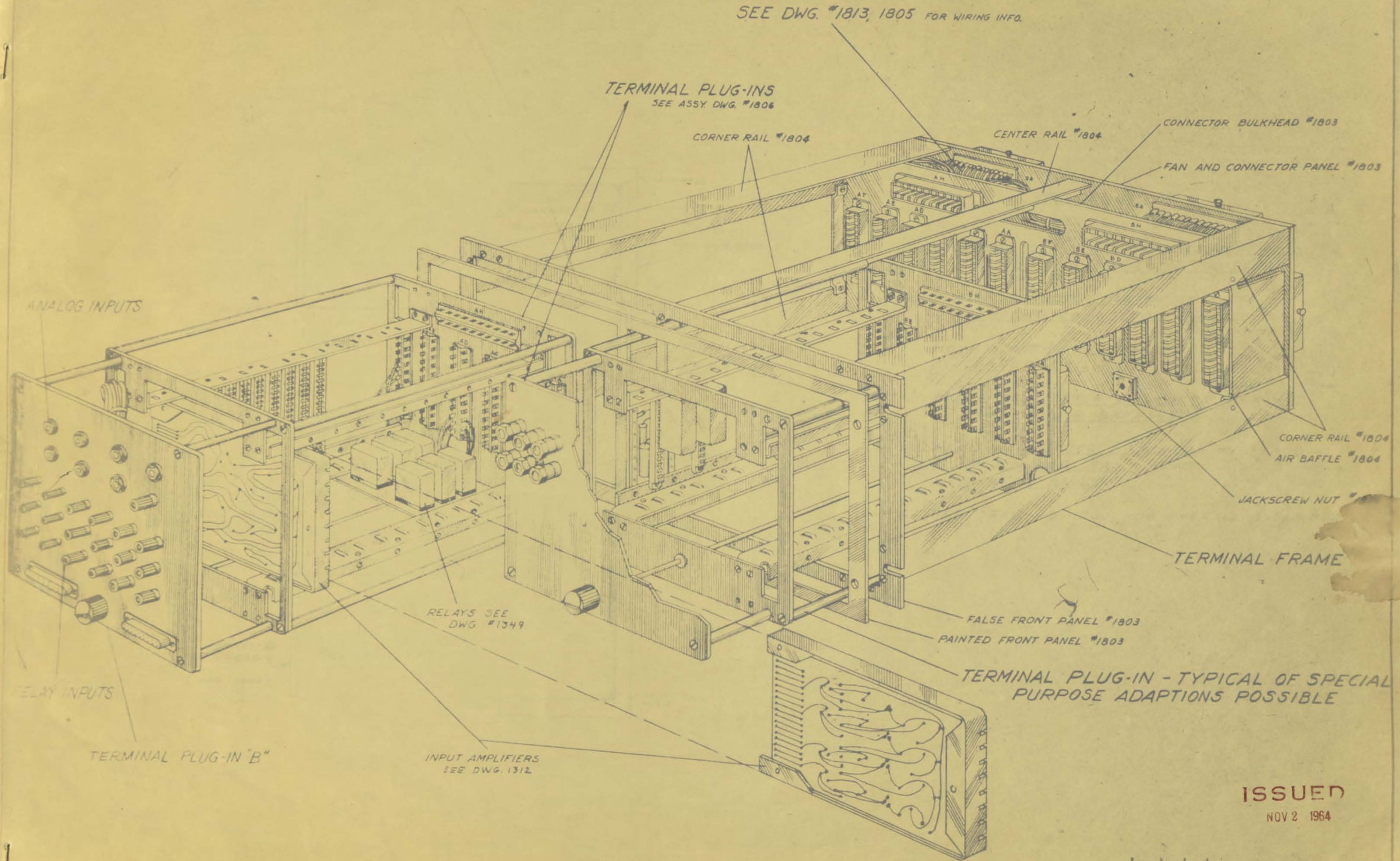
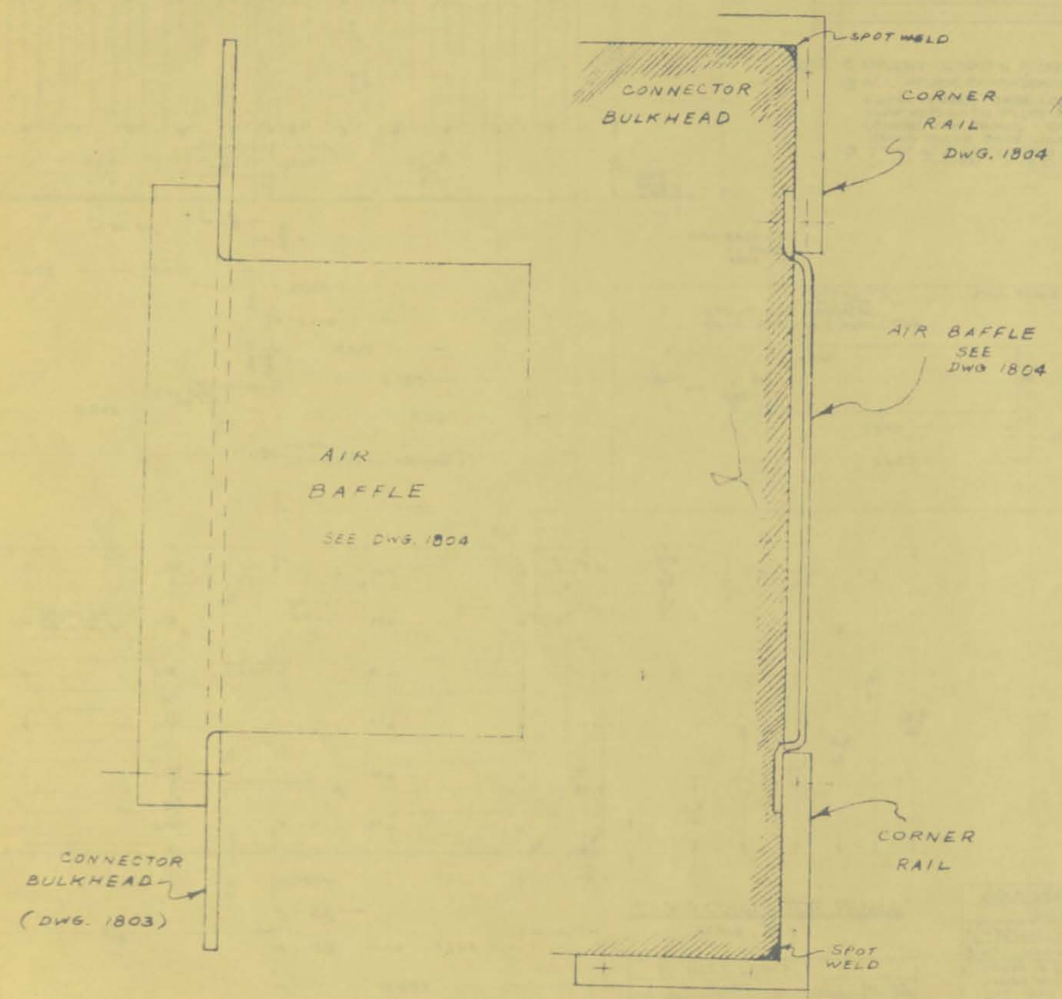


ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			TERMINAL UNIT
ENG.			
DATE	1800		CH.



PROCEDURE

1. ASSEMBLE CORNER RAILS AND CENTER RAILS TO FAN AND CONNECTOR PANEL.
2. PLACE CONNECTOR BULKHEAD OVER FAN AND CONNECTOR PANEL.
3. MOUNT BOTH AIR BAFFLES TO CORNER RAILS.
4. PLACE CONNECTOR BULKHEAD AGAINST TABS OF AIR BAFFLES.
5. WELD CONNECTOR BULKHEAD IN PLACE TO CORNER RAILS AND CENTER RAILS.
6. SEE DRAWING 1800 FOR OVERALL ASSEMBLY.

ISSUED
NOV 2 1964

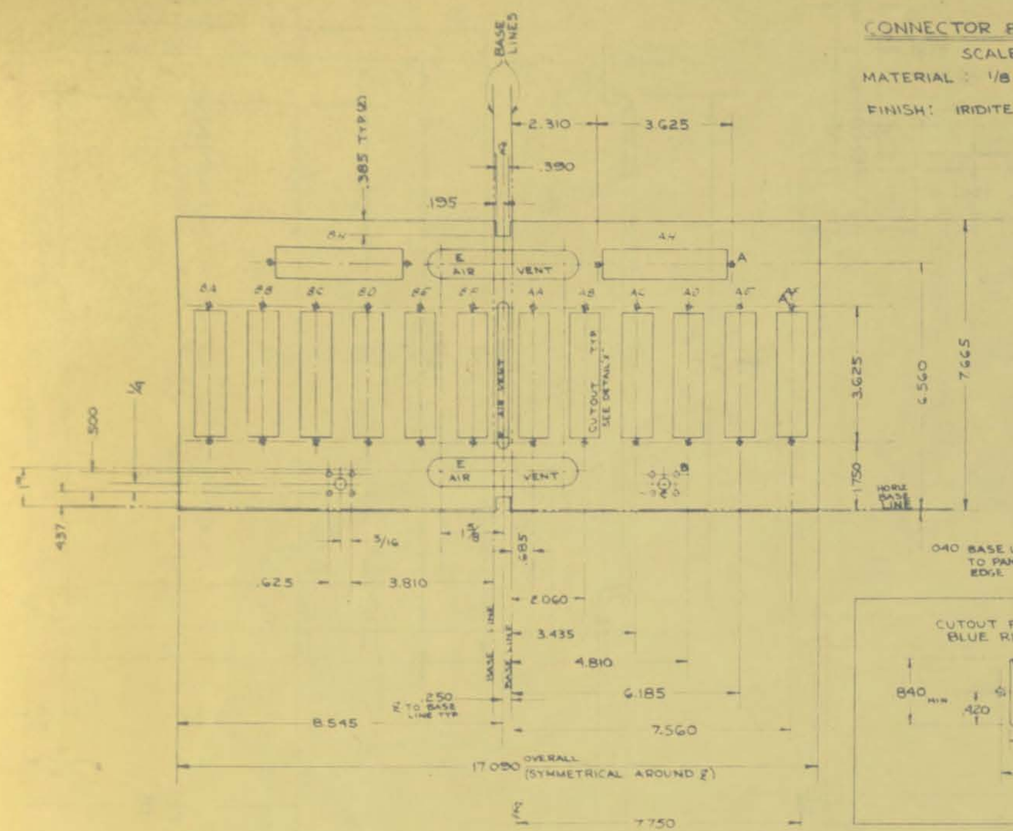
CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			TERMINAL FRAME ASSEMBLY DETAIL
DWN.			
DATE 4/17/64	1802		CIR.

CONNECTOR BULKHEAD

SCALE: 1/2

MATERIAL: 1/8 ALUM.

FINISH: IRIDITE #14 AS PER MIL C 5541



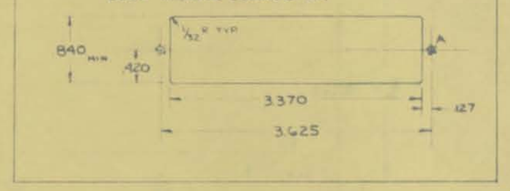
HOLE LEGEND		
	SIZE	QUANT.
A	#43 (.089) 4-40 TAP	28
B	#25 (.1495)	8
C	5/16	2
D		
E	AIRVENT 3/4x4 OVAL CUTOUT	2
F	AIRVENT 5/16x3 1/2 OVAL CUTOUT	1

NOTE: ① AIRVENT CUTOUTS ± 1/32
② ALL INSIDE DIMENSIONS TAKEN FROM THREE BASE LINES MAY BE PUNCHED WITH PLUG IN BOX CONNECTOR PANEL - DWG USING THESE BASE LINES
③ STAMP ⅛" BLACK LETTERS AS SHOWN, CENTERED OVER CUTOUTS.

DETAIL "X"

FULL SCALE

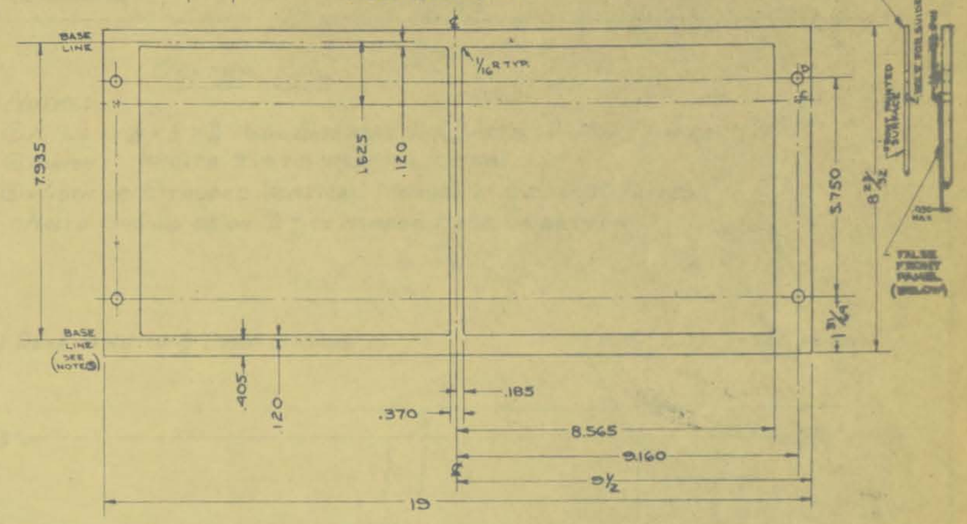
CUTOUT FOR AMPHENOL BLUE RIBBON CONNECTOR

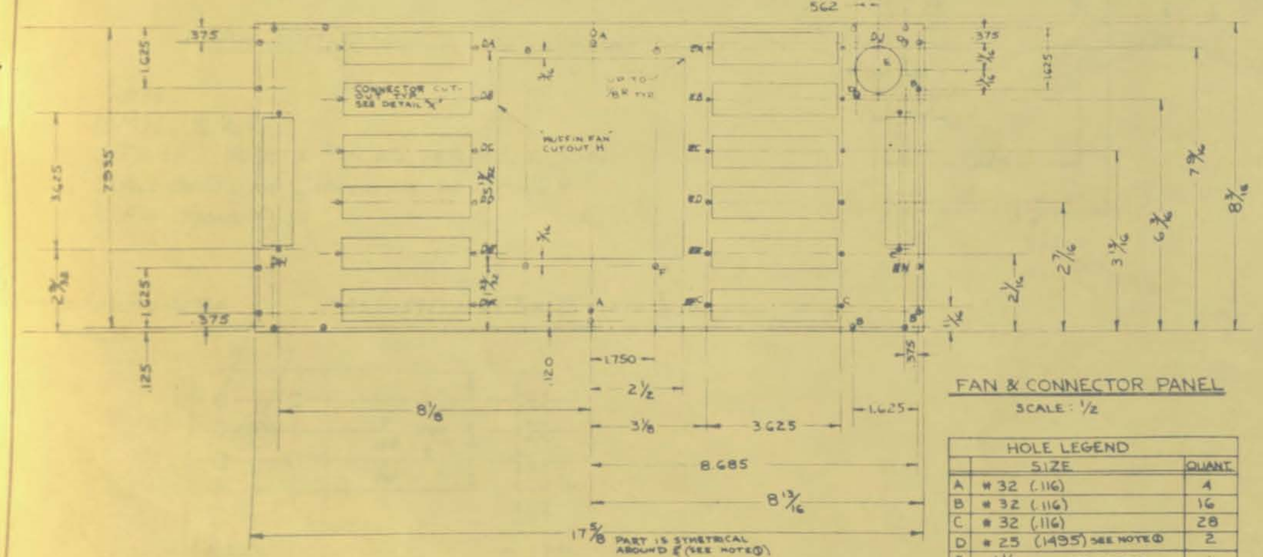


FRONT PANEL (PAINTED)

NOTE: ① MAT'L 1/16 ALUM.
② THIS SEPIA MADE FROM FALSE FRONT PANEL (BELOW)
③ TWO 1/8 GUIDE PINS USED TO ALIGN THIS PANEL WITH FALSE FRONT PANEL (BELOW) BEHIND IT, BOTH PANELS TO BE CLAMPED & SQUARE CUTOUTS & HOLES "C" TO BE MADE IN BOTH TOGETHER.
④ FINISH: FRONT SURFACE & EDGES ONLY PAINT RAFFI & SWANSON TEXTURED BLUE TWEED 5150-565 AS PER MFR'S INST-BUT DO NOT USE MORE THAN 25 DAYS FROM DATE OF MFR.
⑤ BASE LINES CORRESPOND TO LINES ON FALSE FRONT PANEL (BELOW) ONLY

HOLE LEGEND (FRONT PANEL PAINTED)		
	SIZE	QTY.
A		0
B		0
C	TIGHT CLEARANCE FOR 1/8 GUIDE PIN, C'BORE .030 DEEP FROM REAR SURFACE OF PANEL SEE NOTE ③	2
D	9/32	4





FAN & CONNECTOR PANEL

SCALE: 1/2

HOLE LEGEND		
	SIZE	QUANT.
A	#32 (.116)	4
B	#32 (.116)	16
C	#32 (.116)	28
D	#25 (.1495) SEE NOTE ①	2
E	1 1/4 SEE NOTE ①	1
F	#25 (.1495)	4
G		
H	FAN CUTOUT (AS SHOWN)	1

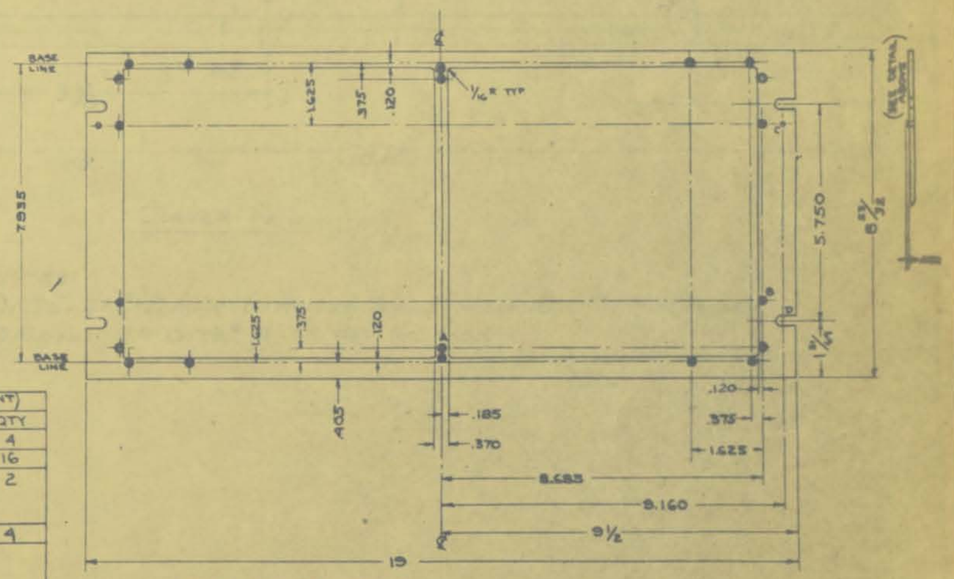
MATERIAL: 1/8 ALUM.

FINISH. IRIDITE #14 AS PER MIL C 5541

NOTE: ① PANEL SYMMETRICAL AROUND ℄ EXCEPT FOR HOLES D&E WHICH ARE AS SHOWN

NOTE: ② STAMP 1/8" BLACK LETTERS AS SHOWN ON REVERSE SIDE ONLY.

HOLE LEGEND (FALSE FRONT PANEL)		
	SIZE	QTY
A	#32 (.116) C'SINK TO 13/64 DIA.	4
B	#32 (.116) C'SINK TO 13/64 DIA.	16
C	PRESS IN 1/8 D. GUIDE PINS FLUSH WITH BACK SURFACE, OUT .030 FROM FRONT SURFACE. (SEE NOTE ③)	2
D	1/4 x 9/16 SLOT	4



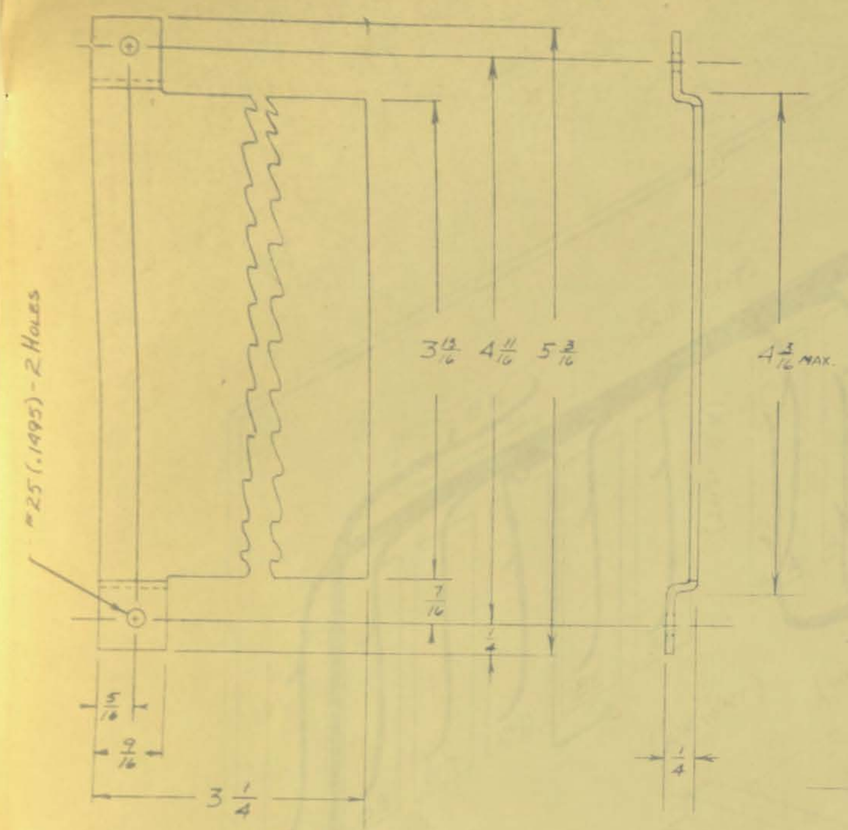
FALSE FRONT PANEL

NOTE: ① MAT'L: 1/8 ALUM.
② FINISH: IRIDITE #14 AS PER MIL C 5541
③ GUIDE PINS USED TO LINE UP PAINTED "FRONT PANEL" ABOVE (TO HIDE SCREW-HEADS)
④ SEE "FRONT PANEL" (ABOVE) FOR MFG. DETAILS

FRACTIONS ± 1/64
DECIMALS ± .005

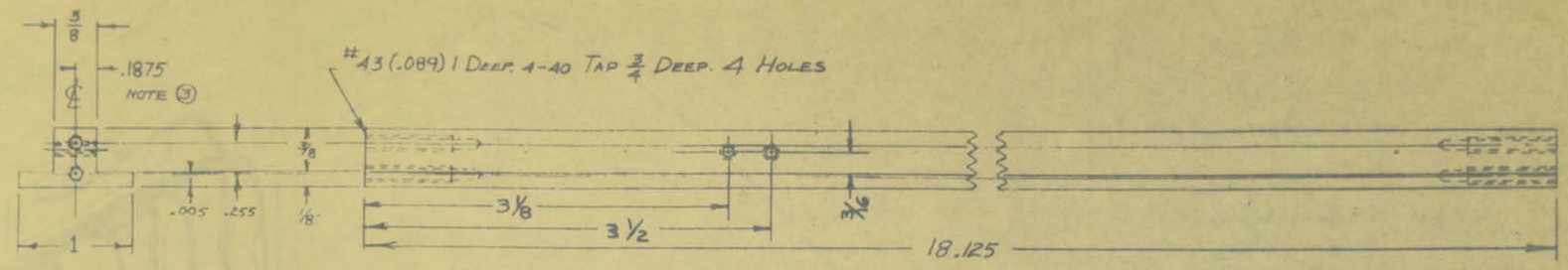
ISSUED
NOV 2 1964

LINC | TERMINAL FRAME STRUCTURE | 1803



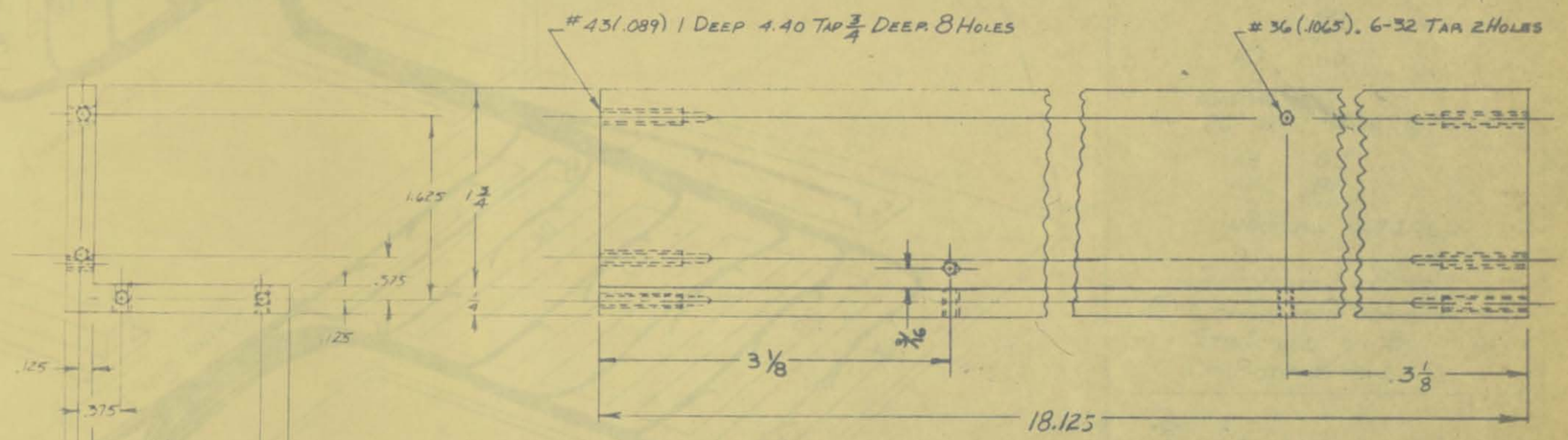
AIR BAFFLE

NOTES:
① MTL: 1/16 ALUM
② FINISH. IRIDITE #14 AS PER MIL C 5541
③ ALL BENDS AND CORNERS MAY BE UP TO 1/16 R
④ FRACTIONS ± 1/64



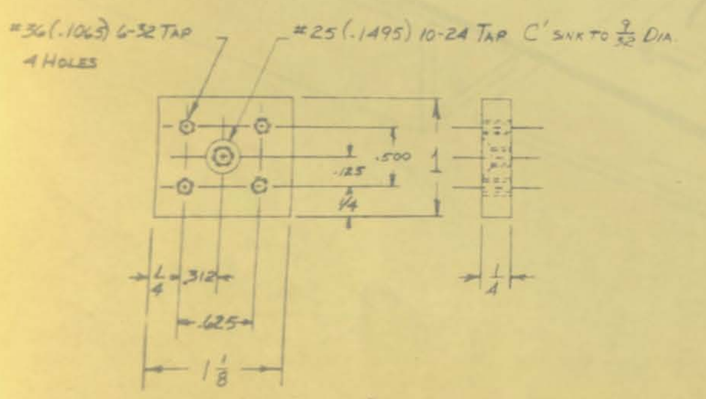
CENTER RAIL

NOTES:
① MTL: 1 x 1/8 x 1/2 x 3/8 ALUM EXTRUDED TEE. ALCOA DIE #1257 OR EQUIV.
② FINISH: IRIDITE #14 AS PER MIL C5541
③ WIDTH OF EXTRUDED VERTICAL MEMBER IS 3/8 ± .008. TAPPED HOLES SHOULD BE ON ℄ THIS MEMBER ±.005 OR BETTER.



CORNER RAIL

NOTES:
① MTL: 1/4 x 2 x 2 ALUM EXTRUDED ANGLE. ALCOA DIE #79-E OR EQUIV.
② FINISH: IRIDITE #14 AS PER MIL C 5541

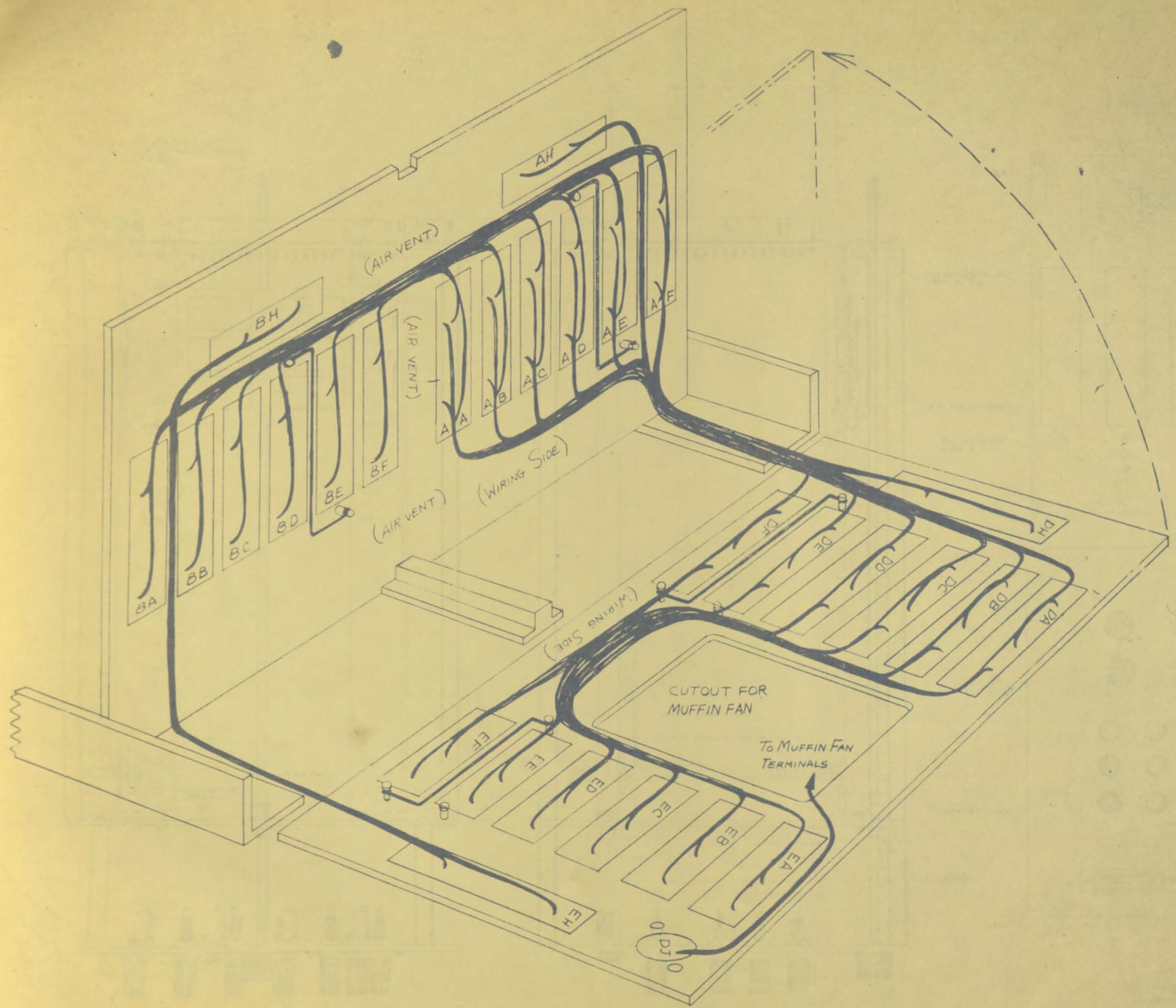


JACKSCREW NUT

NOTES:
① MTL: BRASS

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			TERMINAL FRAME PARTS FABRICATION
ENG. MALPASS			
DATE 9/13/63	1804		CH.



NOTES: ① CONNECTORS MOUNTED FROM SIDE OPPOSITE TO WIRING SIDE.

② CONNECTOR TYPES AS FOLLOWS:

AMPHENOL
26-4401-32P-1028

DA	EA
DB	EB
DC	EC
DD	ED
DH	EH

AMPHENOL
26-4402-32P-1028

DE	EE
DF	EF

AMPHENOL
26-4201-32 S (floating)

AA	BA
AB	BB
AC	BC
AD	BD
AH	BH

AMPHENOL
26-4202-32S (floating)

AE	BE
AF	BF

HUBBELL #7486:
DJ

③ CONNECTOR NAMES TO BE STENCILED ON BOTH SIDES OF BOTH PANELS.

④

⑤ CONNECTOR ORIENTATION TO BE SUCH THAT PIN 1 IS ALWAYS ON TOP OF CONNECTOR FOR BOTH VERT. & HORIZ. SLOTS

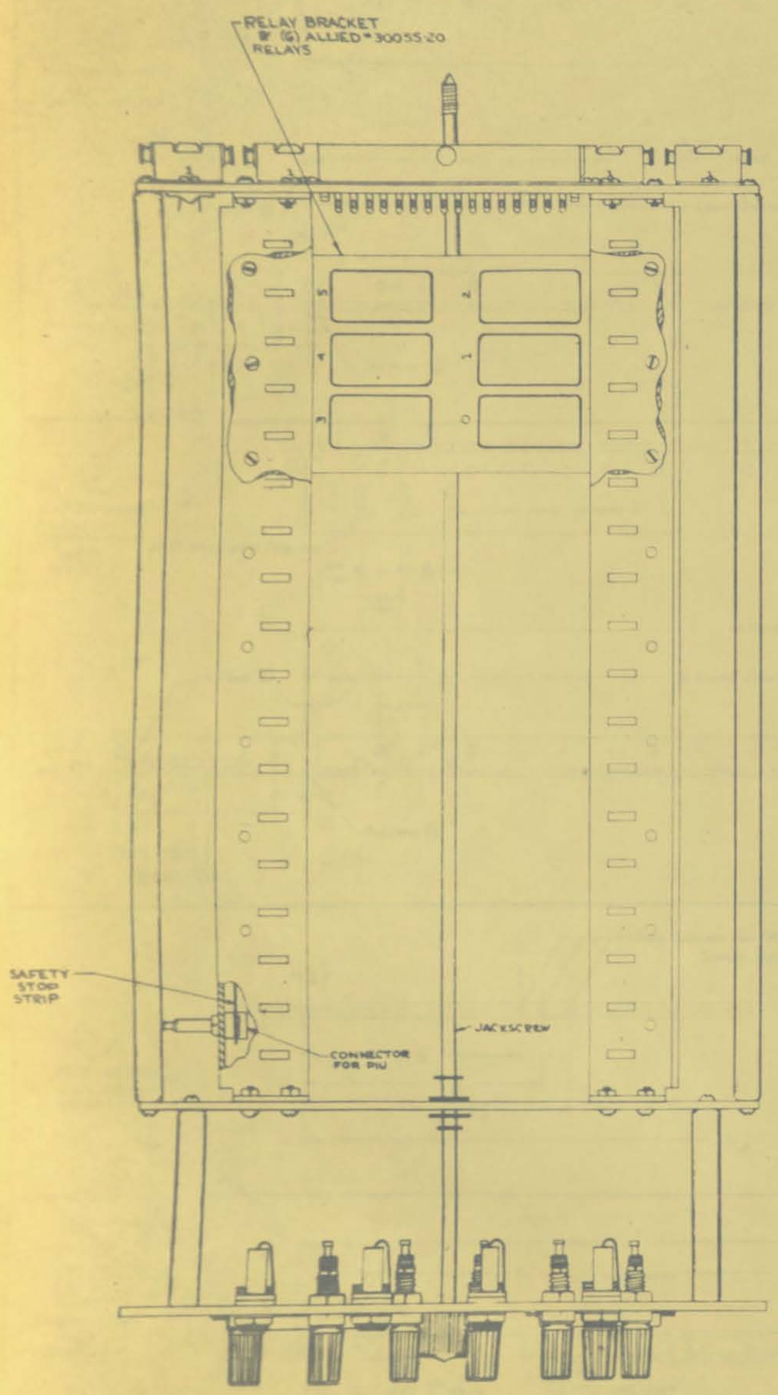
⑥ INSULATED STANDOFFS FOR SHIELD GROUNDS TIED TO PINS 1 OF AE, BE, DE, EE.

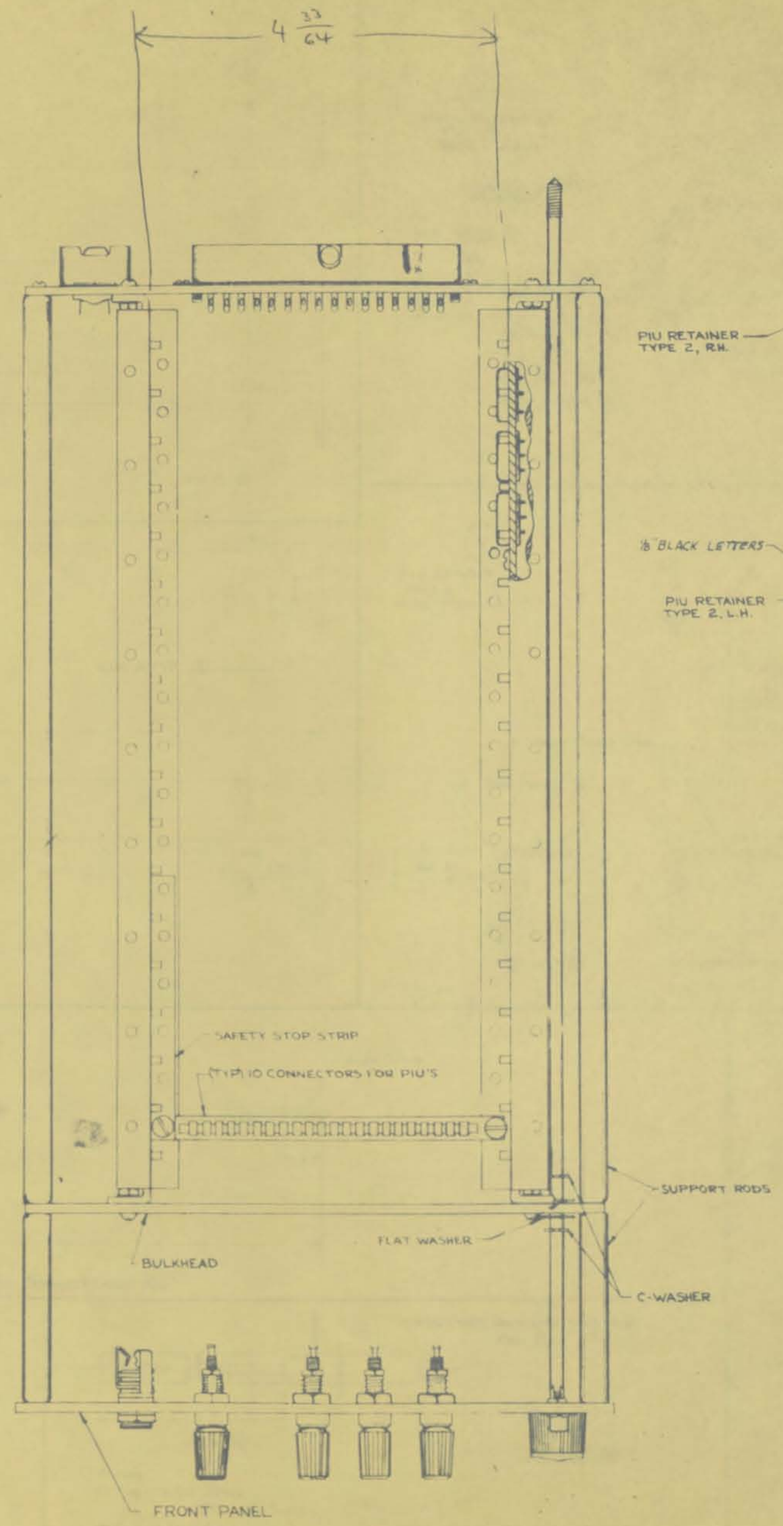
⑦ AIR VENTS TO BE UNOBSTRUCTED BY WIRES AS MUCH AS POSSIBLE

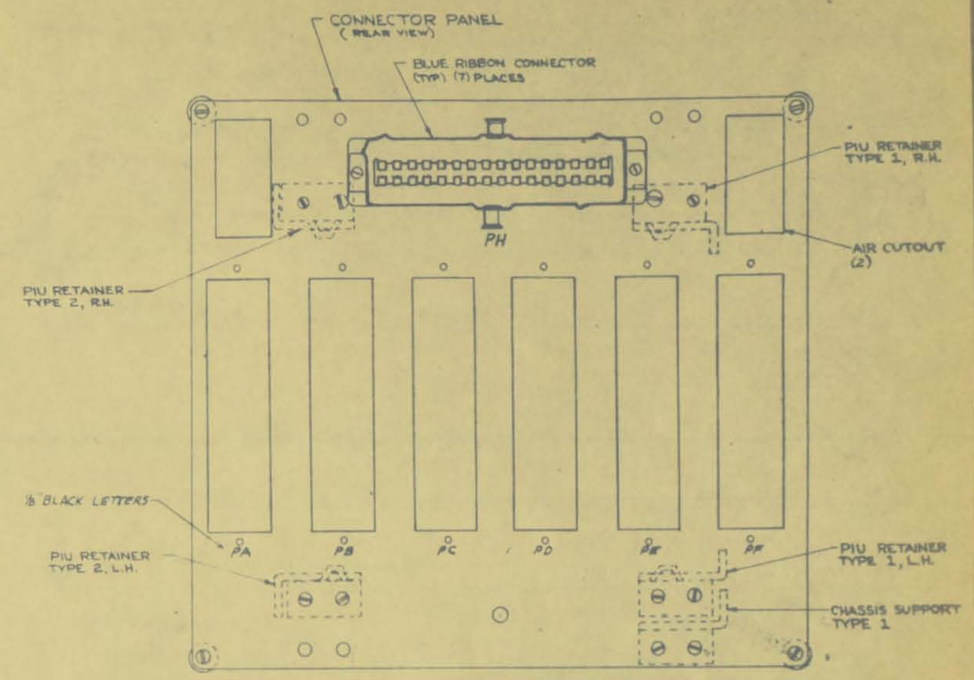
ISSUED
NOV 2 1964

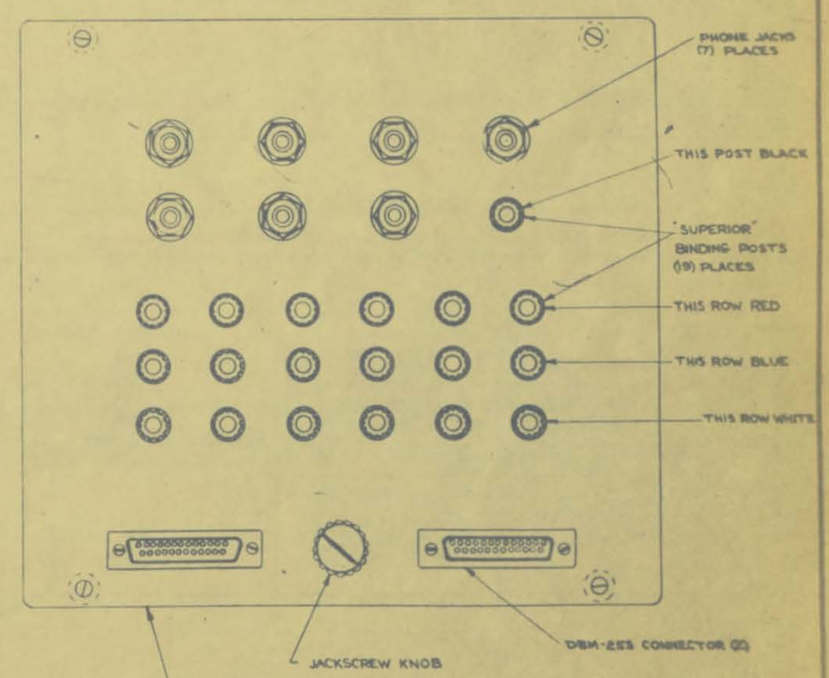
CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	TERMINAL FRAME CABLING
ENG. MALPASS	
DATE SEPT 5 '63	1805 CIL







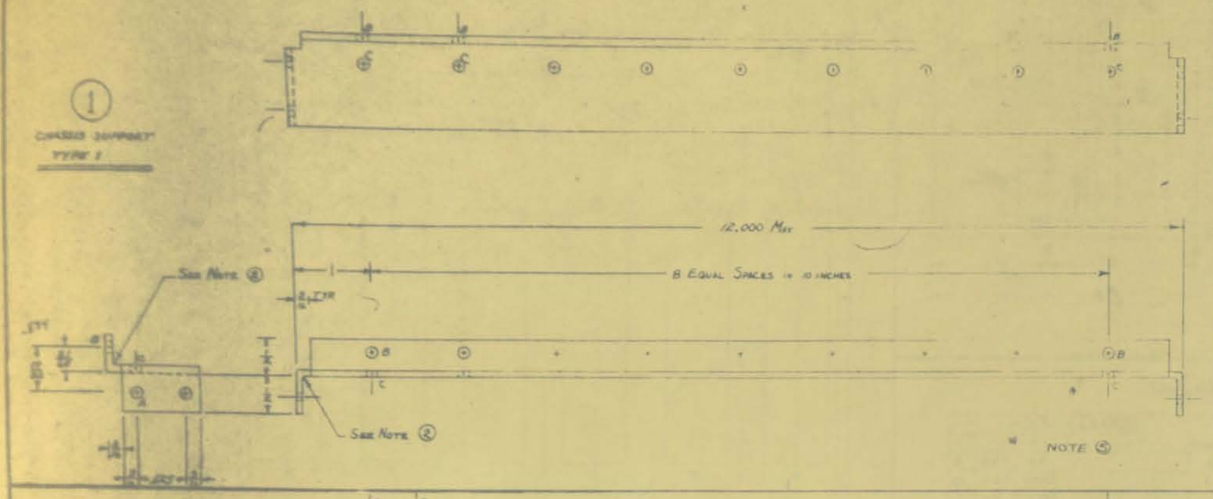


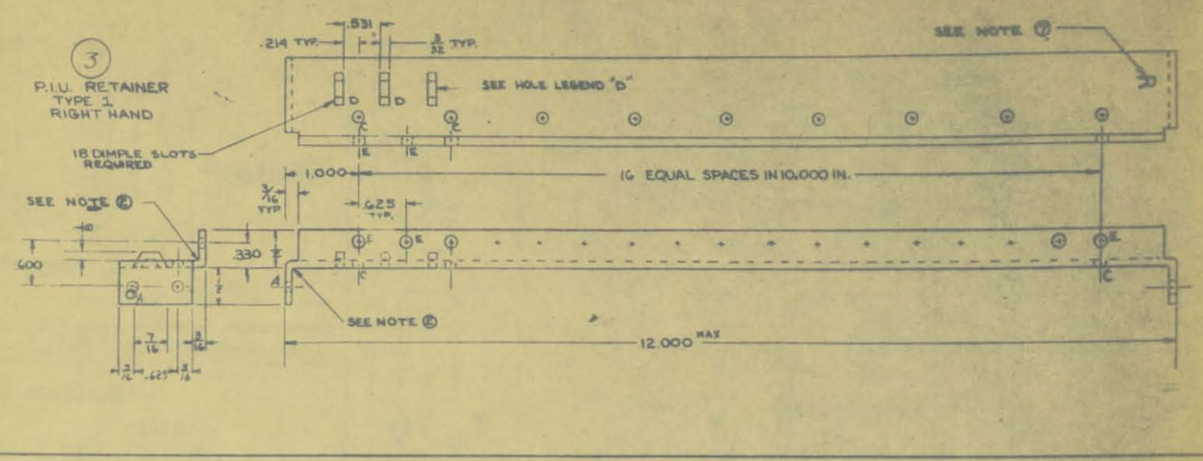
FRONT PANEL (BOX "B")
(FRONT VIEW)

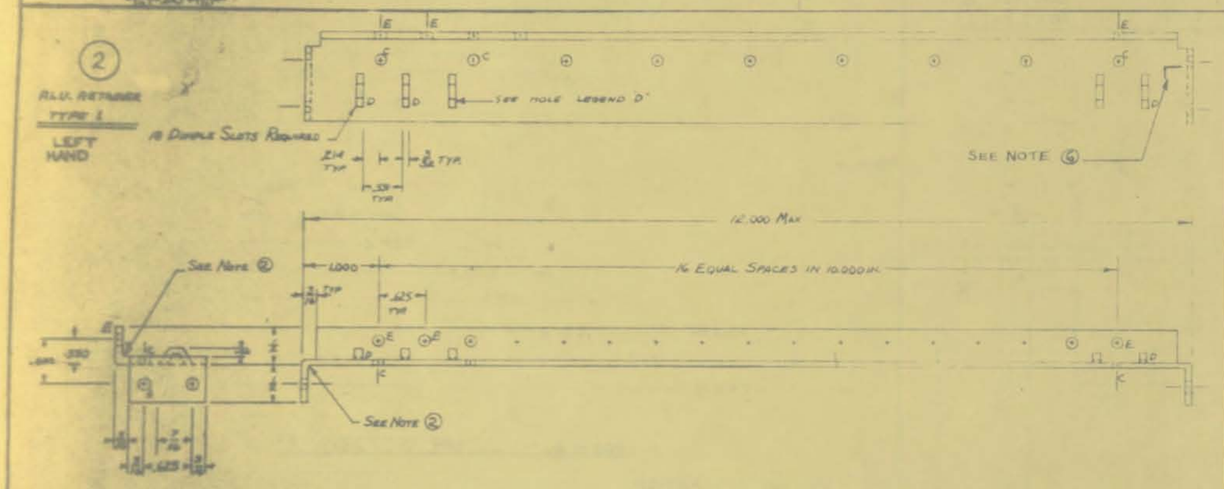
NOTE: BOX "A" IS SIMILAR EXCEPT PHONE JACKS, BINDING POSTS, & CONNECTORS

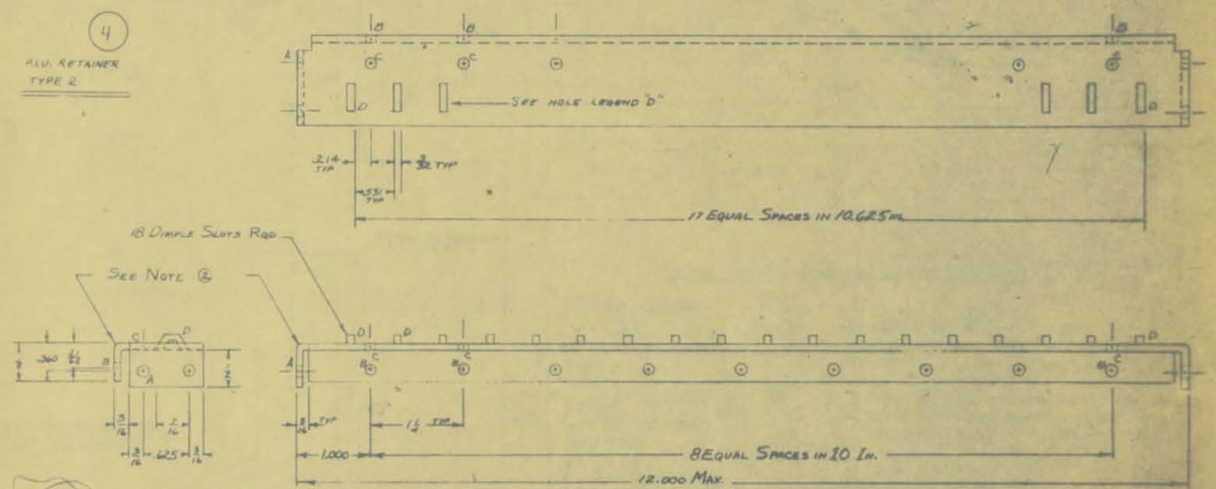
ISSUED
NOV 2 1964

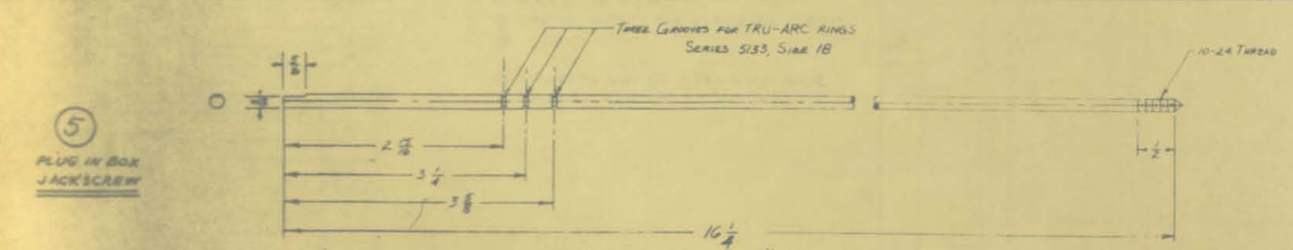
LINC	TERMINAL PLUG-IN ASSEMBLY
DATE 10/25/63	1806







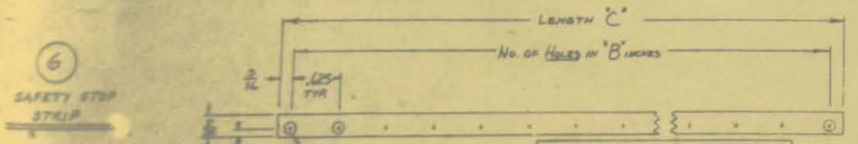




Notes
① MTL: 3/16 DIA STAINLESS STEEL ROD

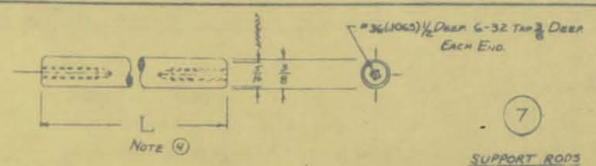
HOLE LEGEND		
	SIZE	QUANT
A	#27 (.144)	4
B	#27 (.144)	9
C	#27 (.144)	9
D	DIMPLE SLOTS: APPROX. 3/8 x 3/32 WIDE x 3/8	18
E	#27 (.144)	17

NOTES
① MTL: .090 ALUM. EXC.
② ALL BENDS TO HAVE SHARPEST INSIDE RADII WITHOUT FRACTURING MATL.
③ REMOVE BURRS & BREAK SHARP EDGES
④ F, IRIDITE #14 AS PER MIL C 5541
⑤ TOLERANCES - ± 1/64 EXCEPT LENGTH & HOLE 'A' SPACING & WHERE NOTED
⑥ TO BE STAMPED "L"
⑦ TO BE STAMPED "R"



Notes:
① MTL: .032 ALUM
② FINISH: IRIDITE #14 AS PER MIL C 5541

No. of Holes "A"	"B"	Length "C"
6	3 1/2	3 1/2
10	5 1/2	6
17	10	10 1/2
4	1 1/2	2 1/2

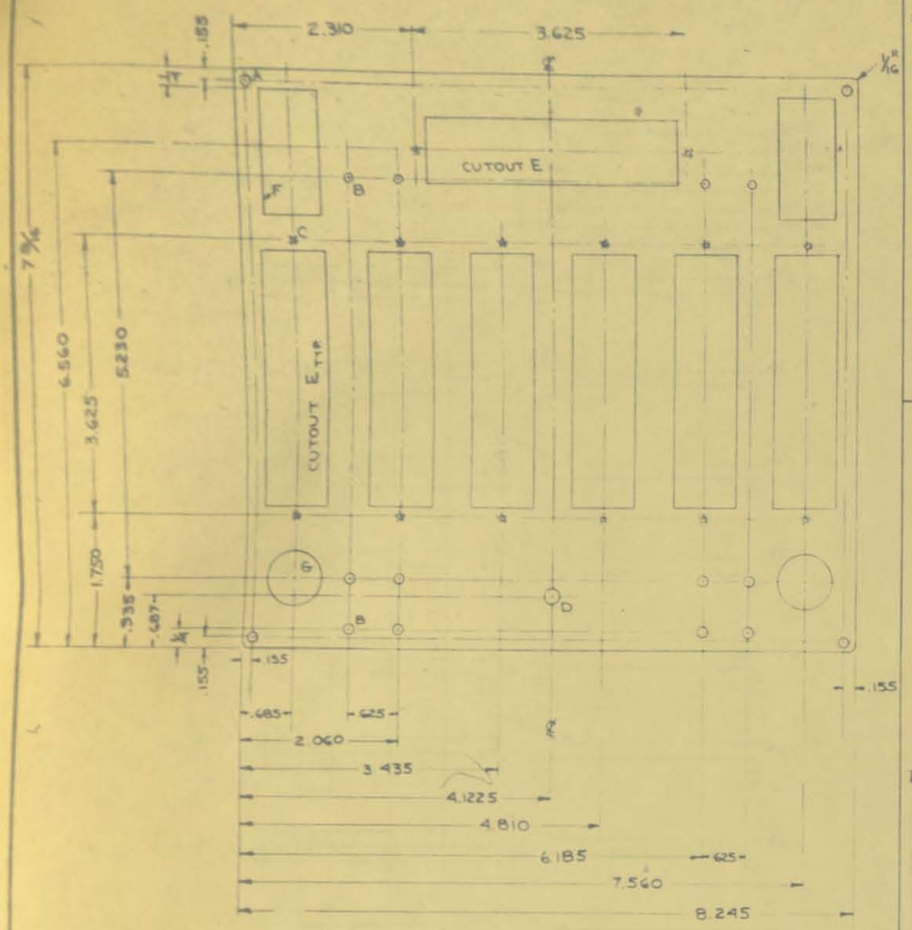


Notes:
① MAT'L: 3/8 ROD STOCK STAINLESS STEEL
② FINISH: SEE ABOVE
③ ENDS ROUNDED TO APPROX. 5/16 D.
④

FRONT SUPPORT ROD	L = 2.500
REAR SUPPORT ROD	L = 12.000

ISSUED
NOV 2 1964

LINC
TERMINAL PLUG IN ASSEMBLY CHAP SERIES
APPROVED
Works 1807



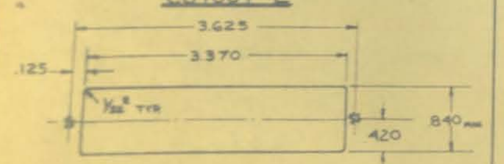
CONNECTOR PANEL PLUG IN BOX

HOLE LEGEND		
	SIZE	QUANT
A	#27 (.144)	4
B	#27 (.144)	12
C	#43 (.089) 4-40 TAP	14
D	#9 (.196)	1
E	CUTOUT - SEE INSERT BELOW	7
F	AIR VENT CUTOUT 23/32 x 1 3/32 (18/4)	2
G	AIR VENT 3/4 D	2

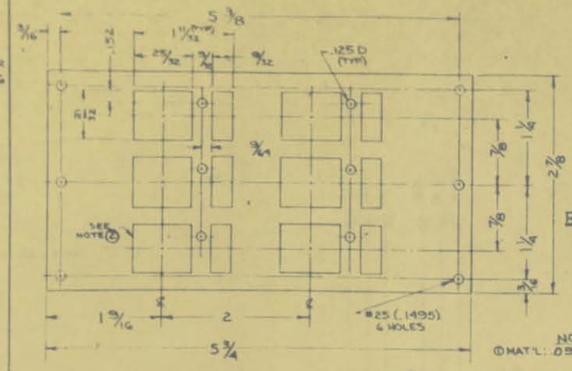
NOTES

① MAT'L 1/8 ALUM.
② FINISH. IRIDITE #14 AS PER MIL C 5541
③
④ AIR VENTS MAY BE ± 1/32 & MAY HAVE ROUNDED CORNERS UP TO 1/16 R

CUTOUT E



FOR AMPHENOL 26-4401-32P-102B
BLUE RIBBON CONNECTOR



RELAY BRACKET PLUG IN BOX B

NOTES

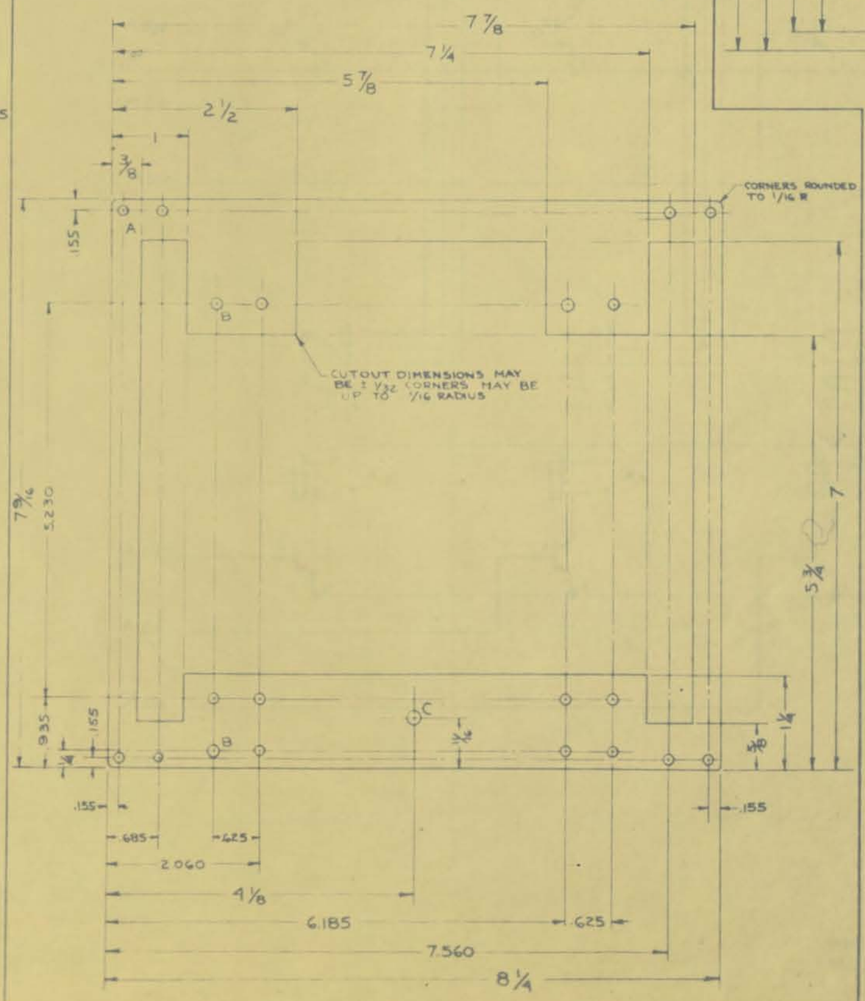
① MAT'L: .090 ALUM.
② SIX HOLES FOR RELAY SOCKET, ALLIED # 30055-20
③ FINISH: IRIDITE #14 AS PER MIL C 5541

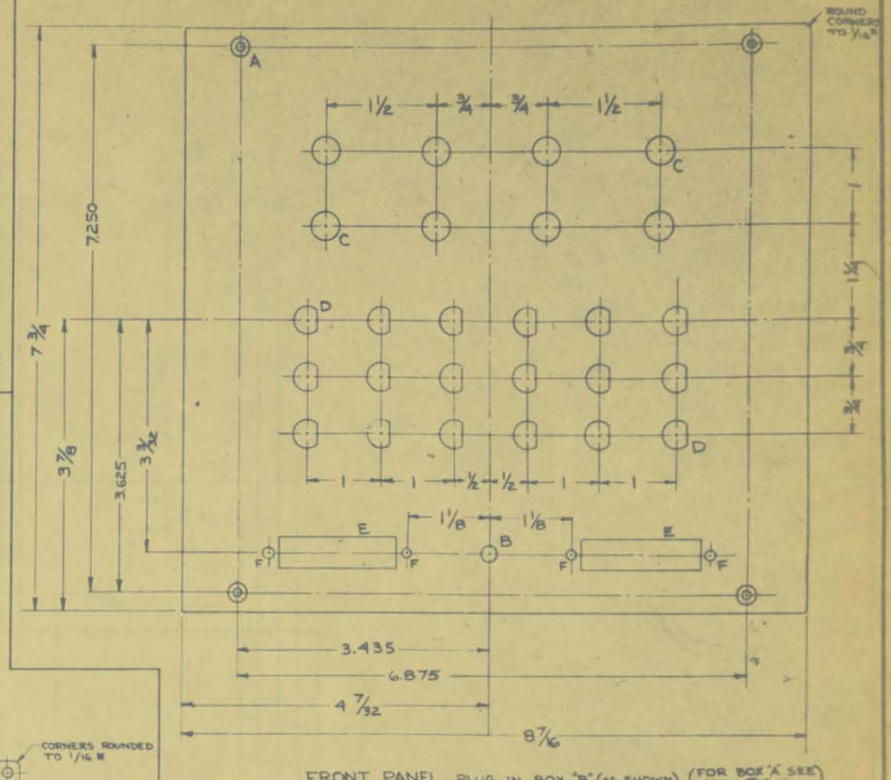
BULKHEAD PLUG IN BOX

HOLE LEGEND		
	SIZE	QUANT.
A	#27 (.144)	8
B	#27 (.144)	12
C	#7 (.201)	1

NOTES

① MAT'L. 1/8 ALUM.
② FINISH: IRIDITE #14 AS PER MIL C 5541





FRONT PANEL PLUG IN BOX "B" (AS SHOWN) (FOR BOX "A" SEE NOTE ⑤ & ⑥)

HOLE LEGEND		
	SIZE	QUANT.
A	#27 (.144) C'SINK TO 19/64 DIA	4
B	7/32	1
* C	3/8	8
* D	21/64 HOLE SEE DETAIL 'D'	18
* E	7/16 x 1 21/32 SEE DETAIL 'E'	2
* F	#30 (.1285)	4

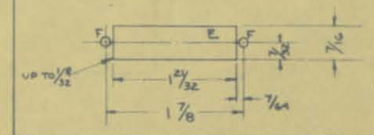
* INDICATES BOX "B" ONLY

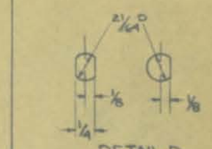
NOTES

① MAT'L: 1/8 ALUM.
② FINISH. IRIDITE #14 AS PER MIL C 5541 FRONT SURFACE ONLY - SATIN FINISH
③ THIS PIECE USED ON BOX "B" ONLY
④ BOX "A" FRONT PANEL IS THE SAME AS ABOVE EXCEPT HOLES C, D, E, & F, ARE OMITTED.

DETAIL E

FOR CANNON CONNECTOR DBM-25S





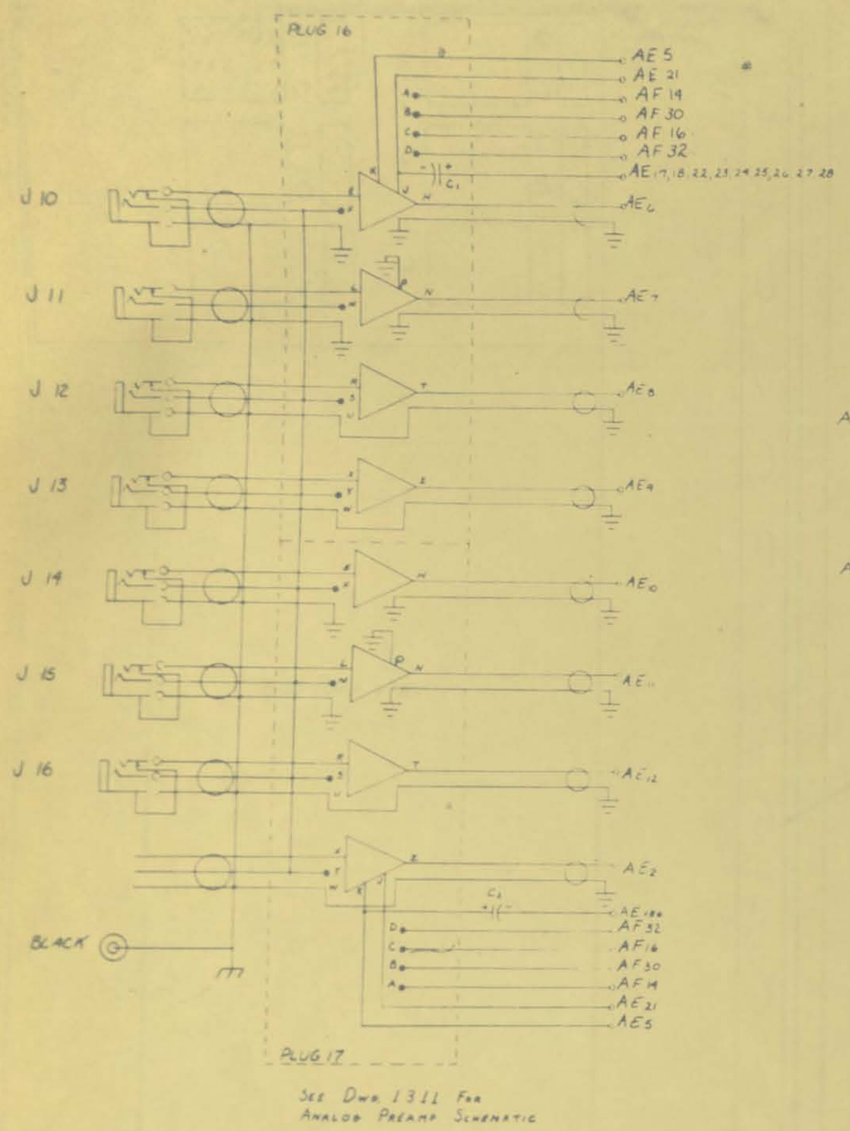
DETAIL D

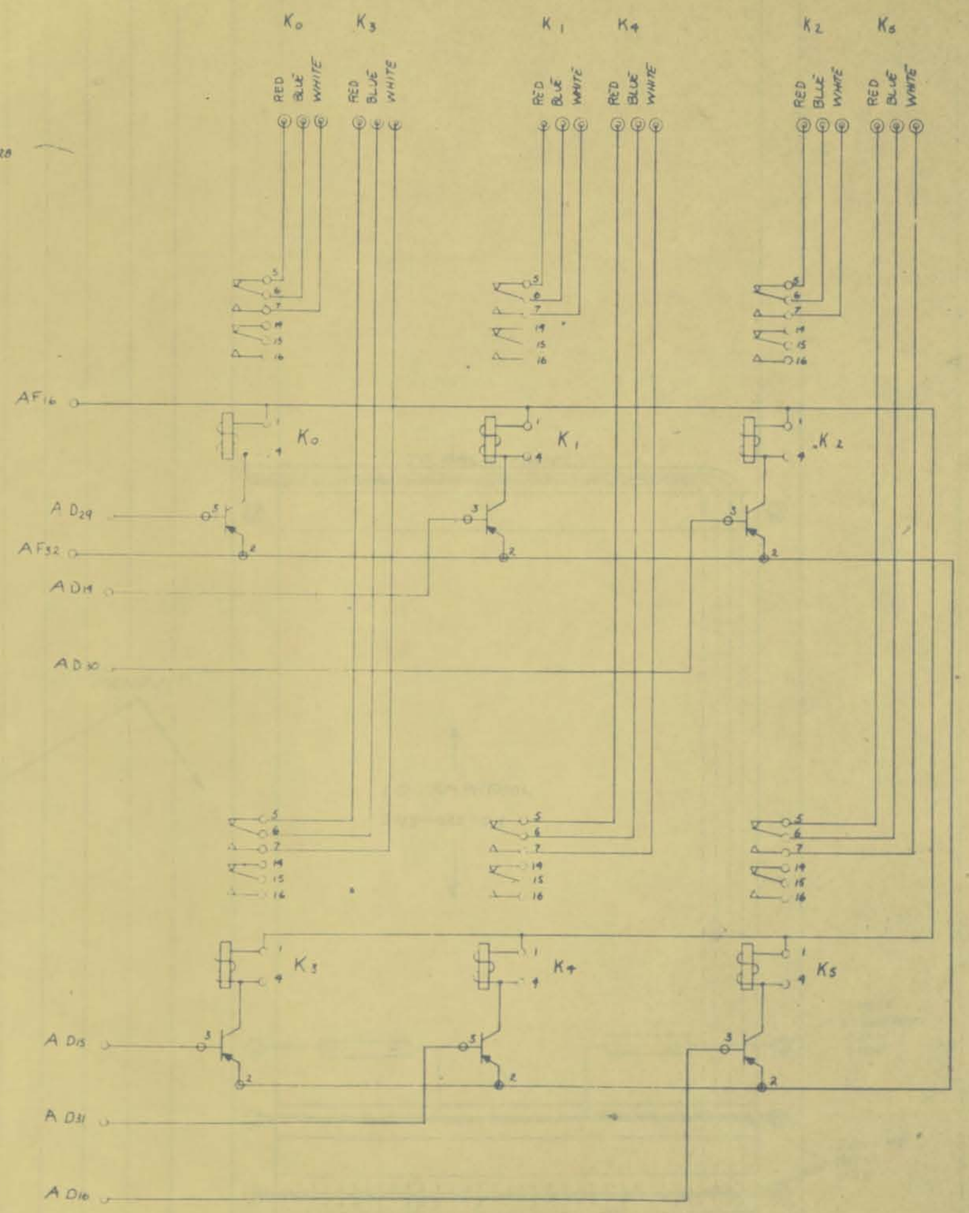
EITHER CONFIGURATION MAY BE USED. MTNG HOLE FOR "SIX WAY" BINDING POST. E.F. JOHNSON # 111-101

DECIMALS ± .005
FRACTIONS ± 1/64

ISSUED
NOV 2 1964

LINC	TERMINAL PLUG IN MAJOR MEMBERS		
	1808		





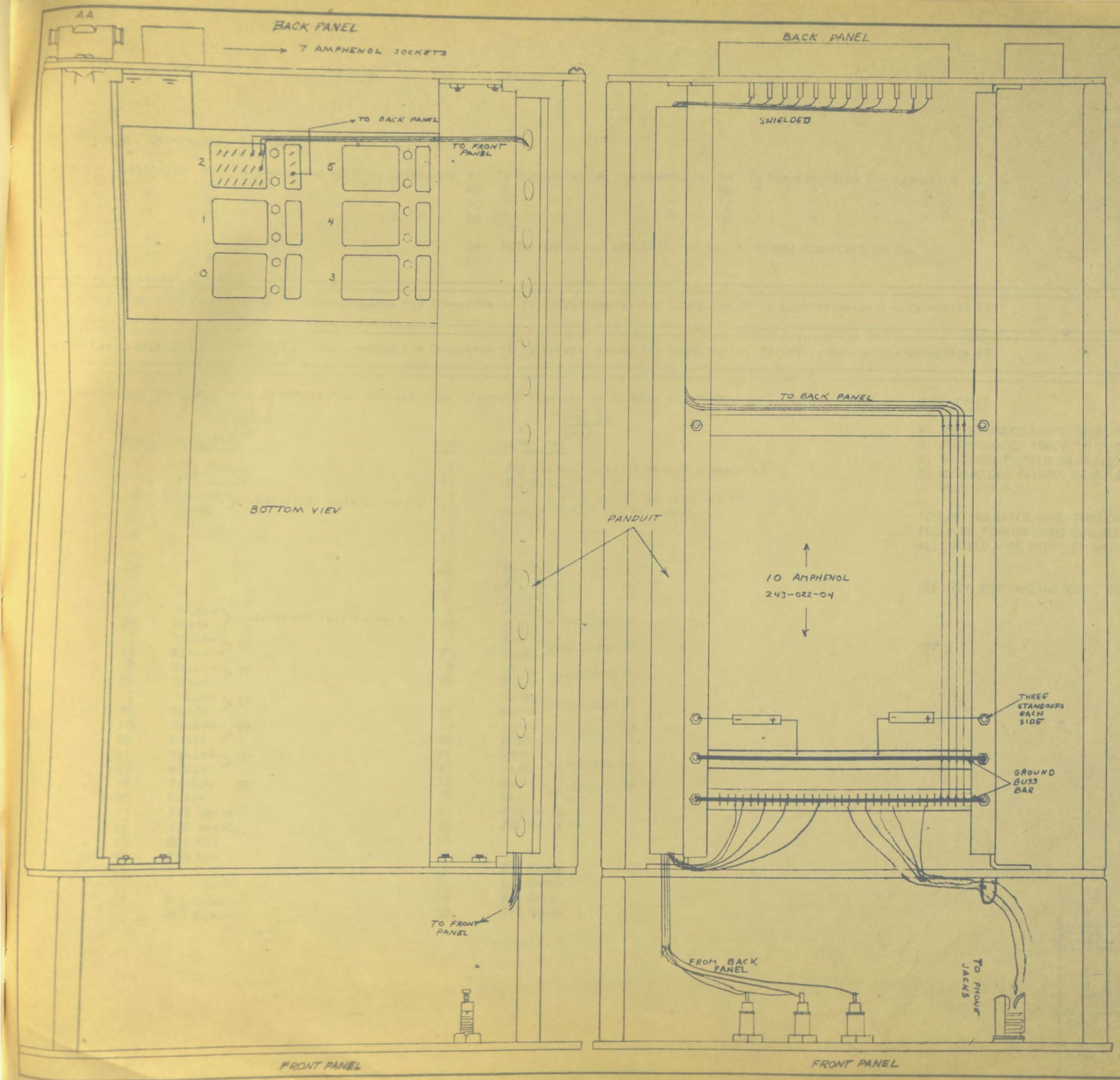
DENOTES GROUND BUSS

DENOTES CHASSIS GROUND

ISSUED
NOV 2 1964

FOR DETAILED SCHEMATIC OF RELAY CIRCUIT SEE DRAWING 1349.

LINC | TERMINAL PLUG IN & SCHEMATIC
W. SIMON | 1810



ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			TERMINAL PLUG-IN B WIRING LAYOUT
ENG.			
DATE 4/16/64	1811		CH.

ALL #22 WIRE, UNSHIELDED, ONE COLOR

EACH PIN,	CONNECTOR	BA	TO CORRESPONDING	PIN	CONNECTOR	AA	TO CORRESPONDING	PIN	CONNECTOR	DA	TO CORRESPONDING	PIN	CONNECTOR	EA
"	"	BB	"	"	"	AB	"	"	"	DB	"	"	"	EB
"	"	BC	"	"	"	AC	"	"	"	DC	"	"	"	EC
"	"	BD	"	"	"	AD	"	"	"	DD	"	"	"	ED
"	"	AH	"	"	"	DH	NOTE: AH IS NOT CONNECTED TO BH, DH IS NOT CONNECTED TO EH.							
"	"	BH	"	"	"	EH								

EACH PIN (TABLE 1) CONNECTOR BF TO CORRESPONDING PIN CONNECTOR AF TO CORRESPONDING PIN CONNECTOR DF TO CORRESPONDING PIN CONNECTOR EF

EACH PIN (TABLE 2) CONNECTOR BE TO CORRESPONDING PIN CONNECTOR AE TO CORRESPONDING PIN CONNECTOR DE TO CORRESPONDING PIN CONNECTOR EE

CONNECTOR DJ: SHIELDED PAIR TO MUFFIN FAN. SHIELD TIED TO GROUND TERMINAL OF HUBBELL CONNECTOR.

TABLE I (D)

PIN	WIRE TYPE
1	#22 BLACK
17	#18 YELLOW
2	YELLOW > UNSHIELDED TWISTED PAIR
18	BLACK > UNSHIELDED TWISTED PAIR
3	
19	
4	
20	
5	
21	
6	YELLOW > UNSHIELDED TWISTED PAIR
22	BLACK > UNSHIELDED TWISTED PAIR
7	YELLOW > TP
23	BLACK > TP
8	YELLOW > TP
24	BLACK > TP
9	YELLOW > TP
25	BLACK > TP
10	YELLOW > TP
26	BLACK > TP
11	YELLOW > TP
27	BLACK > TP
12	YELLOW TP
28	BLACK
13	#22 WHITE
29	#22 WHITE
14	#22 RED
30	#30 RED
15	
31	
16	#18 BLUE
32	#18 BLACK

TABLE II (E)

PIN	WIRE TYPE
1	#22 BLACK, (ALSO TO SHIELD STANDOFFS)
17	#18 BLACK
2	WHITE > SHIELDED TP SHIELD TIED TO PIN 1 VIA STANDOFFS
18	BLACK > SHIELDED TP SHIELD TIED TO PIN 1 VIA STANDOFFS
3	
19	
4	
20	#22 BLACK
5	#22 VIOLET
21	#18 WHITE
6	WHITE > SHIELDED TP
22	BLACK > SHIELDED TP
7	WHITE > SHIELDED TP
23	BLACK > SHIELDED TP
8	WHITE > SHIELDED TP
24	BLACK > SHIELDED TP
9	WHITE > SHIELDED TP
25	BLACK > SHIELDED TP
10	WHITE > SHIELDED TP
26	BLACK > SHIELDED TP
11	WHITE > SHIELDED TP
27	BLACK > SHIELDED TP
12	WHITE > SHIELDED TP
28	BLACK > SHIELDED TP
13	#22 WHITE
29	#22 WHITE
14	
30	
15	#22 BROWN
31	#22 BROWN
16	#18 BLUE
32	#18 BLACK

WIRE TYPES

A. #22 STRANDED ABREV "#22' COLOR"
B. #18 STRANDED ABREV "#18' COLOR"
C. SHIELDED TWISTED PAIR BELDEN #8761 ABREV "SHIELDED T.P."
D. UNSHIELDED TWISTED PAIR, #22 STRANDED, YELLOW AND BLACK ABREV "T.P."

TEFLON INSULATED WIRE THROUGHOUT (EXCEPT BELDEN #8761.)
ALL WIRE TERMINATIONS COVERED WITH TEFLON SPAGHETTI.
ALL SHIELD WIRE PROVIDED WITH CRIMPED "BOOTS."

SEE 1805 FOR CABLING RUNS, CONNECTOR TYPES

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	TERMINAL FRAME WIRING
ENG.	
DATE	1813 CH.

Line Reference Target LRT-BE4-V2

NAME	QTY.	DWG. NO.	VENDOR	PART NO.	RATING
FALSE FRONT PANEL	1	1803			
CONNECTOR BULKHEAD	1	1803			
FAN and CONNECTOR PANEL	1	1803			
JACKSCREW NUT	2	1804			
FRONT PANEL, PAINTED	1	1803			
CORNER RAIL	4	1804			
CENTER RAIL	2	1804			
AIR BAFFLE	2	1804			
SET SCREWS 6-32 × 1/4	10				
F. H. SCREWS 6-32 × 3/8	16				
R. H. SCREWS 6-32 × 3/8	24				
BINDER SCREWS 6-32 × 3/8	2				
R. H. SCREWS 6-32 × 1/4	8				
BINDER SCREWS 4-40 × 3/8	56				
FILLISTER HD. SCREWS 4-40 × 3/8	4				
WASHERS	28				
FAN, WHISPER GRILLE	1	1805	ROTRON		
CONNECTOR	10	1805	AMPHENOL BLUE RIBBON	26-4401-32P-1028	
CONNECTOR	4	1805	AMPHENOL BLUE RIBBON	26-4402-32P-1028	
CONNECTOR	10	1805	AMPHENOL BLUE RIBBON	26-4201-32S	
CONNECTOR	4	1805	AMPHENOL BLUE RIBBON	26-4202-32S	
CONNECTOR	1	1805	HUBBELL	7486	
TERMINAL POSTS	4	1805	USECO	1421	

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC

TERMINAL FRAME
PARTS LIST

ENG.

DATE

1814

CH.

NAME	QUANTITY	DWG. NO.	VENDOR	PART NO.	RATING
CHASSIS SUPPORT TYPE I	1	1807			
SAFETY STOP STRIP	1	1807			
RELAY BRACKET BOX B	1	1808			
F.H. SCREWS 6-32 x 3/8	8				
BIND SCREWS 4-40 x 1/4	18				
LOCKWASHERS #4	14				
STEEL WASHERS #6	32				
NUTS 6-32	40				
R.H. SCREWS 6-32 x 3/8	26				
BIND SCREWS 6-32 x 3/8	22				
WIRING DUCT *	1	1806	PANDUIT	#E .5 x .5	LENGTH 11½"
C WASHERS	2		TRU-ARC		
SNAP CLIP FASTENERS*	3	1806	PANDUIT	#5.5	
CONNECTORS*	10	1806	AMPHENOL BLUE RIBBON	143-022	
CONNECTORS	5	1806	AMPHENOL BLUE RIBBON	26-4401-32P-1028	
CONNECTORS	2	1806	AMPHENOL BLUE RIBBON	26-4402-32P-1028	
CONNECTORS*	2	1806	CANNON	DBM-25S	
PHONE JACKS*	7	1806	SWITCHCRAFT	13B	
PHONE PLUGS*	7	1806	SWITCHCRAFT	267	
BINDING POSTS:*		1806	E. F. JOHNSON		8000 v.
RED	6			111-102	
BLUE	6			111-110	
WHITE	6			111-101	
BLACK	1			111-103	15 amps.
KNOB JACKSCREW	1		RAYTHEON	DSTO-1-3G	
CAPACITORS*	2	1810	GENERAL INSTRUMENT	2406 330D TYPE MLV	150MFD 25 WVT
TERMINAL POSTS*	8	1806	USECO	1421	
CABLE CLAMPS*	10	1806	T and B TY-RAP		12
RELAY SOCKETS*	6	1806 1810	ALLIED CONTROL COMPANY	#30055-20	
SUPPORT ROD 2½ IN.	4	1807			
SUPPORT ROD 12 IN.	4	1807			
JACKSCREW P.I.U.	1	1807			
P.I.U. RETAINER TYPE I L.H.	1	1807			
P.I.U. RETAINER TYPE I R.H.	1	1807			
P.I.U. RETAINER TYPE 2 L.H.	1	1807			
P.I.U. RETAINER TYPE 2 R.H.	1	1807			
FRONT PANEL	1	1808			
BULKHEAD	1	1808			
CONNECTOR PANEL	1	1808			

*NEEDED FOR B PLUG IN ONLY

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			TERMINAL PLUG-IN PARTS LIST
ENG.			
DATE	1815		CH.

1. The testing will be done by personnel other than those who fabricated the parts, assembled the unit or wired it.

2. VISUAL: All Finishes, both irridite and paint will be visually checked to insure compliance to highest industrial standards for cleanliness and uniformity of finish.

3. CONNECTORS: All connectors mounted on connector bulkhead will be inspected to insure that they are freely "floating". Floating is defined as 1/16" movement with respect to the connector bulkhead in a plane parrallel to the connector bulkhead.

4. FAN: When 110 volts, 60 cycle AC is applied to the Hubbell connector on the fan and connector panel, the fan must operate.

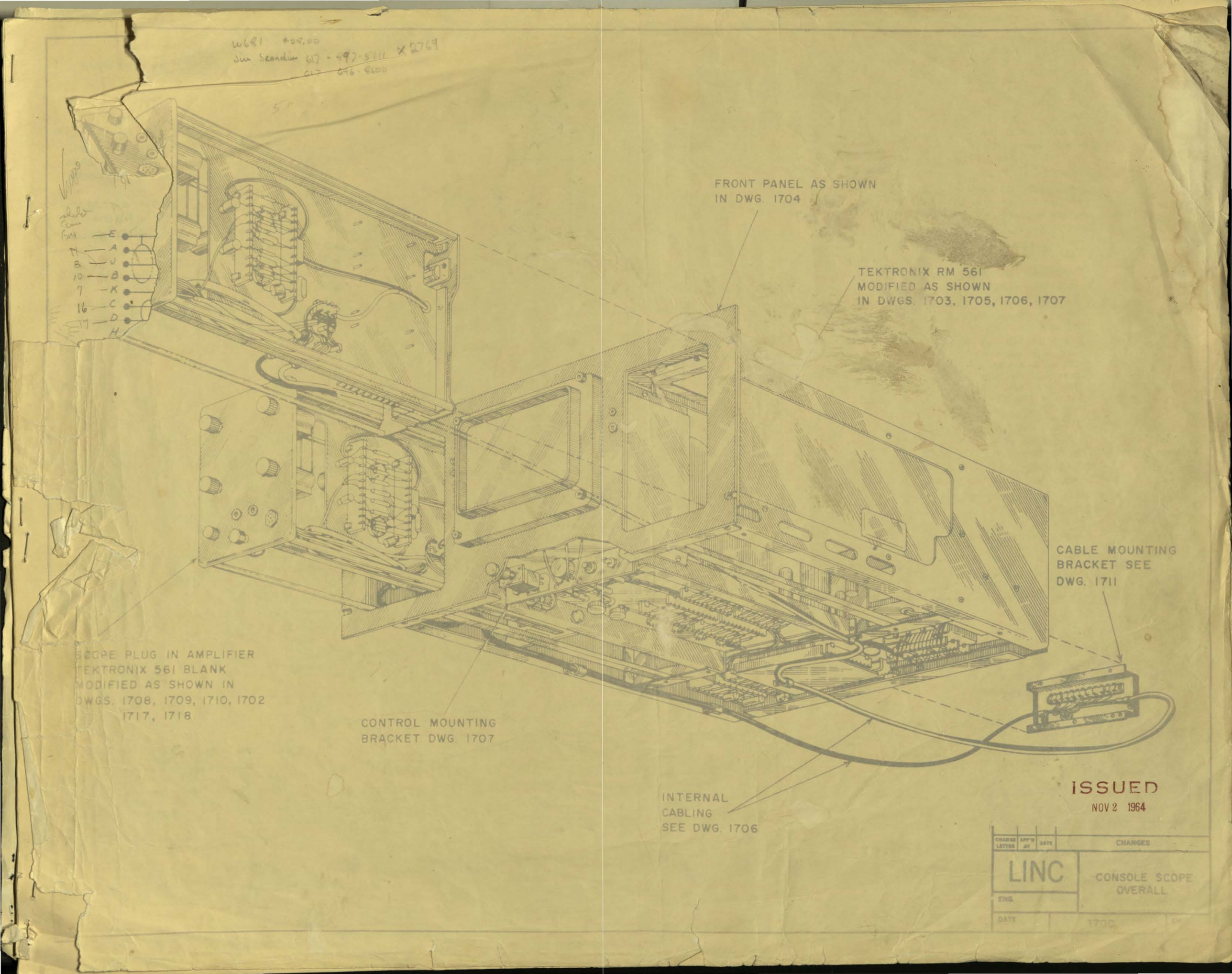
5. WIRING: Test Equipment: Simpson 260 or equivalent ohmmeter
Each connection to be checked for continuity.

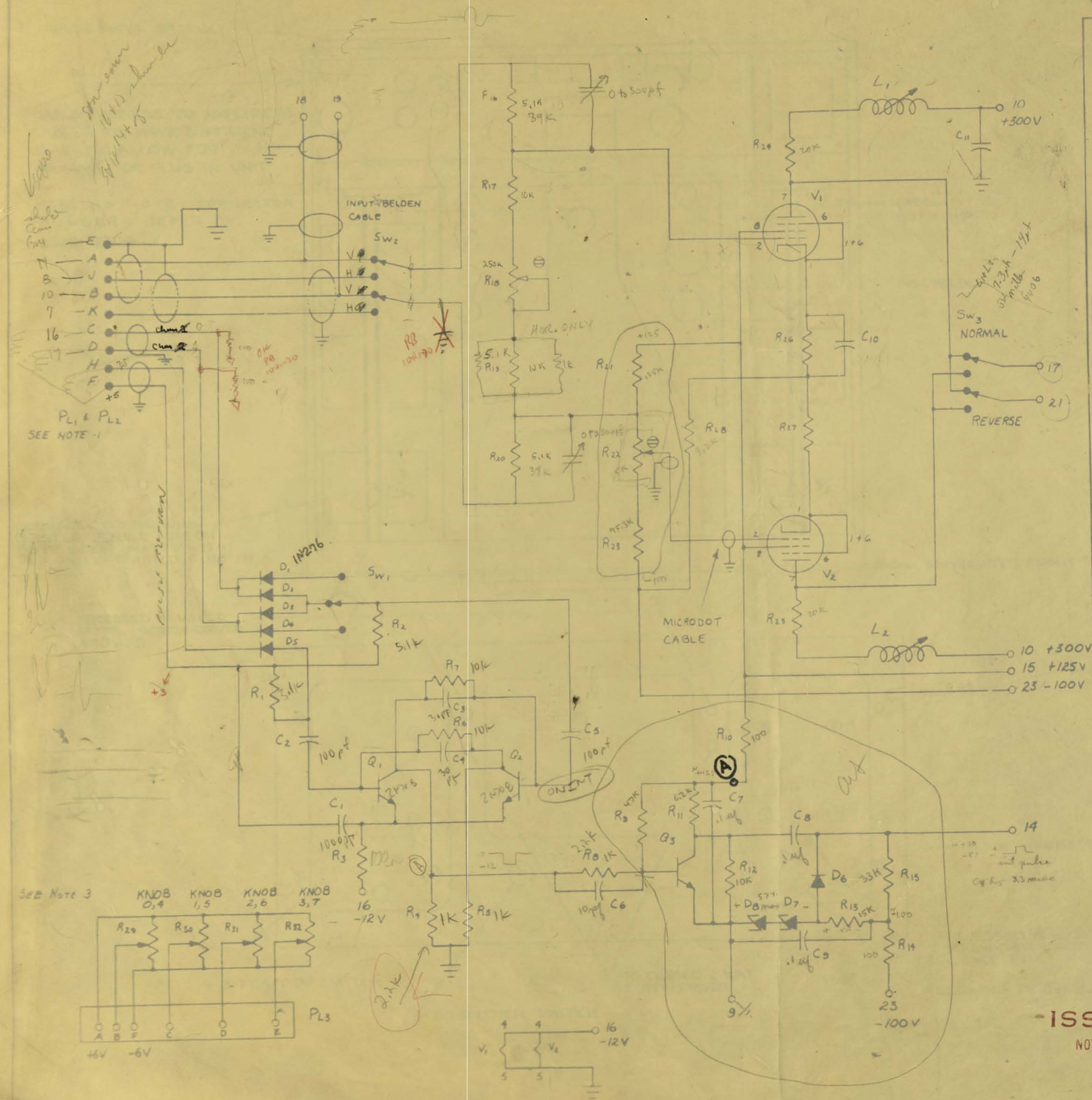
Each	Pin,	Connector	BA	To	Corresponding	Pin	Connector	AA	To	Corresponding	Pin	Connector	DA	To	Corresponding	Pin	Connector	EA
"	"	"	BB	"	"	"	"	AB	"	"	"	"	DB	"	"	"	"	EB
"	"	"	BC	"	"	"	"	AC	"	"	"	"	DC	"	"	"	"	EC
"	"	"	BD	"	"	"	"	AD	"	"	"	"	DD	"	"	"	"	ED
"	"	"	AH	"	"	"	"	DH										
"	"	"	BH	"	"	"	"	EH										

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	TERMINAL FRAME TESTING
ENG.	
DATE	1816 CH.


FRONT PANEL AS SHOWN
IN DWG. 1704
TEKTRONIX RM 561
MODIFIED AS SHOWN
IN DWGS. 1703, 1705, 1706, 1707
CABLE MOUNTING
BRACKET SEE
DWG. 1711
SCOPE PLUG IN AMPLIFIER
TEKTRONIX 561 BLANK
MODIFIED AS SHOWN IN
DWGS. 1708, 1709, 1710, 1702
1717, 1718
CONTROL MOUNTING
BRACKET DWG. 1707
INTERNAL
CABLING
SEE DWG. 1706
E
A
J
B
K
C
D
H
ISSUED
NOV 2 1964
CHANGES
LINC
CONSOLE SCOPE
OVERALL
ENG.
DATE
1700



PARTS NUMBER KEY

C_1	1000pf. CD DIPPED SILVER MVA	1ea
$C_2 C_3$	100pf CD DIPPED SILVER	2ea
$C_5 C_4$	30pf CD DIPPED SILVER MICA	2ea
C_6	10pf. CD DIPPED SILVER MICA	1ea.
$C_7 C_9 C_{11}$	.1 MF. DISC @ 600WV SPRAGUE	3ea.
C_8	.1 MF. TUBULAR 200WV AEROVOX	1ea
C_{10}	.1 MF. 100WV GOOD-ALL X663F	1ea
$D_1 D_2 D_3 D_4 D_5$	1N276 CLEVITE	5ea
D_6	1N484 FAIRCHILD	1ea.
D_7	1N3038 MOTOROLA	1ea.
D_8	1N3030B MOTOROLA	1ea
$L_1 L_2$	8.3 MH – 14MH DELEVAN 200-56/R	2ea
P_{L1}	9 PIN AMPHENOL #126-219	1ea
P_{L2}	50C AMPHENOL #126-221	1ea
P_{L3}	7 PIN AMPHENOL #126-197	1ea
$Q_1 Q_2$	2N708 FAIRCHILD	2ea
Q_3	2N1893 FAIRCHILD	1ea
$R_1 R_2 R_{16} R_{20}$	5.1K A/B ½ W 5%	4ea.
$R_3 R_{10} R_{14}$	100Ω A/B ½ W 5%	3ea
$R_4 R_5 R_8$	1 K A/B ½ W 5%	3ea
$R_6 R_7 R_{12} R_{17} R_{19}$	10K A/B ½ W 5%	5ea
R_9	47K A/B ½W 5%	1ea
R_{11}	6.2K A/B 2W 5%	1ea.
R_{13}	15K A/B 2W 5%	1ea.
R_{15}	33K A/B 2W 5%	1ea.
R_{18}	250K VAR. A/B ½W TYPE G	1ea.
R_{21}	125K ½W 1%	1ea.
R_{22}	5K. VAR. A/B ½W TYPE G	1ea
R_{23}	95.3K ½W 1%	1ea
$R_{24} R_{25}$	20K 5W WARD LEONARD	2ea
R_{26}, R_{27}	39Ω A/B ½W 5%	2ea
R_{28}	8.2K 5W OHMITE #4651	1ea.
$R_{29} R_{30} R_{31} R_{32}$	5K, 3 TURN POT CLAROSTAT #140-6326	4ea.
Sw_1	3 POL 3 POS CENTRALAB #PS-10B	1ea.
Sw_2, Sw_3	DPDT SLIDESWITCH SA STACKPOLE	2ea.
$V_1 V_2$	12BV7 SYLVANIA	2ea.

9/16 LONG STAKPOLE HKT 3/8" O.D. PANEL BUSHINGS 4-32 THRD 30 Ohm INTERDOC

NOTE 1: PL_2 IS MOUNTED ON FRONT OF AMPLIFIER, AND IS WIRED IN PARALLEL WITH PL_1.

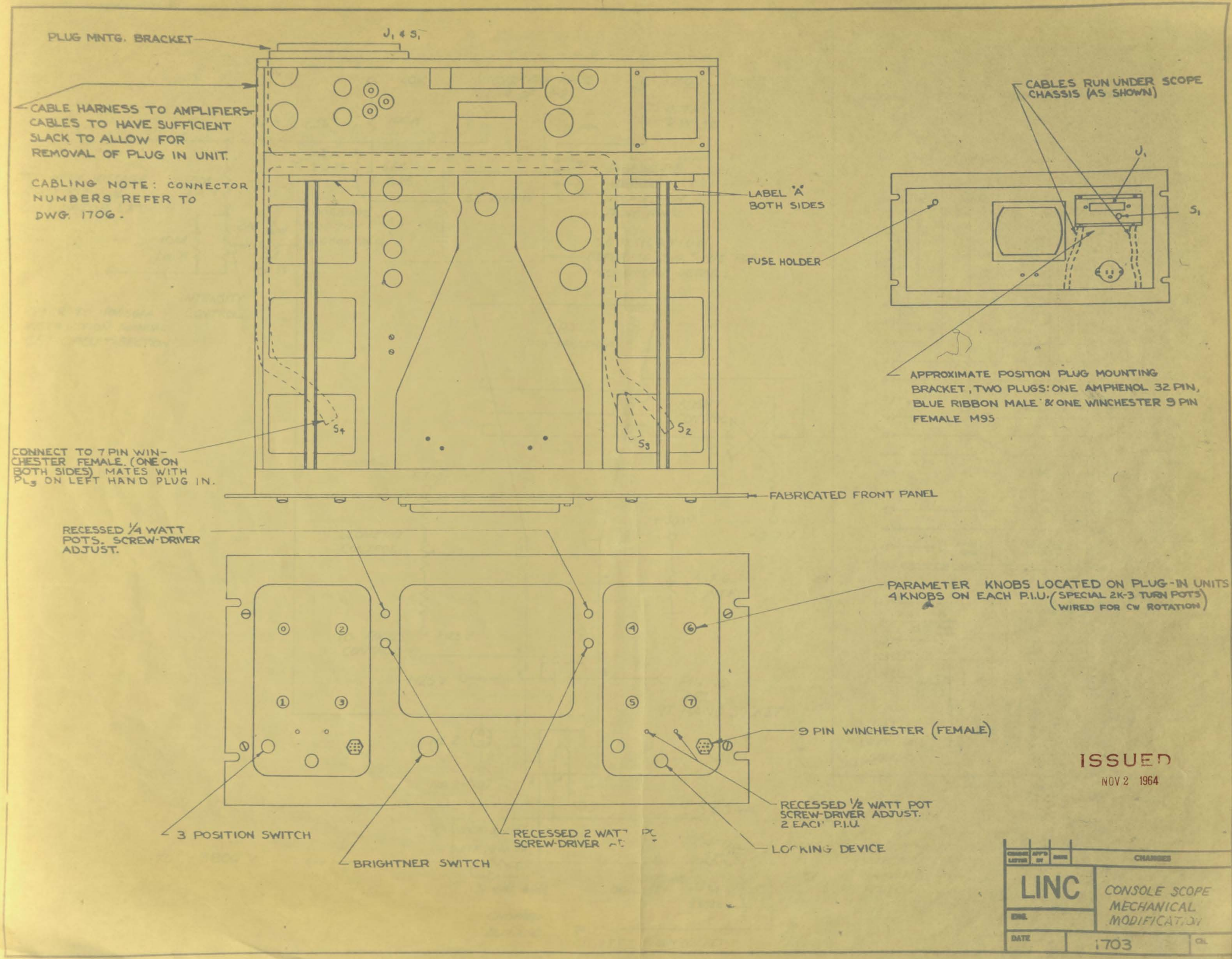
NOTE 2: NUMBERED PINS REFER TO PL 4. 24 PIN CONNECTOR PROVIDED IN TEKTRONIX BLANK PLUG IN UNIT.

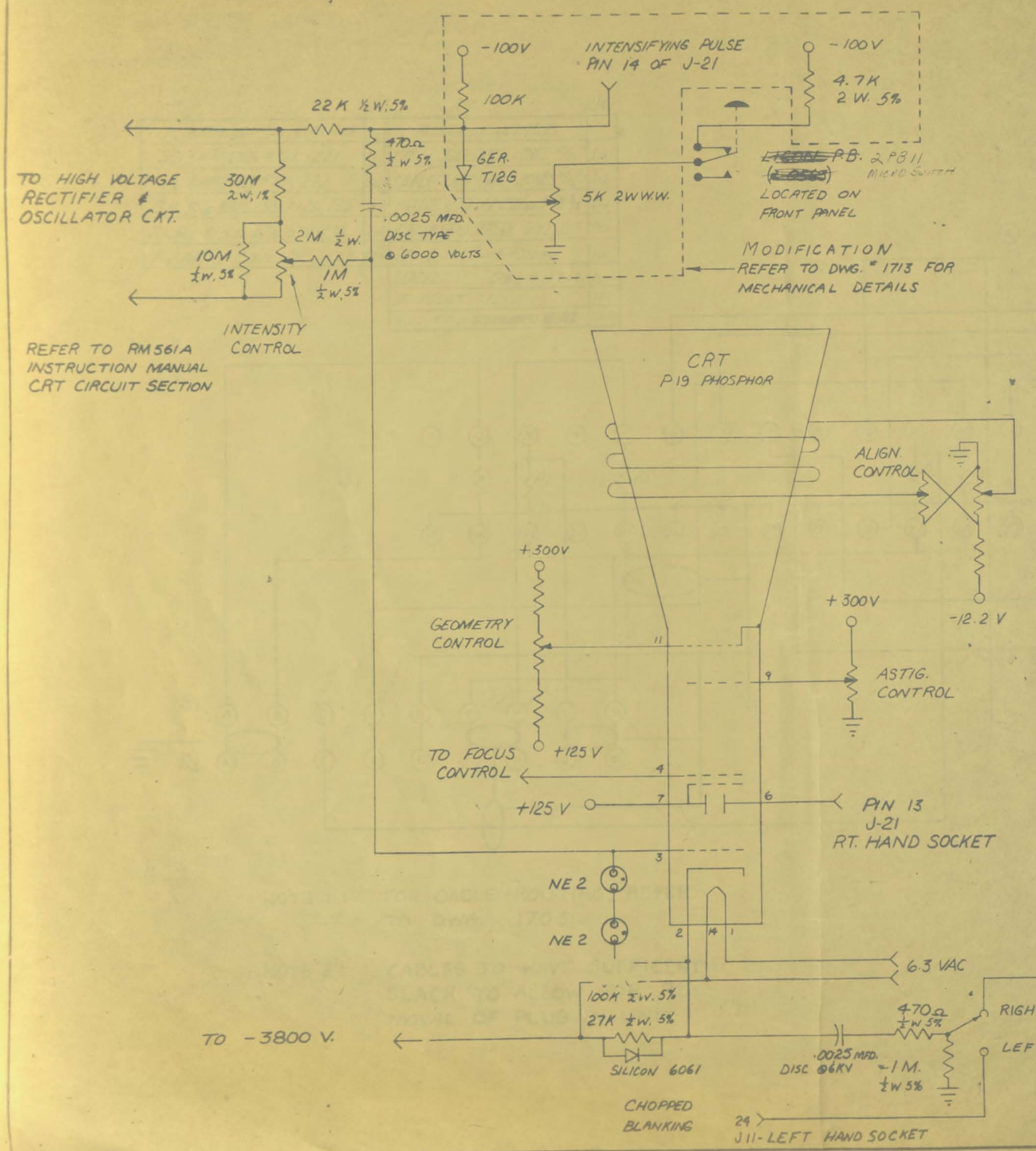
NOTE 3: KNOBS ARE TO BE ENGRAVED AS SHOWN IN DWG 1703 (ONE PLUG-IN 0-3, OTHER PLUG-IN 4-7)

ISSUED
NOV 2 1964

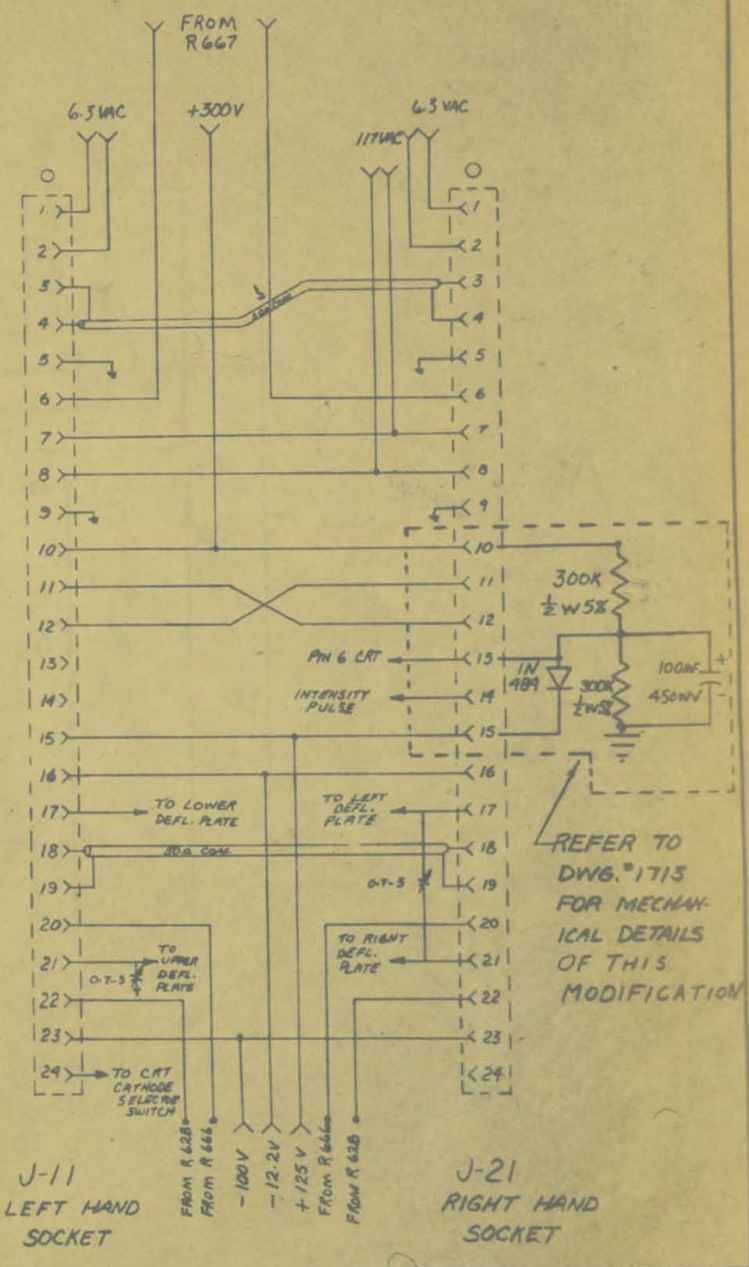
CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	DISPLAY AMPLIFIER & INTENSIFYING CIRCUIT
ENG. W. SIMAN	
DATE 10 OCT 1963	1702


PLUG MNTG. BRACKET
J1 & S1
CABLE HARNESS TO AMPLIFIERS CABLES TO HAVE SUFFICIENT SLACK TO ALLOW FOR REMOVAL OF PLUG IN UNIT.
CABLING NOTE: CONNECTOR NUMBERS REFER TO DWG. 1706.
LABEL "A" BOTH SIDES
FUSE HOLDER
CABLES RUN UNDER SCOPE CHASSIS (AS SHOWN)
J1
S1
APPROXIMATE POSITION PLUG MOUNTING BRACKET, TWO PLUGS: ONE AMPHENOL 32 PIN, BLUE RIBBON MALE & ONE WINCHESTER 9 PIN FEMALE M95
S4
S2
S3
CONNECT TO 7 PIN WINCHESTER FEMALE. (ONE ON BOTH SIDES) MATES WITH PL3 ON LEFT HAND PLUG IN.
FABRICATED FRONT PANEL
RECESSED 1/4 WATT POTS. SCREW-DRIVER ADJUST.
PARAMETER KNOBS LOCATED ON PLUG-IN UNITS 4 KNOBS ON EACH P.I.U. (SPECIAL 2K-3 TURN POTS WIRED FOR CW ROTATION)
9 PIN WINCHESTER (FEMALE)
RECESSED 1/2 WATT POT SCREW-DRIVER ADJUST. 2 EACH P.I.U.
3 POSITION SWITCH
RECESSED 2 WATT
SCREW-DRIVER
BRIGHTNER SWITCH
LOCKING DEVICE
ISSUED
NOV 2 1964
CHANGE LETTER
APP'D BY
DATE
CHANGES
LINC
ENG.
CONSOLE SCOPE MECHANICAL MODIFICATION
DATE
1703
CL



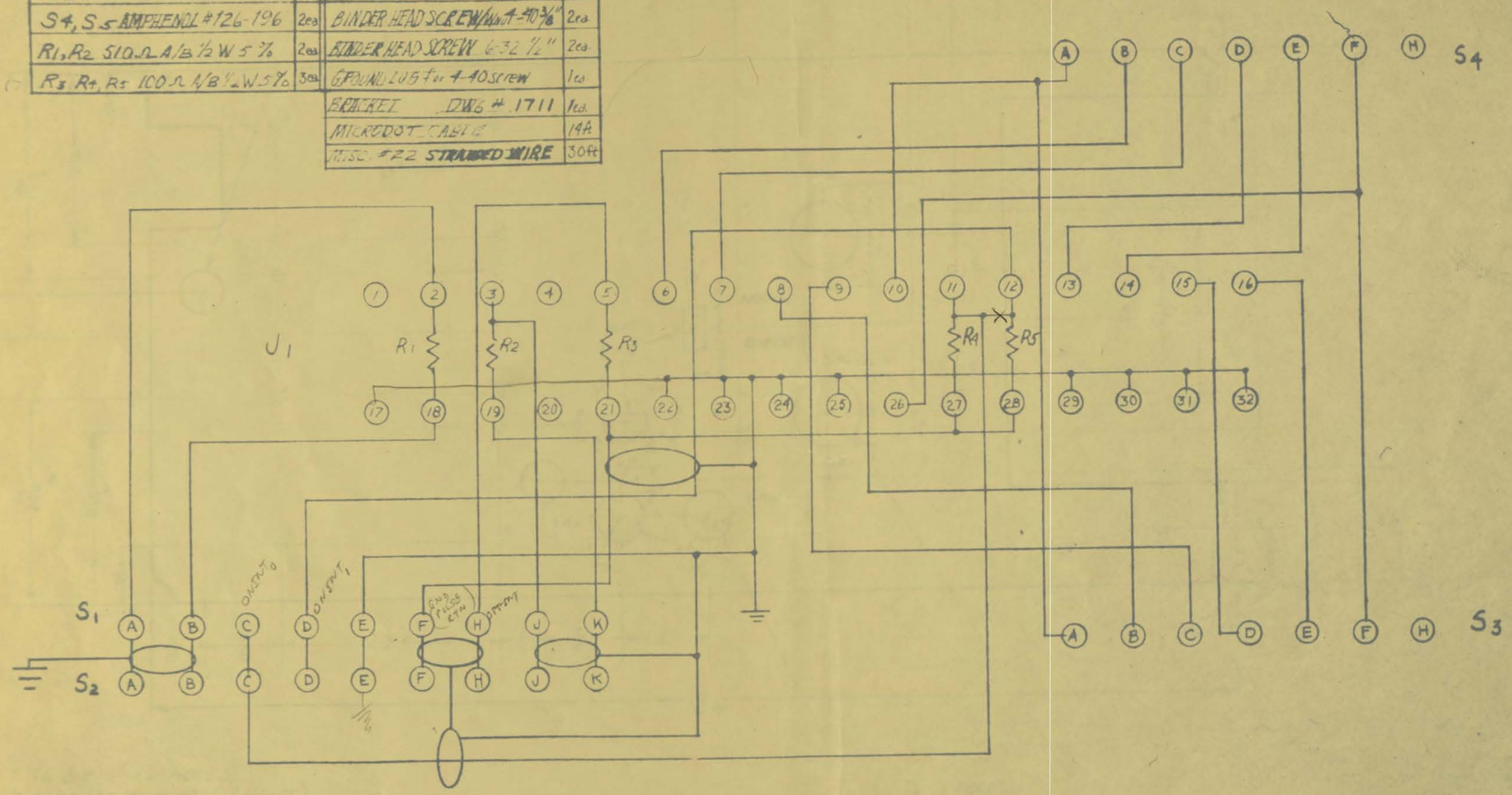
REFERENCE - TEKTRONIX PRELIMINARY MANUAL
RM-561 A.



ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			CONSOLE SCOPE ELECTRONIC MODIFICATION
ENG. W. SIMON			
DATE 25 SEP 63	1705		CH.

	Qty.		Qty
J1 AMPHENOL #26-4402-32P	1ea	MISCELLANEOUS	
S1 AMPHENOL #126-221	1ea	CABLE CLAMP CINCH JONES 5/16"	1ea
S2 AMPHENOL #126-222	1ea	CABLE CLAMP CINCH JONES 7/16"	1ea
S4, S5 AMPHENOL #126-196	2ea	BINDER HEAD SCREW W/NUT 4-40 3/8"	2ea
R1, R2 510Ω A/B ½W 5%	2ea	BINDER HEAD SCREW 6-32 ½"	2ea
R3, R4, R5 100Ω A/B ½W 5%	3ea	GROUND LUG for 4-40 SCREW	1ea
		BRACKET DWG # 1711	1ea
		MICRODOT CABLE	14ft
		MISC. #22 STRANDED WIRE	30ft



NOTE 1: FOR CABLE ROUTING, REFER TO DWG. 1703

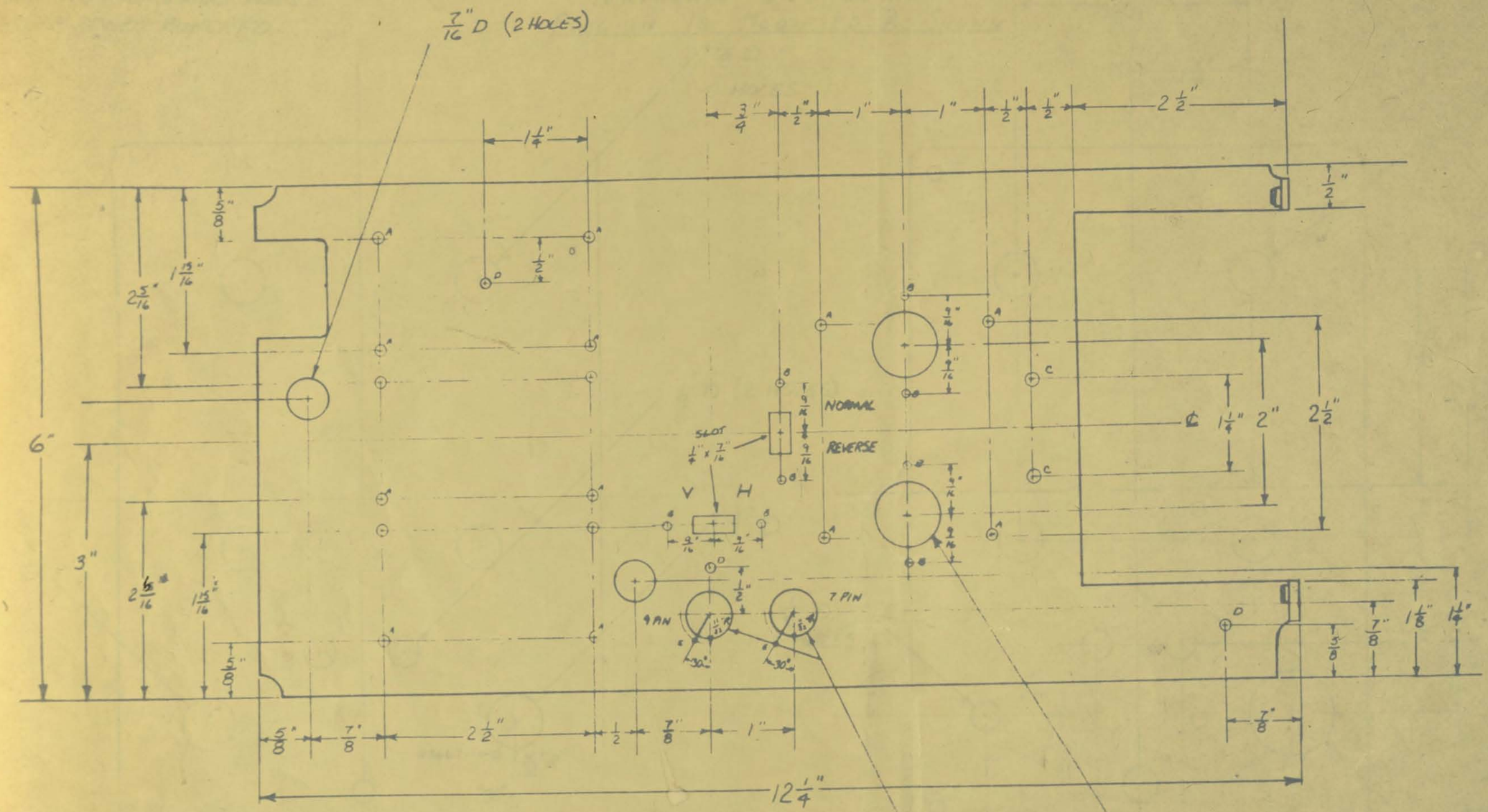
NOTE 2: CABLES TO HAVE SUFFICENT SLACK TO ALLOW FOR REMOVAL OF PLUG IN UNIT

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	CONSOLE SCOPE INTERNAL CABLING
ENG. W. Simon	
DATE 11/1/63	1706

TEKTRONIX 561 SERIES BLANK PLUG-IN
TO BE MODIFIED AS SHOWN



"A" HOLES #26 BIT (16 HOLES)
"B" HOLES #4-40 CLEARANCE (8 HOLES)
"C" HOLES #10-32 CLEARANCE (2 HOLES)
"D" HOLES #6-32 CLEARANCE (3 HOLES)
"E" HOLES FOR KEYING PLUGS: #36 BIT (2 HOLES)
LOCATION IS 11/32" FROM CENTER OF HOLE AND MAKES AN ANGLE OF 30° WITH THE VERTICAL ℄.

NOTE: NORMAL REVERSE, V H TO BE STAMPED ON CHASSIS

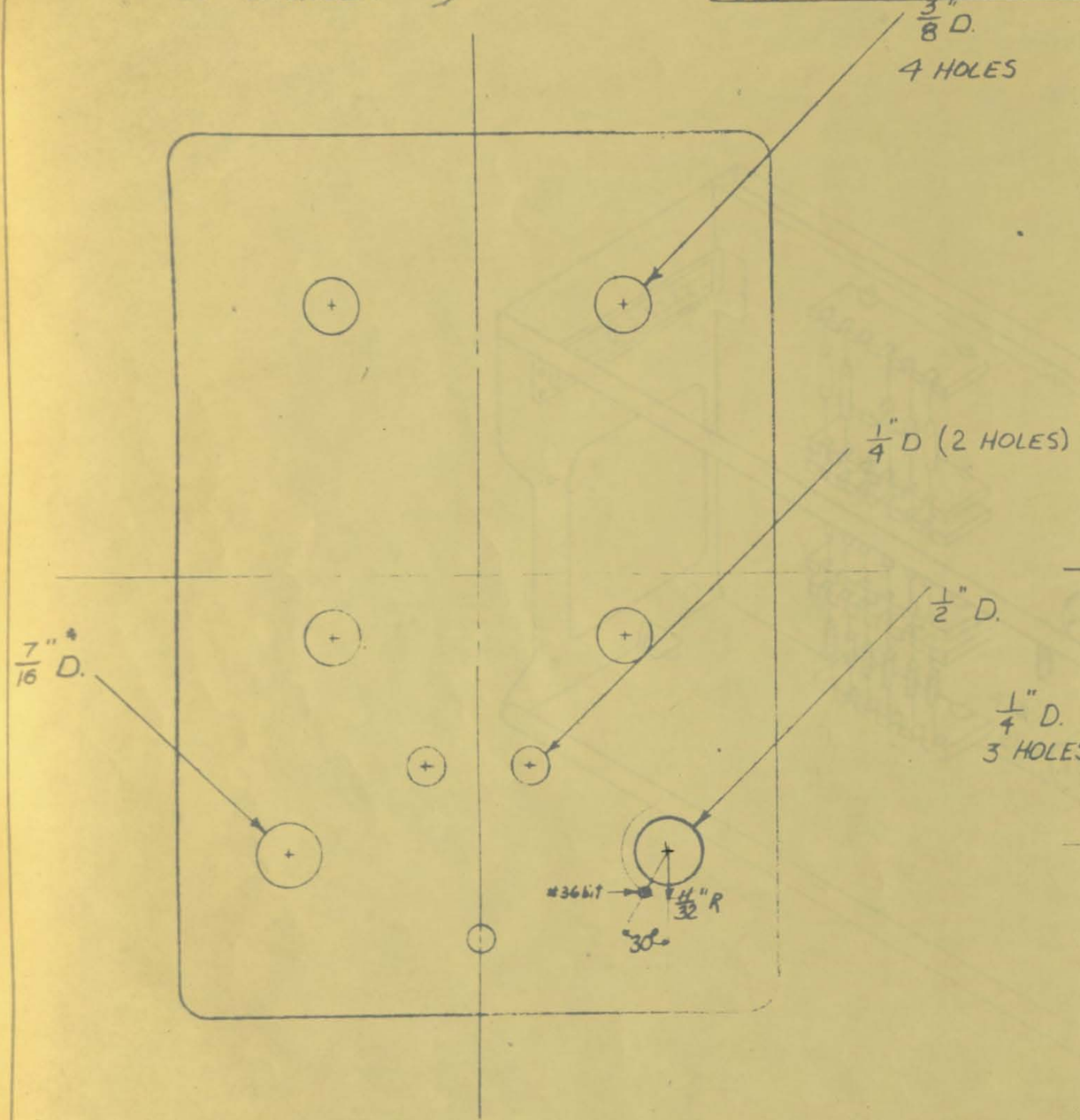
ISSUED
NOV 2 1964

REMOVE BURRS

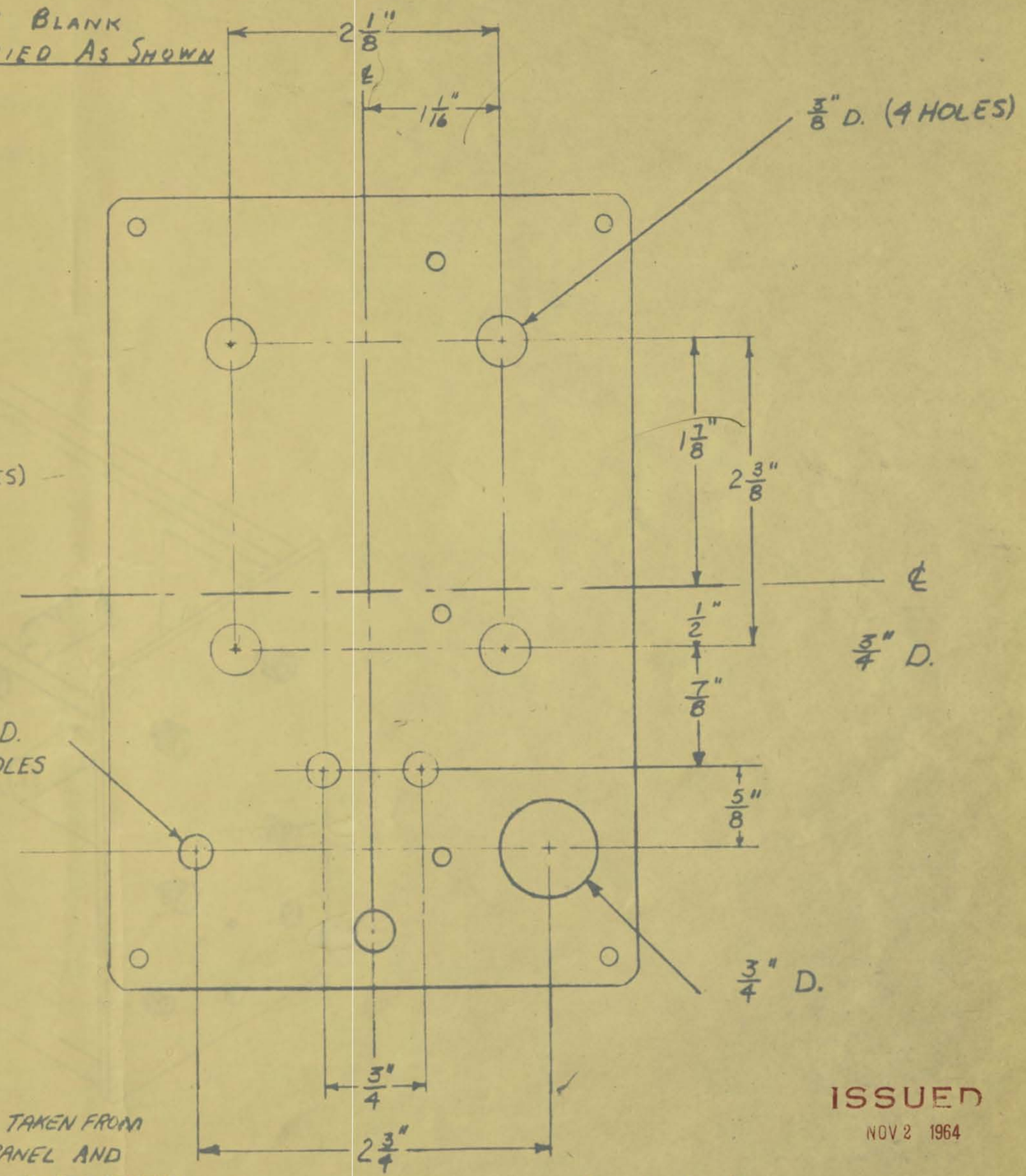
CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			SCOPE PLUG-IN AMPLIFIER CHASSIS LAYOUT
ENG. H LEWIS			
DATE 14 MAY 63	1708		CL A

ALL UNDIMENSIONED HOLES ARE ALREADY PUNCHED.

TEKTRONIX 561 BLANK
PLUG-IN IS MODIFIED AS SHOWN



FRONT PANEL



SUB PANEL

NOTE: ALL DIMENSIONS ARE TAKEN FROM CENTER LINES OF PANEL AND ARE IDENTICAL ON BOTH PANELS.

* Switch Shaft Must Be Shortened By 1/16". Grind Or Sand.

ISSUED
NOV 2 1964

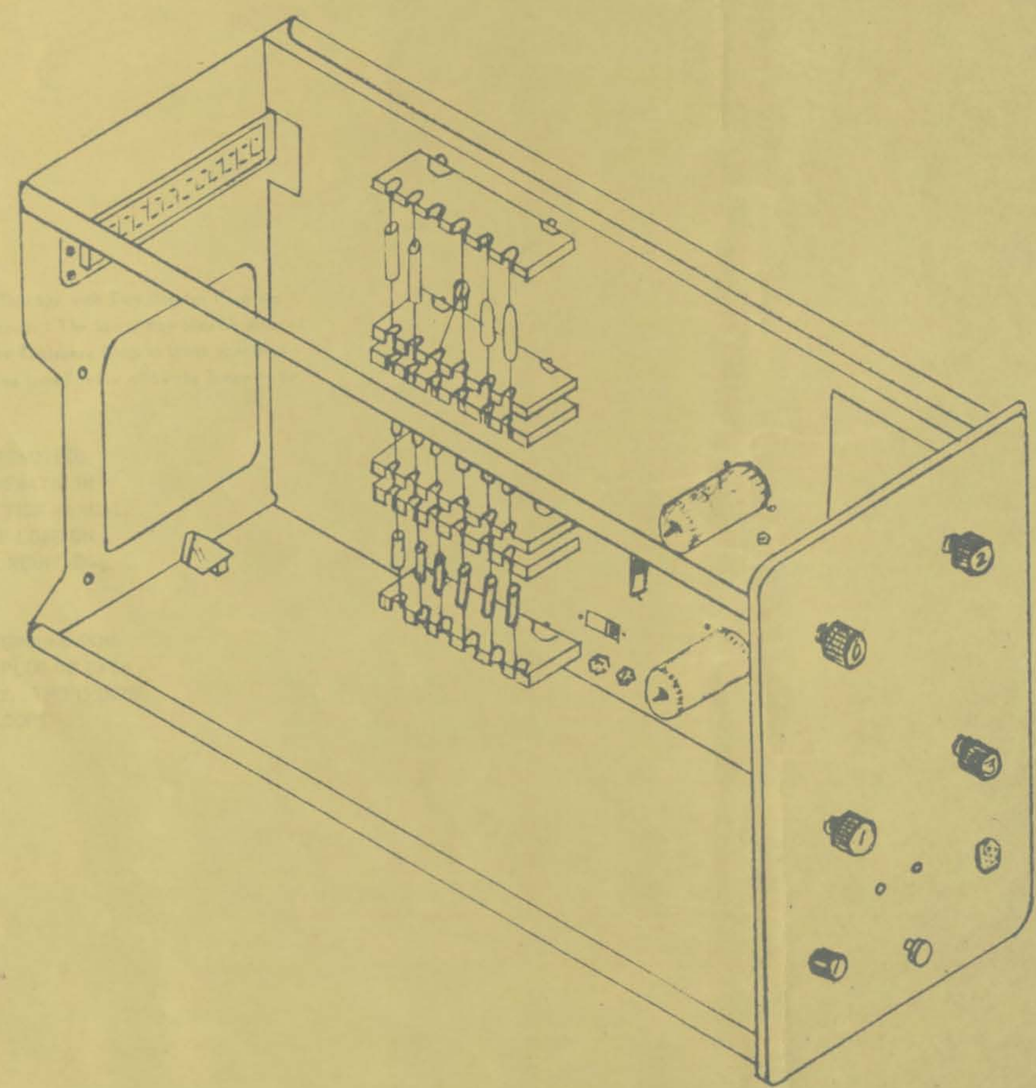
CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC

ENGR. H. LEWIS

SCOPE PLUG-IN AMPLIFIER FRONT PANEL

DATE 11 MAY 63 | 1709 | CH.



ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	SCOPE PLUG-IN AMP. PICTORIAL
ENG. H. LEWIS	
DATE 23 APR 63	1710 CH. A

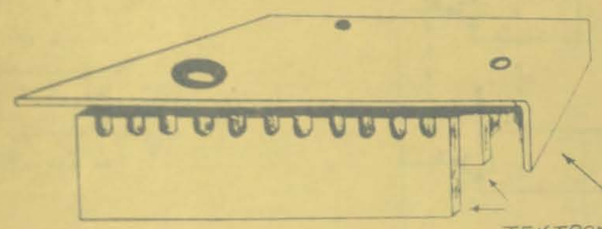
A Standard Tektronix 561 Oscilloscope with Two Display Plug-ins is used as a Remote Display Scope. The Scope may also be utilized as a Maintenance Scope with the Tektronix Plug-in Units specified in Dwg. 1715. The modifications listed below allow the Scope to be used in either fashion.

1. 2.4 K RESISTOR R838 IS REMOVED. SEE "CRT CIRCUIT" SCHEMATIC IN TEKTRONIX 561 INSTRUCTION MANUAL. THIS IS DONE TO REDUCE LOAD ON THE INTENSIFICATION CIRCUIT (Dwg. 1702).

2. REMOVE THIRD PRONG (GROUND CONNECTION) OF AC INPUT PLUG ON BACK PANEL OF SCOPE DOLLY. THIS IS DONE TO PREVENT GROUND LOOPS.

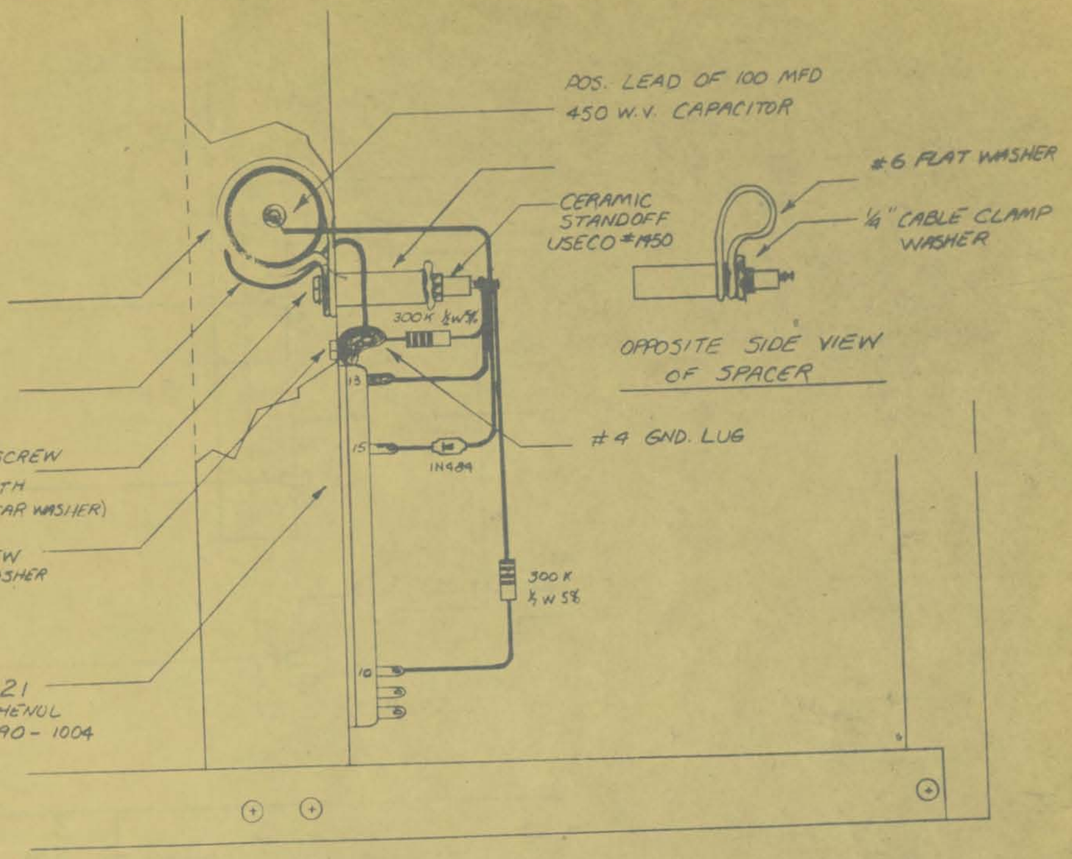
ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			REMOTE SCOPE MODIFICATIONS
ENG.			
DATE	1712		CH.

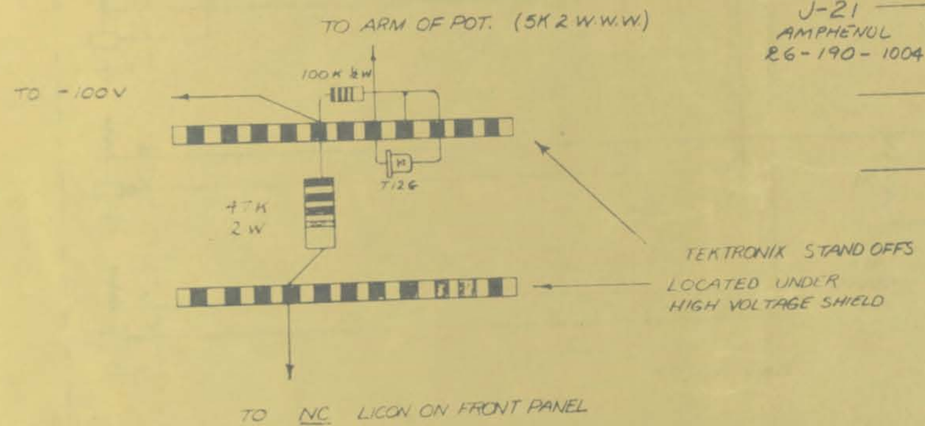


TEKTRONIX STAND OFFS

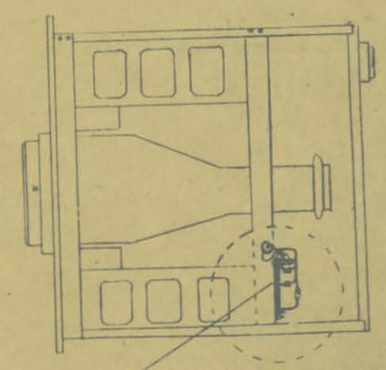
HIGH VOLTAGE SHIELD 337-534



DETAIL OF MODIFICATION

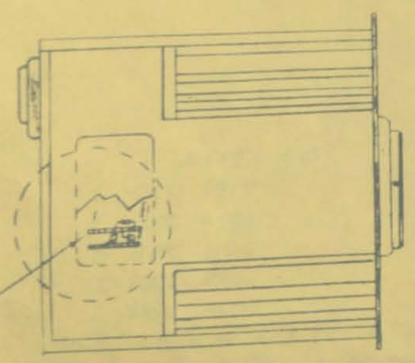


TOP VIEW OF STAND-OFFS



TOP VIEW OF SCOPE CHASSIS

SHOWING POSITION OF MOD.

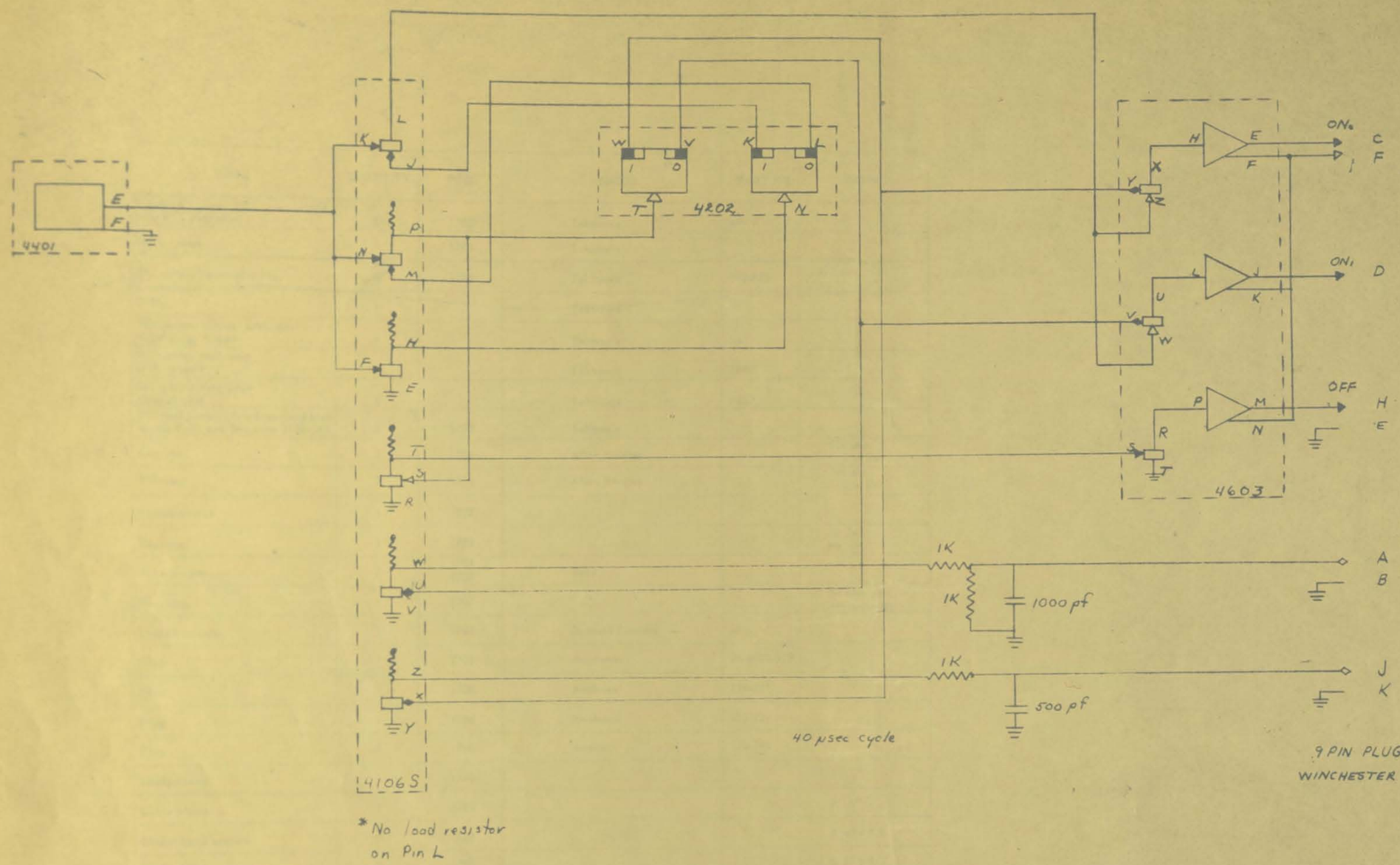


BOTTOM VIEW OF SCOPE CHASSIS

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	CONSOLE SCOPE INTENSIFIER MOUNTING MODIFICATION
ENG. W. SIMON	
DATE 5 FEB 1964	1713



PARTS LIST

1 DEC 1914
1 DEC 4401
1 DEC 4106
1 DEC 4202
1 DEC 4603
3 1K ½W A/B RESISTORS
1 1000 μμfd CAPACITOR
1 500 μμfd CAPACITOR
1 WINCHESTER M9P

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			SCOPE AND PREAMP TESTER
ENG. W. S.			
DATE 6/11/63	1714		CH.

NAME	QUANTITY	DWG.	VENDOR	PART NO.	RATING
RM-561A scope, CRT; aluminized tube P19 phosphor	1	1703	Tektronix	AP19	
561A scope	1	1703	Tektronix		
561 series blank plug-ins	2	1703	Tektronix	040-245	
Dolly	1		Tektronix		
561 series vertical amp. dual trace plug- in unit	1		Tektronix	3A1	
561 series vert. amp. plug- in unit	1		Tektronix	2A63	
561 series time base plug- in unit	1		Tektronix	2B67	
19" rack panel painted textured blue tweed Raffi and Swanson 5150-565	1	1703	Tektronix		
Resistor	2	1706	Allen Bradley		510 ohm 1/2 w 5%
Resistor	3	1706	Allen Bradley		100 ohm 1/2 w 5%
Rotary switch	1	1707			
Resistor	1	1707			5k 2w ww var.
Fuse holder	1	1703 1707	Buss		
Resistor	1	1707			50 ohm pot-sw. combina.
Light brackets	2	1707	General Electric	47	
Plug	1	1706	Amphenol	26-4402-32P	
Plug	1	1706	Amphenol	126-221	
Plug	1	1706	Amphenol	126-222	
Plug	2	1706	Amphenol	126-196	
Cable clamp	1	1706			5/16"
Cable clamp	1	1706			7/16"
Binder head screws	2	1706			4/40 × 3/8
Binder head screws	2	1706			6/32 × 1/2
Ground lug	1	1706			4/40 screw
Bracket	1	1707			
Cable	14 ft.	1706	Microdot		
Stranded wire	30 ft.	1706	Teflon		#22
Plug	1	1703	Winchester	M9S	
5/16" Tinned Copper Braid	70 ft Total 6 in		ALPHA		

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	SCOPE PARTS LIST CONSOLE & REMOTE
ENG.	
DATE	1715 CH.

NAME	QUANTITY	DWG.	VENDOR	PART NO.	RATING
Plug	1	1702	Amphenol	126-219	
Plug	1	1702	Amphenol	126-221	
Resistors	3	1702	~~Amphenol~~		100 1/2 w 5%
Resistors	4	1702	~~Amphenol~~		5.1k 1/2 w 5%
Resistors	3	1702	~~Amphenol~~		1 k 1/2 w 5%
Resistors	5	1702	~~Amphenol~~		10 k 1/2 x 5%
Resistors	1	1702	~~Amphenol~~		47 k 1/2 w 5%
Resistor	1	1702	~~Amphenol~~		6.2 k 2 w 5%
Resistor	1	1702	~~Amphenol~~		15 k 2 w 5%
Resistor	1	1702	~~Amphenol~~		33 k 2 w 5%
Resistor	1	1702	~~Amphenol~~		250 k var. 1/2 w type G
Resistor	1	1702	~~Amphenol~~		125 k 1/2 w 1%
Resistor	1	1702	~~Amphenol~~		5 k var. 1/2 w type G
Resistor	1	1702	~~Amphenol~~		95.3 k 1/2 w 1%
Resistors	2	1702	Ward Leonard		20 k 5 w
Resistors	2	1702	~~Amphenol~~		39 ohm 1/2 w 5%
Resistor	1	1702	Ohmite	4651	8.2 k 5 w
Resistors	4	1702	Clarostat	~~140-6326~~	5 k 3 turn pot.
Transistors	2	1702	Fairchild	2N708	
Transistor	1	1702	Fairchild	2N1893	
Plug	1	1702	Amphenol	126-197	
Capacitor	1	1702			1000 pf. CD dipped silver mica
Capacitors	2	1702			100 pf. CD dipped silver mica
Capacitors	2	1702			30 pf. CD dipped silver mica
Capacitor	1	1702			10 pf. CD dipped silver mica
Capacitors	3	1702	Sprague		.1 mf disc ~~600~~ wv
Capacitor	1	1702	Aerovox		.1 mf tubular 200 wv
Capacitor	1	1702	Good-All	X663F	.1 mf 100 wv
Diodes	5	1702	Clevite	1N276	
Diodes	1	1702	Fairchild	1N484	
Diode	1	1702	Motorola	1N3031B	
Diode	1	1702	Motorola	1N3030B	
Chokes	2	1702	Delevan	200-56/R	8.3 MH – 14MH
Switch	1	1702 1703	Centralab	PS-108	3 pol 3 pos
Switches	2	1702 1703	~~Stackpole~~	#518	
Vacuum tubes	2	1702	Sylvania	12BV7	
Parameter Knobs	4	1703	~~Centralab~~	70-1	
Remote scope cable	1	1703			
Field Modification Kit	1	1702	Tektronix	040-245	Do Not Order
Ceramic strips	8	1702	Tektronix	124-091	
Nylon spacers	16	1702	Tektronix	361-007	
Bushing	2	1702	Tektronix	~~358-054~~	358-0054
Spacer	2	1702	Tektronix	210-471	

NOTE: Quantity sufficient for 1 plug-in.
Quantity must be multiplied by no. of plug-ins desired.
2 per Display Scope. With 2 Display Scopes, i.e. 1 Remote Scope, 1 Console Scope, in standard configuration.

NAME	QUANTITY	DWG.	VENDOR	PART NO.	RATING
Lockwasher	2	1702	Tektronix	210-011	
Tube socket	2	1702	Cinch Jones	Shield Base 9XM	9 pin
Tube shield	2	1702	" "	953	2 3/8" 1.
Terminal post	2	1702	Useco	1451	nylon
Ground lug	2	1702			6/32
Ground lug	2	1702			4/40 screw
Binder head screws	2	1702			6/32 × 1/2
Lockwashers	2	1702			6
Binder head screws	8	1702			4/40 × 3/8
Nuts	8	1702			4
Coaxial cable and ground	3 ft.	1702	Microdot	2-3927	2 conductor
Cable and ground	6"	1702	Microdot	2-3938	3 conductor
Shrinkable tubing	2 ft.	1702			#16 #6 #12 (8" ea.)

NOTE: Quantity sufficient for 1 plug-in.
Quantity must be multiplied by no. of plug-ins desired.
2 per Display Scope. With 2 Display Scopes, i.e. 1 Remote Scope, 1 Console Scope, in standard configuration.

ISSUED
NOV 2 1964

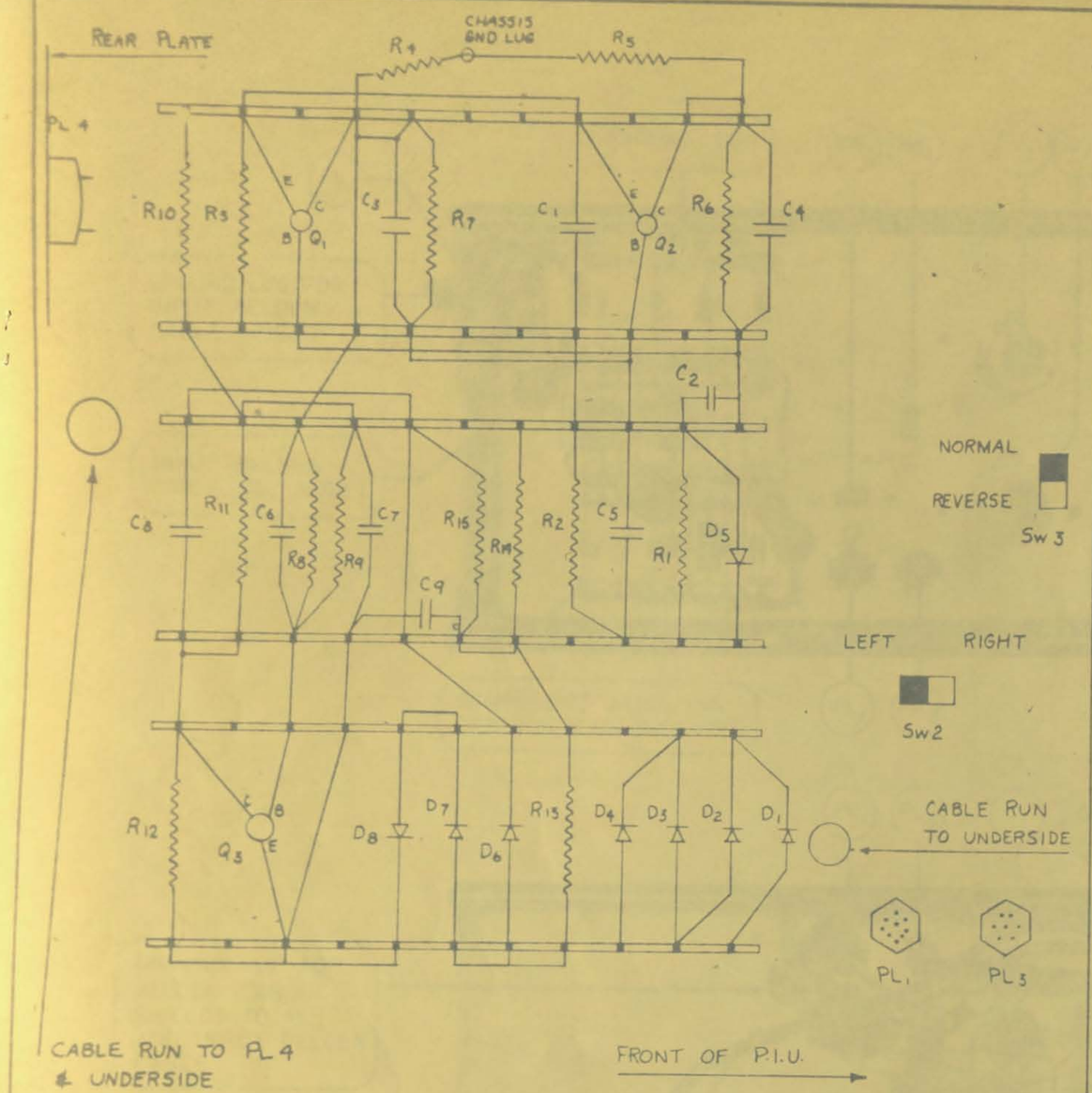
CHANGE LETTER	APP'D BY	DATE	CHANGES

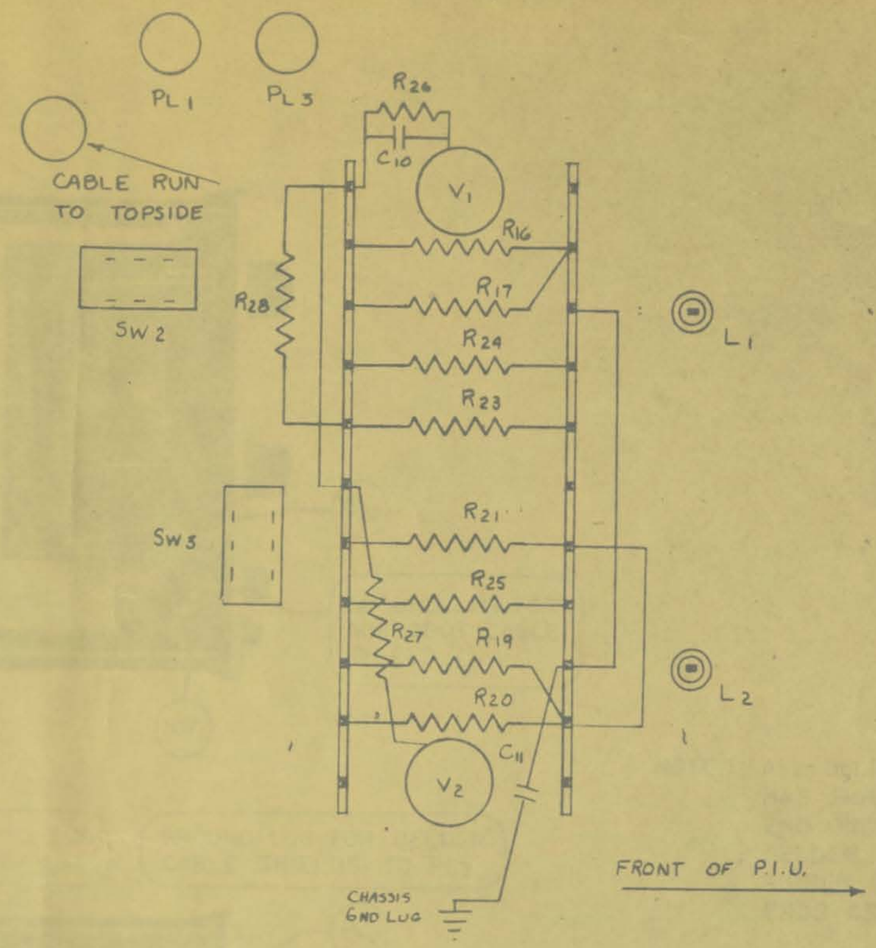
LINC

SCOPE PLUG-IN PARTS LIST

ENG.

DATE 1716 CK.



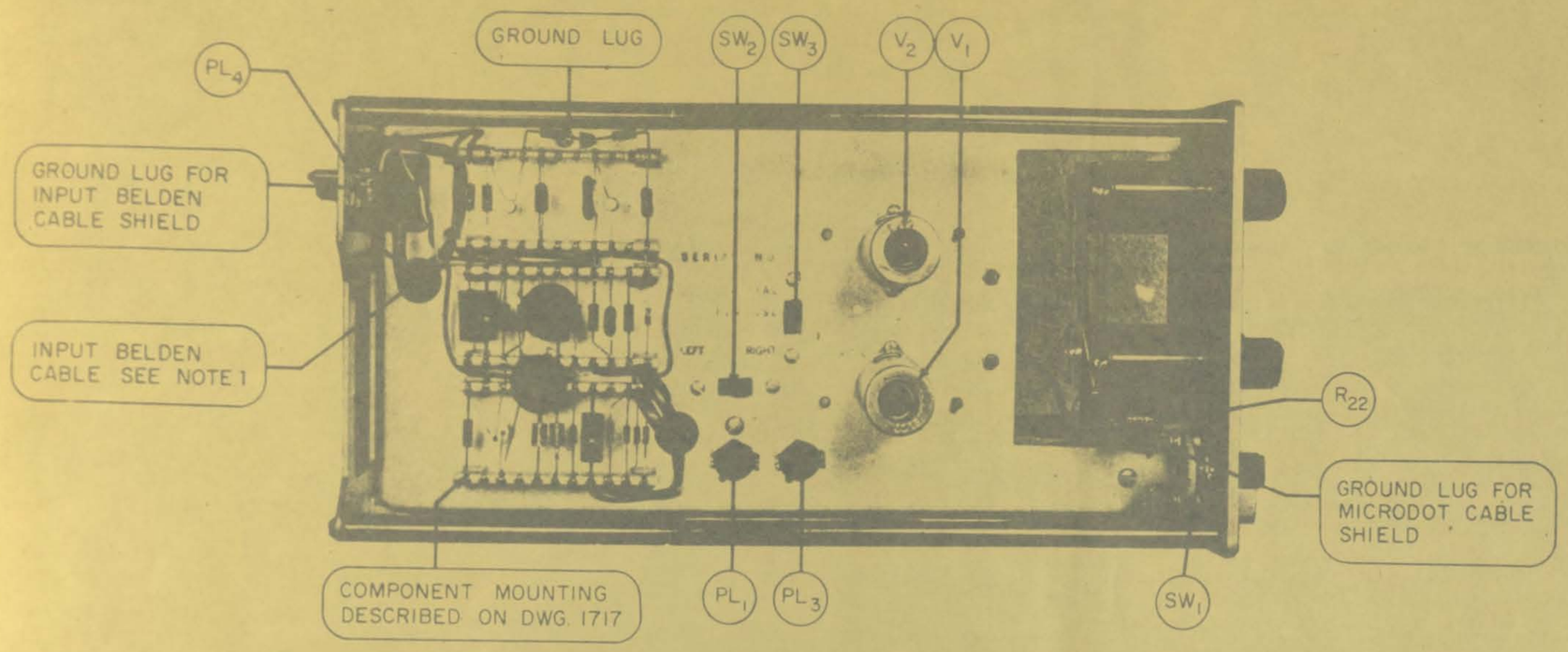


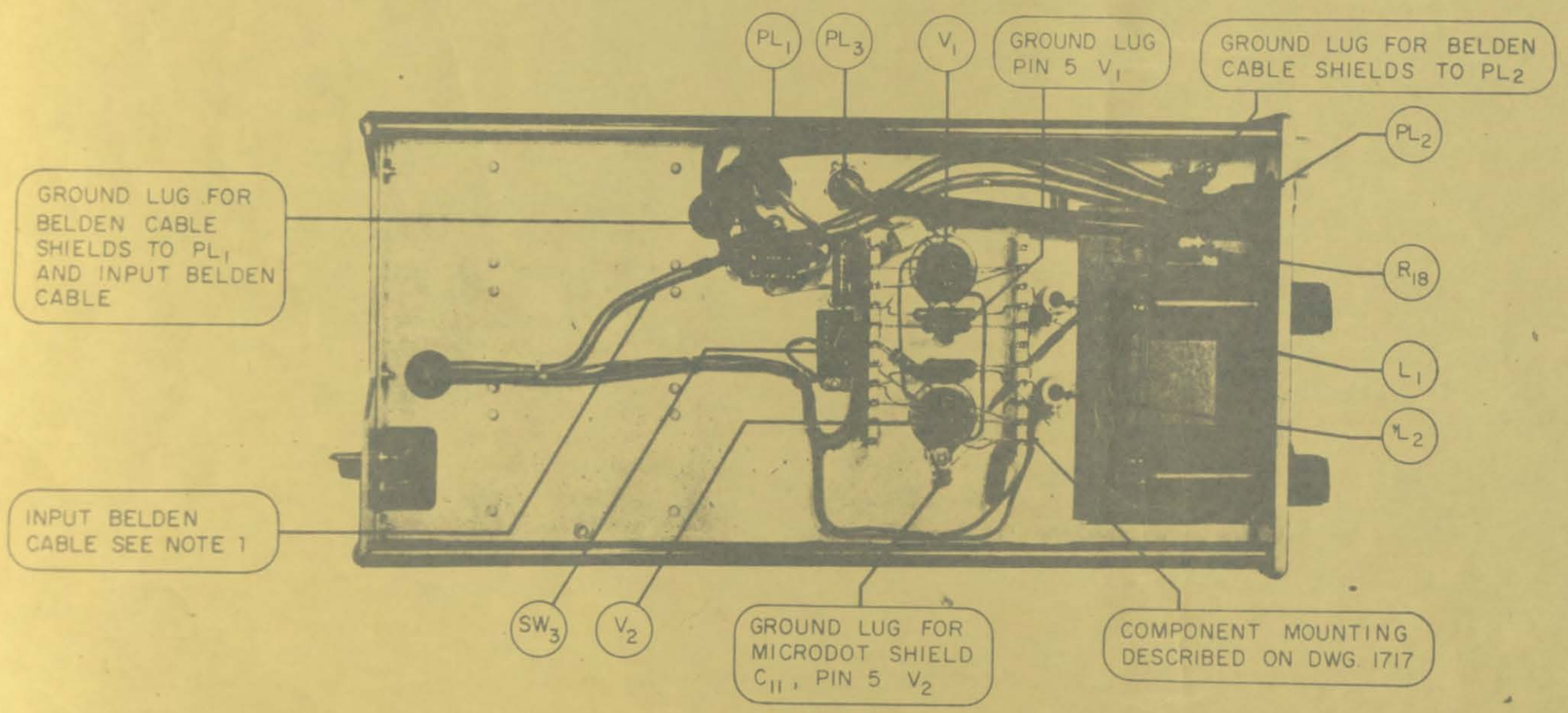
NOTE 1. PART NUMBERS, REFER TO PART NUMBER KEY: DWG 1702

NOTE 2. CABLE RUNS SHOWN IN LAYOUT DWG. 1718

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			SCOPE PLUG IN COMPONENT MOUNTING
ENG.			
DATE 26 APR '64			1717





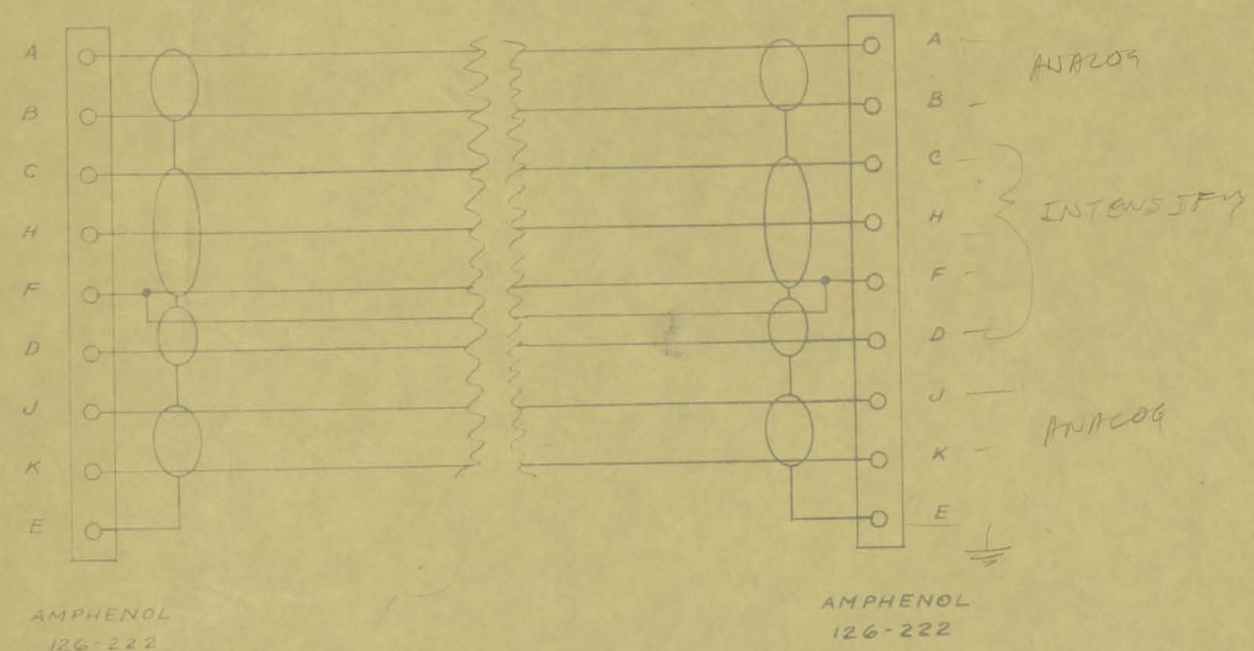
NOTE 1. ALL BELDEN SHIELDED CABLE HAS SHIELD GROUNDED AT ONE END ONLY EXCEPT FOR INPUT BELDEN CABLE WHICH HAS SHIELD GROUNDED AT BOTH ENDS AS SHOWN.

NOTE 2. PART NUMBERS REFER TO PART NUMBER KEY DWG. 1702

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES

LINC	SCOPE PLUG IN COMPONENT LAYOUT
ENG.	
DATE	1718 CH.



THIS CABLE IS USED TO CONNECT THE REMOTE SCOPE TO THE CONSOLE SCOPE WHEN THE REMOTE SCOPE IS USED AS A DISPLAY SCOPE. IT MAY BE CONNECTED TO THE CONSOLE SCOPE AT S_1 (ON REAR) OR PL_2 (ON FRONT OF EITHER PLUG IN) AND TO THE REMOTE SCOPE AT PL_2

9'

SHIELDED CABLES: MICRODOT

ISSUED
NOV 2 1964

CHANGE LETTER	APP'D BY	DATE	CHANGES
LINC			REMOTE SCOPE CABLE
ENG.			
DATE	1719		