

HYDRO OVERSEEDER

MODELS: HTS-20H Hydro Overseeder Honda GX270 **OPERATOR'S, PARTS, & SAFETY MANUAI**



S SCHILLER GROUNDS

MAN 4176210 Rev A 06-2018 Original Language Instructions

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.

A WARNING

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

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

This machine comes with an Operator's, Parts, and Safety Manual and Engine Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. 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 Classen 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 safe operation. For best protection, study the manuals 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 Classen authorized service dealer for any service or parts needed. Classen authorized 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 machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Classen Schiller Grounds Care, Inc. 1028 Street Road Southampton, PA 18966-4217

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This Operator's, Parts and Safety Manual is part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine THESE INSTRUCTIONS ARE FOR YOUR SAFETY. PLEASE READ THROUGH THEM THOROUGHLY BEFORE USE AND RETAIN THEM FOR FUTURE REFERENCE.

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

A WARNING

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

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. SERIAL NUMBER

1028 Street Road Southampton, PA 18966 U.S.A Phone: 215-357-5110 Fax: 215-357-8045

MODEL NUMBER

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

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

HTS-20H ____

If the seeder is used improperly or safety precautions are not followed, the users risk serious injury to themselves, others and property. Read and understand this manual before attempting to operate this seeder.

Some dust and debris created by the use of the tool could contain chemicals know to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:

- Chemicals in fertilizers
- Compounds in insecticides, herbicides and pesticides.
- Arsenic and chromium from chemically treated lumber

Your risk from exposure to these chemicals varies, and depends on how often you do this type of work. To reduce your exposure, work in a well ventilated area and with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles.

Slicing blades will continue to run for several seconds after turning off the seeder. Wait until the blades have completely stopped before lifting the seeder or conducting inspection and maintenance.

In some countries regulations define at what time of the day and on what special days products are allowed to be used and what restrictions apply! Ask your local agencies for all detailed information and observe regulations!.

Adopt proper measures to protect yourself against vibration exposures. Take the whole work process including times the seeder is running under no load or switched off into consideration. Proper measures include among others, regular maintenance and care of product and accessories, keeping hands warm, periodic breaks and proper planning of work processes.

SAFETY DECAL INFORMATION: On the product, the rating label, and within these instructions you will find among others the following symbols and abbreviations. Familiarize yourself with them to reduce hazards like personal injuries and damage to property.



Caution / Warning.



Wear protective gloves.



Read the instruction manual.



Wear a dust mask.



Wear hearing and eye protection.



Wear protective, slip-resistant footwear.



Pay special attention when working on the cutting device! Pay special attention when working on or near the slicing blades!

HTS-20H

OPERATOR PREPARATION & TRAINING

READ THE OPERATOR'S, PARTS, AND 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.
- Dress properly. Always wear proper non-slip footwear and long trousers while working. Do not operate when barefoot or wearing open sandals. Do not wear loose clothing or jewelry as such articles can become caught in moving parts. Wear a protective covering to contain long hair. Wearing protective gloves is recommended when working outdoors.
- Use safety glasses and hearing protection.
- Never allow children, unskilled or improperly trained people to operate this equipment. Local regulations can restrict the age of the operator.
- Do not put hands or feet near or under rotating parts.
- Never pick up or carry the unit while the engine is running. Always turn the engine off and ensure the blades have stopped rotating before carrying the machine.
- 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, 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 & CIRCUMSTANCES



- Evaluate the terrain to determine how to safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Clear the area of objects such as rocks, toys, wire or any other debris that may be thrown or get tangled in the seeder.
- 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.
- Keep work area clean and well lit. Cluttered, dark areas invite accidents. Work only in day-light or in good artificial light.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- Exercise extreme caution when changing direction on slopes.
- Avoid dangerous environments. Do not use the seeder in rain or in damp or wet locations. Do not operate the seeder in gaseous or explosive atmospheres or use the seeder new flammable or combustible liquids. Engines in these type of machines normally spark, and the sparks might ignite fumes.
- Be aware that the seeder may unexpectedly bounce upward or jump forward if the blades should strike buried obstacles such as large stones, roots, or stumps.

HTS-20H ____

MACHINE PREPARATION

- Read engine manual.
- 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.
- Check for damaged parts Before further use of the seeder, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- Verify that machine and attachments, if any, are in good operating condition.
- Do not engage seeder until ready to use.
- The engine housing and exhaust remain hot for a short period after the seeder is turned OFF. Allow the engine and exhaust to cool completely before touching or storing near combustible material.

OPERATING SAFELY IN GENERAL



- Use extra care when loading or unloading the machine into a trailer or truck.
- Never operate without guards, plates, or other safety protective devices in place.
- Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.
- Never leave a machine unattended. Turn off seeder, stop engine, and ensure the blades stop rotating before leaving the machine.
- Use extreme caution when reversing or pulling machine towards you.
- Stop operation if someone approaches.

- Dress properly. Always wear proper non-slip footwear and long trousers while working. Do not operate when barefoot or wearing open sandals. Do not wear loose clothing or jewelry as such articles can become caught in moving parts. Wear a protective covering to contain long hair. Wearing protective gloves is recommended when working outdoors.
- Use safety glasses and hearing protection.

- Start according to instructions in this manual or on the machine.
- Before attempting to start the engine, make sure the seeder is disengaged.
- When starting the engine, make sure hands and feet are clear of the seeder.
- Do not engage seeder at full throttle. Set throttle to idle or lowest possible engine speed.
- Do not change engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

OPERATING ON SLOPES A WARNING

- 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 seed 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, shut off engine.



- Stop the engine, disengage the blade, set parking brake and wait until the blade stops rotating:
 - before refueling.
 - before making depth adjustment unless the adjustment can be made from the operator's position.
- Allow the seeder to come to a complete stop and ensure the blades have stopped rotating when stopping operation to clear blockages, unclog, inspect the machine, do maintenance or repair.
- Stop the engine, disengage the seeder, set parking brake, and wait until the blade stops rotating and disconnect the spark plug wire:
 - 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 as needed 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.
- Reduce the throttle setting during engine shutdown and, if the engine is provided with a shutoff valve, turn the fuel off at the conclusion of operation.

MAINTENANCE SAFETY



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 when work is completed.
- Adjust or repair only after the engine has been stopped and the seeder 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.
- Never attempt to make adjustments while the engine is running 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 blades and moving parts in these circumstances.

HTS-20H _____

ST		FUEL SAFETY
	WARNING	
•	Stop the engine and allow to cool before storing.	Gasoline is flammable; gaso- line vapors are explosive.
•	Drain the fuel tank outdoors only.	Use extra care when handling.
•	Store fuel in an approved container in a cool, dry place.	 Store only in containers spe- cifically designed for fuel.
•	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 fuel container or equipment with gasoline in the tank inside a building where fumes	 When refueling or checking fuel level: Stop the engine and allow to cool; Do not smoke; Refuel outdoors only; Use a funnel;
•	may reach an open flame or spark. Appliances such as furnaces and water	 Ose a fumel, Do not overfill; If fuel is spilled, do not attempt to start the engine until the spill is cleaned up and va-
~	heaters with a pilot light have an open flame.	pors have cleared. Replace caps on fuel containers and tanks
•	Keep gasoline storage area free of grass, leaves and excessive grease to reduce fire hazard.	securely. Sparks from static electricity can start fires or
•	Clean debris from cutting units, drives, mufflers and engine to help prevent fires.	cause explosions. Flowing fuel can generate static electricity. To prevent static electricity sparks:
•	Clean up any spilled gasoline or oil in the storage area. Store the seeder in a sheltered, dry, frost free,	 Keep 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.
•	well-ventilated place.	When practical, remove gasoline powered
•	When not in use, the seeder should be stored indoors in a locked-up place out of the reach of children.	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.
BL		
•	Blades are sharp and can cut. Use extra caution when handling. Wear appropriate personal protective equipment.	 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.
•	Only replace blades. Never straighten or weld them.	 If fuel is spilled on clothing change it immediately.
•	Keep other persons away from blades.	

VIBRATION AND NOISE REDUCTION

HTS-20H

To reduce the impact of noise and vibration emission, limit the time of operation, as well as wear work gloves.

Take the following points into account to minimize the vibration and noise exposure risks:

- Only use the seeder as intended by its design and these instructions.
- Ensure that the seeder is in good condition and well maintained.
- Use correct blades and ensure they are in good condition.
- Keep tight grip on the handle grips.
- Maintain this seeder in accordance with these instructions and keep blades well lubricated.
- Plan your work schedule to spread product use across a longer period of time.

Even if you are operating this seeder in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the use of this product.

- Health defects resulting from vibration emission if the product is being used over long periods of time or not properly managed and maintained.
- Injuries and damage to property due to broken components or the sudden impact of hidden objects during use.
- Danger of injury and property damage caused by thrown objects.

HTS-20H _____

HTS-20H Dimensions: Width
Net Weight: Weight
Speed: SeedForward3 m.p.h Reverse1.5 m.p.h
Engine: Model HTS-20H ModelGX270 Honda, 9.0 h.p., 4 cycle StarterRecoil, on/off switch Governor
Drive: MachineHydro Gear Transmission PrimarySheaves and Belts
Wheels: Front & Rear13 bX 5.00-6
Seeding: Seeding Width

HTS-20H

COVER REMOVED

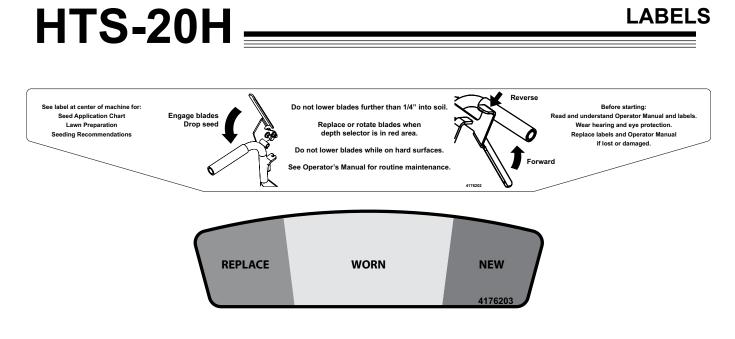
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WARNING LABELS

Warning labels are an important part of the safety system incorporated in this machine. Replace labels if damaged or illegible.



DO NOT OPERATE IN AN ENCLOSED AREA 100070



Green, yellow, red label near the lever indicate how much the blades are worn. New blades will only need to be lowered into the green section. Worn blades will be lowered into the yellow section. Blades that need replacement will be lowered in the red section.

|--|

THESE SETTINGS ARE APPROXIMATE GUIDELINES. SEEDING RATES ARE SPEED DEPENDENT. FASTER SPEED DELIVERS LESS SEED.

F	RATE LBS./		F	RATE LBS./		1
SEED TYPE	1000 SQ. FT.	SETTING	SEED TYPE	1000 SQ. FT.	SETTING	
BENT GRASS	5 1.5	1.0	RYEGRASS	2.5	4.0	
	3.5	1.5		5.0	4.25	⊢
				8.5	4.75	
BERMUDA	2.5	1.0		10	5.0	
	5.0	1.5				
			CENTIPEDE	0.67	0.5	
BLUEGRASS	-	2.0		1.25	1.0	
	2.5	2.25		2.5	1.5	
	4.0	2.75				
	6.0	3.25	St. AUGUSTI		1.25	
				1.0	1.75	
FESCUE	3.5	4.0		1.33	2.25	
	5.0	4.25		1.5	2.5	
	10	4.75				
	12	5.25				

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 ON 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.

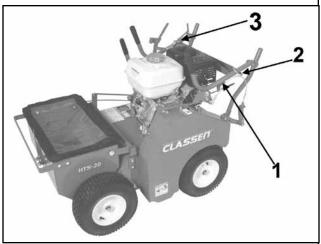
SET-UP INSTRUCTIONS

HTS-20H

SET-UP INSTRUCTIONS

NOTE: Units ship with no gas or oil.

- 1. Cut banding and roll seeder off pallet.
- Unfold by pulling up on handle 1. Slide lock rings 2 down to lock handle in upright position. Slide linkage coupler 3 to the locked position.
- 3. Add oil to the engine crankcase with the engine resting in a level position. Refer to the engine manufacturer's Operator's manual for the correct type and amount of oil.



4. Fill the fuel tank according to the engine manufacturer specifications.

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THROTTLE (A)

Controls engine speed and vacuum suction level.

CHOKE HANDLE (B)

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

FUEL VALVE (C)

Move to the "OFF" position to shut off the fuel whenever transporting the machine by trailer or truck or during storage. Move to the "ON" position before starting the engine. The "OFF" position also can be used to "KILL" the engine as a "KILL" switch is combined with the fuel shutoff.

ENGINE SWITCH (D)

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

RECOIL STARTER HANDLE (E)

Pull to turn over the engine to start it. Guide the recoil starter handle back to the rope guide for best rope life. Allowing the rope to snap back will shorten rope life.

FREE WHEEL ROD (F)

Move the free-wheel rod to the right, then pull out to engage the transmission. Push in, then move to the left to disengage the transmission.

PARKING BRAKE ROD (G)

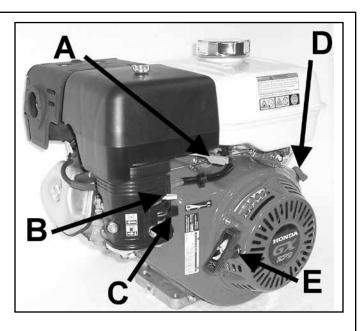
Move parking brake rod slightly up, to the left, and then down to disengage the brake. Pull brake rod up and then to the right, allowing it to rest in the groove, in order to engage the brake.

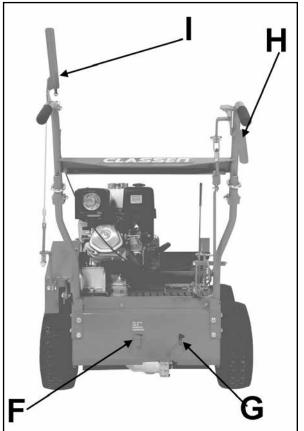
FORWARD / REVERSE HANDLE (H)

Pull right control handle up to move the unit forward or push down to move in reverse.

BLADE / SEED HANDLE (I)

Push down left control handle to engage the blade and to begin dropping seed. Release to disengage.





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BLADE / SEED HANDLE (J)

Pull the depth adjustment lever out and move it towards the handles in order to lower the blades (deeper into soil). Never lower the blades while on hard surfaces. Blades should never be lowered into soil more than ¼". Operating the machine with blades deeper than ¼" will result in damage to the machine. In addition, cutting into the soil deeper than ¼" will hinder germination of seed.

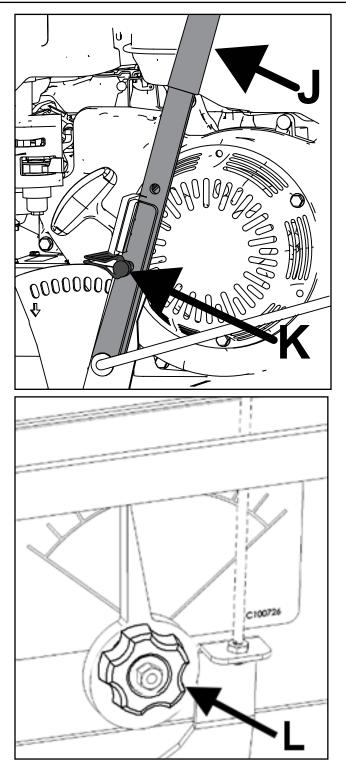
Green, yellow, red labels near the lever indicate how much the blades are worn. New blades will only need to be lowered into the green section. Worn blades will be lowered into the yellow section. Blades that need replacement will be lowered in the red section.

FLOATING SEED BOX PIN (K)

Unlatch and remove the pin to engage the floating seed box. A floating seed box maintains a constant height when riding over small bumps in the soil. Leave the pin engaged to not use the floating seed box feature.

SEED GATE ADJUSTMENT (L)

Loosen knob and adjust seed flow selector to desired number for seed dispersion rate. See the see application chart label at the center of the machine to determine number. Tighten knob.



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BEFORE STARTING THE ENGINE

- 1. Read the Operator's, Parts and Safety Manual. Become familiar with the controls, how each functions, and what it operates.
- 2. Check the engine oil level and transaxle fluid level. Add if necessary.
- 3 Fill the fuel tank with good quality, clean, unleaded regular gasoline (petrol). Use a funnel to avoid spilling.

STARTING THE ENGINE

- 1. Open the fuel valve.
- 2. Move the engine switch to the "ON" position.
- Move the choke lever to the "CHOKE" position for cold starts. (Choke may not be required to start a warm engine. Too much choke use may flood the engine and cause hard starting.)
- 4 Move the throttle to midway between the fast and slow positions.
- 5. Pull the recoil starter slowly until resistance is felt, then pull firmly to start the engine.
- 6. After the engine starts, slowly back the choke off until the engine runs with no choke at all.
- 7. Set the desired engine speed with the throttle. Keep engine speed low until familiar with driving the machine.

OPERATING THE SEEDER

- 1. Ensure both handles are in a released, neutral position.
- 2. Ensure blades are in the highest position, and are not touching the ground.
- 3. Start the engine, keep engine speed low until familiar with driving the machine.
- 4. Release the parking brake and engage the transmission.

- 5. Drive the machine to the area to be seeded.
- 6. Once on soil, move depth adjustment so that it is a maximum of 1/4" into the soil. Do not lower blades while on a hard surface.
- 7. Engage the blade and seed handle and drive machine to seed.
- Once seeding is complete, raise blades to highest position before driving the machine on hard surfaces. Failure to raise the blade before driving on hard surfaces will cause damage to the machine.

STOPPING / TRANSPORTING THE SEEDER

DO NOT run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.

- 1. Ensure that the blades have been raised to the highest position. Failure to raise the blades before driving on hard surfaces will cause damage to the machine.
- 2. Move the engine switch to the OFF position.
- 3. Turn the fuel valve to the OFF position.
- 4. Disengage the transmission if moving the machine in an enclosed area.
- 5. Once the machine is in its final location, engage the transmission.
- 6. Engage the parking brake.
- If folding the handles is desired, slide the lock rings up on the handle, slide the linkage coupler up on the transmission linkage, and fold the handles downward. Failure to slide the linkage coupler prior to folding the handles can result in damage to the linkage.

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STORAGE

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

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

- 1. Drain all fuel from the fuel tank and fuel lines.
- 2. Start the engine and run until all the fuel is used from the carburetor float bowl and the engine stops.
- While the engine is still warm, drain the crankcase oil and replace with the proper weight oil corresponding to the season the equipment will be next used.
- 4. Remove the spark plug and squirt a small amount of engine oil into the cylinder. Slowly pull the starter a few times to distribute oil in the cylinder and reinstall the spark plug.
- 5. Top off if necessary. See engine manual for details.

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

- 1. Check for loose parts and tighten if necessary.
- 2. Fill the fuel tank and then check the engine oil level.
- 3. Reinstall spark plug.
- 4. Start the engine and check for fuel leaks. Repair any leaks before operating the unit.

Washing the machine is possible with water and a mild detergent. Ensure all detergent is removed after cleaning and thoroughly dry machine. DO NOT use water near engine. DO NOT use a pressure washer on the machine.

HTS-20H ____

Stop the engine, ensure the blades stop rotating, and remove spark plug wire before performing any maintenance. When replacement parts are required, use genuine Classen parts. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders, and voids the warranty.

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

Replace any warning decals that become illegible immediately.

Maintenance Procedure	Each Use	Every 25 Hours
Tighten any hardware (nuts, bolts, etc.) that are found loose.	X	
Replace any broken or missing hardware (nuts, bolts, etc.)	X	
Check engine oil	X	
Check engine air filter	X	
Check tire pressure	X	
Check blades for damage and wear	X	
Ensure seed gate opens and closes freely	X	
Check for debris near wheels and under machine	X	
Check to see that set screws on pulley are tight		Х
Check condition of belts, guards, blades for damage or wear		X
Lubricate all linkages		Х
Grease bearings		X

MAINTAINING TIRE PRESSURE

Check the tire pressure before each use. The maximum air pressure is not to exceed 40 psi (176 kPa).

LUBRICATING LINKAGES

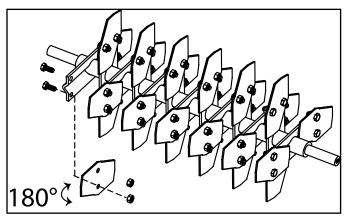
Every 25 hours lubricate all linkages with dry-film Teflon lubricant. NOTE: Use a dry coating lubricant to avoid attraction of dirt.

BLADE ROTATION

Check the blades before each use. If the blades are worn on one side, it is possible to rotate them.

A WARNING

- 1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- Thoroughly inspect the blades for cracks and wear. If a blade is worn, it is recommended to rotate or replace all blades at once. If blades are installed at different lengths, then slicing application will not be consistent. Additionally, the blades may inadvertently be lowered beyond 1/4" into the ground, resulting in damage to the machine.
- 3. Remove two bolts and nuts holding a blade. Rotate the blade 180°, so the beveled side of the blade



faces away from the shaft assembly.

- 4. Reinstall on shaft with bolts and nuts in orientation removed.
- 5. Repeat for all blades.
- 6. Reinstall Blade Assembly following 'Blade Assembly

GREASE BEARINGS

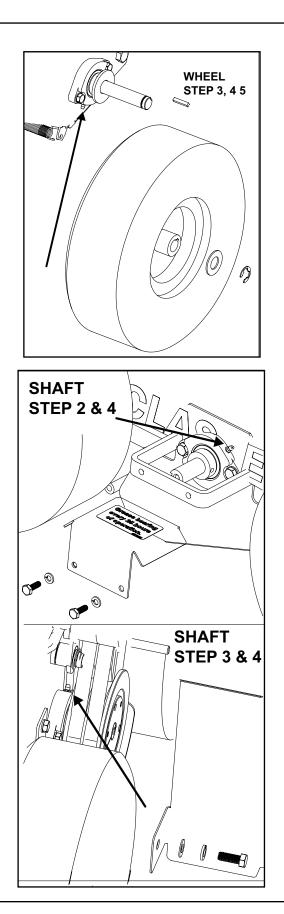
Grease Bearings every 25 hours. There are four grease bearings: two for the shaft assembly, and two for the front wheels.

Grease front wheel bearings: AWARNING

- 1. Turn engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- 2. Use two people for this step. One person pushes down on the handles until the front wheels are slightly elevated off of the floor. The second person inserts a block of wood under the front hopper. Do not lower machine onto block until the second person is away from the machine.
- 3. Remove the wheel e-rings and washers on both front wheels. Remove wheels and keys, do not lose wheel keys.
- Connect the grease gun and pump approximately 0.1 ounces of grease (one standard pump) into each bearing. NOTE: Over-packing a bearing with grease can result in overheating of bearing and premature wear.
- 5. Slide wheels on machine and align the wheel keyhole with the shaft keyhole and reinsert keys. Reinstall washers and e-rings.
- 6. Use two people for this step., One person push down on the handles until hopper is slightly elevated off of block. The second person removes block, When the second person is away from the machine, carefully lower the machine.

Greasing shaft assembly bearings: **AWARNING**

- 1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- 2. Remove the right shaft cover by removing the two bolts holding it on.
- 3. Remove the left shaft cover by removing the five bolts and washers holding it on.
- Connect the grease gun and pump approximately 0.1 ounces of grease (one standard pump) into each bearing. NOTE: Over-packing a bearing with grease can result in overheating of bearing and premature wear.
- 5. Reinstall covers and spark plug cable.



HTS-20H

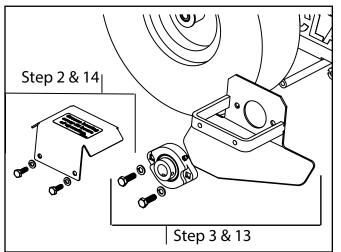
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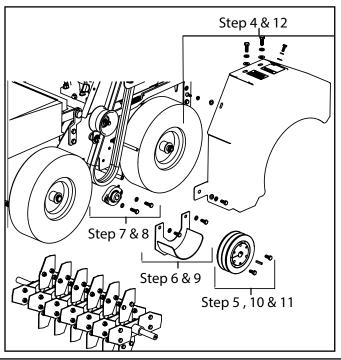
A WARNING

BLADE ASSEMBLY REPLACEMENT

- 1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- 2. On right side of unit (from operator position) first remove the bolts and washers holding on the right shaft cover and then remove cover.
- 3. Remove bolts ,washers ,bearing collar and loosen set screw. Remove the shaft guard and the bearing from shaft.
- 4. On left side of unit, remove front belt shield.
- 5. Remove bolts from pulley hub and slide pulley and the 2 belts off the shaft.
- 6. Remove bolts, washers and left shaft cover.
- 7. Remove bolts ,washers ,bearing collar and loosen set screw. Slide bearing off shaft.
- Remove old shaft assembly. Attach new assembly shaft on left side of unit by sliding on bearing, and locking down set screw with Loctite 242. Attach bearing to unit with bolts and nuts removed in Step 7 Connect the grease gun and pump approximately 0.1 ounces of grease (one standard pump) into each bearing. NOTE: Over-packing a bearing with grease can result in overheating of bearing and premature wear.
- 9. Attach left shaft cover removed in Step 6.
- 10 Slide the pulley with hub back onto shaft with both belts making sure the key is in the keyway and is engaged with the hub.
- 11. When the pulley is on and the belts are straight, lock down pulley by tightening the 2 bolts that go into the hub. See figure for placement of belt.
- 12. Next reinstall front belt shield.

- 13. Move to right side of unit and slide shaft through shaft guard and bearing. Attach bearing collar and shaft guard to secure both to the unit with hardware removed in Step 3. Lock down set screw on bearing with Loctite 242. Connect the grease gun and pump approximately 0.1 ounces of grease (one standard pump) into each bearing. NOTE: Over-packing a bearing with grease can result in overheating of bearing and premature wear.
- 14. Reinstall right cover removed in Step 2.
- 15. Attach spark plug wire.





HTS-20H

Replacement procedure.

BLADE REEL BELTS REPLACEMENT

Check the belts for wear every 25 hours of operation. Replace belt if it is cracked, squeals <u>during operation</u>, or slips.

ACAUTION Do not place fingers between pulley and belt while rotating the assembly. Fingers can be pinched between pulley and belt.

A WARNING

- 1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- 2. On left side of unit, remove front belt shield.
- 3. Remove bolts, washers and left shaft cover.
- 4. Remove the blade reel belts.
- 5. Install new belts. See figure for belt placement.
- 6. Reinstall cover removed in Step 3. Ensure that the belt is routed to the inside of the two guide bolts.
- 7. Reinstall cover removed in Step 2.
- 8. Attach spark plug wire.
- 9. Run the machine to ensure blade reel engages and disengages.

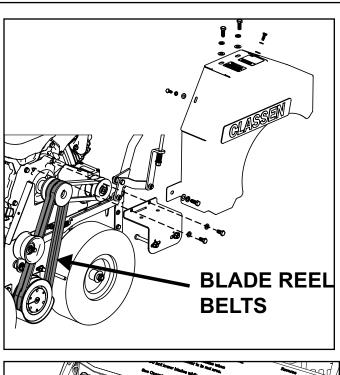
TRANSMISSION BELT REPLACEMENT

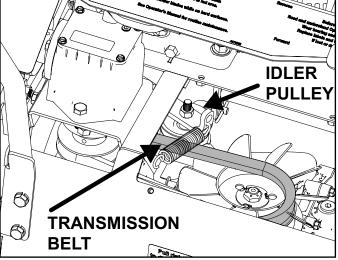
Check the belts for wear every 25 hours of operation. Replace belt if it is cracked, squeals during operation, or slips.

▲ CAUTION Do not place fingers between pulley and belt while rotating the assembly. Fingers can be pinched between pulley and belt._____

A WARNING

1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.





- Remove the five bolts and washers on the frame access plate and remove the plate.
- 3. Pull on idler pulley to relieve belt tension and remove the transmission belt.
- 4. Install new belt.
- 5. Reinstall the frame rear access plate.
- 6. Reinstall Blade Reel Belts per Blade Reel Belts Replacement Section.
- 7. Attach spark plug wire.

GEAR BOX BELT REPLACEMENT

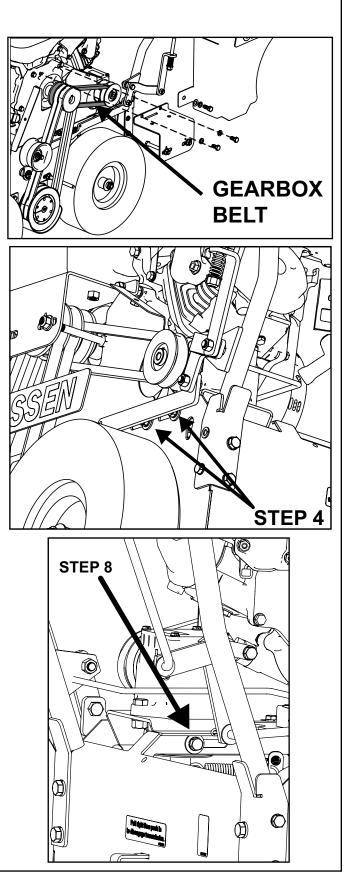
Check the belts for wear every 25 hours of operation. Replace belt if it is cracked, squeals <u>during opera</u>tion, or slips.

CAUTION

Do not place fingers between pulley and belt while rotating the assembly. Fingers can be pinched between pulley and belt.

A WARNING

- 1. Turn the engine to the OFF position, ensure the blades stop rotating, and remove the spark plug cable.
- 2. Follow the Blade Reel Belts Replacement Section and remove the blade reel belts.
- 3. Follow the Transmission Belt Replacement Section and remove the transmission belt.
- 4. Loosen the two bolts located behind the belt tensioner plate under the gearbox with a wrench
- 5. Using a deep socket, loosen the bolt located behind the idler pulley spring and under the gearbox inside main body.
- 6. Push the gearbox towards the engine pulley and remove the gearbox belt.
- 7. Install new belt.
- 8. Pull the gearbox away from the engine pulley and tighten the bolt under the gearbox inside of the main body.
- 9. Pull the gearbox away from the engine pulley and tighten the belt tensioner plate. Ensure new belt is tensioned properly by pressing on the belt at mid-span. the belt should not deflect by more than 1/2".
- 10. Reinstall the Transmission belt per Transmission Belt replacement Section.
- 11. Reinstall Blade Reel Belts per Blade Reel Belts Replacement Section.
- 12. Attach spark plug wire.



TROUBLESHOOTING

_ HTS-20H

	TROUBLESHOOTING GUIDE							
PR	OBLEM	POSSIBLE CAUSE			CORRECTIVE ACTION			
Α.	Engine will not start.	1.	Out of gasoline.	1.	Fill gasoline tank.			
		2.	Spark plug lead wire loose or disconnected.	2.	Reconnect spark plug lead wire.			
		3.	Defective spark plug.	3.	Replace spark plug.			
		4.	Throttle control lever not in proper	4.	Move throttle control lever to start position.			
			position.	5.	Start engine with choke fully open.			
		5.	Engine flooded or flooding.	6	Drain, clean tank and system and refill with			
		6.	Stale or contaminated gasoline.		fresh gasoline.			
		7.	Engine switch off.	7.	Turn engine switch to ON position.			
		8.	Oil level low.	8.	Fill crankcase to proper oil level.			
		9. 1	Front cover is loose on unit.	9.	Make sure front cover is secured properly on unit.			
В.	Loss of power, hard starting.	1.	Spark plug lead wire loose.	1.	Tighten spark plug lead wire.			
		2.	Defective spark plug.	2.	Replace spark plug.			
		3.	Carburetor out of adjustment.	3.	Properly adjust carburetor.			
		4.	Air cleaner dirty.	4.	Clean and service air cleaner. (See the engine Operation and Maintenance illustrations.)			
		5.	Air vents clogged or plugged.	5.	Clean vent in gasoline tank cap and carburetor.			
C.	Engine will not idle properly.	1.	Idle speed too slow.	1.	Adjust carburetor idle speed or idle mixture.			
		2.	Spark plug gap incorrect.	2.	Set spark plug gap; see your Engine Manual			
		3.	Air cleaner dirty.	3.	Clean and service air cleaner. (See the engine Operation and Maintenance illustrations.)			
D.	Engine runs hot or overheats.	1.	Oil level low.	1.	Fill crankcase to proper oil level.			
		2.	Engine cooling fins or baffles clogged with dirt and debris.	2.	Clean and remove obstructions.			
		3.	Carburetor out of adjustment.	3.	Readjust carburetor.			
E.	Excessive vibration during	1.	Broken engine pulley.	1.	See an Authorized Service Dealer.			
	movement or usage.	2.	Loose idler or engine pulley.	2.	Tighten pulley(s).			
		3.	Blades are worn or bent.	3.	Replace blades.			
		4.	The belt is damaged.	4.	Install a new belt.			
		5.	Loose engine mount bolts.	5.	Tighten engine mounting bolts.			
F.	The machine does not move	1.	Low transmission oil level.	1.	Add hydraulic oil to the transmission.			
	forward/reverse when engine is on.	2.	The drive or pump belt is disengaged or loose.	2.	Change the belt.			
		3.	Drive cable is broken or is misadjust- ed.	3.	Replace or adjust cable.			
G.	The machine moves to the left	1.	Blades worn unevenly.	1.	Replace blades.			
	or the right when in drive or during usage.	2.	Deflated or under inflated tire.	2.	Inflate tires to proper pressure.			

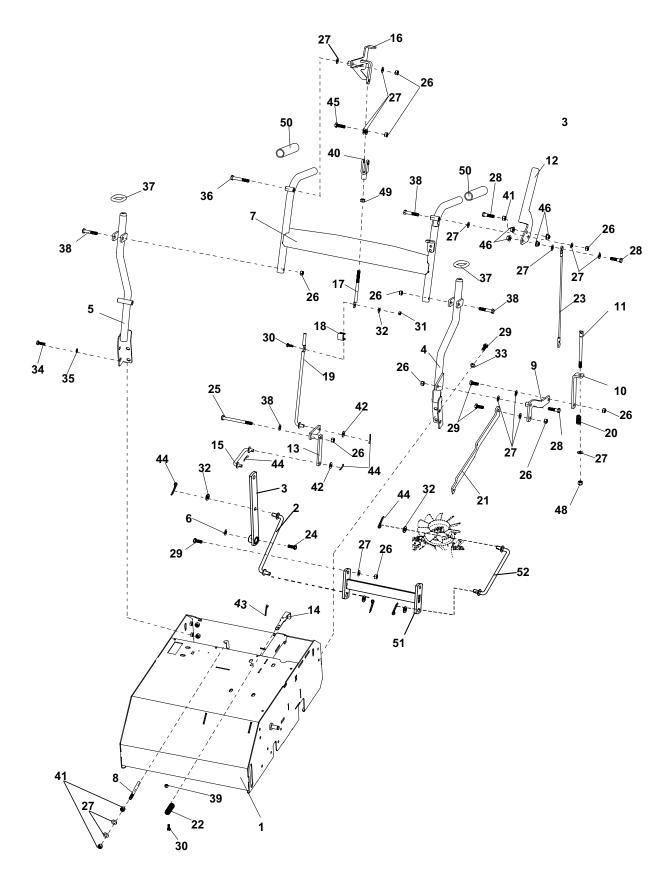
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PARTS SECTION

HANDLE ASSEMBLY

HTS-20H

FIGURE 1



HANDLE ASSEMBLY

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FIGURE 1

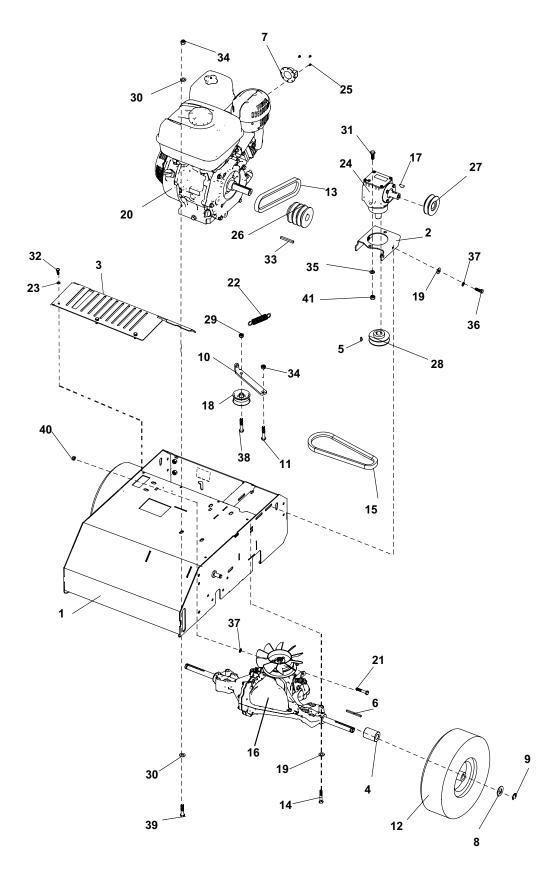
ITM	PART NO.	DESCRIPTION	QTY
1	4170714	S-MAIN BODY W/ LABS	1
2	C400474.7	SP CONN ROD WELDMEN	1
3	C400476.7	SP LINKAGE CONN ARM	1
4	C400461.7	LFT LOWER HANDLE BAR	1
5	C400462.7	RT LOWER HANDLE BAR	1
6	C500034	BOLT, 1/2 FLAT	1
7	4176441	S-UPR HANDLE WLDMT	1
8	C400465.7	BRAKE ROD	1
9	C400469.7	LFT LWR CONN WLDMNT	1
10	C400470.7	LFT LWR CONN ARM	1
11	C400471.7	LFT LOWER FLAT ROD	1
12		LFT CONTROL HANDLE	1
13		RT LWR LEVER WLDMNT	1
14		FREE WHEEL HANDLE	1
15		RT LWR CONN WLDMNT	1
16		BLADE ENGMNT LEVER	1
17		SP UPPER CONN ROD	1
18		LINKAGE COUPLER	1
19	C400484.7	SP LOWER CONN WLDMN	Г 1
20	4169763	SPRING, LEFT CONTRL	1
21	C400491.7	BELT TENSIONER LATE	1
22	4170082	C750 CENTURY SPRING	1
23	4170084	TENSIONER CABLE	1
24	C500149	BOLT, 1/2-13 x 2	1
25	C500165	BOLT, 3/8-16 X 4-1/2	1
26	C500041	NUT, 3/8-16 LOCK	11
27	C500042	WASHER, 3/8" FLAT	17
28	C500146	BOLT, 3/8-16 X 1-1/2	3
29	C500043	BOLT, 3/8-16 X 1	8
30	C500029	BOLT, 1/4-20 x 3/4	7
31	C500139	NUT, 1/4-20 LOCK	1
32	C500088	WASHER, 1/4" FLAT	5
33	C500130	WASHER, 3/8 LOCK	4
34	C500133	BOLT, 5/16-18 x 1	4
35	C500115	WASHER, 5/16 LOCK	4

ITM	PART NO.	DESCRIPTION	QTY
36	C500020	BOLT, 3/8-16 x 2-1/2	1
37	C100251	RING, HANDLE LOCK	2
38	C500091	BOLT, 3/8-16 x 2	3
39	C500068	NUT, 1/4-20 NYLOC	1
40	C500026	CLEVIS YOKE, 3/8" FTH	1
41	C500129	NUT, 3/8-16	3
42	C500083	WASHER, 5/16 FLAT	2
43	C500016	PIN, 5/32" x 1-1/4" COTTER	1
44	4170473	PIN, 1/8 X 1 COTTER	7
45	C500134	BOLT, 3/8-16 x 1-1/4	1
46	C500081	NUT, 3/8-16 WHIZ LOCK	4
47	C500137	WASHER, 1/4 LOCK	5
48	C500076	NUT, 3/8-16 NYLOC	1
49	C500025	NUT, 3/8-24	1
50	4169758	FOAM HANDLE GRIP	2
51	C400467.7	SP TRANSFER WELDMEN	T 1
52	C400495.7	SP CONN ROD WELDM	1

*NOT ILLUSTRATED

DRIVE ASSEMBLY

FIGURE 2



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DRIVE ASSEMBLY

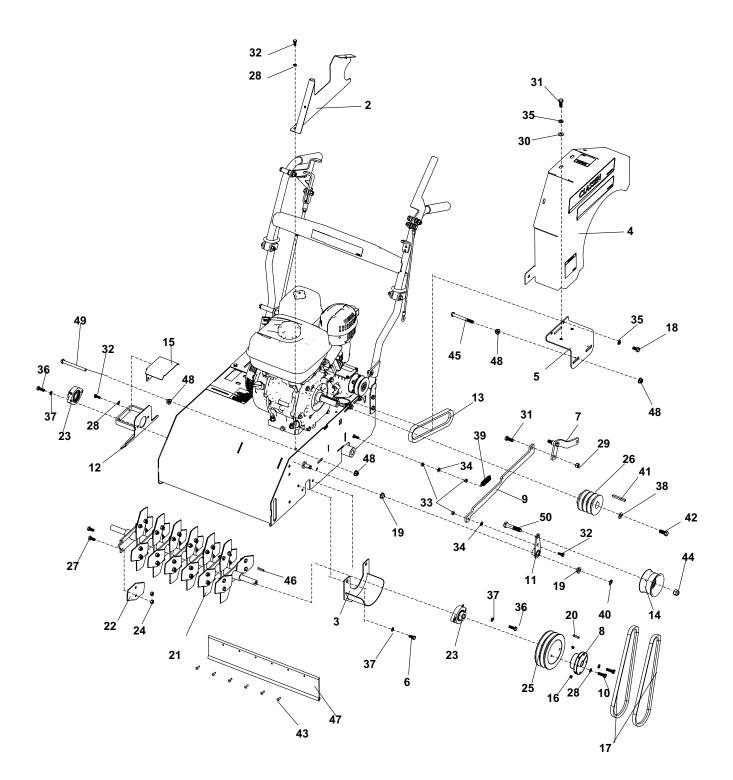
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							FIGURE
ΙТМ	PART NO.	DESCRIPTION	ŶŢĊ	ITM	PART NO.	DESCRIPTION	QTY
1	4170714	S-MAIN BODY W/LABS	1				
2		RT ANGL GEARBOX TENSION					
3		FRAME REAR ACCESS PLATE					
4	C400457	REAR WHEEL SPACER	2				
- 5	64164-48	KEY, 5/32 X 3/16 X 5/8	1				
6	64164-49	KEY, 3/16" SQ X 2-1/2"	2				
7	4170466	ENGINE EXHAUST DIVERTER					
8	C400480	WASHER, WHEEL	2				
9	64221-08	E-RING .750	2				
3 10	C400492.7	TRANSAXLE BELT PLATE	1				
			-				
11	C500146	BOLT, 3/8-16 x 1-1/2	1				
12	4169760	WHEEL & TIRE 13XX5.0X6	2				
13	4169756	6927 GEARBOX V-BELT	1				
14	C500143	BOLT, 5/16-18 x 2-1/2	4				
15	4169755	A26 TRANSMISSION V-BELT	1				
16	C100585	TRANSAXLE	1				
17	121	KEY, 3/16" x 3/4" HALF MOON					
18	C100010	PULLEY, IDLER	1				
19	C500083	WASHER, 5/16 FLAT	2				
20	4166074	ENGINE, HONDA GX270	1				
21	C500074	BOLT, 5/16-18 X 1-3/4	1				
22	4170427	SPRING, C-191	1				
23	C500137	WASHER, 1/4 LOCK	2				
24	4169765	GEARBOX, RT ANGLE	1				
25	265	SCREW, M4 X 8 THREAD CUT	3				
26	4169748	PULLEY, MOTOR 3BK28 X 1	1				
27	4169751	PULLEY, GEARBOX 3-1/8X7/8	1				
28	4169754	PULLEY, GEARBOX 3 X 7/8	1				
29	C500041	NUT, 3/8-16 LOCK	1				
30	C500042	WASHER, 3/8" FLAT	8				
31	C500043	BOLT, 3/8-16 X 1	2				
32	C500029	BOLT, 1/4-20 x 3/4	3				
33	64164-50	KEY, 1/4" SQ X 2.20" LONG	1				
34	C500076	NUT, 3/8-16 NYLOC	4				
35	C500130	WASHER, 3/8 LOCK	2				
36	C500133	BOLT, 5/16-18 x 1	6				
37	C500115	WASHER, 5/16 LOCK	9				
38	C500091	BOLT, 3/8-16 x 2	1				
39	C500079	BOLT, 3/8-16 X 1-3/4	4				
40	C500101	NUT, 5/16-18	1				
41	C500129	NUT, 3/8-16	2				
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	*N	NOT ILLUSTRATED					
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REEL ASSEMBLY

FIGURE 3



HTS-20H

REEL ASSEMBLY

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FIGURE 3

2 C400493.17 BELT SHII 3 C400453.17 LFT SHAF 4 4170715 S-FRONT 5 C400459.17 BELT CVF 6 C500140 BOLT, 5/10 7 C400469.7 LFT LWR 8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	CONN ARM 1 45 -HUB 3/4" 1 46 ISIONER PLATE 1 47
3 C400453.17 LFT SHAF 4 4170715 S-FRONT 5 C400459.17 BELT CVF 6 C500140 BOLT, 5/10 7 C400469.7 LFT LWR 8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	T COVER WLDMT 1 41 BELT SHIELD 1 A MOUNT WLDMT 1 43 5-18 x 3/4 1 44 44 CONN ARM 1 45 46 ISIONER PLATE 1 0 X 3/4 2 48 49 46TT GUARD 1 5027 GEARBOX 1
4 4170715 S-FRONT 5 C400459.17 BELT CVF 6 C500140 BOLT, 5/10 7 C400469.7 LFT LWR 8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	BELT SHIELD 1 42 MOUNT WLDMT 1 43 5-18 x 3/4 1 44 CONN ARM 1 45 -HUB 3/4" 1 46 ISIONER PLATE 1 47 O X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1
5 C400459.17 BELT CVF 6 C500140 BOLT, 5/10 7 C400469.7 LFT LWR 8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	R MOUNT WLDMT 1 43 6-18 x 3/4 1 44 CONN ARM 1 45 -HUB 3/4" 1 46 ISIONER PLATE 1 47 O X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1 1
6C500140BOLT, 5/107C400469.7LFT LWR84169750BEARING9C400491.7BELT TEN10C500029BLT-1/4-2011C400498.17ENGAGEI12C400454.17RIGHT SH	6-18 x 3/4 1 44 CONN ARM 1 45 -HUB 3/4" 1 46 ISIONER PLATE 1 47 O X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1 1
7 C400469.7 LFT LWR 8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	CONN ARM 1 45 -HUB 3/4" 1 46 ISIONER PLATE 1 47 O X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1 50
8 4169750 BEARING 9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEN 12 C400454.17 RIGHT SH	-HUB 3/4" 1 46 ISIONER PLATE 1 47 O X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1 50
9 C400491.7 BELT TEN 10 C500029 BLT-1/4-20 11 C400498.17 ENGAGEI 12 C400454.17 RIGHT SH	ISIONER PLATE 1 47 0 X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 027 GEARBOX 1 50
10C500029BLT-1/4-2011C400498.17ENGAGEI12C400454.17RIGHT SH	X 3/4 2 48 MENT ARM 1 49 IAFT GUARD 1 50 27 GEARBOX 1
11 C400498.17 ENGAGE 12 C400454.17 RIGHT SH	MENT ARM 1 49 IAFT GUARD 1 50 227 GEARBOX 1
12 C400454.17 RIGHT SH	AFT GUARD 1 50 27 GEARBOX 1
	27 GEARBOX 1
13 4169756 V-BELT 69	DOBLIDLER 1
14 C100208 PULLEY, I	
15 4176442 S-RT SHA	FT GUARD CVR 1
16 C500003 KEY, 1/4 x	7/8 HALF MOON 1 *NO
17 4169757 BELT, 694	
18 C500177 BOLT, 3/8-	
19 C100052 BEARING	, CONTROL 2
20 C500011 KEY, 3/16	SQUARE X 1 1
21 C600030 BLADES S	SUB-ASSEMBLY, 1
	/ 5/16" HOLES 26
	, S2 BOLT 3/4 2
	-18 AUTO. LOCK 52
,	REEL 2BK52H 1
26 4169748 PULLEY, I	MOTOR 3BK28X1 1
	6-18 X 3/4 GR 8 52
28 C500137 WASHER	1/4 LOCK 4
29 C500041 NUT, 3/8-1	
	3/8" FLAT 8
31 C500043 BOLT, 3/8-	
32 C500029 BOLT, 1/4-	
33 C500139 NUT, 1/4-2	
	1/4" FLAT 1
	3/8 LOCK 2
36 C500133 BOLT, 5/10	
	5/16 LOCK 9
38 64163-115 7/16" SAE	FLAT WASHER 1

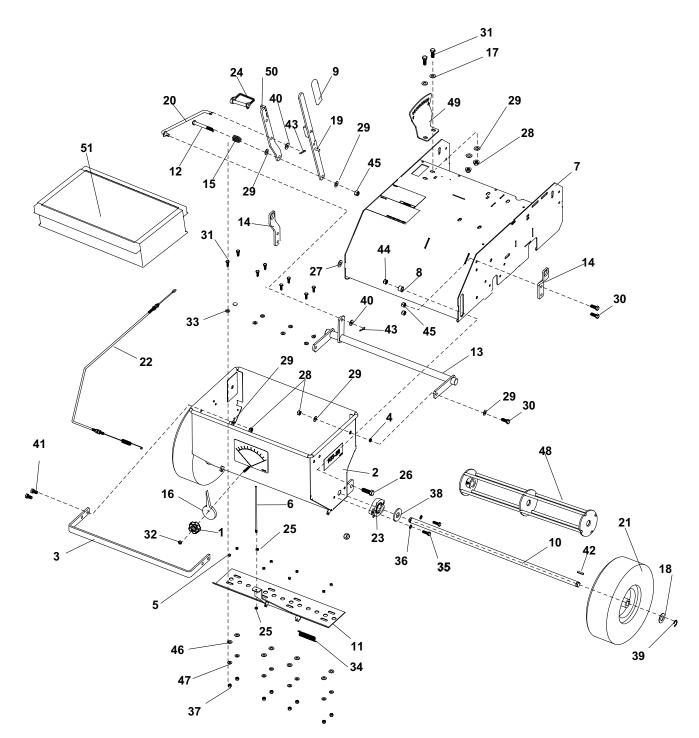
ITM	PART NO.	DESCRIPTION	QTY
39	C100655	SPRING, SMALL	1
40	C500078	E-RING, 1/2"	1
41	64164-50	KEY, 1/4" SQ X 2.20" LONG	1
42	64123-11	BOLT, 7/16-20 X 1"	1
43	C500238	RIVET, 3/16 X 5/8 POP	6
44	64229-05	NUT-NYLON LOCK 1/2-13	1
45	C500170	BOLT, 3/8-16 X 3-1/2	2
46	C500011	KEY, 3/16 SQUARE X 1	1
47	C300015	FLAT, DRAG SHIELD	1
48	C500081	NUT, 3/8-16 WHIZ LOCK	6
49	64123-139	BLT-HEX 3/8-16X4	1
50	C500135	BOLT, 1/2-13 x 2-1/2	1

*NOT ILLUSTRATED

HOPPER ASSEMBLY

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FIGURE 4



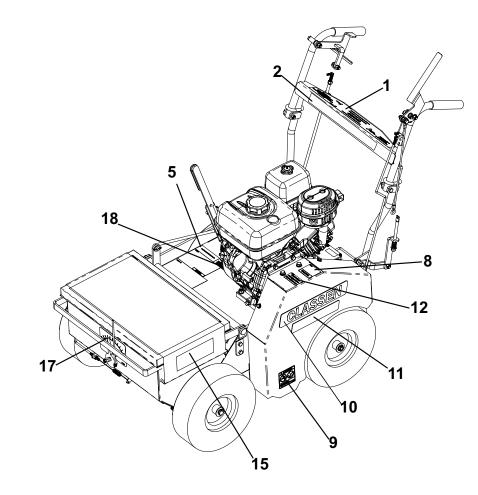
HOPPER ASSEMBLY

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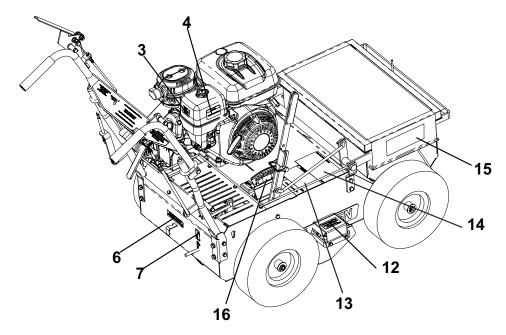
FIGURE 4

ІТМ	PART NO.	DESCRIPTION	QTY	ITM	PART NO.	DESCRIPTION	QTY
$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\23\\14\\5\\6\\7\\8\\9\\01\\12\\23\\24\\25\\26\\7\\8\\9\\30\\13\\23\\34\\5\\6\\7\\8\end{array}$	4172692 C400450.17 4170181.7 4170182 4170183 4170183 4170184.17 4170714 4170714 4170714 41707185 C100007 C400458 C400460 C500159 C400466.7 C400468.7 C500065 C400478.17 C500137 C400480 C400488.7 C400490.17 4169760 4169762 4169759 4170081 C100145 C500150 C500034 C500150 C500034 C500041 C500042 C500043 C500044 C500133 C500155 C500068 C500194	KNOB-5 PRONG 1/4-20 SEED HOPPER BOLT-ON BUMPER BUSHING, HEIGHT CNTRL BUSHING, SEED GATE GATE OPERATION FLAG S-MAIN BODY W/LABS BUSHING, SEED BOX GRIP, RUBBER SHAFT, KEYED SEED GATE WELDMENT BOLT, 3/8-16 x 3 HEIGHT CNTRL WLDMT HEIGHT CNTRL BRCKT SPRING-SPEED STOP SEED FLOW SELECTOR WASHER, 1/4 LOCK WASHER, WHEEL DEPTH ADJUST LEVER HEIGHT SLCTR WLDMT WHEEL & TIRE 13XX5.0X6 CONTROL CABLE, HTS-20 BEARING, 3/4" SHAFT PIN / WIRE LOCK NUT, #10-24 HEX BOLT, 1/2-13 x 1-1/2 WASHER, 1/2 FLAT NUT, 3/8-16 LOCK WASHER, 3/8" FLAT BOLT, 1/4-20 x 3/4 NUT, 1/4-20 LOCK WASHER, 1/4" FLAT SPRING, CLUTCH CABLE BOLT, 5/16-18 x 1 WASHER, 3/4 FLAT	8 1 2 1 1 1 1 2 1 1 2 1 1 2 1 1 2	39 40 41 42 43 44 45 46 47 48 49 50 51	64221-08 C500083 C500177 C500011 4170473 64229-05 C500076 64240-07 4172199 C400456.7 4176463 C400489.7 C100078	E-RING .750 WASHER, 5/16 FLAT BOLT, 3/8-16 X 3/4 KEY, 3/16 SQUARE X 1 PIN, 1/8 X 1 COTTER NUT-NYLON LOCK 1/2-13 NUT, 3/8-16 NYLOC WASHER, 3/8" NYLON WASHER-6MM SEED AGITATOR S-PLATE, DEPTH SLCTOR STOP, DEPTH ADJUST COVER, VINYL SEED BOX	2 1 4 2 1 2 4 8 8 1 1 1 1 1

FIGURE 5



HTS-20H



ASSEMBLY LABELS

HTS-20H _____

FIGURE 5

ΙТΜ	PART NO.	DESCRIPTION	QTY	ІТМ	PART NO.	DESCRIPTION	QTY
1	4176202	LABEL, HANDLES	1				
2	4173007	DECAL, SM CLASSEN PRO,	2				
3	C100060	DECAL, MUFFLER	1				
4	C100070	DECAL-CARBON MONOXIDE	1				
5	C100504	DECAL, SPARK ARRESTOR	1				
6	4176208	LABEL, TRANS ENGMNT	1				
7	4176207	LABEL, PARKING BRAKE	1				
8	4168760	LABEL WARN-HAND PINCH	1				
9	20942	LABEL-DANGER	1				
10	4171963	DECAL, CLASSEN BLACK	1				
11	4171825	LABEL-CLASSEN PRO	2				
12	4176205	LABEL, GREASE BEARING	2				
13	4165977	LABEL-READ MAN/SPANISH	1				
14	4169927	DECAL, SEED APPL CHART	1				
15	C100727	DECAL-HTS-20	2				
16	4176203	LABEL, BLADE HT LOWER	1				
17	C100726	DECAL, SEEDER GAUGE	1				
18	C100505	DECAL, CARB APPROVAL	1				



2 YEAR LIMITED WARRANTY

Schiller Grounds Care, Inc. 1028 Street Road • Southampton, PA 19866 Telephone: 1-800-3666-6268

TWO YEAR LIMITED WARRANTY

This Classen Hydro Overseeder is warranted against defects in materials and workmanship for a period of two (2) years from the date of purchase under the following terms and conditions. Schiller Grounds Care's responsibility under this limited warranty is restricted to repairing or replacing, at its option, any covered part found to be defective in material or workmanship during the warranty period. All parts replaced under warranty will be considered as part of the original product and any warranty on the replaced parts will expire coincidentally with the original product warranty. Warranty service must be performed by an authorized Classen dealer or at our factory located at 1028 Street Road, Southampton PA. Warranty service will be performed without charge to the purchaser for parts and labor. The purchaser will be responsible, however, for the cost and expense of transporting the Hydro Overseeder, part or accessory to and from an authorized dealer's service center or to our factory, for any premium charged for overtime labor requested by the purchaser and for any service and/or maintenance not directly related to any defect covered under this limited warranty. Proof of purchase will be required to substantiate any warranty claim.

Schiller Grounds Care makes no warranty with respect to engines, tires, batteries, belts, regulators, starter-generators, gearboxes, or other parts not of its manufacture. The engine warranty is covered by the engine manufacturer, and these other parts may be covered by the warranties of their respective manufacturers. Consult the Operator's Manual for the engine provided with your product or ask an authorized dealer for the terms and conditions of these warranties.

This limited warranty does not include engines or engine parts, tires, batteries, or transmissions 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, filters, blades, belts, and lubricants. This limited warranty does not cover damages or defects due to normal wear and tear, lack of reasonable and proper maintenance, failure to follow operating instructions or Owner's Manual, misuse, lack of proper storage or accidents, nor does it cover routine maintenance parts and service. This limited warranty does not cover any defects due to repairs, modifications or alternations made to the product by anyone other than Schiller Grounds Care, Inc. or its authorized dealers.

This limited warranty does not cover any Classen Hydro Overseeder, part or accessory that (i) has been subject to misuse, abuse, neglect, negligence or accident, or that has not been assembled, operated or maintained in accordance with the operating or maintenance instructions specified in the Operator's Manual; or (ii) has been altered or modified so as to adversely affect its operation, performance or durability, or that has been altered or modified in ways not approved by Schiller Grounds Care. In addition, this limited warranty does not cover repairs made necessary by normal wear and tear, lack of proper protection during storage or normal maintenance parts and service, including, without limitation, such things as routine cleaning, adjusting or replacing filters, spark plugs, carburetors, ignition, starter drive or other drive belts, brakes, or by the use of parts, supplies or accessories, including, without limitation, gasoline, oil or lubricants, which in the reasonable judgment of Schiller Grounds Care are either incompatible with the product, adversely affect its operation, performance or durability or are other than as recommended in the Operator's Manual or other operational instructions provided by Schiller Grounds Care.

To the extent permitted by law, neither Schiller Grounds Care nor any company affiliated with it makes any warranties, representations or promises as to the quality, performance or freedom from defect of the Classen Hydro Overseeder, part or accessory covered by this limited warranty. The authorized dealer makes no warranty of its own and such dealer has no authority to make any representation, warranty or promise on behalf of Schiller Ground Care or to modify the terms or limitations of this limited warranty in any way.

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