

# Overseeder Instructions



## Features

- Self-propelled hydrostatic drive
- Low-thatch long life blade
- Foot pedal actuation increases comfort, extends blade life
- Auto Drop™ system conserves seed
- Elevated seed box
- Infinite depth adjustment
- Intuitive, best in class controls - easy for everyone

### Overview:

Billy Goat's self-propelled overseeder reduces fatigue associated with pushing and features intuitive forward and reverse operator controls. New to the unit is a blade design that reduces thatch and improves blade life due to its sharpened leading edge and attack angle combined with a new foot actuated height adjust that raises and lowers the reel effortlessly, providing more blade depth. The unit is 22" wide with an exclusive 11-blade slicing reel that floats along contours of yards increasing seed to soil contact and improving germination rates. The unit comes standard with a 30 lb. seed box that is generously elevated above the turf to eliminate any clogging that may occur from moisture. Billy Goat's exclusive Auto Drop™ system automatically starts and stops seed drop with bale engagement and disengagement conserving seed and preventing end-of-run seed piling. Infinite depth adjustment of the slicer blades promotes longer blade life vs. presets and seed settings are found on board for operator convenience. When it's time to rejuvenate your yard, Clean Up with Billy Goat!

- [What type of lawn preparation is necessary prior to overseeding?](#)

First, mow your lawn at the lowest setting on your mower. For best results, power rake to remove thatch from the lawn. If you plan on fertilizing your lawn, do so with a broadcast or drop spreader prior to overseeding. It is important not to water prior to seeding.

- [How can I get the best results from overseeding?](#)

Always overseed in two passes at ½ the application rate for your selected seed at right angles or in a crisscross pattern. (Drop rate settings are under the seed box lid. A Scotts cross-reference is provided for your benefit.) Water heavily immediately, then lightly for 10 –14 days, keeping soil moist. After germination, water less often to promote root growth.

- [When is the best time to overseed?](#)

It is best to overseed in the autumn when weed seed has difficulty germinating. Warm days and cool nights with frequent watering will produce the best results. Generally speaking, you want to overseed when no less than three weeks to the date of first freeze occurs.

- [I'm confused, should I power rake or aerate?](#)

Power raking and aerating are not substitutes for each other though lawns do experience some common benefits. Power raking removes excess organic debris from the lawn. Aerating is meant to reduce soil compaction and improve grass root development.

- [What is thatch?](#)

Thatch is a layer of semi-decomposed grass and other organic material that accumulates above the soil faster than it can be absorbed. Thatch build-up is a normal occurrence and is not necessarily harmful to the lawn until it gets too thick. Poor mulching mower performance can be a big contributor to thatch build-up.

- [Why should I worry about thatch?](#)

Thatch forms a barrier between soil and the water, nutrients, and air required for a healthy lawn. It may also serve as a perfect breeding ground for damaging lawn diseases.

- [How do I get the best results from the power rake?](#)

Soil should be moist, but not too wet. If the soil is too wet the grass could pull away. Best results are achieved when working in two directions. Adjust the depth of the flails under the machine so that they make contact with and remove thatch. The flails should not make contact with the soil. Rake up thatch immediately or use the Billy Goat KV or MV vacuum to make quick work of cleanup.

## **OPERATION**

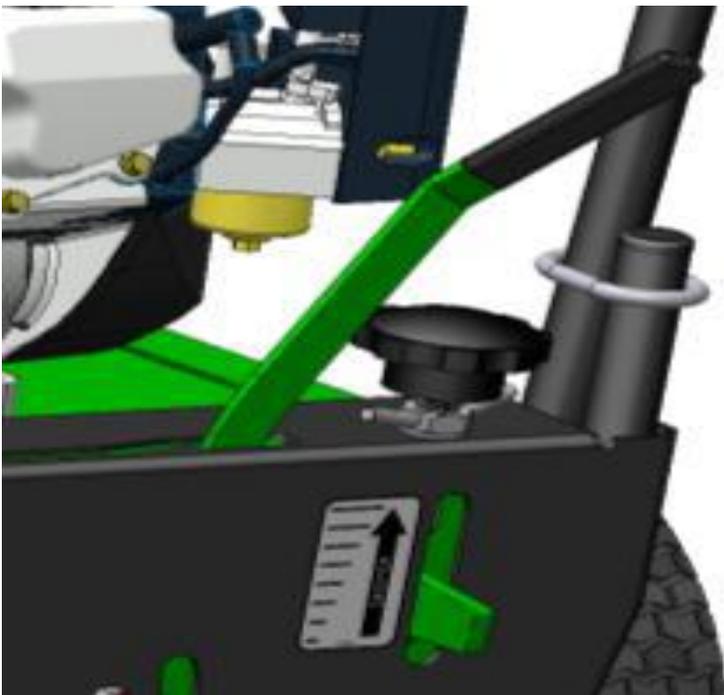
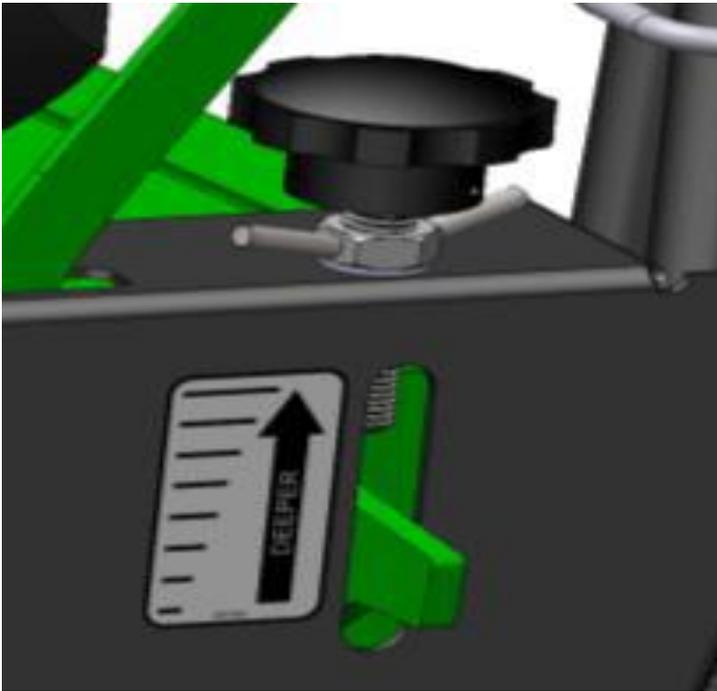
### **FOLDING HANDLE**

This unit is equipped with a folding upper handle for easier storage and transportation. The handle can be folded by sliding the handle lock loops (item 35) up. This releases the upper handle, allowing it to be folded over the unit.

### **ADJUSTING BLADE DEPTH**

The depth of the blades can be raised or lowered by rotating the knob located at the rear of the machine. The relative depth of the blades can be gauged by using the depth scale located on the

rear of the machine and the bar next to it.



### **BLADE POSITION & DEPTH CONTROL LEVER**

The blades can be raised or lowered into the ground by height adjustment lever at the rear of the unit. The blades will be in their lowered position when the lever is to the left and should be locked in the notch on the right when in transport. The resulting blade depth can be adjusted high

### **SLICING TIPS**

Before beginning, it is best to evaluate the condition of the lawn by cutting one or more core samples from area to be treated. A core can be cut using a piece of pvc, or metal pipe. Hammer the pipe into the ground, remove it, push the core out of the pipe and inspect it to determine the depth of thatch in your yard.

**THATCH:** Thatch is a dense layer of dead grass, clippings, and roots that builds up over time at the base of

the lawn preventing air, water, and fertilizer from reaching the soil. This can cause shallow root development and make a lawn more susceptible to drought and disease. Thatch also provides an ideal environment for insects to hide and multiply. Periodic removal of thatch will keep your lawn in good health.

**HEAVY THATCH:** Lawns with an excessive amount of thatch will require multiple treatments for effective removal. Trying to remove excessive thatch (greater than 3/4"[19 mm] deep) in one treatment will damage or destroy the living part of the lawn. It is best to remove heavy thatch in seasonal treatments (i.e. spring, and fall).

**SLOPES:** Rake slopes across not up and down. This is much easier and safer for the operator and is better for the lawn. Raking across will help to reduce runoff during watering and allow the sloped ground to hold more seed, fertilizer, and water. The unit's maximum operating slope is 35% or 19°.

**DEPTH:** The wide range of depth adjustment on your unit is provided to allow for blade wear. Setting the reel deeper will not produce better, or quicker results. The slicing reel should be set even with the ground for verti-slicing work, and set to a maximum 1/2" depth for overseeding jobs. Setting the reel deeper than this will only result in premature wear on the unit (i.e. failed belt). If you desire to work the ground deeper than the above guidelines allow, it should be done gradually in multiple passes..

**VERTICUTTING / OVERSEEDING:** Mow the lawn to shorter than the normal cut height before starting (i.e. approximately 2" tall for fescue grass). For the best result, Slice/Overseed in criss-cross pattern (See Fig. 1 and See Fig 2).

### **VERTI-CUTTING OPERATION**

**MOW:** Mow the lawn to shorter than the normal cut height (approximately 2" tall)

**DRY:** Be sure grass is dry. Wet conditions can cause increased damage to healthy grass.

**SET DEPTH:** With engine off, set the raking depth so that the blades just touch on a flat surface (i.e. driveway, or sidewalk).

#### **START ENGINE:**

Fuel Valve: Move fuel valve to "ON" position

Stop Switch: Located on the engine, place in "ON" position

Choke: Operated with choke lever on side of engine above fuel valve.

Throttle: controlled by lever on engine

Forward/Reverse: Controls are located on the underside of the upper handle. Forward motion will be controlled with the right hand lower lever, and Reverse will be controlled with the left hand lower lever. DO NOT tie down control levers for use!!!

**ENGAGE BLADES:** Push the Reel Lever down on the operators handle (upper left side). **NOTE:** When engaging the blades in heavy load conditions (i.e. heavy thatch, or very uneven turf), push down on the operators handle lifting the front wheels slightly. Engage the blades. Slowly lower the unit into the turf.

**SLICE:** Verti-cut a small test area and examine the results. Some thatch and cut stems should be removed and deposited on top of the healthy grass. Grass runners should be cut and ready for removal. If excessive damage occurs to healthy grass, adjust the blade depth to decrease damage. Continue raking the yard, working in one direction (i.e. north-south, or east-west). **NOTE:** If a large drop in engine RPM occurs, or bounces during operation the blade depth is set too low.

**REMOVE THATCH/STEMS:** After verti-cutting, a layer of thatch and cut stems will be deposited over the top of the lawn. We suggest the use of a lawn vacuum or wheeled blower for collection and removal of the thatch/stems.

### **OVERSEEDING OPERATION**

**MOW:** Mow the lawn to shorter than the normal cut height (approximately 2" tall)

**DRY:** Be sure grass is dry. Wet conditions can cause increased damage to healthy grass.

**SEED:** Spread grass seed according to the seed suppliers directions (e.g. 10 lbs. per 1000 ft<sup>2</sup> [4.5 kg. per 93 m<sup>2</sup> ]) Adjustments to the seed drop is located on the front of the unit on the seed dial and should be used in conjunction with the seed chart on the console.

**SET DEPTH:** With engine off, set the raking depth so that the blades reach 1/4"-1/2"(6-12 mm) below a flat surface (i.e. driveway, or sidewalk).

**START ENGINE:** See Safety and General Operations manual.

**ENGAGE REEL AND SEED DROP:** Push down on the Reel lever on the operators handle. **NOTE:** When engaging the reel in heavy load conditions (i.e. heavy thatch, or very uneven turf), push down on the operators handle lifting the front wheels slightly. Engage the reel. Slowly lower the unit into the turf.

**SLICE:** Run machine over the area that has been seeded to incorporate the seed into the soil. If excessive damage occurs to healthy grass, adjust the blade depth to decrease damage. Continue raking the yard, working in one direction (i.e. north-south, or east-west). **NOTE:** If a large drop in engine RPM occurs, or bounces during operation the blade depth is set too low.

**WATER/FERTILIZE:** After the seed has been worked into the soil, water and fertilize according to the seed suppliers directions.

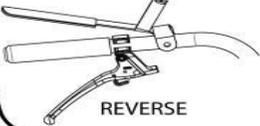
### **ADJUSTING SEED RATE**

To set the seed flow rate, loosen the knob on the indicator dial and set it to the corresponding stop setting on the seed application chart (below or on the console) for the type and amount of seed being used.

**LAWN PREPARATION:**

- MOW LAWN TO LOWEST SETTING ON YOUR MOWER.
- DO NOT WATER PRIOR TO SEEDING.
- POWER RAKE TO DETHATCH LAWN AND REMOVE THATCH.

**REEL DRIVE/SEED DROP**



REVERSE

**SEED APPLICATION CHART**

SEEDING RATES ARE SPEED DEPENDENT. THESE SEED RATES ARE BASED ON A GROUND SPEED OF 3.0 MPH. FASTER TRAVEL DELIVERS LESS SEED.

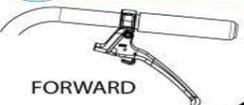
SEED TYPE	RATE LBS 3,000 #/Y	STOP SETTING	SEED TYPE	RATE LBS 3,000 #/Y	STOP SETTING
RYE GRASS	2 1/2	4	BENTON GRASS	1 1/2	1
	5	4.5		3 1/2	1.5
	9 1/2	5		5	1.8
BLUE GRASS	1 1/2	2	BERMUDA GRASS (PULLED & ZYRBA)	2 1/2	1
	2 1/2	2.5		5	1.5
	5	3		CENTAUREA GRASS (COATED)	3/4
9	3.5	2 1/2	1.5		
FESCUE	2 1/2	4	ST. AUGUSTINE GRASS	3/4	1.5
	5	4.5	GRASS	1	2
	10	5	1 1/2	2.5	
	15	6	1 1/2	3	



FOR BEST RESULTS OVERSEED IN TWO PASSES OF ONE-HALF APPLICATION RATE AT RIGHT ANGLES OR IN A CROSS-CROSS PATTERN. WATER HEAVILY IMMEDIATELY THEN LIGHTLY FOR 10 - 14 DAYS KEEPING SOIL MOIST. AFTER GERMINATION, WATER LESS OFTEN TO PROMOTE GROWTH.

**SEEDING RECOMMENDATIONS:**

- FOR BEST RESULTS OVERSEED IN TWO PASSES OF ONE-HALF APPLICATION RATE AT RIGHT ANGLES OR IN A CROSS-CROSS PATTERN.
- WATER HEAVILY IMMEDIATELY THEN LIGHTLY FOR 10 - 14 DAYS KEEPING SOIL MOIST.
- AFTER GERMINATION, WATER LESS OFTEN TO PROMOTE GROWTH.



FORWARD

If you have any problems or encounter any Safety issues, Please call Grand Rental Station Immediately! 337-478-3115