

ERASER

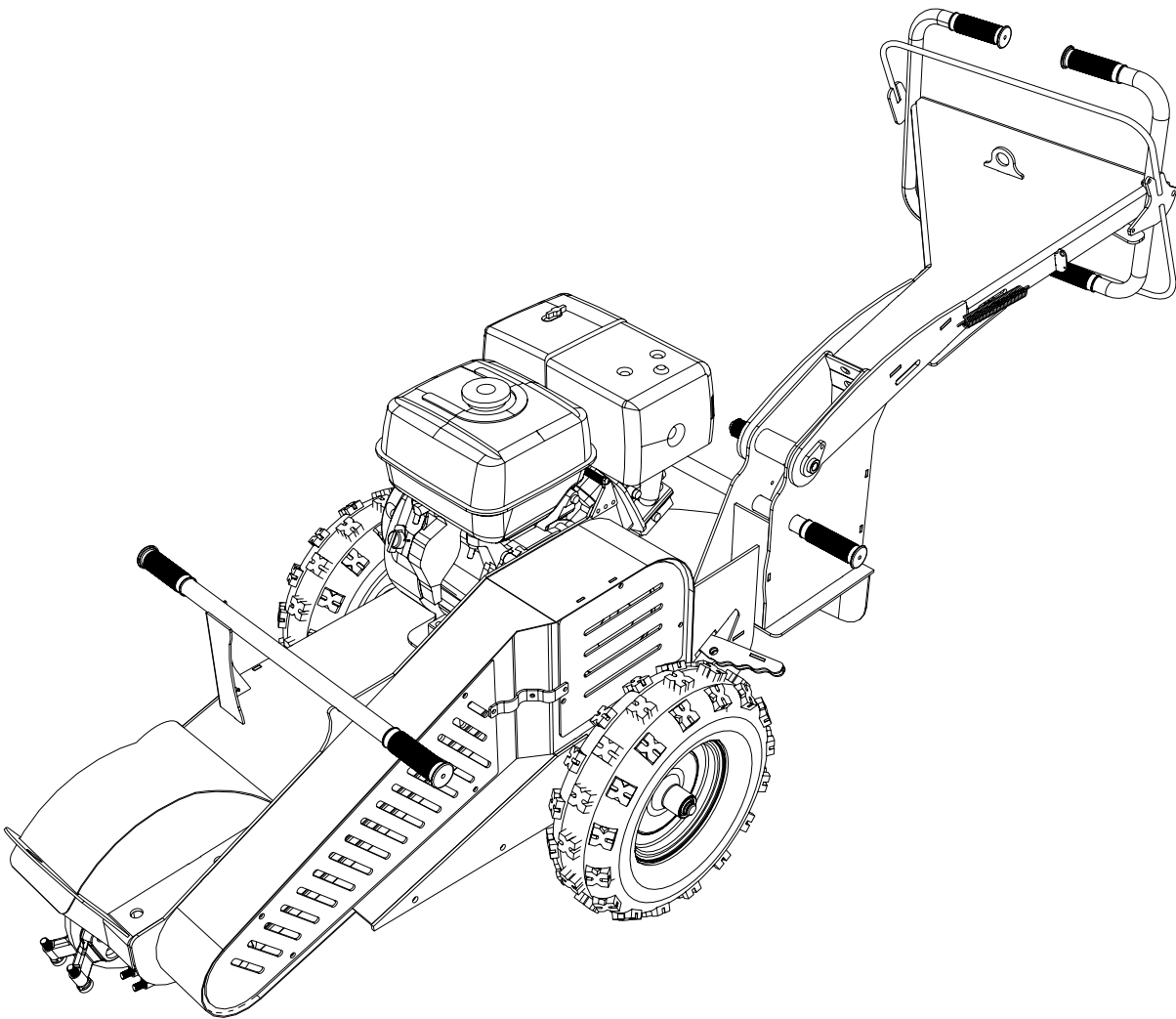


TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
1	Introduction	3
2	Warranty	4
3	Predelivery	5
4	Components	6
5	Safety	7
5.1	Safety Alert Symbol And Signal Words	7
5.2	Operational Hazards	7
5.2.1	Replace Safety Signs	8
5.2.2	Prepare For Emergencies	8
5.2.3	Do Not allow Riders	8
5.2.4	Lower Operating Speed	8
5.2.5	Prevent Rollover	8
5.2.6	Avoid Power Lines And Underground Utilities	9
5.2.7	Avoid Loud Noise	9
5.3	Maintenance Hazards	9
5.4	Hazards From Modifying Equipment	10
5.5	Safety Warning Labels	10
5.6	Sign Off Form	14
6	Operation	15
6.1	Pre-Operation Checklist	15
6.2	Carbide Teeth Break In	15
6.3	Operation	15
6.3.1	Grinding A Stump	16
6.3.2	Storage	17
7	Routine Maintenance	18
7.1	Maintenance Intervals	18
7.2	Inspections	18
7.3	Throttle Inspection	18
7.4	Clutch Inspection	19
7.5	Rotate Cutting Teeth	20
7.6	Replace Cutting Teeth	20
7.7	Replace Tooth Holder	20
7.8	Lubrication	21
7.9	Check Belt	22
8	Troubleshooting	23

1. INTRODUCTION

Thank you for purchasing a Holt Industrial HGW13 Stump Grinder.

You must read, understand, and follow all instructions in this manual before operating, adjusting or servicing this machine.

If you do not understand any part of this manual or you are unsure about any aspect of this machine, contact Holt Industrial. Information provided in this manual was current as of the issue date.

Information furnished in this manual does not include all of the details of design, production, or variations of equipment. It does not cover all the possible contingencies, which may arise during operation or maintenance.

Should special issues arise, or further information be desired, contact your dealer.

This manual covers the Holt Industrial HGW13 Stump Grinder and is provided to assist in the safe operation and maintenance of the equipment.

Equipment modifications from original design and specifications without written permission are strictly prohibited.

Modifications may compromise safe operation of machine, subject users to serious injury or death and may void any remaining warranty.

This operator's manual does not replace, nor does its use discharge the operator from observing all safety codes or operating limitations as well as any applicable federal, state, provincial or local regulations.

There are three different types of labeling on this machine: safety, informative and product labels.

Safety Labels are pictorial with a yellow background and generally 2 panel. Top panel indicates the potential hazard and the bottom panel indicates how to avoid the hazard.

Informative Labels are generally pictorial, have a white background and can vary to the number of panels. The label will illustrate the function of a feature and is accompanied by detailed instructions in the owners manual, with the label illustrated along side.

Product Labels contain product information such as model number or serial number.

2. 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 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 in a strong container 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 _____

3. PREDELIVERY

This predelivery procedure must be performed and signed off by a qualified Holt Industrial representative and Holt Industrial trained owner, maintenance supervisor or operator at the time of delivery and before going into service.

Owner / Owner Representative

Address

City, State/Province, Postal Code

Phone Number

Holt Industrial Representative

Phone Number

VIN Number

Delivery Date

The owner or owner representative is thoroughly trained on the Holt Industrial HGW13 Stump Grinder. Predelivery inspection has been performed. Safe operation, care, adjustments, warranty policy and manuals for the HGW13 Stump Grinder have been reviewed.

Owner / Owner Representative Signature

Date

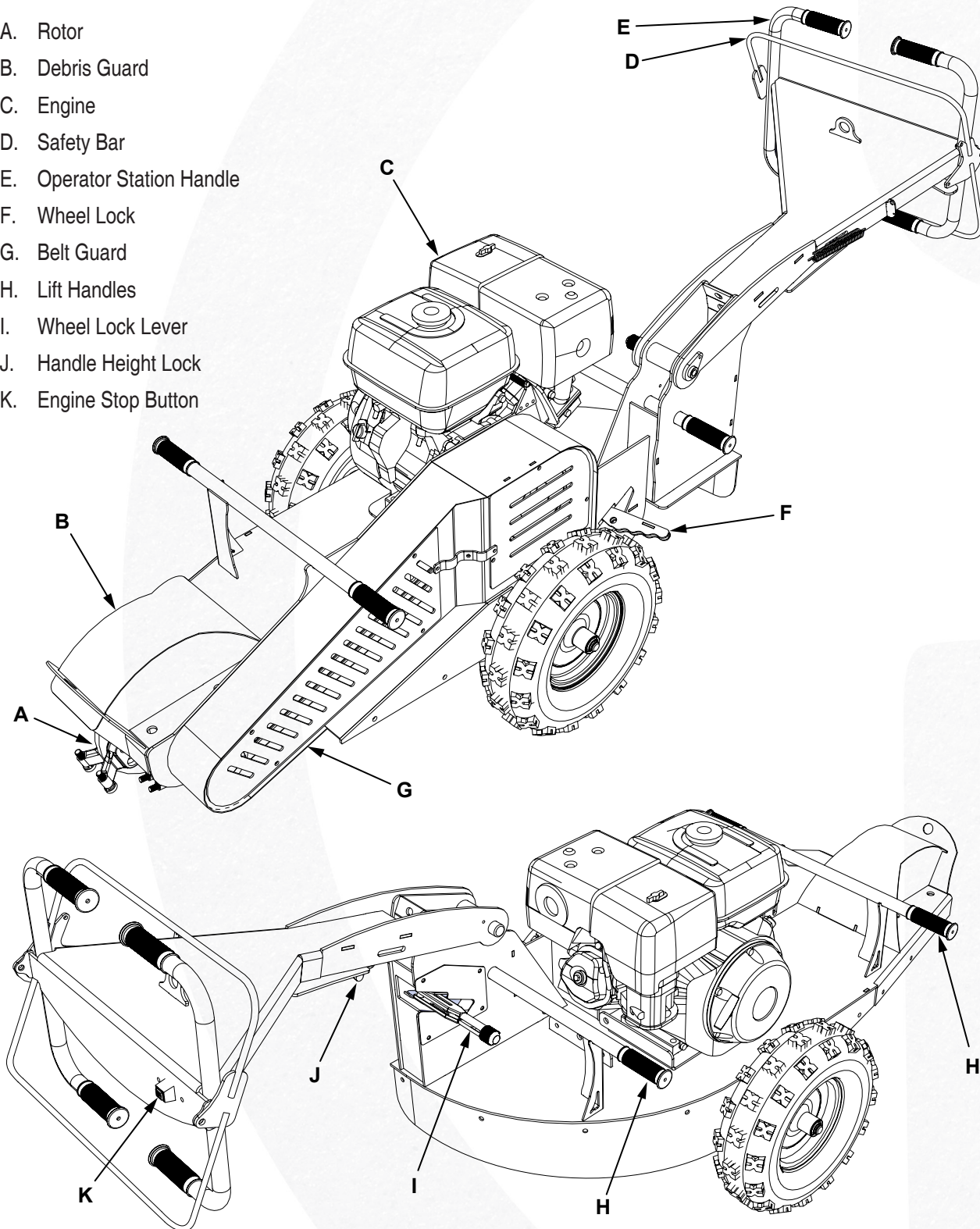
Holt Industrial Representative Signature

Date

X	Predelivery Inspection
	Verify rotor turns freely.
	Verify all fluids are at proper level.
	Verify tires are properly inflated.
	Lubricate all grease fittings.
	Verify all fasteners are tight.
	Verify all decals are installed.
	Start engine and operate all functions to verify operation. Stop engine.

4. COMPONENTS

- A. Rotor
- B. Debris Guard
- C. Engine
- D. Safety Bar
- E. Operator Station Handle
- F. Wheel Lock
- G. Belt Guard
- H. Lift Handles
- I. Wheel Lock Lever
- J. Handle Height Lock
- K. Engine Stop Button



5. SAFETY

5.1 Safety Alert Symbol And Signal 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.

5.2 Operational Hazards

California Proposition 65 Warning

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Wash hands after handling.

WARNING

Prevent serious injury or death.

Read and understand this manual before operating stump grinder.

Always stop engine and allow rotor to stop before approaching rotor.

Never allow anyone near stump grinder 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.

Stop engine before adjusting or performing maintenance.

WARNING

Safely operate equipment.

Allow only properly trained and qualified personnel to operate this equipment.

WARNING

Use stump grinder 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.

Engine exhaust contains carbon monoxide. Carbon monoxide is an odorless gas that can cause death.

Avoid any areas or actions that expose you or others to carbon monoxide.

Never refuel a running engine or refuel near ignition sources.

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 or www.osha.gov.

If you do not understand any part of this manual, contact your dealer.

5.2.1 Replace Safety Signs

Replace missing or damaged safety signs.

Safety sign location are identified in Section 5.5 of this manual.

Replacement safety signs are available from your dealer.

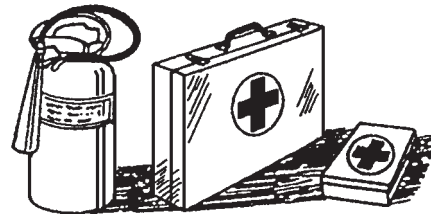
5.2.2 Prepare For Emergencies

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.



5.2.3 Do Not Allow Riders

NEVER lift or carry anyone on stump grinder.

NEVER use stump grinder as a work platform.

NEVER allow passengers on stump grinder.

5.2.4 Lower Operating Speed

Keep rotor low and move at slow speeds on rough or uneven terrain.

5.2.5 Prevent 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.
- Travel with rotor 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.

5.2.6 Avoid Power Lines And Underground Utilities

WARNING

Prevent electrocution.

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

Electrocution can occur without direct contact.

Have local utilities locate and mark under ground wires, cables, pipelines and other hazards before grinding.

6.2.7 Avoid Loud Noise

WARNING

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

Wear a suitable hearing protective device.

5.3 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 engine controls. Read and understand this manual. If you do not understand any part of this manual, contact your dealer.

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

Always use Holt Industrial replacement parts.

WARNING

Moving parts can crush and cut.

Keep clear of moving components.

WARNING

Crushing and severing hazard.

Before performing inspections, service or maintenance:

- **Park machine on firm, level surface.**
- **Engage wheel lock.**
- **Turn engine off.**

WARNING

Entanglement hazard.

Keep clear of moving components.

WARNING

Prevent serious injury or death.

Wear proper protective equipment appropriate for the job.

5.4 Hazards From Modifying Equipment

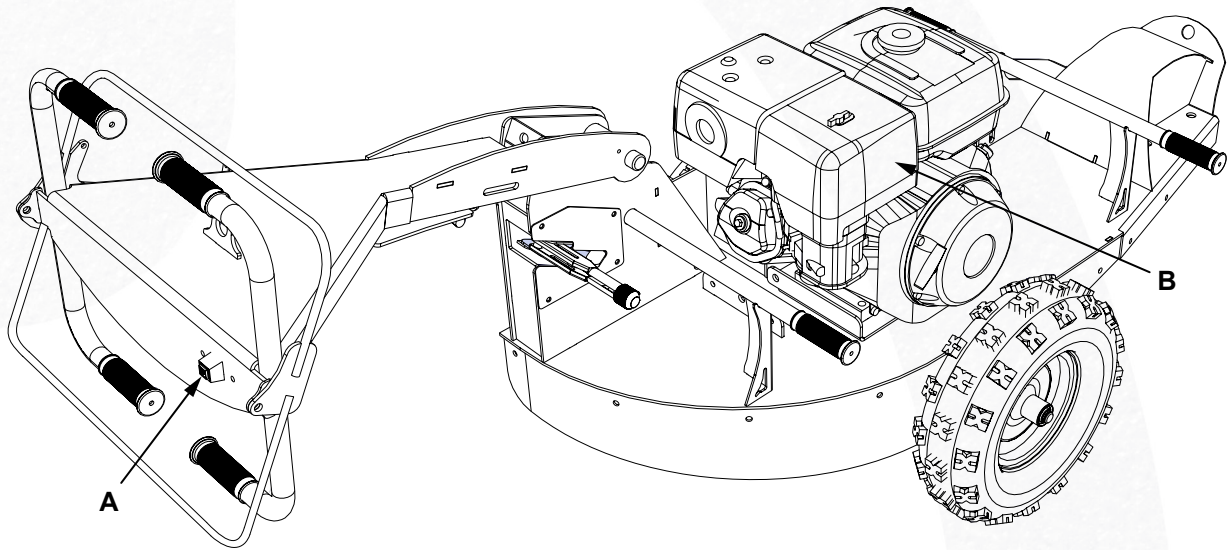
Do not make any alterations to the stump grinder. Altering may cause equipment to be unsafe and may void the manufacturers' warranty.

5.5 Safety Warning Labels

WARNING

To protect you and others against death or serious injury, all labels shown must be on stump grinder and must be legible.

If any of these labels are missing or cannot be read, contact your dealer for replacement labels.



Decal A: D003069



Decal B: MTB-052



Decal C: MTB-176

 **DANGER**

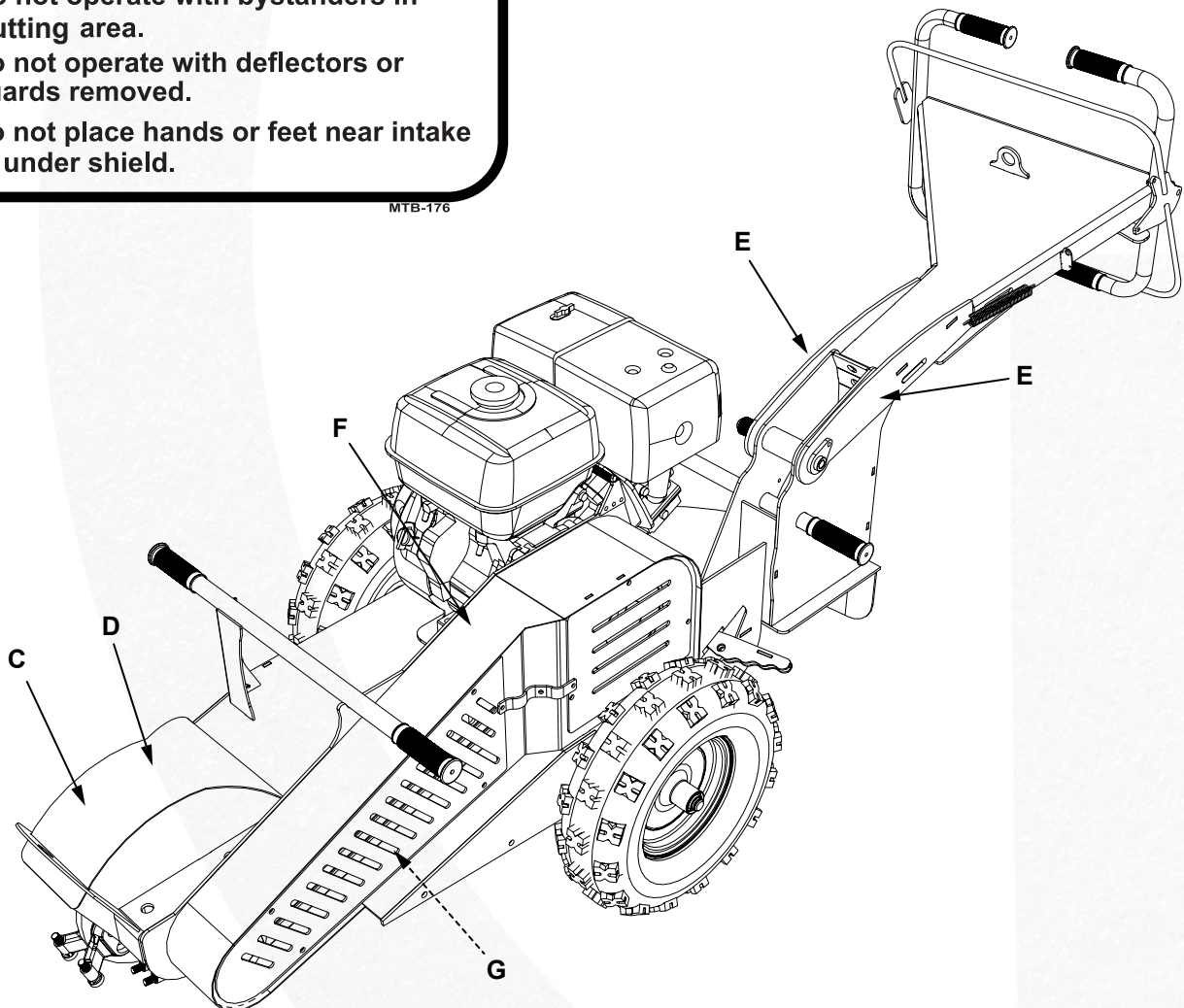


ROTATING BLADES - KEEP AWAY

To prevent serious injury or death:

- Never allow riders; especially children on carrier or cutter.
- Do not operate with bystanders in cutting area.
- Do not operate with deflectors or guards removed.
- Do not place hands or feet near intake or under shield.

MTB-176



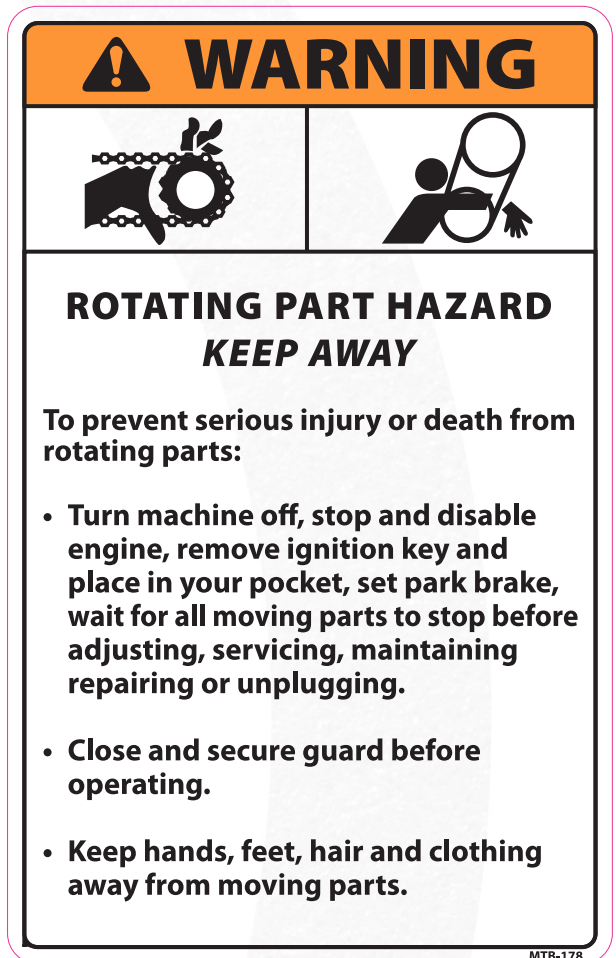
Decal D: MTB-177



Decal E: MTB-065










Decal F: MTB-178



Decal G: MTB-185 Located Under Belt Guard



6. OPERATION

-  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 stump grinder 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.

6.1 Pre-Operation Check List

Perform the following checks prior to operation.

- Review and understand this manual and engine operators manual.
- Verify safety decals are installed and legible. Replace if damaged or missing.
- Verify that all hardware is tight.
- Verify that local utilities have marked all underground utilities.

6.2 Carbide Teeth Break In

New carbide teeth are razor sharp and can chip and shatter easily when they hit hard objects. Once the razor sharpness has worn away, tips do not chip as easily. Observing these precautions will extend the life of the carbide teeth and reduce operating expenses.

6.3 Operation

WARNING

Prevent serious injury or death.

Keep clear of moving machinery.

WARNING

Prevent serious injury or death.

Engine exhaust contains carbon monoxide. Carbon monoxide is an odorless gas that can cause death.

Avoid any areas or actions that expose you or others to carbon monoxide.

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.

WARNING

Never operate stump grinder when other people are in the vicinity. Debris can be thrown several feet from cutting area.

Keep all shields in place.

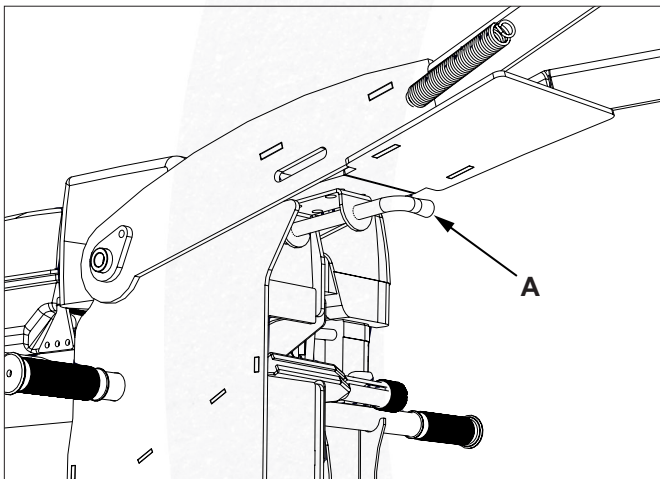
6.3.1 Grinding A Stump

WARNING

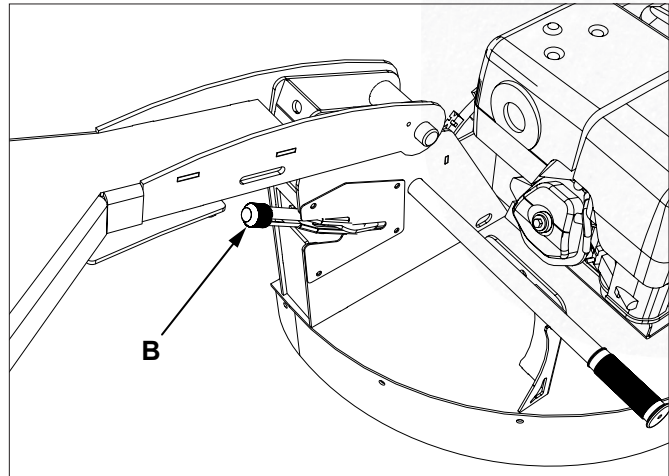
Prevent serious injury or death.

Keep clear of moving machinery.

1. Pull handle height lock (A) and adjust handle to a comfortable level. Push lock in to engage in hole to lock handle.



2. Start stump grinder engine. See OEM engine manual for safety, prestart and operational information.
3. If the stump is on a grade, position stump grinder lower on the grade with the cutting wheel on the stump grinder higher up the grade.
4. Position stump grinder up to the front edge of the stump.
5. Verify stump grinder is positioned at the edge of the stump that is closest to the stump grinder.
6. Position rotor close to, but not touching stump.
7. Pull wheel lock lever (B) to lock left wheel. Lever is shown in the locked position. This will allow you to pivot stump grinder while grinding stump.

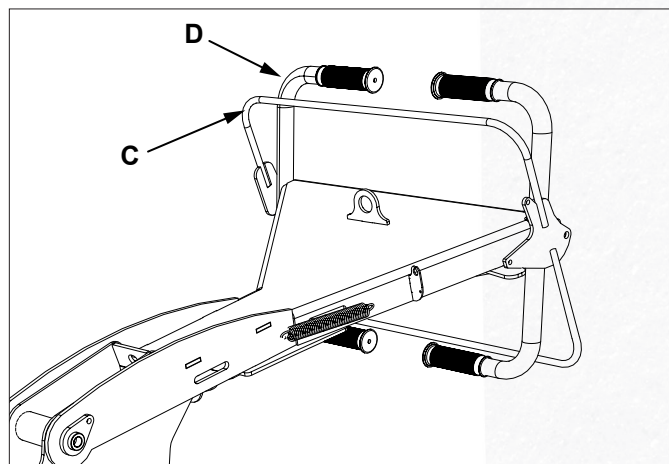


NOTICE

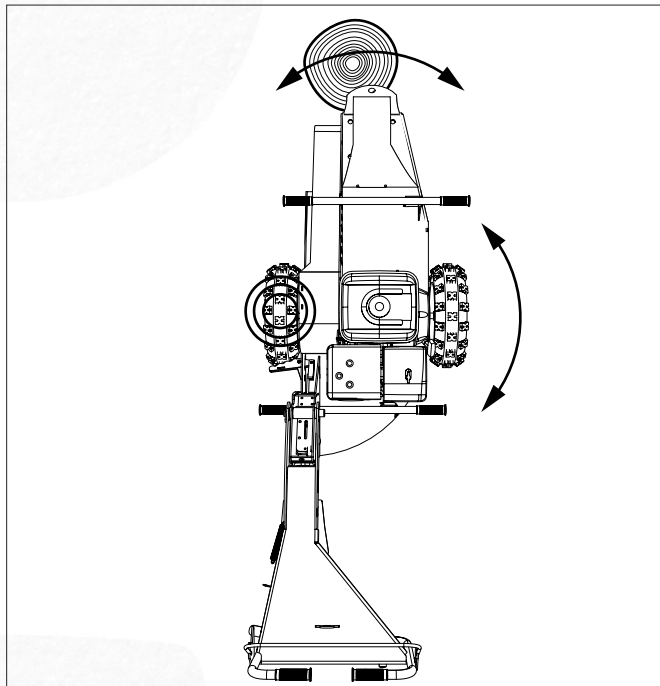
Grinding a stump with engine at less than operating speed may result in clutch damage and also void the warranty.

Safety bar (C) must be tight against handle (D) and engine running at operating speed (3600 rpm) when grinding stump.

8. Pull safety bar (C) tight against handle (D). This will increase engine rpm to operating speed and engage rotor. Releasing safety bar (C) will decrease engine speed and disengage rotor.



9. Make the first pass across front edge of stump, pivoting the stump grinder from side to side in 3-6 inch passes.
10. Continue to take passes across the front edge of the stump, taking 3-6 inches on each pass.

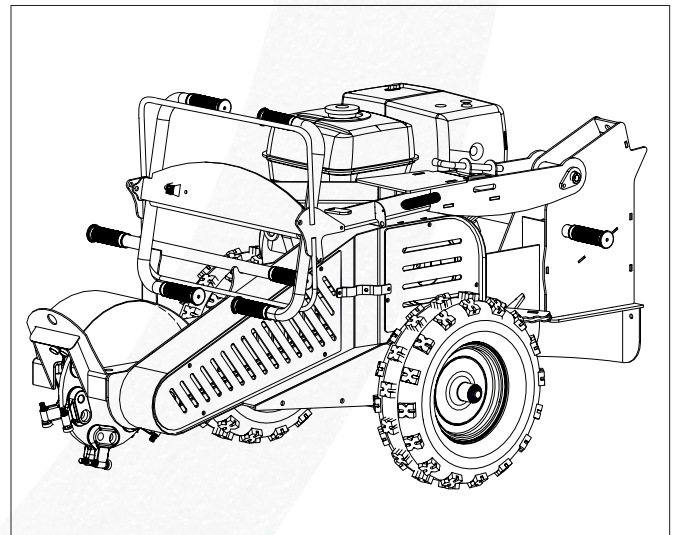
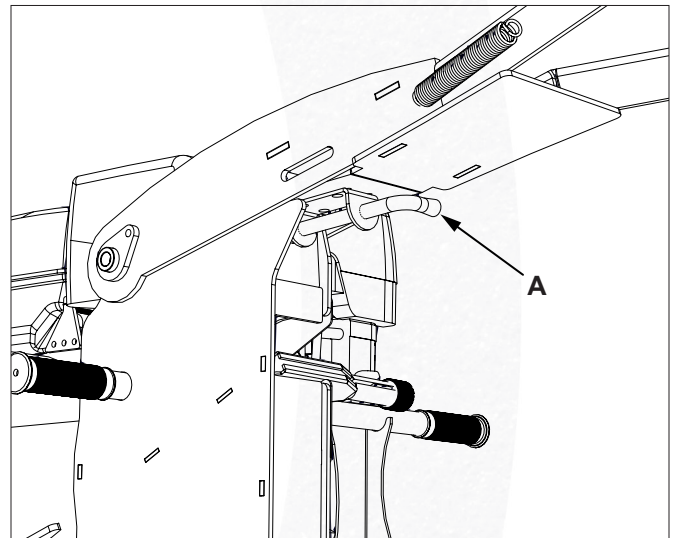


11. When ground level is reached, continue to grind below the surface to the bottom of the stump where the roots branch out.
12. Release safety bar (C) to decrease engine speed and disengage rotor.
13. Release wheel lock and position the stump grinder beside the new front edge of the stump.
14. Engage wheel lock.
15. Pull safety bar (C) against handle (D) to engage rotor. This will increase engine rpm to operating speed and engage rotor.
16. Make multiple passes over the front edge of the stump, taking 3-6 inches on each pass.
17. Reposition stump grinder as needed until the entire stump has been removed to below ground level.

18. Follow the roots, taking as much of the larger surface roots as possible. If these are not removed they can, over time, protrude from the ground in areas where there is a heavy freeze/thaw cycle.
19. Release safety bar (C) to disengage rotor.
20. Move stump grinder away from stump to a flat surface.
21. Stop stump grinder engine.

6.3.2 Storage

Pull handle lock (A) out and flip handle over for storage.



7. ROUTINE MAINTENANCE

7.1 Maintenance Intervals

ITEM	DAILY BEFORE USE	EVERY 4 HOURS	EVERY 30 HOURS	WEEKLY	EVERY 100 HOURS
Verify emergency stop is functioning properly.	•				
With engine stopped, verify throttle is fully open when safety bar is pulled tight against handle.	•				
Check cutting teeth for wear. Rotate or replace cutting teeth as necessary.		•			
Check engine air filter. Clean or replace as necessary.		•			
Lubricate pivot point grease fittings.			•		
Lubricate rotor bearings			•		
Check rotor bearings for side-to-side and up/down movement. Replace bearings if movement is found.				•	
Check drive belt condition and tension.					•
Change engine air filter.					•
Change engine oil.					•

WARNING

Moving parts can crush and cut.

Keep clear of moving components.

Stop engine before performing inspections or maintenance.

WARNING

Prevent serious injury or death.

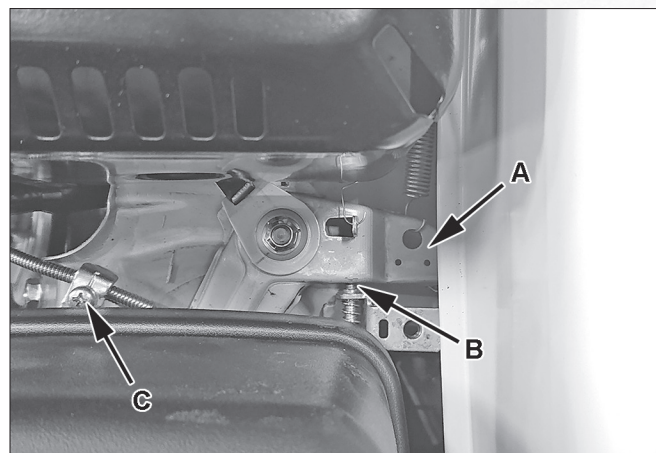
Wear proper protective equipment appropriate for the job.

7.2 Inspections

Inspect the unit for worn or damaged parts. Repair or replace parts as needed.

7.3 Throttle Inspection

With engine stopped, pull safety bar tight against handle and verify throttle (A) is against stop (B). If throttle is not against stop, loosen clamp screw (C) and adjust throttle cable case as necessary. Tighten screw (C) and re-check. Throttle (A) must be against stop (B) and when safety bar is tight against handle. Engine must be running at operating speed (3600 rpm) when grinding a stump.



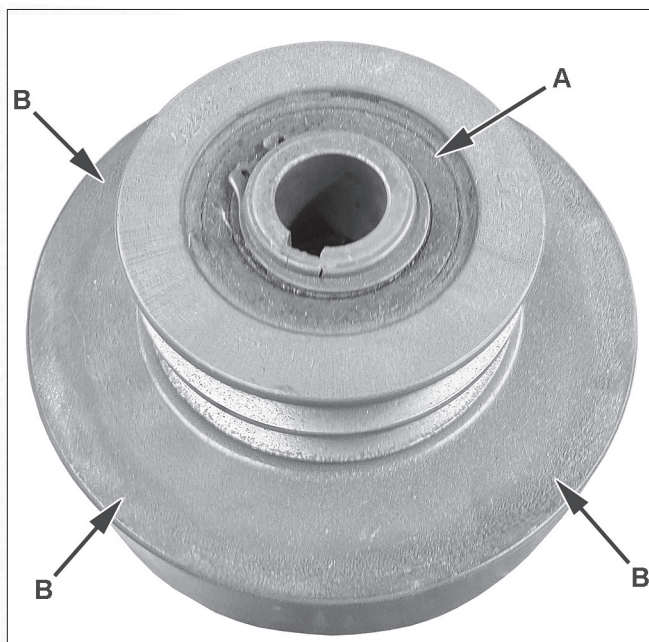
7.4 Clutch Inspection

Inspect clutch between each use.

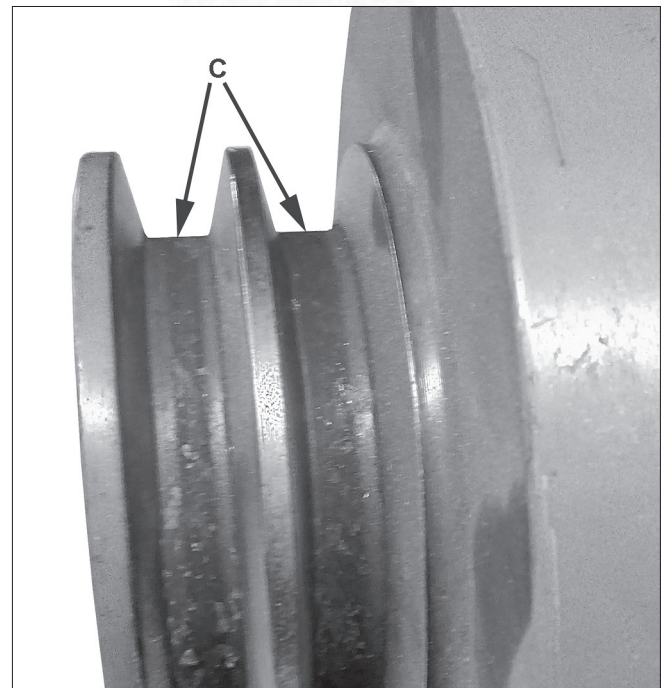
NOTICE

Prevent clutch damage.
Engine must be running at operating speed (3600 rpm) when grinding a stump.

1. Park grinder on a level surface.
2. Shut off engine.
3. Inspect clutch bearing seal area (A). Grease on outside of seal indicates excessive heat. Discoloration in areas (B) also indicates excessive heat. Excessive heat is a result of clutch slippage. This is normally due to grinding a stump at less than operating speed. Verify engine throttle is properly adjusted so engine runs at operating speed (3600 rpm) when safety bar is tight against handle.



4. Inspect pulley grooves. Wear in the bottom of pulley grooves (C) indicates that belt is worn out and must be replaced. Excessive belt wear is a result of belt slippage. This is normally due to belt not being tight enough and will damage the pulley as it must run cool to work properly.

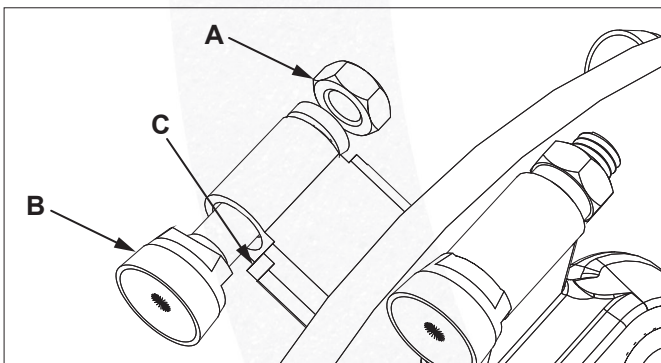
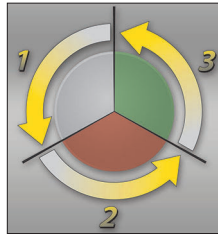


7.5 Rotate Cutting Teeth

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.

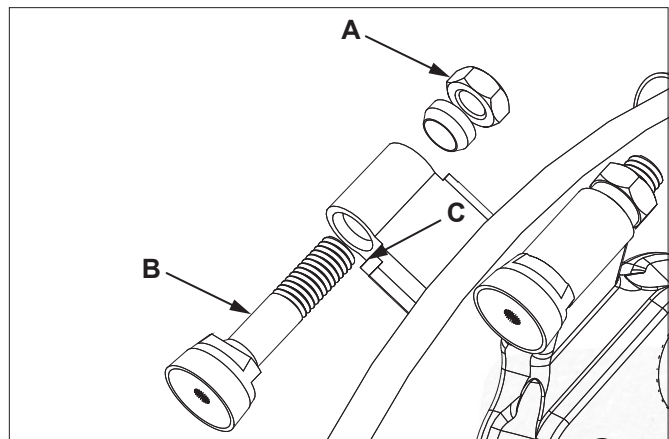
Each tooth can be rotated up to two times from its original position before replacement is necessary.

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



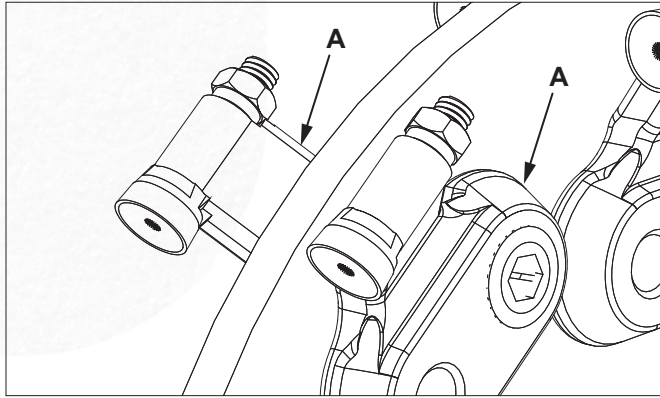
7.6 Replace Cutting Teeth

1. Park stump grinder on a level surface.
2. Shut off engine.
3. Inspect cutting teeth (B) for damage and wear. Replace individual teeth as needed.
4. Remove locknut (A) and spacer from tooth (B). Install new tooth. Flat shoulder on tooth will fit against shoulder (C) on tooth holder.
5. Install spacer and locknut. Tighten locknut (A) to 65 lb/ft (88 Nm) of torque.



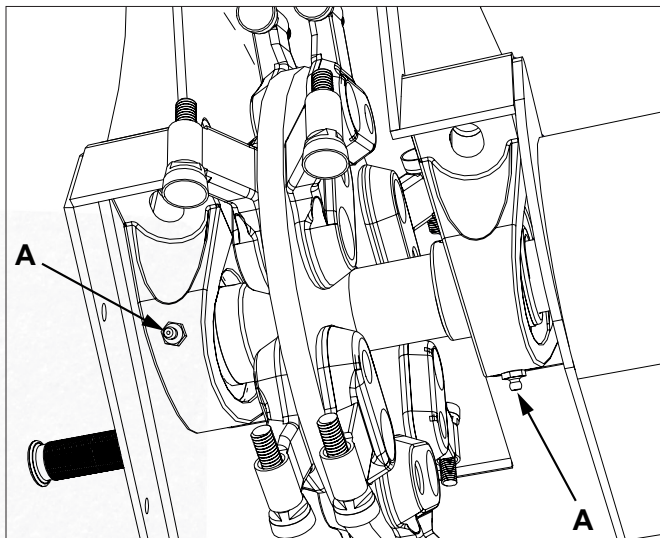
7.7 Replace Tooth Holder

1. Park stump grinder on a level surface.
2. Lower rotor to the ground.
3. Shut off engine and remove key.
4. Inspect tooth holders (A) for damage and wear. Replace individual tooth holders as needed.
5. Remove tooth from tooth holder.
6. Remove mounting hardware on tooth holders. Install new tooth holder and tighten mounting hardware.
7. Install tooth into new tooth holder.
8. Tighten tooth locknut to 65 lb/ft (88 Nm) of torque.

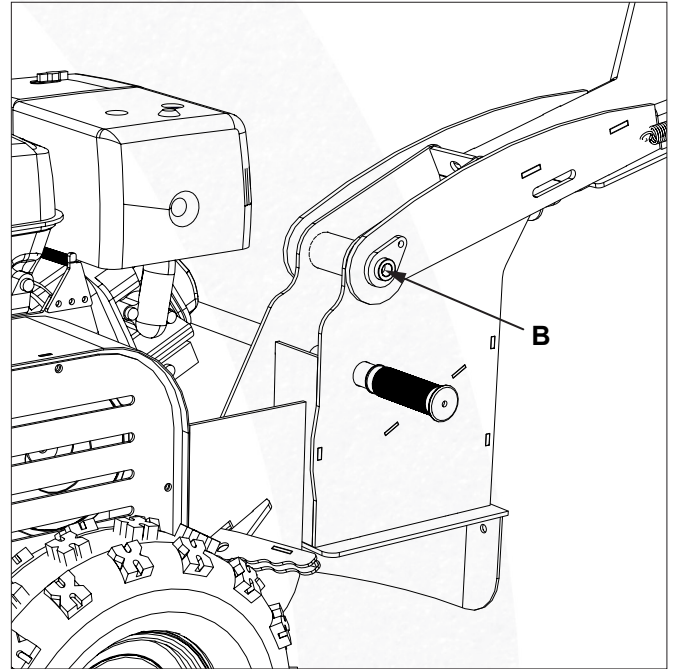


7.8 Lubrication - Every 30 Hours

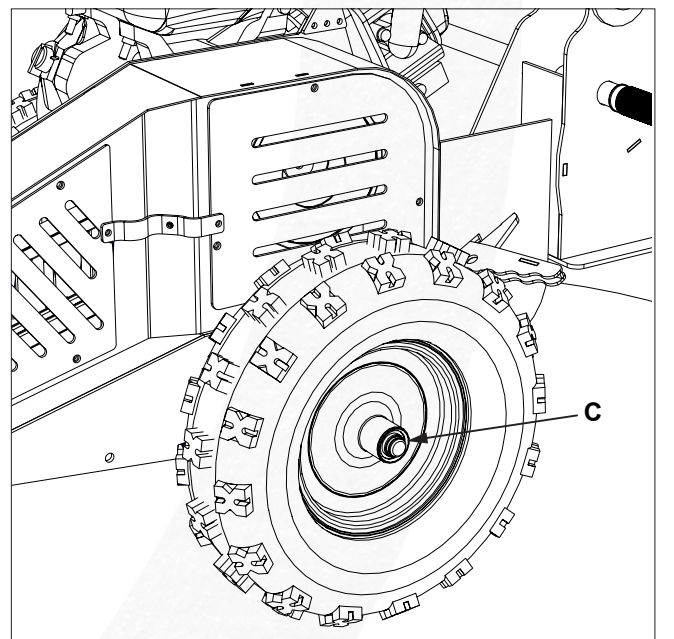
1. Lubricate rotor bearings (A).



2. Lubricate pivot pin (B).

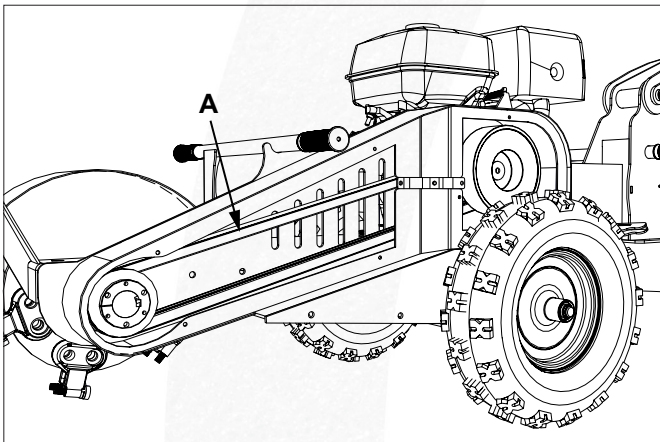


3. Lubricate axles (C).

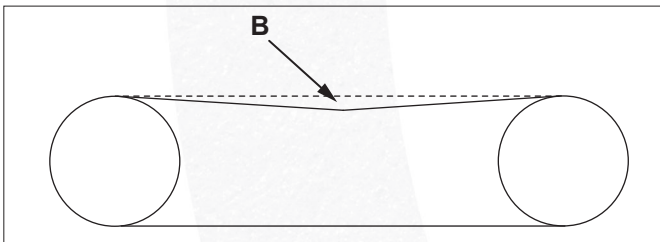


7.9 Check Belt

Remove belt guard and inspect belt (A) for proper tension, wear, damage and correct alignment. Replace belt if worn or if belt is damaged. Check belt alignment. Engine pulley and rotor pulley must be aligned or belt will wear quickly. If not aligned, adjust engine pulley and/or rotor pulley.

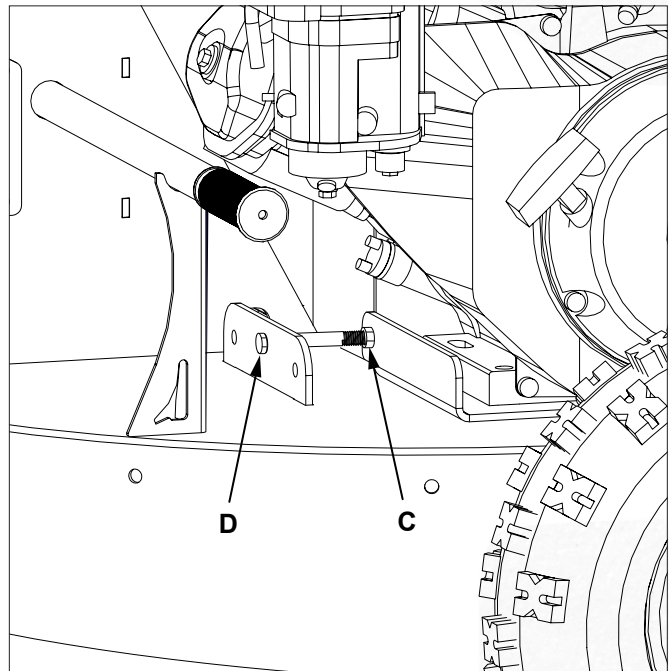


Belt deflection (B) should be 0.5 in. (13 mm) at 3.0 lbs of force for a used belt or 4.25 lbs of force for a new belt.



To adjust belt tension, loosen engine mounting bolts. Loosen jam nut (C). Turn adjustment bolt (D) clockwise to tighten belt to proper tension. Tighten jam nut (C) and engine mounting bolts.

Install belt guard. Do not operate stump grinder with belt guard removed.



8. TROUBLESHOOTING

Problem	Probable Cause	Solution
Rotor does not spin.	Rotor jammed.	Lock out power and clear debris from rotor.
	Drive belt loose.	Tighten drive belt.
Rotor rotates slow or sluggish.	Drive belt loose.	Tighten drive belt.
Excessive vibration.	Debris lodged in rotor.	Lock out power and clear debris from rotor.
Smoke emitting from engine exhaust pipe.	Dirty or clogged engine air filter.	Change engine air filter.

Holt Industrial
4575 Powell Rd.,
Wallenstein, Ontario Canada
N0B 2S0

Phone - 844.444.4658

holtindustrial.com