

Region III

1-6294

0700036

release

COMBUSTION ENGINEERING

Charles E. MacDonald, Chief
Transportation Branch
Division of Safeguards and Transportation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

October 14, 1987

R

Dear Mr. MacDonald:

This is to request an amendment to the Model No. UNC-2901 shipping package to allow the optional use of ceramic sheet insulation to replace asbestos in the top and bottom of the drum. Enclosed is Drawing D-5007-8086, Rev. 4 and Drawing B-5007-8112, Rev. 1 showing this change.

The flexible ceramic sheet will not burn and has better insulating properties than the asbestos sheet. The thermal conductivity of the ceramic is 0.38 btu/in/hr/°F/Ft², versus 1.15 for asbestos. Thus, this change will have no significant effect on the ability of the UNC-2901 package to meet the safety performance requirements of 10 CFR Part 71.

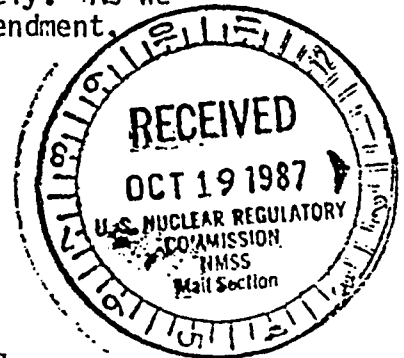
A check for the minimum licensing fee will be submitted separately. As we discussed, we would appreciate your efforts to expedite this amendment.

Very truly yours,

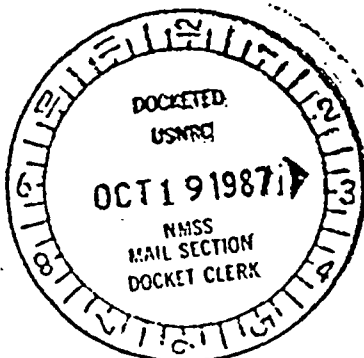
COMBUSTION ENGINEERING, INC

H.E. Eskridge

H. E. Eskridge
Supervisor, Nuclear Licensing,
Safety and Accountability



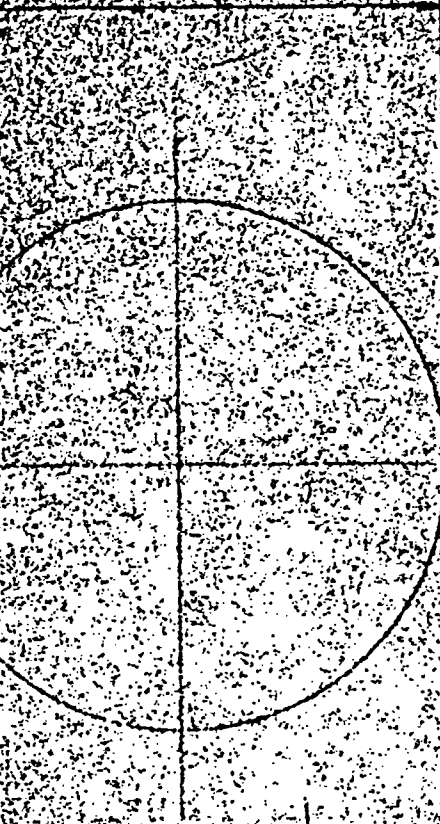
/eg
Enclosure



H-52

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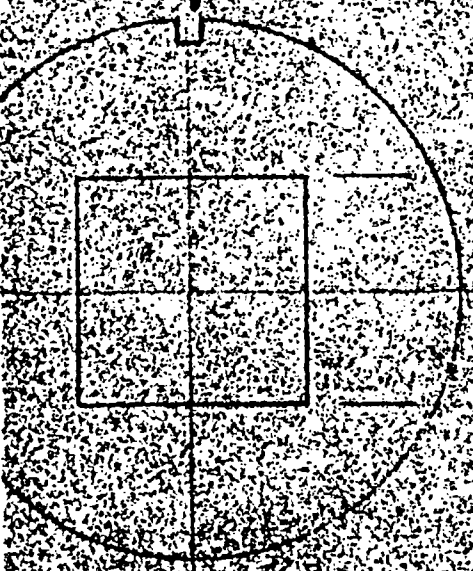
22 DIA (TYP)



ITEM

PLYWOOD

1/4" WID X 1/4" LG
SLOT - 2A ONLY



2A
2B
1 1/4" 30
1 1/4" 30

MATERIAL FOR COMPLETE ASSEMBLY

NO REQD	DET NO.	PWD NO.	QTY	NAME OF PART	SIZE	MATERIAL
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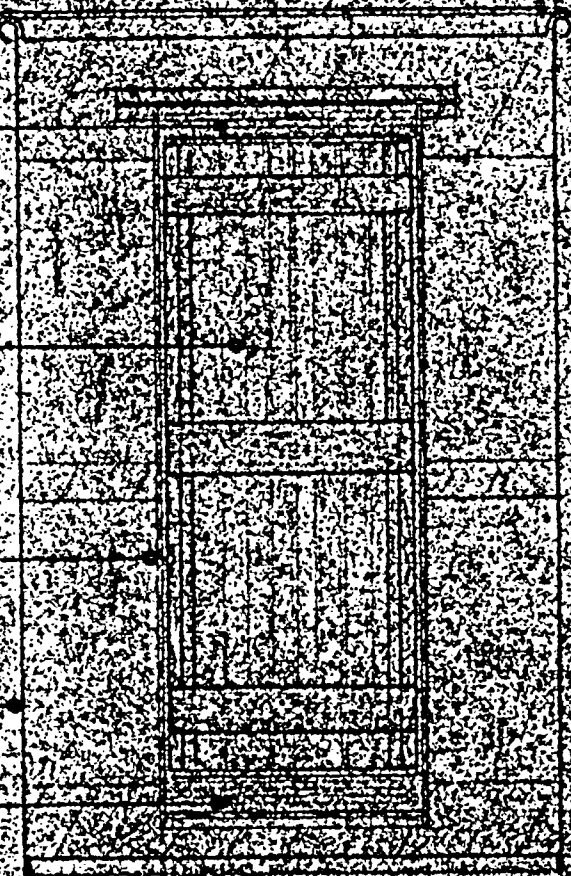
END CUSHION

PELLET PACKAGE

SQUARE INSERT

SHIPPING DRUM

END CUSHION
ETHAFOAM OR EQ



PELLET SHIPPING CONTAINER

1 - 1/4" 30 - 1/4" 30 - 1/4" 30

8 TMR, GSKT, FULL FACE
14" SQ. ASBESTOS
ASIM D-1110
GRADE PRIMA A
OR EQUAL

BY COMBUSTION ENG.

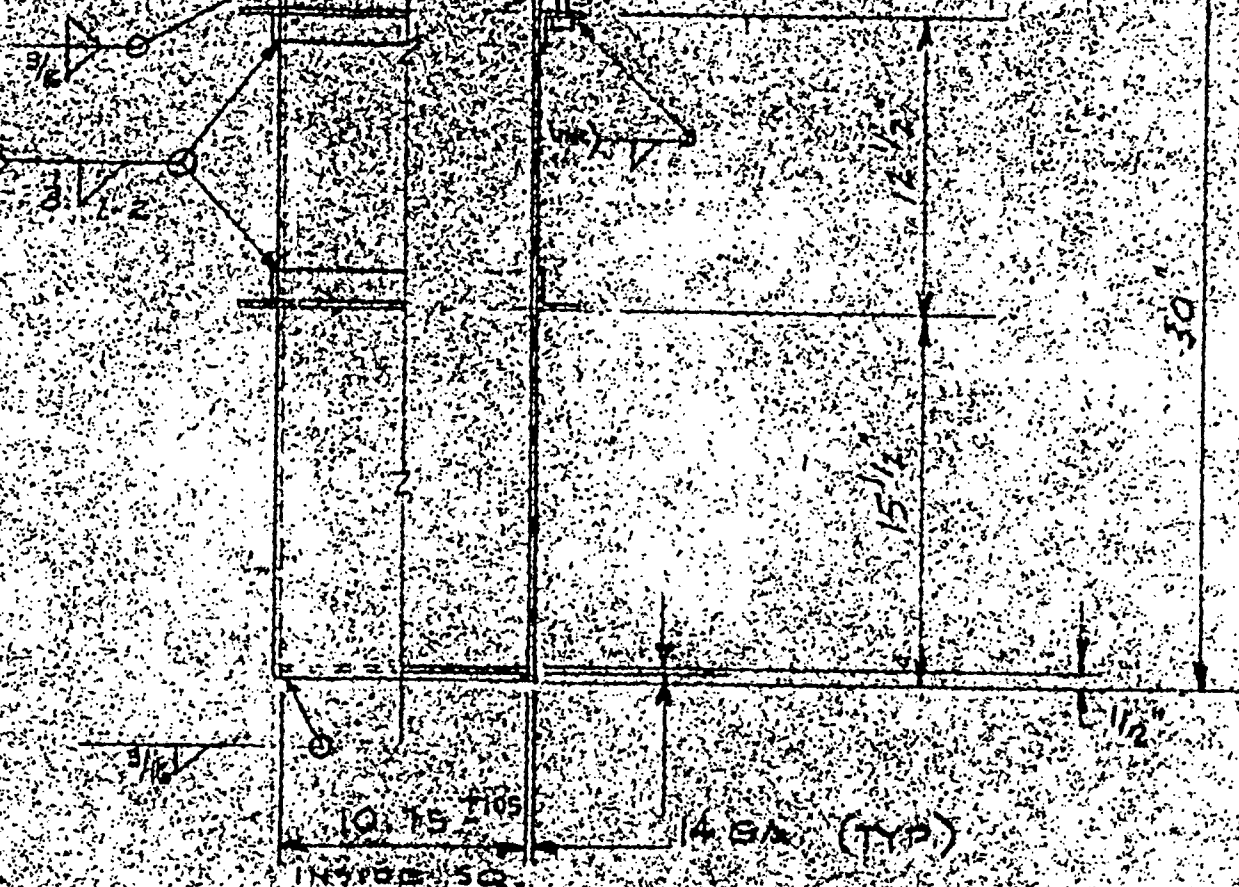
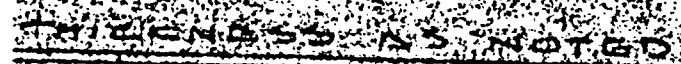





EXHIBIT 4

CLIP TO BE LOCATED ON TOP
SIDE OF DRUM WHEN DRUM



DATE 12/5/80

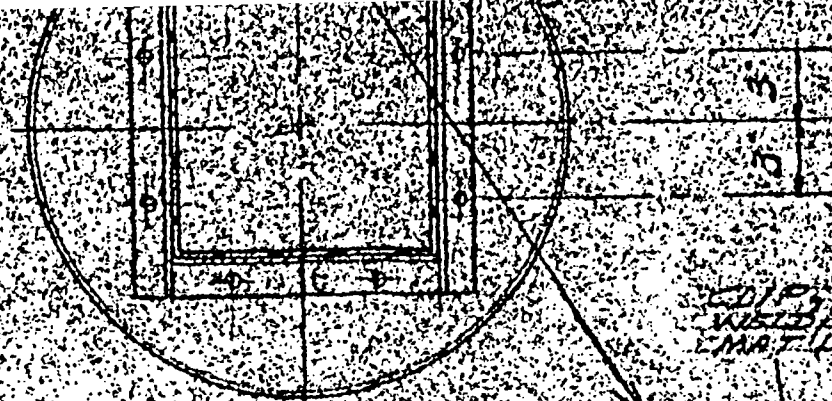


4	9/1/87	1/8" THICK 7500 PSI 12" CIRCULAR 3005 1/8" BORE				
	9/23/91	CLIP TO 4" X 18" MIN	REV			
	11/25/90	CAP FILE HOLD FOR WASTEWATER ON EXISTING 4" DIA. PUMP INSET	REV			
	3/17/98	REVISION SKETCH	REV			
REV	DATE	REVISION	BY	DATE	APPROV	DATE

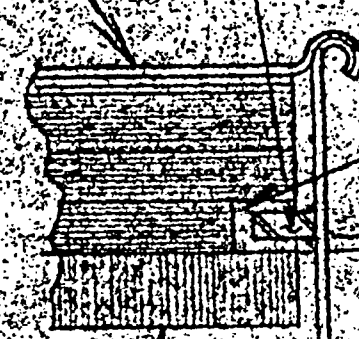
GEOMETRIC SYMBOLS MIL-STD-B		TOLERANCES UNLESS OTHERWISE SPECIFIED	COMBUSTION ENGINEERING AND POWER SYSTEMS CHEMISTRY
~	FLATNESS	FRACTIONAL 1/16	FIVE D P OPERABLE ENGINEERING
-	STRAIGHTNESS	DECIMAL .001	
<	ANGULARITY	ANGULAR .001	FIVE D P OPERABLE ENGINEERING
⊥	PERPENDICULARITY	SURFACE FINISH .001	
	PARALLELISM	SCALE 1/16" = 1"	FIVE D P OPERABLE ENGINEERING
⊙	CONCENTRICITY	DRAWN BY	
⊕	SYMMETRY	CHECKED BY	FIVE D P OPERABLE ENGINEERING

AS SHOWN SUPPLY PLIANCE
 1/2" LG. HEX. HD. BOLTS W/ NUTS & WASHERS

ITEM/DETAIL NO.



EDGED 1" x 1/2" x 1/8" THICK
 WELDED 10" FORCE
 UNTIL CARBON STEEL



1/4" DEEP x 1/4" WIDE
 SLOT IN PLYWOOD

1/4"

A-A

ITEM 10 - 16 GA. STL

(A) ALUMINUM COVER .032 THK

(B) ASBESTOS OR CERAMIC
 SHEET 1/8" THICK x 22" DIA.

(C) PLYWOOD 1/2" THK - 2 @ 9/8"

CLAMP RING 1/2" GA. IN 5/8" DIA. BOLT

THE ABOVE ITEMS (A) (B) AND (C) ARE
 LAMINATED TOGETHER TO FORM
 ONE UNIT AS SHOWN ON DWG.
 B-5007-B112

(2A) PLYWOOD 2 @ 5/8" THK

(3) HARDBOARD 1/2" THK

THERMAL INSULATION 6 TO 4 7/8"

(4) SQUARE INSERT

(3) HARDBOARD 1/2" THK

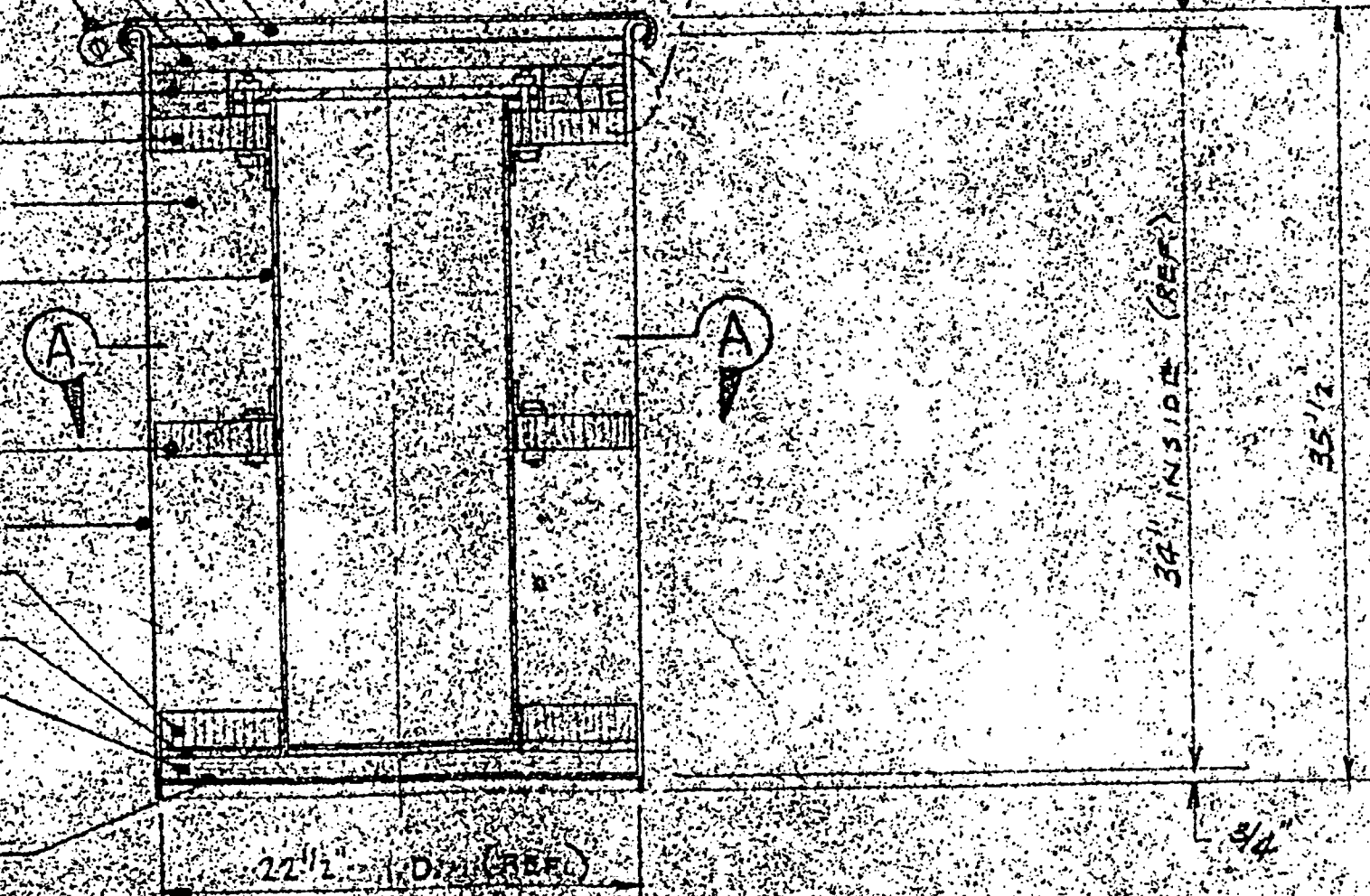
16 GA. STL. FULL OPEN HEAD
 SHIMMING BOLT .007 TH DIA. EQ.

(3) HARDBOARD 1/2" THK

(2B) PLYWOOD 1/2" THK - 2 @ 1/2"

(1) PLYWOOD 1" THK - 2 @ 1/2"

ASBESTOS OR CERAMIC
 SHEET 1/8" THICK x 22" DIA.



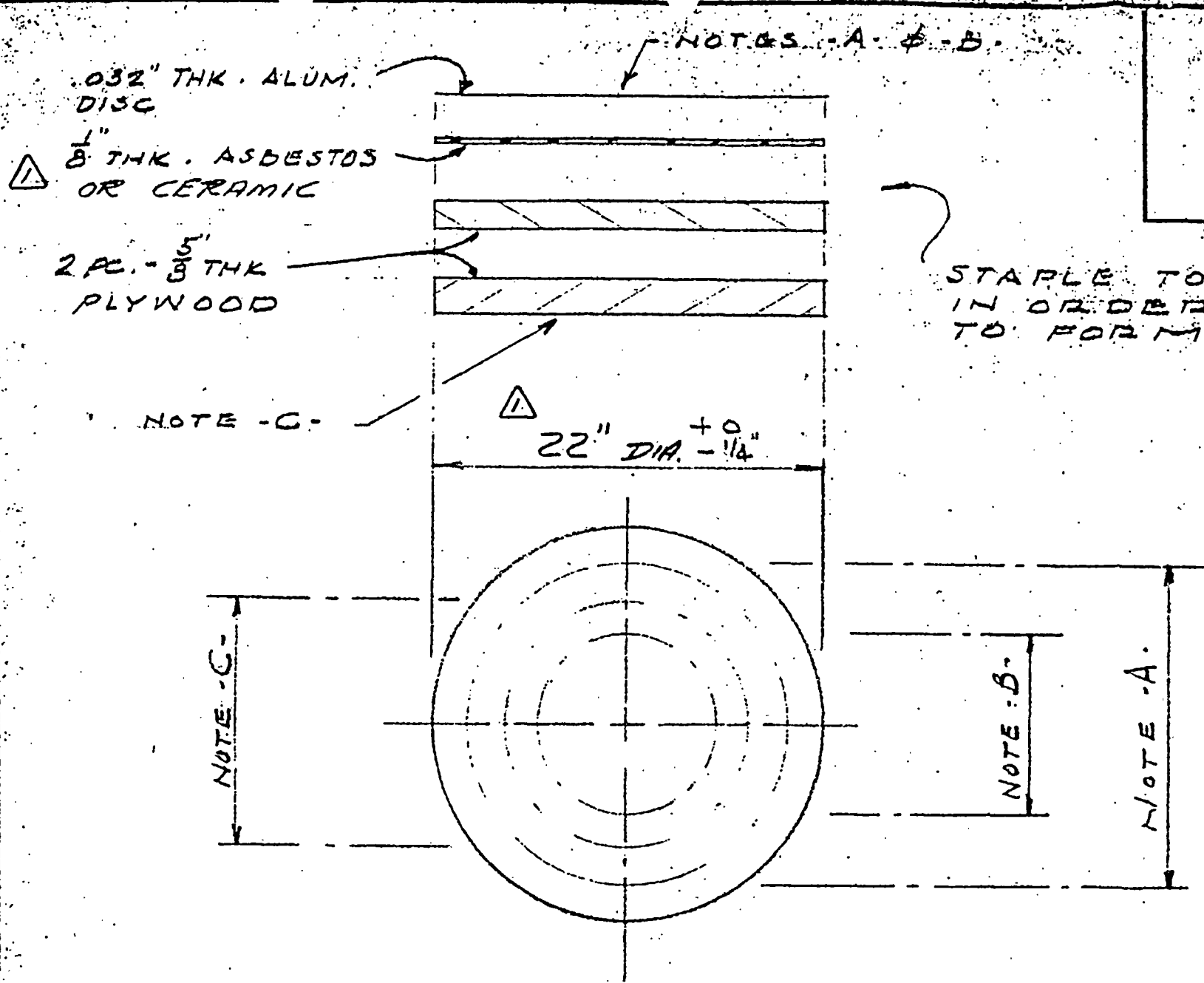
34" INSIDE (REF)

35 1/2"

22 1/2" DIA (REF)

3/4"

CROSS SECTION OF ASSEMBLY



MATERIAL FOR COMPLETE ASSEMBLY

ITEM NO.	PART DESCRIPTION	NO. REQ'D	SOURCE

STAPLE TOGETHER
IN ORDER SHOWN
TO FORM A UNIT.

- NOTE A.. USING A 18" CIRCLE, PLACE ON 4" CTRS. 13/16" LG. STAPLES.
- NOTE B.. USING A 10" CIRCLE, PLACE ON 3" CTRS. 13/16" LG. STAPLES.
- NOTE C.. USING A 14" CIRCLE PLACE 4 @ 90° - 13/16" LG. STAPLES.

1	REV.	BY	DATE	APP'D.	DATE	JOB NO.	DESCRIPTION	W.O. NO.
			10/13/87				1/8" TK. ASB. OR CERAMK WAS ASBESTOS - DIAS WERE 2134	
<p>TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONAL ± 1/8 DECIMAL ± ANGULAR ± FINISH SYMBOL ASA STD</p>						<p>COMBUSTION ENGINEERING, INC. POWER SYSTEMS HEMATITE MISSOURI SUGGESTED ASSEMBLY OF 1901 PLYWOOD INSERT</p>		
SCALE 1 1/2" = 1" 0		DWN. BY VAL		APPR. RM		B-5007-842		REV. A
DATE 11-23-76		CHKD BY RM		APP'D.				