

# ASWP 09 R0

## Installation of Hardware in Woody Plants



### Revision History

Version	Revision Date	Brief Description of Revisions
R0	February 2016	Document has been updated to new format.

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Workplace Safety & Prevention Services wishes to express its appreciation to those who have assisted in the preparation of the **Arborist Safe Work Practices** guide.

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## 1.0 Introduction

The following are the general mandatory requirements for an arborist when installing hardware in woody plants.

## 2.0 Hazards

The following hazards have been identified to aid in establishing and maintaining a safe work environment when installing hardware in woody plants:

Biotic conditions

Climatic Conditions

Electrical

Ergonomics

Gravity

Mechanical

Pedestrian and Vehicular traffic

**Note:** The above list of hazards is not a complete list and a thorough job plan should be completed to identify existing hazards found at the work site.

## 3.0 Legislation / Safe Work Practices

The following information has been provided listing relevant arborist safe work practices and legislation requirements:

- ASWP01 General Legislation
- ASWP02 Work in a Safe Environment
- ASWP02 Protect Self and Others
- ASWP02 Arborist Job Planning
- ASWP07 Arborist Hand and Power Tools
- ASWP 04 Working at Heights
- Fire Marshall's Act

## 4.0 Mandatory Information

The following are the general mandatory requirements for an arborist when installing hardware in woody plants.

- All woody plants shall be inspected prior to ascending
- If pruning or dead wooding is required it should be done prior to installing hardware
- Arborists and other workers on the ground should not stand under the work area of a tree when a cabling system is being installed
- The Danger Zone must be identified and controlled when an overhead hazard exists

- Tools shall be raised, lowered and carried in a manner that will not create an overhead hazard
- All appropriate Personal Protective Equipment (PPE) must be worn
- Arborists in trees should be positioned off to one side in order to avoid injury in case of cable system failure, such as when a block and tackle or a hand winch, are released

## 5.0 Work Practices

The following information will provide general information that is required to place hardware in woody plants.

### 5.1 Site Inspection

Step	Action
Inspect woody plant	Identify hazards including but not limited to: <ul style="list-style-type: none"> <li>• Electrical wires in close proximity to tree</li> <li>• Signs of tree decay</li> <li>• Cavities, cankers and splits</li> <li>• Dead and broken limbs</li> <li>• Root decay and damage</li> </ul>
Inspect tools and equipment required for the work	Inspect tools for hazards including but not limited to: <ul style="list-style-type: none"> <li>• Operational</li> <li>• Sharpness</li> <li>• Cracks, damage</li> <li>• Loose connections</li> <li>• Appropriate certification required (i.e. di-electrical testing)</li> </ul>
Determine safest route of ascent	<ul style="list-style-type: none"> <li>• Inspect for structurally sound tie in points</li> <li>• Refer to ASWP03 Climbing Trees and ASWP04 Work at Heights</li> </ul>

### 5.2 Installing Hardware in Tree

Step	Action
Determine location for hardware	<ul style="list-style-type: none"> <li>• Inspect tree for defects and hazards associated with the location of the work</li> </ul>
Secure work position in the tree	<ul style="list-style-type: none"> <li>• Ascend tree as per the Climbing Trees and Work at Heights documents</li> </ul>
Raise tools	<ul style="list-style-type: none"> <li>• Ensure tools are secured in a tool bag</li> </ul>

Step	Action
Drill holes if required	<ul style="list-style-type: none"> <li>• Maintain a firm grip on drills to protect from drill kick back twisting action</li> <li>• Maintain the appropriate Limits of Approach to electrical conductors</li> <li>• Maintain good body positioning while drilling</li> </ul>
Install hardware	<ul style="list-style-type: none"> <li>• Install hardware as per industry best practices</li> </ul>

### 5.3 Install Hardware from the Ground

Step	Action
Determine location for hardware	<ul style="list-style-type: none"> <li>• Inspect tree for defects and hazards associated with the location of the work</li> </ul>
Install hardware	<ul style="list-style-type: none"> <li>• Install hardware as per industry best practices</li> </ul>