

## NO. 4XB SWITCHING SYSTEM EQUIPMENT TEST LIST INSTRUCTIONS

### 1. GENERAL

**1.01** This section is the first of a series numbered 212-001-011 through 212-001-019. The nine sections contain the equipment test list (ETL) for the No. 4XB Switching System.

**1.02** The ETL is a complete list of the tests, inspections, and other requirements for the No. 4XB circuits which are in Division 212. Certain other closely related requirements for contacts, lubrication, and transmission, found in other divisions, are also included in the equipment test list.

**1.03** Certain tests are repeated to include references for different kinds of test frames or test sets. Other tests repeated for references to both manual tests and test frame tests for the same test. In those cases where tests are repeated as described above, it is necessary to follow the requirements for the tests which apply to the office.

### 2. TEST CLASSIFICATIONS AND DEFINITIONS

**2.01** All tests, inspections, or miscellaneous requirements in the ETL are given one of four classifications. The use of these classifications is described below. For simplification, the word "test" is used to mean a test, inspection, or other work requirement which applies to switching equipment.

**2.02 *Mandatory Work (MW)*:** MW tests are tests used to detect actual or potential failures which could result in a severe service penalty *and* for which indications of failure are missing or obscure. MW tests must be performed at a frequency equal to or greater than that specified in the ETL. For some MW tests, there is an asterisk (\*) in the **FREQ.** column of Form E-5450, Equipment Test List, indicating that a

transmission test is required. The frequency for the test depends on the type of facility involved and can be determined from the appropriate Bell System Practice.

**2.03 *Mandatory Review (MR)*:** MR tests are tests used to detect actual or potential failures which *do not* result in a severe service penalty and for which indications of failure are missing or obscure. MR tests are assigned a frequency at which a review *must be made* to determine whether or not there is a need to perform the test at that time. At the time of review the question must be asked, "Was this test (not a sample) applied to *all* units at or since the time of the previous review?" If the answer is "yes", no work is required at this time unless review of corrective maintenance data indicates otherwise. If the answer is "no", the test *must be applied* to at least a sample of the units. The required review of MR tests, at the ETL frequency, is aimed at protecting customer service and prevention of accumulated equipment deterioration. The present equipment test list contains no MR tests.

**2.04 *Test Frame (TF)*:** TF tests make use of automatic or semiautomatic test frames or test sets. Some TF tests require manual operations, depending on the nature of the test and the features of the test frame or test set. For all TF tests, there is an asterisk (\*) in the **FREQ.** column of Form E-5450, Equipment Test List, indicating that the test shall be programmed by the foreman for his office. The frequency of a particular test will depend on: (1) the number of circuits to be tested, (2) the amount of trouble found by past tests, (3) the availability of the test frame for scheduled testing, and (4) the number of hours the frame is used each day. The foreman *must* enter in the **FREQ.** column the frequency at which the test is programmed in his

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office. For transmission measurements made by the Automatic Transmission Measurement System (ATMS), minimum requirements are specified in other sections. The frequency at which these tests are performed must meet these minimum requirements.

**2.05 Trouble Test (TT):** TT tests are: (1) tests which duplicate built-in trouble-detecting circuitry or (2) tests which duplicate equipment tests which are also performed as part of other scheduled tests (MW, MR, TF). TT tests are included: (1) for making the ETL complete, (2) so that appropriate tests are available for checking the performance of modified or added equipment, and (3) for use by maintenance forces for further isolation equipment faults indicated by built-in trouble-detecting circuitry. TT tests are not given frequencies in the ETL.

## 3. ETL SECTION ARRANGEMENT

**3.01** The following table of contents lists the major categories of No. 4XB switching equipment and shows the ETL section in which the various tests are found. For convenience in scheduling, the MW, MR, and TF tests are grouped and the TT tests are listed separately at the end of each section.

### BSP SECTION ARRANGEMENT

EQUIPMENT	SECTION
Decoders and Card Translators	212-001-012
Links and Connectors	212-001-013
Link Controllers and Markers	212-001-014
Senders and MF Receivers	212-001-015
Traffic Administrative Circuits	212-001-016
Trunks	212-001-017
Frames and Miscellaneous Circuits	212-001-018
CAMA Equipment	212-001-019