

NO.	REVISION	BY	CH	SUP	APPROVED	DATE
1	REVISED PER ECN-5347	LM	TB	JS	T. BROWN	4-18-08
2	REVISED PER ECN-5358	LM	TB	JS	T. BROWN	5-15-08

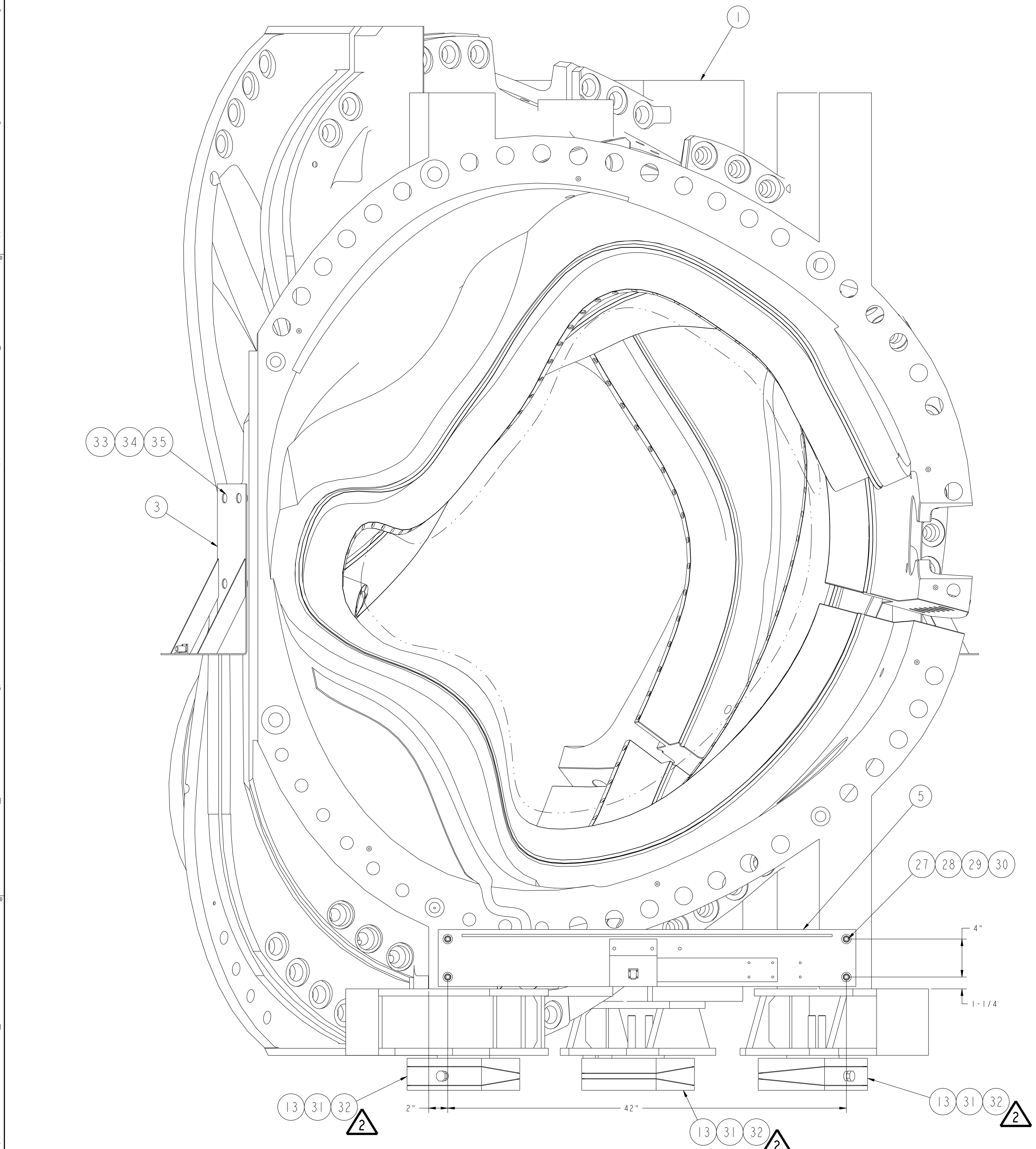
NOTE
WORK THIS DRAWING WITH DRAWING SE185-314

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2	2	38	COMM	1"-8UNC-2B HEX NUT	C'STL - ZN PLT
4	4	37	COMM	1"-8UNC-2A x 4" LG HEX HD CAP SCREW	C'STL - ZN PLT
3	3	36	COMM	1"-8UNC-2A x 3" LG HEX HD CAP SCREW	C'STL - ZN PLT
8	8	35	COMM	1"-8UNC-2A x 1 1/2 LG HEX HD CAP SCREW	C'STL - ZN PLT
15	15	34	COMM	1" SPLIT LOCK WASHER	C'STL - ZN PLT
17	17	33	COMM	1" FLAT WASHER	C'STL - ZN PLT
6	6	32	COMM	AIRLOC # 9.01206 INCLUDES (1) M20 x 2.5MM PITCH x 200mm LG STUD AND (1) WASHER AND (2) HEX NUTS	C'STL - ZN PLT
6	6	31	COMM	3/4" SPHERICAL WASHER SET - McMASTER-CARR #91131A090	C'STL - ZN PLT
4	4	30	COMM	3/8-16UNC-2B HEX NUT	C'STL - ZN PLT
4	4	29	COMM	3/8" SPLIT LOCK WASHER	C'STL - ZN PLT
4	4	28	COMM	3/8" FLAT WASHER	C'STL - ZN PLT
4	4	27	COMM	WELD STUD - 3/8-16UNC-2A x 1 1/4"LG	C'STL
4	4	26	COMM	1/4-20UNC-2B HEX NUT	C'STL - ZN PLT
4	4	25	COMM	1/4-20UNC-2A x 1" LG HEX HD CAP SCREW	C'STL - ZN PLT
4	4	24	COMM	1/4" SPLIT LOCK WASHER	C'STL - ZN PLT
8	8	23	COMM	1/4" FLAT WASHER	C'STL - ZN PLT
12	12	22	COMM	#10-24UNC-2B HEX NUT	C'STL - ZN PLT
16	16	21	COMM	#10-24UNC-2A x 1" LG HEX SOCKET HD CAP SCREW	C'STL - ZN PLT
16	16	20	COMM	#10 SPLIT LOCK WASHER	C'STL - ZN PLT
32	32	19	COMM	#10 (Ø.190 NOM) FLAT WASHER	C'STL - ZN PLT
12	12	18	COMM	#4-40UNC-2B HEX NUT	C'STL - ZN PLT
12	12	17	COMM	#4 SPLIT LOCK WASHER	C'STL - ZN PLT
24	24	16	COMM	#4 FLAT WASHER	C'STL - ZN PLT
12	12	15	COMM	#4-40UNC-2A x 5/8 LG HEX HD MACH SCR	C'STL - ZN PLT
3	3	14	COMM	ADJUSTABLE-DOT LASER KIT - CLASS 1110 LASER - 110 VAC McMASTER-CARR #2055A21 OR EQUIVALENT	---
3	3	13	COMM	AIRLOC WEDGMOUNT PRECISION LEVELER WITH SPHERICAL SEAT, BOLT-ON #1.36206.56-206-VRKC/716	---
1	---	12	SE186-338-02	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #2 WELDMENT - OPPOSITE	SEE DWG
---	1	11	SE186-338-01	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #2 WELDMENT - AS SHOWN	SEE DWG
1	---	10	SE186-337-02	MCWF SEGMENT "C" SUPPORT BRACKET WELDMENT - OPPOSITE	SEE DWG
---	1	9	SE186-337-01	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #1 WELDMENT - AS SHOWN	SEE DWG
1	---	8	SE186-336-02	MCWF SEGMENT "A" SUPPORT BRACKET WELDMENT - OPPOSITE	SEE DWG
---	1	7	SE186-336-01	MCWF SEGMENT "A" SUPPORT BRACKET WELDMENT - AS SHOWN	SEE DWG
1	1	6	SE185-311-8	VERTICAL LASER PEN MOUNTING BRACKET BRACE	SEE DWG
1	1	5	SE185-311-04	LASER PEN MOUNTING BRACKET SUPPORT PLATE WELDMENT	SEE DWG
1	1	4	SE185-311-03	VERTICAL LASER PEN MOUNTING BRACKET WELDMENT	SEE DWG
1	1	3	SE185-311-02	REAR LASER PEN MOUNTING BRACKET WELDMENT	SEE DWG
1	1	2	SE185-311-01	FRONT LASER PEN MOUNTING BRACKET WELDMENT	SEE DWG
1	1	1		MODULAR COIL HALF PERIOD ASSEMBLY	---
---	---	---	THIS DWG	RIGHT HALF PERIOD ASSEMBLY	3
---	---	---	THIS DWG	LEFT HALF PERIOD ASSEMBLY	3

02 ASSY	01 ASSY	PART NO.	DRAWING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY REQ'D
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COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
Pro E	DIMENSIONS ARE IN INCHES MACHINE SURFACES UNLESS OTHERWISE SPECIFIED	NATIONAL COMPACT STELLARATOR EXPERIMENT	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .XX ±.000 .XXX ±.005 ANGULAR ±.015	DSN: L. MORRIS 11-26-07 CHK: M. COLE 11-26-07 ENGR: T. BROWN 11-26-07 SUPV: J. SIEGEL 11-26-07	DRAWING NO: SE185-302 SHEET 1 OF 6 REV 2.0



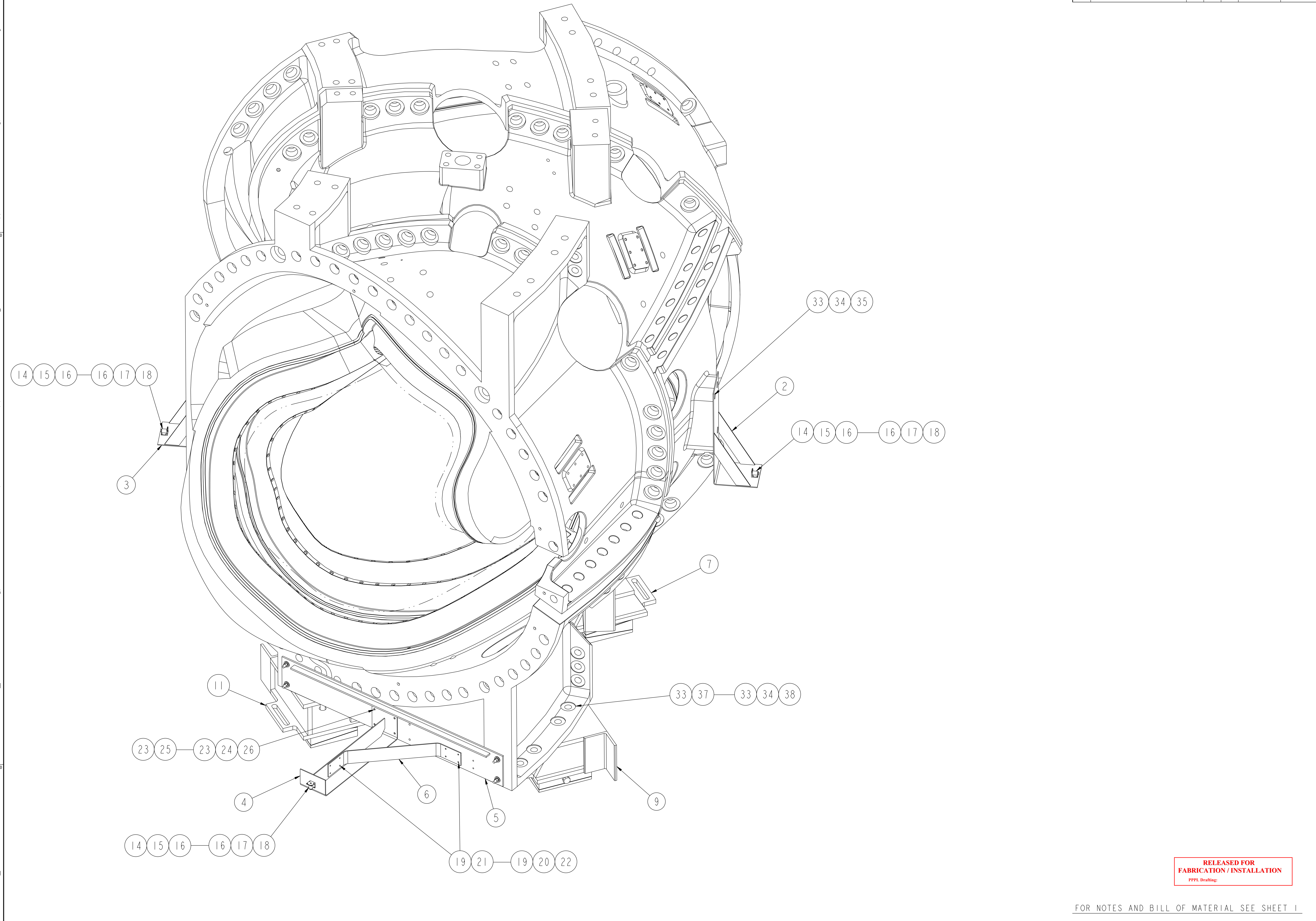
01 ASSEMBLY - LEFT HALF PERIOD ASSEMBLY

RELEASE LEVEL: Fabrication
DWG VERSION NO: 0

WEIGHT
MODEL NAME SE185-300
WELDING ENGINEER

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



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FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

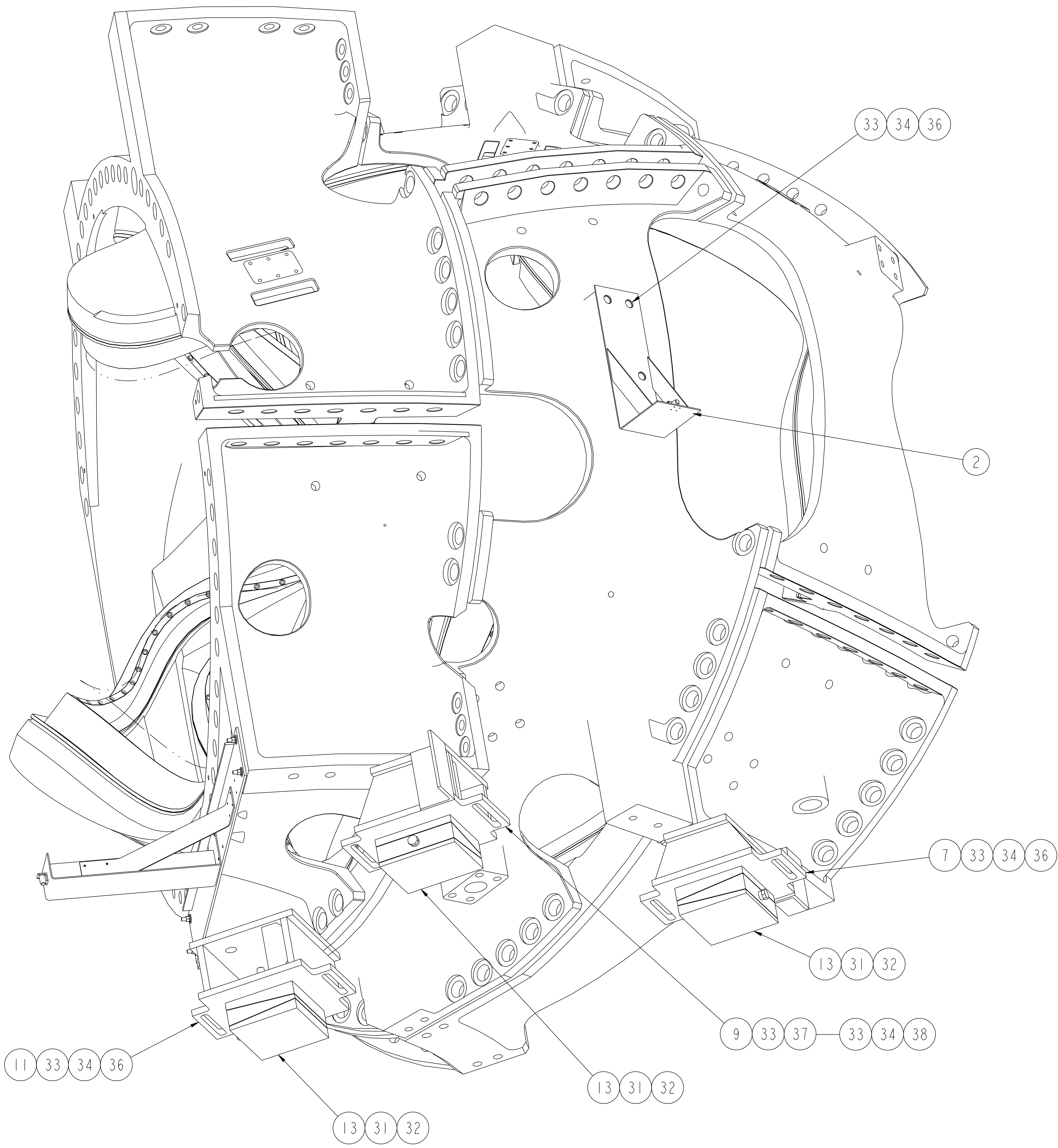
01 ASSEMBLY - LEFT HALF PERIOD ASSEMBLY

RELEASE LEVEL: Fabrication
DWG VERSION NO: 0

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY NATIONAL COMPACT STELLARATOR EXPERIMENT	
	UNLESS OTHERWISE SPECIFIED	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	DSN: L. MORRIS	11-26-07 DRAWING NO:
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .X +/- .000 0°-120° +/- .010 .XX +/- .005 120°-120° +/- .010 ANGULAR +/- .0°-15° OVER 120° +/- .125	CHK: M. COLE	11-26-07
WEIGHT		ENGR: T. BROWN	11-26-07
MODEL NAME SE185-300		SUPV: J. SIEGEL	11-26-07
WELDING ENGINEER			
			SHEET 2 OF 6
			REV 2.0

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



01 ASSEMBLY - BOTTOM ISOMETRIC VIEW

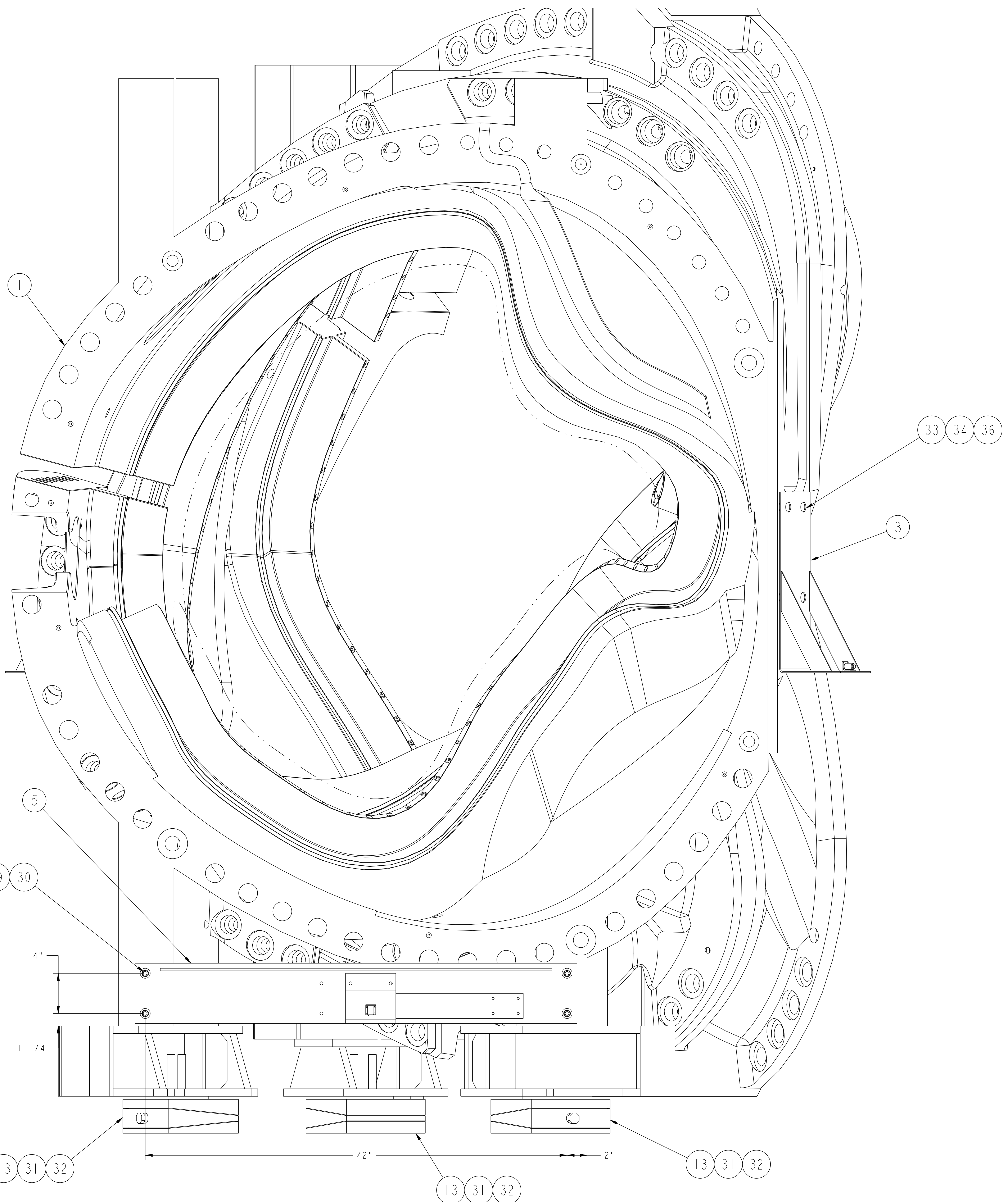
**RELEASED FOR
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 PPPL Drafting

FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY NATIONAL COMPACT STELLARATOR EXPERIMENT	
	UNLESS OTHERWISE SPECIFIED	FIELD PERIOD ASSEMBLY FIXTURE	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES	FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	
	BREAK SHARP EDGES .005/.020		
	TOLERANCES NON-CUMULATIVE	DSN: L. MORRIS	11-26-07 DRAWING NO:
	DECIMAL-INCH FRACTIONS	CHK: M. COLE	11-26-07
NEXT ASSEMBLY	.X +/- .100 0°-12° +/- .100	ENGR: T. BROWN	11-26-07
	.XX +/- .030 12°-12° +/- .100	SUPV: J. SIEGEL	11-26-07
	.XXX +/- .005 12°-120° +/- .100		
	ANGULAR +/- .0°-15° OVER 120° +/- .100		

RELEASE LEVEL: Fabrication
DWG VERSION NO: 0

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FOR BILL OF MATERIAL AND NOTES SEE SHEET 1

02 ASSEMBLY - RIGHT HALF PERIOD ASSEMBLY

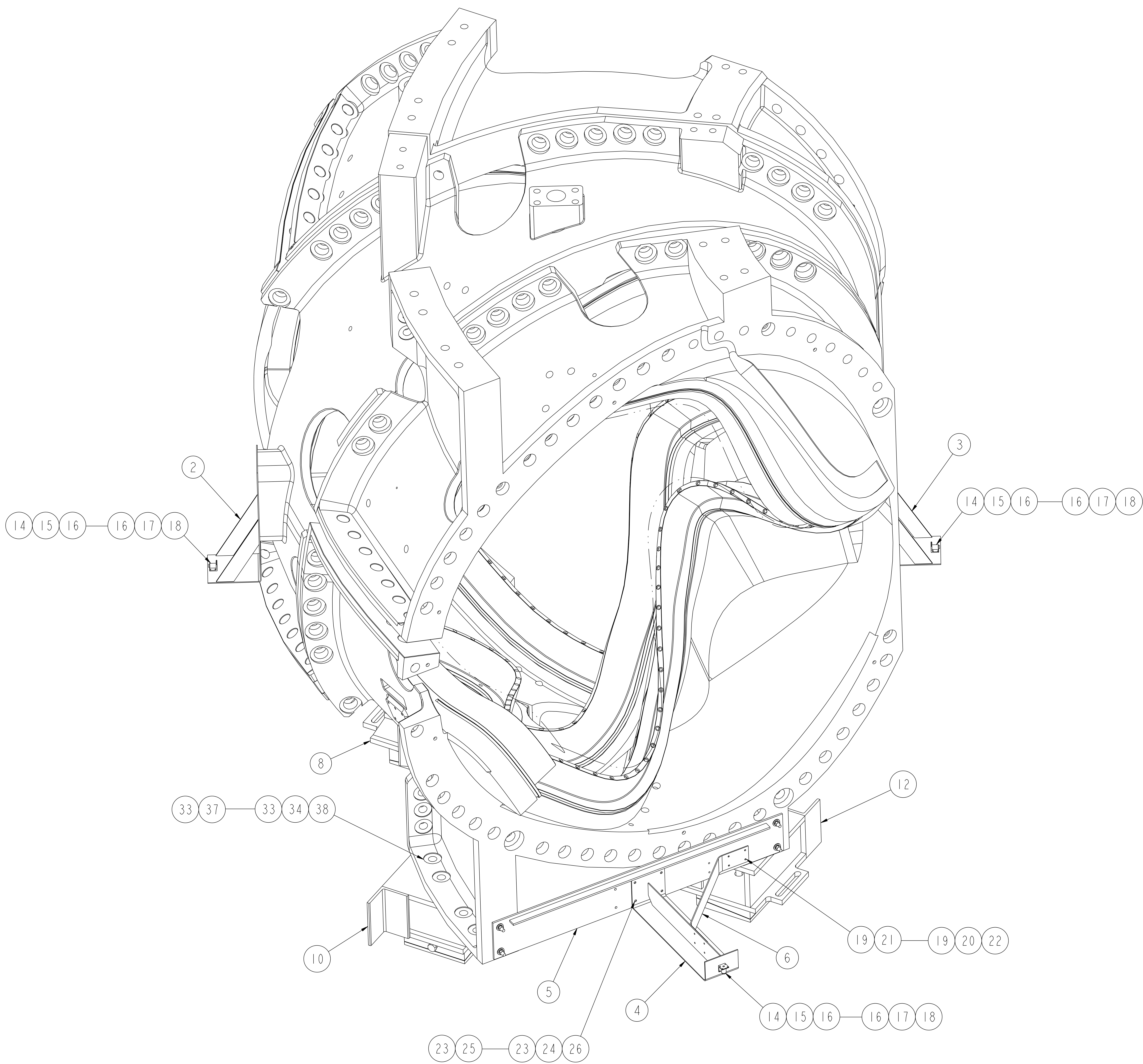
RELEASE LEVEL: Fabrication
 DWG VERSION NO: 0

WEIGHT	
MODEL NAME	SE185-300
WELDING ENGINEER	

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	NATIONAL COMPACT STELLARATOR EXPERIMENT	
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .XX +/- .000 0°-12° +/- .010 .XXX +/- .005 12°-120° +/- .010 ANGULAR +/- .0°-15° OVER 120° +/- .100	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	DSN: L. MORRIS 11-26-07 DRAWING NO: CHK: M. COLE 11-26-07 ENGR: T. BROWN 11-26-07 SUPV: J. SIEGEL 11-26-07
			SE185-302
			SHEET 4 OF 6 REV 2.0

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



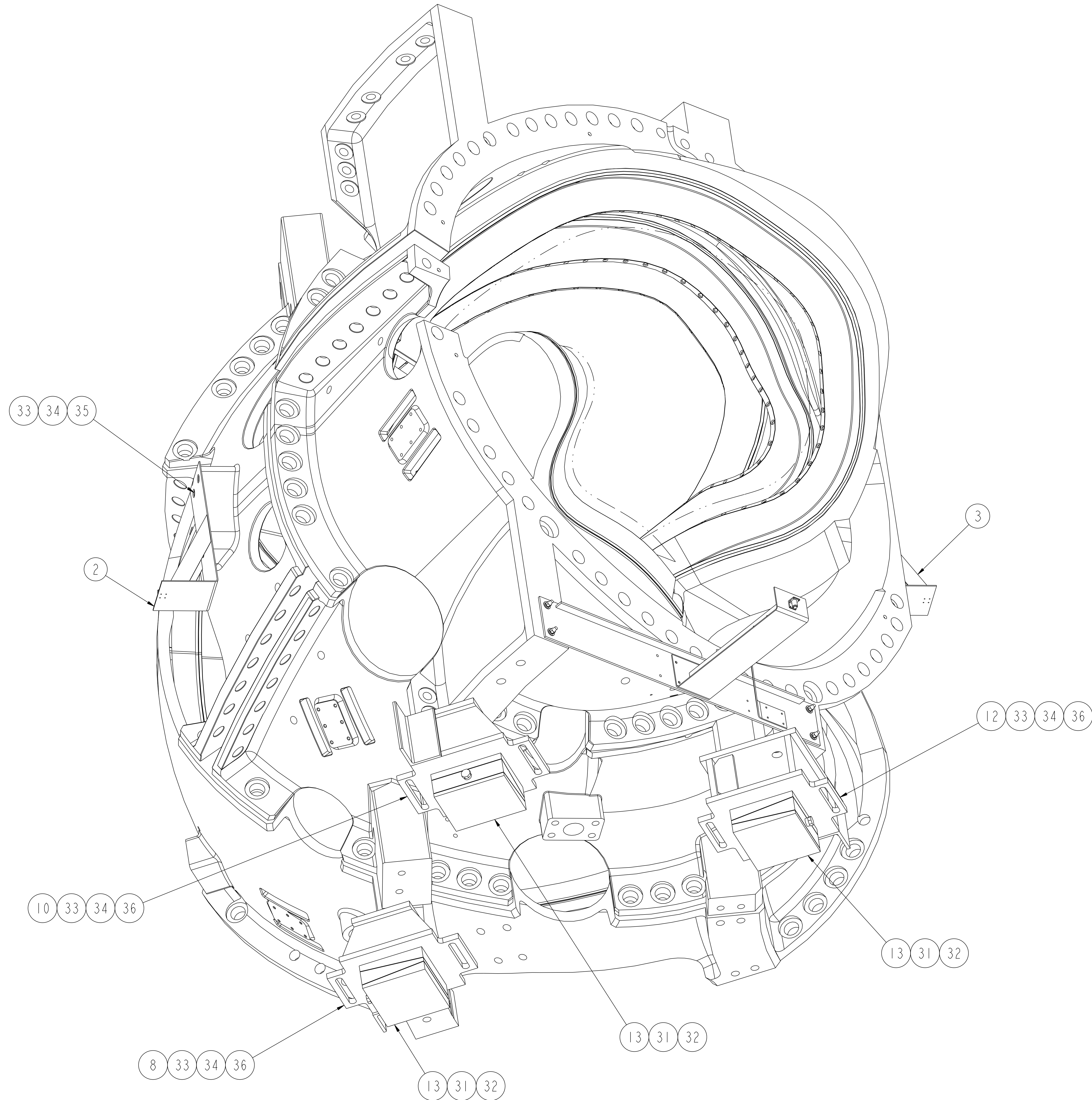
02 ASSEMBLY - RIGHT HALF PERIOD ASSEMBLY

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PPPL Drafting

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY NATIONAL COMPACT STELLARATOR EXPERIMENT	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .X ±.000 0°-120° ±.010 .XX ±.005 120°-120° ±.010 .XXX ±.005 120°-120° ±.010 ANGULAR ±.0°-15° OVER 120° ±.1°-172	DSN: L. MORRIS CHK: M. COLE ENGR: T. BROWN SUPV: J. SIEGEL	11-26-07 11-26-07 11-26-07 11-26-07
WEIGHT	MODEL NAME SE185-300	DRAWING NO: SE185-302	SHEET 5 OF 6 REV 2.0
WELDING ENGINEER	RELEASE LEVEL: Fabrication DWG VERSION NO: 0		

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



02 ASSEMBLY - BOTTOM ISOMETRIC VIEW

FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

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PPPL Drafting

RELEASE LEVEL: Fabrication
DWG VERSION NO: 0

WEIGHT
MODEL NAME
SE185-300
WELDING
ENGINEER

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY NATIONAL COMPACT STELLATOR EXPERIMENT	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	TOLERANCES NON-CUMULATIVE	DSN: L. MORRIS	11-26-07
NEXT ASSEMBLY	DECIMAL-INCH FRACTIONS	CHK: M. COLE	11-26-07
	.XX +/- .000 0°-12° +/- .010	ENGR: T. BROWN	11-26-07
	.XXX +/- .005 12°-120° +/- .010	SUPV: J. SIEGEL	11-26-07
	ANGULAR +/- .0°-15° OVER 120° +/- .010		
		DRAWING NO:	SE185-302
		SHEET 6 OF 6	REV 2.0

NCSX-SE185-302