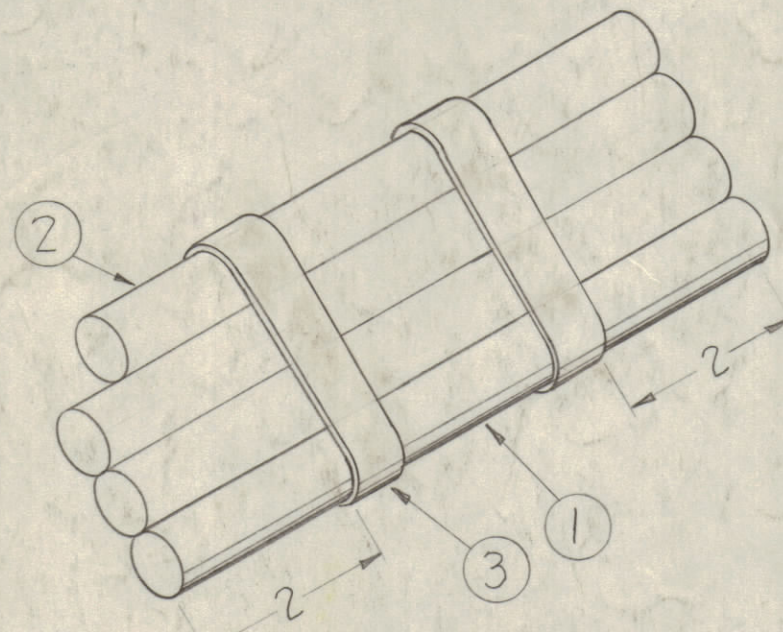
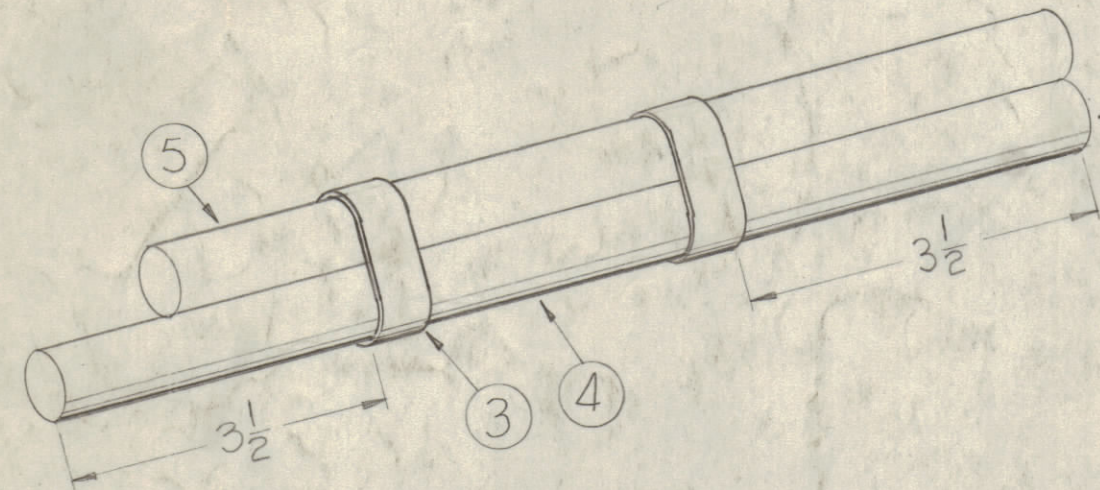


STEP 1
Take three pieces of CI-112-Q2-7L and one piece of CI-112-Q2-6R37L and tape them together with one layer of TA-108-5 as shown below:



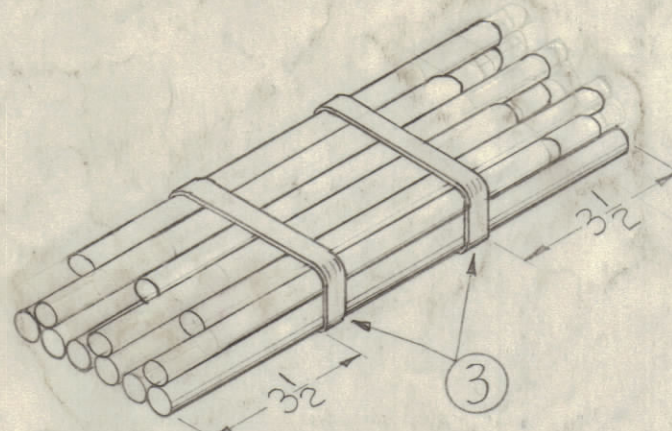
Make 12 assemblies as shown above.

STEP 2
Take one piece of CI-112-Q2-11R5L and one piece of CI-112-Q2-9R62L and tape them together with one layer of TA-108-5 as shown:



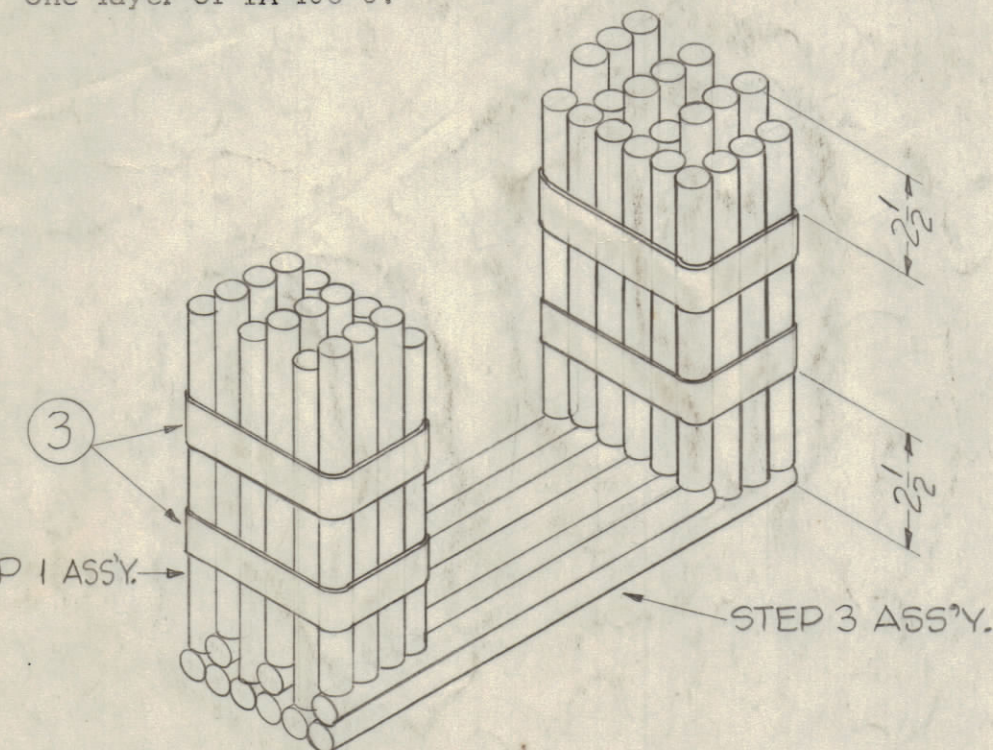
Make 12 assemblies as shown above.

STEP 3
Take 6 assemblies made in step 2 and tape them together with one layer of TA-108-5 as shown above:



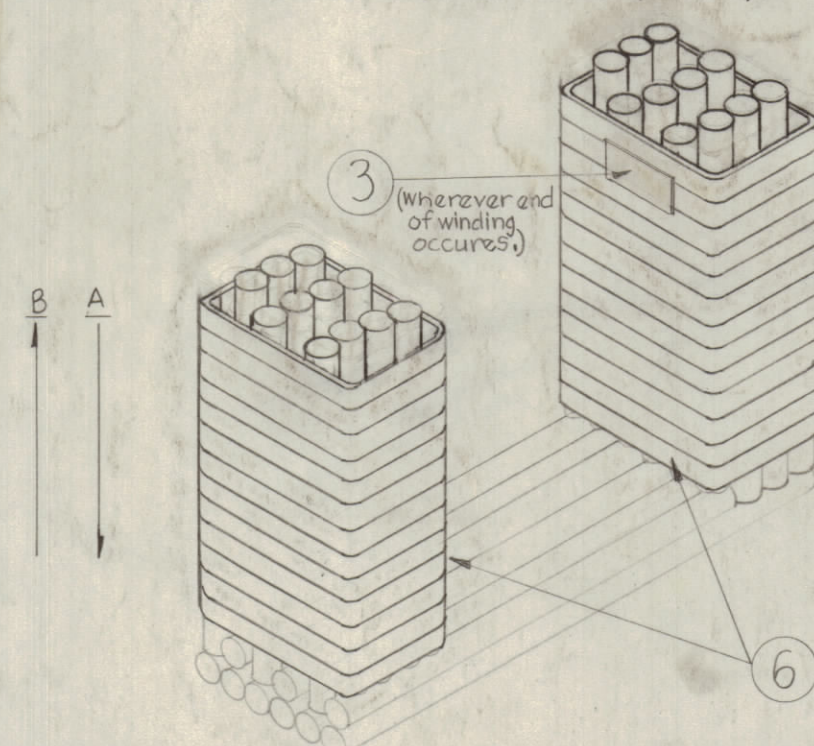
Make 2 assemblies as shown above.

STEP 4
Take 12 assemblies made in step 1 and slide them into slots of assembly made in step 3, as shown below; then tape them together with one layer of TA-108-5.

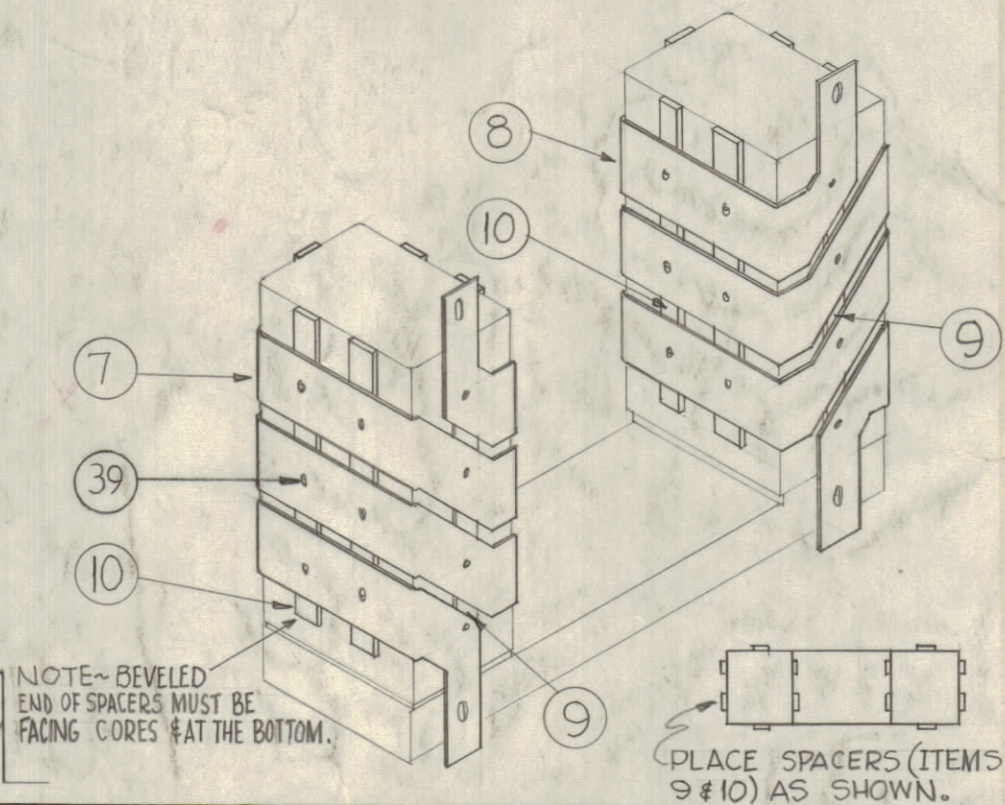


STEP 1 ASSY. STEP 3 ASSY.

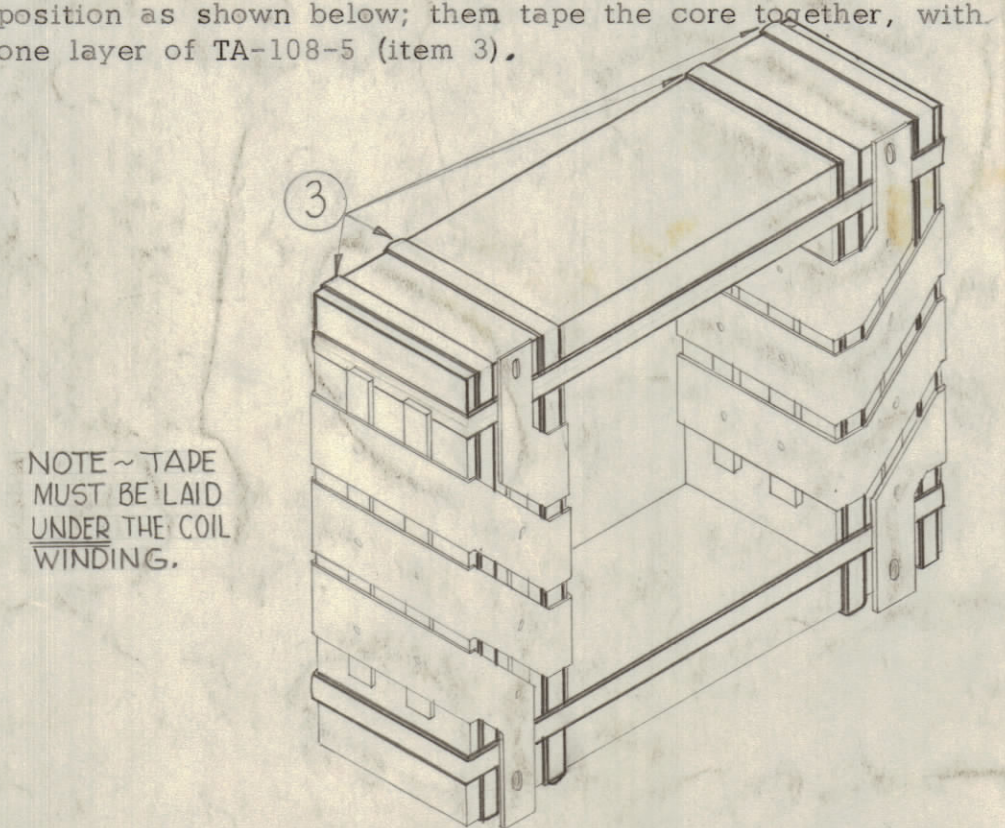
STEP 5
A. Start winding item 6 from top to bottom, approx 17 turns, one turn overlapping its preceding turn by approx half its width.
B. Continue second layer of item 6 as described above from bottom to top. Secure with TA-108-5 (item 3).



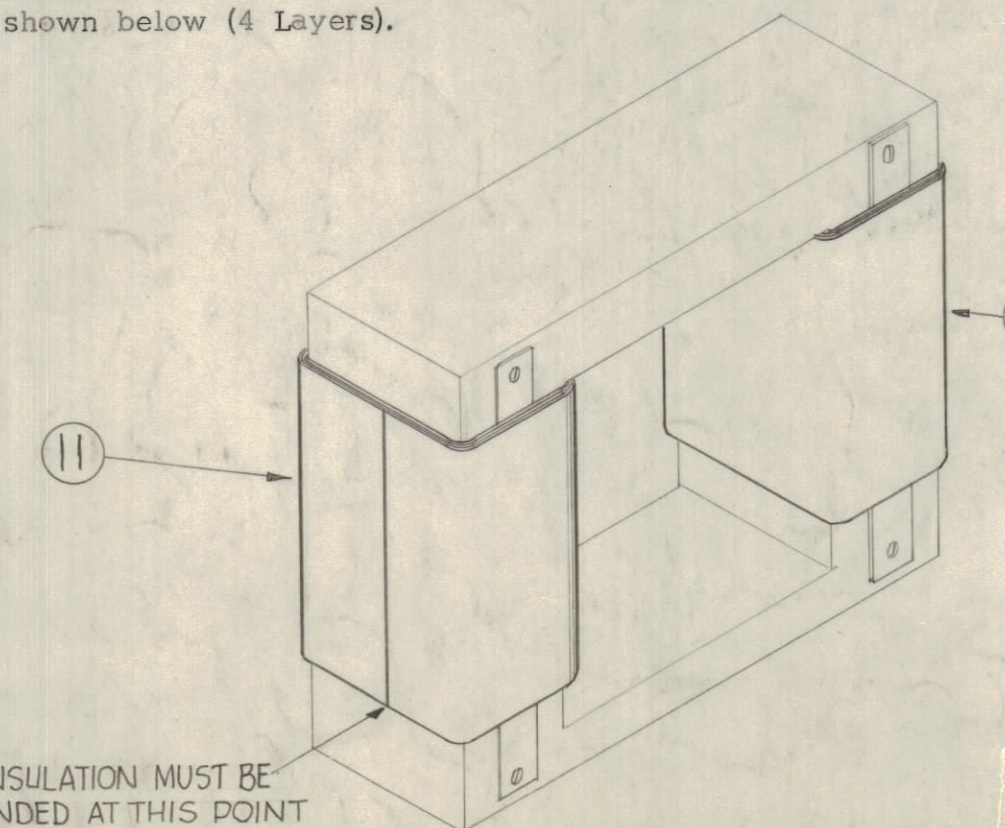
STEP 6
Take the 2 primary coil assemblies item 7&8 and the spacers item 9 & 10 slide them into position as shown below. Secure items 7 & 8 to items 9 & 10 with item 39.



STEP 7
Take the remaining assembly made in step 3 and slide into position as shown below; then tape the core together, with one layer of TA-108-5 (item 3).

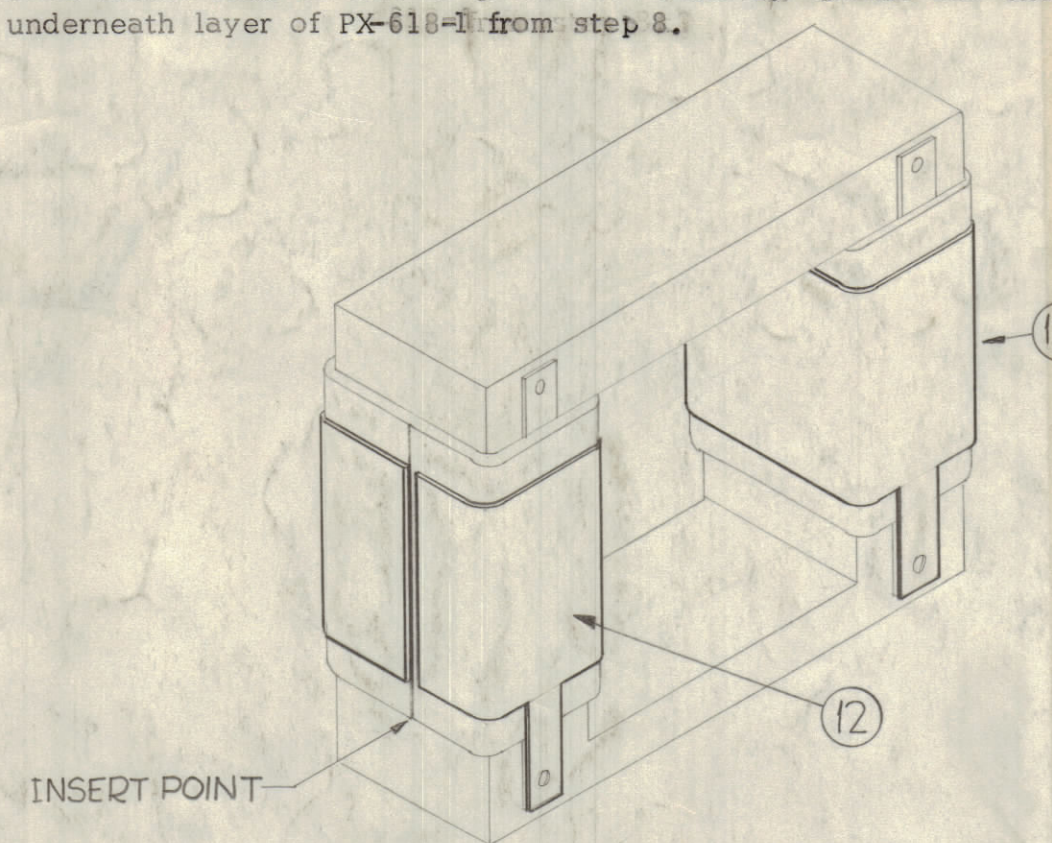


STEP 8
Take PX-618-1 item 11 and wrap tightly around each primary as shown below (4 Layers).

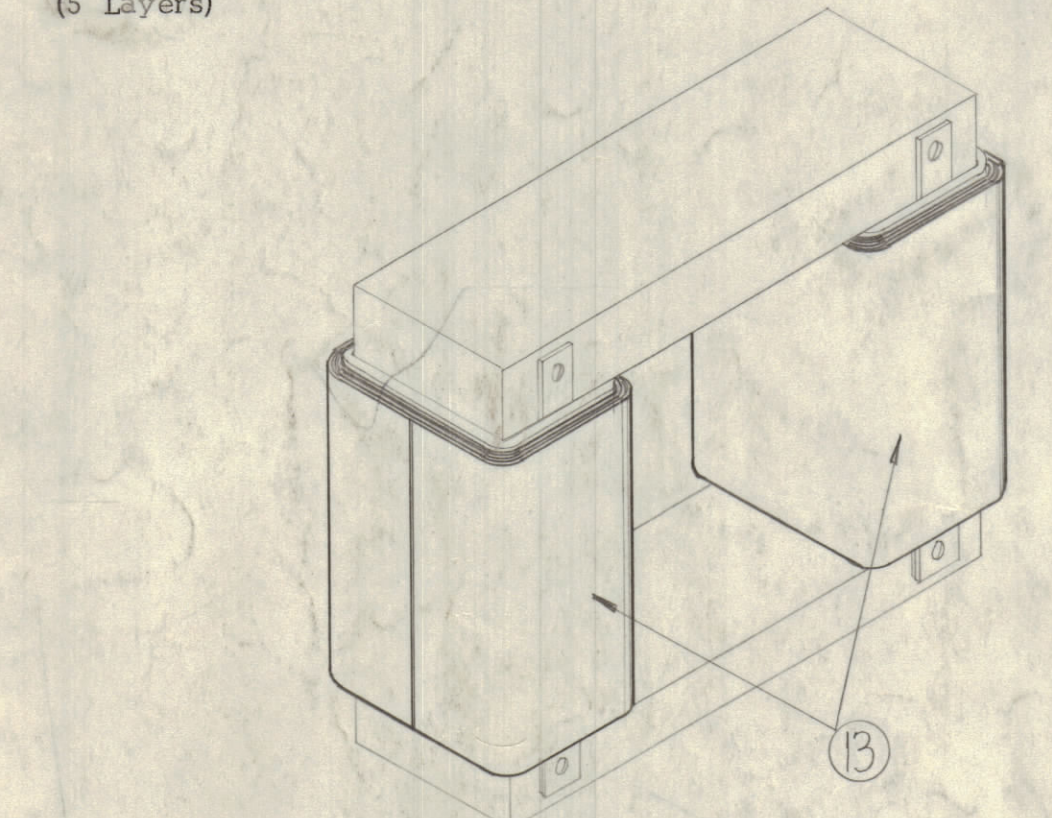


INSULATION MUST BE ENDED AT THIS POINT (Other Side the Same)

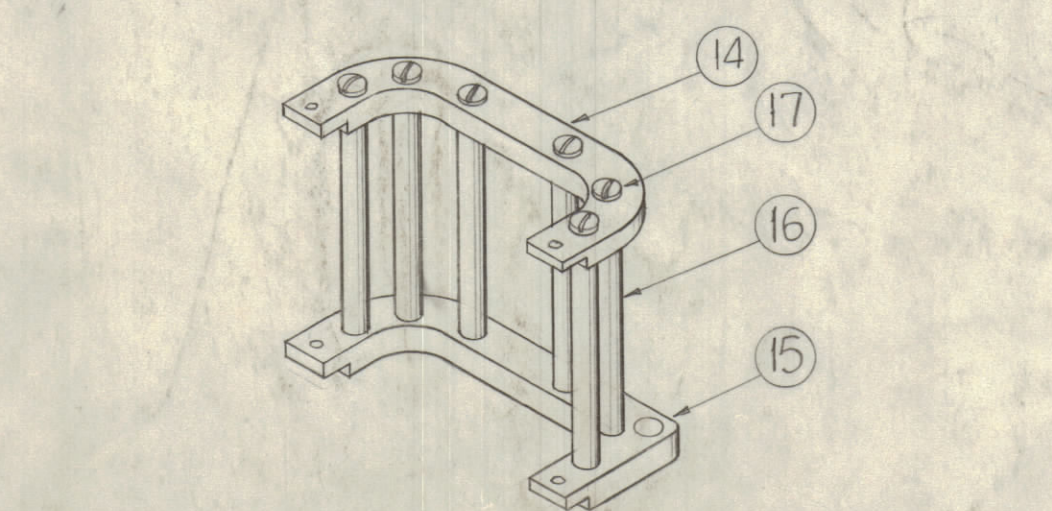
STEP 9
Take shield item 12 and wrap around PX-618-1. Insert one end underneath layer of PX-618-1 from step 8.



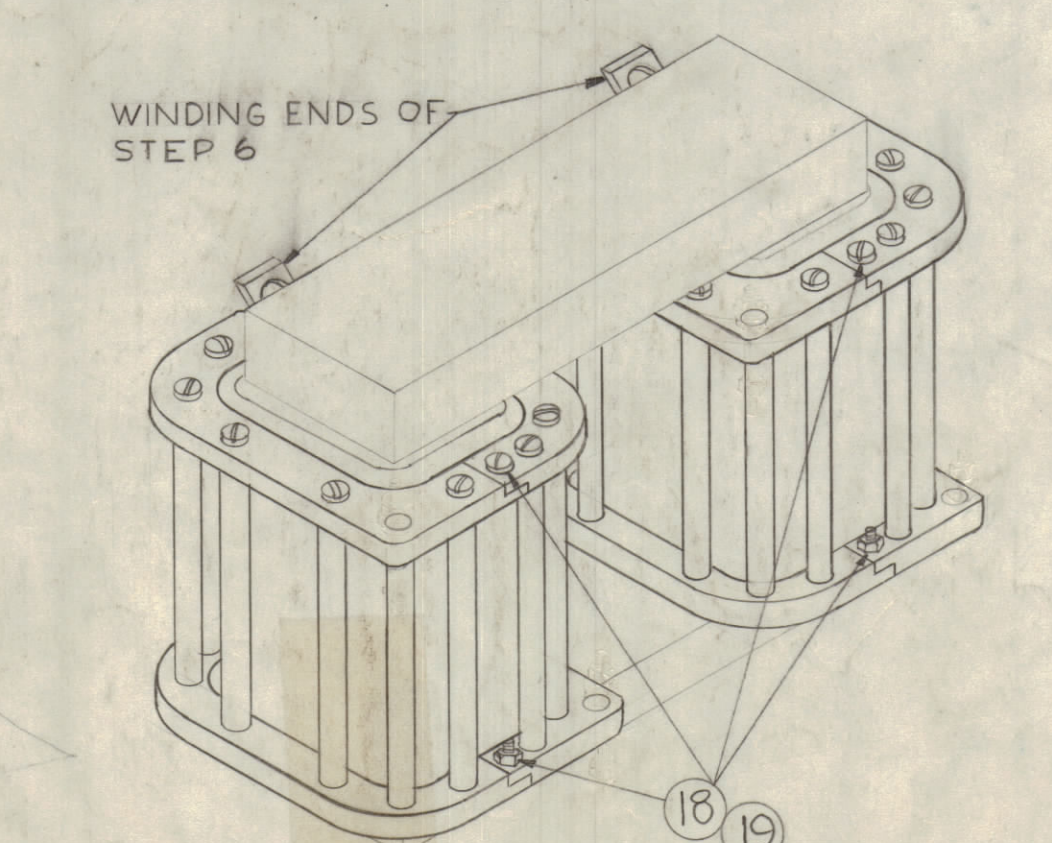
STEP 10
Take item 13 and wrap tightly around MS-2654 (Item 12) (5 Layers)



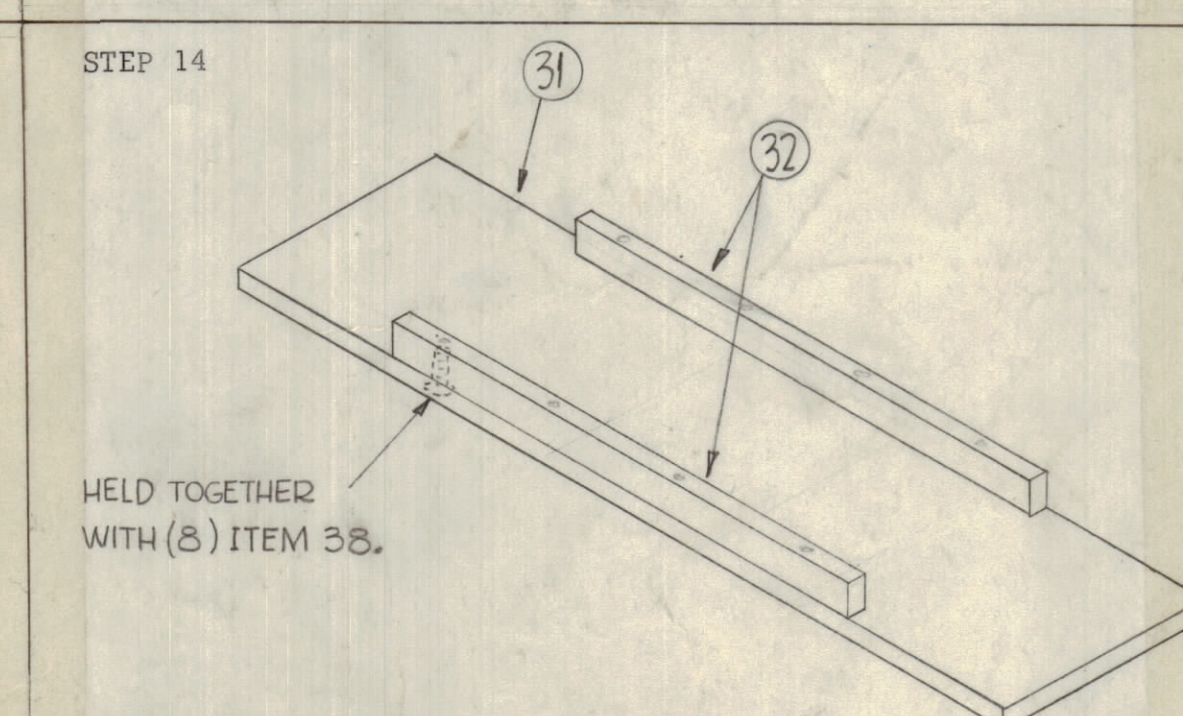
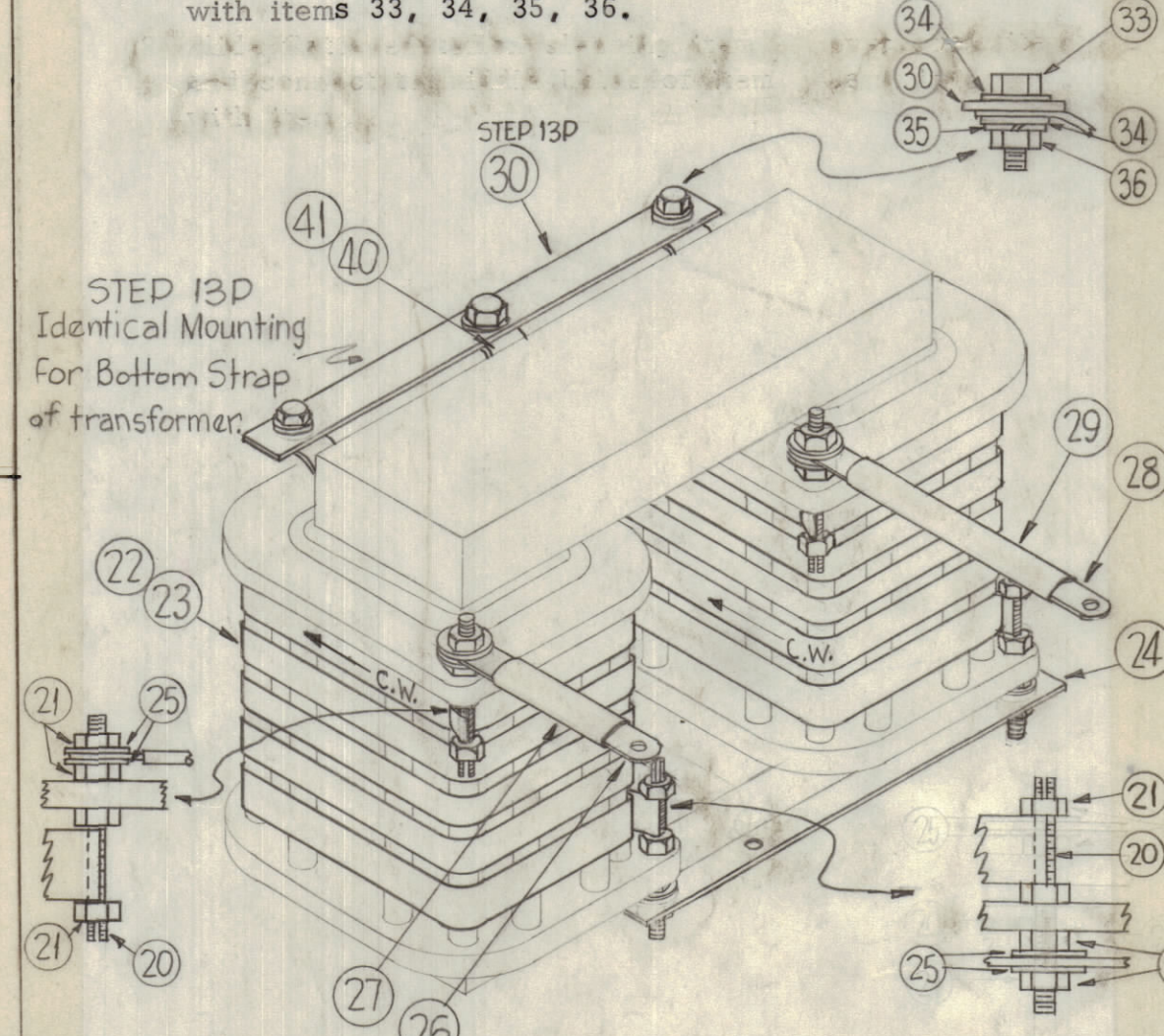
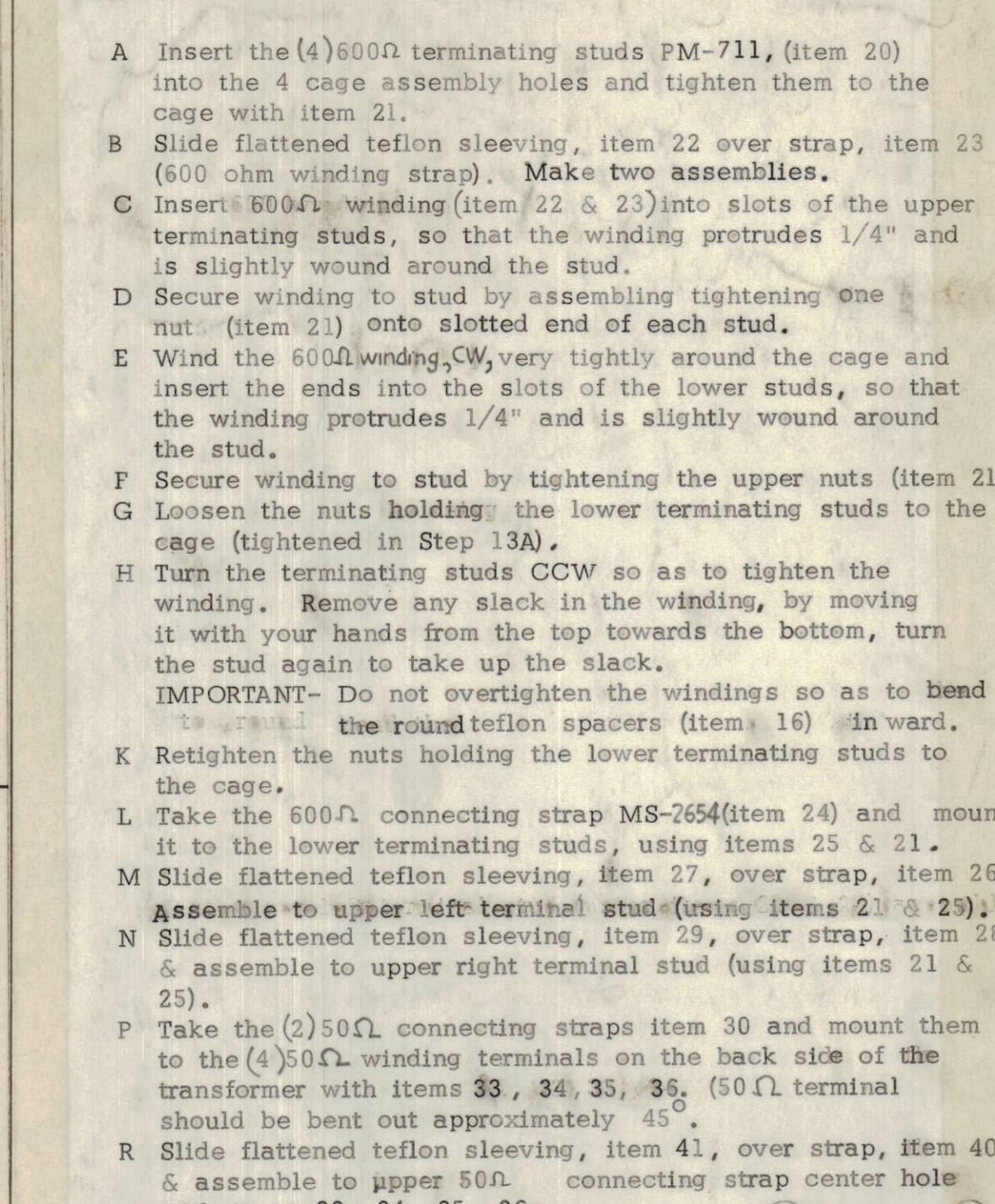
STEP 11
Make 4 cage assemblies as shown below.



STEP 12
Turn assembly made in step 10, 180° around (winding ends must be away from you). Take the 4 cage assemblies made in step 11 and secure them with items 18 & item 19 around each transformer leg as shown below.

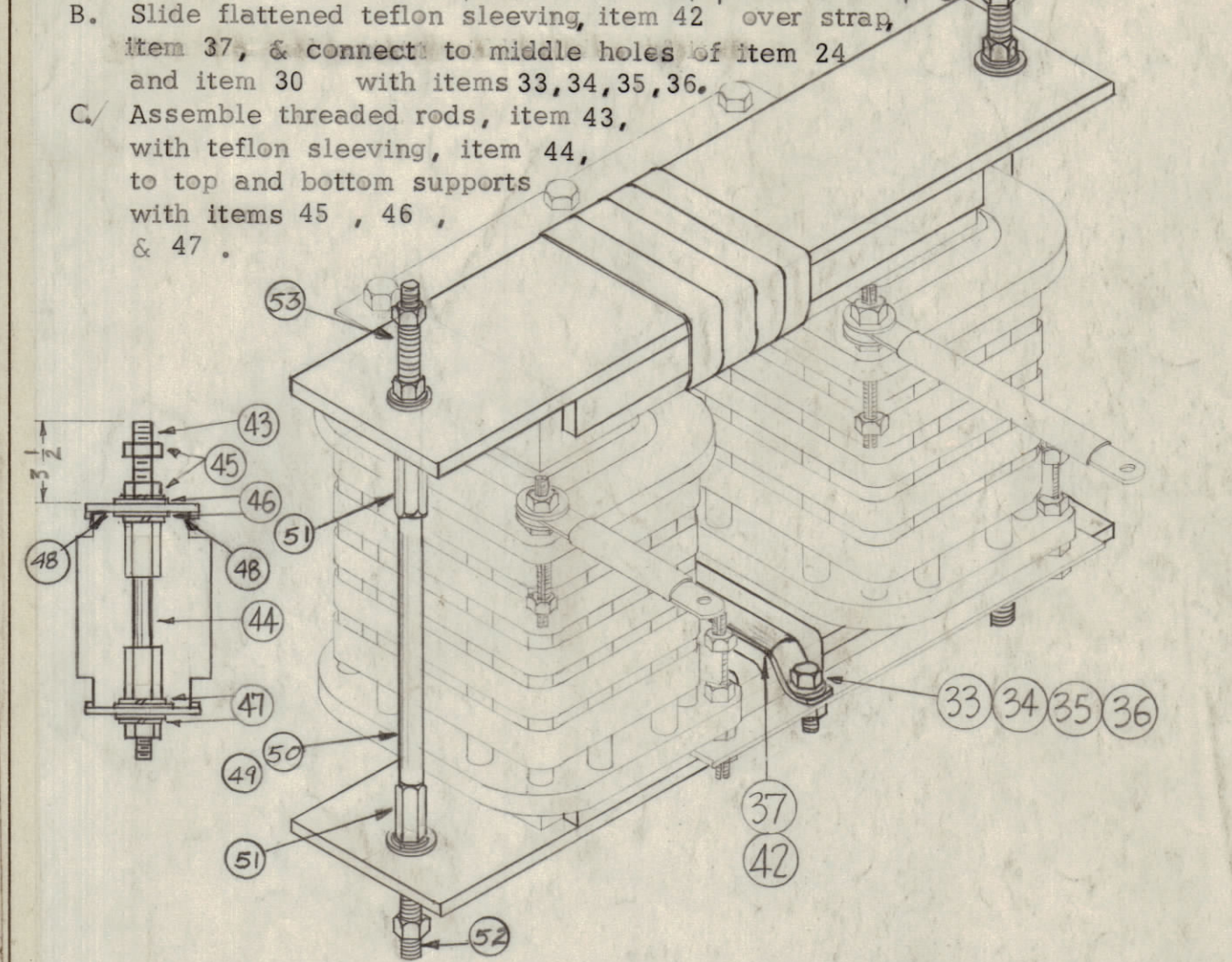


STEP 13
A. Insert the (4) 600Ω terminating studs PM-711, (item 20) into the 4 cage assembly holes and tighten them to the cage with item 21.
B. Slide flattened teflon sleeving, item 22 over strap, item 23 (600 ohm winding strap). Make two assemblies.
C. Insert 600Ω winding (item 22 & 23) into slots of the upper terminating studs, so that the winding protrudes 1/4" and is slightly wound around the stud.
D. Secure winding to stud by assembling tightening one nut (item 21) onto slotted end of each stud.
E. Wind the 600Ω winding, CW, very tightly around the cage and insert the ends into the slots of the lower studs, so that the winding protrudes 1/4" and is slightly wound around the stud.
F. Secure winding to stud by tightening the upper nuts (item 21) onto slotted end of each stud.
G. Loosen the nuts holding the lower terminating studs to the cage (tightened in Step 13A).
H. Turn the terminating studs CCW so as to tighten the winding. Remove any slack in the winding, by moving it with your hands from the top towards the bottom, turn the stud again to take up the slack.
IMPORTANT- Do not overtighten the windings so as to bend the round teflon spacers (item 16) inward.
K. Retighten the nuts holding the lower terminating studs to the cage.
L. Take the 600Ω connecting strap MS-2654 (item 24) and mount it to the lower terminating studs, using items 25 & 21.
M. Slide flattened teflon sleeving, item 27, over strap, item 26. Assemble to upper left terminal stud (using items 21 & 29).
N. Slide flattened teflon sleeving, item 29, over strap, item 28 & assemble to upper right terminal stud (using items 21 & 25).
P. Take the (2) 50Ω connecting straps item 30 and mount them to the (4) 50Ω winding terminals on the back side of the transformer with items 33, 34, 35, 36. (50Ω terminal should be bent out approximately 45°).
R. Slide flattened teflon sleeving, item 41, over strap, item 40 & assemble to upper 50Ω connecting strap center hole with items 33, 34, 35, 36.



Make two assemblies.

STEP 15
A. Tape two step 14 assemblies to top and bottom of transformer with tape, item 3; item 48 to be positioned to top pc. before taping.
B. Slide flattened teflon sleeving, item 42 over strap, item 37, & connect to middle holes of item 24 and item 30 with items 33, 34, 35, 36.
C. Assemble threaded rods, item 43, with teflon sleeving, item 44, to top and bottom supports with items 45, 46, & 47.



STEP 16
A. Test transformer as per spec. S

QTY	ITEM	PART NO.	DESCRIPTION	SYMBOL
X	54	TA113-3.500	INSULATING, TAPE, ELECTRICAL	
1	53	SM5020BN 4-15	ROD THREADED	
1	52	SM5020BN 2.500	ROD THREADED	
2	51	TE5020BN2.000H/2	SPACER, THREADED,	
1	50	PX370-50-7	SLEEVING, TEFLON, 5" LONG.	
1	49	SM5020BN 7.000	ROD THREADED	
2	48	PX-370-59-7	SLEEVING, TEFLON, 8 LG (TO BE CUT LENGTHWISE)	15
8	47	LW550MRN	LOCKWASHER, SPLIT	15
8	46	FW50HBN	WASHER FLAT	15
8	45	NTH5020BN24	NUT HEX	15
1	44	PX-370-50-7	SLEEVING, TEFLON SIZE 7-1/2" LONG	15
1	43	SM5020BN 15.000	ROD, THREADED	15
1	42	PX-370-59-7	SLEEVING, TEFLON SIZE, 5-1/4" L	15
1	41	PX-370-59-7	SLEEVING, TEFLON, SIZE, 2" L	13
2	40	MS-2682	STRAP, CENTER, 50Ω	13
38	39	SC-143-1032 B3	SCREW, MACHINE, NYLON	6
16	38	SCFP0832BN14	SCREW, MACHINING	14
1	37	MS-2679	CONNECTING STRAP, GROUND	15
7	36	NTH2520BN10	NUT, HEX	13, 15
7	35	LW25MRN	LOCKWASHER, SPLIT	13, 15
14	34	FW25HBN	WASHER, FLAT	13, 15
7	33	SCHH2520BN10	SCREW, MACHINE	13, 15
4	32	PX-626	PRESSURE PLATE (PART 1)	14
2	31	PX-627	PRESSURE PLATE (PART 1)	14
2	30	MS-2658	STRAP, CONNECTING, 50Ω	13
1	28	MS-2657-2	STRAP, CONNECTING, 600Ω OUTPUT	13
3"	27	PX-370-59-7	SLEEVING, TEFLON SIZE, 4" LONG	13
1	26	MS-2657-1	STRAP, CONNECTING, 600Ω OUTPUT	13
8	25	FW37HBN	WASHER, FLAT	13
1	24	MS-2656	STRAP, CONNECTING, 600Ω	13
2	23	MS-2655	STRAP, WINDING, 600Ω	13
2	22	PX-370-59-7	SLEEVING, TEFLON, SIZE, 96" LONG	13
12	21	NT-119-3BN	NUT, HEX	13
4	20	PM-711	STUD, TERMINATING, SECONDARY	13
8	19	NT-137-1032	NUT, HEX, NYLON	12
8	18	SC-143-1032-B-10	SCREW, MACHINE, NYLON	12
48	17	SC-143-1032-B-16	SCREW, MACHINE, NYLON	11
24	16	PX-621	SPACER, CAGE	11
4	15	PX-620	RING, CAGE, STUD MTG.	11
4	14	PX-619	RING CAGE	11
2	13	PX-618-2	INSULATOR, SECONDARY	10
2	12	MS-2654	SHIELD, PRIMARY	9
2	11	PX-618-1	INSULATOR, PRIMARY	8
10	10	PX-617-2	SPACER, CORE, 3 HOLE	6
2	9	PX-617-1	SPACER, CORE, 4 HOLE	6
1	8	MS-2653-2	WINDING, PRIMARY, CW	6
1	7	MS-2653-1	WINDING, PRIMARY, CCW	6
2	6	PX-616-1	INSULATOR, CORE	5
12	5	CI-112-Q2-9R62L	CORE, 9-5/8 LONG	2
12	4	CI-112-Q2-11R5L	CORE, 11-1/2 LONG	2
X	3	TA-108-5	TAPE -- 60 FEET	1, 2, 3, 4, 5, 7, 15
12	2	CI-112-Q2-6R37L	CORE, 6-3/8 LONG	
36	1	CI-112-Q2-7-L	CORE, 7" LONG	

NOT TO BE RELEASED W/O AUTHORIZATION
AUTH. BY: _____
DATE: _____

SYM	ZONE	DESCRIPTION	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
E		ADDED ITEM 54	12.20.66	17558	WJO		
E		IT 52 WAS SM5020BN2.00	12.20.66	17558	WJO		
D		IT 49 THRU 53 ADDED TO BOM STEP 15	12.22.66	18241	H.V.		
C	B2	IT 21 WAS NT119-3	9.4.64	12155	KB		
B	D2	Item 45 added. ON STEP (5) (A) REVISED	12-15-61	6056	WJO		
B	D2	ON ITEM (20) QUANTITY WAS 1.					
B	C2	ON ITEM (20) LENGTH WAS 95"					
B	C2	ON ITEM (22) LENGTH WAS 89"					
B	C2	ON STEP (5) BEGINNING OF WINDING CLARIFIED	12-1-61	5981	H.V.		

UNLESS OTHERWISE SPECIFIED: SCALE: MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS & SHARP EDGES

REQ. PER UNIT	MODEL	SECTION	ASSY. NO.	DATE
1	TRC-20K			10-18-61

REG. PER UNIT	FINISH & SPEC. NO.	ELEC. DES. APP.	MECH. DES. APP.	SHEET	OF
1				28	30

A-2174

C

B

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E