

## DROP AND BLOCK WIRING

### WIRE GUARD

#### 1. GENERAL

1.01 This section covers the description of wire guards and their use as protection for drop wire against abrasion.

1.02 This section is reissued to delete the S wire guard which is rated Manufacture Discontinued.

1.03 The best protection against abrasion is obtained by stringing drop wire clear of obstructions. This should be done where practicable even though it means longer wire runs.

#### 2. PROTECTING DROP WIRE AGAINST ABRASION

2.01 Protect drop wire with wire guards where it is impracticable to avoid contact with:

- (a) Tree limbs or branches larger than 1/2 inch in diameter.
- (b) Obstructions in the span such as garages, guys, signs, street lighting standards, etc.
- (c) Suspension strand of ring-supported cable at span clamps in drop wire run between pole and span clamp.
- (d) Small branches (less than 1/2 inch in diameter), twigs, and foliage if it is impracticable to obtain clearance for two or three years. Refer to 620-310-200 covering tree pruning methods for a list of fast and slow growing trees.

#### 3. DESCRIPTION OF WIRE GUARD

3.01 **P Wire Guard**—This is a slotted guard of black plastic which can be spiraled on the drop wire or the drop wire pulled through it. P guards are furnished in 3-foot lengths.

#### 4. INSTALLING WIRE GUARDS

##### General

4.01 Center wire guard on a drop with respect to the point of contact with tree limbs or other obstructions.

4.02 Extend the wire protection at least 3 feet beyond each side of the tree exposure in order to provide for subsequent tree growth.

4.03 Use a B clip crimper for sliding guards to the proper position on the drop wire and for placing wire clips to hold guards in place.

4.04 Hold wire guards in position by placing wire clips on the drop against the ends of the protection. Where more than three guard lengths are used, placed intermediate wire clips not more than three guard lengths apart.

4.05 **P Wire** guards can be placed on drop wire by means of a hook tool fashioned from the tail wire of a drop wire clamp, or by using a screwdriver as a guide. (See Fig. 1, Fig. 2, and Fig. 3.)

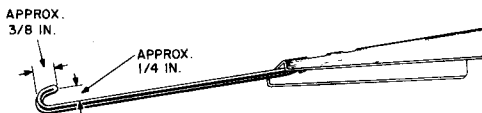


Fig. 1—Hook Fashioned From Drop Wire Clamp

4.06 Place P wire guard on drop wire as follows:

- (1) Spiral one end of the wire guard on the drop wire for a length of about 4 inches.
- (2) When using the hook: Insert the hook in the slit of the guard and hold it close to the drop wire. Grip the part of the guard

already on the wire and pull guard away from the hook as shown in Fig. 2.

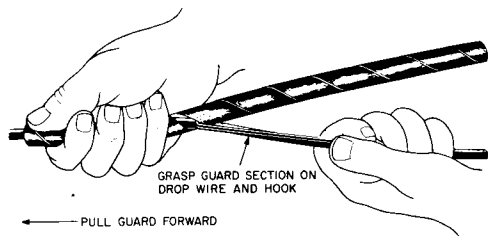


Fig. 2—Placing P Wire Guard Hook Method

(3) When using screwdriver: After inserting the screwdriver blade into the part of the guard not on the wire and holding it in position shown in Fig. 3, grip the part of the guard already on the wire and pull guard away from the screwdriver.

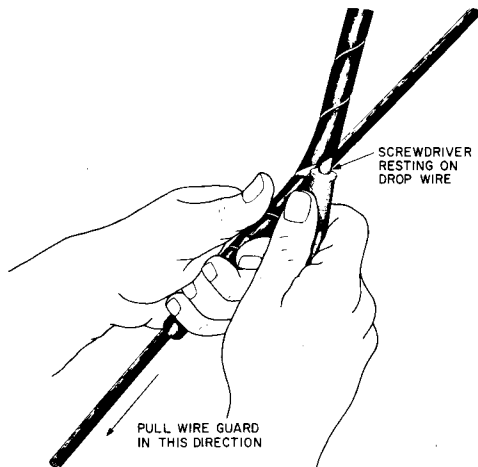


Fig. 3—Placing P Wire Guard Screwdriver Method

#### Typical Installation of P Wire Guard

4.07 Methods of protecting drop wire against abrasion are illustrated in Fig. 4 through 8.

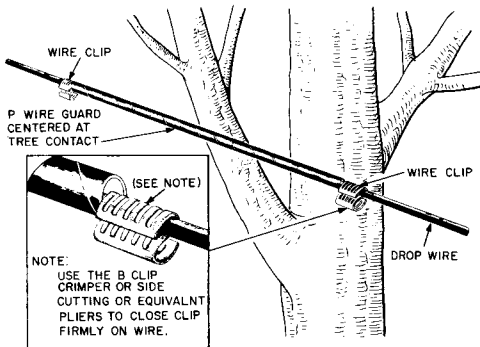


Fig. 4—Protection For Wire At Tree Contact Larger Than 1 1/2 Inch Diameter

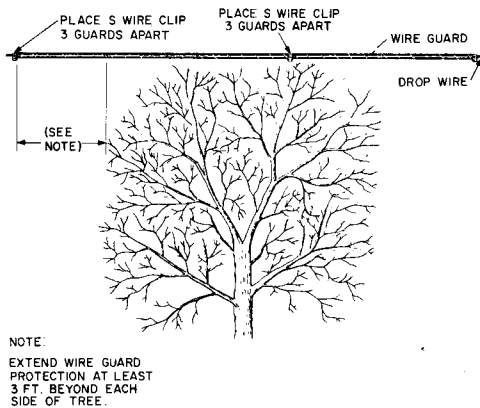


Fig. 5—Protection For Wire Over Tree

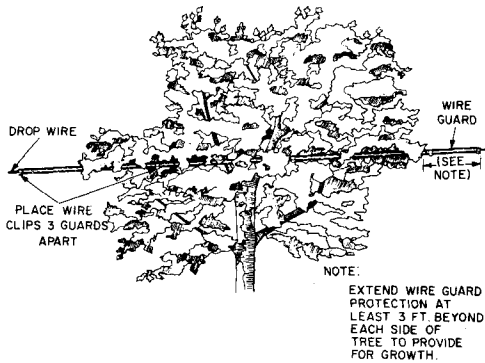


Fig. 6—Protection For Wire Through Tree

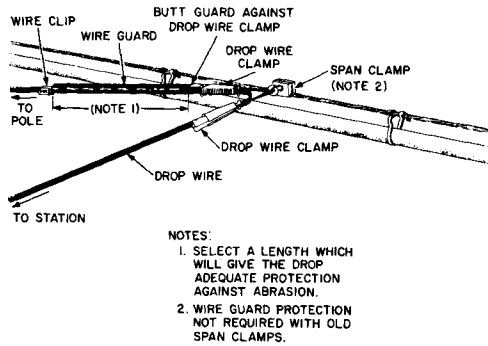


Fig. 8—Protecting Wire From Abrasion At Span Clamp on Strand For Ring Supported Cable

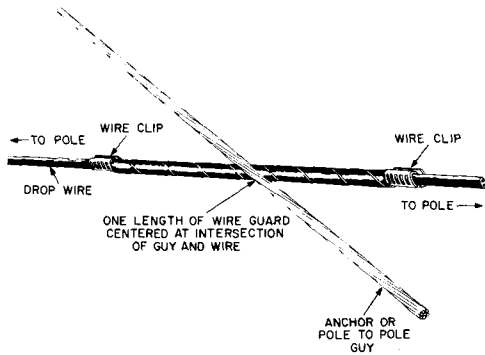


Fig. 7—Protection For Wire At Guy in Span