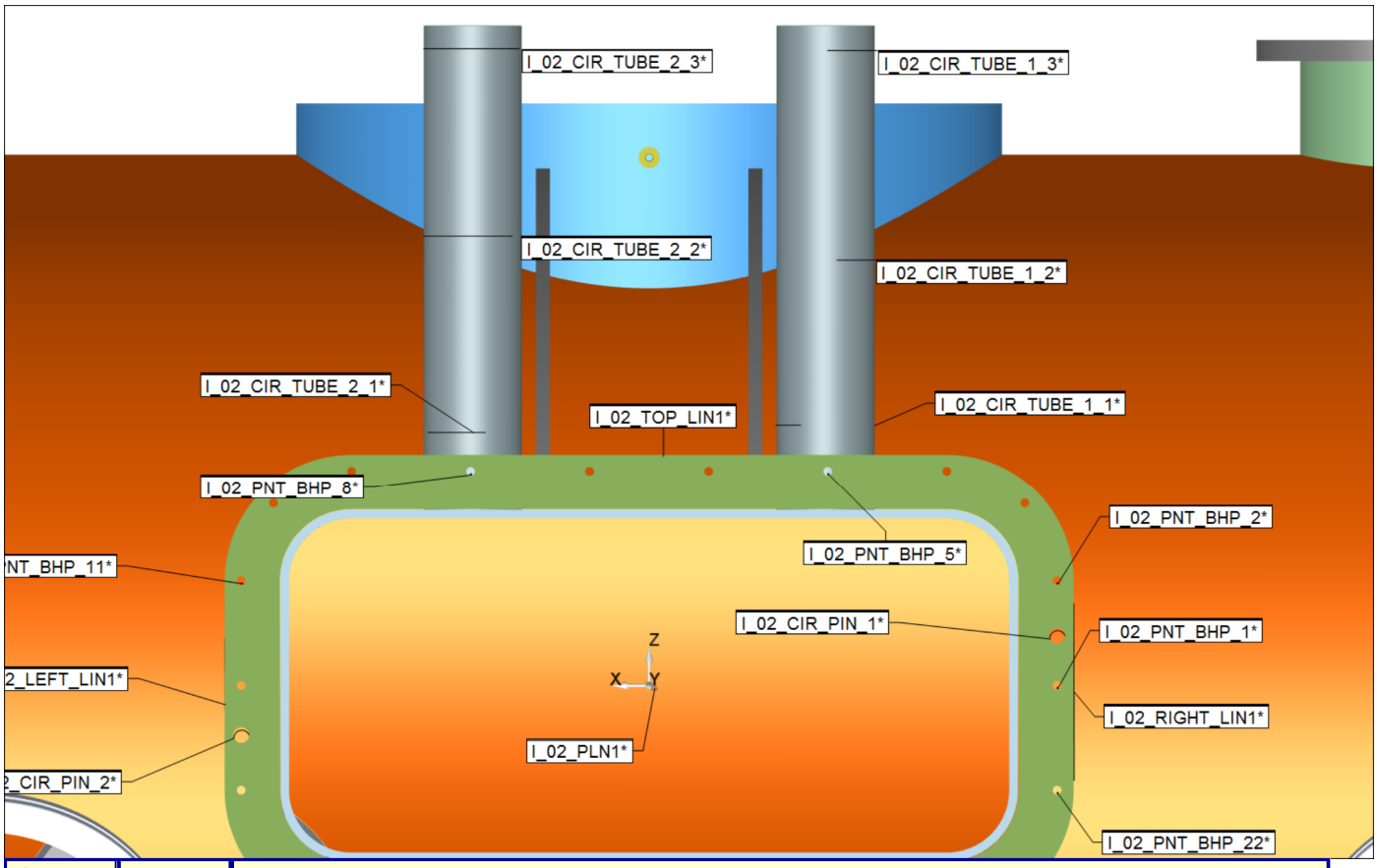


FCFLOC27 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_02_PNT_BHP_1	X	-370.000	-370.005	-0.005
	Z	0.000	-0.803	-0.803
I_02_PNT_BHP_2	X	-370.000	-370.066	-0.066
	Z	95.000	94.185	-0.815
I_02_PNT_BHP_3	X	-341.000	-341.185	-0.185
	Z	166.000	165.216	-0.784
I_02_PNT_BHP_4	X	-270.000	-270.274	-0.274
	Z	195.000	194.292	-0.708
I_02_PNT_BHP_5	X	-162.000	-162.262	-0.262
	Z	195.000	194.409	-0.591
I_02_PNT_BHP_6	X	-54.000	-54.255	-0.255
	Z	195.000	194.496	-0.504
I_02_PNT_BHP_7	X	54.000	53.748	-0.252
	Z	195.000	194.563	-0.437
I_02_PNT_BHP_8	X	162.000	161.715	-0.285
	Z	195.000	194.738	-0.262
I_02_PNT_BHP_9	X	270.000	269.763	-0.237
	Z	195.000	194.806	-0.194
I_02_PNT_BHP_10	X	341.000	340.708	-0.292
	Z	166.000	165.852	-0.148
I_02_PNT_BHP_11	X	370.000	369.662	-0.338
	Z	95.000	94.943	-0.057
I_02_PNT_BHP_12	X	370.000	369.961	-0.039
	Z	0.000	-0.055	-0.055
I_02_PNT_BHP_13	X	370.000	369.996	-0.004
	Z	-95.000	-95.073	-0.073
I_02_PNT_BHP_14	X	341.000	341.097	0.097
	Z	-166.000	-166.024	-0.024
I_02_PNT_BHP_15	X	270.000	270.059	0.059

	Z	-195.000	-195.094	-0.094
I_02_PNT_BHP_16	X	162.000	162.070	0.070
	Z	-195.000	-195.271	-0.271
I_02_PNT_BHP_17	X	54.000	54.097	0.097
	Z	-195.000	-195.422	-0.422
I_02_PNT_BHP_18	X	-54.000	-53.899	0.101
	Z	-195.000	-195.511	-0.511
I_02_PNT_BHP_19	X	-162.000	-161.848	0.152
	Z	-195.000	-195.602	-0.602
I_02_PNT_BHP_20	X	-270.000	-269.903	0.097
	Z	-195.000	-195.731	-0.731
I_02_PNT_BHP_21	X	-341.000	-340.864	0.136
	Z	-166.000	-166.882	-0.882
I_02_PNT_BHP_22	X	-370.000	-369.916	0.084
	Z	-95.000	-95.909	-0.909

========== F10026618-B Item 3 Pipe Locations on Side Port ==========



中	MM	LOC134 - I_02_CIR_TUBE_1_1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	
X	-160.000	-159.408	0.592	1.000	1.000	0.000	
Y	520.000	519.358	-0.642	1.000	1.000	0.000	
Z	232.264	237.042	4.778	10.000	10.000	0.000	
D	88.900	89.339	0.439	0.300	0.300	0.139	
RN	0.000	0.125	0.125	0.600	0.000	0.000	

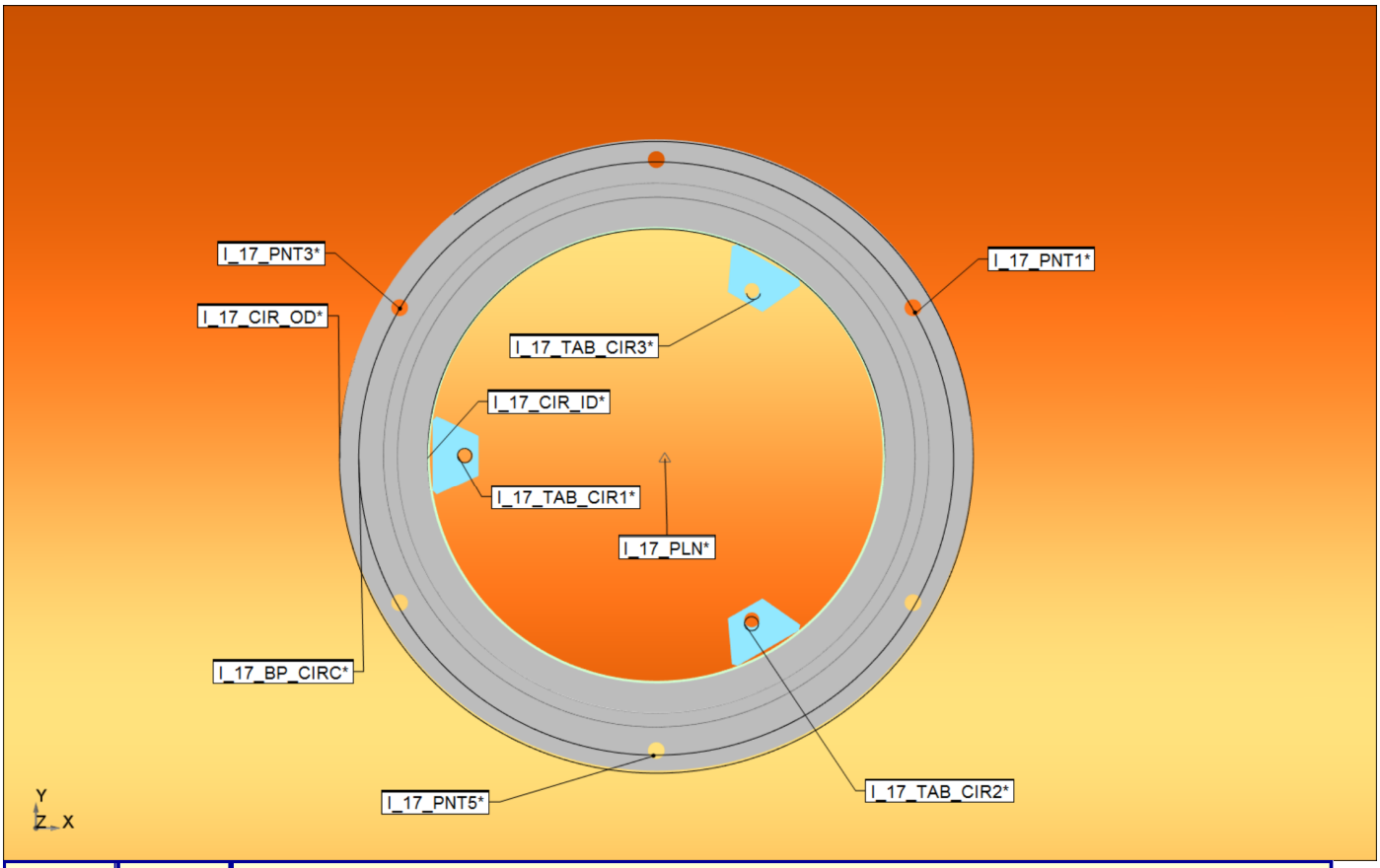
⌖	MM	LOC135 - I_02_CIR_TUBE_1_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-160.000	-161.192	-1.192	1.000	1.000	0.192
Y	520.000	519.866	-0.134	1.000	1.000	0.000
Z	381.034	386.872	5.839	10.000	10.000	0.000
D	88.900	88.561	-0.339	0.300	0.300	0.039
RN	0.000	0.380	0.380	0.600	0.000	0.000

⌖	MM	LOC136 - I_02_CIR_TUBE_1_3				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-160.000	-162.831	-2.831	1.000	1.000	1.831
Y	520.000	519.966	-0.034	1.000	1.000	0.000
Z	584.214	577.649	-6.566	10.000	10.000	0.000
D	88.900	88.949	0.049	0.300	0.300	0.000
RN	0.000	0.233	0.233	0.600	0.000	0.000

⌖	MM	LOC137 - I_02_CIR_TUBE_2_1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	160.000	160.607	0.607	1.000	1.000	0.000
Y	520.000	519.969	-0.031	1.000	1.000	0.000
Z	220.785	230.396	9.610	10.000	10.000	0.000
D	88.900	89.200	0.300	0.300	0.300	0.000
RN	0.000	0.097	0.097	0.600	0.000	0.000

⌖	MM	LOC138 - I_02_CIR_TUBE_2_2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	160.000	160.531	0.531	1.000	1.000	0.000
Y	520.000	520.685	0.685	1.000	1.000	0.000
Z	408.354	408.664	0.310	10.000	10.000	0.000
D	88.900	88.905	0.005	0.300	0.300	0.000
RN	0.000	0.151	0.151	0.600	0.000	0.000

⌖	MM	LOC139 - I_02_CIR_TUBE_2_3				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	160.000	160.319	0.319	1.000	1.000	0.000
Y	520.000	521.067	1.067	1.000	1.000	0.067
Z	579.852	579.284	-0.568	10.000	10.000	0.000
D	88.900	88.879	-0.021	0.300	0.300	0.000
RN	0.000	0.167	0.167	0.600	0.000	0.000



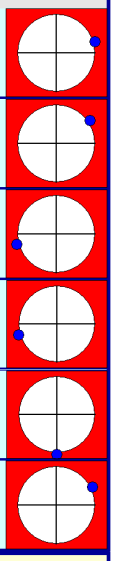
	MM	LOC130 - I_17_PLN				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	587.206	585.853	-1.353	2.000	2.000	0.000
FL	0.000	0.300	0.300	0.130	0.000	0.170

	MM	LOC131 - I_17_CIR_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-700.000	-699.984	0.016	2.000	2.000	0.000
Y	0.000	-1.071	-1.071	2.000	2.000	0.000
D	298.450	298.670	0.220	0.300	0.300	0.000
RN	0.000	0.288	0.288	0.600	0.000	0.000

	MM	LOC132 - I_17_CIR_ID				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-700.000	-699.990	0.010	2.000	2.000	0.000
Y	0.000	-1.019	-1.019	2.000	2.000	0.000
D	215.900	215.978	0.078	0.380	0.380	0.000
RN	0.000	0.239	0.239	0.760	0.000	0.000

	MM	LOC133 - I_17_BP_CIRC				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-700.000	-700.061	-0.061	2.000	2.000	0.000
Y	0.000	-1.643	-1.643	2.000	2.000	0.000
D	279.400	280.406	1.006	0.300	0.300	0.706
RN	0.000	0.517	0.517	0.600	0.000	0.000

FCFLOC25 Position	MM	⌖ Ø.3 E1 E2					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_17_PNT1	0.000	0.959	0.959	0.300		0.659	0.000
I_17_PNT2	0.000	1.387	1.387	0.300		1.087	0.000
I_17_PNT3	0.000	0.765	0.765	0.300		0.465	0.000
I_17_PNT4	0.000	1.112	1.112	0.300		0.812	0.000
I_17_PNT5	0.000	1.942	1.942	0.300		1.642	0.000
I_17_PNT6	0.000	1.454	1.454	0.300		1.154	0.000



FCFLOC25 Datum Shift

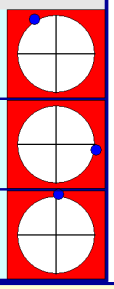
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	Fixed	0.485

FCFLOC25 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
I_17_PNT1	PR	139.700	140.166	0.466
	PA	30.000	29.953	-0.047
I_17_PNT2	PR	139.700	140.088	0.388
	PA	90.000	89.765	-0.235
I_17_PNT3	PR	139.700	139.970	0.270
	PA	150.000	150.111	0.111
I_17_PNT4	PR	139.700	140.240	0.540
	PA	210.000	209.946	-0.054
I_17_PNT5	PR	139.700	140.671	0.971
	PA	270.000	270.000	0.000
I_17_PNT6	PR	139.700	140.103	0.403
	PA	330.000	330.248	0.248

FCFLOC36 Size	MM	3XØ7 0.3/0.3					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_17_TAB_CIR1	7.000	6.719	-0.281	0.300	0.300	0.000	0.000
I_17_TAB_CIR2	7.000	6.637	-0.363	0.300	0.300	0.063	0.000
I_17_TAB_CIR3	7.000	6.503	-0.497	0.300	0.300	0.197	0.000

FCFLOC36 Position	MM	⌖ Ø.3 Ⓢ E1 E3					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
I_17_TAB_CIR1	0.000	1.529	1.529	0.300		1.229	0.000
I_17_TAB_CIR2	0.000	1.042	1.042	0.300		0.742	0.000
I_17_TAB_CIR3	0.000	1.529	1.529	0.300		1.229	0.000



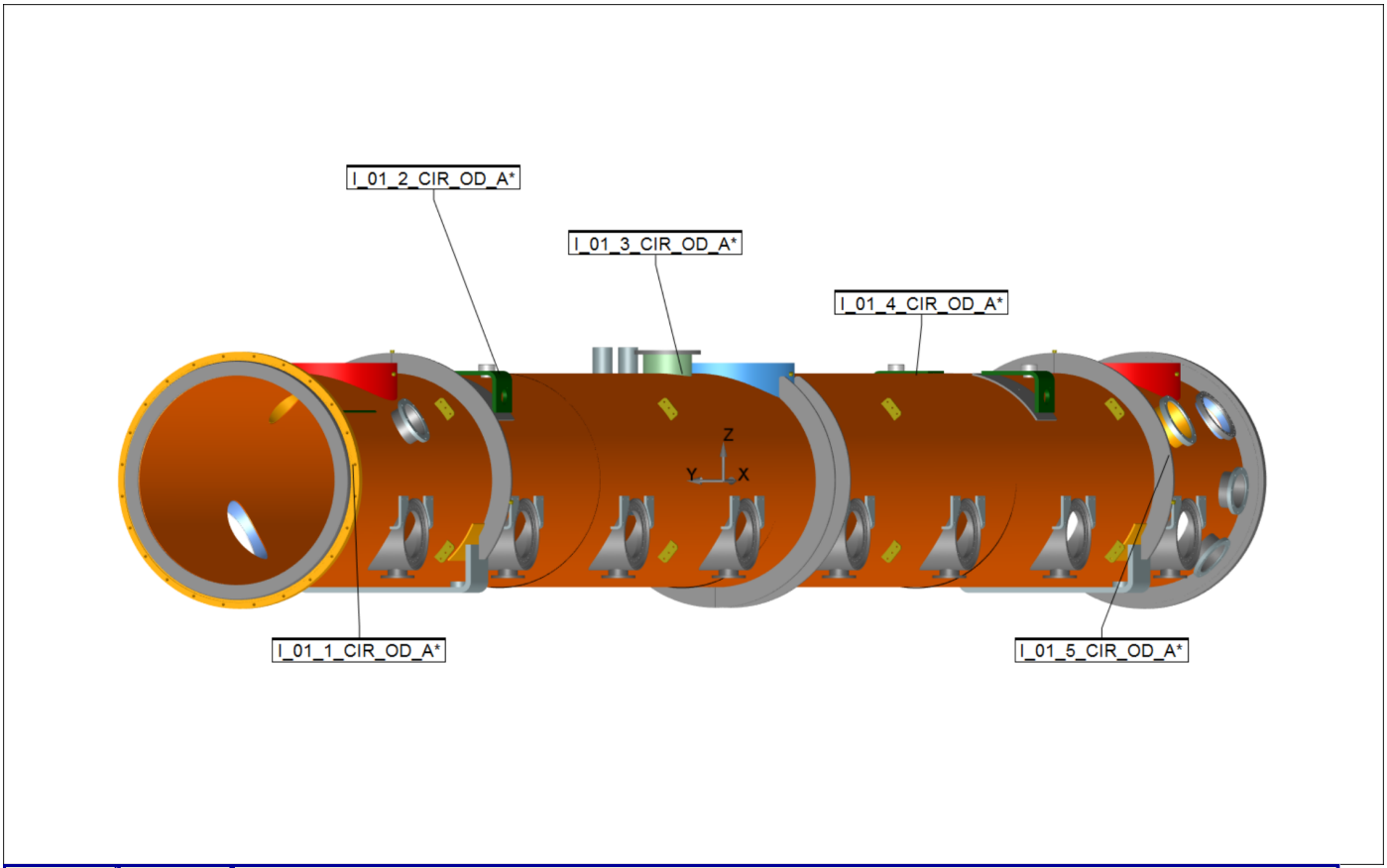
FCFLOC36 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	Fixed	0.496

FCFLOC36 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON				
Feature	AX	NOMINAL	MEAS	DEV
I_17_TAB_CIR1	PR	90.000	90.409	0.409
	PA	180.000	179.589	-0.411
I_17_TAB_CIR2	PR	90.000	90.318	0.318
	PA	300.000	300.262	0.262
I_17_TAB_CIR3	PR	90.000	90.684	0.684
	PA	60.000	60.217	0.217

x 7.0 ± 0.3 Reads 6.90 with pin gage
5.87/5.95 "O" ring groove width measures between 5.90 - 5.92
5.87/5.95 "O" ring groove depth measures 5.91
0.8 surface finish Reads 1.65

========== F10026616-B I-1 vacuum tube ==========



⌖	MM	LOC125 - I_01_1_CIR_OD_A				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-5875.000	-5889.143	-14.143	25.000	25.000	0.000
Y	0.000	0.462	0.462	2.000	2.000	0.000
Z	0.000	0.196	0.196	2.000	2.000	0.000
D	965.200	966.930	1.730	2.000	2.000	0.000
RN	0.000	1.485	1.485	4.000	0.000	0.000

⌖	MM	LOC126 - I_01_2_CIR_OD_A				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-2820.000	-2802.592	17.408	25.000	25.000	0.000
Y	0.000	2.164	2.164	2.000	2.000	0.164
Z	0.000	-1.155	-1.155	2.000	2.000	0.000
D	965.200	967.058	1.858	2.000	2.000	0.000
RN	0.000	2.496	2.496	4.000	0.000	0.000

⌖	MM	LOC127 - I_01_3_CIR_OD_A				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-530.000	-511.010	18.990	25.000	25.000	0.000
Y	0.000	3.611	3.611	2.000	2.000	1.611
Z	0.000	-2.069	-2.069	2.000	2.000	0.069
D	965.200	966.549	1.349	2.000	2.000	0.000
RN	0.000	1.749	1.749	4.000	0.000	0.000

⌖	MM	LOC128 - I_01_4_CIR_OD_A				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	2435.000	2414.051	-20.949	25.000	25.000	0.000
Y	0.000	0.623	0.623	2.000	2.000	0.000
Z	0.000	-4.840	-4.840	2.000	2.000	2.840
D	965.200	962.805	-2.395	2.000	2.000	0.395
RN	0.000	10.949	10.949	4.000	0.000	6.949

⌖	MM	LOC129 - I_01_5_CIR_OD_A				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	4360.000	4360.956	0.956	25.000	25.000	0.000
Y	0.000	-1.407	-1.407	2.000	2.000	0.000
Z	0.000	-0.240	-0.240	2.000	2.000	0.000
D	965.200	960.048	-5.152	2.000	2.000	3.152
RN	0.000	2.129	2.129	4.000	0.000	0.000

pc-dmis	PART NAME : F10023636-none ITEM_11		April 28, 2016	16:01
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

Drawing Number: F10023636-none
Name: FLANGE - FIXED DS
Description: FLANGE-FIXED DOWNSTREAM
Category: FLANGE
Project: LCLSIICryomodule
Item: I-11
Inspected by: R. Riley & O. Lira
Sample Number: RFCG-VV-001-0
Routing Form: 99392
Date: Apr/08/2016

⌖	MM	LOC1 - PLN_FRONT				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
FL	0.000	0.169	0.169	0.100	0.000	0.069

⌖	MM	LOC2 - PLN_STEP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-5.000	-4.980	0.020	0.300	0.300	0.000
FL	0.000	0.163	0.163	0.100	0.000	0.063

⌖	MM	LOC3 - OD_CIR1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Y	0.000	0.000	0.000	0.000	0.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
D	1160.000	1159.554	-0.446	0.300	0.300	0.146
RN	0.000	1.037	1.037	0.600	0.000	0.437

⌖	MM	LOC4 - OD_STEP_CIR1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-5.000	-4.980	0.020	0.300	0.300	0.000
Y	0.000	-0.162	-0.162	0.300	0.300	0.000
Z	0.000	-0.020	-0.020	0.300	0.300	0.000
D	1080.000	1079.933	-0.067	0.300	0.300	0.000
RN	0.000	0.129	0.129	0.600	0.000	0.000

⌖	MM	LOC5 - PLN_BACK				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-40.000	-42.201	-2.201	0.300	0.300	1.901
FL	0.000	0.336	0.336	0.600	0.000	0.000

The following dimensions were measured by hand:

2.0 +/- 0.3 Reads 2.09 to 2.14

21.5 +/- 0.3 Reads 21.5

The lip from the O.D. measures 2.4 to 2.5 so subtracting that from the measured diameter equals
= Ø1159.554-(2*2.45) = Ø1154.654 so
Ø1155.0 +/- 0.3 Reads approximately Ø1154.7

0.8 surface finish measures 0.33

pc-dmis	PART NAME : F10023641-none ITEM_12		April 28, 2016	16:03
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

Drawing Number: F10023641-none
Name: FLANGE - FIXED US
Description: FLANGE-FIXED UPSTREAM
Category: FLANGE
Project: LCLSIICryomodule
Item: I-12
Inspected by: R. Riley & O. Lira
Sample Number: RFCG-VV-001-0
Routing Form: 99392
Date: Apr/08/2016

⌖	MM	LOC1 - PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
FL	0.000	0.355	0.355	0.100	0.000	0.255

⌖	MM	LOC2 - CIR1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Y	0.000	0.000	0.000	0.000	0.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
D	1080.000	1078.822	-1.178	0.300	0.300	0.878
RN	0.000	2.011	2.011	0.600	0.000	1.411

The following dimensions were measured by hand:

30.0 ± 0.3 Reads from 32.95 to 34.25

Checked 13 holes with thread gage. 6 of 13 were bad. 4 of the remaining 7 were not deep enough. (measured 16mm instead of 19mm) i.e. 3 of 13 good

0.8 surface finish measures 0.41

pc-dmis	PART NAME : F10023643-n ITEM-13		April 28, 2016	16:12
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

Drawing Number: F10023643-none
Name: FLANGE - SLIDING
Description: FLANGE-SLIDING
Category: FLANGE
Project: LCLSIICryomodule
Item: I-13
Inspected by: R. Riley & O. Lira
Sample Number: RFCG-VV-001-0
Routing Form: 99392
Date: Apr/07/2016

Flange Flatness

⌖	MM	LOC1 - ITEM_13_PLN				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.005	-0.005	0.050	0.050	0.000
FL	0.000	0.577	0.577	0.100	0.000	0.477

Flange O.D.

⌖	MM	LOC2 - I_13_CIR_OD				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Y	0.000	0.000	0.000	0.000	0.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
D	1160.000	1159.820	-0.180	0.300	0.300	0.000
RN	0.000	0.342	0.342	0.600	0.000	0.000

O Ring 1

⌖	MM	LOC3 - ITEM_13_ORING_1_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.300	0.300	0.000
Y	0.000	0.070	0.070	0.300	0.300	0.000
Z	0.000	0.047	0.047	0.300	0.300	0.000
D	1104.000	1103.923	-0.077	0.300	0.300	0.000
RN	0.000	0.310	0.310	0.600	0.000	0.000

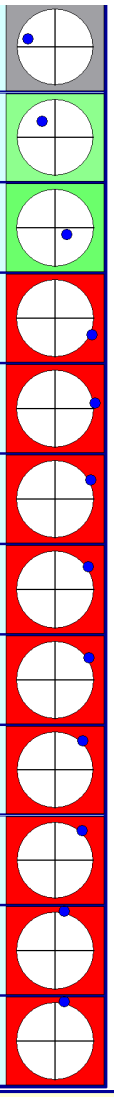
O Ring 2

⌖	MM	LOC4 - ITEM_13_ORING_2_CIR				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.300	0.300	0.000
Y	0.000	0.104	0.104	0.300	0.300	0.000
Z	0.000	0.053	0.053	0.300	0.300	0.000
D	1071.000	1070.805	-0.195	0.300	0.300	0.000
RN	0.000	0.233	0.233	0.600	0.000	0.000

Outer Bolt Hole Pattern

FCFLOC1 Position		MM	⌖ Ø.25 Ⓢ A				
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
ITEM_13_BC_OUT1	0.000	0.512	0.512	0.250		0.262	0.000
ITEM_13_BC_OUT2	0.000	0.163	0.163	0.250		0.000	0.000
ITEM_13_BC_OUT3	0.000	0.103	0.103	0.250		0.000	0.000

ITEM_13_BC_OUT4	0.000	0.185	0.185	0.250		0.000	0.000
ITEM_13_BC_OUT5	0.000	0.136	0.136	0.250		0.000	0.000
ITEM_13_BC_OUT6	0.000	0.088	0.088	0.250		0.000	0.000
ITEM_13_BC_OUT7	0.000	0.377	0.377	0.250		0.127	0.000
ITEM_13_BC_OUT8	0.000	0.512	0.512	0.250		0.262	0.000
ITEM_13_BC_OUT9	0.000	0.510	0.510	0.250		0.260	0.000
ITEM_13_BC_OUT10	0.000	0.476	0.476	0.250		0.226	0.000
ITEM_13_BC_OUT11	0.000	0.456	0.456	0.250		0.206	0.000
ITEM_13_BC_OUT12	0.000	0.421	0.421	0.250		0.171	0.000
ITEM_13_BC_OUT13	0.000	0.479	0.479	0.250		0.229	0.000
ITEM_13_BC_OUT14	0.000	0.365	0.365	0.250		0.115	0.000
ITEM_13_BC_OUT15	0.000	0.371	0.371	0.250		0.121	0.000



FCFLOC1 Datum Shift

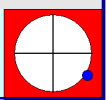
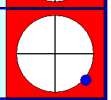
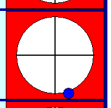
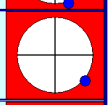
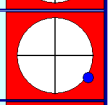
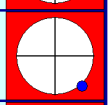
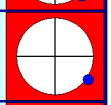
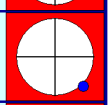
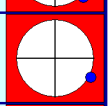
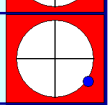
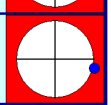
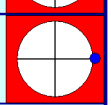
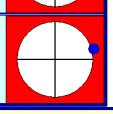
Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	359.992	Fixed	Fixed

FCFLOC1 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
ITEM_13_BC_OUT1	PR	565.000	565.032	0.032
	PA	52.500	52.526	0.026
ITEM_13_BC_OUT2	PR	565.000	565.056	0.056
	PA	67.500	67.506	0.006
ITEM_13_BC_OUT3	PR	565.000	565.013	0.013
	PA	82.500	82.505	0.005
ITEM_13_BC_OUT4	PR	565.000	565.037	0.037
	PA	97.500	97.509	0.009
ITEM_13_BC_OUT5	PR	565.000	565.065	0.065
	PA	112.500	112.502	0.002
ITEM_13_BC_OUT6	PR	565.000	564.960	-0.040
	PA	127.500	127.498	-0.002
ITEM_13_BC_OUT7	PR	565.000	564.817	-0.183
	PA	142.500	142.496	-0.004
ITEM_13_BC_OUT8	PR	565.000	564.779	-0.221
	PA	157.500	157.487	-0.013
ITEM_13_BC_OUT9	PR	565.000	564.794	-0.206
	PA	172.500	172.485	-0.015

ITEM_13_BC_OUT10	PR	565.000	564.788	-0.212
	PA	187.500	187.489	-0.011
ITEM_13_BC_OUT11	PR	565.000	564.776	-0.224
	PA	202.500	202.496	-0.004
ITEM_13_BC_OUT12	PR	565.000	564.792	-0.208
	PA	217.500	217.497	-0.003
ITEM_13_BC_OUT13	PR	565.000	564.761	-0.239
	PA	232.500	232.502	0.002
ITEM_13_BC_OUT14	PR	565.000	564.820	-0.180
	PA	247.500	247.497	-0.003
ITEM_13_BC_OUT15	PR	565.000	564.815	-0.185
	PA	262.500	262.502	0.002

Inner Bolt Hole Pattern

FCFLOC2 Position		MM			⌖ Ø.25 Ⓢ A			
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS	
ITEM_13_BC_IN1	0.000	0.684	0.684	0.250		0.434	0.000	
ITEM_13_BC_IN2	0.000	1.158	1.158	0.250		0.908	0.000	
ITEM_13_BC_IN3	0.000	0.607	0.607	0.250		0.357	0.000	
ITEM_13_BC_IN4	0.000	0.661	0.661	0.250		0.411	0.000	
ITEM_13_BC_IN5	0.000	0.659	0.659	0.250		0.409	0.000	
ITEM_13_BC_IN6	0.000	0.984	0.984	0.250		0.734	0.000	
ITEM_13_BC_IN7	0.000	0.814	0.814	0.250		0.564	0.000	
ITEM_13_BC_IN8	0.000	0.797	0.797	0.250		0.547	0.000	
ITEM_13_BC_IN9	0.000	0.632	0.632	0.250		0.382	0.000	
ITEM_13_BC_IN10	0.000	0.562	0.562	0.250		0.312	0.000	
ITEM_13_BC_IN11	0.000	0.858	0.858	0.250		0.608	0.000	
ITEM_13_BC_IN12	0.000	1.158	1.158	0.250		0.908	0.000	
ITEM_13_BC_IN13	0.000	1.157	1.157	0.250		0.907	0.000	

FCFLOC2 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	359.735	Fixed	Fixed

FCFLOC2 Summary FIT TO DATUMS=ON, DEV PERPEN CENTERLINE=ON

Feature	AX	NOMINAL	MEAS	DEV
ITEM_13_BC_IN1	PR	512.500	512.484	-0.016

	PA	60.000	59.962	-0.038
ITEM_13_BC_IN2	PR	512.500	512.244	-0.256
	PA	75.000	74.942	-0.058
ITEM_13_BC_IN3	PR	512.500	512.214	-0.286
	PA	90.000	89.989	-0.011
ITEM_13_BC_IN4	PR	512.500	512.228	-0.272
	PA	105.000	104.979	-0.021
ITEM_13_BC_IN5	PR	512.500	512.206	-0.294
	PA	120.000	119.983	-0.017
ITEM_13_BC_IN6	PR	512.500	512.009	-0.491
	PA	135.000	135.003	0.003
ITEM_13_BC_IN7	PR	512.500	512.095	-0.405
	PA	150.000	150.004	0.004
ITEM_13_BC_IN8	PR	512.500	512.159	-0.341
	PA	165.000	165.023	0.023
ITEM_13_BC_IN9	PR	512.500	512.221	-0.279
	PA	180.000	180.017	0.017
ITEM_13_BC_IN10	PR	512.500	512.317	-0.183
	PA	195.000	195.024	0.024
ITEM_13_BC_IN11	PR	512.500	512.186	-0.314
	PA	210.000	210.033	0.033
ITEM_13_BC_IN12	PR	512.500	512.085	-0.415
	PA	225.000	225.045	0.045
ITEM_13_BC_IN13	PR	512.500	512.088	-0.412
	PA	240.000	240.045	0.045

Constructed Outer and Inner Bolt Circles from holes

⌖	MM	LOC5 - CIRC_OUTER_BP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.129	-0.129	0.125	0.125	0.004
Z	0.000	0.093	0.093	0.125	0.125	0.000
D	1130.000	1129.853	-0.147	0.125	0.125	0.022
RN	0.000	0.166	0.166	0.250	0.000	0.000

⌖	MM	LOC6 - CIRC_INNER_BP				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	-0.135	-0.135	0.125	0.125	0.010
Z	0.000	-0.002	-0.002	0.125	0.125	0.000
D	1025.000	1024.528	-0.472	0.125	0.125	0.347
RN	0.000	0.342	0.342	0.250	0.000	0.092

Angle between Inner & Outer Bolt Patterns

∡	DEG	ANGL1 - LIN1 TO LIN2				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	7.234	7.234	1.000	1.000	6.234

The following dimensions were measured by hand:

40.0 ± 0.3 Reads 40.0 to 40.2

14 ± 2 measured with pin gages Reads: Outer .546"-.547" (13.87-13.89mm)
Inner .552" (14.02mm)
2 x 6.04/5.94 groove depth Reads: Outer 5.97-5.98 Inner 6.00-6.01

2 x 6.53/6.48 groove width Reads: Outer 6.62-6.82 Inner 6.46-6.48
0.8 surface finish measures 0.37 on Datum -B- surface.

pc-dmis	PART NAME : I_14_bolt_pattern		April 19, 2016	13:32
	REV NUMBER :	SER NUMBER :	STATS COUNT :	1

COUPLER PORT # 4 BOLT HOLE PATTERN

Drawing Number: F10026609-C
Name: WELDMENT,VESSEL LCLS-II, AFTER MACHINING
Description: WELDMENT,VESSEL LCLS-II, AFTER MACHINING
Category: WELDMENT
Project: LCLSIICryomodule
Item: I-14
Inspected by: R. Riley & O. Lira
Sample Number: RFCG-VV-001-0
Routing Form: 99392
Date: Mar/30/2016

⌖	MM	LOC1 - PLN1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.000	0.000	0.000	0.000	0.000
FL	0.000	0.036	0.036	0.100	0.000	0.000

⌖	MM	LOC2 - CIR1				
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.000	0.000	0.000
Z	0.000	0.000	0.000	0.000	0.000	0.000
RN	0.000	0.076	0.076	1.000	0.000	0.000

FCFLOC1 Position	MM	⌖ Ø.25 C D					
Feature	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL	BONUS
PNT1	0.000	0.258	0.258	0.250		0.008	0.000
PNT2	0.000	0.107	0.107	0.250		0.000	0.000
PNT3	0.000	0.117	0.117	0.250		0.000	0.000
PNT4	0.000	0.158	0.158	0.250		0.000	0.000
PNT5	0.000	0.146	0.146	0.250		0.000	0.000
PNT6	0.000	0.258	0.258	0.250		0.008	0.000
PNT7	0.000	0.232	0.232	0.250		0.000	0.000
PNT8	0.000	0.205	0.205	0.250		0.000	0.000
PNT9	0.000	0.227	0.227	0.250		0.000	0.000
PNT10	0.000	0.184	0.184	0.250		0.000	0.000
PNT11	0.000	0.098	0.098	0.250		0.000	0.000
PNT12	0.000	0.011	0.011	0.250		0.000	0.000

PNT13	0.000	0.078	0.078	0.250		0.000	0.000
PNT14	0.000	0.044	0.044	0.250		0.000	0.000
PNT15	0.000	0.092	0.092	0.250		0.000	0.000
PNT16	0.000	0.019	0.019	0.250		0.000	0.000
PNT17	0.000	0.057	0.057	0.250		0.000	0.000
PNT18	0.000	0.153	0.153	0.250		0.000	0.000
PNT19	0.000	0.038	0.038	0.250		0.000	0.000
PNT20	0.000	0.080	0.080	0.250		0.000	0.000
PNT21	0.000	0.117	0.117	0.250		0.000	0.000
PNT22	0.000	0.064	0.064	0.250		0.000	0.000
PNT23	0.000	0.144	0.144	0.250		0.000	0.000
PNT24	0.000	0.149	0.149	0.250		0.000	0.000

FCFLOC1 Datum Shift

Segment	Shift X	Shift Y	Shift Z	Rotation X	Rotation Y	Rotation Z
Segment 1	Fixed	Fixed	Fixed	Fixed	0.195	Fixed

FCFLOC1 Summary FIT TO DATUMS=ON

Feature	AX	NOMINAL	MEAS	DEV
PNT1	X	0.000	-0.126	-0.126
	Z	122.500	122.529	0.029
	PR	122.500	122.529	0.029
	PA	90.000	90.059	0.059
PNT2	X	-31.705	-31.750	-0.045
	Z	118.326	118.355	0.029
	PR	122.500	122.540	0.040
	PA	105.000	105.017	0.017
PNT3	X	-61.250	-61.247	0.003
	Z	106.088	106.147	0.059
	PR	122.500	122.549	0.049
	PA	120.000	119.985	-0.015
PNT4	X	-86.621	-86.579	0.041
	Z	86.621	86.688	0.068
	PR	122.500	122.519	0.019
	PA	135.000	134.964	-0.036
PNT5	X	-106.088	-106.035	0.053
	Z	61.250	61.300	0.050

	PR	122.500	122.479	-0.021
	PA	150.000	149.967	-0.033
PNT6	X	-118.326	-118.199	0.127
	Z	31.705	31.681	-0.024
	PR	122.500	122.371	-0.129
	PA	165.000	164.995	-0.005
PNT7	X	-122.500	-122.386	0.114
	Z	0.000	0.021	0.021
	PR	122.500	122.386	-0.114
	PA	180.000	179.990	-0.010
PNT8	X	-118.326	-118.223	0.103
	Z	-31.705	-31.706	-0.001
	PR	122.500	122.401	-0.099
	PA	195.000	195.013	0.013
PNT9	X	-106.088	-105.979	0.109
	Z	-61.250	-61.218	0.032
	PR	122.500	122.390	-0.110
	PA	210.000	210.012	0.012
PNT10	X	-86.621	-86.528	0.092
	Z	-86.621	-86.622	-0.001
	PR	122.500	122.436	-0.064
	PA	225.000	225.031	0.031
PNT11	X	-61.250	-61.230	0.020
	Z	-106.088	-106.044	0.044
	PR	122.500	122.451	-0.049
	PA	240.000	239.998	-0.002
PNT12	X	-31.705	-31.700	0.006
	Z	-118.326	-118.326	0.000
	PR	122.500	122.499	-0.001
	PA	255.000	255.003	0.003
PNT13	X	0.000	-0.029	-0.029
	Z	-122.500	-122.526	-0.026
	PR	122.500	122.526	0.026
	PA	270.000	269.987	-0.013
PNT14	X	31.705	31.686	-0.019
	Z	-118.326	-118.336	-0.010
	PR	122.500	122.505	0.005
	PA	285.000	284.990	-0.010
PNT15	X	61.250	61.231	-0.019
	Z	-106.088	-106.046	0.042
	PR	122.500	122.454	-0.046
	PA	300.000	300.002	0.002
PNT16	X	86.621	86.629	0.009
	Z	-86.621	-86.624	-0.003
	PR	122.500	122.509	0.009
	PA	315.000	315.002	0.002
PNT17	X	106.088	106.104	0.016
	Z	-61.250	-61.226	0.024

	PR	122.500	122.502	0.002
	PA	330.000	330.013	0.013
PNT18	X	118.326	118.323	-0.003
	Z	-31.705	-31.629	0.076
	PR	122.500	122.478	-0.022
	PA	345.000	345.034	0.034
PNT19	X	122.500	122.500	0.000
	Z	0.000	0.019	0.019
	PR	122.500	122.500	0.000
	PA	360.000	0.009	-359.991
PNT20	X	118.326	118.289	-0.037
	Z	31.705	31.719	0.014
	PR	122.500	122.468	-0.032
	PA	15.000	15.011	0.011
PNT21	X	106.088	106.075	-0.013
	Z	61.250	61.307	0.057
	PR	122.500	122.517	0.017
	PA	30.000	30.026	0.026
PNT22	X	86.621	86.597	-0.024
	Z	86.621	86.642	0.021
	PR	122.500	122.498	-0.002
	PA	45.000	45.015	0.015
PNT23	X	61.250	61.178	-0.072
	Z	106.088	106.087	-0.001
	PR	122.500	122.463	-0.037
	PA	60.000	60.029	0.029
PNT24	X	31.705	31.641	-0.064
	Z	118.326	118.364	0.038
	PR	122.500	122.520	0.020
	PA	75.000	75.033	0.033