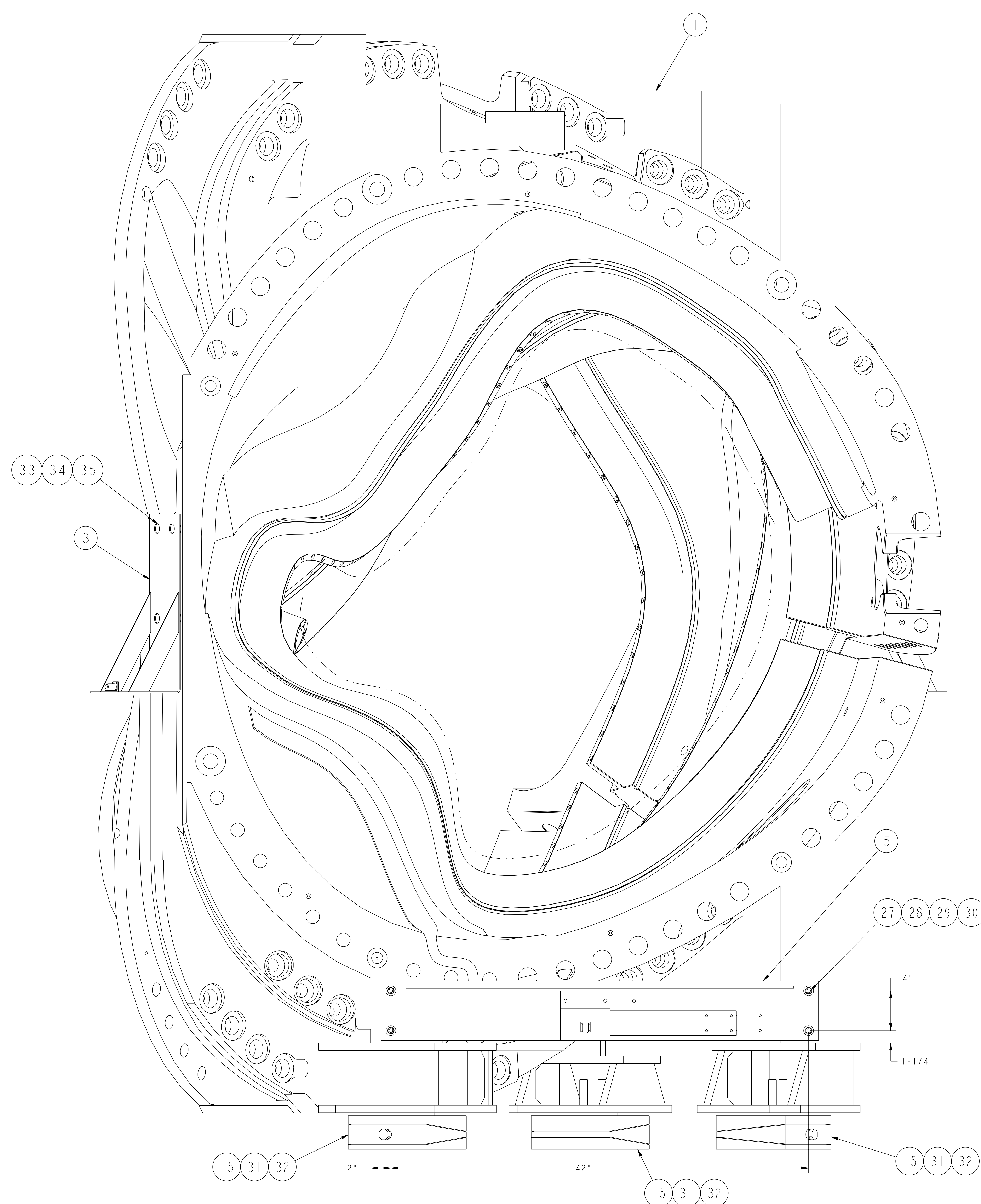


NO.	REVISION	BY	CH	SUP	APPROVED	DATE



NOTE
WORK THIS DRAWING WITH DRAWING SE185-314

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PPPL Drafting

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	M20 x 2.5MM PITCH METRIC CLASS 8 HEX NUT	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/903	---
1	---	12	SE186-308-02	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #2 WELDMENT - OPPOSITE	SEE DWG
---	1	11	SE186-308-01	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #2 WELDMENT - AS SHOWN	SEE DWG
1	---	10	SE186-307-02	MCWF SEGMENT "C" SUPPORT BRACKET WELDMENT - OPPOSITE	SEE DWG
---	1	9	SE186-307-01	MCWF SEGMENT "C" SUPPORT BRACKET TYPE #1 WELDMENT - AS SHOWN	SEE DWG
1	---	8	SE186-306-02	MCWF SEGMENT "A" SUPPORT BRACKET WELDMENT - OPPOSITE	SEE DWG
---	1	7	SE186-306-01	MCWF SEGMENT "A" SUPPORT BRACKET WELDMENT - AS SHOWN	SEE DWG
1	1	6	SE185-311-3	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
---	---	---	---	THIS DWG	LEFT HALF PERIOD ASSEMBLY

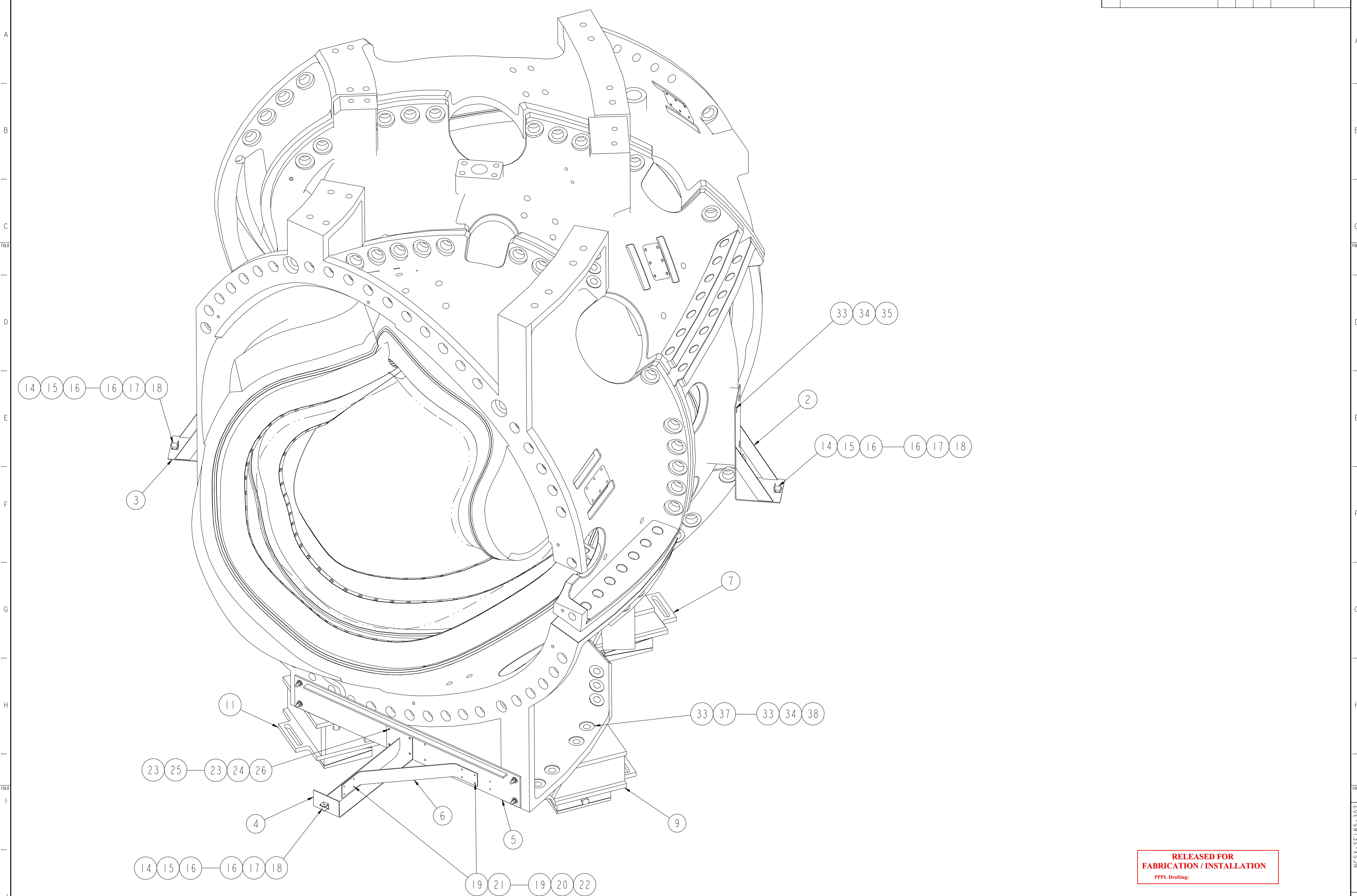
02 ASSY	01 ASSY	PART NO.	DRAWING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY REQ'D
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COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY NATIONAL COMPACT STELLARATOR EXPERIMENT			
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES UNLESS SHOWN OTHERWISE BREAK SHARP EDGES .005/.020	FIELD PERIOD ASSEMBLY FIELD PERIOD ASSEMBLY FIXTURE HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS			
WEIGHT	TOLERANCES NON-CUMULATIVE	DSN: L. MORRIS	11-26-07	DRAWING NO:	
MODEL NAME SE185-300	DECIMAL-INCH FRACTIONS	CHK: M. COLE	11-26-07	SE185-302	
WELDING ENGINEER	ANGULAR ±.05 OVER 120° ±.12	ENGR: T. BROWN	11-26-07	SHEET 1 OF 6	
		SUPV: J. SIEGEL	11-26-07	REV. D	

01 ASSEMBLY - LEFT HALF PERIOD ASSEMBLY

RELEASE LEVEL: Fabrication
DWG VERSION NO: 34

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



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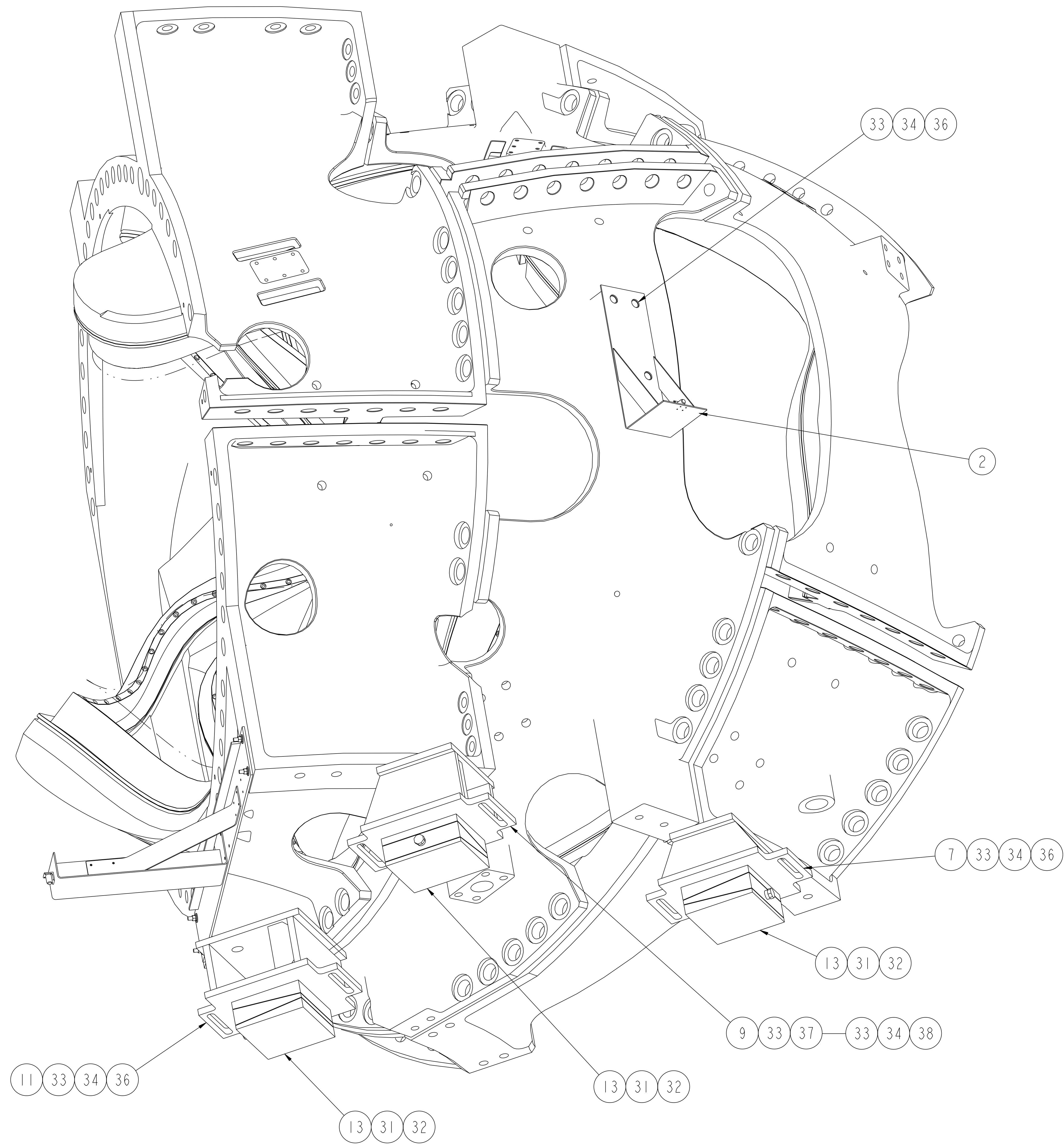
FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

01 ASSEMBLY - LEFT HALF PERIOD ASSEMBLY

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	TOLERANCES NON-CUMULATIVE	DSN: L. MORRIS 11-26-07 DRAWING NO:
NEXT ASSEMBLY	DECIMAL-INCH FRACTIONS	CHK: M. COLE 11-26-07	SE185-302
WEIGHT	.XX +/- .000 0°-120° +/- 12.0° .XXX +/- .005 120°-120° +/- 12.0° ANGULAR +/- 0°-15° OVER 120° +/- 12.0°	ENGR: T. BROWN 11-26-07	SHEET 2 OF 6
MODEL NAME SE185-300		SUPV: J. SIEGEL 11-26-07	REV D, 14
RELEASE LEVEL: Fabrication DWG VERSION NO: 34	WELDING ENGINEER		

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



01 ASSEMBLY - BOTTOM ISOMETRIC VIEW

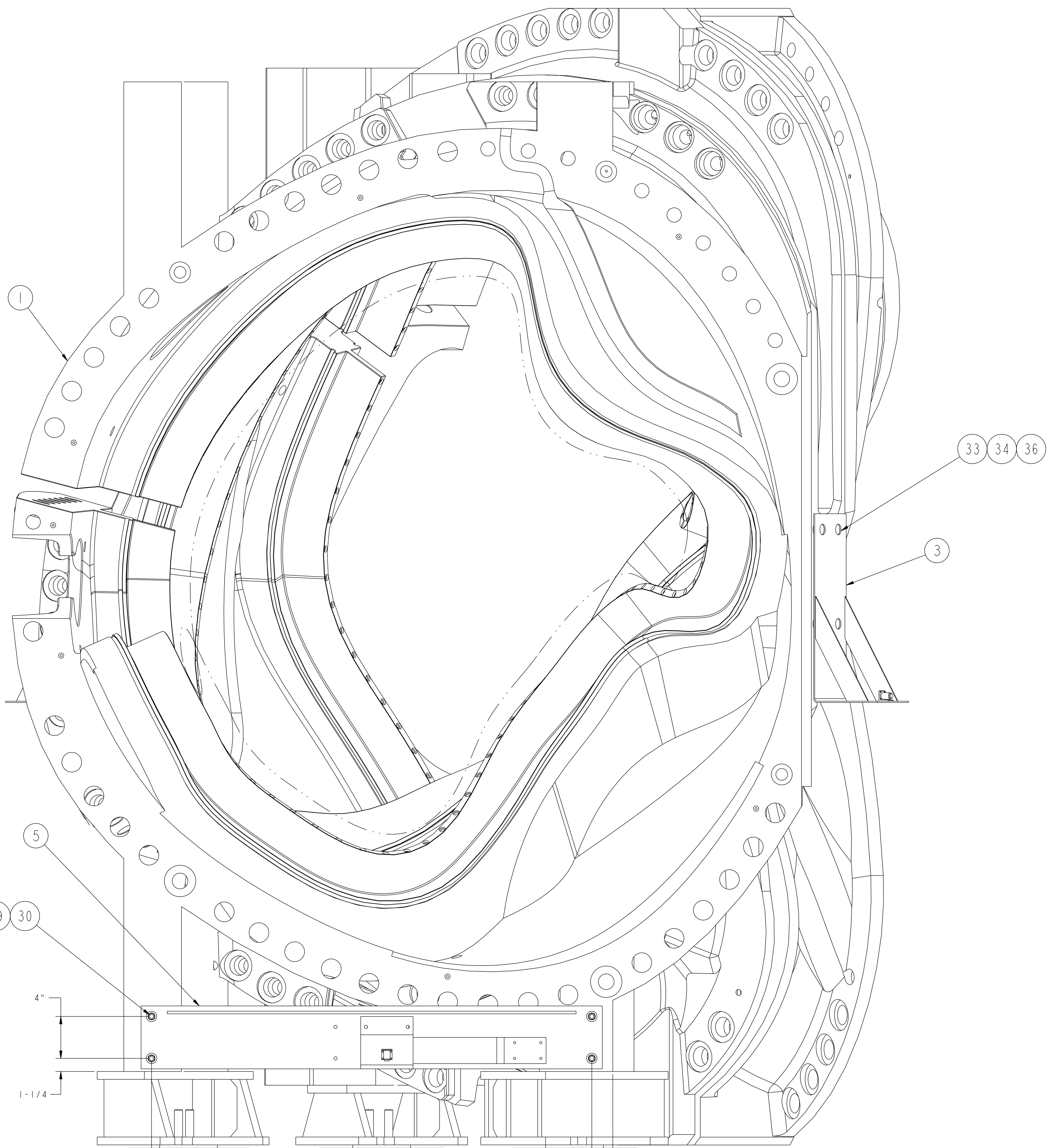
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FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
	UNLESS OTHERWISE SPECIFIED	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	
WEIGHT	TOLERANCES NON-CUMULATIVE	DSN: L. MORRIS	11-26-07 DRAWING NO:
MODEL NAME SE185-300	DECIMAL-INCH FRACTIONS	CHK: M. COLE	11-26-07
RELEASE LEVEL: Fabrication DWG VERSION NO: 34	NEXT ASSEMBLY	ENGR: T. BROWN	11-26-07
WELDING ENGINEER	.XX +/- .000 0°-120° +/- 15.0 .XXX +/- .005 92°-120° +/- 15.0 ANGULAR +/- 0°-15° OVER 120° +/- 15.0	SUPV: J. SIEGEL	11-26-07
			SHEET 3 OF 6
			REV D, 14

NCSX-SE185-302

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



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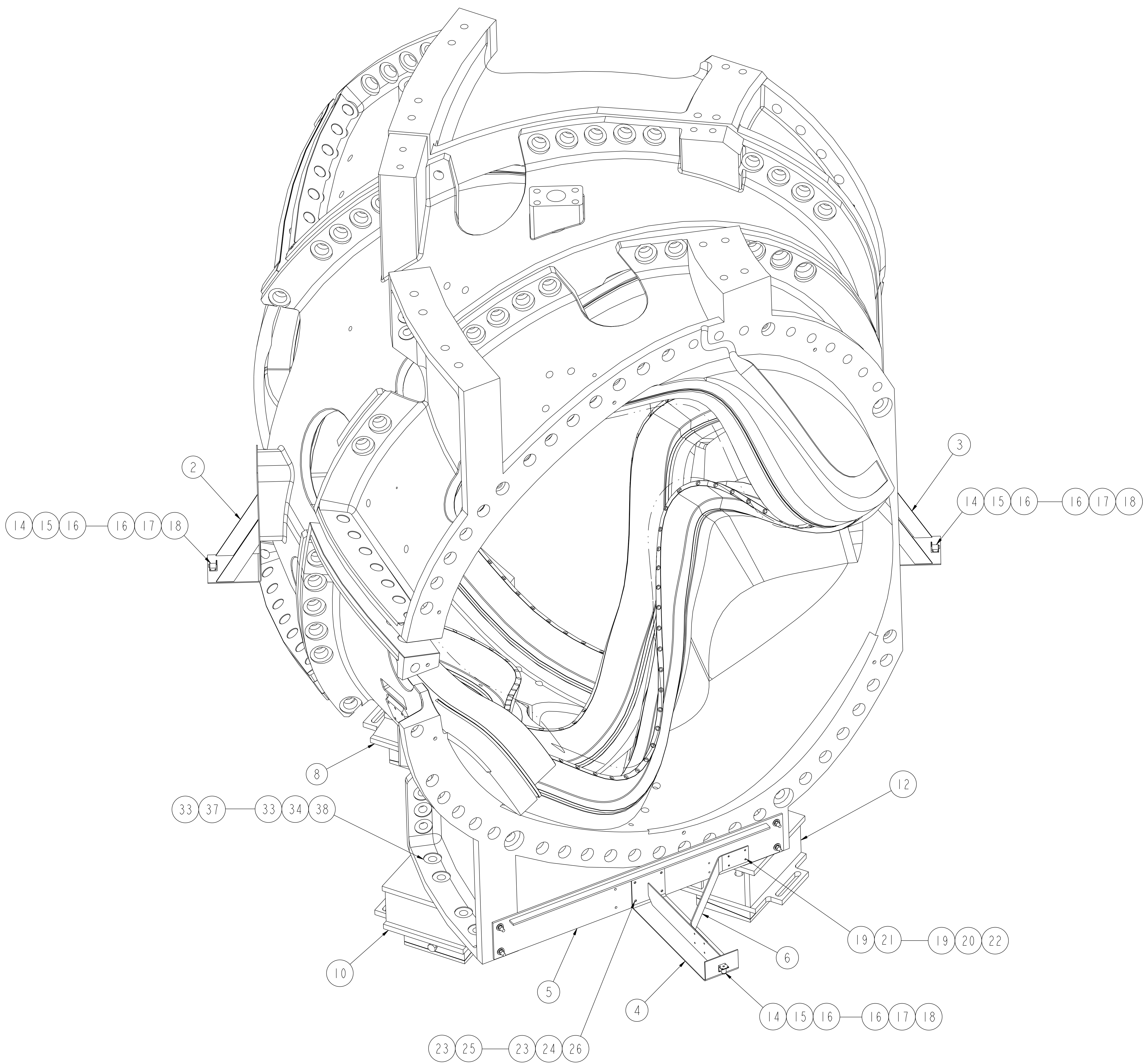
FOR BILL OF MATERIAL AND NOTES SEE SHEET 1

02 ASSEMBLY - RIGHT HALF PERIOD ASSEMBLY

RELEASE LEVEL: Fabrication
DWG VERSION NO: 34

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY	
	UNLESS OTHERWISE SPECIFIED	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 ±.000 120°-120° ±.010 .XXX ±.005 120°-120° ±.010 ANGULAR ±.0°-15° OVER 120° ±.010	DSN: L. MORRIS	11-26-07 DRAWING NO:
WEIGHT	MODEL NAME SE185-300	CHK: M. COLE	11-26-07
WELDING ENGINEER		ENGR: T. BROWN	11-26-07
		SUPV: J. SIEGEL	11-26-07
			SHEET 4 OF 6
			REV D, 14

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



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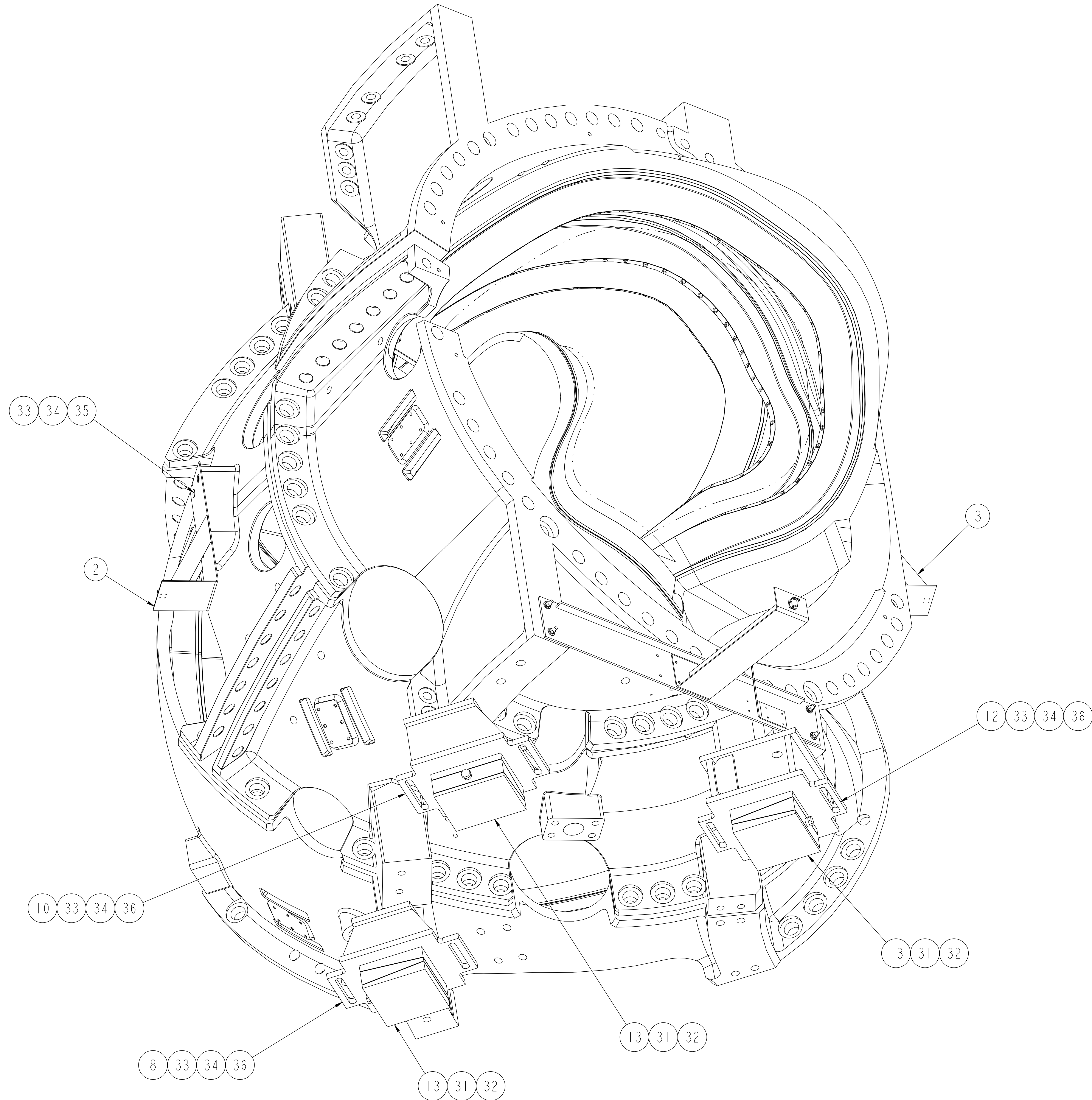
02 ASSEMBLY - RIGHT HALF PERIOD ASSEMBLY

RELEASE LEVEL: Fabrication
DWG VERSION NO: 34

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED DO NOT VERIFY INFORMATION BY SCALING DRAWING	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020 TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .X ±.100 0°-12° ±.100 .XX ±.030 12°-12° ±.100 .XXX ±.005 12°-120° ±.100 ANGULAR ±.0°-15° OVER 120° ±.100	<table border="0" style="width: 100%;"> <tr> <td colspan="2" style="text-align: center;">PRINCETON PLASMA PHYSICS LABORATORY</td> </tr> <tr> <td colspan="2" style="text-align: center;">NATIONAL COMPACT STELLARATOR EXPERIMENT</td> </tr> <tr> <td colspan="2" style="text-align: center;">FIELD PERIOD ASSEMBLY</td> </tr> <tr> <td colspan="2" style="text-align: center;">FIELD PERIOD ASSEMBLY FIXTURE</td> </tr> <tr> <td colspan="2" style="text-align: center;">HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS</td> </tr> <tr> <td style="width: 50%;">DSN: L. MORRIS</td> <td style="width: 50%;">11-26-07</td> </tr> <tr> <td>CHK: M. COLE</td> <td>11-26-07</td> </tr> <tr> <td>ENGR: T. BROWN</td> <td>11-26-07</td> </tr> <tr> <td>SUPV: J. SIEGEL</td> <td>11-26-07</td> </tr> </table>	PRINCETON PLASMA PHYSICS LABORATORY		NATIONAL COMPACT STELLARATOR EXPERIMENT		FIELD PERIOD ASSEMBLY		FIELD PERIOD ASSEMBLY FIXTURE		HALF FIELD PERIOD ASSEMBLY WITH SUPPORTS AND LASER PENS		DSN: L. MORRIS	11-26-07	CHK: M. COLE	11-26-07	ENGR: T. BROWN	11-26-07	SUPV: J. SIEGEL	11-26-07
PRINCETON PLASMA PHYSICS LABORATORY																				
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ENGR: T. BROWN	11-26-07																			
SUPV: J. SIEGEL	11-26-07																			
WEIGHT		DRAWING NO:																		
MODEL NAME	SE185-300	SE185-302																		
NEXT ASSEMBLY		SHEET 5 OF 6																		
WELDING ENGINEER		REV D. 14																		

NCSX-SE185-302

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02 ASSEMBLY - BOTTOM ISOMETRIC VIEW

FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

RELEASE LEVEL: Fabrication
DWG VERSION NO: 34

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 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 .XX +/- .000 0°-120° +/- .010 .XXX +/- .005 120°-120° +/- .010 ANGULAR +/- 0°-15° OVER 120° +/- .112	DSN: L. MORRIS CHK: M. COLE ENGR: T. BROWN SUPV: J. SIEGEL	11-26-07 11-26-07 11-26-07 11-26-07
		DRAWING NO: SE185-302	SHEET 6 OF 6 REV D, 14

NCSX-SE185-302