



## PRO SOD CUTTER

### MODELS:

HSC185E

HSC188E



MAN 4172935  
Rev. B 11-2018

## **CALIFORNIA PROPOSITION 65**



**WARNING: Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**



**ADVERTENCIA: Cáncer y Daño Reproductivo - [www.65Warnings.ca.gov](http://www.65Warnings.ca.gov).**

### **⚠ WARNING**

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

### **⚠ 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.

## **IMPORTANT!**

It is a violation of California Public Resource Code Section 4442 or 4443 to use or operate the engine on any forest-covered, brush-covered or grass-covered land unless the engine is equipped with a spark arrestor, as defined in Section 4442, maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire.

To acquire a spark arrestor for your unit, see your Engine Service Dealer.

Please refer to the engine manufacturer's information included with the machine.

Labeled power ratings are supplied by the engine manufacturer in accordance with SAE testing and gross/net power rating standards (J1940, J1995, J1349).

# PRO SOD CUTTER

## IMPORTANT MESSAGE

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

This product comes with Parts and Operator's Manuals. The useful life and good service you receive from this product depends to a large extent on how well you read and understand this manual. Treat this product properly and adjust it as instructed, and it will give you many years of reliable service.

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

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

**Classen**  
**1028 Street Road**  
**Southampton, PA 18966**

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## NOTICE !!!

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

Classen strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Classen Engineering Department. Any Classen 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 Classen—will result in the Classen 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 Classen will be considered the responsibility of the individual(s) or company designing and/or making such changes. Classen 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 Classen 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**

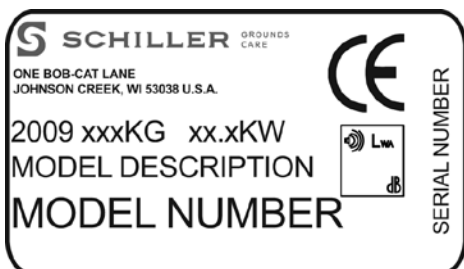
**WARNING** indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

### **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



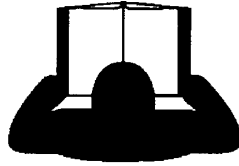
**MODEL NUMBER:** This number appears on sales literature, technical manuals and price lists.

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

## Machine Preparation

### Operator preparation and training

#### Read the Operation & Safety Manual



- If an operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. If any portion of this material is unclear, contact your factory representative for clarification.
- Become familiar with the safe operation of the equipment, operator controls and safety signs. Be prepared to stop the engine quickly in an emergency. Do not operate or allow another person to operate this machine if there are any questions about safety.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- Wear appropriate clothing, including safety goggles or safety glasses with side shields when operating. Do not operate barefoot or wearing open sandals. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Wear hearing protection.
- Wear safety glasses.
- 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 how to safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Clear the area to be cut of objects such as rocks, toys, wire or other debris that may be thrown or get tangled in the sod cutter.
- Identify and mark objects to be avoided such as sprinkler heads, stakes, water valves, etc.
- 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.
- Cut sod only in daylight or in good artificial light.

## Machine Preparation

- 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 blade and blade bolts for wear or damage. Replace worn or damaged blades and bolts.
- Verify that machine and attachments, if any, are in good operating condition.
- Do not engage blade until ready to cut sod.

## OPERATING SAFELY

### In General

- Use extra care when loading or unloading the machine into a trailer or truck.
- Use caution when making turns and crossing roads and sidewalks. Stop blade when not cutting sod.
- Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Never leave a machine unattended. Always turn off blade and stop engine when leaving the operator position. When leaving the machine be sure the wheel drive clutch is engaged.
- Use extreme caution when reversing or pulling machine towards you.
- 

### Starting Safety

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



## Operating On Slopes

Use Extra Care When Working On Slopes

- Do not operate on slopes if uneasy or uncertain. Ultimate responsibility for safe operation on slopes rests with the operator.
- Do not operate on steep slopes.
- Keep all movement on slopes slow and gradual.
- Do not cut sod near drop-offs, ditches or embankments. The machine could suddenly turn over if a wheel runs over the edge or an edge caves in.
- Do not turn on slopes unless necessary, and then turn slowly and downhill when possible.
- Be sure of your footing on slopes.

## 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 blade stops moving then disengage the blade clutch:
  - when not cutting sod;
  - for transport;
  - when crossing surfaces other than grass.
- Stop the engine, disengage the master clutch and wait until the blade stops moving:
  - before refueling;
  - before making blade adjustment.
- Allow the blade to come to a complete stop when stopping operation to clear blockages, unclog, inspect the machine, do maintenance or repair.
- Reduce the throttle setting during engine shut-down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of operation.
- Stop the engine, disengage the master clutch, and disconnect the spark plug wire(s):
  - before clearing blockages;
  - before checking, cleaning or working on the machine;
  - 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.

## MAINTENANCE SAFETY

### In general

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

## Blades

The sod cutter blade is sharp and can cut. Use extra caution when handling. Remove obstructions with care. Wrap the blade or wear gloves.

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

### WARNING



## Fuel

- Petrol (gasoline) and diesel fuels are flammable; petrol (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.
  - Replace caps on fuel containers and tanks securely.

### WARNING



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 (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.
- Storage Safety

## Storage Safety

- Stop the engine and allow to cool before storing.
- Drain the fuel tank outdoors only.
- Store fuel in an approved container in a cool, dry place.
- Keep the machine and fuel containers in a locked storage place to prevent tampering and to keep children from playing with them.
- Do not store the machine or fuel container near heating appliances with an open flame, such as a water heater, or an 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.

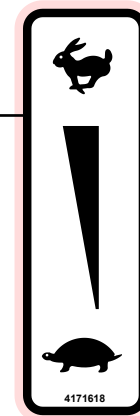
# LABELS

## PRO SOD CUTTER

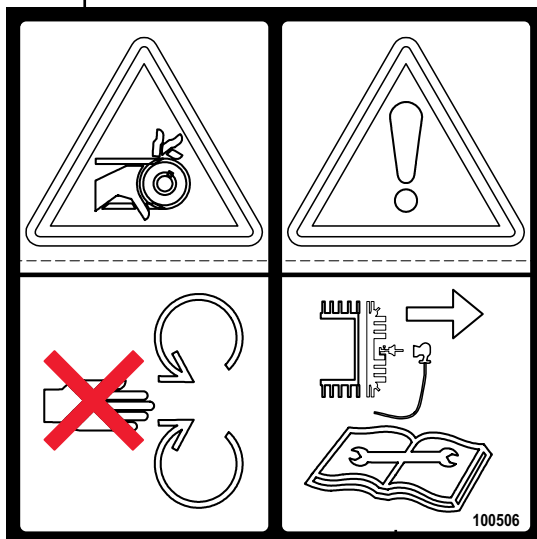


**ATTENTION:**  
SLOPE HAZARD  
-Do not use on wet or slippery slopes.  
-Mow across slopes.  
-Do not use on slopes greater than 120°.

**THROTTLE CONTROL:**  
-Squeeze throttle to increase engine rpm.  
-Release throttle to decrease engine rpm.



**ROTATING PARTS:**  
ENTANGLEMENT / AMPUTATION HAZARD  
-Do not operation with cover removed.  
-Stop engine before servicing.



**ATTENTION:**  
-Read Operator Manual before servicing or repairing.  
-Remove spark plug wire before servicing or repairing.

**LUBRICATE CHAIN DAILY,  
ALSO CHECK TENSION AND  
ADJUST WHEN NEEDED.**

**ON BACK OF  
HYDROSTATIC  
TRANSMISSION,**

**PUSH ARM IN TO  
MANUALLY ROLL  
SOD CUTTER,**

**PULL OUT TO  
LOCK IN  
HYDROSTATIC  
TRANSMISSION.**

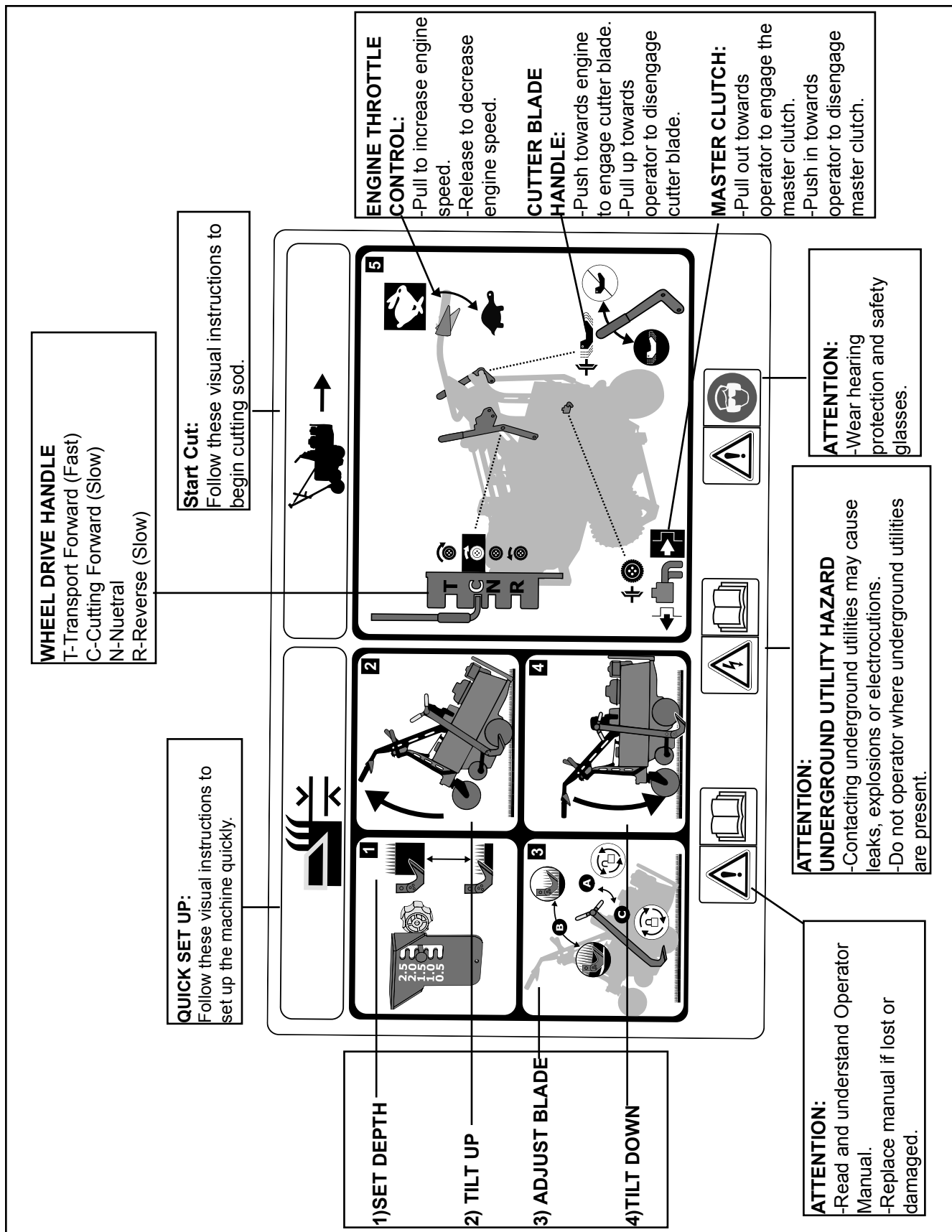


-Moving blades/blade arms cut/crush.

-Stay clear of blades/ blade arms while operating.

-Stop engine before servicing or adjusting.





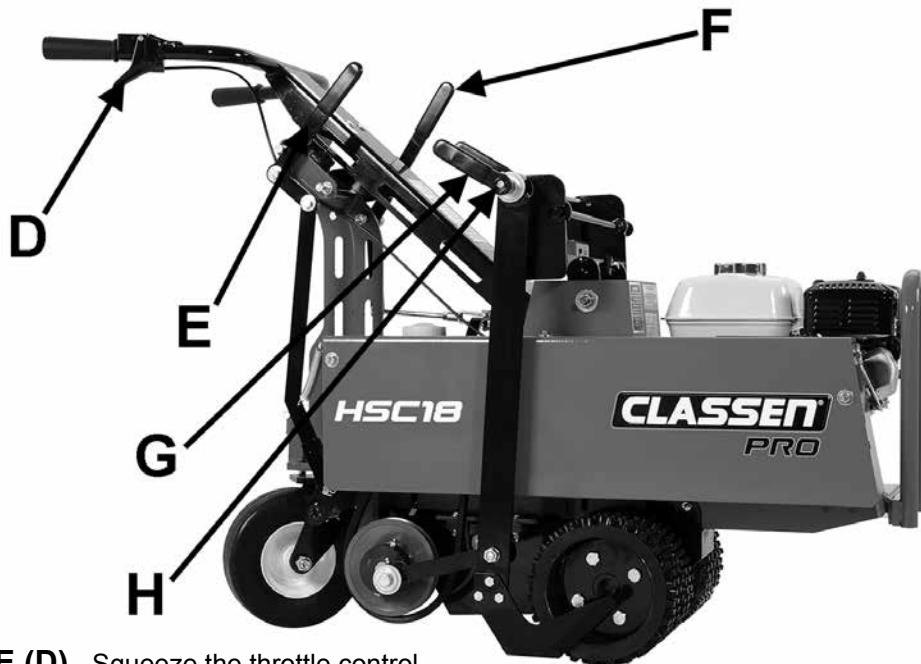
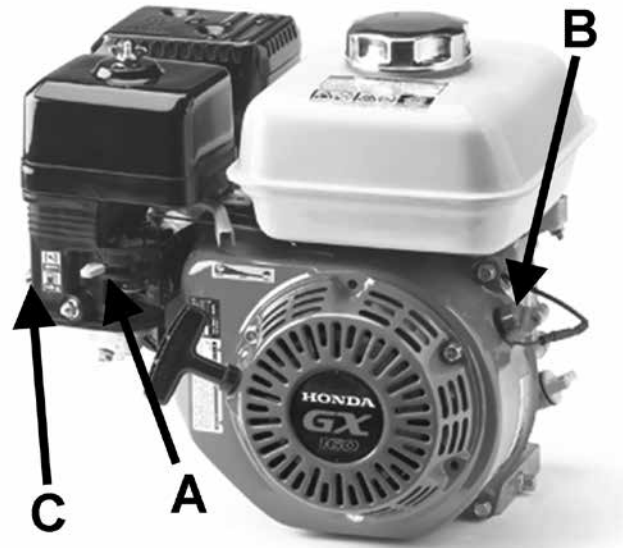
## CONTROLS

## PRO SOD CUTTER

**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)** -  
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)** - Squeeze the throttle control to increase the engine rpm. Squeezing the throttle control to increase the engine rpm also engages the centrifugal clutch powering the blades and wheels when the blades and/or wheel drives are engaged.

**CUTTER BLADE HANDLE (E)** -  
Move the Cutter Blade handle forward to engage the blade drive.  
Move the Cutter Blade handle back to disengage the blade drive.

**HEIGHT ADJUSTMENT NUT (G)** -  
Loose the Height adjustment nut to allow raising or lowering the cutter blade.

**WHEEL DRIVE HANDLE (F)** - Move the Wheel Drive Handle forward from the neutral position N to C (cut) or T (Transport) to put the transmission into forward. Transport is faster than Cut. Move the Wheel Drive Handle rear ward from the neutral position N to R to put the transmission into reverse.

**HEIGHT ADJUSTMENT BAR (H)** -  
Use the Height Adjustment Bar to raise or lower the cutter blade and to get the desired sod cutting depth.

### SET UP INSTRUCTIONS

To prevent injury, wear appropriate eye protection and stand clear when cutting banding. Banding is under tension and may snap back when cut.

1. Remove crate and sides.  
Remove the banding attaching the sod cutter to the pallet.
2. Roll the sod cutter off the pallet.
3. Dispose of crating, and banding in a responsible manner.
4. Check the engine oil level, add if necessary and fill the fuel tank with fresh clean unleaded regular gasoline.

### 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 is necessary.
- Inspect area. Remove stones or other hard objects that might cause damage.
- Check that there are no underground utilities in work area.
- Check all lubrication points and grease as instructed in manual.
- Perform a functional check of the safety interlock system each time you operate the unit. If it doesn't work, repair before using the machine.

### READ SAFETY SIGNS

**⚠ WARNING**

**ALL GUARDS MUST BE IN  
PLACE WHILE MACHINE  
IS IN OPERATION.**

**⚠ WARNING**

**KEEP HANDS AND  
FEET AWAY FROM  
MOVING PARTS.**

## BEFORE STARTING THE ENGINE

1. Be familiar with the controls, how each functions, and what each operates.
2. Check engine oil level. Add oil if necessary, following the engine manufacturer's recommendations. Refer to engine manual supplied with machine.
3. Check Hydro gear oil, add 20W50 oil if necessary.
4. Open the fuel valve.
5. Fill the fuel tank with the amount and type of fuel recommended by the engine manufacturer.

## Starting Engine

1. Turn fuel cock to the "open" position.
2. Turn choke on (closed).
3. Turn ignition switch to "on".
4. Pull recoil starter rope until engine starts.
5. After engine is warm, turn off choke (open).
6. Allow engine to run one minute before cutting sod.
7. Check engine rpm setting before operating. DO NOT exceed 3600 rpm.

## Stopping Engine

1. Release finger throttle control.
2. Turn off ignition switch.

## OPERATING THE SOD CUTTER

### Preparation

1. Check lawn area for obstacles and debris (i.e. sprinklers, hoses, toys, etc.). Remove all items.
2. Make sure underground sprinkler heads and other hidden obstacles are marked to prevent damage.
3. Mark other areas where sod cutting will be a problem or too risky (i.e. mud, tree roots, steep hills).

## Operating

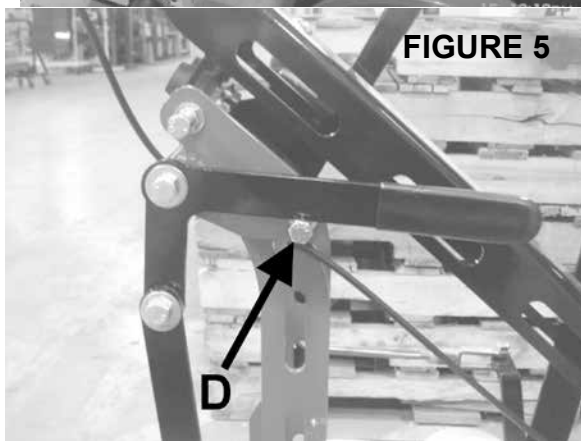
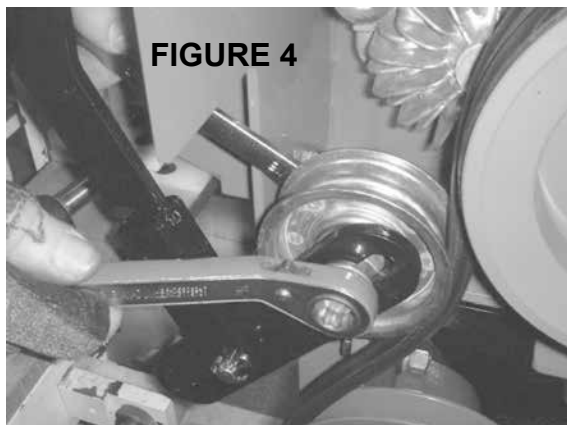
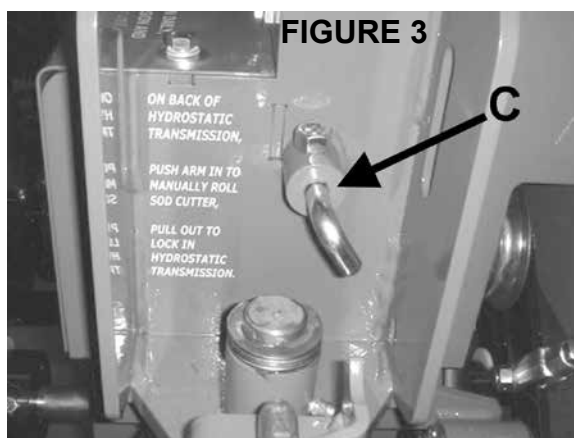
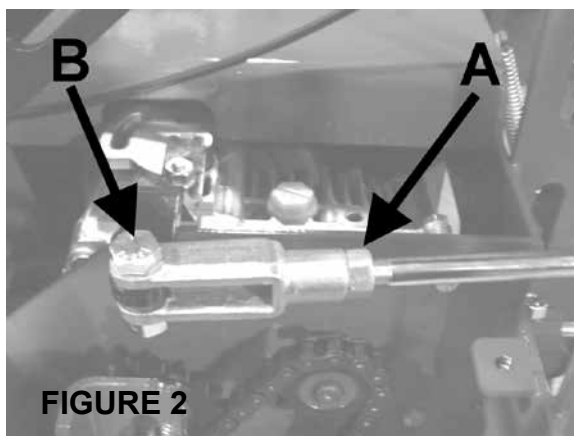
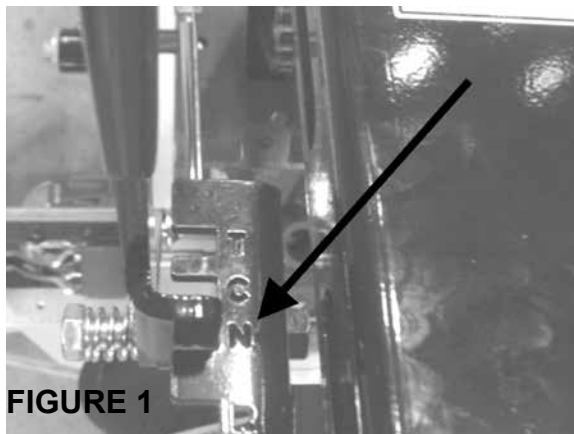
1. Start the engine. CAUTION: To avoid injury, keep your feet or other body parts away from the blade while starting the engine.
2. Select the correct cutting depth desired up to 2 1/2 inches. Loosen the tee handle from the depth gauge plate, located under the height adjustment bar, (#3 on illustration) and put it to the correct height setting. Tighten the tee handle.
3. Push the wheel drive transport handle (#5 on illustration) and the cutter blade speed handle (#4 on illustration) to the desired speed, toward the engine.
4. Raise the main handle upward so the front nose of the sod cutter rests on the ground.
5. Loosen the 1/2" handle nut (#2 on illustration) and lower the height adjustment bar to rest on the depth gauge. Now tighten the 1/2" handle nut securely so it will not loosen with the vibration of the machine.
6. Go to the back of the machine and lower the handle until the cutting blade rests on the ground. You are now ready to cut sod.
7. Turn the throttle to the desired operating speed by pulling the finger throttle control (#6 on illustration) toward you. Maximum engine rpm is recommended for smooth operation.
8. After cutting a short distance, stop machine by letting the finger throttle control go back to its original position. Check thickness of cut and adjust if necessary.
9. At the end of each cutting pass, lift up on the handle bar to clear the cutting blade from the sod. Retard the throttle control and turn machine around into the position for the next cut.
10. When finished cutting sod, reverse steps 3 through 6, leaving the wheel drive handle on for transportation.

### NEUTRAL ADJUSTMENT

1. Put shift lever in Neutral Position (N). **Figure 1**
2. Loosen locking nut A on clevis, then remove bolt B and turn the clevis one way or the other to adjust neutral. **Figure 2.**
3. To check neutral setting, reassemble with control in neutral. Start the engine and pull pin C out. **Figure 3.** Increase engine RPM. The machine should NOT move. If machine moves, then repeat Steps 1-3 until set properly.

### BELT ADJUSTMENT

1. Remove belt cover.
2. Loosen the pulley and move up the slot for tighter belt tension. **Figure 4**
3. After tension has been adjusted, check the over center adjustment.
4. Loosen bolt D and move to where the lever snaps over center and stays engaged. **Figure 5** Note: Too much over center may cause the belt to get loose.
5. Reinstall belt cover.



### BELT DISENGAGEMENT

1. Remove belt cover for access.
2. Move blade engagement lever until idler is about 1/8" to 1/4" away from the back plate **Figure 6**.
3. Adjust stop bolt E to the lever with idle 1/8" to 1/4" from back plate. **Figure 7**
4. Reinstall belt cover.

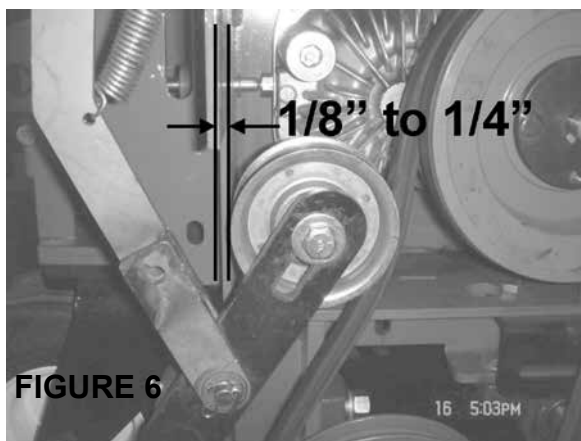
### REAR WHEEL LOCK OR SWIVEL

To allow rear wheel to swivel:

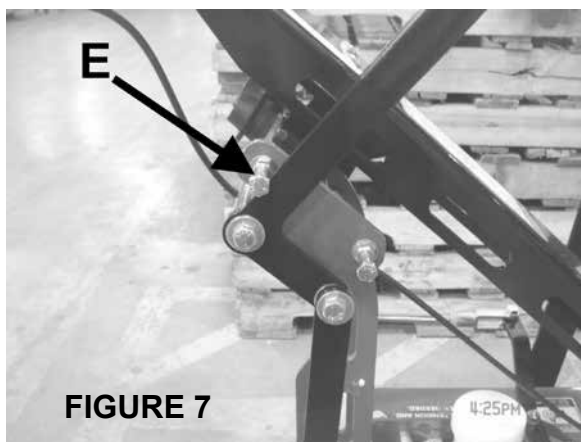
1. Pull pin **F** up and turn. **Figure 8 & 9**

To lock rear wheel:

1. Turn pin **F**.
2. Move wheel back and forth until pin drops back into locking hole.



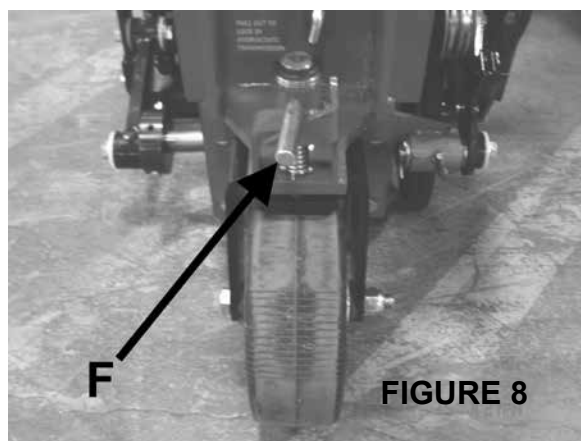
**FIGURE 6**



**FIGURE 7**



**FIGURE 9**



**FIGURE 8**

## GENERAL MAINTENANCE

To keep the sod cutter in good operating condition, perform the following:

- Keep blade sharp; a sharp blade cuts cleaner, faster and more uniformly and places less load on the machine. Sharpen cutting edge on bevel or top side only.
- Keep drive belt at proper tension and free of oil and dirt at all times.
- Check engine oil level and air filter element daily.
- Check for loose bolts and connections.
- All grease fittings are pressurized type. Use a good grade Lithium Base Grease or equivalent. Grease eccentric arms sparingly every 4 hours of service, all others daily. Wipe off all grease fittings before and after each greasing (there are a total of 8 grease fittings).
- Check and adjust chain tension on the front drive wheels is tight, you will need to remove the chain guard. If tightening is required, loosen nuts and bolts on the 3/4" pillow block bearings and push the bearings toward the back of the sod cutter until chain is tight. Make sure both bearings go back evenly to keep jackshaft running even with the frame. Lubricate the chain on the inner circumference, the side facing the sprocket, with a light oil such as SAE20 or SAE30. An oiling can or spray can with a straw for application is recommended. Retighten nuts and bolts on the bearing and replace the chain guard.
- Engine (refer to manufacturer's owner's manual).

## Engine Oil Level Check

1. BEFORE CHECKING OIL:
  - make certain the engine is level
  - the engine switch is in the OFF position
  - the sod cutter blade is NOT engaged
  - the drive wheels are disengaged.
2. Remove the filler cap/dipstick and wipe it clean.
3. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
4. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil. SAE 10W-30 is recommended for general use. Refer to engine oil recommendations in engine manual for other viscosities and information.
5. Screw in the filler cap/dipstick securely.

## Transmission (Gearbox) Oil Level Check

(This unit is bolted to the engine)

1. Check the transmission oil level with the engine stopped and in a level position.
2. Remove the filler cap/dipstick and wipe it clean.
3. Insert and remove the dipstick without screwing it into the filler hole. Check the oil level shown on the dipstick.
4. If the oil level is low, add oil to reach the upper limit mark on the dipstick. Use the same oil that is recommended for the engine, SAE 10W-30.
5. Screw in the filter cap/dipstick securely.

## HYDRO DRIVE OIL LEVEL CHECK

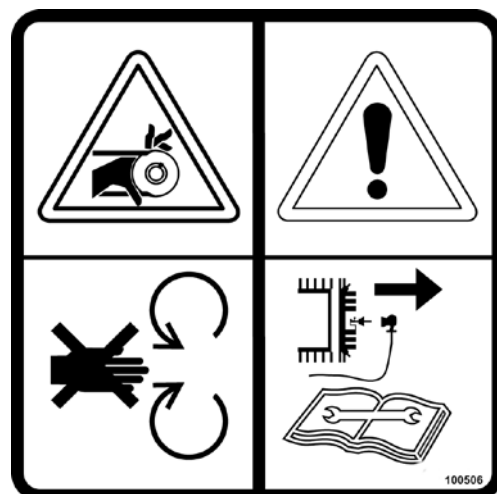
1. Check the Hydro Drive oil level with the engine stopped and in a level position.
2. If the oil level is low, add oil to reach the upper limit mark. Use SAE 20W50 oil.

### WARNING

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

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

Replace any warning decal that becomes illegible immediately.



## 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).

#### **Daily Storage**

1. Check engine oil level and air filter element daily.
2. Check oil level in hydro drive. Hydro drive use 20W50 oil.
3. Close fuel valve at bottom of fuel tank.
4. Clean cutting blade (grass, dirt, etc.).

#### **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, check the transmission 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 blade 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.



**HSC185E & HSC188E**

**ENGINE**

Model HSC185E.....4-cycle GX160 Honda  
..... 9.9 cu. in. (163 cc)

Model HSC188E.....4-cycle GX240 Honda  
..... 14.8 cu. in. (242 cc)

Starter..... Recoil

Governor..... 3400 RPM  $\pm$  200 RPM, no load

Clutch .....spring loaded belt tightener type

**REDUCTION**

Engine to blade.....3.03 to1

Engine to drive wheels ..... 57.2 to 1

**WHEELS:**

Drive .....8 5/8" (219 mm) Dia. w/knobby  
.....tread vulcanized to hub

Rear.... 8 x 1.75 (203 X 45mm) semi-pneumatic tires

**CUTTING WIDTH:**

HSC18..... 18"(45.7cm)

**LUBRICATION**

Hydro Drive.....20W50

Transmission (Gearbox) .....10W30

**Cutting depth** ..... up to 2-1/2"(6.35cm)

**Blade speed** .....1200 RPM @ 3400 engine RPM

**DIMENSIONS**

Wheel Base .....22"(56cm)

HSC185E.....52"L x 38"H x 24.5"W  
.....(132cm x 96cm x 62cm)

HSC188E.....55"L x 38"H x 24.5"W  
.....(140cm x 96cm x 62cm)

**WEIGHT**

**Dry Weights**

HSC185E..... 337 lbs.(153kg)

HSC188E..... 360 lbs. (164kg)

# EC Declaration of Conformity

The Undersigned Manufacturer:

Schiller Grounds Care, Inc.  
1401 Logan Street  
Norfolk, NE 68701

EU Authorized Representative

Authorized to compile Technical File:

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



Kurt Knudsen  
Director of Operations  
Date: 6th October, 2015



Jim White  
Managing Director  
Date: 6th October, 2015

Declare that the machine described below:

Make & Type.....Classen Sod Cutter  
Category.....Sod Cutter  
Series.....HSC185E  
Engine.....Honda GX160  
Speed.....3600 rpm  
Net installed power..... 4.8 HP (3.6 kW)

Complies with the provisions of the following European directives and Amendments and the Regulations transposing it into national law.

Machinery Directive..... 2006/42/EC  
EMC Directive.....2004/108/EC  
Noise in the Environment Directive.....2000/14/EC (Annex V)  
Vibration Directive.....2002/44/EC  
Non Road Emissions.....2004/26/EC

## Sound:

Sound levels were determined in accordance with Directives 2000/14/EC (Annex V) and standards EN/ISO 3744:2009.

Guaranteed Sound Power Level ..... **105 dB**                      **Model HSC185E**  
Sound Pressure..... **85 dB**    **Model HSC185E**

## Vibration:

Hand/arm vibration was measured at the right and left operator handles as per ISO 5349-1:2001 and ISO 5349-2:2001. Only the highest of the left and right readings is given. Levels were calculated using ISO/DIS 5395-1, in accordance with 2002/44/EC.

Guaranteed Vibration Level..... **10.7 m/s<sup>2</sup>**                      **Model HSC185E**

Intended Use and Limits:

This machine is intended for harvesting sod.

# EC Declaration of Conformity

The Undersigned Manufacturer:

Schiller Grounds Care, Inc.  
1401 Logan Street  
Norfolk, NE 68701



Kurt Knudsen  
Director of Operations  
Date: 6th October, 2015

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



Jim White  
Managing Director  
Date: 6th October, 2015

Declare that the machine described below:

Make & Type..... Classen Sod Cutter  
Category..... Sod Cutter  
Series..... HSC188E  
Engine..... Honda GX240  
Speed..... 3600 rpm  
Net installed power..... 7.9 HP (5.9 kW)

Complies with the provisions of the following European directives and Amendments and the Regulations transposing it into national law.

Machinery Directive..... 2006/42/EC  
EMC Directive..... 2004/108/EC  
Noise in the Environment Directive..... 2000/14/EC (Annex V)  
Vibration Directive..... 2002/44/EC  
Non Road Emissions..... 2004/26/EC

## Sound:

Sound levels were determined in accordance with Directives 2000/14/EC (Annex V) and standards EN/ISO 3744:2009.

Guaranteed Sound Power Level ..... **105 dB**                      **Model HSC188E**  
Sound Pressure..... **85 dB**    **Model HSC188E**

## Vibration:

Hand/arm vibration was measured at the right and left operator handles as per ISO 5349-1:2001 and ISO 5349-2:2001. Only the highest of the left and right readings is given. Levels were calculated using ISO/DIS 5395-1, in accordance with 2002/44/EC.

Guaranteed Vibration Level..... **11.3 m/s<sup>2</sup>**                      **Model HSC188E**

Intended Use and Limits:

This machine is intended for harvesting sod.



# **PARTS SECTION**

# PRO SOD CUTTER

This exploded view diagram illustrates the assembly of a mechanical device, likely a portable electronic instrument. The components are numbered 1 through 48, and dashed lines indicate the assembly sequence and alignment. Key parts include a main housing (1), a front panel (2) with a 'GLASS' label, a control panel (3) with buttons (39, 40, 43) and a display (46), a base plate (4), and various internal structural and mounting components (5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 41, 44, 45, 47). The diagram shows how these parts fit together to form the complete unit.

# PRO SOD CUTTER

## MAIN FRAME ASSEMBLY

FIGURE 1

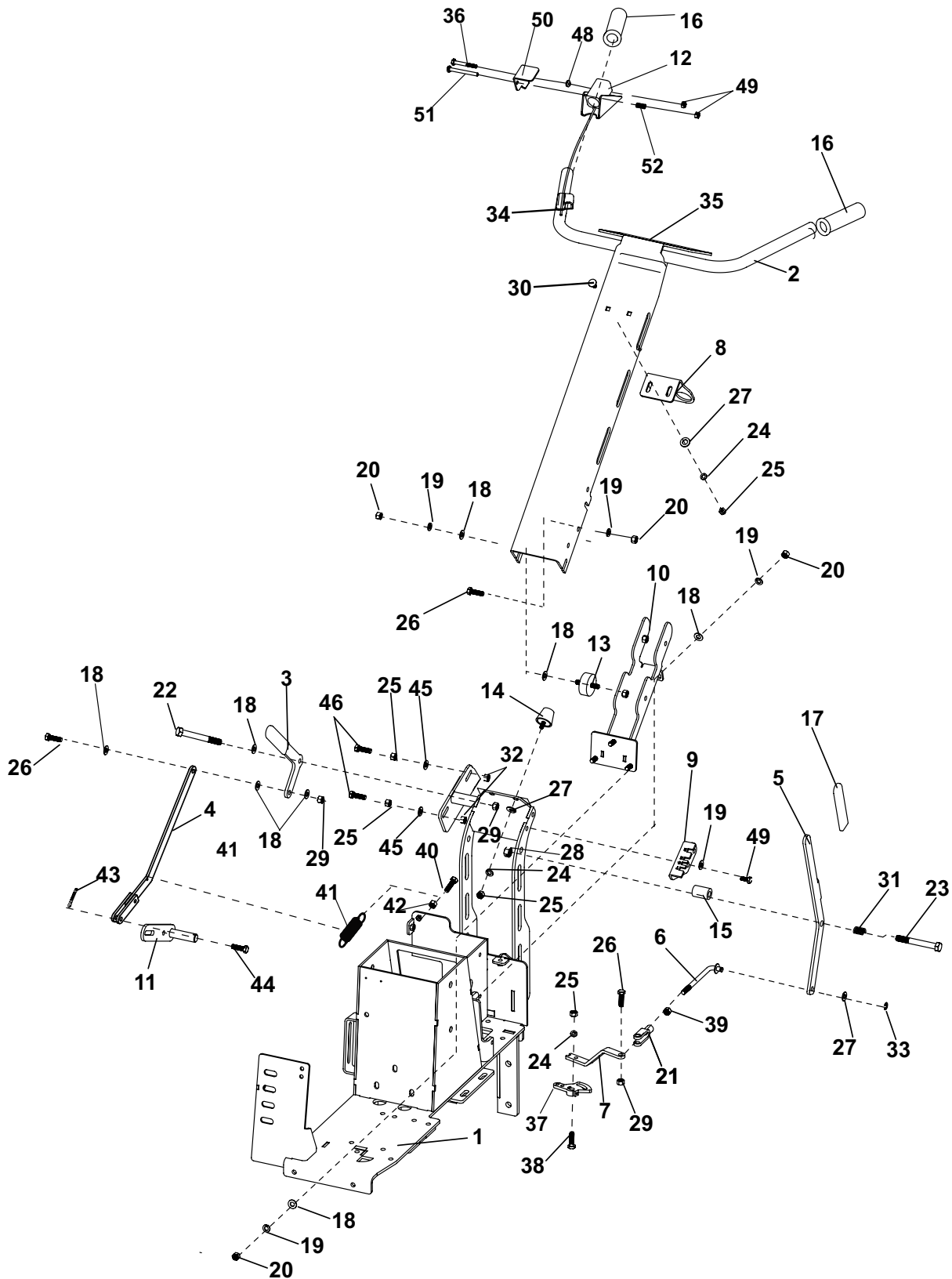
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4172975	S-MAIN BODY HSC18	1	27	C500043	BOLT, 3/8-16 X 1	2
2	C400237.17	BUMPER	1	28	C500154	BOLT, 3/8-16 X 2-3/4	1
3	4172976	S-SHIELD,BELT, MAIN (INCLUDES ITEMS 43, 46 &47)	1	29	C500134	BOLT, 3/8-16 X 1-1/4 (USED ON 5.5HP MODEL)	2
					C500146	BOLT-3/8-16 X 1-1/2 (USED ON 8 HP MODEL)	2
4	4171227.17	GUARD,CHAIN, HYDROSTAT	1	30	C500016	PIN, 5/32" X 1-1/4" COTTER	1
5	4172383.7	GUARD, FINGER HSC185	1	31	4173099.7	CHAIN GUARD	1
6	4171193.7	FORK-SWIVEL WHEEL	1	32	C500219	BOLT, 5/16 X 5	1
7	C100017	TIRE & WHEEL ASSY (9X350X4)	1	33	C500101	NUT, 5/16-18	3
8	90-1048	BOLT-5/8-11 X 6 NC	1	34	C500001	GREASE FITTING, 1/4 X 28	2
9	64163-64	WSHR 1.015X1.500X14GA	5	35	C100617	PIN-ROLL	1
10	C400251	HANDLE, NEUTRAL	1	36	64229-16	NUT-NYLON LOCK 5/8-11	1
11	C100021	BUSHING, BRASS	2	37	4171963	DECAL, CLASSEN FLAT BLACK	1
12	C300203	L-PIN, SWIVEL WHEEL	1	38	C100559	DECAL-LUBRICATE	1
13	C100601	SPRING, SC SWIVEL WHEEL	1	39	4171824	LABEL - HSC18	2
14	64221-1	E-RING 25MM/1.000	1	40	4171825	LABEL - CLASSEN PRO	1
15	C100501	PIN, 3/8" VLIER	1	41	C500083	WASHER-5/16 FLAT	12
16	C500129	NUT, 3/8-16	7	42*	C100490	HYDRO MANUAL ROLL DECAL	1
17	C100010	PULLEY-IDLER	1	43	C100506	DECAL, CE SERVICE BELTS	2
18	38010-2A	IDLER PULLEY	1	44	64152-86	SCREW-SP 1/4-20X3/8	1
19	64221-07	E-RING .375	1	45	4172938.17	GUARD-PULLEY	1
20	C500091	BOLT, 3/8-16 X 2	2	46	C100504	DECAL-SPARK ARRESTOR	1
21	C500042	WASHER, 3/8 FLAT	7	47	C100607	DECAL-12 DEGREE WARN	1
22	C500140	BOLT, 5/16-18 X 3/4	7	48	20557.17	PLT-SPACER BUMPER (USED ON 8HP ONLY)	1
23	C500130	WASHER, 3/8 LOCK	5				
24	C500115	WASHER, 5/16 LOCK	8				
25	64268-03	NUT-3/8-16 NYLOCK	1				
26	C400443.7	ARM, BLADE CLUTCH HYDRO	1				

\* NOT ILLUSTRATED

# HANDLE ASSEMBLY

## PRO SOD CUTTER

FIGURE 2





# PRO SOD CUTTER

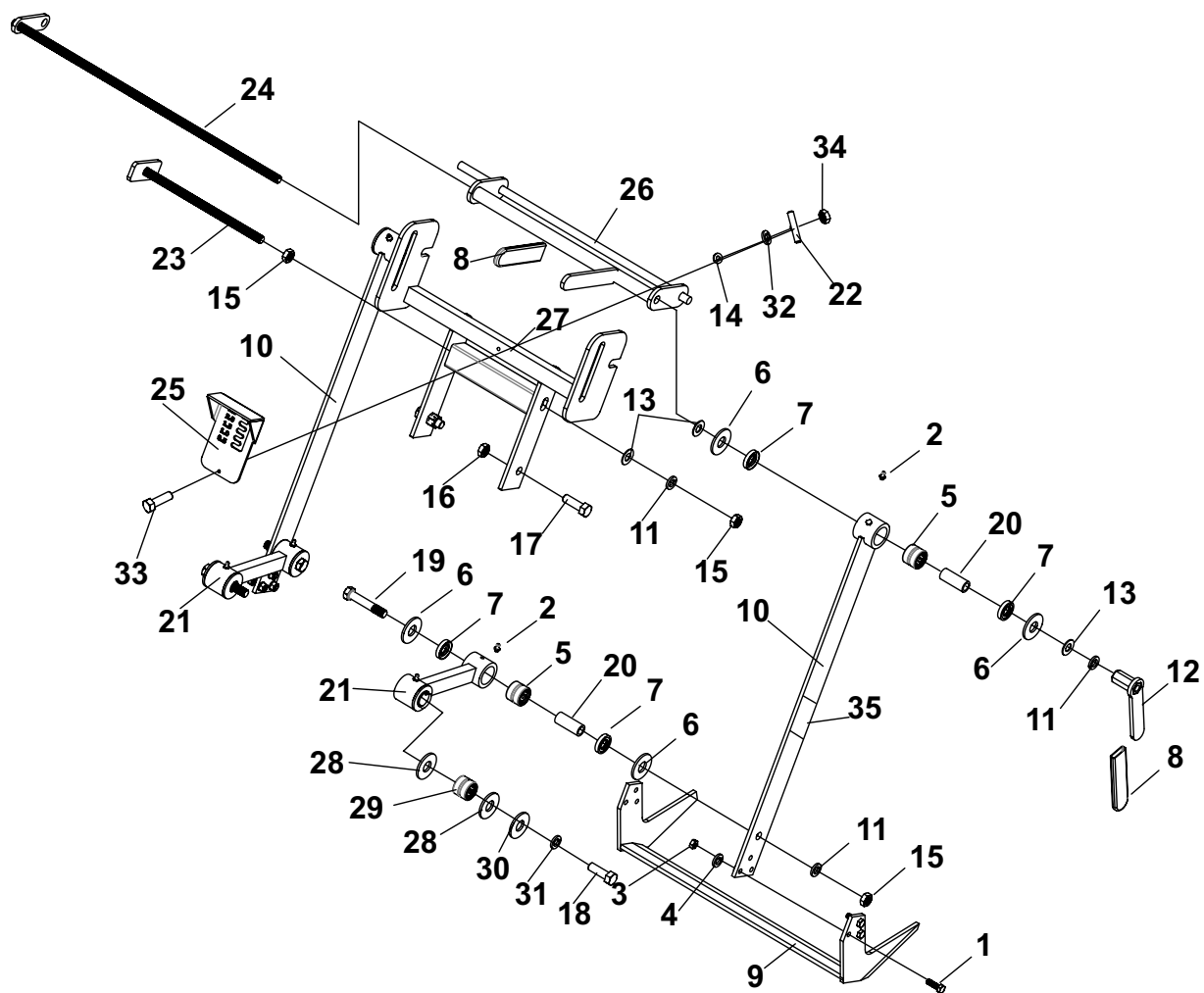
## HANDLE ASSEMBLY

FIGURE 2

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4172975	S-MAIN BODY HSC18	1				
2	4172978	S-MAIN HANDLE HSC18 (INCLUDES ITEMS 34 & 35)	1				
3	4171190.7	WLDMNT-HANDLE, ENGAGEMENT	1				
4	4171914.7	LINKAGE-ENGAGEMENT RH	1				
5	4171191.7	WLDMNT-HANDLE, CONTROL	1				
6	4171192	WLDMNT-HYDRO LINK	1				
7	4171228.7	ARM-SHIFTER	1				
8	4176912.7	DAMPENER-ISOLATION	1				
9	4171230.7	PLATE-SPEED SELECTOR	1				
10	4171194.7	BRKT-MOUNTING, RUBBER	1				
11	C400443.7	ARM, BLADE CLUTCH HYDRO	1				
12	C100486	FINGER THROTTLE AND CABLE	1				
13	C100546	MOUNTS, VIBRATION	4				
14	C100635	RUBBER BUSHING, TAPERED	2				
15	4171701.7	BUSHING - 1/2ID X 1-1/2L	1				
16	C100018	GRIP LH HANDLE	2				
17	4176911-01	GRIP-GREEN 1X.125X4	2				
18	C500042	WASHER, 3/8 FLAT	14				
19	C500130	WASHER, 3/8 LOCK	9				
20	C500129	NUT, 3/8-16	15				
21	C500026	YOKE, 3/8 CLEVIS	1				
22	64123-328	BOLT-HEX 3/8-16 X 4-1/4	1				
23	90-0826	BOLT 1/2-13 X 3-1/4 NC	1				
24	C500115	WASHER, 5/16 LOCK	5				
25	C500101	NUT, 5/16-18	7				
26	C500134	BOLT, 3/8-16 X 1-1/4	7				
27	C500083	WASHER, 5/16 FLAT	2				
28	C500131	NUT, 1/2-13 LOCK	1				
29	C500041	NUT, 3/8-16 LOCK	2				
30	C500163	BLT-CRG 5/16-18 X 3/4	2				
31	C500065	SPRING-SPEED STOP	1				
32	64268-08	NUT-FL NYLON LOCK 5/16-18	2				
33	64221-07	E-RING .375	1				
34	4171618	LABEL-THROTTLE HSC18	1				
35	4177109	LABEL-WARNING EU	1				
36	C500183	BOLT, 1/4-20 X 2	1				
37	C400249-1	CLUTCH ARM SCHV	1				
38	C500133	BOLT-5/16-18 X 1	1				
39	C500025	NUT-3/8-24	1				
40	C500029	BOLT-1/4-20 X 3/4	1				
41	C100034	SRING-1/4-20	1				
42	C500136	NUT-1/4-20	1				
43	02-CP0508	COTTER PIN 5/32 X 1 ZP	1				
44	64188-03	S-PIN CLEVIS 3/8X1-1/8	1				
45	C500088	WASHER-1/4 FLAT	2				
46	C500074	BOLT-5/16-18 X 1-3/4	2				
47	C500043	BOLT-3/8-16 X 1	2				
48	4173112	GROMMET	1				
49	C500139	NUT-LOCK 1/4"	2				
50	4173087.17	BRKT-THROTTLE FRICTION	1				
51	64123-330	BOLT-1/4 X 2 1/2	1				
52	4173113	SPRING	1				

\* NOT ILLUSTRATED


## SOD CUTTER



# PRO SOD CUTTER

## CUTTER ASSEMBLY

FIGURE 3

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4175303	BLT-HEX 5/16-24X1 FL THD	6				
2	C500001	GREASE FITTING, 1/4 x 28	6				
3	64025-51	NUT, 5/16-24	6				
4	C500115	WASHER, 5/16 LOCK	6				
5	C100003	BEARING	4				
6	C100001	WASHER, 3/4 NYLON	8				
7	C100002	SEAL	8				
8	4176911-02	GRIP-YELLOW 1X.125X4	2				
9	C100016.7	BLADE, 18" CUTTING	1				
10	4172185	ARM, BLADE (INCLUDES ITEM 35)	2				
11	C500006	WASHER, 1/2 LCOK	4				
12	C500007.7	NUT, 1/2 HANDLE	1				
13	C500034	WASHER, 1/2 FLAT	6				
14	C500088	WASHER, 1/4" FLAT	1				
15	C500106	NUT, 1/2-13	4				
16	C500131	NUT, 1/2-13 LOCK	2				
17	C500241	BOLT, 1/2-13 x 1	2				
18	C500249	BOLT, FINE THREADED	2				
19	C500152	BOLT, 1/2-13 X 2-3/4	2				
20	C600001	STEEL SLEEVE	4				
21	C400411.7	ARM, ECCENTRIC ENHANCED	2				
22	4172692	KNOB-PLASTIC	1				
23	C200004.7	BOLT ,PITCH ADJUSTMENT	1				
24	C200005.7	BOLT, HEIGHT ADJUSTMENT	1				
25	C300039.17	PLATE, DEPTH GAUGE	1				
26	C400001.7	BAR, HIEGHT ADJUSTMENT	1				
27	C400238.7	PITCH ADJUSTMENT BAR	1				
28	C100626	WASHER, PLASTIC 1/4" ENHCD	4				
29	C100625	BEARING, ENHANCED	2				
30	C400412.7	WASHER, STEEL ENHANCED	2				
31	C500272	WASHER, 1/2" EXT. TOOTH LOCK	2				
32	C500137	WASHER, 1/4 LOCK	1				
33	C500296	BOLT, 1/4 x 2-1/2 CARRIAGE	1				
34	C500068	NUT, 1/4-20 NYLOC	1				
35	4163589	LABEL-CHF VERT EU	2				

\* NOT ILLUSTRATED

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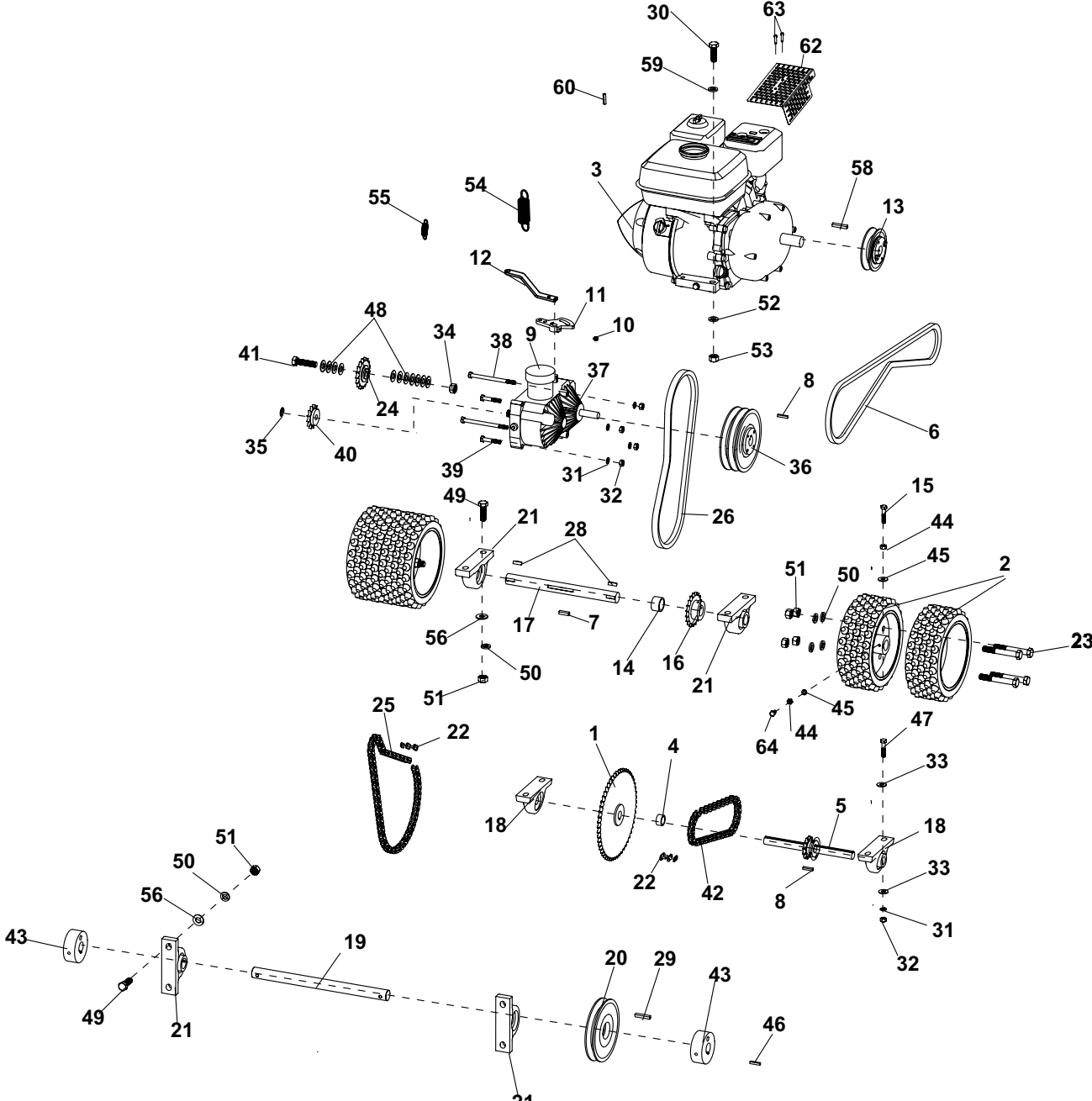
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# SOD CUTTER



# PRO SOD CUTTER

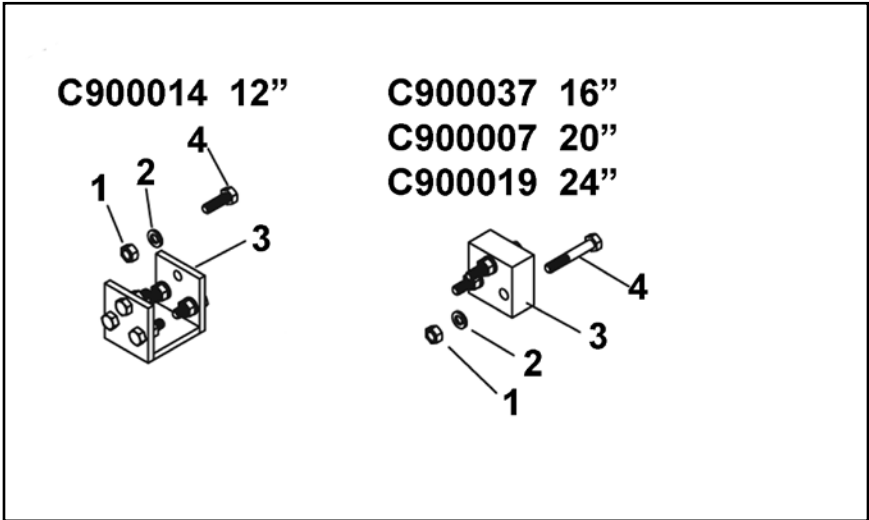
## POWER TRAIN ASSEMBLY

FIGURE 4

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	C100493	SPROCKET, #40x54 w/ HUB	1	47	C500147	BOLT, 5/16-18 x 1-1/2	4
2	4175021	S-WHEEL, MOLDED	4	48	C500034	WASHER, 1/2 FLAT	18
3	C100005	ENGINE HONDA 5.5HP	1	49	C500174	BOLT, 1/2-13 x 1-3/4	8
	C100114	ENGINE-HONDA 8HP		50	C500006	WASHER, 1/2 LOCK	16
4	C300204	SPACER, 3/4" JACK SHAFT	1	51	C500106	NUT, 1/2-13	16
5	C200056	S-SPROCKET W/ SHAFT	1	52	C500130	WASHER, 3/8 LOCK	4
6	C100491	B55 V-BELT FOR 5.5HP	1		( FOR 8HP MODELS)		
	C100503	B58 V-BELT FOR 8 HP			C500115	WASHER, 5/16 LOCK	
					(FOR 5.5HP MODELS)		
7	C500004	KEY, 1/4 x 1 SQUARE	3	53	C500129	NUT, 3/8-16	4
8	C500011	KEY, 3/16 SQUARE X 1	2		(FOR 8HP MODELS)		
9	C100339	RESERVOIR, HYDROSTAT	1		C500101	NUT-5/16-18	
10	C500259	SET SCREW, 5/16-24 x 3/8	1		(FOR 5.5HP MODELS)		
11	C400249-1	CLUTCH ARM, SCH	1	54	C100027	SPRING, THROTTLE	1
12	4171228.7	SHIFTER ARM, SCH	1	55	C100501	SPRING, PLUNGER	1
13	C100028	PULLEY W/HUB & BOLTS	1	56	64163-67	WSHR-.516X1X12GA	8
14	C300001	SPACER, DRIVE SHAFT	1	57*	B222522	DEFLECTOR, EXHAUST	1
15	C500029	BOLT, 1/4-20 x 3/4	2		(USED ON 5.5HP ONLY)		
16	C200001	SPROCKET W/HUB, DRIVE SHAFT	1	58	C500036	KEY-7MM SQUARE	1
17	4171051	SHAFT, 12" DRIVE	1	59	C500042	WASHER, 3/8 FLAT	4
18	C100013	BEARING W/ ECCENTRIC, 3/4"	2		(USED ON 8HP MODEL)		
19	C600003	SC-18 1" ECCENTRIC SHAFT	1		C500083	WASHER, 5/16 FLAT	4
20	C200002	PULLEY W/HUB & BOLTS, 6"	1		(USED ON 5.5HP MODEL)		
21	C100004	BEARING W/ECCENTRIC, 1"	4	60	C100244	WIRE SWIVEL	1
22	C100025	LINK, #40 CONNECTING	2	61*	4161646	PLUG-OIL (8HP ONLY)	1
23	C500158	BOLT, 1/2-13 x 3-1/2	8	62	C400322.7	GUARD-MUFFLER 5.5HP	1
24	C100043	SPROCKET, #40x17x1/2 IDLER	1		C400323.7	GUARD-MUFFLER 8HP	
25	C100494	#40 X 76 ROLLER & CON LINK	1	63	C500274	SCREW-M5X.8 X 1-1/8	2
26	C100513	B38 V-BELT	1	64	64123-114	BLT-HEX 1/4-20 X1	2
27	C500001	GREASE FITTING, 1/4 x 28	4				
28	64164-51	KEY-SQ 1/4 X 1-1/4 ROUNDED	2				
29	C500181	KEY, 1/4 x 1-1/2 SQUARE	1				
30	C500079	BOLT, 3/8-16 x 1-3/4	4				
	(FOR 8HP MODELS)						
	C500147	BOLT-5/16-18 X 1-1/2					
	(FOR 5.5HP MODELS)						
31	C500115	WASHER, 5/16 LOCK	6				
32	C500101	NUT, 5/16-18	6				
33	C500083	WASHER, 5/16 FLAT	4				
34	C500131	NUT, 1/2-13 LOCK	1				
35	C100433	RING, 1/2" SNAP	1				
36	C200054	S-SHEAVE, 2BK62H BUSHING	1				
37	C100311	HYDROSTAT	1				
38	C500168	BOLT, 5-16-18 x 4-1/2	2				
39	C500074	BOLT, 5/16-18 X 1-3/4	2				
40	C200044	SPROCKET, 13 TOOTH	1				
41	C500135	BOLT, 1/2-13 x 21/2	1				
42	C100495	#40 X 50 ROLLERS & CON LINK	1				
43	C700035.7	HUB, ECCENTRIC	2				
44	C500136	NUT, 1/4-20	4				
45	C500137	WASHER, 1/4 LOCK	4				
46	C500003	KEY-1/4 X 7/8 HALF MOON	2				

**\*NOT ILLUSTRATED**

BLADE CONVERSION KITS:



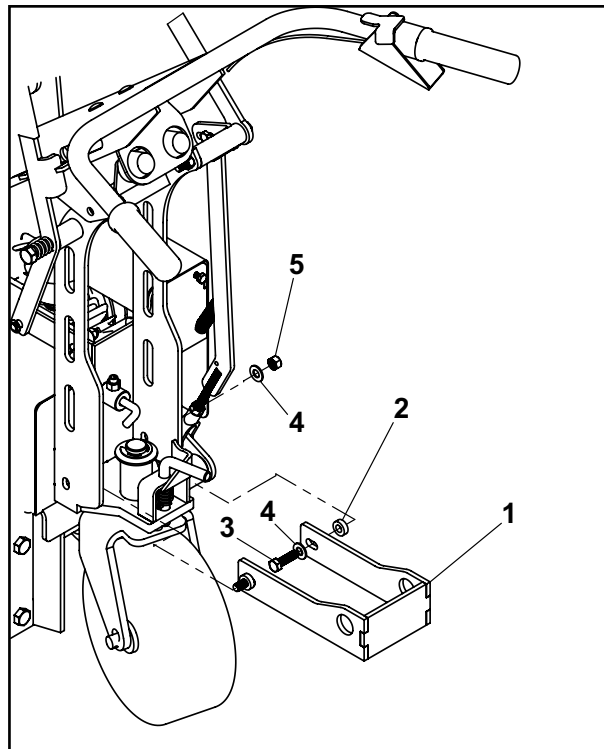
KITS:

C900007	20" BLADE CONVERSION KIT
C900014	12" BLADE CONVERSION KIT
C900019	24" BLADE CONVERSION KIT
C900037	16" BLADE CONVERSION KIT

ITEM	PART NO.	DESCRIPTION	QTY
1	C500115	WASHER, 5/16 LOCK	16
2	C500101	NUT, 5/16-18	2
3	C400011	12" BLADE ADAPTOR	2
	C300417	16" BLADE ADAPTOR	2
	C300047	20" BLADE ADAPTOR	2
	C400188	24" BLADE ADAPTOR	2
4	C500142	5/16" x 2" BOLT (16", 20", 24")	6
	C500133	5/16" x 1" BOLT (12")	12

NOTE: THIS TRAILER HITCH IS FOR USE WITH CLASSEN AST AERATOR/SODCUTTER TRAILER

## TRAILER HITCH KIT (970544)



<b>Item</b>	<b>P/N</b>	<b>Description</b>	<b>Qty</b>
1	4172014.7	WLDMNT-HSC18 TRAILER HITCH	1
2	33148-01	SPACER-.379X.75X.25	2
3	C500134	BLT-3/8-16 X 1-1/4	2
4	C500042	WSHR-3/8" FLAT	4
5	C500041	NUT-3/8-16 LOCK	2

# **CLASSEN®** 2 YEAR LIMITED SERVICE AND WARRANTY POLICY

---

Schiller Grounds Care, Inc.  
1028 Street Road • Southampton, PA 18966  
Telephone: 1-877-596-6337

## **TWO YEAR LIMITED WARRANTY**

Effective January 1, 2015

For the period of two years from the date of purchase, CLASSEN will repair or replace for the original purchaser free of charge, any part or parts found upon the examination of our factory authorized service station, or by the factory in Southampton, PA to be defective in material or workmanship. All transportation charges on parts submitted for repair or replacement under this warranty shall be borne by the purchaser.

This warranty does not include engines or engine parts, tires, batteries, or gearboxes that are covered under separate warranties furnished by their manufacturer or supplier, nor does it include normal maintenance parts, including but not limited to, spark plugs, points, filters, blades, and lubricants.

All service under this warranty will be furnished or performed by our factory authorized service stations.

There is no other expressed warranty. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two years from the date of purchase and to the extent permitted by law, any and all implied warranties are excluded. The above remedy of repair and replacement of defective parts is the purchaser's exclusive remedy for any defect, malfunction or breach of warranty. Liability for incidental or consequential damages under any and all warranties is excluded to the extent permitted by law.

## **NORMAL RESPONSIBILITIES OF THE SELLER AND THE USER**

1. The Distributor or Dealer is responsible for the proper assembly and preparation of the product for delivery to the end user.
2. The User is responsible for reading the Manual and Instructions.
3. The User is responsible for proper operation and maintenance as described in the manual.
4. The User is responsible for the replacement of wear items such as blades, belts, tires, batteries, etc.
5. The User is responsible for damage due to improper operation and maintenance, as well as abuse.

All claims must be received by the factory 30 days after the end of the warranty period to receive warranty consideration.

**CLASSEN®**  
**SCHILLER GROUNDS CARE, INC.**  
**1028 STREET ROAD, P.O. BOX 38**  
**SOUTHAMPTON, PA 18966**  
**PHONE 877-596-6337 • FAX 215-357-8045**