## 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 940type 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 940 C 2 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 940 C 3 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 940 C 4 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
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 singlesided 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.
$2.02941 \mathrm{~A}, \mathrm{~B}$, and C : The $941 \mathrm{~A}, \mathrm{~B}$, 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) 941 B : The 941 B connector has 20 terminals in positions 1 through 20. The connector is used in the LMX-3 Multiplex System.
(c) 941C: The 941 C connector has 20 terminals in positions 21 through 40. The connector is used on 54 A and 55 A 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 $963 \mathrm{~J}-10$ and $963 \mathrm{~J}-10-8$ connectors. The $963 \mathrm{~J}-10$ connector has ten contacts and the $963 \mathrm{~J}-10-8$ 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

[^0]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

| $\begin{aligned} & \text { 942-CODE } \\ & \text { NO. } \end{aligned}$ | CONTACT arrangement | features |
| :---: | :---: | :---: |
| A | $1 \times 10$ | - |
| B | $2 \times 8$ | - |
| C | $2 \times 10$ | - |
| D | $2 \times 10$ | Mounts eight 100 ohm resistors |
| E | $2 \times 10$ | Mounts eight 4.99 ohm resistors |
| F | $2 \times 10$ | Terminates a 31-conductor flat cable |
| G | $2 \times 10$ | - |
| H | $1 \times 10$ | - |
| J | $2 \times 10$ | Mounts ten 4.99 ohm resistors |
| K | $2 \times 10$ | Interconnects specific contacts |
| L | $2 \times 10$ | Terminates six pairs of 28 -gauge wires |
| M | $1 \times 10$ | Terminates two 16-gauge wires |
| N | $2 \times 10$ | Terminates a 31-conductor flat cable |
| P | $2 \times 10$ | Interconnects specific contacts |
| R | $2 \times 10$ | Interconnects specific contacts |
| S | $1 \times 8$ | Terminates eight twisted pairs of wires and mounts four 15 ohm resistors |
| T | $2 \times 10$ | Terminates a 24 -conductor flat cable |
| U | $2 \times 10$ | Terminates a 24 -conductor flat cable |
| W | $2 \times 10$ | Mounts eight 150 ohm resistors |
| V | $2 \times 10$ | - |
| AB | $2 \times 8$ | - |
| AC | $2 \times 10$ | Mounts four 4.99 ohm resistors |
| AD | $2 \times 8$ | Terminates a 31-conductor flat cable |
| AE | $2 \times 8$ | - |

TABLE A (Contd)

| $\begin{aligned} & \text { 942-CODE } \\ & \text { No. } \end{aligned}$ | contact arrangement | features |
| :---: | :---: | :---: |
| AF | $2 \times 8$ | - |
| AG | $2 \times 10$ | Mounts nine 220 ohm resistors |
| AH | $2 \times 8$ | Mounts one resistor |
| AJ | $2 \times 8$ | Mounts two resistors |
| AK | $2 \times 8$ | Mounts three resistors |
| AL | $2 \times 8$ | Mounts four resistors |
| AM | $2 \times 8$ | Mounts five resistors |
| AN | $2 \times 8$ | Mounts six resistors |
| AP | $2 \times 8$ | Mounts seven resistors |
| AR | $2 \times 10$ | Mounts ten 100 ohm resistors |
| AS | $2 \times 10$ | Mounts nine resistors |
| AJ | $2 \times 10$ | Mounts six resistors |
| AU | $2 \times 8$ | Mounts seven resistors |
| BC | $2 \times 10$ | Interconnects specific contacts |
| BD | $2 \times 10$ | Interconnects specific contacts |
| BE | $2 \times 10$ | Interconnects specific contacts |
| BF | $2 \times 10$ | Interconnects specific contacts |
| BG | $2 \times 10$ | Interconnects specific contacts |
| BH | $2 \times 10$ | Interconnects specific contacts |
| BJ | $2 \times 10$ | Interconnects specific contacts |
| BK | $2 \times 10$ | Interconnects specific contacts |
| BL | $2 \times 10$ | Interconnects specific contacts |
| BM | $2 \times 10$ | Interconnects specific contacts |
| BN | $2 \times 10$ | Interconnects specific contacts |
| BP | - | Mounts eight 6.8 microhenry inductors |

TABLE B

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

TABLE B (Contd)

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

TABLE B (Contd)

| CODE <br> NO. | CONTACT <br> ARRANGEMENT |  |
| :---: | :---: | :--- |
| BP | $2 \times 10^{\prime}$ | Terminates wires and provides specific interconnection |
| BR | $2 \times 10$ | Terminates wires and provides specific interconnection |
| BS | $2 \times 10$ | Terminates wires and provides specific interconnection |
| BT | $2 \times 10$ | Terminates wires and provides specific interconnection |
| BU | $1 \times 10$ | Terminates wires and provides specific interconnection |
| BW | $2 \times 10$ | Terminates wires and provides specific interconnection |
| BY | $2 \times 10$ | Terminates wires |
| CA | $2 \times 10$ | Terminates wires |
| CB | $2 \times 10$ | Terminates 10 pairs of wires |
| CC | $2 \times 10$ | Terminates wires |
| CD | $2 \times 10$ | Terminates wires |
| CE | - | Mounts eight KS-16645, L1, resistors and is used on ED-1A409-30 group 4 cable |
| CH | $2 \times 20$ | Terminates a 31-conductor flat cable |
| DA | - | Mounts resistors |


[^0]:    *Trademark of Western Electric.

