NONCODED CONNECTORS-KS-20265 THROUGH KS-20633

## DESCRIPTION

## 1. GENERAL

1.01 This section lists and illustrates noncoded connectors within the part or type number range of KS-20265 through KS-20633, 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, Issue5. In addition, the following connectors were added to this section:

- (a) KS-20265, L3
- (b) KS-20277, L2
- (c) KS-20320, L1

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- (d) KS-20461, L1, L2, L3, and L4
- (e) KS-20496, L2 through L5
- (f) KS-20590, L1 through L7.

## 2. DESCRIPTION OF CONNECTORS

2.01 KS-20265, L1 Through L5: The KS-20265-type are miniature, 50-ohm, coaxial, panel-mounted, female, screw-on connectors arranged for center contact connection. These connectors will mate with the KS-20263, L1 plug and is used in TD-3 and TH-3 radios.

 (a) KS-20265, L1: The KS-20265, L1, (Fig. 1) is arranged for center contact connection on the terminating end. The mounting flange for the L1 is approximately 1/2-inch square.



Fig. 1-KS-20265, L1 Connector

(b) KS-20265, L2: The KS-20265, L2, (Fig. 2) is provided with a center contact arranged to accept a 0.141 diameter semirigid coaxial cable. The mounting flange for the L2 is approximately 1/2-inch square.



Fig. 2-KS-20265, L2 Connector

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(c) **KS-20265, L3:** The KS-20265, L3, (Fig. 3) is arranged for center contact connection on the terminating end.



Fig. 3—KS-20265, L3 Connector

(d) **KS-20265, L4:** The KS-20265, L4, (Fig. 4) is arranged for center contact connection on the terminating end. The mounting flange is approximately 5/8-inch by 1/4-inch.



Fig. 4-KS-20265, L4 Connector

(e) **KS-20265, L5:** The KS-20265, L5 (Fig. 5) is arranged for center contact connection on the termination end.



Fig. 5—KS-20265, L5 Connector

2.02 KS-20277, L2: The KS-20277, L2, (Fig. 6) is a multicontact, female connector, consisting of a rectangular block of insulating material equipped with 17 gold-plated contacts in a single row on 0.100-inch centers. This connector is arranged to engage circuit terminations on one side of a 1/16-inch thick printed wiring board. The wiring end of the contact is arranged for two solderless wrapped connections of 26-gauge wire. This connector is used in No. 5 crossbar offices, which are arranged for automatic call distribution. The L2 connector replaces the L1 connector (Mfr Disc.).



Fig. 6-KS-20277, L2 Connector

2.03 KS-20320, L1: The KS-20320, L1, (Fig. 7) is a polarized, multicontact, male connector consisting of a rectangular block of insulating material equipped with 48 flat blade, gold-plated terminals in four rows of twelve terminals each. The wiring end of the terminal is arranged for two solderless wrapped connections of 24-gauge wire. The connector is arranged to accommodate KS-20218, L1, inserts for connector polarization. This connector will mate with the KS-20203, L1, plug. This connector is used in the No. 2 Electronic Switching System (ESS).



Fig. 7—KS-20320, L1 Connector

2.04 KS-20461, L1 Through L4: The KS-20461, L1 through L4 (Fig. 8) are high voltage, environmental, power connectors, consisting of a cylindrical insert of insulating material equipped with three or six male contacts. It has a metal shell for panel mounting and 3 pins for bayonet coupling to a mating plug. These connectors are used with TH-3 Power Systems. L2 and L4 connectors have 6 contacts, while L1 and L3 connectors have 3 contacts. L1 through L4 mate with KS-20462, L1 through L4 plugs, respectively.



Fig. 8—KS-20461-Type Connector

2.05 KS-20496, L1 Through L5: The KS-20496-type (Fig. 9) are polarized, multicontact connectors, each consisting of a cylindrical block of diallylphthalate molding compound equipped with either male or female, gold or silver plated contacts arranged on wiring end for solder connection, and enclosed in a metal shell. The shell is provided with a flange for panel mounting and a threaded shoulder at the engaging end for mating with the KS-20497 plug as specified in Table A.



Fig. 9—KS-20496-Type Connector

KS-20496 LIST NO.	NO. OF CONTACTS	TYPE	PLATING	MATES WITH KS-20497 PLUG LIST NO.
1	23	Male	Gold	1
2	9	Female	Silver	2
3	11	Male	Gold	3
4	5	Male	Gold	4
5	2	Male	Gold	5

TABLE A

2.06 KS-20590, L1 Through L7: The KS-20590, L1 through L7, connectors consist of a rectangular printed wiring board, color coded on the top edge, equipped with either six or seven contact springs. The six contact spring units have two sets of tip, ring, and sleeve connections; and the seven contact spring units have an additional contact spring for a message register connection.

(a) KS-20590, L1: The KS-20590, L1, connector (Fig. 10) is color coded yellow and has six contact springs which connect the tip, ring, and sleeve to the tip, ring, and sleeve, respectively. The L1 connector is to be used in panel and step-by-step offices with operator intercept.



Fig. 10-KS-20590, L1 Connector

(b) **KS-20590, L2:** The KS-20590, L2, connector (Fig. 11) is color coded red and has six contact springs which provide tip and ring reversal, with straight sleeve to sleeve connections. The L2 connector is to be used in panel and step-by-step offices with recorded announcement intercept.



Fig. 11-KS-20590, L2 Connector

(c) **KS-20590, L3:** The KS-20590, L3, (Fig. 12) is color coded green and has six contact springs which connect tip, ring, and sleeve to tip, ring, and sleeve, respectively; with an 808E diode between the sleeve connections. The diode is arranged to permit current flow only from the sleeve contact spring at the square end of the connector to the sleeve contact spring at the beveled end of the connector. The L3 connector is to be used in panel offices associated with the Automatic Intercept System.



Fig. 12-KS-20590, L3, L4, L5, L6 or L7 Connector

(d) **KS-20590, L4:** The KS-20590, L4, (Fig. 12) has no color code (natural), and has six contact springs. The polarity of the 808E diode is reversed. The L4 connector is to be used in step-by-step offices associated with the Automatic Intercept System.

(e) KS-20590, L5: The KS-20590, L5, (Fig. 12) is color coded white and has seven contact springs, with an 808E diode, with the seventh contact spring being strapped to the adjacent sleeve contact spring. The connector is to be used in step-by-step offices associated with Automatic Intercept Systems equipped with seven point blocks. The connections to the number network frames are made from the M lead and strapped on the cross-connect side of the distribution frame blocks.

(f) KS-20590, L6: The KS-20590, L6, (Fig. 12) is color coded black and has six contact springs, with a commercial diode. The connector is to be used in No. 1 step-by-step offices serviced with automatic message accounting offices that are associated with the Automatic Intercept System.

- (g) **KS-20590, L7:** The KS-20590, L7, (Fig. 12) is color coded orange and has seven contact springs with a commercial diode. The connector is to be used in step-by-step offices associated with the Automatic Intercept System, equipped with seven point blocks. The connections to 1000 number frames are made from the M lead and strapped on the cross-connect side of the distribution frame blocks.
- 2.07 KS-20633, L1, L2, and L3: The KS-20633,

L1, L2, and L3 are miniature, hexagonal connectors. Each connector has 4 gold-plated pin contacts in a polarizing arrangement.

(a) **KS-20633**, L1: The KS-20633, L1, connector (Fig. 13) is equipped with a vibration spring .

and hex nut. This connector is used with the 1X2 coaxial switch.

Fig. 13—KS-20633, L1 Connector

(b) KS-20633, L2: The KS-20633, L2, connector (Fig. 14) is equipped with a hood, cable clamp, and locking ring. This connector is used in the 400A Protection Switching System. (c) KS-20633, L3: The KS-20633, L3, connector (Fig. 15) has solid cylindrical terminals (0.030 inch diameter). This connector is used on the 285F and 286D switches.



Fig. 15—KS-20633, L3 Connector



Fig. 14—KS-20633, L2 Connector