



# **BAUMALIGHT™**

**Hydraulic Auger Drive  
RC442, RC552, RC556,  
RC582, RC586, RC780**

**OPERATOR'S MANUAL**

**THE RIGHT  
EQUIPMENT**

Issue Date: May 2013

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# 1 INTRODUCTION

## 1.1 Overview

Congratulations on your choice of a Baumalight Hydraulic Auger Drive to complement your drilling operation. This equipment has been designed and manufactured to meet the needs of a discriminating buyer for efficient hole drilling.

The drive is hydraulically powered by the hydraulic system on your power unit. Safe, efficient and trouble free operation of your auger drive requires that you and anyone else who will be operating or maintaining the auger drive, read and understand the Safety, Operation, Maintenance and Troubleshooting information contained within the Operator's Manual.

This manual covers the Baumalight Auger Drive models RC442, RC552, RC556, RC582, RC586 and RC780. 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 power unit 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 operators seat and facing in the direction of travel.

## **1.2 Intended Use and Foreseeable Misuse**

The auger drive is designed to be used by experienced operators, trained in the safe operation of the power unit and trained in the hazards related to using the auger drive and the safe use of the auger drive 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 auger drive and auger will not come across metallic objects, stones or other materials.

Auger drive tools 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 tool is misused. Misuse may also cause damage to the power unit 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:

<b>⚠ DANGER</b>
<b>DANGER - Indicates a hazardous situation, which, if not avoided, WILL result in death or serious injury.</b>

<b>⚠ WARNING</b>
<b>WARNING - Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.</b>

<b>⚠ CAUTION</b>
<b>CAUTION - Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.</b>

<b>NOTICE</b>
<b>NOTICE - Indicates a situation that could result in damage to the equipment or other property.</b>

## 2.2 Operational Hazards

### **⚠ WARNING**

**Prevent serious injury or death.**

**Read and understand this manual before operating auger drive.**

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

**Never allow anyone near the auger drive during operation.**

**All personnel except the operator must be at least 25 feet away 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 auger drive 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 auger drive is securely attached to power unit before operation or transport.**

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.

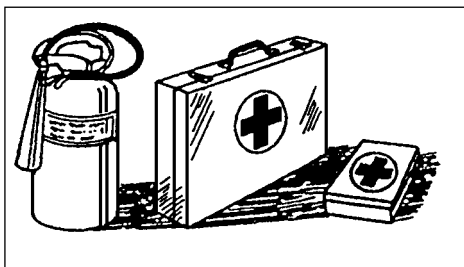
Keep your equipment in proper working condition.

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 866-820-7603.

## Prepare for Emergencies

- Be prepared in case of emergencies.
- Keep a fire extinguisher and first aid kit close to the power unit.
- Know emergency phone numbers for your area.
- 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 with auger drive.
- NEVER use auger drive as a work platform.
- NEVER allow passengers on auger drive.

## Lower Operating Speed

- Keep load 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 load close to the ground. It may be necessary to remove auger before transporting.
- 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.**

Check clearance before raising equipment.

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

## Detach Auger Drive Safely

Detach auger drive on a firm and level surface. Auger drive may fall over if detached on sloping or soft surface. Be sure people, livestock and pets are clear of power unit.

Relieve hydraulic pressure before disconnecting hydraulic hoses. See your power unit Operator's Manual.

## Raised Attachment

### **WARNING**

**Crushing hazard.**

**Raised, unsupported auger drive can fall, resulting in death or serious injury.**

**Never enter the area under a raised auger drive.**

A raised auger drive can lower unexpectedly, resulting in death or serious injury.

NEVER enter area under a raised auger drive.

Lower auger drive 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 auger drive. Altering the equipment may cause unsafe conditions and may void the manufacturer's warranty.

## 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 power unit 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

### Maintenance

Before servicing, park power unit 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 866-820-7603.

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 866-820-7603 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**

**Crushing hazard.**

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

**Park power unit on firm, level surface.**

**Engage parking brake.**

**Turn engine off and remove key.**

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

#### **WARNING**

**Entanglement hazard.**

**Keep clear of moving components.**

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

#### **WARNING**

**Burn hazard.**

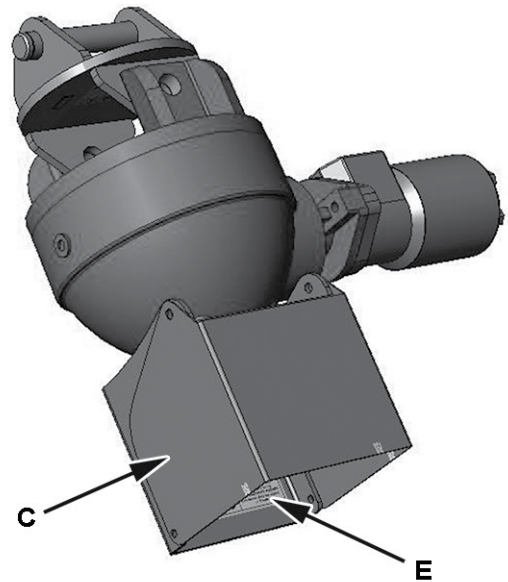
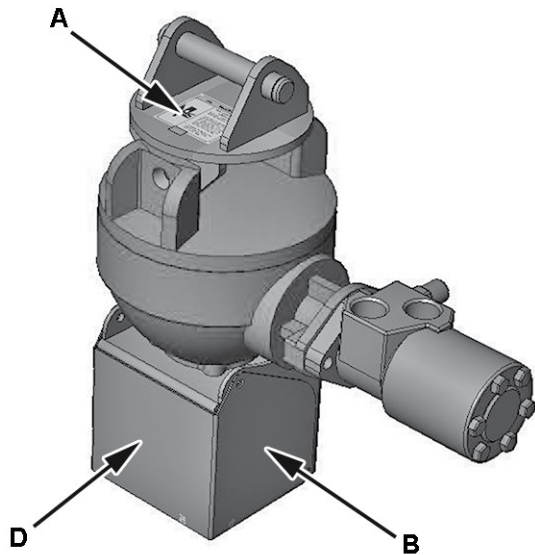
**Hot and high pressure hydraulic oil.**

**Allow oil to cool before servicing.**

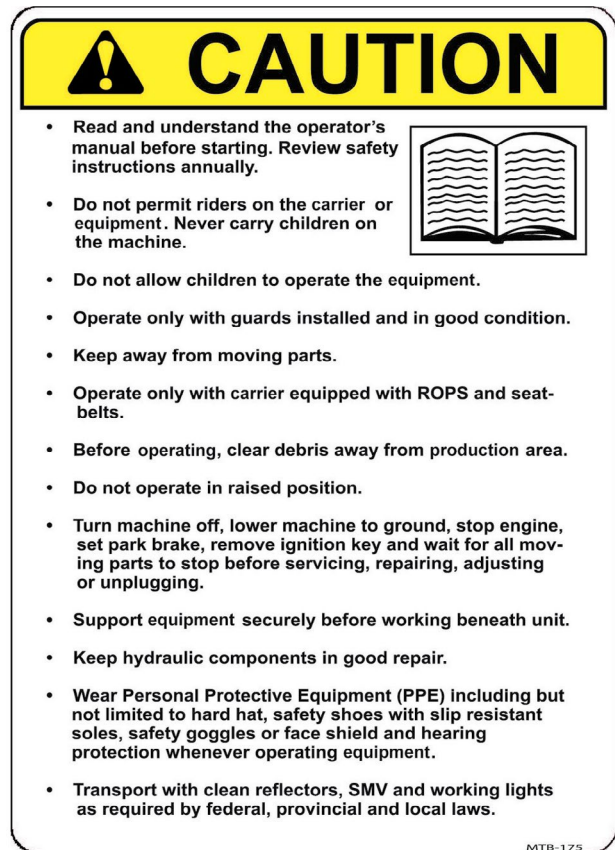
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# 3 SAFETY SIGNS

## 3.1 Safety Signs - RC442



A. MTB-180 Safety Sign



B. MTB-181 Safety Sign



C. MTB-182 Safety Sign

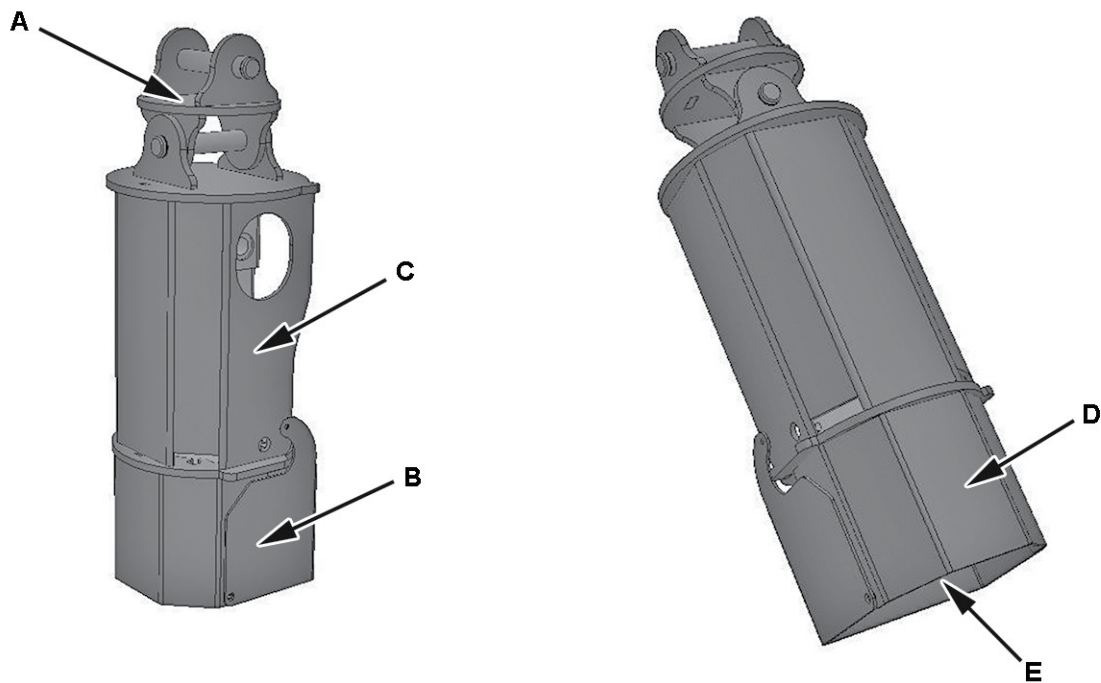


D. MTB-183 Safety Sign

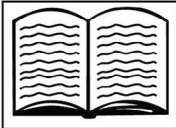


E. MTB-184 Safety Sign

### 3.2 Safety Signs - RC552, RC556, RC582, RC586, RC780



A. MTB-180 Safety Sign

<b>⚠ CAUTION</b>	
<ul style="list-style-type: none"> <li>• Read and understand the operator's manual before starting. Review safety instructions annually.</li> <li>• Do not permit riders on the carrier or equipment. Never carry children on the machine.</li> <li>• Do not allow children to operate the equipment.</li> <li>• Operate only with guards installed and in good condition.</li> <li>• Keep away from moving parts.</li> <li>• Operate only with carrier equipped with ROPS and seat-belts.</li> <li>• Before operating, clear debris away from production area.</li> <li>• Do not operate in raised position.</li> <li>• Turn machine off, lower machine to ground, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, repairing, adjusting or unplugging.</li> <li>• Support equipment securely before working beneath unit.</li> <li>• Keep hydraulic components in good repair.</li> <li>• Wear Personal Protective Equipment (PPE) including but not limited to hard hat, safety shoes with slip resistant soles, safety goggles or face shield and hearing protection whenever operating equipment.</li> <li>• Transport with clean reflectors, SMV and working lights as required by federal, provincial and local laws.</li> </ul>	
<small>MTB-175</small>	

B. MTB-181 Safety Sign

<b>⚠ DANGER</b>		
<b>GUARD MISSING</b> When this sign is visible <b>DO NOT OPERATE</b>		<b>KEEP CLEAR!</b> Keep others away. <b>ENTANGLEMENT HAZARD</b> can cause <b>Serious Injury</b> or <b>Death</b>

E. MTB-184 Safety Sign

<b>⚠ WARNING</b>	
	
<b>HIGH PRESSURE FLUID HAZARD</b> To prevent serious injury or death from high pressure fluid:	
<ul style="list-style-type: none"> <li>• Relieve pressure on system before repairing or adjusting.</li> <li>• Wear proper head and eye protection when searching for leaks. Use wood or cardboard instead of hands.</li> <li>• Keep all components in good repair.</li> </ul>	

C. MTB-182 Safety Sign

<b>⚠ DANGER</b>

<b>ROTATING PARTS HAZARD</b> <b>KEEP AWAY</b> To Prevent Serious Injury or Death from Rotating Parts
<ul style="list-style-type: none"> <li>• Read and understand the operator's manual before using.</li> <li>• Do not operate without all shields and guards in place.</li> <li>• Do not use body weight to force auger into the ground or to locate auger point when auger is turning.</li> <li>• Keep away from auger, cutting head and drive system when engine is running.</li> </ul>

D. MTB-183 Safety Sign

# 4 INITIAL SETUP

## 4.1 Hydraulics

**⚠ WARNING**

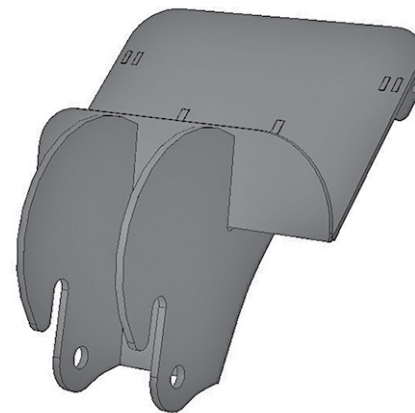
**Pressurized fluids can penetrate the skin.**

**Disconnect and lock out power source before disconnecting and/or connecting hydraulic hoses.**

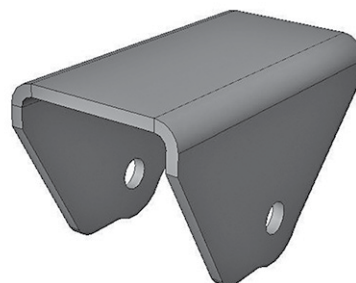
The auger drive requires hydraulic hoses with quick couplers. You must connect your power unit hoses to these hoses.

Power unit hoses must be the same size as the auger drive hoses. Using smaller diameter hoses will decrease hydraulic flow.

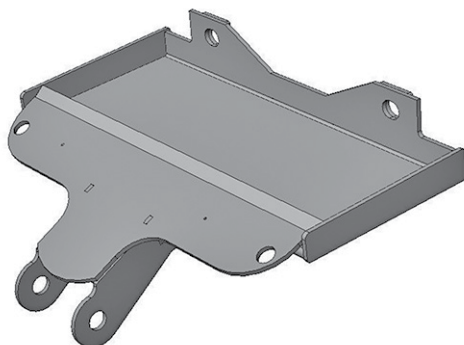
Various mounting plates are available from Baumlight to connect the auger drive to your power unit.



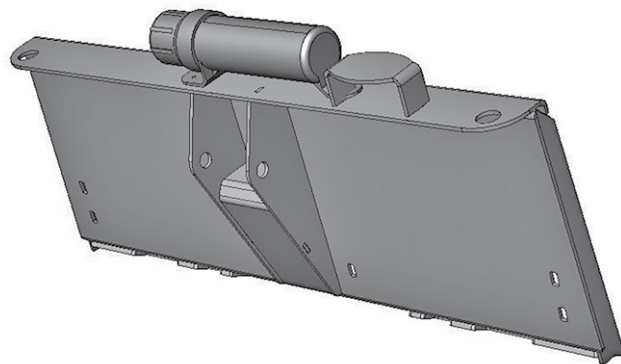
Loader Bucket Mounting Plate



Standard Universal Mounting Plate



Smaller or Ride-On Skid Steer Mounting Plate



Skid Steer Mounting Plate



# 5 OPERATION

## 5.1 Preparation for Use

Although the auger drive has been carefully inspected and checked prior to shipment from manufacturer, it is recommended that the unit be thoroughly inspected.

Check all bolts for tightness and remove all shipping tags, bags, skids, and blocking.

Review and understand this manual and operating unit manual.

Remove any masking materials affixed during painting. Inspect the auger drive and any accessory equipment to verify that nameplates and all safety warning, caution signs and decals provided with the equipment are in place and clearly visible.

Visually inspect the unit before each start up.

Check for loose or missing parts and any damage that may have occurred during moving or shipping.

Review all power unit pre-start instructions, and be sure that all recommended steps and procedures have been followed.

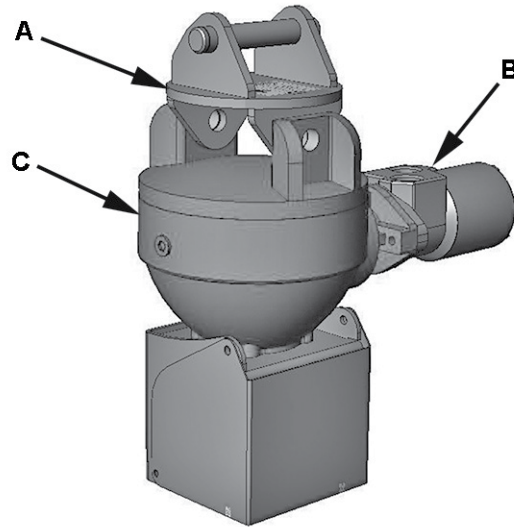
NOTE: Always keep the weight of the power unit in mind. Never position body in line of impact.

## 5.2 Pre-Operation Check List

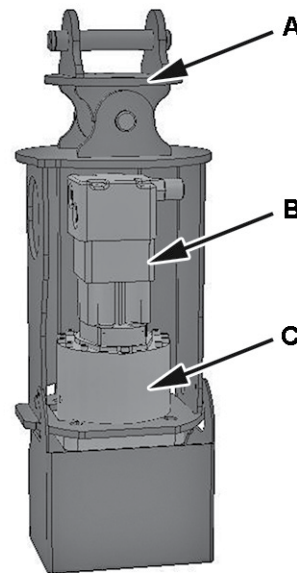
Check-mark	Check these items:	Frequency
	Verify that auger drive is properly attached to power unit.	Each operation.
	Verify that hydraulic hoses are connected to power unit hydraulic couplers.	Each operation.
	Verify all guards, doors and covers are installed and secured.	Each operation.
	Verify cutting teeth on the auger are tight.	Each operation.

## 5.3 Components

- A. Universal Joint
- B. Hydraulic Motor
- C. Planetary Drive or Gearbox



RC442



RC582

## 5.4 Attach Auger Drive To Power Unit

### **WARNING**

**To prevent injury or power unit damage, put transmission in “Park”.**

**Never position yourself between power unit and auger drive.**

**Only experienced and properly trained operator’s should operate the auger drive.**

The auger drive is shipped from the factory in a basic, universal configuration that allows it to be bolted to any hookup kit. However, your power unit must be equipped with remote hydraulic outlets to operate the auger drive.

1. Read and follow all safety instructions.
2. Attach auger drive to power unit. See power unit Operator’s Manual.
3. Verify auger drive is secured 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.

## 5.5 Detach Auger Drive From Power Unit

### **WARNING**

**Prevent serious injury or death caused by unexpected movement:**

- 1. Park power unit on a level surface.**
- 2. Engage parking brake.**
- 3. Disengage hydraulic drive.**
- 4. Shut off engine and remove key.**

1. Park power unit on a level surface.
2. Lay auger drive on ground.
3. Shut off engine and remove key.
4. Disconnect hydraulic hoses.
5. Detach auger drive from power unit. See power unit Operator's Manual.

## 5.6 Transporting

### DANGER

**Prevent electrocution.**

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

**Electrocution can occur without direct contact.**

Check clearance before raising equipment.

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

1. Verify all reflectors and Slow Moving Vehicle (SMV) sign are visible.
2. Verify hydraulics are disengaged.
3. Carry auger drive low. It may be necessary to remove auger before transporting.
4. Travel at a reasonable and safe speed.

### WARNING

**Prevent bodily injury from rotating auger.**

**Disengage hydraulics before transporting.**

## 5.7 First Time User Tips

### WARNING

**Prevent injury from rotating auger.**

**Do not rotate auger while auger is out of the ground.**

**Never approach auger before auger has come to a complete stop.**

### DANGER

**Prevent electrocution.**

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

**Electrocution can occur without direct contact.**

First, operate all functions in a clear area with power unit at idle speed to get a good feel for the controls before you attempt to dig holes.

Do not dig in an area where there are buried obstacles. Buried concrete, rocks, roots or other objects can produce shock loads or binding and cause failures.

## 5.8 Field Operation

### **WARNING**

**Prevent serious injury or death caused by unexpected movement:**

1. Park on a level surface.
2. Engage parking brake.
3. Disengage hydraulic drive.
4. Shut off engine and remove key.

### **WARNING**

**Prevent injury from rotating auger.**

**Do not rotate auger while auger is out of the ground.**

**Never approach auger before auger has come to a complete stop.**

**Never operate auger drive when other people are in the vicinity.**

### **DANGER**

**Prevent electrocution.**

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

**Electrocution can occur without direct contact.**

1. Attach auger drive to power unit. See Attach Auger Drive To power unit in this section.
2. Adjust face plate until the auger is pointing straight down.
3. Slowly lower until the auger tip is just touching the ground.
4. Position so the flighting is in a vertical orientation.
5. This auger was designed for one-person operation from the seat of the power unit. It is the responsibility of the operator to see that no one is within 25 feet of the auger when it is started.
6. Engage hydraulics and place hydraulic control in detent position.
7. Set throttle at approximately 3/4 of rated engine speed. Increase throttle setting if more oil flow is required, but do not exceed rated speed.
8. Lower auger drive and let the weight of the power unit arms push auger into the ground.
9. If auger stalls, slightly raise auger and allow auger to regain speed.

To stop, slightly raise auger, disengage hydraulics and raise auger out of hole.

# 6 SERVICE and MAINTENANCE

## 6.1 Maintenance

Maintenance Chart		
General Inspection	Inspect the unit for worn, bent or broken parts.	Daily
Shear Bolt	Check that Pin is tight.	Daily
Gearbox	Change oil.	Every Two Years

## 6.2 Inspection

### WARNING

Prevent serious injury or death caused by unexpected movement:

1. Park power unit on a level surface.
2. Engage parking brake.
3. Disengage hydraulic drive.
4. Shut off engine and remove key.

Inspect the unit for any buildup of contamination (dirt, stones, etc.), worn bent or broken parts.

## 6.3 Check Gearbox Oil Level

1. Lower auger drive to ground.
2. Set parking brake, stop engine and remove key.

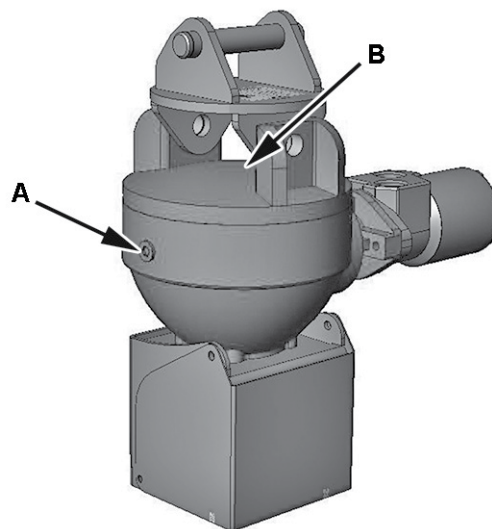
### **⚠ WARNING**

**Moving parts can crush and cut.**

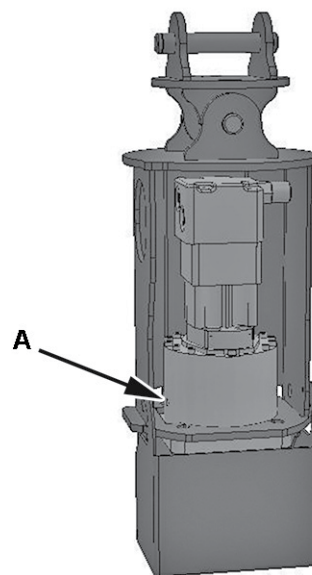
**Keep clear of moving components.**

**Follow lockout procedure before servicing.**

3. Remove plug (A). Oil level must be at the bottom of inspection port. For RC442, remove plug (B) and add oil through this port. Add 85W-140 or 140 wt. oil if necessary.
4. Install and tighten plugs (A) and (B).



RC442



RC582



## 6.4 Change Gearbox Oil

1. Lower auger drive to ground.
2. Set parking brake, stop engine and remove key.

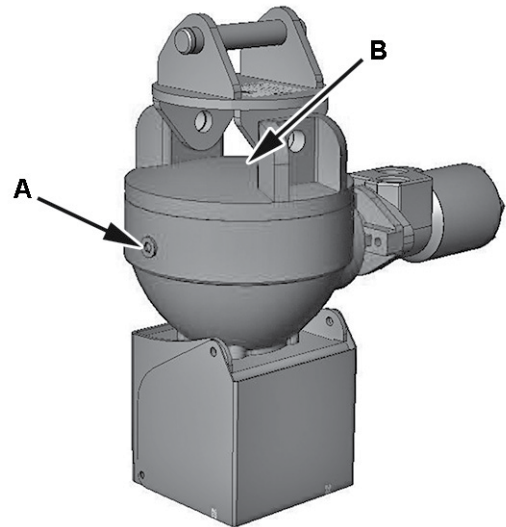
### **⚠ WARNING**

**Moving parts can crush and cut.**

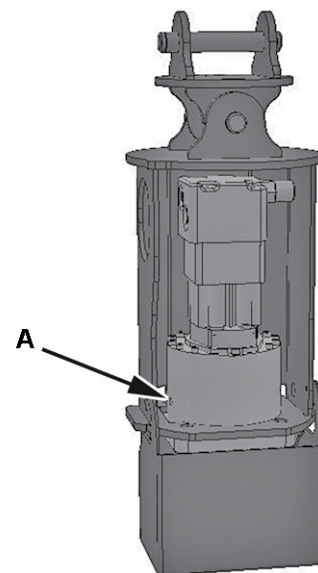
**Keep clear of moving components.**

**Follow lockout procedure before servicing.**

3. Remove plug (A) and tilt gearbox so oil runs out. Drain oil into a suitable container. Dispose of oil in an environmentally safe manner. Install drain plug.
4. RC442 Only - Install plug (A) and remove plug (B). Add 1.7 liters of 85W-140 or 140 wt. oil. Install plug (B).
4. All Except RC442 - Add 0.25 liters of 85W-140 or 140 wt. oil. Install plug (A).



RC442



RC582

## 7 TROUBLESHOOTING

<b>PROBLEM</b>	<b>CHECK</b>	<b>SOLUTION</b>
Auger won't turn.	No power	Place hydraulic system in detent.
	Stones blocking auger.	Remove stones or raise auger to release.
	Broken shear bolt(s).	Replace shear bolt(s). Identify cause of failure and rectify before resuming work.
Auger stalls.	Not enough oil flow.	Increase oil flow. Be sure unit can supply enough oil.
	Running too slow.	Increase engine RPM.
	Digging too fast.	Lower loader at a slower rate.
	Oil filter plugged.	Change oil filter.
	Low oil level.	Check oil level. Add as required.

# **8 STORAGE**

## **8.1 Storing Auger Drive (End of Season)**

1. Store auger drive in a dry place.
2. Clean auger drive thoroughly. Dirt will draw moisture and cause rust.
3. Check for loose or missing hardware.
4. Paint parts as necessary.

## **8.2 Removing Auger Drive From Storage (Beginning Of Season)**

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

## 9 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 power unit 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 \_\_\_\_\_



MTB MFG INC.  
CORPORATE HEADQUARTERS  
4575 Powell Rd.,  
Wallenstein, Ontario Canada  
N0B 2S0  
Phone - 519.698.9864  
Toll Free - 866.820.7603  
Fax - 519.698.1087  
[www.baumalight.com](http://www.baumalight.com)

