

29-TYPE CABINETS DESCRIPTION AND INSTALLATION

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3. LOCATION	4	1.01 This section covers the description and installation of the 29-type cabinets which are used as outdoor housing for control and access points in dedicated plant.	
ON POLES	4	1.02 This section is reissued to delete reference to the 29A4, 29A40, 29B4, 29B40, 29C4, 29C40, 29C5-800, 29C50-800, 29D4, 29D40, 29D5-1200, 29D50-1200, 29E40, 29E5-1800, and 29E50-1800 cabinets which are rated manufacture discontinued (Mfr Disc). Since this reissue is a general revision, no revision arrows have been used to denote significant changes.	
ON WALLS	4	1.03 The 29E4 cabinet is used as a replacement cabinet for the discontinued cabinets listed in paragraph 1.02.	
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NOTICE

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2. DESCRIPTION

2.01 The 29E4 cabinet (Fig. 1) consists of a metal housing with hinged doors and mounting brackets for pole or wall installation. The 29E4 cabinet has split sealing glands as an intergal part of the top assembly. Three cable entrance apertures

are provided in the top and four 2-13/16 inch U-shaped openings in the bottom plate assembly. The cable entrance openings in the bottom assembly are each covered with a removable cover secured with two screws. A retainer plate is used at the bottom of the cabinet to secure the entrance cable (See Fig. 2).

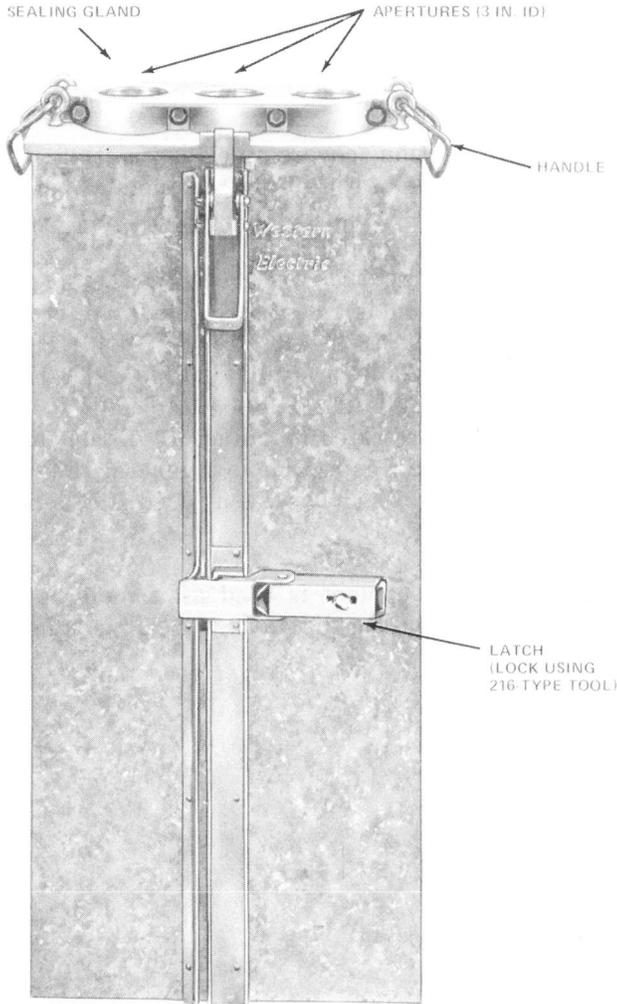


Fig. 2—Retainer Plate

	HEIGHT	WIDTH	DEPTH
INSIDE DIMENSION (IN.)	* 45.75	* 15.9	6.25
OUTSIDE DIMENSION (IN.)	49.2	18.3	7.9

* BACKBOARD DIMENSIONS

Fig. 1—29E4 Cabinet

2.02 The three aperture sealing glands and associated hardware shown in Fig. 3 will accommodate PIC cable up to 3.0 inches in diameter.

2.03 Ground straps and bond clamps are not furnished with the cabinet and must be ordered separately.

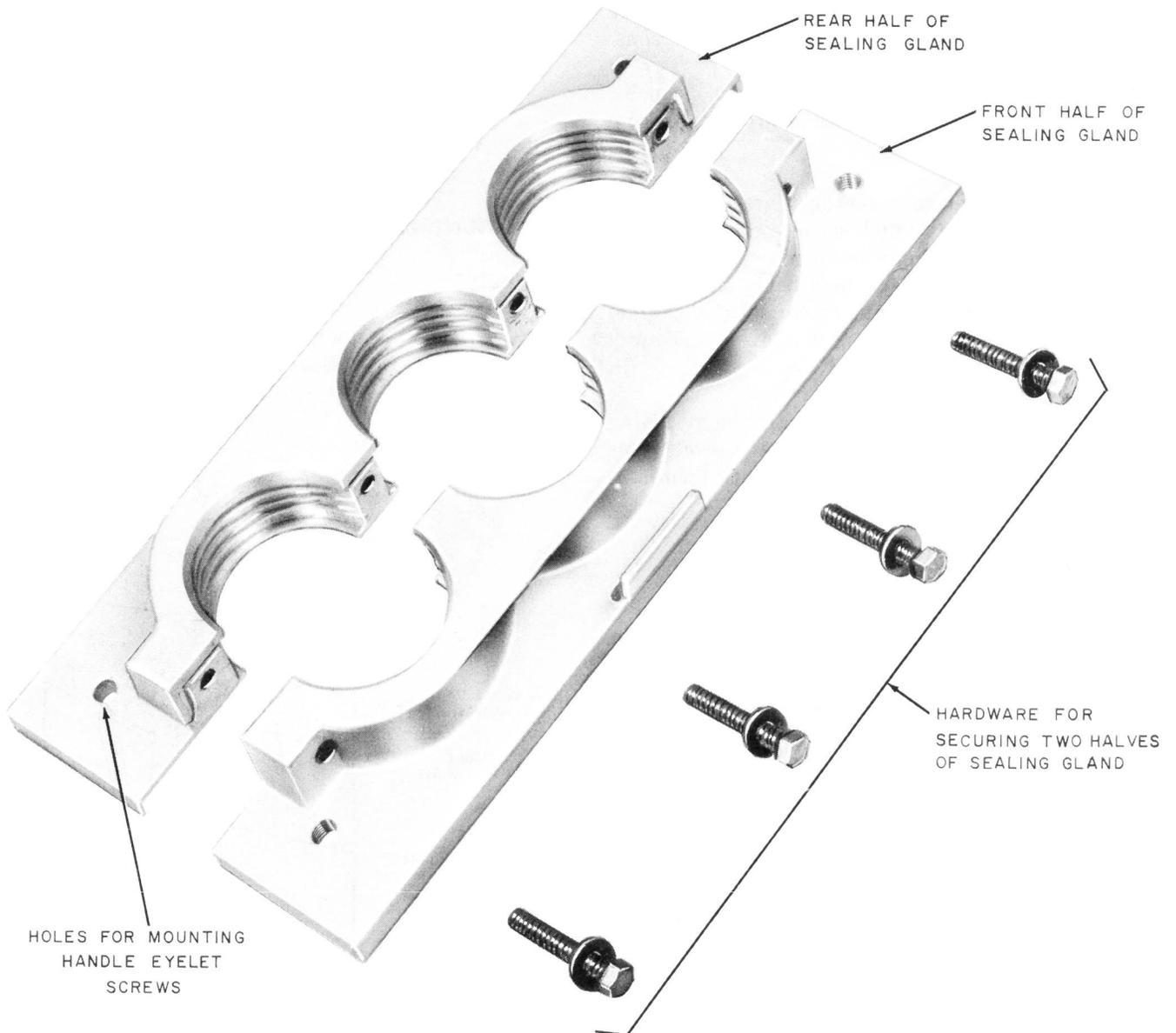


Fig. 3—Sealing Gland and Hardware

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3. LOCATION

ON POLES

3.01 The preferred location of the 29E4 cabinet is on the side of the pole away from vehicular traffic to provide added safety for the craft persons.

3.02 The 29E4 cabinet may be placed on poles either at aerial cable level or ground working level as described below:

(a) In high level construction, locate the cable suspension bolt which secures the detachable mounting bracket a minimum of 3 feet, 6 inches (maximum 5 feet, 6 inches) below the lowest suspension strand. The bottom of the cabinet shall not be less than 10 feet above a driveway or highway.

(b) In low level construction, locate the mounting bracket about 5 feet above grade level. Pole balcony facilities are not required with terminals mounted close to the ground.

ON WALLS

3.03 Where a cabinet is to be mounted on a building wall, locate it in accordance with the engineering work prints. If the specified location does not appear suitable from the standpoint of construction or safety or is considered as offering potential maintenance difficulties, notify the outside plant engineer. The cabinet should be located:

(a) With the mounting bracket approximately 5 feet above grade level. This height may be increased if by so doing the possibility of accidents or damage to the cabinet is reduced.

(b) Where it will be accessible without the use of a ladder.

(c) Where it will not be subject to damage such as may occur near driveways, machinery, hoists, doors, etc.

(d) To clear stairways, fire escapes, etc.

(e) To avoid light and power circuits.

(f) To avoid ladders, drains, waste and exhaust pipes.

(g) No less than 20 inches from the corner of a building.

(h) To provide sufficient space for opening the cabinet doors.

(i) On a firm and even mounting surface.

(j) Where it will be accessible to telephone craft personnel at all times.

4. MOUNTING

ON POLES

4.01 Attach the upper mounting bracket as shown in Fig. 4. Assure that the crossmember is level.

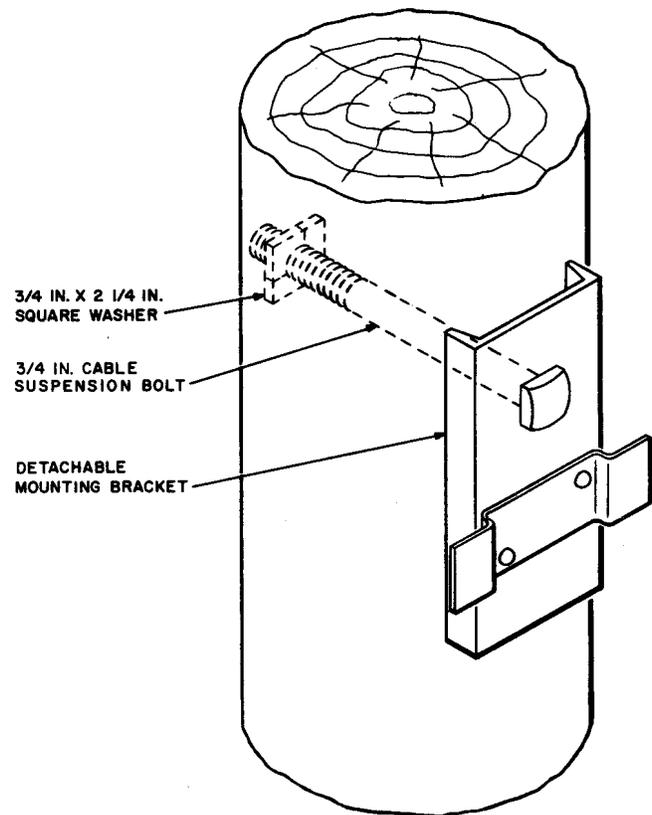


Fig. 4—Mounting Bracket Installed on Pole

- 4.02** Secure a rope sling and handline to the handles at the top of the cabinet.
- 4.03** Raise the cabinet by means of block and tackle or a pole derrick. Guide the cabinet during hoisting by means of the handline secured to the cabinet handles.
- 4.04** Hang the cabinet by engaging the two hangers on the back of the housing with the crossmember of the installed mounting bracket.
- 4.05** Level the cabinet and fasten the bottom mounting bracket to the pole with two 3/8-by 4-inch drive screws.
- 4.06** Install a balcony at high level constructions as outlined in Section 631-300-213.

ON WALLS

- 4.07** Attach the upper mounting bracket to the wall by means of a 1/2-inch machine bolt anchor with a 4-inch galvanized machine bolt or a 1/2- by 3-1/2 inch hammer drive anchor and 9/16-by 1-3/8 inch round washer.
- 4.08** Hang and secure the cabinet as outlined in paragraphs 4.02 through 4.05.

5. PLACING AND BONDING ENTRANCE CABLE

TOP ENTRANCE

- 5.01** Remove the front half of the sealing gland and route the entrance cable through the opening. Cut the cable approximately 18 inches below the bottom of the cabinet.

BOTTOM ENTRANCE

- 5.02** Remove the cover and retainer plate. Remove the screws from the plate and remove plate from U-shaped opening (Fig. 5), then loop cable through the closure and cut the cable approximately 18 inches below the bottom of the cabinet.

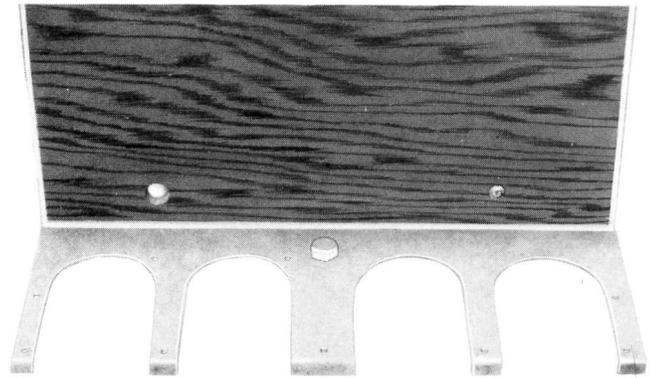


Fig. 5—U-Shaped Slots With Retainer Plate Removed

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5.03 Remove the required length of plastic jacket and underlying metallic shield from the end of the cable. Install a B or D bond clamp as outlined in Section 081-852-118 of the Bell System Practices.

5.04 Scuff the cable, then install two sealing washers over the sheath of the cable. Position the inner sealing washer 3-1/8 inches from the end of the sheath and the outer sealing washer clear of the sealing collar.

5.05 Using 3/4 inch wide B sealing tape, form the sealing collar on the cable. This collar should exceed the washer diameter by one-half turn.

5.06 Move the sealing washers into position on both sides of tape collar. The collar, including the washer, should not be more than 1-1/4 inches wide as shown in Fig. 6.

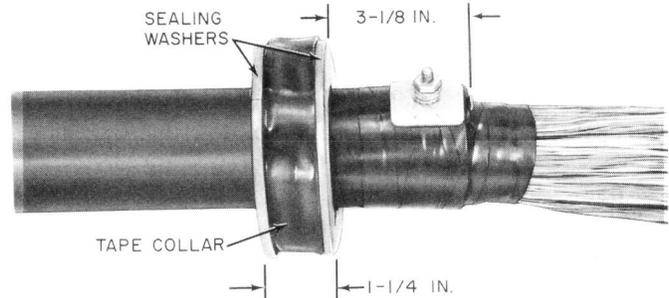


Fig. 6—Sealing Collar in Place

5.07 Place B sealing cord in the grooves as shown in Fig. 7. The unused cavity should be sealed with a solid plug of 3/4 inch wide B sealing tape with solid sealing washers of proper size at each end of the plug. The plug should exceed

the washer diameter by one-half turn.

5.08 Place the prepared cable in the sealing gland as shown in Fig. 7.

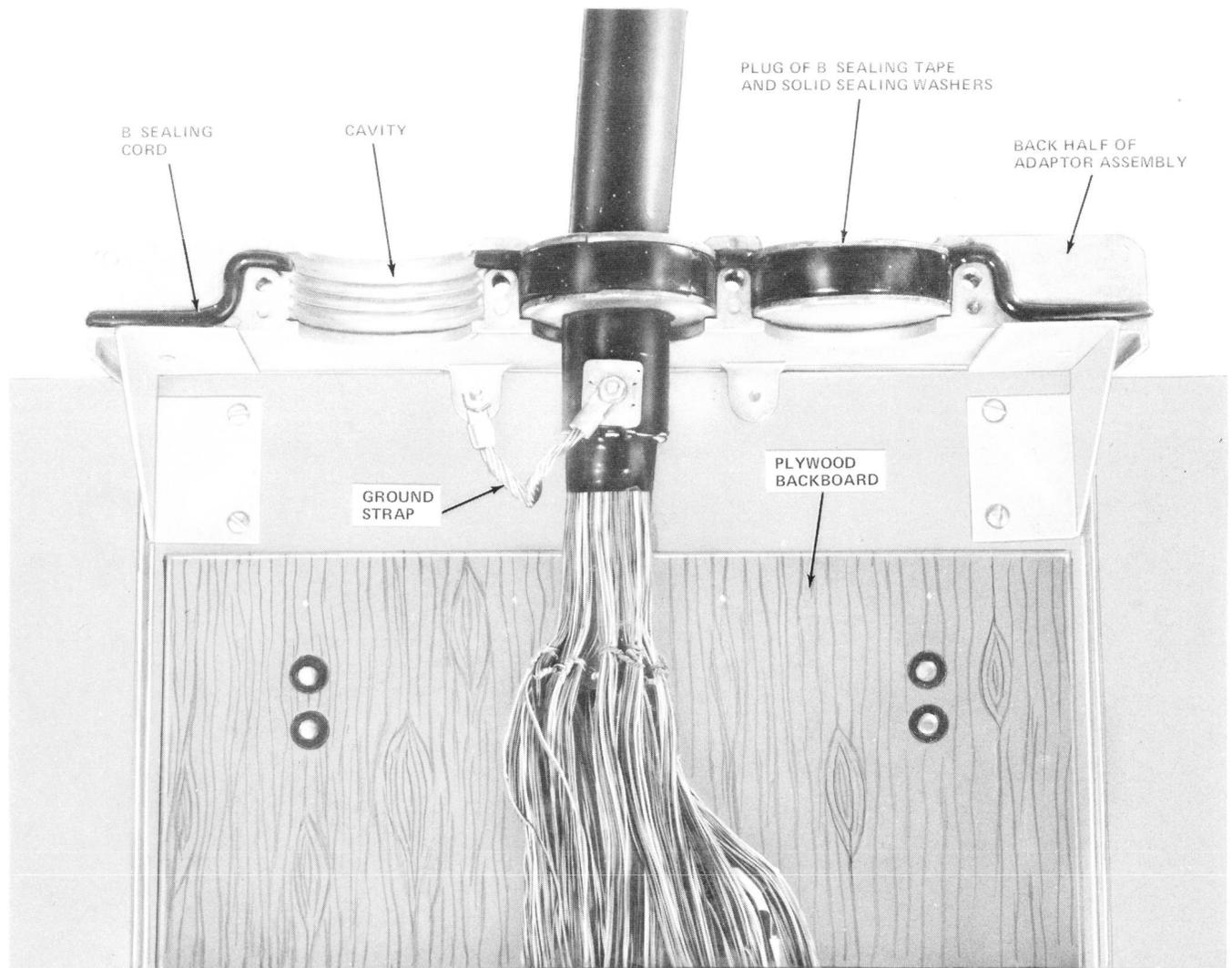


Fig. 7—Cable Placed in Gland

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5.09 Position the front half of the sealing gland over the prepared cable as shown in Fig. 8, then secure with the hex-head bolts. Bring the two halves together evenly. As the compression load increases, give each bolt one turn, one after the other, to keep the load distributed. Apply 300 to 450 inch-pounds of torque to each hex head to bolt

5.10 Attach bond strap to B or D bond clamp and secure to cabinet for shield continuity (Fig. 8). For bottom entry cables, use the rear cover plate screw for bond connection.

6. CABLE PREPARATION

6.01 Further wiring arrangements from this point will depend upon specific application. See Section 642-220-201.

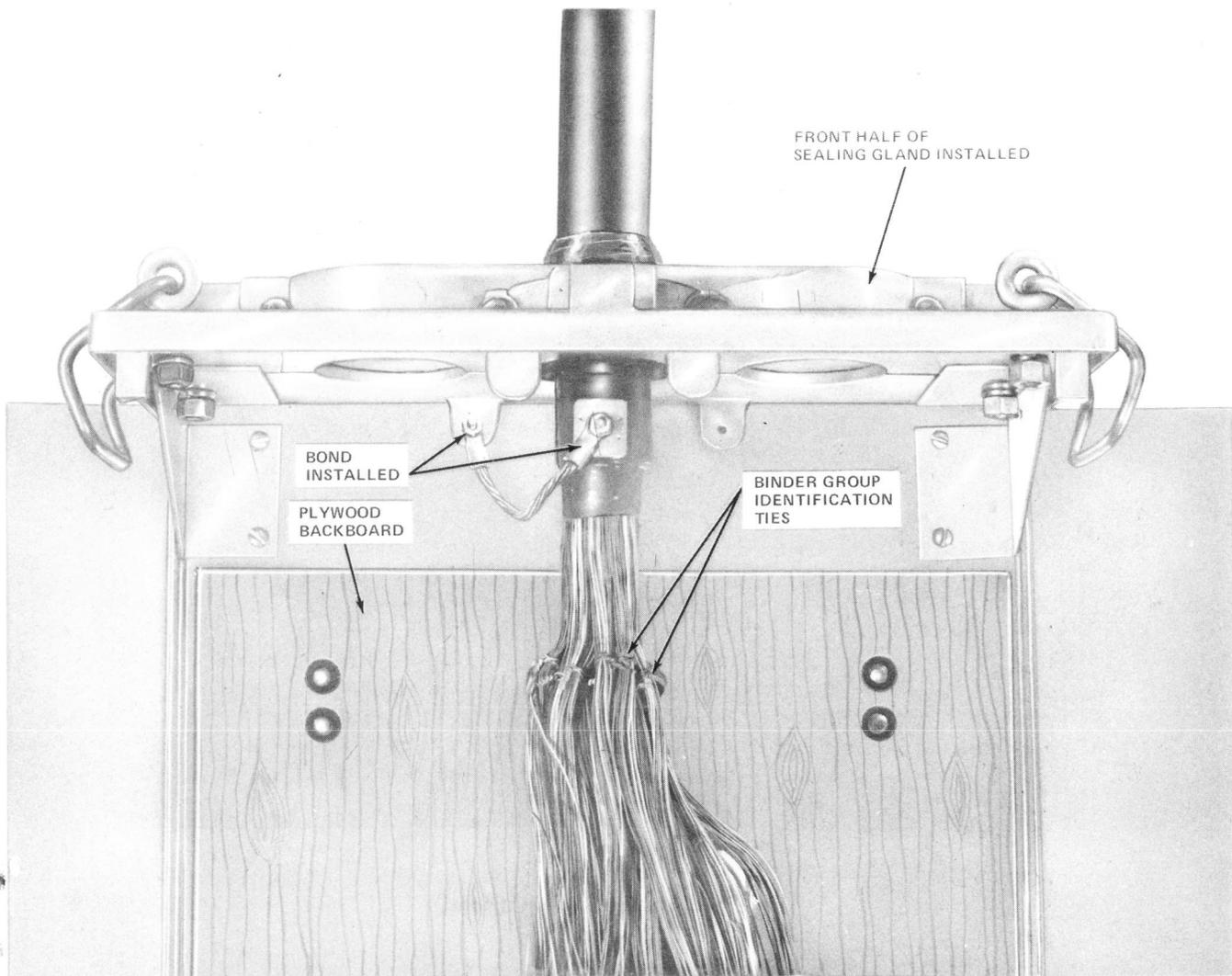


Fig. 8— 29E4 Cabinet With Cable Installed