

# Sherdec Tree Service

## Support Cables



**W. Tod Miller**

Owner, Certified Arborist and Certified Electrical Line Clearance Arborist



Office: (513) 943-1797  
Fax: (513) 943-0293



[www.sherdectreeservice.com](http://www.sherdectreeservice.com)  
[info@sherdectreeservice.com](mailto:info@sherdectreeservice.com)

© 2006 Sherdec Tree Service LLC. All Rights Reserved.

Tree cabling involves the installation of hardware that is intended to reduce the risk of catastrophic failure. Support cables are used to reduce storm damage by limiting the lateral movement of branches and increasing the stress loads that the supported branch union can sustain.

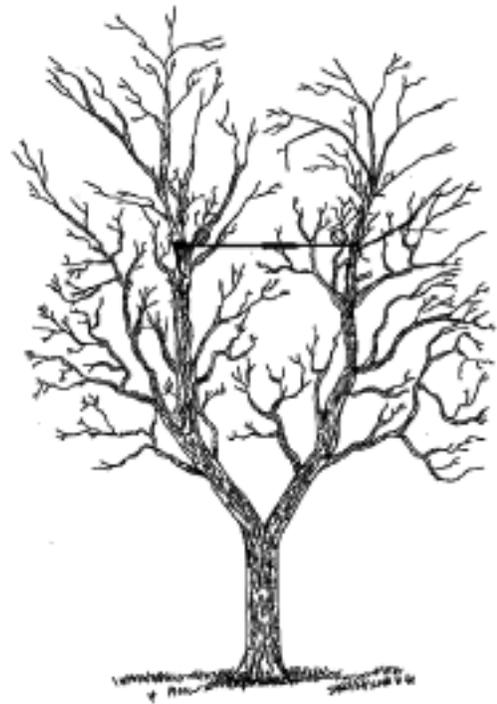
Cables are installed in trees to provide support to weak or potentially dangerous limbs by connecting two or more limbs together. Mechanical support may be needed due to split, decayed or poorly structured limb junctions or the inherent dangers of weak-wooded trees. Poorly structured, multistemmed trees are more susceptible to breaking under the stress of wind or the weight of accumulated ice or snow. It is important to keep in mind that support cables have limitations.

Mechanical devices cannot be relied upon to make a potentially hazardous tree safe; once a defect is present there is always a risk of the tree failing.

Before installing cables in a tree, the tree should be properly pruned and its structure evaluated. Hazardous and dead limbs need to be removed. The wood must be solid and large enough to support the cables. Trees that are too severely damaged should not be cabled, as a false sense of security may be created. Consideration must be given to removing the tree.

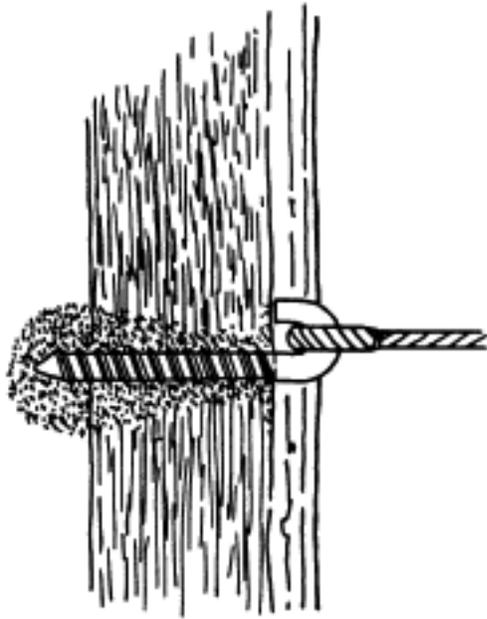
In most situations, Sherdec Tree Service is now using a unique cabling system called the "Cobra Cabling System." This system was invented in Germany and has only recently become available in the U.S. Cobra cables are made of a synthetic fiber that stretches to allow the tree to flex naturally. Allowing the tree to flex in a controlled manner encourages the growth of "reaction tissue" that strengthens weak areas.

Rather than drilling holes into the leads that are to be cabled, Cobra cables utilize a special padded splice loop around the leads; the loop is able to grow with the tree to avoid girdling, but grips tightly under stress. A shock absorber in the middle of the cable prevents the "whiplash effect" that occurs when rigid steel cables are shock loaded.

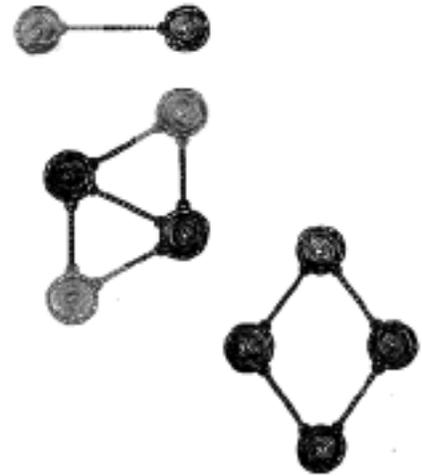


Multiple cables are often recommended to maximize strength; ideally, triangles or boxes should be formed between cabled leads. Cobra cables are providing new options in some cases where trees may have had to be removed in the past.

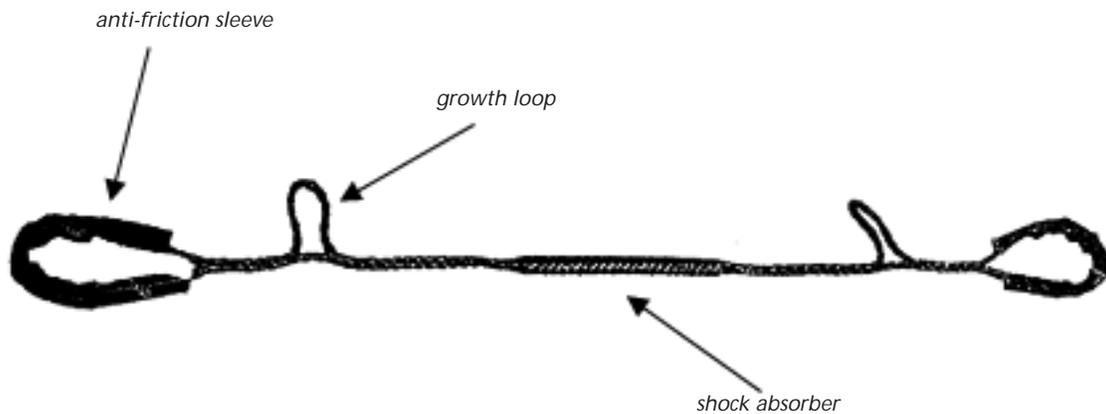
The installation of cables in a tree represents an ongoing responsibility. All hardware in trees should be inspected at least annually to ensure proper placement and make adjustments. Cobra cables should be moved up as the tree grows taller, and all of the components (other than the rope, which lasts 10-15 years) may be reused.



*Decay Commonly Associated With Lag Hooks and Through-Bolts Used to Attach Steel Cables*



*Examples of Formations of Cables; Single, Paired Triangle, Box*



*Full Cobra Cable System; Note Anti-Friction Sleeve, Growth Loop, and Shock Absorber. This Support Cable System Allows Natural Flexing of Trees, Stimulating Natural Growth and Strengthening Responses.*