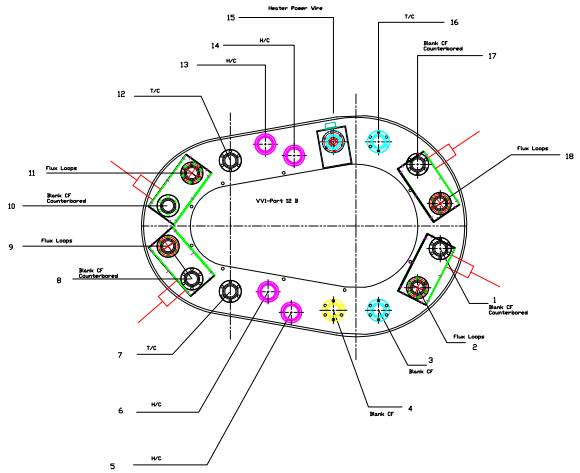
NO.	REVISION	BY	CH	SUP	APPROVED	DATE



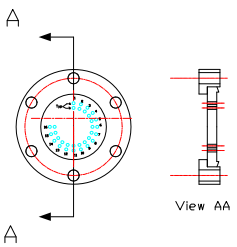
Flange No.	FUNCTION	TAG	FEEDTHROUGH	FITTINGS AND HARDWARE	TERMINATIONS
1	Flux Loops	None	None	Counterbored 8.75 Blind CF Flange	None
2	Flux Loops	LL1-14, MA, MB, FF4, TH1-3, TH2-1, TH2-2	Silicone Rubber	Bolt Blind 8.75 CF with SAFH drilled	Junction Box
3	None	None	None	Blind 8.75 CF FLANGE	None
4	None	None	None	Blind 8.75 CF FLANGE	None
5	Heating and Cooling Sys		8.75 CF Flange	Bellows	Welded Tube
6	Heating and Cooling Sys		8.75 CF Flange	Bellows	Welded Tube
7	Thermocouples		20 Pin Conflat Feedthrough 8.75 CF Flange OD	Type C Crimp-Push Pins	MS Style Circular Connector
8	Flux Loops	None	None	Counterbored 8.75 Blind CF Flange	None
9	Flux Loops	EE1, TE, FF, CE, TF, MD1, LL4, LL7, EE2, TG, MDB, FF, MDB-4	Silicone Rubber	Bolt Blind 8.75 CF with SAFH drilled holes	Junction Box
10	Flux Loops	None	None	Counterbored 8.75 Blind CF Flange	None
11	Flux Loops	EE1, EE7, FF7, GE10, IH5, IH8, IE8, IE9, IE5	Silicone Rubber	Bolt Blind 8.75 CF with SAFH drilled holes	Junction Box
12	Thermocouples		20 Pin Conflat Feedthrough 8.75 CF Flange OD	Type C Crimp-Push Pins	MS Style Circular Connector
13	Heating and Cooling Sys		8.75 CF Flange	Bellows	Welded Tube
14	Heating and Cooling Sys		8.75 CF Flange	Bellows	Welded Tube
15	Strip Electric Heaters		Silicone Rubber	Bolt Blind 8.75 CF with SAFH drilled holes	Junction Box with 16 Pin Amphenol Box Receptacle
16	Thermocouples		20 Pin Conflat Feedthrough 8.75 CF Flange OD	Type C Crimp-Push Pins	MS Style Circular Connector
17	Flux Loops	None	None	Counterbored 8.75 Blind CF Flange	None
18	Flux Loops	EE2, FF4, IE6, FF3, IH6, IE, TH1-1, TH2-2	Silicone Rubber	Bolt Blind 8.75 CF with SAFH drilled holes	Junction Box

Flange No.	TAG No.	Hole Position	I Sub Connector Pin #s
2	LL2	1	1 and 14
	LL2	2	2 and 15
	MA	3	3 and 16
	MA3	4	4 and 17
	FF4	5	5 and 18
	TH2-2	6	6 and 19
	TH2-4	7	7 and 20
	TH2-5	8	8 and 21
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	I Sub Connector Pin #s
9	EE1	1	1 and 14
	EE	2	2 and 15
	EE7	3	3 and 16
	TE	4	4 and 17
	EE1	5	5 and 18
	MD2	6	6 and 19
	LL4	7	7 and 20
	LL7	8	8 and 21
	MD5	9	9 and 22
	GE10	10	10 and 23
		11	
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	I Sub Connector Pin #s
11	EE1	1	1 and 14
	EE7	2	2 and 15
	FF7	3	3 and 16
	GE10	4	4 and 17
	IH5	5	5 and 18
	IH8	6	6 and 19
	IE8	7	7 and 20
	IE9	8	8 and 21
	IE4	9	9 and 22
		10	
		11	
		12	
		13	
		14	
		15	
		16	

Flange No.	TAG No.	Hole Position	I Sub Connector Pin #s
18	AA2	1	1 and 14
	CC4	2	2 and 15
	IE6	3	3 and 16
	FF3	4	4 and 17
	IH6	5	5 and 18
	IE	6	6 and 19
	TH2-1	7	7 and 20
	TH2-2	8	8 and 21
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	



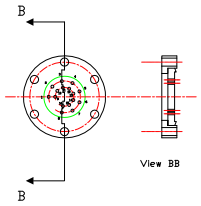
Flange # 2, 9, 11 and 18

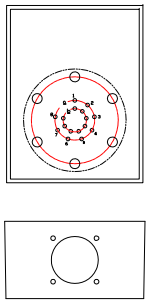
Flange No.	TAG No.	Hole Position
15	HE5-1-1	1a
	HE5-1-2	1b
	HE5-2-1	2a
	HE5-2-2	2b
	HE5-3-1	3a
	HE5-3-2	3b
	HE5-4-1	4a
	HE5-4-2	4b
	HE5-5-1	5a
	HE5-5-2	5b
	HE5-6-1	6a
	HE5-6-2	6b
	HE5-7-1	7a
	HE5-7-2	7b
	HE5-8-1	8a
	HE5-8-2	8b

#1 Spare
#2 Spare
#3 Spare
#4 Spare

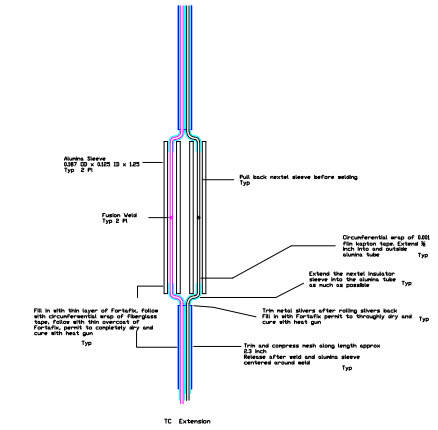
ELECTRIC HEATER STRIPS NUMBERED 1-8
1- NEAREST PORT 12 FLANGE
8- NEAREST VACUUM VESSEL

a- ELECTRIC HEATER STRIP
b- V V Z
b- BOTTOM

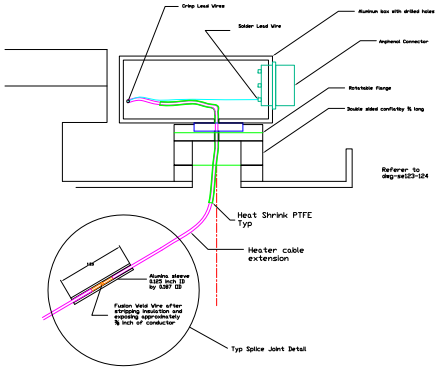




Flange # 15



TC Extension



George Labik
6 Aug 2007- Rev 1 17Aug 2007

				6			
				5			
				4			
				3			
				2			
				1			
				ASSEMBLY			
03	02	01	PART NO.	NOMENCLATURE OR DESCRIPTION		DRAWING NO.	MATERIAL

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY NATIONAL COMPACT STELLARATOR EXPERIMENT
AutoCAD2000	DIMENSIONS ARE IN INCHES MACHINE SURFACES 125	PORT 12 INTERFACES VV2 BOTTOM
DO NOT VERIFY DIMENSION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	

SCALE: NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH: .X ±.100, .XX ±.030, .XXX ±.005, ANGULAR ±2°-0' / FRACTIONS: 0°-12' ±1/64, 12'-30' ±1/8, 30'-120' ±1/4, OVER 120' ±1/2	DN: FOM	DATE: 09/9/2008	CADD FILE:
		ENG.G.LABIK	APPROVED	se 123-124
		DSIG.G.LABIK	CHK SUPV 07 JB	SHEET 3 OF 8 REV 0
		CHK: G.TCHILINGURIAN		

WELDING ENGINEER

APPR: _____ DATE _____

APPR: _____ DATE _____