

## INSPECTIONS ON STATION VISITS STATION EQUIPMENT - WIRING

### 1.00 INSPECTION OF STATION EQUIPMENT

1.01 The items of common types of apparatus to which attention should be given when making an inspection are as follows:

#### 1.02 Handset Handle and Mounting

- (a) Telephones presenting an unsatisfactory appearance or which are badly chipped, cracked or broken should be replaced.
- (b) See that the receiver and transmitter caps are tightly in place.
- (c) If the handset or any part of it is defective, replace as required.
- (d) Observe for noisy or burning transmitter while testing with the test desk or, where test desk employees are not on duty, with talking battery through the transmitter.
- (e) Observe the operation of the switchhook or plunger and see that it does not stick or bind. See that there are no excessive clicks in the receiver during this operation.
- (f) Check that the telephone is of the proper type for the transmission zone involved. If not, replace or advise your supervisor.

#### 1.03 Location

Observe the location of the station equipment with respect to liability of damage from moisture and possibility of crosses with electric lighting fixtures. If conditions are such as to warrant a change in location to correct them, report the situation to the Plant Service Center if it can be done at that time, otherwise report it on the appropriate form.

#### 1.04 Number Card or Instruction Card

Observe the general condition as to legibility of the number or instruction card, condition of the cellulose acetate window or glass and frame, proper type card and correct telephone number. Replace any parts found defective or missing and tighten loose frame screws. Missing, illegible or soiled number cards and instruction cards, and those prepared with lead pencil entries should be replaced.

#### 1.05 Dial or Apparatus Blank

- (a) If the number plate is dirty, clean it by wiping with a clean cloth or replace it if it is badly marred or worn.
- (b) See that the dial is mounted securely.
- (c) Replace the finger wheel if it is bent or the finish badly worn. If the finger stop is bent, bend it back to its proper shape or replace it with a new one. See that the finger stop is tight.
- (d) Test the speed of the dial and adjust if necessary. Make sure the bell does not tap while dialing.

#### 1.06 Cords

- (a) Straighten out twisted cords and replace those that are defective or damaged.
- (b) See that the stay cords and stay hooks are properly fastened.
- (c) Test the cords for noise and cut-outs by shaking the cord while listening with the receiver off hook and talking battery through the transmitter.

#### 1.07 Keys (Key Systems - Key Stations)

- (a) See that the key is securely mounted and that plungers or key levers operate properly.

- (b) Check for loose, broken or missing key handles or key buttons.
- (c) See that the key tops are not broken or loose and that the screws which fasten the key tops and keys are not missing or loose.
- (d) If designation cards are provided see that they are legible and up to date.

#### 1.08 Subscriber Set

- (a) If the subscriber set is so badly marred or worn as not to be in keeping with the surroundings, replace the set as required.
- (b) See that the set is securely and properly attached to its support and that sets equipped with relays are mounted plumb.
- (c) Tighten any equipment which may be loose in the set.
- (d) Inspect the wire and cord connections, tighten those found loose, and correct any conditions likely to cause crosses.
- (e) In sets equipped with ringing relays see that the relay armature does not bind against the sides of the relay and that it moves freely on its pivots.
- (f) Test the ringer operation with the testboard or by dialing the ring back code. Observe for bell taps and correct ringer polarity. Requirements and adjustments of the ringer shall be made in accordance with the Plant Series maintenance practice for the particular item of equipment.

- (g) Observe the location of the subscriber set with respect to liability of damage from moisture. See that the subscriber set is located so that the bell may be plainly heard. If conditions are such as to warrant a change in location to correct them report the situation on the appropriate form.

#### 1.09 Magneto Subscriber Sets

Magneto station equipment is now used primarily for private line, toll station or leased line services. Because of the importance of many of these services, tests

of this equipment shall only be made with the approval of the control testboard or supervisor.

- (a) Private line services shall be protected as outlined in other Plant Series practices on this subject.
- (b) See that the hand generator handle is not missing or defective.
- (c) See that the hand generator operates properly and is securely mounted.

#### 1.10 Transmitter Batteries

- (a) See that the batteries are properly located and installed.
- (b) See that the batteries are properly connected, that the connections are tight. Batteries that are swollen, leaking or more than two years old shall be replaced.

NOTE: Local instructions may require the replacement of batteries less than two years old.

#### 1.11 Directories

Observe that proper directories are provided, that they are up-to-date issue, not badly worn, and properly located in the case of public telephone stations.

### 2.00 INSIDE WIRING INSPECTION

- (a) Inspect the condition of the inside wire where it is accessible. If the wire is not properly or securely fastened, rerun or refasten as required. Where the insulation is defective or damaged, repair or report as necessary. Where there is inadequate clearance or insulation from electric light wires, conduits, bell wiring, radio wiring, etc., see that such clearance is provided, or report on the appropriate form.
- (b) Observe the location of the wiring with respect to the liability of damage from moisture, mechanical injury or other causes.
- (c) Inspect the connecting block. See that it is properly mounted, that the connections are tight and the cover is not bent so as to come in contact with the terminals.

(d) Inspect the ground connection. Where it is not properly made, is defective or of improper separation from the power ground, or subject to mechanical injury, repair or provide a new ground connection or bond as required. Ground clamps should be accessible for inspection and shall be tagged with a Ground Wire Caution Tag (Form E-3013B) where required.

#### 2.13 Protector

(a) Observe the location of the protector with respect to liability of damage due to moisture or mechanical injury and accessibility to users of coin collectors. If conditions are such as to warrant a change to correct them, correct or report on the appropriate form.

(b) Examine the protector mounting. Replace those that are broken, defective or excessively corroded. Make sure the type of protector, fused or fuseless, is correct for the type of aerial plant and grounding medium involved.

(c) Inspect the fuses. Replace those that are of an improper type or are broken or defective. Tighten those that are loose and see that the fuses are placed so that the slots face the porcelain base of the protector.

(d) On older type protectors equipped with the 26 and 27 type protector blocks remove and inspect the protector blocks. Replace those that are of an improper type or are broken, defective or badly pitted. Wipe clean protector blocks that are dirty, but do not scrape. In placing the blocks see that they are held firmly in the mounting. Replace protector caps that are defective or are missing. See that the cap is screwed on tightly. Place rubber gasket and moisture-proof cap as necessary.

(e) Fused protectors on stations served by grounded metal sheath cable should be converted to fuseless protectors when the station is visited except when it would be necessary to place a new ground wire. The number of protectors that may be connected to ground wires of various sizes is covered by the section entitled "Station Protection Installation."

(f) Examine the line and inside wire connection. Tighten any found loose. Test the ground connection for ground at the protector.