

## DROP AND BLOCK WIRING

### DROP WIRE CLAMPS

#### DESCRIPTION AND USE

#### 1. GENERAL

1.01 This section covers the description, use, and installation of drop wire clamps used in drop and block wiring.

1.02 This section is reissued to clarify the use of the C Drop Wire Clamp.

1.03 The B and C clamps are similar to the discontinued PC clamp in that they consist of three parts: shell, shim, and wedge equipped with a wire loop. In use, these clamps grip the wire between the corrugated surface of the shell and the rough surface of the shim held down by the wedge.

#### B DROP WIRE CLAMP

1.04 The component parts of this clamp are made of aluminum alloy with corrosion-resistant steel wire loop on the wedge. This clamp is for general use except in the following highly corrosive areas:

- (a) Within 5 miles of the seacoast.
- (b) Within a mile radius of pottery or ceramic works, oil refineries, chemical plants, and steel mills.

#### C DROP WIRE CLAMP

1.05 This clamp consists of a copper shell, a brass shim, and a brass wedge equipped with a copper wire loop. It is for use only in highly corrosive areas as defined in 1.04 (a) and (b). Due to the high cost of this clamp, it should not be used in areas where the B clamp would be satisfactory.

1.06 Both the B and C clamps are high strength and hence suitable for use on all drop wires including high strength drop wire.

#### 2. INSTALLING DROP WIRE CLAMP ON PARALLEL DROP WIRE

2.01 Place the wire loop of the wedge on the drive hook as indicated in Fig. 1. Where the attachment is a knob, spread the wire loop sufficiently to permit its slipping over the knob and into the groove. Then pull on the wire loop and at the same time pinch the two sides together until the loop conforms to the diameter of the groove.

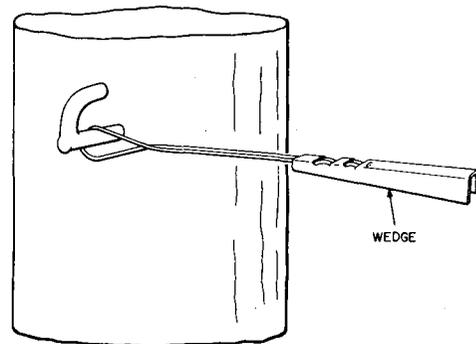


Fig. 1 — Wire Loop of Wedge Hook

2.02 Place the shell of the clamp on the wire with the small end pointing toward the hook. With the wire lying flat in the shell, insert the shim edgewise toward the inside corner of the shell with its rough side against the wire as shown in Fig. 2.

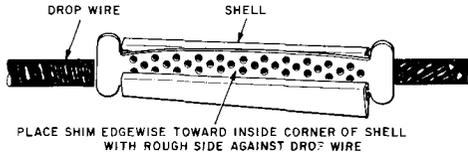


Fig 2 — Shim Placed Edgewise in Shell

2.03 Complete the insertion of the shim inside the shell over the wire as follows: Grip the wire at both ends of the shell with the thumbs resting on the top edges of the ends of the shim as indicated in Fig. 3. Press down on the shim with the thumbs until the shim snaps into position over the wire inside the shell.

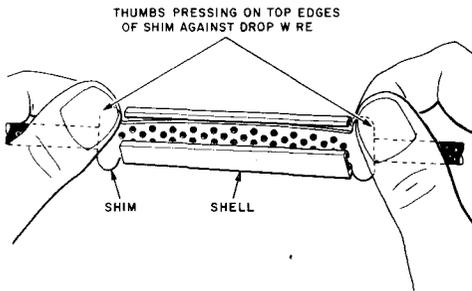


Fig. 3 — Snapping Shim into Position

2.04 The relative positions of shim, wire, and shell when completely assembled are illustrated in Fig. 4.

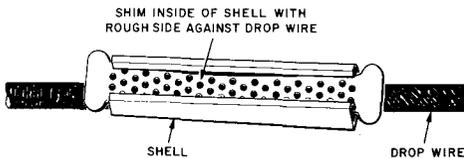
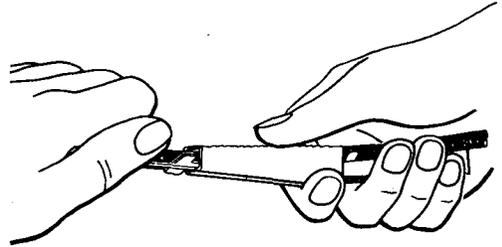


Fig. 4 — Shim in Final Position in Shell

2.05 Slide the assembled shell and shim along the wire to a position where the wedge can be easily inserted into the large end of the shell. Insert the wedge into the shell and hold loosely assembled in one hand while pulling slack in or out of the drop wire through the clamp until the proper sag is obtained. (See Fig. 5.)



HOLD CLAMP LOOSELY ASSEMBLED AT LARGE END OF SHELL WHILE SLIP DROP WIRE THROUGH CLAMP TO ADJUST FOR SAG IN THE SPAN. ADJUSTING DROP WIRE SAG.

Fig. 5 — Adjusting for Sag in Drop Wire

2.06 Hold the drop wire at proper sag with the one hand while sliding the shell and shim firmly over the wedge as shown in Fig. 6. Tapping the exposed end of the wedge with pliers is not necessary to obtain adequate holding power.

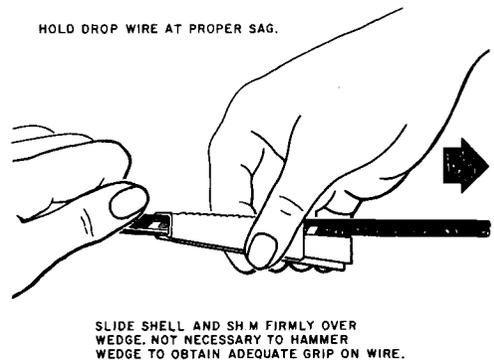
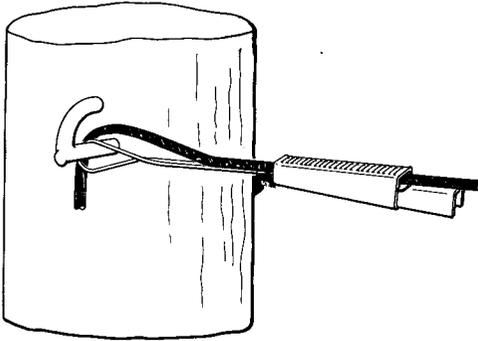


Fig. 6 — Completing Installation of Clamp on Drop Wire

**2.07** A completely installed drop wire clamp is shown in Fig. 7.



**Fig. 7 — Completely Installed Drop Wire Clamp**

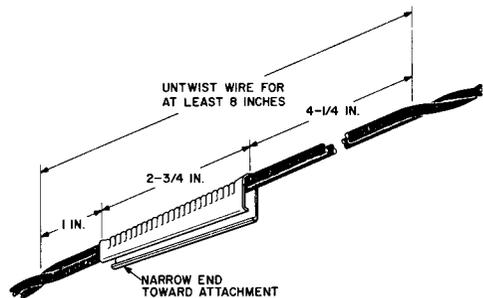
**3. INSTALLING DROP WIRE CLAMP ON TWISTED PAIR WIRE**

**3.01** Place the wire loop on the hook as shown in Fig. 1.

**3.02** Pull the wire to the desired sag in order to determine the approximate position for placing the clamp.

**3.03** Untwist the wire for at least 8 inches of its length at the location the clamp will occupy. Place the two conductors side by side in the shell as indicated in Fig. 8.

**3.04** Complete the installation of the clamp on the twisted pair wire as described for parallel wire in 2.05 to 2.07.



**Fig. 8 — Installing Drop Wire Clamp on Twisted Pair Wire**