

BRC-24 HYDRO 24" LITTLE WONDER BRUSH CUTTER 5024-22-01



CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

A WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CALIFORNIA

Proposition 65 Warning

Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

IMPORTANT MESSAGE

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

This machine comes with an Operation and Safety Manual, Parts and Service Manual, and Engine Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Schiller Grounds Care, Inc. product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manuals thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a Schiller Grounds Care, Inc. dealer for any service or parts needed. Schiller Grounds Care, Inc. service ensures that you continue to receive the best results possible from Schiller Grounds Care, Inc. products. You can trust Schiller Grounds Care, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Schiller Grounds Care, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Schiller Grounds Care, Inc. 1028 Street Road Southampton, PA 18966-4217

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This Operator / Parts Manual is part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine.

NOTICE !!!

Unauthorized modifications may present extreme safety hazards to operators and bystanders and could also result in product damage.

Schiller Grounds Care, Inc. strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Schiller Grounds Care, Inc. Engineering Department. Any Schiller Grounds Care, Inc. product that is altered, modified or changed in any manner not specifically authorized after original manufacture-including the addition of "after-market" accessories or component parts not specifically approved by Schiller Grounds Care, Inc. will result in the Schiller Grounds Care, Inc. Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Schiller Grounds Care, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. Schiller Grounds Care, Inc. will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means: **ATTENTION! BECOME ALERT!**

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Schiller Grounds Care, Inc. machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

ADANGER

DANGER indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

WARNING indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

CAUTION indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, MAY result in property damage.

Schiller Grounds Care, Inc. SERIAL NUMBER

Dhe Bobcat Lane Johnson Creek, VI 53038 U.S.A Phone: 920-699-2000 FO:X 920-699-3683

MODEL NUMBER

MODEL NUMBER: This number appears on sales literature, technical manuals and price lists and serial tag.

SERIAL NUMBER: This number appears only on your unit. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

OPERATOR PREPARATION AND TRAINING

READ THE OPERATION & SAFETY MANUAL



 If an operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. If any portion

to explain this material to them. If any portion of this material is unclear, contact your factory representative for clarification.

- Become familiar with the safe operation of the equipment, operator controls and safety signs. Be prepared to stop the engine quickly in an emergency. Do not operate or allow another person to operate this machine if there are any questions about safety.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- Wear appropriate clothing, including safety goggles or safety glasses with side shields when operating. Wear substantial footwear and long pants. Do not operate barefoot or wearing open sandals. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Wear appropriate hearing protection.
- Wear safety glasses.
- Never allow children, unskilled or improperly trained people to operate this equipment. Local regulations can restrict the age of the operator.
- Do not put hands or feet near or under rotating parts. Keep clear of the front deck opening at all times.
- Never pick up or carry the unit while the engine is running.
- Keep warning labels and this operator's manual legible and intact. Replacement labels and manuals are available from the factory.
- Do not operate machine while under the influence of drugs or alcohol, or any other condition of impairment.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.

SITE PREPARATION AND CIRCUMSTANCES

• Evaluate the terrain to determine how to safely perform the job. Only use accessories and attachments approved by the manufacturer.

- Clear the area to be cut of objects such as rocks, toys, wire or any other debris that may be thrown or get tangled in the brush cutter.
- Be sure the area is clear of pets and people, especially young children. Never assume they will remain where you last saw them. Stop the machine if any enter the area.
- Only cut in daylight or in good artificial light.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- Do not cut wet grass as tires may lose traction.

MULTIPLE OPERATORS

• Keep a safe distance between operators when working together.

MACHINE PREPARATION

- Read engine manual.
- Check operator presence interlock system. Adjust or have any problems repaired before using.
- Damage to the engine can occur if there is no oil or oil level is low. Check the oil level and add oil per engine manual as necessary.
- Do not tamper with or defeat safety devices. Keep guards, shields and interlock safety devices in place and in proper working condition. They are for your protection.
- Keep all fasteners such as nuts, bolts, and pins well secured.
- Visually inspect blades, blade bolts and the cutter assembly for wear or damage. Replace worn or damaged blades and bolts to preserve balance.
- Verify that machine and attachments, if any, are in good operating condition.
- Do not engage blades until ready to mow.



All rotary blade machines are potentially dangerous. They can amputate hands and feet and throw objects. Failure to follow these safety and operating instructions could result in serious injury or death.

OPERATING SAFELY

IN GENERAL

- Use extra care when loading or unloading the machine into a trailer or truck.
- Use caution when making turns and crossing roads and sidewalks. Stop blade when not cutting.
- Never operate the mower without guards, plates, or other safety protective devices in place.
- Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Never leave a machine unattended. Turn off blades, set parking brake, and stop engine before leaving the machine.
- Use extreme caution when reversing or pulling machine towards you.
- Never operate the equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run.
- Stop operation if someone approaches.

STARTING

- Start according to instructions in this manual or on the machine.
- Before attempting to start the engine, make sure:
 - the parking brake is on;
 - the blade is disengaged;
 - the traction drive is in NEUTRAL
- When starting the engine, make sure hands and feet are clear of the blades.
- Do not engage Blade at full throttle. Throttle to idle or lowest possible engine speed.
- Do not change engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

INTERRUPTING OPERATION

Before leaving the operator's position:

- -Park on level ground.
- -Disengage blade.
- -Set the parking brake.
- -Shut off the engine and remove the key
- Disengage the blade, and wait until the blade stops rotating:
 - When not cutting.
 - When crossing surfaces other than grass.
- Stop the engine, disengage the blade, set parking brake and wait until the blade stops rotating:
 - before refueling .
 - before making height adjustment unless the adjustment can be made from the operator's position.
- Stop the engine, disengage the blade, set parking brake and disconnect the spark plug wire:
- before clearing blockages or unclogging;
- before checking, cleaning or working on the machine;
- after striking a foreign object. Inspect the machine for damage and have repairs made as needed before restarting;
- if the machine begins to vibrate abnormally: shut off machine immediately. Inspect and have repairs made as needed before restarting;
- except for repairs or adjustments as specifically noted, such as for carburetor adjustment, where the engine must be running. Keep hands and feet clear of moving parts in these circumstances.
- Allow the blade to come to a complete stop when stopping operation to clear blockages, unclog, inspect the machine, do maintenance or repair.
- Reduce the throttle setting during engine shutdown and, if the engine is provided with a shutoff valve, turn the fuel off at the conclusion of mowing.

OPERATING ON SLOPES

USE EXTRA CARE WHEN OPERATING ON SLOPES. EVALUATE THE RISKS INVOLVED BEFORE OPERATING ON A SLOPE

- Do not operate on slopes if uneasy or uncertain about the machine stability. Ultimate responsibility for safe operation on slopes rests with the operator.
- Be sure of your footing on slopes.
- With walk-behind machines, operate across slopes, not up and down.
- Avoid starting or stopping on a slope. If wheels lose traction, disengage the blades and proceed straight down the slope.
- Use lower speeds and exercise caution on slopes.
- Avoid sharp turns to prevent tipping and loss of control. Use extra caution when changing direction on slopes.
- Walk, never run.
- Be alert to dips and rises which change the general slope. Watch for holes, rocks, roots, and other hidden objects in the terrain. Keep away from dropoffs. Avoid ground conditions which will cause the machine to slide..

MAINTENANCE SAFETY

In general

- Maintain machine according to manufacturer's schedule and instructions for maximum safety and best results.
- Park machine on level ground.
- Never allow untrained personnel to service machine.
- Guards should only be removed by a qualified technician for maintenance or service. Replace when work is completed.
- Adjust or repair only after the engine has been stopped and the blade has stopped moving.
- Disconnect spark plug wire(s) before doing any maintenance.
- Replace parts if worn, damaged or faulty. For best results, always replace with parts recommended by the manufacturer.
- Do not dismantle the machine without releasing or restraining forces which may cause parts to move suddenly.
- Provide adequate support, e.g. jack stands for lifted machine or parts if working beneath.
- Do not put hands or feet near or under rotating parts.
- Clean up spilled oil or fuel thoroughly.
- Replace faulty mufflers.
- To reduce fire hazards, keep the engine, muffler, and fuel storage area free of grass, leaves, debris buildup or grease.
- Never attempt to make adjustments while the engine is running except for repairs or adjustments as specifically noted, such as for carburetor adjustment, where the engine must be running. Keep hands and feet clear of moving parts in these circumstances.

Blades



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- The blade is sharp and can cut. Use extra caution when handling. Remove obstructions with care. Wrap the blade or wear gloves.
- Only replace or sharpen blade. Never straighten or weld it.
- Keep other people away from the blade.

Fuel



• Store only in containers specifically designed for fuel.

Petrol (gasoline) is flammable;

explosive. Use extra care when

petrol (gasoline) vapors are

- When refueling or checking fuel level:
 - Stop the engine and allow to cool;
 - Do not smoke;

handling.

- Refuel outdoors only;
- Use a funnel;
- Do not overfill;
- If fuel is spilled, do not attempt to start the engine until the spill is cleaned up and vapors have cleared.
- Replace caps on fuel containers and tanks securely.

Sparks from static electricity can start fires or cause explosions. Flowing fuel can generate static electricity. To prevent static electricity sparks:

- Keep containers electrically grounded. Do not fill containers in a vehicle or on a truck or trailer bed with a plastic liner. Fill containers on the ground away from the vehicle.
- When practical, remove petrol (gasoline) powered equipment from the truck or trailer and refuel it on the ground. If equipment must be refueled on the truck or trailer, refuel from a portable container rather than a dispenser nozzle.
- Keep the dispenser nozzle in contact with the rim of the fuel tank or container opening until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing change it immediately.

STORAGE SAFETY

- Stop the engine and allow to cool before storing.
- Drain the fuel tank outdoors only.
- Store fuel in an approved container in a cool, dry place.
- Keep the machine and fuel containers in a locked storage place to prevent tampering and to keep children from playing with them.
- Do not store the fuel container or equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.
- Appliances such as furnaces and water heaters with a pilot light have an open flame.
- Keep petrol (gasoline) storage area free of grass, leaves and excessive grease to reduce fire hazard.
- Clean grass and debris from cutting units, drives, mufflers and engine to help prevent fires.
- Clean up any spilled gasoline or oil in the storage area.

WARNING LABELS

Warning labels are an important part of the safety system incorporated in this machine.

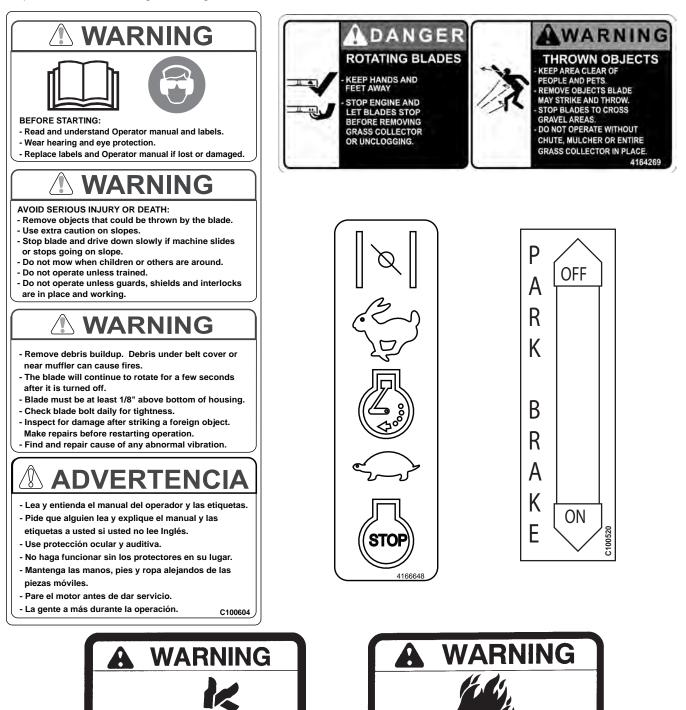
Replace labels if damaged or illegible.

-ROTATING PARTS.

COVER REMOVED.

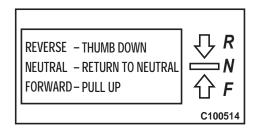
-DO NOT OPERATE WITH

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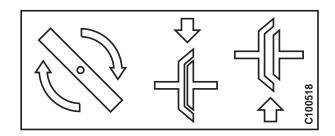


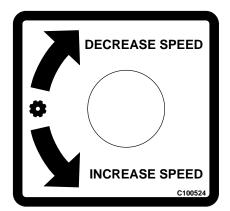
WARNING LABELS

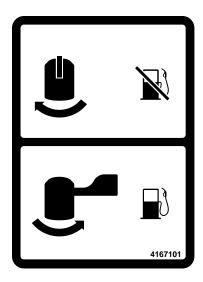
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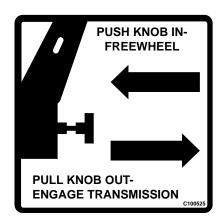












SET-UP INSTRUCTIONS

- 1. Unpack the unit.
- 2. Open the free wheel valve by pushing the free wheel knob on the back of the machine. Roll the machine off of the pallet.
- 3. Connect the blade control linkage.
- 4. Fill the engine with the proper grade of oil. See engine manual for oil specifications.
- 5. Read the operation and safety manual before starting. The operator manual is located in the tube on the front of the handle support.
- 6. Run the engine for 5 minutes before engaging the blades to ensure full lubrication.

CONTROLS

BLADE CONTROL LEVER (A)

Hold down the lever to engage the blades for cutting. Release the lever to disengage and stop the blades.

TRACTION CONTROL LEVER (B)

Push the thumb lever down to go in the reverse direction. Pushing the lever further increases reverse speed.

Pull the bottom lever up to move in the forward direction. Pulling the lever further increases forward speed to the maximum set by the Speed Adjustment Knob.

SPEED ADJUSTMENT KNOB (C)

Turn the knob clockwise to decrease maximum speed. Turn the knob counterclockwise to increase maximum speed.

FREE WHEEL KNOB (D)

Push the knob in to freewheel the machine. Pull the knob out to engage the transmission.

THROTTLE CONTROL (E)

Control the engine speed. Pushing the lever forward makes the engine speed go faster, while pulling the lever back slows down the speed of the engine.

ENGINE STARTER CORD (F)

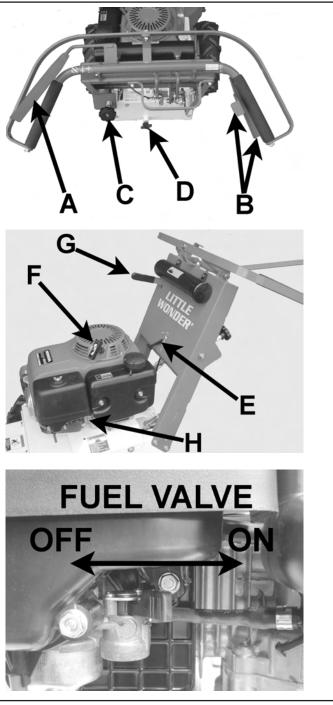
Pull the cord to turn the engine over to start it. See section and/or operation.

PARK BRAKE (G)

Pull lever up to engage the park brake. Push lever down to disengage park brake.

FUEL VALVE (H)

Move to the "OFF" position to shut off the fuel whenever transporting the machine by trailer or truck or during storage. Move to the "ON" position before starting the engine.



PRE-OPERATION CHECK LIST OWNER'S RESPONSIBILITY

- Review and follow all safety rules and safety decal instructions.
- Check that all safety decals are installed and in good condition. Replace if damaged.
- Check to make sure all shields and guards are properly installed and in good condition.
- Check that all hardware is properly installed and secured.
- Check to be sure engine is free of dirt and debris. Pay particular attention to the cooling fins, governor parts and muffler. Clean air intake screen. Check air cleaner; service as necessary.
- Check all lubrication points and grease as instructed in manual.
- Inspect area and remove stones, branches or other hard objects that might be thrown, causing injury or damage.
- Check that there are no exposed underground utilities in the work area.

FUELING-Gasoline (is extremely flammable and highly explosive under certain conditions. BE SURE to install fuel cap after fueling.

- Fill fuel tank with good quality, clean, unleaded regular petrol (gasoline) to the level recommended by the engine manufacturer.
- Use a funnel to avoid spillage.



BEFORE STARTING THE ENGINE

- Read the operator manual and engine manual.
- Be familiar with all controls, how each functions and what each operates.
- Check the engine oil level and add if necessary.
 Follow the engine manufacturers recommendations per the engine manual supplied with the machine
- Open the fuel valve.
- **Choke:** For cold starts, set the throttle lever to the "CHOKE" position. For warm starts set the throttle to the half-open position.

STARTING THE ENGINE

- 1. Pull the recoil starter to start the engine.
- 2. If the choke is "ON" when the engine starts, gradually back it off until the engine runs with no choke at all.

MOVING THE UNIT

TO MOVE THE UNIT WITHOUT THE BLADE RUNNING:

- 1. Do not engage the blade control lever.
- 2. Pull the Freewheel knob out to engage the transmission.
- 3. Set throttle to the desired engine speed.
- 4. Adjust the maximum travel speed with the Speed Adjustment Knob.
- 5. Disengage the Park Brake.
- 6. Pull or squeeze the forward / reverse lever on the right handlebar towards the handlebar to move the machine in a forward direction. The more the lever is squeezed the faster the machine will go, up to its maximum speed.
- 7. Push the thumb lever down to reverse. The farther the lever is pushed down the faster the machine will reverse, up to its maximum reverse speed.
- 8. Release the forward / reverse lever to stop the machine.

TO MOVE THE UNIT WITHOUT RUNNING THE ENGINE:

- 1. Push the Freewheel knob in.
- 2. Disengage the Park Brake.
- 3. Push the unit.



CUTTING

UNDERGROUND UTILITIES, ELECTROCUTION, EXPLOSION, SERVICE DISRUPTION RISK

Before beginning any work, check area for exposed utilities. Also check for anything that could cause damage to the machine or harm the operator. Do not operate where there is any risk of contacting exposed utilities. Thoroughly inspect the areas where the equipment is to be used and remove rocks, toys, wire and other debris that may be picked up and thrown by the machine.

- 1. Move the machine to the area where it is to be used. With the engine off, Park Brake on and the blade disengaged, check that the cutting height is at the desired height for the job.
- 2. Start the engine, then adjust the speed of the engine to full throttle. Make sure that the Freewheel knob is pulled out.
- 3. Engage the blade by holding down the blade control lever. Pull the speed lever on the right handle bar up to move the machine forward while holding down the blade control lever to cut.

STOPPING OPERATION

- 1. Release the blade control lever to stop the blades.
- 2. Drive to level ground and release the traction drive to stop the machine.
- 3. Engage the park brake.
- 4. Stop the engine by moving the throttle control to the "OFF" position.

TRANSPORT

Engage the parking brake when transporting the machine on a truck or trailer. Use tie down straps to secure the machine from moving during transport. Close the fuel valve during transport to prevent flooding should any dirt get under the carburetor float needle. Leaving the valve open can allow severe flooding which may ruin the engine by diluting the oil.

MAINTENANCE

Stop the engine and remove spark plug wire before performing any maintenance.

When replacement parts are required, use genuine Schiller Grounds Care, Inc. parts or parts with equivalent characteristics, including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/ or bystanders.

Carbon monoxide present in the exhaust is an odorless and deadly gas. Never start or run the engine inside where exhaust fumes can collect. Provide enough fresh air to keep fumes from getting too strong.

Replace any warning decals that become illegible immediately.

DAILY MAINTENANCE

Blade Control

To operate the blade, the blade control lever must be held. The blades should stop when the lever is released.

To Check:

- 1. Start the engine and run at 1/2 throttle with the blade disengaged.
- Engage the blade by holding in the Blade Control Lever. Release the Blade Control Lever and the blade should stop.
- 3 Repair the machine before using if the Blade Control does not work.

BELTS

- Check condition of belt for damage or wear.
- Replace broken, worn, or damaged belt.
- 1. Make sure the engine is off, spark plug is removed, and parking brake is engaged.
- 2. Remove the four bolts **E** holding the Blade belt cover **G** on. (Figure 1)
- 3. Remove any debris such as leaves, grass, sticks or other build up that might cause a fire or damage.
- 4. Inspect the belt and pulleys for damage or wear that could cause problems. Replace damaged or worn parts with Schiller Grounds Care, Inc. parts.
- 5. See Blade Belt / Pulley Replacement instructions.

HARDWARE

- Tighten any hardware (nuts, bolts, etc) that are found loose.
- Replace any broken or missing hardware (nuts, bolts, cotter pins, etc.).

SHIELD PLATES

- Check condition of shield plates for damage or wear.
- Replace broken, worn, or damaged shield plates.

TIRES

The tires are foam filled. They have a valve stem but CANNOT be aired.

ENGINE

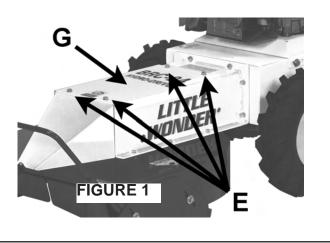
See engine manual for air cleaner service intervals and servicing procedure.

OIL

Check oil level daily. Top off as needed.

Change engine oil after the first 5 hours of operation. Then change as recommended by the engine manufacturer.

- 1. Remove the drain plug and drain oil while engine is warm.
- 2. Replace the drain plug, remove fill plug and fill with new oil. See engine manual for oil specifications.
- 3. Start and run engine for 30 seconds. Stop engine.
- 4. Wait 30 seconds, then re-check oil level.
- 5. Top off as necessary. See engine manual for details.



BLADES

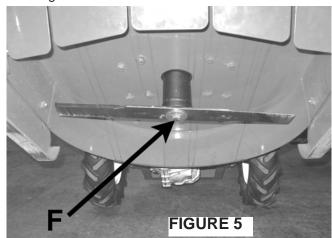
Service:

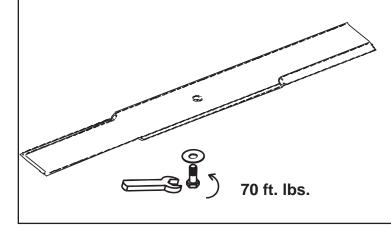
Stop engine and remove spark plug wire before servicing blade.

Wear leather or thickly padded gloves to prevent injury from the blade. Keep hands clear of the blade path:

Use an impact wrench to remove the blade bolt **F**. If an impact wrench is not available; use a socket on a long breaker bar or a box wrench to loosen the blade bolt. If additional leverage is needed, slip a pipe or thick walled tube over the breaker bar or wrench.

- Check blade for damage.
- Replace broken, bent, cracked or otherwise damaged blade.
- Do not weld or straighten blade.
- If the blade is good, it may be turned over to use the second set of cutting edges.
- If all edges are dull, the blade may be sharpened or replaced.
- Use of another manufacturer's blades may be dangerous.

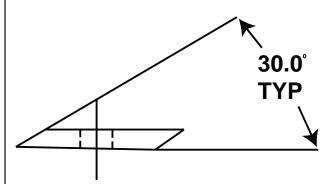




Sharpening:

Wear the appropriate personal protective equipment when sharpening the blade.

- Inspect the blade before sharpening..
- Replace broken, bent, cracked or otherwise damaged blade.
- Do not weld or straighten blade.
- Maintain cut angle of 30°.
- Do not over heat blades when sharpening.



Blade Balance:

Maintain blade balance at 5/8 oz-in (19.4 g-cm) or less. Failure to keep blades balanced causes excess vibration, wear and shortened life of most components of the machine.

To balance a blade:

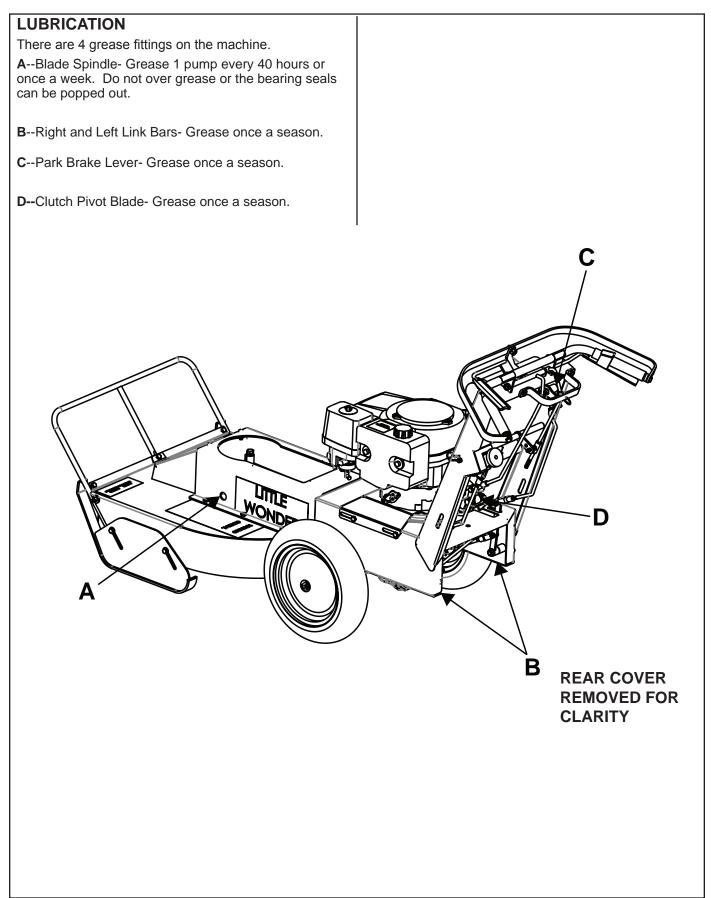
- 1. Sharpen blade first
- 2. Balance the blade at the center.
- Attach a 1/8 oz. (3.9 g) weight at a distance of 5" (127mm) from center on the light end. This should make the light end the heavy end.

- If it does, the blade is balanced.

- If it does not, file or grind the heavy end until the addition of the weight makes the light end the heavy end.

MAINTENANCE

BRUSH CUTTER



BELTS

Under tensioned V-belts can slip and squeal. This generates excess heat and results in cracking and premature belt failure. Over-tensioned belts reduce belt and bearing life.

Properly tensioning and aligning a belt drive will allow the belt drive to perform at it's maximum level.

Stop the engine and remove the spark plug wire before making any belt adjustments.

Adjust belt tension after the first five hours of operation. Then tension as required.

BLADE BELT ADJUSTMENT

There should be a maximum of 1/2" deflection with 5 lbs pressure in the middle of the non idler side of the belt.

- 1. Remove the four bolts E holding the Blade belt cover G on. (Figure 1)
- 2. Loosen the bolt holding the small pulley **C** just enough to move the pulley back and forth.

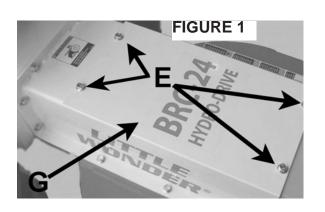
(Figure 2)

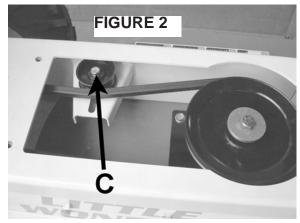
- 3. Slide the small pulley firmly against the belt and tighten bolt **C**. Check the tension and readjust if necessary.
- 4. Replace the Blade belt cover G.

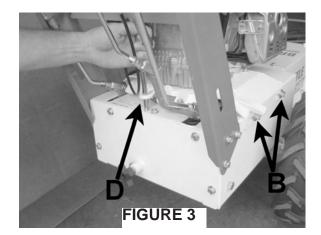
TRANSAXLE BELT ADJUSTMENT

The transaxle belt should have a deflection of 1/8" with 5 lbs. force.

- 1. Follow steps 1 & 2 in **Blade Belt Adjustment Section** to loosen the blade belt so the transaxle belt may be adjusted.
- 2. Loosen the two bolts **B** on each side of the machine above the wheels. (Figure 3)
- 3. Use a pry bar in hook **D** behind the engine to tension the transaxle pulley belt. (Figure 3)
- 4. While maintaining tension with the pry bar, tighten bolts **B**.
- 5. Check the adjustment. Readjust if necessary.
- 6. Follow steps 3-4 in the Blade Belt Adjustment section to re-tension the blade belt.







BLADE HEIGHT ADJUSTMENT

Stop the engine and remove the spark plug wire before making any belt adjustments.

- 1. Place a block under the deck to securely hold it at the height desired.
- Loosen the two bolts H holding the skid plates G on each side of the machine. (Figure 1)
- 3. Move the skid plates to sit level on the ground. Retighten bolts H and remove block.

MAXIMUM TRAVEL SPEED ADJUSTMENT

- To decrease maximum travel speed of the machine, turn the speed adjustment knob F clockwise. (Figure 2)
- 2. To increase maximum travel speed of the machine turn the speed adjustment knob F counter clockwise.

LINKAGE ADJUSTMENTS

Stop the engine and remove the spark plug wire before making any belt adjustments. REVERSE:

Maximum reverse speed is limited by the left link lever

contacting the engine plate. (Figure 3)

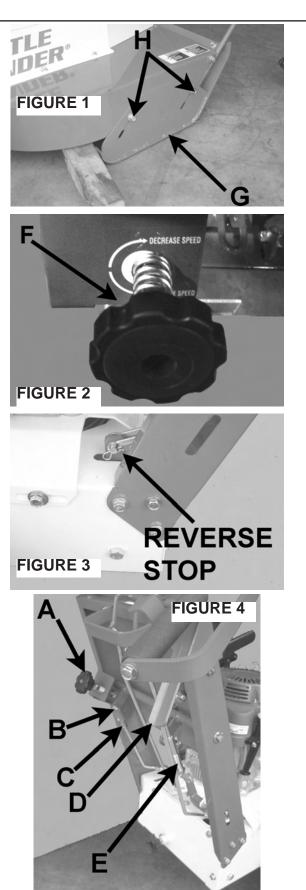
FORWARD:

The traction control lever should contact the handle at maximum speed.

To Adjust Forward Speed:(Figure 4)

- Turn the Speed adjustment knob A all the way in the faster direction (clockwise). Remove the clevis pin B connecting the rod to the lever on the cross shaft. Loosen the jam nut C securing the clevis.
- Pull up on the rod until the linkage hits the stop for maximum forward speed. Squeeze the traction lever D to the handle. Check the alignment of the hole in the clevis with the hole in the lever. Adjust the clevis by turning it on or off the rod until the holes line up.
- 3. Reinstall the clevis pin, tighten the jam nut, and adjust the speed control knob to the desired speed.

The spring E on the traction linkage allows the traction lever to be squeezed to the handle when the speed control knob is set to less than maximum speed. If the preload on the spring is not sufficient, the nut may be tightened to compress the spring more.



BLADE CONTROL LINKAGE

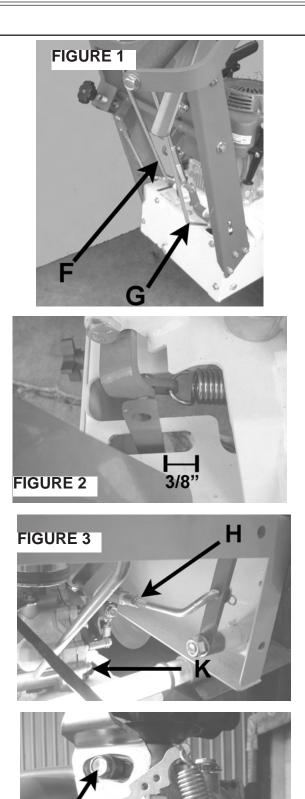
The effective length of the blade clutch rod **F** may be adjusted by turning the swivel on or off the rod. Making the rod longer will raise the blade control lever in the "OFF" position and increase the engagement force on the blade clutch. Making the rod shorter will lower the blade control lever in the "OFF" position and decrease the engagement force on the blade clutch. **(Figure 1)**

PARKING BRAKE LINKAGE

- 1. Disconnect the vertical link rod G. (Figure 1)
- 2. Disconnect the transaxle freewheel linkage and remove the rear cover. Push the lower lever forward until all the slack in the linkage is taken up. There should be about 3/8" between the front of the lower lever and the front of the slot it operates in as a starting point for adjustment. (Figure 2)
- If adjustment is required, loosen the jam nut H at the clevis and disconnect the rod. Turn the rod in or out of the clevis as required and reconnect. (Figure 3)
- 4. Adjust the vertical link rod so the brake lever 'snaps' over center and locks in the "ON" position.
- 5. Pull and push on the machine. The wheels should skid. If the wheels turn, rotate the lower rod out of the swivel a turn at a time. Push and pull on the machine with each turn to check the adjustment. When the wheels don't turn extend the rod one more turn. Tighten the jam nut H (Figure 3) and reinstall the rear cover and reconnect the freewheel linkage.
- 6. If there is no more adjustment, remove the cotter pin on the castle nut **K** securing the brake arm to the transaxle. Tighten the castle nut **K** one-sixth of a turn at a time until the brake holds. Replace the cotter pin.

TRANSAXLE NEUTRAL ADJUSTMENT

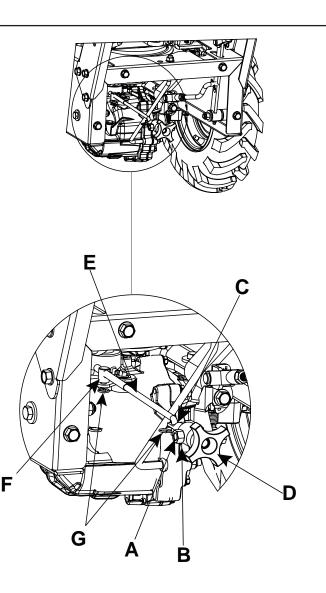
- 1. The transaxle comes from the factory with the neutral position set. It should never require adjustment. If it needs adjustment, raise the rear of the machine and support it securely on jack-stands with the wheel off the ground.
- 2. Loosen bolt **J** on the transaxle. Start the engine.
- 3. Rotate plate L to the position where the wheels will no longer turn. Retighten bolt J. (Figure 4)



FREE WHEEL ADJUSTMENT

Stop the engine and remove the spark plug wire before making any belt adjustments.

- Plunger setscrew A: Tighten the Ball to contact with the flat on the plunger shaft C, then back off 1/4 turn and tighten the jam nut B. The plunger shaft C should move between the drive and free wheel positions and "snap" into a detent at each end of the travel.
- 2. Knob **D**: Position the jam nut **B** and knob on the plunger shaft so full travel between Free Wheel and Drive position can be obtained.
- 3. Connecting Link E: Position the knob D in the drive position. Install the swivel F in the hole on the Free Wheel Valve lever on the transaxle. Push the lever on the transaxle forward until resistance is felt. Turn the connecting link rod E into the swivel until it just goes into the hole in the plunger shaft. Secure with hairpin cotters G at the swivel and rod ends.
- 4. With the Free Wheel linkage disconnected, the machine should move only with difficulty. With the Free Wheel linkage connected, the machine should roll relatively freely in the Free Wheel Position. In the drive position it should act the same as when it is not connected. The rod may need to be turned in or out of the swivel by a turn or two for final adjustment.



BELT REPLACEMENT

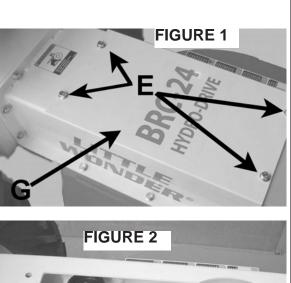
Stop the engine and disconnect the spark plug wire before attempting to replace any belt.

TRANSAXLE BELT REPLACEMENT

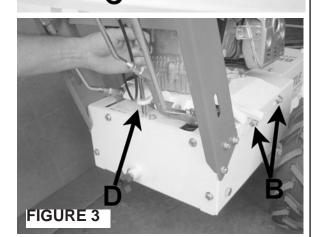
- 1. Remove the four bolts E holding on the blade belt cover **G**. (Figure 1)
- 2. Loosen idler pulley **C** and slide the idler pulley to the side to relieve tension on the blade belt.
- 3. (Figure 2)
- 4. Loosen bolts **B** on each side of the machine above the wheels. Slide the engine assembly forward.
- 5. Remove the old transaxle belt **M** (rear cover removed for clarity). (Figure 4)
- 6. Install the new transaxle belt.
- Use a pry bar in hook D behind the engine to tension the transaxle pulley belt. While maintaining tension with the pry bar tighten the bolts B.
- Check adjustment. The transaxle belt should have a deflection of 1/8" with 5 lbs. force. Repeat if necessary.
- Slide the small pulley firmly against the blade belt and tighten bolt C. Check the tension. There should be a minimum of 1/2" deflection with 5 lbs pressure in the middle of the non-idler side of the belt. Readjust tension if necessary.
- 10. Replace the blade belt cover G.

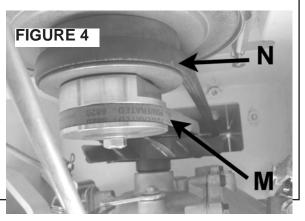
BLADE BELT REPLACEMENT

- 1. Follow steps 1-3 in the Transaxle Blade Replacement section
- 2. Remove and replace the blade drive belt N.
- 3. Reinstall the transaxle belt.
- 4. Follow steps 5-8 in the Transaxle Blade Replacement section.









STORAGE

To prevent possible explosion or ignition of vaporized fuel, do not store equipment with fuel in tank or carburetor in an enclosure with open flame (for example, a furnace or water heater pilot).

DAILY STORAGE

- 1. Stop the engine and engage the parking brake.
- 2. Check engine oil level and air filter element.
- Close fuel valve located below air cleaner to keep fuel from draining into engine.
- 4. Remove any material stuck under the deck.

EXTENDED STORAGE

Before the equipment is put into storage for any period exceeding 30 days:

- 1. Drain all fuel from the fuel tank and fuel lines.
- 2. Start the engine and run until all the fuel is used from the carburetor float bowl.
- While the engine is still warm drain the oil. Refill with the proper weight oil corresponding to what the engine manual says.
- 4. Lubricate all lubrication points.
- 5. Clean and oil cutting blades to prevent rust.

To put equipment into operation after an extended storage:

- 1. Check for loose parts, tighten if necessary.
- 1. Fill fuel tank with clean fresh fuel.
- 2. Check oil level and add if necessary.
- Check fuel lines and system for leaks. Repair any leaks before operating
- Start the engine and proceed to operate for the intended use.



TROUBLESHOOTING						
COMMON PROBLEMS	COMMON CAUSES					
ENGINE WILL NOT START. (Check the Engine Manual for more details.)	 Refer to the section "Operation" in this manual to verify engine starting procedure. Check the spark plug connection. Check that throttle lever is set to the "CHOKE ON" position. Check the level of fuel Check fuel valve is "ON". 					
ENGINE STARTS BUT DOES NOT RUN PROPERLY OR HAS NO POWER. (Check the Engine Manual for more details.)	 Make sure the throttle lever is not set to the slow setting or still in the "CHOKE" position. Turn the machine off and check the air filter. If it is dirty clean or replace it according to the Engine Manual. Check the oil level in the engine. Add if necessary. If the oil is too full drain the oil to the proper level. Check to make sure there is enough fuel. Also make sure the fuel is not old, dirty or the machine has not been stored beyond a month with the same fuel in it. If the engine still has problems contact your dealer for service. 					
ENGINE HAS SMOKE COMING FROM IT. (Check the Engine Manual for more details.)	 Check to make sure the machine is not running on "CHOKE" Check to make sure the oil is not overfilled. Check the air filter for debris and clean if necessary. Check the engine for debris build up around the exhaust system. MAKE SURE THE ENGINE HAS HAD THE PROPER TIME TO COOL BEFORE TOUCHING THE MACHINE. If there is still smoke coming from the engine contact the nearest dealer for service. 					
ENGINE RUNS AND STARTS BUT THE MACHINE WILL NOT GO FORWARD OR IN REVERSE.	 Check that the free wheel lever is pulled out. Make sure the parking brake is disengaged. Check to make sure the direction lever is being pressed far enough down or pulled up to make the machine move. With the engine off and brake engaged, check the transaxle belt is not broken or fallen off the pulley. Replace or re-tension belt. Make sure nothing is lifting the machine up off the wheels. 					
MACHINE IS DIFFICULT TO GET INTO REVERSE OR FORWARD.	Check linkage for free operation.					
THE BELT IS FRAYED OR KEEPS COMING OFF THE PULLEY.	 Check the pulley to make sure it is free from damage such as a nick or crack. If the pulley feels rough call a dealer for service and a replacement pulley. Check the belt for wear and damaged spots. If there are signs of damage or wear on the belt, replace with the correct type of belt. Check the belt tension. If V-belts are under tensioned, they can slip. Slippage generates heat and will result in cracking and belt failure. Properly tensioning and aligning a belt drive will allow the belt drive to perform at it's maximum level. If belts are over-tensioned, belt and bearing life can be reduced. If the belt and pulley appear to be in good condition, contact your dealer for service. 					

TROUBLESHOOTING (cont.)							
COMMON PROBLEMS COMMON CAUSES							
Extra vibration when engaging the blade.	Make sure the throttle lever is set to the "STOP" position, engine has stopped, parking brake is engaged and the blade has stopped spinning before checking blade.						
	 Check for a broken or bent blade. DO NOT straighten blade. Replace bent or broken blade with a new Schiller Grounds Care, Inc. blade. If the blade appears to be in good condition, check the bolt connecting the blade and verify that it is tightened and properly seated. If the problem still persists then contact a local dealer for service. 						
The blade will not spin.	 Make sure the Blade lever on the left handle is being held down while the engine is on. Stop the engine, disconnect the spark plug wire and engage the parking brake be fore checking. Check the condition of the blade belt Reinstall, replace or retension as necessary. If the bade still doesn't operate, consult your dealer for service. 						

BRC-24 HYDRO SPECIFIC/	ATIONS
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Engine:	Honda GVX
Displacement:	389cc
Fuel Capacity:	2.2 quarts
Oil Capacity:	1.2 quarts
Transmission:	Hydro-Gear T2
Speed:	Forward: 0 to 4 mph Reverse: 0 to 2mph
Tire Size:	4.80 X 8.0 Chevron pattern solid foam filled
Cut Width:	24"
Cut Height:	3.25" to 4.75"
Operating Width:	365 lbs
Length:	78"
Width:	32"
Height:	41"
Maximum Operating Slope:	20º Front to back and side to side
Emissions:	50 states certified by Honda

2 YEAR LIMITED SERVICE & WARRANTY POLICY FOR GASOLINE POWERED BRUSH CUTTER

All *Little Wonder* Gasoline Powered Brush Cutters are guaranteed against defects in material and workmanship, under normal usage, for a period of TWO YEARS from the date of purchase, under the following terms:

Any *Little Wonder* Gasoline powered Brush Cutter or part found to be defective within the warranty period is to be returned to any registered *Little Wonder* dealer.

Engines for all gasoline powered products are warranted separately by the engine manufacturer. Therefore, there are no warranties made, expressed or implied, for engines for gasoline power products by *Little Wonder*.

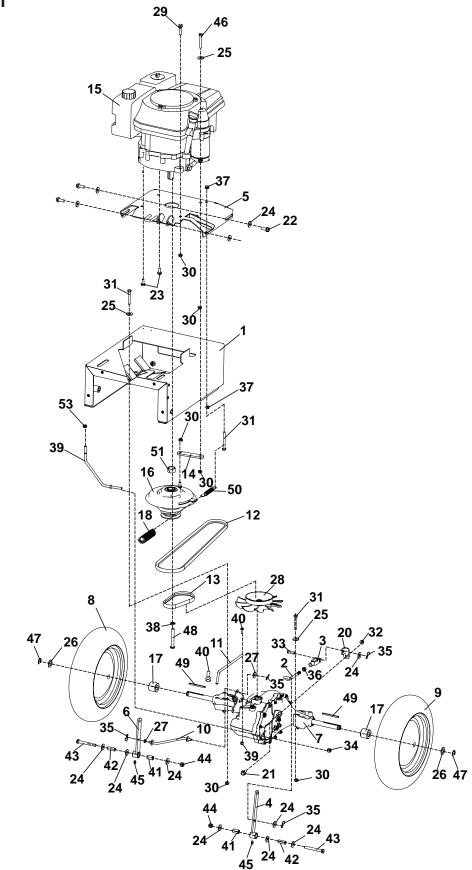
Transportation charges for parts and units submitted for replacement under this warranty must be borne by the purchaser.

THIS WARRANTY covers manufacturing defects only and does not cover defects resulting from misuse, abuse, negligence, improper handling, care or maintenance, normal wear and tear or non-observance of operating, maintenance or installation instructions, or accident, or if the product has been repaired or altered outside our factory or authorized repair facility in any respect which affects its condition.

Little Wonder's liability is limited to repair or replacement of the defective product or part at our sole discretion. All other liabilities, in particular, liability for damages, including without limitation consequential, special or incidental damages are excluded.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO EMPLOYEE, REPRESENTATIVE OR DEALER IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR TO GRANT ANY OTHER WARRANTY.

PARTS SECTION

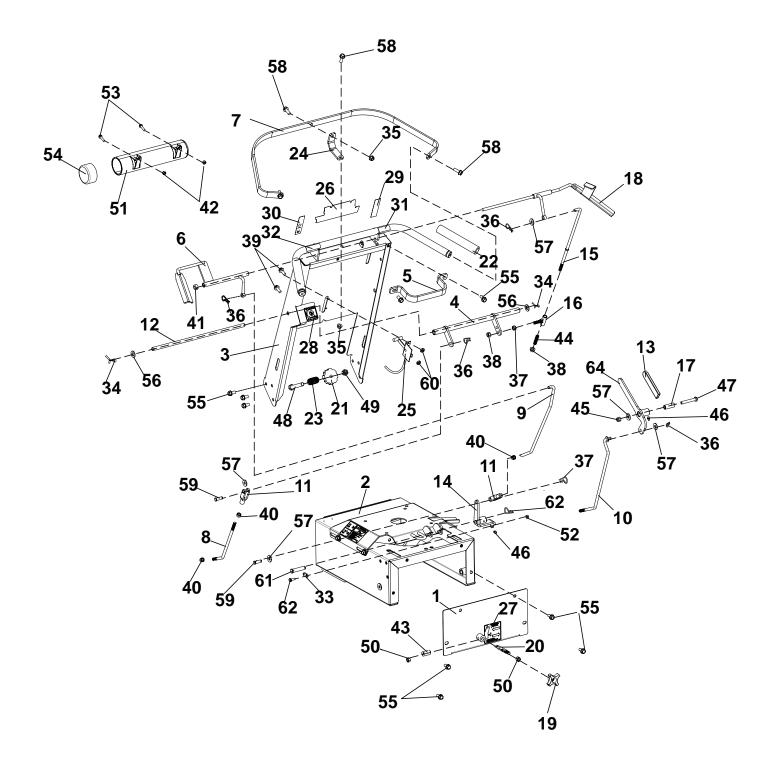


DRIVE ASSEMBLY

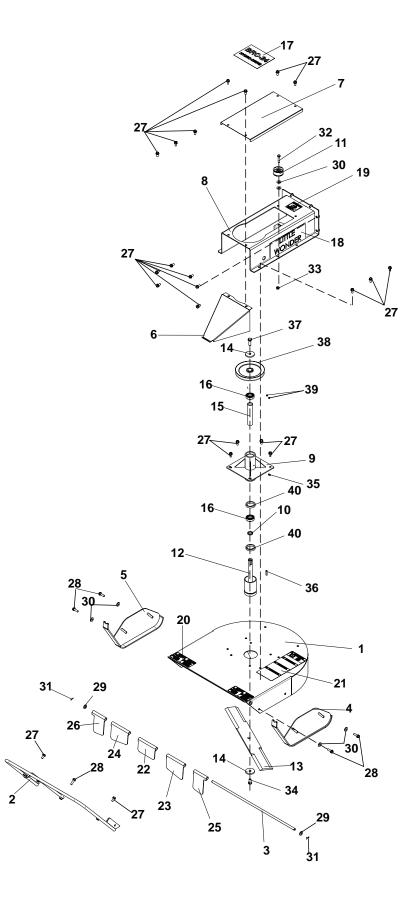
BRUSH CUTTER

FIGURE 1

ITM	PART NO.	DESCRIPTION	QTY	ΙТМ	PART NO.	DESCRIPTION	QTY
1	C400297 10	WLDMT-ENGINE DECK	1	50	4167065	SPRING-CLUTCH RETURN	1
2		LINK-TRANSAXLE, RIGHT	1	50 51	4167078	SPACER-CLUTCH	1
2	38020-01	CLEVIS YOKE 3/8 PLATE	1	52	4167101	DECAL-FUEL SHUT-OFF	1
4		WLDMT-LINK OUTER RIGHT	1	52	64141-4	NUT-WLF 3/8-16	1
			1	55	04141-4	NUT-WEF 3/8-10	I
5	4167198	S-WLDMT-ENGINE MOUNT WLDMNT-LEVER PUMP LINK	1				
6 7	-		1				
	C100585		1				
8	C100586	WHEEL- LEFT WHEEL-RIGHT	1				
9	C100593	_	-				
10		WLDMT-TRANSAXLE LINK, LEFT					
11		ROD-BRAKE 9.25	1				
12	C100587	BELT-BLADE DRIVE	1				
13	C100588	BELT-WHEEL DRIVE	1				
14		ARM-TORQUE	1				
15	C100589	ENGINE-HONDA GXV390	1				
16	C100591	CLUTCH-BRAKE	1				
17	C300150	SPACER-1.5X.765X1.223	2				
18	C100610	SPRING-CLUTCH BRAKE	1				
19	2000570	DECAL-EXPLOSIVE FUEL	1				
20		ARM-BRAKE	1				
21	64262-011	BLT-FLG HD 3/8-16 X 1	1				
22	64139-24	BLT-WLF 3/8-16 X 1	4				
23	64139-01	BLT-WLF 5/16-24 X 3/4	2				
24	64163-31	WASHER25/64 X 1 X 12ga	13				
25	64163-29	WASHER-21/64 X 1 X 11GA	4				
26	64163-06	WSHR .768/.756X1.25X14G	4				
27	64163-02	WSHR .321/.328X.593/.608X11G/					
28	4167164	S-FAN, TRANSAXLE	1				
29	64262-009	BLT-FLG HD 5/16-18 X 1-1/2	1				
30	64268-02	NUT-FL NYLON LOCK 5/16-18	8				
31	64123-55	BLT-HEX 5/16-18 X 3	5				
32	64229-03	NUT-NYLON LOCK 3/8-16	1				
33	64188-03	PIN-CLEVIS 3/8 X 1-1/8	1				
34	64229-02	NUT-NYLON LOCK 5/16-18	1				
35	64168-2	COTTER-HAIRPIN .08X1.19	6				
36	64025-04	NUT-3/8-24 HEX	1				
37	64141-6	NUT-WLF 5/16-18	2				
38	64006-06	LOCKWSHR-7/16 HELICAL	1				
39	4167091	ROD-TORQUE	1				
40	4167241	SWIVEL	1				
41	4167034	SPACER-PIVOT	2				
42	4167031		2				
43	64123-79	BLT-HEX 3/8-16X3-1/4	2				
44 45	64229-03	NUT-NYLON LOCK 3/8-16	2				
45 46	85010N	ZERK-1/4-28 STR SELF THREAD					
46	64123-292	BLT-HEX5/16-18X2-1/2 FLTHRD	1				
47	64221-08	E-RING .750	2				
48	64123-291	BLT-HEX 7/16-20X3-1/4	1				
49	64164-41	KEY-3/16 X 3 SQ	2				



ITM	PART NO.	DESCRIPTION	QTY	ІТМ	PART NO.	DESCRIPTION	QTY
1	4167197	S-WLDMT-REAR PLATE W/LABS		55	64139-21	BLT-WLF 3/8-16 X 3/4	12
2		WLDMT-ENGINE DECK	1	56	64163-67	WASHER516 XX 1X 12GA	2
3	4167196	S-WLDMT-HANDLE W/LABS	1	57	64163-31	WASHER-25/64 X 1 X 12GA	5
4		WLDMT-TRACTION IDLER LINK	1	58	64139-24	BLT-WLF 3/8-16 X 1	4
5			1	59	64188-03	PIN-CLEVIS 3/8 X 1-1/8	2
6 7		WLDMT-LEVER, BLADE CNTRL	1	60	64025-15	NUT-HEX #10-24 KEPS	2
8	C400277.17 C400306	GUARD-HANDLE ROD-TRACTION LINKAGE	1 1	61 62	64188-73 64123-89	PIN-CLEVIS, 1/2 X 2-1/4 BLT-HEX 1/4-20X3/4	1 3
9	C400308	ROD-BRAKE CONTROL LINK	1	63	64168-1	COTTER-HAIRPIN .120 x 2-3/8	1
9 10	C400301	WLDMT-BRAKE LINKAGE	1	64	4167201	S-BRAKE LEVER W/GRIP	1
11		CLEVIS YOKE 3/8 PLATE	2	04	4107201		1
12	C400285	BAR-TRACTION IDLER PIVOT	1				
13	C100007	GRIP-BRAKE	1				
14		WLDMT-MIDDLE LINK	1				
15	C400302	WLDMT-TRACTION LINKAGE	1				
16		WLDMT-LVR CONNECTING LINK	(1				
17	4167066	BUSHING-BRAKE LEVER	1				
18	C400274.17	WLDMT-TRACTION LEVER	1				
19	38524	KNOB-4 PRONG 3/8-16	1				
20	C400311	LINK-KNOB, REAR	1				
21	C400174	KNOB-1/2 IN	1				
22	C100261	GRIP-HANDLE 1 X 7-3/4	2				
23	C500065	SPRING-SPEED STOP	1				
24		BRACE-HANDLE GUARD	1				
25	C100608	CABLE, THROTTLE	1				
26	C100616	DECAL-LITTLE WONDER, WHT					
27	C100525	DECAL-ENGINE TRANSMISSION					
28	C100524	DECAL-SPEED CONTROL	1				
29 30	C100520 4166648	DECAL-PARK BRAKE DECAL-THROTTLE CONTROL	1 1				
30 31	C100514	DECAL-THROTTLE CONTROL DECAL-RIGHT THUMB	1				
32	C100514 C100518	DECAL-RIGHT THOMB DECAL-LEFT THUMB	1				
33	4167067	CONNECTOR-MIDDLE LINK	1				
34	64140-1	COTTER PIN-1/8X1	2				
35	64141-4	NUT-WLF 3/8-16	2				
36	64168-2	COTTER-HAIRPIN .08X1.19	5				
37	64151-18	NUT-HEX 3/8-16 CTR LOCK	1				
38	64268-03	NUT-FL NYLON LOCK 3/8-16	2				
39	64152-46	SCREW-SLT HH 10-24X1/2	2				
40	64025-04	NUT-3/8-24 HEX	3				
41	48428	COLLAR SET .38	1				
42	64229-01	NUT-NYLON LOCK 1/4-20	2				
43	4167042	PLUNGER-3/8-16	1				
44	C100611	SPRING-OVERTRAVEL	1				
45	64229-03	NUT-NYLON LOCK 3/8-16	3				
46	85010N	ZERK-1/4-28 STR SELF THREAD					
47 48	64123-159 64123-293	BLT-HEX 3/8-16 X 2-1/2 BLT-HEX 1/2-13 X 3-1/2 FLTHRD	1 1				
40 49	64025-19	NUT-1/2-13 HEX	1				
49 50	64025-05	NUT-3/8-16 HEX	2				
51	4129802	TUBE-DOCUMENT	1				
52	64151-17	NUT-HEX 1/4-20 CTR LOCK	1				
53	64262-003	BLT-FLG HD 1/4-20 X 1	2				
54	38061A	CAPS VINYL	1				



DECK ASSEMBLY

BRUSH CUTTER

FIGURE 3

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ITM	PART NO.	DESCRIPTION	QTY	ITM	PART NO.	DESCRIPTION	QTY
1	4167199	S-WLDMT-CTTEDCK W/LABS	1				
2		WLDMNT -BUMPER	1				
3	C400286	BAR-TRACTION IDLER PIVOT	1				
4	C400283.17	WLDMT-SKID SHOE, LEFT	1				
5	C400282.17	WLDMT-SKID SHOE, RIGHT	1				
6	C400294.10	WLDMT-FRONT COVER	1				
7	C400293.10	COVER-BELT HOUSING	1				
8	4167200	SBELT HOUSING W/LABS	1				
9	C400300.7	WLDMT-HSG BLADE SPINDLE	1				
10	C400314	SPACER-17/32 2-3/16 1/4 THK	1				
11	C100010	PULLEY-IDLER	1				
12	C400312.7	WLDMT-BLADE HUB	1				
13	C100584	BLADE-BRUSHCUTTER 24IN	1				
14	C400313	BLADE HUB WASHER	2				
15	C300151	BEARING SPACER	1				
16	C100590	BEARING-BLADE	2				
17	C100614	DECAL-BRC24	1				
18	C100615	DECAL, "LITTLE WONDER, RED	-				
19	2000577	DECAL, "ROTATING PARTS"	1				
20	4164269	DECAL-THROWN OBJECTS"	2				
21	4166628	DECAL-WARNING	1				
22		FLAP-MIDDLE	1				
23		FLAP-INNER LEFT	1				
24		FLAP-INNER RIGHT	1				
25		FLAP-OUTER LEFT	1				
26		FLAP-OUTER RIGHT	1				
27	64139-21	BLT-WLF 3/8-16 X 3/4	24				
28	64139-18	BLT-WLF 3/8-16 X 1-1/4	3				
29	64163-67	WASHER516 X 1 X 12GA	2				
30	64163-31	WASHER-25-64 X 1 X 12GA	6				
31	64140-1	COTTER PIN-1/8X1	2				
32	64123-87	BLT-HEX 3/8-16 X 1-3/4	1				
33	64141-4	NUT-WLF 3/8-16	1				
34	64123-05	BLT-HEX 1/2-20 X 1-1/2	1				
35	85010N	ZERK-1/4-28 STR SELF THREAD					
36	64164-12	1/4X1/4X1-1/4 MACH KEY	1				
37	64123-19	BLT-HEX 1/2-20 X 1	1				
38	4167259	PULLEY-7IN DIA 1IN BORE	1				
39	64044-18	SCREW-SET 5/16-18 X 5/16	2				
40	64163-64	WASHER531X2.00X.125	2				
10	01100 07		<u>~</u>				

SCHILLER GROUNDS CARE, INC. ONE BOB-CAT LANE P.O. BOX 469 JOHNSON CREEK, WI 53038 920-699-2000 www.schillergc.com



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