

UNIT AUTOMATIC EXCHANGES

Replacement of Units, Auto. Nos. 5 or 6 by Units, Auto. No.13

1. Scope of Instruction. This Instruction describes the methods to be adopted to effect the replacement, where the accommodation conditions fall within one of the following categories:-

(A) Units, Auto. No.5 or 6 installed in the standard "A" (100-line) type building (Exchange Sketch 5100).

(B) Units, Auto. No.6 installed in the old-type 200-line building (to Architect's Drawing 4747).

(C) Units, Auto. No.6 installed in the new standard "B" (200-line) type building (Exchange Sketch 5108).

2. Category A. Standard "A" (100-line) type building exists. Additional accommodation will be required before the change of equipment can be made, and this will necessitate either the erection of a standard "B" type building on the existing site or the extension of the existing building. A new building should be erected on the existing site if possible, but the conditions under which an extension of the existing "A" type building is permissible are laid down in ACCOMMODATION, Sites and Buildings, B 3107.

3. Where the transfer is effected by the erection of a standard "B" type building, the installation of the Units, Auto. No.13 should proceed in accordance with G 3530.

4. Should it be necessary to extend the "A" type building, however, the layout of the No.13 type units in the extended building should be as shown in Exchange Sketch 5282, and the following procedure regarding the replacement of the equipment should be adopted:-

* (a) The lead-in cable should be opened at the joint and a temporary extension cable let in, sufficient in length to enable the Units, Auto. No.5 or 6 and the Frame, MD O/240 to be moved into the extended portion of the building against the wall and adjoining the existing battery rack. The lead-in to the new frame should then be teed in to the joint.

(b) The Unit, Auto. No. 13C should next be placed in position over the cable trench, after this has been extended, and the Units, Auto. No.13A lined up adjacent to this.

(c) The number of junction relay-set racks (Units, Auto. No.13B) required for an exchange of this type will vary with the amount of junction traffic, and these should be placed at the door end of the building and arranged so that growth is towards the "A" units.

* (d) Lead-covered cables should be used to carry the circuits between the Unit, Auto. No. 13C (M.D.F.) and the "B" units, and these should be supported on cable brackets fixed to the ceiling. (The type and sizes of cable to be used for this section of the cabling are:-

For Power leads to Units	...	...	...	...	Cable, E.L. I.R.V. core,
					250v, single, 0.0225 sq. in.
" tones, etc.,	...	...	...	...	Cable, E.S. & W.C.Q. 8 pr/20

For general cabling	...	...	...	Cable, E.S. & W.C.Q.	14 pr/10
"	"	"	...	"	"
"	"	"	...	"	28 pr/10).

The types of cable and the cabling arrangements should otherwise conform with G 3530.

(e) The transfer arrangements should be as follows:-

The new plant should be insulated from the working plant by the insertion of Wedges, Locking No. 4 in the springs of the Protectors H.C. & T. on the new M.D.F., and the installation and testing out of the new equipment should proceed as indicated in G 3530. The change-over should be effected by the removal of the heat coils from the old protectors and the withdrawal of the wedges from the new protectors.

5. On completion of the transfer, the existing units should be recovered and the battery rack for the larger cells erected.

6. On issuing invitations to tender for the building extension, the builder's attention should be directed to the necessity for revisits to be made after completion of the main work (for the purpose of extending the cable trench after the existing equipment has been moved into the temporary position), and again after the change of equipment has been effected (for the erection of the new battery rack).

7. It should be noted that not more than 8 units (A and B) can be accommodated in the extended building.

8. Category B. Old-type 200-line building exists. A change of equipment in the old-type 200-line building should be made on similar lines to those adopted in Category A, except that it will be necessary to remove the batteries and the battery rack and to accommodate the batteries temporarily in a battery hut. The existing equipment should then be moved to the space so vacated.

9. Accommodation will only be available for 7 units (A and B) in a building of this type.

10. Category C. New standard "B" (200-line) type building exists. The change under these conditions should be made as indicated in G 3521, except that the Units, Auto. No. 6 should be moved into the temporary position indicated in Exchange Sketch 5335 (which covers the change of Units, Auto. No. 12 to the No. 13 type equipment).

References:- G 3521, 3530
(E1) ACCOMMODATION, Sites and Buildings, B 3107

END