

Figure 1

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1. General

1.1 This document is a basic guide for installing the C(G)-391 High Density Connector. It applies only to C(G)-391 Connectors that do not have a cable stub.

1.2 The C(G)-391 Central Office Connector has been designed to meet or exceed Bellcore Specification TR-EOP-000164.

2. Installation Steps

Installation consists of eight sequential steps:

1. Temporary Mounting
2. Installing Cable Stub
3. Final Mounting
4. Grounding
5. Splicing Cable Stub
6. Marking and Jumpering
7. Inserting Protector Units
8. Testing

3. Step 1—Temporary Mounting

The C(G)-391 Connector comes with a temporary field stubbing kit that provides working access for field installation of the cable stub (Figure 2).

3.1 Position field stubbing bracket on left side of C(G)-391 Connector mounting bracket. Insert screw (provided with field stubbing bracket) through slot in C(G)-391 Connector mounting bracket and hole in field stubbing bracket.

3.2 Insert two 1/4-20 or .216-24 screws (provided with the field stubbing kit) through slots in field stubbing bracket. Mount field stubbing bracket to left-hand side of frame vertical mounting bar.

4. Step 2—Installing Cable Stub

Follow local practices for installing the cable stub.

4.1 Remove back cover from C(G)-391 Connector (Figure 3).

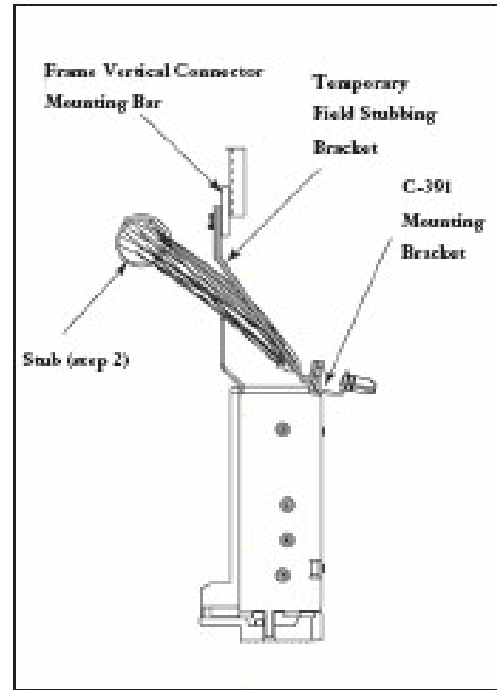
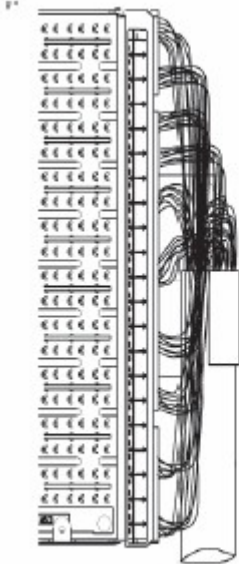


Figure 2

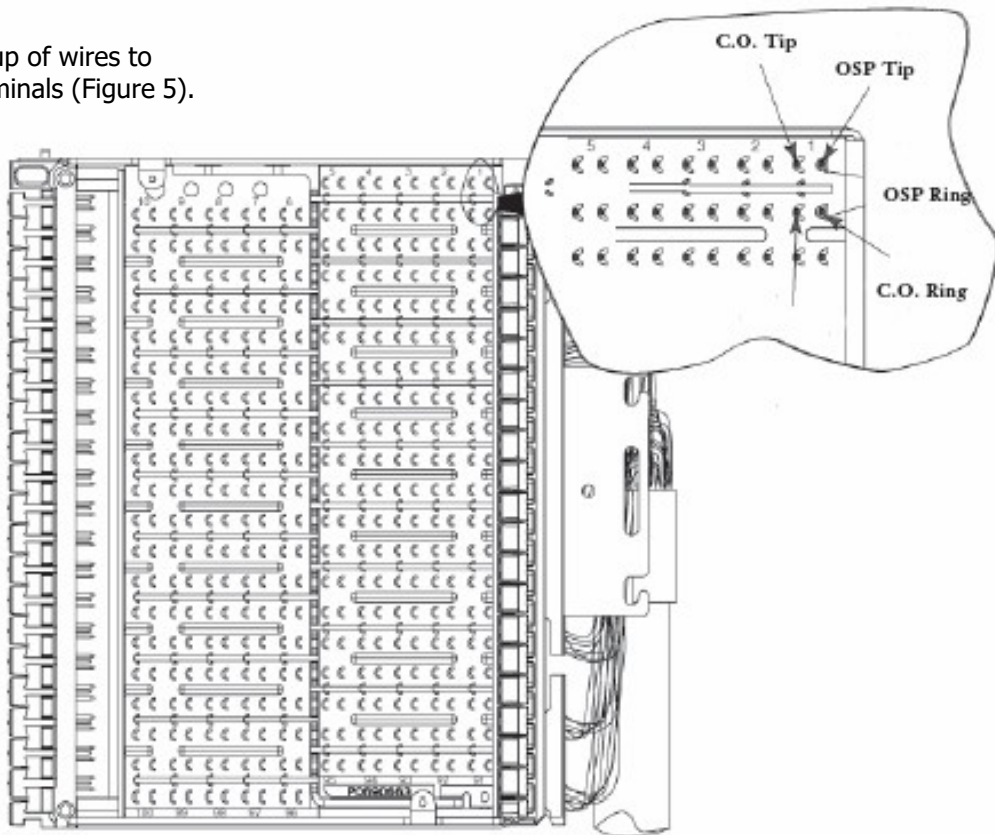


Figure 3

4.2 Feed 10-pair group of cable stub wires through each of the ten vertical fanning holes (Figure 4).



4.3 Dress each 10-pair group of wires to appropriate row of OSP terminals (Figure 5).



4.4 Wire-wrap each pair of wires to respective terminal pins.

4.5 Replace back cover after all OSP terminal connections have been made.

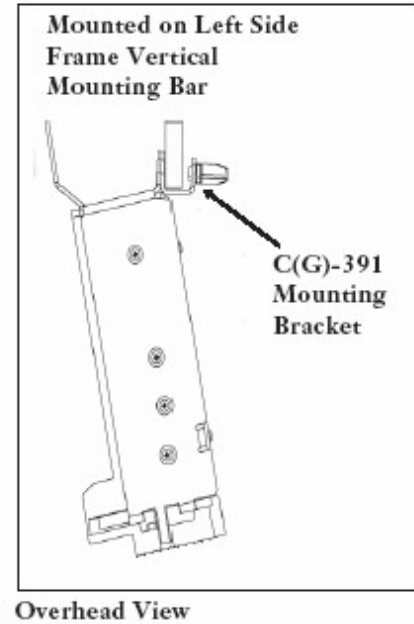
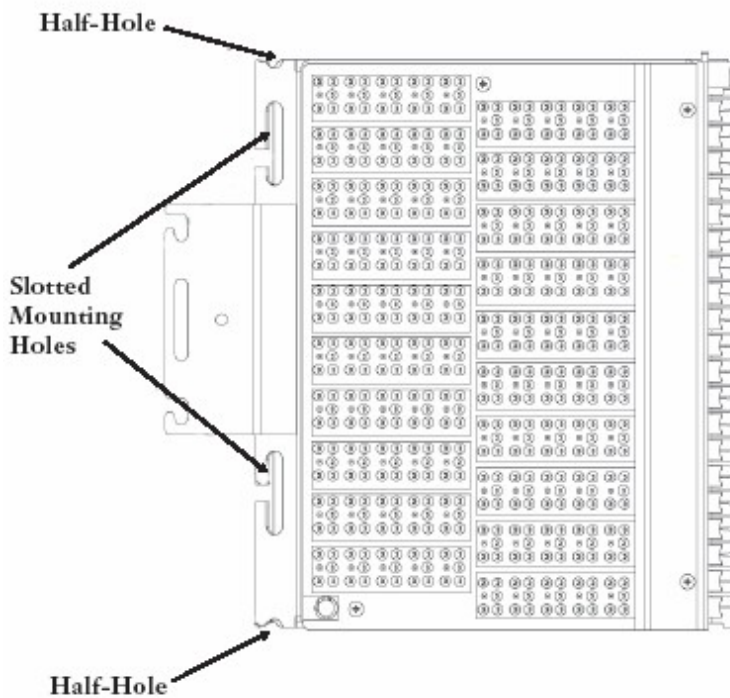
5. Step 3—Final Mounting

5.1 After cable stub installation (Step 2), remove field stubbing bracket.

5.2 The C(G)-391 Connector mounting bracket has two slotted mounting holes and a half hole at each end. Insert 1/4-20 or .216-24 screws (provided) through one mounting hole and one half hole, or through two slotted mounting holes, and secure the C(G)-391 mounting bracket to the left-hand side of frame vertical mounting bar (Figure 6).

NOTE: *Mounting hole patterns may differ at the top and bottom of some tall, conventional main distributing frames' vertical mounting bars. A special mounting bracket may be used to facilitate mounting the C(G)-391 Connector in these applications (Figure 6 inset).*

Figure 5



6. Step 4—Grounding

The C(G)-391 Connectors are configured for either frame grounding (NT8G1xxx- and NT8G2xxxseries), or independent grounding (NT8G6xxx- and NT8G8xxx-series). Connectors configured for independent grounding may be reconfigured for isolated grounding. Connectors configured for frame grounding cannot be reconfigured.

6.1 FRAME GROUND METHOD: Mount the C(G)-391 Connector to the main distributing frame by inserting the two mounting screws through the slotted mounting bracket. Ground straps or cables are not required.

6.2 When configured for independent grounding, the C(G)-391 Connector may easily be changed to isolated grounding (Figure 7)

Special Mounting Bracket

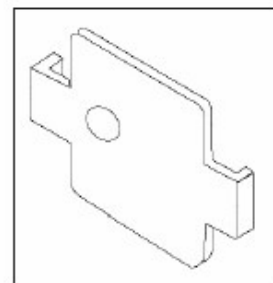
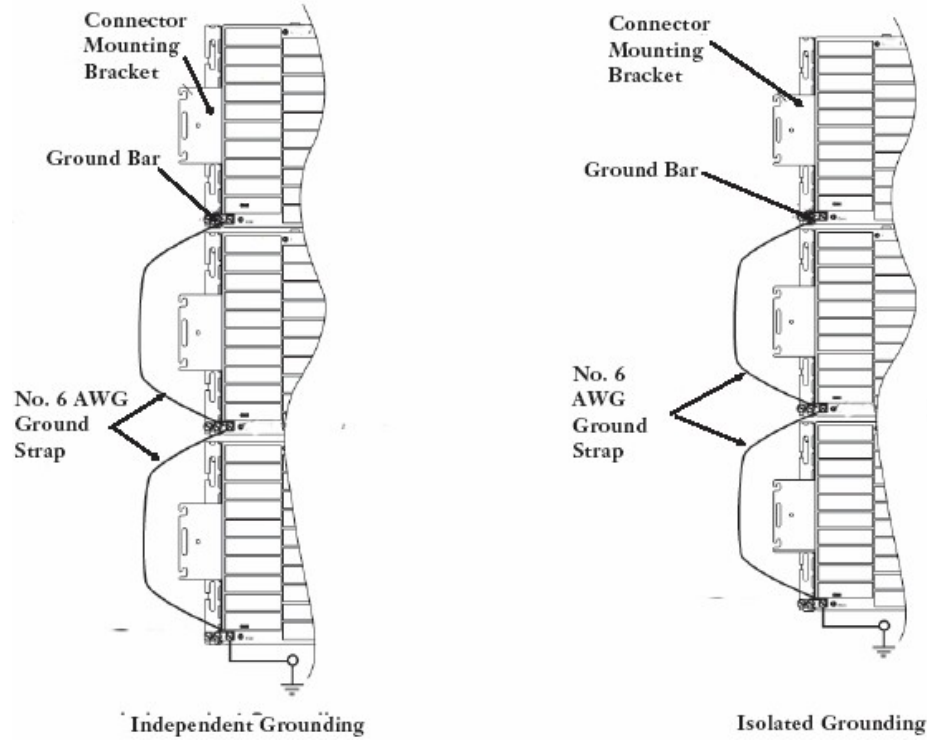


Figure 6

6.2.1 Independent Grounding

- a. No. 6 AWG 11-inch ground strap interconnects ground bars or vertically adjacent connectors. Last connector is connected to frame ground bar with a No. 6 AWG ground strap (not included).
- b. No. 12 AWG ground strap connects cable shield ground attached to connector ground bar (installed at factory). Refer to Figure 7 inset "A".
- c. Ground bracket connects connector ground bar (installed at factory). Refer to Figure 7 inset "A".



(Cable Stub Removed For Clarity)

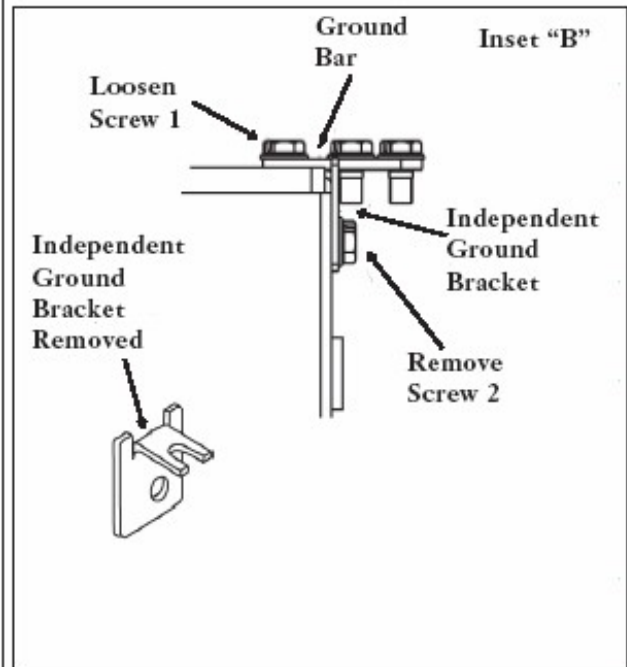
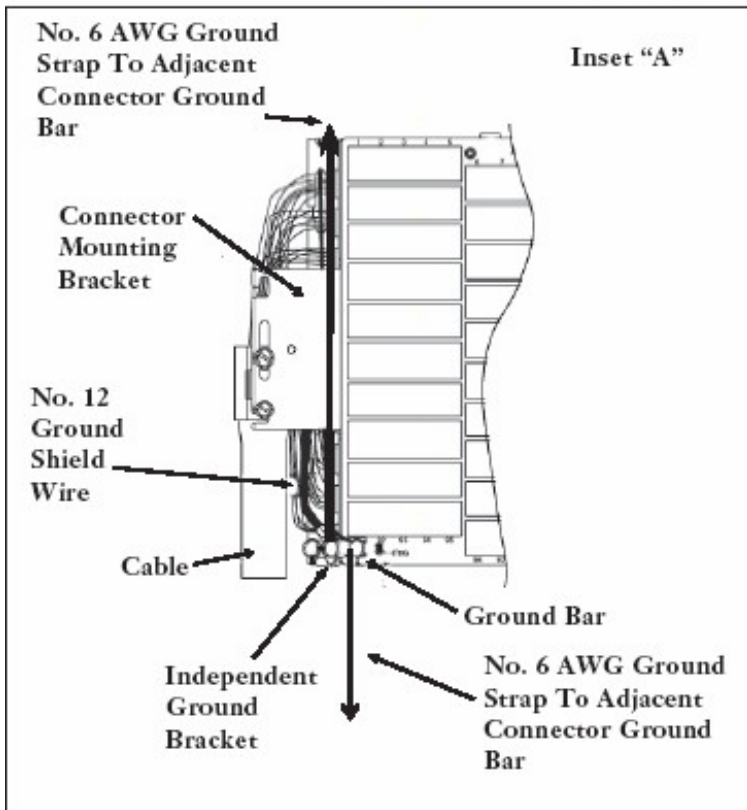


Figure 7

6.2.2. Isolated Grounding

- a. Follow steps 6.2.1 a and b as detailed in independent ground method.
- b. Remove independent ground bracket by loosening screw 1 and removing screw 2 (Figure 7, inset "B") between connector ground bar and connector mounting bracket. Retighten screw 1 after removing ground bracket.

7. Step 5—Splicing Cable Stub

Cable stub wiring uses standard cable wire color codes. Match stub pairs to entrance cable pairs and follow local practices for splicing.

8. Step 6—Marking and Jumpering

Jumper terminals consist of 20 rows of wire-wrap terminal pins. Each row of five terminals is identified by a number for easy pair identification.

Follow these recommended procedures:

- 8.1** Use appropriate stenciling kit to mark cable pair numbers. Mark cable ID near "CA" area at top of connector; mark pair count ID near "PR" area at bottom connector.
- 8.2** Secondary fanning strips may have closed or slotted openings. Insert five pairs of wires into secondary fanning strip opening (pairs one through five in top opening).
- 8.3** Feed jumper wires into primary fanning strip. Bring first jumper wire pair forward, and wire-wrap jumper wires to terminal pins.
- 8.4** Dress each wire along bottom of appropriate row of terminal pins.
- 8.5** Repeat steps above for remaining jumper pairs.
- 8.6** Dress wire slack to rear of C(G)-391 connector. Jumper pairs should run neatly from terminal field across connector backplane.

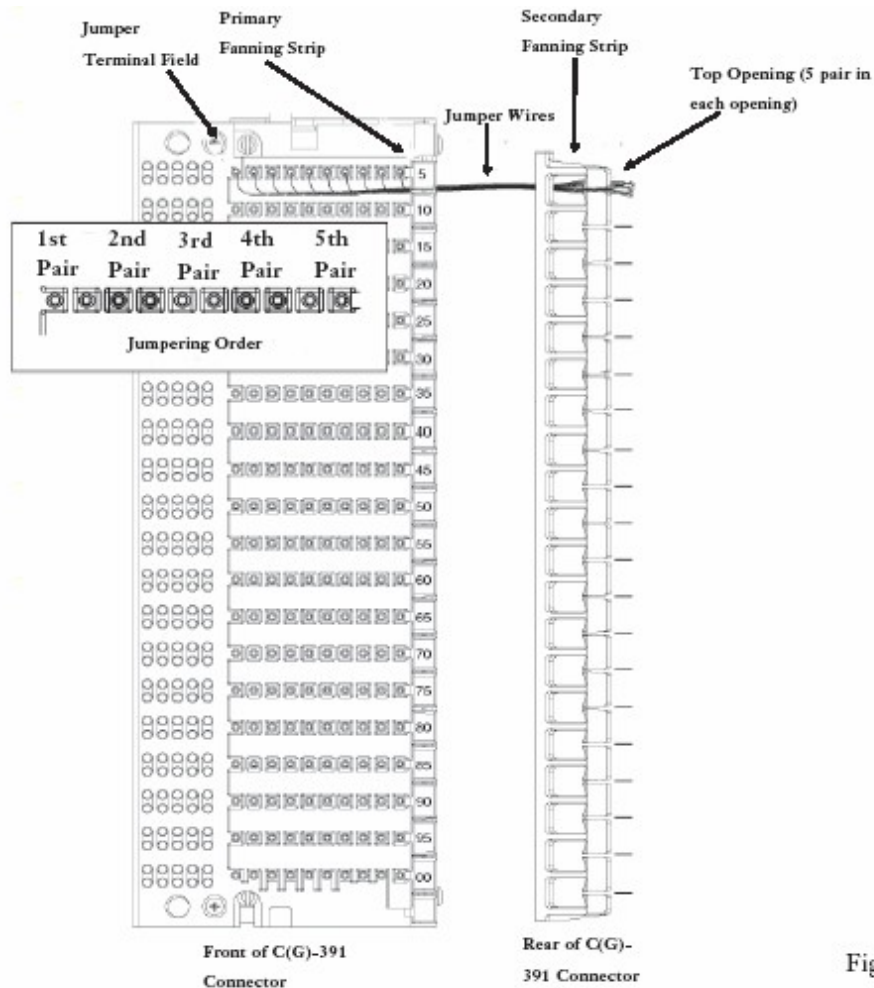


Figure 8

9. Step 7—Inserting Protector Modules

The protector field is located on the left side of the C(G)-391 Connector. Numbers at the top and right side of the protector field identify wire pairs. The protector field is keyed so that protector modules can only be installed one way (Figure 9).

NOTE: Use appropriate test set to check protector modules for tip and ring continuity and ground.

9.1 Insert protector modules to “detent” position during installation (Figure 9 inset). Detent position protects OSP pairs, but keeps OSP pairs disconnected from Central Office (CO) equipment.

9.2 After installation steps have been completed, push each protector unit into its fully inserted position. This connects CO pairs to OSP pairs.

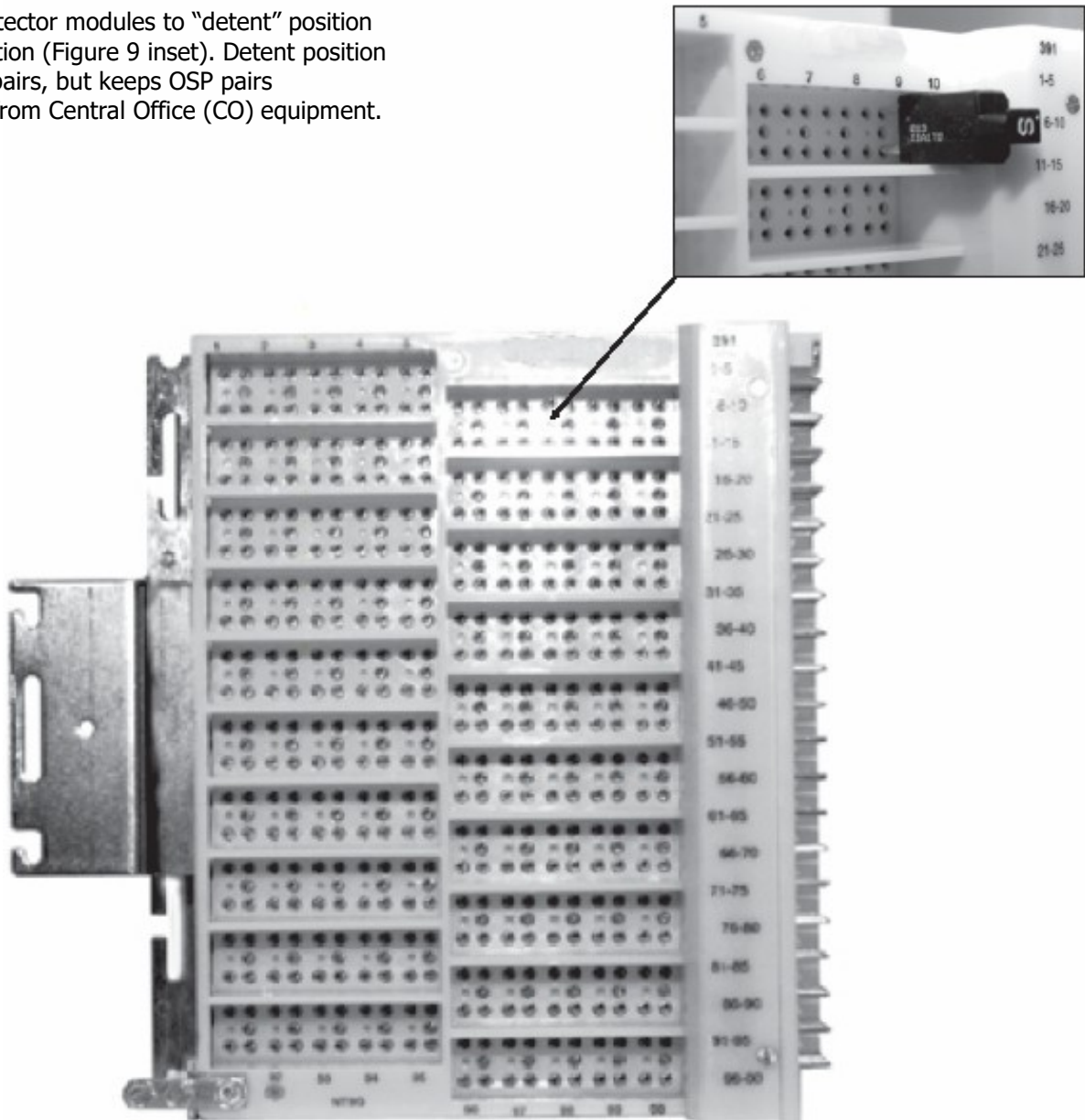
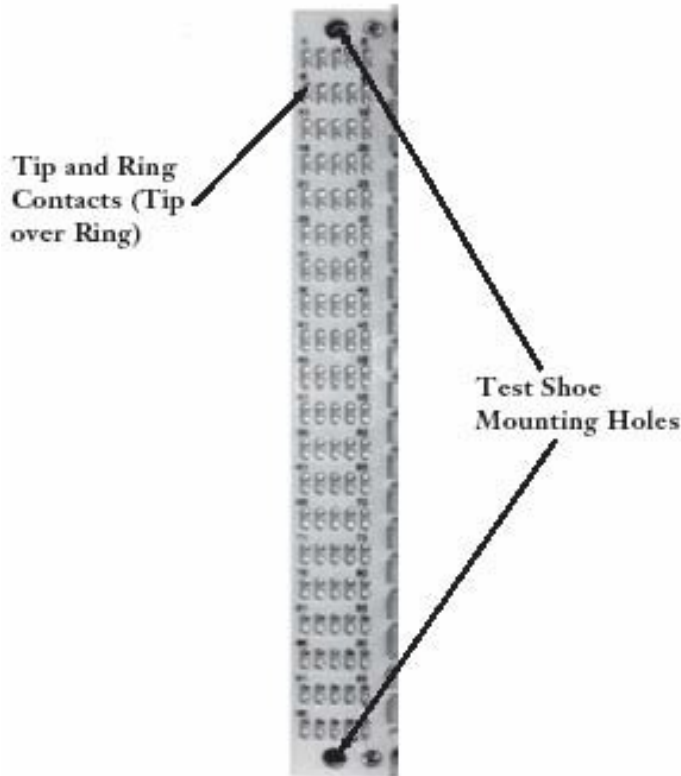


Figure 9



10. Step 8—Testing

The C(G)-391 test field consists of 100 pairs of gold-plated contacts. Test points are connected directly to OSP cable with separate connections for tip and ring of each pair. Test field terminals are numbered to show beginning and end of each row of five terminals (Figure 10)

- 1,5
- 6,10
- 11,15 (through...)
- 99,00 (100)

Use NT8G99AA Single-pair test cord or A0354444 100-pair test connector to test connections.

NOTE: *The C(G)-391 is also designed to be used with AT&T model P2FM Single Pair Test Cord, and AT-8987 T-Test Connector.*

Figure 10