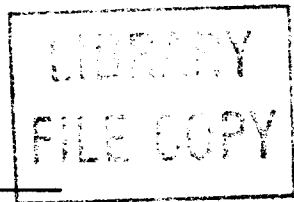


## CODED JACKS—475 THROUGH 499

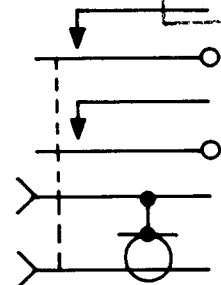
### DESCRIPTION



#### 1. GENERAL

**1.01** This section lists and illustrates coded jacks within the part or type number range of 475 through 499, used for the maintenance and operation of equipment in central offices.

**1.02** The following information provided in this section was previously shown in Section 032-511-101, Issue 3. This issue does not affect the Equipment Test List.



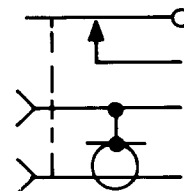
**Fig. 2—475B Jack**

#### 2. DESCRIPTION OF CODED JACKS

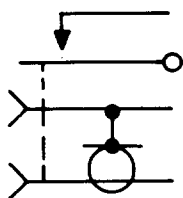
**2.01 475A, B, C, D, and E:** These coaxial-type jacks have auxiliary contacts and are used with the 337 or similar-type plugs. These jacks are equipped with terminals at the rear for connecting wires instead of coaxial cables.

(c) **475C:** This jack (Fig. 3) is used on the J68858AB C2 Super Group Receiving Regulated Amplifier in Toll Systems.

(a) **475A:** This jack (Fig. 1) is used in L Carrier Telephone Systems.

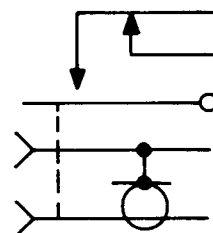


**Fig. 3—475C Jack**



**Fig. 1—475A Jack**

(d) **475D:** This jack (Fig. 4) is used on the J68858A L600A Multiplex Transmitting Bay.



**Fig. 4—475D Jack**

(b) **475B:** This jack (Fig. 2) is used on the J64036A Video Visual Gain and Delay Distortion Measuring Set in Toll Systems.

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Bell System except under written agreement

(e) **475E:** This jack (Fig. 5) is used with the J64036B Measuring Set.

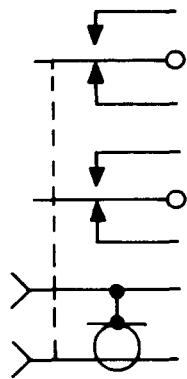


Fig. 5—475E Jack

**2.02 476A:** This single-mounted jack (Fig. 6) is designed to be used with the 47 or similar-type plugs. This jack is intended to be mounted with the springs in a vertical plane. The 476A jack is used in order wire telephone set circuits at ac powered stations. This jack is used in J68643 voice frequency telephone repeaters at auxiliary repeater stations of the L1 Carrier Telephone System.

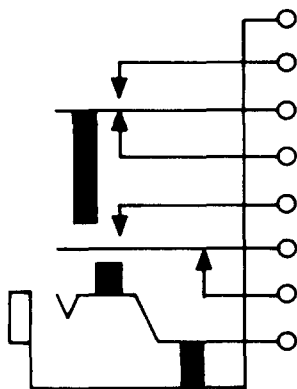


Fig. 6—476A Jack

**2.03 477A, B, C, D, and E:** These coaxial-type jacks are arranged for a solderless shield connection to the connecting cable by means of a sleeve which is furnished as a loose part. When these jacks are used with the 358A plug, they will provide a good impedance match for a 75 ohm coaxial cable, such as the 724, up to at least 100 MHz. These jacks are provided with a 2A cushion.

(a) **477A:** This jack (Fig. 7) body mounts in a fixed position in a frame. The test voltage is 2000 volts ac.

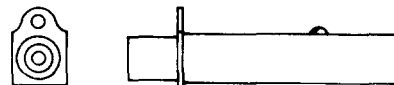


Fig. 7—477-Type Jack

(b) **477B:** This jack (Fig. 7) rotates freely in the frame, facilitating alignment of the cable. This jack replaces the 464C jack. The test voltage is 2000 volts ac.

(c) **477C:** This jack (Fig. 7) is not provided with a 2A cushion. The test voltage is 2000 volts ac. The body rotates freely in the frame, facilitating alignment of the cable.

(d) **477D:** This jack (Fig. 7) is tested at 3000 volts ac. The body rotates freely in the frame, facilitating alignment of the cable.

(e) **477E:** This jack (Fig. 8) is designed to be connected to a 730A cable. The test voltage is 2000 volts ac. This jack is not provided with a 2A cushion. The body rotates freely in the frame, facilitating alignment of the cable.

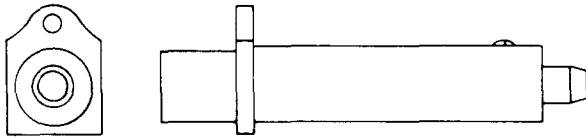


Fig. 8—477E Jack

**2.04 478A:** This coaxial-type jack (Fig. 9) is designed for use with the 358A and similar-type plugs. The test voltage for this jack is 2000 volts ac. The 478A jack is designed for a soldered wire connection to the inner contact terminal at the mounting end. This jack is not designed for a coaxial cable connection. This jack is used in the TD-2 Radio System.

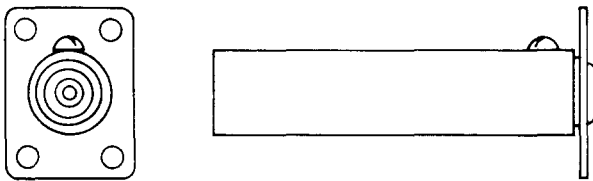


Fig. 9—478A Jack

**2.05 479A and B:** These coaxial-type jacks (Fig. 10) are used with the 337-type plugs. These jacks are used, in connection with emergency restoration of service, for making temporary patches in coaxial units in the field. The test voltage for these jacks is 2000 volts ac.

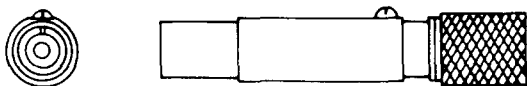


Fig. 10—479A or B Jack

**2.06 480B, C, D, and E:** These coaxial-type jacks (Fig. 11) are used with the 337-type plugs. The ac test voltage is 500 volts.

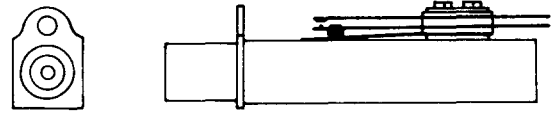


Fig. 11—480-Type Jack

(a) **480B:** This single-mounted jack has an auxiliary pair of normally open contacts mounted on the outside of the frame. When the associated plug is inserted into the jack, the auxiliary contacts are operated to a closed position. This jack is also designed for a solderless shield connection to a 724 or similar-type cable by means of a sleeve which is furnished as a loose part of the jack. The 480B jack is provided with a 2A cushion. This jack is used with the L Carrier Telephone Systems.

(b) **480C:** When the associated plug is inserted into the jack, the auxiliary contacts are operated to a closed position. This jack is also designed for a solderless shield connection to 724 or similar-type cable by means of a sleeve which is furnished as a loose part of the jack. The 480C jack is provided with a 2A cushion. This jack has one set of break contacts.

(c) **480D:** This jack is used with the KS-19224, L1, cable.

(d) **480E:** This jack is designed for a solderless shield connection to a 724 or similar-type cable by means of a sleeve which is furnished as a loose part of the jack. The 480E jack is provided with a 2A cushion. This jack is equipped with a set of make-before-break auxiliary contacts. This jack is used for patching trunks.

**2.07 481A and B:** These multicontact jacks (Fig. 12) are designed for flexible mounting. They are used in the reader for the Automatic Message Accounting Systems and Accounting Center 1. These jacks are provided with guide holes for locating pins on the plug portion of the readers and for lining up the contact springs of the jacks with the contacts of

the readers. The contact springs are insulated from each other.

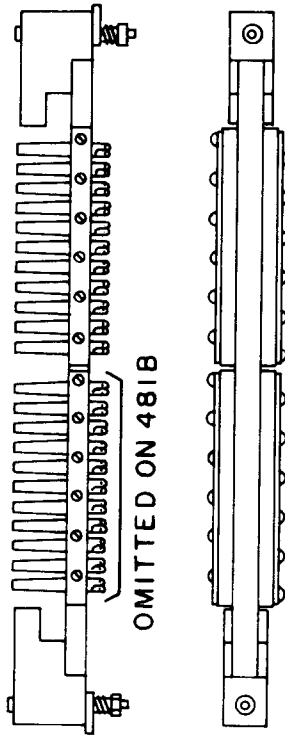


Fig. 12—481A or B Jack

- (a) **481A:** This jack is equipped with 44 pairs of contact springs.
- (b) **481B:** This jack is equipped with 22 pairs of contact springs.

**2.08 482B and BM:** These single-mounted twin jacks (Fig. 13) have a single frame with two sleeves and are designed to be used with the 338 or similar-type plugs. The contact springs are equipped with No. 2 metal contacts.

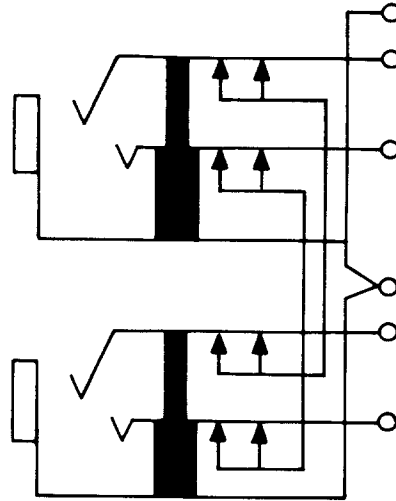


Fig. 13—482B or BM Jack

- (a) **482B:** This jack is recommended instead of the 482A jack.
- (b) **482BM:** This jack consists of terminal ends which are designed for mechanically wrapped connections. This jack is used in the Voice Frequency Patch Bay in the L-type multiplex. The 482BM jack replaces the 482AM jack.

**2.09 483C and CM:** These single-mounted jacks (Fig. 14) are intended to be mounted with the springs in a vertical plane. These jacks are used with the 309 or similar-type plugs.

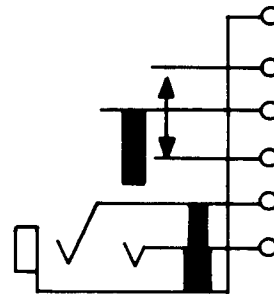


Fig. 14—483C or CM Jack

(a) **483C**: This jack is specially adjusted to be used in telegraph repeater equipment and for limited service only.

(b) **483CM**: This jack is equipped with solderless wrapped terminals. This jack is used in the No. 5 crossbar.

**2.10 484C**: This single-mounted jack (Fig. 15) is intended to be mounted with the springs in a vertical plane. This jack is designed to be used with the 347 or similar-type plugs. The 484C jack replaces the 216G jack.

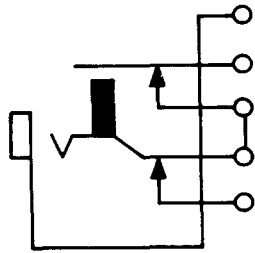


Fig. 15—484C Jack

**2.11 485C**: This single-mounted jack (Fig. 16) is intended to be mounted with the springs in a vertical plane. This jack is designed to be used with the 347 or similar-type plugs. The 485C jack replaces the 236E jack.

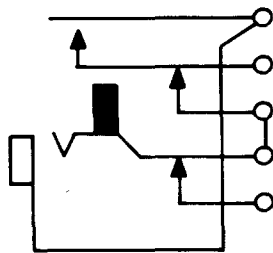


Fig. 16—485C Jack

**2.12 486A**: This single-mounted jack (Fig. 17) has coaxially arranged inner and outer contacts which are mounted in a tubular metal frame. This jack contains a 75 ohm deposited carbon rod resistor mounted coaxially with the outer housing and connected across the coaxial members. The 486A jack is

used as a termination jack in coaxial circuits and is designed for a 358A or similar-type plug, but not for cord or coaxial cable connections. The maximum continuous dissipation is 0.1 watt. The return loss of an ideal 75 ohm transmission line, when terminated in this jack, is greater than 45 db at frequencies up to 80 megacycles. This jack is used in the TD-2 Radio Relay System.

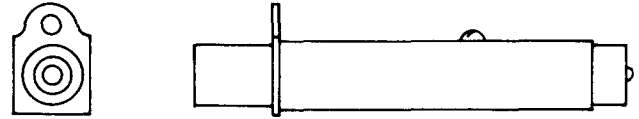


Fig. 17—486A Jack

**2.13 487A**: This coaxial-type jack (Fig. 18) is designed to be used with the 358A or similar-type plugs. This jack is not designed for cord connections. At the threaded end, the inner contact terminal is arranged for a soldered wire connection. The ac test voltage is 2000 volts. This jack forms a part of the 9A attenuator and the 26-type pads.

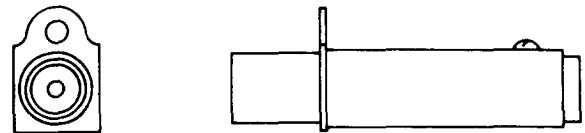


Fig. 18—487A Jack

**2.14 488A**: This single-mounted jack (Fig. 19) has coaxially arranged inner and outer contacts which are mounted in a tubular metal frame. One end of the 488A jack is designed for soldered wire connections to the inner and outer contact terminals. This jack is not designed for a coaxial cable connection. The test voltage is 2000 volts ac. The 488A jack is used in the IF switching and distributing amplifiers of the TD-2 Radio Relay Station.

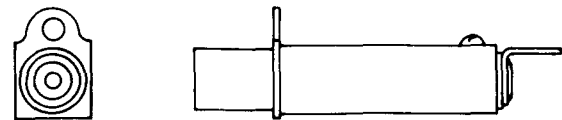


Fig. 19—488A Jack

**2.15 489A:** This coaxial-type jack (Fig. 20) has coaxially designed inner and outer contacts. The 489A jack is a twin jack that is designed for mounting in jack mountings such as the 185 and 230A. The mounting lugs on the two individual jacks may be positioned for mounting in order to extend in opposite directions, back to back, in the same direction, or side-by-side. This jack is designed to be used with the 337 and similar-type plugs, but not for cord or coaxial cable connections. The inner contacts of the two jacks are interconnected by two 55 ohm resistors in series. The outer contacts are connected together and to the midpoint between the resistors. The 489A jack is used as a 110 ohm balanced termination in the J68337A FM Terminal Test Set of the TD-2 Radio System. The test voltage for this jack is 2000 volts ac. The test is made before the resistors are connected.

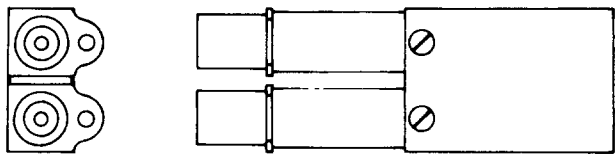


Fig. 20—489A Jack

**2.16 490A:** This single-mounted jack (Fig. 21) is designed for use with the 358A and similar-type plugs. This jack is not designed for connection to a coaxial cable. At the threaded end, the inner contact terminal is designed for soldered wire connection. The 490A jack is used as part of the J68337E IF Frequency Meter Detector used in the terminal test set of the TD-2 Radio System. The ac test voltage is 2000 volts.



Fig. 21—490A Jack

**2.17 491A:** This coaxial-type jack (Fig. 22) has coaxially arranged inner and outer contacts. One end of the jack is designed to be used with the 358A and similar-type plugs. The other end of the jack is designed for a solderless shield connection to the connecting cable by means of a sleeve which is furnished as a loose part with the jack. The 491A is a twin jack which is designed for mounting in jack mountings such as the 185 and 230A. The mounting lugs on the two individual jacks may be positioned for mounting in order to extend back-to-back, in the same direction, or side-by-side. The outer contacts are connected together. A removable coverplate is furnished for use in covering an unused cable entrance hole. The jack construction permits strapping of inner contacts. The 491A jack is used in amplifier switching in the repeater equipment of the L3 Carrier Telephone System. The ac test voltage is 2000 volts.

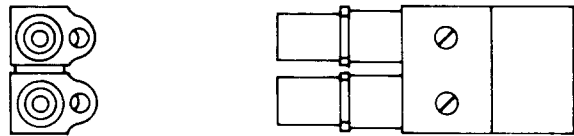
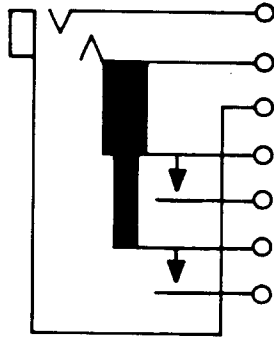


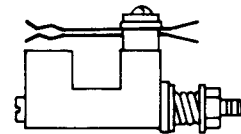
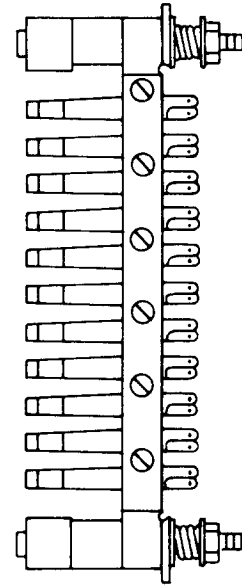
Fig. 22—491A Jack

**2.18 494A:** This unit-type jack (Fig. 23) is arranged for strip-type mounting and is used with the 310 or similar-type plugs. This jack is used in the J93401E and N Automatic Test Equipment in common systems.



**Fig. 23—494A Jack**

**2.19 495A:** This multicontact jack (Fig. 24) is designed for flexible mounting. This jack is equipped with 22 pairs of contact springs. The contact springs are insulated from each other. This jack is provided with guide holes for locating the pins on the 216B plug and for lining up the contact springs of the jack with the contacts of the plug. The 495A jack is used with the 216B plug in connection with the perforators of the accounting center for the automatic message accounting system. This jack replaces the D-176252 jack.



**Fig. 24—495A Jack**

**2.20 496A:** This multicontact jack (Fig. 25) is designed for flexible mounting. This jack is equipped with 33 pairs of contact springs. The contact springs are insulated from each other. This jack is provided with guide holes for locating the pins on the plug assembly of the KS-13882, L3, perforator in order to line up the contact springs of the jack with the contacts of the plug. The 496A jack is used with the plug assembly of the KS-13882, L3, perforator of the accounting center for the automatic message accounting system.

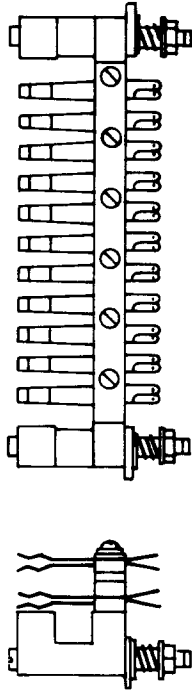


Fig. 25—496A Jack

**2.21 498A:** This is a coaxial-type jack (Fig. 26) which has the center conductor arranged for soldered wire connection. The outer conductor is electrically common with the mounting plates. The test voltage is 2000 volts ac. This jack forms a part of the 19A and B pads. The 498A jack is designed to be used with the 358A or similar-type plugs.

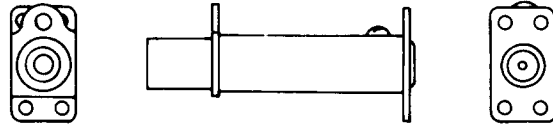


Fig. 26—498A Jack

**2.22 499A:** This unit-type jack (Fig. 27) is designed for strip-type mounting and is used with the 310 or similar-type plugs. This jack is furnished only on orders for jack mountings. The 499A jack will mount on 116, 136, 137, 180, 250A or similar-type jack mountings having  $\frac{5}{8}$ -inch or greater mounting centers. The contact springs are equipped with contacts of No. 2 metal.

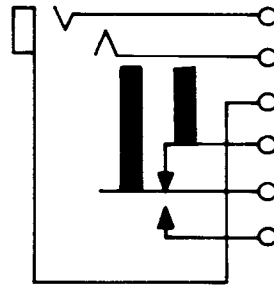


Fig. 27—499A Jack