OUTSTANDING CHANGES MUST BE ATTACHED FOR WORKING COPY
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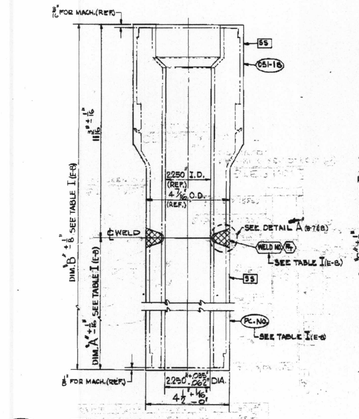
E-233-051

CHROME PLATE THREADS & OVER TOP OF FLANGE & DOWN INSIDE FOR DIM. AS SHOWN IN ACCORDANCE WITH WEST-INGHOUSE SPECIFICATION WPS. CAP 359261-1 Q-C-5501. CHROME PLATING THICKNESS TO BE .0005" TO .0008"



(051-01) THRU (051-14) & (051-16) HOUSING ASSEMBLY
TYPICAL CONTROL ROD HOUSING WELDING ASSY.
SCALE: 6"=1'-0"

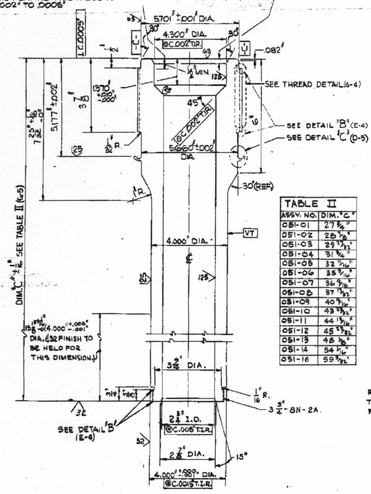


TABLE II

ASSY. NO.	DIM. 'C'
051-01	27⅝"
051-02	26⅛"
051-03	25⅞"
051-04	31⅛"
051-05	33⅜"
051-06	38⅝"
051-07	36⅝"
051-08	37⅛"
051-09	40⅞"
051-10	43⅜"
051-11	44⅛"
051-12	45⅛"
051-13	48⅜"
051-14	54⅛"
051-16	59⅛"

(051-01) THRU (051-14) & (051-16) HOUSING ASSEMBLY (SEE NOTE #5)
TYPICAL CONTROL ROD HOUSING MACHINING ASSY.
SCALE: 6"=1'-0"

.0705" ±.005"
8.660" ±.002" DIA.
.160" +.000" -.005" R.

DETAIL 'C' (G-5)
SCALE: 48"=1'-0"

.0705" ±.005"
.160" +.000" -.005" R.

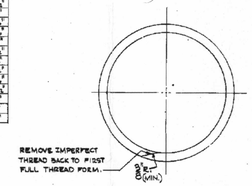
NOTE
AFTER PLATING THREADS SHALL SUCCESSFULLY PASS THE APPLICATION OF 6G - NO GO RING GAGES FOR 6°-5 ACME-2G THREADS.

.6070" MAX. DIA. AFTER PLATING
.6029" MIN. DIA. BEFORE PLATING
.5701" ±.001" DIA.
WIRE SIZE .11548" DIA. FOR THREAD INSPECTION.
.013" +.003" -.000" R. BEFORE PLATING
45°
.004" +.001" -.000" BEFORE PLATING

THREAD & GAGE STANDARD
6°-5 ACME-2G THREAD
MAJOR DIA. MAX. = 6.000"
MAJOR DIA. MIN. = 5.990"
PITCH DIA. MAX. = 5.850"
PITCH DIA. MIN. = 5.832"
MINOR DIA. MAX. = 5.730"
MINOR DIA. MIN. = 5.738"
THREAD FINISH = 63AA

THREAD DETAIL (G-6)
SCALE: 48"=1'-0"

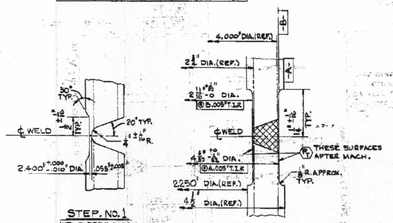
CAUTION
MIN. DIM'S. BEFORE PLATING SHALL NOT BE LESS THAN STANDARD MIN. DIM'S. SHOWN. MAX. DIM'S. AFTER PLATING SHALL NOT EXCEED STANDARD MAX. DIM'S. SHOWN.



DETAIL 'B' (F-6) (G-5)
SCALE: NONE

TABLE I

ASSY. NO.	PC. NO.	WELD NO.	DIM. 'A'	DIM. 'B'
051-01	051-19	1-051	16⅜"	28⅛"
051-02	051-20	2-051A-D	18"	29⅜"
051-03	051-21	3-051A-D	18⅜"	30⅜"
051-04	051-22	4-051A-D	23⅜"	32⅛"
051-05	051-23	5-051A-H	21⅜"	33"
051-06	051-24	6-051A-D	26⅜"	35⅜"
051-07	051-25	7-051A-D	28⅛"	36⅜"
051-08	051-26	8-051A-H	26⅜"	37⅛"
051-09	051-27	9-051A-H	29⅜"	40⅜"
051-10	051-28	10-051A-D	32⅜"	44⅛"
051-11	051-29	11-051A-H	33⅛"	45⅛"
051-12	051-30	12-051A-D	35⅜"	46⅜"
051-13	051-31	13-051A-H	37⅛"	48⅜"
051-14	051-32	14-051A-D	43⅜"	54⅛"
051-16	051-34	16-051A-F	42⅛"	59⅛"



STEP NO. 1
WELD PREP MACH.

STEP NO. 2
MACHINING REQ'D. FOR (4) OF WELD.

DETAIL 'A' (F, G-7)
SCALE: 12"=1'-0"

MATERIAL NOTES
"A" AS SUPPLEMENTED BY C.E. PURCHASE SPEC. P8C8(b).
"B" AS SUPPLEMENTED BY C.E. PURCHASE SPEC. P4582(2).

	051-34	1	TUBE	4½"OD x 2250" I.D. x 43⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-16		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-32	1	TUBE	4½"OD x 2250" I.D. x 43⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-14		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-31	1	TUBE	4½"OD x 2250" I.D. x 37⅜" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-13		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-30	1	TUBE	4½"OD x 2250" I.D. x 38⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-12		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-29	1	TUBE	4½"OD x 2250" I.D. x 34⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-11		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-28	1	TUBE	4½"OD x 2250" I.D. x 32⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-10		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-27	1	TUBE	4½"OD x 2250" I.D. x 29⅛" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-09		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-26	1	TUBE	4½"OD x 2250" I.D. x 26⅝" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-08		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-25	1	TUBE	4½"OD x 2250" I.D. x 25⅛" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-07		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-24	1	TUBE	4½"OD x 2250" I.D. x 24⅜" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-06		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-23	1	TUBE	4½"OD x 2250" I.D. x 21⅜" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-05		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-22	1	TUBE	4½"OD x 2250" I.D. x 21" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-04		6	HOUSING ASSY.	EACH CONSISTING OF:		
	051-21	1	TUBE	4½"OD x 2250" I.D. x 19⅜" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-03		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-20	1	TUBE	4½"OD x 2250" I.D. x 18⅛" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE			
051-02		4	HOUSING ASSY.	EACH CONSISTING OF:		
	051-19	1	TUBE	4½"OD x 2250" I.D. x 17" LG.	INCONEL	SB-167 "B"
	051-18	1	FLANGE	(SEE SC-32666-256)	SST TYPE 304	SA-182 "A"
051-01		1	HOUSING ASSY.	CONSISTING OF:		

ASSY NO.	PC NO.	NO. REQ'D.	NOMENCLATURE	MATERIAL SPEC.	MATERIAL NOTE
LIST OF MATERIAL - QUANTITIES PER					

GEOMETRIC TOLERANCES FOR MACHINED SURFACES UNLESS SPECIFIED ON FACE OF DRAWING.

SYM.	GEOMETRY	TOL.
⏥	FLATNESS & STRAIGHT.	.001"/in
⊥	PERPENDICULARITY	.001"/in
//	PARALLELISM	.001"/in
◎	CONCENTRICITY	.001" DIA
⌖	SYMMETRY	.001" DIA
⌖	TRUE POSITION	.001" DIA
◎	CONCENTRICITY	.001"TIR
↗	RUNOUT	.001"TIR

ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68° F. — SEE NOTE #4
FINISH √ UNLESS NOTED
TOLERANCE ON: FRACTIONS ± 1/64 DECIMALS ± .010" ANGLES ± 0°-30' UNLESS NOTED

CONTRACT 3266

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GENERAL NOTES

1. FOR STANDARD NOTES, SEE REF. DWG. NO. 4.
2. SIZES IN U/M ARE FINISHED SIZES. NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE, UNLESS NOTED.
3. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
4. REFERENCE (REF.) DIMENSIONS ARE FOR INFORMATION ONLY, DO NOT USE FOR FABRICATION.
5. AFTER MACHINING AND PRIOR TO CHROME PLATING BY INSPECT EACH HOUSING ASSY OVER THE OUTSIDE SURFACES TO M&P SPEC. 2.4.3.3.(c)

REFERENCE DRAWINGS

NO.	TITLE	DWG. NO.
1.	CLOSURE HEAD MACHINING	E-233-047
2.	CLOSURE HEAD ASSEMBLY	E-233-048
3.	CONTROL ROD PENETRATION - DETAILS	E-233-052
4.	STANDARD NOTES	A-280-552

WELD TABULATION CONT.

10-051 A-D	WA- 32666-051
11-051 A-H	
12-051A-D	
13-051A-H	
14-051A-D	
16-051A-F	

WELD TABULATION

WELD NO.	DETAIL	WELD PROC.
1-051	WA- 32666-051	
2-051 A-D		
3-051 A-D		
4-051 A-D		
5-051 A-H		
6-051 A-D		
7-051 A-D		
8-051 A-H		
9-051 A-H		
11-051 A-H		

SYM	ZONE	DESCRIPTION	DATE	APPROVED
1	L/M	REVISED NO. REQ'D ON PC#051-14 FROM 12 TO 4. REVISED NO. REQ'D ON PC# 051-16 FROM 6 TO 8. DELETED ASS'Y NO. 051-33 FROM L/M TABLE E-8.	CEH 7-5-67	B.M. 7-11-67
2	A5-6 D6-7 C-7	ADDED NOTE #5 ADDED "SEE DETAIL 'B'" 8 15/16"+.031" WAS 8 7/16"+.031"	CEH 11-2-67	B.M. 11-19-67
3	F-6	ADDED "SEE DET. B" THRD. RELIEF	SST 12-18-68	B.M. 1-6-68
4	A-7	REVISED NOTE #5.	SST 12-18-68	B.M. 1-6-68
5	L/M	NO. REQ'D. FOR ASS'Y NO. 051-16 WAS 5.	P.S.P. 1-10-68	P.S.P. 1-10-68

DWN. BY	J.B. Stewart Jr.
DATE	11-18-66
CKD. BY	A.L. [illegible]
DATE	12-7-66
APPD. BY	J.A. [illegible]
DATE	12-19-66
APPROVED	DATE

SEE FIRST SHEET FOR APPROVAL STATUS

S.I. P.S.P. # 325043
ENGINEERING, INC.
LOCA DIVISION

CONTROL ROD MECHANISM HOUSING DETAILS

FOR WESTINGHOUSE ELECTRIC COORP. 175" I.D. REACTOR VESSEL

CODE IDENT. NO. | SIZE E | 233-051-5
SCALE AS SHOWN | WEIGHT | SHEET

7-31-12

D-01