WIRING AT MAIN BUILDING TERMINALS USING QUICK CONNECT HARDWARE

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1. GENERAL

1.01 This section covers the method of running 2-conductor F Cross-Connecting Wire between the outside plant feeder cable terminations and the building cable terminations at the main terminal of a building.

1.02 This section is reissued to:

- Delete use of 66L-type connecting block and UP-B type cabinet
- Include colored modular backboard arrangement.

1.03 The main terminal of the building is the terminal at which the outside plant feeder cable and building cable are terminated. These terminals are constructed as outlined in Section 631-460-201.

1.04 All cable pairs entering and leaving these terminals are permanently tied down and interconnections are made with cross-connections.

1.05 The method of terminating the cross-connecting wire on the quick connect type block is outlined in Section 631-050-108.

2. ▸RUNNING CROSS-CONNECTING WIRE AT A MAIN TERMINAL CONSTRUCTED WITH COLORED MODULAR BACKBOARDS EQUIPPED WITH 66M1-50 CONNECTING BLOCKS◂

2.01 Normally the ***green*** backboard designates feeder cable termination and the ***blue*** backboard designates building cable terminations, however in a small terminal such as illustrated in Fig. 2 both the entrance cable and building cable are terminated on 66M1-50 connecting blocks mounted on a ***green*** backboard. Designation strips identify the entrance cable and building cable, respectively.

2.02 A main terminal with cross-connecting wires running between the connecting blocks on which the C.O. feeder cable terminates and the connecting blocks on which the building cable terminates is illustrated in Fig. 1.

2.03 The cross-connecting wires are connected as follows:

(a) Using a 714B Tool connect the 2-conductor F Cross-Connecting Wire to the tip and ring multiple terminals adjacent to the terminals on which the assigned central office pair is connected.

(b) ▸Place the wires in the fanning slots and run down the side of the connecting block around the distributing rings to the assigned building cable pair, then place wires in fanning slot and terminate to the assigned building cable pair. Leave approximately one inch of slack at each termination so that cross connecting wire can be formed to the back of terminal.◂

(c) Repeat steps (a) and (b) for each assignment.

2.04 A protected main terminal in a cable terminal section is illustrated in Fig. 2. A 134-type protector is placed between the 66M1-50 Connecting Block and the C.O. feeder cable. This allows the cross-connections to be run in the same manner regardless of whether or not the building is served

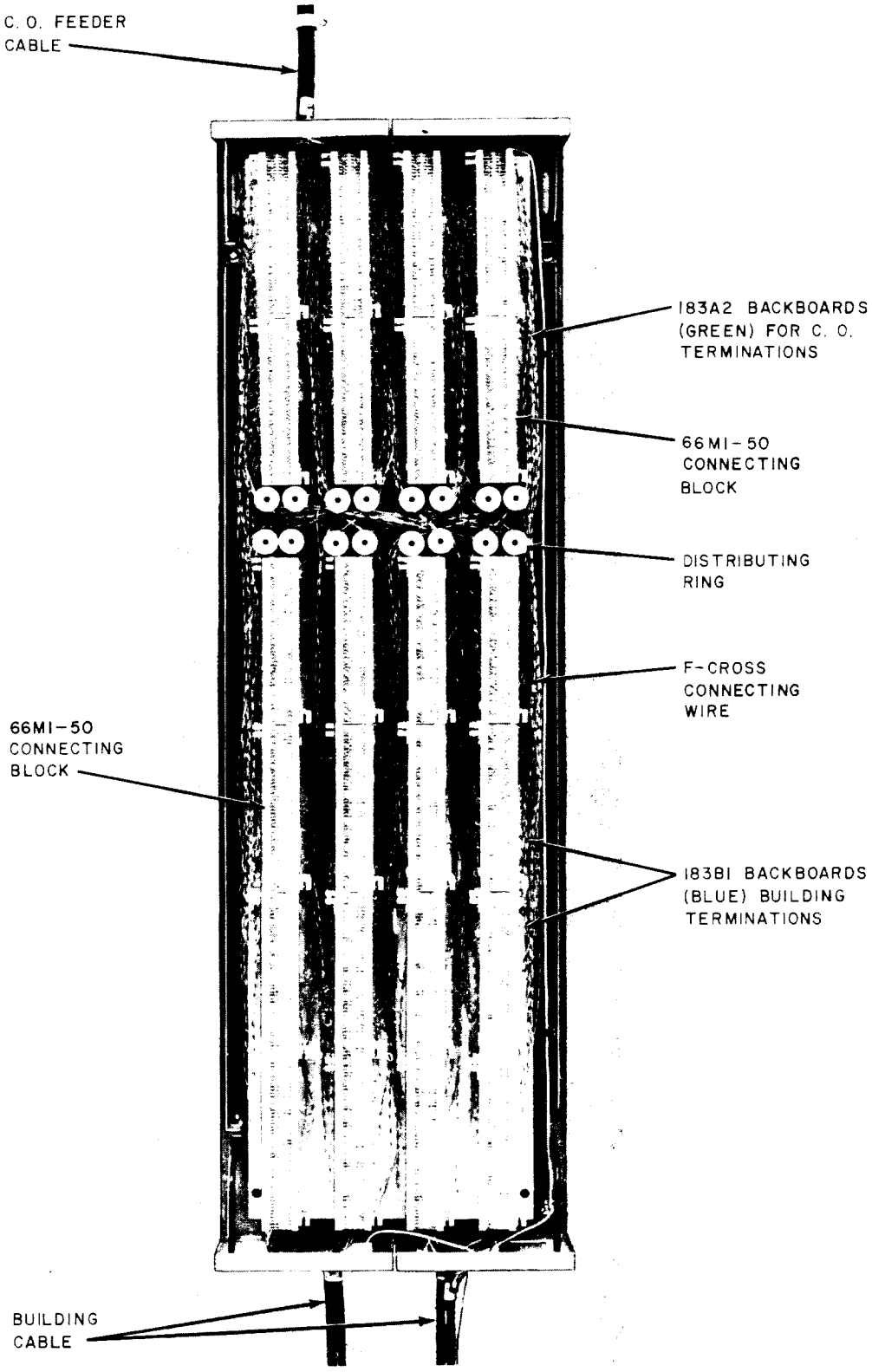

Fig. 1—Unprotected Terminal—400 Pair Entrance Cable Two 400 Pair Building Cables

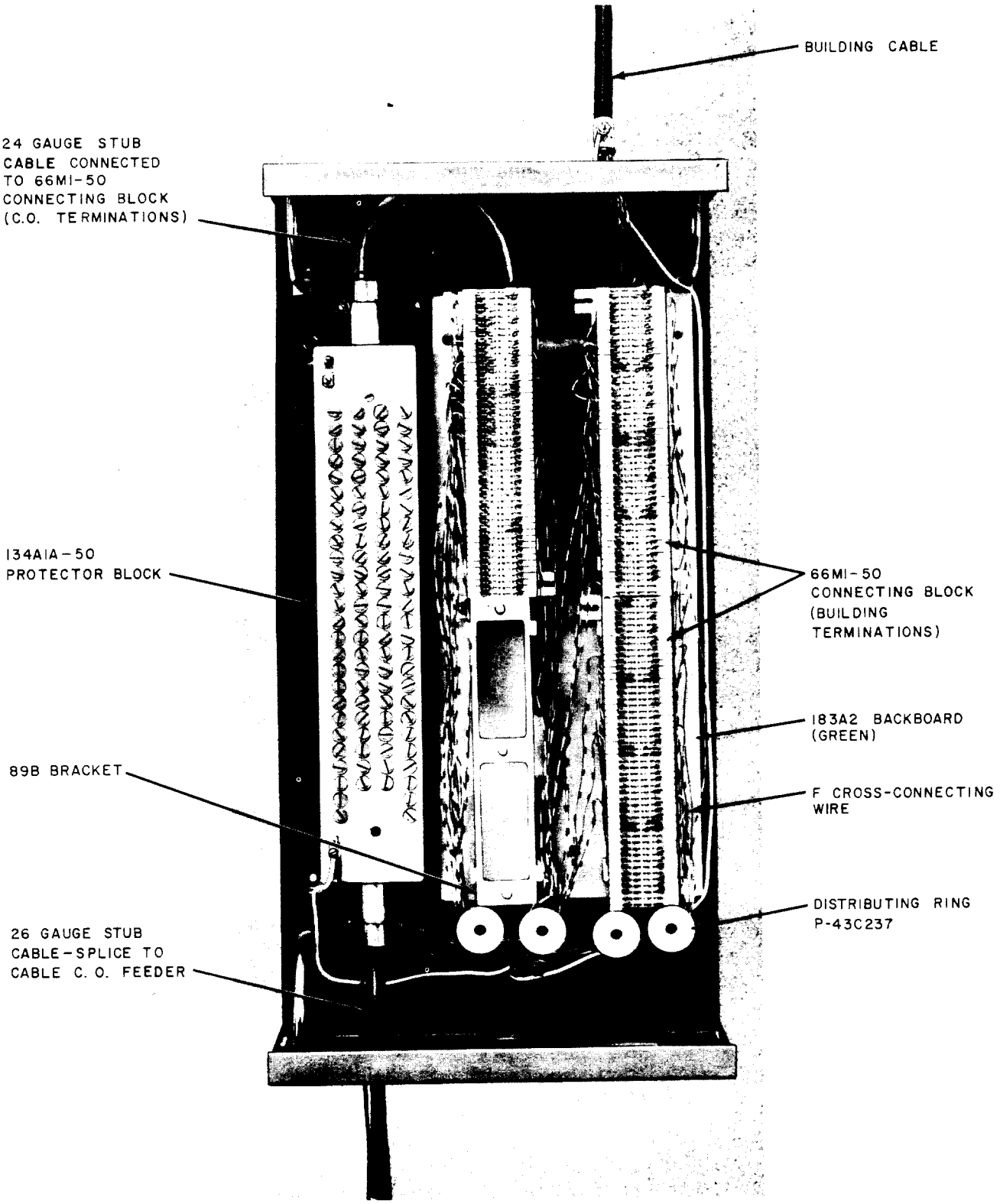

Fig. 2—50 Pair Protected Terminal

by exposed or unexposed cable. The cross-connecting wires are connected as outlined in 2.03 (a) through (c).

3. RUNNING CROSS-CONNECTING WIRE AT A MAIN TERMINAL CONSTRUCTED WITH 5A TYPE TERMINALS

3.01 The 5A type terminals mounted on AT-8519 Cable Terminal Sections are illustrated in Fig. 3. The cross-connecting wires from the central office cable pairs to the building cable pairs are split with 60 percent of the wires routed through the top wire rings and 40 percent through the bottom wire rings to avoid cross-connection wire congestion.

3.02 The quick-connect terminals on the 5A type terminal blocks are arranged in vertical rows of 100 pairs to each row. Pair 1 is located at the top left hand corner of the terminal block and the last pair at the bottom right hand corner. This block is described in Section 631-050-110.

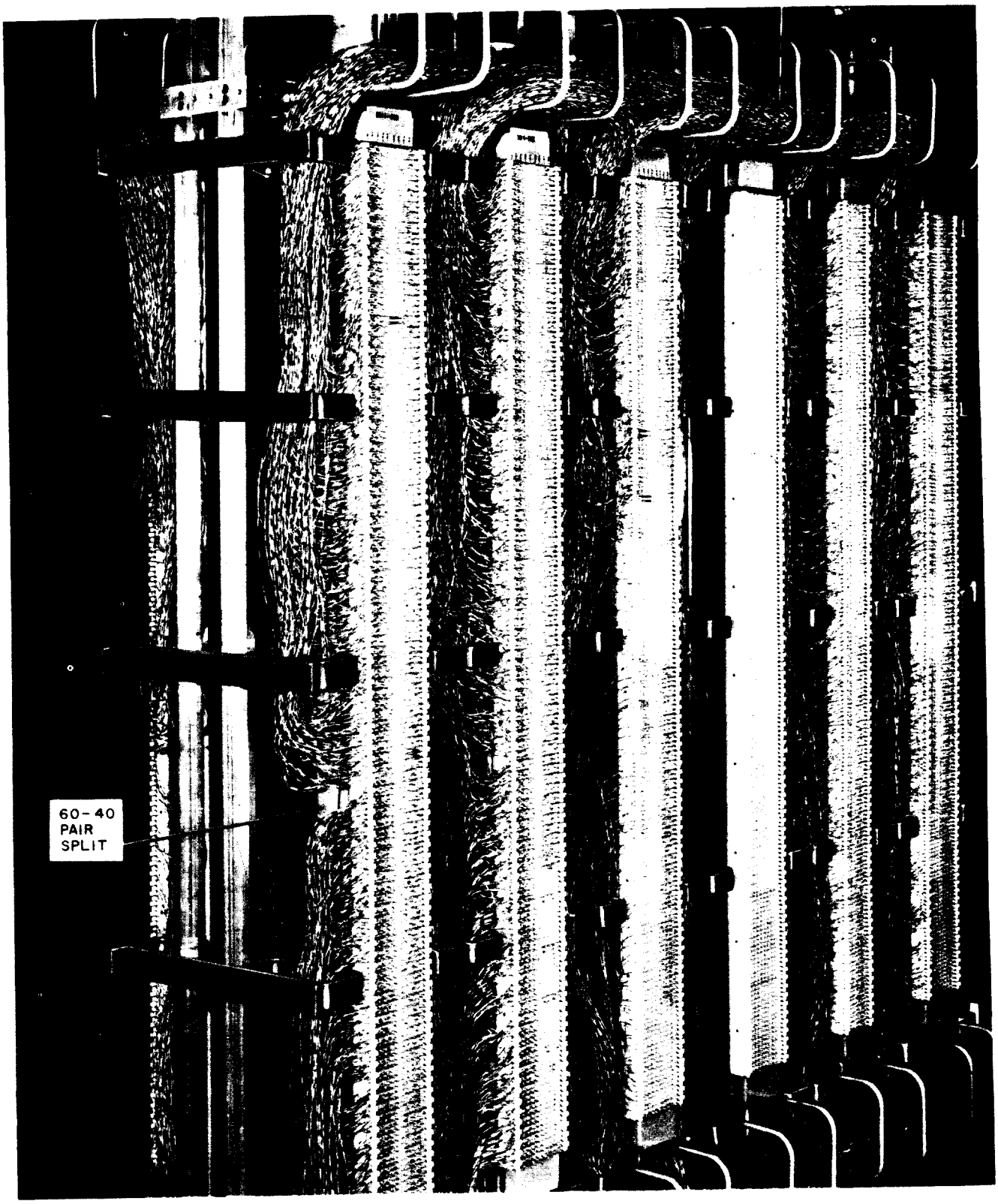

Fig. 3—Main Terminal Constructed With 5A Type Terminal Mounted on AT-8519B Cable Terminal Section

3.03 Using a 714B Tool terminate the F Cross-Connecting Wire to the assigned central office pair then: (Fig. 4)

Caution: To avoid damaging existing wiring, use an orange stick or suitable tool to move existing wiring aside when terminating with 714B Tool.

(a) If the assigned central office pair is located within the upper 60 percent of the terminal block, route the cross-connecting wire up along the outside of the top wiring rings (Fig. 5) then down behind the wire clips to the assigned building cable pair. Place wires in fanning slot

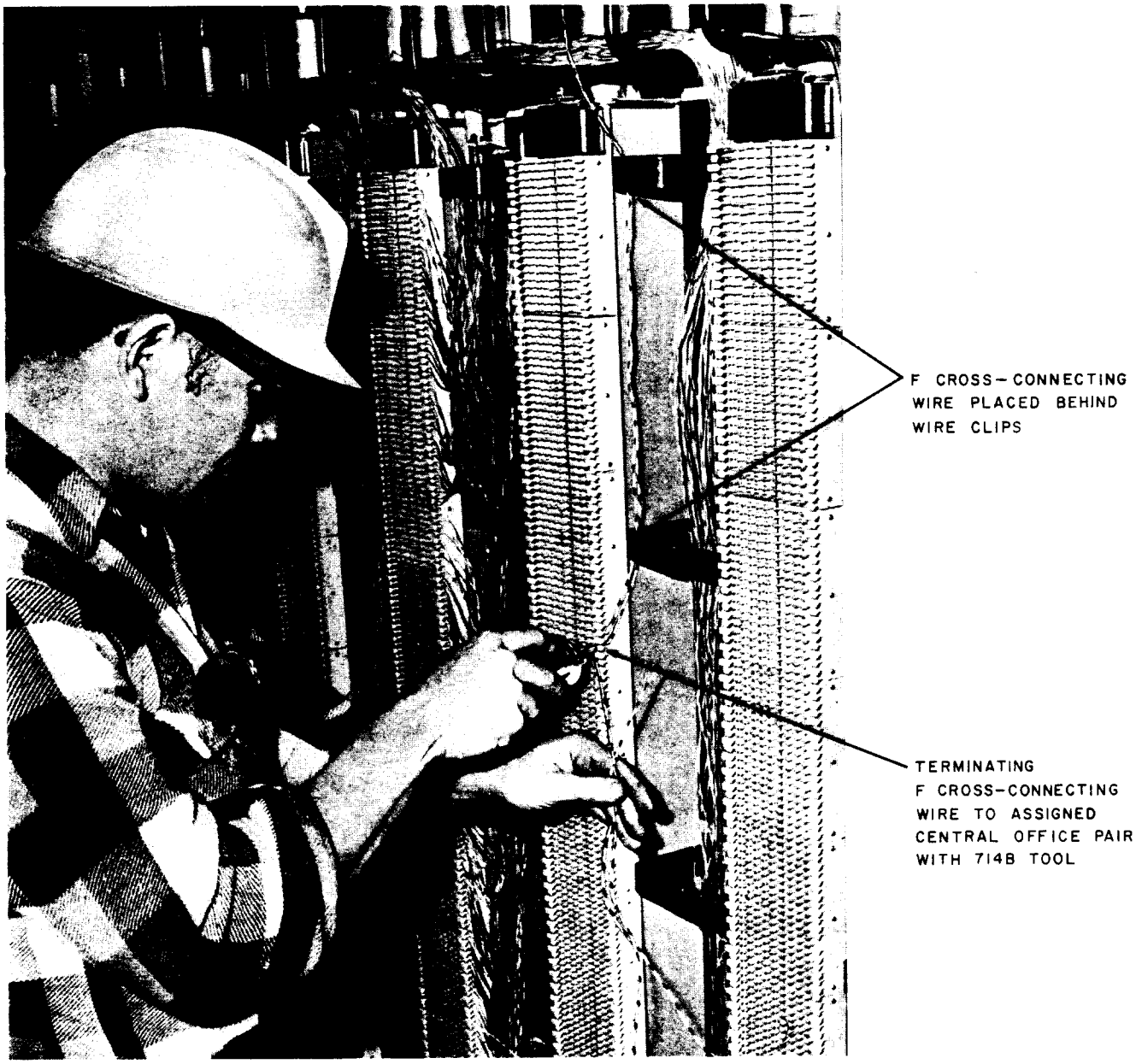

Fig. 4—Terminating F Cross-Connecting Wire To Assigned Central Office Pair

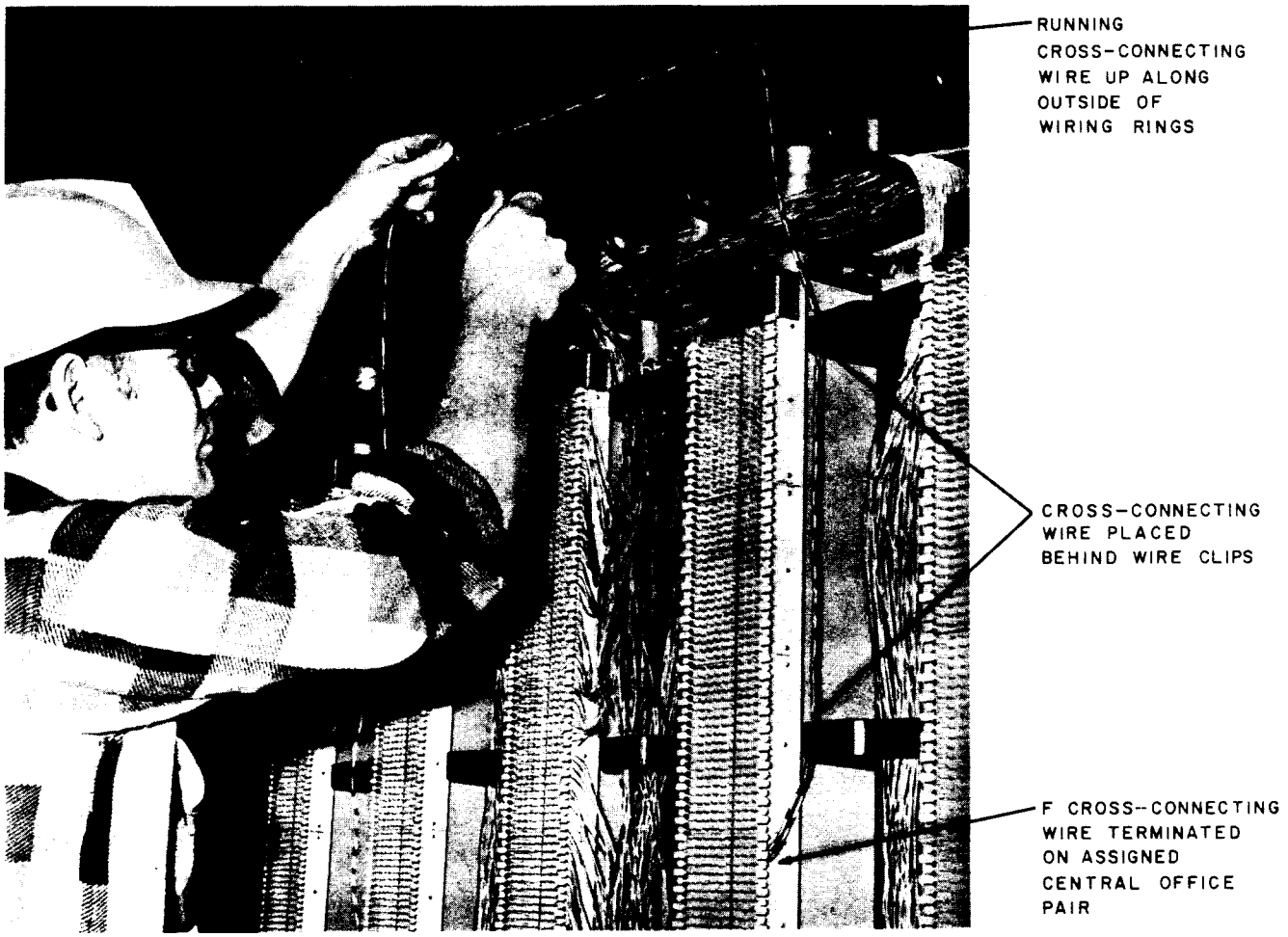

Fig. 5—Running F Cross-Connecting Wire Up and Along Outside of Wiring Rings

and terminate on the assigned building cable pair. (Fig. 6).

(b) Place the cross-connecting wire in the wiring rings (Fig. 7). Form a finger loop at each termination (Fig. 8).

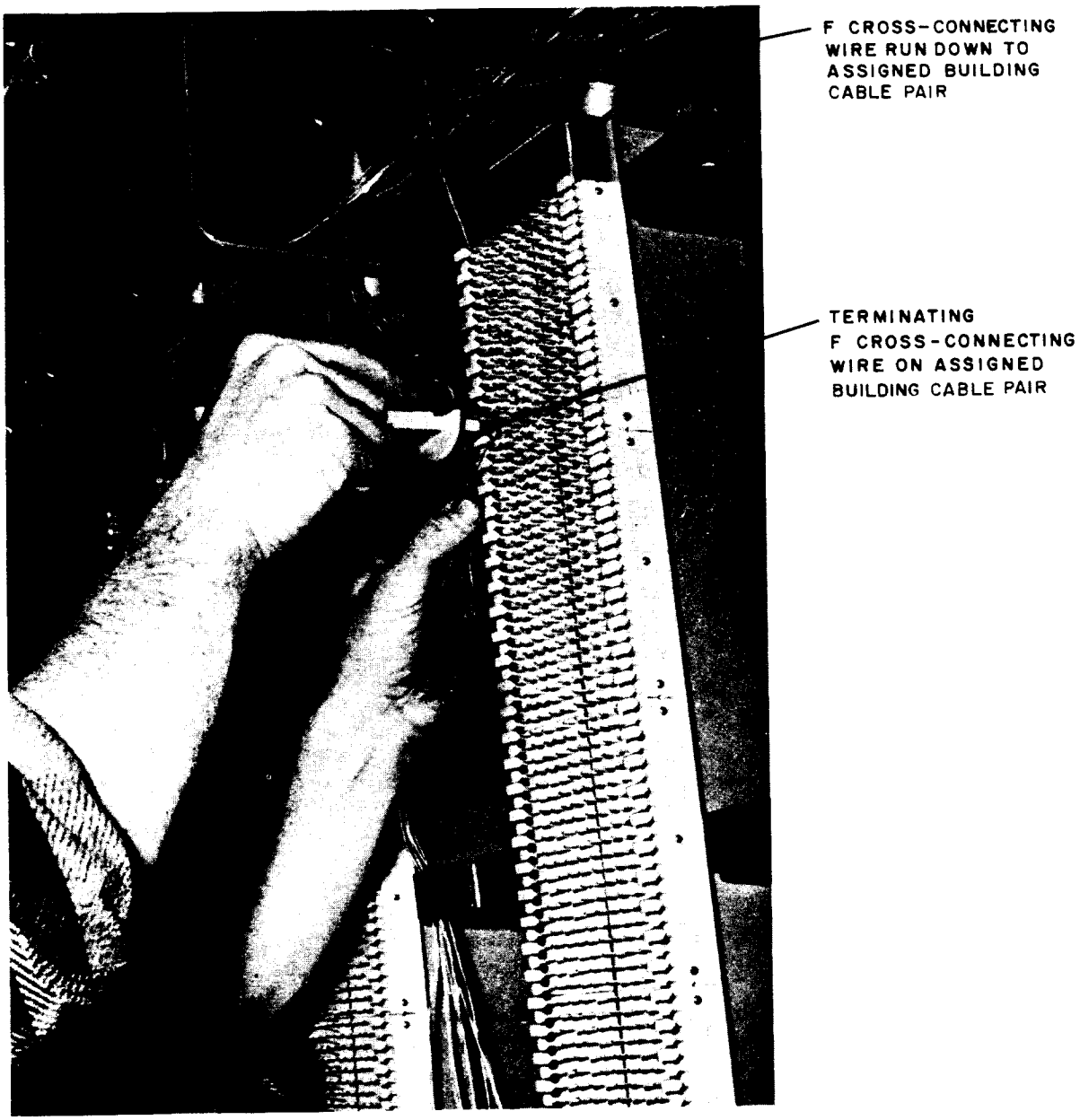

Fig. 6—Terminating F Cross-Connecting Wire To Assigned Building Cable Pair

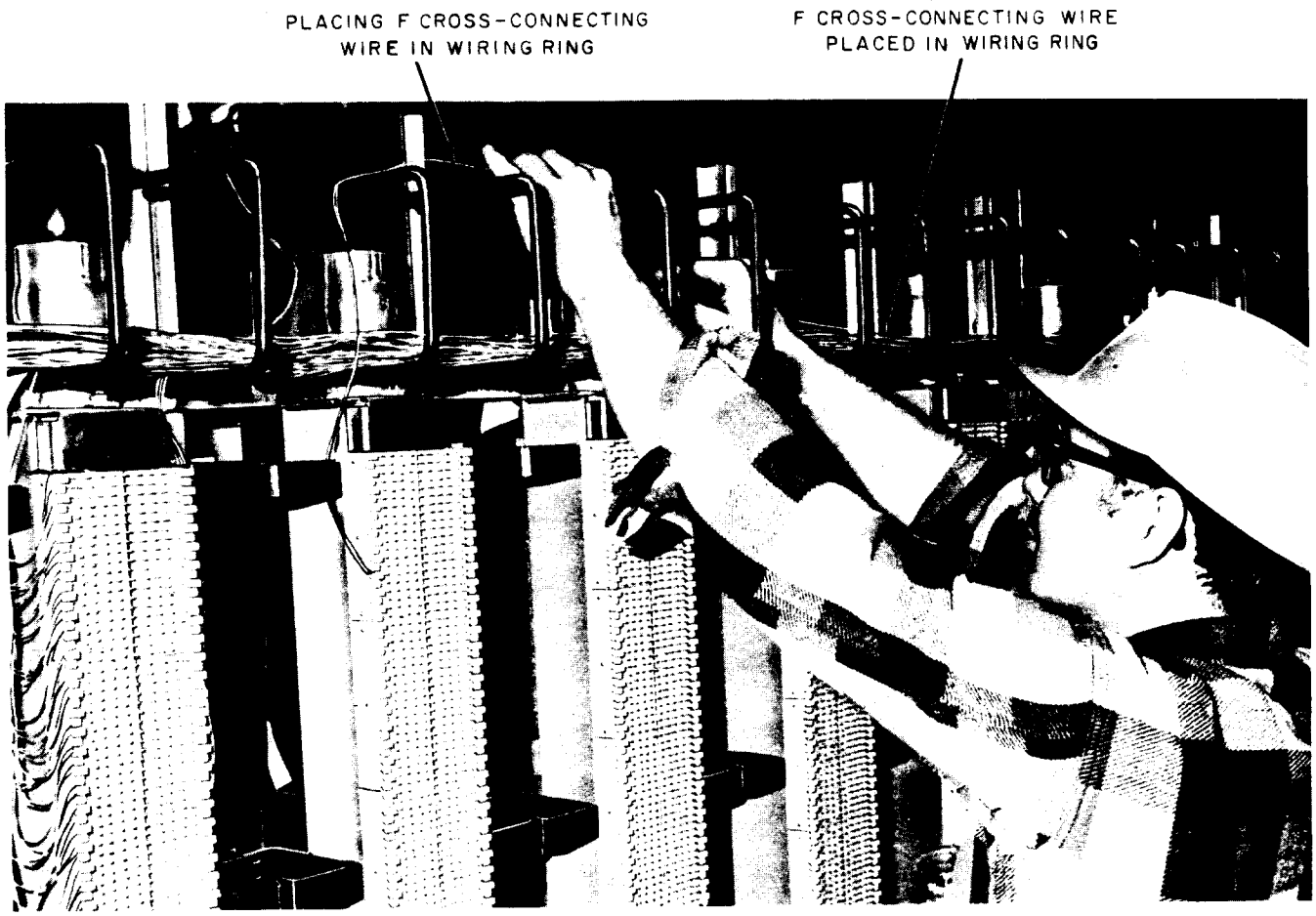

Fig. 7—Placing F Cross Connecting Wire in Wiring Ring

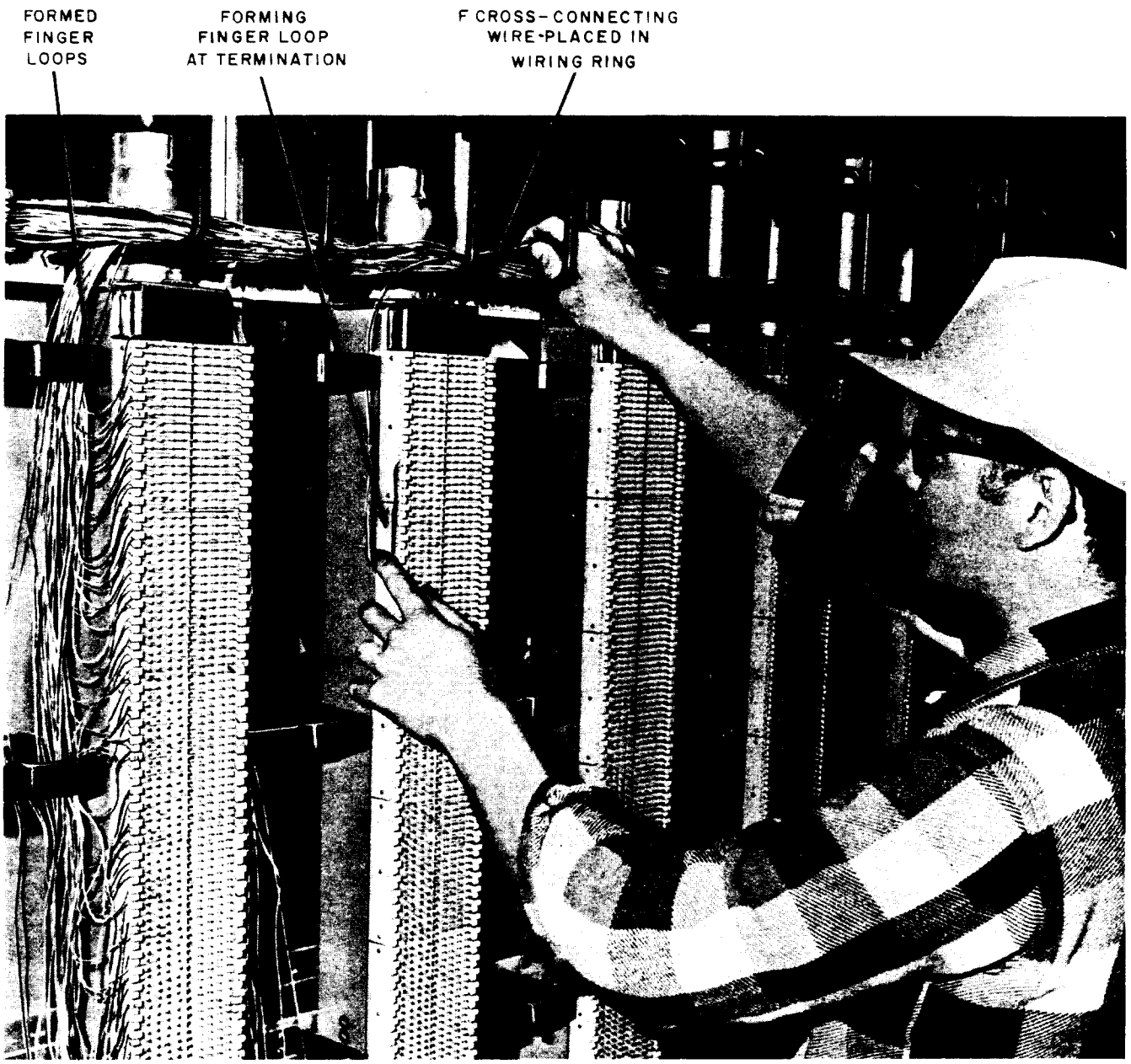

Fig. 8—Forming Finger Loop At Termination

(c) If the assigned central office pair is located within the lower 40 percent of the terminal block route the cross-connecting wire behind the wire clip and down along the outside of the bottom wiring rings (Fig. 9) then up to the assigned building cable pair terminal. Place wire

Fig. 9—Running Cross-Connecting Wire Along The Outside of Bottom Wiring Ring

in fanning slot and terminate on the assigned building cable pair (Fig. 10).

(d) Place the cross-connecting wire in the wiring rings (Fig. 11 and 12). Then form a finger loop at each termination.

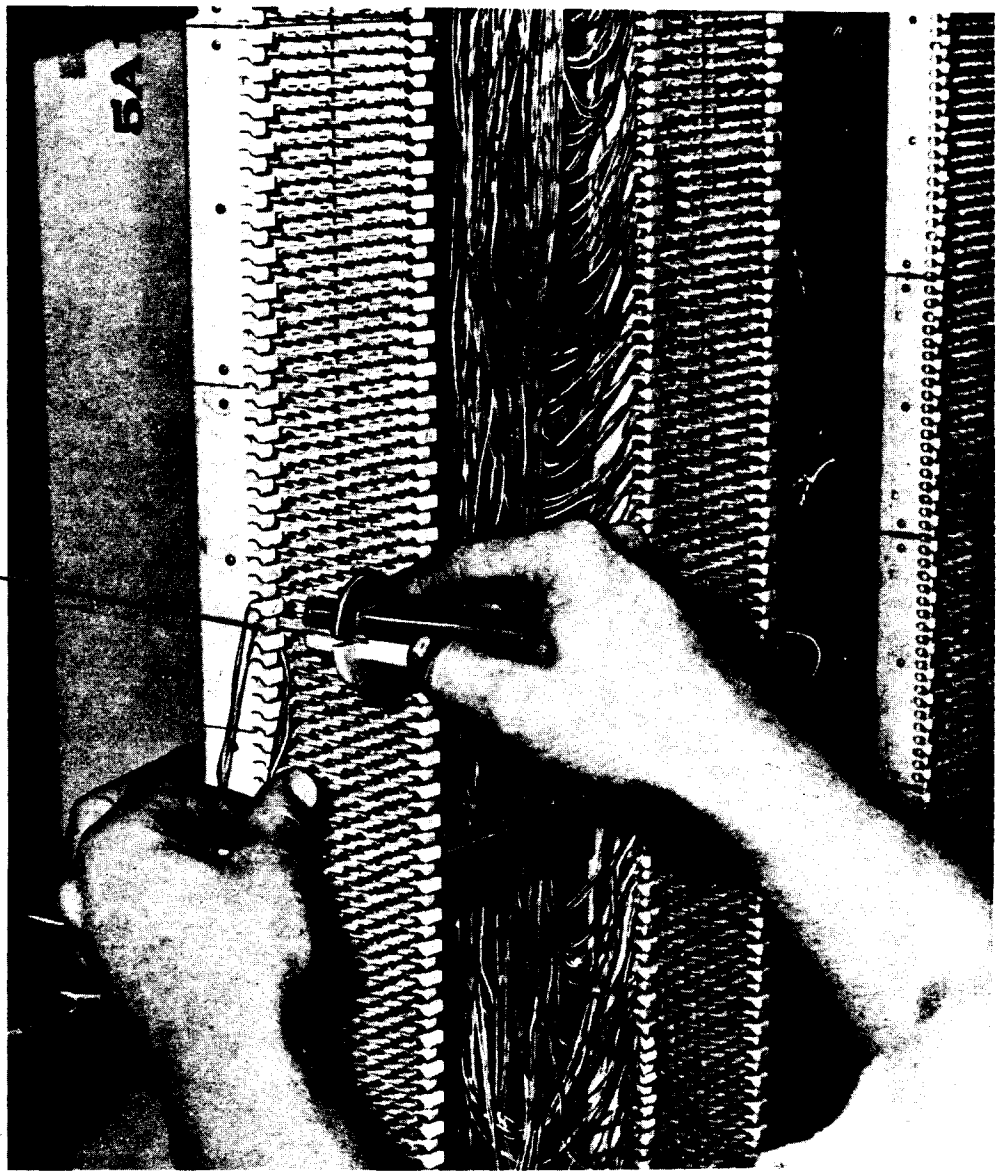

Fig. 10—Terminating F Cross-Connecting Wire on Assigned Building Cable Pair

Fig. 11—Placing F Cross-Connecting Wire in Bottom Wiring Rings

Fig. 12—Positioning F Cross-Connecting Wire in Bottom Wiring Ring

(e) If the assigned building cable pair is located on the opposite side of the cable terminal section from the central office pair, then it will be necessary to run the cross-connecting wire as follows to prevent diagonal crosses:

(1) Run the cross-connecting wire up and over to a point opposite the 5A Terminal Block containing the assigned building cable pair, then over the top of the cable terminal section and down to assigned building cable pair. (Fig. 13)

(2) Place the wire in fanning slot and terminate on the assigned building cable pair.

(3) Place the cross-connecting wire in the wiring rings then form a finger loop at each termination.

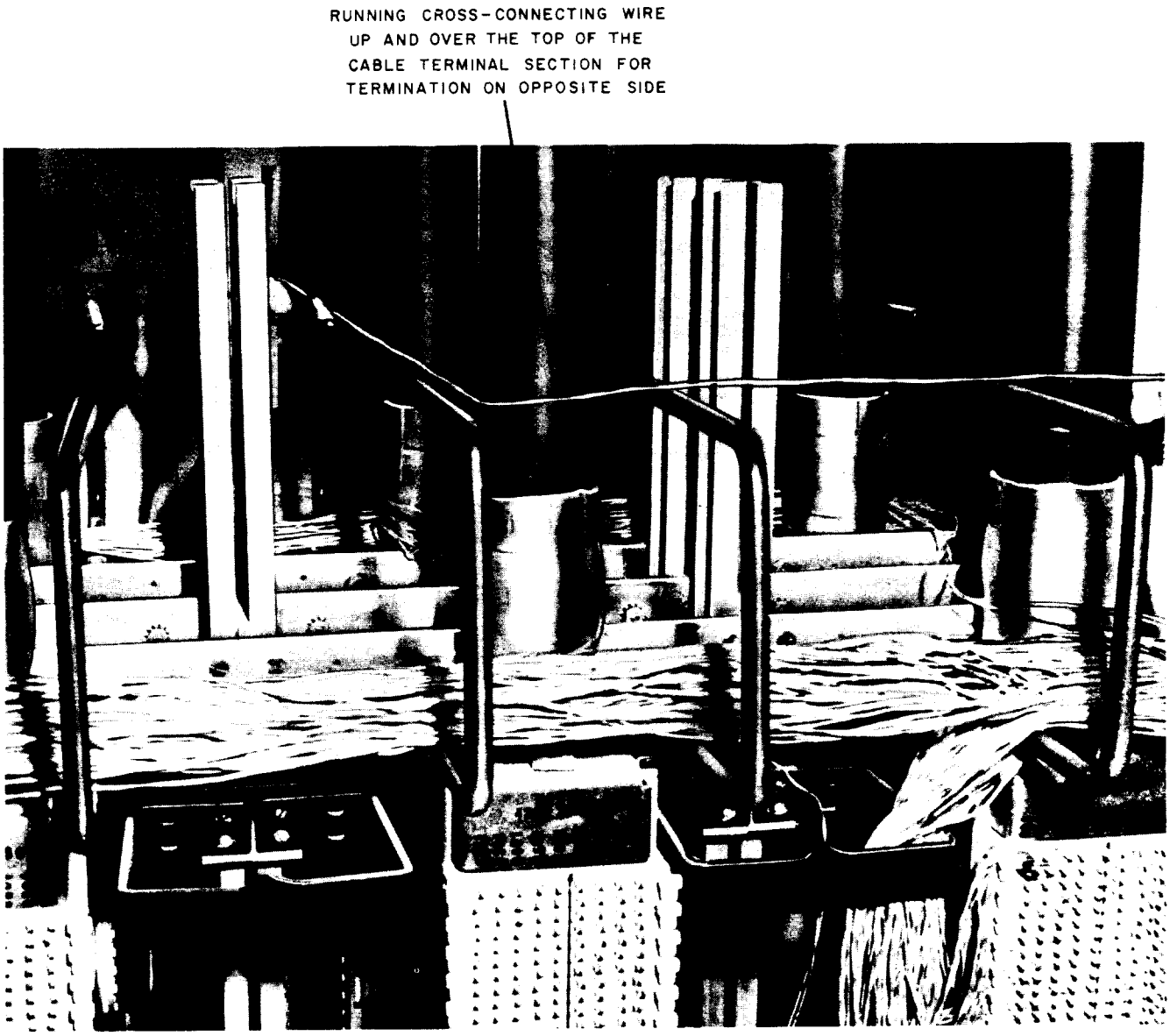

Fig. 13—Running Cross Connecting Wire To Opposite Side of Cable Terminal Section

3.04 A 183B2 Adapter (Fig. 14) is available for providing multiple connections on the 5-type terminal as shown in Fig. 15.

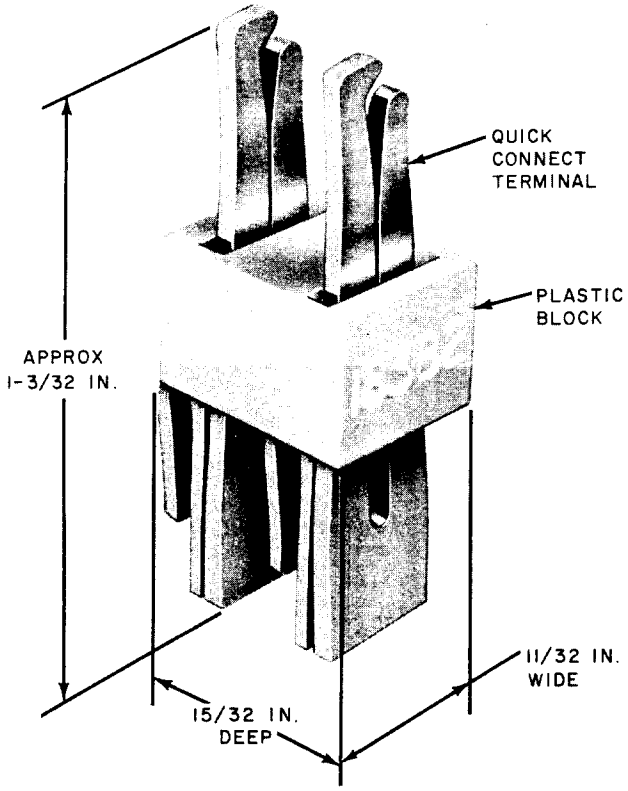

Fig. 14—183B2 Adapter

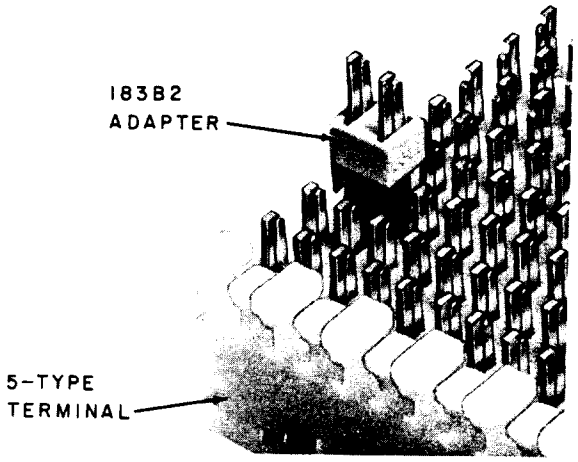

Fig. 15—183B2 Adapter Placed on 5-Type Terminal

3.05 The 5A-type terminal block mounted in H303 Cable Terminal Sections for mechanical protection is illustrated in Fig. 16. The cross-connecting wires from the central office terminals are split with 60 percent of the cross-connecting wires routed through the top wiring rings and 40 percent routed through the bottom wiring rings.

3.06 Using the 714B Tool terminate the cross-connecting wire to the assigned central office cable pair, then route the cross-connecting wire to the assigned building cable pair as shown in Fig. 16. Connect to the assigned building cable pair.

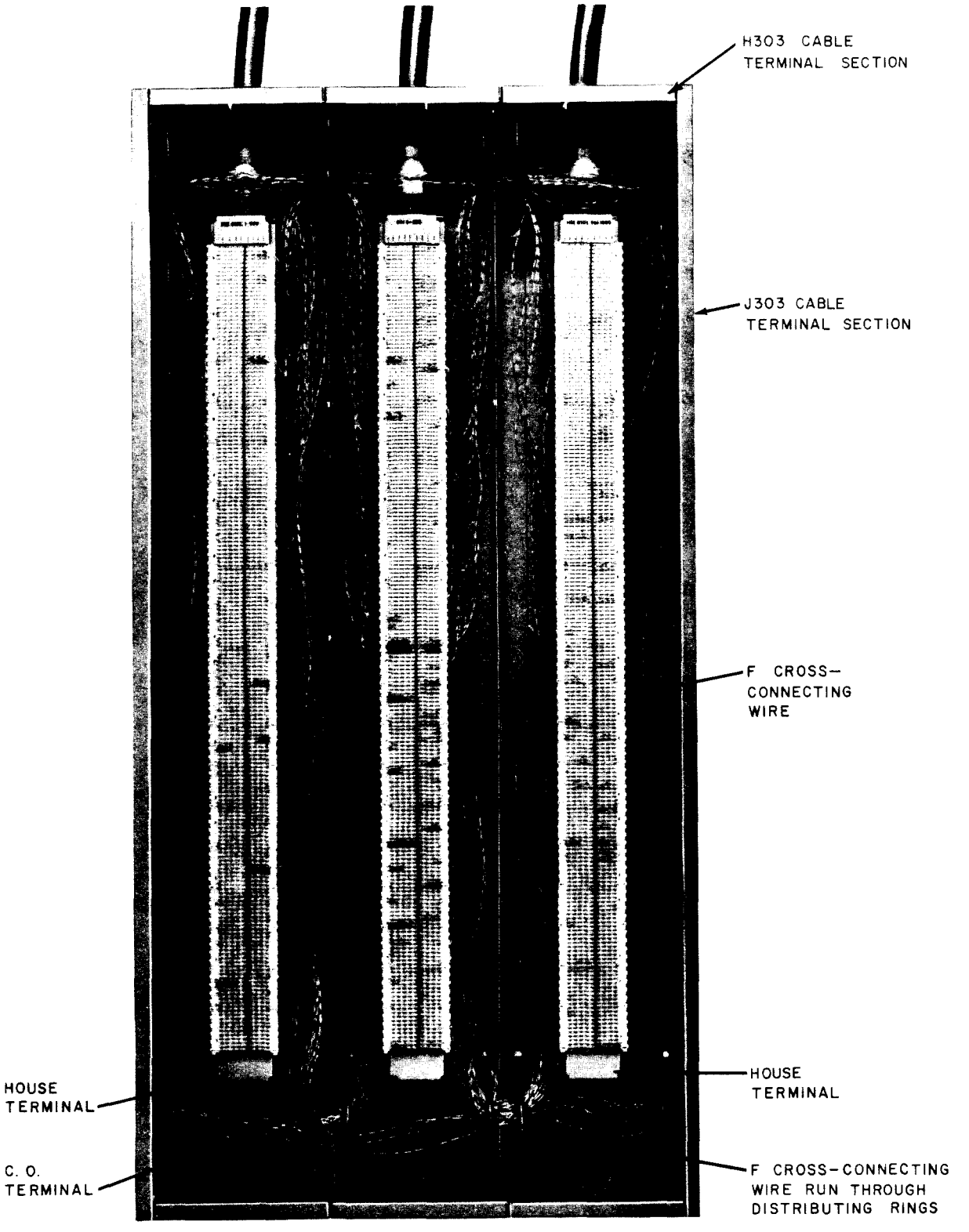

Fig. 16—Main Terminal With 5A Terminal Mounted in Cabinet

4. REMOVAL OF CROSS-CONNECTING WIRE FROM TERMINAL

4.01 When it is necessary to remove a cross-connecting wire from a terminal use a 724A Tool and place the fork of the tool astraddle the terminal and under the wire (Fig. 17). ***To prevent excessive buildup of cross-connecting wire, remove the cross-connecting wire from the terminal.***

4.02 Grasp the tool and pull the wire from the terminal in a direction perpendicular to the face of the block. ***Do not use adjacent terminals as leverage points.***

4.03 To reterminate the wire cut off the old contact portion of the wire and reterminate as outlined above.

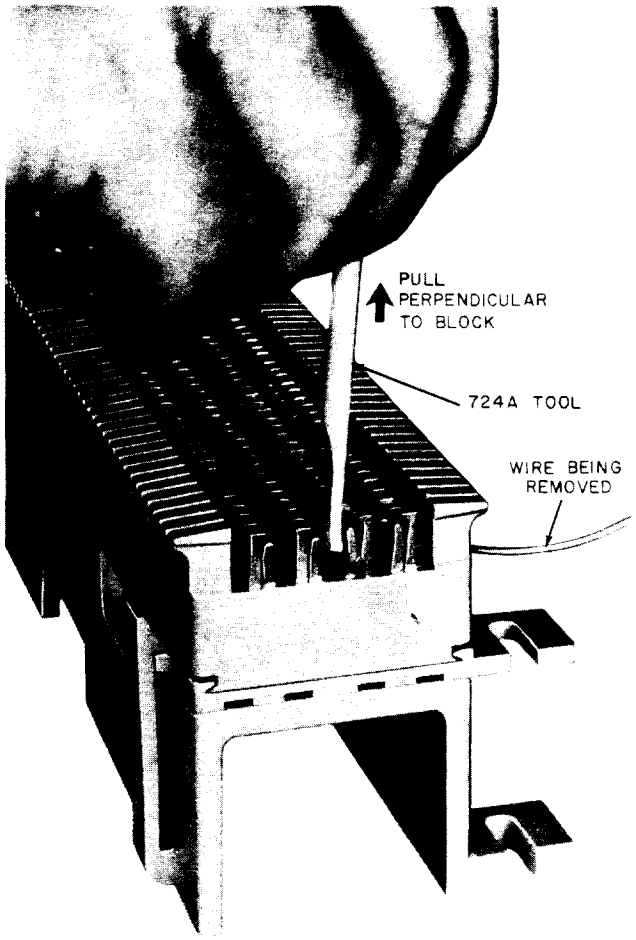

Fig 17—Removing Wire With 724A Tool