



# Bush-Whacker®

**TOUGH ON GRASS, EASY ON YOUR WALLET**



2017

# OPERATOR'S MANUAL AND SAFETY GUIDE

## MD-144

## Welcome

Thank you for selecting the MD-144 Rotary Mower. Your machine has been carefully inspected by both the factory and the dealership prior to being received by you to ensure that it is ready for operation.

This manual explains the proper operation of your machine. It is very important that you read and understand these instructions before operating or maintaining the machine. Failure to do so could result in personal injury or even death to you or passersby. Consult your Bush-Whacker dealership if you do not understand the instructions in this manual or need additional information.

Hall Manufacturing, Inc. reserves the right to make changes at any time without notice or obligation. Additional copies of the manuals are available from your local Bush-Whacker dealer.

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## Table of Contents

Introductory Page .....	2
Safety Section .....	4-12
General Safety Instructions and Warnings.....	5
Decals Placement.....	6-7
Operations.....	8-9
Attaching/Detaching Cutter.....	10
Rollover.....	10-11
Rotating Blades.....	11
Hydraulics.....	12
Maintenance.....	13-20
General Maintenance.....	14
At Least Twice Daily.....	14-15
Daily.....	15-16
Every 1,000 Hours or Annually.....	17
Gearbox Assembly / Disassembly.....	18-19
Operational Tips.....	20-24
Warranty Information.....	26-28
Warranty Registration Card.....	29
Notes.....	30

# Safety Section

# General Safety Instructions and Warnings



## Attention

### Important Safety Information

**Read and Study this safety information BEFORE operating this equipment.**



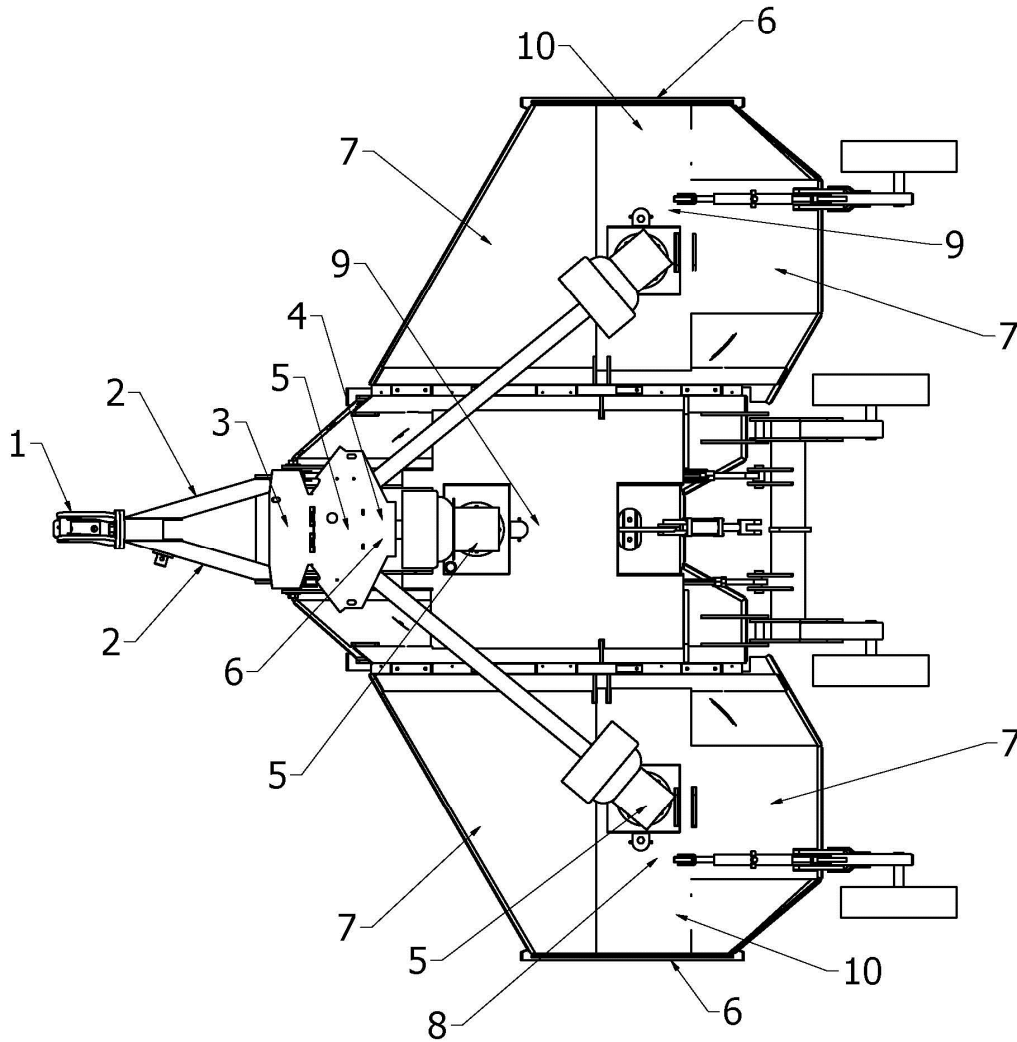
The use of common sense and reasonable safety precautions are a must in the operation of this equipment. Think Safety – Accident prevention is dependant upon the personnel involved in the operation, transport, and maintenance of the equipment. To minimize the chance of accidents, serious injury, or even death; Safety Precautions Must Be Followed! **FAILURE TO FOLLOW SAFETY INSTRUCTIONS AND FAILURE TO USE COMMON SENSE COULD RESULT IN SERIOUS INJURY AND/OR DEATH TO THE OPERATOR, BYSTANDERS, PASSERSBY, OR ANIMALS IN THE AREA.**



## Safety Decals Information

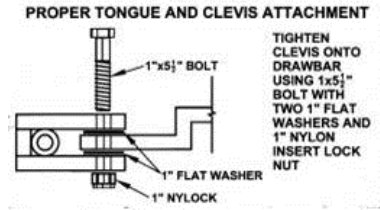
- Always keep the area around safety decals clean and free of debris so that they can be easily seen and read.
- When installing new components to the equipment, it is necessary to obtain new safety decals from your Bush-Whacker dealer and adhere them promptly and properly.
- Always keep safety decals clean, using soap and water. Do not use abrasive cleaners because they could cause damage to the decals.
- If the safety decals get damaged, or are missing, contact your local Bush-Whacker dealer to order replacements for them.
- In order to replace the safety decals, the equipment must be clean and dry. Then remove the adhesive backing and place it on the equipment.

# Safety Decal Placement

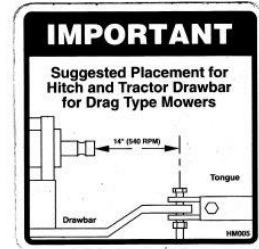


# Safety Decal Placement

#1  
Part# 4478



#2  
Part# 4479



#3  
Part# 2569



#4  
For 540 RPM  
Part# 4169



For 1000 RPM  
Part#4170

#5  
Part# 4415



#6  
Part# 4416



#7  
Part# 2572



#8  
Part# 4167



#9  
Part# 4168



#10  
Part# 4480



# Safety Warnings

## Operations

**NEVER** operate a rotary mower with a person or animal in the area. The blades may throw objects for great distances and can strike a person, passerby, or animal causing serious injury or death.



Stop operation of the machine for a passerby or if someone appears to be approaching the area. Objects can be thrown for hundreds of yards at great speed.



**ALWAYS** inspect the deflector shields and/or chain guards daily to ensure that they are in proper working order and that no chains are missing. If the deflector shields or chain guards are not operating correctly, chain links are missing, or the complete deflector shields or chain guards assembly is missing, do not operate the mower. **NEVER OPERATE THE MOWER WITHOUT CHAIN GUARDS OR DEFLECTORS IN PROPER WORKING ORDER.**

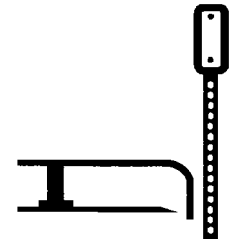
Rocks, gravel, wire, rope, bricks, or similar objects are potential hazards for rotary mowers operation. These items can cause damage to the machine; but more importantly, they can be ejected from underneath the mower at very high speeds, resulting in property damage, injury or even death. Always inspect the mowing area prior to the operation of any rotary mower. If any of these objects or similar objects are found, remove them immediately before operation.



**NEVER** operate the mower without the driveline safety shields in place and in proper working order. Operation without safety shields can lead to injury or death.

**EXTREMELY IMPORTANT**—Make sure all gearbox shields are in place and tightened before operating the mower. If one works loose, stop mowing and tighten immediately. **NEVER OPERATE THE MOWER WITHOUT ALL GEARBOX SHIELDS PROPERLY INSTALLED. OPERATION WITHOUT SAFETY SHIELDS MAY CAUSE SERIOUS INJURY OR DEATH.**

Avoid hitting hard solid objects such as large rocks, concrete culverts, guard rails, etc. This could cause serious damage to the machine. Broken machine parts or pieces of the object can be thrown at very high speeds. This could result in serious injury or death to persons at a considerable distance from the rotary mower.



**NEVER ALLOW ANYONE TO RIDE ON THE MOWER OR THE TRACTOR.** This equipment, if not operated properly, could be potentially dangerous; therefore, **NEVER ALLOW A CHILD TO OPERATE A ROTARY MOWER.**



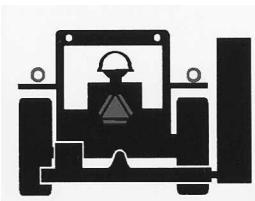
# Safety Warnings

## Operations



Thoroughly examine the rotary mower each day before operating. Tighten loose bolts, nuts, and hydraulic fittings. Replace all damaged or broken parts, including hydraulic hoses. If rotary mowers are not kept in proper working order, they could be damaged and this could result in serious injury.

NEVER engage in repair work under the mower deck or any other part of the mower that is raised off the ground until the mower is safely and securely supported in the raised position. Inadequate support can result in the mower falling, which could result in serious injury or death.



Use **proper signage** around working area. This will help the operator have a safe place to work, and help passers by to take appropriate precautions.

Use the proper **reflective devices** on the equipment to help prevent accidents.

Make sure that all rules of the road are followed, and Slow Moving Vehicle (SMV) rules are also observed



**Always inspect the area before mowing for potential mower hazards.** Remove or avoid all foreign objects such as wire, cable, metal objects, and all other foreign material. **Failure to do so could result in serious injury to the operator or passerby from foreign material being thrown from the mower.**

If operating along roadway, keep equipment within the **lane closest to the work area**. Never operate equipment against the flow of traffic, which could possibly result in a head-on collision causing serious injury or death.



Never use equipment around railroad tracks without direct railway supervision. Inexperience in railway operations may cause loss of communications, loss of signals, rail and tie damage or derailment.

NEVER cross railway tracks anywhere other than at normal traffic crossings. Unauthorized machinery on railways are in extreme danger of being struck by locomotives and railway machinery resulting in damaged equipment, serious injury or death.

# Safety Warnings

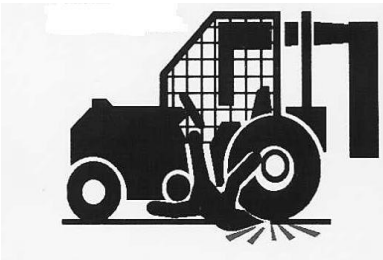
## Attaching/Detaching Cutter

Before approaching any rotary mower or before dismounting the tractor, always make sure of the following:

The tractor transmission is in the parking gear, and the parking brake is set to keep the tractor from moving while unattended.

The tractor PTO is disengaged.

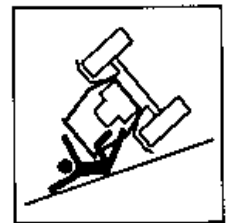
The engine has stopped, the key is out of the ignition, and all moving parts (both tractor and mower) have completely stopped. The rotating parts of the tractor and rotary mower may continue to rotate after the PTO has been disengaged. **THE OPERATOR SHOULD REMAIN SEATED UNTIL ALL MOVEMENT HAS CEASED!**



**NEVER WORK ON THE ROTARY MOWER WITH THE POWER ON.**

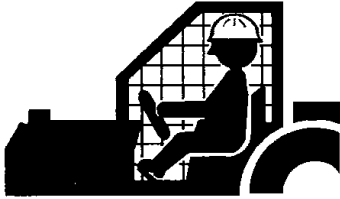
## Rollover

Care must be taken when operating on uneven terrain, ditches, or embankments. The chances of the tractor and/or mower rolling over are increased. Also, the chance of objects being thrown by the blade are increased when operating under these adverse conditions.



# Safety Warnings

## Rollover



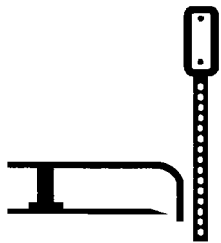
Never operate the equipment without the **Roll-Over Protective Structure (ROPS) and without a seat belt**. These items prevent injury in a roll-over accident. It is also highly recommended to wear protective equipment such as a hard hat, safety glasses, safety shoes, and ear plugs.

**OPERATE CAREFULLY!** It is important to slow down when turning and when going down slopes. Doing so could result in a roll over resulting in injury, or possibly death, to the operator.



## Rotating Blades

Stay away from rotating blades. **Keep hands and feet clear of rotating blades and discharge areas at all times.** Never get close to the blades until **all motion has stopped and machine is turned off.**



Never allow **rotating blades to contact solid objects** like rocks, posts, curbs or guard rails. **Only operate if all guards and deflectors are in place and in good working condition.**

Never operate equipment with loose blades. Retighten after the first 8 hours of use and after blade replacement.

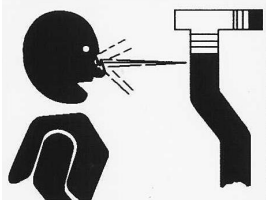


- Never operate with mower deck raised if bystanders or traffic are in the area. This helps to prevent injury or death from objects thrown by the blades.
- Stop cutting if someone comes within 500 feet. **DO NOT operate equipment with bystanders in the area!** Rotary mowers have the ability to throw debris considerable distances when blades are allowed to strike foreign objects. Operator must exercise caution or serious injury or even death could result.

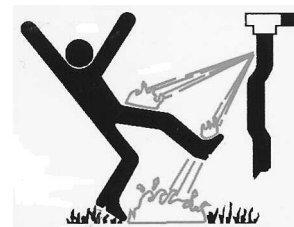
# Safety Warnings

## Hydraulics

Relieve all pressure in the hydraulic lines by setting the mower deck on the ground, shutting the tractor off, and actuating lift valve handles before disconnecting hoses. This relief of pressure will reduce possibility of serious injury from spewing hydraulic fluid.



Frayed, torn, or crimped hoses may rupture and spray boiling oil onto the operator and cause serious bodily injury from scalding.



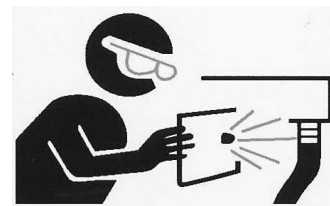
Failure to inspect and repair or replace hoses may cause worn hoses to **rupture suddenly** and **violently** resulting in **serious bodily injury** from **scalding or fire** with resulting burn injury or death.

**Boiling oil** may spray onto hot tractor parts and **catch fire** causing severe burn injury or death.



**Inspect hoses daily and repair or replace when needed.** Stop all leaks. Repair or replace hoses as indicated to prevent unexpected failure and possible serious injury to operator or bystander.

**Use paper or cardboard to check for leaks.** Never use your hand. If **oil penetrates skin**, gangrene or other serious injury could occur. **If skin is penetrated by hydraulic fluid, get immediate medical attention.**



## Safety Conclusion

Now that the operator has read the information provided in this manual; he or she should now be aware of how dangerous a rotary mower can be if operated improperly. It is important that the operator of this equipment should be cautious, conscientious, and use common sense when operating this equipment in order to avoid serious injury and or death to the operator, support personnel, passersby, or animals.

**Safety  
Depends on You!**

# General Maintenance

## General Maintenance

Refer to tractor's service manual for proper tractor maintenance.

**NEVER service the mower with the power on, except where otherwise stated.**

Before working on a mower always check to see that:

- The tractor's transmission is in the parking gear and the parking brake is set. This helps to keep the tractor from moving while unattended.
- The tractor PTO is disengaged.
- The engine is off and all moving parts (both tractor and mower) have completely stopped.

**ALWAYS install transport locking bars before doing any wing blade maintenance.**

The rotating parts of the tractor and mower continue to rotate after the PTO has been disengaged. The operator should remain seated until all movement has ceased.

Never engage in repair or service work under the mower deck or any other part of the mower that is raised off of the ground until the mower is safely and securely supported in the raised position.

Use extreme caution when working on a mower. Many of the parts are heavy and sharp and can cause serious injury if they are dropped or fall on the operator or bystander.

The blades are very sharp and can pivot. Use extreme caution when performing maintenance on them. Failure to do so could result in serious injury or possibly even death.

Use marfac double ought grease or cotton picker spindle grease to lubricate all Bush-Whacker gearboxes. Replacement gearbox grease is available from your Bush-Whacker dealership.

**Always use genuine Bush-Whacker replacement parts, available through the network of authorized dealers. The use of non-OEM parts could void the warranty of this machine. Non-OEM parts, specifically blades and blade bolts, may not meet Hall Manufacturing Inc. specifications and could lead to serious injury or death.**

### At Least Twice Daily

#### Rotor Bar Assembly, Blades, Blade Bolts, and Nuts

- Check blades for any signs of cracking or damaged cutting surfaces. If a blade is cracked, replace the set at once. DO NOT operate the mower at any time with a cracked or severely damaged blade! If a blade breaks, it could cause severe injury or possibly death.
- Check if blade cutting surfaces are dull. If they are, re-sharpen or replace blades.
- Check if blade bolts and nuts are loose, cracked or damaged. DO NOT operate the mower with any of those characteristics. Any of these conditions could allow the blade to come loose and could cause injury or possibly death. Always keep the blade bolts and nuts tightened to 350 ft. lbs. of torque.
- DO NOT operate the mower with just one blade.

## At Least Twice Daily

### Rotor Bar Assembly, Blades, Blade Bolts, and Nuts

- Make sure rotor bar assembly is securely attached with castle nut and cotter pin to the output shaft.
- Always make sure to replace the blades in sets.

NOTE: When mowing at low cutting heights or on uneven terrain, the blades can come in contact with the ground frequently. When this happens, the blade tips can be pushed upwards causing the blade to bend. By pushing upwards on the blade tip, the rear of the blade (at the bolt hole) is forced downward away from the rotor bar assembly. This causes the bolt to be pulled through the bar and can cause it to shear. When the bolt shears, it will throw a blade. When operating in these conditions, the operator must check the blade bolts more frequently than normal, at least four times a day.

Always use genuine Bush-Whacker replacement blades, bolts, and nuts. Other blades may not meet Hall Manufacturing specifications and could lead to serious injury or death.

After changing blades, always check to be sure they are rotating in the proper direction (center and right wing CCW and left wing CW). Improper rotation will cause the blades to “lay the grass down” and not cut properly.

### Hydraulics

- If at any time the hoses become frayed, worn, or pinched, replace them.

## Daily

### Shields

- Make sure ALL shields are in place and tightened before operating the mower. If one works loose, stop mowing and tighten immediately.
- Replace shields if they become excessively worn or damaged.

### Drive Shafts

- Inspect the Drive Shaft Shields, make sure that they are installed and working properly. If shields become damaged or loose during operation, stop immediately and fix or replace them.
- Make sure the drive shaft shield mounting chains are securely fastened.
- Inspect cross kits
- Grease each zerk fitting with natural or synthetic lubricants. Never mix the two types of lubricants.
- Check Drive Shaft tubes to ensure that they telescope properly. If they do not, replace them.

## Daily

### Gearboxes

- Check gear lube. If the grease is lower than the inspection plug on the rear side of the gearbox, then fill to the level of the plug. NOTE: Do not overfill the gearbox.
- Inspect output shaft for vines, wire, rope, etc. that may collect around the shaft and tear up the output seal. If a seal is leaking, replace it, or risk overheating and severe damage to the equipment.
- Check the mounting bolts and nuts to be sure that they are correctly secured. If left unchecked, it could cause excessive vibrating which could damage the equipment.

### Pins, Bolts, and Nuts

- Inspect all pins, bolts, and nuts, making sure that they are all in place and secure. Look for loose fasteners and tighten to the proper torque as required.

### Skid Shoes

- Check for any wear or damage, replace if required.

### Frame

- Look for any structural cracks, damage and wear.
- Keep the equipment clean. Inspect for debris caught in the machine, especially at all pinch points.

### Wheel Hubs

- Grease wheel hubs at zerk fitting once a day before operating the mower. Check seals for leakage. Replace seals if a leak is detected. Also, check bearings for damage. If they have seized, they are damaged; replace them immediately before use.

### Chain Guards

- Rear and front chain guards are standard equipment for all Bush-Whacker rotary mowers.
- Always inspect the chain guards to be sure that no chain links are missing and the guards are operating correctly. If the guards are not operating correctly, links are missing, or the complete chain guard assembly is missing, do not operate the mower. **Never operate the mower without chain guards or deflector in proper working order.**

### Hinges

- Grease hinges each day before operating the mower. This will ensure proper action of the hinges and pins. Also clean any build up of dirt and grime from the hinges. This build up can cause the hinges to work improperly and damage the machine.



## Every 1,000 Hours or Annually

It is recommended to do annual, pre-season maintenance at the end of each operating season, rather than at the beginning.

The mower should be stored in the off-season **cleaned, inspected and repaired**. This will help prevent any rust forming on the mower's surfaces and contaminants damaging the hydraulic components.

## **Gearbox Disassembly Procedure**

1. Drain all gear oil from the gearbox by removing the drain plug located on the gearbox housing below the gearbox mounting flange.
2. Remove the 8 inspection cover bolts from the top of the gearbox. Remove the inspection cover to expose the input shaft.
3. Remove the bolts from blank cap. Remove the blank cap taking care not to damage the gasket between the cap and housing.
4. Remove the retaining ring between the shaft and gear (for gearboxes with gears on the back side of the input shaft only).
5. Press out input shaft through blank cap hole. This will remove the race and allow the shaft to slide out. Gear may be removed through the top of the gearbox housing. Seal, retaining ring, and race may be removed from the front of the gearbox if necessary. It is very important to make note of the location of the shims used when removing the input shaft.
6. Remove the cotter pin and retaining nut from the output shaft. The output gear will slide off of the output shaft. Remove any shims that may be present.
7. Remove seal protector from output of gearbox housing and remove the retaining ring underneath.
8. The output shaft assembly will have to be pressed out from the inside or it can be pulled out through the bottom of the housing. The output seal, spacer, and lower bearing will be removed with the shaft. The upper bearing will be pressed off the end of the shaft.
9. If any of the bearing races in the housing need to be removed, a blind hole bearing puller should be used.
10. See Parts Book for parts breakdown.

## Gearbox Assembly Procedure

1. The output assembly goes into the housing first. If the upper bearing race has been pulled out it must be pressed in. The lower bearing must be pressed onto the shaft before installation.
2. Once the output shaft is in place, install the upper bearing, shims, gear, and retaining nut.
3. The bearing preload is measured by rolling torque. The rolling torque should be between 6-15 inch pounds. Adjust the retaining nut until you reach this rolling torque. Secure the retaining nut with the cotter pin.
4. The bearing race for the front bearing on the input shaft must be pressed in. Outer retaining ring should be installed in the gearbox housing. Make sure the shims are installed between the retaining ring and race as necessary.
5. Place the input shaft through the back of the gearbox while holding the gear in place. Slide the shaft through the gear and press into the front bearing. Ensure the shaft to bearing retaining ring is installed on the front of the input shaft. Install the gear to shaft retaining ring.
6. Press bearing onto the back of the shaft. Be sure to replace any shims that were removed during disassembly. Press race partway into the back of the gearbox housing. Install the cap on the back of the housing using the appropriate gasket and tighten the bolts to 38 ft-lb.
7. Check contact pattern of gear set with marking compound. Contact is to be in the central toe area of the gear teeth with a minimum 50% tooth height and 50% tooth length in contact. The back lash should be between 0.006" and 0.022" when measured at the pitch diameter of the gear set. If the gear mesh or back lash are incorrect use shims reposition the gears.
8. The bearing preload is measured in the same manner as for the output shaft. The rolling torque should be between 11-25 inch pounds. Install thicker gaskets to decrease the rolling torque and thinner gaskets to reduce the rolling torque.
9. Once the preload is set, install the output spacer, seal, retaining ring, and seal protector. Install the input seal in the housing. Remove the blank cap and apply sealant to the gaskets and replace the cap. Torque the bolts back to 38 ft-lb.
10. Replace the inspection cover on the top of the gearbox and torque the bolts to 20 ft-lbs.
11. Fill the gear box with the recommended lubricant in an upright position similar to the mounting position. Fill the gearbox to the level plug.



# Operational Tips

## Operational Tips

### Tractor PTO Operating Range

This mower can be ordered from the factory as a 540 or 1000 RPM machine. Always make sure that the tractor and mower have the same PTO speed. Check the tractor manufacture's instruction manual for the proper engine RPM to achieve the proper PTO speed. **DO NOT** operate the mower at any higher RPM, doing so will cause damage to the mower as well as create an extreme hazard to the operator, passersby, or animals. Also note that doing so will void the warranty of the machine.

### Drive Lines

Do not operate the main drive shaft or wing drive shafts at more than a 35 degree angle. Doing so will cause them to fail. Exception: the optional constant velocity main drive shaft has a maximum operation angle of 80 degrees.

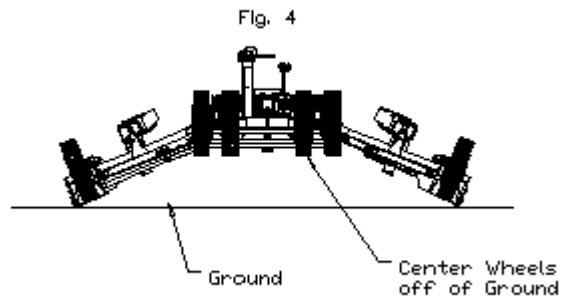
Never lift the wings of the mower while the PTO is engaged. Always make sure that the blades have come to a complete stop before raising the wings. Doing so will cause extreme damage to the drive line and gearboxes

### Wing Cylinders

The wings are designed to follow the contour of the ground. In order to accomplish this, the wings have a sliding ear that allows the wing to follow the ground contour.

## Operational Tips

Never make the cylinder double acting where it can move in either direction the pull or push position. As illustrated in Fig. 4, when the wing cylinders are engaged in the push direction while the wing tire assemblies are on the ground; the center section becomes suspended by the hinge assembly.



### Hydraulic System

Always plug any unused ports of your hydraulic valve. If any port is left open, hydraulic fluid will spray from the valve and may cause an eye injury or become harmful if swallowed.

If the valve “screams” when operated, adjust the valve relief plug until the noise has stopped. This noise indicates the hydraulic fluid is bypassing internally making the cylinder not work properly. When the mower is in operation, the wing control valve handles should be in the forward most position. This is the float position and allows the wings to follow the contour of the ground. If you are having trouble with your valve operating the mower properly, check to be certain that you have an open center valve with an open center tractor or you have a closed center valve with a closed center tractor. An open center system will not work on a closed system tractor.

## Operational Tips

### Cylinders

Always have a breather plug installed on the cylinders. If there is no breather, the cylinder will not operate properly and may be damaged. Also, always have a restrictor installed between the valve and the cylinder. Hall Manufacturing, Inc. recommends installing the restrictor between the hose and the cylinder at the cylinder port. Never operate the mower without a restrictor, the wing will lower too quickly and will damage the mower. If you are having trouble with the cylinders raising the center section, check the relief plug on the valve to be sure the hydraulic fluid is not by-passing.

### Transporting

Always secure the two wing sections with the travel safety pins when transporting the mower or performing maintenance on either wing section. This is of utmost importance, because the hydraulic system may fail and allow the wing to fall causing injury or death.

### Leveling the Mower and Setting the Cut Height using the Optional Re-phasing Cylinder System

In order to achieve an even cut it is important to make sure that the mower is level from front to back and from side to side. Front to back leveling is achieved by adjusting the turn-buckle on the leveling rods located on the center section of the mower. The leveling rods should be shortened if the front is too low and lengthened if the front is too high. It is important to mention that this adjustment should take place with all of the tension removed from the level rods.

When all three sections are level, the cutting height can be set by activating the center cylinder to the desired height of cut. In order for the mower to lower to the proper cutting height, a stroke control kit can be installed on the center cylinder which limits the collapsed length of the cylinder.





# Warranty Section

## HALL MANUFACTURING WARRANTY POLICY FOR BUSH-WHACKER ROTARY MOWERS

### NEW EQUIPMENT WARRANTY

Subject to limitations and exclusions set forth herein, Hall Manufacturing Inc. warrants that if any component or part of a machine manufactured by Hall Manufacturing, excluding any mechanical gearbox or mechanical gearbox component used by Hall Manufacturing, proves to be defective in material or workmanship within one (1) year from the delivery date of the original sale to the end user, Hall Manufacturing will, at its option, either repair or replace the defective part without charge. In addition, Hall Manufacturing warrants that if any mechanical gearbox or mechanical gearbox component used by Hall Manufacturing on any Bush-Whacker rotary mower proves to be defective in material or workmanship within three (3) years from the delivery date of the original sale, Hall Manufacturing will, at its option, either repair or replace the defective mechanical gearbox or gearbox part without charge, except for rotary mowers sold directly to a state or related governmental agencies for which the mechanical gearbox or mechanical gearbox component warranty period is limited to one (1) year from the delivery date of the original sale. No payment will be made in lieu of repair of the machine.

### LIMITATIONS AND EXCLUSIONS

If the equipment is used for rental the warranty period is ninety (90) days from the date of sale to the renter. This includes all mechanical gearboxes and their components.

This limited warranty covers defects in materials and workmanship in the parts manufactured or used by Hall Manufacturing excluding:

Damage resulting from accident, abuse, misuse, neglect or other than normal and ordinary use of the equipment.

Damage resulting from failure to use the product in accordance with the manufacturer's instructions.

Refer to the appropriate owner's manual for the Bush-Whacker mower model you purchased.

Hall Manufacturing shall be released from all obligations and liabilities under this warranty if:

The equipment had been operated with any accessory, equipment, component or part not manufactured by Hall Manufacturing or approved for use by Hall Manufacturing.

The equipment has been repaired, altered or modified without Hall Manufacturing's approval or if the equipment shall have been operated subsequent to its involvement in an accident or breakdown unless the Owner furnishes reasonable evidence that such repair, alteration, modification or operation subsequent to its involvement in an accident or breakdown was not a cause of the defect.

The Owner does not return, at Owner expense, the defective accessory, equipment component or machine to, or notify, an authorized Bush-Whacker dealer. The Owner shall be responsible for submission of reasonable evidence of proof of Date Discovery of said defect.

### REPLACEMENT PARTS WARRANTY AND PARTS REPLACED BY WARRANTY

Hall Manufacturing further warrants that if any genuine Bush-Whacker part or component utilized by an authorized Bush-Whacker dealer proves to be defective in material or workmanship, within thirty (30) days of such utilization, Hall Manufacturing will, at its option, repair or replace the defective part without charge. Owner shall be responsible for all freight charges including labor to and from the place where the warranty work is performed.

### WHAT YOU MUST DO TO ENFORCE THIS WARRANTY

Warranty services must be performed or approved by an authorized Bush-Whacker Dealer. The Owner must, at the Owner's expense, deliver, mail or ship the defective product together with the original Bill of Sale to any Authorized Dealer in the Owner's area.

Owner must pay any postage, shipping charges, insurance costs, freight and other expenses to and from the place where the warranty work is performed. If required to return equipment or any component or part to an authorized Bush-Whacker Dealer, Owner shall be obligated to pay any premium payable for overtime labor if overtime is incurred as a result or a request by the Owner.

### UNAPPROVED SERVICE OR MODIFICATION

All obligations of Hall Manufacturing under this warranty shall be terminated if:

Service is performed by someone other than a Dealer authorized by Hall Manufacturing

Equipment is modified or altered in ways not approved by Hall Manufacturing.

### ACCIDENTS AND NORMAL MAINTENANCE

This warranty covers only defective materials and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper maintenance, improper protection in storage or improper use. The cost of normal maintenance and replacement of service items such as: cutting parts, drive line cross kits and clutch pads, skid shoes, gearbox and drive line shields, tires, bearings, seals, chains, etc. shall be paid for by the Owner.

## HALL MANUFACTURING WARRANTY POLICY FOR BUSH-WHACKER ROTARY MOWERS

### DISCLAIMER OF IMPLIED WARRANTIES & CONSEQUENTIAL DAMAGES

Hall Manufacturing's obligation under this limited warranty, to the extent allowed by law, is in lieu of all warranties, Implied or expressed, **INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE** and any liability for incidental and consequential damages with respect to the sale or use of the equipment warranted. Such incidental and consequential damages shall include but not limited to: transportation charges loss of income; rental of substitute equipment, and expenses due to loss, damage, detention or delay in the delivery of equipment or parts resulting from acts beyond the control of Hall Manufacturing.

### IMPROVEMENTS OR CHANGES

Hall Manufacturing reserves the right to make improvements or changes in design and specification at any time without incurring any obligation to owners of units previously sold.

### WARRANTY CLAIMS PROCEDURE

Warranty claims must be delivered to Hall Manufacturing within thirty (30) days after the warranty service work was performed.

Hall Manufacturing will approved or deny claim within thirty (30) days of receiving a claim.

Hall Manufacturing will issue credit for all genuine Bush-Whacker parts or components as well as all approved Dealership employee labor time at a rate of \$30.00 per hour within thirty (30) days of the claim approval.

Defective parts must be held for inspection for ninety (90) days after the work is performed. Hall Manufacturing may request that parts be returned to the Hall Manufacturing factory for inspection.

### ACKNOWLEDGEMENT REQUIRED

Hall Manufacturing shall have no obligation under this warranty unless the Owner Registration Card, included with your Operators Manual, is signed by Owner and Dealer or Dealer's Agent and is delivered along with a copy of the original Bill of Sale from the Dealer to Hall Manufacturing within sixty (60) days from the date of sale.

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### COMPLETE THE WARRANTY REGISTRATION CARD

(ON THE FOLLOWING PAGE)

PLACE IN AN ENVELOPE ALONG WITH THE ORIGINAL BILL OF SALE

MAIL TO:

HALL MANUFACTURING, INC.  
P. O. BOX 5638  
NORTH LITTLE ROCK, AR 72119

# WARRANTY REGISTRATION

\*\* Return to Hall Manufacturing within sixty (60) days of purchase

Date of Purchase \_\_\_\_\_ Purchaser \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Product \_\_\_\_\_ Model# \_\_\_\_\_ Serial# \_\_\_\_\_

Dealer \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

\_\_\_\_\_  
Signature of Original Buyer

\_\_\_\_\_  
Signature of Dealer or Dealer's Agent

\* Please include a copy of the original bill of sale

## Notes

## Notes

