JS-180
HEADSET JACK APPLIQUE

CONTENTS PAGE

1. GENERAL

1.01 This section provides information on the JS-180 Headset Jack Applique manufactured by Plantronics, Inc. The unit provides a means for adapting headsets that use two-prong plugs to GTE Automatic Electric (GTE AE) telephones.

2. DESCRIPTION

2.01 The unit (Figure 1) consists of a headset jack, receptacle, transfer switch, recall pushbutton, and an amplifier housed in an ivory-colored plastic case. The unit comes equipped with either an 18-inch cord (Model JS-180-1) or an 8-foot cord (Model JS-180-2). A snap-on cradle provides a place for storing the headset.

2.02 The transfer switch is used for switching from handset to headset operation without breaking the connection. The recall pushbutton is used either to flash the operator or to break the connection for redialing.

2.03 The unit's cradle and base come as unassembled pieces that snap together for installation. A kit containing the following installation equipment is included with the unit:

(a) Two mounting brackets for securing the unit to a telephone.
(b) Two setscrews.
(c) Three snap-on electrical connectors.
(d) Allen wrench for securing the brackets.

2.04 Figure 2 shows a schematic diagram of the unit.

3. INSTALLATION

3.01 The unit can be used with the telephones listed in Tables 1 and 2. The type of Touch Calling Unit (TCU) used with TCU-equipped telephones can be identified as follows:

(a) The Type 12C Inductor-Capacitor Touch Calling Unit (LCTCU) has doeskin gray pushbuttons and a doeskin gray subfaceplate.
(b) The Type 12C Integrated Circuit Touch Calling Unit (ICTCU) has doeskin gray pushbuttons and a dark gray subfaceplate.
(c) The Type 12D TCU has doeskin gray pushbuttons, a doeskin gray subfaceplate, and a raised dot in the center of the # pushbutton.

3.02 This unit can stand freely on a desk near the telephone, or it can be mounted on furniture (e.g., on the side of a desk), on a wall, or on either side of the telephone by using brackets. The Model JS-180-2 unit that has an 8-foot cord is generally used for furniture-mounted applications.

Free-Standing Installation

3.03 If the unit is to stand by itself, perform the following procedure:

(a) Insert the cradle (on the desired side) into the guides on the bottom of the body until the detent dimples snap into place.
(b) Clip the base to the body by first inserting the front guide posts and then lowering the body onto the rear guides until the two pieces snap together.
(c) Remove the telephone housing from the telephone baseplate.
(d) If the telephone is equipped with a rotary dial or a Type 12C LCTCU, make all internal wiring connections to the telephone in accordance with Table 1. If the telephone is equipped with a Type 12C ICTCU or a Type 12D TCU, make all internal wiring connections in accordance with Table 2. Where wire to wire connections are indicated, use the snap-on electrical connectors as shown in Figure 3.

CAUTION: Safe grounding and handling procedures must be adhered to when handling the integrated circuit type TCU's. The tone generator is susceptible to damage by electrostatic discharge and is subject to voltage overstressing. Power must not be applied while handling these TCU's. Never touch the frequency spring electrical connections; they can be mechanically damaged.

(e) When all connections have been made, replace the telephone housing. Make certain that the cable is not stretched or damaged by the housing .

Furniture or Wall Mounting

3.04 If the unit is to be mounted on furniture or on a wall, perform the following procedure:

(a) Mount the base of the unit (through the two holes in the base) by using either two No. 6 by 3/8-inch

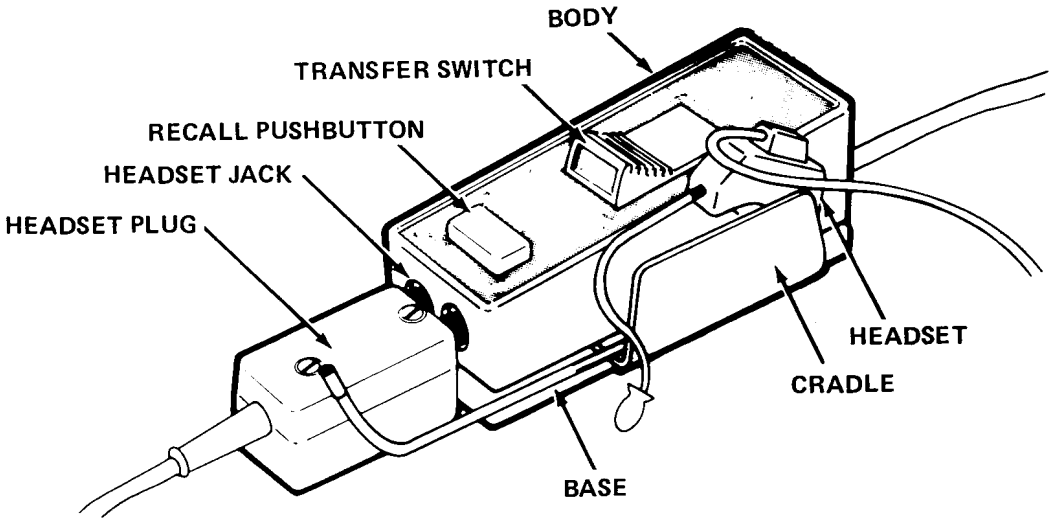
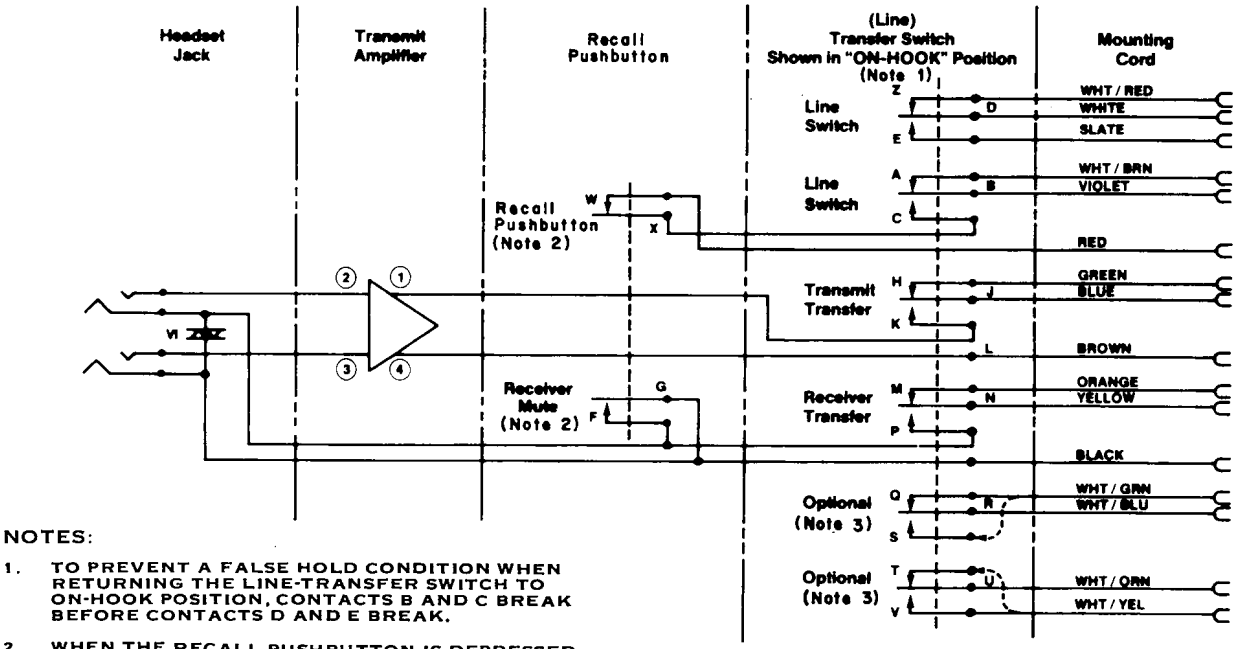


Figure 1. Unit Assembly with Headset.



NOTES:

1. TO PREVENT A FALSE HOLD CONDITION WHEN RETURNING THE LINE-TRANSFER SWITCH TO ON-HOOK POSITION, CONTACTS B AND C BREAK BEFORE CONTACTS D AND E BREAK.
2. WHEN THE RECALL PUSHBUTTON IS DEPRESSED, CONTACTS F AND G MAKE BEFORE CONTACTS W AND X BREAK.
3. EITHER A NORMALLY OPEN OR NORMALLY CLOSED OPTION CAN BE USED BY MOVING A LEAD ON THE SWITCH AS SHOWN BY THE DASHED LINE.
4. SWITCH APPLICATIONS:
   (a) CONTACTS D, E, AND Z: A1 LEAD CONTROL/SPEAKERPHONE
   (b) CONTACTS B AND C: RING TRANSFER
   (c) CONTACTS Q, R, S, T, U, AND V: TIP TRANSFER, SPEAKER MUTING, AND MEMORY RESET.

Figure 2. Schematic Diagram of Unit.

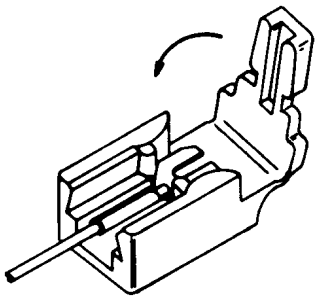


Figure 3a. Used as Insulator.

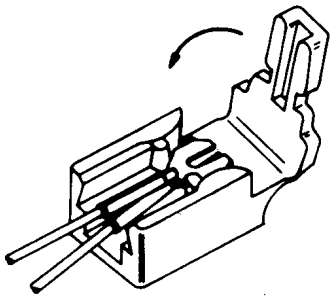


Figure 3b. Used as Insulated Splice.

Figure 3. Snap-On Electrical Connector.

panhead metal screws for mounting to metal surfaces or two No. 6 by 1/2-inch round-head wood screws for mounting to wood surfaces. Make certain that the base is oriented (front to back) with respect to headset jack position.

(b) Clip the base to the body as described in paragraph 3.03(b).

(c) Remove the telephone housing from the telephone baseplate.

(d) If the telephone is equipped with a rotary dial or a Type 12C LCTCU, make all internal wiring connections to the telephone in accordance with Table 1. If the telephone is equipped with a Type 12C ICTCU or a Type 12D TCU, make all internal wiring connections in accordance with Table 2. Where wire-to-wire connections are indicated, use the snap-on electrical connectors as shown in Figure 3.

CAUTION: Safe grounding and handling procedures must be adhered to when handling the ICTCU's. The tone generator is susceptible to damage by electrostatic discharge and is subject to voltage overstressing. Power must not be applied while handling these TCU's. Never touch the frequency spring electrical connections; they can be mechanically damaged.

(e) When all connections have been made, replace the telephone housing. Make certain that the cable is not stretched or damaged by the housing.

Telephone Mounting

3.05 If the unit is to be mounted on a telephone, perform the following procedure:

(a) Remove the telephone housing from the telephone baseplate.

(b) Attach the two brackets to the flange of the telephone baseplate as follows:

(1) Hold the unit beside the baseplate to determine where the brackets should be located. The front edge of the bracket is mounted approximately one-fourth inch back from the front edge of the telephone.

(2) Fasten the brackets securely to the baseplate by using the socket setscrews and the allen wrench included with the unit.

(3) If the flange of the baseplate is flared, tighten the screws until the brackets bend as shown in Figure 4.

(c) Slide the guides on the bottom of the unit onto the brackets until the detent dimples snap into place.

(d) Insert the cradle into the guides on the opposite side until the cradle's detent dimples snap into place.

NOTE: The baseplate may be snapped into place for some telephone installations, but in many cases, this makes the unit sit too high.

(e) Adjust the length of the cable to suit installation requirements.

(f) If the telephone is equipped with a rotary dial or a Type 12C LCTCU, make all internal wiring connections to the telephone in accordance with Table 1. If the telephone is equipped with a Type 12C ICTCU or a Type 12D TCU, make all internal wiring connections in accordance with Table 2. Where wire-to-wire connections are indicated, use the snap-on electrical connectors as shown in Figure 3.

CAUTION: Safe grounding and handling procedures must be adhered to when handling the ICTCU's. The tone generator is susceptible to damage by electrostatic discharge and is subject to voltage overstressing. Power must not be applied while handling these TCU's. Never touch the frequency spring electrical connections; they can be mechanically damaged.

(g) When all connections have been made, replace the telephone housing. Make certain that the cable is not stretched or damaged by the housing.

4. TEST OPERATION

4.01 After the unit has been installed, perform the following procedure to verify the unit is working properly:

(a) Plug the headset into the unit. After placing a call, set the transfer switch to the headset ON position (i.e., the red indicator on the transfer siwtch is showing). Headset reception and transmission should meet acceptable standards.

(b) Depress the recall pushbutton when the headset is turned on to verify proper operation of the unit; repeat this step if necessary.

(c) Set the transfer switch to the handset position (i.e., the red indicator on the transfer switch does not show) and check the operation of the telephone; repeat this step if necessary.

NOTE: If the unit is wired into a key telephone, ensure that a false hold condition does not occur when the transfer switch is returned to the handset position.

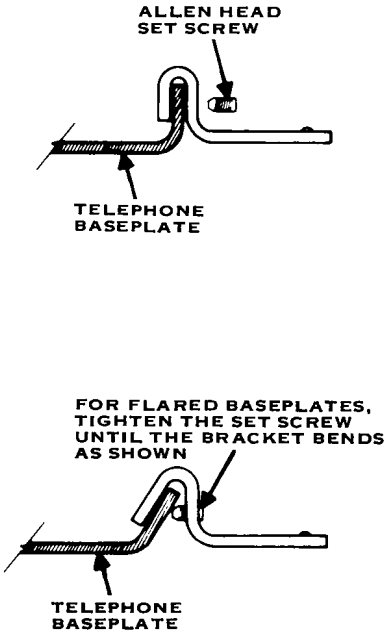


Figure 4. Bracket Mounting.

LEGEND:
DSS Console = Direct Station Selection Attendant Position Console
LC = Inductor Capacitor
ST = Spacer Terminal
TB = Terminal Board Terminal
TCU = Touch Calling Unit
TN = Transmission Network Terminal
TS = Terminal Strip

NOTES:

1. The white-brown, white-red, white-orange, white-yellow, white-green, and white-blue leads are taped and stored.
2. Move the orange hookswitch lead from TB 28 to TN 23 and the red hookswitch lead from TB 6 to TB16. Move the white recall lead from TB 28 to TB 16 and the other white recall lead from TN 2 to TB 6.
3. Move the orange hookswitch lead from TB 28 to TB 16 and the red hookswitch lead from TB 46 to TB 40. Move the white recall lead from TB 40 to TB 46 and the other white recall lead from TB 28 to TB 17.
4. Move the red handset lead from TN 5 to TB 61. Move the yellow handset lead from TN 4 to TB 55.
5. Move the read handset lead from TN 5 to TB 61. Move the yellow handset lead from TB 29 to TB 55.

Table 1. Wiring Instructions for Telephones Equipped with Either a Rotary Dial or a Type 12C LCTCU.

	TYPE OF TELEPHONE							
UNIT CABLE WIRES (NOTE 1)	NB 80 NC 80 ROTARY DIAL	NB 80 TYPE 12C LCTCU	NC 80 TYPE 12C LCTCU	85C ROTARY DIAL	102A ROTARY DIAL (NOTE 2)	102A TYPE 12C LCTCU (NOTE 3)	103A ROTARY DIAL	103A TYPE 12C LCTCU
Brown	TN 2 or 3 or 23	Spacer A	ST A	TN 23	TN 2	TN 11	TN 2	TN 2
Red	TN 10	TN 10	ST D	TN 10	TN 23	TB 39	TN 2	TN 46
Orange	Remove yellow handset wire from TN 4 or 13 and green hookswitch wire from TN 13 and splice.	Remove black handset wire from spacer B and brown hookswitch wire from TN 23 and splice.	Remove yellow handset wire from ST B and green hook-switch wire from TN 13 and splice.	Remove yellow handset wire from TN 4 or 13 and green hookswitch wire TN 13 and splice.	37/44 (TB) and yellow handset wire and green hookswitch wire and splice.	37/44 (TB) and yellow handset wire and green hookswitch wire and splice.	TB 55 (Note 4)	TB 55 (Note 5)
Yellow	TN 4	Spacer B	ST B	TN 4	TN 13	TB 29	TN 4	TB 29
Green	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TN 5 and splice.	41 (TB) and red handset wire from TN 5 and splice.	41 (TB) and red handset wire from TN 5 and splice.	TB61 (Note 4)	TB 61 (Note 5)
Blue	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5
Violet	TN 11	Spacer D	TN 10	TN 11	TN 17	TN 17	TB 7	TB 39
Slate	TN 2 or 3 or 23	Spacer C	ST C	TN 2 or 23	TB 47	TB 47	TB 47	TB 47
White	TN 8	TN 8	TN 8	TN 8	TB 49	TB 49	TB 49	TB 49
Black	TN 2 or 3 or 23	TN 4	TN 2	TN 2 or 23	TN 2	TN 23	TN 23	TN 2

LEGEND:
DSS Console = Direct Station Selection Attendant Position Console
LC = Inductor Capacitor
ST = Spacer Terminal
TB = Terminal Board Terminal
TCU = Touch Calling Unit
TN = Transmission Network Terminal
TS = Terminal Strip

NOTES:

1. The white-brown, white-red, white-orange, white-yellow, white-green and white-blue leads are taped and stored.
6. Wiring instructions in parentheses are for the Type 186 telephone equipped with a rotary dial and without hold.
7. Move the white and orange leads from TB 27 to TB 30. Move the yellow handset lead from TN 4 to TB 9. Move the red handset lead from TN 5 to TB 29.
8. Remove the yellow handset lead from TB 29 and the red handset lead from TN 5.

Table 1. Wiring Instructions for Telephones Equipped with Either a Rotary Dial or a Type 12C LCTCU (Continued).

	TYPE OF TELEPHONE								
UNIT CABLE WIRES (NOTE 1)	186 ROTARY DIAL WITH HOLD (WITHOUT HOLD, NOTE 6)	186 WITH HOLD TYPE 12C LCTCU	186 WITHOUT HOLD TYPE 12C LCTCU	187 ROTARY DIAL (HANDSET MUST BE OFF-HOOK)	187 TYPE 12C LCTCU (HANDSET MUST BE OFF-HOOK	860B 863A ROTARY DIAL	860B 863A TYPE 12C LCTCU	DSS CONSOLE ROTARY DIAL (NOTE 7)	DSS CONSOLE TYPE 12C LCTCU
Brown	TN 23	TB 6	TB 6	TN 23	TS 8	TN 2	TB P	TN 2	TN 11
Red	TB R or (N)	TB R	TB N	TN 11	TN 11	TB E	TB E	TB 46	TB 27
Orange	Remove yellow handset wire from TN 4 and green hook-switch wire from TN 13 and splice.	Remove black handset wire from TB 8 and blue hookswitch wire from TN 2 and splice.	Remove slate handset wire from TB 8 and blue hookswitch wire from TN 2 and splice.	Remove yellow handset wire from TN 13 and splice	Remove yellow handset wire from TS 10 and splice	Remove yellow handset wire from TN G and green hookswitch wire from TN 13 and splice.	Remove yellow handset wire from TN G and green hookswitch wire from TN 4 and splice.	TB 9	Splice to yellow handset wire (Note 8)
Yellow	TN 4	TB 8	TB 8	TN 13	TS 10	TN 13	TN G	TN 4	TB 29
Green	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TB 5 and splice.	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TN 5 and splice.	Remove red handset wire from TS 9 and splice.	Remove red handset wire from TN N and splice.	Remove red hand-set wire from TB N and splice.	TB 29	Splice to red handset (Note 8)
Blue	TN 5	TB 5	TB 5	TN 5	TS 9	TN 5	TN 5	TN 5	TN 5
Violet	TN 11	TN 6	TN 6	TS 13	TS 13	TN 11	TB D	TB 31	TB 46
Slate	TB 1B	TB 1B	TB 1B	TS 2	TS 2	TB J	TB J	TB 48	TB 48
White	TB N or (M)	TB N	TB M	TS 1	TS 1	TB K	TB K	TB 50	TB 50
Black	TN 23	TB 7	TB 7	TN 23	TS 11	TN 2	TN 2	TN 2	TN 2

TABLE 2. WIRING INSTRUCTIONS FOR TELEPHONES EQUIPPED WITH EITHER A TYPE 12C ICTCU OR A TYPE 12D TCU.

LEAD COLOR	ND 80 95 182A 192A	120A (NOTE 1) DESK VERSION	103A (NOTE 2)	186 WITH HOLD	186 WITHOUT HOLD	187	860B 863A (NOTE 3)	DSS17A (LARGE) CONSOLE	DSS CONSOLE (NOTE 2)
Unit Cable Wires (Note 4)									
White-Red		TB-51 (Note 6)							
Brown	TN 2	TN 2 (Note 7)	TN 2	TN 2	TN 2	TB 10	TN 23	TN 2	TN 2
Red	TB D	TB 46	TB 39	TB R	TB N	TN 11	TB E	TB 30	TB 46
Orange	SP 2	TB 44	TB 61	TB 5	TB 5	TB 12	TN F	TB 27	TB 27
Yellow	TB B	TB 29	TB 29	TB 8	TB 8	TB 11	TN G	TB 29	TB 29
Green	SP 1	TB 28	TB 62	SP 1	SP 1	TB 9	TN N	TB 28	TB 28
Blue	TB A	TN 11	TN 11	TB 6	TB 6	TB 8	TN P	TN 11	TN 11
Violet	TN 10	TB 30	TB 46	TN 6	TN 6	TB 13	TB D	TB 46	TB 30
Slate	(Note 5)	TB 47	TB 47	TB 1B	TB 1B	TB 2	TB J	TB 50	TB 50
White	(Note 5)	TB 49	TB 28	TB N	TB N	TB 1	TB K	TB 48	TB 48
Black	TN 2	TN 23	TN 2	TN 2	TN 2	TN 2	TN 23	TN 23	TN 23
Handset Wires									
Red	SP 1	TB 28	TB 62	SP 1	SP 1	TB 9	TN N	TB 28	TB 28
Green	TN 23	TN 2 (Note 7)	TN 2	TB 7	TB 7	TB 10	TN 2	Note 8	
Yellow	SP 2	TB 37	TB 61	TB 5	TB 5	TB 12	TN F	TB 27	TB 27
Black	TN 23	TN 23 (Note 7)	TN 23	TB 7	TB 7	TB 10	TN 2		
Hookswitch Wires									
Green	SP 2	TB 37		TB 23	TB 23	TN 23	TN F		
Blue				TB 5	TB 5	TB 12			
Yellow		TN 23 (Note 7)					TN 23		
Brown	TN 23		TB 28						
Type 12C ICTCU Wires									
Balck-White	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5	TN 5

TABLE 2. WIRING INSTRUCTIONS FOR TELEPHONES EQUIPPED WITH EITHER A TYPE 12C ICTCU OR A TYPE 12D TCU (CONTINUED).

LEAD COLOR	ND 80 95 182A 192A	120A (NOTE 1) DESK VERSION	103A (NOTE 2)	186 WITH HOLD	186 WITHOUT HOLD	187	860B 863A (NOTE 3)	DSS17A (LARGE) CONSOLE	DSS CONSOLE (NOTE 2)
Brown	TB C	TB 6	TB 6	TB A	TB A	TB L2	TB 8	TB 9	TB 9
Slate	TB B	TB 29	TB 29	TB 8	TB 8	TB 11	TN G	TB 29	TB 29
Pink	TB A	TN 11	TN 11	TB 6	TB 6	TB 8	TN P	TN 11	TN 11
Green	TN 2	TN 2	TN 2	TN 2	TN 2	TN 2	TN 2	TN 2	TN 2
Blue	TN 13	TN 4	TN 4	TN 13	TN 13	TN 13	TN 13	TN 4	TN 4
White	TN 1	TN 1	TN 1	TN 1	TN 1	TN 1	TN 1	TN 1	TN 1
Red	TB D	TB 40	TB 40	TN 6	TN 6	TN 11	TB D	TB 42	TB 42

LEGEND:

DSS Console = Direct Station Selection Attendant Position Console.
SP = Connection to spare or unused terminal or splice to companion lead(s).
TB = Terminal Board Terminal or Spare Terminal.
TN = Transmission Network Terminal.

NOTES:

1. If the Type 102A telephone equipped with a Type 12C ICTCU does not have the modified (spark-suppressed) RECALL switch, move the orange hookswitch lead from TB 28 to TB 30, move the white recall lead from TB 28 to TB 31, and connect the HD-680027-A spark-suppression network between TB 31 and TB 39.
2. Before making lead connections, remove the red handset wire from TN 11 and remove the yellow handset wire from TB 29.
3. Before making lead connections, remove the black strap lead from TN 23 and TN F remove the red strap lead from TN 5 and TN N.
4. The white-brown, white-red, white-orange, white-yellow, white-green, and white-blue leads are taped and stored, except the white-red lead of the Type 102A telephone which is connected to TB 51.
5. Optional A and A1 switch contacts.
6. The white-red lead is used for hands-free answer-back service.
7. For the Type 102A wall version telephone, all connections are the same except move lead from TN 2 to TB 41 and from TN 23 to TB 17.
8. Remove the green hookswitch lead from TN 13 and splice with the white-blue wire; connect the white-green wire to TN 13.

JS-180
HEADSET JACK APPLIQUE

1. GENERAL

1.01 This addendum to Issue 1 of this section is reissued to change Table 2.

1.02 The changes previously included in Issue 1 of this addendum are aslo included in this issue. The changes appearing for the first time in this addendum are indicated by change indicators.

1.03 Microfiche Copy Recipients. Remove Issue 1 of this section from the file and replace it with the microfiche copy identified as Issue 1, Addendum 1.

1.04 Paper Copy Recipients. In ink or red pencil, make the changes indicated in part 2 of this addendum. Write "See Addendum" in the margin next to each change. File this addendum directly in front of the addended section.

1.05 GTE AE practices are used by GTE employees for operating and maintaining the equipment GTE AE manufactures and sells. These practices may change or may not be suitable in a specific situation and so are recommended as suggested guidelines only. GTE AE hereby disclaims any responsibility and/or liability for any consequential or inconsequential damages that may result from the use of such practices unless such practices are utilized in conjunction with the operation and maintenance of original equipment manufactured or supplied by GTE AE and covered by its standard warranty. GTE AE acknowledges that the customer's special requirements policy/practices may take precedence over those supplied by GTE AE if conflicts develop during installation and ongoing operation.

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2. CHANGES

2.01 Remove and destroy pages 9 and 10 and replace them with the new pages 9 and 10 attached to this addendum.

Attached: Page 9 of 10 dated February 1982, revised.
Page 10 of 10 dated February 1982, revised.