ECOLAWN APPLICATOR® MANUAL

Model ECO 100 – 5.5 HP Honda
Commercial self propelled top dresser

Engine

Engine and gear case are factory-filled with high quality SAE 30 detergent oil (SE, SF, or SG). Check level prior to operation. Please refer to the Honda engine manual. Use lead free gasoline WITHOUT oil mixed in.

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WARRANTY

LIMITED WARRANTY FOR ECOLAWN APPLICATOR® (engine excluded)

For one full year from date of purchase, Ecolawn will replace, for the original purchaser, free of charge, any parts of the machine (excluding engine) found upon examination by Ecolawn or its approved agent to be defective material, defective workmanship, or both. This is the exclusive warranty.

This warranty does not apply to engines and their components, as these are warranted separately. This warranty does not apply to parts that have been altered, accidently damaged or abused, improperly lubricated, from normal wear, or other causes beyond the control of Ecolawn.

SAFETY INSTRUCTIONS

This manual solely describes the operation of the Ecolawn Applicator®. Engine operation is not included in this manual. Please consult the Honda engine manual for more information about the engine.

General

Never allow children to operate power equipment.

Do not use Ecolawn Applicator on slopes or hills.

Do not make modifications to the Ecolawn Applicator®.

Only use the Ecolawn Applicator® for its intended purpose.

Keeps hands and objects out of the hopper while is in operation.

Use only original parts to repair the Ecolawn Applicator®.

Guards

Do not run engine or operate machine with any of the guards removed.

Engine

Remove the spark plug wire when machine is not being used to prevent its operation without instructions.

Hopper

Hopper: maximum load 440 pounds or 200 kg
Keep hands away from agitator/mixer.

Decals

All safety decals are available for replacement at no cost.

Operating instructions for the Ecolawn Applicator®

Efficient top dressing

Proceed to top dressing by following the same pattern as when mowing

- Start with the sections of the lawn that are furthest away from the top dresser's supply source in order to decrease circulation from areas that have already been top dressed.

Types of spreading

The versatility of the Ecolawn Applicator® allows it to be used with various substrates:

- compost
- top dressing
- granular fertilizer
- sand
- etc.

Optimal operation

To ensure maximum durability and efficiency of the Ecolawn Applicator®, do not overload the hopper. The weight of some substrates such as sand or soil may damage the spreader and reduce power efficiency. Never overload the maximum charge capacity of the hopper (550 lbs).

Comparative table – Substrates and weight

Substrate	Quantity	Weight
Compost (60 % humidity)	10 cubic feet	300 lbs
Mix 50 % compost, 50 % sand	10 cubic feet	550 lbs
Sand	10 cubic feet	800 lbs

Main uses

Top dressing, lawn restoration, and seeding constitute the main uses for the Ecolawn Applicator®. Visit the **Organic Lawn Care** section at www.ecolawnapplicator.com to know more about this subject.

Before using the Ecolawn Applicator® for the first time

Check oil and gas levels

- Engine
- Reducer
- Fuel tank

Trying the Ecolawn Applicator® for the first time

It is recommended to make a few trials with the spreader before starting to top dress a large surface for the first time. Although the adjustment of the spreader had been done, other adjustments may be necessary following the first trials.

As the straps of the machine are new, they may not adhere perfectly to the pulley which may cause sliding when starting the machine for the first time.

1. Start the spreader without adding any charge for about 10 minutes in order to help the straps adhere to the pulley.
2. Fill the hopper to 1/3 capacity and run the spreader for about 10 minutes.
3. Finally, fill the tub to its maximum capacity and start using the spreader.

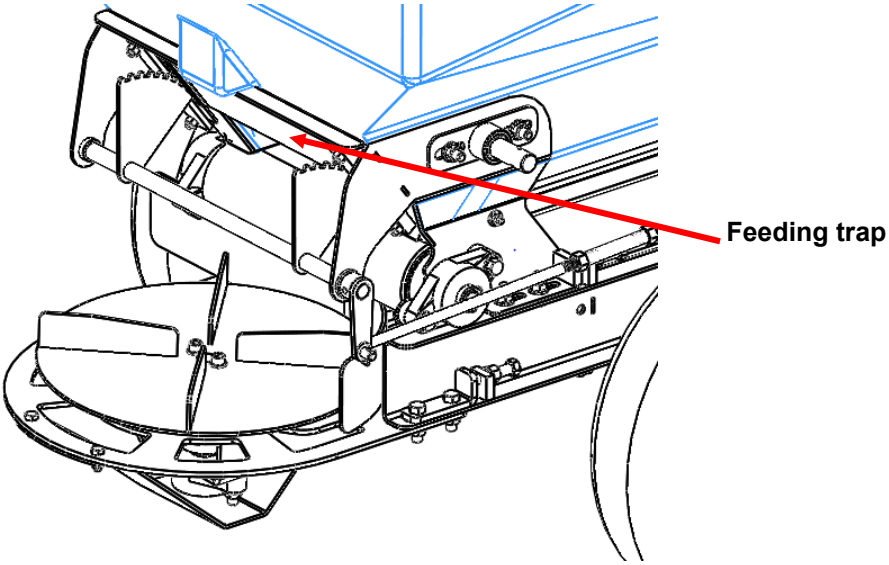
After one hour of usage, make a visual inspection of the spreader. Vibrations combined with a heavy charge may cause nuts and bolts to loosen; tighten if needed. Make this inspection a second time after eight hours of usage.

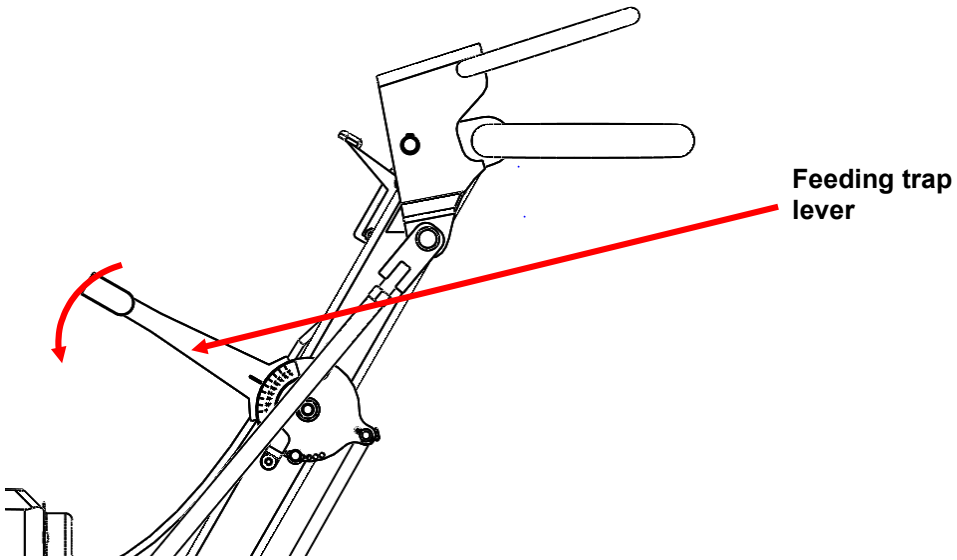
If some pulleys do not correctly run following the first trials, read the section: Ecolawn Applicator® - Troubleshooting and Adjustments.”

Using the Ecolawn Applicator®

Step 1 Filling the hopper

Attention: Ensure that the feeding trap is properly closed, pulling down the lever.



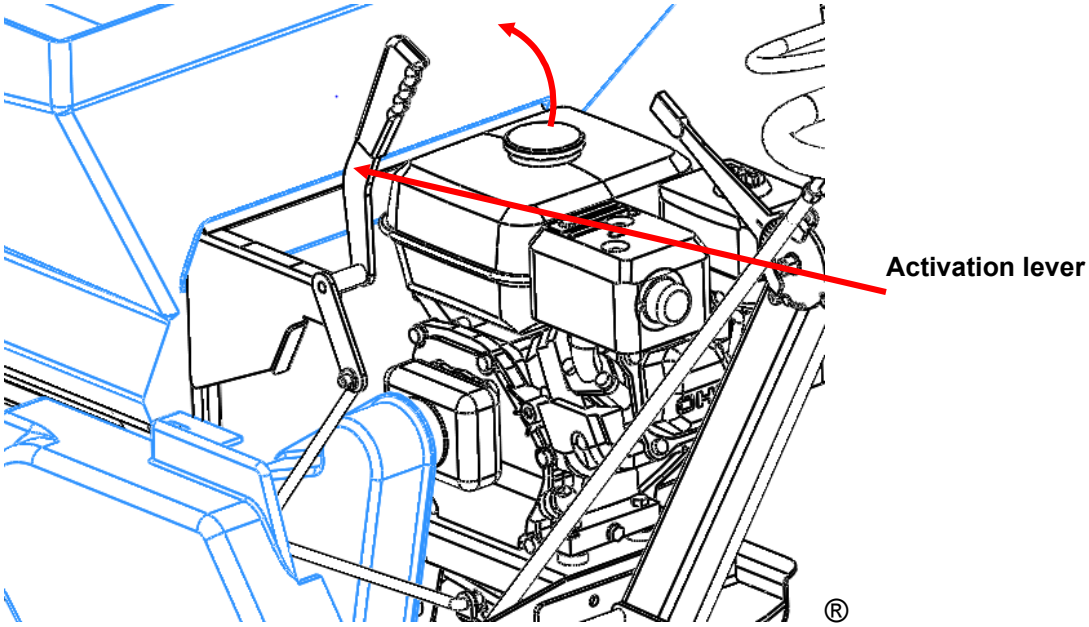


Fill the spreader with the substrate to be spread.

Note: Maximum charge capacity of the hopper is 440 lbs or 200 kg.

Step 2 Starting the engine

Attention: Before starting the engine of the spreader, make sure the conveyor is not set in motion. The conveyor activation lever must be pulled up and the feeding trap must be properly closed.



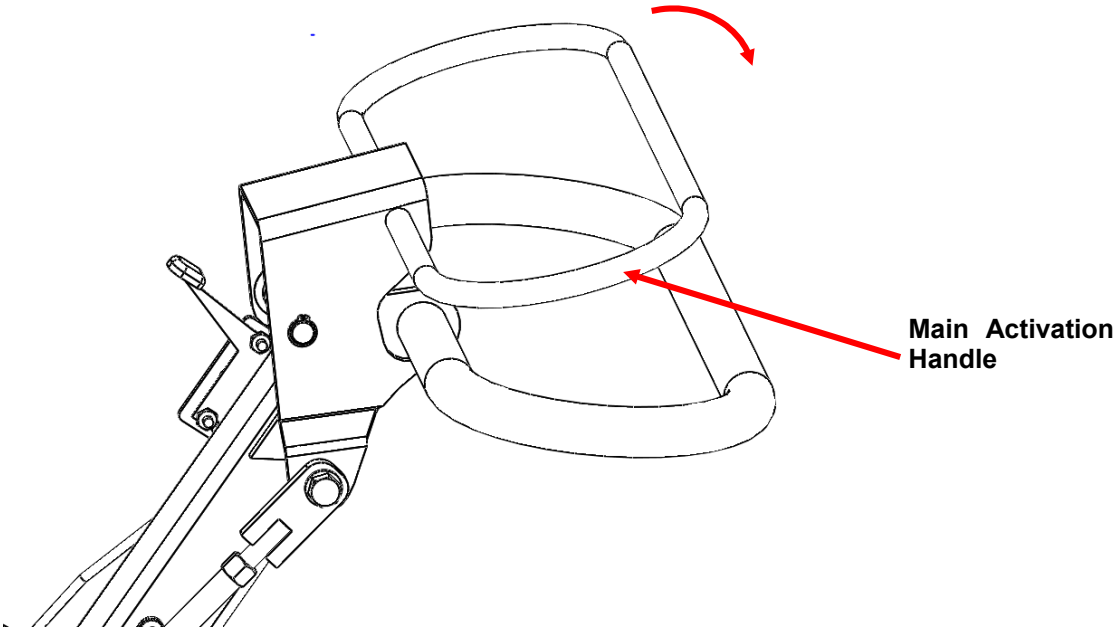
Step 3 Opening the feeding trap

To start spreading the substrate, open the feeding trap and pull down the conveyor activation lever.

Step 4 Top dressing with a substrate

To spread the substrate, propel the spreader forward by pulling down and holding the main activation handle

Note: The engine's speed determines the rapidity and length of the spreading; the opening angle of the feeding trap determines the thickness level of the spreading.



Step 5 Stopping the spreading when hopper is empty

When the hopper is empty, pull up the conveyor lever; close the feeding trap and fill again, if needed.

Ecolawn Applicator® - Troubleshooting and Adjustments

Attention: before proceeding to any adjustment or maintenance operation of the spreader, make sure the engine is off.

The most frequent problems are related to the operation of the conveyor. Check the following items and make the corresponding adjustments, if needed.

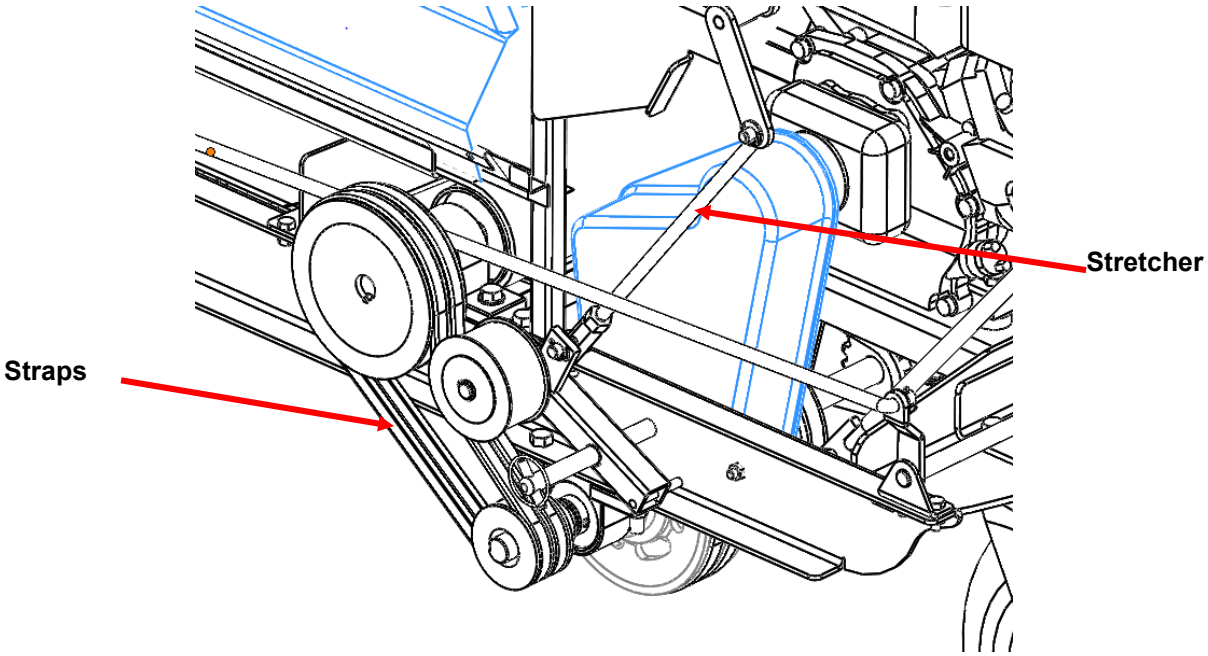
The conveyor belt is not running

Symptom

The hopper of the machine is full. The conveyor is activated by pulling the lever downward however the conveyor belt does not work since the straps are sliding.

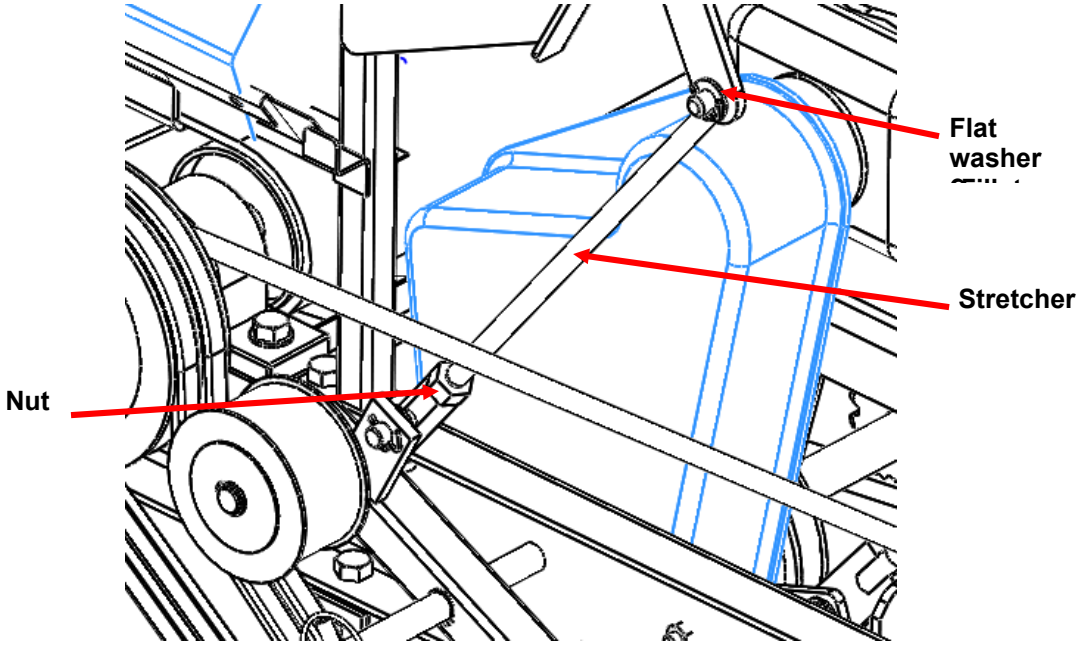
Solution

The straps are not tight enough. First, remove the guards from the stretcher and verify the tension in the straps. It is possible that they actually slide on the pulleys which power the conveyor belts.



If the tension in incorrect, adjust the stretcher of the conveyor, 1/8 inch at a time.

1. Remove the flat washer keeping the stretcher in place.
2. Loosen the nut to adjust tension.
3. Turn the stretcher counter-clockwise to increase tension or clockwise to reduce tension.
4. Tighten the nut to maintain the stretcher at proper tension level.
5. Replace the flat washer.



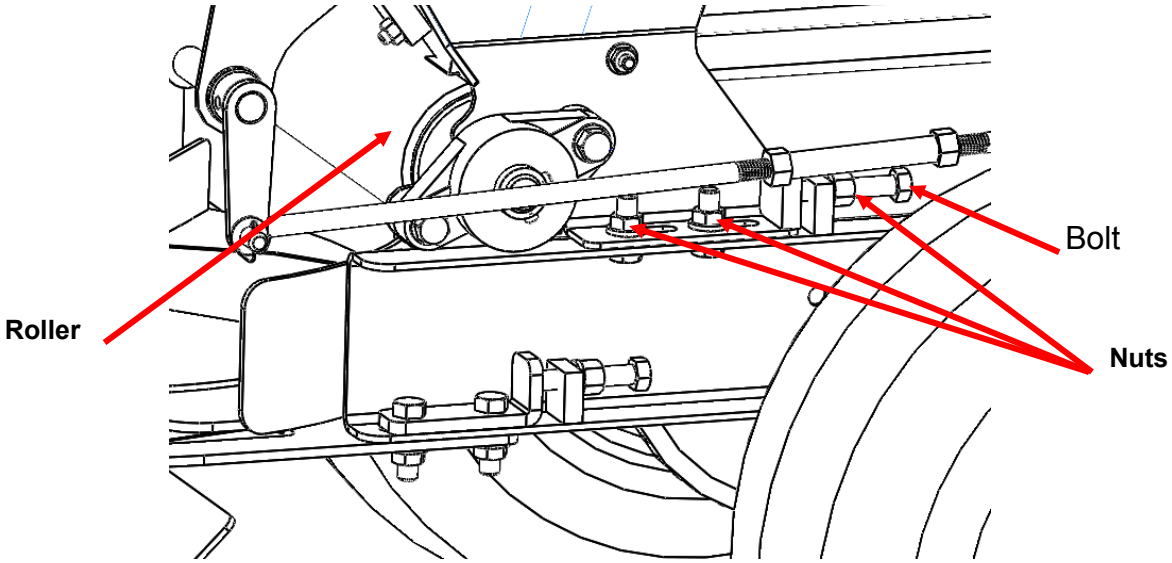
Symptom

The hopper of the machine is full. The conveyor is activated and the conveyor belt is not running although the stretcher is adjusted properly and the conveyor rollers are turning. The conveyor belt is sliding.

Solution

Adjust the conveyor belt rollers on each side, 1/16 inch at a time to increase the tension on the conveyor belt.

1. Loosen the three nuts to adjust tension.
2. Turn the bolt to make the conveyor move forward about 1/16 inch.
3. Tighten the 3 nuts to maintain the conveyor belt in place.
4. Repeat the same procedure to the other side in order for both adjustments to be symmetrical.
5. Do a trial run and readjust if needed.



The spreader does not move forward or does so, with difficulty.

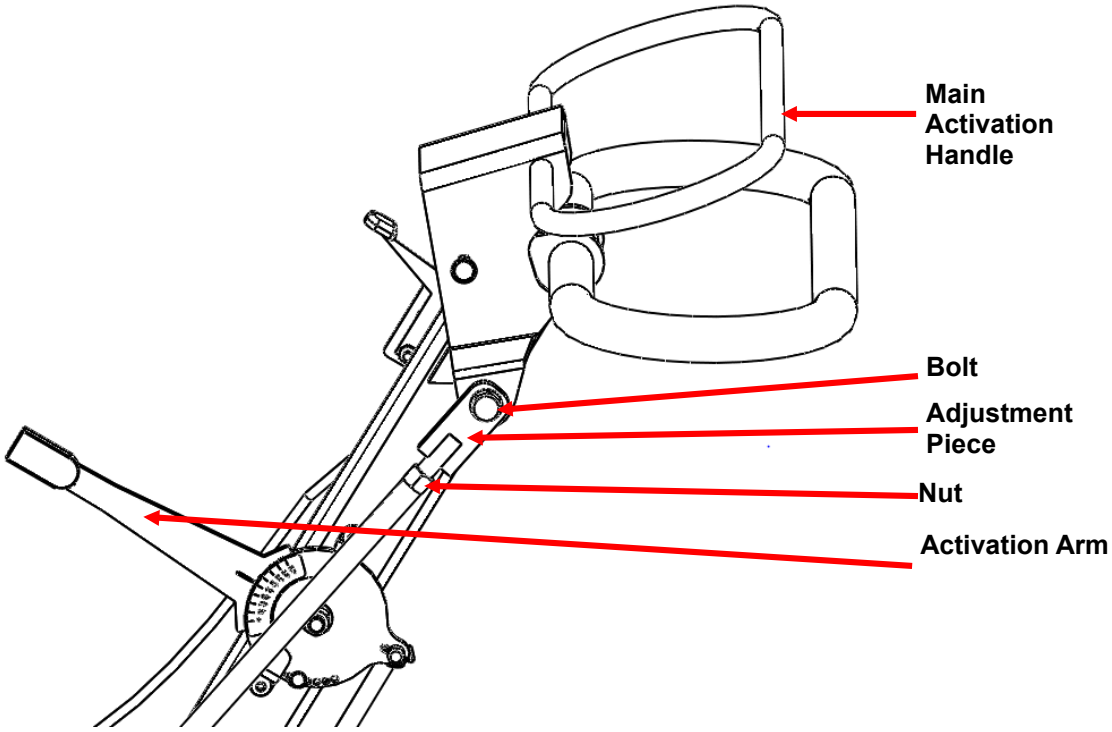
Symptom

The spreader is in operation and does not move forward or does so, with difficulty.

Solution

An adjustment to the main activation handle's pressure may be necessary.

1. Remove the bolt to free the activation arm from its attachment to the main activation handle
2. Loosen the nuts to adjust the pressure.
3. Turn the adjustment piece clockwise to increase pressure or in the opposite direction to reduce pressure.
4. Tighten the nuts to maintain pressure on the activation arm.
5. Put the bolt back in place to reconnect the activation arm to the main activation handle.



The distribution disc is jammed or does not function properly.

Symptom

The spreader goes forward and the conveyor works however the substrate's distribution disc does not rotate and seems jammed. This is usually related to organic or inorganic debris that is stuck between the disc and the guards.

Solution

To unlock the disc, turn it manually or remove debris.

Symptom

The spreader is moving forward, however, the substrate distribution disc is turning without results. This is caused when the pulleys used to make the disc turn are ineffective. They may be filled with substrate, preventing the transmission belt from functioning properly.

Solution

Clean the pulleys and the disk and put back the pulley back in place.

The pulleys do not function properly.

Occasionally, pulleys may be filled with organic or inorganic debris. Make a visual inspection of the pulleys and clean them, if needed.

General maintenance

Shaft bearings

Grease both crankshaft ball bearings on the zerks provided after every 50 hours of operation.

Engine oil /filter

See engine manufacturer’s instructions. Change oil and filter after every 50 hours of operation.

V-Belt

The belts must be tight enough to avoid slipping during operation.

Choice of the appropriate substrate

Quality and characteristic of the substrate

It is particularly important to choose substrate of good quality in order to proceed with an adequate top dressing operation. To save and ensure the efficiency as well as an ecological concern, we suggest using bulk substrate. If this type of substrate is used, make sure it includes the following characteristics: friability, moisture content lower than 65 %, absence of organic matter (stone, plastic, glass) or non decomposed matter (wood pieces).

Moisture content of the substrate

Using a substrate with a moisture content of more than 65 % is not recommended since it will have a tendency to stick to the side of the hopper and other parts of the spreader, such as the mixor/agitator and the distribution disc.

To help the substrate empty from the hopper, it is possible to agitate the spreader by moving it up and down while top dressing which will allow the substrate to loosen up and clear out from the hopper.

In order to reduce the thickening effect of highly moistened substrate, it is possible to coat the sides of the hopper (and other parts) with a graphite-based lubricant. Consult the SLIP Plate lubricant Internet site at www.**slipplate**.com to know more about this topic.

Friability of the substrate

It is very important to verify the friability of the substrate used, that is, its capacity to be reduced into smaller fragments. A substrate that is not very friable can be easily recognized by its composition which is made of numerous compact pieces, and is hard to breakdown.

A substrate that has recently been screened is much more friable. In addition, a substrate containing 10% of sand is more friable, therefore, making the top dresser work more easily.