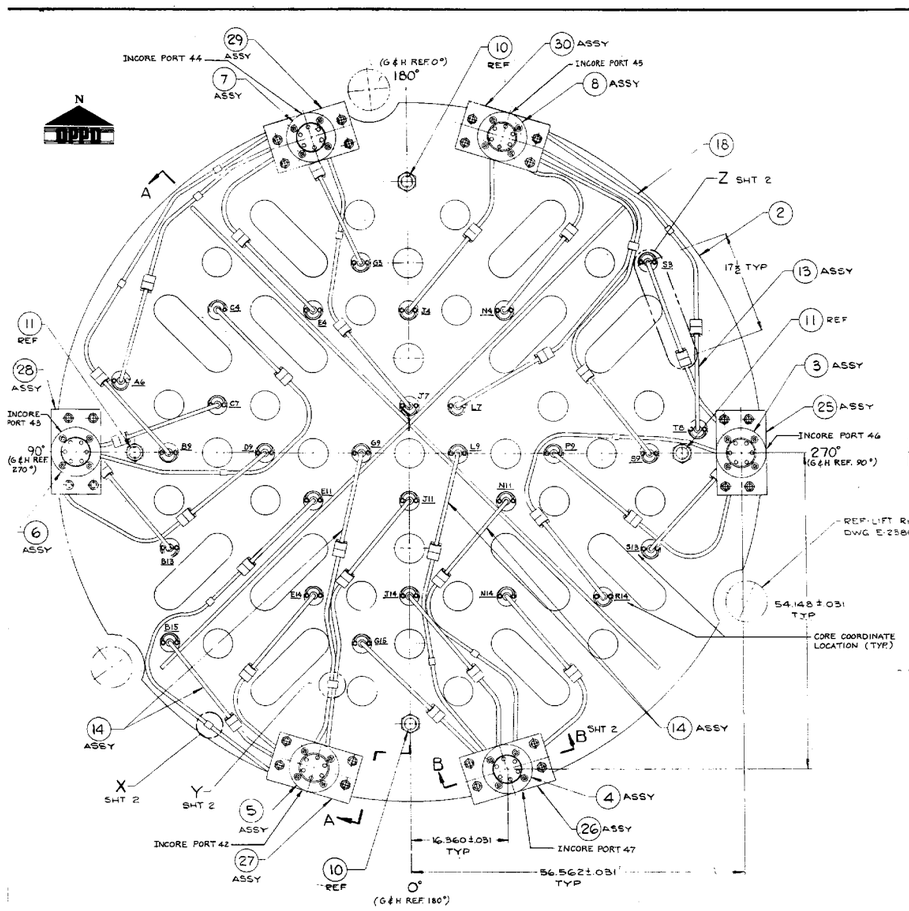
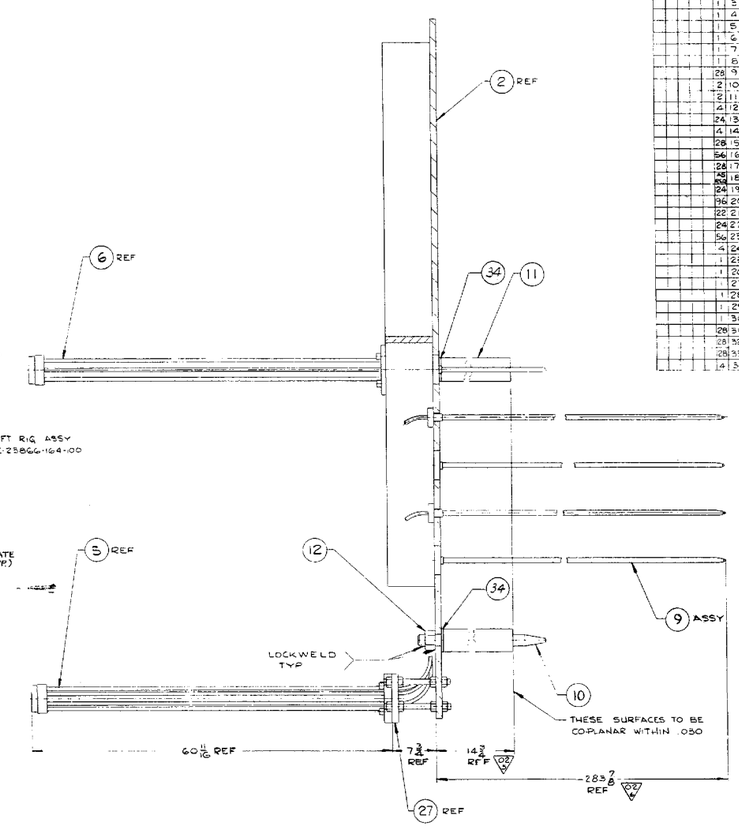


1 IN-CORE INSTRUMENTATION ASSEMBLY



SECTION A-A

BILL OF MATERIALS
QUANTITIES ARE FOR

GROUP NO. & QUANTITY 6	5	4	3	2	1	ITEM NO.	NAME	PIECE NO.	MATERIAL	REMARKS
					X	1	INSTRUMENTATION SUPPORT ASSY	E 23866-165-051-1		
					1	2	PLATE	-052-1		
					1	3	GUIDE TUBE CLUSTER	-054-1		
					1	4	GUIDE TUBE CLUSTER	-054-2		
					1	5	GUIDE TUBE CLUSTER	-054-3		
					1	6	GUIDE TUBE CLUSTER	-054-4		
					1	7	GUIDE TUBE CLUSTER	-054-5		
					1	8	GUIDE TUBE CLUSTER	-054-6		
					28	9	THIMBLE ASSY	-053-1		
					2	10	LOCATING PIN	-055-11		
					2	11	PIN	-055-10		
					4	12	NUT-FINISHED HEX	-051-2	ASTM A194-67 SPE 1	2-GUN 2B
					24	13	GUIDE TUBE & FLANGE ASSY	-055-17		
					4	14	GUIDE TUBE & FLANGE ASSY	-055-20		
					28	15	FLANGE	-055-15		
					56	16	SOCKET HEAD CAP SCREW	-051-16	ASTM A193-66 SPE 1	1-13UNC 3B × 1½ LG
					28	17	BRACKET	-055-14		
					AS req	18	GUIDE TUBE	-055-18	ASTM A269-66 SPE 1	.625 OD × .058 WALL
					24	19	STUD BOLT	-055-9		
					96	20	NUT-FINISHED HEX	-051-20	ASTM A194-67 SPE 1	1-8UNC 2B
					22	21	SADDLE BLOCK-SINGLE	-055-12		
					24	22	SOCKET HEAD CAP SCREW	-051-22	ASTM A193-66 SPE 1	¾-10UNC 3B × 2 LG
					50	23	SOCKET HEAD CAP SCREW	-051-23	ASTM A193-66 SPE 1	⅜-16UNC 3B × ½ LG
					4	24	SADDLE BLOCK-DOUBLE	-055-13		
					1	25	GUIDE TUBE FLANGE ASSY	-055-1		
					1	26	GUIDE TUBE FLANGE ASSY	-055-2		
					1	27	GUIDE TUBE FLANGE ASSY	-055-3		
					1	28	GUIDE TUBE FLANGE ASSY	-055-4		
					1	29	GUIDE TUBE FLANGE ASSY	-055-5		
					1	30	GUIDE TUBE FLANGE ASSY	-055-6		
					28	31	BRACKET	-055-16		
					28	32	LOCK BAR	-055-22		
					28	33	LOCK BAR	-055-23		
					4	34	WASHER	-051-33	ASTM A276-65 SPE 13	SEE NOTE 7

7. ITEM NO 34, 4 21/32 OD × 2 1/2 I.D. × 3/16 THICK.
6. CHROME PLATE THREADS OF ITEMS 16 & 32 .0002 - .0005 THICK IN ACCORDANCE WITH QQ-C 320 CLASS 2B.
5. GUIDE TUBES (ITEM 18) MUST BE INSERTED INTO THE GUIDE TUBE FLANGE ASSY (ITEMS 25 TO 30) CORRESPONDING TO ITS INSTRUMENTATION POSITION NO. SEE DWG. E 23866-165-056 ITEMS 1-66
4. EXCEPT WHERE THERE IS A DOUBLE SADDLE BLOCK (ITEM 24) NO GUIDE TUBES (ITEM 18) SHALL BE WITHIN ¼ OF ONE ANOTHER. ITEM 18 MUST NOT PASS OVER ANY 5 DIA. HOLE OR SLOT.
3. MINIMUM I.D. OF ITEM 18 AFTER BENDING & WELDING MUST NOT BE LESS THAN .625 AND MUST PASS A BALL GAGE OF THIS DIA.
2. THIS PRODUCT TO BE IN ACCORDANCE WITH CENPD SPEC. 23866-16-401
1. DIMENSIONING AND TOLERANCING PER USASI Y14.5-1966

NOTES:

EA-FC-00-134 DF 12/01

ALL ITEMS DEPICTED ON THIS DRAWING ARE WITHIN LICENSE RENEWAL SCOPE.

REV.	DESCRIPTION	BY & DATE	CHK & DATE	ENG APPL	PROJ APPL
007	1-ZONE D-3, WAS 14½ REF E-ADDED ITEM 34 TO B(14) 3-ZONE D-2 WAS 28⅝ PER REV REQ. 23866-325	RJB 10-30-87	DWL 10-30-87	[illegible]	[illegible]

REV.	DESCRIPTION	BY & DATE	CHK & DATE	ENG APPL
	CERTIFIED FOR CONSTRUCTION PER REV REQ 23866-320	DW 5-2-78	PJK 5-2-78	[illegible]
007	1 REVISED PLAN VIEW TO SHOW RE ROUTING OF INSTR. AT POS. 9, 12, 13, 15, 24 & 26 SEE REV REQ 23866-478	DW 11-7-79		RVM
	(3) ADDED ITEMS 32 & 33 TO QWY PLAN VIEW (1) BAY QUANTITY ITEM 2 WAS 1 (4) ADDED NOTE 6 (5) ZONE D3 14½ WAS 15 5/16 (6) ZONE D3 28⅝ WAS 28⅞ FOR CHANGES (7) THRU (11) SEE UNIT 2 REV REQ 23866-481	DW 11-4-80	[illegible]	[illegible]

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN UNIT NO. 1

COMPONENT CODE # 91-0128-0470

PREPARED UNDER AEC CONTRACT | LEAD CONTRACT 23866

TOLERANCES UNLESS OTHERWISE SPECIFIED

DIMENSIONS	UNDER 6	6-18	OVER 18
DECIMAL DIMS.	±.005	±.005	±.010
FRACTIONAL DIMS	±1/64	±1/32	±1/16
FINISH (L) 3AA-125 MICRO IN.		ANGLES ±1/2°	
THREADS-UNIFIED CL-2A-2B		CHAMFER ±5°	
BREAK CORNERS 1/64 MAX. RAD. OR CHAMFER			
FILLETS 1-64 TO 1/32 RADIUS			
DIMENSION IN INCHES BASED ON 68°F (20°C)			

NEXT ASSY.
FINAL ASSY
SUPERSEDES
SUPERSEDED
DO NOT SCALE D'WG.
SCALE: EIGHTH SIZE
CALC. WT.
ACT. WT.

DRAWN BY D. W. LEAR 12-21-65
CHECKED [illegible] 12-21-65
APPROVALS [illegible] 12-21-65
[illegible] 12-21-65

COMBUSTION ENGINEERING NUCLEAR
WINDSOR, CONNECTICUT

IN-CORE INSTRUMENTATION SUPPORT ASSEMBLY

E-23866-165-051 4

001552 1

FOR INFORMATION ONLY

NOTE: THIS PRINT IS TO BE USED FOR THE FCS LICENSE RENEWAL PROJECT ONLY.
IT MAY NOT REFLECT THE MOST CURRENT REVISION OF THIS DRAWING.