

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G32.105.1
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AT&T Co Standard

DROP AND BLOCK WIRING
INSTALLING DROP WIRE CLAMPS

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1. GENERAL

1.01 This section replaces Issue 2. It covers drop wire clamps and is reissued because of the standardization of the **B and C Drop Wire Clamps** and the discontinuance of the PC Drop Wire Clamp.

1.02 The B and C clamps are similar to the 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.

1.03 **B Drop Wire Clamp.** The component parts of this clamp are made of aluminum alloy with corrosion resistant steel wire loop on the wedge. This clamp can be used generally except in the following highly corrosive areas:

- (a) Within 5 miles of the seacoast.
- (b) Within a mile radius of industrial areas containing pottery, ceramic or chemical plants and steel mills.

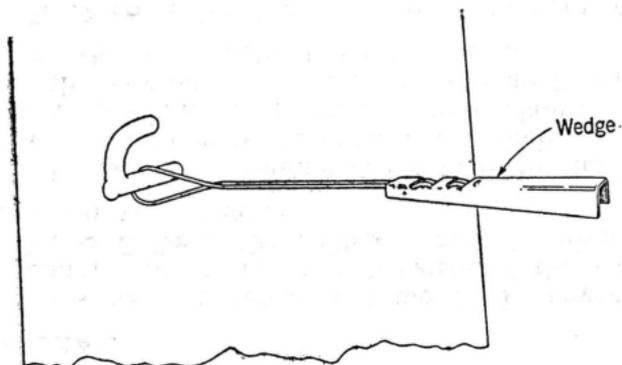
1.04 **C Drop Wire Clamp.** This clamp consists of a copper shell, a brass shim and a brass wedge equipped with a copper wire loop. It differs from the PC clamp in that the wire loop is .102 inch in diameter instead of .092 inch. The C clamp is suitable for use in corrosive and non-corrosive areas.

1.05 **Both the B and C clamps are high strength** and hence suitable for use on all drop wires including high strength drop wire. PC clamps (new or recovered), being low strength, are not suitable for high strength drop wire.

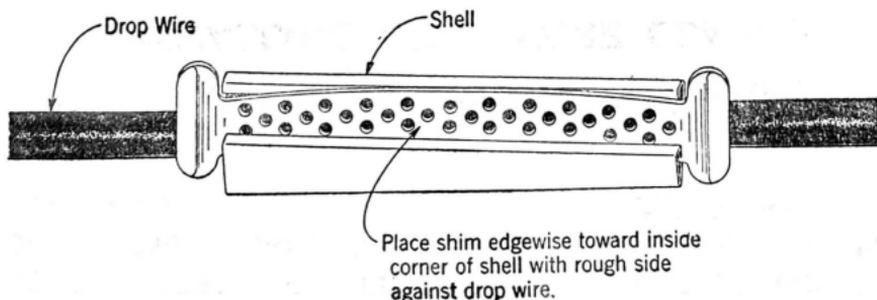
1.06 The old two-piece P and R Drop Wire Clamps now in plant should be used as long as the drop wires on which they are installed remain in service. When such wires are taken down the P and R clamps should be returned for junk with the drop wire.

2. INSTALLING DROP WIRE CLAMP ON PARALLEL DROP WIRE

2.01 Place the wire loop of the wedge on the drop wire hook as indicated below. 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.

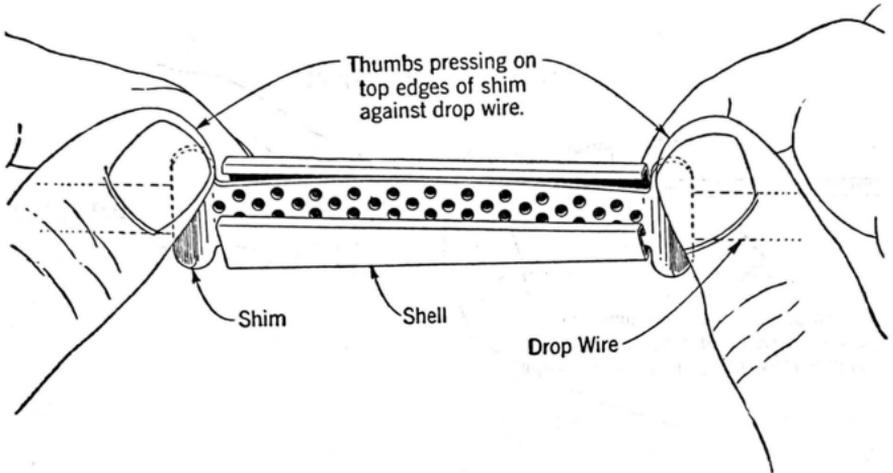


2.02 Place the shell of the clamp on the wire with the small end pointing toward the hook. With the wire lying flat in the shell, insert the shim edgewise toward the inside corner of the shell with its rough side against the wire.

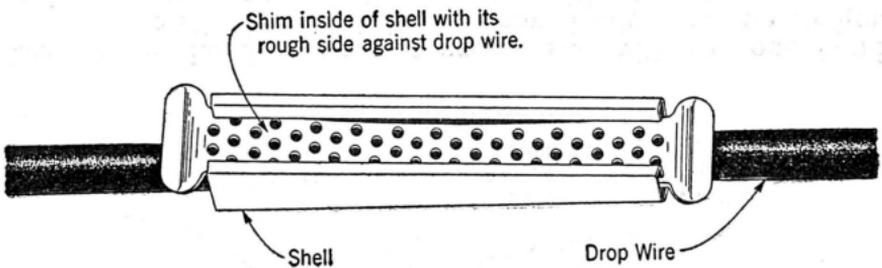


2.03 Complete the insertion of the shim inside the shell over the wire as follows:

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 below. Press down on the shim with the thumbs until the shim snaps into position over the wire inside the shell.

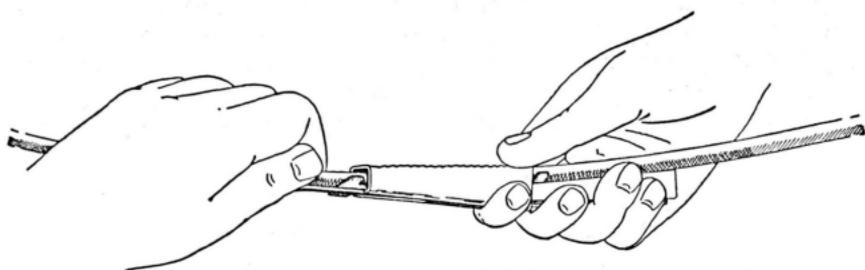


The relative positions of shim, wire and shell when completely assembled are illustrated below.



2.04 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.

ADJUSTING FOR SAG IN DROP WIRE

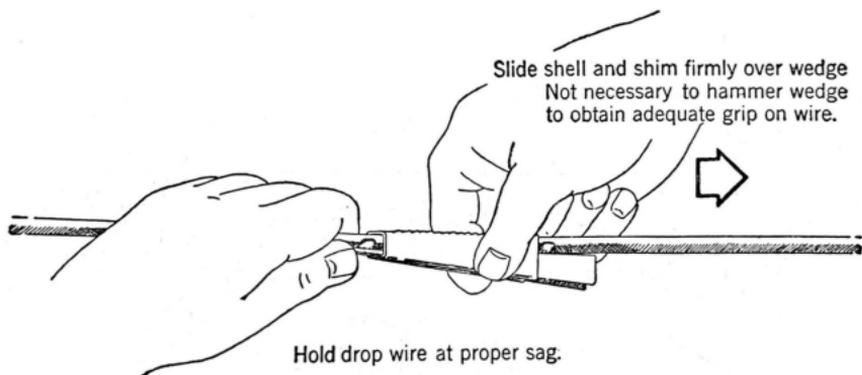


Slip drop wire through clamp to adjust for sag in the span.

Hold clamp loosely assembled at large end of shell while adjusting drop wire sag.

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

COMPLETING INSTALLATION OF CLAMP ON DROP WIRE

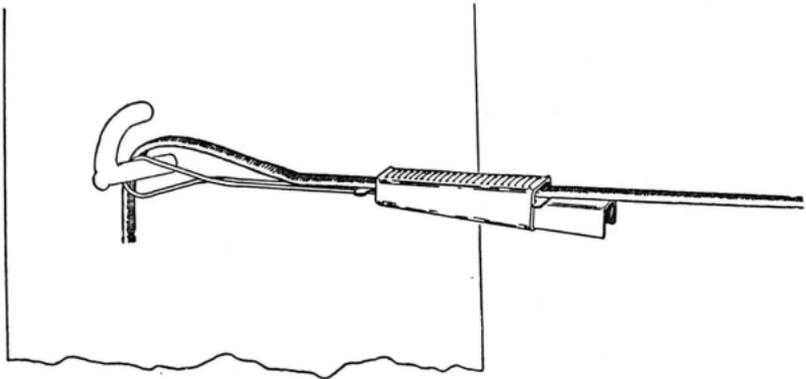


Slide shell and shim firmly over wedge
Not necessary to hammer wedge to obtain adequate grip on wire.

Hold drop wire at proper sag.

2.06 A completely installed Drop Wire Clamp is shown in the following illustration:

COMPLETELY INSTALLED CLAMP ON DROP WIRE

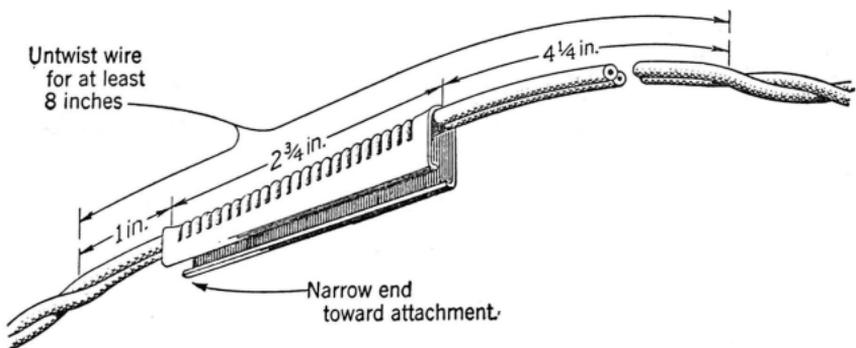


3. INSTALLING DROP WIRE CLAMP ON TWISTED PAIR WIRE

3.01 Place the wire loop on the hook as shown in Paragraph 2.01.

3.02 Pull up the wire to the desired sag before placing the shell of the clamp on the wire in order to determine the approximate position of the clamp on the wire when completely installed.

3.03 Untwist the wire for at least 8 inches of its length across the position the clamp will occupy when installed. Place the two conductors side by side in the shell as indicated below and then proceed with the operation of inserting the shim as outlined in Paragraphs 2.02 and 2.03.



3.04 Any minor sag adjustments can be made in the manner described in Paragraph 2.04.

3.05 Complete the installation of the clamp on the twisted pair wire as outlined in Paragraph 2.05 for parallel wire.