

# ASWP 13 R0

## Brush Chipper 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 SafeWorkPractices** guide.

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# 1.0 Introduction

This document outlines the safe use of a brush chipper.

**Note:** Not all practices outlined are applicable to all models of chippers.

## 2.0 Hazards

The following hazards have been identified to aid in establishing and maintaining a safe work environment when operating a brush chipper:

Biotic Conditions  
Climatic Conditions  
Electrical Conditions  
Ergonomics  
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
- Temporary Conditions – Ontario Traffic Manual

Legislation	RRO / RSO	Section Referenced
<a href="#">Industrial</a>	851/90	79, 80, 81, 82, 83, 84, 85
<a href="#">Construction</a>	213 / 91	67, 68, 69, 93, 94, 95, 96, 101, 104, 105, 108, 109

## 4.0 Mandatory Information / Work Practices

The following are the general mandatory requirements for an arborist when working with a brush chipper.

- Operators shall wear appropriate Personal Protective Equipment (PPE)
- Only qualified personnel may operate a chipper
- Routine inspection and maintenance must be completed as per the manufacturer's instructions
- Do not wear jewelry or clothing that could become entangled in brush or moving parts
- Secure long hair so that it does not become entangled in moving parts
- Never place any body parts in the in-feed chute for any reason while the machine is operating
- Never place yourself in front of the discharge chute
- Inspect chipper prior to use
- Ensure all guards and protective devices are operational and in place
- Ensure manufacturer's instructions are readily available and have been understood by the operator

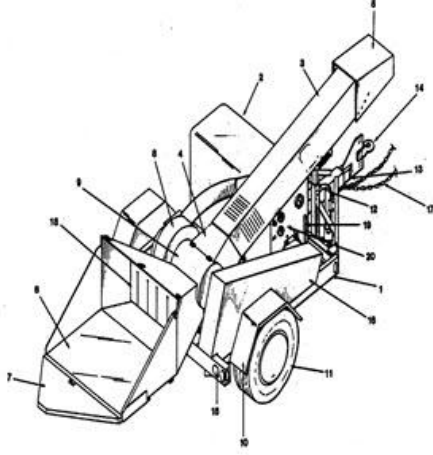
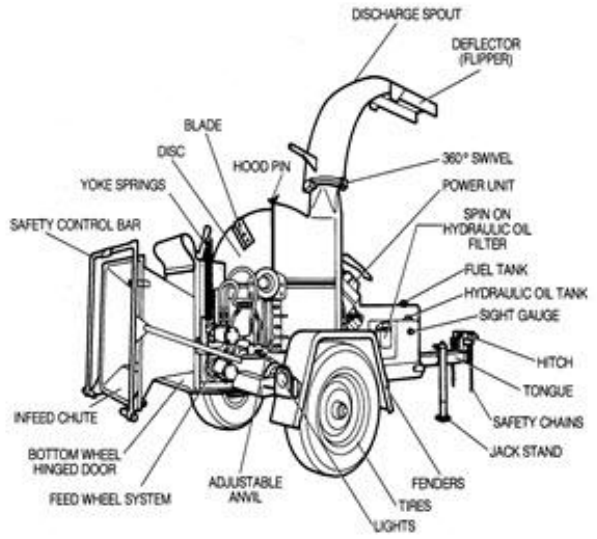
## 5.0 Work Practice

The following information will provide general information that is required when working with a brush chipper.

**Note:** Refer to owner / operator manuals for specific brush chipper operation / maintenance.

### 5.1 Pre-operational Checks

Step	Action
Inspect chipper  <b>Note:</b> An example of chipper inspection points are shown in Figure 1	<ul style="list-style-type: none"><li>• Inspect as per the manufacturer's instructions</li><li>• Inspect guards</li><li>• Ensure the manufacturer's instructions are available</li></ul> <b>Note:</b> An example of a chipper inspection points are shown in Figure 2.

Step	Action
<p><b>Figure 1</b></p>  <p>1. TRAILER 2. ENGINE 3. EXHAUST CHUTE 4. EXHAUST TRANSITION 5. DISCHARGE BONNET 6. FOLDING FEED TABLE 7. OPERATOR GUIDE 8. BLOWER AND FLYWHEEL HOUSING 9. ROTOR AND BLADES HOUSING 10. FENDERS 11. TIRES 12. DROPSIDE 13. DRAWBAR 14. TOWING EYE 15. LIGHTS 16. BELT GUARD 17. SAFETY CHAINS 18. RUBBER SHROUD 19. CLUTCH LEVER 20. ENGINE CONTROLS</p>	<p><b>Figure 2</b></p> 
Connect chipper	<ul style="list-style-type: none"> <li>Secure connection to towing vehicle</li> <li>Secure safety chains</li> <li>Plug in lights and brakes if applicable and ensure proper operation</li> </ul>
Check directional control arm – if equipped	<ul style="list-style-type: none"> <li>Ensure directional control arm is stopping and redirecting in-feed rollers as per the manufacturer's instructions</li> </ul>
Secure work site	<ul style="list-style-type: none"> <li>Secure work site with traffic control devices and pedestrian barriers as per Ontario Traffic Manual Book 7</li> </ul>

## 5.2 Operation of Chipper

Step	Action
Inspect brush pile	<p>Inspect brush pile for:</p> <ul style="list-style-type: none"> <li>Nails</li> <li>Metal objects</li> <li>Foreign objects.</li> <li>Cut larger limbs into small sections to allow free movement through chipper</li> </ul>
Lift brush onto feed table	<ul style="list-style-type: none"> <li>Bend at the knees to lift brush</li> </ul>

Step	Action
Feed brush into chipper	<ul style="list-style-type: none"> <li>• Ensure that hands and loose clothing do not become entangled with the brush</li> <li>• Do not stand directly behind the in-feed chute of the chipper</li> <li>• Do not feed chipper from the roadside</li> <li>• Turn away from roadside to retrieve more brush</li> <li>• Do not place hands or feet inside chipper in-feed chute</li> <li>• Larger limbs should be cut into smaller pieces to allow freer movement into chipper</li> </ul>
Free stuck limbs	<ul style="list-style-type: none"> <li>• Limbs lodged in machine can be freed by operating the directional control lever (if equipped)</li> </ul> <p><b>Note:</b> For chippers with no directional control valve, follow the Removing Blockage section below.</p>

### 5.3 Emergency Shut Down of Chipper

Step	Action
Refer to manufacturer's instruction for further specific information	
Move directional control arm to the neutral position – If equipped	<ul style="list-style-type: none"> <li>• Stop movement of the in-feed rollers</li> </ul>
Move directional control arm to the neutral position – If equipped	<ul style="list-style-type: none"> <li>• Shut down machine to stop knives</li> </ul>

### 5.4 Removing Blockage (Chipper)

Step	Action
Shut down chipper	<ul style="list-style-type: none"> <li>• Shut down chipper</li> <li>• Secure chipper using Lock Out Procedures</li> </ul>
Follow manufacturer's instructions for	

removal of blockage	
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