

MAN 4170071
Rev. A 01-2015



554870
REN-O-THIN V BRIGGS & STRATTON
W/ FLAIL BLADE

554871
REN-O-THIN V HONDA
W/ FLAIL BLADE

554872
REN-O-THIN V BRIGGS & STRATTON
W/ SPRING TINE

554873
REN-O-THIN V HONDA
W/ SPRING TINE

554874
REN-O-THIN V BRIGGS & STRATTON
W/ FIXED BLADE

554875
REN-O-THIN V HONDA
W/ FIXED BLADE



OP / PARTS 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 cancérigènes, 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 cancérigènes, 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 Schiller Grounds Care, Inc. 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 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 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 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 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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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 mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

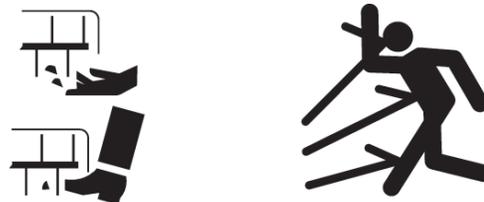
REN-O-THIN

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. 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 long trousers, substantial shoes and safety goggles or safety glasses with side shields when operating dethatcher. Wear substantial footwear. Do not operate barefoot or wearing open sandals. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Wear appropriate hearing protection.
- Never allow 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, 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 dethatched of objects such as rocks, toys, wire or other debris that may be picked up or thrown by the dethatcher.
- 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 on wet grass.

⚠ DANGER

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

MACHINE PREPARATION

- Check blade clutch operation. Adjust or have any problems repaired 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 reel assembly for wear or damage. Replace worn or damaged blades and bolts in sets 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 when not dethatching.
- Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Never leave a machine unattended. Always turn off blades and stop engine before leaving the operator position.
- Always be sure of your footing on slopes.
- Walk, never run.
- Exercise extreme caution when changing direction on slopes.
- Do not operate on excessively steep slopes.
- Work across slopes with walk behind machines.
- Use extreme caution when reversing or pulling the dethatcher towards you. Be sure the area behind is clear.
- Start the engine or switch on the motor carefully according to instructions and with feet well away from the blades.
- Never pick up or carry the machine while the engine is running.
- Do not start the cutting blades until you are ready to start dethatching.
- Obey safety instructions. Failure to do so may cause injury to yourself or others.

STARTING

- Start only according to instructions in this manual or on the machine.
- Before attempting to start the engine, make sure the blade clutch is disengaged.
- When starting the engine, make sure hands and feet are clear of the blades.
- Do not tilt the machine when starting.
- Do not change engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

**MANUEVERING SAFELY****In General
Operating on Slopes**

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

- With walk behind machines, operate across slopes, **not** up and down. With ride-on machines, operate up and down slopes, **not** across, except zero turn machines.
- Be alert to dips and rises which change the general slope. Watch for holes, rocks and roots in the terrain and other hidden hazards. Keep away from drop offs. Avoid ground conditions which will cause the machine to slide.
- If the operator is uncomfortable or unsure of the machines stability, operation on these slopes should cease immediately.
- The ultimate responsibility for safe operation on slopes, rests with the operator.
- Use lower speeds and exercise extreme caution on slopes and especially in sharp turns to prevent tipping and loss of control. Use extra caution when changing direction on slopes.

INTERRUPTING OPERATION

- Before leaving the operator's position:
 - Park on level ground.
 - Disengage the blades.
 - Shut off the engine.
- Disengage the blades and wait until the blades quit rotating:
 - when not dethatching;
 - for transport;
 - when crossing surfaces other than grass.
- Stop the engine, disengage the blades and wait until the blades quit rotating:
 - before refueling;
 - before making height adjustment .
- Stop the engine, disengage the blades, and disconnect the spark plug wire(s):
 - 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 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 blades 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 shut-down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of mowing.

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.
- Guards should only be removed by a qualified technician for maintenance or service. Replace guards when work is complete.
- Adjust or repair only after the engine has been stopped and the blades have quit rotating.
- Disconnect spark plug wire(s) before making any repairs.
- 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. 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.
- Particular care must be taken when adjusting the carburetor while the engine is running. Keep hands and feet clear. Shut off PTO.
- When working underneath lifted parts or machines, make sure adequate support is provided.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Replace worn or damaged parts for safety.
- Use only replacement parts supplied by original manufacturer.
- Stop the engine and allow to cool before storing
- Do not store the machine or fuel container near heating appliances with an open flame such as a water heater or an appliance with a pilot light.
- Keep petrol (gasoline) storage area free of grass, leaves and excessive grease to reduce fire hazard.

- Keep the machine and fuel containers in a locked storage place to prevent tampering and to keep children from playing with them.

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.
- Drain the fuel tank outdoors only.
- 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.
 - 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 fuel 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.

REN-O-THIN

⚠ WARNING



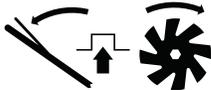

BEFORE STARTING:

- Read and understand Operator Manual and labels.
- Wear hearing and eye protection.
- Replace labels and Operator Manual if lost or damaged.

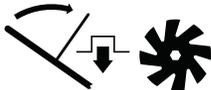
⚠ WARNING

AVOID SERIOUS INJURY OR DEATH:

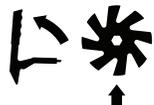
- Remove objects that could be thrown.
- Do not allow children or untrained persons to operate.
- Do not operate unless guards and shields are in place and working.
- Do not operate when children or others are around.
- Reel continues to rotate for a few seconds after bail is released.



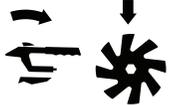
**PULL BAIL TOWARD
HANDLE TO ENGAGE REEL**



**RELEASE BAIL
TO DISENGAGE REEL**



**PULL BACK
TO RAISE REEL**



**MOVE FORWARD
TO LOWER REEL**

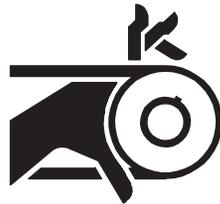
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⚠ ADVERTENCIA

- Lea y entienda el manual del operador y las etiquetas.
- Píde que alguien lea y explique el manual y las etiquetas a usted si usted no lee Inglés.
- Use protección ocular y auditiva.
- No haga funcionar sin los protectores en su lugar.
- Mantenga las manos, pies y ropa alejados de las piezas móviles.
- Pare el motor antes de dar servicio.
- La gente a más durante la operación.

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⚠ WARNING



- ROTATING PARTS.
- DO NOT OPERATE WITH COVER REMOVED

2000577



OPERATOR'S MANUAL

- Read and understand
- Replace if lost or damaged

2000735

⚠ DANGER

ROTATING BLADES

- Keep hands and feet clear.
- Stop engine, let blades stop.
- Remove spark plug wire before accessing blades.
- Do not operate without drag shield in place.



⚠ WARNING

THROWN OBJECTS

- Keep area clear of people and pets.
- Remove objects blades may strike or throw.
- Stop blades to cross gravel or paved areas.



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OPTIONAL SEEDER LABELS

REN-O-THIN

SEED APPLICATION CHART					
THESE SETTINGS ARE APPROXIMATE GUIDELINES. SEEDING RATES ARE SPEED DEPENDANT. FASTER SPEED DELIVERS LESS SEED.					
RATE LBS./ SEED TYPE 1000 SQ. FT. SETTING			RATE LBS./ SEED TYPE 1000 SQ. FT. SETTING		
BENT GRASS	0.5	20	FESCUE	3.56	23
	1.0	23	(TALL)	4.98	25
	1.5	24		6.07	27
BERMUDA	2.0	17		7.83	30
	2.75	19	RYEGRASS	1.4	16
				2.18	18
BLUEGRASS	2.13	15		2.85	20
	4.28	18		4.6	22
				5.0	25
FESCUE (CREEPING)	2.85	22		7.0	27
	3.5	25		10	30
	4.98	27			
	6.05	28			
	7.0	30			

LAWN PREPARATION:
MOW LAWN TO 1 TO 2 INCH HEIGHT. DO NOT WATER PRIOR TO SEEDING. POWER RAKE TO DETHATCH LAWN AND REMOVE THATCH IN EXCESS OF 1/2 INCH. AERATE LAWN WITH CORE TYPE AERATOR. FERTILIZE LAWN WITH BROADCAST SPREADER.

SEEDING RECOMMENDATIONS:
FOR BEST RESULTS, OVERSEED IN TWO PASSES OF 1/2 APPLICATION RATE AT RIGHT ANGLES IN A CRISSCROSS PATTERN. WATER HEAVILY IMMEDIATELY THEN LIGHTLY FOR 10 TO 14 DAYS KEEPING SOIL MOIST. AFTER GERMINATION, WATER LESS OFTEN TO PROMOTE ROOT GROWTH.

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REN-O-THIN

FUEL SHUT OFF (A)

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

SWITCH (B)

NOTE: B & S Engines A and B are combined.

Move to the "OFF" position to stop the engine. Move to the "ON" position before starting engine.

CHOKE (C)

Move to the "CHOKE" position to apply the choke. Move to the "RUN" position to remove the choke.

THROTTLE (D)

Controls engine speed.

BLADE CLUTCH CONTROL (E)

Move the bail towards the handle to engage the blades. Release the bail to disengage.

LIFT CONTROL (F)

Pull the handle back to raise the reel into the transport position. Push forward to lower to the working position. (Shown in work position).

HEIGHT ADJUSTMENT (G)

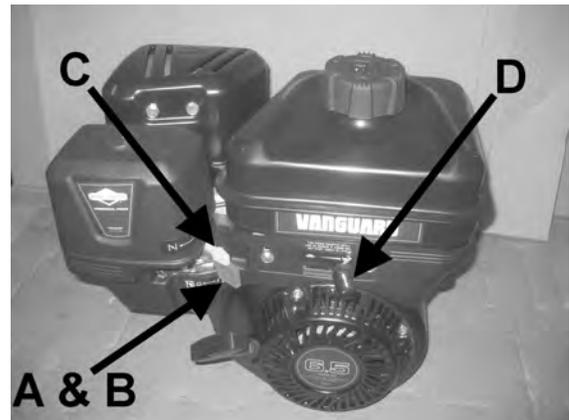
Turn the height adjustment knob to raise or lower the reel to the position desired.

FOLDING HANDLE(H)

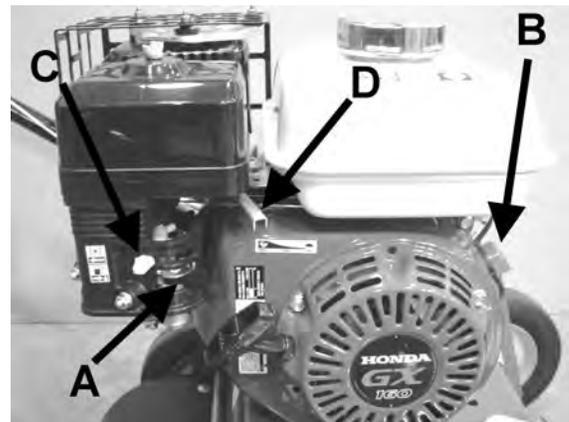
Raise the handle locks (L) and latch on the handle to fold the handle. Raise the handle and drop the locks (L) over the handle bracket to secure in the operating position

SEED CONTROL -OPTIONAL(J)

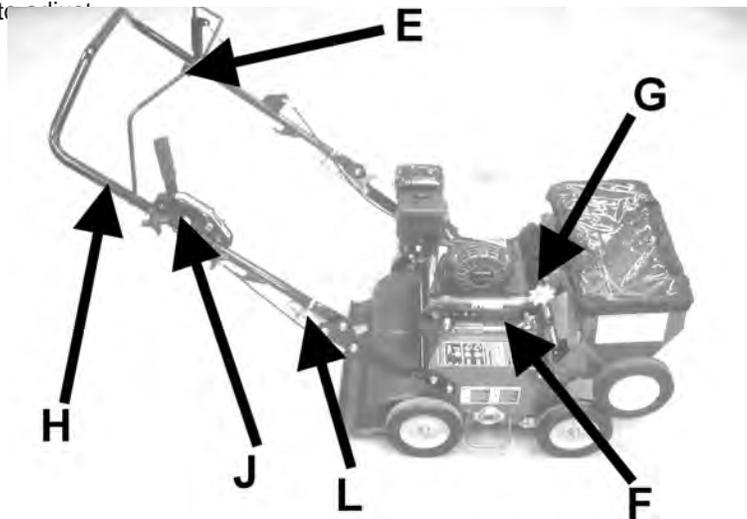
Push the lever forward to open the seed gate, pull back to close the seed gate. Use the knob to adjust the stop for the desired seed flow.



Briggs & Stratton



Honda



SET-UP INSTRUCTIONS



WARNING

Banding is under tension and may snap back when cut. Wear eye protection and stay clear when cutting banding.

1. Cut banding securing the machine to the pallet. Cut cable ties on the handle lock on the handles.
2. Lift the handle to the operating position. Secure in place by moving the handle locks down over the handle supports.

3. Roll the machine off the pallet onto a smooth, level surface.
4. Check the oil level in the engine, add if necessary.
5. Check the height of the tines. Adjust if necessary.
6. Fill the fuel tank with clean, fresh unleaded gasoline. E10 is acceptable. **DO NOT** use E15 or E85.

Refer to the engine manufacturer's operator manual. Read the operator manual before use.

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. Be sure the discharge shield is installed.
 - 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.
 - Visually check for loose or damaged parts and fasteners. Repair or replace as needed before unit is placed into operation.
- Check the reel for bent or broken blades/springs; replace as necessary.
 - Inspect area and remove stones, branches or other hard objects that might be thrown, causing injury or damage.
 - 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 always be secured into fill tube when engine is running.

FUELING

- When refueling or checking fuel level:
 - Fill fuel tank with good quality, clean, unleaded gasoline. E10 is acceptable. **DO NOT** use E15 or E85.
 - 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.

WARNING

To prevent injury due to rotating blades, never place hands or feet beneath the equipment at any time.

To prevent injury from thrown blades, never operate equipment with reel blades or springs that are cracked, badly bent, missing, or in any abnormal condition.

⚠ WARNING

DO NOT operate this equipment until you have thoroughly read and understand the operation section of this manual.

DO NOT operate equipment without all shields in place.

DO NOT make adjustments or perform any maintenance while the engine is running.

NEVER start or run the engine inside where exhaust fumes can collect. Carbon monoxide present in the exhaust is an odorless and deadly gas.

Gasoline is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks when refueling. **BE SURE** to install fuel cap after refueling.

⚠ WARNING

To prevent injuries from thrown blades/springs, **NEVER** operate the unit with reel blades that are missing, cracked, badly bent or in any springs of abnormal condition.

Before operating, check the area and remove any object which may present a safety hazard or damage the equipment.

To prevent injury from rotating blades/springs, **NEVER** place hands or feet beneath the unit.

This unit is not self propelled by a mechanical drive system. However, under some conditions the reel rotation may cause the unit to move under its own power.

Engage the reel ONLY when you are in the proper operator's position behind the handle.

The clutch bail is designed to be held by the operator to keep the reel belt engaged ONLY during use. DO NOT clamp or fasten the bail to the handle. If the reel is allowed to rotate while the operator is not in the proper operating position, the unit may move on its own. This will create an unsafe situation in which the operator and/or bystanders may be injured.

⚠ WARNING

When replacement parts are required, use genuine **Ryan** 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.

REELS AND SUGGESTED USES**Flail Blade Reel, Model Nos. 554870, 554871**

1/8" (3 mm) flail blades for thatch control and breaking up soil cores after aerating. This reel is **NOT RECOMMENDED** for fine lawns and turf, such as golf course greens.

Spring Tine Reel, Model Nos. 554872, 554873

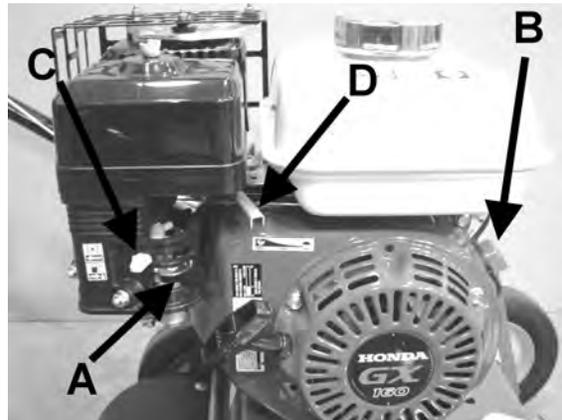
.109 diameter spring tines for thatch control. This reel is suggested for use where sprinkler heads or other objects may be damaged by flail or fixed blades. This reel is **NOT RECOMMENDED** for fine lawns and turf, such as golf course greens.

Fixed Blade Reel, Model Nos. 554874, 554875

1/8" (3 mm) 2" (51 mm) blade spacing is excellent for general dethatching, renovating and breaking up cores. It is also best for cutting grooves for seeding.

STARTING THE ENGINE

1. Turn fuel shut-off valve **A** to "ON" position.
2. Push stop switch **B** to "ON" position.
3. Move manual choke control lever **C** to "CHOKE" position.
4. Move engine throttle control lever **D** to "FAST" position.
5. Grasp starter grip and pull slowly until resistance is felt, then pull cord rapidly to start engine. Repeat if necessary with choke opened slightly.
6. After engine starts, move choke **C** to "RUN" position.
7. Adjust throttle control **D** on engine as required.



HONDA ENGINE SHOWN
BRIGGS ENGINE A & B are combined.

OPERATING TIPS

1. Start the unit in motion **BEFORE** engaging the reel to prevent unnecessary damage to the turf and to avoid bogging down the engine. Disengage the reel before stopping forward motion.
2. Make all passes across the turf at a uniform speed.
3. Disengage the reel at the end of each pass and before slowing or stopping to make a turn. This prevents turf damage while turning the unit.
4. If the engine bogs down while going through a thick patch of turf, push down on the handle just enough to raise the reel and allow the engine to return to normal speed.

NOTE: Never cross hard objects or surfaces (such as sidewalks, driveways, stepping stones, etc.) with the reel engaged. Severe blade damage may occur.

STOPPING THE ENGINE

1. When you are ready to stop, release the control bail and wait for the tines to stop.
2. Switch the engine off. Move the lift lever to the transport position.

REN-O-THIN

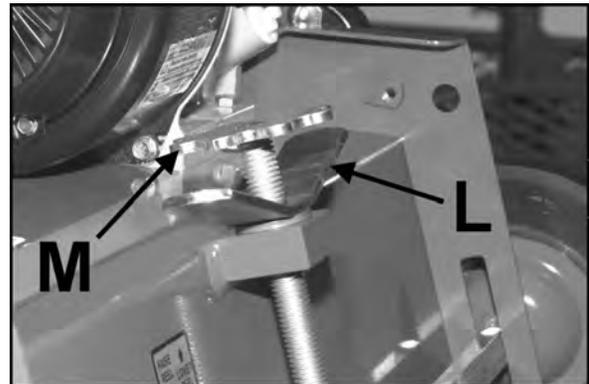
BLADE HEIGHT ADJUSTMENT

To adjust blade height:

1. Lower the blades to the operating position by moving the lift lever forward.
2. Turn the adjusting knob to raise or lower the front wheels . Make the initial adjustment on a hard level surface.
3. Set **flail blades or spring tines** to 1/8" (3mm) above the surface initially. Test this setting on a small area, then, adjust to conditions as required. Each mark on the adjustment label equals 1/8" (3mm).

OR

Set **fixed** blades 1/8" above the surface for dethatching or verticutting, 1/8" (3mm) below the surface for seeding. Test the setting on a small area and adjust to conditions as required.



If the desired position cannot be obtained with the front wheels , the rear wheels may be remounted. The top set of holes lowers the blades, the bottom set raises the blades.

⚠ WARNING

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.

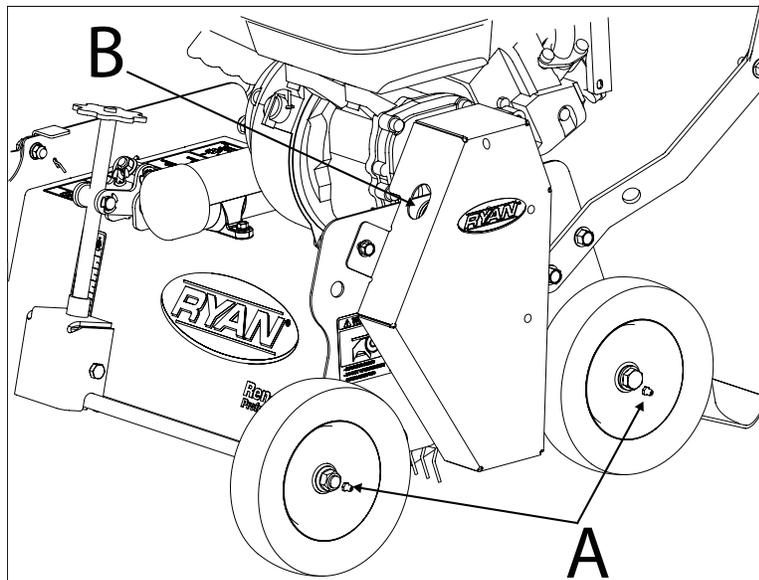
BELT REPLACEMENT

Belt tension is maintained by a spring loaded idler, controlled by the clutch bail. No belt tension adjustment is necessary when proper belts are used.

1. Remove belt guard and old belt from unit.
2. Install the new belt and reinstall belt guard.

LUBRICATION

- Change engine oil after the first 5 hours of operation, then per the engine manufacturers schedule. See engine manual for change interval and oil type.
- Check the air cleaner daily. Clean or replace accoring to the engine manufacturers instructions. See engine manual.
- The reel and idler pulley bearings are factory sealed and require no lubrication. Wheel bearings **A** and Pivot idler **B** have grease fittings and require lubrication with a standard lithium based grease every 25 hours of use.



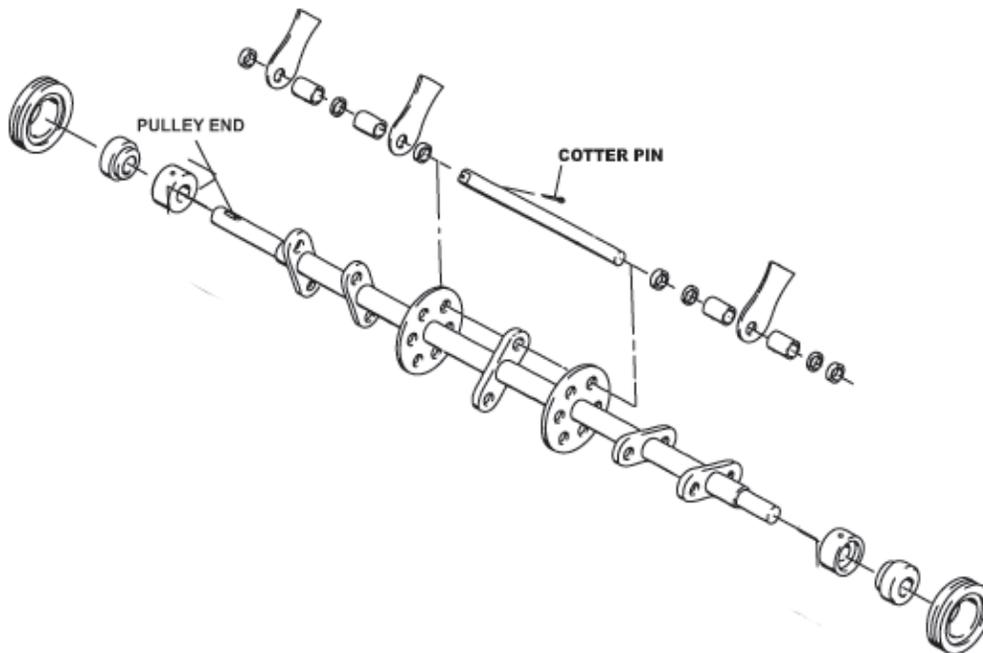
FLAIL BLADE REELS

NOTE: Work on only one of the six blade shaft assemblies at a time.

1. Remove reel assembly from machine.
2. Remove the cotter pin from one of the blade shafts and pull the shaft out.
3. Replace the blades and any other worn parts. Reassemble in the proper order while sliding the shaft back into place. Secure the shaft with a new cotter pin.

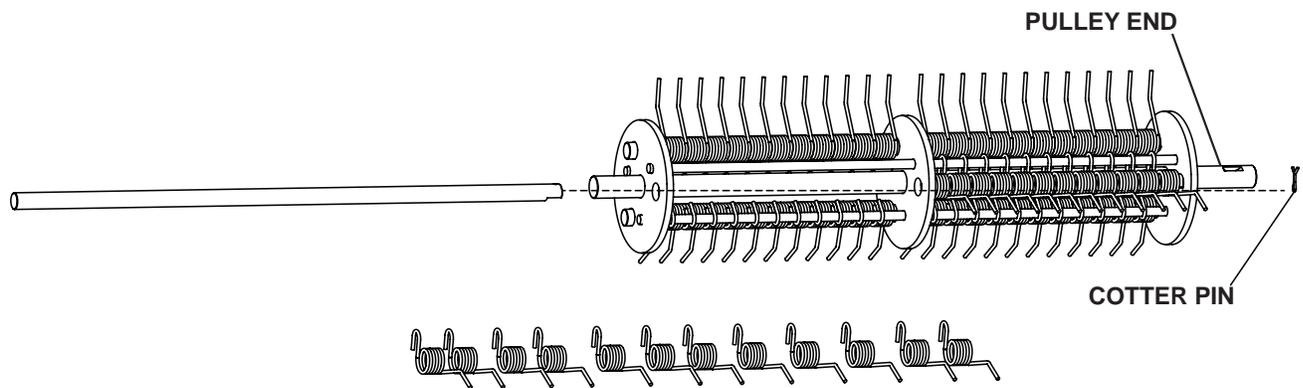
NOTE: blades worn on one face may be reversed to use the fresh edge.

4. Repeat for the remaining shafts.
5. Replace blades in sets to maintain balance.
6. Replace the reel assembly in the machine. See Reel Remove/Replace



SPRING TINE REELS

1. Remove reel assembly from machine.
2. Remove the cotter pin from one of the spring tine shafts. Pull the shaft out. Replace the shaft if worn.
3. Install spring tines as the shaft is slid back into place. Secure with a new cotter pin.
4. Repeat for the remaining shafts.
5. Replace spring tines in sets to maintain balance.
6. Replace the reel assembly in the machine. See Reel Remove/Replace



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).

After daily usage of unit.

1. Wash the unit with water after the engine has cooled down.
2. Check the reel blades for damage. Replace any cracked, broken, bent or worn blades.
3. Check the engine oil level and inspect the air cleaner for excessive dirt or any obstructions.
4. Service engine according to engine manufacturer's recommendations. Refer to engine manual for all recommendations.

EXTENDED STORAGE

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

1. Drain all fuel from fuel tank and lines (use a hose or fuel line, routed from fuel tank shut-off to proper container).
2. Start engine and run until all fuel is used from the carburetor float bowl.
3. While engine is warm, drain the crankcase oil and refill with the proper weight of oil corresponding to the season when the equipment will next be used.
4. Remove the spark plug and squirt a small quantity of engine oil into the cylinder. Turn the engine over a few times to distribute the oil.
5. Lubricate all lubrication fittings.
6. Clean and oil cutting blades to prevent rust.

To put equipment into operation after an extended storage:

1. Fill fuel tank with clean fresh fuel.
2. Check crankcase oil level, and start engine.
3. Check fuel system for fuel leaks.
4. Check for loose parts and tighten.
5. Check for cracked or broken blades and replace.

SPECIFICATIONS	
Chassis:	12 gauge steel, formed and welded
Reduction:	1.33:1 (engine to reel)
Wheelbase:.....	14 5/8" (371 mm) at level position
Reel Speed:.....	1700 RPM
Cutting Width:.....	18" (457mm)
Cutting Depth:.....	7/8" (22mm)
Blade Adjustment:.....	1" (25mm) above ground level to 7/8" (22mm) below ground level
Weight (less reel):.....	106 lbs. (48 Kg.)
Engines:	
Models 554870, 554872, 554874:	Briggs & Stratton 12H332 Type 0159, Trim B8 4 cycle 6.5 H.P. aluminum cylinder with cast iron sleeve
Models 554871, 554873, 554875:	Honda GX160 4 cycle 5.5 H. P. Honda 9.9 cu. in. (163 cc).
Starter.....	Recoil, on/off switch
Governor.....	3600 RPM, no load
Models 554870 & 554871: Flail Reel	
Models 554872 & 554873: Spring Tine Reel	
Models 554874 & 554875: Fixed Blade Reel	

SEEDER ACCESSORY (970524)

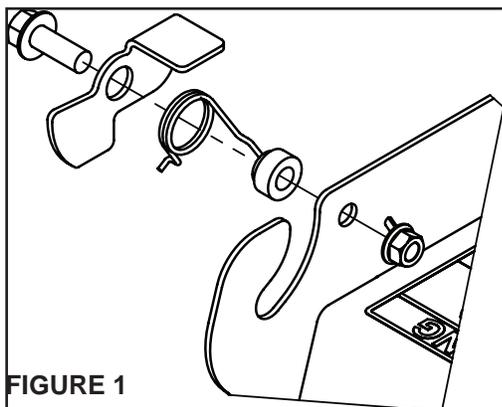
INSTALLATION: (Use Figure 7 for reference)

1. Install the latch assembly to the right front of the machine. Figure 1 below.
2. Replace the handle rest brackets with brackets from the seeder kit. The brackets from the kit do not allow the handle to fold into the seed box.
3. Place the left pin of the seed box into the hole on the left side of the machine frame.
4. With the seed control cable inside the machine frame, drop the right side pin through the latch to secure the seed box to the machine.
5. Attach the seed control lever to the machine handle as shown. Secure with 2 knobs.

OPERATION:

It is suggested the Renothin seeder accessory be used with a fixed blade reel set to cut about 1/8" (3mm) below the ground surface. Depending on conditions, satisfactory results may be accomplished with flail or spring tine reels. These reels should not be set below the ground surface.

Take the machine to the site to be seeded. Fill the seed box with grass seed. Set the stop on the Seed gate control lever to the appropriate location and move the control lever up against the stop. Start the engine and move the machine over the area to be seeded with the seed gate control open. Close the seed gate control any time you do not want seed being dropped.



SEEDING RATES:

A seed chart label is provided to give a starting point for seed gate control settings. Due to the variable nature of seed* this chart should be used only for an initial starting point. To get an accurate seed rate, seed a known area. Check to see how much seed was consumed and adjust accordingly.

* Grass seed is a product of nature. As such the test weight and size and shape the seeds vary due to growing conditions and seed variety. Grass seed is often sold as a blend of different varieties further affecting its flow qualities. Travel speed also affects seed flow rate. For these reasons it is impossible to make an accurate seed rate chart. It is important to check seed usage and adjust accordingly to get the seeding rate desired.

REMOVAL:

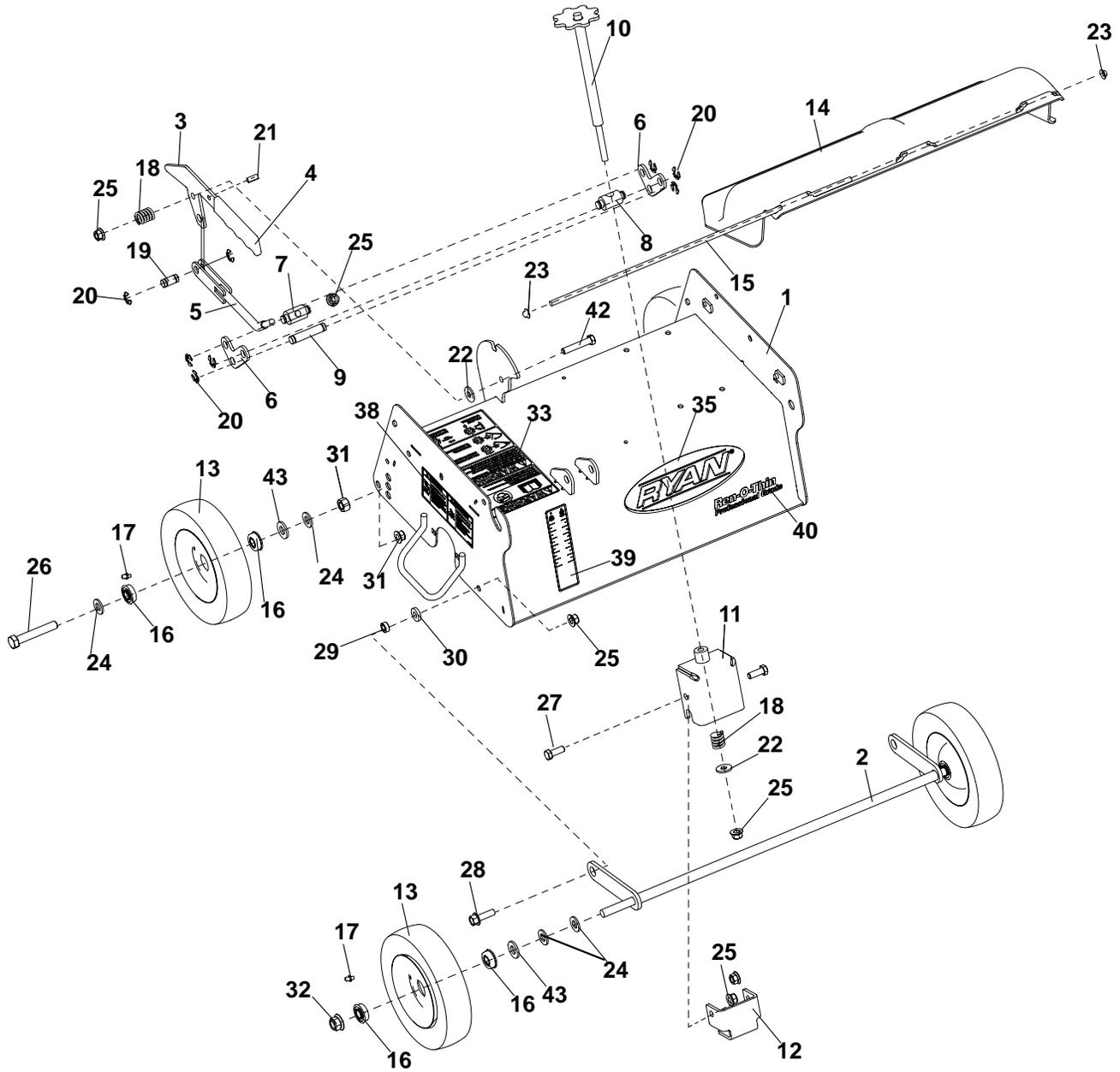
To remove the seeder accessory from the Renothin base unit:

1. Remove the control lever from the handle. Run the knobs back on for safe keeping.
2. Place the handle in the seed box.
3. Open the latch and lift the seed box off of the machine.
4. Store in a safe place until it is required again.

WHEEL AND CHASSIS GROUP

REN-O-THIN

FIGURE 1



WHEEL AND CHASSIS GROUP

REN-O-THIN

FIGURE 1

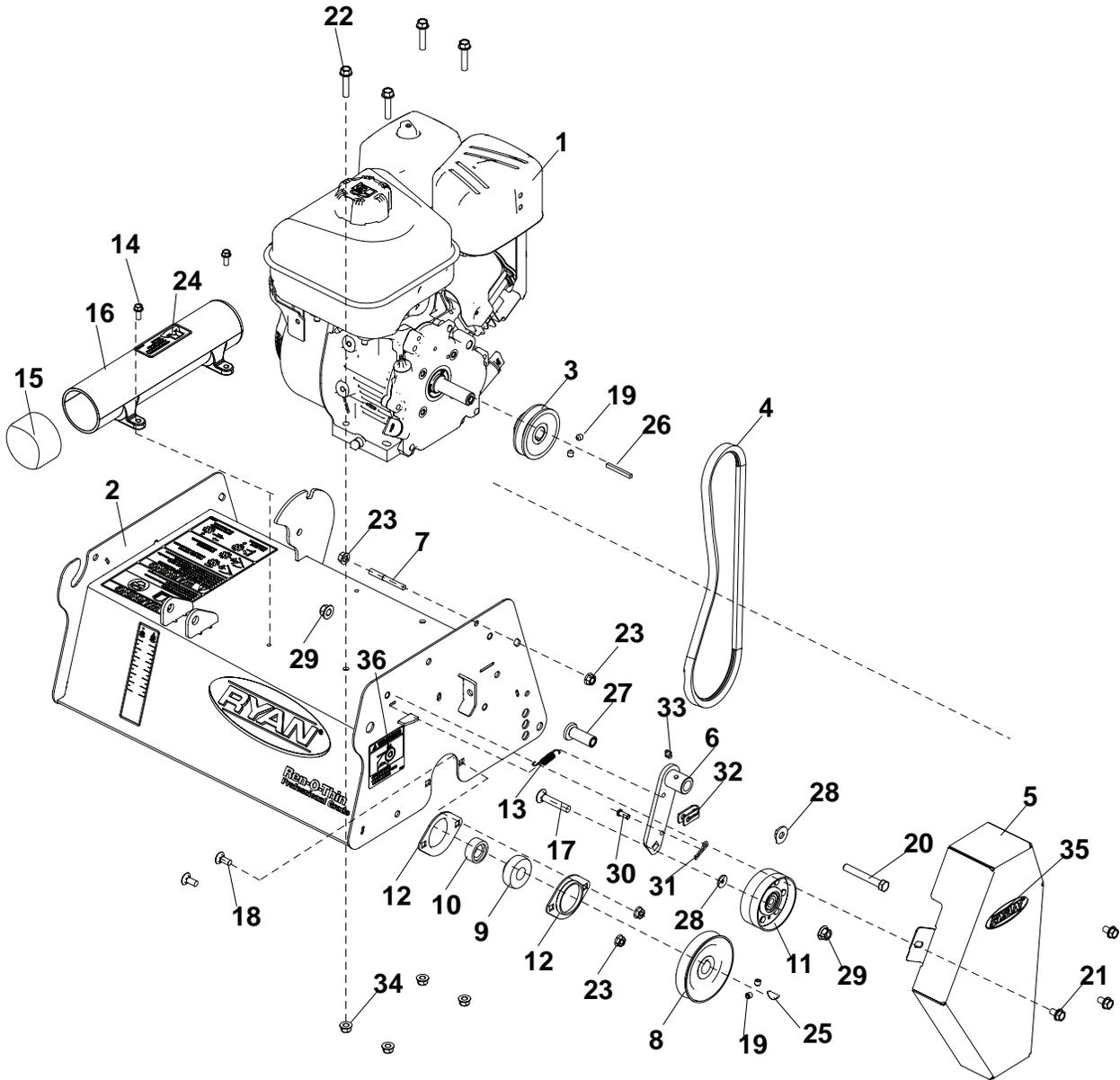
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4171048	S-ENGINE DECK	1				
2	4170043	WLDMT-AXLE	1				
3	4170503.7	HANDLE-LIFT	1				
4	38404-03	GRIP-CONTROL LEVER	1				
5	4170034	WLDMT-CLEVIS	1				
6	4169668	PLATE-LIFT	2				
7	4170027	TRUNNION-.500	1				
8	4170028	TRUNNION-5/8-11	1				
9	4170079-02	SHAFT-2 GROOVE 2.50 LG	1				
10	4170044	WLDMT-ADJ SCREW	1				
11	4170045.7	WLDMT-LIFT HOUSING	1				
12	4169673.7	HOUSING-INNER LIFT	1				
13	4124193	WHEEL AY 8 X 1.75	4				
14	4169080	SHIELD, TRAILING	1				
15	4169617	ROD-TRAILING SHIELD	1				
16	520983	BEARING-1/2X1-1/8 WHEEL	8				
17	85010N	ZERK 1/4-28 STR SELF TAP	4				
18	35011A	SPRING CONTROL DETENT	2				
19	4170079-01	SHAFT-2 GROOVE 1.063 LG	1				
20	64144-34	SNAP RING.50	8				
21	64061-19	ROLL PIN-5/16X3/4	1				
22	64163-31	WSHR 25/64X1X12	2				
23	64175-02	PUSHNUT 5/16 ROD	2				
24	64163-67	WSHR-.516X1X12GA	8				
25	64268-03	NUT-FL NYLON LOCK 3/8-16	5				
26	64123-31	BLT-HEX 1/2-13X3	2				
27	64123-50	BLT-HEX 3/8-16X1	2				
28	64262-012	BLT-FLG HD 3/8-16 X 1-1/4	2				
29	515729	BUSHING	2				
30	64163-46	WSHR.383/.393X.88X7GA	2				
31	64025-19	NUT-1/2-13 HEX	4				
32	64268-05	NUT-FL NYLON LOCK 1/2-13	2				
33	4171070	LABEL-MAIN	1				
34*	4171071	LABEL-SPANISH	1				
35	4168826	LABEL-RYAN OVAL 9"	1				
36*	4116761	LABEL-MADE IN USA	1				
37*	2000577	LABEL WARNING	1				
38	4171072	LABEL-DANGER WARNING	1				
39	4163713	LABEL-RENOTHIN HOC	1				
40	4124338	LABEL-FRONT REN-O-THIN	1				
41*	4161125	LABEL-RYAN OVAL, SMALL	1				
42	64123-67	BLT-HEX 3/8-16X2	1				
43	524229	WASHER FELT	4				

*NOT ILLUSTRATED

ENGINE AND GUARD GROUP

REN-O-THIN

FIGURE 2



ENGINE AND GUARD GROUP

REN-O-THIN

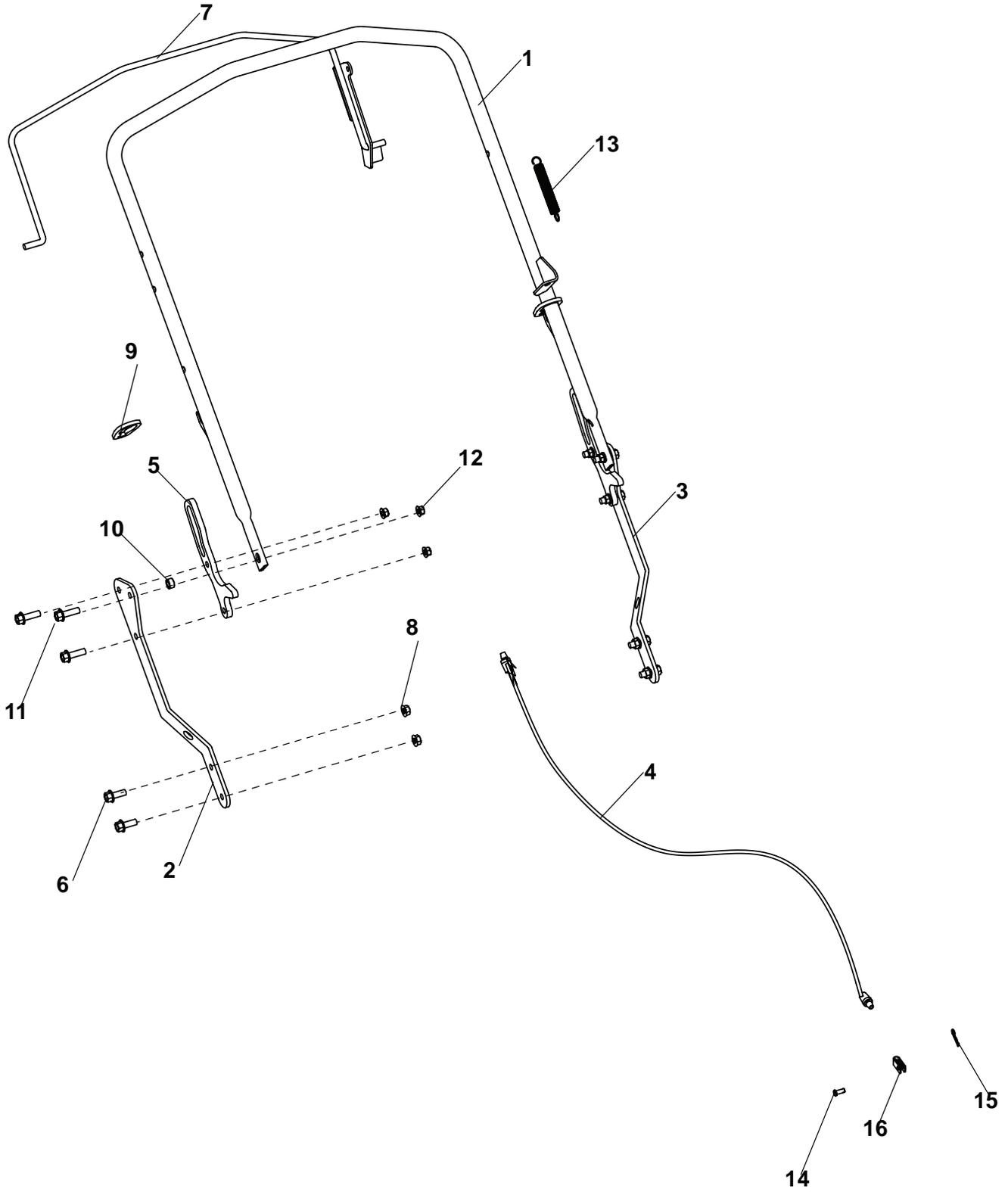
FIGURE 2

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4166692	ENGINE-B&S 6.5HP	1				
	540354	ENGINE-HONDA GX160					
2	4171048	S-ENGINE DECK	1				
3	4169608	PULLEY-ENGINE	1				
4	4169631	BELT-REEL DRIVE	1				
5	4169684.2	COVER-BELT	1				
6	4170042.7	WLDMT-IDLER	1				
7	4171047	GUIDE-BELT	1				
8	517137	PULLEY-4 INCH"A"	1				
9	521856	BEARING BALL	2				
10	521857	COLLAR BRG LOCKING	2				
11	2228016	PULLEY-IDLER PUMP	1				
12	548962	FLANGETTE-2 BLT 3/4 BRG	4				
13	548995	SPRING EXTENSION	1				
14	64197-025	BLT-TDFM 1/4-20X5/8	2				
15	38061A	CAP-BLACK VINYL	1				
16	4129802	TUBE-DOCUMENT	1				
17	64018-5	BLT-CRG 3/8-16X1-3/4	1				
18	64018-9	BLT-CRG 5/16-18X3/4 G5	4				
19	64044-18	SCREW-SET 5/16-18 x 5/16	4				
20	64123-88	BLT-HEX 3/8-16X2-3/4	1				
21	64139-13	BLT-WLF 5/16-18X1/2	3				
22	64262-009	BLT-FLG HD 5/16-18 X 1-1/2	4				
23	64141-6	NUT-WLF 5/16-18	6				
24	2000735	LABEL-OPER MAN	1				
25	64164-19	KEY 3/16X3/4 #9 WDRUFF	1				
26	64164-39	KEY 3/16 X 1-3/4 SQ	1				
27	4172285	BUSHING-PIVOT	1				
28	64163-31	WSHR 25/64X1X12	2				
29	64268-03	NUT-FL NYLON LOCK 3/8-16	2				
30	64188-65	PIN CLEVIS 1/4X.62	1				
31	64168-2	COTTER-HAIRPIN.08X1.19	1				
32	4166457	CLEVIS-CABLE	1				
33	85010N	ZERK 1/4-28 STR SELF TAP	1				
34	64268-02	NUT-FL NYLON LCK 5/16-18	4				
35	4161125	LABEL-RYAN OVAL, SMALL	2				
36	2000577	LABEL WARNING	1				

HANDLE GROUP

REN-O-THIN

FIGURE 3



REN-O-THIN

HANDLE GROUP

FIGURE 3

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4170041.7	HANDLE-RENOTHIN	1				
2	4169665.7	BRKT-HANDLE LH	1				
3	4169666.7	BRKT-HANDLE RH	1				
4	4169638	CABLE-CONTROL	1				
5	4169676	BRKT-HANDLE REST	2				
6	64262-011	BLT-FLG HD 3/8-16 X 1	4				
7	4170053.7	BAIL-CONTROL	1				
8	64141-4	NUT-WLF 3/8-16	4				
9	4168156	LOCK-HANDLE	2				
10	4168728	SPACER-PIVOT	2				
11	64262-012	BLT-FLG HD 3/8-16 X 1-1/4	6				
12	64268-03	NUT-FL NYLN LCK 3/8-16	6				
13	2702144	SPRING-EXTENSION	1				
14	64188-65	PIN-CLEVIS, 1/4 X .62	1				
15	64168-2	COTTER-HAIRPIN .08X1.19	1				
16	4166457	CLEVIS-CABLE	1				

* NOT ILLUSTRATED

FLAIL BLADE REEL

REN-O-THIN

FIGURE 4

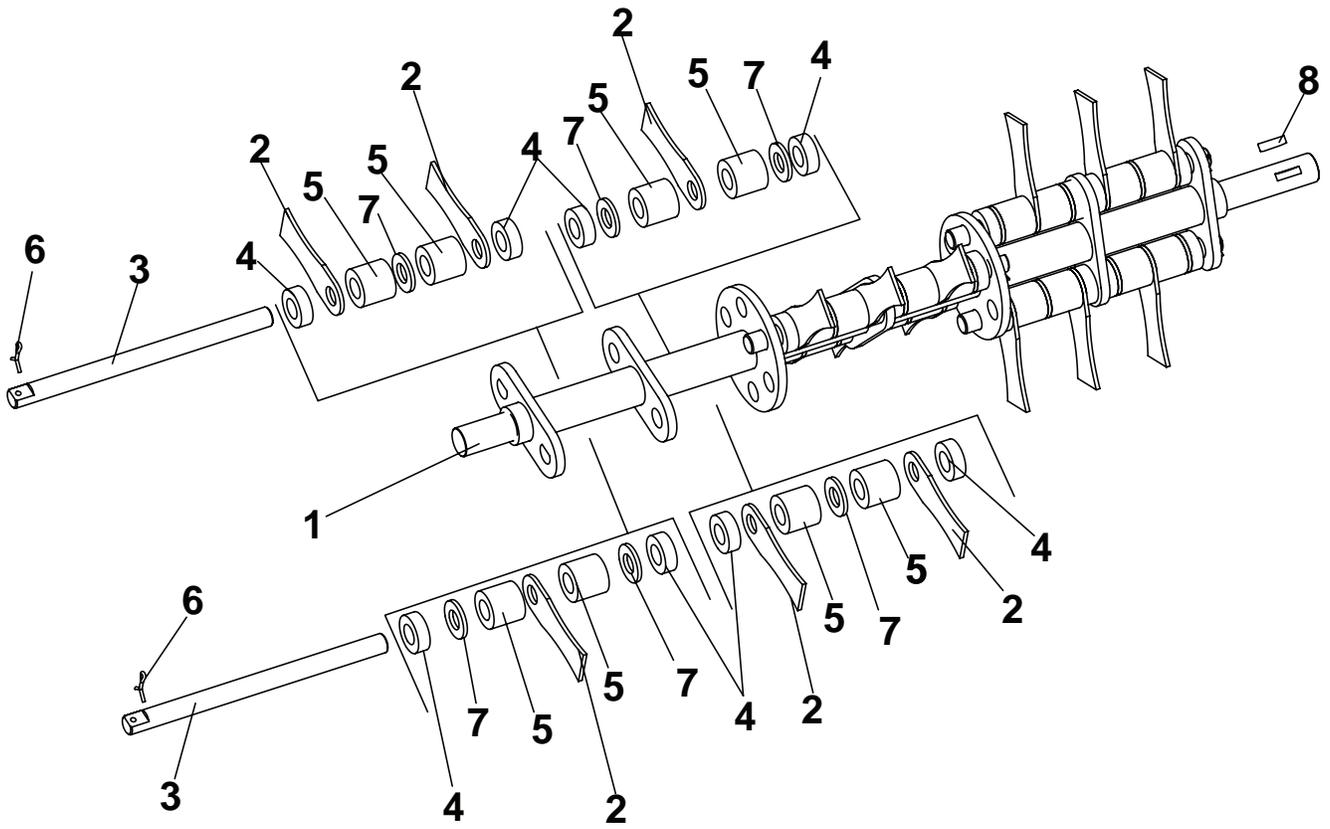


FIGURE 4

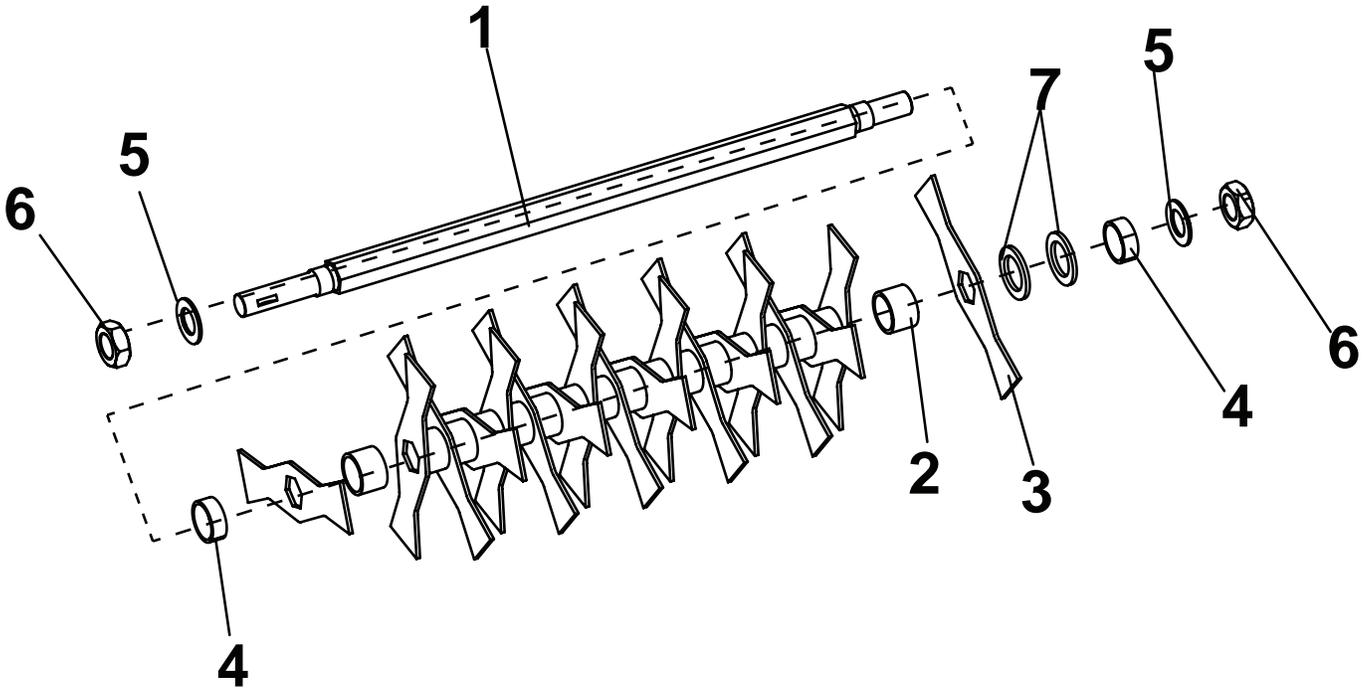
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4170067.7	WLDMT-FLAIL SHAFT	1				
2	516897	BLADE FLAIL	18				
3	517155	SHAFT	6				
4	517162	SPACER .328 (8mm)	24				
5	517163	SPACER .891 (23mm)	24				
6	64140-1	COTTER PIN-1/8X1	6				
7	64163-67	WSHR-.516X1X12GA	18				
8	64164-19	KEY-3/16X3/4 #9 WDRUFF	1				

* NOT ILLUSTRATED

FIXED BLADE REEL

REN-O-THIN

FIGURE 5



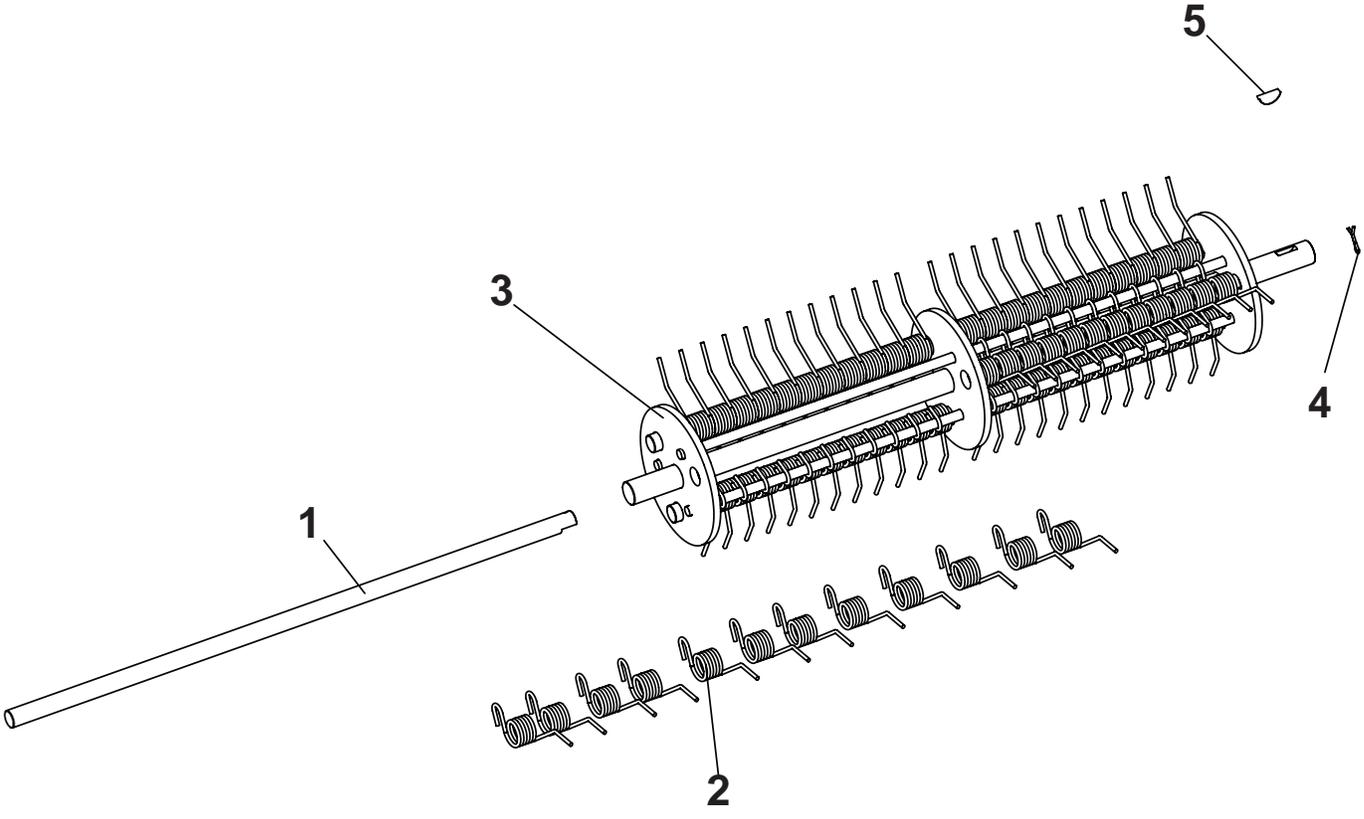
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4169622	SHAFT-FIXED BLADE REEL	1				
2	516905	SPACER .900 (23mm)	17				
3	516898	BLADE, 1/8" (3.2mm)	18				
4	516903	SPACER .500	2				
5	64163-113	WSHR-.890X1.50X.090	2				
6	64001-15	NUT-HEX JAM 7/8-14	2				
7	820484	WASHER FLAT 1.17x1.75x.134	2				

*** NOT ILLUSTRATED**

SPRING TINE REEL

REN-O-THIN

FIGURE 6



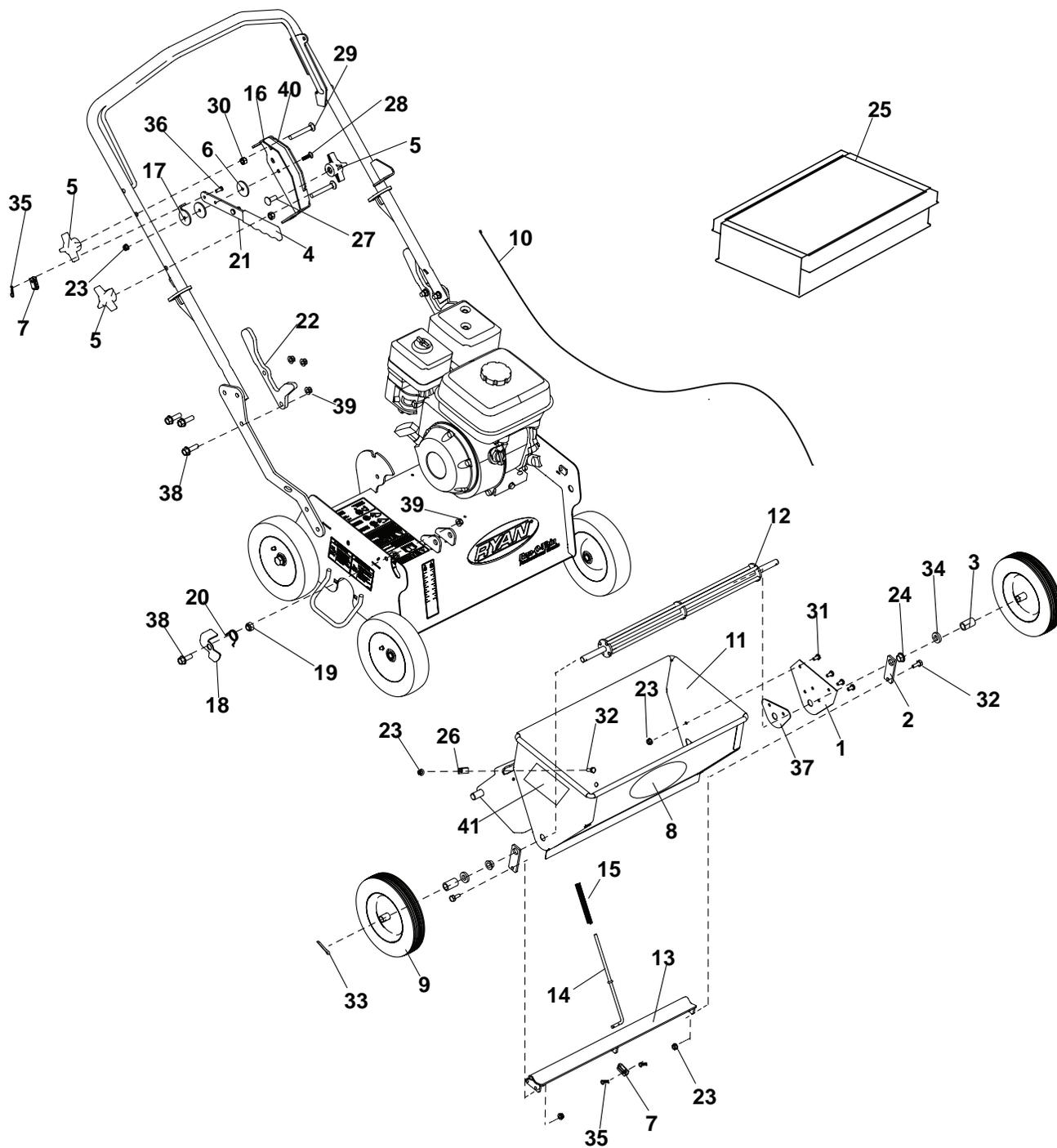
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4169624	ROD-SPRING MOUNTING	3				
2	4169626	TINE-SPRING	72				
3	4170068.7	WLDMT-SHAFT SPRING TINE	1				
4	64140-1	COTTER PIN-1/8X1	3				
5	64164-19	KEY-3/16X3/4 #9 WDRUFF	1				

* NOT ILLUSTRATED

SEED BOX ASSEMBLY (OPTIONAL 970524)

REN-O-THIN

FIGURE 7



SEED BOX ASSEMBLY (OPTIONAL 970524)

REN-O-THIN

FIGURE 7

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4170999.2	PLATE-MAIN BODY CLOSE	1				
2	4171000.7	SEED GATE FLAT	2				
3	2183063-01	SPACER 32MM LONG	2				
4	38404-03	GRIP-CONTROL LEVER	1				
5	38524	KNOB-4 PRONG 3/8-16	3				
6	4165854	WASHER-UHMW PE	2				
7	4166457	CLEVIS-CABLE	2				
8	4168826	LABEL-RYAN OVAL 9"	1				
9	4169922	WHEEL-DRIVE	2				
10	4169974	CABLE-SEED BOX	1				
11	4169983.2	HOPPER-SEED	1				
12	4169990	WLDMNT-AGITATOR	1				
13	4169993.7	GATE-SEED FLOW	1				
14	4169998	ROD-SPRING	1				
15	4169999	SPRING-COMP .362X.48X 5	1				
16	4170001.7	PLATE-FLOW CONTROL	1				
17	4170002.7	WSHR-.260 X 1.50 FIXED	1				
18	4170004.7	LATCH-STOP	1				
19	4170005	BUSHING-STOP LATCH	1				
20	4170006	SPRING-STOP LATCH	1				
21	4170008.7	HANDLE-SEED CONTROL	1				
22	4170684	BRKT-HANDLE REST	2				
23	64268-01	NUT-FL NYLON LCK 1/4-20	9				
24	C100052	BEARING, CONTROL	2				
25	C100078	COVER-VINYL SEED BOX	1				
26	48228A	CLIP-CABLE, INSULATED	1				
27	64018-23	BLT-CRG 3/8-16X3/4 SHN	1				
28	64018-42	BLT-CRG 1/4-20 X1	1				
29	64018-47	BLT-CRG 3/8-16X2-3/4	2				
30	64025-05	NUT-3/8-16 HEX	2				
31	64123-49	BLT-HEX 1/4-20X1/2	5				
32	64123-89	BLT-HEX 1/4-20X3/4	3				
33	64140-8	COTTER PIN-1/4-2	2				
34	64163-36	WSHR 1X33/64X.187	2				
35	64168-2	COTTER-HAIRPIN .08 X 1.19	3				
36	64188-65	PIN-CLEVIS, 1/4 X .62	1				
37	4171908.2	CLOSURE-INNER	1				
38	64262-011	BLT-FLG HD 3/8-16 X 1	1				
39	64268-03	NUT-FL NY LCK 3/8-16	7				
40	4171830	LABEL-SEED CONTROL	1				
41	C100138	DECAL-SEEDING CHART	1				

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