

ASWP 11 R0

Aerial Device Operation



Revision History

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

ARBORIST SAFE WORK PRACTICES

DISCLAIMER

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

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1.0 Introduction

The purpose of this document is to outline the safe work practices involved in operating an Aerial Device.

2.0 Hazards

The following hazards have been identified to aid in establishing and maintaining a safe work environment when operating an Aerial Device:

- Biotic Conditions
- Cuts and Abrasions
- Climatic Conditions
- Electrical Conditions
- Ergonomics
- Gravity
- Mechanical

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 arborist safe work practices and legislation requirements:

- ASWP01 General Legislation
- ASWP01 Work in a Safe Environment
- ASWP02 Protect Self and Others
- ASWP02 Arborist Job Planning
- ASWP12 Chain Saw Operation
- Workplace Hazardous Material Information System (WHMIS)
- Temporary Conditions – Ontario Traffic Manual

Legislation	RRO / RSO	Section Referenced
Industrial	851/90	42, 43, 57, 60, 79
Construction	213 / 91	26, 67, 68, 69, 93, 94, 95, 96, 97, 98, 101, 104, 105, 108, 109, 143, 144, 145, 146, 147, 148, 149, 182, 183, 186, 187, 188

4.0 Mandatory Information / Work Practices

The following are the general mandatory requirements for an arborist when working with an aerial device.

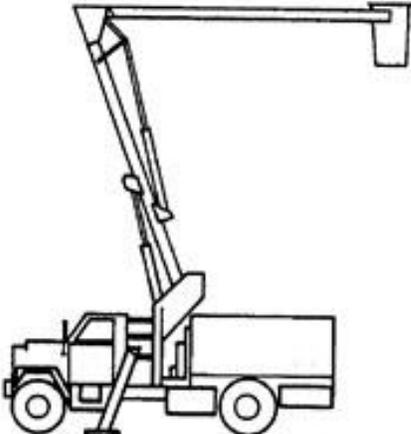
- The manufacturer's instructions must be followed for all maintenance and operation instructions
- Ensure manufacturer's instructions are readily available
- Operators shall wear appropriate Personal Protective Equipment (PPE)
- Operators shall wear an appropriate Fall Protection System
- The Operator of the Aerial Device will control the work site and communicate directions to the ground person
- Only Qualified Personnel may operate an Aerial Device
- All personnel must know the control measures needed for vehicle and pedestrian control
- All appropriate workers and their supervisors shall be familiar with, and competent in, the execution of the rescue technique; including review and practice Aerial Device rescue and evacuation procedures at least annually
- All buckets must contain a rope of sufficient length to raise a bucket evacuation device to be used in Aerial Device rescues
- Workers should maintain three-point contact when entering or exiting an Aerial Device
- When transferring between an Aerial Device to a tree or to another Aerial Device during an evacuation, the worker must be secured at all times with a fall protection system
- Ensure manufacturer's instructions are readily available and have been understood by the operator

5.0 Work Practice

The following information will provide general information which is required when working with aerial devices.

Note: Refer to owner / operator manuals for specific aerial device operation / maintenance.

5.1 Setup Aerial Device

Step	Action
Inspect job site for hazards	Inspect tree for: <ul style="list-style-type: none"> • Electrical hazards • Decay within the tree • Location of tree in relation to vehicle and pedestrian traffic • Ground conditions / slopes
Secure work site	<ul style="list-style-type: none"> • Refer to job plan • Identify Drop Zone • Setup appropriate work site boundaries • Inspect aerial device emergency equipment • Refer to Traffic Control – Temporary conditions – Ontario Traffic Manual Book 7
Inspect aerial device	<ul style="list-style-type: none"> • Follow the manufacturer’s instruction for specific checks and tests • Inspect bucket, booms, outriggers, etc.
Setup aerial device for checks (Figure 1) <p style="text-align: center;">Figure 1</p> 	<ul style="list-style-type: none"> • Follow the manufacturer’s instruction for setup procedures • Ensure that all personnel are clear of descending outriggers

Step	Action
Setup aerial device for work	<ul style="list-style-type: none"> • Follow manufacturer's instruction in setup procedure of aerial device <p>Note: Ensure that all personnel are clear of descending outriggers.</p> <ul style="list-style-type: none"> • Ensure a rope of sufficient length to raise a bucket evacuation device to be used in Aerial Device rescues is with the basket • Inspect bucket, liner and chain saw scabbard for defects
Inspect Fall Arrest System	<ul style="list-style-type: none"> • Inspect full body harness and shock absorbing lanyard as per manufacturer's information and Appendix "A" Inspection of Fall Protection System
Put on Fall Arrest System	<ul style="list-style-type: none"> • Adjust and put on Full Body Harness • Attach shock absorbing lanyard to full body harness and to the manufacturer's approved anchor point on the aerial device

5.2 Operation of Aerial Device

Step	Action
Position booms to the work	<ul style="list-style-type: none"> • Operate Aerial Device according to manufacturer's instruction • Ensure booms maintain the appropriate Limits of Approach to electrical apparatus • Ensure Ground Assistant(s) are clear of the Drop Zone of trees and brush
Begin work	<ul style="list-style-type: none"> • Control the Drop Zone • Ensure adequate communication between the operator and Ground Assistants • Operators must not stand on the lip of the bucket during operations • Maintain Limits of Approach of equipment and personnel from energized electrical apparatus • Refer to ASWP04 Working at Heights for use

Step	Action
	of chain saw aloft

5.3 Starting and Using a Chain Saw Aloft

Step	Action
Select appropriate chain saw for the work	
Inspect saw / fuel saw	<ul style="list-style-type: none"> • Refer to ASWP12 Chain Saw Operation
Start saw/ warm up	<ul style="list-style-type: none"> • Secure safe location from pedestrian and vehicular traffic • Start saw on ground following manufacturers manual
Verify chain brake operation	<ul style="list-style-type: none"> • Follow manufacturer's instructions
Shut off saw	
Select scabbard	<ul style="list-style-type: none"> • Ensure it is the appropriate size and weight for saw and aerial device basket design • Ensure scabbard is designed for an electrical environment if used in that environment
Inspect scabbard	<ul style="list-style-type: none"> • Check for physical damage of attachment mechanism • Check for cracks or damage to overall scabbard
Attach saw scabbard to bucket	<ul style="list-style-type: none"> • Determine location for scabbard on bucket for ease of work • Keep fingers away from pinch points when attaching scabbard • Ensure scabbard is securely attached to bucket prior to using
Insert saw in scabbard	<ul style="list-style-type: none"> • Keep fingers away from pinch points when inserting chain saw
Locate aerial device to cutting location	<ul style="list-style-type: none"> • Maintain Limits of Approach to electrical apparatus • Position body to ensure that safe work positioning can be maintained • Ensure work site is clear of vehicles and pedestrian traffic • Control Drop Zone
Remove saw from scabbard	<ul style="list-style-type: none"> • Communicate with ground person prior to starting saw on actions to be taken • Securely grasp saw
Start saw	<ul style="list-style-type: none"> • Engage chain brake • Appropriate Personal Protective Equipment is worn • Maintain Limits of Approach to electrical apparatus

Step	Action
	<ul style="list-style-type: none"> • Place body of saw into branch union of tree if available • Ensure saw bar will be clear of branches/foliage • Ensure area below saw is clear • Keep saw below lip of bucket. • Always start saw from the outside of the bucket structure • Secure footing in bucket • Grasp handle securely • Pull starter cord and push saw down and away from the bucket
Perform cut	<ul style="list-style-type: none"> • Ensure good footing inside the bucket • Maintain Limits of Approach to electrical apparatus • Keep all cuts below shoulder level • Maintain proper body positioning, try not to over extend body • Move aerial device to make body positioning easier • Ensure appropriate cuts are used
Shut off saw	<ul style="list-style-type: none"> • Apply chain brake • Replace chain saw in scabbard
Relocate aerial device	<ul style="list-style-type: none"> • Maintain Limits of Approach, to electrical apparatus • Ensure area is clear below cut area • Notify ground person of intentions to move • Secure chain saw between cuts to prevent falling

5.4 Maintenance of Aerial Device

Step	Action
Perform maintenance	<ul style="list-style-type: none"> • Perform and document maintenance as per manufacturer's instruction

5.5 Evacuation / Rescue from an Aerial Device

Step	Action
Aerial Device Evacuation	<ul style="list-style-type: none"> • Perform Aerial Device Evacuation at least annually.
Aerial Device Rescue	<ul style="list-style-type: none"> • Perform Aerial Device Rescue at least annually.

5.6 Transportation

Step	Action
Secure Aerial Device for transport	<ul style="list-style-type: none">• Secure Aerial Device as per manufacturer's instruction• Secure all tools and accessories