

REPLACING PAGE ADDENDUM

Filing Instructions:

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

**2600-HZ E1J SINGLE-FREQUENCY SIGNALING CIRCUIT OUT-OF-SERVICE
TESTS USING TESTING CIRCUIT SD-96519-01 OR SD-96519-02 AND
2B SIGNALING TEST SET J-64730B**

1. GENERAL

1.001 This addendum supplements Section 179-327-501, Issue 1. The attached pages must be inserted in accordance with the filing instructions above.

1.002 This addendum is issued to change the title to include the 2B signaling test set J-64730B. This addendum does not affect the Equipment Test List.

Attached:

Page 1 dated June 1973—Revised
Page 2 dated June 1973—Reissued

2600-HZ E1J SINGLE-FREQUENCY SIGNALING CIRCUIT OUT-OF-SERVICE TESTS USING TESTING CIRCUIT SD-96519-01 OR SD-96519-02 AND 2B SIGNALING TEST SET J-64730B

1. GENERAL

1.01 This section describes a method of making out-of-service tests of 2600-cycle single-frequency signaling circuits per SD-99762-01 using testing circuit SD-96519-01 or SD-96519-02. It also describes a method of making potentiometer adjustments to correct for changes in the characteristics of some circuit elements.

Caution: *303-type relays shall be maintained in an upright position for not less than 1 minute before beginning any tests.*

1.02 The tests covered are:

A. Adjustment of Transmitter M Relay:

This test checks that the M relay is properly following pulses and describes a method of adjusting the M ADJ potentiometer.

B. Hold of HL Relay and Release of CO Relay:

This test checks that the HL and CO relays release within the desired time limits.

C. Transmitter Voice Path and Transmitted Tone Level:

This test checks the transmitter voice path and the level of the transmitted single-frequency tone.

D. Voice Amplifier Cutoff Transistor:

This test checks the base voltage of Q9 transistor with no signal input.

E. Gain of Receiver Voice Amplifier and Insertion of Band-Elimination Filter:

This test checks transmission of the voice path through the receiver and blocking of the signal tone when present on the line. A method of adjusting the RCV potentiometer for zero transmission loss is provided.

F. Operate Sensitivity of Receiver Signaling Amplifier:

This test checks the receiver sensitivity and describes its adjustment by means of the SS potentiometer.

G. Timing of Receiver R, RG, and G Relays:

This test checks the operate and release time of the R and RG relays and describes a method of adjusting the OT and RT potentiometers to meet requirements. It also provides a test to assure proper limiting of the signal amplifier. The operate and release time of the G relay is also checked.

H. Receiver Guard Action: This test checks the receiver guard circuit in limiting operation by voice signals.

Note: *Tests A through H must always be performed on new units or units repaired by WECO prior to installation.*

1.03 The E1J 2600-cycle single-frequency signaling unit is referred to in this section as SF unit.

1.04 The transmission measuring set is referred to in this section as TMS.

1.05 The 2B signaling test set is referred to in this section as 2B test set.

1.06 In order to reduce errors due to parallax when reading the 2B test set meters, lines of sight should be perpendicular to the meter faces.

1.07 Make percent break adjustments of the 2B test set slowly, above 70 percent, to prevent pulsing-out incorrect values. The 2B test set will be pulsing incorrectly if the rate of vibration of the PERCENT BREAK meter pointer is not the same as that of the PULSES PER SECOND meter

pointer. To restore correct percent break values, turn the ADJ % BK control counterclockwise until both pointers are vibrating at the same rate, then turn the control more slowly clockwise until the desired percent break value is obtained. It may also be necessary to change the coarse ADJ % BK switch from S, M, or L setting to obtain desired range on the PERCENT BREAK meter.

1.08 The J98613AY test panel (SD-96519-01 or SD-96519-02) is referred to in this section as test circuit. KEYERS Switch 1 and RECEIVER Switch 2 on this panel are referred to as SW1 and SW2, respectively.

1.09 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 or 4 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same column are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

1.10 If the requirements of this section cannot be met after readjustment of potentiometers or relays, the units should be returned to a repair center because of special techniques involved in testing and clearing trouble on some of the components.

1.11 The proper performance of the tests covered in this section depends upon the correct pulse-per-second calibration and range of the 2B test set. See Section 100-263-501 for calibration if accuracy is not known.

2. APPARATUS

2.01 The apparatus required for each test is shown in Table A. The details of each item are covered in the paragraph indicated by the number in parentheses.

APPARATUS	TESTS							
	A	B	C	D	E	F	G	H
Test Circuit (2.02)	1	1	1	1	1	1	1	1

TABLE A (Cont)

APPARATUS	TESTS							
	A	B	C	D	E	F	G	H
2B Test Set (2.03)	1	1	1	1	-	-	1	-
TMS (2.04)	-	1	1	-	1	1	-	1
Cord (2.05)	1	1	1	1	-	-	1	-
Cord (2.06)	1	1	1	1	-	-	1	-
Cord (2.07)	-	1	1	-	1	1	-	1
Cord (2.08)	-	-	-	1	-	-	1	-
Tool (2.09)	1	1	1	1	1	1	1	1
258D (dummy) Plug	1	1	1	1	-	-	1	-
Screwdriver R-8210	1	-	-	-	1	1	1	-
Tool (2.10)	-	1	-	-	-	1	1	-
Tool (2.11)	-	-	√	-	-	-	-	-

√ As required.

2.02 Testing circuit, J98613AY (SD-96519-01 or SD-96519-02), including folding test fixture J98613AC.

2.03 The 2B test set, J64730B (SD-56134-02), "W" option or later, includes power cords and patch cords for "E" and "M" leads (2P1D and 2P3B cords).

2.04 The 13A or 21A TMS.

Note: If step calls for setting dial switch of TMS to odd number, use lower even number setting for 21A TMS.

Example: Set dial switch of TMS to 15 (for 21A, set dial switch to 10)

2.05 Patching cord, P2A cord, 6 feet long, equipped with two 347A plugs (2P1D cord).

2.06 Patching cord, P2A cord, 6 feet long, equipped with two 347B plugs (2P3B cord).