

# CODED CONNECTORS—940 THROUGH 943

## DESCRIPTION

### 1. GENERAL

1.01 This section lists and illustrates coded connectors within the part or type number range of 940 through 943, 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 **940A, C, C2, C3, C4, C5, D, and E:** The 940-type connectors (Fig. 1) consist of a molded housing of insulating material having a molded, polarizing rib and contains 50 spring terminals in 2 rows of 25 each. One end of each terminal is contained within the housing and is equipped with twin contacts for connection to a printed wiring terminal. The connectors are arranged to make contact with printed wiring terminals on two sides of a 0.062-inch thick printed wiring board. The other end of each terminal protrudes through the wall of the housing.

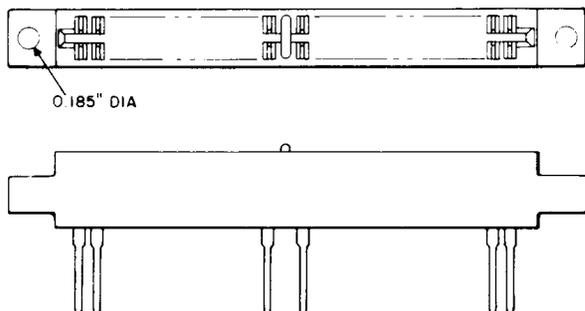


Fig. 1—940-Type Connectors

(a) **940A:** The 940A connector has 50 contact springs of the normally open type. The terminals are arranged for 2- mechanically wrapped connections of 22-, 24-, or 26-gauge wire and three wraps of 22-gauge wire. The connector is used on the D3 channel bank.

(b) **940C:** The 940C connector has paired contact positions 1 and 26, 5 and 30, and 7 and 32. These positions are equipped with "make" contact spring assemblies arranged to "break" and mate with the finger terminations on two sides of a printed wiring board. The remaining 44 contact springs are of the normally open type. The contact spring terminals will accept up to 3-wrapped connections of 22-, 24-, and 26-gauge wire. The connector is used on the incoming intertoll and toll tandem trunks.

(c) **940C2:** The 940C2 connector has paired contacts, positions 1 and 26, 14 and 39, 15 and 40, 16 and 41, 17 and 42, 18 and 43, 19 and 44, 20 and 45, 21 and 46, 22 and 47, 23 and 48, 24 and 49, and 25 and 50. These contact positions are equipped with "make" contact spring assemblies arranged to break and mate with the finger spring terminations on two sides of a printed wiring board. The remaining 24 contact springs are of the normally open type. The contact spring terminals will accept 3-wrapped connections of 22-, 24-, or 26-gauge wire. The connector is used in M1C multiplex bays.

(d) **940C3:** The 940C3 connector has paired contact positions 7 and 32, and 8 and 33, which are equipped with "make" contact spring assemblies. The remaining 46 contact springs are of the normally open type. The 50 terminals will accept 3-wrapped connections of 22-, 24-, or 26-gauge wire. The connector is used in M1C multiplex bays.

(e) **940C4:** The 940C4 connector contains 32 contact spring assemblies of the normally closed type at position pairs 26 and 1 through 41 and 16. The remaining 18 contact spring assemblies are of

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the normally open type and are at position pairs 42 and 17 through 50 and 25. The 50 terminals will accept 3-wrapped connections of 22-, 24-, or 26-gauge wire. The connector is used in the Remote Testing System for the SLC\*-40 Subscriber Loop Carrier System.

(f) **940C5:** The 940C5 connector contains 26 contact spring assemblies of the normally closed type at position pairs 29 and 4, 30 and 5, 33 and 8, 34 and 9, 36 and 11, and 40 and 15 through 47 and 22. The remaining 24 contact spring assemblies of the normally open type are at positions 26 and 1 through 28 and 3, 31 and 6, 32 and 7, 35 and 10, 37 and 12 through 39 and 14, 48 and 23 through 50 and 25. The 50 terminals will accept 3-wrapped connections of 22-, 24-, or 26-gauge wire. The connector is used in M1C multiplex equipment bays.

(g) **940C6:** The 940C6 connector has contacts which are normally closed (shorted) at positions 8 and 33, and 11 and 36. The remaining 46 contacts are open. The 50 terminals will accept 3-wrapped connections of 22-, 24-, or 26-gauge wire. The connector is used in A7E channel bank bays.

(h) **940D:** The 940D connector contains 23 spring terminals arranged in a single row in positions 26 through 50, except no springs are in positions 33 or 44. The contact spring terminals are arranged for solder connections to a single-sided 0.062-inch thick wiring board. The connector is used in the SLC-40 Subscriber Loop Carrier System.

(i) **940E:** The 940E connector has no contact spring assemblies located in block positions 1, 2, 4, 11, 12, 26, 27, 34, 36, and 37. The connector contains 40 contact spring assemblies, in 2 rows of 20 each, that are arranged for solder connections to a double-sided 0.062-inch thick printed wiring board. The terminals will accept 3-wrapped connections of 24-gauge wire or 2-wrapped connections of 26-gauge wire. The connector is used on flexible printed circuit board backplanes.

**2.02 941A, B, and C:** The 941A, B, and C connectors (Fig. 2) consist of a molded housing of insulating material containing spring terminals. One end of each terminal is contained within the housing and is equipped with twin metal contacts for connecting to a printed wiring board terminal. The ends are

arranged to make contact with printed wiring terminals on two sides of a 0.062-inch thick printed wiring board. The other end of each terminal protrudes through the wall of the housing and is arranged for two mechanically wrapped connections.

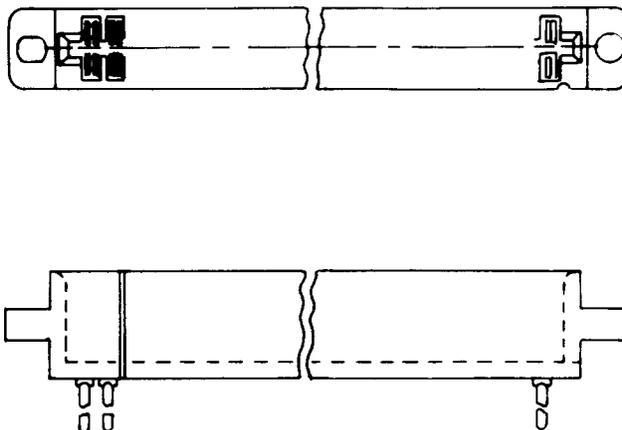


Fig. 2—941A, B, or C Connector

(a) **941A:** The 941A connector consists of 40 spring terminals in 2 rows of 20 each. The connector is used in the Subscriber Loop Multiplex System.

(b) **941B:** The 941B connector has 20 terminals in positions 1 through 20. The connector is used in the LMX-3 Multiplex System.

(c) **941C:** The 941C connector has 20 terminals in positions 21 through 40. The connector is used on 54A and 55A power units in the Subscriber Loop Multiplex System.

**2.03 942- and 943-Type:** The 942- and 943-type connectors consist of a small printed wiring (paddle board) board to which one or two contact assemblies are attached by ultrasonic welding. A contact assembly consists of a plastic insulator equipped with bifurcated contacts. These contact assemblies are coded as 963J-10 and 963J-10-8 connectors. The 963J-10 connector has ten contacts and the 963J-10-8 connector has eight contacts, one contact in each connector is missing from each of the end positions. The connectors can terminate flat cable or discrete wire, interconnect contacts and/or mount components.

(a) **942-Type:** The 942-type connectors (Fig. 3) have an overall length of 0.982 inch, including

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the contact assembly. The length of the printed wiring board is 0.942 inch. A list of the available 942-type connectors and features are provided in Table A.

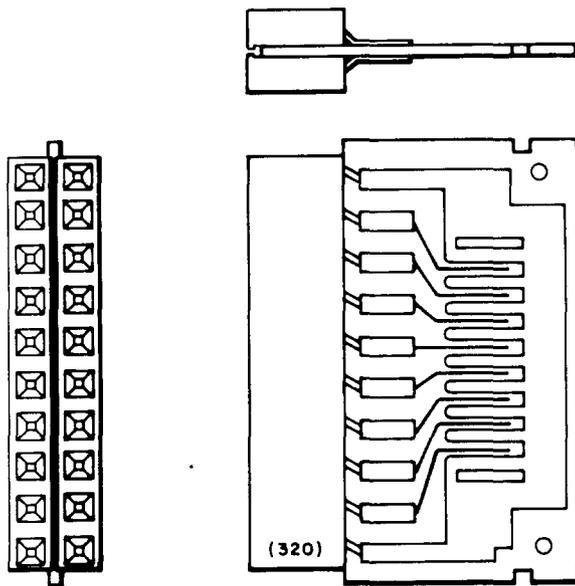


Fig. 3—942-Type Connectors

(b) **943-Type:** The 943-type connectors (Fig. 4) have an overall length of 1.482 inches, including the contact assembly. The length of the printed wiring board is 1.442 inches. A list of the available 943-type connectors and features are provided in Table B.

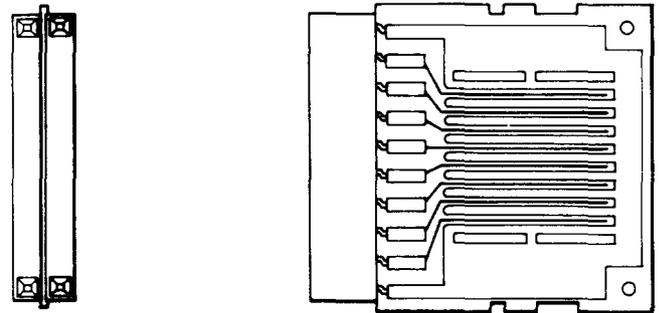


Fig. 4—943-Type Connectors

TABLE A

942-CODE NO.	CONTACT ARRANGEMENT	FEATURES
A	1 × 10	—
B	2 × 8	—
C	2 × 10	—
D	2 × 10	Mounts eight 100 ohm resistors
E	2 × 10	Mounts eight 4.99 ohm resistors
F	2 × 10	Terminates a 31-conductor flat cable
G	2 × 10	—
H	1 × 10	—
J	2 × 10	Mounts ten 4.99 ohm resistors
K	2 × 10	Interconnects specific contacts
L	2 × 10	Terminates six pairs of 28-gauge wires
M	1 × 10	Terminates two 16-gauge wires
N	2 × 10	Terminates a 31-conductor flat cable
P	2 × 10	Interconnects specific contacts
R	2 × 10	Interconnects specific contacts
S	1 × 8	Terminates eight twisted pairs of wires and mounts four 15 ohm resistors
T	2 × 10	Terminates a 24-conductor flat cable
U	2 × 10	Terminates a 24-conductor flat cable
W	2 × 10	Mounts eight 150 ohm resistors
V	2 × 10	—
AB	2 × 8	—
AC	2 × 10	Mounts four 4.99 ohm resistors
AD	2 × 8	Terminates a 31-conductor flat cable
AE	2 × 8	—

TABLE A (Contd)

942-CODE NO.	CONTACT ARRANGEMENT	FEATURES
AF	2 × 8	—
AG	2 × 10	Mounts nine 220 ohm resistors
AH	2 × 8	Mounts one resistor
AJ	2 × 8	Mounts two resistors
AK	2 × 8	Mounts three resistors
AL	2 × 8	Mounts four resistors
AM	2 × 8	Mounts five resistors
AN	2 × 8	Mounts six resistors
AP	2 × 8	Mounts seven resistors
AR	2 × 10	Mounts ten 100 ohm resistors
AS	2 × 10	Mounts nine resistors
AJ	2 × 10	Mounts six resistors
AU	2 × 8	Mounts seven resistors
BC	2 × 10	Interconnects specific contacts
BD	2 × 10	Interconnects specific contacts
BE	2 × 10	Interconnects specific contacts
BF	2 × 10	Interconnects specific contacts
BG	2 × 10	Interconnects specific contacts
BH	2 × 10	Interconnects specific contacts
BJ	2 × 10	Interconnects specific contacts
BK	2 × 10	Interconnects specific contacts
BL	2 × 10	Interconnects specific contacts
BM	2 × 10	Interconnects specific contacts
BN	2 × 10	Interconnects specific contacts
BP	—	Mounts eight 6.8 microhenry inductors

TABLE B

CODE NO.	CONTACT ARRANGEMENT	FEATURES
A	1 × 10	Terminates a 24-conductor flat cable
B	2 × 10	Terminates a 24-conductor flat cable
C	1 × 10	Terminates a 24-conductor flat cable and mounts eight 100 ohm resistors
D	2 × 10	Terminates 18 pairs of wires where one is grounded of each pair
E	2 × 8	Mounts eight 1000 ohm resistors and extends header to provide access to the terminals when the connector is mated
F	1 × 10	Terminates a 24-conductor flat cable
G	2 × 10	Terminates power cable
H	2 × 10	Terminates one or two 24-conductor flat cable
J	2 × 10	Terminates 16 pairs of wires
K	2 × 10	Terminates 12 pairs of wires
L	2 × 10	Terminates 12 pairs of wires
M	2 × 10	Terminates power cable on No. 1A Processor
N	2 × 10	Terminates cables up to ten coax or twisted pairs; able to place a resistor from signal to shield
S	2 × 10	Terminates 19 pairs of wires
T	2 × 10	Terminates two 10-conductor cables and mount four 15 ohm resistors
U	2 × 10	Terminates one cable with ten conductors and mount four 15 ohm resistors
W	1 × 10	Terminates two 24-conductor flat cables
Y	2 × 10	Terminates a 24-conductor flat cable
AB	1 × 10	Terminates ten leads
AC	2 × 10	Terminates two pairs of wires and mounts twelve 150 ohm resistors
AD	1 × 10	Mounts a KS-21193, L16 and a KS-21193, L12 cover
AE	2 × 10	Terminates two 10-conductor cables and four 15 ohm resistors
AF	2 × 10	Terminates two 10-conductor cables and four 15 ohm resistors
AG	2 × 10	Mounts eight 100 ohm resistors

TABLE B (Contd)

CODE NO.	CONTACT ARRANGEMENT	FEATURES
AH	2 × 10	Terminates power cable in No. 2B Electronic Switching System
AJ	2 × 10	Terminates power cable in No. 2B Electronic Switching System
AK	2 × 10	Terminates power cable in No. 2 Electronic Switching System
AL	2 × 10	Terminates 20 pairs of wires
AM	2 × 10	Terminates 20 pairs of wires
AN	2 × 10	Terminates power cable and mounts two 1.0 microfarad capacitors
AP	2 × 10	Mounts twenty-four 458A diodes
AR	2 × 10	Terminates a 31-conductor flat cable on a 0.03125 center in the DIMENSION * PBX System
AU	2 × 10	Mounts eight 1000 ohm resistors
AW	2 × 10	Mounts eight 180 ohm resistors
AY	2 × 10	Mounts five 180 ohm and three 1000 ohm resistors
BA	2 × 10	Mounts eight 470 ohm resistors
BB	2 × 10	Terminates power cable
BC	2 × 32	Mounts eight 100 ohm resistors
BD	2 × 10	Terminates a 31-conductor flat cable
BE	2 × 10	Terminates 20 pairs of wires
BF	2 × 32	Mounts eight 402 ohm resistors
BG	2 × 10	Terminates power cable and mounts two 1.0 microfarad capacitors
BH	2 × 10	Used to strap +3V and ground between halves of a F21 circuit pack in No. 3A Processor
BJ	2 × 10	Used to connect +5V or ground of an A-19 power connector J1C82B-1 power unit for No. 3A Processor
BK	2 × 10	Terminates power cable and interconnects specific contacts
BL	2 × 8	Terminates eight discrete wires and mounts eight 10,000 ohm resistors
BN	2 × 10	Mounts eight 1000 ohm resistors

TABLE B (Contd)

CODE NO.	CONTACT ARRANGEMENT	FEATURES
BP	2 × 10	Terminates wires and provides specific interconnection
BR	2 × 10	Terminates wires and provides specific interconnection
BS	2 × 10	Terminates wires and provides specific interconnection
BT	2 × 10	Terminates wires and provides specific interconnection
BU	1 × 10	Terminates wires and provides specific interconnection
BW	2 × 10	Terminates wires and provides specific interconnection
BY	2 × 10	Terminates wires
CA	2 × 10	Terminates wires
CB	2 × 10	Terminates 10 pairs of wires
CC	2 × 10	Terminates wires
CD	2 × 10	Terminates wires
CE	—	Mounts eight KS-16645, L1, resistors and is used on ED-1A409-30 group 4 cable
CH	2 × 20	Terminates a 31-conductor flat cable
DA	—	Mounts resistors