P1 CARRIER TELEPHONE SYSTEM

SYSTEM LINE-UP AND MAINTENANCE

PREPARATION FOR SYSTEM LINE-UP

1.00 GENERAL

1.01 Install all central office terminals as covered in the section entitled P1 Carrier Telephone System, Central Office Terminal – Installation.

1.02 Verify, by dc continuity test or use of tone, that the carrier pair is good between the P1 carrier terminals and the protectors on the distributing frame.

1.03 Connect the carrier pair to the terminal equipped with the 800A line network.

1.04 Disconnect the derived voice-frequency circuits of this system by disconnecting the wires from screw terminals 11 and 26 on board A or by placing 258C plugs in DER VF jacks of all channels.

2.00 CHECK CENTRAL OFFICE TERMINAL VOLTAGE

2.01 On KS-14510 meter turn selector to DC VOLTS, 60 position.

2.02 Read voltage across screw terminals 14 and 15 on board A of first terminal, positive lead to 14.

Requirement: 21.5 to 23.5 volts dc
Repeat 2.02 on all terminals. If requirement cannot be met, refer to T-95231-30 to correct.

3.00 CHECK TEST SET BATTERIES

3.01 Ground the 7F test set with 1W13B cord or equivalent.

3.02 Operate BAT switch to ON position.

3.03 Turn BATTERY TEST switch to positions A1, A2, A3, A4, and B1, and observe that the DECIBEL meter needle is to the right of the BAT mark for each position.

3.04 Turn BATTERY TEST switch to B2 position. Remove cord from REC jack and turn DET SENS-db switch to +10 position.

3.05 Turn ADJ B2 potentiometer until DECIBEL meter points to BAT mark.

Note: Recheck these requirements at periodic intervals during the time the test set is turned on. The receive cord should again be removed from the test set for these checks. If requirements in 3.03 and 3.05 cannot be met, replace test set batteries and repeat 3.03, 3.04, and 3.05.

3.06 Return BATTERY TEST switch to NORM position.

3.07 Turn NOISE FLT switch to OUT position.

4.00 CHECK CENTRAL OFFICE TERMINAL OUTPUT POWER

4.01 Turn DET SENS-db switch to +10 position.

4.02 Turn REC switch to DET HI-IMP.

4.03 Connect the receive cord from the REC jack on test set to CARR and yellow dot test points on board A in the terminal employing the 800A line board; red to CARR, black to yellow dot.

4.04 On all but this terminal, place a W1Y cord (shorting strap) across MOD test points on the B boards.

4.05 The DECIBEL meter should read between —2 and —6 (+8 to +4 dbm) if no output pad is installed in the terminal. If an output pad is installed in the terminal, the DECIBEL meter should read —2 to —6 minus the output pad value. For example, if a 4-db output pad is installed in the terminal, the DECIBEL meter should read —6 to —10 (+4 to 0 dbm).

4.06 Move the W1Y cord from the second terminal to MOD test points on board B of first terminal.

4.07 Repeat 4.05 and 4.06 on each succeeding terminal of the system.

Note: If no signal is present, check multiple wiring between terminals. If a reading is not within the requirement, remove the terminal (on which the MOD jacks are not shorted) from the line and repeat the transmitting portion of the terminal adjustment. If readings are all high, check the carrier line.

4.08 Remove W1Y cords (shorting straps) from all terminals.

4.09 For the remainder of the system line-up, the carrier pair must be prepared for carrier operation. All line networks must be properly connected including autotransformers, blocking networks, carrier line termination, etc. It is also very important to insure that all bridged taps are removed from the carrier line.