

## CODED CONNECTORS—946 THROUGH 959

### DESCRIPTION

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#### 1. GENERAL

1.01 This section lists and illustrates coded connectors within the part or type number range of 946 through 959, used for the maintenance and operation of equipment in central offices.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

#### 2. DESCRIPTION OF CONNECTORS

2.01 **946A, B, and C:** The 946A, B, and C connectors consist of contact springs symmetrically sandwiched between a plastic tongue and two insulators which are riveted together between two stainless steel brackets. The spring contact is hard-gold plated and the bonding portion of the terminal is soft-gold plated (946A) or solder coated (946B and C). The 946A, B, and C connectors are used on the No. 1 Electronic Switching System (ESS), No. 3 ESS, No. 4 ESS, and No. 1A processor.

(a) **946A:** The 946A connector (Fig. 1) consists of 92 contact spring assemblies. The connector is intended to mate with the 947A, C, G, H, or K connector.

(b) **946B:** The 946B connector (Fig. 2) consists of 52 contact spring assemblies. The connector is intended to mate with the 947B or J connector.

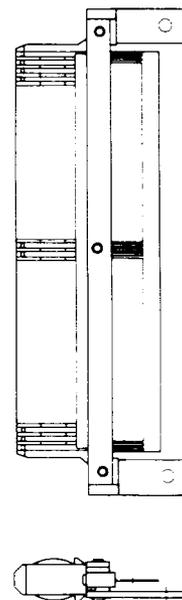


Fig. 1—946A Connector

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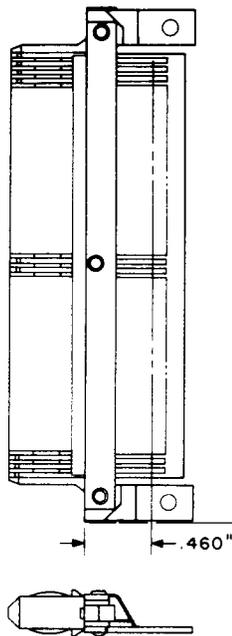


Fig. 2—946B Connector

(c) **946C:** The 946C connector (Fig. 3) consists of 92 contact spring assemblies. The connector is intended to mate with the 947A, C, G, H, or K connector.

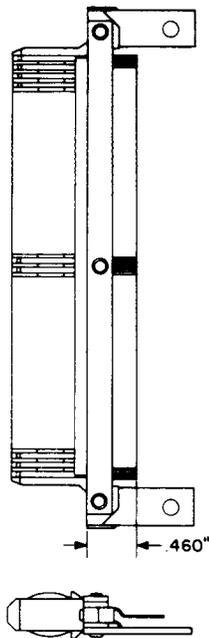


Fig. 3—946C Connector

**2.02 947-Type:** The 947-type connectors (Fig. 4) consist of two molded insulating parts, two metal covers riveted to one of the molded parts and terminals. The terminals are 0.025 inch square and are designed to accommodate a multilayer printed wiring board and up to three levels of 28 or 30 American Wire Gauge (AWG) solderless wrapped connections. The two molded insulated parts are separable, which allows terminal replacement on an individual basis.

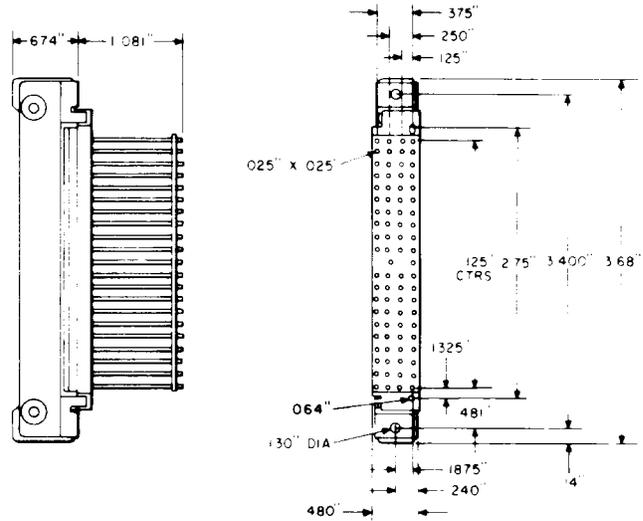


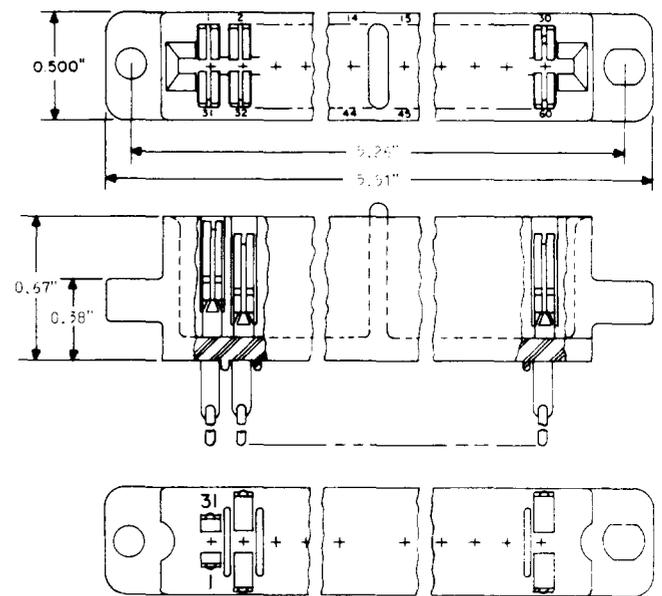
Fig. 4—947-Type Connector

(a) **947A:** The 947A connector consists of 82 terminals, intended for use in the following manner: 76 signal leads, 4 ground leads, and 2 power leads. The connector is designed to mate with the 946A or 946C connector and is used on the No. 1 ESS, No. 1A ESS, No. 1A processor, No. 3 ESS, and No. 4 ESS.

(b) **947B:** The 947B connector consists of 42 terminals intended for use in the following manner: 36 signal leads, 4 ground leads, and 2 power leads. The connector is designed to mate with the 946B connector and is used on the No. 1 ESS, No. 1A ESS, No. 1A processor, No. 3 ESS, and No. 4 ESS.

- (c) **947C:** The 947C connector consists of 82 terminals equipped with hard gold-plated tips. In cases where a third level solderless wrapped connection is not used, the hard-gold plating allows the terminals to mate with 942-type or 943-type backplane connectors.
- (d) **947D:** The 947D connector consists of 42 terminals equipped with hard gold-plated tips. In cases where a third level solderless wrapped connection is not used, the hard-gold plating allows the terminals to mate with 942-type or 943-type backplane connectors.
- (e) **947E:** The 947E connector consists of 82 terminals and is used in the remreed frame on the No. 1 ESS.
- (f) **947F:** The 947F connector consists of 42 terminals and is used in the remreed frame on the No. 1 ESS.
- (g) **947G:** The 947G connector consists of 82 terminals. This connector is used in the remreed frame on the No. 1 ESS.
- (h) **947H:** The 947H connector contains standard narrow terminals instead of wide power and ground terminals. There is no gold on the terminals for solderability and the welded ground tab has been eliminated. The connector is used in the remreed frame on the No. 1 ESS.
- (i) **947J:** The 947J connector contains standard narrow terminals instead of wide power and ground terminals. There is no gold on the terminals for solderability and the welded ground tab has been eliminated. The connector is used in the remreed frame on the No. 1 ESS.
- (j) **947K:** The 947K connector contains standard narrow terminals instead of wide power and ground terminals. The welded ground tab has been eliminated and the hard gold-plated terminal tips are arranged to mate with a 942-type connector. The 947K connector is used in the remreed frame on the No. 1 ESS.

**2.03 948-Type:** The 948-type connectors (Fig. 5) consist of a molded housing of insulating material having a molded, polarized rib and are equipped with contact spring terminals. One end of each terminal is contained within the housing and is equipped with twin contacts of metal for connection to a printed wiring terminal. The other end of each terminal protrudes through the wall of the housing and is arranged for two mechanically wrapped connections of 26 gauge wires.



**Fig. 5—948-Type Connector**

- (a) **948A:** The 948A connector is equipped with 60 normally open contact spring terminals in 2 rows of 30 each. The connector is used on the V120 pulse code modulation (PCM) terminal.
- (b) **948B1:** The 948B1 terminal is equipped with 60 normally closed contact spring terminals. The connector is used in the Automatic Call Distribution (ACD) operation position control circuit.

(c) **948B2:** The 948B2 connector is equipped with 32 normally closed and 28 normally open contact spring terminals. The connector is used in the Cable Pressure Monitoring System (CPMS) line access and measure circuit.

(d) **948C:** The 948C connector is equipped with 30 solder-type contact spring assemblies. The connector is used on the 60-, 120-, and 180-line consoles for computer controlled order receiving equipment.

**2.04 949A1, A2, B1, C1, and D1:** The 949-type connectors consist of a molded housing of insulating material having a molded, polarizing rib and are equipped with spring terminals. One end of each terminal is contained within the housing and is equipped with twin metal contacts for connection to a printed wiring terminal. The other end of each terminal protrudes through the wall of the housing and is arranged for two mechanically wrapped connections of 26 gauge wires.

(a) **949A1:** The 949A1 connector (Fig. 6) is equipped with 74 spring terminals in 2 rows of 37 each. The connector is used on the V120 PCM terminal.

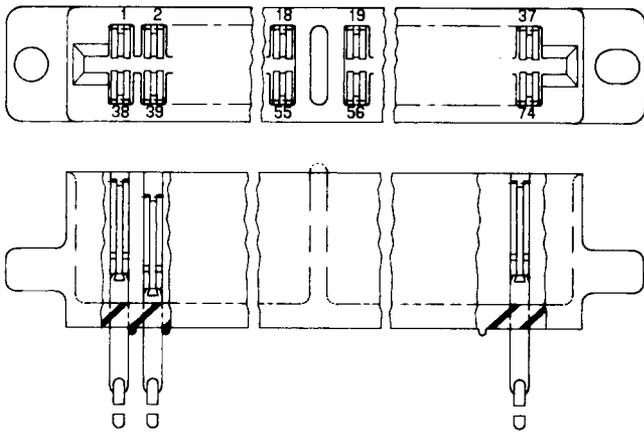


Fig. 6—949A1 Connector

(b) **949A2:** The 949A2 connector is equipped with 74 spring terminals: 32 shorting-type spring terminals and 42 nonshorting-type spring terminals. The connector is used on the N4 carrier terminal.

(c) **949B1:** The 949B1 connector is equipped with 74 spring terminals. The connector is used on the manually controlled interrogator.

(d) **949C1:** The 949C1 connector (Fig. 7) is equipped with 74 spring terminals that will accept 2 wraps of 26 or 24 gauge wires. The connector is used on the flexible printed circuit backplanes.

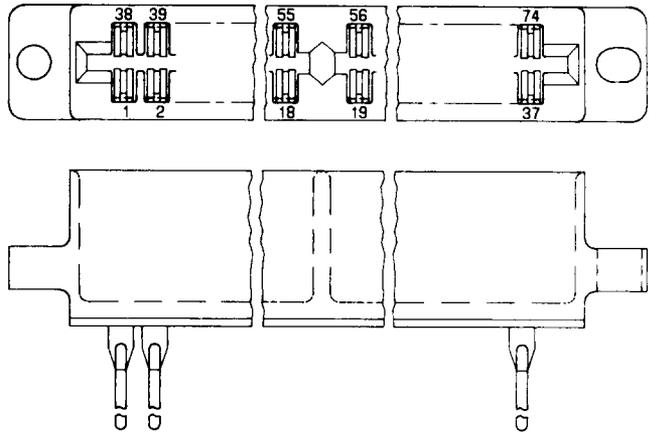


Fig. 7—949C1 Connector

(e) **949D1:** The 949D1 connector is equipped with 74 spring terminals. The connector block is molded from polyphenylene sulfide with 43 ±3 percent glass content. An insulator is assembled over the terminals of the connector. The connector is used on the calling receiver unit of the TOUCH-TONE\* telephone.

\* Trademark of AT&T.

**2.05 950A, B, and C:** The 950A, B, and C connectors (Fig. 8) consist of an edgeboard connector equipped with a phenolic block. The connectors are designed to mate with a 473A plug, allowing the plug to stop in either of two depths.

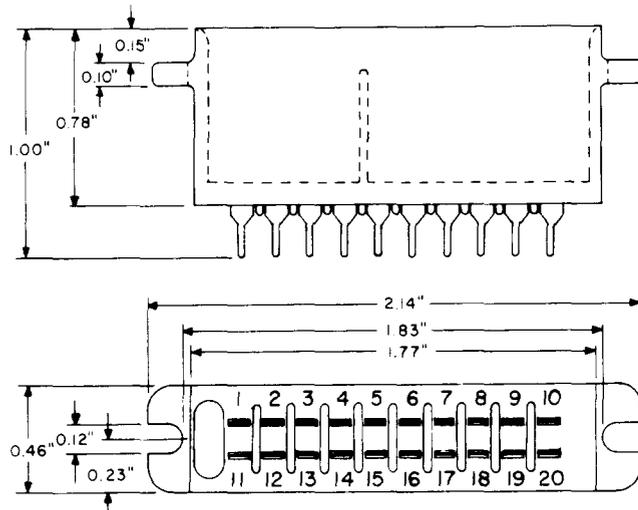


Fig. 8—950A, B, or C Connector

- (a) **950A:** The 950A connector is equipped with ten pairs of normally closed contacts featuring extended gold-contact pads and single wire-wrap terminations. The connector is used on the J98622AN maintenance connector unit.
- (b) **950B:** The 950B connector is equipped with 20 contacts having terminals arranged for solderless wire-wrap connections. The connector is used on the metallic facility terminal.
- (c) **950C:** The 950C connector is equipped with 16 pairs of normally closed contacts and a keying rib located between contacts 12 and 13. The connector is used on A6B direct formed supergroup equipment.

**2.06 951A:** The 951A connector (Fig. 9) consists of a molded body and shell, equipped with 32 terminals in 2 rows of 16. Each terminal is designed to accept two 26 AWG solderless wrap connections. The connector is used on the remreed trunk link network.

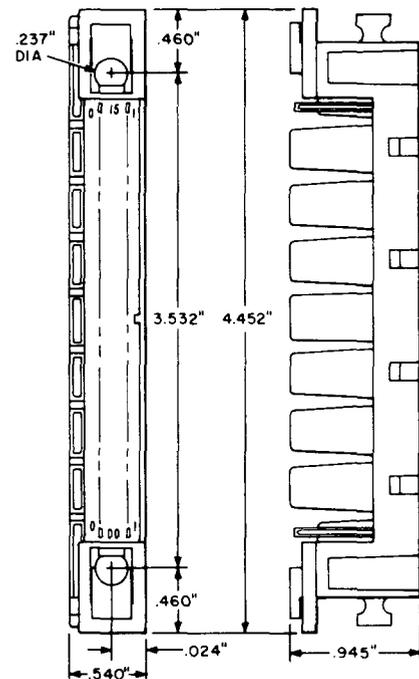


Fig. 9—951A Connector

**2.07 953A, B, and C:** The 953A, B, and C connectors (Fig. 10) consist of plastic housing contact assemblies containing a row of ten contacts mounted on a small printed wiring board. The connectors are designed to interconnect 30 AWG stranded wires to the contact assemblies and are used on the voiceband interface equipment.

- (a) **953A:** The 953A connector consists of two plastic housing contact assemblies.
- (b) **953B:** The 953B connector consists of two plastic housing contact assemblies mounted to a printed wiring board.
- (c) **953C:** The 953C connector consists of one plastic housing contact assembly.

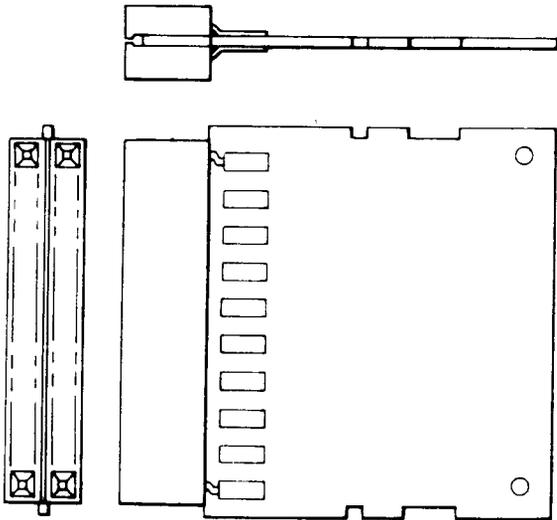


Fig. 10—953A, B, or C Connector

**2.08 954A:** The 954A connector (Fig. 11) consists of a small printed circuit board and two plastic housing contact assemblies, each containing a row of ten contacts. The connector is designed to interconnect twelve 28 AWG stranded wires to the contact assemblies and is used on the No. 1A processor.

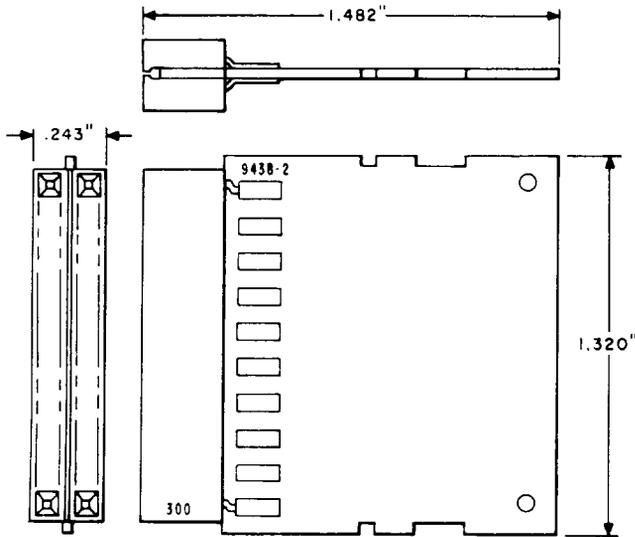


Fig. 11—954A Connector

**2.09 955A:** The 955A connector consists of a small printed wiring circuit board and two plastic housing contact assemblies, each containing a row of ten socket terminals. The connector is designed to terminate one or two 31 conductor flat flexible cables and is used on the No. 1A processor.

**2.10 956A:** The 956A connector (A&M Only) consists of a single sided printed circuit board and is designed for insertion in a 934B connector.

**2.11 957A:** The 957A connector (Fig. 12) consists of a molded block of insulating material with low- and high-frequency contacts and ground terminals. The backplane side of the connector is provided with 12 receptacles which accept 958A connectors for high-frequency signal transmission and 11 wire wrapped terminals for two 24- or 26-gauge low frequency signal and power connections. Eleven wire-wrapped terminals, for grounding purposes, are located in a row opposite the low frequency terminals. The connector provides termination of a 75-ohm sub-miniature coaxial cable to a printed wiring board in a matched impedance configuration. The 957A connector is used on the M34 Digital Multiplex/T4M Digital Radio System.

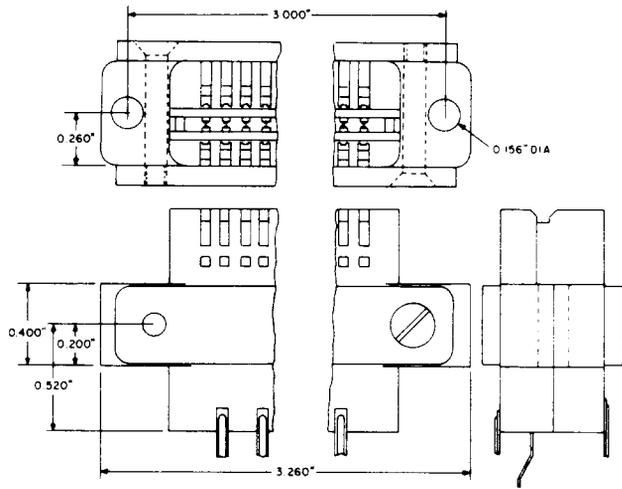
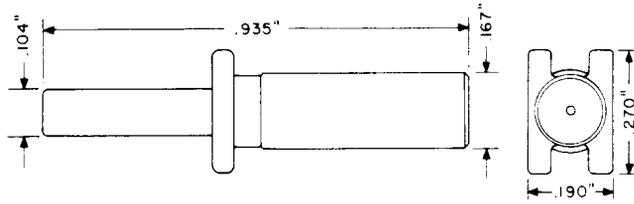


Fig. 12—957A Connector

**2.12 958A:** The 958A connector (Fig. 13) consists of a coaxial plug arranged to terminate the KS-19224, L2, 75-ohm, subminiature coaxial cable and to plug into the 957A backplane. The connector is equipped with a locking detail which is captured and retained by the 957A locking spring. The 958A connector is used on the M34 Digital Multiplexer/T4M Digital Radio System.



**Fig. 13—958A Connector**

**2.13 959A, B, C, D, and E:** The 959-type connectors consist of two assemblies bonded to a printed wiring board.

(a) **959A:** The 959A connector is equipped with 16 resistors and 2 capacitors. The connector is designed to be used as a bus termination in the main store circuit associated with the 3A central control and is used on the J1C052A-1 main store unit.

(b) **959B:** The 959B connector is equipped with 16 resistors (of different values) and 2 capacitors and is used on the main store unit.

(c) **959C:** The 959C connector consists of two contact assemblies bonded to a printed wiring board assembly containing a number of resistors. The connector is used on the main store unit.

(d) **959D:** The 959D connector consists of two contact assemblies bonded to a printed wiring board. The connector is designed to be used on the interface cable between the dial line adapter circuit pack and the 407A data set.

(e) **959E:** The 959E connector consists of two assemblies bonded to a printed wiring board, containing eight termination resistors. The connector is used on the audio response controller frame.