

Prepared by  
The Pacific Telephone and Telegraph Company  
Southern California Area

BELL SYSTEM PRACTICES  
Outside Plant Construction  
and Maintenance

ADDENDUM G32.180  
Issue A, May, 1949-S  
T. P. T. & T. Co.

DROP AND BLOCK WIRING  
PROTECTING UNEXPOSED CABLE AT  
EXPOSED WIRE CONNECTIONS

NOTES CONCERNING THIS ADDENDUM

This Addendum supplements Section G32.180 with information on the use of the 109A Protector. The instructions for connecting a protector ground wire to an F-Type cable terminal which has an enameled instead of a galvanized casting previously contained in Addendum G32.180, Issue 1, and the prohibition of the use of gas service pipes for protector grounds previously contained in Supplementary Addendum G32.180, Issue A, are also included herein.

The cross-reference "See Addendum" should be written in Section G32.180 following Paragraphs 1.02 and 2.03 to indicate the addition of new information, at Paragraph 3.01 and 4.05 which are supplemented and at Paragraphs 2.01, 2.02 and Subparagraph 4.04(a) which are replaced.

1. GENERAL

- 1.03 The installation and wiring of No. 1093C Protector shall be in accordance with instructions contained herein for the No. 1093A Protector.
- 1.04 The installation and wiring of the 109A Protector shall be in accordance with the instructions contained herein for the D-96845 Protector.

2. DESCRIPTION OF PROTECTORS

- 2.01 Where only one or two exposed drop or block wires are to be connected to an unexposed cable and it appears unlikely that additional exposed wires will be involved, protection for this cable shall be provided by means of the No. 1086A Protector (Assembly of No. 58AP protector in No. 86A Protector Mounting), the No. 1093A Protector (Assembly of No. 98A Protector in No. 93A Protector Mounting) or the No. 1093C Protector (Assembly of No. 98A Protector in No. 93C Protector Mounting).

For a description of these protectors, refer to the Station Installation and Maintenance Practices.

2.02 Where three or more exposed drop or block wires are to be served by an unexposed cable, protection for this cable shall be provided by means of the D96845 or the 109A Protector described in the following paragraphs. The D96845 Protector shall not be installed inside of buildings nor used as a substitute for the standard station protectors to provide protection at subscribers' premises. However, the 109A Protector is designed for use as either an outside plant protector or a station protector and may be installed inside of buildings when warranted by special circumstances.

2.04 The 109A Protector is a modification of the D-96845 Protector which it replaces and contains the following features in addition to those described in Paragraph 2.03:

(a) The designations "INSTRUMENT", "G" and "LINE" are stamped centrally on the side of the porcelain block, adjacent to the ground post and centrally on the shelf below the free ends of the fuses, respectively.

(b) A binding post stud occupies the lower mounting hole of the porcelain block. This stud will accommodate six washers and is intended for terminating signaling ground wires. In order to avoid confusion with the main ground post, this post is not marked.

(c) The code number and the Western Electric Company name are embossed on the cover.

### 3. LOCATING PROTECTORS

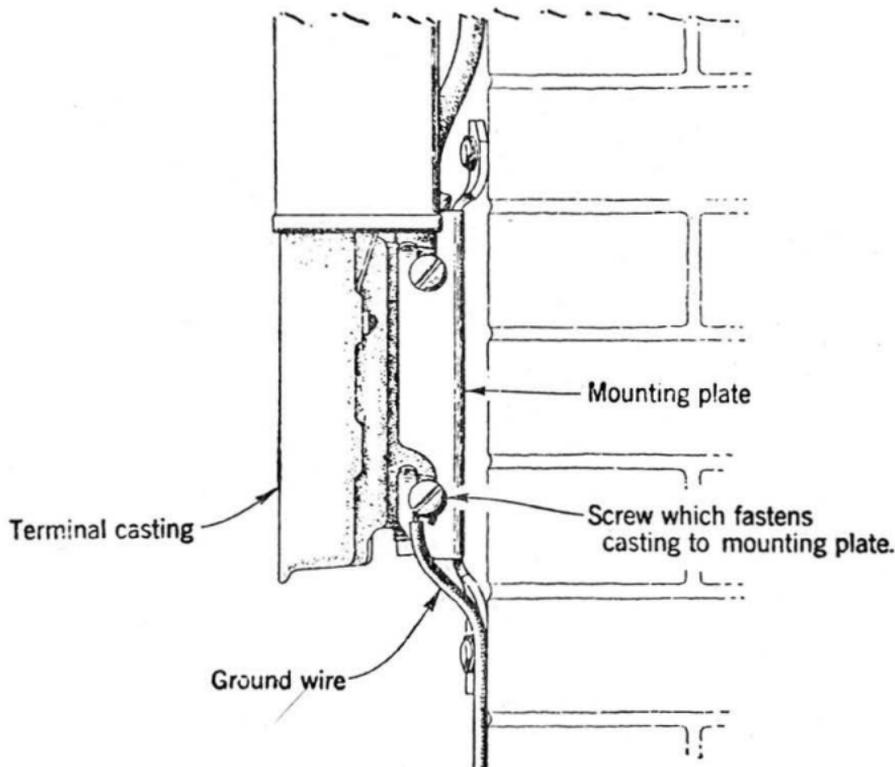
3.01 Gas service pipes are not approved for protector grounds in this area and should not be used for that purpose.

### 4. INSTALLING PROTECTORS

4.04(a) Where the protector is installed adjacent to an F or No. 14 Type Cable Terminal having a galvanized casting, connect No. 12 BRC Solid R Wire to the terminal casting as illustrated in Paragraph 6.01(a) and (b). Where the F terminal has an enameled instead of a galvanized casting, terminate the ground wire under the head of one of

the screws which fasten the terminal to the mounting plate as shown in the following illustration, selecting preferably the lower screw nearest the protector. Where the casting of a No. 14 terminal has been painted and it would be necessary to remove the paint in order to obtain a good connection, terminate the ground wire as outlined in (b) of Paragraph 4.04. Clean the surfaces at the ground wire connection thoroughly with Abrasive Cloth.

### METHOD OF CONNECTING GROUND WIRE TO F TYPE CABLE TERMINAL HAVING AN ENAMELED CASTING



4.05 Gas service pipes are not approved for protector grounds in this area and should not be used for that purpose.