

INSTALLATION
GENERAL STATION INSTALLATION PROCEDURES

1. GENERAL

- 1.01 This practice covers the general installation and testing procedures to be followed in making a new telephone installation, reinstallation, reconnection of left-in station, or inside move.
- 1.02 In case the customer objects to regulations covered in this practice, and satisfactory arrangements cannot be made, consult your supervisor before proceeding with the installation.

2. GAINING ACCESS FROM CUSTOMER

- 2.01 No attempt to gain access to customer's premises shall be made without the consent of the owner or his agent. Entry should not be made unless accompanied by some authorized person other than a telephone employee.
- 2.02 Always be willing to show identification before entering the premises; be neat, courteous, and adept in all work.

3. LOCATION OF TELEPHONE

- 3.01 In choosing the best location for the telephone, be guided by a location's advantages, disadvantages, and the following desirable environmental conditions:
 - a. Moderate, normal-temperature range.
 - b. A nonexplosive atmosphere.
 - c. A water-free or low humidity area.

NOTE: If the location has a surrounding factor which conflicts with one of these conditions, special station equipment and procedures, as covered in other appropriate practices, shall be used.

- 3.02 The telephone location shall be chosen with the following advantages kept in mind :
 - a. Acceptable to customer.
 - b. Suitable for maintenance.
 - c. Easily heard ring.
 - d. Free from accidental mechanical damage.
 - e. Free from off-hook trouble.
 - f. Close to conduit facilities.
 - g. Close to approved bellbox cabinet or telephone set alcove (LWH, 12 x 9 x 12 inches).
- 3.03 Try to avoid, wherever possible, the following objectionable features when selecting a telephone location:

- a. Site readily accessible to small children.
- b. Site close to grounded object or water (sink drainboards, bathtubs, radiators, etc.)
- c. Necessity to drill holes.
- d. Need to have wire and cable exposed.
- e. Finely finished mounting surface (marble, ceramic tile, glass tile, expensive paneling).
- f. Closeness of fluorescent fixture (minimum separation, 24 inches).

3.04 On Desks or Tables

When installing a telephone on a desk or table, these considerations shall be kept in mind:

- a. Which hand does customer use?
- b. Will holes be drilled?
- c. Will cable and wire be exposed?

3.05 This procedure shall be observed before installing the telephone on a table or desk:

- a. Inspect the desk for special manufacturer-provided features (built-in connecting block brackets or knock-out holes with rubber grommets for telephone line cord).
- b. Determine if connecting block can be located high on one of desk panels just below top of the desk to hold line cord off floor.
- c. If part of the telephone circuit is contained in a housing separate from the telephone set housing, check to determine whether this part can be located inside the knee well of the desk or on the underside of the table.

4. INSTALLING TELEPHONE

4.01 Proceed as follows in installing the telephone:

- a. Refer to practices covering the particular type of telephone being installed or to manufacturer's drawings.
- b. Install the drop, protector, ground, and station wiring as covered in other practices.
- c. Terminate the locally grounded conductor of the inside wire to the ground terminal of the telephone set connecting block for desk mounted sets or to the ground terminal in wall mounted sets.
- d. Connect one clip of a hand test telephone to the ground terminal.
- e. With the other clip of the hand test telephone, contact in turn the green and red inside wire conductors. If the inside wire is poled correctly, a click will be heard in the hand test telephone receiver as red conductor is contacted. If not, rearrange the drop wires at protector.
- f. Terminate inside wire red conductor on terminal L1 (ring -) and inside wire green conductor on L2 (tip +).

NOTE: For most telephones the ring (negative line) connects to red (or ridged) interior wire conductor; right-hand station protector terminal; and right-hand cable terminal stud. (Ring Red, Right Ridged)

4.02 Use the following procedure when connecting telephones equipped with SATT dials to party lines.

- a. Perform the procedure described in paragraph 4.01 a. through e.
- b. Connect one clip of the hand test telephone to the red inside wire.
- c. Connect the other clip to one of the line terminals of the connecting block on desk mounted sets or the line terminal in wall mounted sets.
- d. With the telephone handset on hook, listen on the receiver of the test set for one or a series of clicks while dialing a 5 on the telephone set dial. If nothing is heard, move the test clip on the line terminal to the other line terminal and test in the same manner.

NOTE Refer to practices for individual telephone sets or manufacturer's drawings. The switch hook arrangement on some telephones (for example: A.E. Co. self compensating) is such that access to internal telephone set wiring will be required to verify that ground pulses are actually being applied to the tip line cord conductor.

- e. Terminate the green conductor (tip +) of the inside wire on the terminal on which the click or clicks were heard and the red conductor (ring -) of the inside wire to the other terminal.

4.03 For reinstallation or reconnection of telephones with SATT dials, use procedure a. and/or b. below:

- a. Check polarity of wiring at the protector or station connecting block.
- b. Check the polarity of the telephone set as described in paragraph 4.02.

5. TESTING

5.01 After the installation is completed, perform tests to verify ringing, dial speed, and noise level.

5.02 Proceed as follows :

- a. Bell rings - verify through ring-back.
- b. Dial speed - verify that dial operates within speed tolerances.
- c. Noise level - make talking test when "O.K. 'ing" service order.

5.03 Before leaving customer's premises, assure that customer is familiar with operation of the particular telephone set installed.