

## AERIAL CABLE MAINTENANCE

### MINOR SHEATH REPAIRS

#### 1. GENERAL

1.01 This practice covers the use of the E Pressure Flange in repairing minor sheath defects. It may be used on 1-inch or larger single polyethylene-sheathed aerial cable where there is no conductor damage. The repair of smaller polyethylene-sheathed cables is covered in Section 633-470-200; lead-sheathed cables can be repaired by soldering.

#### 2. DESCRIPTION

2.01 The E Pressure Flange (Fig. 1) consists of the following:

- (a) A black rubber saddle with a sealing compound protected by release paper on the underside.
- (b) A threaded brass insert and a ferrule in a pressure connection flange on top of the saddle.
- (c) A thin corrosion-resistant steel strip with a hole in the center to fit over the flange.
- (d) A plastic warning marker cap for use over the flange when the E Pressure Flange is used as a sheath repair.

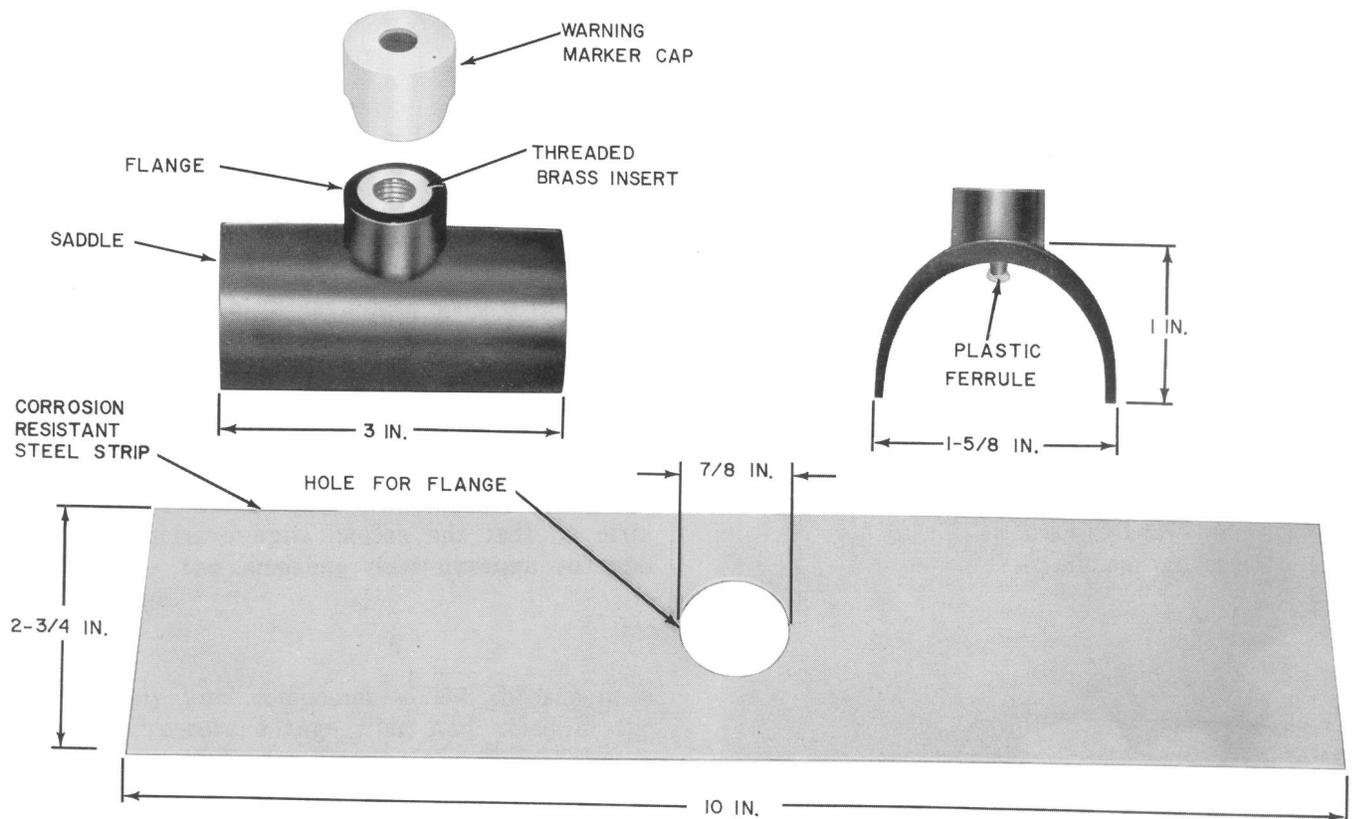


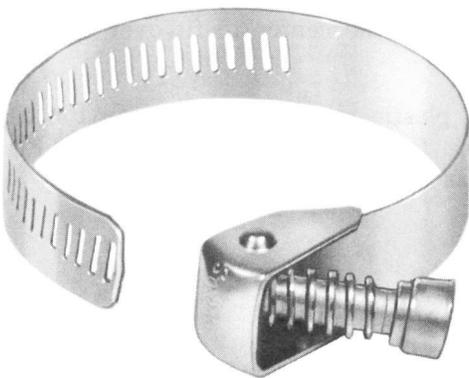
Fig. 1—E Pressure Flange

## SECTION 627-395-325

**2.02** The release paper protects the sealing compound against contamination prior to installation.

**2.03** The brass insert has a 1/8-inch female pipe thread which accommodates a C Pressure Flange Plug. The plug must be ordered separately.

**2.04** Two C Sealing Clamps (Fig. 2) are required for placing the E Pressure Flange. The sealing clamps are not furnished with the pressure flange and must be ordered separately.



**Fig. 2—C Sealing Clamp for E Pressure Flange**

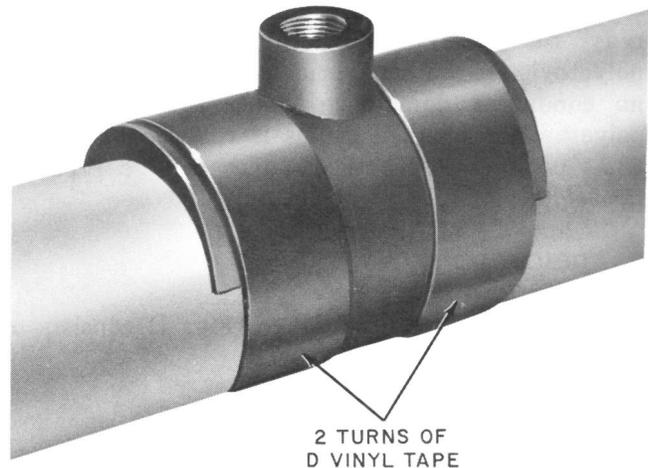
### 3. INSTALLATION

**3.01** Using a carding brush, lightly scuff the surface of the cable in the area of the defect to be covered with the saddle. **Be sure to scuff only at right angles to the length of the cable.**

**3.02** Remove and discard the plastic ferrule from the flange saddle with pliers.

**3.03** Remove the release paper from the flange saddle.

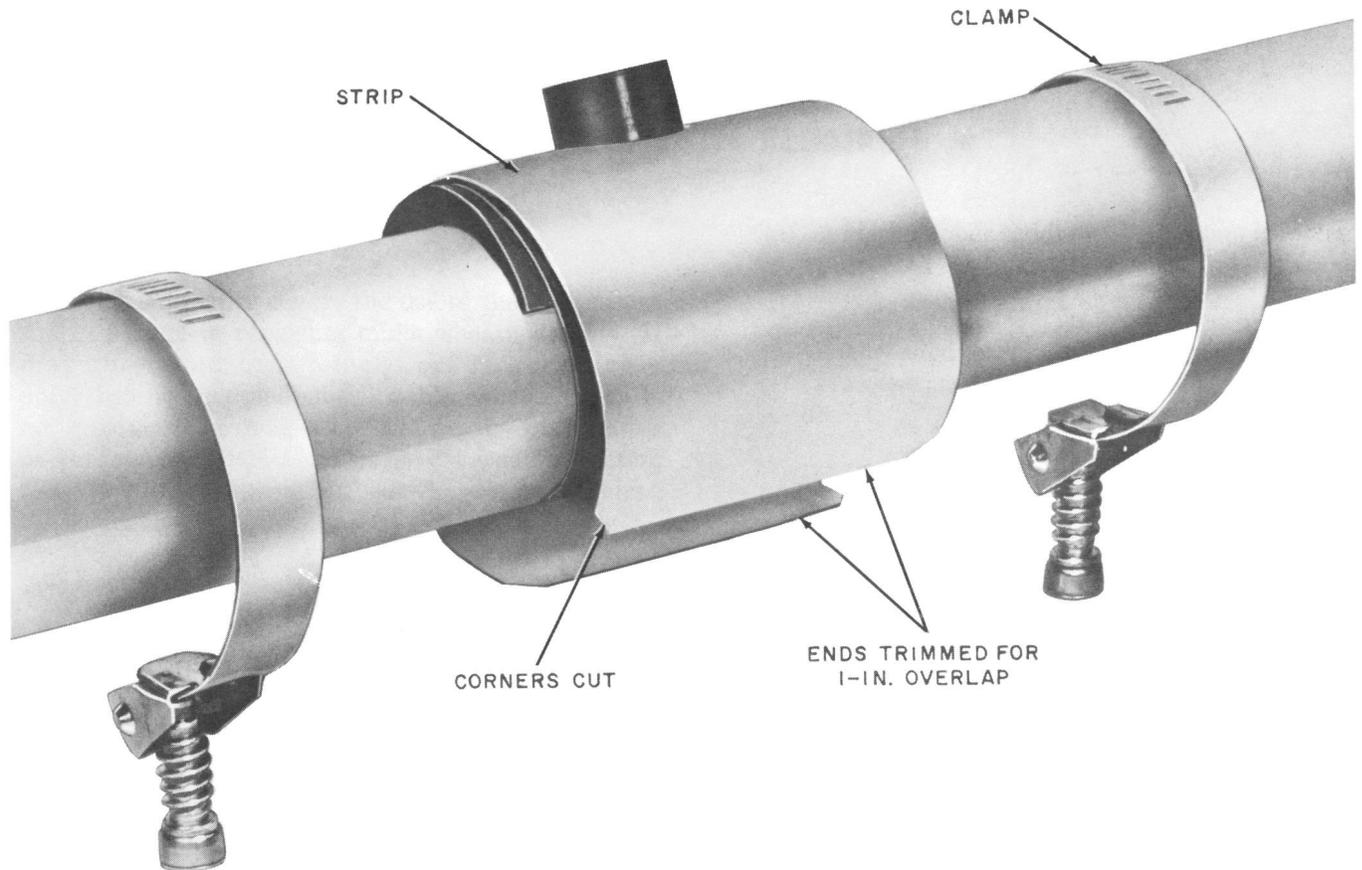
**3.04** Place the flange over the prepared area of the sheath. Apply two turns of D Vinyl Tape on each side of the flange to hold the flange in place (Fig. 3).



**Fig. 3—E Pressure Flange Saddle Taped to Cable**

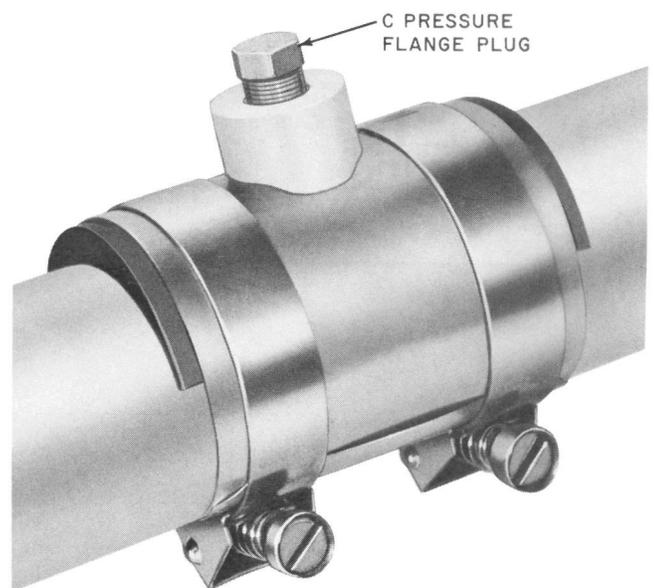
**3.05** Place the two sealing clamps loosely around the cable on each side of the flange (Fig. 4).

**3.06** Place the steel strip over the flange and form the strip snugly around the flange and cable. Using shears, cut off one end of the strip so that the end lies directly under the cable and parallel to it. Cut off the other end of the strip so that the second edge overlaps the first edge by approximately one inch.



**Fig. 4—Strip Formed Around Saddle and Cable**

- 3.07** Cut 45-degree, 1/4-inch corners off the strip and smooth all cut edges with a file.
- 3.08** Position the sealing clamps on the steel strip near the edges with the heads of the clamps at the bottom of the cable, and fasten securely.
- 3.09** Place the warning marker cap over the flange.
- 3.10** Apply pipe compound to the threads of a C Pressure Flange Plug and place in the threaded insert in the flange (Fig. 5). Using a 7/16-inch wrench, tighten securely.
- 3.11** If the cable is pressurized, test for leaks using E Pressure Testing Solution.



**Fig. 5—E Pressure Flange Installed**