

DROP AND STATION WIRING ATTACHMENTS ON ALUMINUM, STEEL, AND VINYL SIDING

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1. GENERAL

1.01 This practice provides procedures for mounting drop wire, station protectors, station wiring and associated attachments on aluminum, steel and vinyl sided homes.

1.02 Prior to beginning any work, contact the customer and obtain permission to attach the required equipment. Be sure the customer is aware of the necessity to drill a limited number of holes to mount equipment. If permission cannot be obtained and no other means of giving the customer service is available (other than direct attachment), contact your supervisor.

2. MATERIAL

2.01 This paragraph lists the material covered in this practice. CTS numbers are listed if available.

a. E Drop Wire Clip	CTS #68-11-017-1
b. Angle Screw	CTS #68-21-105-8
c. S Knob	CTS #68-34-002-8
d. Metal Siding Clip (Horizontal)	CTS #68-21-189-9
e. Metal Siding Clip (Vertical)	CTS #68-21-190-2
f. C Porcelain Knob	CTS #68-34-001-1
g. Protector 2100 H	CTS #70-75-053-0
h. 350 Type Protector	CTS #70-75-056-4
i. Drop Wire Hook	CTS #68-21-063-9

3. SAFETY PRECAUTIONS

3.01 After customer's permission has been obtained to make required attachments, check aluminum or steel siding for foreign voltage using the B Voltage Tester (CTSP 490-050-106). Choose an inconspicuous location such as below the last panel to make this test. Be sure metal toothed disc penetrates the enamel.

3.02 If using an electrical drill, be sure that all requirements for grounding this tool are followed. Refer to CTSP 405-705-320.

4. GENERAL PRECAUTIONS

4.01 When working on aluminum or steel siding and a ladder is required, care should be taken not to dent or mar the siding. Attempt to place ladder as close as possible under a lap joint so as to avoid undue pressure on the panel.

4.02 When working on vinyl siding, every effort should be made to avoid placing a ladder against this siding. If this is not possible, follow the procedures in paragraph 4.01.

NOTE: Extreme cold weather affects vinyl siding and may cause it to crack or shatter if undue pressure is applied. If unsure as to type of siding on house, contact the customer.

4.03 When drilling holes in aluminum or steel siding for mounting protectors, knobs, clamps, etc., make a small circle on the siding using a sharp pointed tool such as the side of a screwdriver blade. Circle should not be larger than 1/4-inch in diameter. Scribe a cross within the circle. This will prevent enamel from chipping. See Figure 1.

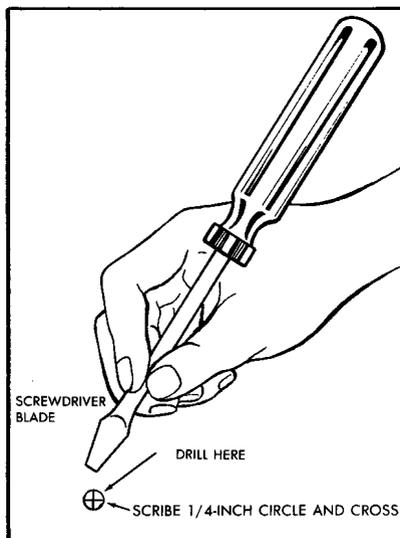


FIGURE 1.

4.04 Always use a sharp bit in a hand type push drill. Use short light strokes. **DO NOT** use a sharp tool such as an awl or ice pick. This will indent the panel, or in the case of vinyl siding, perhaps crack or shatter the panel.

4.05 When placing self-tapping screws in aluminum or steel siding, tighten screws only until they are snug. **DO NOT** exert extra pressure after screw has become snug as this will raise the aluminum or steel siding at the point of contact.

4.06 When placing attachments on vinyl siding, first determine the type of backing under the siding. (In new home construction, this is normally a composition material.) This will determine the type of fastener or attachment to use.

5. INSTALLATION OF DROP WIRE, PROTECTOR, STATION WIRE AND ATTACHMENTS

5.01 Drop Wire: After determining where drop wire will contact the house, locate a wall stud or other solid location to mount the angle screw and knob or drop wire hook. It is very important to locate a solid location, otherwise the weight of the drop may pull the attachment loose and tear the siding. Attach drop wire and drop wire clamp, and form drip loop. When fused type protection is used on flammable or conducting building walls, procelain knobs shall be used to the point of connection with the station protector.

5.02 Protector: Hold protector against siding and mark location using a pencil or marker. (Locate protector as close as possible to lap joint.) Follow procedures for drilling mounting holes as outlined in paragraphs 4.03 and 4.04. Use a spacer of nonrusting type material to get adequate clearance for cover if necessary. When using fused type protection, use the upper two mounting holes in the mounting bracket. See Figure 2.

5.03 Station Wiring: Wherever possible, use the plastic, metal siding clip (see Figure 3) for all horizontal and vertical station wire and ground wire runs. This will eliminate the need for metal clamps and screws. Vertical clips should be used at each panel lap joint. Horizontal clips should be placed at 12 to 15 inch intervals. See Figure 4. To install either the horizontal or vertical siding clip, use the following procedures:

a. To install the horizontal clip:

(1) Place the wire in the hooked portion of the clip so that the flat side will be against the siding for the Pittsburgh interlock or the flat side up for the stacking type.

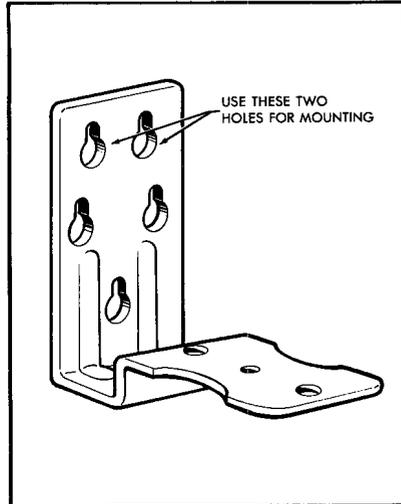


FIGURE 2. 2000 Type Protector Mounting Bracket

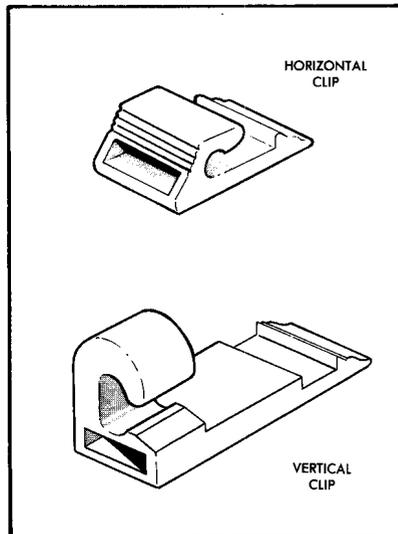


FIGURE 3.

(2) Place the tapered end of the clip (with the wire still in the clip) in the horizontal joint of the siding.

(3) Hold the clip in place with the 4-inch screwdriver by placing the blade in the notch in the bottom of the clip provided for this purpose. While holding the screwdriver with one hand, bump the end of the handle with the heel of the other hand.

NOTE: Use only enough force to properly seat the clip.

(4) Remove any slack from the wire, dress the wire against the siding, and proceed with the next clip. Place the clips 12 to 15 inches apart. See Figure 5.

b. To install the vertical clip:

(1) Place the tapered end of the clip in the horizontal joint of the siding.

(2) Hold the clip in place with the 4-inch screwdriver by placing the blade in the notch in the bottom of the clip provided for this purpose. See Figure 6.

(3) While holding the screwdriver with one hand, bump the end of the handle with the heel of the other hand.

NOTE: Use only enough force to properly seat the clip.

(4) Place the wire into the notch provided and remove any slack in the wire. Place the V clips into every horizontal joint up or down to entrance hole. See Figure 7.

c. When more than one wire is run in the same direction, place each wire in a different lap joint for horizontal runs, and place separate vertical clips for each wire.

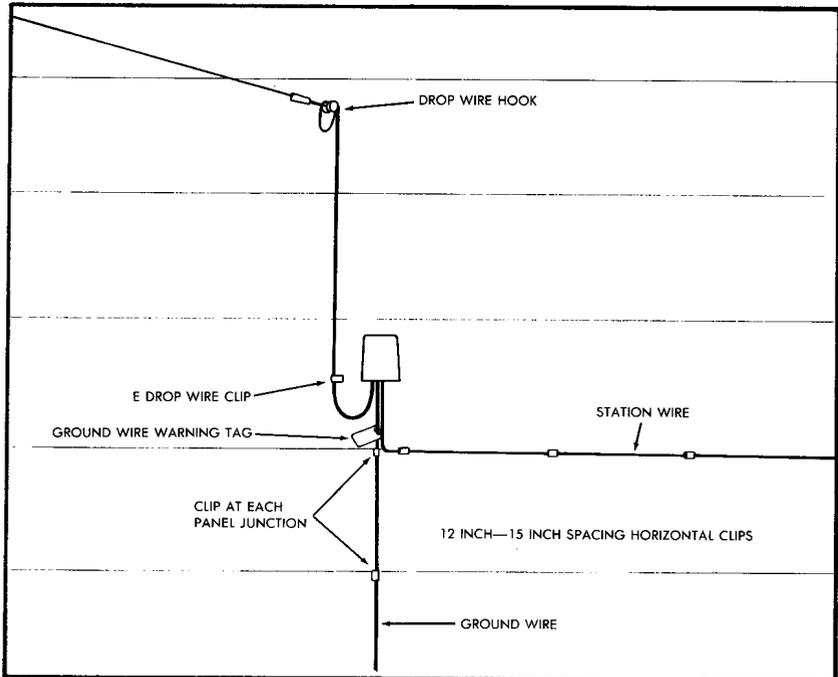


FIGURE 4. Fuseless Protection on Aluminum or Vinyl Siding

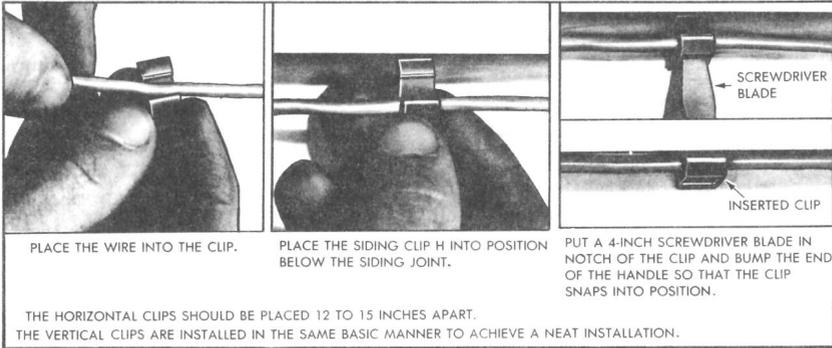


FIGURE 5. Installing Horizontal Clip

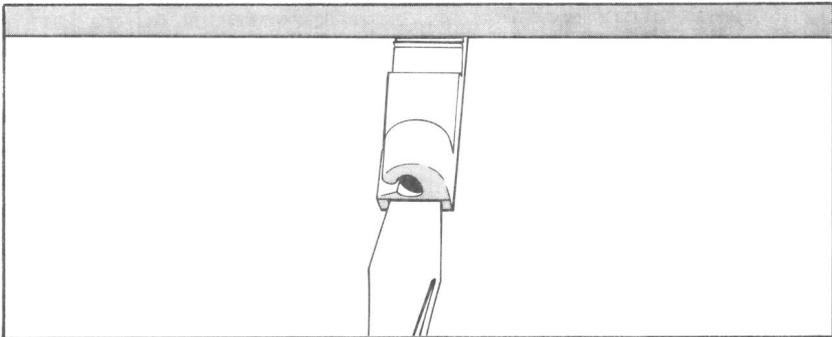


FIGURE 6. Installing the Vertical Clip

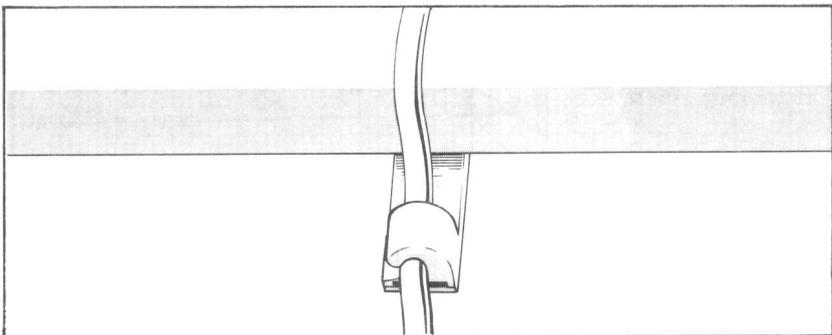


FIGURE 7. Installed Vertical Clip