

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G31.112.3**  
**Issue 1, April, 1955**  
**AT&T Co Standard**

**B RURAL WIRE**  
**LOADING COILS**  
**INSTALLATION**

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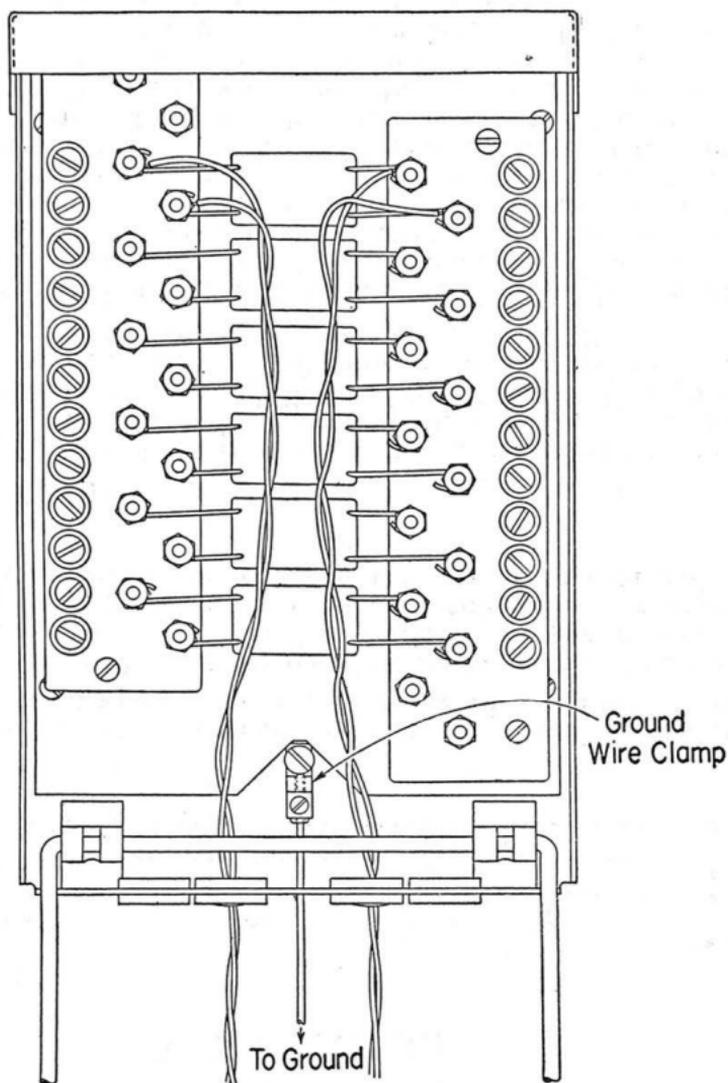
**1. GENERAL**

- 1.01 This section describes methods of installing loading coil cases and loading coils for use with B Rural Wire.
- 1.02 Loading coils shall be installed on B Rural Wire only when specified in detailed plans or by other specific instructions, which should also indicate the points at which loading coils are to be connected as well as the type of coil to be used.

**2. DESCRIPTION**

2.01 A 177A Loading Coil Case provides mounting arrangements and electrical protection for six 637-Type Loading Coils, suitable for loading all six of the B Rural Wire pairs. Three types of coils (637A, 637B, and 637C) are available and the same mounting arrangements are used for all three types.

2.02 The 177A Loading Coil Case consists of a sheet metal housing approximately 11-1/4" high, 6-7/8" wide, and 4" deep, containing two 6-pair connecting blocks equipped with 107B Protectors. The B Rural Wire pairs enter through grommeted holes in the bottom of the case. The six pairs from one direction are terminated on the right-hand protector block and the six pairs from the other direction are terminated on the left-hand block. The wire leads from the 637-type loading coils serve as mechanical supports for the coils, as well as electrical connections. The interior wiring arrangement of a 177A Loading Coil Case is shown in the following sketch:



177A LOADING COIL CASE EQUIPPED WITH  
637-TYPE LOADING COILS

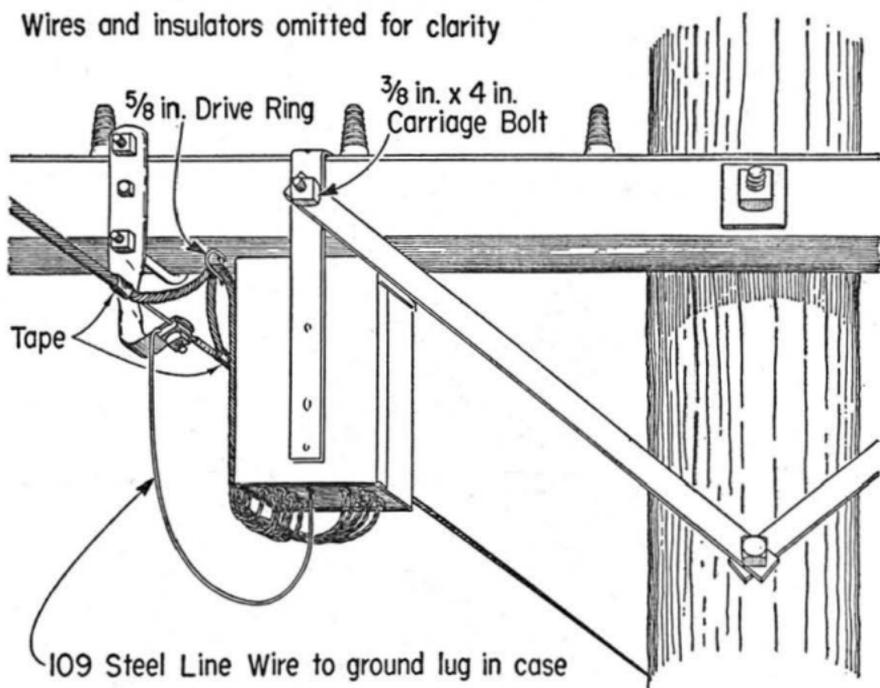
2.03 A mounting bracket, permitting either pole or cross-arm mounting, is furnished as a part of each loading coil case.

### 3. INSTALLATION

3.01 The loading coils should be mounted in the loading coil case before the case is carried up the pole for installation. The coil lead wire should be placed between the two washers under the bottom nut. This may be done by removing both nuts and all but the bottom washer from each binding post. Place one washer and nut over the loading coil lead wire and tighten with a 216B tool. Then replace remaining washers and nut.

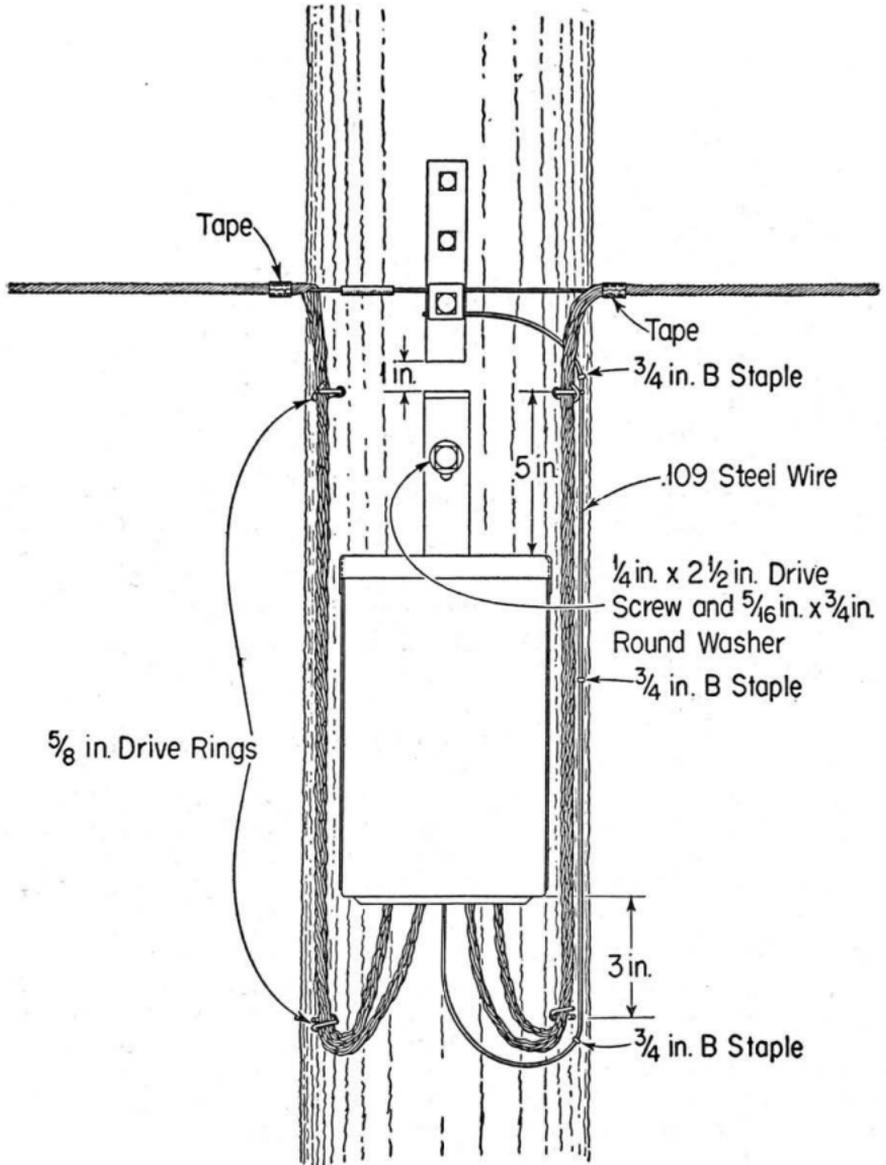
3.02 The following sketch illustrates a loading coil case installed on a crossarm. The ground wire from the case should be clamped in the lower groove of the clamp of the C Wire Bracket.

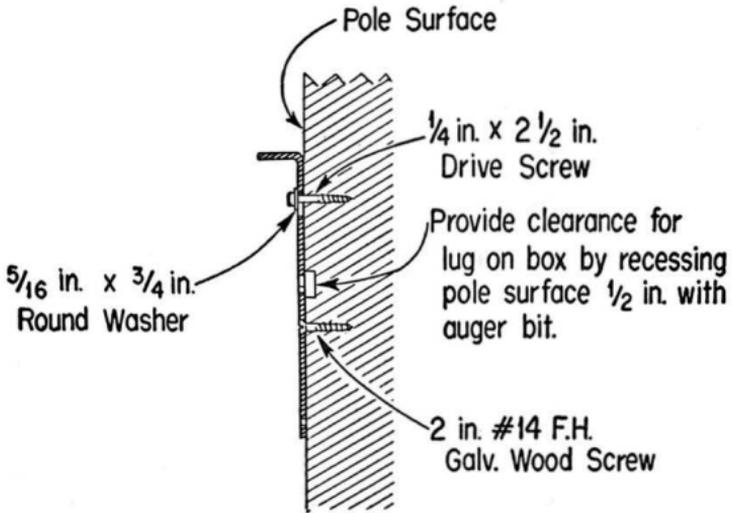
Wires and insulators omitted for clarity



3.03 The following sketch illustrates a loading coil case installed on a pole. When making this type of installation, the mounting bracket must first be removed from the case, by removing the locking screw which also holds the ground wire clamp. Mount the bracket loosely with a 1/4 in. by 2-1/2 in. screw and a 5/16 in. by 3/4 in. round washer, as indicated in the sketch. Locate and bore a 1 in. hole, about 1/2 in. deep, behind the keyhole slot in the mounting bracket,

to provide clearance for the stud on the back of the case. Secure the bracket by tightening the drive screw and placing a 2 in. No. 14 flat head galvanized wood screw in the counter-sunk hole in the bracket. Mount the case on the bracket and secure it with the locking screw.





Details of mounting bracket  
on pole