CLASSEN®

TRS-20HE / TRS-20BE TURF RAKE
(Serial No. 001000 & UP)

TSS-20HE / TSS-20BE TURF SEEDER
(Serial No. 001000 & UP)

OPERATORS MANUAL

C100540

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INTRODUCTION

THANK YOU

Thank you for purchasing a CLASSEN TRS-20E/ TSS-20E.

READ THIS MANUAL

Read this manual carefully in its entirety. It contains assembly, operating, maintenance, and adjustment instructions for your TRS-20E/TSS-20E. By following the operating and maintenance instructions you will prolong the life of your equipment and maintain its maximum efficiency. Failure to do so could result in personal injury or equipment damage. This manual
should be considered a permanent part of your TRS-20/TSS-20 and should remain with it if you sell it.

WARRANTY

Refer to last page.

MEASUREMENTS

U.S. Units of measure are used in this manual.

SERIAL NUMBERS

Write frame and engine serial numbers, plus model numbers in “Owner’s Record” section below. You may need these numbers when you order parts. The serial number sticker plate is located near
the left rear corner of the TRS-20E/TSS-20E frame.

ORDERING PARTS

When ordering parts, always give the serial number and model of your TRS-20E/TSS-20E as well as the quantity, part number and description of the part needed.

DIRECTIONS

“Right Hand” and “Left Hand” sides of the TRS-20E/TSS-20E are determined by facing the “back” of the unit as you would operate the machine.

PRE-DELIVERY CHECK LIST

CHECK THE FOLLOWING BEFORE YOU DELIVER THE TRS-20E/TSS-20E TO THE CUSTOMER.

1. Guards and shields fastened in place.
2. Decals fastened and legible.
3. Gas lever on engine turned on.
4. All lubrication points greased.
5. Air cleaner.
6. Touch up scratches.
7. Add engine oil (refer to Engine manual)
8. Add fuel, start engine, test run.

DATE SET UP _____/_____/_____

DELIVERY CHECK LIST

REVIEW THE OPERATORS MANUAL WITH THE CUSTOMER.

1. Schiller Grounds Care, Inc. warranty.
2. Safe operation and service.
3. How to use controls.
4. Operating the machine correctly.
5. Transporting the TRS-20/TSS-20.
6. Correct fuel and lubricants.
7. Daily and periodic inspections.
8. Changing oil after break-in period.
9. Servicing the TRS-20E/TSS-20E regularly and correctly.
10. Schiller Grounds Care, Inc. parts and service.
11. Give the customer the Operator's Manual and encourage customer to read it.

DATE DELIVERED
_____/_____/_____

SIGNATURE _____

OWNER'S RECORD

DATE PURCHASED

_____

TRS-20E/TSS-20E SEEDER MODEL NUMBER

_____

ENGINE MODEL NUMBER

_____

TRS-20/TSS-20 SERIAL NUMBER

_____

ENGINE SERIAL NUMBER

_____

SAFETY PRECAUTIONS

TRAINING

1. Regard the unit as a piece of power equipment and teach this regard to all who operate this unit.
2. Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
3. Never allow children, teenagers or people unfamiliar with these instructions to use this piece of equipment.
4. Avoid operating unit while people, especially children or pets, are nearby. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
5. Be sure you know how to stop the TRS-20E/TSS-20E at a moment's notice.
6. When using the TRS-20E/TSS-20E, make certain frame plate is attached at all times when not bagging.

PREPARATION SAFETY

1. The use of personal protective equipment, such as (but not limited to) protection for the eyes, ears, feet and head is recommended.
2. While operating, always wear substantial foot wear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
3. Area should be free of all obstacles and debris.

ENGINE SAFETY

1. Handle gasoline with care; it is highly flammable.
2. Use an approved gasoline container.
3. Always add fuel before starting the engine.

⚠ WARNING ⚠

<u>DO NOT</u> FILL TANK COMPLETELY FULL.

<u>DO NOT</u> SMOKE WHILE YOU FILL FUEL TANK.

<u>DO NOT</u> REMOVE GAS CAP IF ENGINE IS RUNNING.

<u>DO NOT</u> OPERATE ENGINE IN A CONFINED SPACE WHERE DANGEROUS CARBON MONOXIDE FUMES CAN COLLECT.

4. Fill the fuel tank outdoors.
5. If fuel is spilled, do not attempt to start the engine. Move away from the area of the spill and avoid creating any source of ignition until fuel vapors have dissipated.

OPERATIONAL SAFETY

1. Carefully read and follow all caution stickers.
2. Operate only in daylight or good artificial light.
3. Do not operate machine unless all guards, shields and covers are in place and in proper working condition.
4. It is essential all operator safety mechanisms be connected and in operating condition prior to use.
5. Do not change the engine governor settings or over-speed the engine. Operating an engine at excessive speed may increase the hazard of personal injury.
6. Disengage all blade and drive clutches (release bail) before starting.
7. Start the engine carefully with feet well away from the blades.
8. Do not put hands, feet or clothing near rotating parts while the unit is being operated.
9. Travel up and down slopes at a 45° angle rather than across, to prevent unit from tipping over.
10. Exercise extreme caution when changing direction on slopes. Do not get too close to sharp drop-offs or operate unit on excessively steep slopes.
11. Use caution when backing up or pulling the unit towards you.
12. Stop the blades if unit has to be tilted for transportation, when crossing surfaces (i.e. sidewalks, driveways, stepping stones, etc.) or when transporting the unit to and from the area being worked on.
13. Never pick up or carry a TRS-20/TSS-20 while the engine is running.

14. Stop the engine and disconnect the spark plug wire:
    a) before checking, cleaning or working on unit
    b) after striking a foreign object (inspect the unit for damage and make repairs before restarting and operating)
15. Stop the engine:
    a) whenever you leave the unit
    b) before refueling
    c) before clearing blockages.
16. Reduce the throttle setting during engine run-out and, if the engine is provided with shut-off valve, turn the fuel off at the conclusion of operating.
17. Before shutting off, put drive lever in neutral.

OPERATION

PREPARATION

1. Carefully read this manual and operate TRS-20E/TSS-20E correctly.
2. Always check machine on level ground.
3. Visually check all moving parts and all fasteners, if loose or broken, tighten or replace. Check for broken or bent blades, replace if necessary.
4. Lubricate all fittings after every four hours of using machine, using a pressurized gun with standard lithium base lubricant (see "General Maintenance" section). Wipe off fittings before and after lubricating.
5. Add oil to the engine crankcase with engine resting in a level position (refer to engine manufacturer's Owner's Manual for the correct type and amount of oil).
6. Fill the fuel tank according to engine manufacturer specifications.
7. Police lawn area for obstacles and debris (i.e. sprinklers, hoses, toys, etc.)
8. Mark underground sprinkler heads and other hidden obstacles to prevent damage.

⚠ CAUTION ⚠

TO AVOID INJURY, DO NOT PLACE YOUR FEET OR OTHER BODY PARTS UNDER THE BLADES WHILE STARTING THE ENGINE.

STARTING ENGINE

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

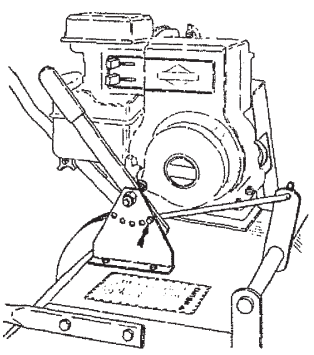

Fig. 1

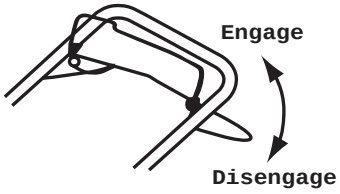

Fig. 2

TRANSPORTING THE TRS-20E/ TSS-20E

1. Position height adjustment lever to the start/ transport position (see Fig. 1).
2. Start motor , Run motor at one half throttle.
3. Engage top bail.
4. Select speed lever.
5. Bottom bail up for engagement for main shaft

OPERATING THE TRS-20E/TSS-2E

1. Put speed lever in neutral position
2. Start engine
3. Engage top bail
4. Select forward or reverse with the speed lever.
5. Drive TRS-20E/TSS-20E to the area to be raked or seeded.
6. Move height adjustment lever to the appropriate setting for the shaft assembly being used. (see ''optional shaft assemblies'' section)
7. Lift bottom bail to engage the main shaft. Release bail to stop

OPTIONAL BLADE ASSEMBLIES

CHANGING BLADE ASSEMBLIES

Within minutes your machine can be converted to a turf rake, turf seeder or turf slicer by purchasing the optional blade assemblies available complete with side plates, bearings and drive pulley. Changing the blade assembly can be done quickly as described below.

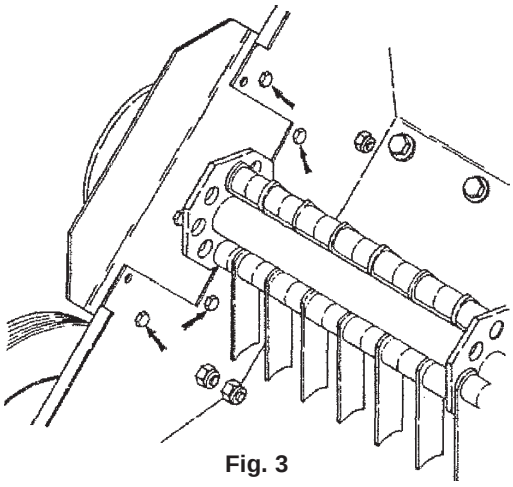

Fig. 3

1. Set unit up on block allowing enough distance beneath machine to change blade assembly.
2. After removing the belt shield, remove the twelve bolts on the left side and three on the right side which hold the blade assembly to the main body (see Fig. 3).
3. Remove the belts from both sides and remove the entire blade assembly. There is no need to loosen any set screws.
4. Next install the optional blade assembly and fasten with six 1/4" x 5/8" bolts on each side. Tighten all bolts on both shields. Center the shaft and tighten the two set screws in each bearing using Pro Lock (nut type, medium strength).
5. When changing back to the original shaft it will not be necessary to loosen any set screws. Only the bolts in the belt shields and the eight bolts holding the shaft will need to be removed.

⚠CAUTION⚠

BE CERTAIN THAT THE SET SCREWS ARE TIGHTENED PROPERLY IN BEARINGS AND PULLEY WHEN REASSEMBLING.

REPLACING SHAFT ASSEMBLY ONLY

If replacing the existing shaft assembly, only follow steps 1 through 3 above. Proceed with the following steps.

1. Remove the two drive pulleys and bearing plates from the main shaft (one on each side). Replace with new shaft. Reinstall the bearing plates and drive pulleys on the new shaft using Pro Lock (retaining 1, medium strength) on the shaft and Pro Lock (nut type, medium strength) on the set screws. The pulleys will be positioned on the shaft by bolts, the 1/4" lock washer and the pulley retainer washer.
2. Route the belt behind the idler pulleys and roll the belts onto the lower pulleys then reinstall the belt shields.

⚠WARNING⚠

CAUTION: BE CERTAIN THAT THE SET SCREWS ARE TIGHTENED PROPERLY IN BEARINGS AND PULLEY WHEN REASSEMBLING.

RECOMMENDED HEIGHT ADJUSTMENTS

Raking Height

When using the Turf Rake with its raking (flail) blade assembly adjust the raking height as follows.

Normal height is set by placing the Turf Rake on a hard surface making sure one satellite shaft is at dead bottom. Adjust the wheels so the raking fingers on the bottom shaft just touch the ground. DO NOT set the fingers so that they will penetrate the ground as this will counteract the centrifugal force of the fingers and prevent the from raking properly.

With repeated use, raking side of the fingers will begin to wear. To give the fingers a new square raking edge, remove the end plates and turn the entire main shaft assembly 180° and replace it on the Turf Rake. NOTE: Use Pro-Lock (retaining 1, medium strength) on the 7" pulley on the main shaft.

To prolong the life of the main shaft, extra holes are provided. If the circular holes holding the satellite shafts become distorted, rotate all four satellite shafts to the next set of holes.

Seeding/Multipurpose Height

The seeding/multipurpose blades are used for cutting grooves for over-seeding and can also be used for verticutting grasses. To set the height properly place unit on the lawn surface and adjust the wheel height up (see Fig. 4). Adjusting the wheel height up lowers the blades.

Seeding

The proper height setting for over-seeding is approximately 1/4" into the ground. Adjust the wheel height up approximately one notch. If set deeper, grass seed being applied may not germinate.

For best results, over-seed in two passes of 1/2 application rate at right angles or in a criss-cross pattern. Water heavily immediately after seeding then lightly for 10-14 days keeping soil moist.

Slicing

The proper height setting for slicing or aerating is 1/2" to 3/4" into the ground. Adjust the wheel height up one or two notches.

For crawling grasses such as Zoysia, Bermuda, Bahia, etc. raise the wheels only one notch. Crawling grasses should not be sliced too deeply.

For single strand grasses like Bluegrass or Rye, aerate in perpendicular directions for more even slicing. For example, slice in a North-South direction on the first pass, switching to an East-West direction on the second pass.

As the seeder/multipurpose blades wear they may be rotated to provide a new cutting edge. The wheels may be raised to allow the blades to penetrate deeper into the ground.

⚠CAUTION⚠

BE CERTAIN THAT THE SET SCREWS ARE TIGHTENED PROPERLY IN BEARINGS AND PULLEY WHEN REASSEMBLING.

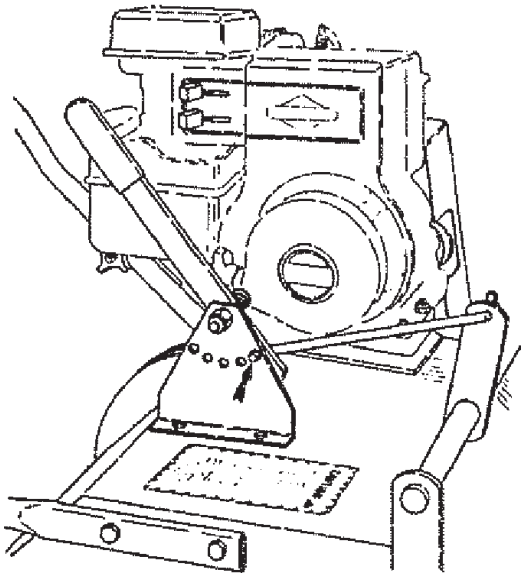

Fig. 4

Slicing Height

The slicer blade assembly is recommended for slicing, verticutting or aerating when a thinner blade is preferred. This is the recommended blade for use on golf course greens. To set the height properly place unit on the lawn surface and adjust the wheel height up (see Fig. 4). Adjusting the wheel height up lowers the blades.

The proper height setting for slicing or aerating is 1/2" to 3/4" into the ground. Adjust the wheel height up one or two notches.

For crawling grasses such as Zoysia, Bermuda, Bahia, etc. raise the wheels only one notch. Crawling grasses should not be sliced too deeply.

For single strand grasses like Bluegrass or Rye, aerate in perpendicular directions for more even slicing. For example, slice in a North-South direction on the first pass, switching to an East-West direction on the second pass.

As the slicer blades wear they may be rotated to provide a new cutting edge. The wheels may be raised to allow the blades to penetrate deeper into the ground.

GENERAL MAINTENANCE

TO KEEP THE TRS-20E/TSS-20E IN GOOD OPERATING CONDITION, PERFORM THE FOLLOWING:

- 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.
- Keep all safety decals legible. Remove all grease, dirt and debris from decals. Any safety decal that becomes illegible should be replaced immediately (see 'Safety Decals" section). Safety decals can be affixed by peeling off the backing and applying to clear, dry surface. Smooth out to remove any air bubbles.
- Do not operate equipment without shields in place.
- Do not make any adjustments or perform any maintenance while the engine is running.
- Check engine mounting bolts frequently to maintain proper tightness.
- Thoroughly clean off blades when application is completed and apply a light coat of oil to prevent rust on blades.
- Keep belt free of oil and dirt.
- Check for worn or deteriorating components that could create a hazard. When new components are installed, be sure that current safety decals are affixed to the replaced components. Safety decals can be affixed by peeling off the backing and applying to clear, dry surface. Smooth out to remove any air bubbles.

ENGINE MAINTENANCE

- Refer to engine manufacturer's Owner's Manual.
- Check engine oil level with engine resting in a level position.
- Inspect air filter element and replace if necessary.
- If carburetor adjustment is necessary, stand to one side and keep feet and hands clear while making adjustments.

MACHINE STORAGE

STORAGE INSTRUCTIONS

⚠ SAFETY WARNING ⚠

TO PREVENT POSSIBLE EXPLOSION OR IGNITION OF VAPORIZED FUEL, DO NOT STORE EQUIPMENT WITH FUEL IN TANK OR CARBURETOR OR NEAR OPEN FLAME (I.E. FURNACE, WATER HEATER, PILOT LIGHT).

Before the TRS-20E/TSS-20E is put into storage for any period exceeding 30 days, the following steps should be taken.

1. Drain all fuel from fuel tank and fuel lines.
2. Start engine and run until all fuel is used from carburetor float bowl.
3. While engine is still warm, drain the crankcase oil and replace with the proper weight oil corresponding to the season the TRS-20E/TSS-20E will next be used (refer to engine manufacturer's Owner's Manual).
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 that oil.

OPERATION AFTER EXTENDED STORAGE

To put TRS-20E/TSS-20E into operation after an extended storage:

1. Check for loose parts and tighten if necessary.
2. Check for cracked or broken blades and replace,
3. Check that all safety decals are in place and legible.
4. Fill fuel tank.
5. Check engine oil level with engine in level position (refer to engine manufacturer's Owner's Manual).
6. Start engine.
7. Check for fuel leaks.

CARE FOR HYDRAULIC SYSTEM

To keep the hydraulic system in working order, there are a few steps needed to take place. If synthetic oil were used we would suggest a full synthetic oil such as **Mobil 1 15W50, Quaker State Full Synthetic 5W50**, or a similar oil.

Oil viscosity is very important to transmission life. For optimum performance the oil viscosity should maintain a viscosity of 13 cSt [70 SUS]. The minimum oil viscosity to prevent component wear is 9 cSt [55 SUS]. These Viscosity requirements are for an oil temperature of 110 degrees Celsius [230 degrees Fahrenheit] Typically; standard SEA 20W-50 multi-viscosity motor oils will meet this requirement. If the operating temperature is elevated then synthetic oil with greater viscosity index, or more viscosity at elevated temperatures, may be needed to meet viscosity requirements.

System Start-up: (purging air from system). Factory Fills unit with SAE 20W-50 multiviscosity motor oil. This will need to be checked when setting up with instructions below.

At system start-up, several things need to be accomplished to ensure a properly running system.

1. Fill the BDU case and expansion level and ensure they do not empty during the following procedure.
2. Start engine and increase throttle to at least 2/3 speed.
3. Open bypass valve by depressing bypass plunger and holding.
4. Adjust control linkage such that transmission control is stroking full forward.
5. Move and hold control in forward for 3 seconds; repeat two additional times.
6. Close bypass valve be releasing bypass plunger.
7. With engine still at same speed, repeat step 5.
8. Move control to neutral.
9. Check engine speed. Adjust to recommended maximum engine speed.
10. Adjust neutral position.
11. Adjust forward control stop to recommended axle speed.
12. Adjust reverse control stop to recommended axle speed.
13. If axle speed is not achieved ensure linkage allows proper movement of transmission control.
14. If transmission control lever is rotating fully but recommended axle speed is not achieved, repeat start-up procedure.
15. Refill expansion tank oil to recommended level.

E15 (a blend of gasoline and ethanol)

On October 13, 2010, the Environmental Protection Agency partially granted Growth Energy's waiver request application submitted under section 211(f)(4) of the Clean Air Act. This partial waiver will allow fuel and fuel additive manufacturers to introduce into commerce gasoline that contains greater than 10 volume percent (vol%) ethanol and up to 15 vol% ethanol (E15) for use in certain motor vehicles once certain other conditions are fulfilled. It is important to remember that there are a number of additional steps that must be completed - some of which are not under EPA control - to allow the sale and distribution of E15. These include but are not limited to submission of a complete E15 fuels registration application by industry and changes to some states' laws to allow for the use of E15.

What is E15?
What is the E15 Waiver?
What Vehicles May Use E15?
What Vehicles and Engines May Not Use E15?
The Agency is Deferring Action on the Waiver Request for the Following Vehicles Pending Completion of DOE Testing
What Conditions are Part of the Waiver Decision?
What is EPA doing to Address Potential Misfueling?
The Waiver Notices
The Regulations

What is E15?

Ethanol is an alcohol that can be mixed with gasoline to result in a cleaner-burning fuel. The most common blend of gasoline and ethanol is E10, or 10 percent of ethanol to 90 percent of gasoline. E15 is gasoline containing 15 vol% ethanol.

The primary source of ethanol is corn, but other grains or biomass sources may be used such as sorghum, corn cobs, cornstalks, and switchgrass.

What is the E15 waiver?

In order to protect the emission control systems of vehicles and engines, the Clean Air Act prohibits the introduction of fuels or fuel additives that are not substantially similar to the fuels or additives used in certifying vehicles and engines to emission standards. However, the Act authorizes EPA to grant a waiver of this prohibition for a fuel or additive if it can be demonstrated that vehicles and engines using the otherwise prohibited fuel or additive will continue to meet emission standards over their useful lives.

In March 2009, Growth Energy (a coalition of U.S. ethanol supporters) and 54 ethanol manufacturers applied for a waiver to increase the allowable amount of ethanol in gasoline from E10 to E15. The waiver application included data on the impact of E15 on vehicle emissions, fuel system materials, and driveability. Additional data were developed by the US Department of Energy, which began testing for potential impacts of various ethanol-gasoline blends on motor vehicle emissions. This testing followed enactment of the Energy Independence and Security Act of 2007, which calls for significantly increasing the amount of biofuels, such as ethanol, to be used in transportation fuel. EPA received over 78,000 public comments about Growth Energy's application.

EPA is partially granting Growth Energy's waiver request application. This partial grant waives the prohibition on fuel and fuel additive manufacturers on the introduction into commerce of gasoline containing greater than 10 vol% ethanol and no more than 15 vol% ethanol for use in certain motor vehicles. More specifically, this action has two components. First, we are approving the waiver for and allowing the introduction into commerce of E15 for use in Model Year (MY) 2007 and newer light-duty motor vehicles, which includes passenger cars, light-duty trucks, and medium-duty passenger vehicles.

The second component of the action is that we are not approving the waiver for E15 use in MY2000 and older light-duty motor vehicles, heavy-duty gasoline engines and vehicles (e.g., delivery trucks), highway and off-highway motorcycles, and nonroad engines, vehicles, and equipment (e.g., boats, snowmobiles, and lawnmowers) because there is insufficient test data to support it for these vehicles and engines. The Agency is deferring a decision on the applicability of a waiver with respect to MY2001-2006 light-duty motor vehicles. EPA expects to make a determination for these vehicles after DOE test data for those model years becomes available.

What Vehicles May Use E15?

MY2007 and newer cars.
MY2007 and newer light-duty trucks.
MY2007 and newer medium-duty passenger vehicles.

What Vehicles and Engines May Not Use E15?

All motorcycles.
All vehicles with heavy-duty engines, such as school buses, transit buses, and delivery trucks.
All off-road vehicles, such as boats and snowmobiles.
All engines in off-road equipment, such as lawnmowers and chain saws.
All MY2000 and older cars, light-duty trucks, and SUVs.
All 2001-2006 cars, light-duty trucks, and medium-duty passenger vehicles (pending a waiver decision with respect to those vehicles).

The Agency is Deferring Action on the Waiver Request for the Following Vehicles and Pending Completion of DOE Testing

All MY2001-2006 cars.
All MY2001-2006 light-duty trucks.
All MY2001-2006 medium-duty passenger vehicles.

What Conditions are Part of the Waiver Decision?

EPA placed two types of conditions on the waiver for E15: those for mitigating the potential for misfueling of E15 into vehicles and engines for which E15 is not approved, and those

addressing fuel and ethanol quality. All conditions must be met prior to the introduction of E15 into commerce.

Fuel quality conditions:

Ethanol used for E15 must meet ASTM International D4806-10.
The Reid Vapor Pressure for E15 is limited to 9.0 psi during the summertime.

Misfueling mitigation conditions:

Labels must be placed on E15 retail dispensers indicating that E15 use is only for MY2007 and newer motor vehicles.
Product Transfer Documents (PTDs) must accompany all transfers of fuels for E15 use.
Parties involved in the manufacture of E15 must participate in a survey of compliance at fuel retail dispensing facilities to ensure proper labeling of dispensers.
Parties must submit a plan addressing conditions to EPA for approval.

What is EPA doing to Address Potential Misfueling?

EPA is proposing a regulatory program to help mitigate potential misfueling of certain engines, vehicles and equipment with gasoline containing greater than E10 and no more than E15. This proposed rule would require all E15 fuel dispensers to have a label if a retail station chooses to sell E15 and seeks comment on separate labeling requirements for fuel blender pumps and fuel pumps that dispense E85. Similar to the prohibition in section 211(f)(1), the proposed rule would prohibit the use of gasoline containing greater than 10 vol% ethanol in vehicles and engines not covered by the partial waiver for E15. In addition, the proposed rule would require PTDs specifying ethanol content and Reid Vapor Pressure (RVP) to accompany the transfer of gasoline blended with ethanol and a national survey of retail stations to ensure compliance with these requirements. The proposed rule would also modify the Reformulated Gasoline (RFG) program by updating the Complex Model to allow fuel manufacturers to certify batches of gasoline containing up to E15. The proposed measures would help promote the successful introduction of E15 into commerce.

There will be a 60 day comment period for the proposed rule following publication in the Federal Register. In addition, EPA will hold a public hearing at the Millennium Knickerbocker Hotel in Chicago, IL. The hearing will start at 10 a.m. local time and will continue until everyone present has had a chance to speak. People wishing to testify at the hearing should notify Julia MacAllister at (734) 214-4131 (or at macallister.julia@epa.gov) by November 8, 2010. 150 phone lines will be available for those who wish to listen to the hearing but are unable to attend in person. During the hearing, you may call the following toll-free number: 1 -866-299-3188. At the prompt, enter conference code 7342144423 followed by the # sign. Note that you will not be able to present testimony over the phone.

The Waiver Notices

EPA may consider a waiver for gasoline-ethanol blends greater than 10 vol% to be used in non flexible-fueled vehicles under its authority in Clean Air Act section 211 (f)(4).

NOTE: You will need Adobe Acrobat Reader, available as a free download, to view some of the files on this page. See EPA's PDF page to learn more about PDF, and for a link to the free Acrobat Reader.

EPA reviewed the March 2009 application from Growth Energy, available test data and public comments on the

waiver request. On October 13, 2010, EPA determined that, subject to compliance with all of the conditions listed in the waiver decision, a gasoline produced with greater than E10 and no more than E15 will not cause or contribute to a failure of certain motor vehicles to achieve compliance with the emission standards to which they have been certified over their useful lives. Therefore, EPA partially and conditionally granted the waiver request application submitted by Growth Energy for its gasoline-ethanol blend with up to 15 vol% ethanol.

Response to Application for Waiver | PDF Version (58 pp, 4.57M, published November 4, 2010)
Status Update (July 2010)

Status Update (PDF) (2 pp, 493K, November 30, 2009)
Extension of Comment Period: Notice | PDF Version (2 pp, 75K, published May 20, 2009)
Notice of Receipt of Waiver Application | PDF Version (3 pp, 77K, published April 21, 2009)

For further information or assistance, please contact Robert Anderson at 202-343-9718 or anderson.robert@epa.gov.

The Regulations

Proposed Rule: Regulation to Mitigate the Misfueling of Vehicles and Engines with Gasoline Containing Greater than Ten Volume Percent Ethanol and Modifications to the Reformulated and Conventional Gasoline Programs

Fact Sheet: EPA Announces E15 Partial Waiver Decision and Pump Labeling Proposal | PDF Version (5 pp, 530K, October 13, 2010)
Proposed Rule | PDF Version (49 pp, 3.39M, published November 4, 2010)

For further information or assistance regarding please contact EPA's Assessment and Standards Division voicemail at: (734) 214-4636 or email: ASDinfo@epa.gov.

For more information, please contact the EPA Fuels Programs Support Line at 202-343-9755.

Please visit the EPA's Transportation and Air Quality web-based repository of mobile source documents, Document Index System (DIS). This searchable repository contains regulations, Federal Register notices, policy letters, and guidance documents.

EC Declaration of Conformity

The Undersigned Manufacturer:
Schiller Grounds Care, Inc.
1401 Logan Street

Norfolk, NE 68701

Chuck Clark
Director of Operations
Date: March 8, 2011

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

Jim White
Managing Director
Date: March 8th, 2011

Declare that the machine described below:

Make & Type……Classen Self Propelled Turf Rake and Seeder
Category……Turf Rake / Turf Seeder
Series……TRS-20H-E, TSS-20H-E
Engine……Honda
Speed……High idle governor setting 3600 rpm ±100rpm
Net installed power……3.6KW (4.8 HP) and 5.3KW (7.0 HP)

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
Vibration Directive……2002/44/EC
Non Road Emissions……2002/88/EC

Sound:

Sound levels were determined in accordance with Directives 2000/14/EC (Annex V).

Series	TRS-20H-E	TSS-20H-E
Guaranteed Sound Power Level	106 dBA	107 dBA
Sound Pressure	91 dBA	86 dBA
Vibration	7.4 m/s²	6.4 m/s²

Vibration:
Hand/arm vibration was measured at the right and left operator hand holds per ISO 5349-1-2001 and ISO 5349-2-2001. Levels were calculated in accordance with 2002/44/EC.

Intended Use and Limits:
This machine is for seeding grass to areas covered by grass or other vegetation cut to a short height. The machine may also be used as a power rake or dethatcher. It is intended for use on areas ranging from flat to 12 degrees. Loss of control may result on steeper slopes. It is not intended for use in rocky areas.

P/N C800030

CLASSEN®

Schiller Grounds Care, Inc.
1028 Street Road • Southampton, PA 18966
Telephone: 1-800-366-6268

TWO YEAR LIMITED WARRANTY

Effective April 1, 2007

For the period of two years from the date of purchase, CLASSEN MFG., INC. 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 Norfolk, Nebraska, 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.

See the complete line of Turf Care Products from

CLASSEN®

COMPACT AERATORS
CA-18H
CA-18B

STAND ON AERATOR
SA-25

SPLIT DRIVE AERATORS
TA-25D
TA-17D

TURF AERATORS
TA-19D
TA-19B
TA-26D

RECIPROCATING AERATORS
RA-21H
RA-21B
RAS-21H
RAS-21B

TOW/3PT AERATORS
48RT
60RT

TURF SEEDERS
TS-20H
TS-20B
TSS-20H
TSS-20B

TRAILERS
AST

TURF RAKES
TR-20H
TR-20B
TRS-20H
TRS-20B
TR-20RH
TR-20RB

SOD CUTTERS
SC-18/5.5
SC-18/8.0

HYDRO-DRIVE SOD CUTTERS
SCHV-18/5.5
SCHV-18/8.0

Classen reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. Classen, or its distributors and dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

02/2011