# INSTALLATION OF SUBSTATION SERVICES.

## GENERAL INSTALLATION NOTES.

## 1. GENERAL.

This Instruction covers the general principles of substation installation procedure. For the details applicable to any particular function or type of service, refer to the relevant Instruction in the SUBSTATION division of these Instructions.

### 2. CONDUCT.

Technicians employed on installation shall conduct themselves in a manner which will give no cause for complaint. They are working in subscribers' premises and the co-operation of every officer is essential to avoid discredit to the Department. Attention shall be given to dress and deportment as well as to the quality of workmanship and supervisory officers shall exercise careful control on these points.

#### 3. IMPORTANT DETAILS TO BE OBSERVED.

All wiring and equipment installed in subscribers' premises and the effort involved in its installation or recovery comes directly under the observation of members of the public and the following details should be closely observed so that a favourable impression is created -

- (i) Vacant or temporarily closed premises must not be entered without permission from the owner (or his agent) or a recognised tenant. When work is required in unattended premises containing valuable articles, it is preferable for arrangements to be made for the attendance of the owner's representative to prevent the possibility of subsequent claims;
- (ii) A minimum number of employees shall attend a subscriber's premises to perform the work required. If, during the progress of work, any reduction in staff appears desirable, the senior man shall instruct the surplus staff to report to the officer in control for other duty;
- (iii) A Technician responsible for the installation of apparatus shall see that the necessary material is to hand before proceeding to the subscriber's premises; an adequate supply of small stores, such as flat clips, anchoring devices, staples, screws, etc., shall be carried. These items should be kept in suitable receptacles and not in an untidy litter in the bottom of the tool bag;
- (iv) Tools should be set out in a hold-all in an orderly manner, so that each will be immediately to hand when required. All tools must be maintained <u>in a good state of repair</u>, and shall only be used for the purpose for which they were designed;

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- (v) All premises must be left clean and tidy on completion of the job. Fallen morter, plaster, etc., shall not be left lying where it can be spread by the boots of people walking through it, but it shall be swept up promptly. All scrap ends of cable and wire and products of drilling, boring, etc., must be removed. A selvyt cloth spread under the immediate place of working to catch dust, chips, etc., simplifies the ultimate task of cleaning up;
- (vi) Care must be taken to ensure that walls are not dirtied by contact with hands, tools or material, or polished surfaces damaged by tools and equipment. If it is necessary to work on or over horizontal surfaces liable to damage, a selvyt cloth should be used to obtain protection;
- (vii) Temporary or incomplete work on small jobs must be avoided whenever possible. If it is necessary to leave work unfinished, the subscriber should be told the reason for the stoppage and when work will recommence. If the job is left temporarily unfinished, say for lunch, all material, tools and traps in floors shall be made safe before leaving so that there is no risk of accident;
- (viii) Departmental apparatus must not be left at a subscriber's premises for a lengthy period. Apparatus left pending installation, or recovery after dismantling must be left in the most secure position available, and must be removed as soon as possible. Where cartons are provided for equipment they shall be used for that purpose alone and shall be returned to the Depot when empty;
  - (ix) Certain forms and orders must be carried and as these may be produced in the subscriber's presence, Technicians shall keep them as clean and tidy as possible to present a business-like appearance. Dirty and tattered papers create a bad impression in the subscriber's mind, and allowing the papers to deteriorate to a crumpled condition may cause entries made thereon to become illegible.
    - (x) Engineers in charge of instellation depots shall assist Technicians by making suitable arrangements to enable them to comply with subparagraphs (1i1), (iv) and (ix) above.

#### 4. AUTHORITY FOR CARRYING OUT WORK.

All work done by Technicians employed on the installation of substation apparatus must be covered by an authority. This may be one of the following -

- (i) <u>Telephone Order</u>. Issued by Telephone Branch following a request by a subscriber for work to be done.
- (ii) <u>Major or Minor Works Authorities and Recoverable Works Orders and Dockets.</u> Authorised by the Divisional Engineer. These are often based on a Telephone Order when the cost of the work exceeds a certain amount.
- (111) Service Order Docket. Originated by the service Technician when the assistance of an Installation Technician is required to replace defective equipment or wiring. (Passed to the Installation Division through the Divisional Engineer of the Service Division concerned.)

No work shall be undertaken unless it is covered by one of the authorities listed above, and, in the case of (ii), all alterations other than substitution of minor items of standard equipment found necessary in the field, shall be referred to the authorising Engineer.

## 5. SUBSCRIBERS' REQUIREMENTS.

The location of the equipment shall be discussed with the subscriber and his wishes met as far as they are consistent with the relevant instructions. If the subscriber's desires cannot be met, the Technician must explain the reasons, and if mutual satisfaction cannot be obtained the matter shall be referred to the Senior Technician before proceeding.

If after arriving at a job, the Technician is in doubt regarding the work to be carried out, or if he requires further instructions or information he should immediately obtain the advice of the Senior Technician or other responsible officer at the depot. Most large business organisations delegate to one person the control of all telephone arrangements for their premises and the Technician must escertain the identity of this person and discuss the details with him. If the advice of an unauthorised person is taken, wrong locations may be selected or unsuitable apparatus provided.

In cases where an alteration of apparatus appears desirable to meet the requirements of the subscriber, the Technician should report the circumstances to the Senior The subscriber must authorise any amendments to Telephone Orders by Technician. signing a Form Tel 40, but no emendments are permitted if they are outside the scope of the Standard Telephone Facilities. When conversing with subscribers, the Technician shall not enter into any arguments regarding costs, efficiency of equipment or methods of doing work. It is not expected that Technicians should be fully aware of the charges applicable for standardised services but they should be conversant with the technical details. Technicians, particularly those in country areas, should, however, memorise the tariffs for the more common services so that, if requested, they will be able to quote an approximate tariff. Where the Technician is not familiar with the tariffs, he should refer the matter to the Senior Technician who will advise the subscriber on the correct procedure, but, in passing on information on tariffs, all Technicians should emphasise that such information is subject to confirmation by the Telephone Branch.

#### 6. DIRECTORIES.

A telephone directory is provided by the Department for each telephone which can be connected to the public exchange. This does not include telephones connected to private lines. Installation Technicians must provide a copy of the current issue of the directory for the relevant area for each new connection. When a subscriber moves from one exchange area to another but still in the same network as formerly and, therefore, using the same telephone directory, he is responsible for that directory and a new one will not be provided by the Technician carrying out the reconnection side of the removal. Subscribers moving in from other networks are provided with a new directory. Technicians shall recover directories when effecting cancellations. Copies of directories in excess of the entitlement may be purchased by subscribers from the Telephone Branch.

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