

## NONCODED CONNECTORS—KS-21869 THROUGH KS-22066

### DESCRIPTION

#### 1. GENERAL

**1.01** This section lists and illustrates noncoded connectors within the part or type number range of KS-21869 through KS-22066, used for the maintenance and operation of equipment in central offices.

**1.02** The information provided in this section was previously shown in Section 032-300-101, Issue 5. In addition, the following connectors were added to this section:

- KS-21869, L6 through L10
- KS-21870, L8 through L12
- KS-21891, L1, L2, and L3
- KS-21892, L1, and L2
- KS-21999, L1, L2, and L3
- KS-22000, L1 and L2
- KS-22065, L1 through L5
- KS-22066, L1 through L5

#### 2. DESCRIPTION OF CONNECTORS

**2.01** *KS-21869-Type*: The KS-21869-type connectors (Fig. 1) consist of two rows of socket contacts spaced 0.100 inch apart in molded insulators. The connectors mount on printed wiring boards. For more information, see Table A.

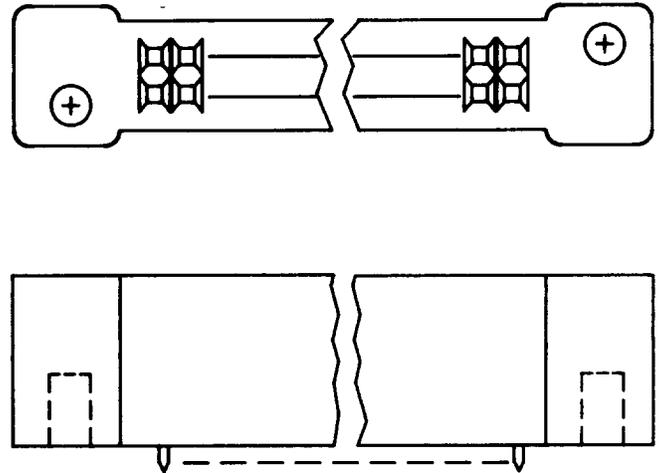


Fig. 1—KS-21869-Type Connector

TABLE A

| KS-21869 LIST NO. | NO. OF CONTACTS | MATES WITH KS-21870 LIST NO. |
|-------------------|-----------------|------------------------------|
| 1                 | 44              | 1                            |
| 2                 | 30              | 2                            |
| 3                 | 44              | 3                            |
| 4                 | 52              | 4                            |
| 5                 | 10              | —                            |
| 6                 | 15              | —                            |
| 7                 | 20              | —                            |
| 8                 | 40              | —                            |
| 9*                | 34              | —                            |
| 10                | 40              | —                            |

\*Has special center line

#### NOTICE

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**2.02 KS-21870-Type:** The KS-21870-type connectors (Fig. 2) consist of two rows of pin contacts spaced 0.100 inch apart in molded insulators. The connectors mount on printed wiring boards. For more information, see Table B.

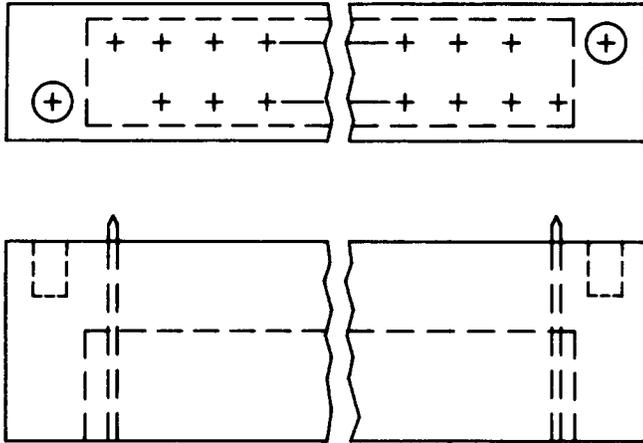


Fig. 2—KS-21870-Type Connector

TABLE B

| KS-21870 LIST NO. | NO. OF CONTACTS | MATES WITH KS-21869 LIST NO. |
|-------------------|-----------------|------------------------------|
| 1                 | 44              | 1                            |
| 2                 | 30              | 2                            |
| 3                 | 44              | 3                            |
| 4                 | 52              | 4                            |
| 5                 | 52              | 4                            |
| 6                 | 30              | 2                            |
| 7                 | 44              | 3                            |
| 8                 | 30              | 2                            |
| 9                 | 44              | 3                            |
| 10                | 52              | 4                            |
| 11                | 30              | 2                            |
| 12                | 44              | 3                            |

**2.03 KS-21891, L1, L2, and L3:** These connectors mate with the KS-21892 connectors. The plastic body of the connector may be screw mounted to printed wiring boards. The posts of the KS-21891-type connectors are designed for solderless wrap termination. The KS-21891 connectors are supplied with latching clips to prevent dislodging of mating connector.

(a) **KS-21891, L1 and L3:** These connectors (Fig. 3) consist of a field of 24 square posts arranged in a 2 by 12 array. The L3 has longer wire wrap tails than the L1.

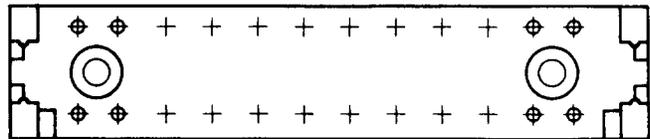


Fig. 3—KS-21891, L1 or L3, Connector

(b) **KS-21891, L2:** This connector (Fig. 4) has clearance holes for use with compliant pins staked on an epoxy backplane.

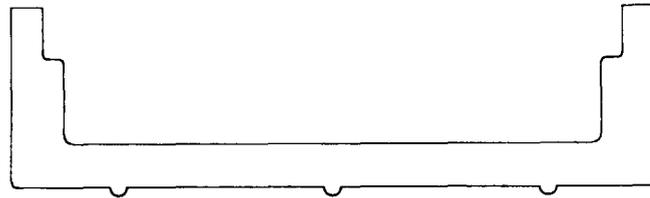
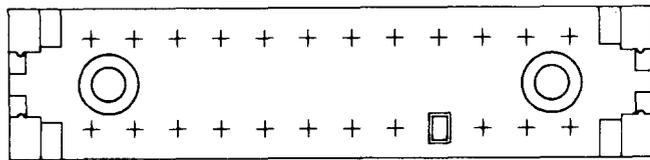


Fig. 4—KS-21891, L2, Connector

**2.04 KS-21892, L1 and L2:** These connectors (Fig. 5) mate with a KS-21891 header which contains 24 square contacts, arranged in 2 rows of 12. These connectors may also be terminated with the KS-21942 flat planar cable.

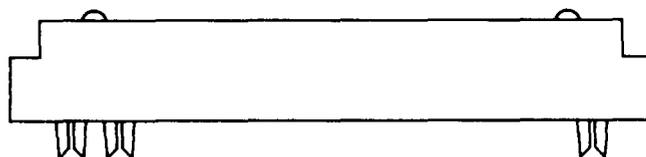
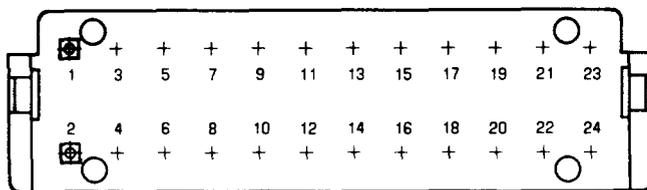


Fig. 5—KS-21892, L1 or L2, Connector

(a) **KS-21892, L1:** The KS-21892, L1, connector is provided with a bussing cover and a KS-21892, L3, strain relief clip which prevents stressing the wire-to-contact interface.

(b) **KS-21892, L2:** The KS-21892, L2, connector is provided with a closed-end cover and a strain relief clip.

**2.05 KS-21896, L1 Through L99:** The KS-21896-type connectors (Fig. 6) are multicontact miniature ribbon receptacles, equipped with top cable entry covers intended for the termination of jacketed cable. The L1 through L49 connectors are reserved for receptacles provided with spring wire latches. The L50 through L99 connectors are reserved for receptacles with screw locking devices.

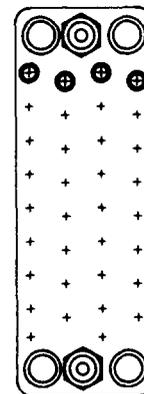


Fig. 6—KS-21896-Type Connector

**2.06 KS-21998-Type:** These connectors (Fig. 7) are designed to mate with miniature ribbon connectors KS-21997, KS-21443, or KS-16689. The L8 through L13 connectors provide an alternate mate for KS-21442, L10 through L13 connectors. For more information, see Table C.

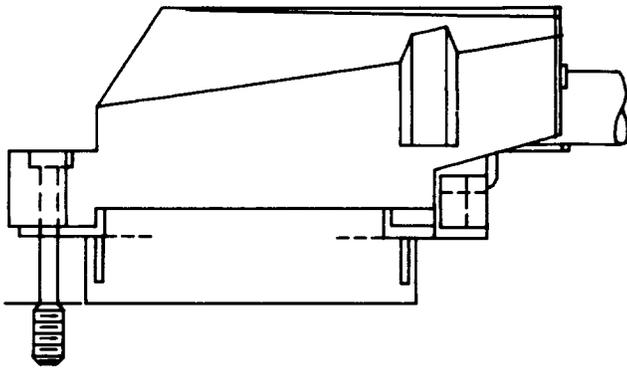


Fig. 7—KS-21998-Type Connector

TABLE C

| KS-21998 LIST NO. | NO. OF CONTACTS | FEATURES                     |
|-------------------|-----------------|------------------------------|
| 1                 | 50              | —                            |
| 2                 | 50              | With self-locking screens    |
| 3                 | 50              | Includes a center entry hood |
| 4                 | 50              | Panel Mounted Receptacles    |
| 5                 | 50              | Panel Mounted Receptacles    |
| 6                 | 4               | —                            |
| 7                 | 12              | —                            |
| 8                 | 14              | Hood Strain Relief Cable     |
| 9                 | 64              | Hood Strain Relief Cable     |
| 10                | 36              | Hood Strain Relief Cable     |
| 11                | 24              | Hood Strain Relief Cable     |
| 12                | 14              | Hood Strain Relief Cable     |
| 13                | 50              | —                            |

**2.07 KS-21999-Type:** The KS-21999-type connectors (Fig. 8) are multicontact, miniature, ribbon plugs, equipped with 180° top entry hoods and molded plastic bodies containing copper alloy, gold-plated, polarized contacts. These contacts have insulation piercing terminals, which with the aid of special tooling, provide a fast method of wire termination. For more information, see Table D.

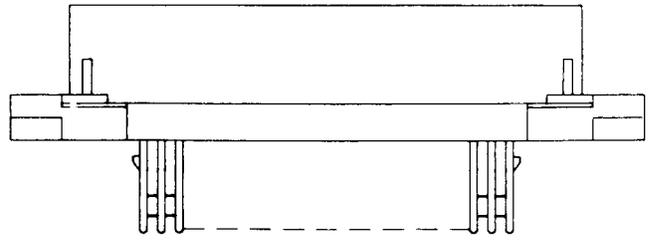


Fig. 8—KS-21999-Type Connector

TABLE D

| KS-21999 LIST NO. | NO. OF CONTACTS | GOLD THICKNESS   |
|-------------------|-----------------|------------------|
| 1                 | 50              | 40 micro-inches  |
| 2                 | 50              | 100 micro-inches |
| 3                 | 64              | 40 micro-inches  |

**2.08 KS-22000, L1 and L2:** The KS-22000, L1 and L2, connectors (Fig. 9) are multicontact, miniature, ribbon receptacles, consisting of a plastic body containing 50 gold-plated, copper alloy polarized contacts for mating with corresponding miniature ribbon plugs. They are equipped with center entry hoods.

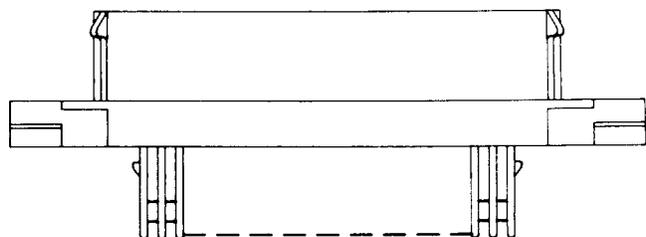
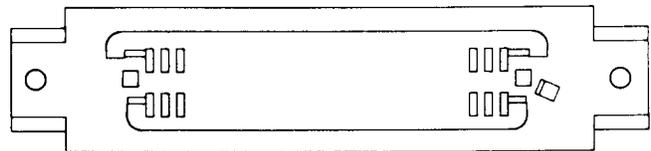


Fig. 9—KS-22000, L1 or L2, Connector

- (a) **KS-22000, L1:** This connector has contacts with 100 micro inches of gold plating.
- (b) **KS-22000, L2:** This connector has contacts with 40 micro inches of gold plating.

**2.09 KS-22065-Type:** The KS-22065-type sub-miniature male connectors (Fig. 10) are right angle mounting types for solder attachment to 1/16-inch printed wiring boards. They consist of polarized insulators and gold-plated contacts. These connectors have two mounting holes in the bases and two in the flanges. The connectors mate with the KS-19087 female connectors. For more information, see Table E.

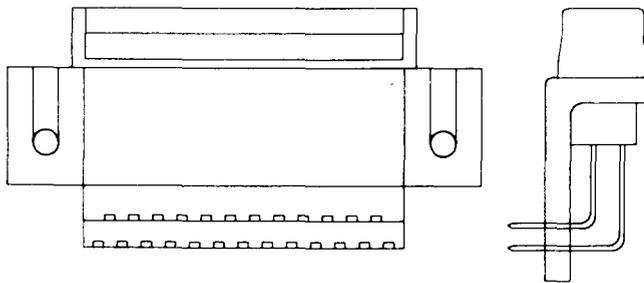


Fig. 10—KS-22065-Type Connector

TABLE E

| KS-22065 LIST NO. | NO. OF CONTACTS | PRIMARY USE                |
|-------------------|-----------------|----------------------------|
| 1                 | 9               | Auxiliary Data System      |
| 2                 | 15              | —                          |
| 3                 | 25              | 1200A, 113A, 108 Data Sets |
| 4                 | 37              | Auxiliary Data System      |
| 5                 | 37              | Auxiliary Data System      |

**2.10 KS-22066-Type:** The KS-22066-type sub-miniature, female connectors (Fig. 11) are right angle mounting types for solder attachment to nominal 1/16-inch printed wiring boards. They consist of polarized insulators and gold-plated contacts. They have two mounting holes in the bases and two in the flanges. For more information, see Table F.

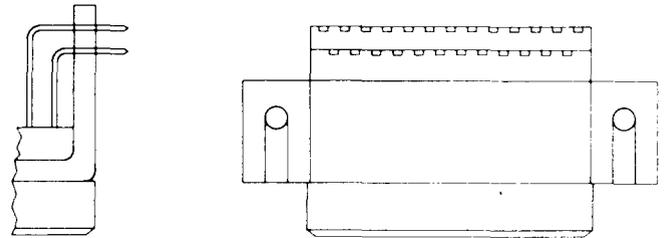


Fig. 11—KS-22066-Type Connector

TABLE F

| KS-22066 LIST NO. | NO. OF CONTACTS | PRIMARY USE                |
|-------------------|-----------------|----------------------------|
| 1                 | 9               | Auxiliary Data System      |
| 2                 | 15              | —                          |
| 3                 | 25              | 1200A, 113A, 108 Data Sets |
| 4                 | 37              | Auxiliary Data System      |
| 5                 | 37              | Auxiliary Data System      |