

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

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AT&T Co Standard

TERMINALS—MOUNTING

45A VIDEO TERMINAL

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1. GENERAL

1.01 This section describes the method of mounting the 45A Cable Terminal in the 387A Apparatus Case for indoor or outdoor use on telephone company or subscriber's premises, and in the J44105R Cable Terminal and Jack Panel for central office use or on subscriber's premises. The arrangement of the terminal stub cable and the video cables are included.

2. MATERIAL

2.01 The materials required in connection with the installation of the 45A Cable Terminal are listed:

Case, Apparatus, 387A	For mounting two 45A terminals on walls, panels, etc., indoors on subscriber's premises, or outdoors on walls, poles, etc.
Cable Terminal and Jack Panel, J44105R	For mounting a maximum of 7, 45A Cable Terminals or combinations of 45A Cable Terminals and mounting plates of equipment jacks.
Terminal, Cable, 45A	Four pair video terminal. Four P182024 Fil. Head Machine Screws are supplied for mounting the terminal.

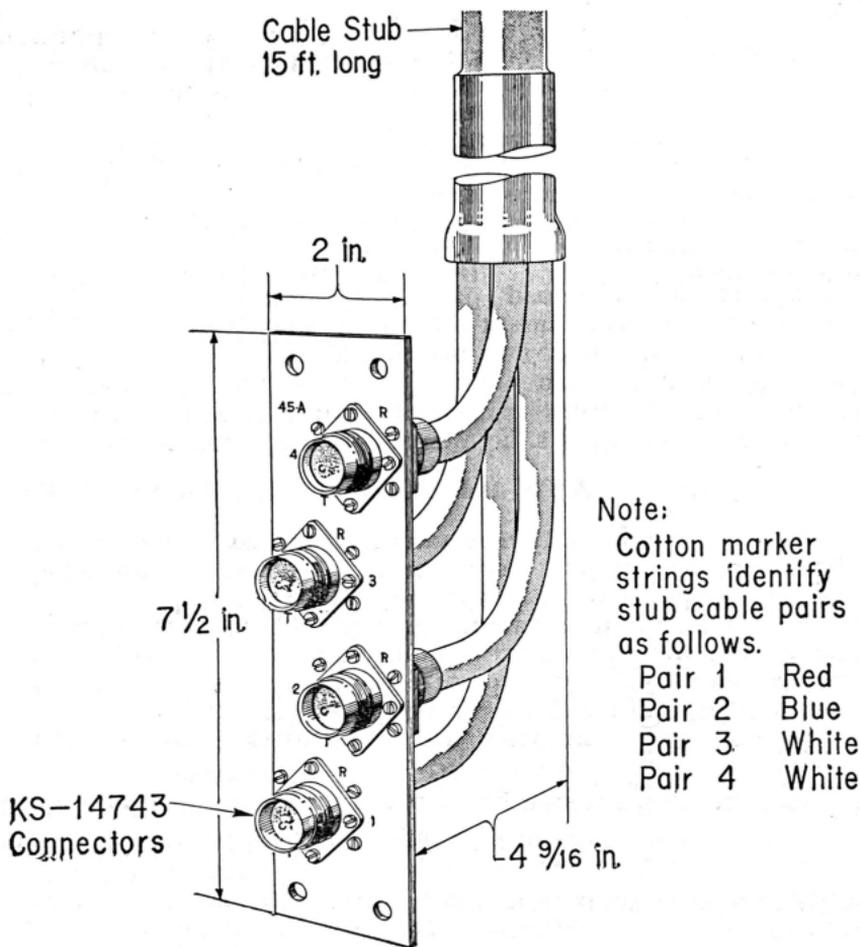
Fastening Devices

Anchors	1/4-inch x 1-1/4-inch Hammer Driven Anchors
Bolts	1/4-inch x 4-inch Toggle Bolts
Clamps	No. 17 Cable Clamp
Screws	3/4-inch No. 14 RH Galvanized Wood Screws
	1-1/2-inch No. 14 RH Galvanized Wood Screws

2.02 Material for mounting the J44105R Cable Terminal panel on equipment bays is listed in Part 6.

3. DESCRIPTION

3.01 The 45A Cable Terminal is a gastight terminal. Each of the four 16 gauge video pairs is terminated separately on the faceplate in a KS-14743 Connector. Ordinarily furnished with a 15-foot stub cable, the 45A Cable Terminal may be obtained with longer stub length up to 75 feet on special order.



45A CABLE TERMINAL

3.02 The 45A Cable Terminal may be mounted for indoor use on equipment bays, walls or other suitable mounting surfaces. It can be mounted in the 387A Apparatus Case when a weatherproof housing is required.

4. PRECAUTIONS

4.01 Video circuits carry so wide a range of frequencies and operate with such large variations in signal strength that extra care has to be taken to design these circuits with adequate shielding and freedom from noise and crosstalk. It is

important that this high quality be maintained at splices and at connections between the terminals, jacks, plugs, etc.

4.02 Noisy locations such as on MDF's, IDF's, or PBX frames should be avoided in selecting the location of the terminal. **These locations are electrically noisy.**

5. LOCATING VIDEO TERMINALS

5.01 The location of the 45A Cable Terminals should be specified on the detail plans. If plans are not issued, the location should be obtained from the engineer.

5.02 Insofar as practicable, the location should be in accordance with the following points when the 45A Cable Terminals are mounted in the 387A Apparatus Case.

(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. Then, if they are needed, flexible shielded video cables are placed between the terminal or terminals and the amplifier equipment leading to the customer's equipment.

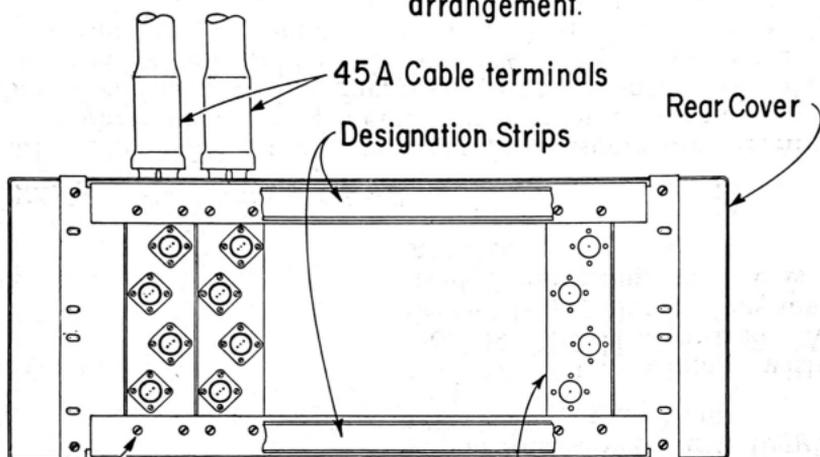
6. MOUNTING ON EQUIPMENT BAY

6.01 On subscriber's equipment bays suitable for mounting a 19-inch wide panel, the central office type panel designed for use with the 45A Cable Terminal may be used. Where the installation of the equipment on the subscriber's premises is large, 6-foot and 7-foot duct type frameworks per ED-92523-01 or ED-92712-01, respectively will probably be provided for mounting the cable terminal panel.

6.02 The grounding arrangements provided on the subscriber's equipment bays should be examined. The larger installations are likely to be suitably grounded. However, at small installations it may be necessary to provide an additional ground connection from the subscriber's equipment bay to the nearest ground, such as a cold water pipe, in addition to the ground furnished by the stub cable of the 45A Cable Terminal.

6.03 The central office type panel is shown below. This J44105R Cable Terminal and Jack Panel will mount up to seven 45A Cable Terminals. Also, as jack panels for terminating the flexible video cables running to the video equipment may also be mounted, four cables per jack panel, any combination of 45A Cable Terminal and Jack Panel up to seven may be mounted.

Note: Allow space above top of panel for good stub cable arrangement.



P41E284 Panel Assembly

182024 Fil, Head Machine Screw
(No.10-32 x $\frac{5}{8}$ in. long, Brass)

P41E267 Base Plate
(Jack Panel for mounting 4
KS-14324 Jacks
or 4 KS-16287
L2 Jacks)

6.04 The above panel assembly may be obtained (exclusive of 45A Cable Terminals and Jack Panels) as **Cable Terminal and Jack Panel, J44105R—List 1.**

6.05 Each additional jack panel including the P-41E267 Base Plate and machine screws for mounting the plate and for mounting four KS-14324 or KS-16287 Jacks on the plate may be obtained as **Cable Terminal and Jack Panel, J44105R—List 2.**

6.06 A dust cover, with cutout in top for 45A Cable Terminal stubs, mounting over the panel assembly may be obtained as **Cable Terminal and Jack Panel, J44105R—List 3.**

6.07 Further details regarding central office type mounting arrangements for the 45A Cable Terminal may be obtained from the Equipment Engineer.

6.08 Secure the stub cable of the 45A Terminals to the mounting surface by means of any of the following fastening devices.

Surfaces

Fastening Devices

Equipment Bay

Waxed cotton thread tie or Flex-wire Clip (F-12).

Masonry or Brick

No. 17 Cable Clamp with 1/4" x 1" Hammer Drive Anchor.

Hollow Tile

Wire consisting of two strands of lashing wire or .049 steel construction wire anchored by means of 1-1/2 in. No. 8 RH Galvanized Wood Screw used as a toggle or 1/8" x 4" Toggle Bolt.

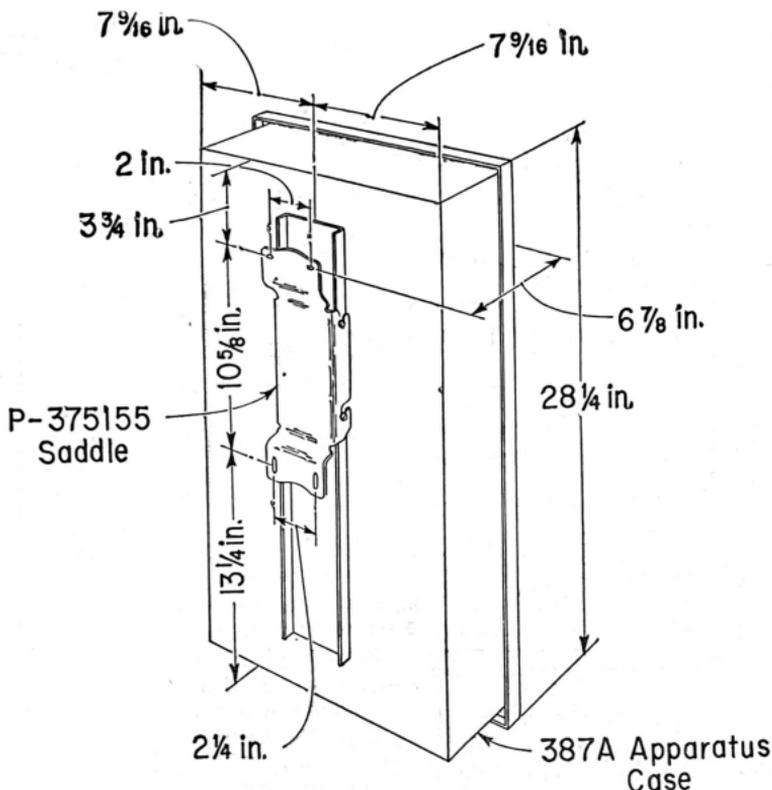
Wood

No. 17 Cable Clamp with 1" No. 14 RH Galvanized Wood Screw. 1-1/2" Strap Nails may be used if mounting surface is substantial.

7. 387A APPARATUS CASE

7.01 The 387A Apparatus Case is a weatherproof hot dip galvanized sheet metal housing for mounting two 45A Cable Terminals. It has facilities for terminating the flexible shielded video pair cables associated with the terminals. A drop door, which can be secured with a padlock, is furnished.

7.02 The 387A Apparatus Case is mounted in a vertical position. The P-375155 Saddle is supplied as a part of the case for mounting purposes.



7.03 Attach the P-375155 Saddle to the mounting surface.

Type of Support

Anchoring Device to be Used

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

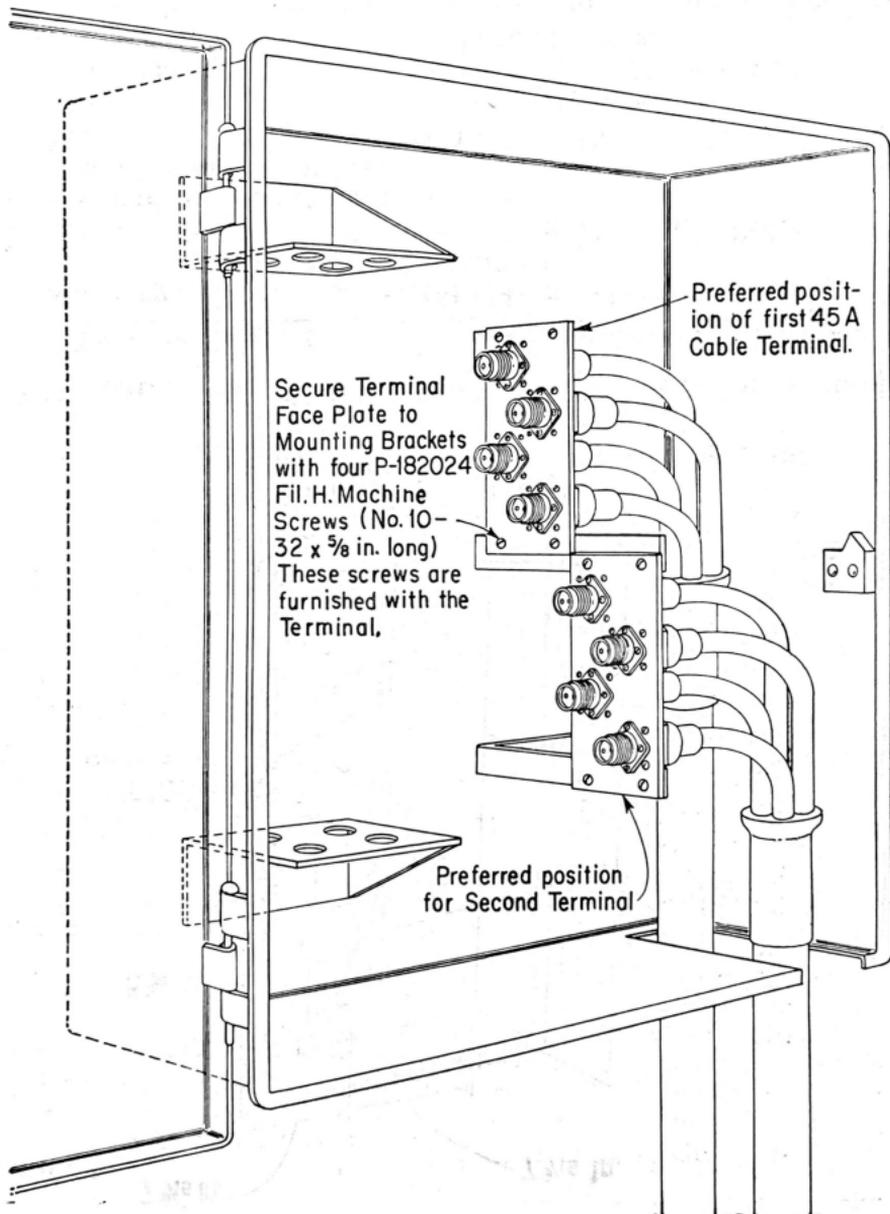
Backboard*

(4) 3/4" No. 14 RH Galvanized Wood Screws

* A 1-inch thick backboard is used for mounting the 387A Apparatus Case where the surface is not suitable for direct mounting.

7.04 Fasten the 387A Apparatus Case securely on the saddle with the machine screws provided. Knockouts for the terminal stubs and for the flexible video cable pairs are provided at top and bottom so that the terminal stubs and the video pairs may enter the case from top or bottom.

7.05 Secure the 45A Cable Terminals in position on the terminal mounting brackets by means of four P-182024 Fil. Head Machine Screws supplied with the terminal (equivalent to No. 10 in. x 32 Fil. Head Brass Machine Screws 5/8-inch long), inserted in the tapped holes of the terminal mounting bracket.



7.06 Secure the stub cable of the 45A terminal to the mounting surface as covered in Paragraph 6.08.

8. SIZE OF SLEEVE

8.01 The method of splicing the video pairs to the shielded polyethylene 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:

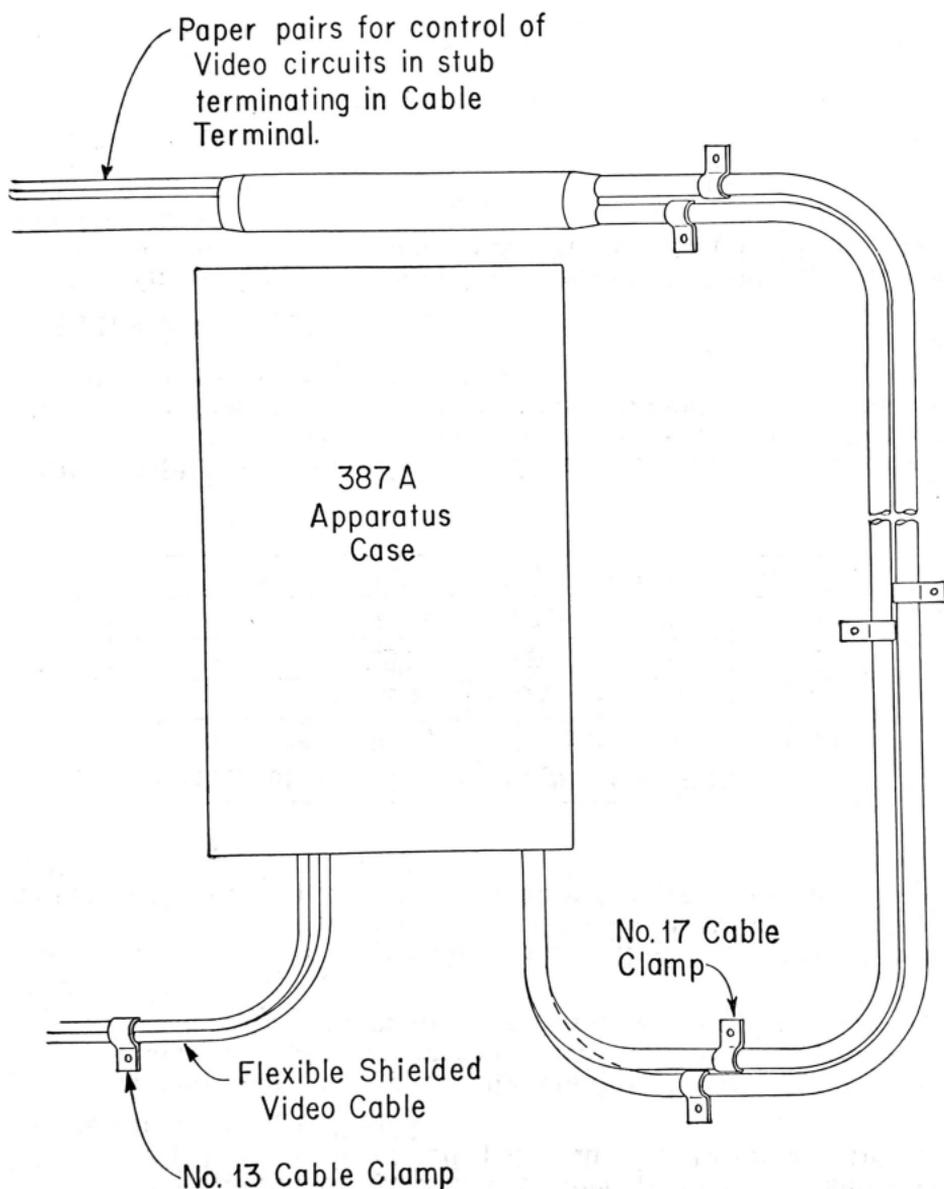
Number of Video Pairs	Equivalent Number of Pairs			
	19 Ga.	22 Ga.	24 Ga.	26 Ga.
2	25	51	101	202
4	51	101	202	303
6	134	151	303	404
8	177	252	404	505

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 opening be less than 17 inches.

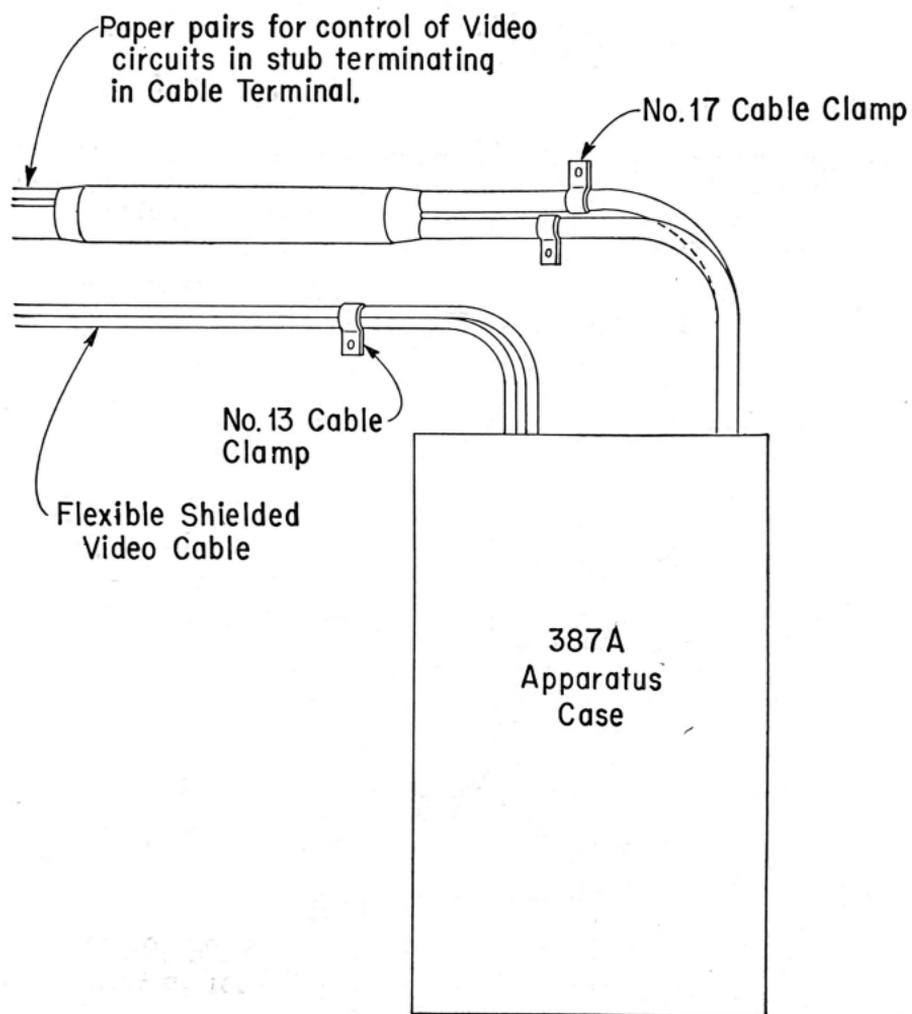
9. STUB ARRANGEMENT

9.01 The following illustrations show 45A Cable Terminals mounted in the 387A Apparatus Case at inside or outdoor locations.

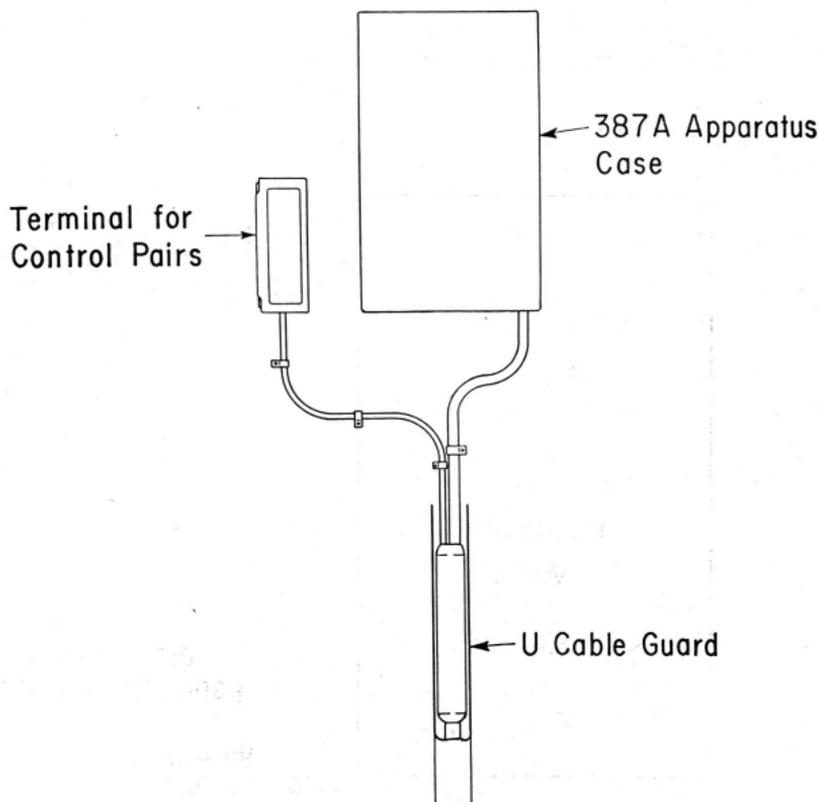
(a) Apparatus case above horizontal run of cable.



(b) Apparatus case below horizontal run of cable. Note that this arrangement should **Not** be used outdoors.

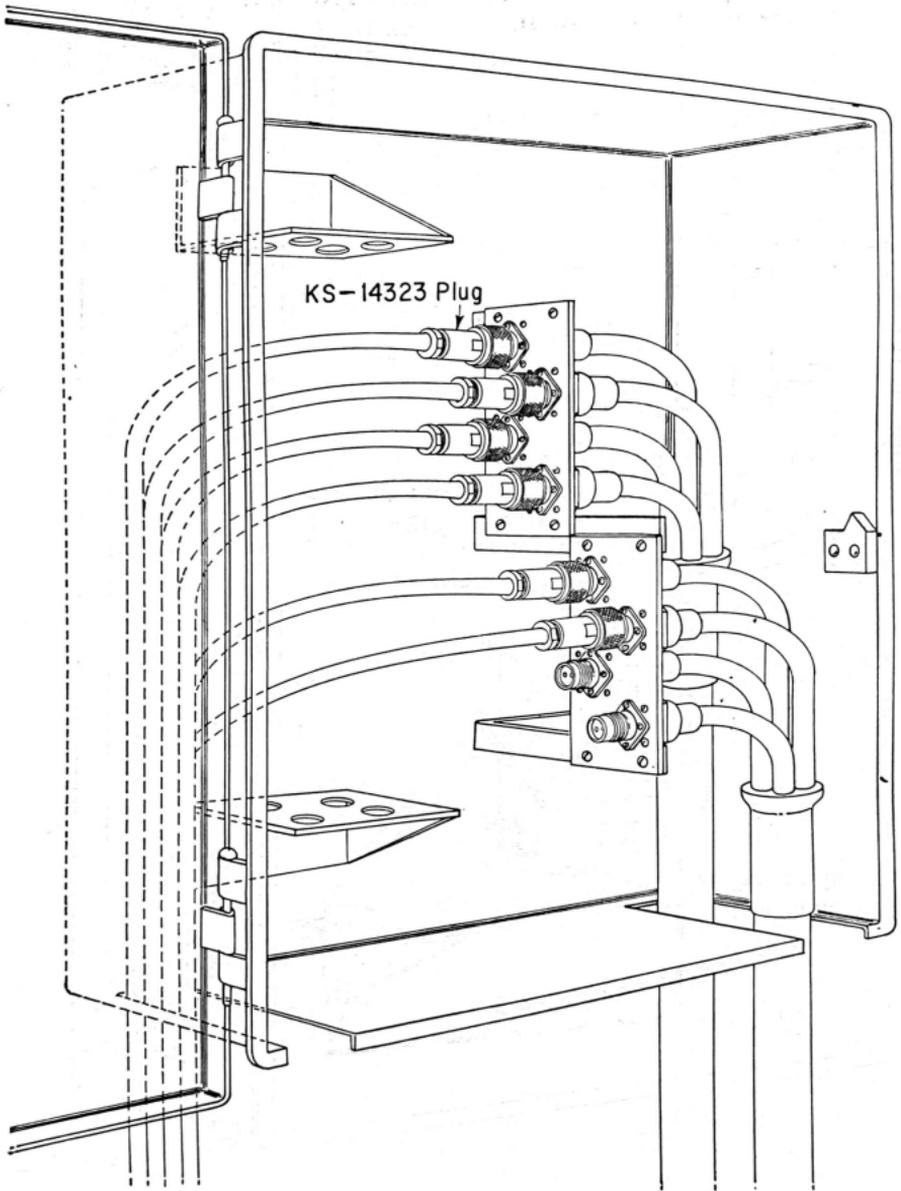


9.02 Apparatus case above buried or underground cable.



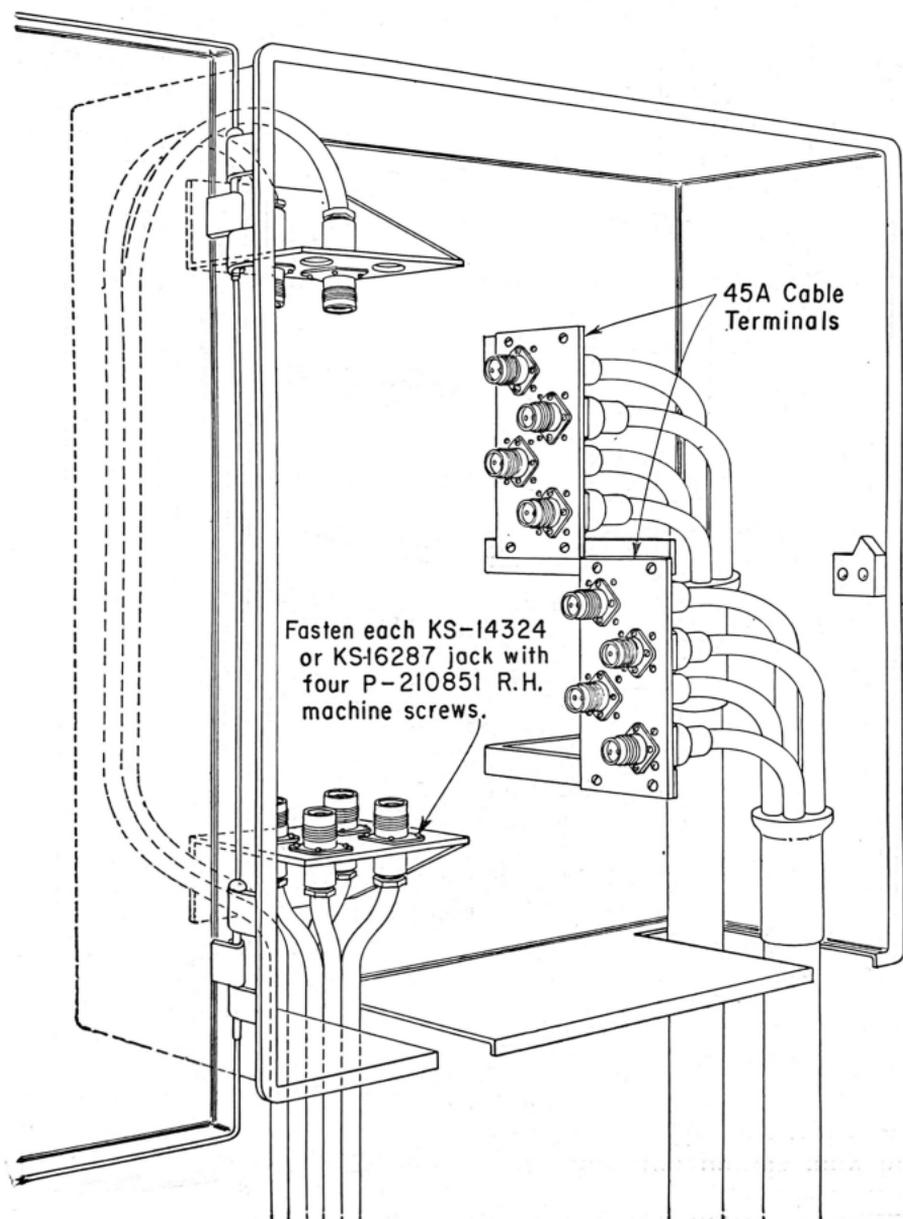
10. ARRANGEMENT OF CABLES IN 387A APPARATUS CASE

10.01 The flexible shielded video cables which connect to the amplifier equipment on the customer's premises may be terminated directly on the video pairs at the faceplate of the 45A Cable Terminal, mounted in the 387A Apparatus Case.

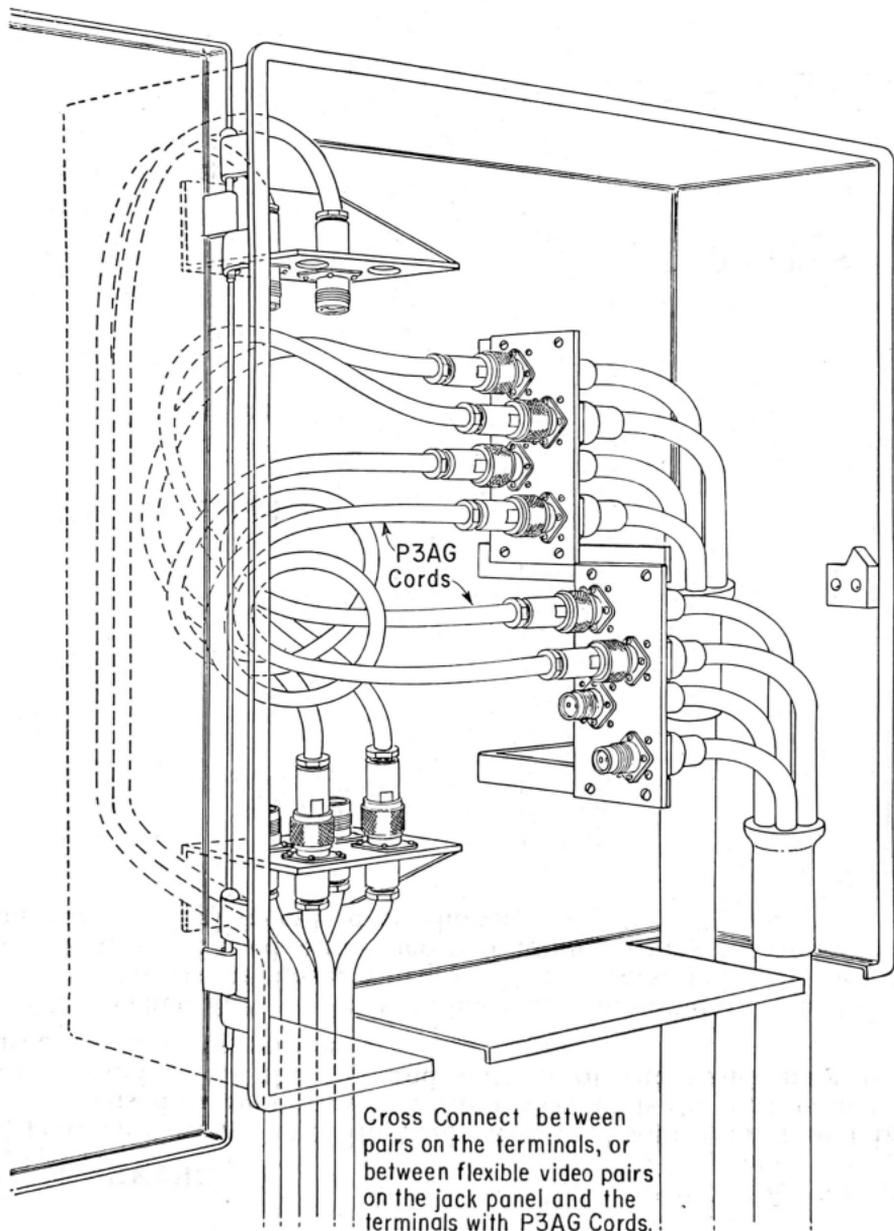


10.02 When the flexible shielded video cables are to be terminated on the jack panels provided in the 387A Apparatus Case, terminate each flexible shielded video cable on a KS-14324 or KS-16287 Jack. The method of making this termination is covered in Part 4 of Section G61.640.1. Fasten

the KS-14324 or KS-16287 Jack in position on the jack panel with four P-210851 RD Head Machine Screws (equivalent to No. 4-40 threads per inch x 3/16-inch long RD Head Machine Screws).



10.03 Cross connection between video pairs on the terminal faceplates or between video pairs on the jack plate and the flexible video pairs terminated on the jack panels may be made with P3AG Cords of 2 foot length. The P3AG Cord consists of No. 720 Cable equipped at each end with a KS-14323 Plug.



11. MARKING

11.01 When the J44105R Cable Terminal and Jack Panel is used for mounting 45A Cable Terminals the designations strip provided at the top and bottom of the panel may be used for marking purposes.

11.02 When 45A Cable Terminals are mounted in the 387A Apparatus Case, video cable numbers, point to point designations, if used, and video pair numbers may be stencilled on the terminal faceplate as shown.

