

## LOOP CHECK TICKET

### 1. GENERAL

**1.01** This section describes the preparation and use of the Loop Check Ticket, Form E-4948. This 5" x 8" ticket is used to record the results of a transmission check of customer loops, using the 24A Loop Checker.

**1.02** The 24A Loop Checker is designed for rapid and economical checking of customer loops. By visual indication, it evaluates the customer's loop in accordance with current transmission design standards. It will be used to test loops served by step-by-step offices and No. 1 and No. 5 crossbar offices. It is not to be used to test loops served by panel offices. The method of using the 24A Loop Checker is covered in other Bell System Practices.

### 2. PREPARATION OF LOOP CHECK TICKET

**2.01** The Loop Check Ticket, hereinafter referred to as the ticket, should be prepared by Plant Service Center forces when a *survey* of customer loops is to be made. It will also be used to furnish the results of a loop check when made on a repair or installation visit.

**2.02** This ticket is used to:

- (1) Provide data for making a field test.
- (2) Record results of the loop check test.
- (3) Record results of plant assignment records check.
- (4) Show loop make-up.
- (5) Show results of a subsequent physical field check.
- (6) Provide a record of the results of any special transmission test that is made.

**2.03** Tickets shall be prepared in duplicate. If desired, they may be serially numbered.

**2.04** When a survey of customer loops is to be made, one *working* pair will be selected in each 25 pair customer cable complement terminated on the main frame. Select the 12th pair in the complement. The pair selected must be one serving an exchange main station. The first time a party line is selected, use the station farthest from the central office. The next time a party line is selected, use the station nearest the central office. Alternate in this manner on subsequent selections of stations on party lines when a party line is working on the pair selected. This method should be used to the extent that the distance from the central office can be readily determined from the terminal locations shown on the cable records. Do not select pairs used for foreign exchange lines, or lines equipped with Long Line Equipments or Dial Impulse Repeater Circuits.

If the 12th pair in the complement does not meet the above conditions — or is spare — select the next higher pair (13th), then the next lower pair (11th), etc., alternating between the next higher and lower pairs *within the complement* until a pair is found that can be used.

**2.05** Enter in the appropriate spaces on the ticket, the cable and pair number, binding post, terminal location, telephone number, panel and jack or dial equivalent, the customer's name and address, class of service and type of set as obtained from the assignment records and line cards.

**2.06** The original ticket is forwarded to the field forces for a loop check. The Length Setting is entered by the craftsman making the check. The setting is obtained from a Distance Zone Map prepared by Engineering. This map is a picture of zones circumscribed about the central office. Each zone represents 2000 feet of cable plant from the central office with an appropriate length setting. Other entries to be furnished by the craftsman are made at the time of the test.

2.07 The duplicate ticket shall be filed in the Plant Service Center. Progress of the original ticket can be posted on this copy to assure complete handling of the test and investigation. When the test, investigation, and corrective action have been completed, the duplicate may be destroyed.

### 3. ANALYSIS DATA

3.01 After a loop check has been made, the ticket will be sent to the Plant Service Center.

#### Record Check

3.02 Those tickets which indicate a yellow reading should be checked against the assignment records for central office bridges, cross-box bridges, stations wired out of limits, or any substandard condition. Conditions found should be posted on the ticket in the appropriate spaces of the Record Check section.

3.03 All lines which indicate a yellow reading shall be tested at the test desk for grounds, shorts, or foreign battery.

3.04 The length setting shown on the ticket should be verified against the Distance Zone Map in the Plant Service Center.

3.05 If the Record Check or test desk test indicates a condition which might possibly cause a yellow reading, the required corrective action should be taken and arrangements made for a retest with the loop checker.

3.06 If no conditions are found which indicate the possible cause of a yellow reading, the ticket shall be forwarded to the appropriate engineering group for investigation of loop make-up.

#### Loop Make-Up

3.07 Engineering will check the loop design for excess bridged taps, inadequate loading, bridged tap between load coils, etc. Any tickets for which design deficiencies are not found will be returned to the Plant Service Center for a physical field check.

#### Physical Field Check

3.08 When a physical field check is necessary, the line should be inspected for dead drops, dead cross-box bridges, excess drop wire length, station located between load points, and any unusual plant condition which would cause the yellow reading.

3.09 If no trouble can be found, the ticket should be forwarded to the appropriate forces for a special transmission investigation and test. Tickets will be returned to the Plant Service Center after this investigation.

### 4. DISPOSITION OF TICKETS

4.01 Those tickets which indicate a green reading will require no further action.

4.02 All Loop Check Tickets will be retained in the Plant Service Center. Final disposition will be determined locally.

### 5. ORDERING INFORMATION FOR FORM E-4948

5.01 Forms E-4948 are provided in pads of 50 tickets and in package units of 5 pads. When convenient, the forms should be ordered in multiples of the package unit.

(Quantity) Form E-4948

Printed in U.S.A. FORM E-4948  
(2-62)

**LOOP CHECK TICKET**  
PLANT DATA

SERIAL NO. \_\_\_\_\_

CABLE NO. \_\_\_\_\_ PAIR NO. \_\_\_\_\_ B.P. \_\_\_\_\_

TERMINAL LOC. \_\_\_\_\_ PANEL & JACK \_\_\_\_\_  
TELEPHONE NO. \_\_\_\_\_ OR DIAL EQUIV. \_\_\_\_\_

CUSTOMER NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

CLASS OF SERVICE \_\_\_\_\_ SHOW TYPE OF SET \_\_\_\_\_

LENGTH SETTING \_\_\_\_\_ ZERO SETTING \_\_\_\_\_  
COULD NOT ZERO SET

METER READING:

NEEDLE STAYS WITHIN GREEN AREA   
 NEEDLE SWINGS INTO YELLOW AREA

ON A YELLOW READING INDICATE FULL EXTENT OF  
NEEDLE SWEEP BY USE OF TWO VERTICAL LINES

2	1	ZERO	1	2
YEL			GN	

YELLOW READING VERIFIED BY RETEST

DATE \_\_\_\_\_ CHECKED BY \_\_\_\_\_

ANALYSIS DATA

RECORD CHECK

C.O. BRIDGES \_\_\_\_\_ X-BOX BRIDGES \_\_\_\_\_

STATION WIRED OUT OF LIMITS \_\_\_\_\_

NATURE OF SUBSTANDARD CONDITION \_\_\_\_\_

CORRECTIVE ACTION INITIATED \_\_\_\_\_

Front

LOOP MAKE-UP

CABLE - NON-LOADED \_\_\_\_\_ LOADED (SHOW TYPE) \_\_\_\_\_

26 GA. \_\_\_\_\_ 24 GA. \_\_\_\_\_ 22 GA. \_\_\_\_\_ 19 GA. \_\_\_\_\_

TOTAL \_\_\_\_\_

OPEN WIRE \_\_\_\_\_ DISTRIBUTION WIRE \_\_\_\_\_

BRIDGE TAPS \_\_\_\_\_

LINE DIAGRAM (WHERE APPROPRIATE) INCLUDE LOAD DATA AND  
BRIDGE TAP LOCATION

NATURE OF SUBSTANDARD CONDITION \_\_\_\_\_  
 CORRECTIVE ACTION INITIATED \_\_\_\_\_

PHYSICAL FIELD CHECK

DEAD DROPS \_\_\_\_\_ DROP WIRE OVER 300 FT. \_\_\_\_\_

X-BOX BRIDGES NOT ON RECORDS \_\_\_\_\_

STATION BETWEEN LOAD POINTS \_\_\_\_\_

OTHER OBSERVATIONS \_\_\_\_\_

NATURE OF SUBSTANDARD CONDITION \_\_\_\_\_  
 CORRECTIVE ACTION INITIATED \_\_\_\_\_

SPECIAL TRANSMISSION TESTS

NATURE OF SUBSTANDARD CONDITION \_\_\_\_\_  
 CORRECTIVE ACTION INITIATED \_\_\_\_\_

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