CABLING METHODS - CENTRAL OFFICE
RELAY RACK EQUIPMENT

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1. GENERAL

1.01 This section is issued to present the cabling procedure to be followed when cabling Relay Rack equipment.

1.02 The cabling situations described in this section are considered to be typical and should be adhered to as closely as possible when cabling like and similar equipment.

2. CABLING RELAY RACKS

Terminal Block at Top of Bay

2.01 Cables serving the relay racks are to be brought into the bay on the opposite side of the local form unless circumstances prevent cabling in this manner. See Figure 1.

2.02 The block mounting bar is equipped with self-tapped holes to permit installation of cable pins. Butt all cables 1-1/2 inches below the cable strap; form the wires across the cable pins in single form ; form wires to each block as required and fan to blocks from the main form. (Figure 1).

2.03 Band the form from the cable butt to the last block with cable ties.

2.04 Tie the shop form to the bottom side of the cable pins using two strands of lacing cord or cable ties. See Figure 2.

Terminal Block as Part of Unit

2.05 The cables shall be brought down the opposite side of the bay from the local form when the horizontal block is at the top of the unit. Butt the cable on the vertical run 1-1/2 Inches below the top cable strap and band the form with cable ties. See Figure 3.

2.06 Relay Racks with jumper rings shall be cabled as shown in Figure 4. Butt the cable l/2 inch below the cable strap.

2.07 Cables serving single circuit units equipped with terminal strips shall be brought down the side of the bay adjacent to the terminal strip it serves. Cables being terminated on the right side'of the bay shall be brought down the right upright. Cables terminating on the left side of the bay shall be brought down the left upright. The breakoffs to each terminal strip shall be banded to the main form with cable ties.

Cabling Various Relay Rack Equipment

2.08 Cable racks as illustrated in Figure 5.

2.09 Cable trafficorder patch panels or similar equipment as shown in Figure 6.

2.10 All wires of trafficorder cables shall be connected on the patch end as shown on the trafficorder patch panel termination (TCN) drawing.

2.11 Only wires covering equipped shall be connected on the equipment (or terminal block) end. In special cases where jumpers can be left off, the cables can be connected on both ends.

2.12 Cables intended for future use shall be protected as described in the 256-050 series of GTE Practices. Sufficient length shall be left to connect the wire when the unequipped positions are installed.

Detector Access Bay

2.13 Cables serving the first 3 units (blocks) of the Detector Access Bay shall be "Chicago"

stitched to the breakoff and run directly into the individual blocks. This is necessary because of the large quantity of cables and the fact that the first cable ring is below the units being served. These cables are not to be loose wires but will be butted at the base of the terminal fanning strip of the blocks they are serving. The remaining cables should be loose wire and fanned straight from the cable rings to the blocks. It is not necessary for these loose wire cables to be secured with cable ties or looped as on a regular relay rack.

3. CABLING DOUBLE SIDED (GATED) RELAY RACKS

3.01 Cables serving double sided (gated) relay racks shall be brought into the rack from the top and butted at the topmost cable ring or slat. Conductors to each unit shall be looped out from the main form and allowed a minimum of 12" of slack to allow the gate to be opened without disturbing the connection. See Figure 7.

3.02 Cables intended for future use shall be brought back up to the main form and secured with cable ties. Information regarding the method of reserving spare or unused wire is presented in the 256-050 series of GTE Practices.

4. BATTERY AND GROUND

4.01 The battery and ground cables should enter the relay rack at the point nearest the fuse panel terminals.

4.02 The battery and ground cable shall be formed and held in position with cable ties where necessary. Cable ties will be used where the cables break from the rack or power bracket.

4.03 When connecting power cables, verify at the main termination and fuse panel termination that battery and ground feeders are connected "battery to battery" and "ground to ground".

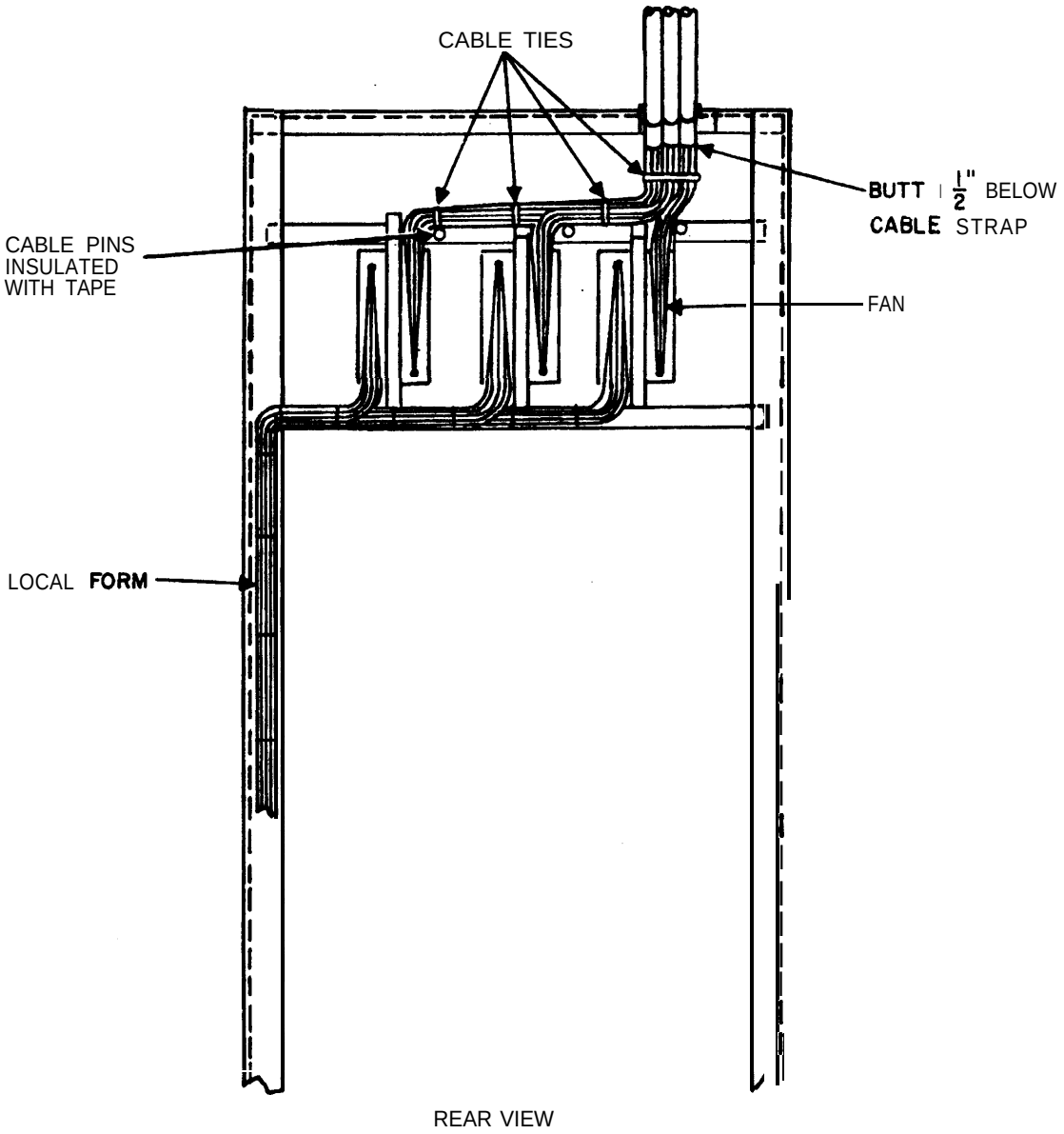


Figure 1. Cabling Relay Racks With Terminal Blocks at Top of Rack.

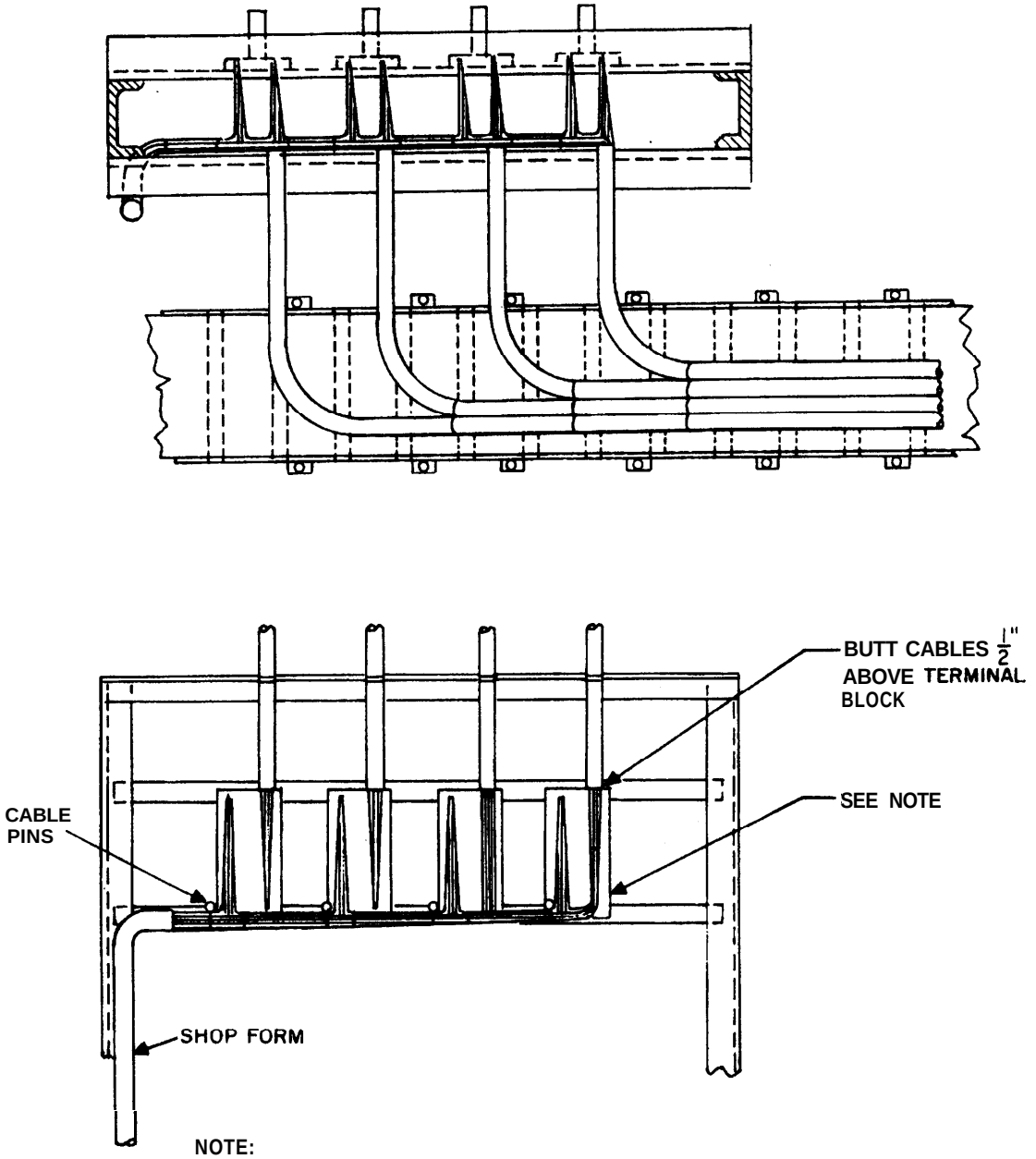


Figure 2. Cabling Relay Racks With Terminal Blocks at Top of Bay (to be used when hand forms are not acceptable).

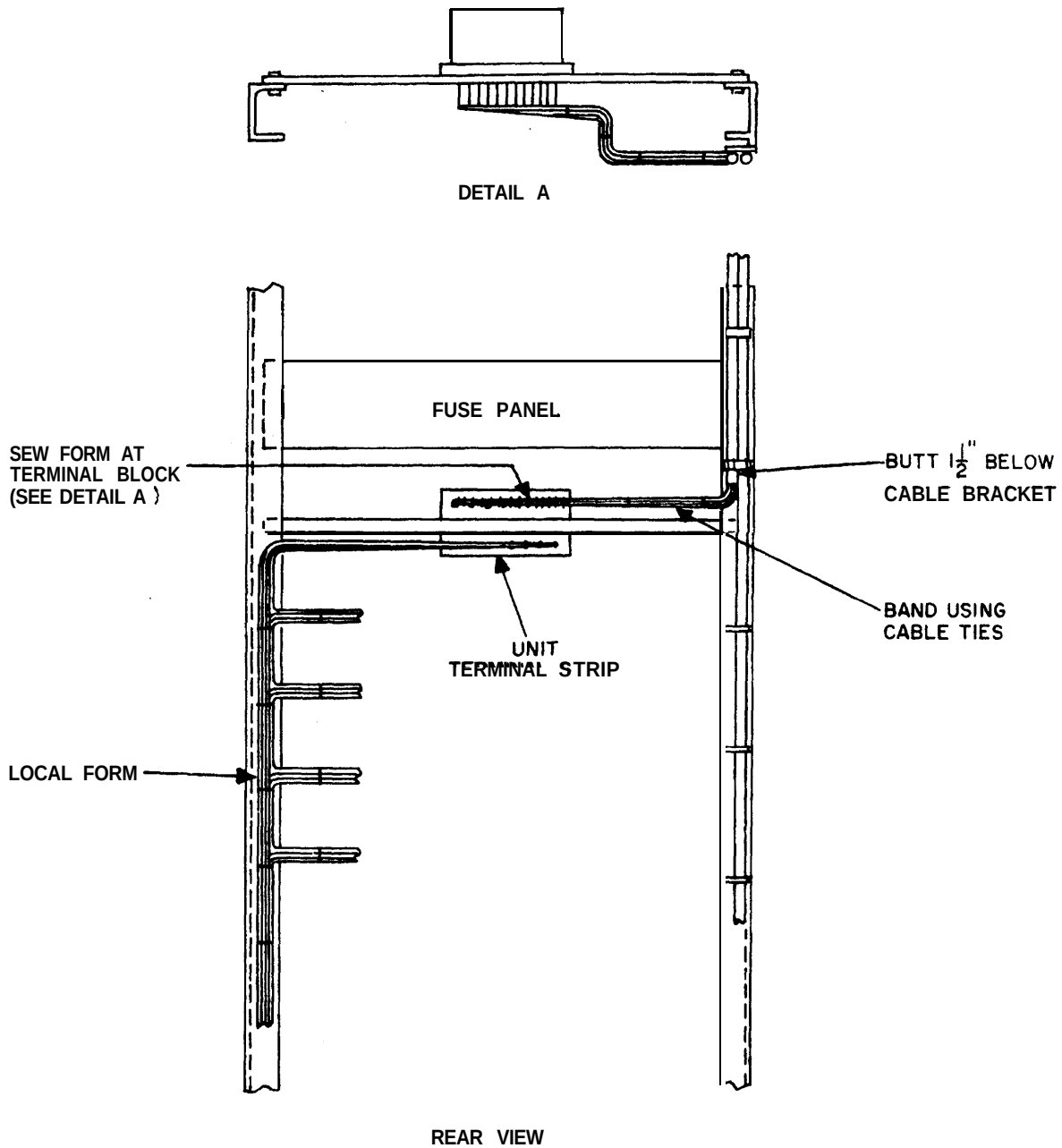
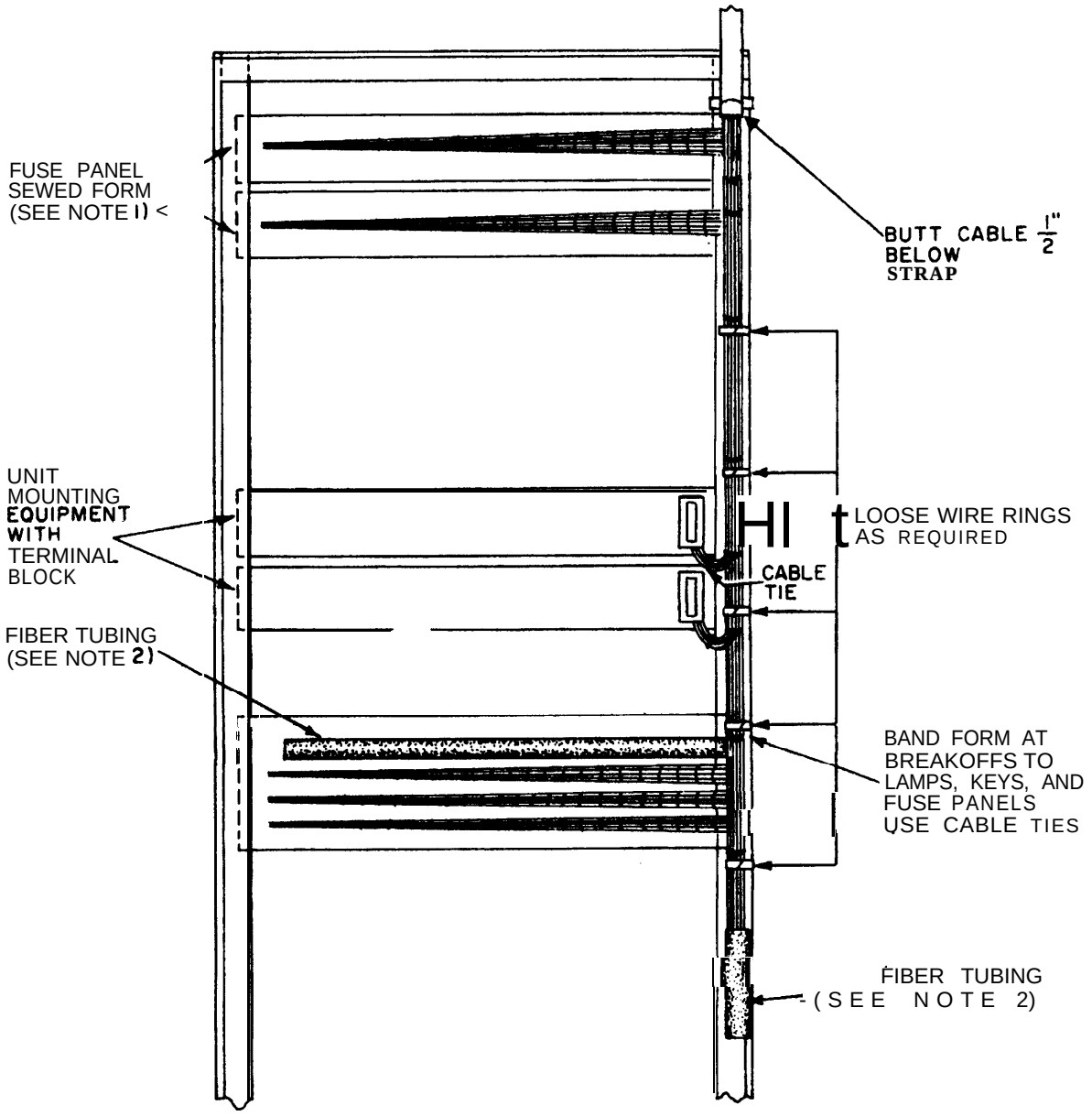
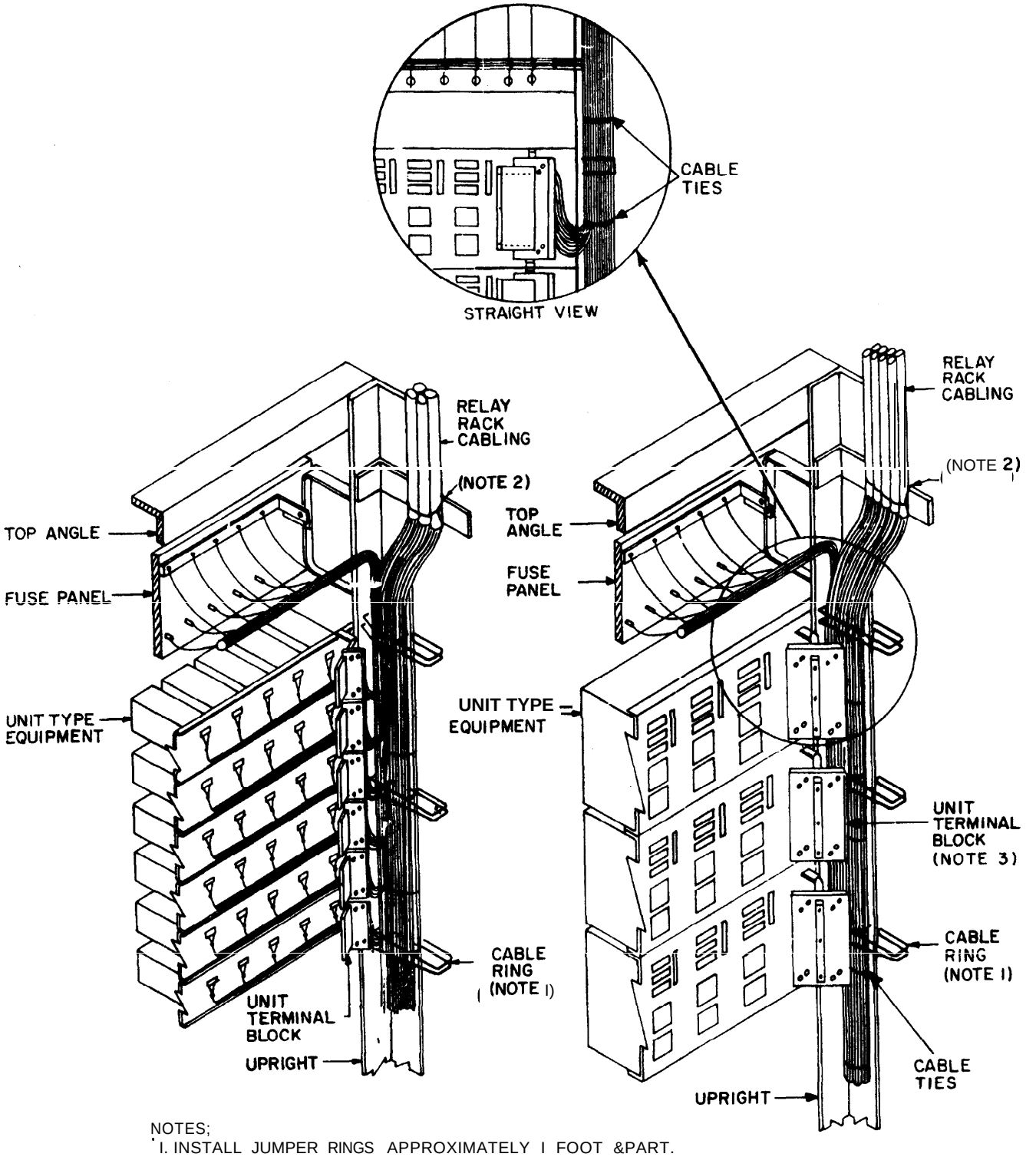


Figure 3. Cabling Unit Type Equipment on Relay Racks.



NOTES:
1. USE LACING CORD TO SEW FORMS WHERE CLOSE STITCHING IS REQUIRED SUCH AS LAMP AND KEY PANELS, BATTERY AND GROUND FORMS,ETC. USE CABLE TIES WHERE CLOSE STITCHING IS NOT REQUIRED.
2. EXCESS WIRES IN FORMS FOR FUTURE USE SHOULD BE STORED IN FIBER TUBING. AVAILABLE IN 3' LENGTHS.
F-986 1 1/2", F-986-A 1/16", F-986-B 1".

Figure 4. Cabling Relay Racks With Jumper Rings.



NOTES;
I. INSTALL JUMPER RINGS APPROXIMATELY I FOOT &PART.
2. LACE CABLES TO TOP CABLE BRACKET TO SUPPORT THE WEIGHT OF **THE CABLE.**
3. BLOCKS SHOULD BE HELD AS FAR LEFT AS POSSIBLE DURING CONNECTING PHASE.

Figure 5. Cabling Relay Racks.

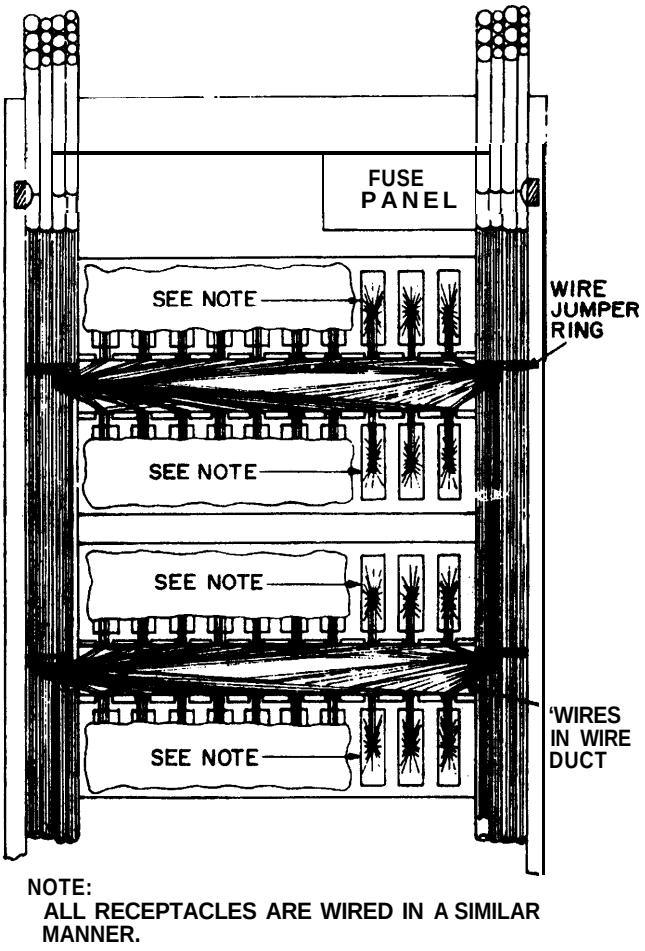


Figure 6a. Cabling Trafficorder Patch Panels or Similar Equipment.

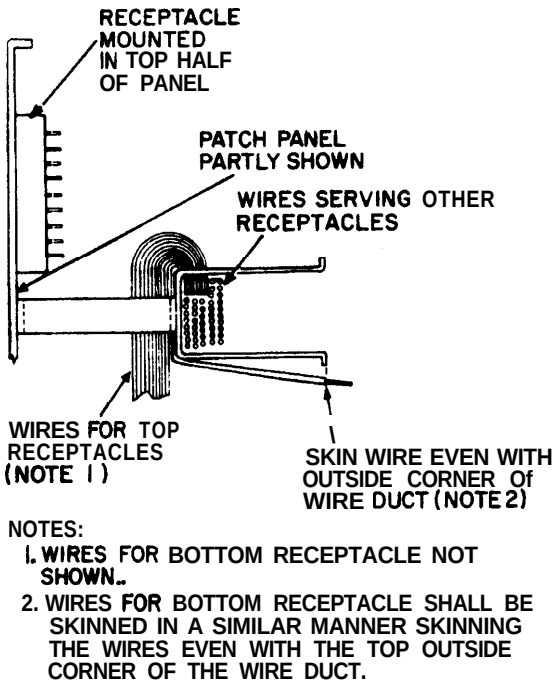


Figure 6b. Cabling Trafficorder Patch Panels or Similar Equipment.

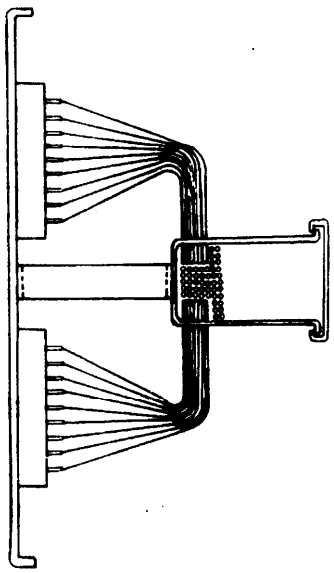


Figure 6c. Cabling Trafficorder Patch Panels or Similar Equipment.

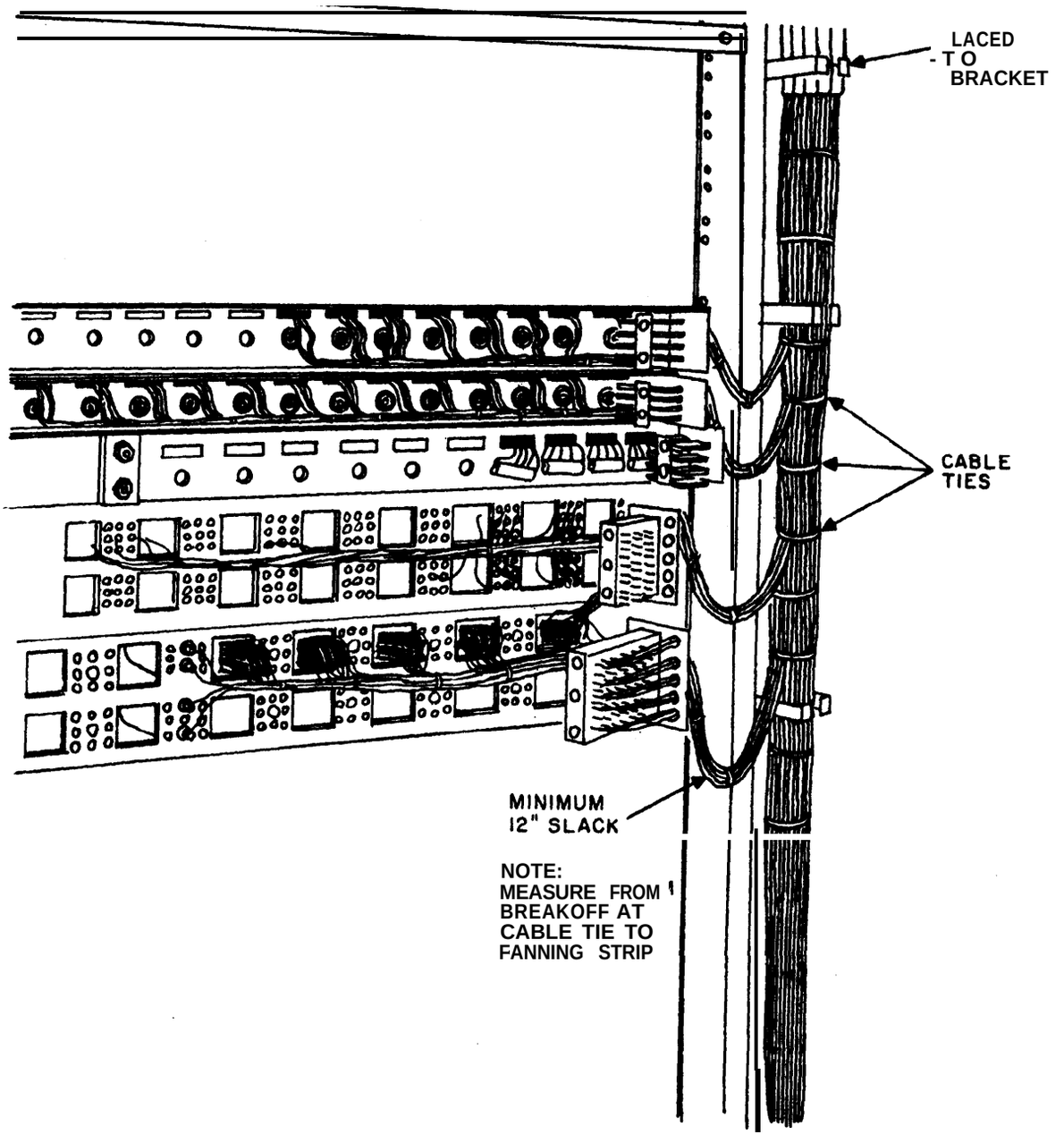


Figure 7. Method of Cabling Double Sided (Gated) Relay Rack.