



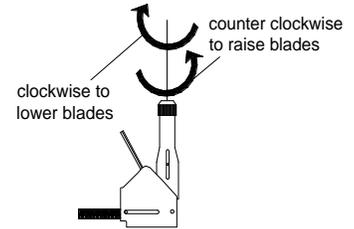
**OPERATION**

**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 28) up. This releases the upper handle, allowing it to be folded over the unit.

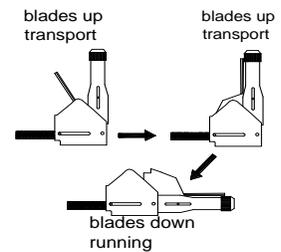
**ADJUSTING BLADE DEPTH**

The depth of the blades can be raised or lowered by rotating the knob on the top of the adjustment lever. The blades are lowered by rotating the knob clockwise, and raised by rotating the knob counter-clockwise. The relative depth of the blades can be gauged by using the depth scale located on the right front corner of the engine base. With new blades installed the depth can be estimated as follows: 2.5 on the scale is even with the ground, 3 is equal to 0.25" deep, and 3.5 is equal to 0.5" deep



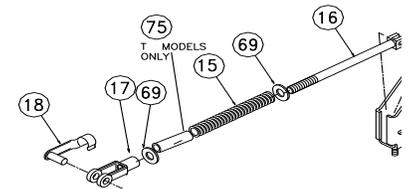
**BLADE POSITION & DEPTH CONTROL LEVER**

The blades can be raised or lowered into the ground by height adjustment lever on the engine base. The height adjuster lock lever must be pushed back against the adjustment lever in order to lower the blades into the ground. The resulting blade depth can be adjusted higher or lower. See ADJUSTING BLADE DEPTH.



**SPRING TINE CONVERSION**

If are converting your Power rake to a spring tine reel, you will need to replace the spacer on the control lever to accommodate for the tine. First remove the clip (item 18), then unscrew the yoke (item 17), remove the washer (items 69) and insert the spacer (item 75) in front of the spring. Reassemble in reverse order.



**RAKING/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 flail reel is intended to be set so it just touches the surface on flat ground. 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.

**SLICING / 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).

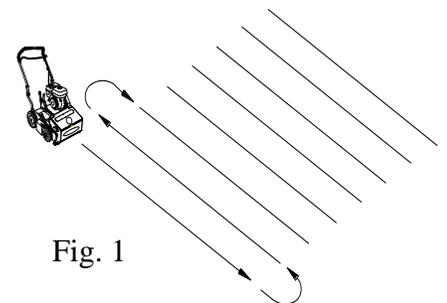


Fig. 1

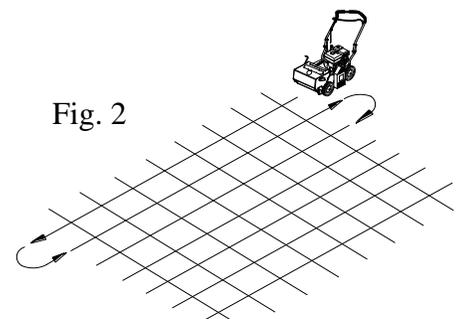


Fig. 2



### RAKING OPERATION-FLAIL REEL

**NOTE: Must have the flail reel assembly (350112) for this operation.**

**MOW:** Mow the lawn to it's normal cut height.

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

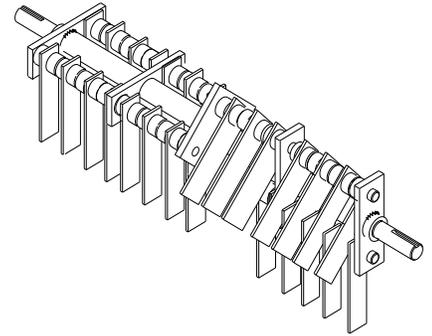
**SET DEPTH:** With engine off, set the raking depth so that the blades just touch on a flat surface (i.e. driveway, or sidewalk).

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

**ENGAGE BLADES:** Pull back on the bail on the operators handle. **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.

**RAKE:** Rake a small test area and examine the results. Thatch should be removed and deposited on top of the healthy grass. 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 the unit pulls you forward and bounces during operation the blade depth is set too low.

**REMOVE THATCH:** After raking, a layer of thatch will be deposited over the top of the lawn. This thatch must be removed prior to any fertilizing, seeding, or watering of the lawn. We suggest the use of a lawn vacuum or wheeled blower for collection and removal of the thatch.



### RAKING OPERATION-SPRING REEL

**NOTE: Must have the spring tine reel assembly (350354) for this operation.**

**MOW:** Mow the lawn to it's normal cut height. Tall grass will not leave a manicured look when the dethatching job is complete.

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

**SET DEPTH:** With engine off, set the raking depth so that the spring tines are just above touching the flat surface (i.e. driveway, or sidewalk) the units height is being adjusted on. **NOTE:** Allowing the spring tines to have substantial contact with the ground will cause premature wear and failure of the spring tines.

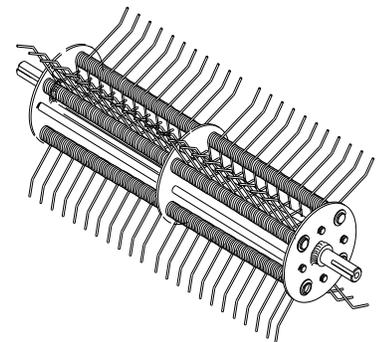
**START ENGINE:** See General Safety and operation manual.

**ENGAGE TINES:** Pull back on the bail on the operators handle. **NOTE:** When engaging the spring tines 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 spring tines. Slowly lower the unit into the turf.

**RAKE:** Rake a small test area and examine the results. Thatch should be removed and deposited on top of the healthy grass. If excessive damage occurs to healthy grass, adjust the spring tine 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 the unit pulls you forward and bounces during operation the spring tine depth is set too low.

**REMOVE THATCH:** After raking, a layer of thatch will be deposited over the top of the lawn. This thatch must be removed prior to any fertilizing, seeding, or watering of the lawn. We suggest the use of a lawn vacuum or wheeled blower for collection and removal of the thatch.



### VERTI-CUTTING OPERATION

**NOTE: Must have the slicing reel assembly (350113) for this 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).

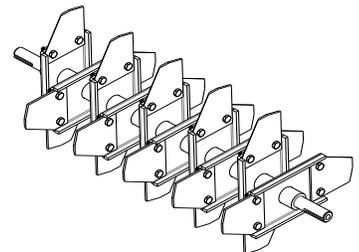
**START ENGINE:** See General Safety and operation manual.

**ENGAGE BLADES:** Pull back on the bail on the operators handle. **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 the unit pulls you forward and 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.





## PR & OS Owner's Manual

### OVERSEEDING OPERATION

**NOTE: Must have the slicing reel assembly (350113) for this 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> ])

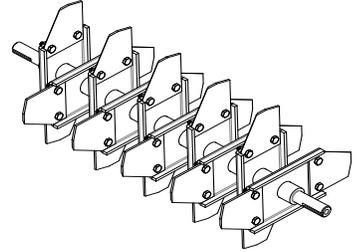
**SET DEPTH:** With engine off, set the raking depth so that the blades reach 1/4"-1/2" (6-12 mm) below a flat surface (i.e. driveway, or sidewalk).

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

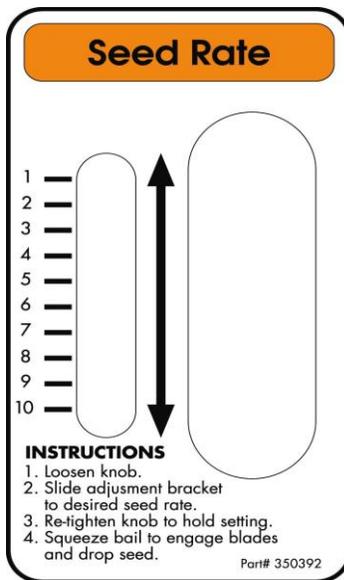
**ENGAGE CLUTCH:** Pull back on the bail on the operators handle. **NOTE:** When engaging the clutch in heavy load conditions (i.e. heavy thatch, or very uneven turf), push down on the operators handle lifting the front wheels slightly. Engage the clutch. Slowly lower the unit into the turf.

**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 the unit pulls you forward and 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



### LAWN PREPARATION

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

### LAWN PREPARATION

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

### SEED APPLICATION CHART:

THE SETTINGS SHOWN ARE APPROXIMATE GUIDELINES. SEEDING RATES ARE SPEED DEPENDENT. FASTER TRAVEL DELIVERS LESS SEED, SLOWER TRAVEL DELIVERS MORE SEED.

SEED TYPE	RATE LBS 1,000 FT <sub>2</sub>	STOP SETTING	SEED TYPE	RATE LBS 1,000 FT <sub>2</sub>	STOP SETTING
RYE GRASS	1/2	2	BENT GRASS	2/3	2
	3/4	3		1 1/3	3
	1 1/2	4	BERMUDAGRASS (HULLED & ZOYSIA)	3/4	2
	2 1/3	5		1 2/3	3
BLUE GRASS	3/4	4	CENTIPEDE GRASS (COATED)	2/3	2
	1	5		1 1/4	3
	1 1/2	6		2 1/2	4
FESCUE	2 1/2	7	ST. AUGUSTINE GRASS	3/4	4
	3/4	6		1	5
	1 1/4	7		1 1/3	6
	2	8		1 1/2	7
	3 1/2	9			