

PICTUREPHONE<sup>®</sup> SERVICE  
BASEBAND VIDEO TRANSMISSION  
INITIAL SERVICE (PHASE 0)  
CABLE EQUALIZERS  
VIDEO LOOP FACILITY ALIGNMENT

1. GENERAL

1.001 This addendum supplements Section 518-800-510, Issue 1

1.002 This addendum is reissued for the following reasons:

- (a) To add information to Chart 1 for the adjustment of the J87245B power supply converter.
- (b) To add information to Charts 4, 6, and 10 regarding a temporary loopback in key telephone systems (KTSs) when a station set is not installed at the time of loop equalization.
- (c) To add a new procedure (Chart 7.1) for alignment of a KTS-to-station loop with equalizers when there is no line to a central office or PBX.
- (d) To revise information in Chart 8 on selection of station build-out networks used in KTS applications. The revised procedure accounts for bridged taps introduced in the key equipment.

1.003 Changes covered by the previous issue of this addendum and incorporated in this reissue are as follows:

- (a) Addition of a **Warning** to the introduction

(b) Revision of Chart 2

(c) Addition of information to Charts 3 and 7.

The following change applies to the introduction of the section:

- (a) **Warning**—added after the paragraph beginning "Cable equalizers are installed...."

**Warning: This applies to cable equalizers 606A, 607A, 937A through 937F, and 939A through 939C. Do not connect test point TP1, TP2, or TP3 of these cable equalizers directly to ground nor to any instrument with a grounded input. Such a ground connection will damage the cable equalizer. If ground connections are required, always make the connection through a 200-volt, 4- $\mu$ F or larger capacitor; do not use an electrolytic capacitor.**

CHART 1

The following change applies to Chart 1 of the section:

- (a) New unnumbered paragraph in the introductory test

**CHART 1**

**PRELIMINARY PROCEDURES**

(Add to introductory text immediately after the paragraph beginning "Installation notes for 937-type equalizers....")

**Field Adjustment of J87425B, L3 Converter**

The J87425B, L3 converter is factory adjusted to  $-24 \pm 0.02$  volts and normally should not require field adjustment. Installation testing may be accomplished, however, using a dc voltmeter with 2-percent accuracy (KS-14510, L1 or equivalent) connected across pins 2 (+) and 10 (-) located on the rear of the converter. If the output voltage is not within the nominal operating range, the converter may be adjusted to  $-24 \pm 0.25$  volts using the ADJ VOLT potentiometer. This adjustment may be done with or without equalizers installed. A protection circuit will operate if the voltage is adjusted to 28 volts. In this case, remove the plug-in converter, replace the protection circuit fuse, and reinsert the unit to restore the protection circuit. Then repeat the above adjustment procedure.◆

**CHART 2**

The following change applies to Chart 2 of the section:

- (a) Steps 3 through 5—revised

**CHART 2**

**CHECK OF CABLE EQUALIZER TEST SET**

STEP	PROCEDURE										
3	<p>Prepare the CETS as follows:</p> <table border="0" style="margin-left: 40px;"> <tr> <td style="padding-right: 20px;">SWITCH</td> <td>POSITION</td> </tr> <tr> <td>MODE</td> <td>F2-F6</td> </tr> <tr> <td>SELECTOR</td> <td>F6</td> </tr> <tr> <td>EQUALIZER ALIGN</td> <td>AUX</td> </tr> <tr> <td>IMPEDANCE</td> <td>NORMAL</td> </tr> </table>	SWITCH	POSITION	MODE	F2-F6	SELECTOR	F6	EQUALIZER ALIGN	AUX	IMPEDANCE	NORMAL
SWITCH	POSITION										
MODE	F2-F6										
SELECTOR	F6										
EQUALIZER ALIGN	AUX										
IMPEDANCE	NORMAL										
4	<p>Depress the BATT CHECK pushbutton.</p> <p><b>Requirement:</b> An indication in the blue BATT OK region of the meter scale.</p> <p><b>Note:</b> If an indication in the red REPLACE BATT region is obtained, replace the batteries.</p>										

CHART 2 (Cont)	
STEP	PROCEDURE
5	<p>Depress the CAL pushbutton and adjust P6 for a null indication.</p> <p><b>Note 1:</b> When calibrating the CETS, potentiometer P6 <i>must always</i> be adjusted first because it is the overall level control for the CETS test oscillator. Potentiometers P1 through P5 control the relative levels of the other five test signals.</p> <p><b>Note 2:</b> Null for calibrating the CETS is indicated when the meter needle is on the center line of the meter scale.</p>

**CHART 3**

The following change applies to Chart 3 of the section:

- (a) Note 4—added

CHART 3	
ADJUSTMENT OF FLAT GAIN IN VIDEO LOOP FACILITY FROM A PICTUREPHONE VIDEO SWITCHING OFFICE	
(Add to introductory text immediately following Note 3.)	
<p><b>Note 4:</b> Power is <i>not</i> applied in the 1A1 service unit until a display unit or a dummy plug is connected to the service unit. The CETS (cable equalizer test set) is supplied with an H-326-335, Group 9 dummy plug (cord assembly). This dummy plug is used when aligning station set cable equalizer 939A or 939B in a 1A1 PICTUREPHONE service unit when <i>no</i> display unit is connected. The dummy plug is placed in the connector to which the display unit is normally attached. The dummy plug turns on power to the service unit and permits aligning the 939A or 939B equalizer.</p>	

**CHART 4**

The following changes apply to Chart 4 of the section:

- (a) Step 82.1 and **Caution**—added
- (b) Step 101—added

CHART 4	
PRECISION EQUALIZATION IN VIDEO LOOP FACILITY FROM A PICTUREPHONE VIDEO SWITCHING OFFICE	
STEP	PROCEDURE
82	Set the <i>common</i> KTSCE screw switch, SW1, to the closed position.  <i>Note:</i> Check that the <i>control</i> KTSCE screw switch, SW1, is in the closed position.
82.1	◆If there is no station (service unit and display unit) connected to the KTS, connect a temporary strap between pins B28 and A17 on the 600A KTU connector. This provides a loopback required for the following portion of the procedure.  <i>Caution: Pin A17 is the - 24 volt supply and should not be connected to any other point.</i> ◆  ◆ <i>At KTS location:</i>
101	If a temporary strap was placed between pins B28 and A17 of the 600A KTU in Step 82.1, remove the strap.◆

**CHART 6**

The following changes apply to Chart 6 of the section:

- (a) Step 62.1 and *Caution*—added
- (b) Step 74—added

CHART 6	
PRECISION EQUALIZATION IN VIDEO LOOP FACILITY FROM A WIDEBAND REMOTE SWITCH	
STEP	PROCEDURE
62	Set the <i>common</i> KTSCE screw switch to the closed position.
62.1	◆If there is no station (service unit and display unit) connected to the KTS, connect a temporary strap between pins B28 and A17 on the 600A KTU connector. This provides a loopback required for the following portion of the procedure.  <i>Caution: Pin A17 is the - 24 volt supply and should not be connected to any other point.</i> ◆  ◆ <i>At KTS location:</i>

<b>CHART 6 (Cont)</b>	
<b>STEP</b>	<b>PROCEDURE</b>
74	If a temporary strap was placed between pins B28 and A17 of the 600A KTU in Step 62.1, remove the strap.◀

**CHART 7**

The following change applies to Chart 7 of the section:

- (a) Note—added

<b>CHART 7</b>	
<b>ALIGNMENT OF LONG VIDEO LOOP BETWEEN KEY TELEPHONE SYSTEM AND A STATION SET</b>	
<b>STEP</b>	<b>PROCEDURE</b>
1	<p><i>At all locations:</i></p> <p><i>Note:</i> Read the <i>Cautions</i> and <i>Notes</i> at the beginning of Chart 3.</p> <p>Establish communication between key telephone system equipment and station set locations.</p>

**CHART 7.1**

The following new chart and figures are added between Charts 7 and 8 of the section:

- (a) Chart 7.1 with Fig. 3 and 4—added

<b>▶CHART 7.1◀</b>	
<b>ALIGNMENT OF LONG VIDEO LOOP (CONTAINING EQUALIZERS) BETWEEN KEY TELEPHONE SYSTEM AND A STATION SET— WITH NO LINE FROM KTS TO CENTRAL OFFICE OR PBX</b>	
<p>The alignment of an equalized video loop between a KTS and a station set when there is no line to a central office or PBX results in slightly different signal levels than when alignment is done per Chart 7. In Chart 7, the 606A and 607A equalizers on the central office side of the KTS are used in the alignment of KTS-station loops. The lack of these equalizers when there is no line to a central office or PBX necessitates the use of Chart 7.1. When this chart (Chart 7.1) is used, the</p>	

CHART 7.1(Cont)

KTS-station lines are sufficiently equalized for internal calls; but, when a central office or PBX line is added to the KTS, each equalized station line should be realigned per Chart 7 to be compatible with the exchange network transmission plan. The transmission paths for equalized KTS video loops are illustrated in Fig. 3.

STEP	PROCEDURE								
	<p><b><i>At KTS and station set equalizer locations:</i></b></p>								
1	Establish communications between KTS equipment and station set location.								
2	Make connections at the station set and KTS, and from the KTS service unit or bay to the 69-type apparatus mounting according to the 518-800-ZZZ section applicable to the equipment arrangements involved.								
3	Set screw switches of the 607A and 939B equalizers according to the facility layout record card (information obtained from Section 860-200-200). Also close switch SW1 on the 607A.								
4	Plug the equalizers into the proper mounting position.								
	<p><b><i>At KTS location:</i></b></p>								
5	Prepare the CETS as follows:								
	<table border="0"> <thead> <tr> <th data-bbox="521 1115 594 1136">SWITCH</th> <th data-bbox="841 1115 930 1136">POSITION</th> </tr> </thead> <tbody> <tr> <td data-bbox="521 1167 610 1188">MODE</td> <td data-bbox="841 1167 878 1188">F1</td> </tr> <tr> <td data-bbox="521 1220 800 1241">EQUALIZER ALIGN</td> <td data-bbox="841 1220 902 1241">AUX</td> </tr> <tr> <td data-bbox="521 1272 708 1293">IMPEDANCE</td> <td data-bbox="841 1272 911 1325">LOW 100Ω</td> </tr> </tbody> </table>	SWITCH	POSITION	MODE	F1	EQUALIZER ALIGN	AUX	IMPEDANCE	LOW 100Ω
SWITCH	POSITION								
MODE	F1								
EQUALIZER ALIGN	AUX								
IMPEDANCE	LOW 100Ω								
6	<p>Using locally prepared clip leads (see note) and/or test connectors, connect a cord between the CETS balanced output and the video pairs (VIR/VIT) transmitting to the station. This connection should be made at the 66-type terminal block appearance closest to the KTS and should be made without disconnecting the transmission pairs. See Fig. 4.</p> <p><b><i>Note:</i></b> There are two options in making these clip leads.</p> <p>(1) Make cords similar to those provided with the CETS, but with clip leads instead of pin plugs. Such cords should be no longer than the standard test cords and should be made from the same type of wire and same type of plug at the test set end. (See the following table.)</p>								

CHART 7.1(Cont)

STEP	PROCEDURE																						
	<table border="1" data-bbox="467 401 1421 913"> <thead> <tr> <th colspan="2" data-bbox="467 401 1421 459">PARTS REQUIRED</th> </tr> <tr> <th data-bbox="467 459 647 518">QUANTITY</th> <th data-bbox="647 459 1421 518">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td data-bbox="467 518 647 606">1</td> <td data-bbox="647 518 1421 606">H. B. Jones #S-302-CCT, 2-Contact Plug, with cable clamp</td> </tr> <tr> <td data-bbox="467 606 647 688">1</td> <td data-bbox="647 606 1421 688">H. B. Jones #S-304-CCT, 4-Contact Plug, with cable clamp</td> </tr> <tr> <td data-bbox="467 688 647 770">10 Feet</td> <td data-bbox="647 688 1421 770">Black Test Lead Wire, #20, stranded, rubber covered</td> </tr> <tr> <td data-bbox="467 770 647 852">10 Feet</td> <td data-bbox="647 770 1421 852">Red Test Lead Wire, #20, stranded, rubber covered</td> </tr> <tr> <td data-bbox="467 852 647 913">4</td> <td data-bbox="647 852 1421 913">Any suitable alligator clips</td> </tr> </tbody> </table> <p data-bbox="402 953 1528 1079">(2) Make double-ended clip leads out of copper wire, preferably insulated. These clip leads should be as short as practicable, but no longer than 10 inches, with alligator clips at both ends. The clip at one end is connected to the 66-type terminal block and the clip at the other end is connected to the pin plug of the standard CETS test lead.</p> <p data-bbox="386 1115 1003 1142"><i>At station set cable equalizer (SSCE) location:</i></p> <p data-bbox="272 1178 748 1205">7 Prepare the CETS as follows:</p> <table data-bbox="678 1230 1127 1402"> <thead> <tr> <th data-bbox="678 1230 959 1251">SWITCH</th> <th data-bbox="997 1230 1127 1251">POSITION</th> </tr> </thead> <tbody> <tr> <td data-bbox="678 1283 959 1304">MODE</td> <td data-bbox="997 1283 1127 1304">F1</td> </tr> <tr> <td data-bbox="678 1335 959 1356">EQUALIZER ALIGN</td> <td data-bbox="997 1335 1127 1356">AUX</td> </tr> <tr> <td data-bbox="678 1377 959 1398">IMPEDANCE</td> <td data-bbox="997 1377 1127 1398">NORMAL</td> </tr> </tbody> </table> <p data-bbox="272 1451 1528 1514">8 Connect a cord between the CETS INPUT connector and the SSCE pin jacks TP1 and TP2. See Fig. 4.</p> <p data-bbox="272 1545 1528 1608">9 Adjust potentiometer F1 on the SSCE to obtain a reading in the green region on the CETS meter.</p> <p data-bbox="272 1640 1528 1703">10 Set screw switches S2R and S2T, located on the connector board of the 1A service unit, to the open position.</p> <p data-bbox="272 1734 1528 1797">11 Connect a cord between the CETS BALANCED OUTPUT connector and pin jacks R0 and T0 on the connector board of the 1A service unit.</p> <p data-bbox="272 1829 1317 1856">12 Set the EQUALIZER ALIGN switch on the CETS to the REMOTE position.</p>	PARTS REQUIRED		QUANTITY	DESCRIPTION	1	H. B. Jones #S-302-CCT, 2-Contact Plug, with cable clamp	1	H. B. Jones #S-304-CCT, 4-Contact Plug, with cable clamp	10 Feet	Black Test Lead Wire, #20, stranded, rubber covered	10 Feet	Red Test Lead Wire, #20, stranded, rubber covered	4	Any suitable alligator clips	SWITCH	POSITION	MODE	F1	EQUALIZER ALIGN	AUX	IMPEDANCE	NORMAL
PARTS REQUIRED																							
QUANTITY	DESCRIPTION																						
1	H. B. Jones #S-302-CCT, 2-Contact Plug, with cable clamp																						
1	H. B. Jones #S-304-CCT, 4-Contact Plug, with cable clamp																						
10 Feet	Black Test Lead Wire, #20, stranded, rubber covered																						
10 Feet	Red Test Lead Wire, #20, stranded, rubber covered																						
4	Any suitable alligator clips																						
SWITCH	POSITION																						
MODE	F1																						
EQUALIZER ALIGN	AUX																						
IMPEDANCE	NORMAL																						

CHART 7.1(Cont)

STEP	PROCEDURE										
	<p><b>At KTS location:</b></p>										
13	<p>Using locally prepared clip leads (see note in Step 6) and/or test connectors, connect a cord between the CETS input and the video leads VOT/VOR from the output of the 607A equalizer. This connection should be made at the 66-type terminal block appearance closest to the KTS and should be done without disconnecting the transmission pairs. See Fig. 4.</p>										
14	<p>Prepare the CETS as follows:</p> <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">SWITCH</th> <th style="text-align: left;">POSITION</th> </tr> </thead> <tbody> <tr> <td>MODE</td> <td>F1</td> </tr> <tr> <td>EQUALIZER ALIGN</td> <td>LOCAL</td> </tr> <tr> <td>IMPEDANCE</td> <td>LOW</td> </tr> <tr> <td></td> <td>100Ω</td> </tr> </tbody> </table>	SWITCH	POSITION	MODE	F1	EQUALIZER ALIGN	LOCAL	IMPEDANCE	LOW		100Ω
SWITCH	POSITION										
MODE	F1										
EQUALIZER ALIGN	LOCAL										
IMPEDANCE	LOW										
	100Ω										
15	<p>Adjust potentiometer F1 on the 607A cable equalizer to obtain a reading in the green region on the CETS meter.</p>										
16	<p>Set the MODE switch on the CETS to the F2-F6 position.</p>										
17	<p>Set the SELECTOR switch on the CETS to the F2 position.</p>										
18	<p>Adjust potentiometer F2 on the 607A cable equalizer to obtain a reading in the green region on the CETS meter.</p>										
19	<p>Repeat Steps 17 and 18 for SELECTOR switch positions F3, F4, F5, and F6 to adjust potentiometers F3, F4, F5, and F6, respectively.</p>										
20	<p>Repeat Steps 17 through 19 until the CETS meter indicates in the green region for all positions of the SELECTOR switch.</p> <p><b>Note 1:</b> A center-line reading may not be obtainable during the first few repetitions of the procedure.</p> <p><b>Note 2:</b> If an indication within the green region cannot be obtained for all SELECTOR switch positions after repeating the procedure approximately five to seven times, proceed to Chart 12 to isolate the trouble.</p>										
21	<p>Set the EQUALIZER ALIGN switch on the CETS to the REMOTE position.</p> <p><b>At SSCE location:</b></p>										

CHART 7.1(Cont)									
STEP	PROCEDURE								
22	<p>Prepare the CETS as follows:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">SWITCH</th> <th style="text-align: center;">POSITION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">MODE</td> <td style="text-align: center;">F1</td> </tr> <tr> <td style="text-align: center;">EQUALIZER ALIGN</td> <td style="text-align: center;">LOCAL</td> </tr> <tr> <td style="text-align: center;">IMPEDANCE</td> <td style="text-align: center;">NORMAL</td> </tr> </tbody> </table>	SWITCH	POSITION	MODE	F1	EQUALIZER ALIGN	LOCAL	IMPEDANCE	NORMAL
SWITCH	POSITION								
MODE	F1								
EQUALIZER ALIGN	LOCAL								
IMPEDANCE	NORMAL								
23	Adjust potentiometer F1 on the SSCE to obtain a reading in the green region on the CETS meter.								
24	Set the MODE switch on the CETS to the F2-F6 position.								
25	Set the SELECTOR switch on the CETS to the F2 position.								
26	Adjust potentiometer F2 on the SSCE to obtain a reading in the green region on the CETS meter.								
27	Repeat Steps 25 and 26 for SELECTOR switch positions F3, F4, F5, and F6 to adjust potentiometers F3, F4, F5, and F6, respectively.								
28	Repeat Steps 25 through 27 until the CETS meter indicates within the green region for all positions of the SELECTOR switch.								
	<b>Note:</b> See notes in Step 20.								
29	Remove the CETS cords.								
30	Operate the CETS power switch to OFF.								
31	Set screw switches S2R and S2T, located on the connector board of the 1A service unit, to the closed position.								
	<b>At KTS location:</b>								
32	Remove the CETS cord connections.								
33	Operate the CETS power switch to OFF.								
34	Perform transmission acceptance tests per Section 341-200-101/518-800-514.								

**CHART 8**

The following changes apply to Chart 8 of the section:

- (a) Introductory text—revised
- (b) Steps 1, 2, 5, 6, 7, and 8—revised
- (c) Step 10—added
- (d) Table B—replaced by new Table B

<b>CHART 8</b> <b>PREPARATION OF SHORT VIDEO LOOP BETWEEN KEY TELEPHONE SYSTEM AND A STATION SET</b>	
<p><b>Selecting Station Set Line Build-Out Networks A, B, C, or D on the 877A or 877B Circuit Board</b></p> <p>An 877A or 877B line build-out (LBO) circuit board is provided in each video pair <i>where</i> the length of cable between the station display unit and the KTS service unit, or bay, is less than the equivalent of approximately 400 to 500 feet. The LBO network is inserted in the 1A service unit in place of the 939-type cable equalizer, as shown in the middle part of Fig. 2.</p> <p>The LBO network used and its orientation in the 1A service unit depends upon the type and physical length of the cable between the KTS cable equalizers and the video display unit, and upon the number of video lines picked up by the station.</p> <p>The proper build-out network should be specified on the facility layout record card. If the LBO network required is <i>not</i> specified, perform the following steps for standard design KTS systems.</p> <p><b>Note 1:</b> For nonstandard design key systems, which use up the entire station-to-station transmission allocation within the KTS, the D network on the 877B circuit card is used for all stations.</p> <p><b>Note 2:</b> The length of cable between the service unit and the display unit should be measured using a tape measure or ruler. The length of cable between the KTS equipment and the service unit may be measured with a tape measure or the length may be determined by a resistance measurement, as follows.</p>	
STEP	PROCEDURE
1	Place a short between test points R0 and T0 on the connector board of the station service unit.
2	Disconnect the <i>common</i> (VOT/VOR) video pair from the connecting block at the KTS equipment.

## CHART 8 (Cont)

STEP	PROCEDURE
	<p><b>Note:</b> This pair carries the video signals from the station service unit to the KTS equipment. This is the pair that was shorted in Step 1.</p>
3	<p>Measure the resistance between the tip and ring conductors of this pair at the KTS equipment location.</p> <p><b>Note:</b> Use an ohmmeter or resistance bridge having an accuracy of 10 percent or better and having a <math>\times 1</math> ohms scale. Determine the resistance as accurately as possible.</p>
4	<p>Convert the measured resistance value to cable feet to the service unit by multiplying by 31 feet per ohm for 22-gauge cable or by 19.5 feet per ohm for 24-gauge cable.</p>
5	<p>Add the length obtained in Step 4 to the length of cable between the service unit and the display unit to obtain the total length of cable plus <math>30(N-1)</math>, where <math>N</math> is the number of video lines (CO, PBX, or intercom lines) picked up by the station. This total is the "equivalent" cable length. The <math>30(N-1)</math> rule accounts for bridged taps introduced in the KTS equipment.</p>
6	<p>Refer to Table B to determine the proper 877-type network required for this equivalent length of cable.</p>
7	<p>Reconnect the VIT/VIR video pair on the connecting block at the KTS equipment location.</p>
8	<p>Remove the short at the station service unit which was placed in Step 1.</p>
9	<p>Insert the proper LBO network oriented so that the stamping indicates <i>A, B, C, or D IN USE</i>, as required.</p>
10	<p>Perform transmission acceptance tests per Section 341-200-101/518-800-514.</p>

CHART 8 (Cont)

◆TABLE B◆

STATION SET LINE BUILD-OUT NETWORKS

CABLE GA AND TYPE KTS TO SERVICE UNIT	NETWORK	EQUIPMENT CABLE LENGTH KTS TO DISPLAY UNIT PLUS 30(N-1)			
		877A NETWORK A	877B NETWORK B	877A NETWORK C	877B NETWORK D
22 PULP		Up to 130	130-230	230-330	330-430
24 PULP		Up to 120	120-220	220-230	320-420
26 PULP		Up to 140	140-250	250-350	350-440
22 PIC		Up to 180	180-320	320-460	460-600
24 PIC		Up to 180	180-310	310-450	450-580
26 PIC		Up to 190	190-330	330-460	460-580
24 252A SWBD CABLE		Up to 140	140-260	260-380	380-500
24 D-TYPE INSIDE WIRE		Up to 125	125-225	225-325	325-425
22 D-TYPE STATION WIRE		Up to 165	165-315	315-465	465-615
22 ABAM		Up to 190	190-340	340-490	490-620
24 CA 3217		Up to 220	220-390	390-540	540-670
24 DL WIRE		Up to 160	160-280	280-410	410-530
24 ABMM		Up to 190	190-340	340-480	480-610

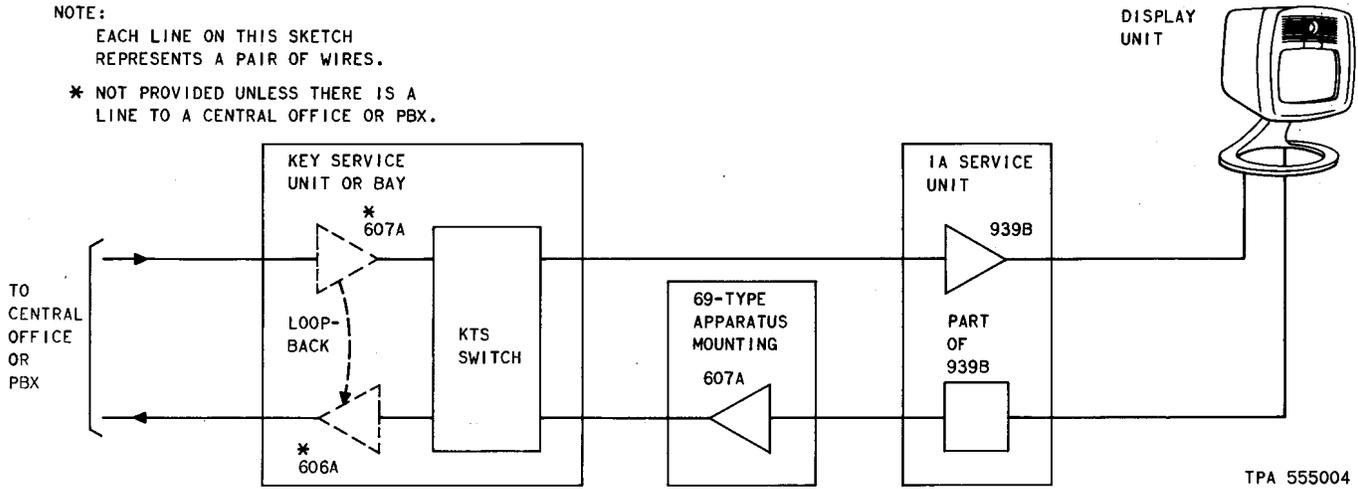
**CHART 10**

The following changes apply to Chart 10 of the section:

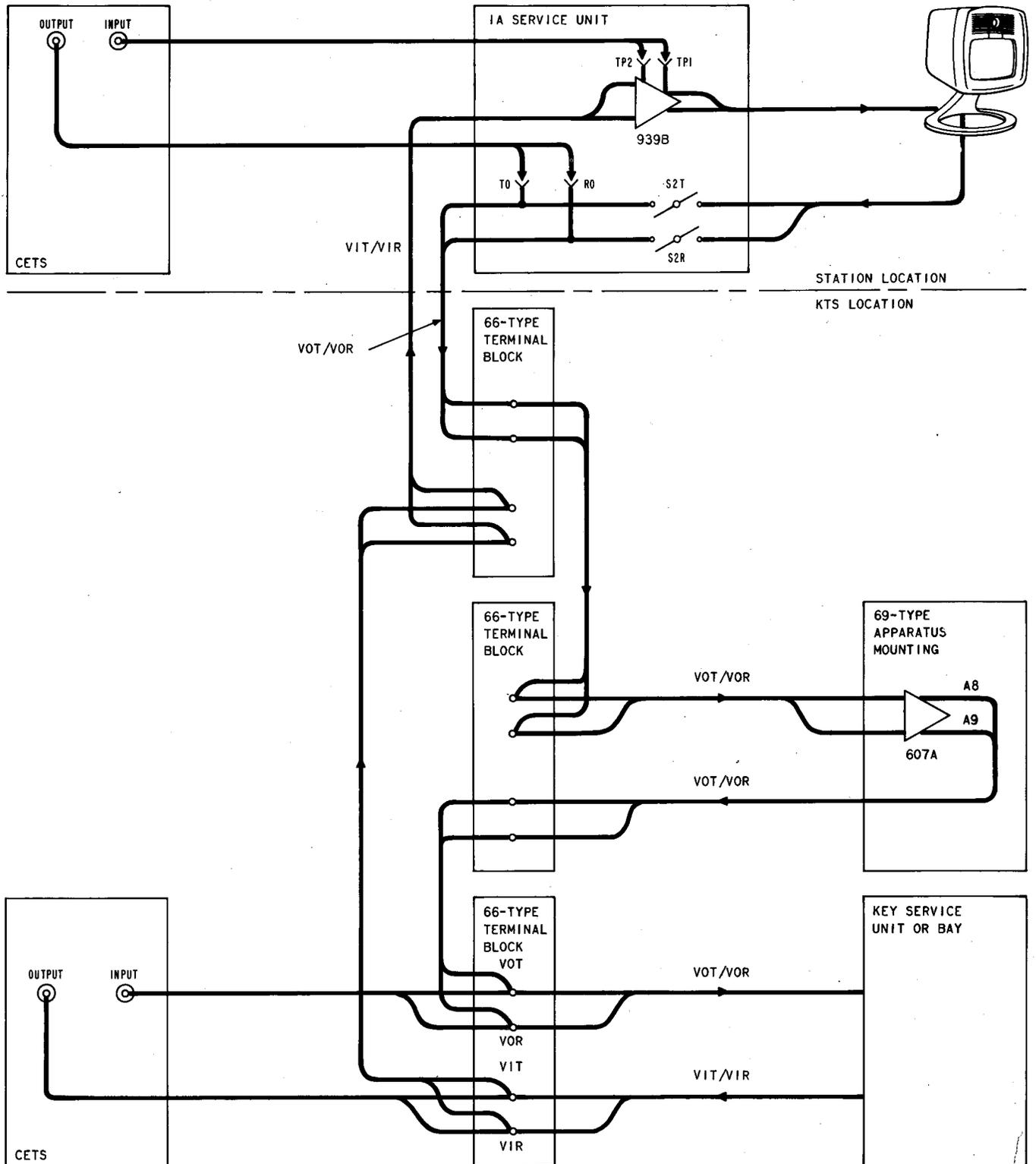
- (a) Step 62.1 and **Caution**—added
- (b) Step 74—added

<b>CHART 10</b>	
<b>PRECISION EQUALIZATION IN VIDEO LOOP FACILITY FROM A PBX</b>	
<b>STEP</b>	<b>PROCEDURE</b>
62	Set the <b>common KTSCE</b> screw switch to the closed position.
62.1	<p>◆If there is no station (service unit and display unit) connected to the KTS, connect a temporary strap between pins B28 and A17 on the 600A KTU connector. This provides a loopback required for the following portion of the procedure.</p> <p><b>Caution: Pin A17 is the –24 volt supply and should not be connected to any other point.</b>◆</p> <p>◆<b>At KTS location:</b></p>
74	If a temporary strap was placed between pins B28 and A17 of the 600A KTU in Step 62.1, remove the strap.◆

NOTE:  
EACH LINE ON THIS SKETCH  
REPRESENTS A PAIR OF WIRES.  
\* NOT PROVIDED UNLESS THERE IS A  
LINE TO A CENTRAL OFFICE OR PBX.



◆ Fig. 3—Equalized KTS Video Loop ◆



TPA 555005

◆ Fig. 4—Cable Equalizer Test Set (CETS) Connections ◆