

# **BAUMALIGHT™**

## **Drop Saw**

### **OPERATOR'S MANUAL**

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# 1 INTRODUCTION

## 1.1 Overview

Congratulations on your choice of a Baumalight Drop Saw to complement your pruning, trimming and clearing operation. This equipment has been designed and manufactured to meet the needs of a discriminating buyer for efficient clearing of brush, shrubs and trees.

The blade is hydraulic powered by the hydraulic system on your skid steer or excavator.

Replaceable bearings are provided at major pivot points for extended service life.

Safe, efficient and trouble free operation of your Drop Saw requires that you and anyone else who will be operating or maintaining the Drop Saw, read and understand the Safety, Operation, Maintenance and Troubleshooting information contained within the Operator's Manual.

This manual covers the Baumalight Drop Saw, DSH, DSV, DSA, DHX and DXV models. Use the Table of Contents as a guide to locate required information.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Baumalight dealer, distributor or the factory if you need assistance, information or additional copies of the manuals.

When this machine is worn out and no longer in use, it should be returned to the retailer or other party for recycling.

**OPERATOR ORIENTATION** - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the operator's seat and facing in the direction of travel.

## 1.2 Intended Use And Foreseeable Misuse

The Drop Saw is designed to be used by experienced operators, trained in the safe operation of a skid steer or excavator and trained in the hazards related to using the drop saw and the safe use of the drop saw for the intended purpose. Operators will require personal protective equipment to reduce the risk from some hazards that cannot be completely eliminated or controlled by the design of the tool.

Care is required to ensure that the Drop Saw will not come across metallic objects, stones or other materials.

Drop Saw are not designed for use in hazardous atmospheres where there is a risk of fire or explosion due to flammable gases or vapors. Use in hazardous, explosive atmospheres is prohibited.

Serious injury or death of the operator or bystanders may be caused if the drop saw is misused. Misuse may also cause damage to the machine carrying the implement.

# 2 SAFETY

## 2.1 Safety Alert Symbol And Safety Words

You must read, understand and follow the instructions given by the operating unit manufacturers, as well as the instructions in this manual.

The safety information in this manual is denoted by the safety alert symbol:



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

The level of risk is indicated by the following signal words:

### DANGER

**DANGER** - Indicates a hazardous situation, which, if not avoided, **WILL** result in death or serious injury.

### WARNING

**WARNING** - Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

### CAUTION

**CAUTION** - Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

### NOTICE

**NOTICE** - Indicates a situation that could result in damage to the equipment or other property.

## 2.2 Operational Hazards

### WARNING

**Prevent serious injury or death.**

**Read and understand this manual before operating the drop saw.**

**Always stop engine and remove key before leaving operators seat.**

**Never allow anyone near the drop saw during operation.**

**Travel at a safe speed.**

### WARNING

**Prevent serious injury or death from moving parts.**

**Moving parts can crush and dismember.**

**Do not operate without guards and shields in place.**

**Disconnect and lock out power source before adjusting or servicing.**

### WARNING

**Use drop saw only for the designed applications.**

**Any other use may result in personal injury, damage to equipment and may void the warranty.**

**⚠ WARNING**

**Prevent serious injury or death.**

**Verify drop saw is attached to skid steer or excavator before operation or transport.**

**⚠ WARNING**

**Protect from flying debris.**

**Wear proper safety glasses, goggles, or a face shield to protect from flying debris.**

Carefully read all safety messages in this manual and on equipment safety signs. Keep safety signs in good condition and replace missing or damaged safety signs.

New equipment components and repair parts must include the current safety decal.

Learn how to properly operate equipment. NEVER operate or work around this equipment without proper instruction, while fatigued or under the influence of alcohol, prescription or non-prescription medication or if feeling ill.

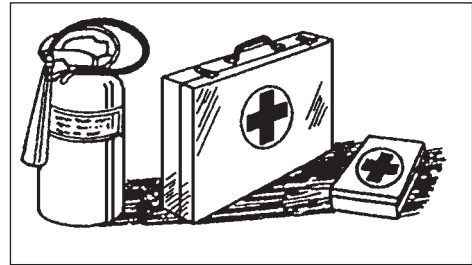
Keep your equipment in proper working condition.

Know the regulations and laws that apply to you and your industry. This manual is not to replace any regulations or laws. Additional information may be found at: [www.asae.org](http://www.asae.org) or [www.osha.gov](http://www.osha.gov).

If you do not understand any part of this manual, contact Baumalight at 866-820-5603.

## Prepare For Emergencies

- Be prepared in case of emergencies.
- Keep a fire extinguisher and first aid kit close to the machine.
- Keep emergency phone numbers close to your phone.
- Know your address so emergency services can locate you if an emergency arises.



## Replace Safety Signs

- Replace missing or damaged safety signs.
- Safety signs are identified in Section 3 of this manual.
- Replacement safety signs are available from your Baumalight dealer.

## Do Not Allow Riders

- NEVER lift or carry anyone on the Drop Saw.
- NEVER use Drop Saw as a work platform.
- NEVER allow passengers on the Drop Saw.

## LOWER OPERATING SPEED

- Keep drop saw low and move at slow speeds on rough or uneven terrain.

## Avoid Rollover

The equipment may rollover, resulting in death or serious injury. To help prevent rollover:

- Travel at a slow speed.
- Avoid sharp turns & sudden movement on slopes.
- Carry drop saw close to the ground.
- Avoid holes, ditches and other obstructions which may cause equipment to rollover.
- Use caution when operating on slopes and do not operate on excessively steep slopes.
- Do not exceed load capacity of equipment.

## Avoid Powerlines & Underground Utilities

### DANGER

**Prevent electrocution.**

**Death or serious injury can result if equipment comes near or contacts power lines.**

**Electrocution can occur without direct contact.**

DO NOT leave the operator's seat if any part of the equipment contacts electric lines or cables.

## Detach Drop Saw Safely

Detach Drop Saw on a firm and level surface. Drop Saw may fall over if detached on sloping or soft surface. Be sure people, livestock and pets are clear of machinery.

Relieve hydraulic pressure before disconnecting hydraulic hoses. See your skid steer or excavator Operator's Manual.

## Raised Attachment

### WARNING

**Crushing hazard.**

**Raised, unsupported drop saw can fall, resulting in death or serious injury.**

**Never enter the area under a raised Drop Saw.**

A raised Drop Saw can lower unexpectedly, resulting in death or serious injury.

NEVER enter area under a raised Drop Saw.

Lower Drop Saw to ground, engage parking brake, shut off engine and remove key before servicing.

## Avoid Loud Noise

### WARNING

**Prolonged exposure to loud noise can cause impairment or loss of hearing.**

**Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.**

## Hazards From Modifying Equipment

Do not make any alterations to your Drop Saw. Altering the equipment may cause unsafe conditions and may void the manufacturer's warranty.

## Avoid Wood Dust Inhalation

### **WARNING**

**Wear an approved respirator (N95 Type as a minimum).**

**Follow local, state and federal regulations.**

The health effects from exposure to wood dust are due to chemicals in the wood or chemical substances in the wood created by bacteria, fungi, or molds.

## Avoid High Pressure Fluids

### **WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage and exposure.**

**Use body and face protection while searching for leaks. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.**

**Use wood or cardboard to detect hydraulic leaks, never use your hands.**

Escaping fluid under pressure can penetrate the skin causing serious injury.

Prevent the hazard by relieving pressure (See skid steer Operator's Manual.) before connecting or disconnecting hydraulic lines. Verify all connections are tight before applying pressure.

Search for leaks with a piece of cardboard or wood.

Protect hands and body from high pressure fluids. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or serious infection may result.

## 2.3 Maintenance Hazards

Before servicing, park machine on a firm and level surface, set parking brake, chock wheels, and place a “Do Not Operate” tag on control panel. Read and understand this manual. If you do not understand any part of the manual, contact Baumalight at 866-820-5603.

Always wear face and/or eye protection, safety shoes, and other protective equipment appropriate for the job.

Do not make unauthorized modifications. Contact Baumalight at 866-820-5603 before you weld, cut/drill holes, or make any other modifications.

Always use Baumalight replacement parts.

### **WARNING**

**Moving parts can crush and cut.**

**Keep clear of moving components.**

**Follow lockout procedure before servicing.**

### **WARNING**

**Entanglement hazard.**

**Keep clear of moving components.**

**Wear proper protective equipment appropriate for the job.**

### **WARNING**

**Crushing hazard.**

**Before performing inspections, service or maintenance:**

**Park machine on firm, level surface.**

**Engage parking brake.**

**Turn engine off and remove key.**

**Place “Do Not Operate” tag on control panel.**

### **WARNING**

**Burn hazard.**

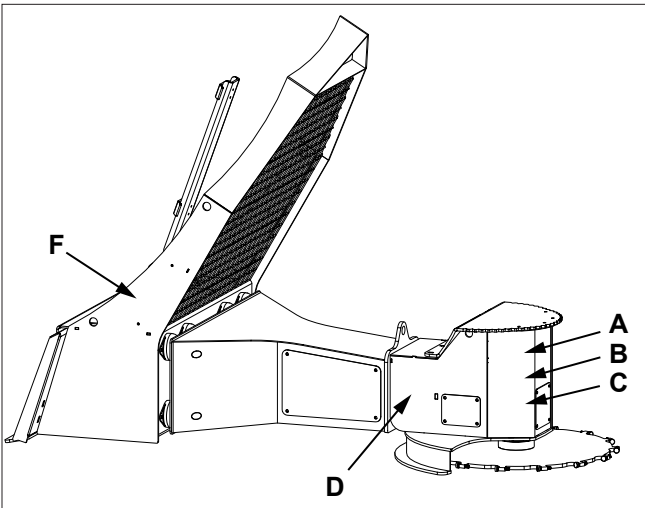
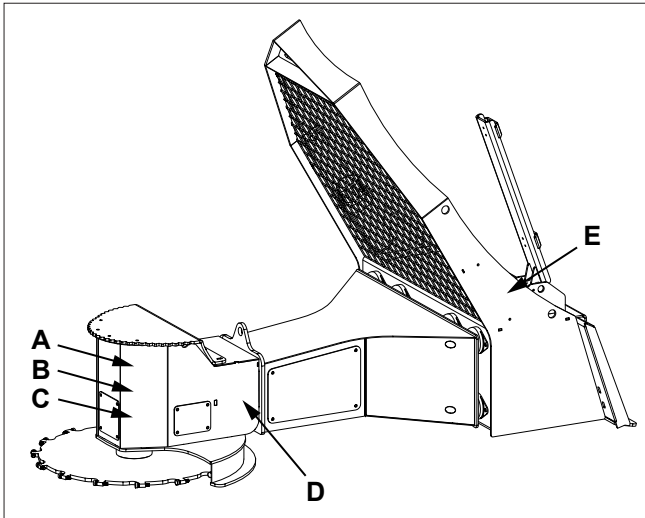
**Hot and high pressure hydraulic oil.**

**Allow oil to cool before servicing.**



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# 3 SAFETY SIGNS



A. Safety Sign



B. MTB-176 Safety Sign



C. MTB-177 Safety Sign



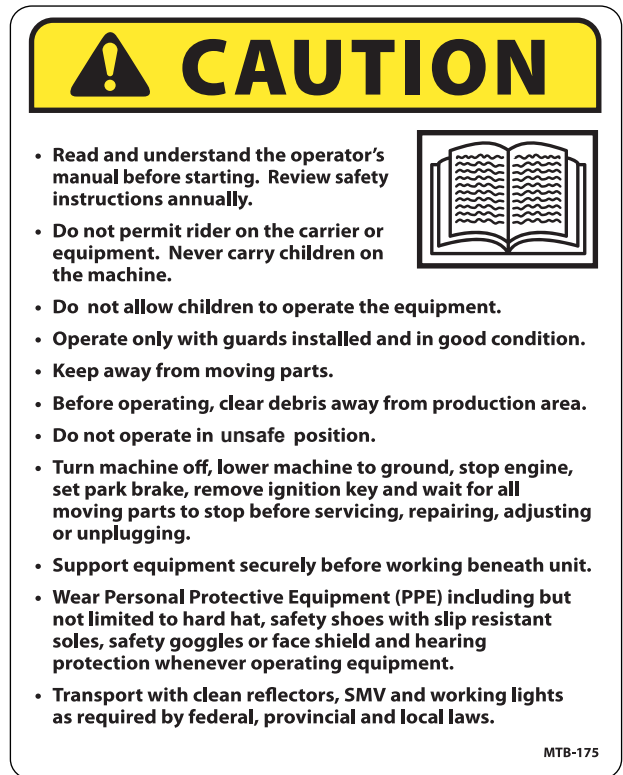
D. MTB-065 Safety Sign



E. MTB-182 Safety Sign



F. MTB-175 Safety Sign



# 4 OPERATION

## 4.1 Preparation For Use

- ⚠ Keep bystanders, livestock, pets, etc away from work area.
- ⚠ Always wear protective equipment appropriate for the job.
- ⚠ Do not operate, work on or around this machine while under the influence of alcohol, drugs or if feeling ill.
- ⚠ Keep clear of moving machinery at all times.
- ⚠ Stop skid steer or excavator engine before leaving operators area.
- ⚠ It is your responsibility to operate this equipment safely. You must be familiar with the equipment and all safety practices before use.
- ⚠ Do not allow untrained or unqualified people to operate this equipment.

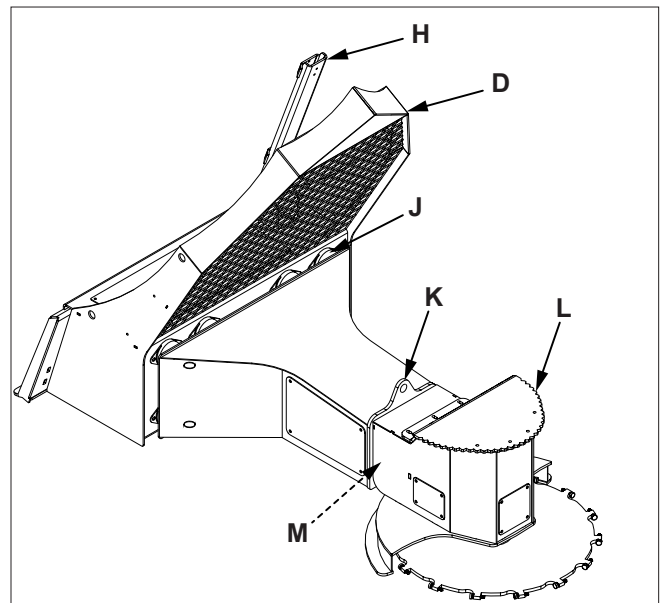
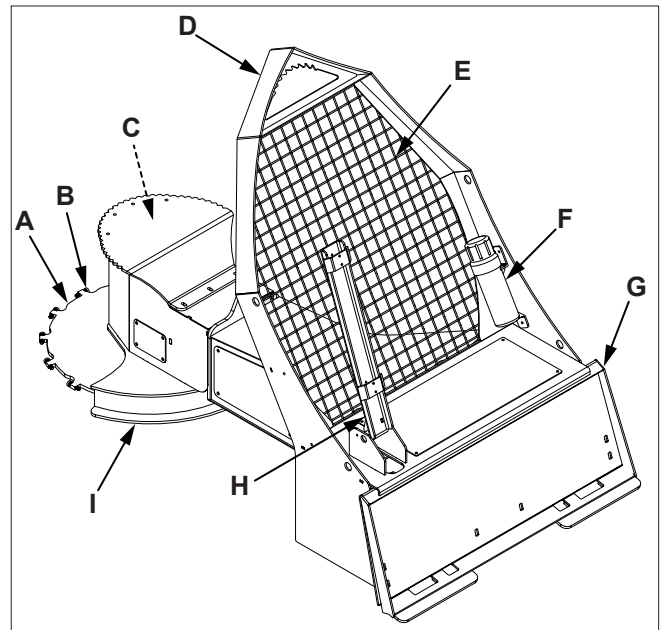
## 4.2 Pre-Operation Check List

- Verify that drop saw is properly attached to skid steer or excavator.
- Verify that hydraulic hoses are properly connected.
- Check for entangled material on blade.
- Verify all guards, doors and covers are installed and secured.
- Verify cutting teeth are in good condition and are tight.

## 4.3 Machine Components

Dashed line indicates item hidden from view unless cover is removed.

- A. Blade
- B. Cutting Teeth
- C. Hydraulic Motor
- D. Angled Push Bar
- E. Protective Mesh
- F. Operators Manual Tube
- G. Quick Attach
- H. Hydraulic Hose Holder
- I. Blade Guard
- J. Rubber Shock Mounts
- K. Lifting Eye
- L. Front Push Bar
- M. Cutting Head Rotation Motor (Optional)



## 4.4 Attach Drop Saw

### **⚠ WARNING**

To prevent injury or machine damage put transmission in park.

Never position yourself between skid steer or excavator and drop saw.

Only experienced and properly trained operator's should operate the skid steer or excavator and drop saw.

1. Read and follow all safety instructions.
2. Attach drop saw to skid steer or excavator. See Operator's Manual.
3. Verify pins are secure in the correct position.
4. Connect hydraulic hoses. Verify hydraulic hoses are clear of pinch areas and moving parts.
5. Move to a clear open area to test functions.

## 4.5 Detach Drop Saw

### **⚠ WARNING**

Prevent serious injury or death.

1. Park machine on firm, level surface.
2. Engage parking brake.
3. Disconnect hydraulic drive.
4. Shut off engine and remove key.

1. Park on a level surface.
2. Lower drop saw to the ground.
3. Shut off engine and remove key.
4. Disconnect hydraulic hoses.
5. Detach drop saw from skid steer or excavator. See Operator's Manual.

## 4.6 Transporting

1. Verify all reflectors and Slow Moving Vehicle (SMV) sign are visible.
2. Raise drop saw slightly off ground.
3. Verify hydraulics are disengaged.
4. Travel at a reasonable and safe speed.

 **WARNING**

**To prevent bodily injury from rotating blade, be sure to disengage hydraulics before transporting drop saw.**

## 4.7 Carbide Teeth Break-In

During the first few hours of use, avoid hitting stones as much as possible to allow the carbide teeth to wear slightly. This can be done by keeping the cutting wheel above ground level. Brand new carbide tips are razor sharp and can chip and shatter easily when they hit hard objects. Once the razor sharpness has worn away, the tips do not chip as easily. Observing these precautions will extend the life of the carbide teeth and reduce operating expenses.

The teeth bolts must be retightened every ten minutes for the first hour of use on a new drop saw.

## 4.8 First Time User Tips

- First, operate all functions in a clear area with throttle at low idle to get a good feel for the controls before you actually move into any brush.
- Slow cutting speed if pressure surges up close to max psi, doing this will greatly reduce blade stoppage.
- Run throttle only at half speed for first time users.
- Move the drop saw slowly until you have a better feel how much the unit can take.
- The machine is equipped with a front push bar and an angled push bar to push brush or small trees over. This will allow the drop saw teeth to contact the lower portion of the brush and the blade to cut it off.
- For tall brush, you can use the angled push bar to push the brush over and cut it off close to ground. Each operator must experiment to find a technique that works for them in their application.

### **WARNING**

**Always turn off the skid steer or excavator and disengage hydraulic drive before getting off the seat and approaching the blade.**

### **WARNING**

**Wear an approved respirator (N95 Type as a minimum).**

**Follow local, state and federal regulations.**

**The health effects from exposure to wood dust are due to chemicals in the wood or chemical substances in the wood created by bacteria, fungi, or molds.**



## 4.9 Field Operation

### **⚠ WARNING**

**Prevent serious injury or death.**

1. Park machine on firm, level surface.
2. Engage parking brake.
3. Disconnect hydraulic drive.
4. Shut off engine and remove key.

### **⚠ WARNING**

**Prevent serious injury or death.**

**Never operate drop saw when other people are in the vicinity.**

**Debris can be thrown several feet from cutting area.**

**Keep all shields in place.**

**Keep away from moving parts.**

### **⚠ WARNING**

**Clean machine thoroughly before service or maintenance procedures.**

**The health effects from exposure to wood dust are due to chemicals in the wood or chemical substances in the wood created by bacteria, fungi, or molds.**

1. Attach drop saw to skid steer or excavator. See Attach Drop Saw in this section.

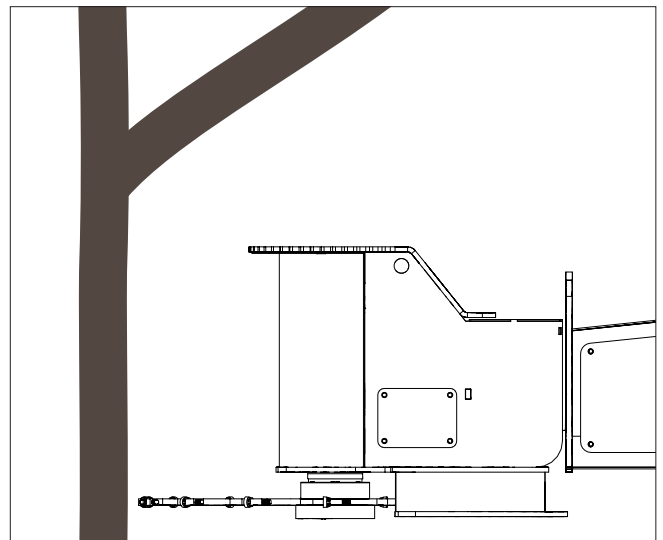
### **⚠ WARNING**

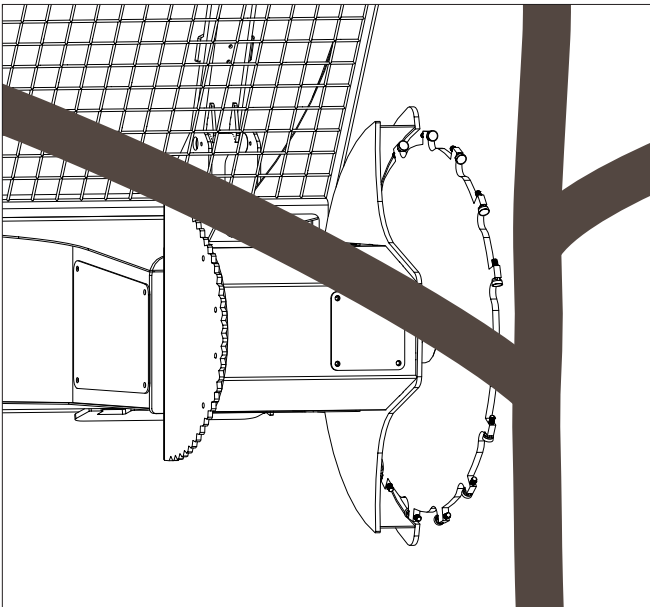
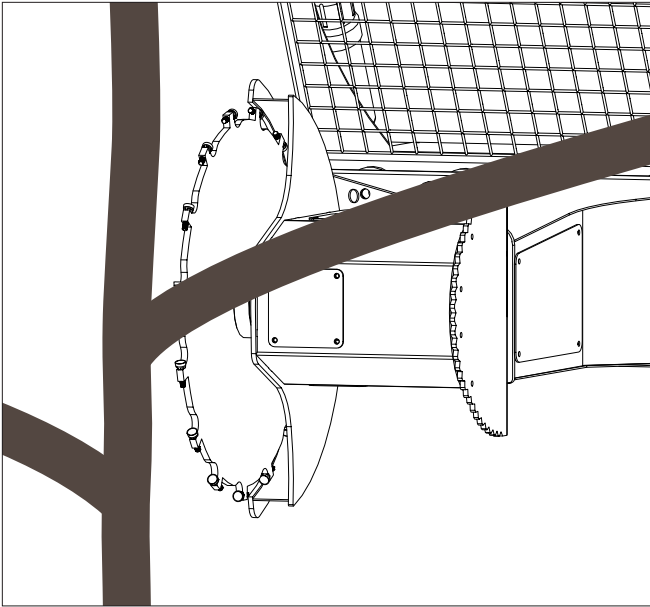
**Prevent serious injury or death.**

**Operating unit must be equipped with a forestry guard to protect the operator.**

2. Set engine speed to low idle and engage hydraulics.
3. Slowly increase engine speed to high idle. Verify drop saw is operating smoothly.
4. If equipped with a rotating cutting head, rotate cutting head as needed to obtain the closest cut to trunk or ground.

If equipped with a stationary cutting head, position drop saw as needed to obtain the closest cut to trunk or ground.





5. Operate hydraulics to move drop saw blade into brush, shrubs or tree.
6. If blade stalls, stop movement, slightly raise drop saw and allow blade to regain speed. Slow movement to prevent further stalling.

**⚠ WARNING**

**Moving parts can crush and cut.**

**Keep clear of moving components.**

**Lockout operating unit before clearing jams.**

**⚠ WARNING**

**Never approach drop saw before blade has come to a complete stop.**

7. When cutting is completed, disengage hydraulics and allow blade to stop.
8. Lower drop saw to ground and stop skid steer or excavator engine.

# 5 SERVICE And MAINTENANCE

## 5.1 Maintenance

Maintenance Chart		
General Inspection	Inspect the unit for any buildup of contamination (dirt, stones, etc.).	Daily.
Hydraulic Hoses	Inspect hydraulic hoses for damage and wear.	Daily.
Cutting Teeth	The teeth bolts must be retightened every ten minutes for the first hour of use on a new drop saw.	First hour of use.
Cutting Teeth	Check and replace one at a time as necessary. With daily use expect to replace 4 to 6 teeth per day. See Replace Cutting Teeth in this section.	Every 4 hours.

## 5.2 Inspections

### **⚠ WARNING**

**Prevent serious injury or death.**

1. Park machine on firm, level surface.
2. Engage parking brake.
3. Disconnect hydraulic drive.
4. Shut off engine and remove key.

### **⚠ WARNING**

**Clean machine thoroughly before service or maintenance procedures.**

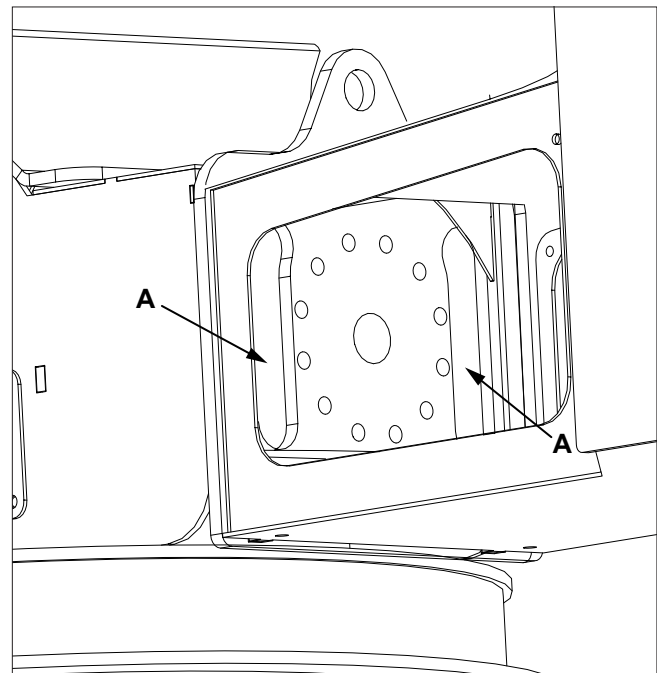
**The health effects from exposure to wood dust are due to chemicals in the wood or chemical substances in the wood created by bacteria, fungi, or molds.**

Inspect the unit for any buildup of contamination (dirt, stones, etc.).

Check cutting teeth every 4 hours of use. Replace cutting teeth as needed. Unit will cut faster and remaining teeth will last longer if broken teeth are replaced.

Inspect hydraulic hoses for damage and wear. Models with rotating head may experience premature hose wear in the areas (A) where hoses go through the slotted frame. Replace worn or damaged hoses.

Baumalight has included one replacement set of internal motor hoses with the drop saw. These hoses were placed inside the body of the drop saw.

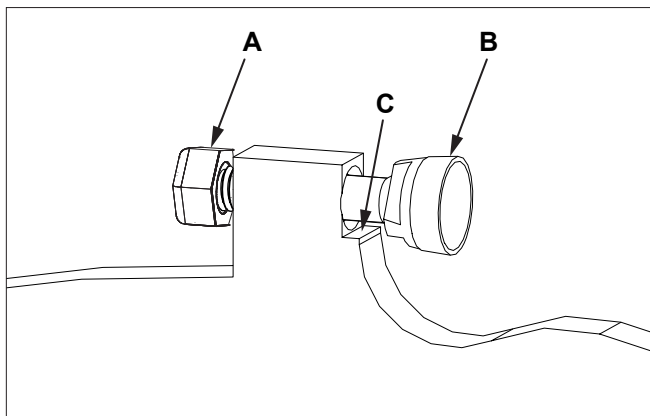
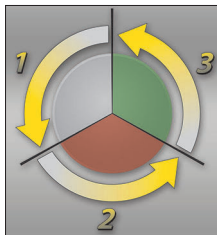


## 5.3 Rotate Cutting Teeth

Check cutting teeth every 4 hours of use. Keep cutting teeth in good condition. Unit will cut faster and remaining teeth will last longer if broken or worn teeth are replaced.

Each tooth can be rotated up to two times from its original position before replacement is necessary.

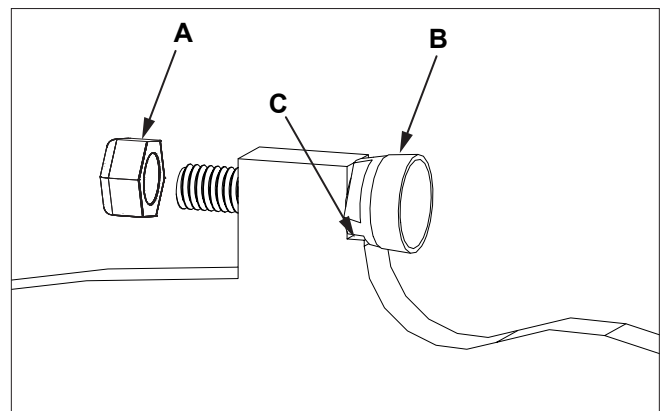
1. Park drop saw on a level surface.
2. Lower blade to the ground.
3. Shut off engine and lockout engine controls.
4. Inspect teeth for wear on top edge. Once top edge is worn, rotate tooth so a new edge is on top (cutting) edge.
5. Loosen locknut (A) on tooth (B) and rotate tooth 1/3 turn. Flat shoulder on tooth will fit against shoulder (C) on tooth holder.
6. Tighten locknut (A) to 65 lb/ft (88 Nm) of torque.



**Note:** Parts breakdown can be found on Baumalight's website. [www.baumalight.com](http://www.baumalight.com)

## 5.4 Replace Cutting Teeth

1. Park drop saw on a level surface.
2. Lower blade to the ground.
3. Shut off engine and lockout engine controls.
4. Inspect cutting teeth (B) for damage and wear. Replace individual teeth as needed.
5. Remove locknut (A) and tooth (B). Install new tooth. Flat shoulder on tooth will fit against shoulder (C) on tooth holder.
6. Install locknut. Tighten locknut (A) to 65 lb/ft (88 Nm) of torque.

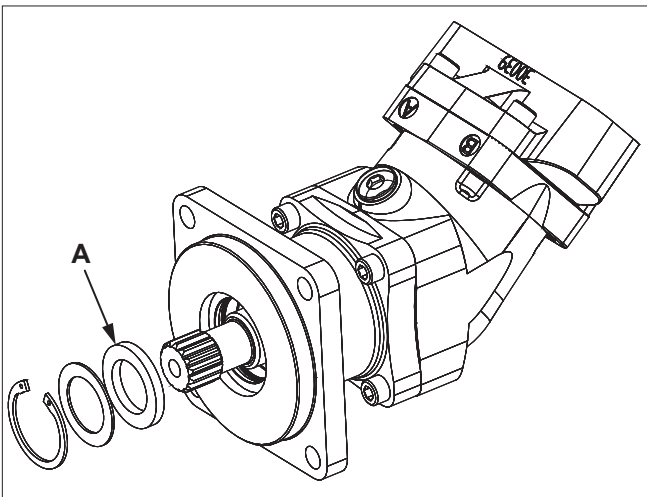


**Note:** Parts breakdown can be found on Baumalight's website. [www.baumalight.com](http://www.baumalight.com)

## 5.5 Motor Shaft Seal

To prevent hydraulic motor damage, the motor shaft seal is designed to fail if case pressure exceeds 100 psi (689 kPa).

If motor shaft seal (A) has failed, verify case drain line is free flow to sump or reservoir. Also check drain line for blockage. Correct any problems before replacing shaft seal.



Order replacement seal kit from Baualight and follow instructions provided with kit.

Motor Shaft Seal Replacement manual can be found at [www.baualight.com/support](http://www.baualight.com/support)

**Note:** Parts breakdown can be found on Baualight's website. [www.baualight.com](http://www.baualight.com)

# 6 TROUBLESHOOTING

PROBLEM	CHECK	SOLUTION
Blade does not spin.	Blade jammed.	Remove material from blade.
	Low oil level.	Check oil level. Add if necessary.
	Low oil flow.	Check flow control on skid steer or excavator. See your dealer.
	Low pressure.	Check valve open.
Blade rotates slow or sluggish.	Low oil.	Check oil level. Add if necessary.
	Oil filter plugged.	Replace skid steer or excavator oil filter.
	Relief valve not set properly.	Set relief pressure to motor specification.
	Low oil flow.	Check flow control on skid steer or excavator. See your dealer.
Excessive vibration.	Cutting teeth worn or missing.	Replace worn, broken or missing teeth.
	Debris lodged in blade.	Remove debris.

# 7 STORAGE

## 7.1 Storing Drop Saw

1. Store drop saw in a dry place.
2. Clean drop saw thoroughly. Dirt and wood chips will draw moisture and cause rust.
3. Check condition of cutting teeth. Replace as necessary. (See Service and Maintenance section.)
4. Check for loose or missing hardware.
5. Paint parts as necessary.

## 7.2 Remove Drop Saw From Storage

1. Review Operator's manual and check adjustments.
2. If parts have been replaced, verify they run properly.



# 8 WARRANTY

This product is warranted to be free of defects in materials and workmanship under normal use and service, for a period of one year from the date of purchase, when operated and maintained in accordance with the Operating and Maintenance Instructions supplied with this unit. This warranty does not cover misuse or negligence.

Under no circumstances will the manufacturer be liable for any consequential damage or expense of any kind, including loss of profits. The manufacturer is under no circumstances liable for skid steer damage of any kind. The manufacturer is not liable for the maintenance of the product.

This warranty is extended only to the original purchaser. Warranty is void if repairs are attempted by anyone other than an Authorized Service Center.

If a difficulty develops with the product, you should contact your nearest Authorized Repair Center, or distributor. Only these locations are authorized to make repairs to the product or affect the replacement of defective parts, which will be done at no charge within a reasonable time after the receipt of the product. Units or parts should be returned at the customer's expense to the nearest repair location or Authorized Service Center. Pack unit in a strong carton and pad tightly to avoid damage. Damage in-transit is not covered by warranty. Include original purchase receipt with any claim (keeping a copy for your files).

The Manufacturer's Liability is limited to repair of the product and/or replacement of parts and is given to the purchaser in lieu of all other remedies including incidental and consequential charges. There are no warranties, expressed or implied other than those specified herein. For the nearest Authorized Service Center call the manufacturer.

Please note the following details and file this information in an appropriate place.

Model Number: \_\_\_\_\_ S/N: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_ Owner's Name \_\_\_\_\_

For parts, specifications and the latest machine information please visit our website.

[www.baumalight.com](http://www.baumalight.com)

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