

DRESSING

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1. GENERAL

1.1 Scope of Section

1.11 This section covers the general requirements and methods associated with the dressing of skinner leads to various types of apparatus.

1.12 Many figures contained herein have been extracted from Sections 610 through 680 which have now been rated (-) minus. Many figures from these sections have been omitted due to a "Manufacture Discontinue" rating or because of association to obsolete equipment.

1.13 Most of the figures contained in this section are associated with non-ESS type equipment. Refer to Handbook 261 for methods and requirements associated with specific ESS type apparatus.

1.2 Precautions

1.21 Any specific precautions to be taken against personal injury, equipment damage or service interruptions are covered in this section along with the associated method. General precautions are covered in Handbook 0 and are to be observed at all times as they apply to operations being performed.

1.3 Tools and Supplies

1.31 The tools and supplies required to perform any sewing, banding or wire threading operation associated with wire dressing, are listed below:

Tools

R-1102	Plastic Spudger
R-1682	5" Electricians Scissors
R-2434	8" Wire Scissors
R-4266	Cable Tie Fastening Tool - Fixed Setting
R-4827	Cable Tie Fastening Tool - Variable Setting
R-4630	Wire Threading Tool

Supplies

R-2916	Twine
R-4265 L-1	Nylon Cable Ties through L-4

2. COMMON METHODS AND REQUIREMENTS

2.1 Dress skinner leads to various types of apparatus as shown herein. The dress of leads to any particular piece of apparatus not shown in the following figures of this section should agree, as near as possible, with the dress of apparatus it most closely resembles.

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NOTICE - NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL  
SYSTEM EXCEPT UNDER WRITTEN AGREEMENT

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2.11 Dress all skinners so as to present a neat workmanship appearance and, as far as possible, to permit access to all connections. In the case of solderless wrapped connections, special care shall be taken to dress the skinner leads in a manner that will allow future access for the wrapping tool.

2.12 On modifications and additions to existing equipment, the dress of the new wiring should conform to the dress of existing wiring of like apparatus in the immediate area. Where a change involves the removal of the old wiring at a piece of apparatus, the new wiring should be dressed to conform with the latest dressing methods available wherever practicable.

2.13 All wires shall be dressed away from vitreous-enamel type resistors and potentiometers (rheostats) to reduce any possible fire hazard.

2.14 The dress of skinner leads with "BU" or "BY" (PVC) type insulation shall be dressed away from any metalwork other than the terminals of the apparatus to which they connect. In cases where skinners are dressed between rows of terminals on relatively close spacing, such as wire spring relays, etc., the skinners may touch other terminals. However, in no case shall they be dressed across the edge of other terminals so tightly as to result in pressure between the wire and terminal which might cause insulation breakdown.

NOTE: The requirement of Paragraph 2.14 does not apply to type "BG," "BW," "DM" or "DP" wire.

2.141 Plastic insulated wire without a textile covering that has not been irradiated (IPVC) should not be allowed to come in contact with another terminal which requires soldering.

2.15 At terminal strips without fanning strips, there should be a visible clearance between the wires and the back edge of the rear terminals. Approximately 1/8" is desirable to minimize contact in case of form movement.

2.16 In general, dressing the skinner leads can easily be accomplished by holding the form firmly at the breakout points and then dress them with either your finger or the R-1102 Spudger. The use of metal tools or objects should not be used on working equipment.

### 3. VERIFICATION

3.1 The following is a brief description of verification items, and associated paragraphs for the dressing of skinner leads to various types of apparatus.

ITEM	BRIEF DESCRIPTION	PARAGRAPH
3.101	Dress skinner to apparatus as shown in figures.	2.1
3.102	If apparatus figure is not shown, dress the skimmers to apparatus closely resembling it.	2.1
3.103	Dress to present neat workmanship appearance.	2.11
3.104	Permit access to all connections.	2.11
3.105	New wiring to conform to dress of existing wiring.	2.12
3.106	New wiring to conform to latest dress method wherever practicable.	2.12
3.107	Dress wires away from heat producing devices.	2.13
3.108	Dress "BU" and "BY" (PVC) insulated wires away from metalwork to which it is not connected to. Also, do not dress tightly across edge of other terminals which might cause insulation failure.	2.14
3.109	PVC wire without textile covering (no IPVC) shall not contact terminals requiring soldering.	2.141
3.110	Terminal strips without fanning strips should have clearance at rear terminal row.	2.15

No arrows due to extensive revision.

Vertical lines at side of paragraph indicates requirement.

Engineering Planning Manager  
(Installation)

**ATTACHMENT:**

Figures 1 through 89.

**Reason for Reissue:**

Combine Sections 600 through 680.  
Update information and eliminate obsolete figures.



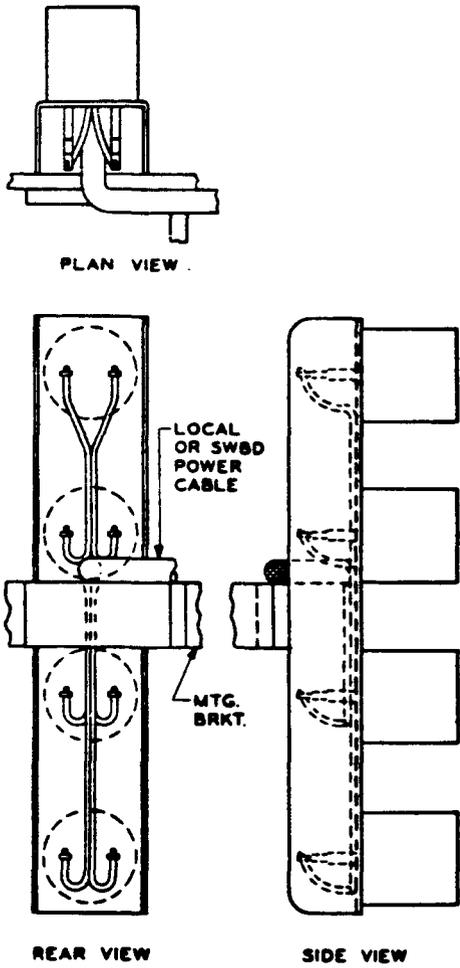


FIG. 1 AISLE PILOT LAMP SOCKETS

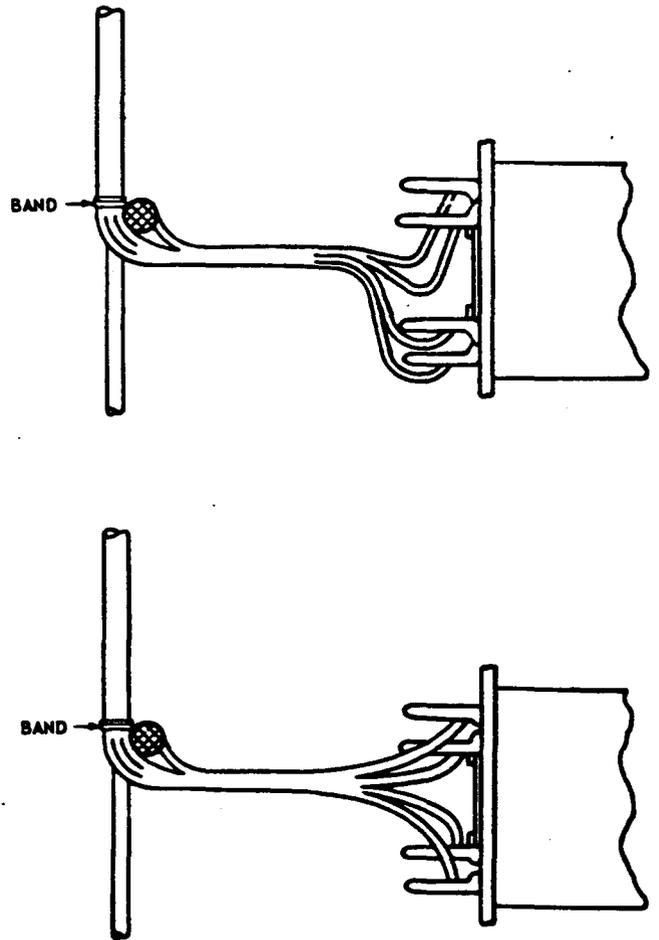


FIG. 2 APPARATUS, VARIOUS - SAME PIECE SERVED BY A VERTICAL AND HORIZONTAL FORM

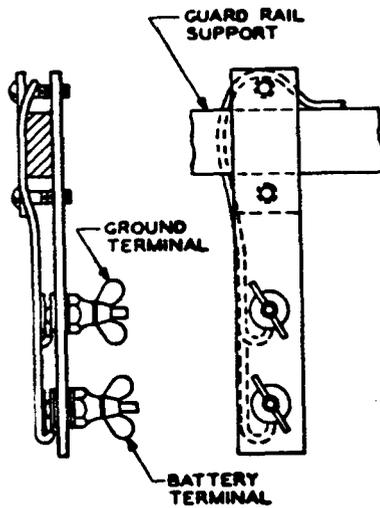
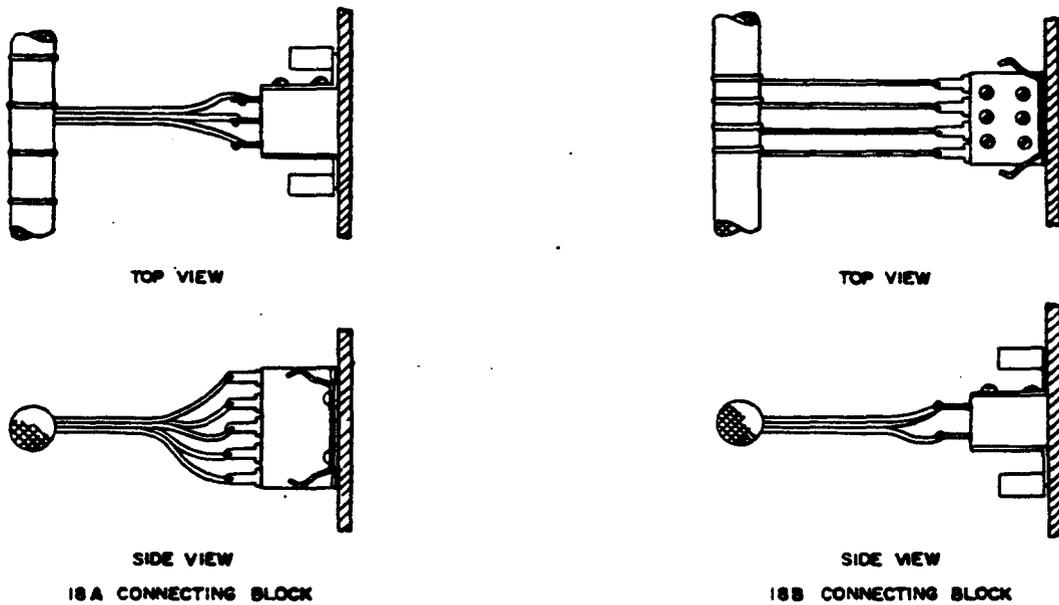
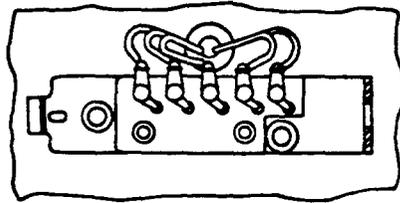


FIG. 3 BLOCKS, CONNECTING - 17B AND SIMILAR TYPES MOUNTED ON VERTICAL SIDE OF MDF



NOTE:  
 HORIZONTAL CABLE FORMS ARE SHOWN. WITH VERTICAL CABLE FORMS, SKINNERS TO THE 18A CONNECTING BLOCK SHOULD BE TAKEN OUT AT SEPARATE STITCHES FOR EACH SET OF THREE TERMINALS. WITH VERTICAL CABLE FORMS, SKINNERS TO THE 18B CONNECTING BLOCK SHOULD ALL BE TAKEN OUT AT THE SAME STITCH.

FIG. 4 BLOCKS, CONNECTING - 18 AND SIMILAR TYPES ON MOUNTING PLATES



SECT A-A  
(DIAL AND DIAL MTG OMITTED)

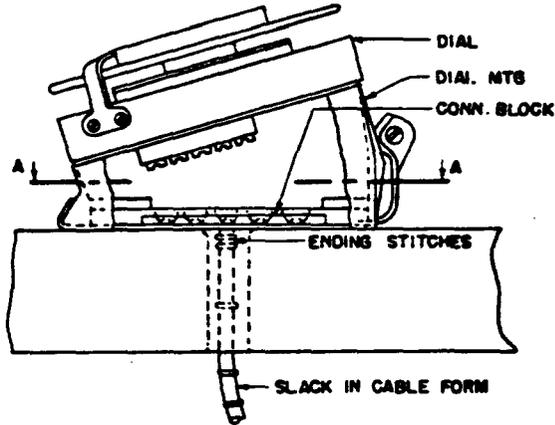


FIG. 5 BLOCKS, CONNECTING - 25 AND SIMILAR TYPES

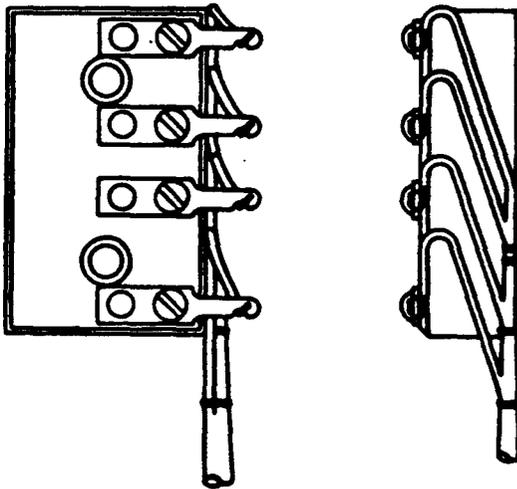
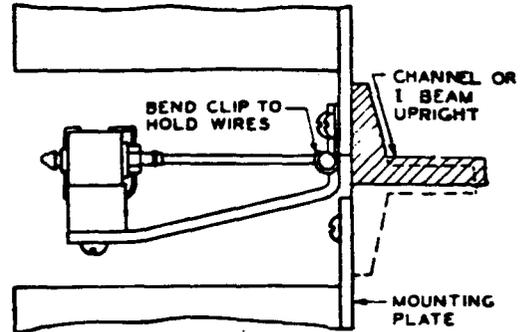
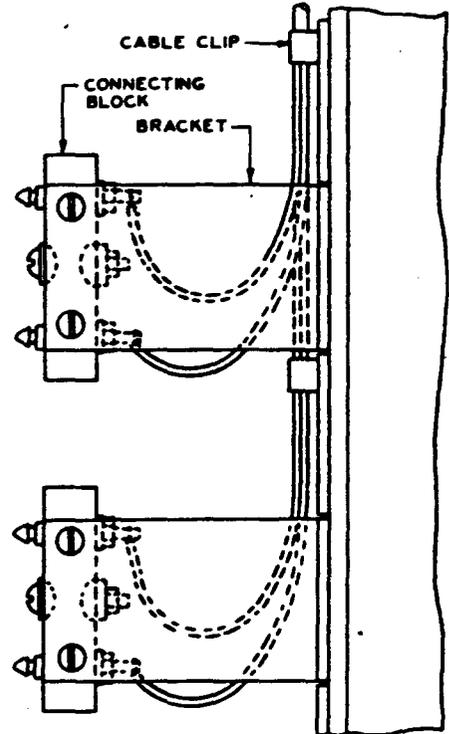


FIG. 6 BLOCKS, CONNECTING - 27 AND SIMILAR TYPES

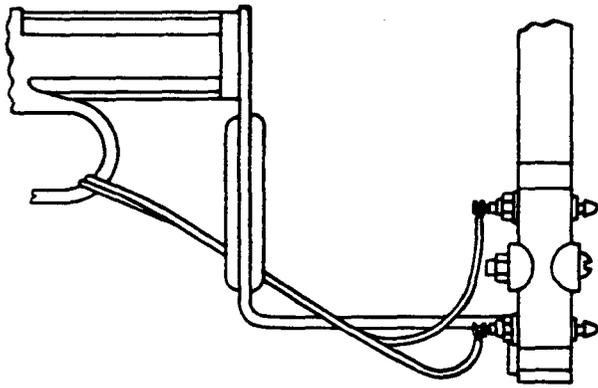


TOP VIEW

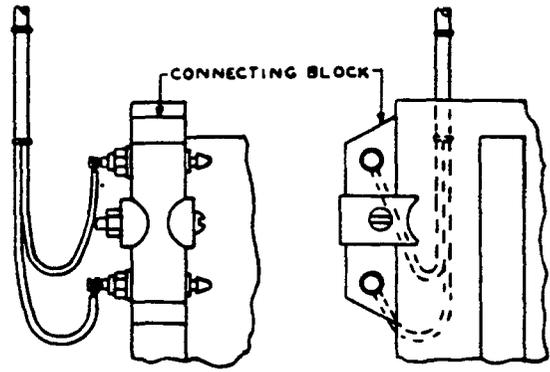


SIDE VIEW

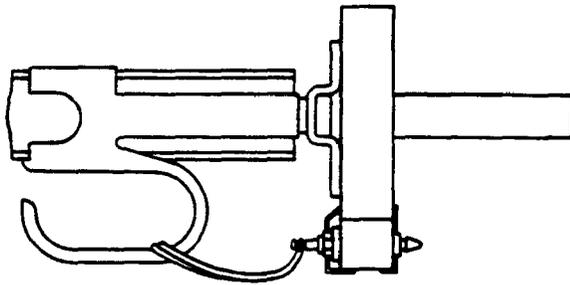
FIG. 7 BLOCKS, CONNECTING - 33 AND SIMILAR TYPES ON RELAY RACKS



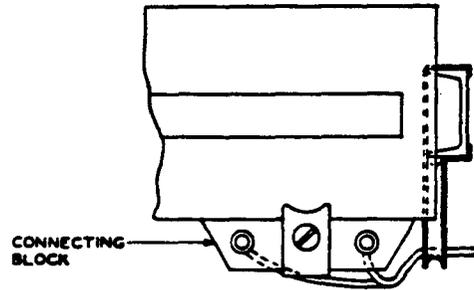
VERTICALLY MOUNTED TERMINAL STRIPS  
ON HORIZONTAL SIDE



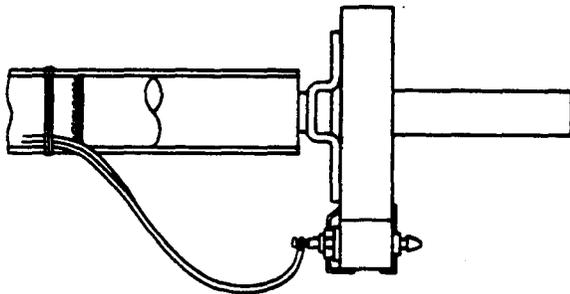
VERTICALLY MOUNTED TERMINAL STRIP



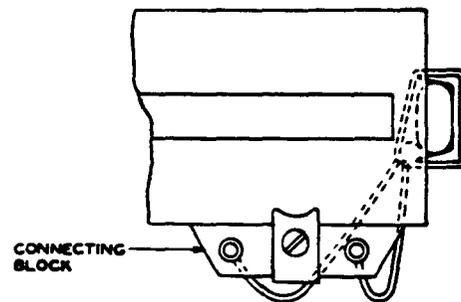
WIRING FROM FANNING RING



CONNECTING  
BLOCK



WIRING FROM TRANSVERSE ARM



CONNECTING  
BLOCK

HORIZONTALLY MOUNTED TERMINAL STRIPS

FIG. 8 BLOCKS, CONNECTING - 33 AND SIMILAR TYPES ON TERMINAL STRIPS

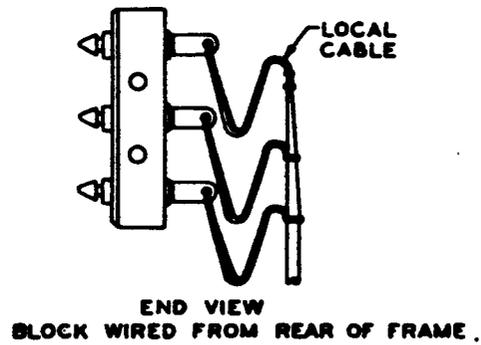
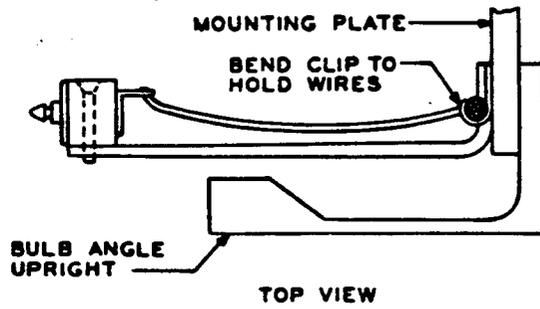
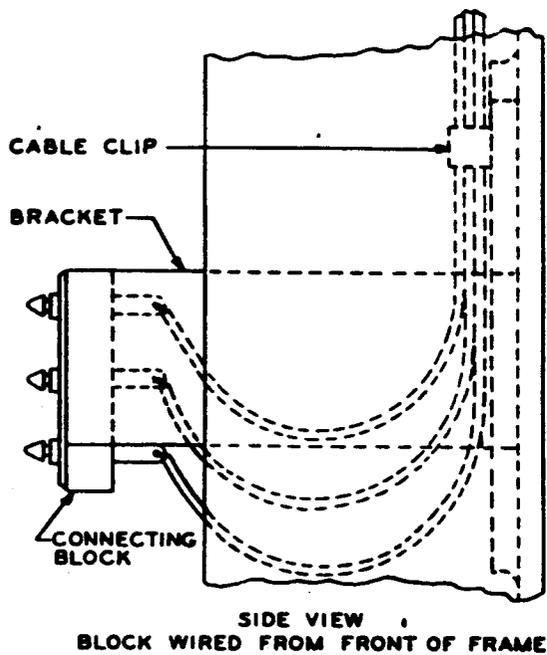
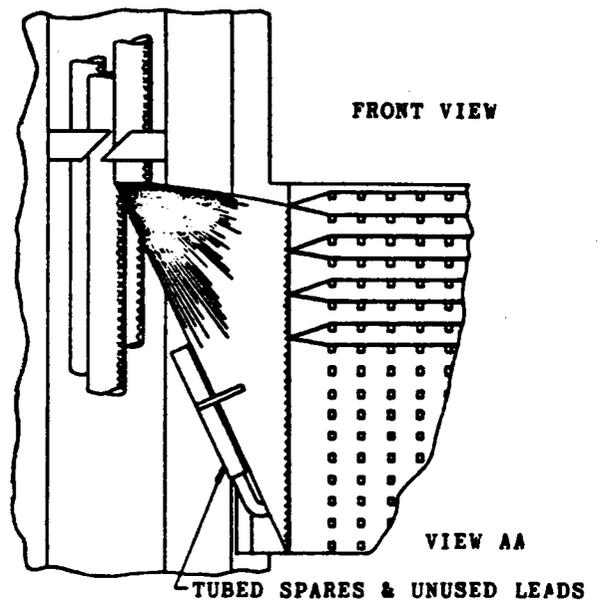
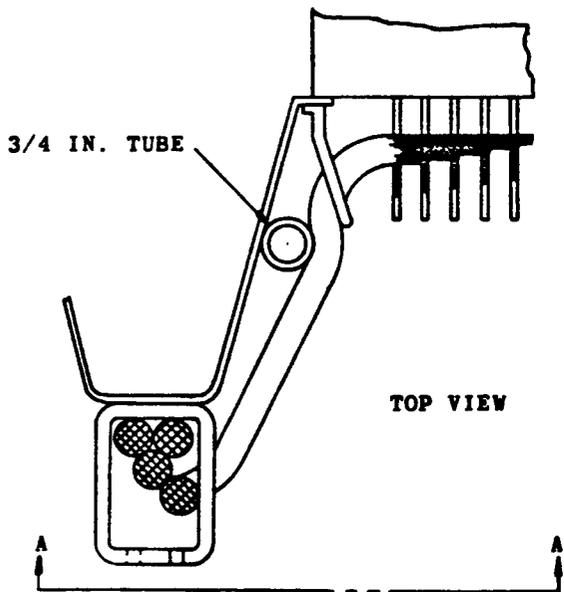
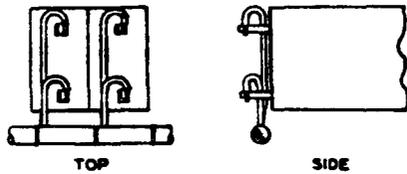


FIG. 9 BLOCKS, CONNECTING - 55 AND SIMILAR TYPES

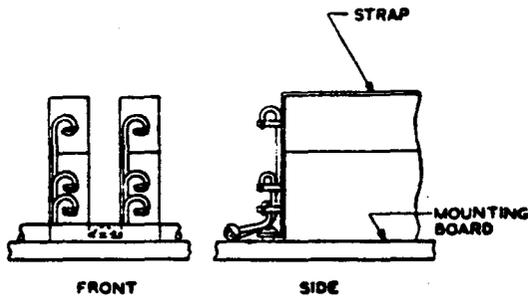


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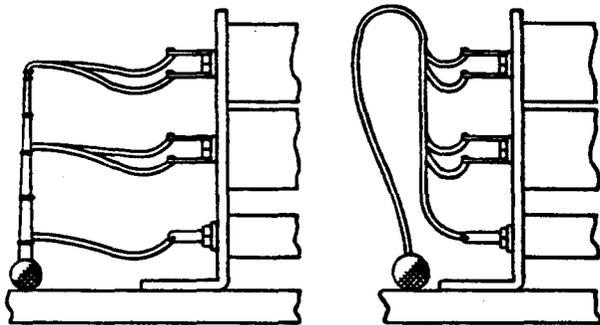
FIG. 10 66 AND 78 TYPE CONNECTING BLOCKS USED ON MAIN, INTERMEDIATE AND TRUNK. DISTRIBUTING FRAMES (ESS)



447, 449 AND SIMILAR TYPE CAPACITORS PLACED ON END.



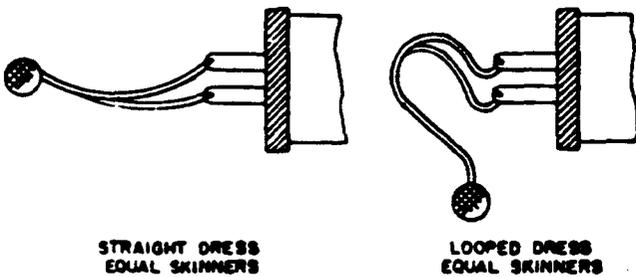
447, 449 AND SIMILAR TYPE CAPACITORS IN FLAT PILE UP



WHERE SEPARATE CABLE ARMS CAN BE LOCATED OPPOSITE EACH BRACKET WHERE CABLE ARM MUST BE PLACED CLOSE TO BRACKET

153, 437, 439-442, 475 AND SIMILAR TYPE CAPACITORS MOUNTED ON 27 TYPE BRACKETS

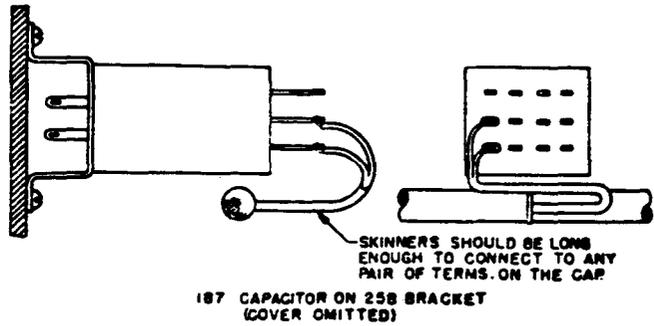
FIG. 11 CAPACITORS - 152, 437, 439 TO 442, 447, 449, 475 AND SIMILAR TYPES



STRAIGHT DRESS EQUAL SKINNERS

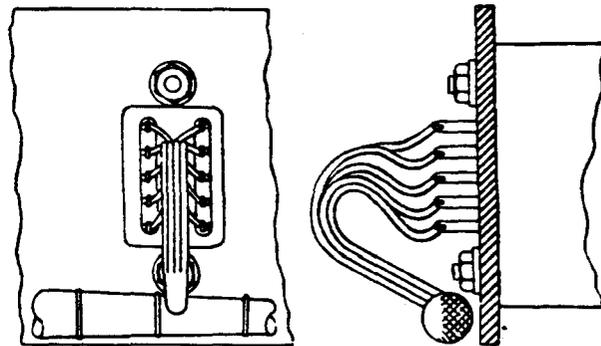
LOOPED DRESS EQUAL SKINNERS

FIG. 12 CAPACITORS - 187, 437, 439 TO 442, 447, 449 AND SIMILAR TYPES

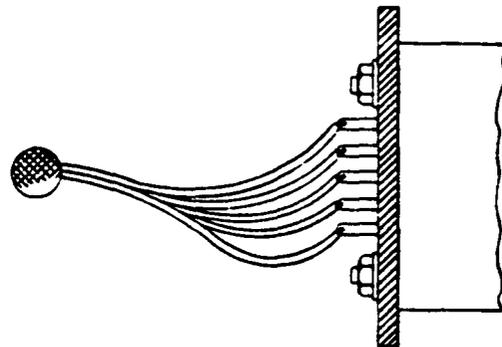


187 CAPACITOR ON 25B BRACKET (COVER OMITTED)

FIG. 13 CAPACITORS - 187 AND SIMILAR TYPES ON 25B BRACKETS



LOOPED DRESS-EQUAL SKINNERS



STRAIGHT DRESS-EQUAL SKINNERS

FIG. 14 COILS, LOADING - 621 AND SIMILAR TYPES IN 141A AND SIMILAR TYPE LOADING COIL CASES. COILS REPEATING - 94 AND SIMILAR TYPES

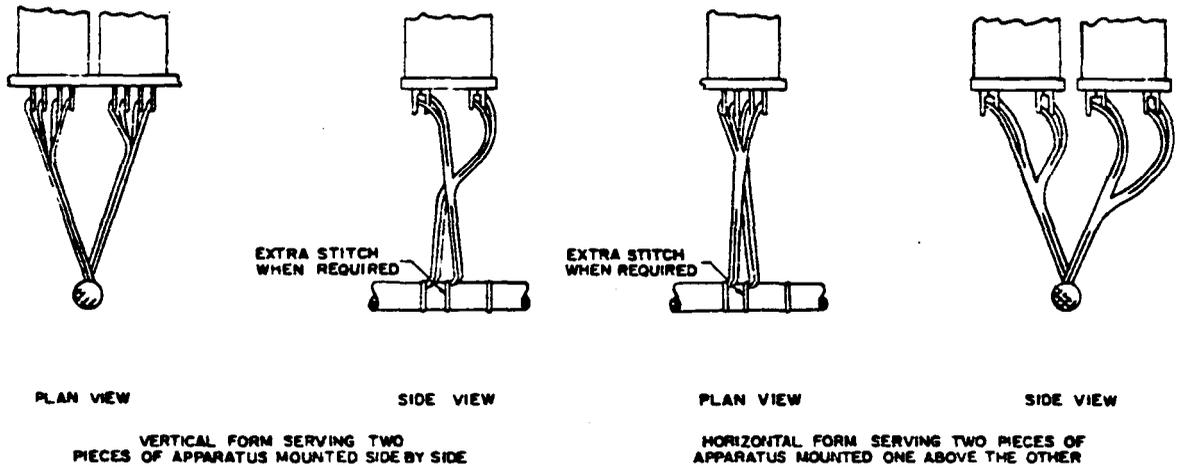
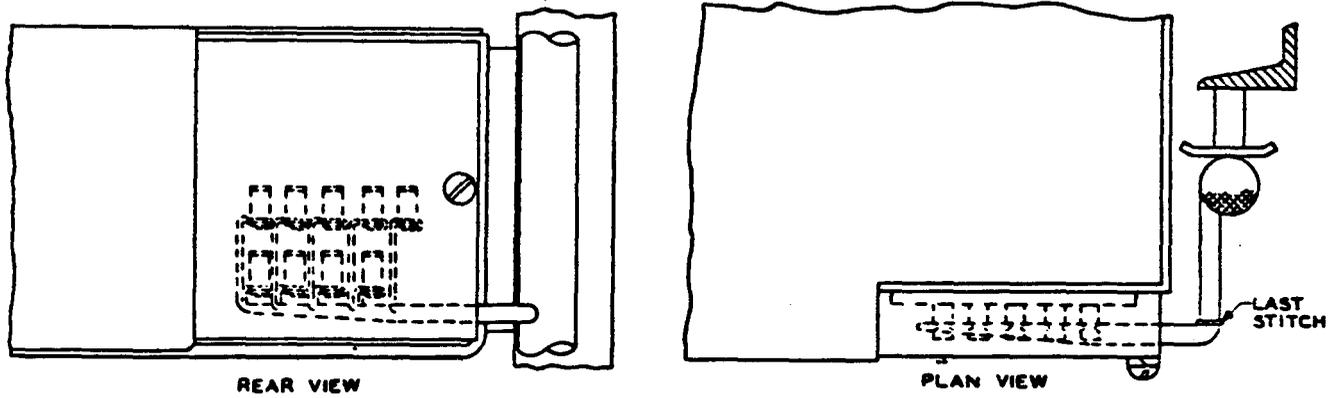


FIG. 15 CAPACITORS AND SIMILAR APPARATUS - SKINNERS TO TWO PIECES OF APPARATUS BROUGHT OUT AT SAME POINT



838 AND SIMILAR TYPE LOADING COIL CASES

FIG. 16 COILS, LOADING - 711 AND SIMILAR TYPES IN 83 AND SIMILAR TYPE LOADING COIL CASES

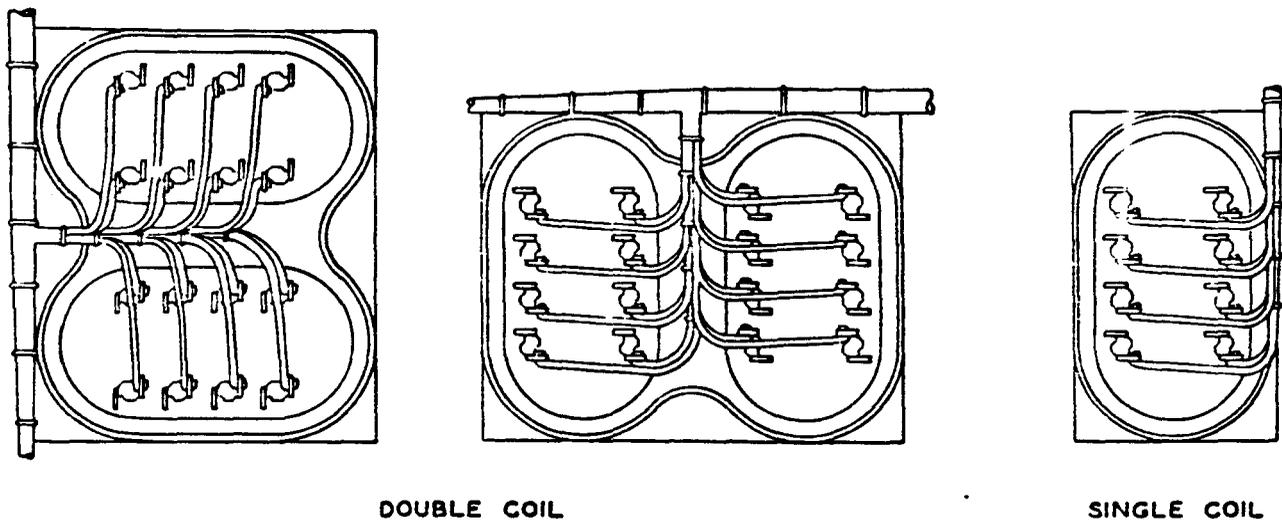


FIG. 17 COILS, REPEATING - 74, 91 AND SIMILAR TYPES

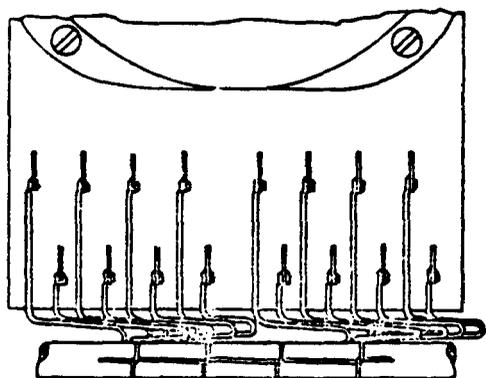
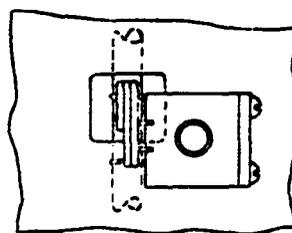
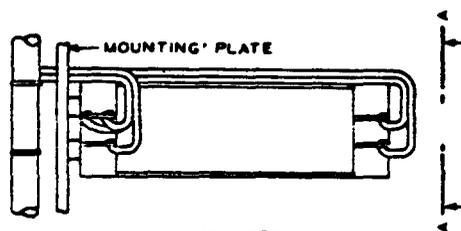


FIG. 18 COILS REPEATING - 76, 77 AND SIMILAR TYPES

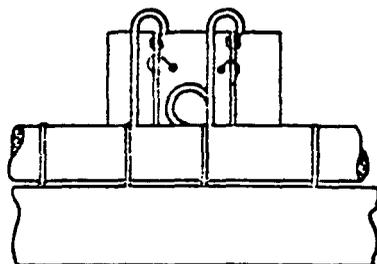


VIEW A-A

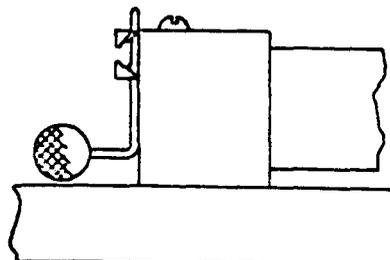


SIDE VIEW

FIG. 19 COILS, REPEATING - 98 AND SIMILAR TYPES

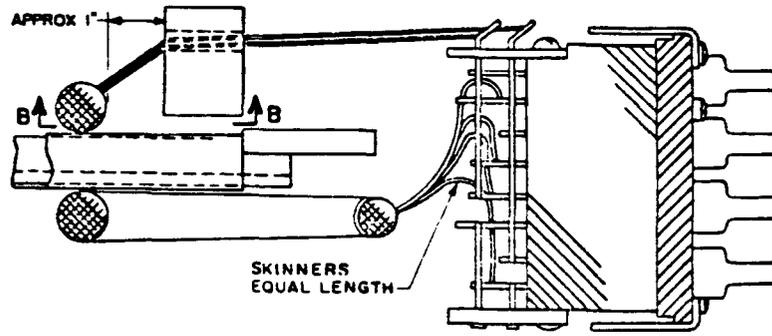


FRONT VIEW



SIDE VIEW

FIG. 20 COILS, REPEATING - 110 AND SIMILAR TYPES



SECT. A-A

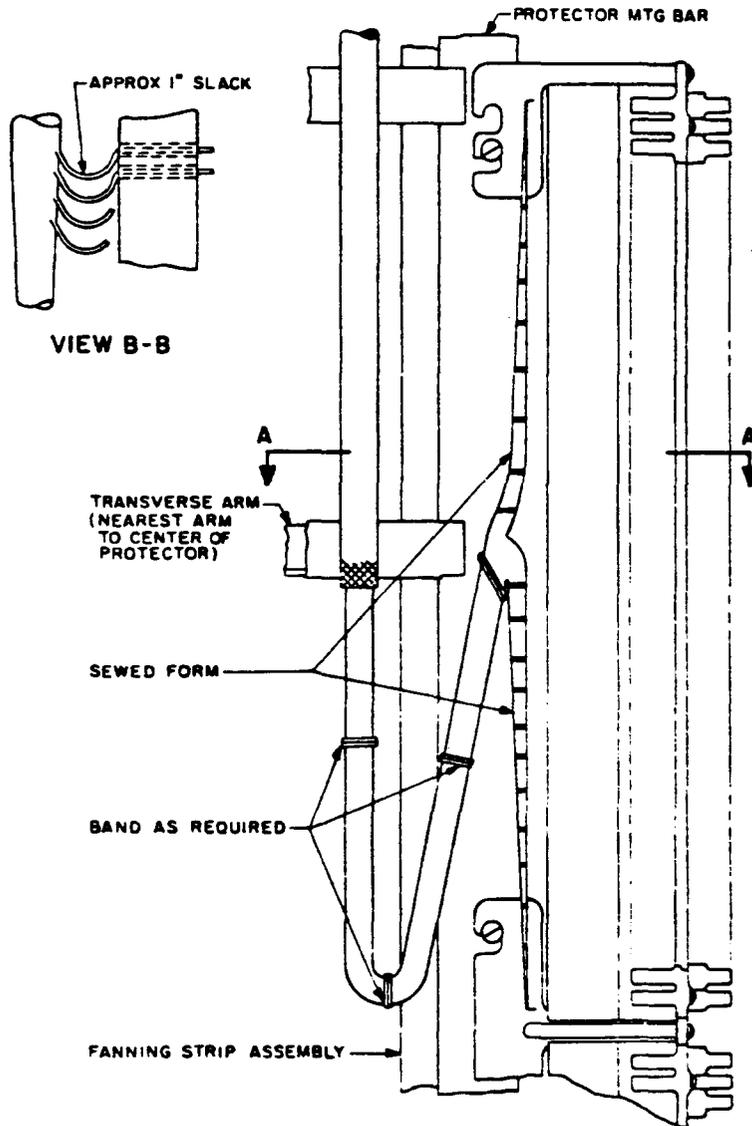
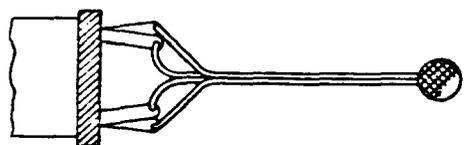


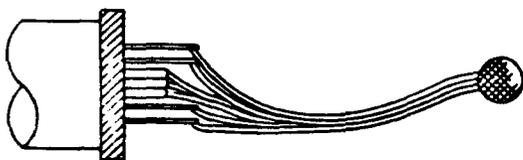
FIG. 21 CONNECTORS - 300 TYPE  
PROTECTORS - 121 TYPE



RECTANGULAR TYPE COILS  
STRAIGHT DRESS-EQUAL SKINNERS



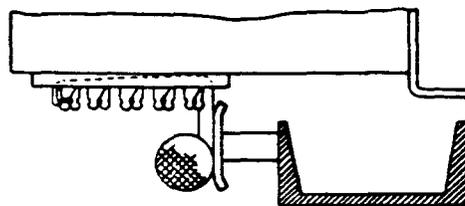
ROUND TYPE COILS  
STRAIGHT DRESS-UNEQUAL SKINNERS



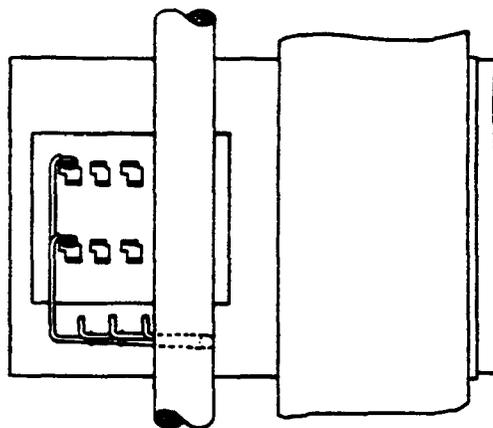
LOOPED DRESS-EQUAL SKINNERS

FIG. 22 COILS, REPEATING - 189 AND  
SIMILAR TYPES COILS,  
INDUCTION - 181 AND SIMILAR  
TYPES

NOTE:  
1. IN C & H TYPE CARRIER EQUIPMENT THE OUTER RUBBER  
COVERING OF 720 TYPE CABLE SHOULD BE TERMINATED  
AT THE VERTICAL FORM AND THE SKINNERS DRESSED  
IN THE NORMAL MANNER.

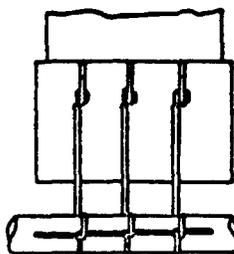


PLAN VIEW

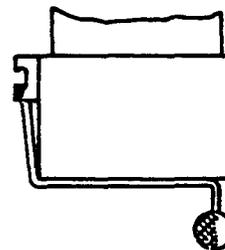


SIDE VIEW  
CHANNEL TYPE RELAY RACK SHOWN

FIG. 23 FILTERS - 121A AND SIMILAR  
TYPES



TOP VIEW



SIDE VIEW

FIG. 24 INDUCTORS - 12 AND SIMILAR  
TYPES

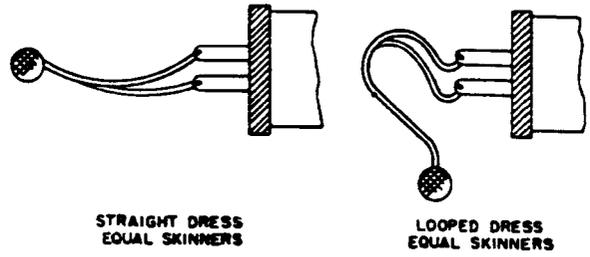
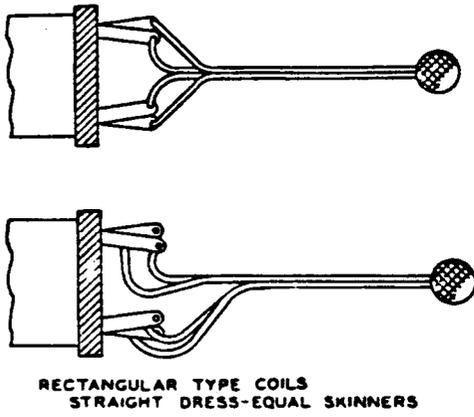


FIG. 26 INDUCTORS - 82, 182, 274, 307, AND SIMILAR TYPES

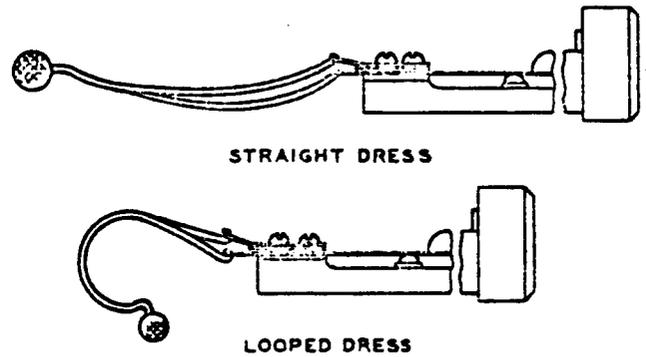
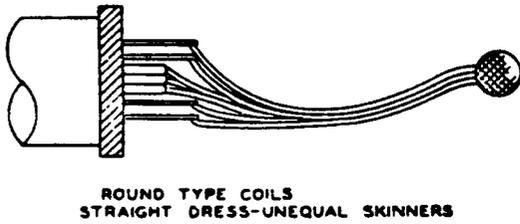


FIG. 27 JACKS - IN 80 AND SIMILAR TYPE JACK MOUNTING

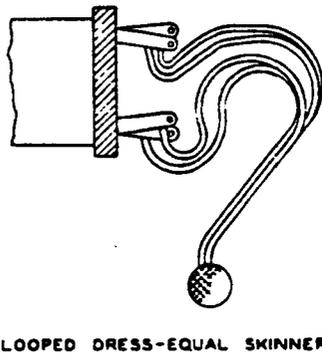


FIG. 25 INDUCTORS - 47, 85 AND SIMILAR TYPES

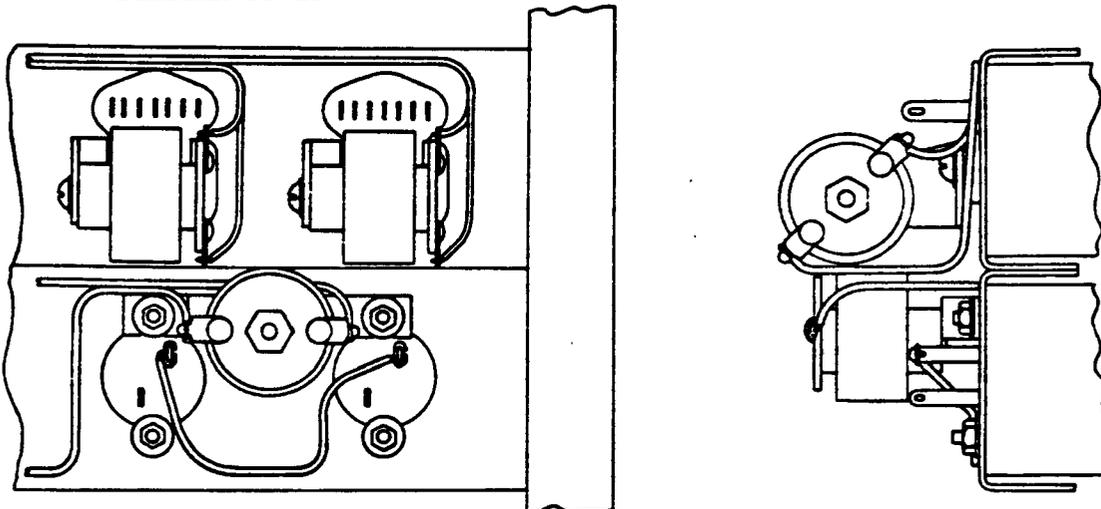


FIG. 28 INDUCTORS - 200 AND SIMILAR TYPES MOUNTED ON WIRING SIDE - SURFACE WIRING

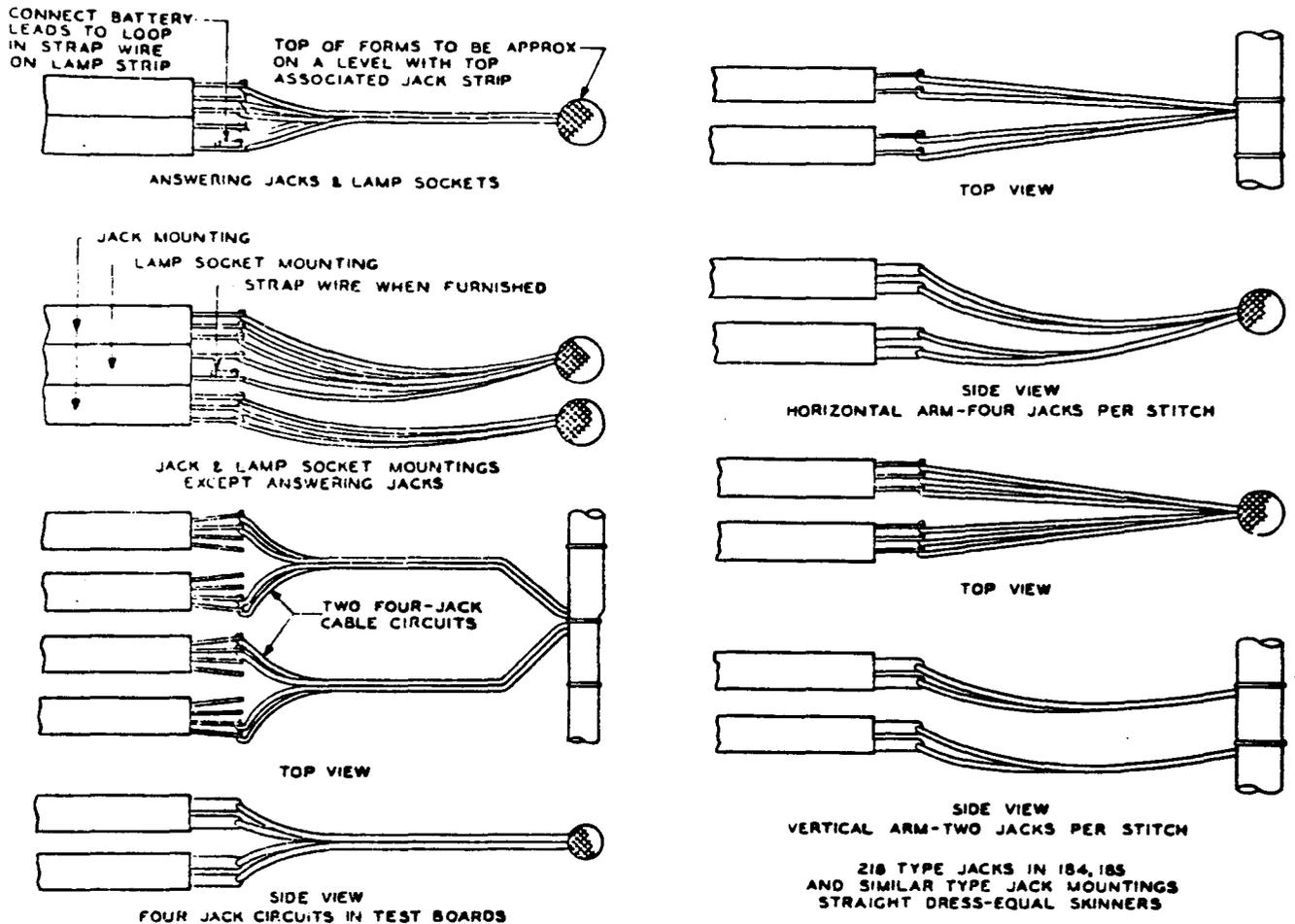


FIG. 29 JACKS, KEYS AND LAMP SOCKET MOUNTINGS - STRIP MOUNTED

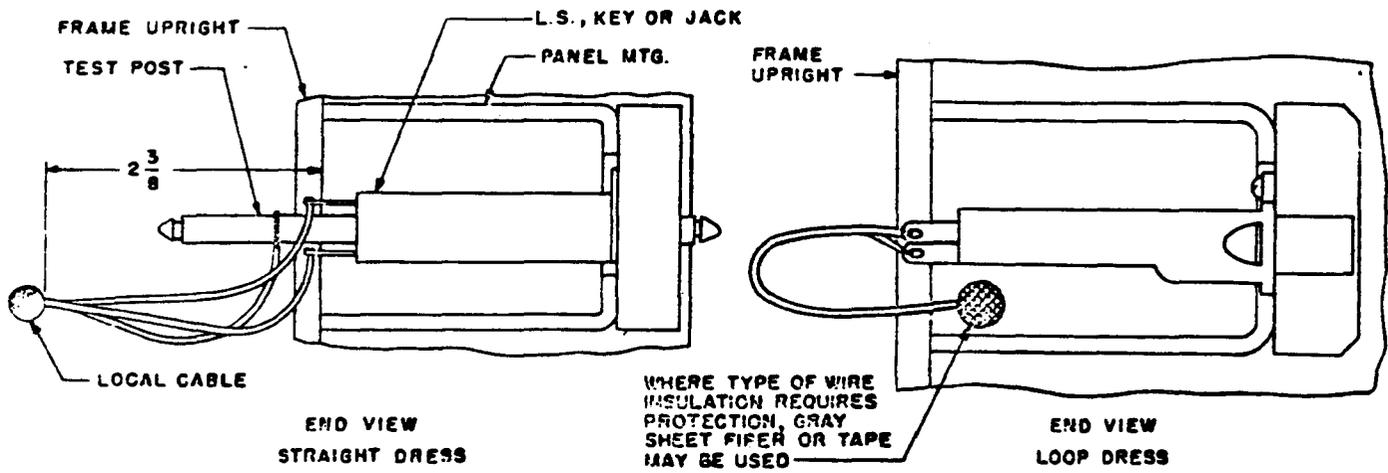
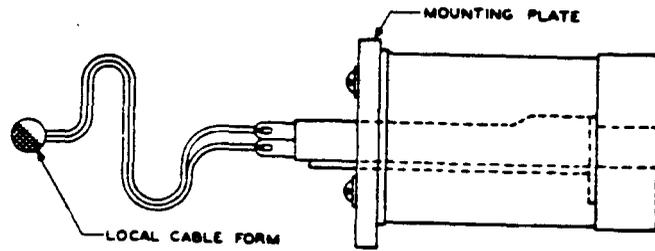


FIG. 30 JACKS - PANEL MOUNTED - AND ASSOCIATED EQUIPMENT



NOTE:  
 SKINNERS SHALL BE OF SUFFICIENT LENGTH TO PERMIT REMOVAL OF JACKS BEYOND FRONT EDGE OF JACK MOUNTING

FIG. 31 JACKS - IN NO. 212A, 252A AND SIMILAR TYPE JACK MOUNTINGS

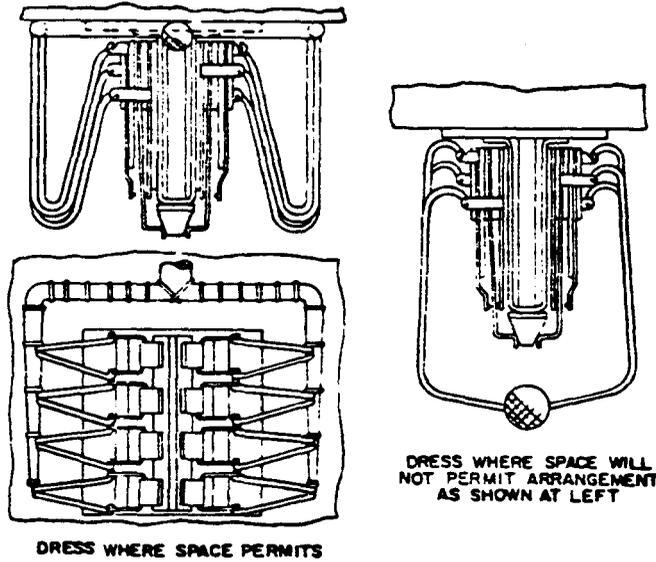


FIG. 32 KEYS - 378 AND SIMILAR TYPES IN MOULDINGS

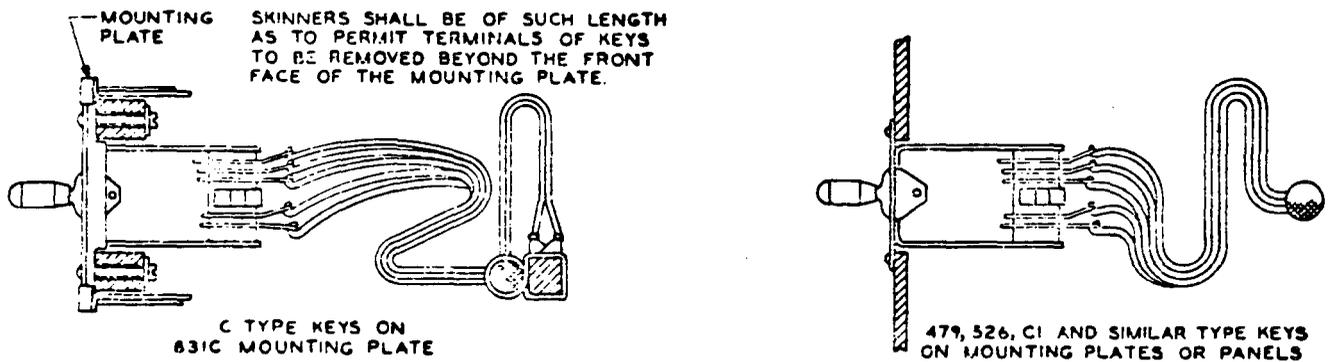
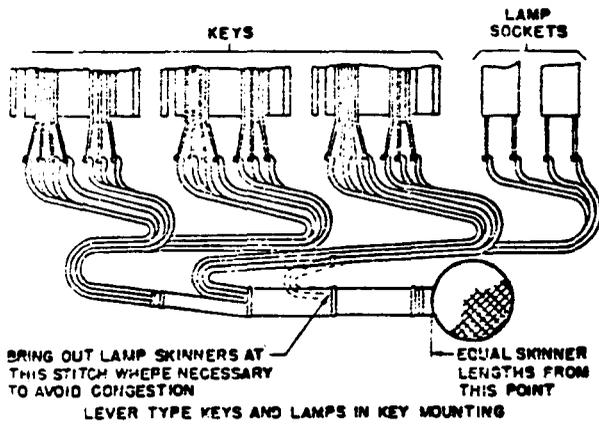
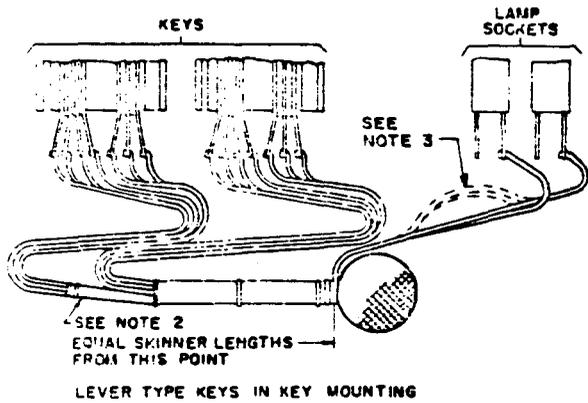


FIG. 33 KEYS - 479, 526, C1 AND SIMILAR TYPES MOUNTED ON 831C AND SIMILAR TYPE PLATES AND PANELS



NOTES:

1. SKINNERS SHOULD BE OF SUCH LENGTH AS TO PERMIT KEYS TO BE REMOVED AND PLACED ON THEIR SIDES ON TOP OF THE KEYSHELF.
2. IN KEYSHELVES WHERE INTERFERENCE IS ENCOUNTERED BETWEEN THIS CABLE FORM AND PNEUMATIC TUBES, THE FORM SHOULD BE SHORTENED SUFFICIENTLY TO CLEAR THE TUBES, AND THE SKINNERS DRESSED BACK FLATNER TOWARD THE LAMP SOCKETS. THE GENERAL FORM OF DRESS SHOULD BE MAINTAINED.
3. IN KEYSHELVES WHEN INTERFERENCE IS ENCOUNTERED BETWEEN THE SKINNER LENGTH (RUNNING TO THE LAMP SOCKETS) AND THE CABLE ARM, THE SKINNERS MAY, IF NECESSARY, BE DRESSED BACK TOWARD THE LAMP SOCKETS. THE GENERAL FORM OF DRESS SHOULD BE MAINTAINED.

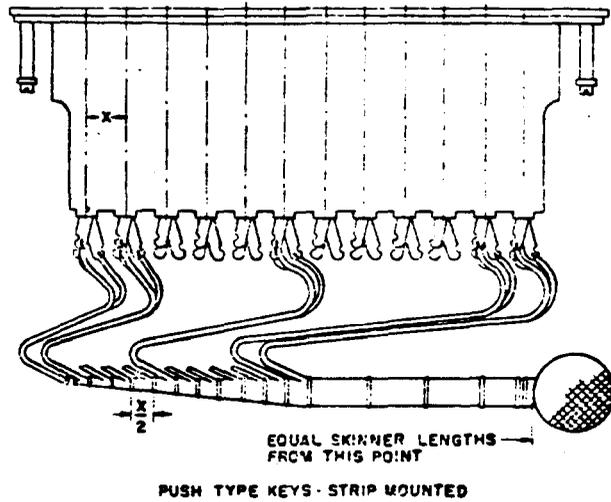


FIG. 34 KEYS - IN KEY SHELVES

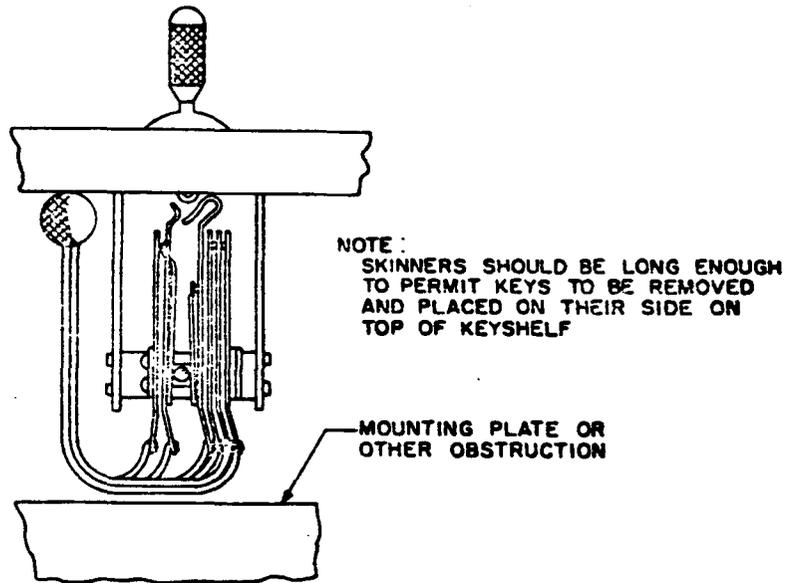


FIG. 35 KEYS - INDIVIDUALLY MOUNTED IN TEST  
CABINETS - TURRETS - TEST WAGONS -  
AND KEYSHELVES WITH SHALLOW PANS

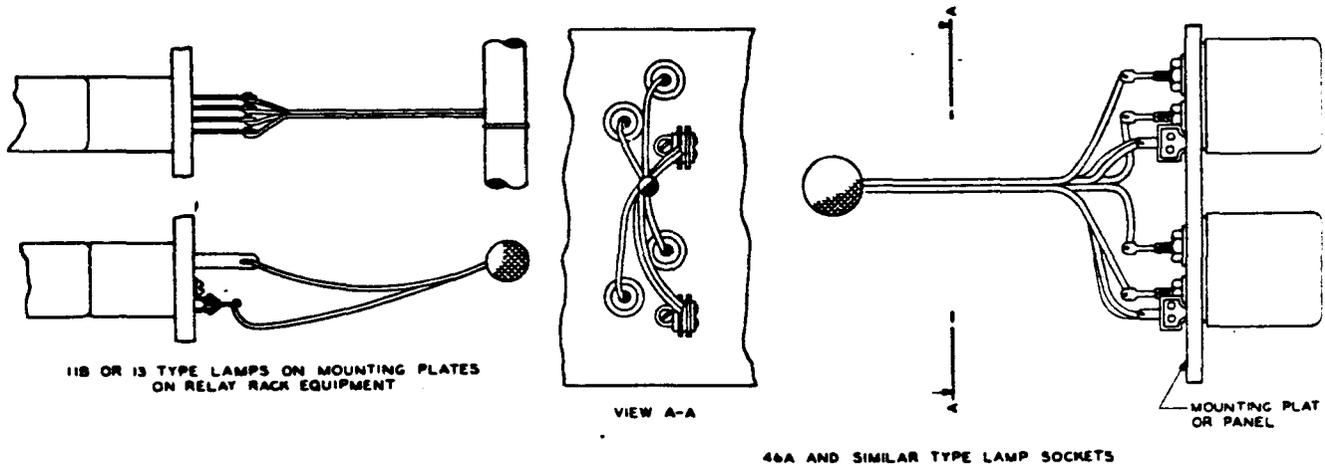
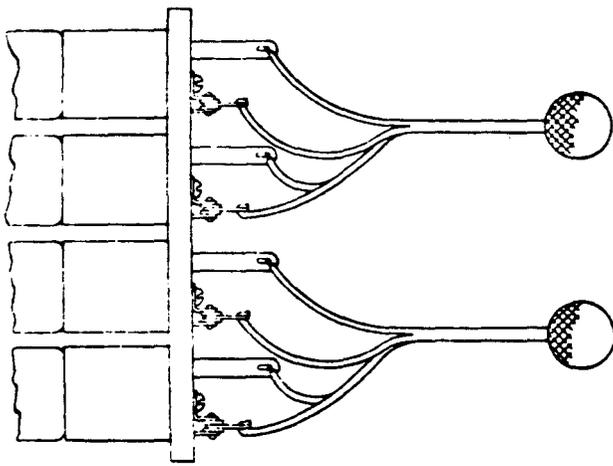
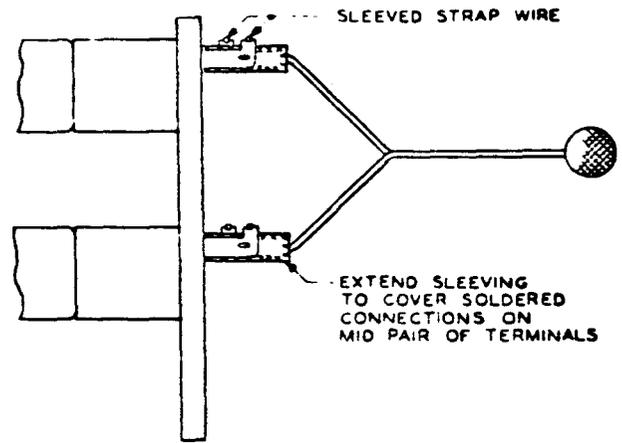


FIG. 36 LAMPS - MOUNTED ON MOUNTING PLATES

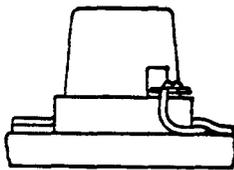
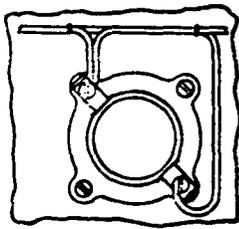


13 TYPE LAMPS ON LAMP PANEL

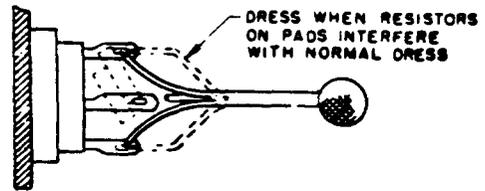


11A LAMPS ON DOUBLE ROW LAMP PANEL

FIG. 37 LAMPS - MOUNTED ON PANELS



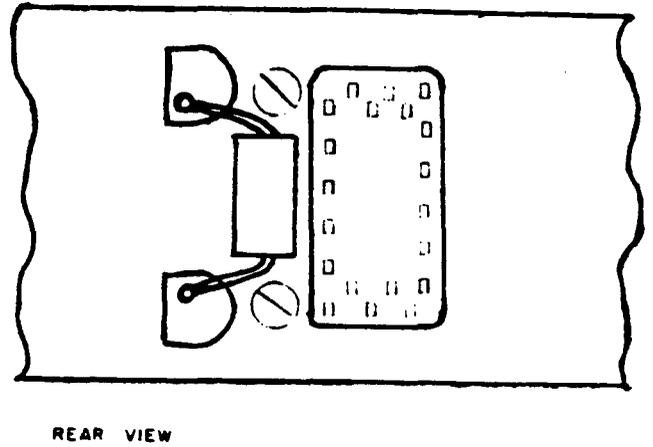
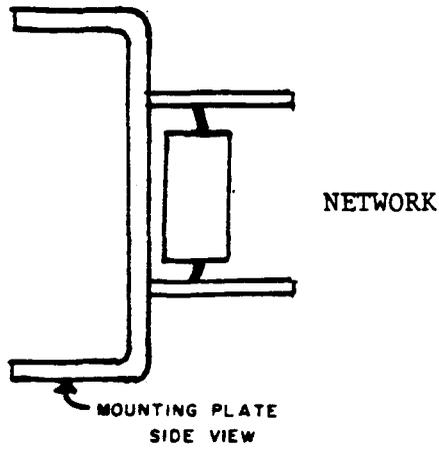
H-715 OR 50715  
BRYANT RECEPTACLE  
AND SIMILAR TYPE LAMP  
SOCKETS ON WOODWORK



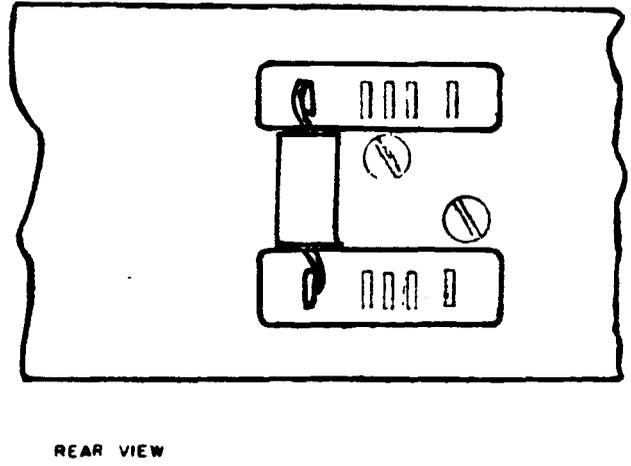
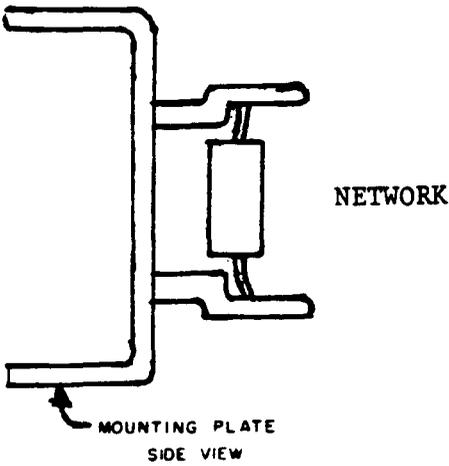
141, 143, 144, KS-14226,  
AND SIMILAR TYPES  
ELECTRON TUBE SOCKETS  
1A, 1C, AND SIMILAR TYPES PADS

FIG. 39 PADS - 1A, 1C AND SIMILAR TYPES

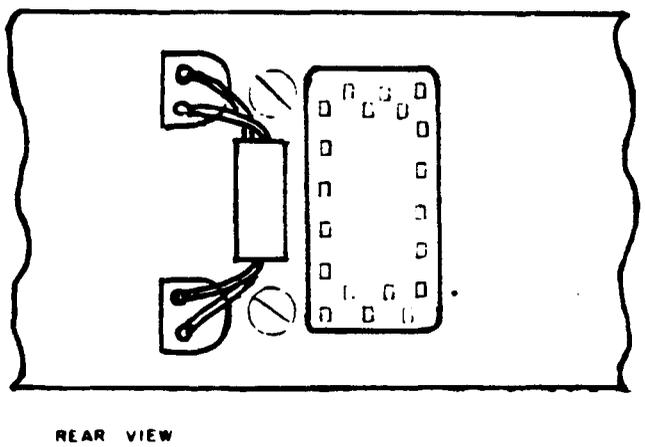
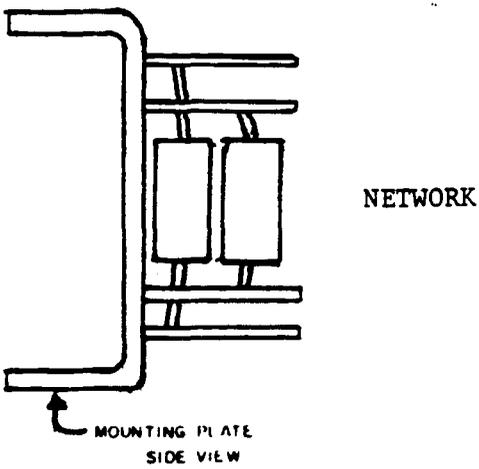
FIG. 38 LAMPS - MOUNTED ON WOODWORK



NETWORK MOUNTED ON AF, AG, & AJ TYPE RELAYS

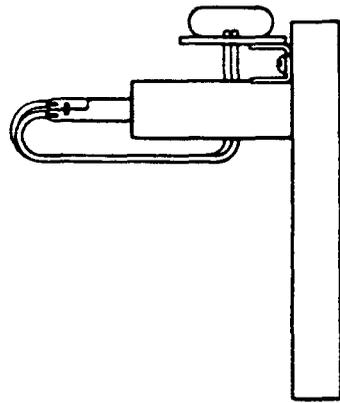
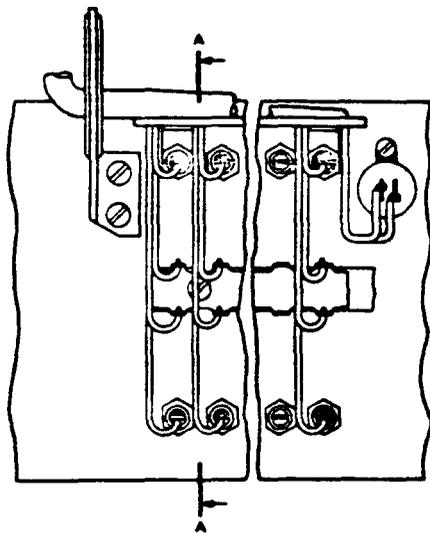


NETWORK MOUNTED ON U & Y TYPE RELAYS



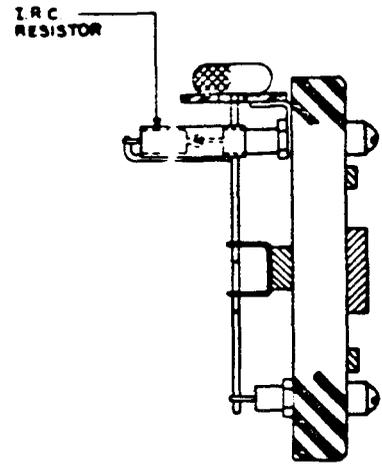
NETWORKS MOUNTED ON AK TYPE RELAYS (COMMON BATTERY OR GROUND)

FIG. 40 NETWORKS 185, 186 AND SIMILAR

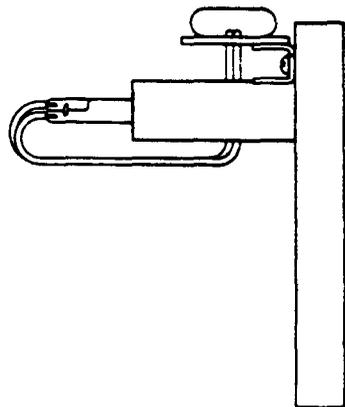
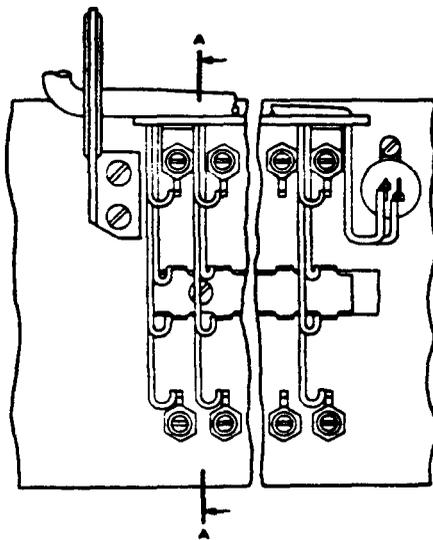


END VIEW-LAMP WIRING

SOLDERED CONNECTIONS

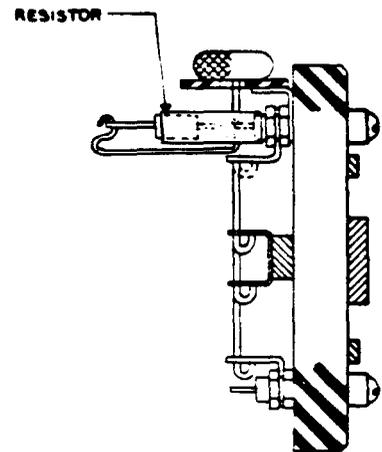


SECT A-A



END VIEW-LAMP WIRING

WRAPPED CONNECTIONS



SECT A-A

FIG. 41 PANELS, FUSE (SITH FANNING STRIPS) - 60 CAPACITY DOUBLE ROW

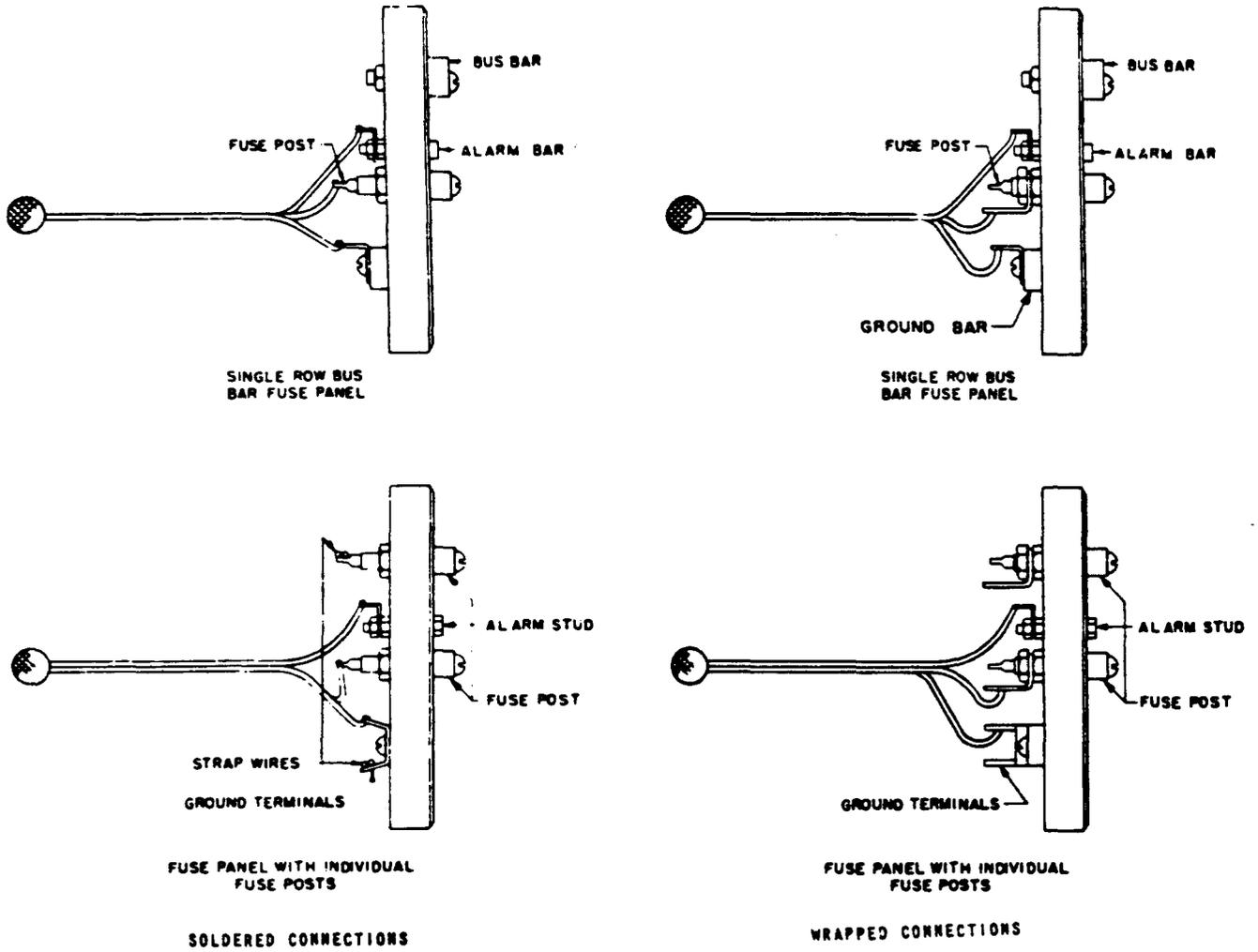


FIG. 42 PANELS FUSE (WITH SEWED FORMS) - SINGLE ROW MOUNTED HORIZONTALLY

NOTE - LEADS TO THE GROUND BAR TERMINALS MAY BE IN SEPARATE STITCHES OR COMBINED WITH THE STITCHES TO THE FUSE PANEL TERMINALS

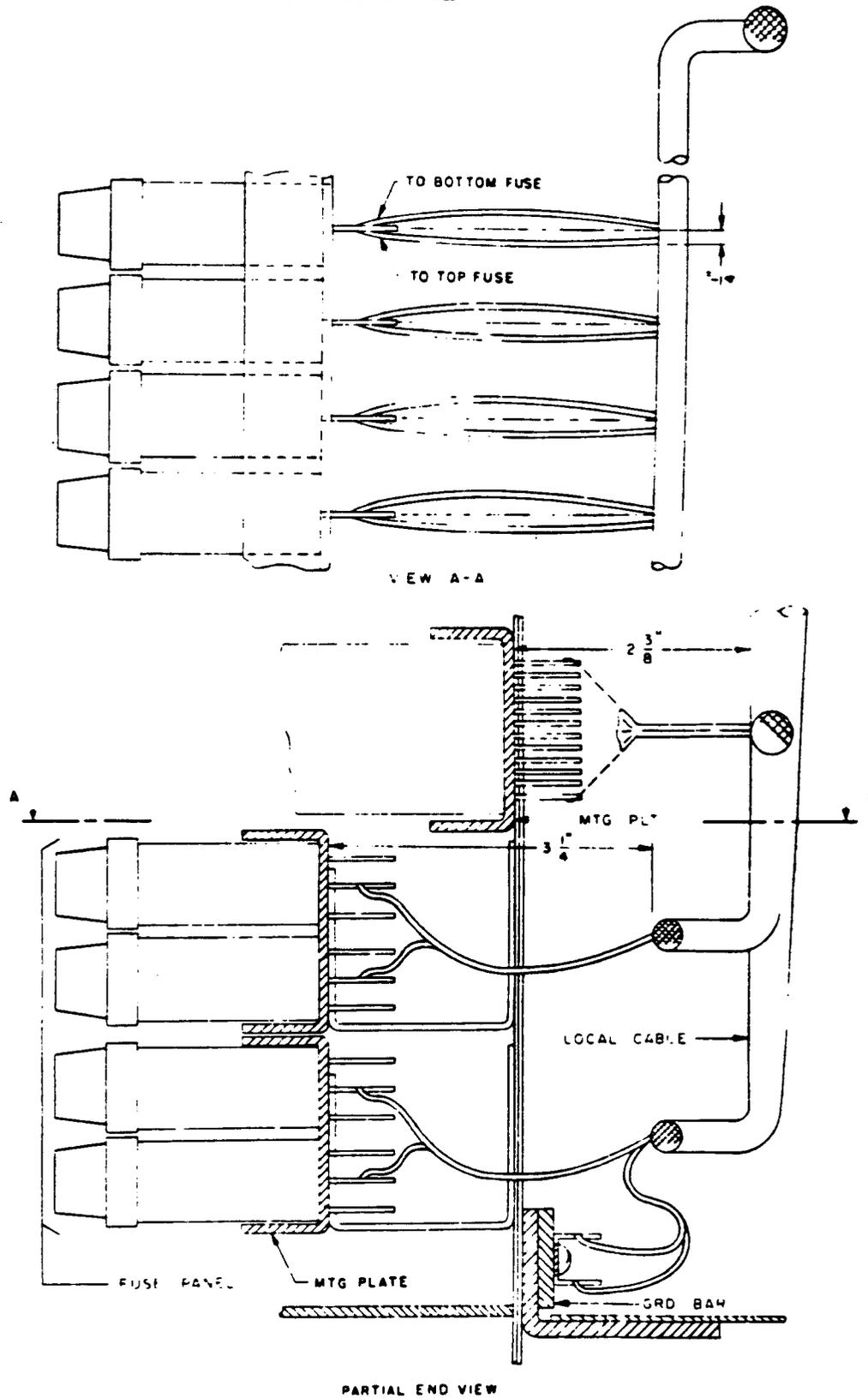


FIG. 43 PANEL, FUSE - 18, 21 AND SIMILAR TYPE FUSE BLOCKS - LOCAL CABLE - NO. 5 CROSSBAR

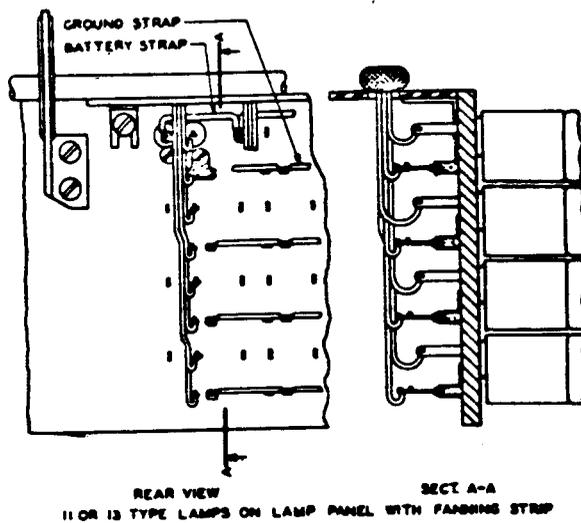


FIG. 44 PANELS, LAMP (WITH FANNING STRIPS) - MOUNTING 11 OR 13 TYPE LAMPS

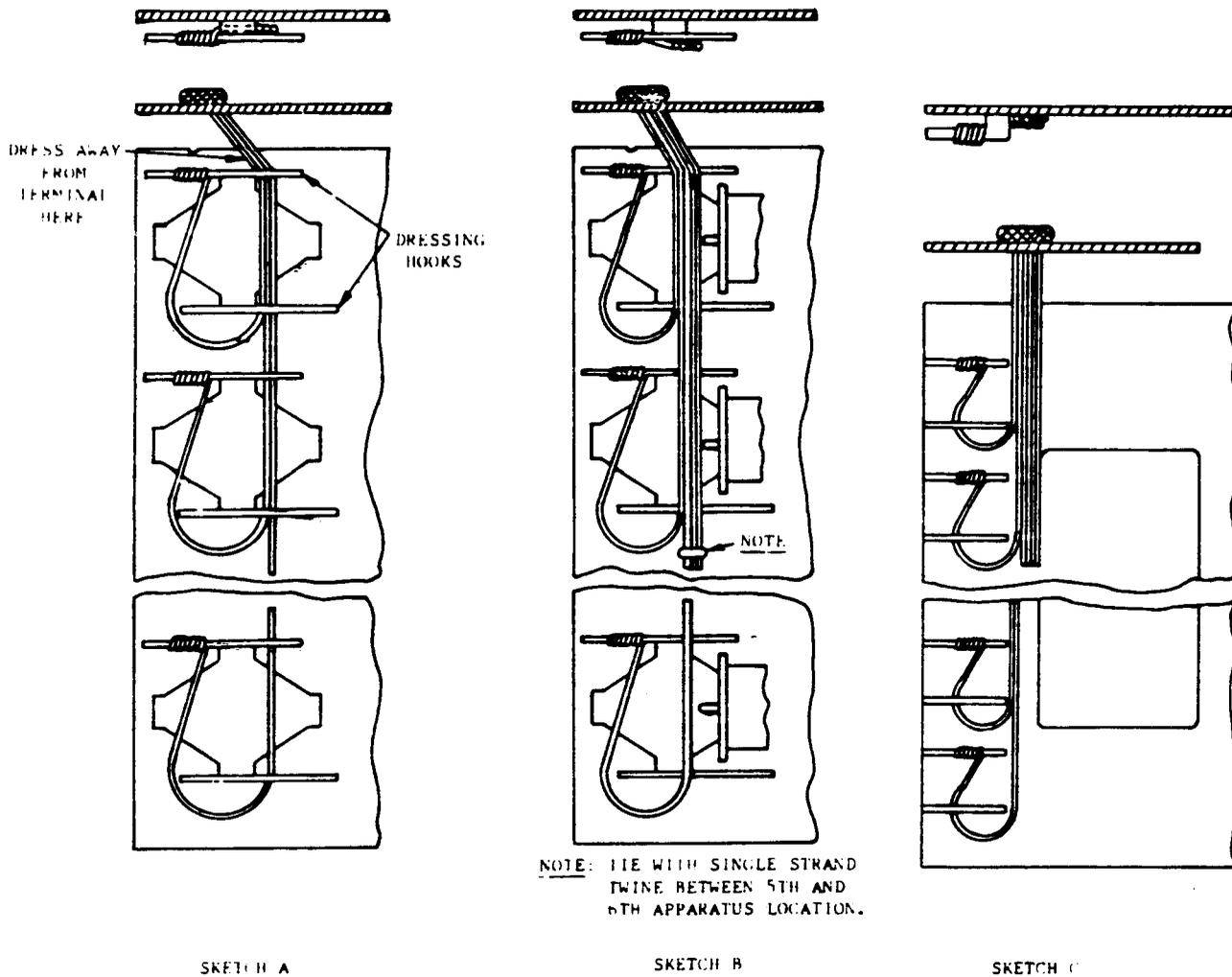


FIG. 45 PANEL 313A NETWORK TERMINALS - ANI

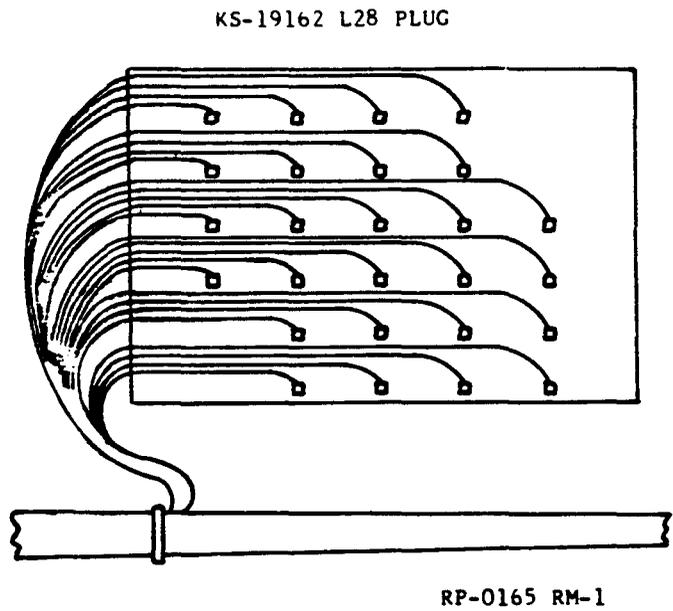
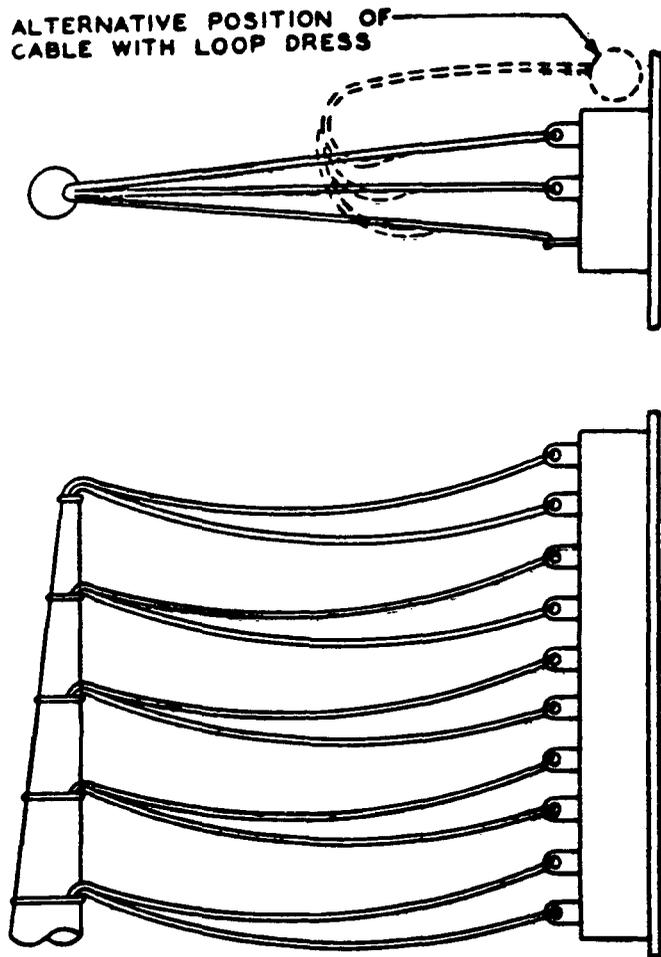


FIG. 46 PLUGS H. B. JONES CO. AND KS-19162 TYPE

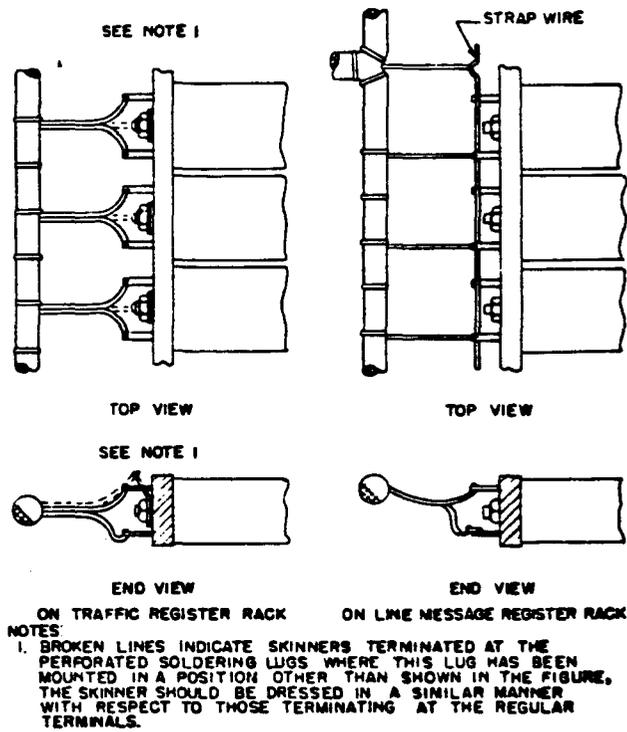


FIG. 47 REGISTERS, MESSAGE AND TRAFFIC - 14 AND SIMILAR TYPES

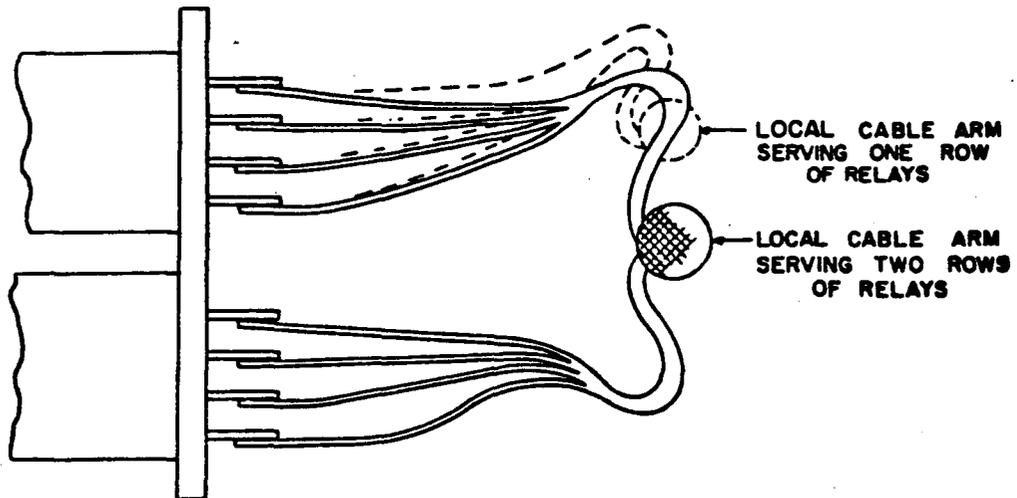


FIG. 48 RELAYS - 221, 223, 224, 225, AND SIMILAR TYPES

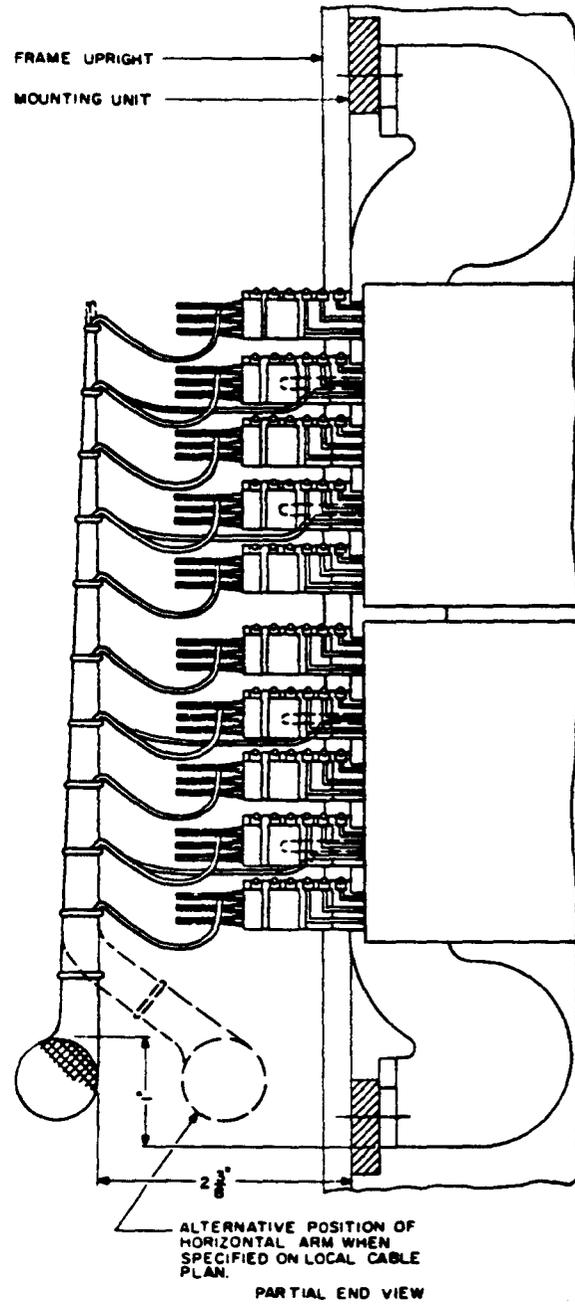
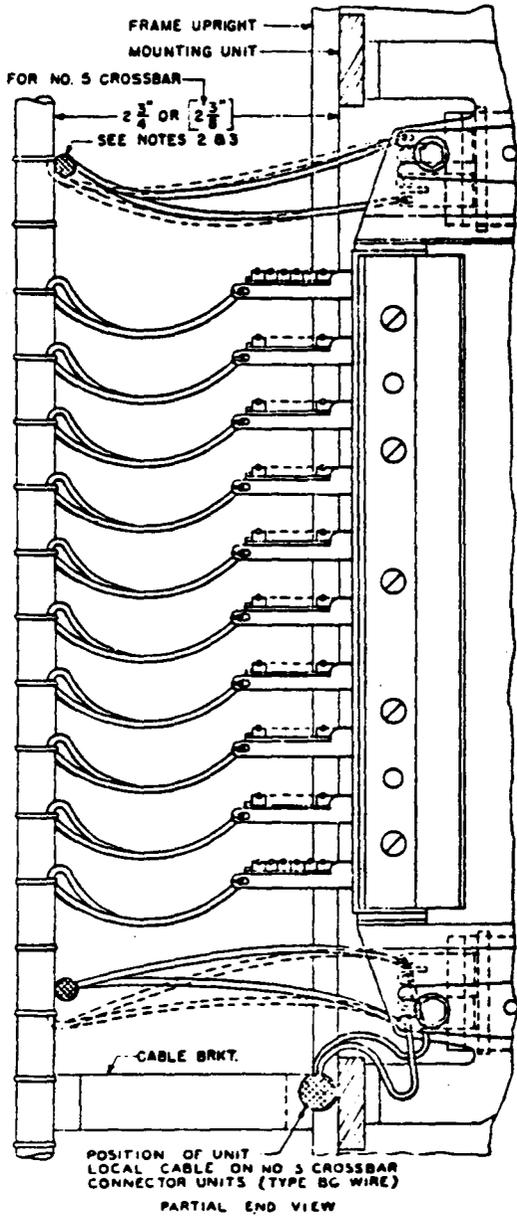
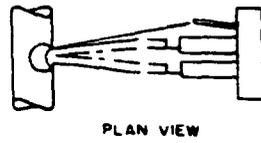
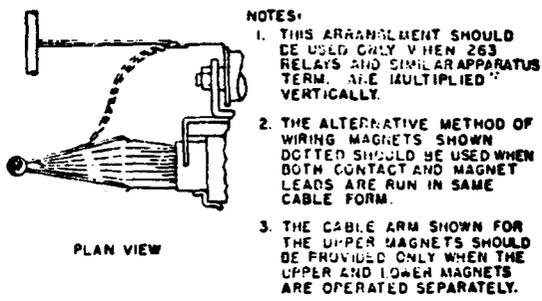
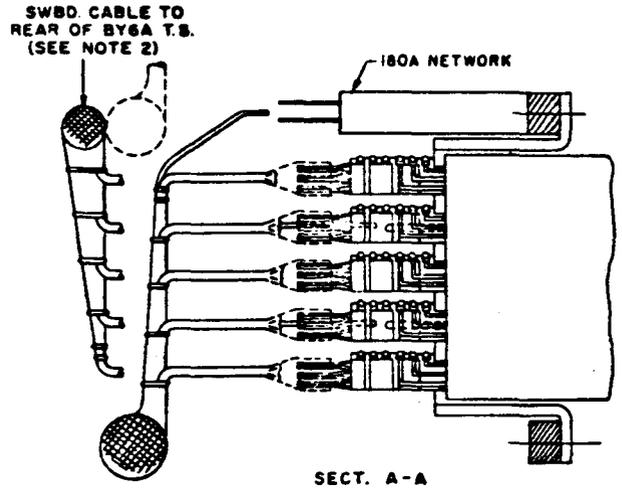
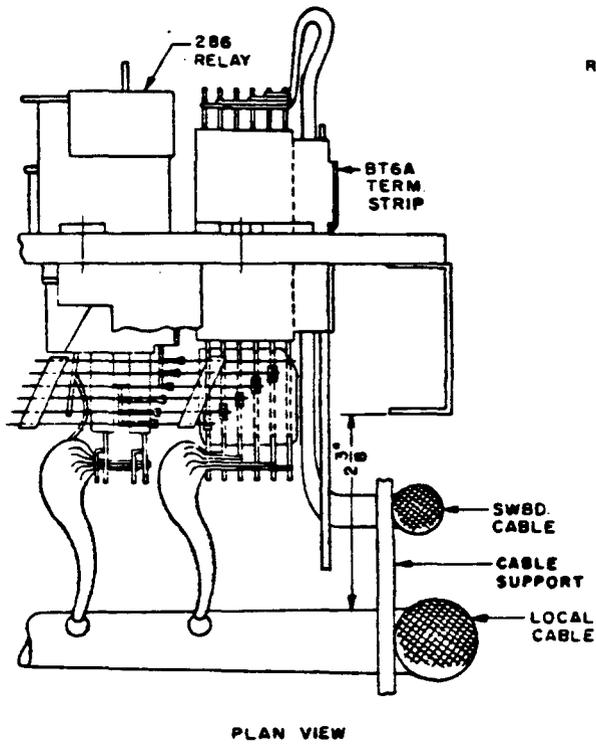
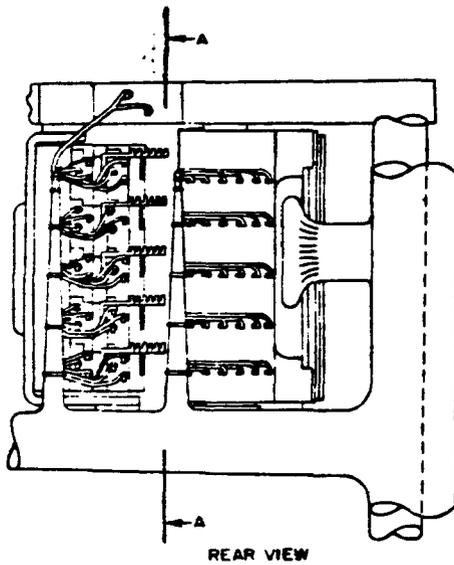


FIG. 49 RELAYS, MULTICONTACT - 263 AND SIMILAR TYPES - VERTICAL MULTIPLE WIRING

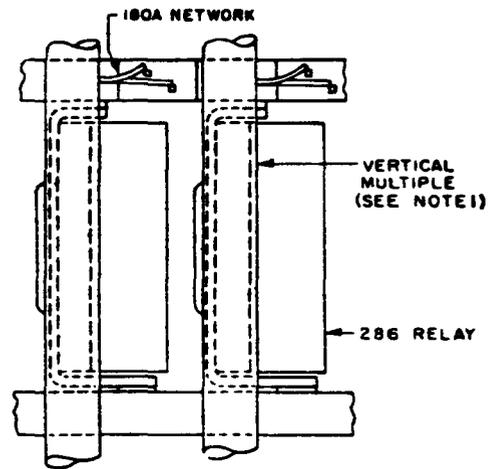
FIG. 50 RELAYS, MULTICONTACT - 287 AND SIMILAR TYPES - SINGLE HORIZONTAL MAIN FORM ADDITIONS AND REPLACEMENTS FOR 263 TYPE



- NOTES:
1. DRESS OF SKINNERS FROM VERTICAL MULTIPLE TO RELAYS AND NETWORKS SHALL BE THE SAME AS SHOWN IN FIG. A EXCEPT THAT A SEPARATE STITCH SHALL BE USED FOR THE NETWORK SKINNERS WHERE THE VERTICAL FORM PASSES THE NETWORKS.
  2. SWBD. CABLE LEADS TO THE BY6A T.S. SHOULD BE DRESSED THE SAME AS THE LOCAL CABLE LEADS TO THE BT6A T.S.



HORIZONTAL FORM WIRING FIG. A



VERTICAL MULTIPLE WIRING FIG. B

FIG. 51 RELAYS, MULTICONTACT - 286 TYPE, WITH BT6A AND BY6A TERMINAL STRIPS - LOCAL AND SWITCHBOARD CABLE WIRING

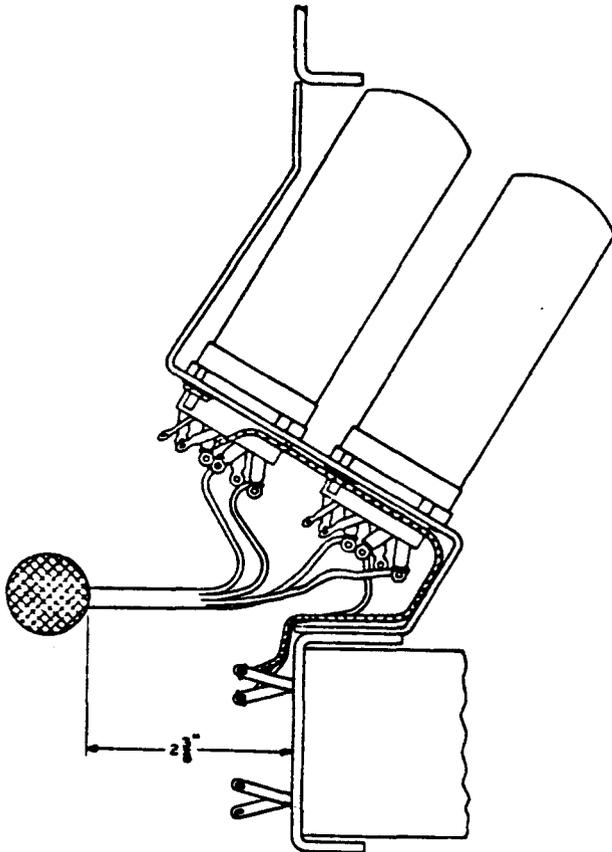


FIG. 52 RELAYS - 276 AND SIMILAR TYPES - STRIP MOUNTED

NOTE:  
IT WILL BE NECESSARY TO REMOVE ELECTRON TUBE SOCKET FOR ATTACHING WIRES TO TERMINALS AND SLACK IS PROVIDED IN SURFACE WIRING LEADS FOR THIS PURPOSE. SKINNERS FROM CABLE FORMS ARE SHOWN AS BEING WIRED FROM TIP OF FORM, IN WHICH CASE THE FORM CAN BE PULLED FORWARD TO PERMIT REMOVAL OF ELECTRON TUBE SOCKET. WHEN SKINNERS TO ELECTRON TUBE SOCKET ARE FROM BUTT OF FORM AND THE FORM IS SO RIGID THAT IT CAN NOT BE PULLED FORWARD IT WILL BE NECESSARY TO TERMINATE SKINNER AT SUPPLEMENTARY TERMINALS AT THE REAR OF THE MOUNTING PLATE; THESE SUPPLEMENTARY TERMINALS BEING WIRED TO ELECTRON TUBE SOCKET TERMINALS BY MEANS OF SURFACE WIRING.

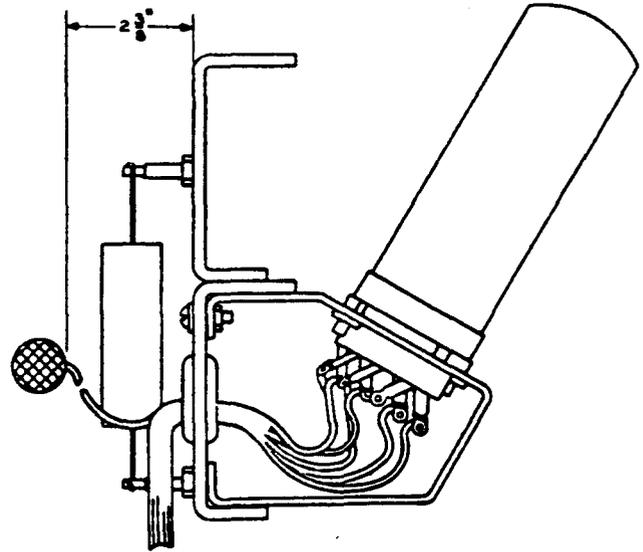


FIG. 53 RELAYS - 276 AND SIMILAR TYPES - INDIVIDUALLY MOUNTED

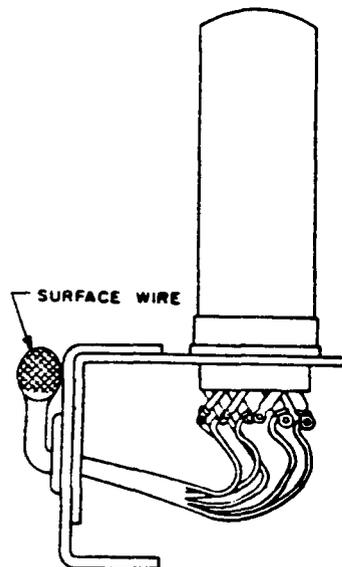
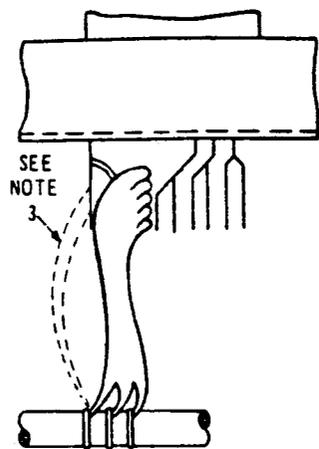
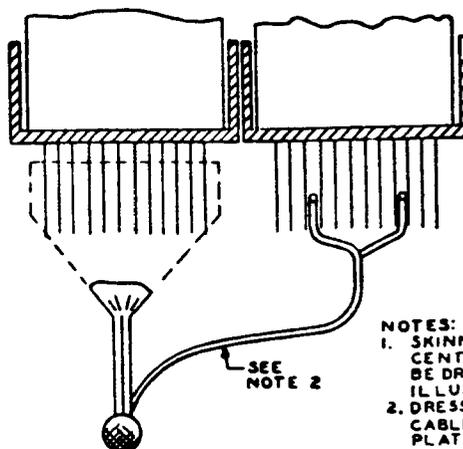


FIG. 54 RELAYS - 292 AND SIMILAR TYPES - INDIVIDUALLY MOUNTED

NOTE - SUFFICIENT SLACK SHALL BE PROVIDED IN THE SURFACE WIRE LEADS TO PERMIT REMOVAL OF THE VACUUM TUBE SOCKET.



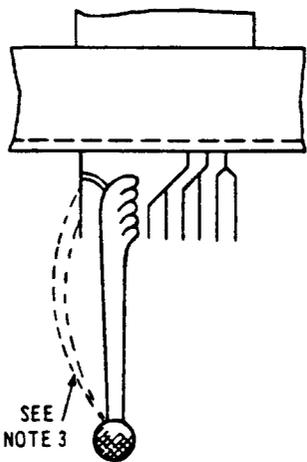
PLAN VIEW



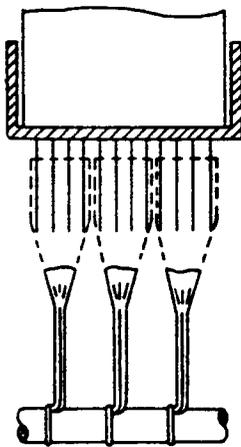
SIDE VIEW

HORIZONTAL FORM

- NOTES:
1. SKINNERS TO AJ RELAYS MOUNTED ON CENTERS LESS THAN 2 1/2 INCHES SHOULD BE DRESSED IN THE SAME MANNER AS ILLUSTRATED FOR THE AF AND AG RELAYS
  2. DRESS OF SKINNERS BREAKING OUT OF CABLE ARM SERVING RELAYS MOUNTED ON PLATE ABOVE. ONE ARM PER TWO PLATES OF RELAYS IS SPECIFIED IN CASES WHERE ONLY A FEW WIRES ARE INVOLVED AND WOULD RESULT IN A WEAK FORM IF A SEPARATE CABLE ARM PER PLATE WAS USED.
  3. ALTERNATE DRESS AT WINDING TERMINALS.

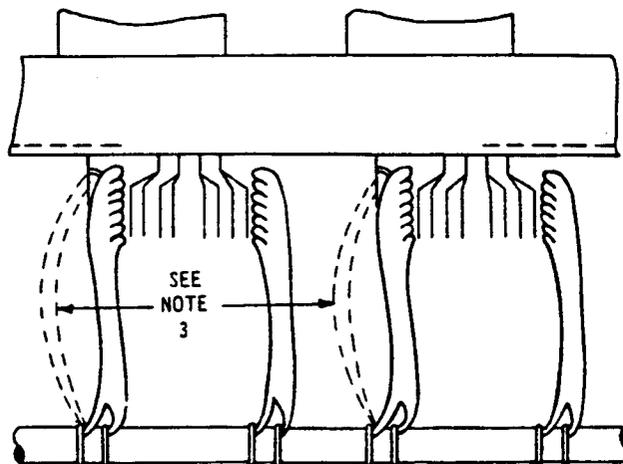


PLAN VIEW



SIDE VIEW

VERTICAL FORM



PLAN VIEW

HORIZONTAL FORM

AJ TYPE RELAYS (24 MAKE) USING SPLIT DRESS-MOUNTED ON 2 1/2 INCH CENTERS (SEE NOTE 1)

FIG. 55 RELAYS - WIRE SPRING - AF, AG, AJ, AND SIMILAR TYPES

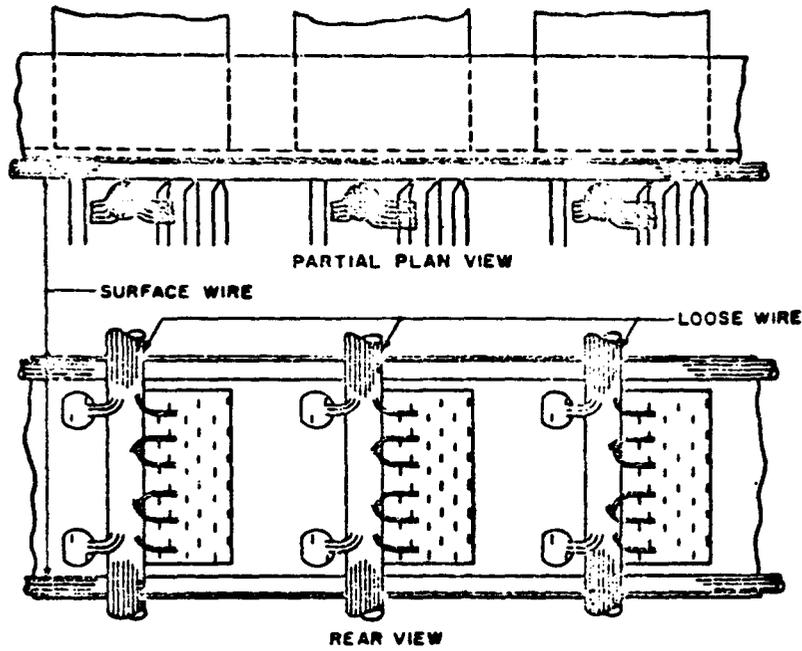
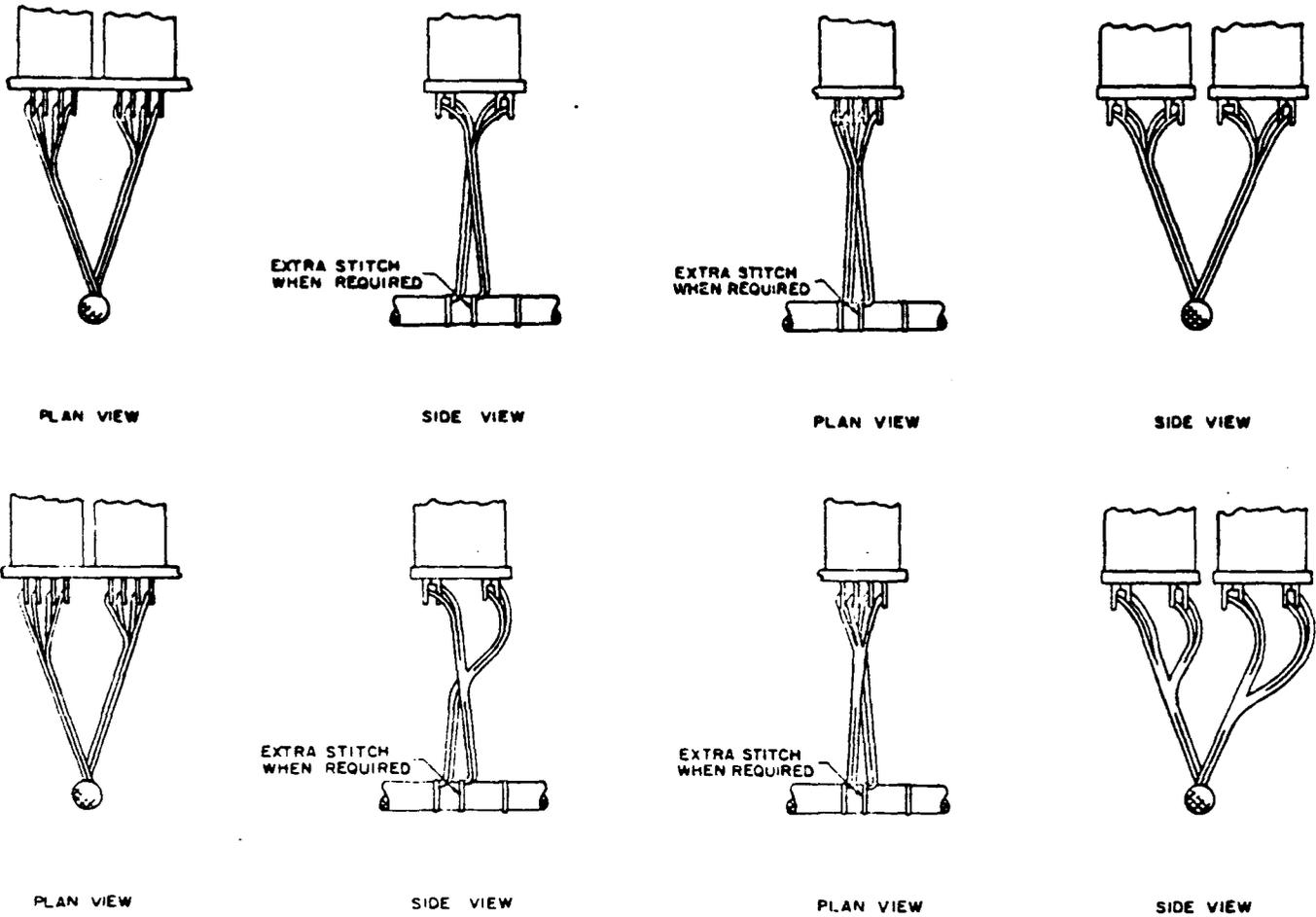


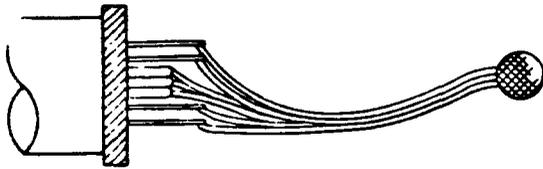
FIG. 56 RELAYS - AF TYPE - VERTICAL LOOSE WIRING AND SURFACE WIRING



VERTICAL FORM SERVING TWO  
PIECES OF APPARATUS MOUNTED SIDE BY SIDE

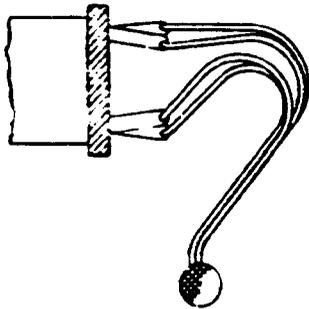
HORIZONTAL FORM SERVING TWO PIECES OF  
APPARATUS MOUNTED ONE ABOVE THE OTHER

FIG. 57 RELAYS - STRIP MOUNTED - SKINNERS TO EACH RELAY BROUGHT OUT AT SAME POINT

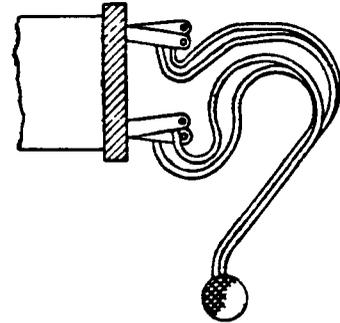


ROUND TYPE RELAYS AND COILS  
STRAIGHT DRESS-UNEQUAL SKINNERS

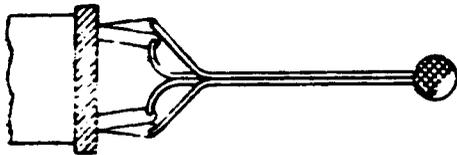
NOTE:  
DRESS OF SKINNERS TO 209,215 AND SIMILAR TYPE RELAYS  
MOUNTED IN CONNECTING BLOCKS 3 COVERED IN THE FIGURE  
SHOWING DRESS OF SKINNERS TO 3 AND SIMILAR TYPE  
CONNECTING BLOCKS.



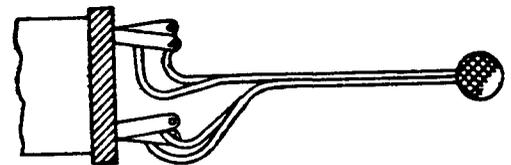
LOOPED DRESS-EQUAL SKINNERS



LOOPED DRESS-EQUAL SKINNERS

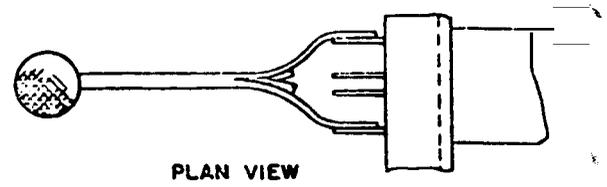
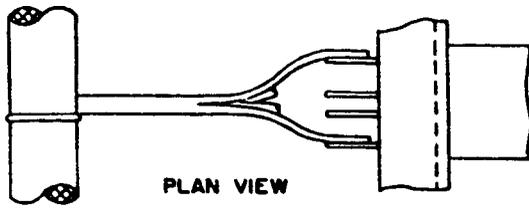


RECTANGULAR TYPE RELAYS AND COILS  
STRAIGHT DRESS-EQUAL SKINNERS

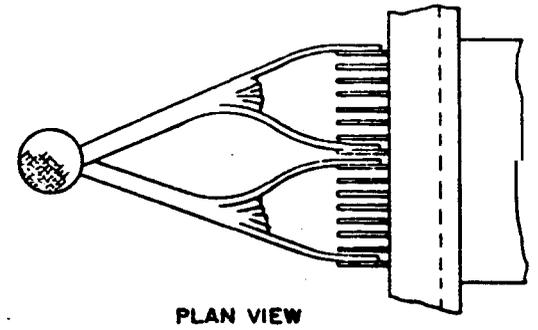
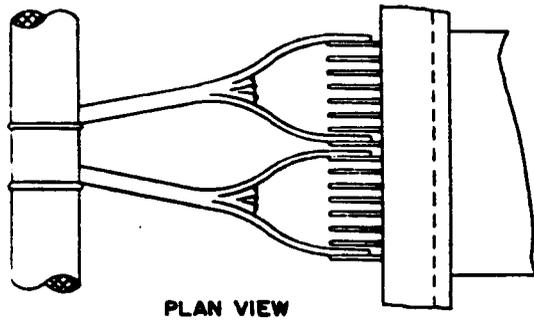


RECTANGULAR TYPE RELAYS AND COILS  
STRAIGHT DRESS-EQUAL SKINNERS

FIG. 58 RELAYS - STRIP MOUNTED - SKINNERS TO EACH RELAY  
BROUGHT OUT AT A DIFFERENT POINT



ARRANGEMENT FOR SMALL RELAYS  
REQUIRING ONE BREAK OUT STITCH PER RELAY



ARRANGEMENT FOR LARGE RELAYS  
REQUIRING TWO BREAK OUT STITCHES PER RELAY

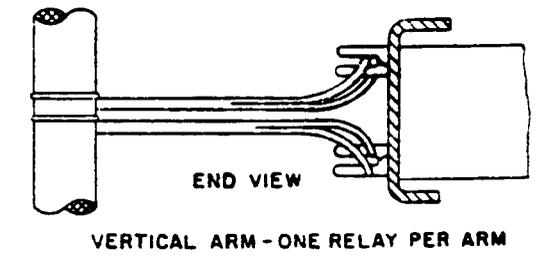
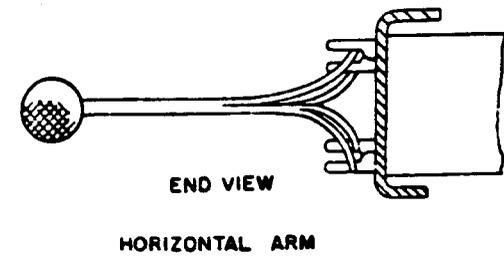
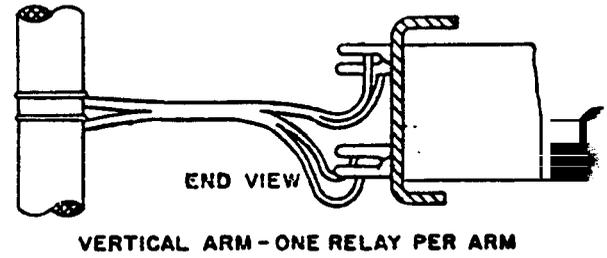
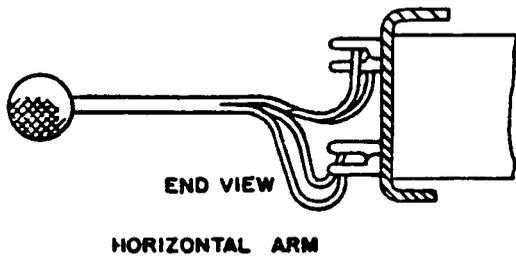
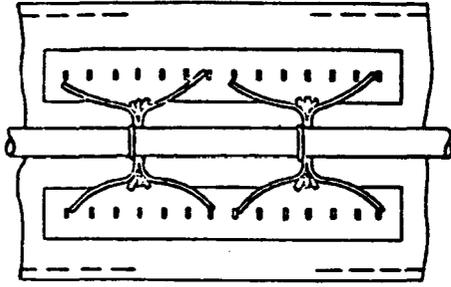
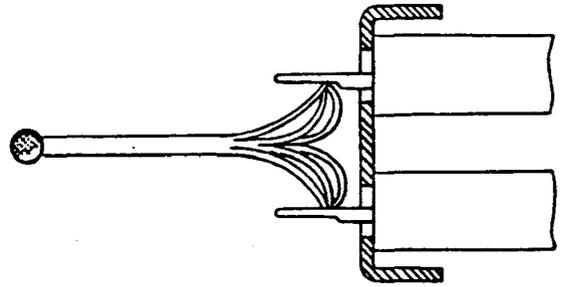


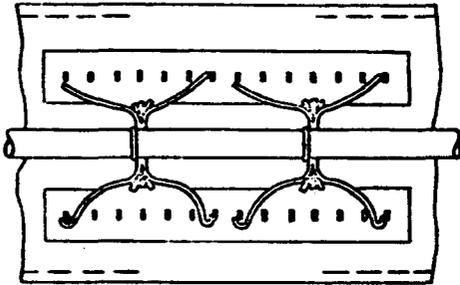
FIG. 59 RELAYS - STRIP MOUNTED U, UA, Y, AND SIMILAR TYPES



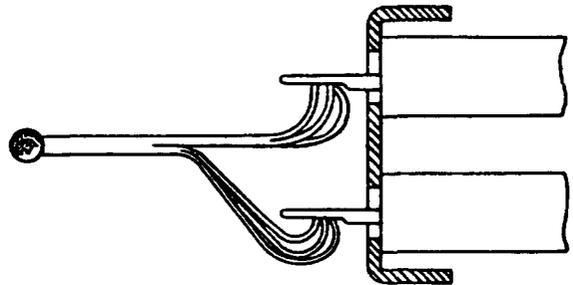
FRONT VIEW



SIDE VIEW

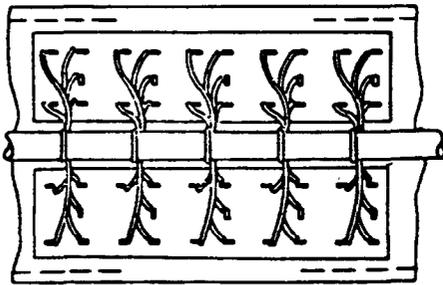


FRONT VIEW

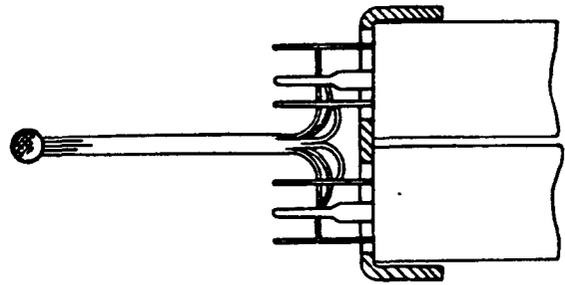


SIDE VIEW

290 TYPE RELAYS



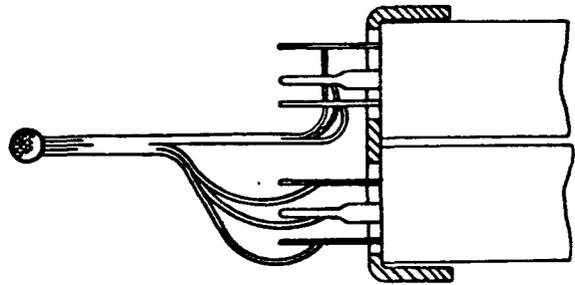
FRONT VIEW



SIDE VIEW



FRONT VIEW



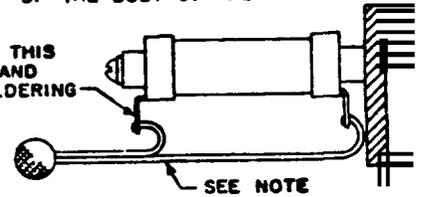
SIDE VIEW

293 TYPE RELAYS

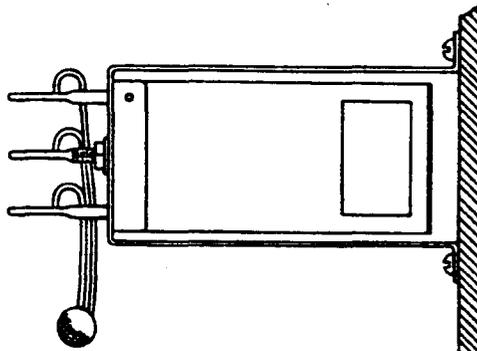
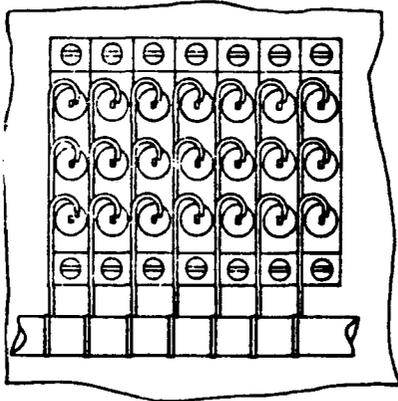
FIG. 60 RELAYS - DRY REED - 290, 293, AND SIMILAR TYPES

NOTE  
ALL WIRING SHALL BE KEPT CLEAR  
OF THE BODY OF THE RESISTOR

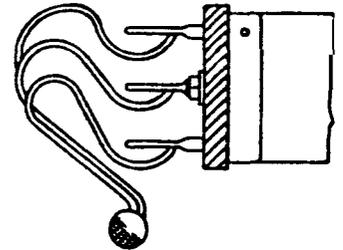
BEND TERMINAL IN THIS  
POSITION, CLEAN AND  
RE-TIN BEFORE SOLDERING



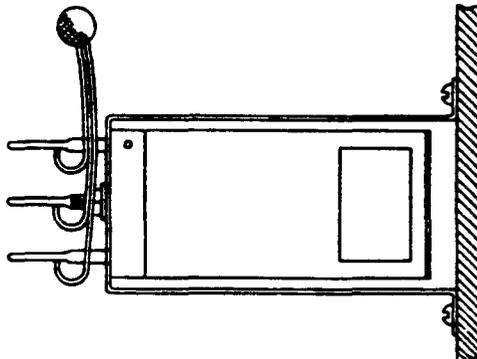
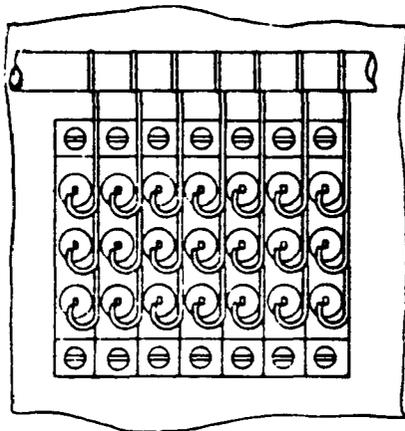
38, KS8512 AND SIMILAR  
VITREOUS ENAMEL TYPE RESISTORS



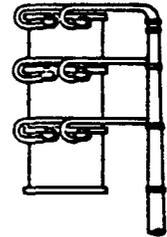
WITH CABLE ARM  
LOCATED BELOW RESISTORS



LOOPED DRESS-EQUAL SKINNERS  
18, 19, 40, 60 AND SIMILAR TYPE  
RESISTORS (19 TYPE SHOWN)



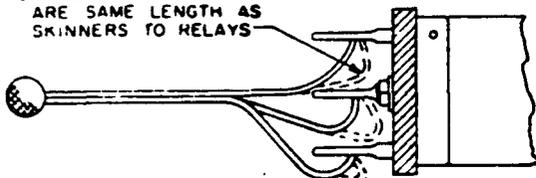
WITH CABLE ARM  
LOCATED ABOVE RESISTORS



63 AND SIMILAR TYPE  
RESISTORS

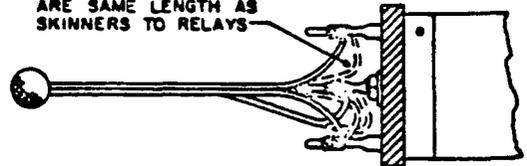
18 AND SIMILAR TYPE RESISTORS (19 TYPE SHOWN)  
IN 3 AND SIMILAR TYPE RESISTOR MOUNTINGS

ALTERNATIVE DRESS WHERE  
SKINNERS TO RESISTORS  
ARE SAME LENGTH AS  
SKINNERS TO RELAYS



STRAIGHT DRESS EQUAL SKINNERS  
18, 19, 40, 60 AND SIMILAR TYPE  
RESISTORS (19 TYPE SHOWN)

ALTERNATIVE DRESS WHERE  
SKINNERS TO RESISTORS  
ARE SAME LENGTH AS  
SKINNERS TO RELAYS



STRAIGHT DRESS-EQUAL SKINNERS  
18, 19, 40, 60 AND SIMILAR TYPE  
RESISTORS (19 TYPE SHOWN)

FIG. 61 RESISTORS - 18, 19, 38, 40, 60, 63, KS8512, AND SIMILAR TYPES

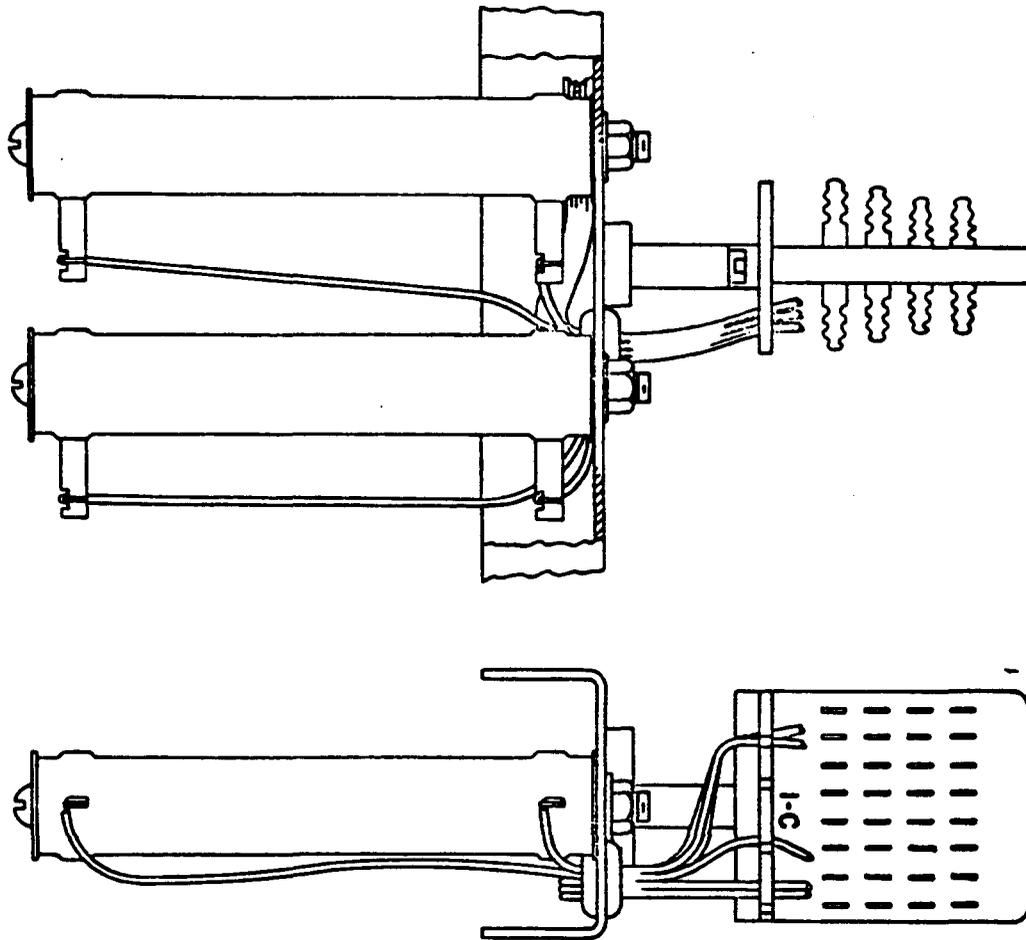


FIG. 62 RESISTORS - 100 AND SIMILAR TYPES - SURFACE WIRING

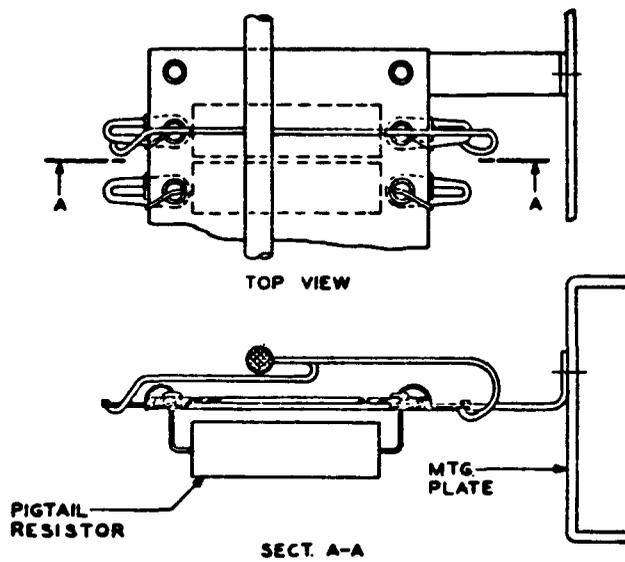


FIG. 63 RESISTORS - CARD MOUNTED ON MOUNTING PLATES

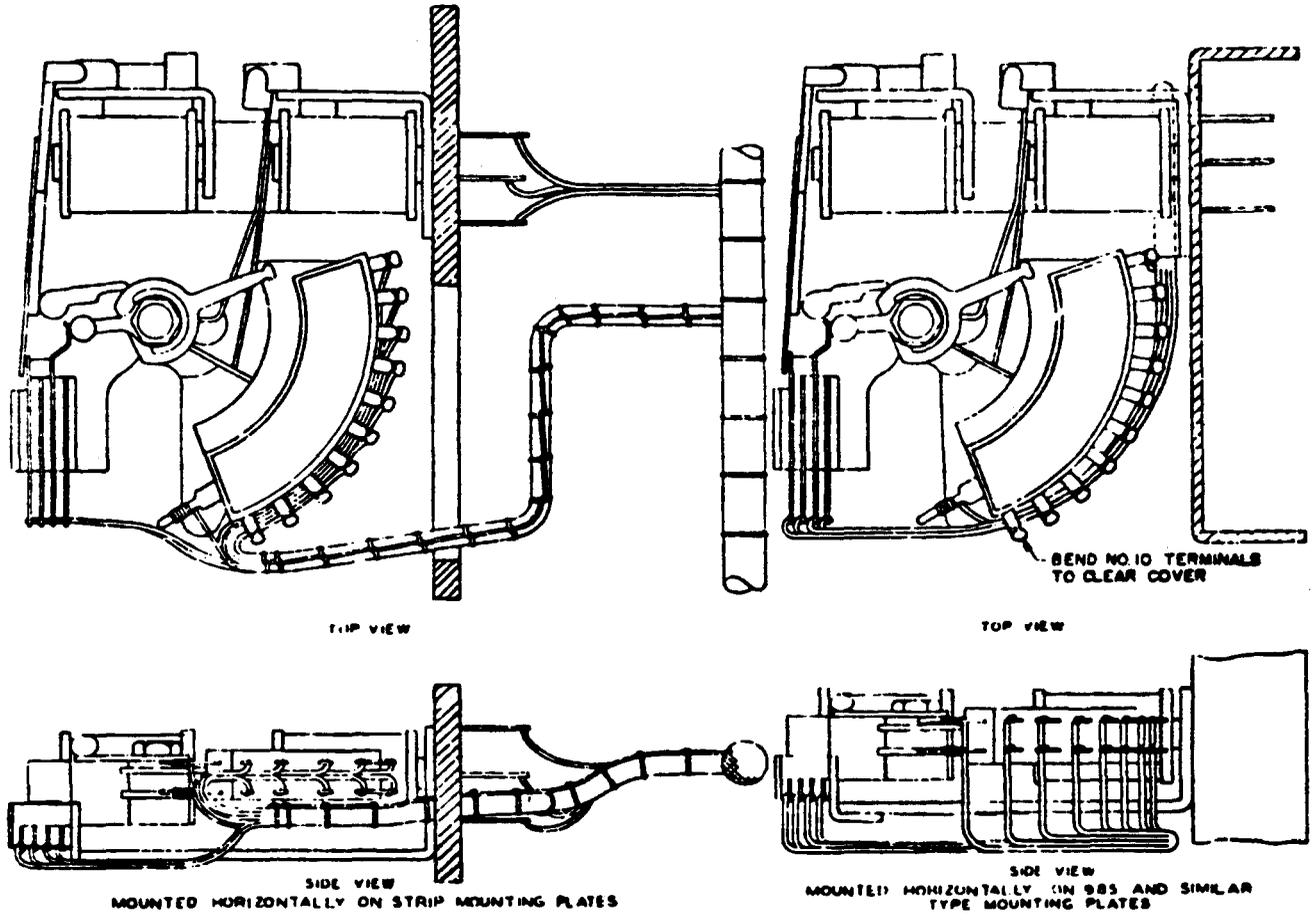
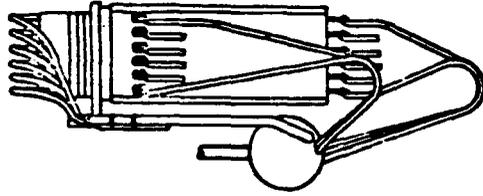
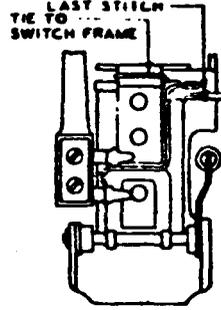


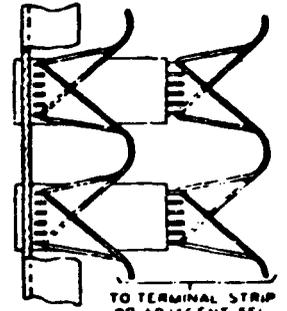
FIG. 64 SELECTORS, 204 AND SIMILAR TYPES - MOUNTED HORIZONTALLY



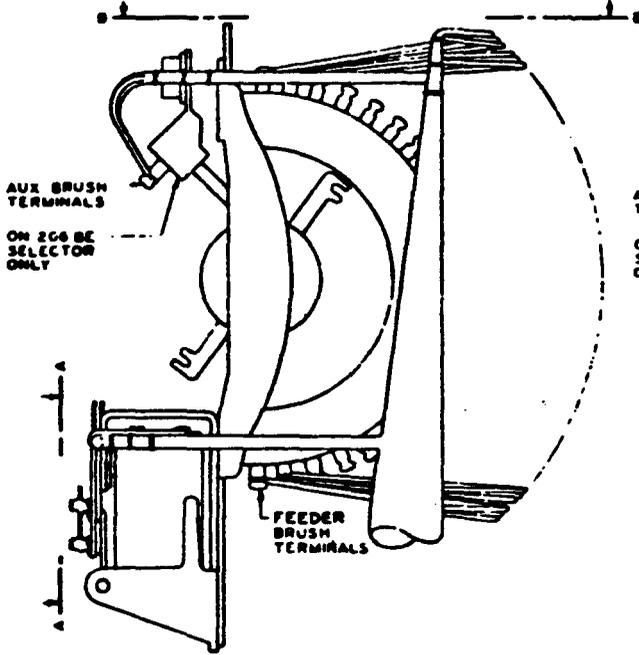
VIEW B-B



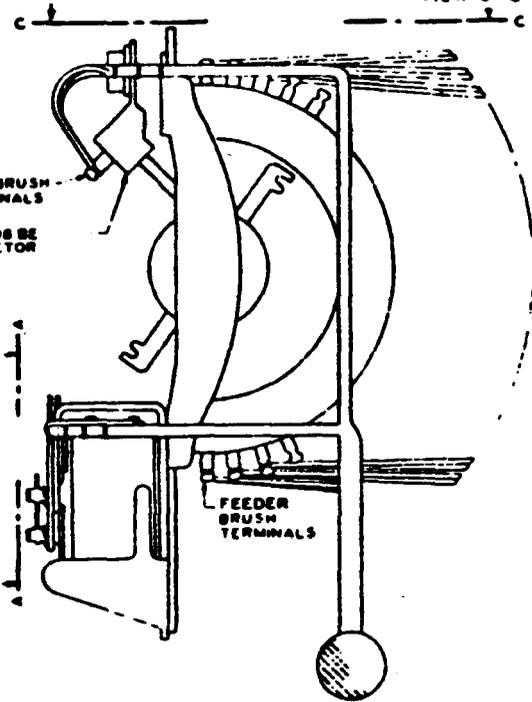
VIEW A-A



METHOD OF WIRING MULT BETWEEN SEL SWITCHES  
VIEW C-C



VERTICAL WIRING TO BANKS



BANKS MULTIPLIED HORIZONTALLY

FIG. 65 SELECTORS, 206 AND SIMILAR TYPES

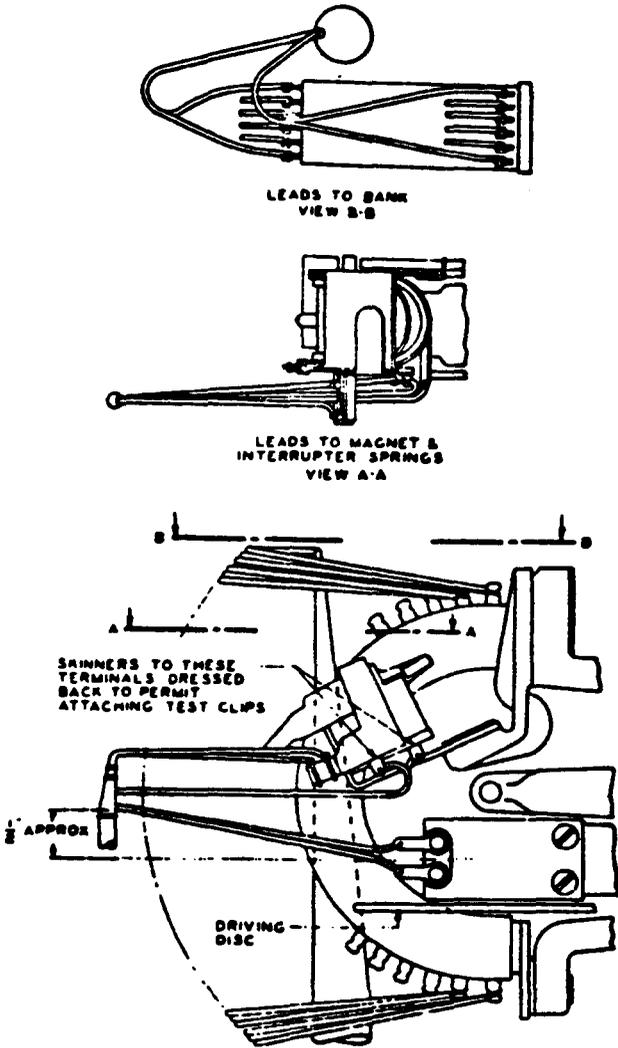


FIG. 66 SELECTORS, 207A, B, C, AND SIMILAR TYPES

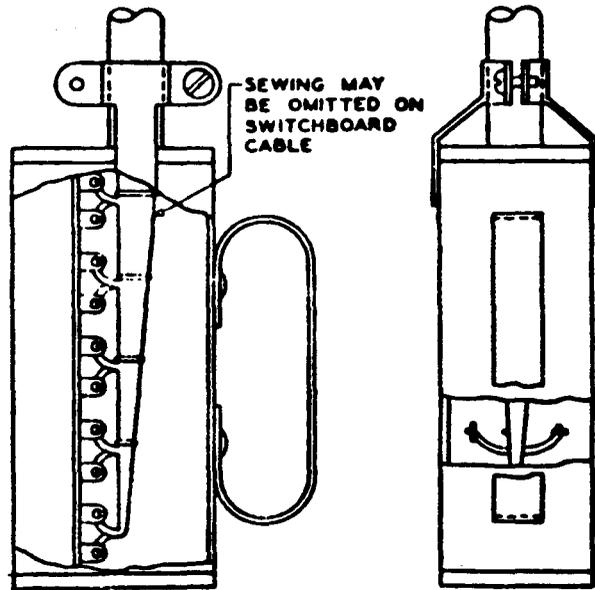
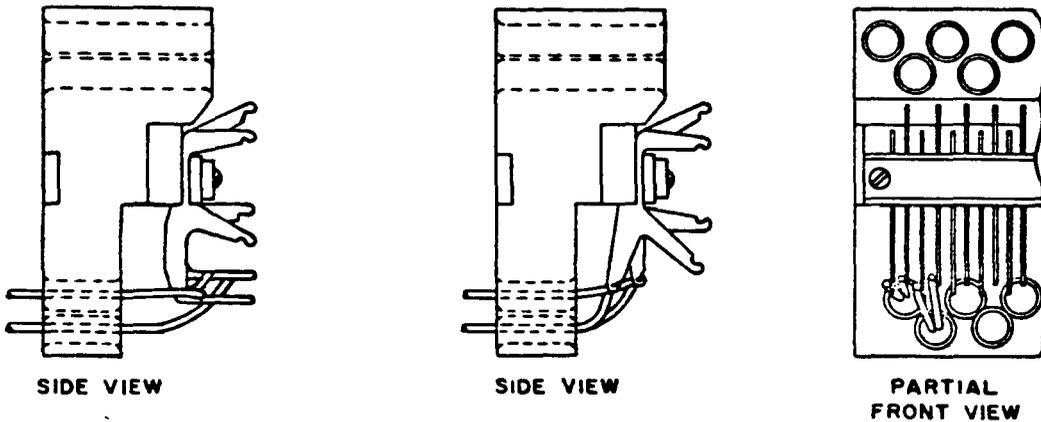


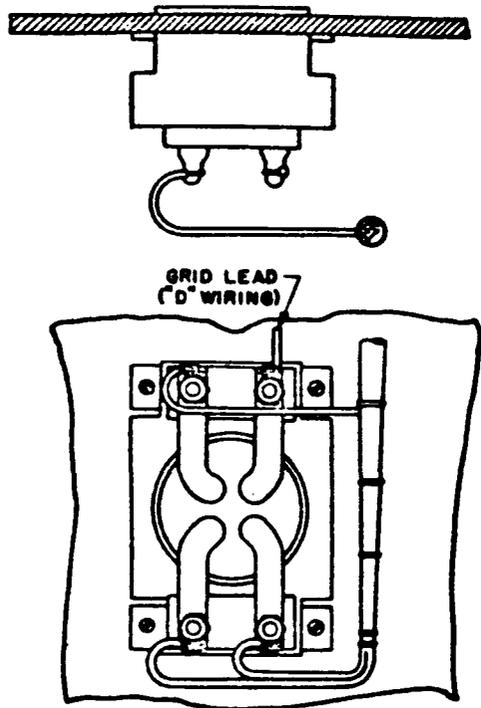
FIG. 67 SOCKET, H. B. JONES CO.



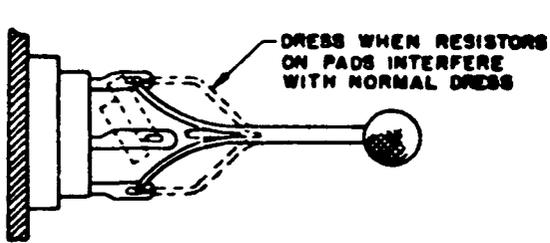
DRESS TO LOWER  
TERMINALS ARRANGED  
FOR SOLDERLESS  
WRAPPING

DRESS TO NOTCHED TERMINALS

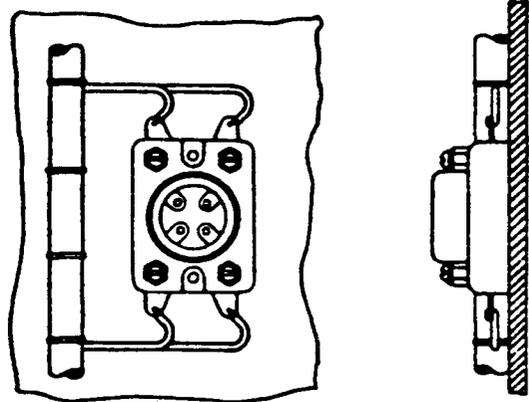
FIG. 68 STRIPS, TERMINAL - 65, 182, AND SIMILAR TYPES



100R ELECTRON TUBE SOCKET

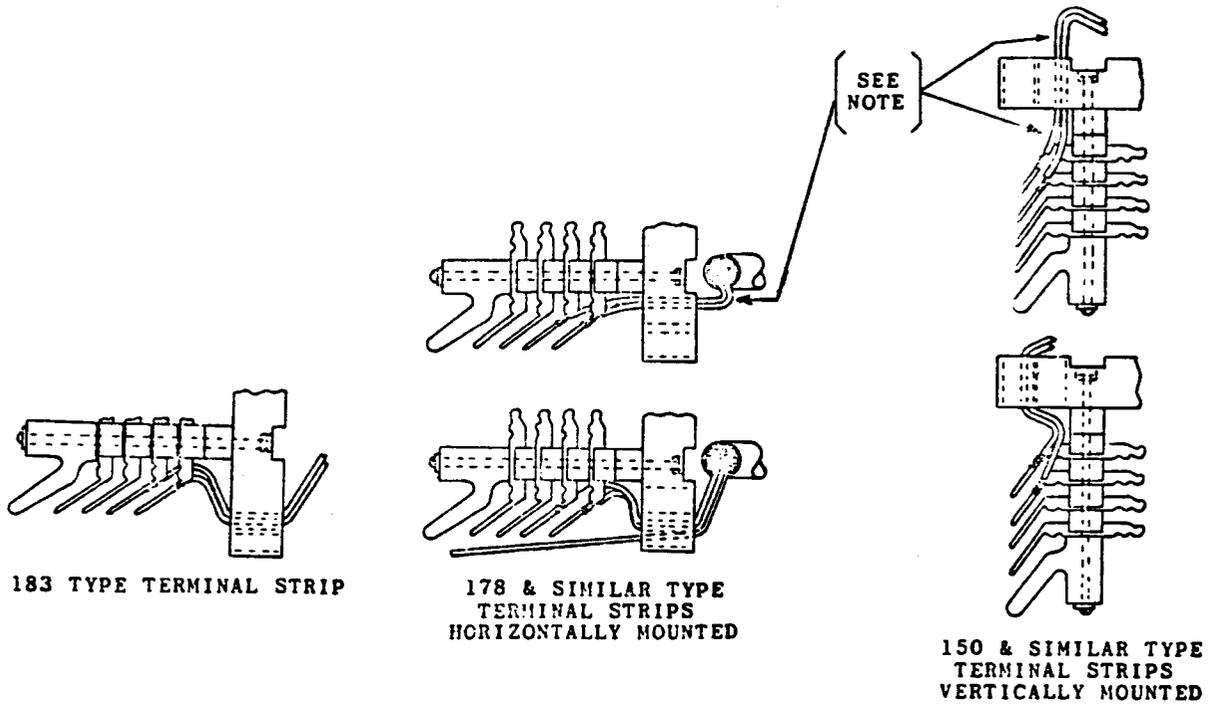


141, 143, 144, KS-14226,  
AND SIMILAR TYPES  
ELECTRON TUBE SOCKETS



125B ELECTRON TUBE SOCKET

FIG. 69 SOCKETS, ELECTRON TUBE - 100, 125, 141, 143, 144, KS-14226, AND SIMILAR TYPES



**NOTE:** Where the location of the inner hole of a fanning strip will not permit the slack of the leads, fanned through that hole, to be dressed into the angle formed by the fanning strip and the pile up, dispose of the slack at the rear of the fanning strip. Where this is not practical fan the leads through the outer holes.

FIG. 70 STRIPS, TERMINAL - 150, 178, 183, 198, AND SIMILAR TYPES (ARRANGED FOR SOLDERLESS WRAPPING)

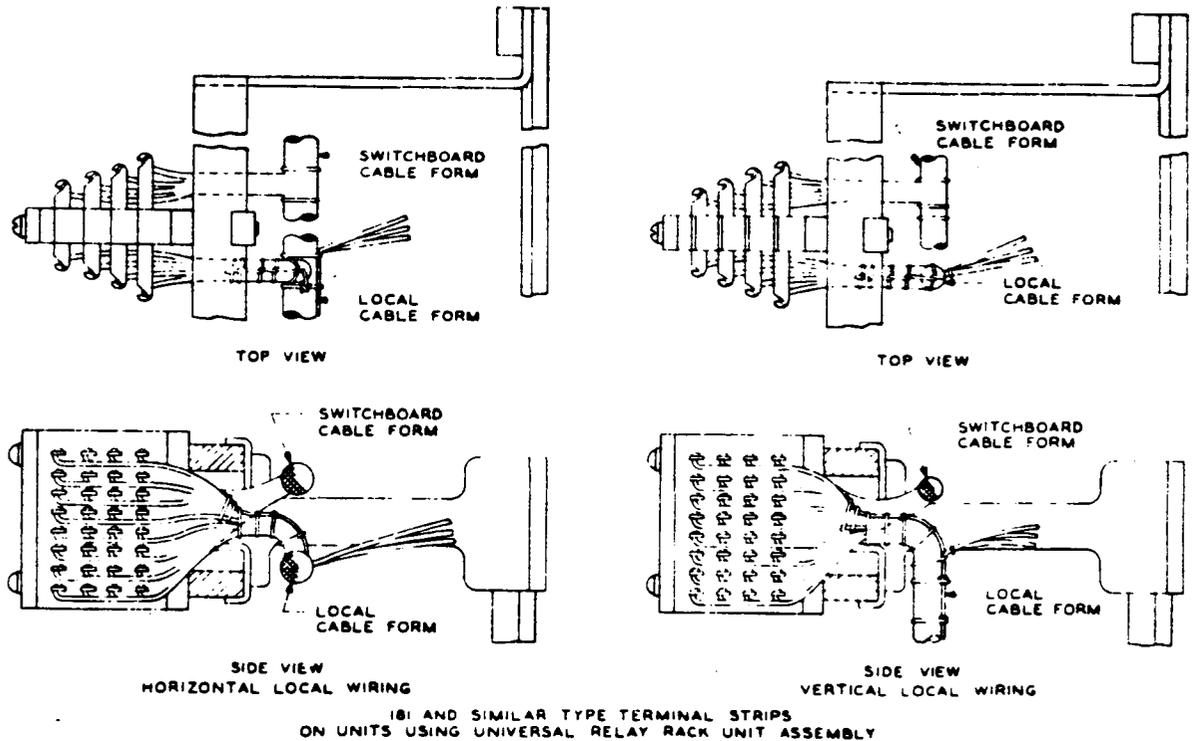
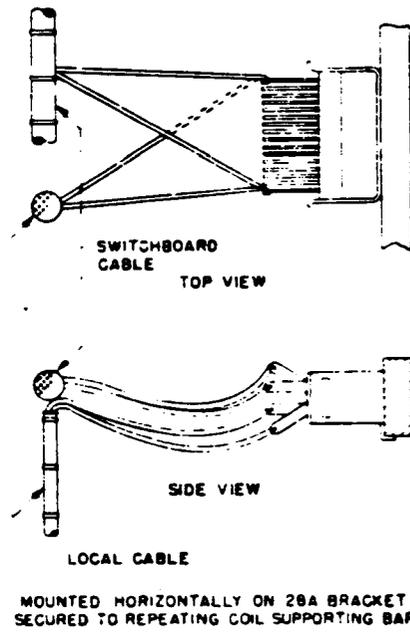
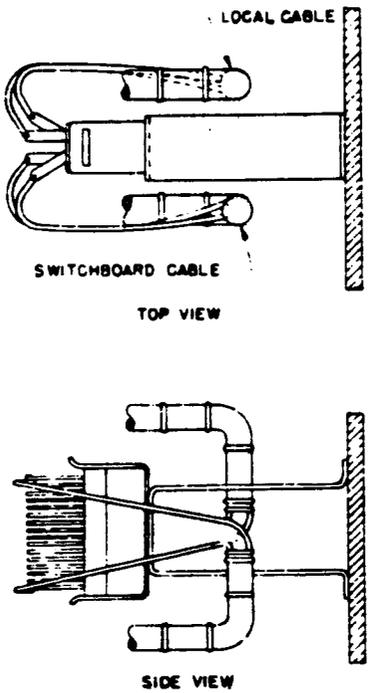
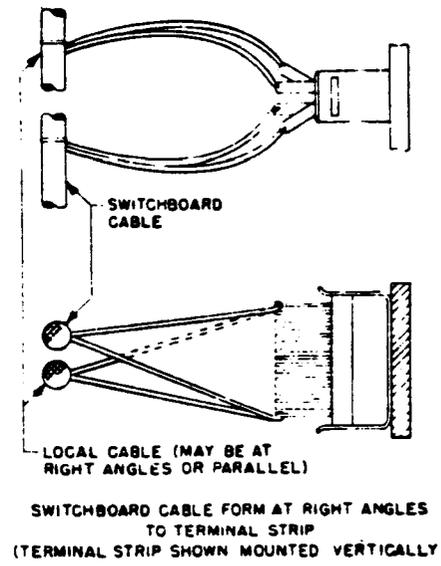
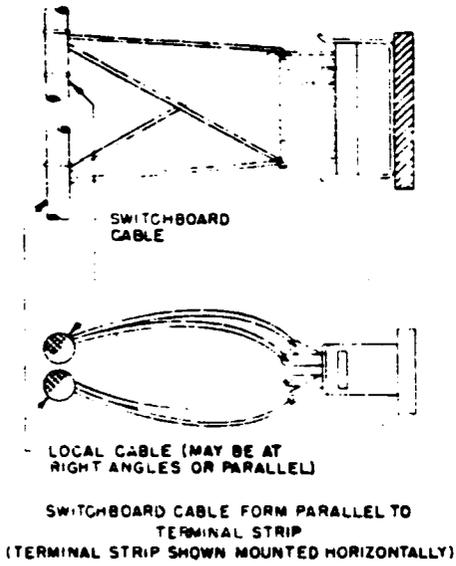
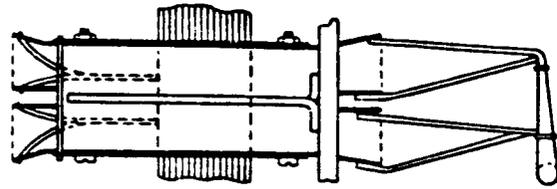


FIG. 71 STRIPS, TERMINAL - 181 AND SIMILAR TYPES

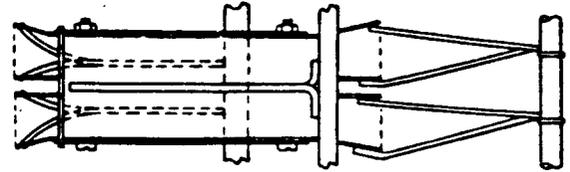


MOUNTED ON 28B BRACKET AND MOUNTING  
DETAIL P-411766 FOR PANELS

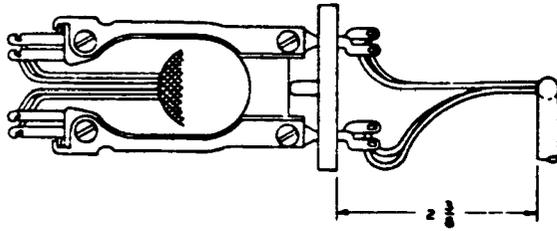
FIG. 72 STRIPS, TERMINAL - 203A AND SIMILAR TYPES ON  
28 AND SIMILAR TYPE BRACKETS



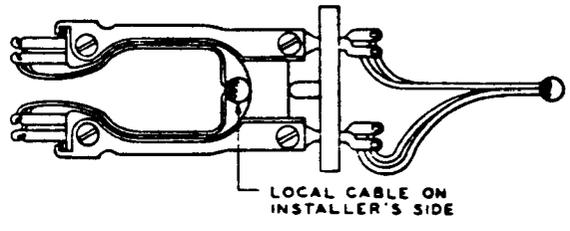
PLAN VIEW



PLAN VIEW



SIDE VIEW

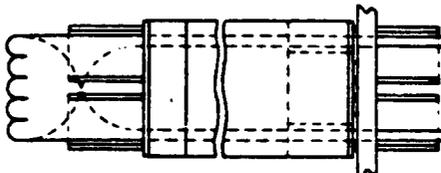


SIDE VIEW

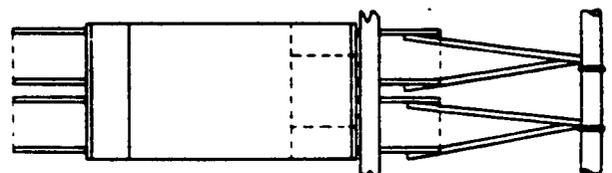
VERTICAL LOCAL CABLE ARMS

HORIZONTAL LOCAL CABLE ARMS

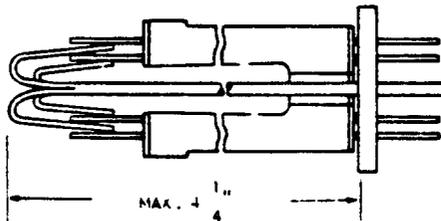
224 TERMINAL STRIP (SOLDER TYPE TERMINAL)



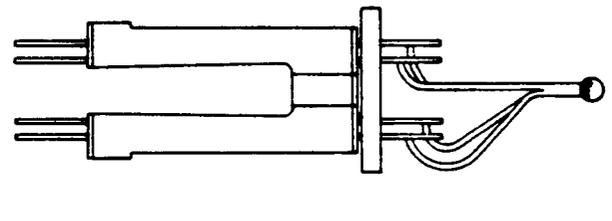
PLAN VIEW



PLAN VIEW



SIDE VIEW



SIDE VIEW

HORIZONTAL SWITCHBOARD CABLE ARMS

HORIZONTAL LOCAL CABLE ARMS

224 TERMINAL STRIP (SOLDERLESS TYPE TERMINAL)

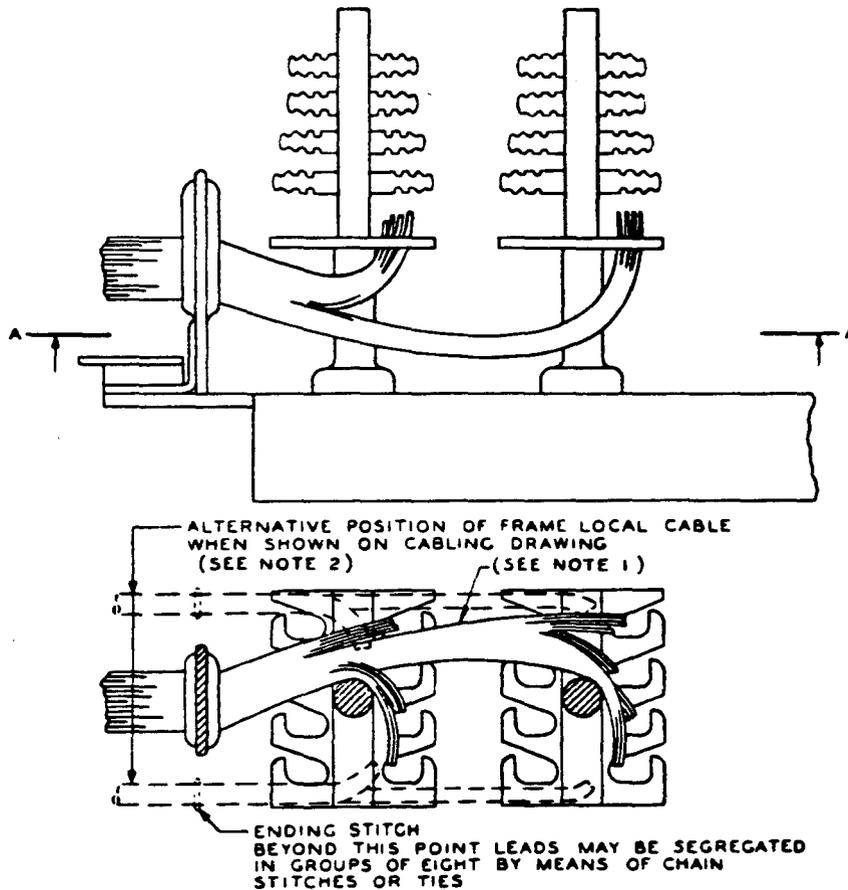
NOTES

- 1 WHERE LOCAL CABLE FORMS ARE TERMINATED ON THE FRONT (APPARATUS SIDE) OF THE TERMINAL STRIP, AND TWO CABLE HOLES ARE PROVIDED FOR EACH TERMINAL STRIP, THE LEADS TO THE LEFT HALF OF THE TERMINAL STRIP, TOP AND BOTTOM TERMINALS, SHALL BE RUN THROUGH THE LEFT HOLE AND THE LEADS TO THE RIGHT HALF OF THE TERMINAL STRIP, TOP AND BOTTOM TERMINALS, SHALL BE RUN THROUGH THE RIGHT HOLE, AS VIEWED FROM THE REAR OF THE BAY.
- 2 WHERE SWITCHBOARD CABLE LEADS ARE TERMINATED ON THE FRONT (APPARATUS SIDE) OF THE TERMINAL STRIP, AND TWO CABLE HOLES ARE PROVIDED FOR EACH TERMINAL STRIP, THE LEADS TO THE TOP ROW OF TERMINALS, SHALL BE RUN THROUGH THE LEFT HOLE AND THE LEADS TO THE BOTTOM ROW OF TERMINALS SHALL BE RUN THROUGH THE RIGHT HOLE, AS VIEWED FROM THE REAR OF THE BAY. WHEN LOCAL CABLE LEADS HAVE BEEN TERMINATED ON THE APPARATUS SIDE OF THE TERMINAL STRIP BY THE SHOP, THE SWITCHBOARD CABLE LEADS SHOULD BE DIVIDED BETWEEN THE TWO HOLES IN THE SAME MANNER AS USED BY THE SHOP.

FIG. 73 STRIPS, TERMINAL - 224 TYPE

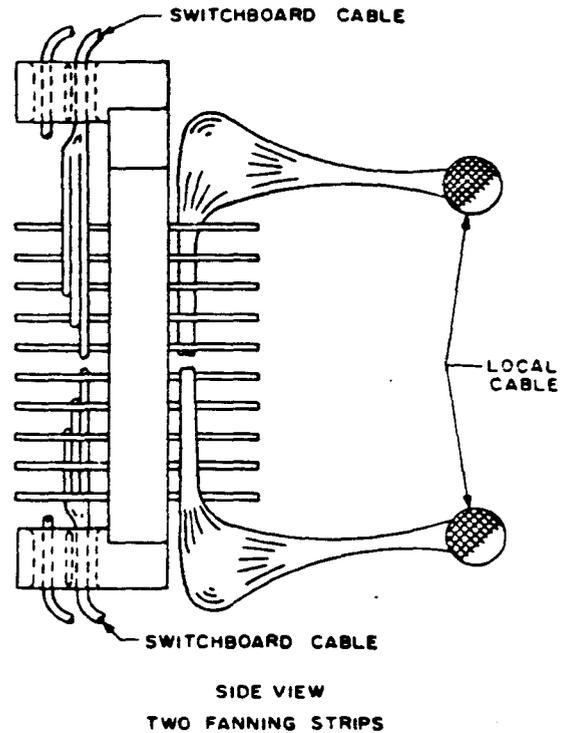
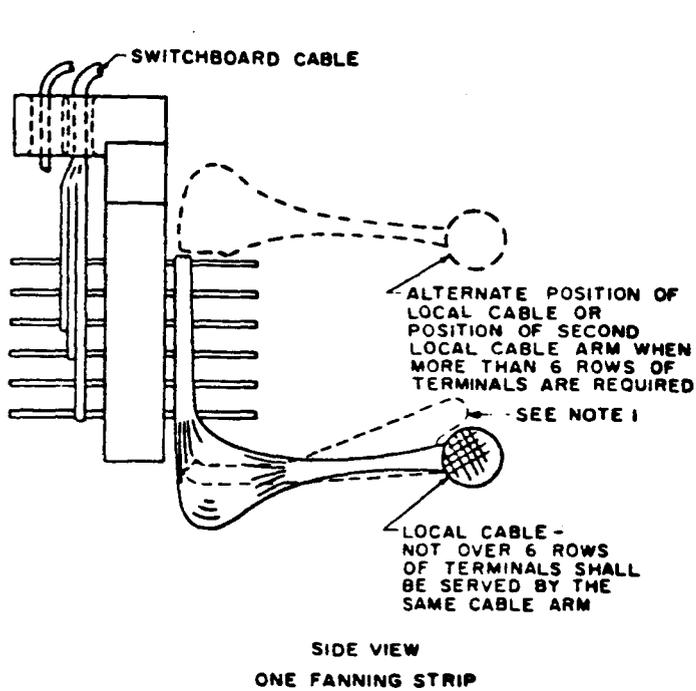
## NOTES:

1. WHERE NECESSARY TO AVOID EXCESSIVE PILEUPS OF WIRES, LEADS CONNECTED TO LOWER HALF OF TERMINAL STRIP MAY BE RUN UNDER THE TERMINAL STRIP SUPPORT.
2. WHEN A HORIZONTAL SEWED FORM IS USED, THE ARM SHALL BE RUN ABOUT 1/2" IN BACK OF THE FANNING STRIP, EITHER ABOVE OR BELOW THE TERMINAL STRIP SUPPORT, DEPENDING ON LOCAL WIRING CONDITIONS. THE SKINNERS SHOULD BE RUN DIRECTLY FROM THE HORIZONTAL ARM TO THE TERMINAL STRIP WITHOUT SEWING.

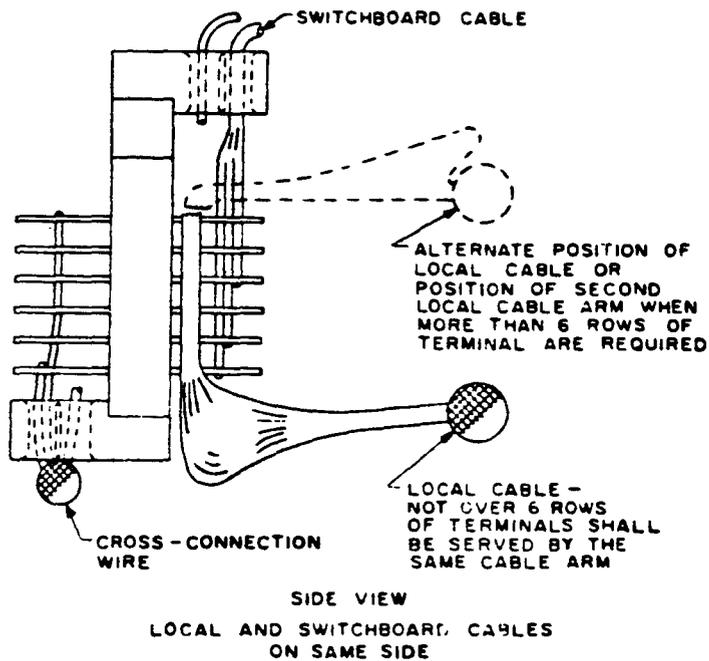


SECT. A-A

FIG. 74 STRIPS, TERMINAL - 227 AND SIMILAR TYPES - INTRAFRAME  
LOOSE WIRING OR FRAME LOCAL CABLE



LOCAL AND SWITCHBOARD CABLE ON OPPOSITE SIDE



NOTES  
1 ALTERNATE DRESS WHEN SKINNERS INTERFERE WITH EQUIPMENT MOUNTED BELOW THE TERMINAL STRIP.

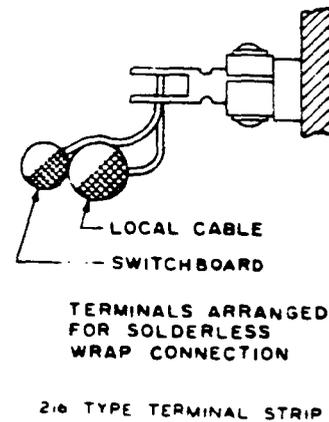


FIG. 75 STRIPS, TERMINAL - 216, 217H, 251, 252, 262, BB, BK, AND SIMILAR TYPES - SOLDERLESS WRAPPED TERMINALS

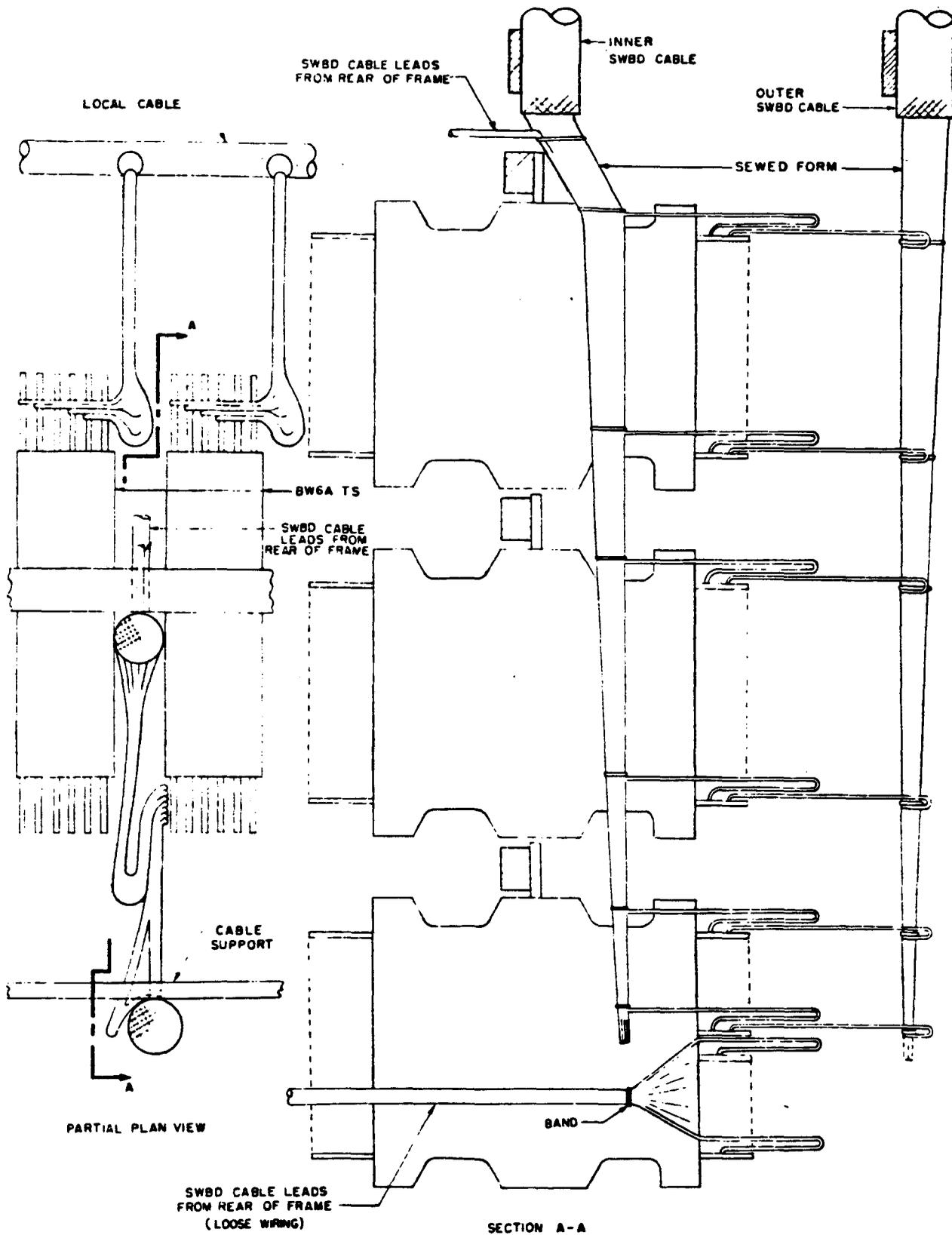


FIG. 76 STRIPS, TERMINAL - BW6A - INCOMING OR OUTGOING CABLES - SEWED FORM

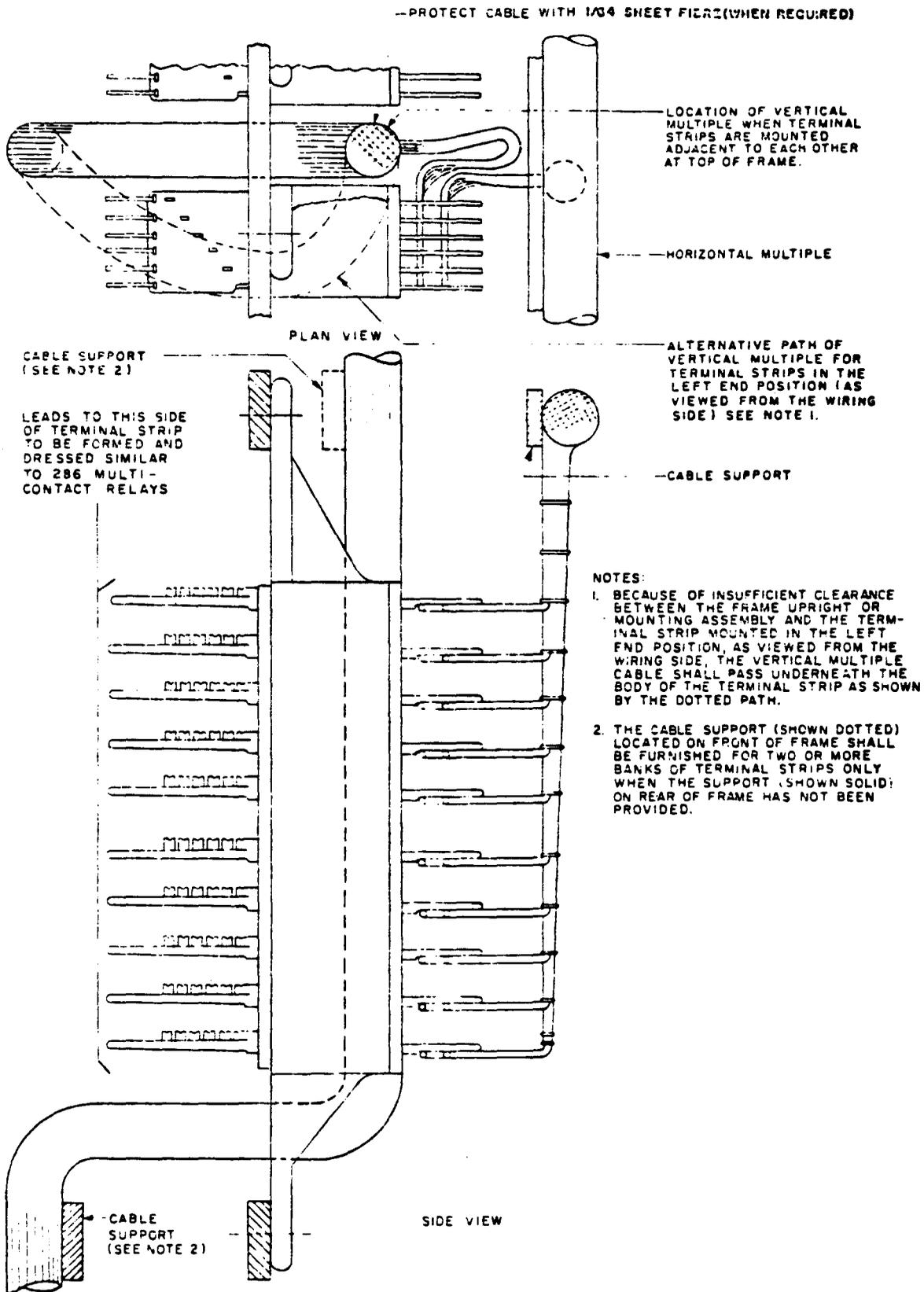
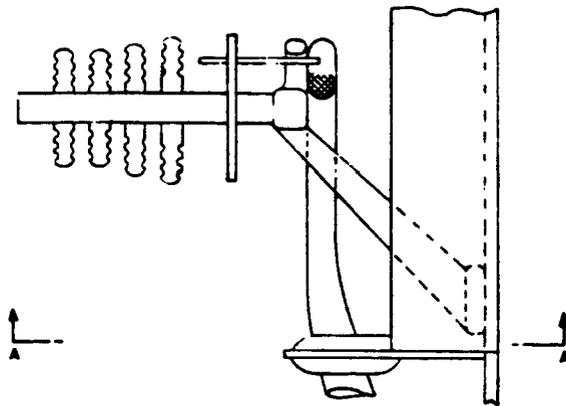
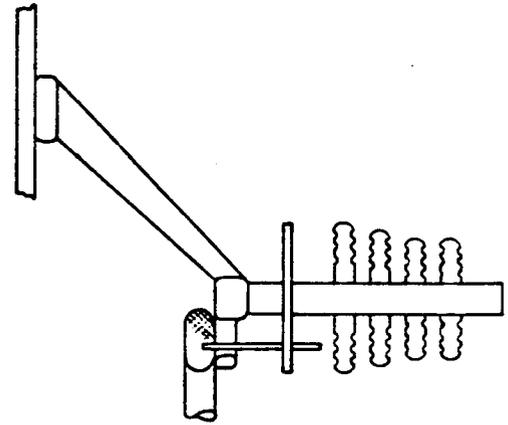


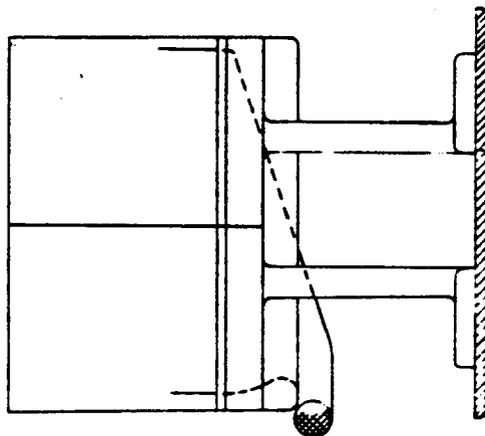
FIG. 77 STRIPS, TERMINAL - CA6A - MOUNTED AT TOP OF FRAME



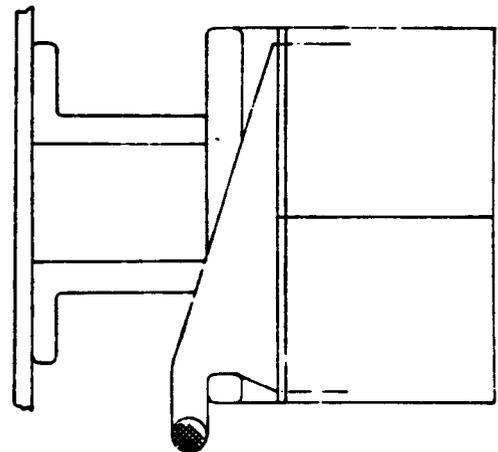
PLAN VIEW



PLAN VIEW



SECT A-A  
BULB OR CHANNEL TYPE BAYS



END VIEW  
DUCT TYPE BAYS

FIG. 78 STRIPS, TERMINAL - C4A - SINGLE OR DOUBLE MOUNTED (DOUBLE MOUNTED SHOWN) - SWITCHBOARD CABLE

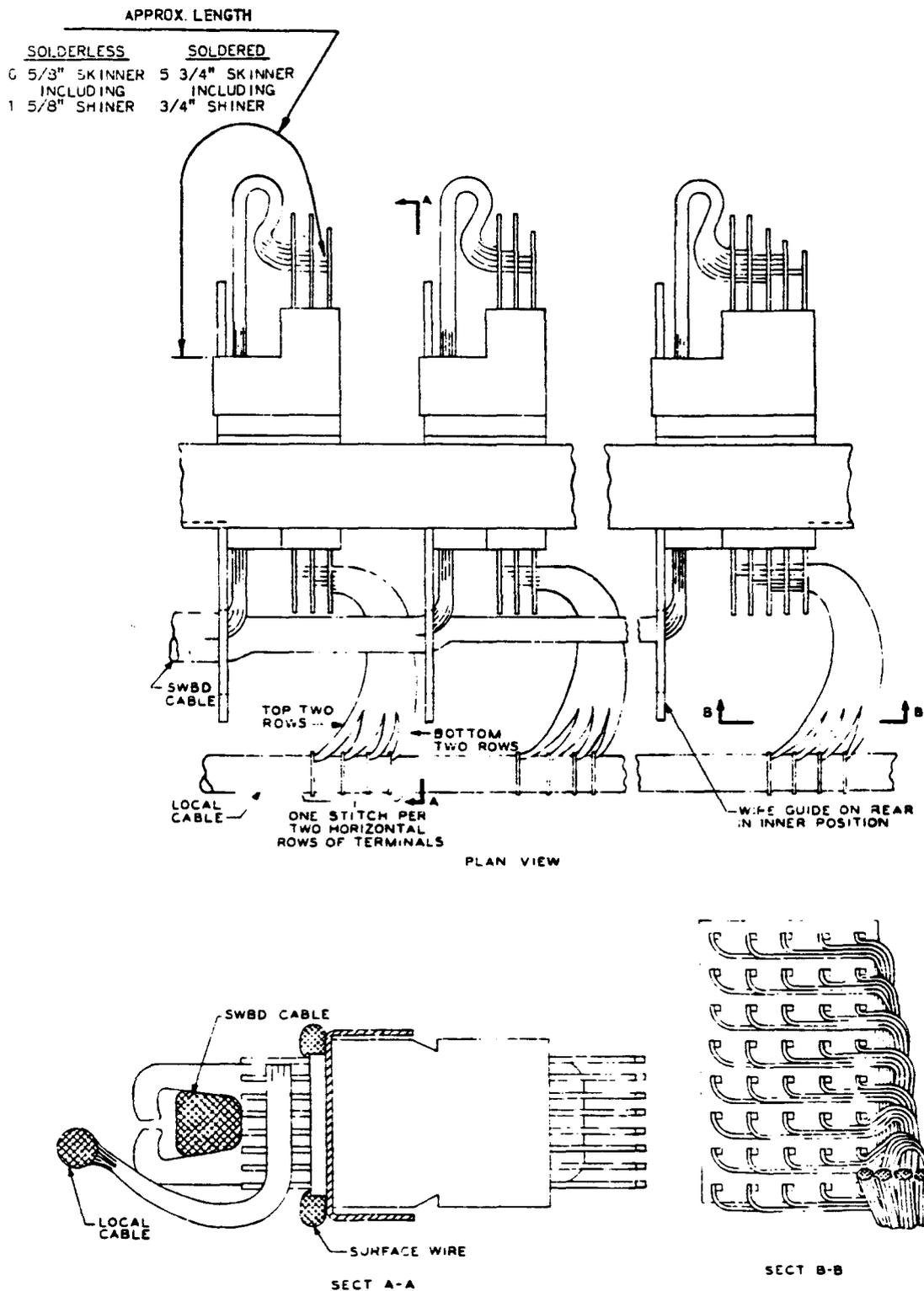
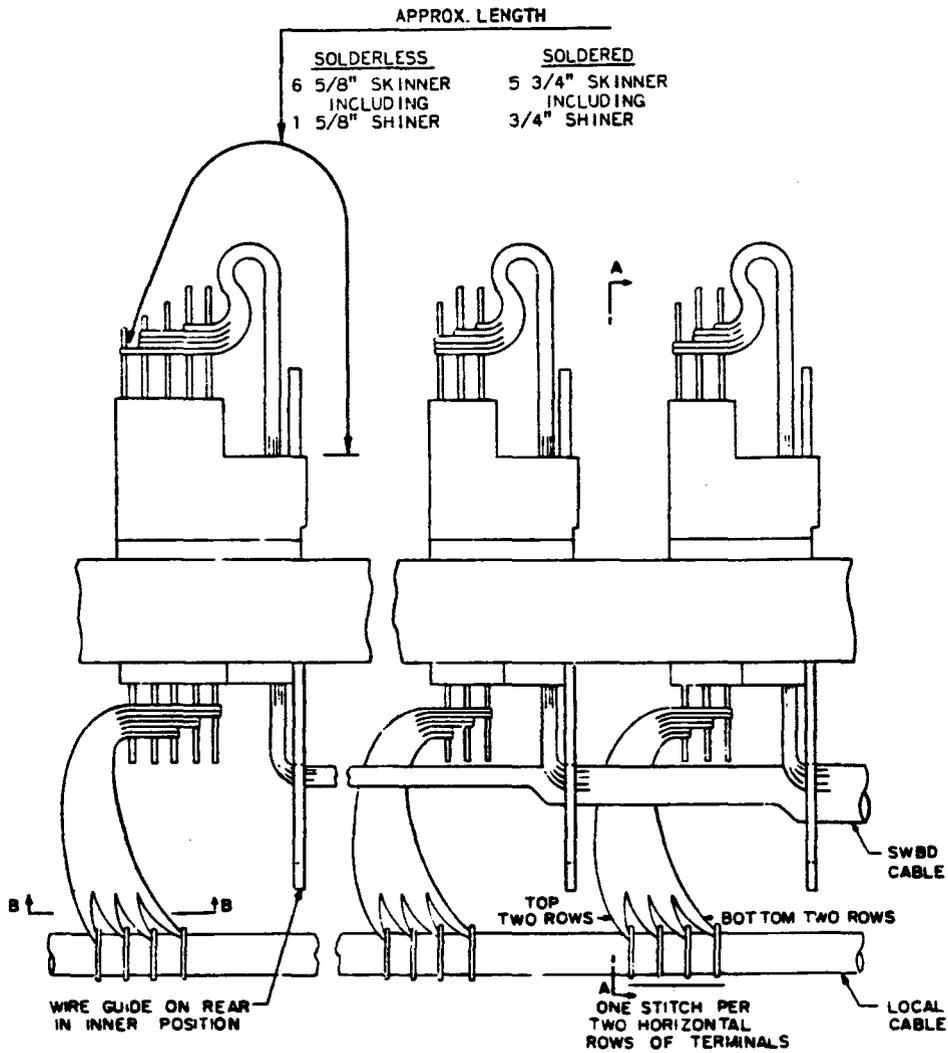


FIG. 79 STRIPS, TERMINAL - D TYPE - LOCAL AND SWITCHBOARD CABLE (T.S. MOUNTED WITH WIRING THROAT TOWARDS LEFT SIDE LOOKING AT REAR OF FRAME)



PLAN VIEW

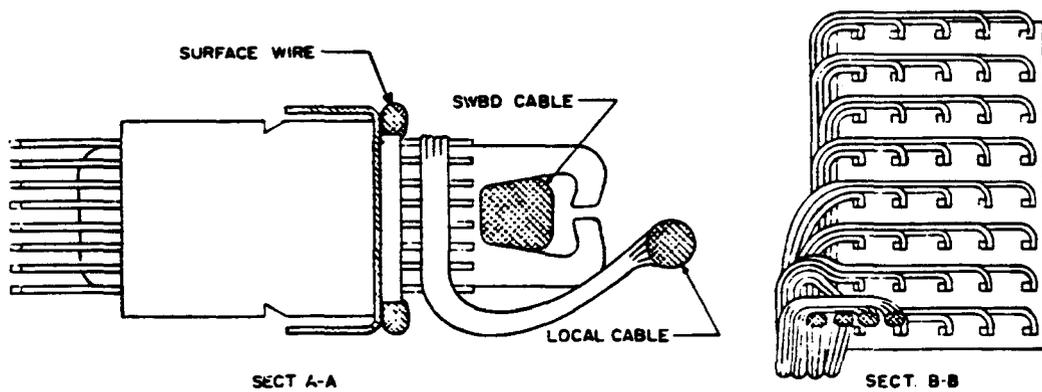


FIG. 80 STRIPS, TERMINAL - D TYPE - LOCAL AND SWITCHBOARD CABLES (T.S. MOUNTED WITH WIRING THROAT TOWARDS RIGHT SIDE LOOKING AT REAR OF FRAME)

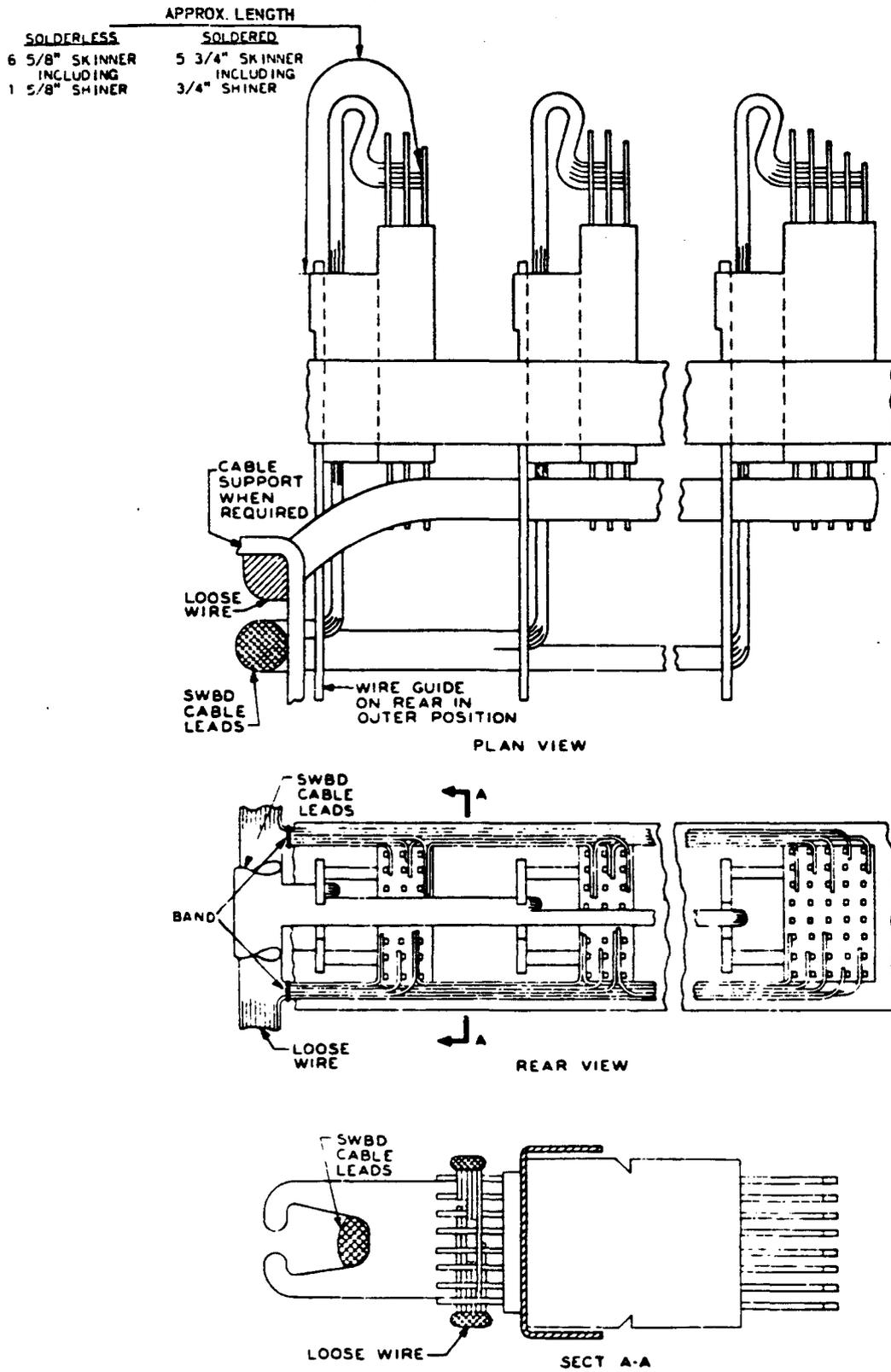
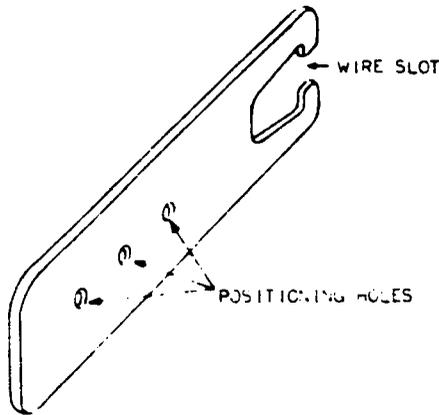


FIG. 81 STRIPS, TERMINAL - D TYPE - LOOSE WIRING AND SWITCHBOARD CABLE

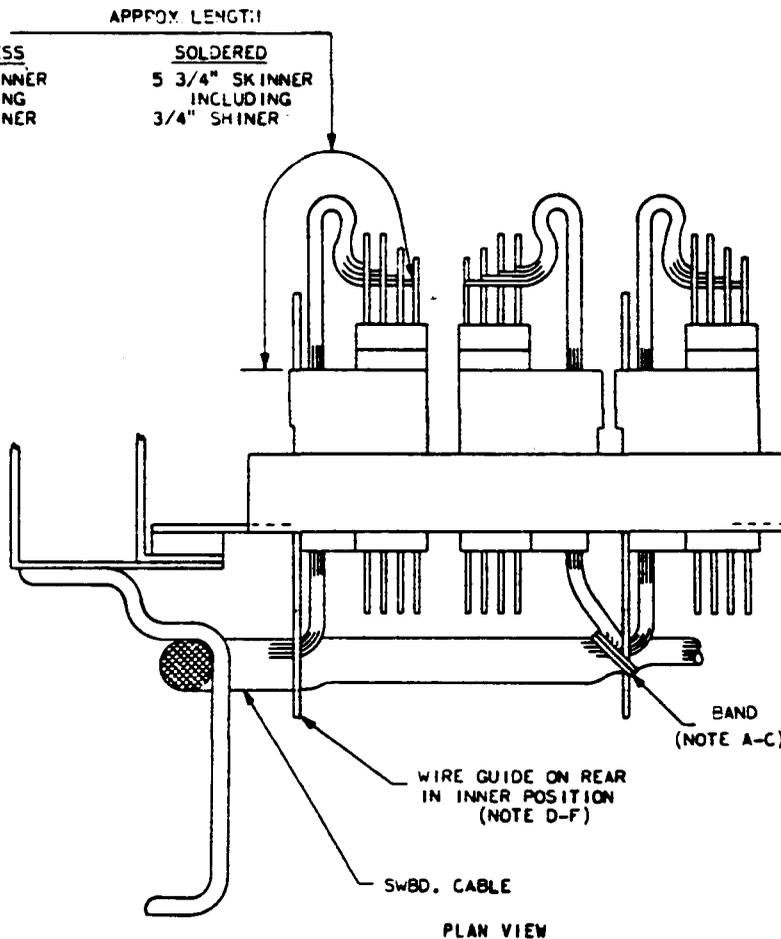
NOTES



"D" TYPE TERMINAL STRIP WIRE GUIDE

APPROX. LENGTH:

SOLDERLESS	SOLDERED
6 5/8" SKINNER INCLUDING 1 5/8" SHINER	5 3/4" SKINNER INCLUDING 3/4" SHINER



- (A) WHERE WIRE GUIDES ARE NOT PROVIDED OR WHERE THE WIRE GUIDE DOES NOT PROVIDE SUPPORT AT A BREAKOUT TO A TERMINAL STRIP PLACE BAND AROUND WIRES TO ADJACENT WIRE GUIDE.
- (B) ALSO, WHEN THE DISTANCE BETWEEN WIRE GUIDES EXCEEDS 8", PLACE ADDITIONAL BAND OR BANDS EQUALLY SPACED BETWEEN THE WIRE GUIDES AT DISTANCES NOT EXCEEDING 8" BETWEEN THE WIRE GUIDES AND THE BANDS SO THAT DISTANCE BETWEEN ANY WIRE GUIDES OR BANDS DO NOT EXCEED 8".
- (C) ALL BANDS SHOULD BE MADE WITH A STARTING STITCH USING TWO STRANDS OF NO. 12 TWINE ENDED IN A SQUARE KNOT.
- (D) WHERE A TERMINAL STRIP IS SERVED BY BOTH SWITCHBOARD AND LOCAL CABLE THE WIRE GUIDE IS IN "INNER" POSITION AS IS THE CASE IN THIS FIGURE.
- (E) WHERE A TERMINAL STRIP IS SERVED BY LOCAL CABLE THAT IS LOOSE WIRING THE WIRE GUIDE IS IN THE "OUTER" POSITION AS SHOWN IN FIGURE 31.
- (F) THERE ARE TWO TYPES OF WIRE GUIDES AVAILABLE P-10A911, SINGLE END SHOWN IN SKETCH B AND P-16A191, DOUBLE END GUIDE

FIG. 82 STRIPS, TERMINAL, D TYPE, TERMINAL STRIP ARRANGEMENT WHEN WIRE GUIDE IS OMITTED

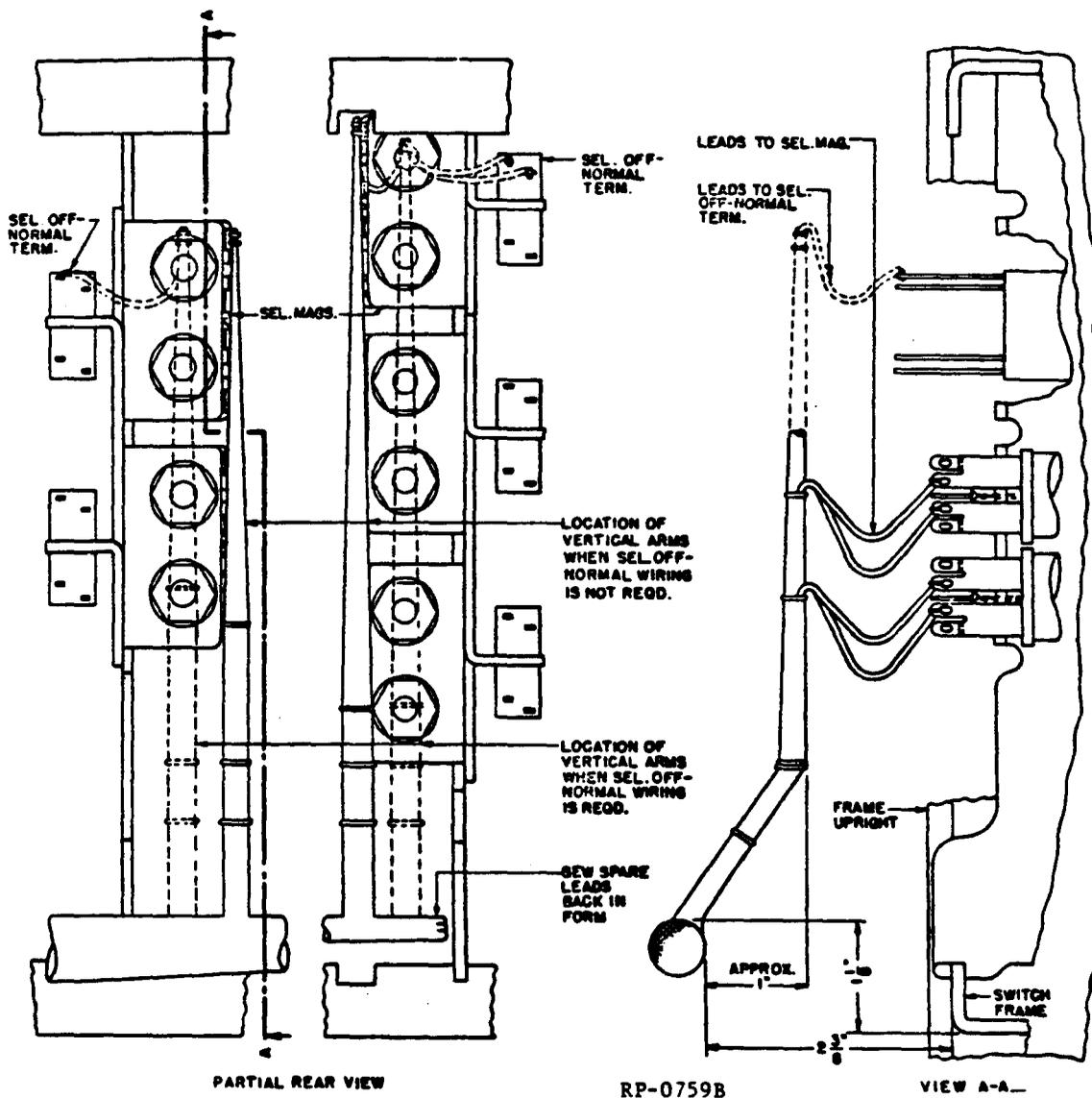
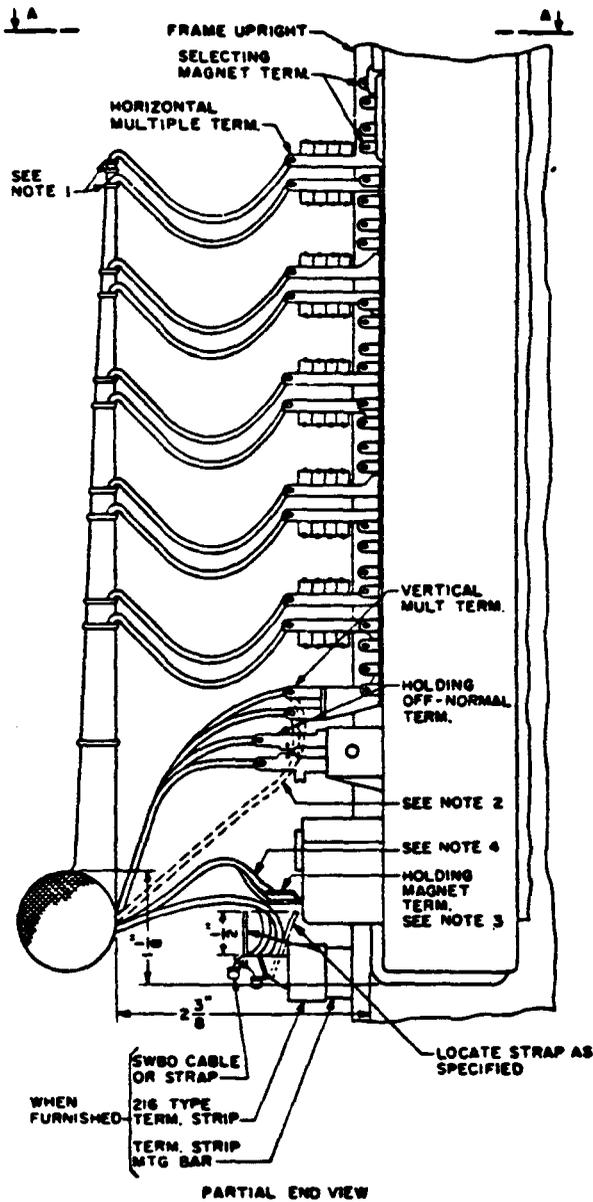
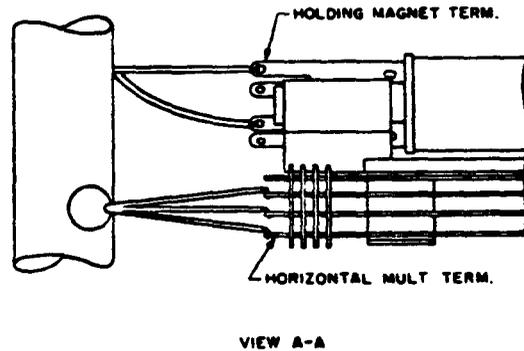


FIG. 83 SWITCHES, CROSSBAR - 324 AND SIMILAR TYPES - SOLDER-TYPE TERMINALS, SELECT MAGNETS AND SELECTING OFF-NORMAL SPRING TERMINALS



NOTES:

1. SINGLE STITCH MAY BE USED ON FRAMES WHEN EXTRA STITCH IS NOT REQUIRED TO SEPARATE LEADS OF SAME COLOR.
2. USE THIS DRESS WHEN HOLDING OFF-NORMAL TERMINALS ARE NOT FURNISHED.
3. IT IS PERMISSIBLE TO RESORT TO RIGHT HAND SOLDERING ON THESE TERMINALS WHEN THE FRAME IS IN A HORIZONTAL POSITION. THIS WILL RESULT IN BOTTOM SOLDERING WHEN THE FRAME IS IN ITS ERECTED POSITION.
4. HOLD MAGNET LEADS SHALL BE DRESSED DOWN WHEN TERMINAL STRIP IS NOT FURNISHED.
5. LEADS SERVING VERTICAL MULTIPLE TERMINALS 0 & 1 AND HOLD MAGNETS 0 & 1 MAY BE COMBINED INTO ONE BREAKOUT AND SECURED WITH A SINGLE BAND OR STITCH. THIS ALSO APPLIES TO VERTICAL UNITS 2 & 3, 4 & 5, ETC.



RP-0759C

FIG. 84 SWITCHES, CROSSBAR - 324 AND SIMILAR TYPES - (SOLDER-TYPE TERMINALS), SINGLE HORIZONTAL MAIN FORM

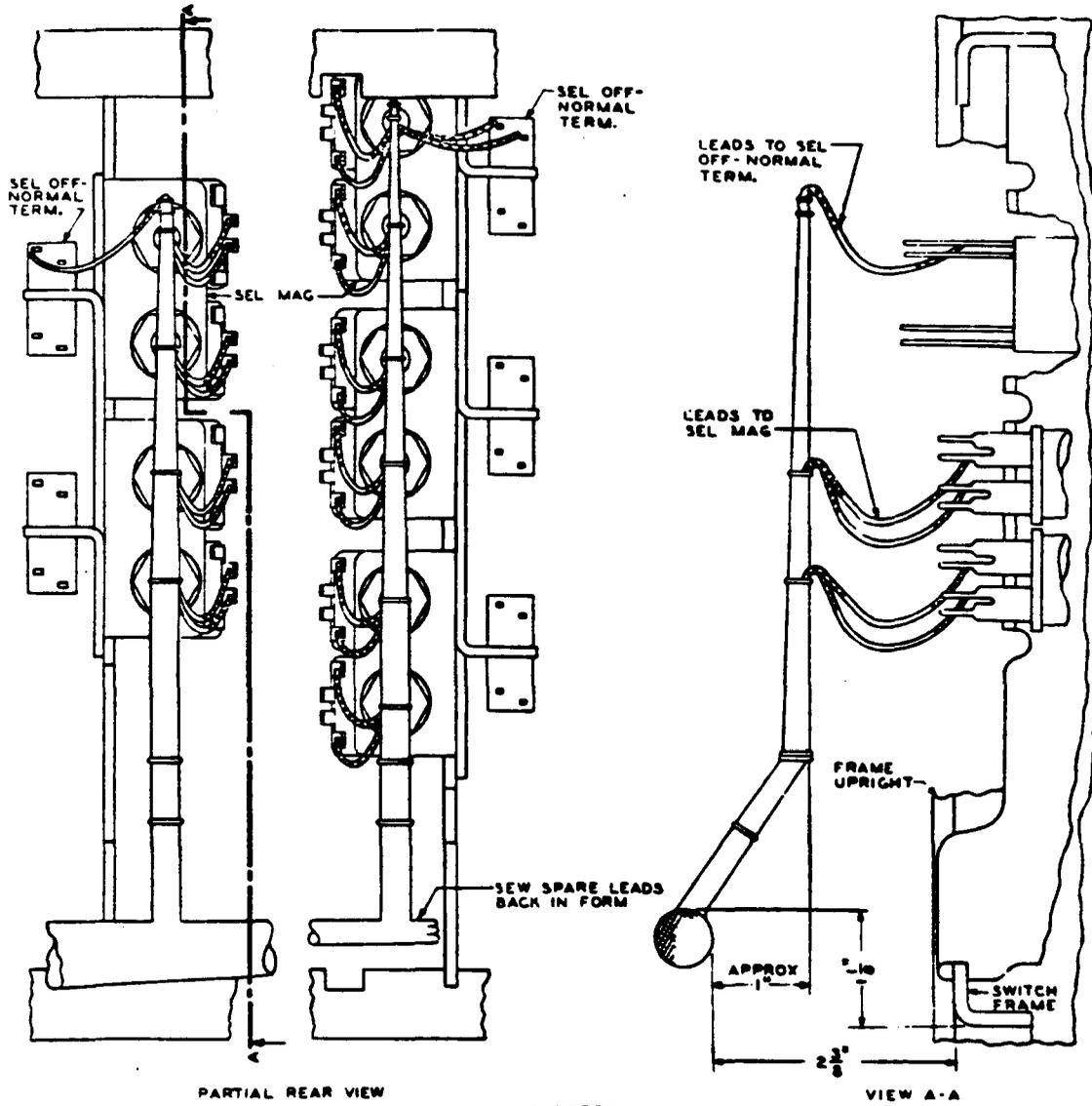
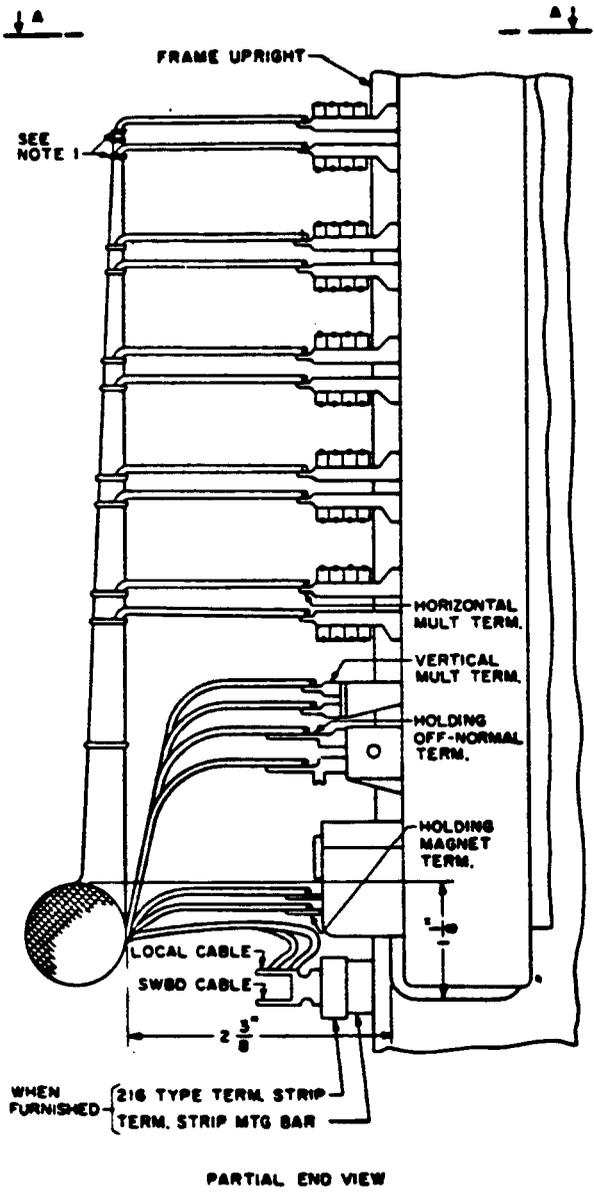
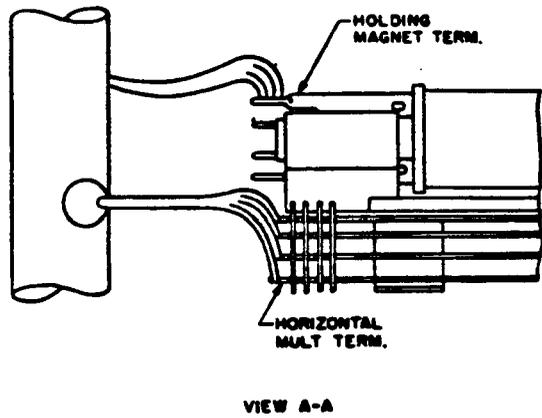


FIG. 85 SWITCHES, CROSSBAR - 324 AND SIMILAR TYPES - (WRAP-TYPE TERMINALS), SELECT MAGNETS AND SELECTING OFF-NORMAL SPRING TERMINALS



NOTES:  
 1. SINGLE STITCH MAY BE USED ON FRAMES WHEN EXTRA STITCH IS NOT REQUIRED TO SEPARATE LEADS OF SAME COLOR.



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FIG. 86 SWITCHES, CROSSBAR - 324 AND SIMILAR TYPES - (WRAP-TYPE TERMINALS), SINGLE HORIZONTAL MAIN FORM

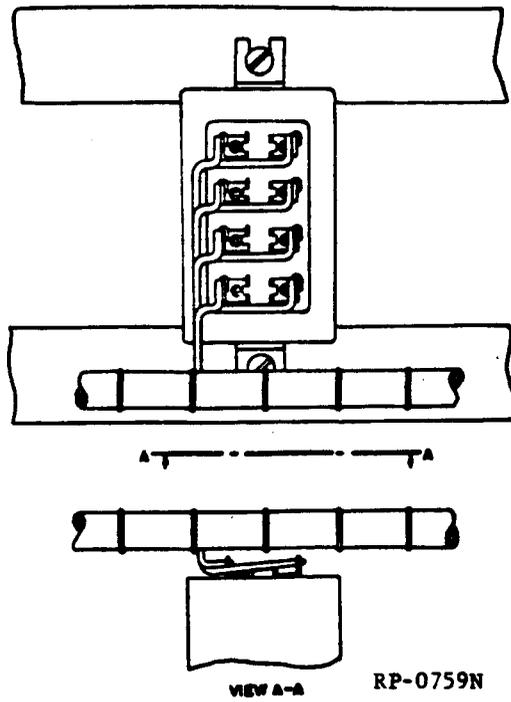


FIG. 87 TRANSFORMERS, INPUT - 213, 214, AND SIMILAR TYPES, OUTPUT - 116A AND SIMILAR TYPES

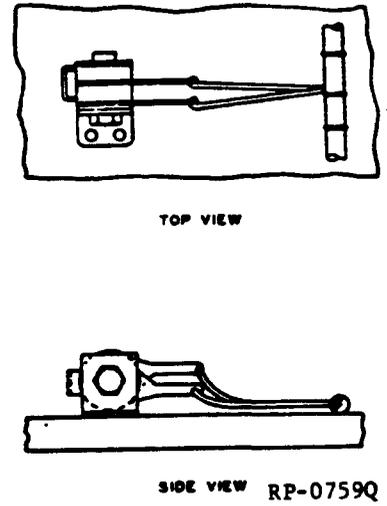


FIG. 88 VARISTORS - 3B AND SIMILAR TYPES

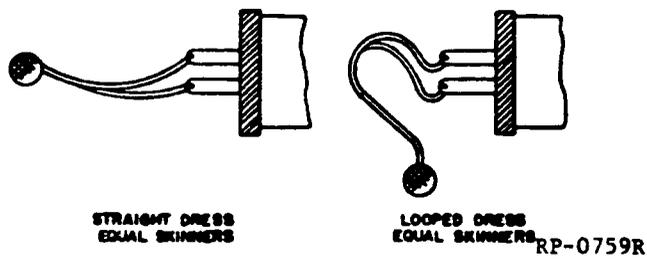


FIG. 89 VARISTORS - 33 AND SIMILAR TYPES