

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

**SECTION G61.150.1**  
**Issue 1, January, 1952**  
**AT&T Co Standard**

**TERMINALS—MOUNTING**  
**VIDEO PAIR TERMINALS**

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**1. GENERAL**

1.01 This section describes the method of mounting the 38A Cable Terminal in the P188355 Bracket, the P188315 Terminal Mounting Assembly, the central office type of Apparatus Mounting Panel and the 383A Apparatus Case. The arrangement of the stub cable with the above and the method of setting up the terminal stub for connection to aerial, underground or buried cable is included.

**2. MATERIAL**

2.01 The materials required in connection with the installation of the 38A cable terminal are listed below:

- Assembly, Mounting, Terminal, P-188315** For mounting one 38A terminal on M.D.F. or Protector Verticals, or on P.B.X. or equipment frame.
- Bracket, P188355** For mounting one 38A terminal on walls, panels, etc., on subscriber's premises.
- Case, Apparatus, 383A** For mounting one 38A terminal in outdoor locations or where facilities for cross-connection are desired.
- Panel, Mounting, Apparatus, P188356** For mounting up to eight 38A terminals and brackets on subscriber's equipment bay. See Para. 6.07 for complete assembly.

**Terminal**

38A Cable Terminal.

**Fastening Devices:**

**Anchors**

1/4-inch x 1-1/4-inch Hammer Drive Anchors.

**Bolts**

1/4-inch x 4-inch Toggle Bolts.

**Clamps**

No. 13 Cable Clamp.

**Screws**

1/4-inch x 3/8-inch Fillister Head Machine Screws with Nuts to match.

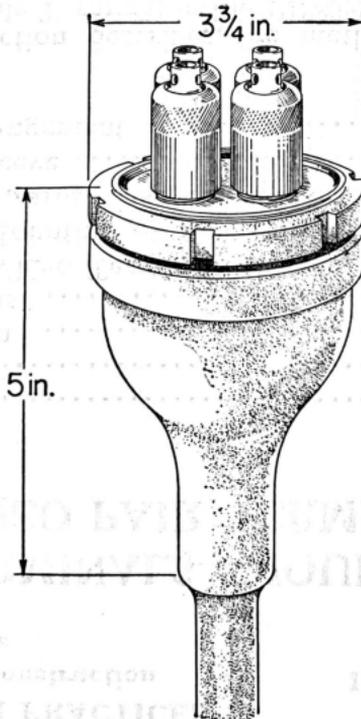
3/4-inch No. 14RH Galvanized Wood Screws.

1-1/2-inch No. 14 RH Galvanized Wood Screws.

**3. DESCRIPTION**

3.01 The 38A cable terminal illustrated in the following sketch is used to terminate video pairs. The terminal is gas-tight and is equipped with a 15-foot stub cable containing four 19-gauge low capacitance paper insulated pairs. Each pair in the stub cable is individually shielded with two copper tapes.

**38-A CABLE TERMINAL**



3.02 The 38A cable terminal may be mounted for indoor use on equipment bays, main frame or protector verticals, P.B.X. frames, walls or other suitable mounting surfaces. It can be mounted in the 383A apparatus case when a weatherproof housing is required. The 383A apparatus case can be used for cross-connection purposes at indoor or outdoor locations.

#### 4. PRECAUTIONS

4.01 Video circuits carry so wide a range of frequencies and operate with such large variations in signal strength that adequate shielding must be maintained. While the cables, terminals, plugs, jacks, etc., are well shielded against electrical interference, it is necessary to maintain the high quality of this shielding at any splices or joints by closely following the methods shown in these practices.

4.02 Cracks or openings in the shielding of the cables, loose or poor connections in the couplings, etc., may result in impairment of the circuit.

#### 5. LOCATING VIDEO TERMINALS

5.01 The location of the 38A Cable Terminal should be specified on the detail plans. If plans are not issued, the location should be obtained from the engineer.

5.02 In so far as practicable, the location should be in accordance with the following points.

- (a) Where it will be accessible and can be reached from the floor level. Satisfactory working conditions are generally obtained by locating the terminal approximately 5 feet above the floor.
- (b) On the wall close to the customer's video equipment.
- (c) On the customer's video equipment bay if space has been provided.
- (d) Where the terminal or terminals will be used for cross-connection purposes, they should preferably be mounted in a suitable location in the building basement so that cross-connections can be made without the necessity of gaining access to the customer's equipment room. With this arrangement, flexible shielded video cables are placed between the terminal or terminals and the amplifiers or video repeating coils which lead to the customer's equipment.

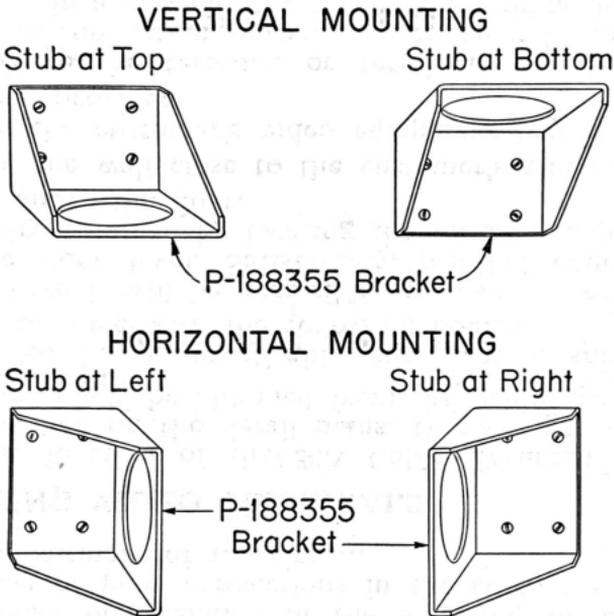
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**6. BRACKET MOUNTING OF 38A TERMINAL**

6.01 The 38A terminal is suitable for both vertical and horizontal mounting on walls by means of the P188355 bracket. To mount the terminal proceed in the following manner.

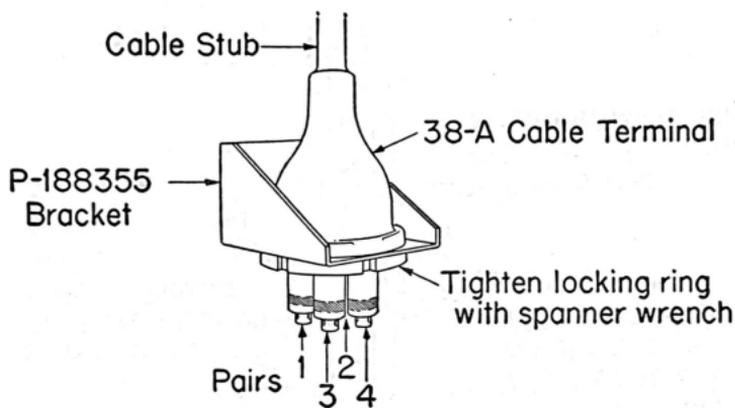
6.02 Attach the P188355 bracket on the mounting surface as illustrated below.



<u>Type of Support</u>	<u>Anchoring Device to be Used</u>
Metal Mounting Plate on Equipment Bay (see also Para. 6.06)	(4) 1/4" x 3/8" Fillister Head Machine Screws (4) Nuts to match
Masonry or Brick	(4) 1/4" x 1-1/4" Hammer Drive Anchors
Hollow Tile Plaster on Metal Lath and Similar Surfaces	(4) 1/4" x 4" Toggle Bolts
Wood	(4) 1-1/2" No. 14 RH Galvanized Wood Screws
Backboard	(4) 3/4" No. 14 RH Galvanized Wood Screws

6.03 A 1-inch thick backboard is used for mounting the P188355 bracket where the wall surface is not suitable for direct mounting.

6.04 Set the 38A cable terminal in position on the P188355 bracket as indicated below. The preferred position of the terminal is with pairs 1 and 2 at the rear and pairs 3 and 4 at the front of the bracket. Secure the terminal in position by tightening the locking ring with an adjustable spanner wrench.

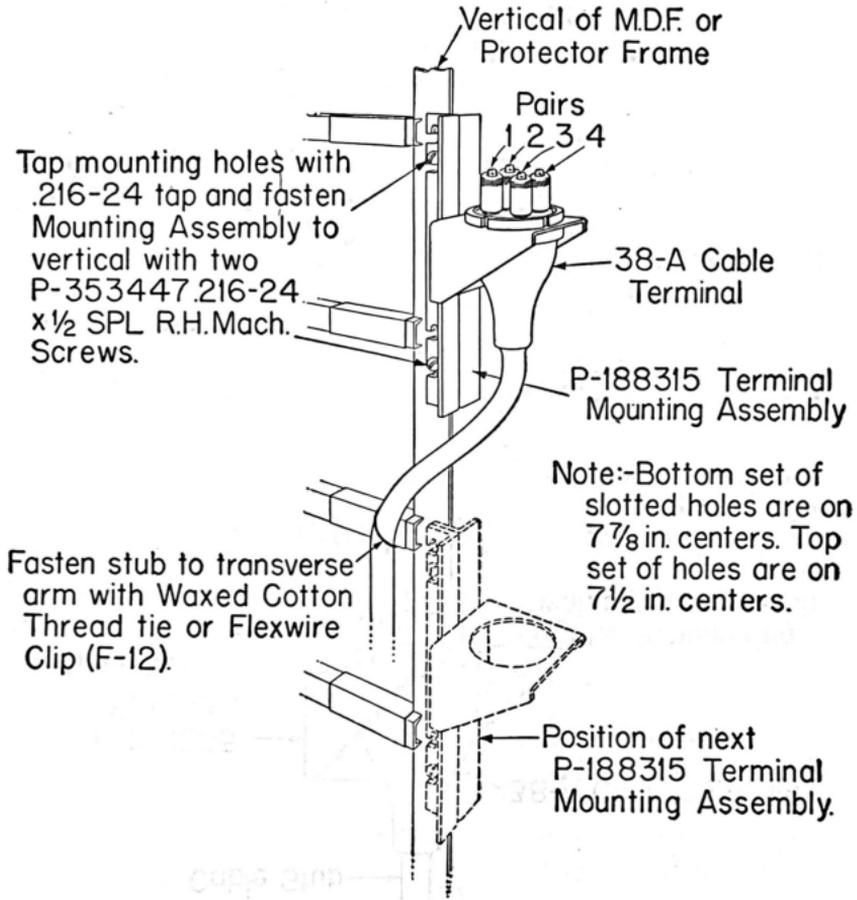


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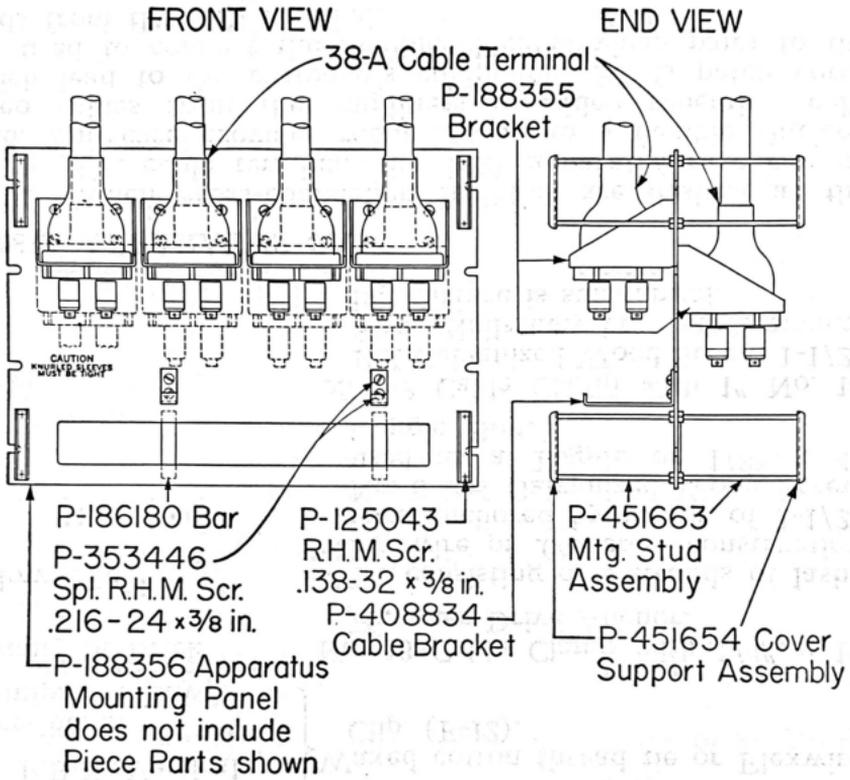
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6.05 Mount the 38A terminal on M.D.F. or protector verticals in central offices or on P.B.X. or equipment frames by means of the P188315 Terminal Mounting Assembly as shown in the following illustration.



6.06 On subscriber's equipment bays suitable for mounting a 19-inch wide panel, the central office type Apparatus Mounting Panel, P188356 can be used. This is shown in the following illustration with the additional parts required for mounting up to eight 38A cable terminals on P188355 brackets.



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6.07 The above panel may be obtained separately, or if the panel assembly (exclusive of brackets and 38A terminals) is required it may be obtained as per Drawing ED-42043-01, Group 1. The required number of P188355 brackets and associated screws and washers can be obtained as per Drawing ED-42043-01, Group 2. For further details refer to the Equipment Engineer. The 38A terminals must also be obtained separately.

6.08 Secure the stub cable of 38A terminals to the mounting surface by means of the following fastening devices.

Surfaces

Fastening Devices

M.D.F., Protector or P.B.X. Vertical Subscriber's Equipment Bay	}	Waxed cotton thread tie or Flexwire Clip (F-12).
Masonry or Brick		No. 13 Cable Clamp with 1/4" x 1" Hammer Drive Anchor.
Hollow Tile		Wire consisting of 2 strands of lashing wire or .049 steel construction wire anchored by means of 1-1/2" No. 8 RH Galvanized Wood Screw used as a Toggle or 1/8" x 4" Toggle Bolt.
Wood		No. 13 Cable Clamp with 1" No. 14 RH Galvanized Wood Screw. 1-1/2" Strap Nails may be used if mount- ing surface is substantial.

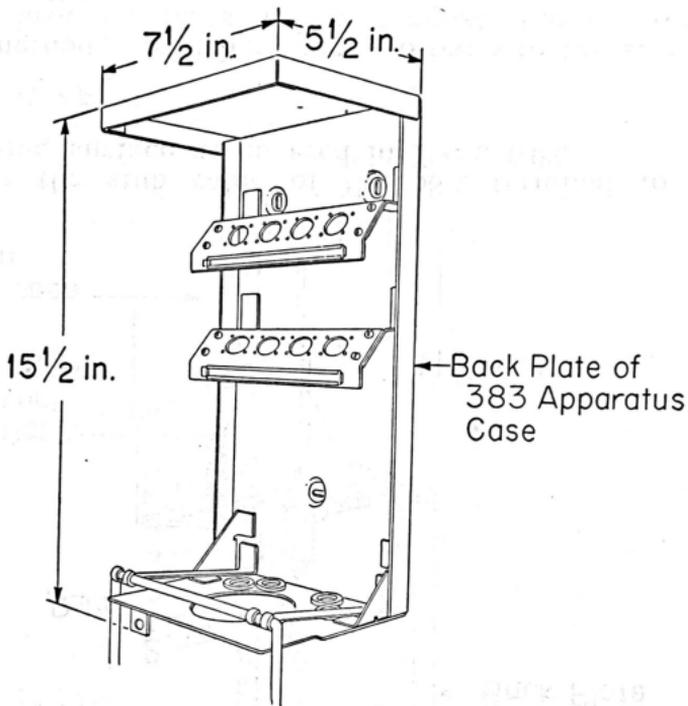
**7. 383A APPARATUS CASE**

7.01 When cross-connection facilities are desired at the 38A cable terminal, the 383A apparatus case can be used. The case provides room for up to 4 flexible shielded video cables from the amplifiers or video repeating coils which lead to the customer's equipment. P3AG patch cords are used to connect the flexible shielded video pairs to the leads from the 38A terminal.

7.02 The arrangement of the cross-connecting cables inside the apparatus case is covered in Section G61.640.1.

7.03 The 383A apparatus case is a sheet metal weather-proof housing equipped with a drop door which can be secured with a padlock.

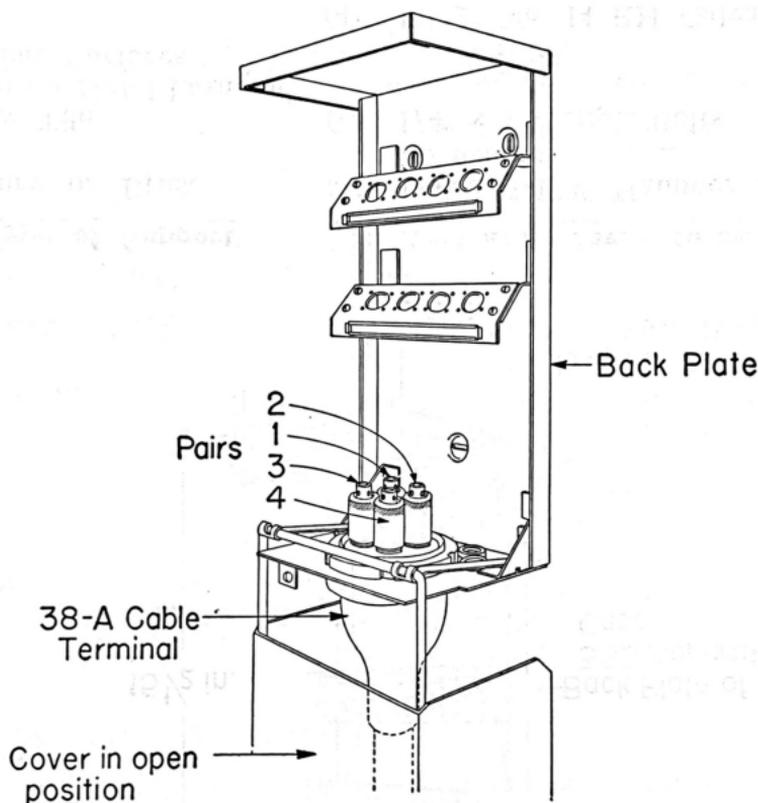
7.04 The case is mounted in a vertical position. Attach the backplate of the 383A apparatus case to the mounting surface as illustrated below:



<u>Type of Support</u>	<u>Anchoring Device to be Used</u>
Masonry or Brick	(4) 1/4" x 1-1/4" Hammer Drive Anchors
Hollow Tile Plaster on Metal Lath and Similar Surfaces	(4) 1/4" x 4" Toggle Bolts
Wood	(4) 1-1/2" No. 14 RH Galvanized Wood Screws
Backboard	(4) 3/4" No. 14 RH Galvanized Wood Screws

(a) A 1-inch thick backboard is used for mounting the 383A apparatus case where the surface is not suitable for direct mounting.

7.05 Set the 38A cable terminal in position in the opening provided on the bottom plate of the apparatus case as illustrated below. The preferred position for the terminal is with pairs 1 and 2 at the rear and pairs 3 and 4 at the front of the case. Secure the terminal in position by tightening the locking ring with an adjustable spanner wrench.



7.06 Secure the stub cable of the 38A terminal to the mounting surface as covered in Para. 6.08.

## 8. SIZE OF SLEEVE

8.01 The method of splicing the video pairs to the shielded paper insulated pairs in the terminal stub is covered in Section G50.659.1.

8.02 Video pairs are generally combined with other conductors, so the size of the splice opening usually will be determined by the number and kind of other conductors in the video cable.

8.03 To find the appropriate size of sleeve, convert the video pairs to their equivalent in pairs of the same gauge as the other conductors in the cable, using the following table:

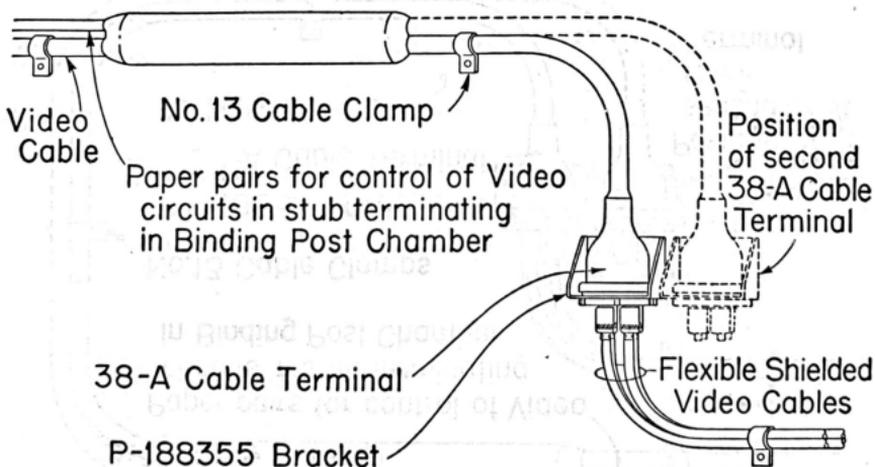
Number of Video Pairs	Equivalent Number of Pairs			
	19 Ga.	22 Ga.	24 Ga.	26 Ga.
2	25	51	101	202
4	51	101	202	303
6	134	151	303	404
8	177	252	404	505

8.04 Add the video pair equivalent to the other conductors and then select the size of sleeve as covered in other sections of the practices. In no case should the length of the opening be less than 17 inches.

## 9. STUB ARRANGEMENT

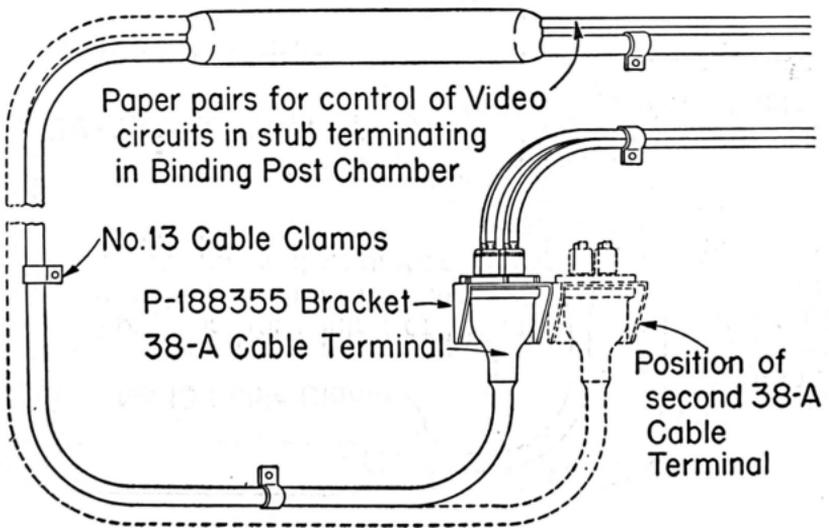
9.01 The following illustrations show 38A cable terminals in bracket mountings on inside building walls:

(a) Vertical mounting, stub at top.

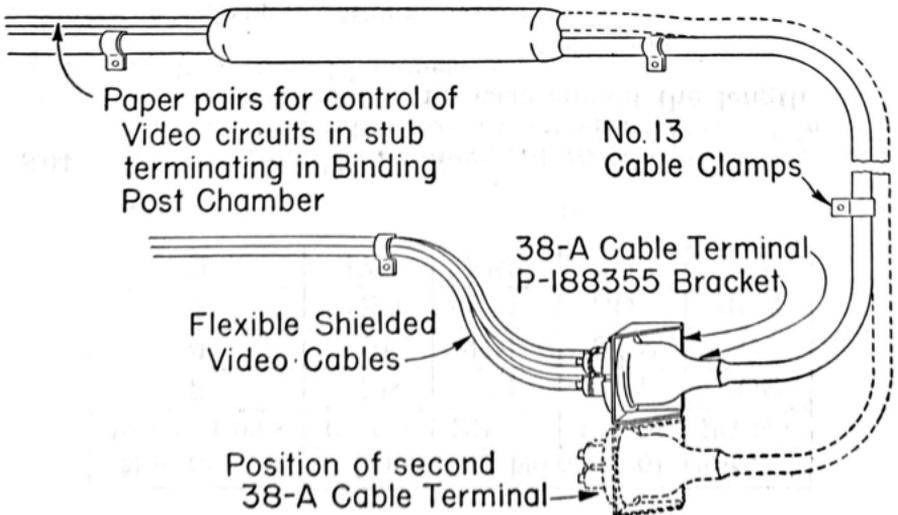


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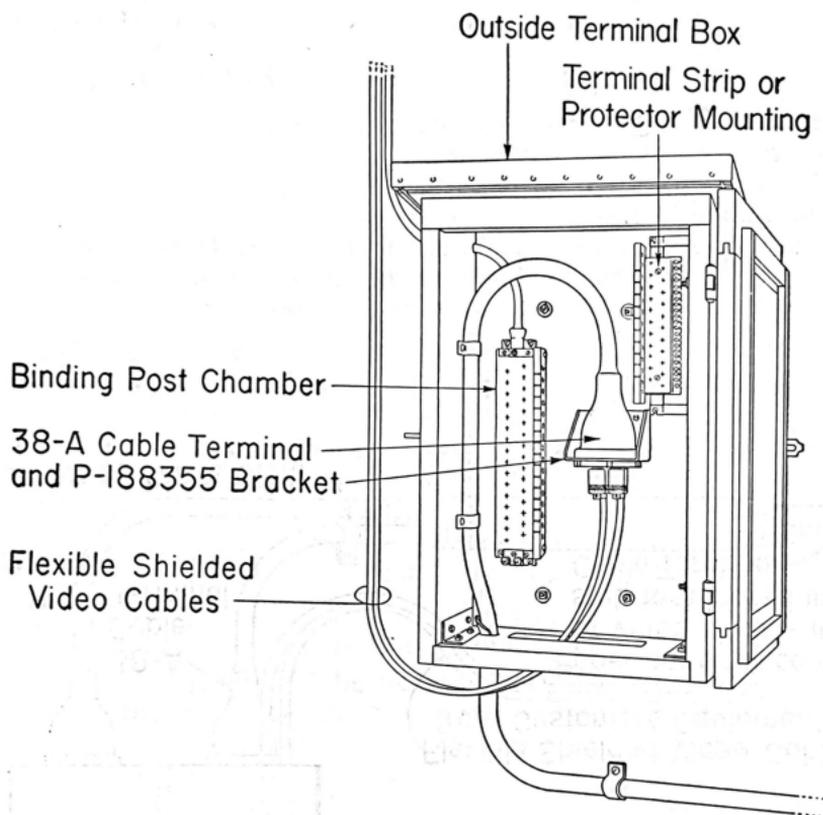
(b) Vertical mounting, stub at base.



(c) Horizontal mounting.



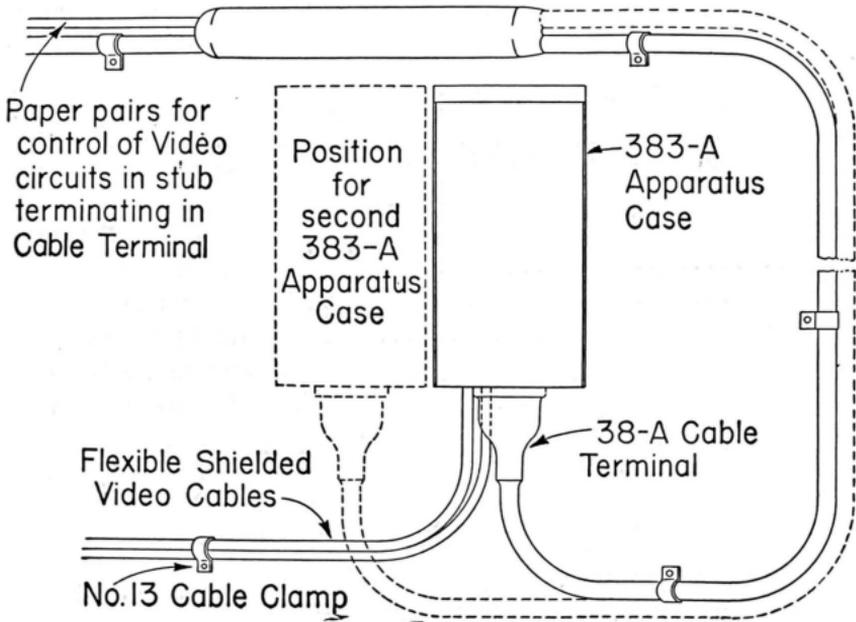
9.02 The following illustration shows a typical outdoor installation of a 38A cable terminal together with a binding post chamber and terminal strip mounted in a weather-proof box, such as the BB Cable Terminal Box.



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(b) Apparatus case below horizontal run of cable.



9.04 Apparatus case above buried or underground cable.

