# C RURAL WIRE

# TREE ATTACHMENTS

## 1. GENERAL

**1.01** This section describes the use of trees for supporting C Rural Wire in areas where it is considered uneconomical to use poles, and where there are trees suitable for making tree attachments.

**1.02** A tree attachment consists of:

(a) Sling made from a length of 109H or 109F Steel Line Wire with a B Wire Deadend or wirevise at each end.

(b) Drive hook for securing one end of sling to tree.

(c) D Wire Supports or Deadend Supports for connecting other end of sling to C Rural Wire.

**1.03** The precautions, placing, protection, splicing, etc, described in Division 624 of Plant Series Practices for C Rural Wire shall be observed unless otherwise specified.

**1.04** Before starting operations, check that ***permission*** has been granted and all ***easements and right-of-ways are in order.***

## 2. SELECTING THE ROUTE

**2.01** The route of the wire, while using a zigzag pattern, should be as direct as practical. The trees should be sufficiently out of line to prevent tree and wire contact, when attachments are placed. A pull of 3 to 5 feet is adequate. A pull of 20 feet or more should be avoided. Where corners with pulls over 20 feet cannot be avoided, make deadend attachments directly to the tree on separate drive hooks for each direction. The distance between deadend attachments should conform to 2.04. The attachments and wire shall be located to maintain proper clearance, when loaded with snow or ice, as well as under normal conditions.

**2.02** The trees selected for attaching C Rural Wire should be alive, sound, and at least 8 inches in diameter at the point of attachment.

***Caution: Climbers should not be used when climbing trees.***

**2.03** Class 9 or 10 poles may be used to improve alignment, maintain ground clearance, or to shorten span lengths where suitable trees are not available. These poles should be located 2 or 3 feet out of line so that the C Rural Wire can be suspended in the sling, pulling away from the pole. To maintain the flexibility of the tree line construction, attachments to these poles should be the same as those used for trees.

**2.04** The spans between deadend attachments should be as uniform as practical to prevent uneven distribution of slack in the wire. If possible, a deadend attachment should be made about every 1/2 mile to facilitate construction and maintenance.

## 3. ATTACHMENTS

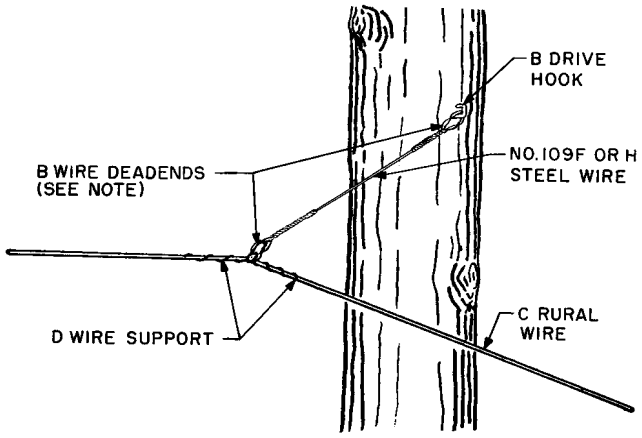
**3.01** Use drive hooks to make attachments to trees. Drive the hook until the opening between the drive hook and tree is about 1/2 inch. Do not remove the bark from the area around the drive hook. If necessary to replace a drive hook, remove the original hook from the tree.

**3.02** Drive hooks placed in trees should be at an angle to the wire route to prevent the hook from pulling out of the tree by any stress placed on the line, such as ice or falling limbs.

**3.03** Slings should be at least 4 feet long. Shorter slings may be used if necessary, but are undesirable because they reduce the amount of slack and flexibility in the line.

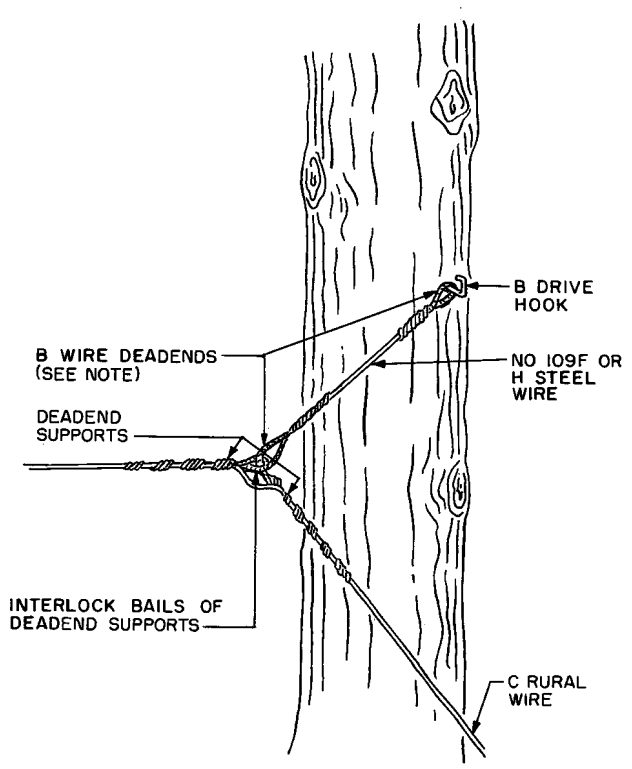
**3.04** For attaching the sling to the C Rural Wire and drive hook, use the B Wire Deadend or the 109 Wirevise. Do not use the 109 Wirevise in a corrosive area.

**3.05** Fig. 1 through 5 illustrate attachments to trees.



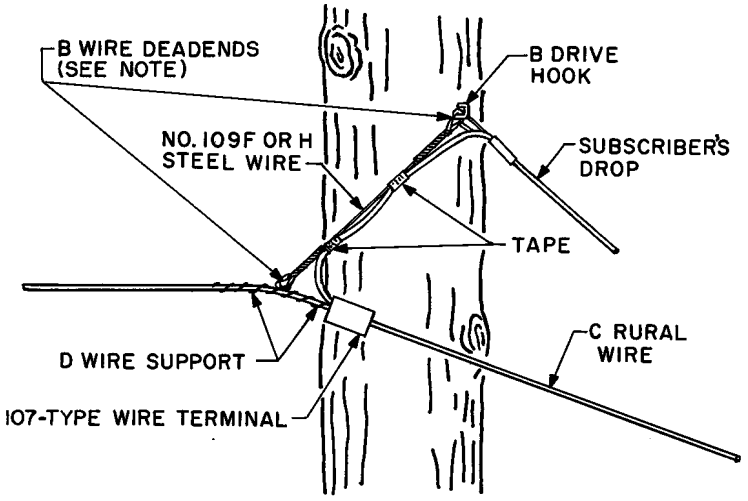

NOTE: USE 5/16" THIMBLE ON B WIRE DEADEND WHERE DEADEND AND SUPPORTS INTERLOCK.

**Fig. 1 — Tree Attachment — Corner of 5 Feet or Less**




NOTE: USE 5/16" THIMBLE ON B WIRE DEADEND WHERE DEADEND AND SUPPORTS INTERLOCK.

**Fig. 2 — Tree Attachment — Corner of More Than 5 Feet But Less Than 20 Feet**




NOTE: USE 5/16" THIMBLE ON B WIRE DEADEND WHERE DEADEND AND SUPPORTS INTERLOCK.

**Fig. 3 — 107-Type Wire Terminal**

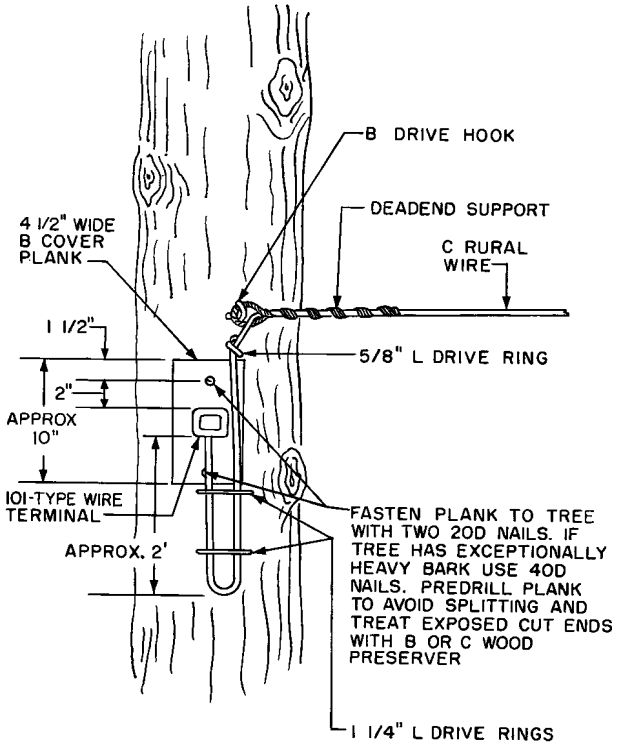



**Fig. 4 — Use of 101-Type Wire Terminals**

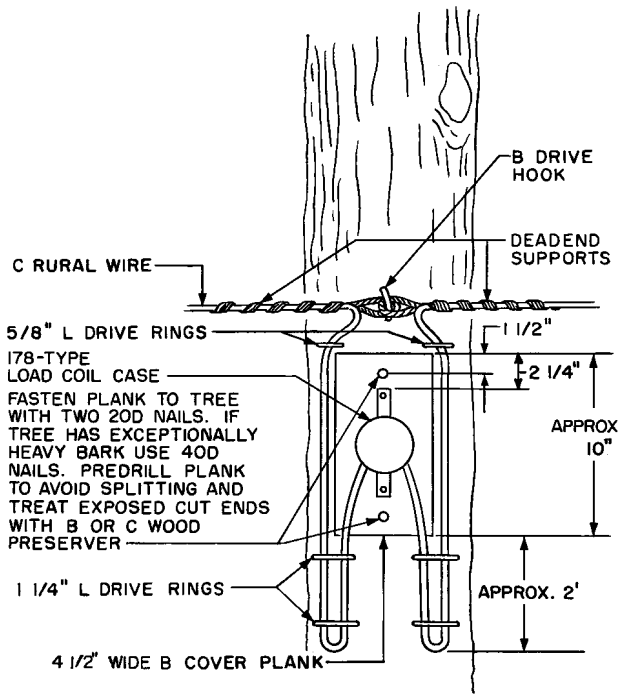



**Fig. 5 — Use of 178-Type Load Coil Case**