# SERVING AREA INTERFACE AT-8630 AND

# B AERIAL INTERFACE AT-8685

# WIRING

## 1. GENERAL

**1.01** This section covers the method of running cross-connecting wire between the outside plant feeder cable terminations on the center panel (green) and distribution cable terminations on the side panels (blue) of the interfaces.

**1.02** This section is reissued to:

● Illustrate cross-connecting wire run in B aerial interface AT-8685

● Delete use of five pair insertion tool and include use of one pair 788D2 insertion cut-off tool

● Include use of waterproof cap on 88-type connecting blocks.

**1.03** The interface is a device for cross-connecting feeder cable pairs to distribution cable pairs of a serving area. These interfaces are established under engineering work orders and are introduced into new or existing plant. Serving area interfaces are represented by the symbol ⊟X⊟ on cable location records and work prints.

**1.04** The interface consists of connecting blocks for terminating the feeder and distribution cables. Connecting blocks for terminating the feeder cable are located on the center panel (green) with those for terminating the distribution cables on the two side panels (blue).

**1.05** The feeder (*IN*) pairs which are committed to a serving area are permanently terminated in 25-pair binder groups on the center panel of the interface.

**1.06** The distribution (*OUT*) pairs which originate at the interface are permanently terminated in 25-pair binder groups on the side panels of the interface.

**1.07** The 88-type connecting block used in the interface is described in Section 631-050-120.

**1.08** The 788D2 tool (one-pair insertion cut-off tool), (Fig. 1), 88BB-1 waterproofing caps, and spool of 24-gauge F cross-connecting wire stored in interfaces are used for interconnecting feeder and distribution cables. *Use only tools and wire specified.*
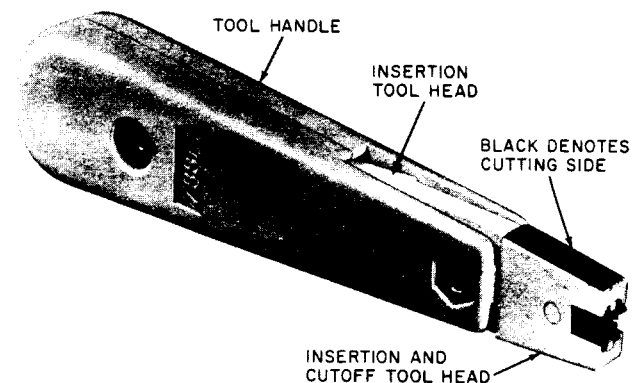


Fig. 1—788D2 Tool (One Pair Insertion Cut-Off Tool)

**1.09** The names of the various parts of the wiring block on which the connecting blocks are placed are shown in Fig. 2.

## 2. METHODS OF PAIR IDENTIFICATION

**2.01** Before proceeding with the work operation described herein, it is important that craft personnel become familiar with the following methods of pair identification.

(a) The 88BBW-1 connecting block is a two colored block to aid in the identification of five pair groups. The blocks are installed starting with the white side up at extreme left and alternating colors for the remainder of the strip.

(b) On the feeder (center) panel the binding post numbers are marked on the designation strips as shown in Fig. 3 or Fig. 10.

(c) On the distribution (side) panels the binding post numbers are marked on the designation strips starting with pair 1 located on the blue field to the left of the green field and continuing as shown in Fig. 3 or Fig. 10.
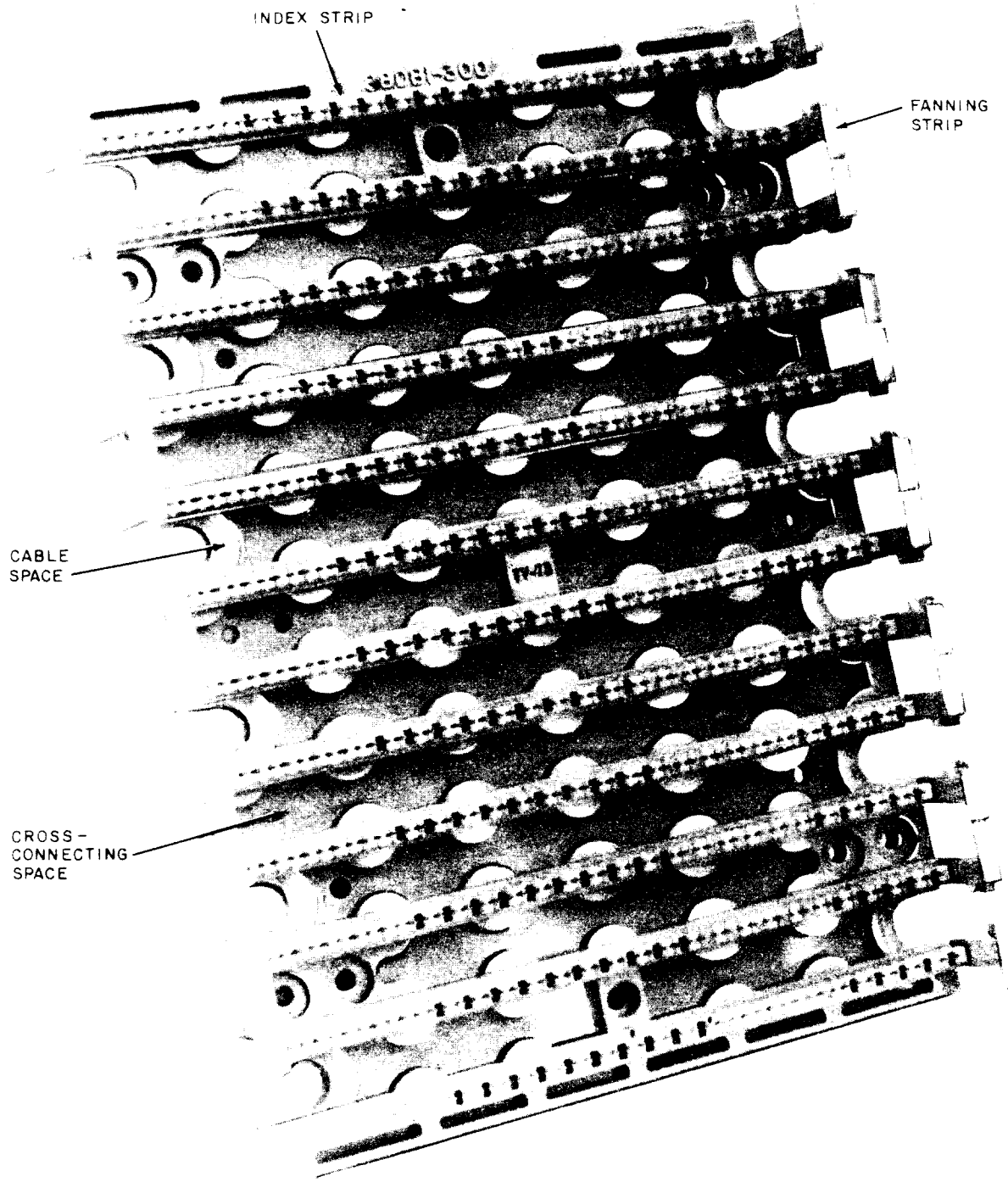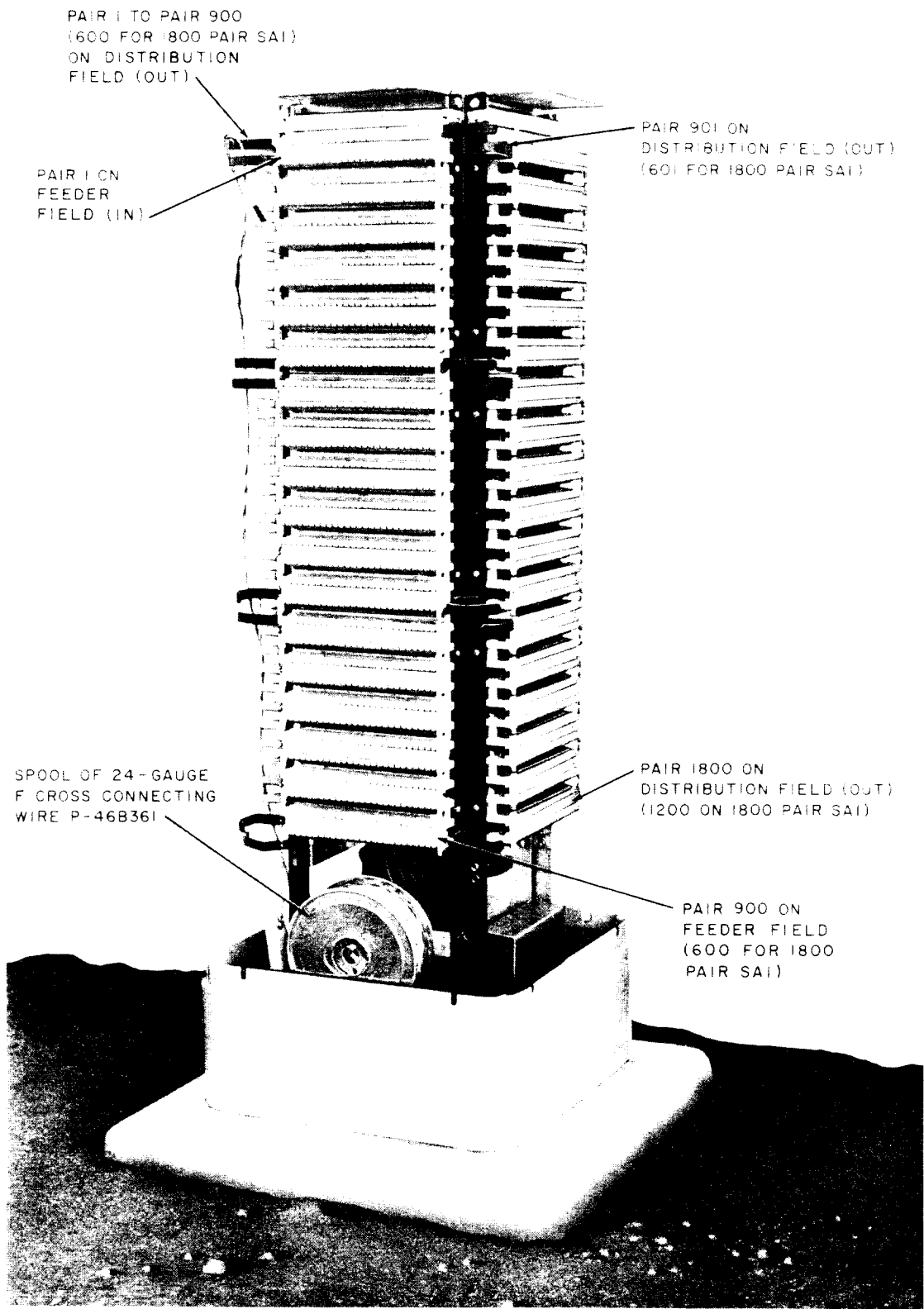
Fig. 2—Wiring Block

PAIR I TO PAIR 900
(600 FOR 1800 PAIR SAI)
ON DISTRIBUTION
FIELD (OUT)

PAIR I CN
FEEDER
FIELD (IN)

PAIR 901 ON
DISTRIBUTION FIELD (OUT)
(601 FOR 1800 PAIR SAI)

SPOOL OF 24-GAUGE
F CROSS CONNECTING
WIRE P-46B361

PAIR 1800 ON
DISTRIBUTION FIELD (OUT)
(1200 ON 1800 PAIR SAI)

PAIR 900 ON
FEEDER FIELD
(600 FOR 1800
PAIR SAI)

Fig. 3—Marked Serving Area Interface

### 3. TERMINATING CROSS-CONNECTING WIRE

**3.01** Remove and discard old waterproof cap, pull cross-connecting wire from spool, then insert the cross-connecting wire into assigned feeder cable termination. Seat and cut cross-connecting wire with insertion cut-off tool (Fig. 4).

*CAUTION: The cutting blades of the insertion cut-off tool are identified by a black mark on the side of the head containing the blades. Ensure that the black side of the 788D2 tool is toward the end of the cross-connecting wire to be cut.*
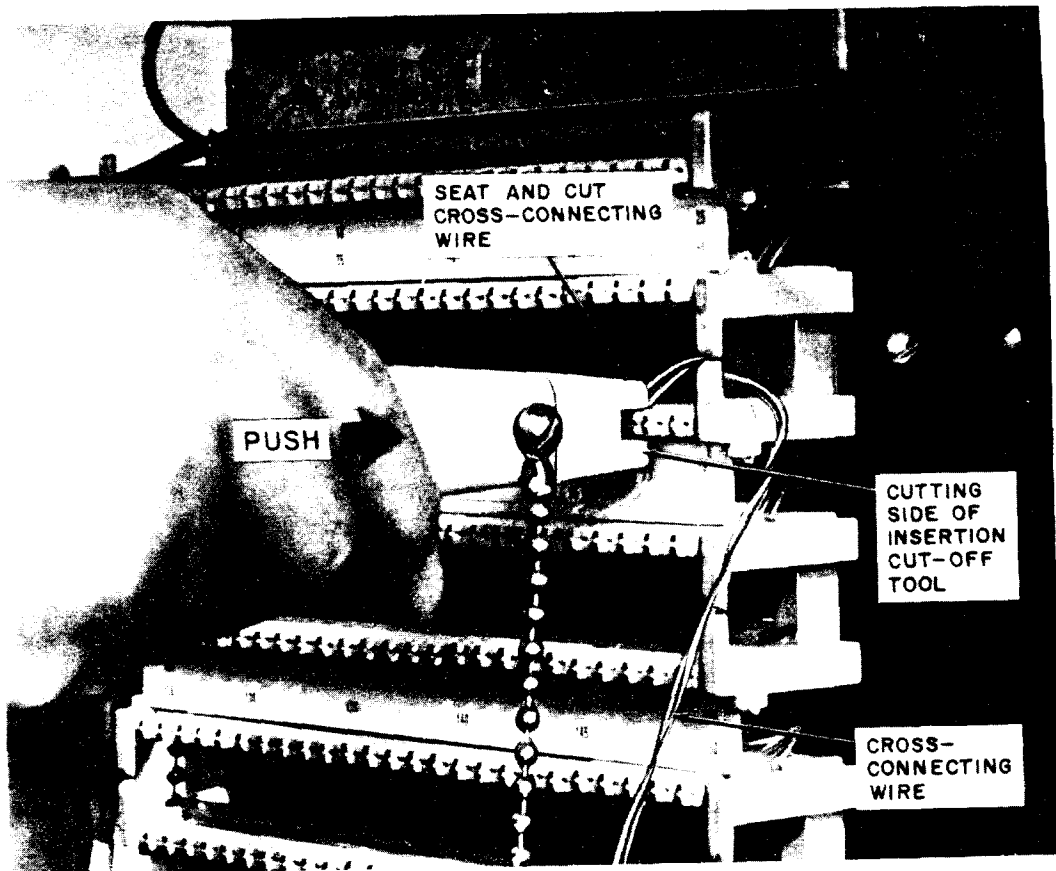


**Fig. 4—Terminating Cross-Connecting Wire on Feeder Field**

**3.02** Place new waterproof cap, then push terminated wire to back of wiring channel, position the wires along the channel and through the wiring slot. As the wire comes through the wiring slot form a finger loop (Fig. 5). *These finger loops allow a sufficient amount of slack*

*for movement of the cross-connecting wire to trace each point of termination.*

**3.03** Route the wires as indicated by the dotted lines in Fig. 6 to the assigned distribution cable pair. *Form a finger loop to allow a sufficient amount of slack.*
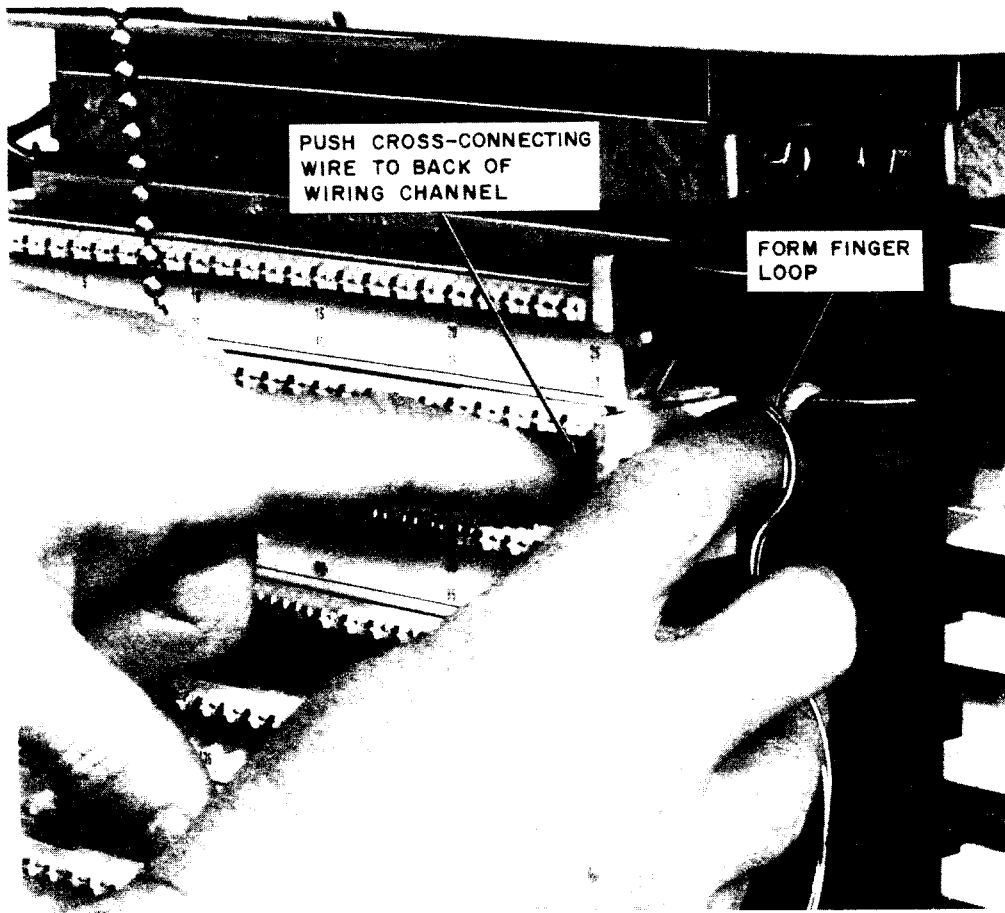


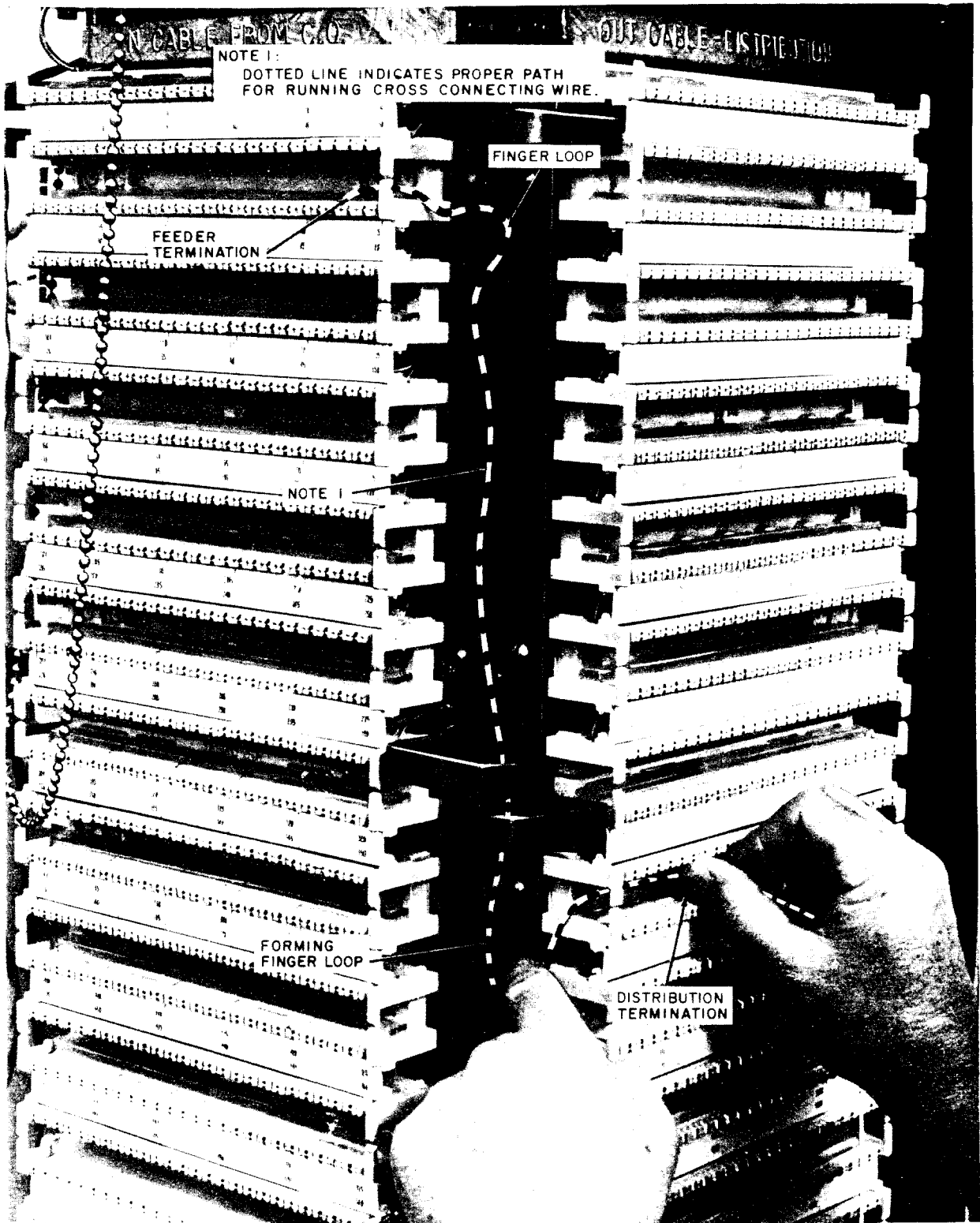Fig. 5—Placing Cross-Connecting Wire in Wiring Channel and Forming Finger Loop

Fig. 6—Cross-Connecting Wire Run

**3.04** Push the wire to the back of the cross-connecting
space of wiring block. Remove and discard
waterproof cap, then insert the cross-connecting
wire in the slots containing the assigned distribution
pair. Using the insertion cut-off tool, seat and
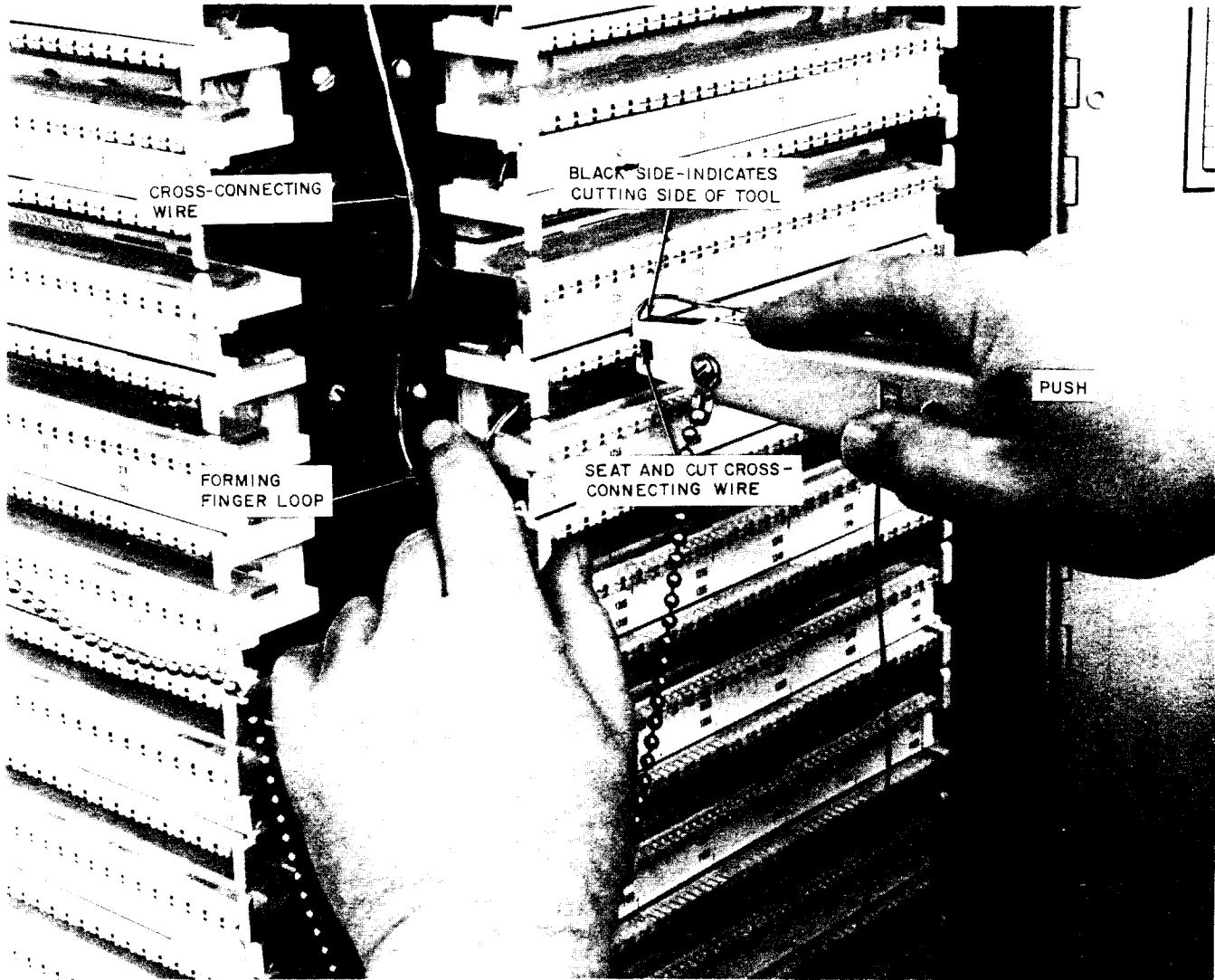cut-off the cross-connecting wire (Fig. 7).

CROSS-CONNECTING
WIRE

BLACK SIDE-INDICATES
CUTTING SIDE OF TOOL

PUSH

FORMING
FINGER LOOP

SEAT AND CUT CROSS-
CONNECTING WIRE

**Fig. 7—Seating and Cutting Cross-Connecting Wire**

**3.05** Install new waterproof cap on the terminated cross-connecting wire (Fig. 8).
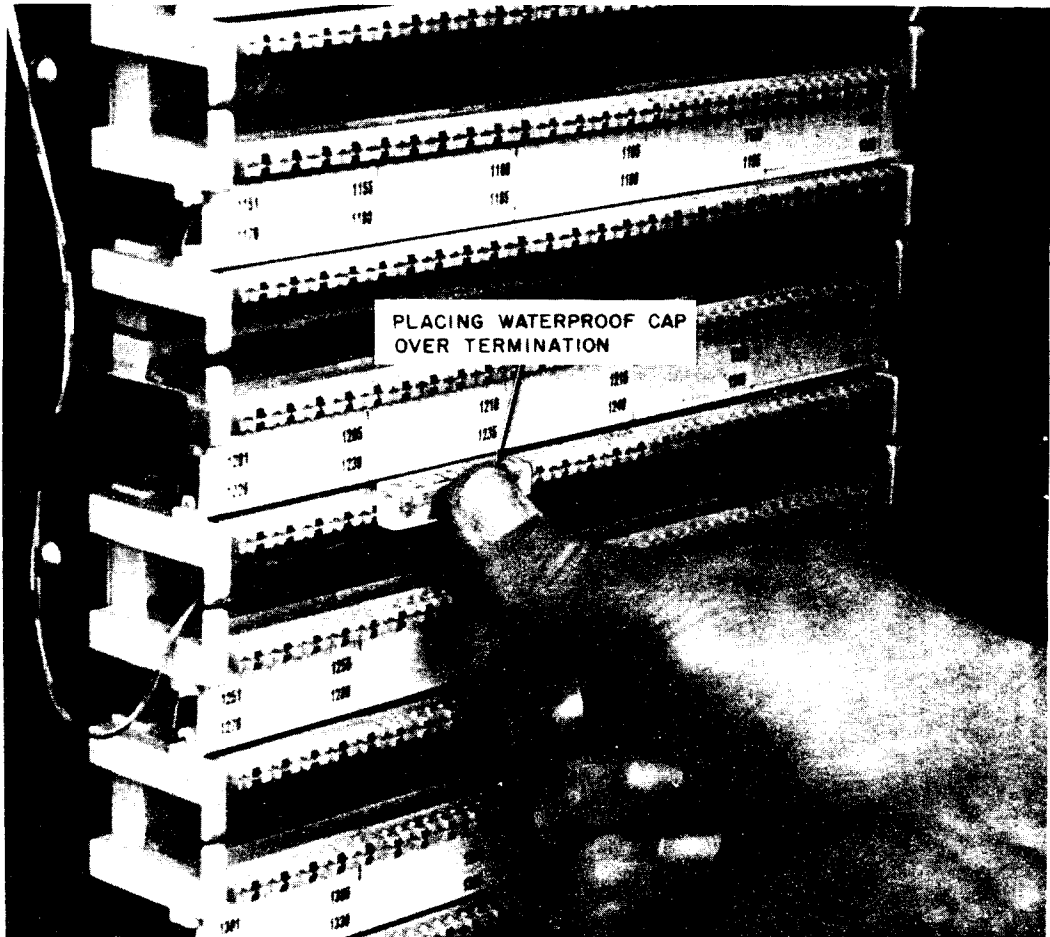
PLACING WATERPROOF CAP OVER TERMINATION

**Fig. 8—Placing Waterproof Cap**

**3.06** An interface with several cross-connecting wires installed is shown in Fig. 9 and 10.



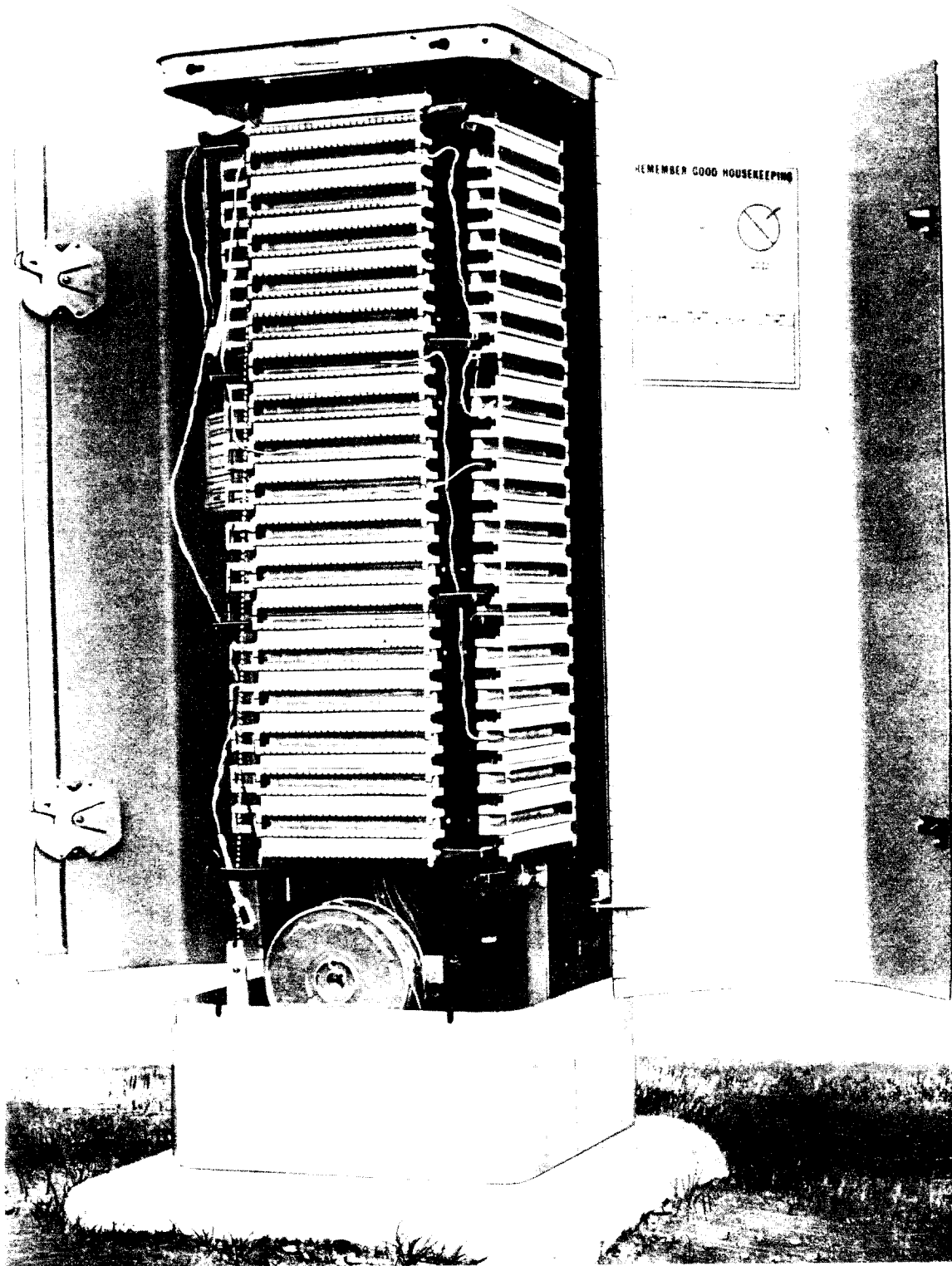**Fig. 9—Serving Area Interface AT-8630 with Several Cross-Connecting Wire Runs**
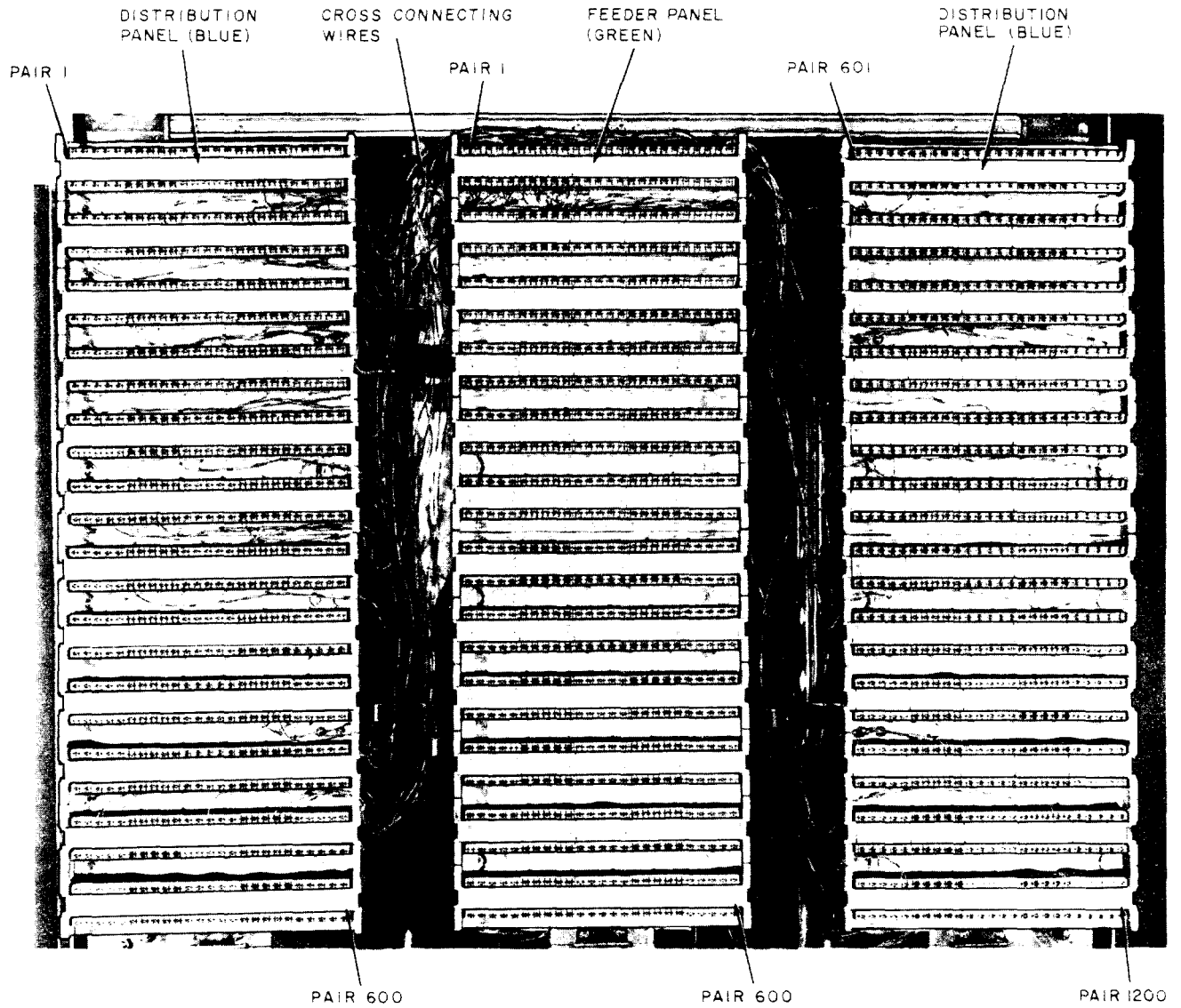
DISTRIBUTION          CROSS CONNECTING         FEEDER PANEL                    DISTRIBUTION
PANEL (BLUE)          WIRES                    (GREEN)                         PANEL (BLUE)

PAIR I                             PAIR I                          PAIR 601

PAIR 600                              PAIR 600                              PAIR 1200

**Fig. 10—B Aerial Interface AT-8685 with Several Cross-Connecting Wire Runs**

## 4. REMOVING AND RETERMINATING CROSS-CONNECTING WIRE

**4.01** Remove and discard waterproof cap, then remove the cross-connecting wire from the 88-type connecting block with long-nose pliers as shown in Fig. 11. *To prevent excessive buildup of cross-connecting wire, remove the disconnected cross-connecting wire from the serving area interface. This helps to maintain good housekeeping.*

**4.02** To reterminate the wire, cut off the old contact portion of the wire and reterminate as outlined in Part 3. If wire is not long enough to leave proper amount of slack, replace wire. *Do not piece out.*

## 5. IDENTIFYING SPECIAL CIRCUITS

**5.01** When cable pairs are used for special services, it will be necessary to identify the circuits by placing a special circuit marker (KS-6660 or KS-16847) over the pair at the feeder and distribution termination.
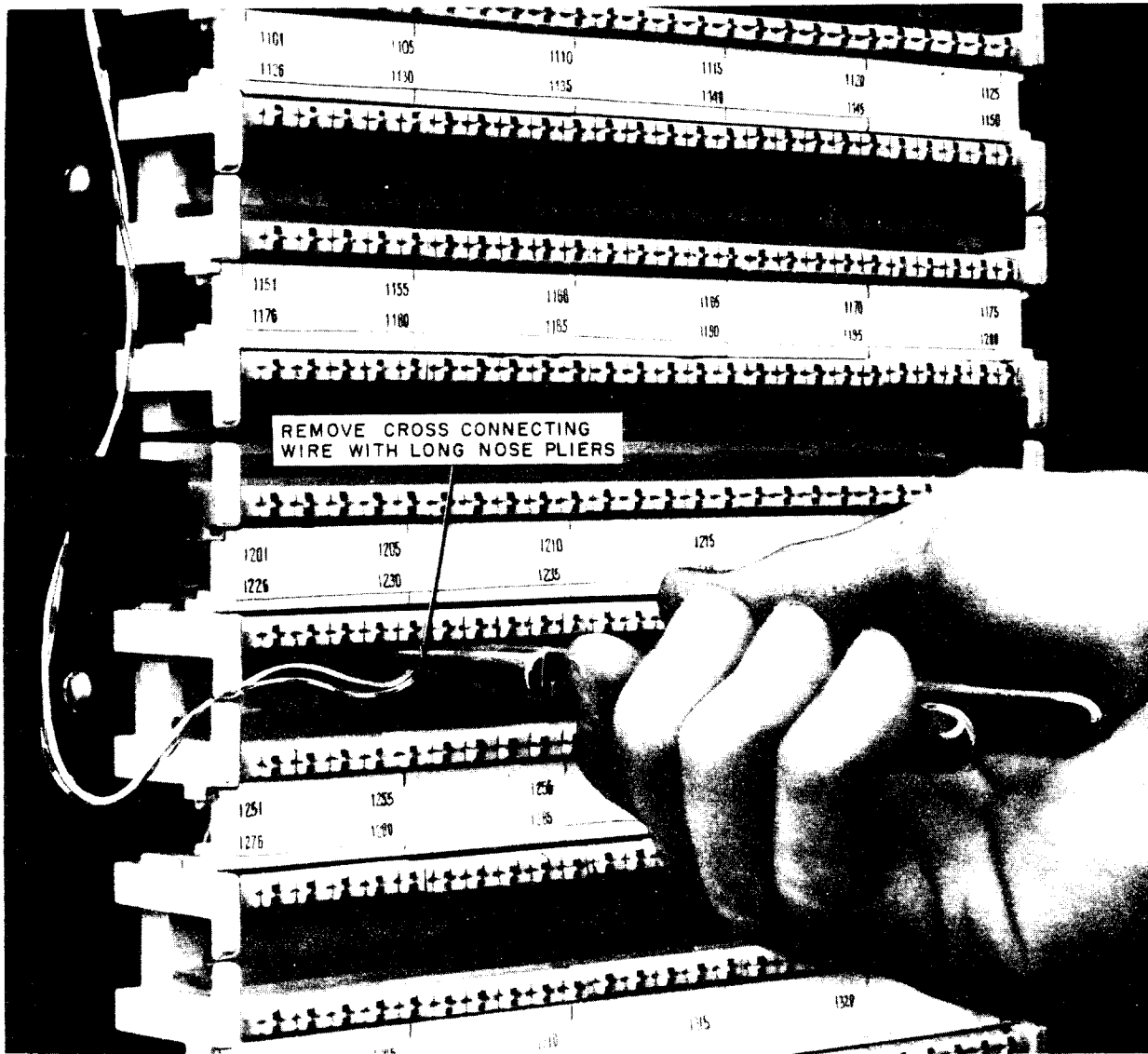


Fig. 11—Removing Cross-Connecting Wire