

MAN 4166772

Rev. A 05-2011

ORIGINAL LANGUAGE INSTRUCTIONS



**MODEL:**  
**744283D**

**MATAWAY  
SELF-PROPELLED SCARIFIER / POWER RAKE**



**SCHILLER**

**GROUNDS  
CARE**

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# OPERATOR'S MANUAL

**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.

**⚠ WARNING**

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

**Californie Proposition 65 Avertissement**

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérogènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

**⚠ AVERTISSEMENT**

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérogènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

**California Advertencia  
de la Proposicion 65**

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

**⚠ ADVERTENCIA**

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

**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 Ryan product. You have purchased a world class product, one of the best designed and built anywhere.

This machine comes with a Technical Manual containing safety, operation, parts, maintenance and service information. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand this manual. 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 Ryan 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 manual 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 Ryan dealer for any service or parts needed. Ryan service ensures that you continue to receive the best results possible from Ryan's products. You can trust Ryan replacement parts because they are manufactured with the same high precision and quality as the original parts.

Ryan 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 manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

**Schiller Grounds Care, Inc.**  
**One Bob Cat Lane**  
**Johnson Creek, WI 53038-0469**

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SEE MANUAL 4166771 FOR PARTS INFORMATION

## 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.

### **DANGER**

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

### **WARNING**

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

### **CAUTION**

**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.**

One Bobcat Lane  
Johnson Creek, WI 53038 U.S.A  
Phone: 920-699-2000  
Fax: 920-699-3683

MODEL NUMBER

SERIAL NUMBER

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

**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.

## PREPARING FOR SAFE OPERATION

### Operator preparation and training

#### Read the Operation & Safety Manual

- If an operator or mechanic cannot read, it is the owner's responsibility 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. Know how to stop the engine and attachments 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 long trousers and safety goggles or safety glasses with side shields when operating. Do not operate barefoot or wearing open sandals. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Wear hearing protection.
- Never allow underage children, unskilled or improperly trained people to operate this equipment. Local regulations can restrict the age of the operator.
- 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.
- 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 what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Clear the area to be dethatched of objects such as rocks, toys, wire or other debris that may be picked up or thrown by the machine.
- 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.
- Operate only in daylight or in good artificial light.
- Do not operate wet grass as tires may lose traction.

### Machine preparation

- Check operator presence interlock system and brake operation. Adjust or repair any problems before using.
- 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 dethatch.

## OPERATING SAFELY

### In general

- Use extra care when loading or unloading the machine into a trailer or truck.
- Slow down and use caution when making turns and crossing roads and sidewalks. Stop blades if not dethatching.
- Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Stop operation if someone approaches.
- Keep housing service openings closed when dethatching.
- Do not turn sharply. Use care when reversing.
- Use counter-weight(s) or wheel heights when suggested in the operator's manual.
- Never leave a machine running unattended. Always turn off blades, set parking brake (if equipped), stop engine and remove key (if equipped) before leaving the operator's position.

### Starting

- Start only according to instructions in this manual or on the machine.
- Before attempting to start the engine, make sure:
  - the master clutch is disengaged;
  - the traction drive is in NEUTRAL.
- When starting the engine, make sure hands and feet are clear of the blades.
- Do not start the machine while standing in front of the discharge chute or with the chute directed at someone.
- Do not engage master clutch 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 the master clutch.
  - Shut off the engine.
- Disengage the master clutch and wait until the blades quit rotating:
  - before raising blade assembly;
  - when not dethatching;
  - for transport;
  - when crossing surfaces other than grass.
- Disengage the master clutch, stop the engine, :
  - before refueling;
  - before making height adjustment unless the adjustment can be made from the operator's position.
- Disengage the master clutch, stop the engine, allow the blades to come to a complete stop, and disconnect the spark plug wire:
  - before clearing blockages;
  - before checking, cleaning or working on the machine;
  - before performing maintenance or repair;
  - after striking a foreign object. Inspect the machine for damage and make repairs before restarting;
  - if the machine begins to vibrate abnormally: shut off machine immediately. Inspect and make repairs 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.
- Reduce the throttle setting during engine shut-down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of operation.

## MANEUVERING SAFELY

### In general

- Slow down before turning.
- Do not operate in reverse unless absolutely necessary. Always look behind and down for small children and pets before and during backing.
- Be aware when approaching blind corners, shrubs, trees, tall grass or other objects that may obscure vision.
- If tires lose traction, disengage the blades. If on a slope, head downhill.



### WARNING

### Slope Operation

- Slopes are a major factor in loss-of-control and tip over accidents that sometimes lead to severe injury or death. All slopes require extra caution.
- Do not operate on slopes if uneasy or uncertain. Ultimate responsibility for safe operation on slopes rests with the operator.
- Do not operate excessively steep slopes.  
A slope is too steep if:
  - The machine must be crabbed (turned partially sideways uphill) to drive across the slope.
  - The machine turns downhill going across the slope.
  - You are uneasy about being on the slope.
- With walk behind machines, operate across slopes, not up and down.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.
- Do not turn on slopes unless necessary, and then turn slowly and downhill when possible.
- Stay away from slopes if the ground is loose or if caught in the rain during operation.
- Use lower speeds on a slope to avoid stopping or shifting.
- Remove obstacles such as rocks, tree limbs etc.
- Avoid driving over obstacles such as ruts, holes, rocks and roots whenever possible. Be alert to dips and rises. Uneven terrain can overturn a machine or cause it to slide. Tall grasses can hide obstacles.

- Do not operate near dropoffs, ditches or embankments. The machine could suddenly turn over if a wheel runs over the edge or an edge caves in.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Do not operate on slopes when grass is wet. Reduced traction could cause sliding.

## MAINTENANCE AND STORAGE 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.
- Adjust or repair only after the engine has been stopped and the blades have quit rotating.
- Replace parts if worn, damaged or faulty. For best results, always replace with parts recommended by the manufacturer.
- Disconnect spark plug wire(s) before making any repairs.
- Do not dismantle the machine without releasing or restraining forces which may cause parts to move suddenly.
- Provide adequate support, e.g. jackstands 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.



## Blades

- Only replace blades. Never straighten or weld them.
- Keep other persons away from blades.



## Fuel

- Gasoline and diesel fuels are flammable; gasoline vapors are explosive. Use extra care when handling.
- Store only in containers specifically designed for fuel.
- When refueling or checking fuel level:
  - Stop the engine and allow to cool;
  - Do not smoke;
  - 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.



### Prevent sparks from static electricity during fueling:

- 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 gas 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.
- Replace caps on fuel cans and tanks securely.

## Storage

- 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 machine or fuel container near heating appliances with an open flame such as a water heater or other appliance with a pilot light.
- Keep 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.



**Blades Cut**

- Amputation Hazard
- Keep hands and feet clear.
- Remove spark plug wire before cleaning or servicing.

**Throttle Control**

- Move forward to increase engine speed.
- Move rearward to decrease engine speed.
- Move all the way rearward to stop engine.

**-Thrown Object Hazard**

- Keep bystanders away.

**-Move clutch control lever rearward to stop blades and wheels.**

**-Move clutch lever forward to engage wheel drive.**

**-Squeeze latch to clutch lever and move forward to engage wheel drive and blades.**

**Attention!**  
Wear hearing protection and safety glasses.

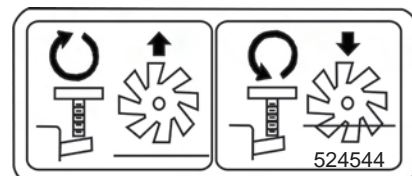
**-Move lift lever down to lower blades.**  
**-Move lift lever up to raise blades.**

**-Read and understand operator manual.**  
**-Replace if lost or damaged.**



### ROTATING PARTS:

- Cut/Crush/Entanglement Hazard
- Keep hands away from moving parts.
- Do not operate if belt cover is removed.
- Remove spark plug before servicing.



### REEL HEIGHT ADJUST



### MOVING BLADES:

- Cut/Crush Hazard
- Keep hands and feet clear of blades while operating.
- Stop engine before servicing or adjusting.

## THROTTLE (A)

Move throttle lever forward to increase engine speed. Move the lever all the way back to stop the engine.

## LIFT LEVER (B)

Raises and lowers the frame mounted reel. Pull the lever back and down to lower the reel. Pull the lever up and forward until it locks over center to raise the reel.

## OPERATOR PRESENCE LEVER (C)

Must be held against the handle bar whenever the clutch control is engaged or the engine will stall (the engine can be started without holding the operator presence lever, if the clutch control is disengaged).

## CLUTCH CONTROL (D)

Engages the clutch for both the drive transmission and reel rotation. The machine may be pushed when the drive is disengaged. Engaging the drive when the machine is off acts as a parking brake.

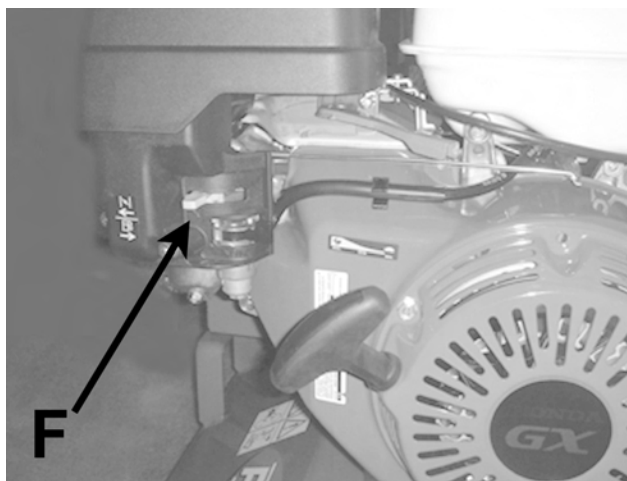
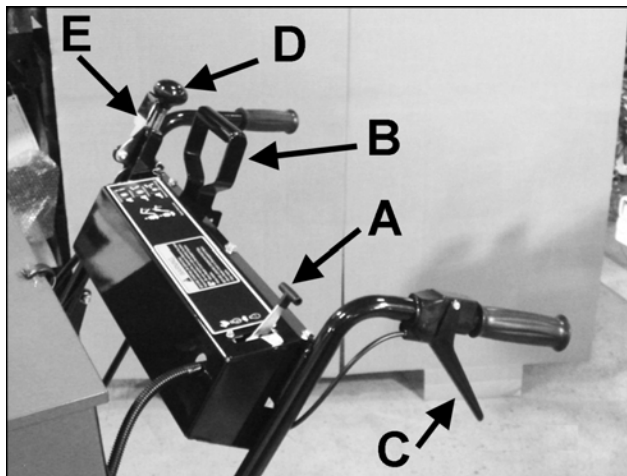
## REEL CONTROL LEVER (E)

Must be pulled back against the clutch control handle for the reel clutch to be engaged.

Pull the Reel Control Lever back against the clutch control and push the clutch control forward to engage both the drive clutch and the reel clutch. Push the clutch control forward without pulling back the reel control lever to engage the drive clutch ONLY. Pull the clutch control all the way back until it locks over center to disengage both clutches.

## CHOKE (F)

Move cable control to right to apply choke. Move choke control to left to remove choke.



## PRE-OPERATION CHECK LIST OPERATOR'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 if necessary.
- Clean area around oil fill dipstick. Remove dipstick and check to be sure oil is in operating range (between marks on dipstick). Add oil if necessary but **DO NOT OVERFILL**. Install dipstick assembly firmly until cap bottoms out on tube. Dipstick assembly must be secured into fill tube when engine is running.
- Check all lubrication points and grease as instructed in manual.
- Perform a functional check of the Operator Presence system each time you operate the unit.

### **WARNING**

**Petrol is extremely flammable and highly explosive under certain conditions. BE SURE to install fuel cap after refueling.**

Fill fuel tank with good quality, clean, unleaded regular gasoline to the level recommended by the engine manufacturer.

#### TO CHECK OR ADD FUEL:

- Use a funnel to avoid spilling.
- Do it outdoors.
- Do not smoke.
- Stop the engine; allow to cool.
- Do not overfill.
- Clean up spilled fuel.

### **WARNING**

**To prevent injury from thrown blades, do not operate unit with reel blades that are cracked, badly bent, missing, or in any abnormal condition.**

**To prevent injury from rotating blades, keep hands or feet from beneath the unit.**

**Before operating, check area to be worked and remove any object(s) which may present a safety hazard and/or damage the equipment.**

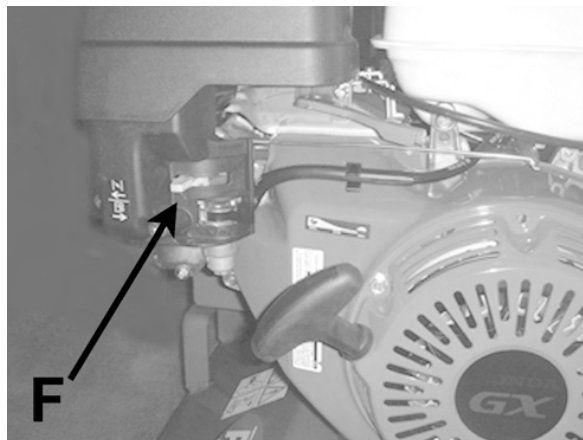
**Engage the reel ONLY when you are in the operator's position.**

## BEFORE STARTING THE ENGINE

- Be familiar with controls, how each functions and what each operates.
- Ensure the engine is level, then check the engine oil level. Add oil if necessary.
- Open the fuel valve.

## STARTING THE ENGINE

1. Move the lift lever to the raised position.
2. Disengage the clutch control. (The engine will not start if the clutch control is engaged).
3. Move the throttle lever midway between fast and slow.
4. Use the choke as required to start a cold engine. Choke control **F** is located on the front of the engine.



5. Stand at side of unit placing left foot on top of housing and slowly pull the recoil starter until just past compression. Return starter handle, pull firmly with a smooth, steady motion to start.

## DETHATCHING

1. Adjust reel to desired cutting depth. See adjustment section.
2. On fine turf such as a golf greens make a few test runs on similar turf. This will allow preliminary adjustments to be made before entering greens (etc.) and help eliminate the possibility of turf damage due to misadjustments.  
**NOTE:** Low tire pressure may cause uneven reel penetration. Maintain correct tire pressure to eliminate this possibility (refer to the Tire Pressure section in the maintenance section, for recommended tire pressure).
3. Start the engine. Compress and hold the operator presence lever.
4. Pull back on the reel control lever and push the clutch control forward to engage both the reel and drive clutches. Adjust the throttle to the desired walking speed.
5. Lower the reel **after** the unit is in motion.

**NOTE:** To prevent damage to the turf, the unit should be in motion and the clutch control engaged **before** lowering reel onto the turf.

Never cross hard surfaces or objects (sidewalks, driveways, stepping stones, etc.) while the reel is down and/or engaged.

6. After each pass across the turf, raise the reel, disengage the clutch control and position the unit manually for the next pass (this will help prevent damage to the turf). Make all passes across the turf at uniform speed.



## DAILY MAINTENANCE

### Operator Presence System

For the engine to run, the Operator Presence Lever must be held when the Clutch Control is engaged. Start the engine and engage the clutch control without holding the Operator Presence Lever. The engine should kill.

Repair the machine before using if the Operator Presence System does not kill the engine.

### Blades:

Check for damage. Replace any broken, cracked or otherwise damaged blades. Do not weld or straighten blades.

### Hardware:

Tighten any nuts and bolts that are found loose. Replace any broken or missing cotter pins. Repair any other problems before operating.

### Engine:

Change oil after the first 5 hours. See engine manual for change intervals and oil specifications. See engine manual for air cleaner service intervals and service procedure.

### Tire Pressure:

Keep tires inflated to 25 lbs/in<sup>2</sup> (1.76 kg/cm<sup>2</sup>). Improper tire inflation can cause rapid tire wear, poor traction and uneven penetration.

## WARNING

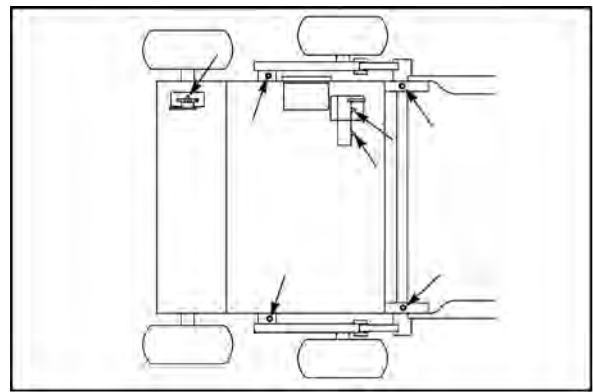
### Explosion Hazard

**Small tires pressurize very rapidly. Use a hand pump or short bursts from a pressurized source to avoid overfilling. Do Not exceed the recommended pressure.**

## LUBRICATION

The Mataway has 7 grease fittings.

1. Wipe each fitting before and after lubrication.
2. Use a good quality Lithium based grease.
3. Lubricate equipment after every 8 hours of use and before long storage periods.



## STORAGE INSTRUCTIONS

**⚠ WARNING**

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

Do not smoke, avoid sparks and open flames when draining or filling the fuel tank.

**Before the equipment is put in to storage for any period exceeding 30 days, the following steps should be taken.**

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.
3. While engine is warm, drain the crankcase oil and replace it with the proper weight oil corresponding to the season the unit will next be used. Refer to the engine manual for proper oil recommendations.

**⚠ CAUTION**

**Do not attempt to service or make repairs near the engine area while the engine is still hot.**

4. Remove the spark plug and squirt a small amount of clean motor oil into the cylinder. Turn the engine over a few times to distribute the oil and reinstall the sparkplug.
5. Lubricate all lubrication fittings.
6. Apply a light coat of oil to the blades and reel shaft to prevent rust.
7. Lubricate drive chain with Lubriplate brand #13563 or equivalent.

**NOTE:** Do not store unit with blades in the down position. Be sure all belts are free from tension (the clutch control lever in the disengaged position).

**To put the equipment into service after an extended period of storage:**

1. Move unit to a level, well ventilated area.
2. Check unit for loose hardware and broken parts. Tighten and replace as necessary.
3. Check for cracked or split fuel lines.
4. Make sure the air cleaner filter is clean.
5. Check that the air cleaner components and all shrouds and belt covers are in place.
6. Check spark plug and plug wire.
7. Note if any blades need replacing.
8. Determine if the transmission and engine oil need filling. Refill engine oil according to the manufacturers recommendations, and refer to the Preventive Maintenance section of this manual for correct oil weight and amount for the transmission.
9. Fill the tank with appropriate fuel as recommended by the engine manual.

**⚠ WARNING**

**Do not smoke, avoid sparks and open flames when draining or filling the fuel tank.**

10. Make sure controls are in the disengaged or neutral position.
11. Start engine and let run (at slow speed) until approximate operating temperature has been reached.
12. While engine is running (and has reached operating temperature) visually inspect fuel lines and carburetor for leaks. If a leak is found, make sure the engine has cooled sufficiently before attempting any repairs.

### TRANSPORTING

The unit may be transported under its own power. With the lift lever up and the clutch control disengaged, start the engine and compress and hold the operator presence lever. Engage only the drive transmission clutch by pushing the clutch control forward **without** pulling the reel control lever back. Set the throttle to the operator's desired walking speed.

The unit may be loaded into the back of a truck or trailer using a gradual sloped ramp and operating the unit in the same manner as stated previously.



### **WARNING**

**Use adequate lifting device and/or assistance when loading and unloading unit. If loading by ramp, be sure ramp is properly supported.**

**Keep hands and feet from underneath the unit while operating or ramp loading the unit.**



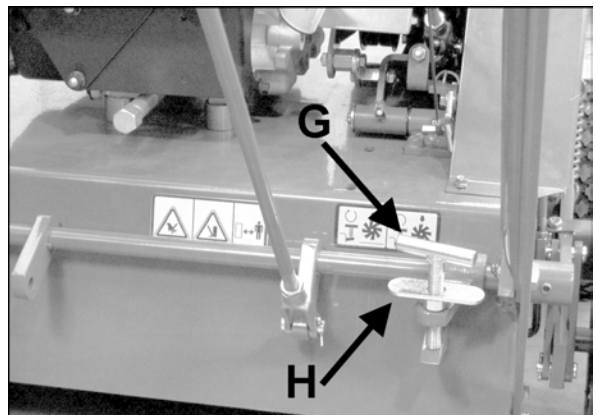
## DEPTH ADJUSTMENT

Make initial depth adjustment with the unit on a level surface.

1. Lower the unit to the operating position.
2. Loosen lock nut **H**.
3. Turn adjusting screw **G** until the blades just touch the surface.
4. Raise the unit to the transport position. Turn the adjustment screw **G** 3 1/2 turns counter-clockwise to get 1/4" (6mm) of blade penetration.
5. Tighten lock nut **H** after adjustment.

Make a test run to check adjustment.

Increasing depth decreases ground clearance.



**NOTE:** Never cross hard surfaces or objects, (sidewalks, stepping stones, etc.) with reel blades down and/or engaged.

Low tire pressure may cause uneven reel penetration. Maintain correct tire pressure to eliminate this possibility (refer to the Tire Pressure section in the maintenance section, for recommended tire pressure).

### SPECIFICATIONS

**Front axle**..... 3/4" (19 mm) diameter  
mounted in self-aligning ball bearings

**Rear axle**..... 3/4" (19 mm) diameter  
welded to pivot arms

**Blades**.....Reversible, high carbon steel (hardened)  
(blade thickness varies by reel)  
1/32" (.8mm; 1/16" (1.5mm); 1/8" (3mm)

**Chassis**.....3/16" (5 mm) formed and  
welded steel plate

**Clutch**.....Belt tightener type for reel  
and forward travel

**Controls**.....Throttle control, lift lever  
combined drive and reel clutch lever

**Depth Adjustment**.....Micrometer screw

**Depth of Cut**.....Up to 1/4" (6 mm)

**Dimensions:**

**Width**.....36" (91cm)

**Height**.....44" (112cm) including handle

**Length**.....53" (135cm) including handle

**Wheelbase**.....16 1/2" (42cm)

**Width of cut**.....19" (483 mm)

**Net Weight**.....425 lbs. (195 Kg) with 547553 Reel

**Gear Case**.....22 to 1 reduction

**Speed**...214 ft./min.(65m/min.) at 3200 engine r.p.m.

**Drive**....."A" section belt from engine to gear box  
No. 40 roller chain from gearbox to front axle  
Matched set of 3, V section belts from engine to reel

**Engine**.....Model No. GX390UT2, 11.7 H.P. Honda  
Governor set at 3200 r.p.m. (no load).  
Engine displacement: 23.7 cu. in. (389 cc) and  
developes 18.5 ft.-lbs. (25.1 N·m)  
of torque at 2500 r.p.m.

**Reduction**.....Engine to reel - 1:1  
Engine to wheels - 37.3:1

**Reel**.....Quick change mounting  
Rotation in opposite direction of forward motion

**Reel Speed**.....3200 r.p.m.

**Wheels**.....Front; 4.10/3.50 - 4, pneumatic tires  
chain driven  
Rear; 4.10/3.50 - 4 pneumatic tires  
free wheeling on self-aligning ball bearings.

# EC Declaration of Conformity

4166931 REV A

**The Undersigned Manufacturer:**

Schiller Grounds Care, Inc.  
One Bob-Cat Lane  
Johnson Creek, WI 53038



Chuck Clark  
Director of Operations  
Date: 25th July 2011

**EU Authorized Representative:**

Earlsmere Limited  
Unit 18 Valley Road  
Station Road Industrial Estate  
Wombwell, Barnsley, South Yorkshire, S73 OBS UK



Jim White  
Managing Director  
Date: 25th July 2011

**Declare that the machine described below:**

Make & Type: ..... **Ryan, Mataway**  
Category:..... **Scarifier Walk-Behind**  
Series: ..... **744283D**  
Engine: ..... **Honda**  
Type:..... **GX390**  
Speed: ..... **3200 R.P.M**  
Net Installed Power: ..... **8.7 KW (11.7 hp)**  
Cutting Width:..... **483 mm (19")**

Complies with the provisions of the following European Directives, Amendments and the regulations transposing it into national law.

**Directives/Harmonized Standards**

Machinery Directive..... **2006/42/EC**  
EMC Directive: ..... **2004/108/EC**  
Noise in the Environment Directive ..... **2000/14/EC**  
Vibration Directive ..... **2002/44/EC**  
Pedestrian controlled aerators and scarifiers..... **EN13684**  
Non Road Emissions Directive..... **2002/88/EC**

**Sound:** Sound levels were determined in accordance with Directives 2000/14/EC, 2006/42/EC and standards EN13684.

Guaranteed Sound Power Level ..... **102.0dB**  
Operator Ear..... **84.4dB**

**Vibration:**

Hand/arm vibration was measured at the right and left operator handles per ISO 5349-1-2001 and ISO 5349-2-2001. Levels were calculated in accordance with 2002/44/EC.

Only the highest of the left and right readings is given.

Guaranteed Vibration Level..... **8.9m/s<sup>2</sup>**

**Intended Use:**

This machine is for use in seeding grass to areas covered by grass or other vegetation cut to a short height. The machine produces slits cleared of grass and other vegetation, drops grass seed in the slits, and firms the seed into contact with the soil for good germination. The machine may also be used as a power rake/dethatcher. It is intended for use on areas ranging from flat to a 12° slope.



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