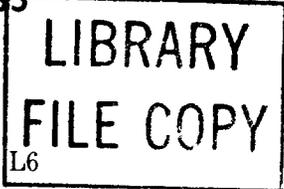


NONCODED PLUGS—KS-21049 THROUGH KS-22335

DESCRIPTION



1. GENERAL

1.01 This section lists and illustrates noncoded plugs within the part or type number range of KS-21049 through KS-22335, used for the maintenance and operation of equipment in central offices.

1.02 The information provided in this section was previously shown in Section 032-302-101, Issue 3. The KS-21443, L1 and L2, plugs are rated Mfr Disc. The following plugs were added to this section:

- KS-21132, L1 and L2
- KS-21170, L1 through L4
- KS-21387, L1
- KS-21443, L3 through L12
- KS-21576, L1
- KS-21781, L1 and L2
- KS-21897, L1 and L50
- KS-21926, L1 and L2
- KS-21964, L1, L2, and L3
- KS-21997, L1 through L12
- KS-21999, L1 through L4
- KS-22044, L1
- KS-22223, L1 through L6

- KS-22224, L1 through L6

- KS-22225, L1.

2. DESCRIPTION OF PLUGS

2.01 *KS-21049-Type:* The KS-21049, L2 through L13 (Fig. 1) are multicontact plugs, each consisting of a molded, thermoplastic insulator, and four replaceable socket contacts. The KS-21049, L1, contacts are designed for crimped terminations of 24- and 26-gauge wire. The contacts are available in loose or reeled form. For more information, see Table A.

TABLE A

KS-21049 LIST NO.	COLOR
2	Red
3	White
4	Light Blue
5	Black
6	Yellow
7	Maroon
8	Light Green
9	Dark Blue
10	Tan
11	Light Gray
12	Dark Green
13	Purple

NOTICE

Not for use or disclosure outside the Bell System except under written agreement

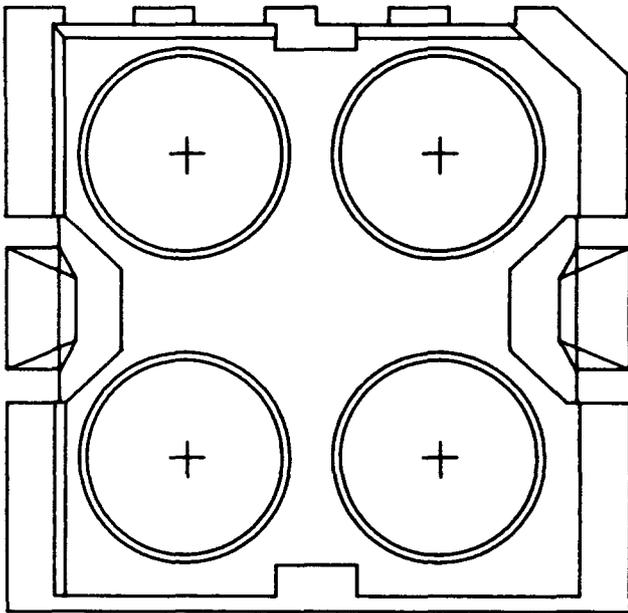


Fig. 1—KS-21049-Type Plug

2.02 **KS-21052:** The KS-21052 (Fig. 2) is a plastic, dummy plug, without electrical connection, used to actuate the contact springs of KS-21000 and similar type miniature jacks.

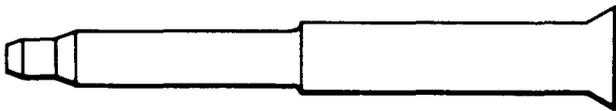


Fig. 2—KS-21052 Plug

2.03 **KS-21132, L1 and L2:** The KS-21132, L1 and L2 (Fig. 3) are 64 contact miniature, ribbon plugs with a 450 cable housing. They are a rectangular block of insulating material with hard gold-plated ribbon contacts and are assembled in a front and back metal shell, enclosed in a plastic housing. These plugs mate with the KS-21133 receptacle.

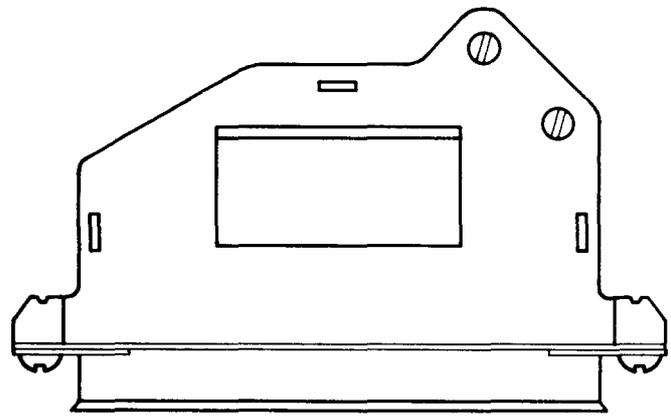


Fig. 3—KS-21132, L1 or L2, Plug

2.04 **KS-21170-Type:** The KS-21170-type are miniature, 50-ohm, coaxial, snap-on plugs that mate with the KS-19180, KS-19181, KS-19182, KS-19185, KS-19692, and KS-21169 connectors. They are used in the L5 Carrier System.

(a) **KS-21170, L1:** The L1 plug (Fig. 4) is mounted with a solderless shield connection to RG-174/U-type coaxial cable.

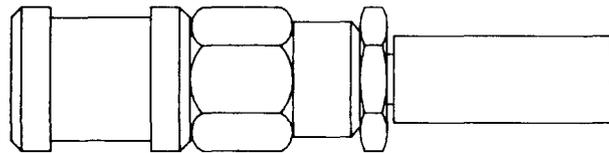


Fig. 4—KS-21170, L1, Plug

(b) **KS-21170, L2:** The L2 (Fig. 5) is a bulk-head-mounted, right-angle plug intended for solderless shield connection to RG-174/U-type coaxial cable. This plug is connected to the cable by the use of a KS-15710, L5, crimping tool.

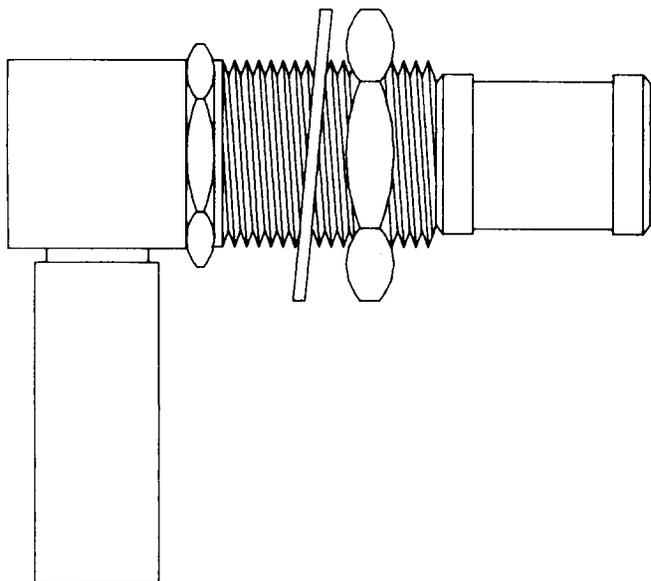


Fig. 5—KS-21170, L2, Plug

(c) **KS-21170, L3:** The L3 (Fig. 6) is a straight, bulkhead-mounted plug.

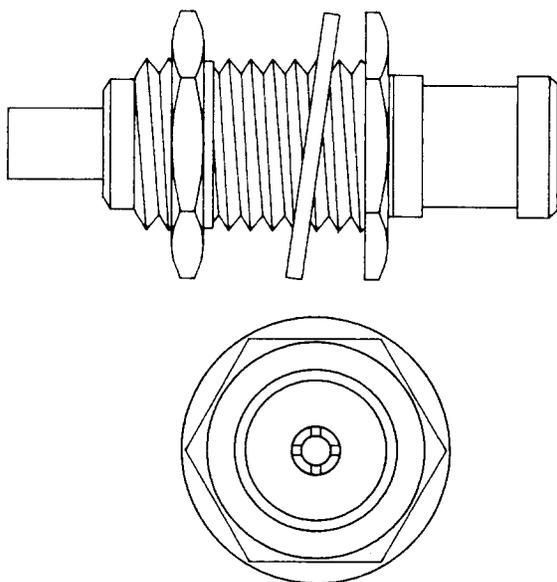


Fig. 6—KS-21170, L3, Plug

(d) **KS-21170, L4:** The L4 (Fig. 7) is a right-angle plug intended for solderless shield connection to KS-19224, L1, coaxial cable.

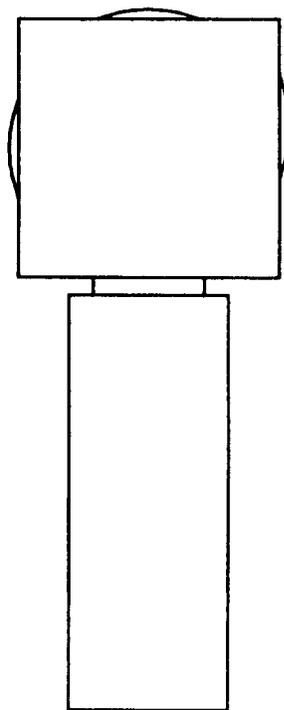
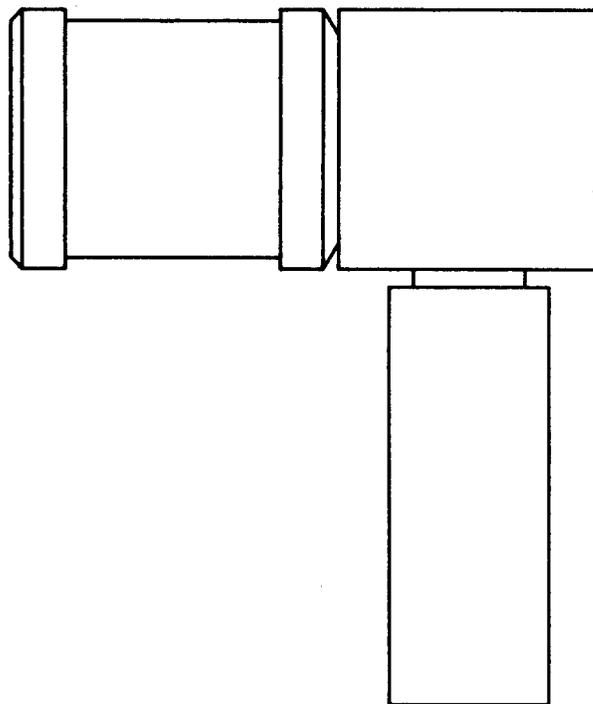


Fig. 7—KS-21170, L4, Plug

2.05 KS-21275-Type: The KS-21275-type plugs consist of 2-piece, molded-plastic insulator and gold-plated contacts for solder connections. The KS-21275, L19, is a shorting plug and has no internal connections. These plugs mate with the KS-21274-type connectors. For more information, see Table B.

TABLE B

KS-21275 LIST NO.	FIG. NO.	INSULATOR COLOR	NO. OF CONTACTS
1	8	Red	2
2	8	White	2
3	8	Blue	2
4	8	Yellow	2
5	8	Black	2
6	8	Orange	2
7	8	Green	2
8	8	Violet	2
9	8	Brown	2
10	9	Red	5
11	9	White	5
12	9	Blue	5
13	9	Yellow	5
14	9	Black	5
15	9	Orange	5
16	9	Green	5
17	9	Violet	5
18	9	Brown	5
19	—	Yellow	—

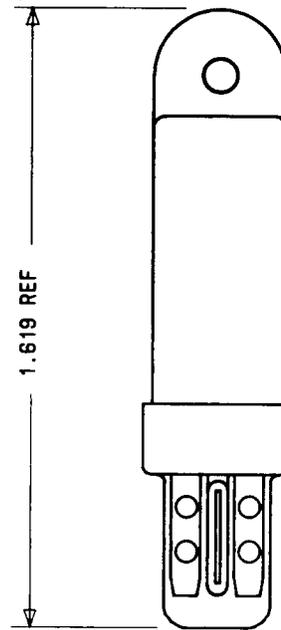


Fig. 8—KS-21275, L1 Through L9 Plug

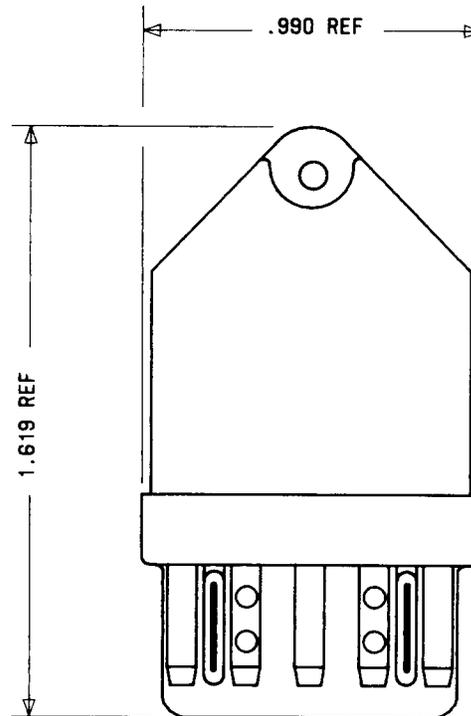


Fig. 9—KS-21275, L10 Through L18

2.06 KS-21276, L1: The KS-21276, L1, plug (Fig. 10) is equipped with 11 nickel-plated pins with special bullet shaped tips. The plug is primarily used with a cord shield in the coin telephone, and mates with the KS-13364, L7, socket.

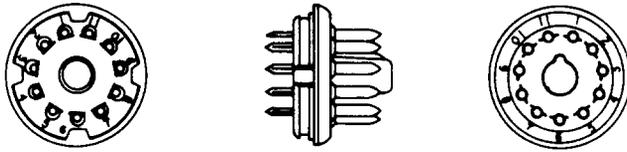


Fig. 10—KS-21276, L1, Plug

2.07 KS-21298: The KS-21298 (Fig. 11) is a polarized, multicontact plug equipped with male screwlocks. The plug will accept up to eight miniature, twin-coaxial, gold-plated, contact assemblies KS-20296, L1. The KS-21298 plug is used with the L Mastergroup Digital System and mates with the KS-21297 connector assembly.

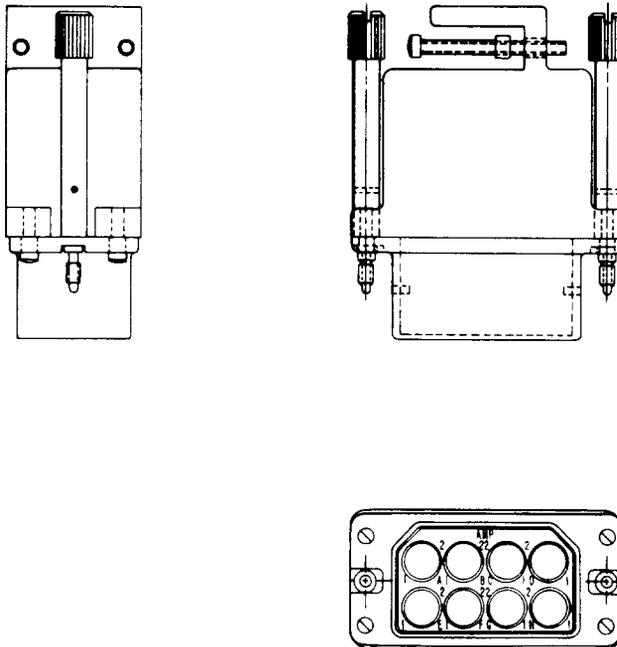


Fig. 11—KS-21298 Plug

2.08 KS-21340, L1 and L2: The KS-21340, L1 and L2, plugs (Fig. 12) have 14 and 16 pins, arranged in two rows. The terminals are 0.156 inches long and are provided with solder cups. The KS-21340, L1 and L2, are used with companion sockets KS-21295, L2 and L3, on the No. 5A Crossbar System.

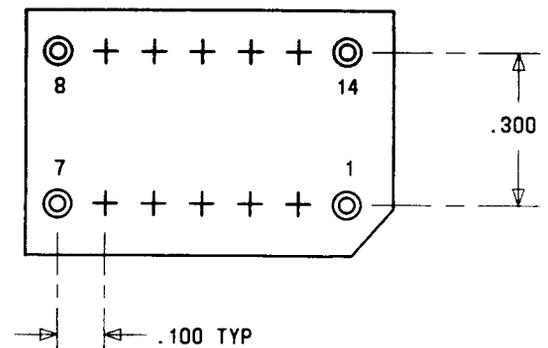
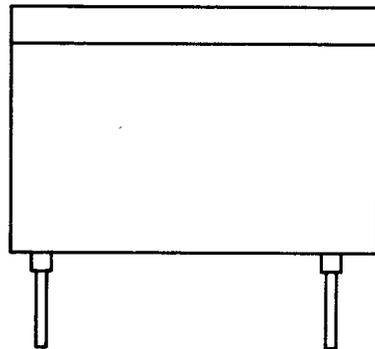
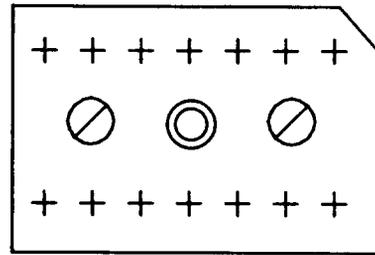


Fig. 12—KS-21340, L1 or L2, Plug

2.09 **KS-21387, L1:** The KS-21387, L1, adapter plug (Fig. 13) permits frame personnel to plug test equipment with standard 3-conductor plugs into miniature jacks.

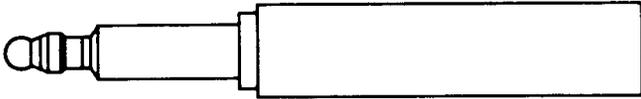


Fig. 13—KS-21387, L1, Plug

2.10 **KS-21443-Type:** The KS-21443-type plugs are multicontact, miniature, ribbon contacts. They contain replaceable contacts with dual slots and a terminating end. The plug and mating receptacle contains a captive screw for locking mated connectors.

(a) **KS-21443, L3 and L4:** The L3 (Fig. 14) and L4 plugs have 50 contacts, slide-on plastic covers, and mate with the KS-16690, L3 and L4, or KS-21442 receptacles.

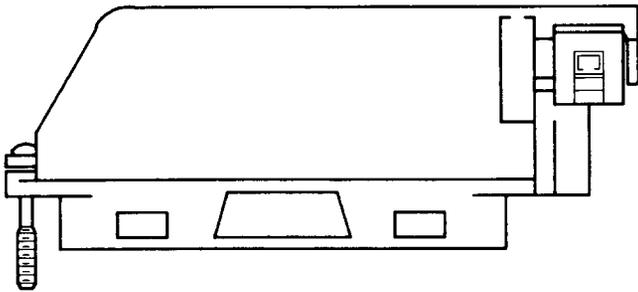


Fig. 14—KS-21443, L3, Plug

(b) **KS-21443, L5, L9, L10 and L11:** The L5, L9, L10, and L11, plugs (Fig. 15) mate with the KS-16690, L5, L9, L10, and L11, or KS-21442 receptacles.

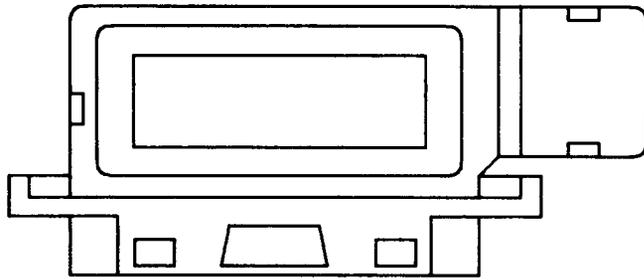


Fig. 15—KS-21443, L5, L9, L10, and L11, Plug

(c) **KS-21443, L6 and L7:** The L6 and L7 plugs (Fig. 16) mate with the KS-16690 or KS-21442 receptacles.

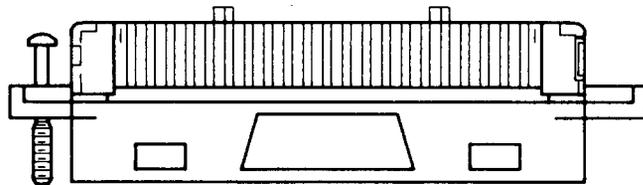


Fig. 16—KS-21443, L6 or L7, Plug

(d) **KS-21443, L8 and L12:** The L8 (Fig. 17) and L12 plugs mate with the KS-16690 and KS-21442 receptacles.

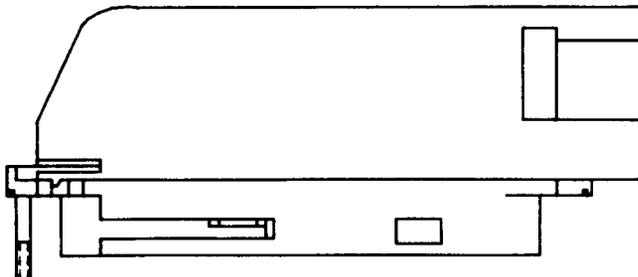


Fig. 17—KS-21443, L8, Plug

2.11 KS-21576, L1: The KS-21576, L1, plug (Fig. 18) is designed to connect opposing contacts in a dual inline package socket or layout of holes. The plug consists of a molded, plastic body and four gold-plated, phosphor-bronze jumper pins. The plug is used to provide option straps on circuit packs.

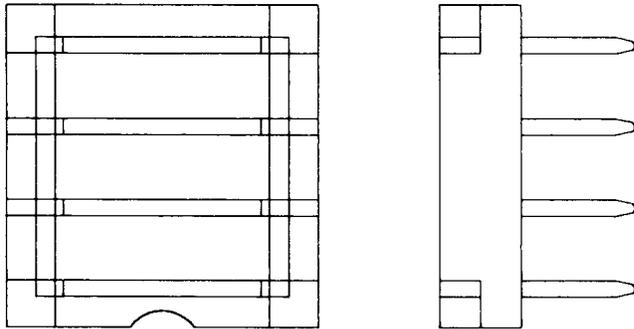


Fig. 18—KS-21576, L1, Plug

2.12 KS-21781, L1 and L2: The KS-21781, L1 (Fig. 19), and L2 (Fig. 20) plugs consist of a white, plastic insulator, and a gold-plated, staple-shaped conductor. The KS-21781, L1, will connect together two adjacent contacts on the KS-21780 socket. The plastic insulator has provisions for retaining itself on the socket. The plug has provisions for the attachment of an extractor to facilitate its attachment to and removal from the sockets. The KS-21781 plug is used in the D3 and D4 Carrier Transmission System.

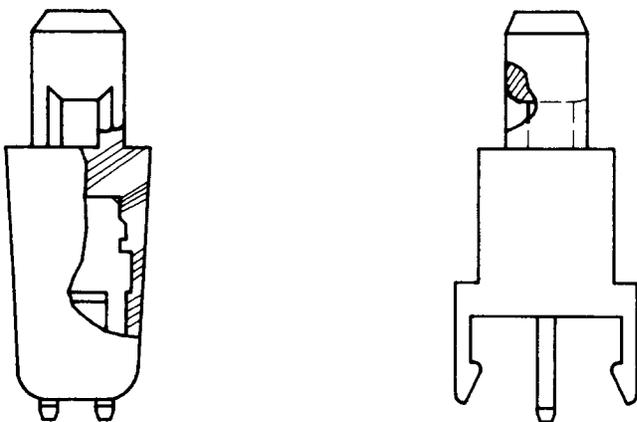


Fig. 19—KS-21781, L1, Plug



Fig. 20—KS-21781, L2, Plug

2.13 KS-21897, L1 and L50: The KS-21897, L1 and L50, are multicontact, miniature, ribbon plugs with a top cable entry cover. Special tooling of the terminals provides a method of making contact with insulated wires. These plugs mate with the KS-16786 and KS-21896 receptacles.

(a) **KS-21897, L1:** The L1 plug (Fig. 21) is equipped with flanges to allow locking, with corresponding receptacles equipped with spring wire latches.

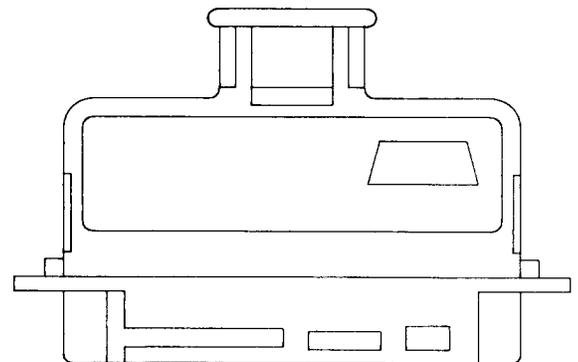
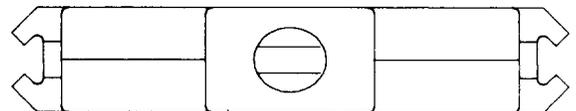


Fig. 21—KS-21897, L1, Plug

(b) **KS-21897, L50:** The L50 plug (Fig. 22) has no locking flange and is equipped with screw locking devices.

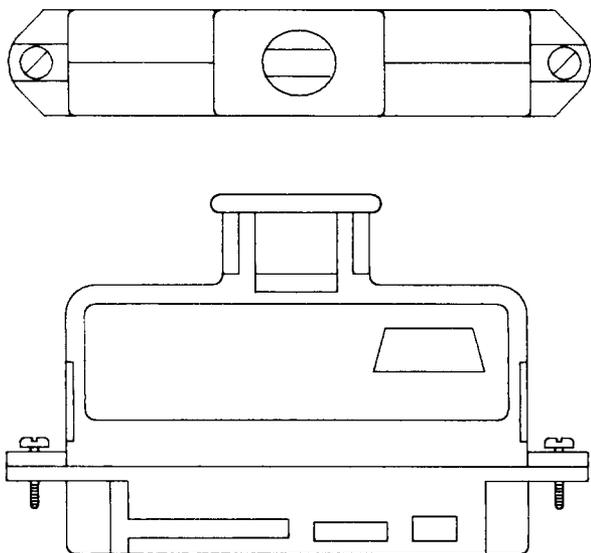


Fig. 22—KS-21897, L50, Plug

2.14 **KS-21926, L1 and L2:** The KS-21926, L1 and L2 (Fig. 23) are miniature, single-finger, 2-conductor plugs for attachment to a 2-conductor type cord. The L2 plug contains a shell screw that is insulated from the plug sleeve.



Fig. 23—KS-21926, L1 or L2, Plug

2.15 **KS-21964-Type:** The KS-21964, L1 (Fig. 24), L2 (Fig. 25), and L3 (Fig. 26) are miniature plugs consisting of a molded, block of black plastic and gold-plated contacts. They are designed to mate with the KS-21963-type sockets in the 238A repeater.

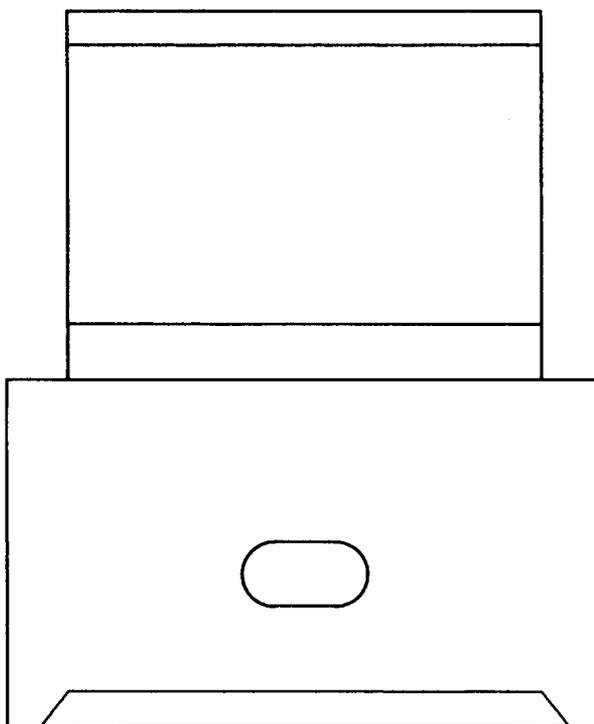
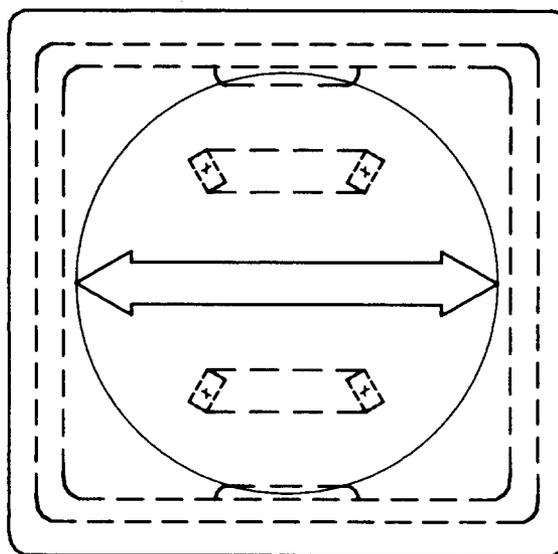


Fig. 24—KS-21964, L1, Plug

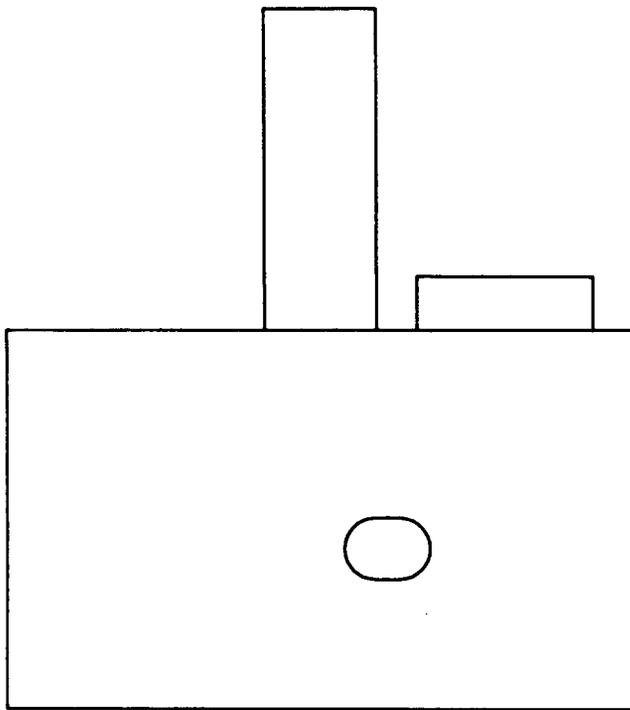


Fig. 25—KS-21964, L2, Plug

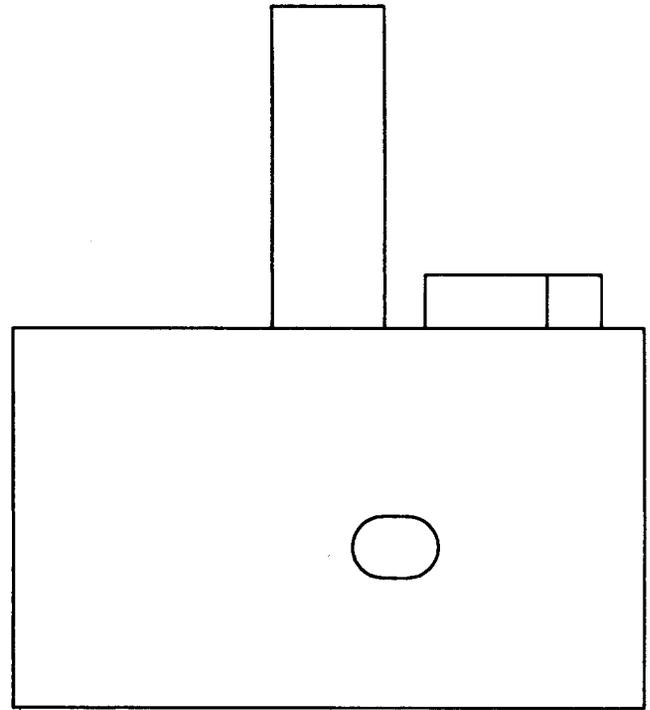
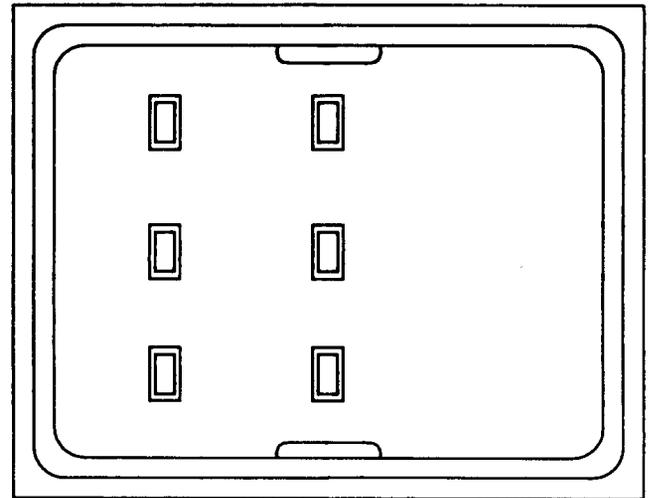
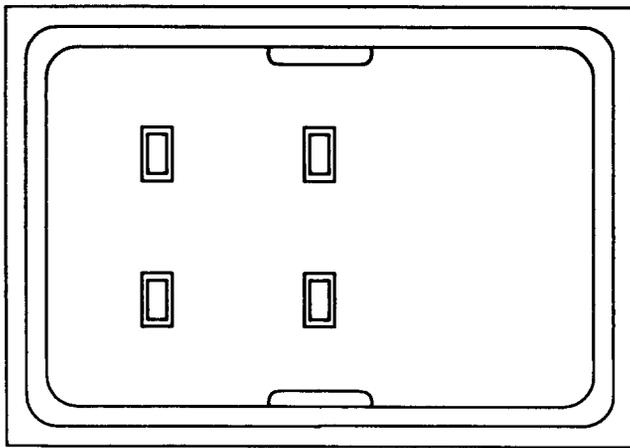


Fig. 26—KS-21964, L3, Plug



2.16 KS-21997, L1 Through L12: The KS-21997-type are multicontact miniature ribbon connectors equipped with a snap-on end cable entry cover intended for the termination of jacketed cable. The connector contacts have a hard gold-plated finish and a special terminating feature that will accept unstripped insulated wires. The KS-21997-type connectors are equipped with crimpable cable clamp. For more information, See Table C.

TABLE C

KS-21997 LIST NO.	FIG. NO.	CONTACT SIZE USED		PRIMARY USES
1*	27	50	50	B25A Cable
2*,†	27	50	4	D120A and D200A Cords
3*,†	27	50	12	D120A and D200A Cords
4	28	36	36	D120A and D200A Cords
5	28	24	24	D120A and D200A Cords
6	28	14	14	D120A and D200A Cords
7	28	36	36	D120A and D200A Cords
8	28	24	24	D120A and D200A Cords
9	28	14	14	D120A and D200A Cords
10	28	50	50	D120A and D200A Cords
11	28	64	64	1A Electronic Switching System (ESS) International
12	28	50	4	—

* Furnished without hood and cable clamp.

† Equipped with a dust cover.

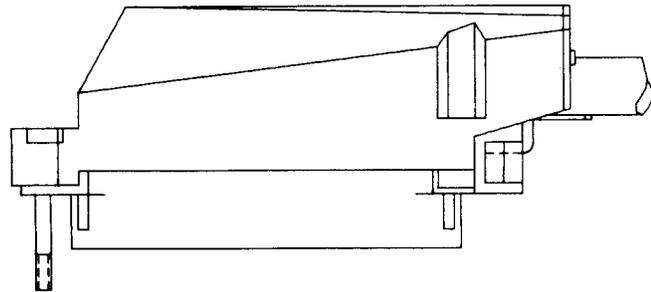
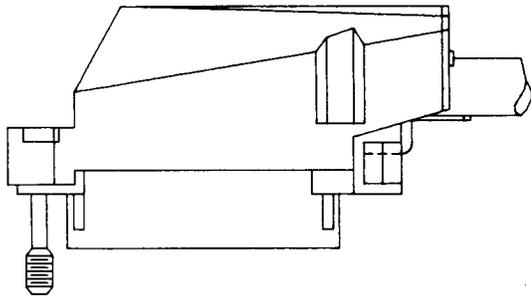
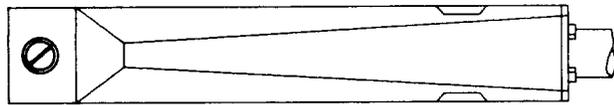
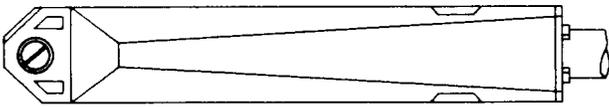


Fig. 27—KS-21997, L1, L2, or L3, Plug

Fig. 28—KS-21997, L4 Through L12, Plug

2.17 KS-21999-Type: The KS-21999-type (Fig. 29) are multicontact ribbon plugs with 180° top entry hoods. The plug contacts have insulation piercing terminals which, with special tooling, provides a fast method of wire termination. These plugs mate with corresponding KS-22000 receptacles.

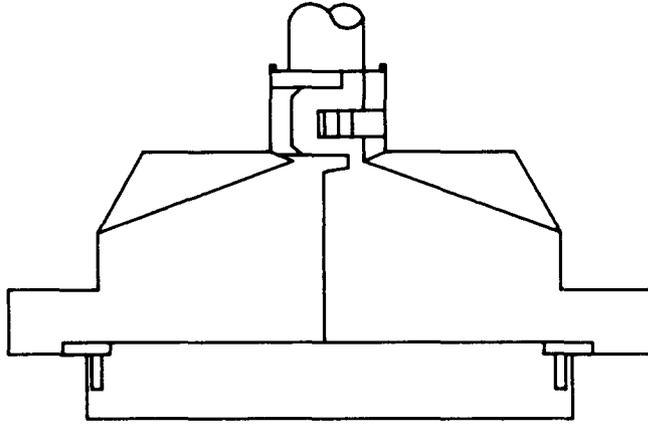


Fig. 29—KS-21999-Type Plug

- (a) **KS-21999, L1 and L2:** The L1 and L2 plugs have 50 contacts.
- (b) **KS-21999, L3 and L4:** The L3 and L4 plugs have 64 contacts.

2.18 KS-22044, L1: The KS-22044, L1 (Fig. 30) is a miniature, twin-finger, 2-conductor type plug, assembled in a molded, plastic plugshell and is usually connected to a single, 4-conductor type cord.

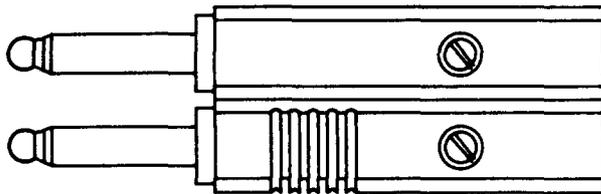


Fig. 30—KS-22044, L1, Plug

2.19 KS-22223-Type: The KS-22223-type (Fig. 31) are molded, thermoplastic signal plugs used to block jack sleeve openings without activating the jack springs. This plug is used with the KS-22221 jack panels on the N4 carrier terminals. The six list numbers provide a color coding method of marking critical circuit applications of the plug. For more information, see Table D.

TABLE D

KS-22223 LIST NO.	COLOR
1	Red
2	Black
3	Green
4	Blue
5	White
6	Yellow

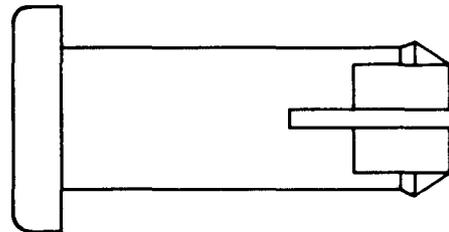


Fig. 31—KS-22223-Type Plug

2.20 KS-22224, L1 Through L6: The KS-22224-type plugs (Fig. 32) are similar to the KS-22223-type plugs except they are made for primary circuit jacks.

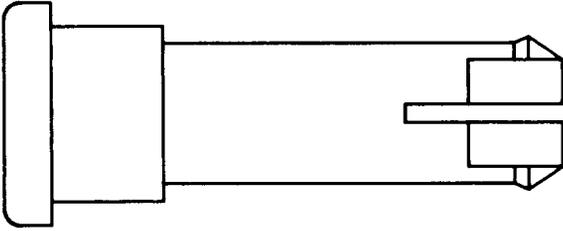


Fig. 32—KS-22224-Type Plug

2.21 **KS-22225, L1:** The KS-22225, L1 (Fig. 33) is an adapter plug for converting from a standard size 3-conductor switchboard-type to a miniature type. The profile conforms to a 310-type, and the heel end fits a KS-20999 type connector. This plug is used with the N4 carrier terminals.

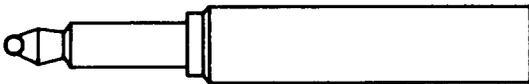


Fig. 33—KS-22225, L1, Plug

2.22 **KS-22335, L1:** The KS-22335, L1 (Fig. 34) is a miniature, multicontact plug, equipped with insulation piercing terminals which, with special tooling, provides a fast method of wire termination. This plug has 64 contacts. The L1 plug mates with corresponding KS-16690, KS-21442, KS-21998, or KS-22334 receptacles.

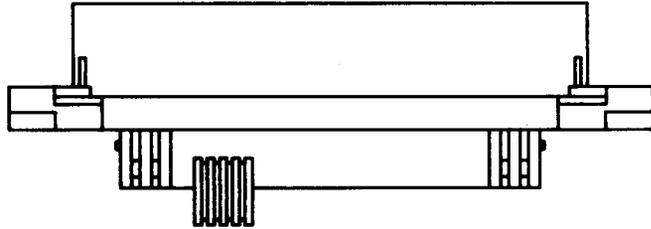


Fig. 34—KS-22335, L1, Plug