

# OPERATOR'S MANUAL

COMMERCIAL TOW-BEHIND BROADCAST TOP DRESSER



**ECOLAWN**  
APPLICATOR



RECORD YOUR ECOLAWN SERIAL NUMBER:



SCAN TO  
**ACTIVATE**  
YOUR WARRANTY

**ECO 50S**

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## 2 WARRANTY

Ecolawn Applicator warrants its products to be free from defects in materials and workmanship for **one (1) year** from the date of registered purchase.

**Proof of original purchase** is required to validate this warranty.

From the registered purchase date, Ecolawn Applicator will replace, **at no cost**, any part of the unit—**excluding the engine**—that is deemed defective in material or workmanship by Ecolawn Applicator or an authorized agent, following inspection.

This warranty **does not apply** to any product that has been subjected to:

- Misuse or neglect
- Improper maintenance or installation
- Modification or use of unauthorized parts or attachments
- Accidents or improper application
- Unauthorized adjustments or repairs

**Note:** Engines, motors, and accessories not manufactured by Ecolawn Applicator are covered only by the warranties (if any) provided by their respective manufacturers. Ecolawn Applicator does not extend warranty coverage to these components.

### 2.1 Registration

To activate your warranty, register your ECO 50-S Top Dresser online at:

<https://www.ecolawnapplicator.com/support/register-your-ecolawn/>

### 2.2 Limitation of liability

Ecolawn Applicator's liability, whether arising from warranty, negligence, strict liability, or otherwise, is strictly limited to **replacement of defective parts**.

Ecolawn Applicator will not be liable for any other injury, loss, or damage—**direct or consequential**—including but not limited to:

- Loss of use
- Lost income or profit
- Increased operational costs
- Damage to or spoilage of substrate

Any use or operation of the ECO 50-S Top Dresser in a manner **not expressly permitted** by the Operator's Manual, or the performance of unauthorized modifications, **will void the warranty**.

## 2.3 Parts, Service and Warranty

For all warranty claims, replacement parts, or service inquiries, contact your **local authorized Ecolawn dealer**.

**Note:** Ecolawn Applicator reserves the right to make changes to the design or construction of its equipment without obligation to apply those changes to previously sold units.

This manual is considered a **permanent part** of the ECO 50-S Top Dresser and should remain with the unit at all times.

Replacement manuals are available at:

<https://www.ecolawnapplicator.com/support/owners-manual-parts-list/>

### 2.4 Have questions ?

For further assistance, contact Ecolawn Applicator:

By Phone: 1-866-326-5296  
By E-mail: [info@ecolawnapplicator.com](mailto:info@ecolawnapplicator.com)  
Online at: [www.ecolawnapplicator.com](http://www.ecolawnapplicator.com)

## 3 EC DECLARATION OF CONFORMITY



### EU DECLARATION OF CONFORMITY

Declaration Ref. No.:	CE1845 – EU DoC 1.0
Manufacturer: (name and address)	ECOLAWN APPLICATOR 410, Boul. Poirier, Magog, Quebec. J1X 0A1. Canada.
EU Authorised Representative: (name and address)	HERCO MACHINERY, Niels Van Dijck Hermans Company bvba, Ambacjtsweg 3, BE-2310 Rijkevorsel. Belgium.
Description of Equipment:	Towed, wheeled machine having an open body, to transport and spread materials.
Model / Type:	ECO50 / ECO50S
Serial No.:	2441
EU Directives:	Machinery Directive (2006/42/EC)
Harmonized Standards Applied:	EN ISO 12100 - Safety of machinery. General principles for design. Risk assessment and risk reduction.

We hereby declare that this equipment fulfills all the relevant provisions of the Directives stated and National Laws and Regulations adopting these Directives.

Person empowered to  
draw up the declaration:

Daniel Côté

Signature:

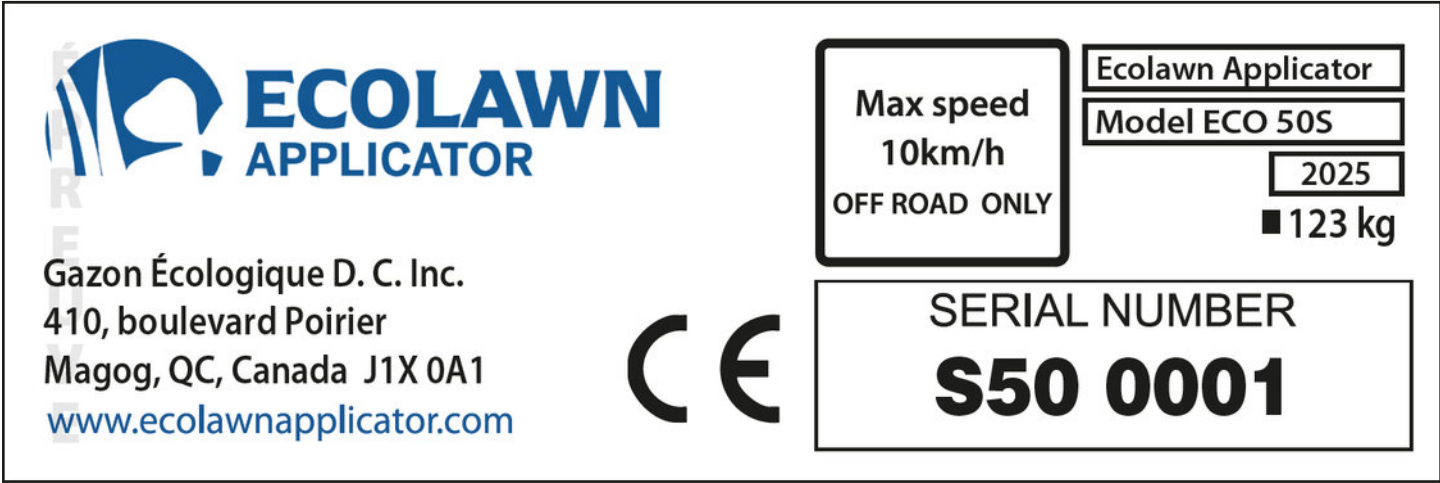
Position: President

Place of issue: Magog, Canada

Date: February 2024

Modifications to the equipment without prior approval will render this declaration null and void.

4 ECO 50-S NAMEPLATE



5 SPECIFICATIONS

Length: 78 in. / 1.92 m.	Ground Speed: Up to 3.4 mph/ 5.5 kph
Width: 34 in. / 0.86 m.	Discharge: Rear
Height: 40 in. / 1.01 m.	Empty Weight: 270 lbs / 123 kg
Hopper Capacity: 11.5 cu. ft. / 0.32 cu. m.	Application Thickness: Up to 1/4 in. / 6.35 mm
Hopper Weight Limit: 500 lbs. / 227 kg	Tire Pressure: 24 psi / 165 kpa
*Spreading Width: 4-18 ft. / 1.2-5.4 m.	

\*Spreading width may vary depending on the density of substrate used.

6 UNIT DESCRIPTION

6.1 Intended Use

The ECO 50-S Top Dresser is a tow-behind implement designed for top dressing and land restoration on residential, institutional, and commercial lawns. This unit is intended for spreading light soil mixes or screened compost.

To operate, fill the hopper with the desired substrate and tow the unit over the area to be treated. The spreading system may be engaged or disengaged as needed. Note that the spreading mechanism is ground-driven—it will only operate when the unit is moving forward.



**IMPORTANT:** Use the ECO 50-S Top Dresser **only** for its intended purpose. Misuse may result in equipment damage or operator injury and will void the warranty.

6.2 System Composition

The ECO 50-S Top Dresser consists of a heavy-duty frame supported by two wheels, which houses and supports all operating components.

The unit is powered by a towing vehicle (refer to your towing vehicle's Operator's Manual for proper specifications and setup). Material is loaded into the hopper, which is mounted on top of the frame. A conveyor belt located at the bottom of the hopper delivers the material toward the ejection system.

A hand-operated control lever engages or disengages the conveyor belt, activates mixer rotation, and opens the feed trap as needed.



## 7 SAFETY INSTRUCTIONS

### 7.1 Before Operating

Read and fully understand this Operator's Manual before operating the ECO 50-S Top Dresser. A replacement manual is available for free at the Ecolawn Applicator website:

<https://www.ecolawnapplicator.com/support/owners-manual-parts-list/>

Throughout this manual, the following safety labels are used:

- **WARNING:** Indicates a hazard that could result in serious injury, property damage, or death.
- **CAUTION:** Indicates a hazard that could result in minor injury or property damage.
- **NOTE:** Provides important information regarding the operation or service of the ECO 50-S Top Dresser.

Always follow all safety instructions—your safety depends on it.

### 7.2 Operators

**WARNING:** Never allow children or untrained individuals to operate the ECO 50-S Top Dresser. Only properly trained individuals who have read and understood this manual should operate the unit. The operator is solely responsible for safe use.

### 7.3 Intended driving surfaces

The ECO 50-S Top Dresser is intended for use on grass, sports fields, and paved surfaces in residential or park areas.

**WARNING:** This unit is not intended for use on streets or roadways with vehicle traffic. Doing so may result in serious injury or death.

### 7.4 Influence

**WARNING:** Never operate the ECO 50-S Top Dresser when under the influence of drugs or alcohol.

### 7.5 Guards

**WARNING:** Keep all shields, guards, and safety devices in place. Do not operate the unit if any guard is missing or damaged. Replace or repair guards before use.

### 7.6 Modifications

Do not modify or alter the ECO 50-S Top Dresser. Ecolawn Applicator does not guarantee the function, quality, or safety of modified units. Unauthorized modifications void the warranty. Always use OEM parts for replacements or repairs.

### 7.7 Safe attire

**WARNING:** Long pants and safety footwear are required when operating the unit. Avoid loose clothing that may get caught in moving parts. Wearing safety glasses, hearing protection, and a dust mask is recommended—some substrates may pose a respiratory hazard.

### 7.8 Safety stickers

The following sticker is applied on the ECO 50-S Top Dresser. If the sticker is missing, or illegible, replace it prior to operating the ECO 50-S Top Dresser. The part number is listed below the image.



Fig 7.8. – P/N: X-0053

### 7.9 Pictograms



### 7.10 Inspection

Inspect the ECO 50-S Top Dresser before each use. Refer to Section 11.2 for detailed inspection procedures.

### 7.11 Operate the Tow Vehicle

**WARNING:** Never operate the tow vehicle in enclosed or poorly ventilated areas. Exhaust fumes contain carbon monoxide, a colorless and odorless gas that can cause serious injury or death.

**WARNING:** Turn off the tow vehicle's engine before performing any maintenance or repairs on the ECO 50-S Top Dresser.

### 7.12 Hazard Areas

**WARNING:**

- Do not stand near the unit during operation.
- Crush hazards exist at all times during use.
- Projectiles may be thrown during spreading.
- All moving parts can cause injury or entrapment.

### 7.13 Hopper

**WARNING:** Never allow any person in the hopper for any reason—it could result in serious injury or death.

**WARNING:** Never reach into the hopper while the unit is operating.

**NOTE:** Do not modify the mixer shaft or its controls.

**CAUTION:** Do not exceed a maximum load of 500 lbs (227 kg). Overloading may damage the unit.

### 7.14 Passengers

**WARNING:** Do not carry passengers. The ECO 50-S Top Dresser is not designed to transport people and doing so could cause injury or equipment damage.

## 7 SAFETY INSTRUCTIONS

### 7.15 Operating on slopes

**WARNING:** Do not operate on hills or slopes—there is a risk of tipping, which could result in injury or death.

**NOTE:**

- If slope operation is necessary, do not exceed a 10° incline.
- Always drive directly up or down the slope; never drive sideways.
- The ECO 50-S Top Dresser is not equipped with emergency brakes—use extreme caution and good judgment when operating on inclines.

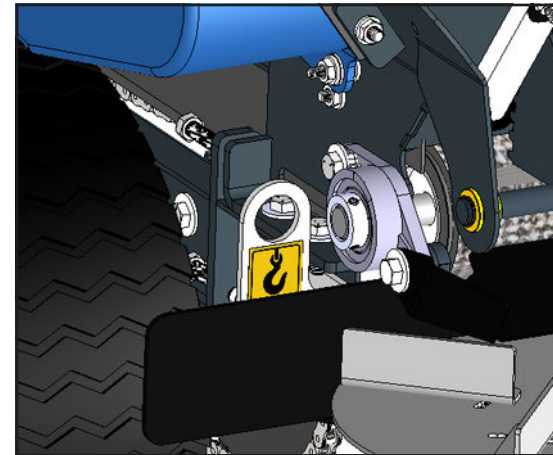


Figure 7.19-1

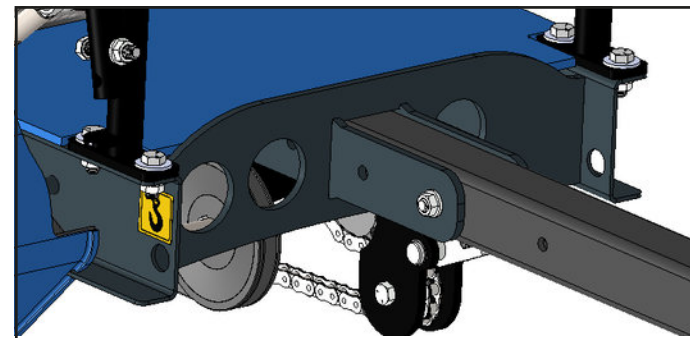


Figure 7.19-2

A sticker at each tie-down point indicates proper lift/secure locations.

See Figure 7.19-3.

Do not lift or secure the unit by any other part.



Figure 7.19-3, P/N: X-0666

### 7.18 Loading

**WARNING:** Keep clear of the unit when loading substrate with mechanical equipment.

The engine must be turned off before loading material into the hopper.

### 7.19 Transporting the unit

The ECO 50-S Top Dresser is not equipped with a braking system. Use extreme caution when loading or unloading the unit from a trailer. Improper handling may result in damage to the unit, property damage, or personal injury.

Using the four designated tie-down/lift points—two at the rear and two at the front of the frame. See Figure 7.19-1 and 7.19-2.

## 8 GENERAL INFORMATION

### 8.1 Labeling and terminology

Record the ECO 50-S Top Dresser's serial number on the cover page of this manual for easy reference when contacting a dealer or distributor for service or replacement parts.

**NOTE:** The terms "right" and "left" refer to the operator's perspective while standing at the steering column at the rear of the unit during operation.

Use only **Original Equipment Manufacturer (OEM)** parts for all repairs and replacements. **Failure to do so will void the warranty.**

Do not modify, misuse, or neglect the ECO 50-S Top Dresser.

**Any unauthorized modification or improper use will void the warranty.**

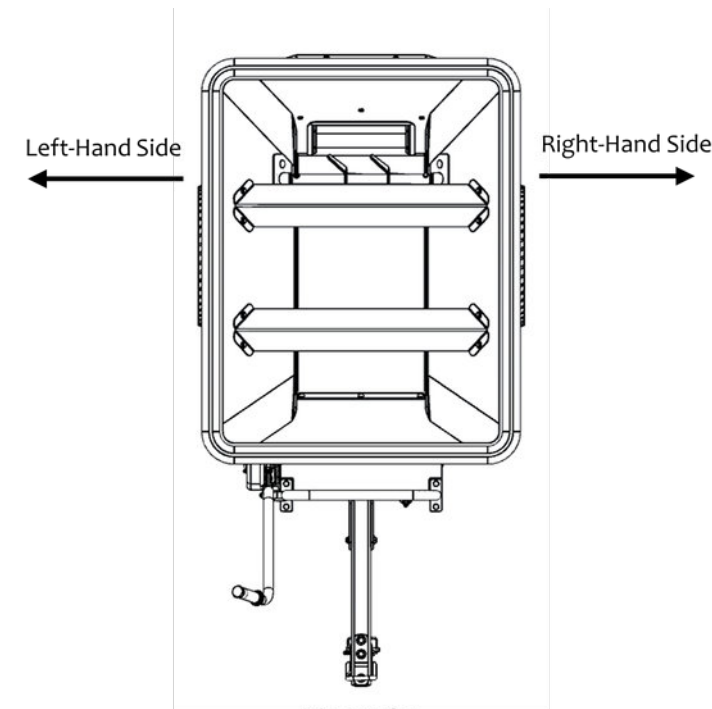


Figure 8.1

### 8.2 Maintenance and repair

Only perform maintenance or repairs if you are properly trained and qualified. For any major maintenance or repair needs, contact your local Ecolawn dealer.

**WARNING:** Always turn off the engine before performing any maintenance or repairs.

**CAUTION:** The hopper must be unloaded prior to any maintenance or service work.

**NOTE:** Proper maintenance is essential to the performance and longevity of the ECO 50-S Top Dresser. Perform adjustments promptly to prevent premature wear or failure. Damage resulting from misuse or neglect may void the warranty if deemed so by an authorized Ecolawn representative.

Keep the ECO 50-S Top Dresser clean and free from excess substrate buildup. Fine materials can compromise seals and bearings, leading to damage over time.

Always use **Original Equipment Manufacturer (OEM)** parts for all repairs and replacements.

Using non-OEM parts may compromise the integrity, safety, and performance of the unit. **Use of non-OEM parts will void the warranty.**

Contact your local Ecolawn dealer for all replacement parts and service inquiries.

## 9 ASSEMBLY

Follow these steps carefully to assemble the ECO 50-S Top Dresser. Ensure that all hardware is tightened securely and that components are properly aligned during installation.

### STEP 1 Prepare the unit

- Uncrate the ECO 50-S Top Dresser.
- Carefully remove the unit from the pallet.
- Support the unit securely on **jack stands** before proceeding with assembly.

### STEP 2 Install the Wheels

- Mount the **wheels** onto the **differential shaft**.

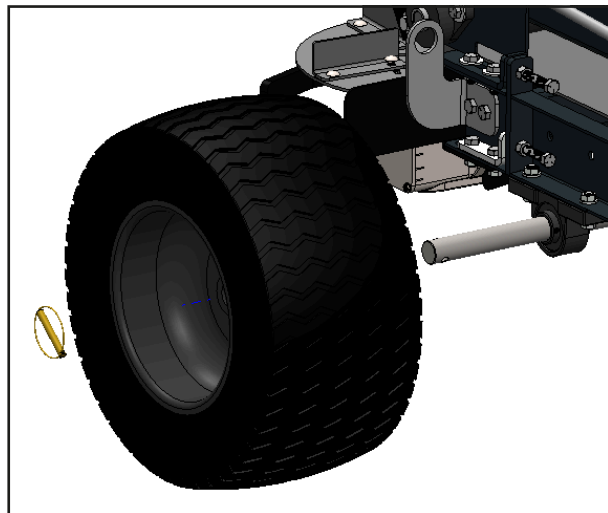


Figure 9.2

### STEP 3 Install the control handle

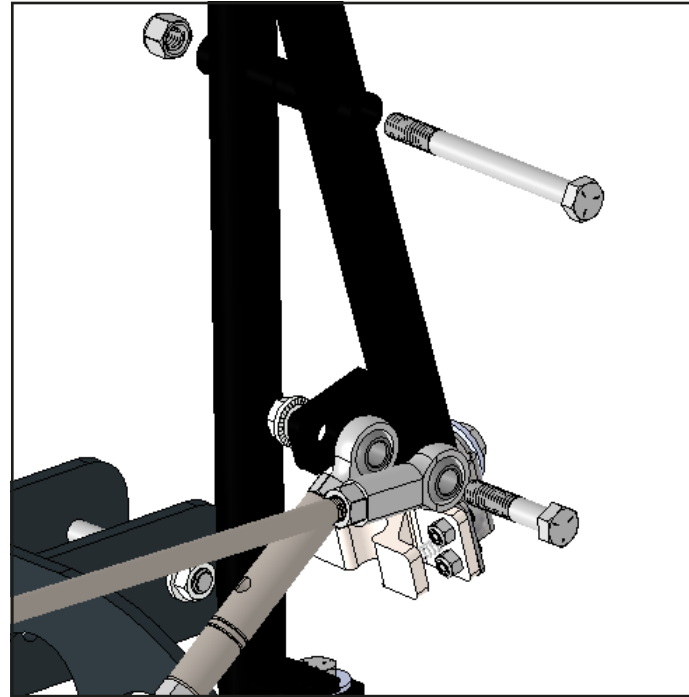


Figure 9.3

### STEP 4 Install the draw bar

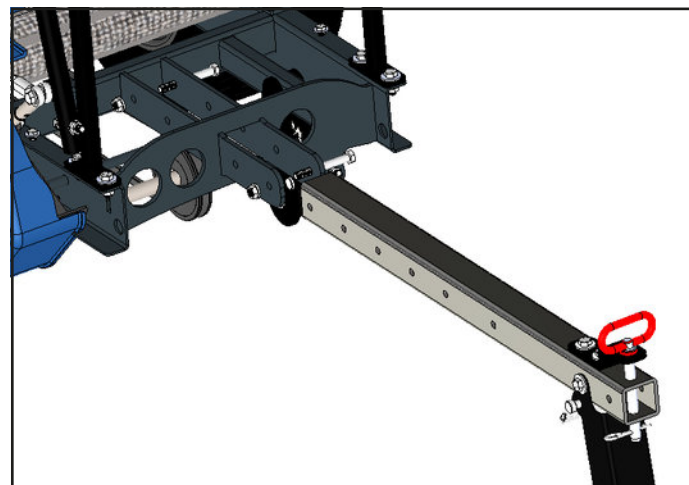


Figure 9.4

## 10 OPERATION INSTRUCTIONS

### 10.1 Before Operating

Before each use, inspect the unit for any required adjustments or maintenance.

Always ensure that the ECO 50-S Top Dresser is in safe working condition prior to operation.

### 10.2 First Use

For optimal performance and proper break-in, follow these procedures during the first use:

1. Run the unit empty for a few minutes to allow the v-belts to seat into the pulleys.
2. Test the unit with 1/3 of the hopper's capacity. Repeat this 3 times to confirm proper operation.
3. While running the unit with substrate, test the control lever (refer to sections 10.4 to 10.9).
4. The conveyor belt may need slight adjustments during the first 5 hours of use as it settles.
5. Minor adjustments to the controls may be necessary (see section 11.3).

### 10.3 Operating Speed

The ECO 50-S Top Dresser is designed to operate at speeds up to **3 mph (4.5 kph)**.

**WARNING:** Do not exceed 3 mph (4.5 kph). Excessive speed may result in loss of control, equipment damage, or personal injury.

### 10.4 Controls

The ECO 50-S Top Dresser features a single control lever.

- The unit must be moving forward before using the lever.
- The spreading system is ground-driven; the transmission engages only when the unit is towed.

#### To engage spreading:

Lower the control lever fully to activate:

- Feed trap opening
- Conveyor belt
- Mixer rotation

**WARNING:** Always face forward while operating the control lever. Turning to look backward can result in loss of control or injury.

**WARNING:** Keep both hands on the towing vehicle's steering wheel during operation. Do not hold the lever continuously.

**CAUTION:** Do not engage the control lever while stationary. This will cause material to spill from the feed trap onto the ground or ejection disk.

The lever is located on the back-right side from the operator's towing position.

**NOTE:** Always fully engage or disengage the lever. Partial engagement may cause:

- Incomplete feed trap opening
- Belt or mixer slippage
- Irregular material flow



# 10 OPERATION INSTRUCTIONS

## 10.5 Application Adjustment

### 10.5.1 Speed

**WARNING:** Do not exceed the maximum speed of 3 mph (4.5 kph).

**CAUTION:** Do not modify the engine's settings to exceed the factory default speed or rpm limits.

**NOTE:** The thickness of the application may vary depending on the type of substrate being used. Lighter substrates may spread farther than heavier ones.

Adjusting the vehicle speed will also adjust the spreading width. Refer to figures 10.5.1-1 and 10.5.1-2 for guidance on spreading patterns at different speeds.

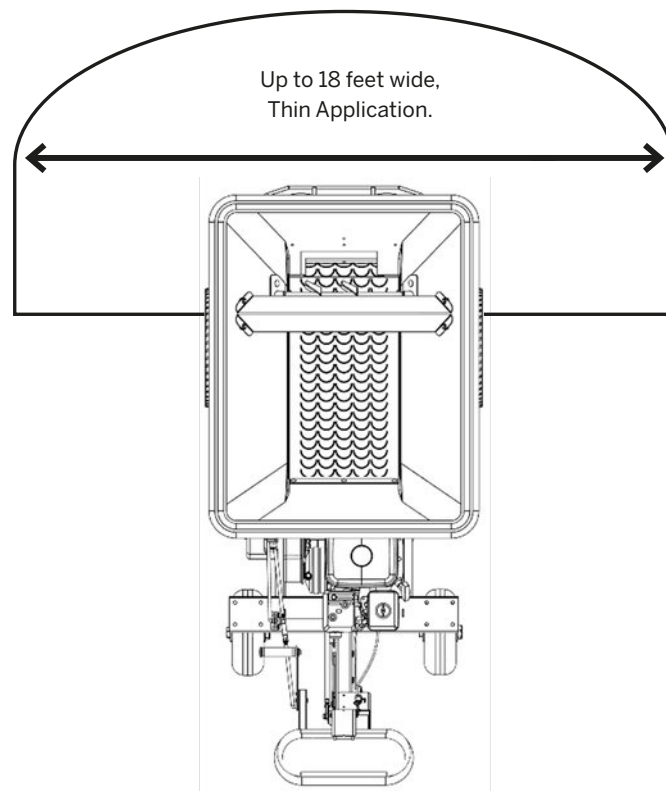


Figure 10.5.1-1

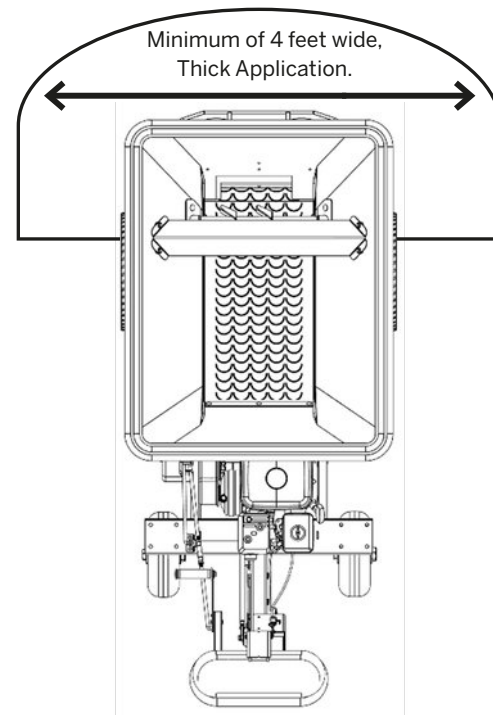


Figure 10.5.1-2

### 10.5.2 Trap Opening

The size of the opening of the feed trap is adjusted using the door stopper. This opening regulates the flow of substrate from the hopper onto the ejection disk.

**NOTE:** Ensure that the feed trap remains closed when not in use to prevent spillage and uneven application. (See figure 10.5.2)

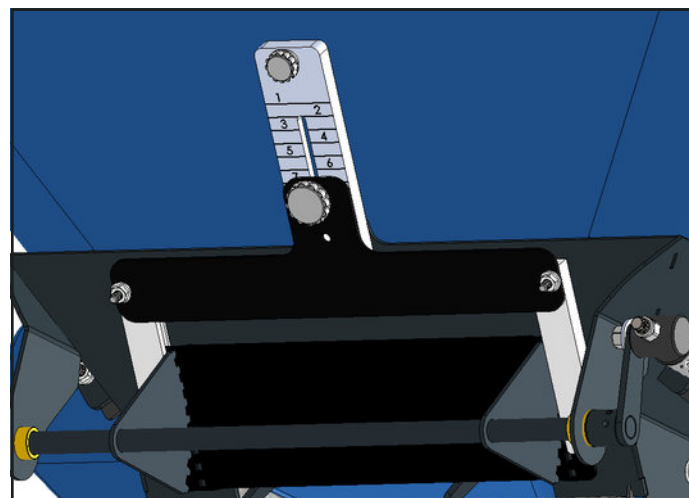


Figure 10.5.2

## 10.6 Spreading Operation

Once your ECO 50-S Top Dresser is inspected and hitched to a tow vehicle, follow these steps for the spreading operation:

- Engine Off Before Loading**  
 Always ensure the engine is turned off before loading the hopper. If using dumping equipment, keep a safe distance and do not stand near the unit while it is being loaded.
- Avoid Overloading the Hopper**  
 The hopper has a maximum weight limit of 500 lbs (227 kg). Be mindful of the weight of the material, especially if it's wet, as it may cause the conveyor belt to slip or wear down faster.
- Proper Filling**  
 Never fill the hopper to the brim. Overloading can damage the ECO 50-S Top Dresser. Check section 5 for the specific hopper weight limit.
- Start from the Furthest Point**  
 When spreading, begin at the furthest point from the substrate source. This avoids driving over areas you've already treated and ensures an even application.
- Adjust Spread Width and Thickness**  
 Use the available controls to adjust the spread width and thickness based on the type of material and your desired coverage.
- Drive Safely**  
 Always operate the unit at a comfortable speed. Drive safely around obstacles such as trees, ponds, and slopes. Warning: Never operate the unit on slopes or hills, as these can be dangerous.
- Never Stand in Front of the Unit**  
**WARNING:** Never allow anyone to stand in front of the unit while spreading substrate to avoid injury from projectiles.

- Keep the Feed Trap Closed**  
**NOTE:** Keep the feed trap closed when not ready to spread to prevent spillage or uneven application.

- If Material Gets Stuck**  
**WARNING:** If substrate collects under the disks, stop the engine, disengage all controls, and clean the unit by hand.

**CAUTION:** Never touch the moving disks during operation to avoid serious injury.



# 11 MAINTENANCE

## 11.1 Before Maintenance

**WARNING:** Always empty the hopper before performing any maintenance or adjustments. Failure to follow these steps can result in injury or death.

**WARNING:** Exercise caution when lifting the ECO 50-S Top Dresser onto jack stands to avoid injury. Do not stay under the unit longer than necessary.

**CAUTION:** Never use wood or cinder blocks to support the unit. Always use proper support equipment to prevent injury and damage to the Top Dresser.

**CAUTION:** Always chock both the wheels when performing maintenance that doesn't require lifting. If you are unsure about your ability to perform maintenance safely, take the unit to your local dealer.

## 11.2 Inspection

Regular inspections are key to keeping your ECO 50-S Top Dresser in top condition. Perform the following checks before each use:

1. Inspect tires for low inflation or cracks.
2. Test the controls to ensure proper function (see section 11.7 for adjustments).
3. Keep an eye on the conveyor belt, especially during the first 5 hours of use, when it may require more maintenance.
4. Check the hopper for debris (rocks, branches, plastic, etc.) that could obstruct function.

## 11.3 Lubrification Schedule

- **Bearings (8x)** – Every 40 hours of use
- **Chain** – Every 40 hours of use
- **Wheel/Differential Axle** – Seasonal  
Apply anti-seize to axle shaft.
- (See Figure 11.3 for axle details.)

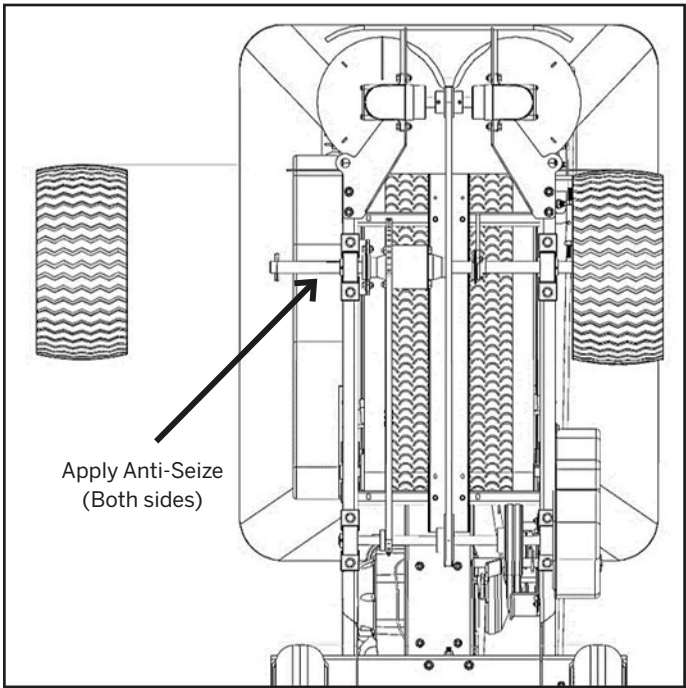


Figure 11.3

## 11.4 Cleaning Method

Regular cleaning is essential to maintain functionality and prevent substrate buildup in places where it shouldn't be. Always clean the ECO 50-S Top Dresser after every use to ensure its proper functioning. Neglecting to do so may void the warranty.

## 11.5 Tools

To perform maintenance, ensure you have the following tools:

- Jack
- Jack Stands
- 9/16" Wrench
- 1/2" Wrench
- 7/16" Ratchet
- Wheel Chocks

## 11.6 Supporting The Unit

**WARNING:** Lift and support the unit only on a flat surface.

**WARNING:** Only lift the unit from under the frame.

## 11.7 Adjustments

### 11.7.1 Conveyor belt Adjustment

**WARNING:** Never place your hand on the conveyor belt while the engine is running. Serious injury may occur.

**NOTE:** Improper tensioning can cause the conveyor belt to slip.

To adjust the conveyor belt tension:

1. Loosen bolts #1 and #2 on both sides.
2. Using bolt #3, adjust the belt tension evenly on both sides. (Fig 11.7.1-1)

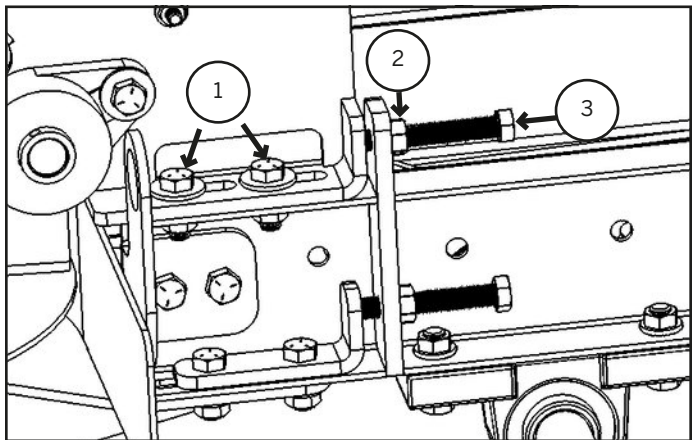


Figure 11.7.1-1

3. Press down on the conveyor belt with light to medium pressure at the scraping blade. The belt should sink approximately 3/16" (see Fig 11.7.1-2).



Figure 11.7.1-2

4. Once proper tension is set, tighten bolts #1 and #2 on both sides.
5. Engage the conveyor belt while towing the ECO 50-S Top Dresser for a short distance. Observe and adjust tracking by turning bolt #3 on the left side. Ensure the belt stays centered in the V-groove (see Fig. 11.7.1-3 & 11.7.1.4). Repeat as necessary.

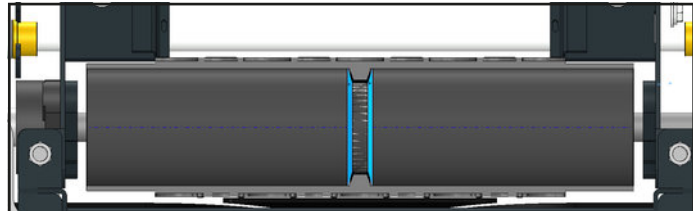


Figure 11.7.1-3

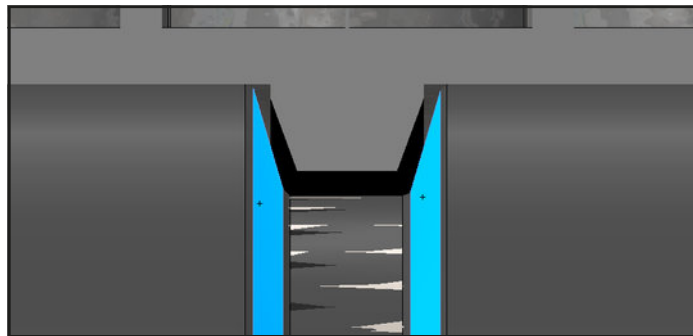


Figure 11.7.1-4

6. Retighten bolt #1 and #2 on the left side.

After adjustments, test the conveyor with 1/3 hopper capacity to ensure proper performance.

**WARNING:** Never place your hand on the conveyor belt while the engine is running.

# 11 MAINTENANCE

## 11.7.2 Disc Support Adjustment

**NOTE:** If the disks are not spinning or if the spread is uneven, this adjustment is necessary.

1. Support the unit on jack stands and remove the wheels.
2. Loosen bolts #1 and #2 on both sides. (Figure 11.7.2)
3. Adjust tension with bolt #3.
4. Ensure equal tension on both sides.
5. Retighten bolts #1 and #2

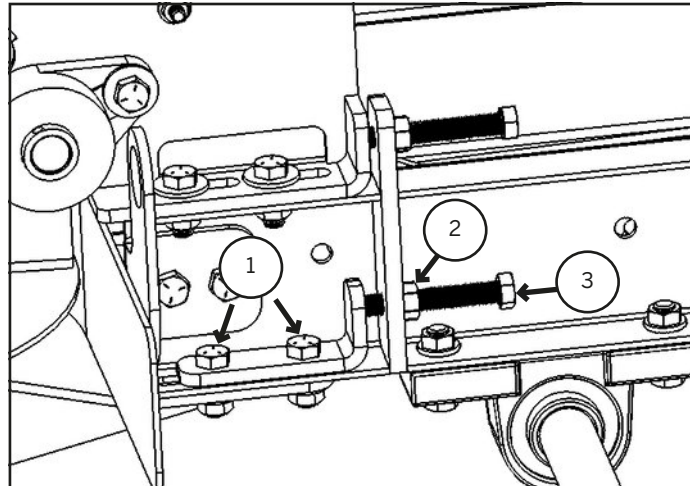


Figure 11.7.2

## 11.7.3 Chain Adjustment

To adjust chain tension (Fig 11.7.3):

1. Loosen nut #1
2. Adjust tension using nut #2.
3. Lock adjustment by tightening nut #2

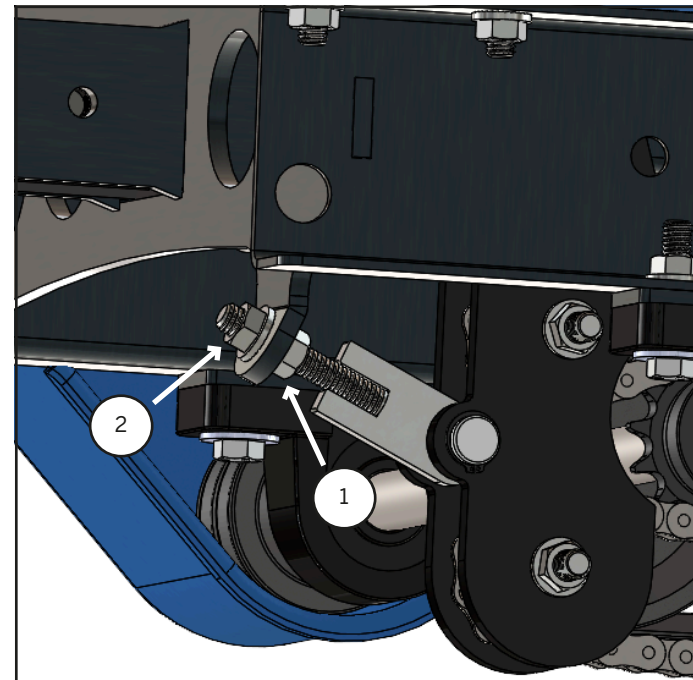


Figure 11.7.3

## 11.7.4 Feed Trap Adjustment

1. Set the control handle is in the closed position. (Fig 11.7.4)
2. Using nut #1, adjust the feed trap to the closed position. It should be as close as possible to the conveyor without touching.
3. Reposition de collet #2 on the rod. There should be very little to no tension on the spring when the trap is closed.

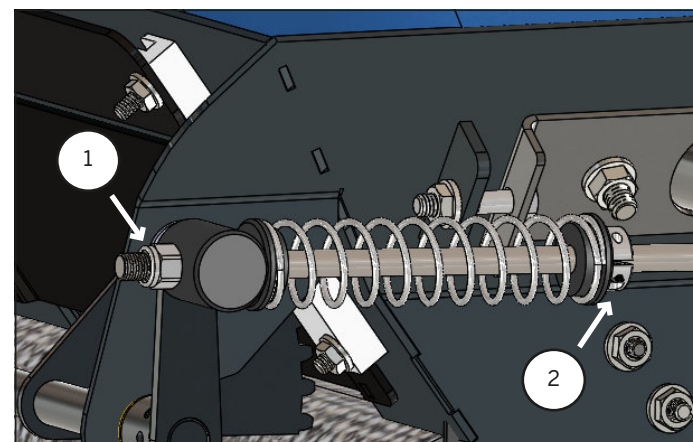


Figure 11.7.4

## 11.7.5 Mixer Adjustment

**NOTE:** Adjusting the mixer belt may or may not be necessary after conveyor belt adjustments.

**NOTE:** The factory default is a twisted belt to help break down clumped substrate.

1. Remove the guard.
2. Loosen bolt #1 by a few turns. (Fig 11.7.5)
3. Adjust using bolt #2, ensuring both sides match.
4. Retighten bolt #1.
5. Reinstall the guard.

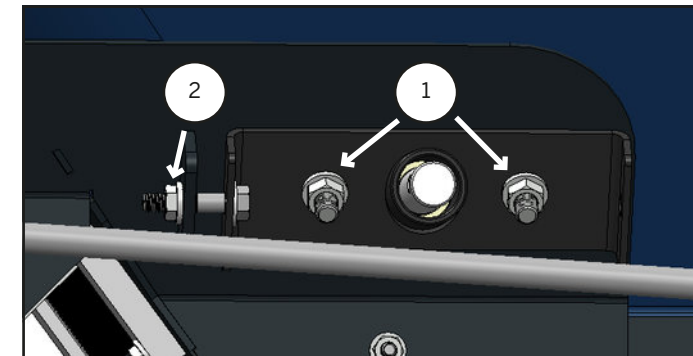


Figure 11.7.5

## 11.7.6 Conveyor Drive Adjustment

**NOTE:** This adjustment affects the conveyor belt engagement, not its tension.

1. Loosen the jam nuts at each end of the rod (one has a left-hand thread).
2. Adjust the rod to modify tension.
3. Retighten the jam nuts.

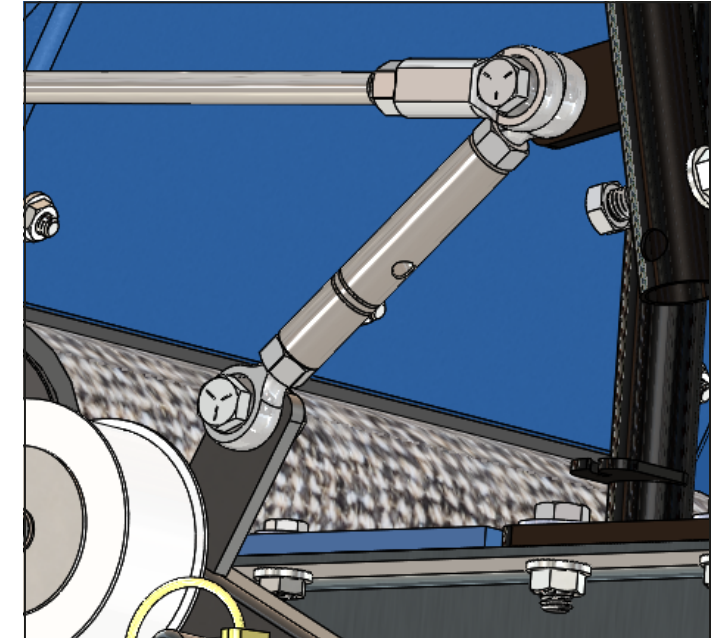


Figure 11.7.6

## 11.8 Storage

Before storing the ECO 50-S Top Dresser, complete all maintenance tasks, including lubrication. This prevents parts from corroding, galling, or seizing during the off-season. When removing the unit from storage, inspect adjustments, as fluctuating temperatures may affect them.

For long-term storage, consider loosening adjustments to prevent belts from stretching due to time or temperature variations.



12 TROUBLESHOOTING

12.1 Conveyor Belt

PROBLEM	SOLUTION
Conveyor tracks when lever is not engaged	<ul style="list-style-type: none"><li>• Normal when machine is new, a few hours of use will stretch the v-belts and this will stop</li><li>• Reduce drive to conveyor v-belt adjustment tension (Section 11.7.6)</li></ul>
Conveyor tracks from side to side / Bump in center of conveyor.	<ul style="list-style-type: none"><li>• Adjust conveyor (Section 11.7.1).</li></ul>
Belt slips when substrate in hopper	<ul style="list-style-type: none"><li>• Too much weight.</li><li>• Adjust conveyor tension (Section 11.7.1).</li></ul>

12.2 Other

PROBLEM	SOLUTION
Disks won't turn	<ul style="list-style-type: none"><li>• Verify disk support adjustment (Section 11.7.2).</li><li>• Something stuck in disks.</li><li>• V-belt might be worn.</li></ul>
Only one disk turns	<ul style="list-style-type: none"><li>• Verify gearbox assembly.<ul style="list-style-type: none"><li>◦ Key might be missing from shaft/pulley.</li><li>◦ Pulley might not be tight on both gearboxes.</li></ul></li><li>• Gearbox may need replacement</li></ul>
Conveyor belt does not engage, roller does not move	<ul style="list-style-type: none"><li>• Adjust drive to conveyor v-belt adjustment tension (Section 11.7.6)</li><li>• Replace V-belts</li></ul>
Mixer doesn't turn.	<ul style="list-style-type: none"><li>• Check for debris</li><li>• Verify if adjustment matches on both sides</li><li>• Adjust mixer tension</li><li>• Replace mixer v-belt</li><li>• Verify mixer shafts and bushings for wear.</li></ul>
Chain skips or comes off	<ul style="list-style-type: none"><li>• Verify for damage on the chain or sprockets</li><li>• Verify if the sprockets are aligned properly</li><li>• Adjust the chain tension (Section 11.7.3)</li></ul>
Substrate spills and collects on ground	<ul style="list-style-type: none"><li>• Make sure feed trap is closed when not in operation.</li><li>• Inspect hopper seals to conveyor for damage</li><li>• Adjust feed trap (control 3) rod length, when closed there should be no gap between feed trap and conveyor</li><li>• Verify if disks spin properly</li></ul>

13 REPLACING THE CONVEYOR BELT

⚠ WARNING:

- Do not perform maintenance or repairs with substrate in the hopper.

Before beginning, support the unit on jack stands and remove the wheels.

13.1 Procedure Overview

Follow these steps in order:

1. Uninstall the mixer assembly
2. Uninstall the hopper assembly
3. Uninstall the rollers
4. Replace the belt
5. Reinstall the rollers
6. Reinstall the hopper
7. Reinstall the mixer assembly
8. Adjust the conveyor belt

13.2 Uninstall the Mixer Assembly

- Remove the mixer guard.

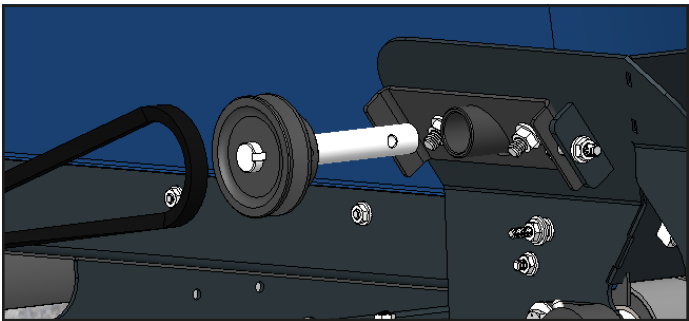


Figure 13.2

- Remove the shafts from both sides of the mixer tube.

13.3 Uninstall the Hopper Assembly

- Remove the flaps.
- Remove the mixer support brackets.
- Remove the 3 screws over the feed trap.

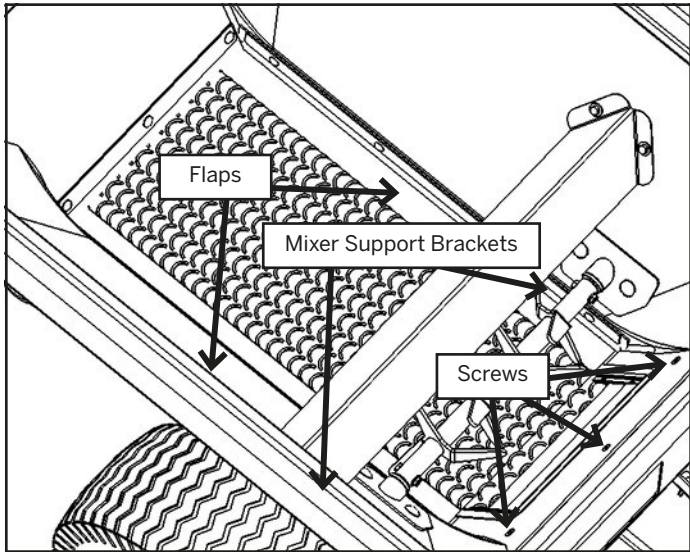


Figure 13.3

13.4 Uninstall the rollers

- Remove the scraping blade from the frame.
- Remove the tension guard.
- Remove the Drive to Conveyor v-belts.
- Remove the drive roller.
- Remove the flange bearings.
- Remove the front roller.



# 13 REPLACING THE CONVEYOR BELT

## 13.5 Replace the conveyor belt

- Remove the bolts from the plate to the feed mechanism support. (Fig 13.5)

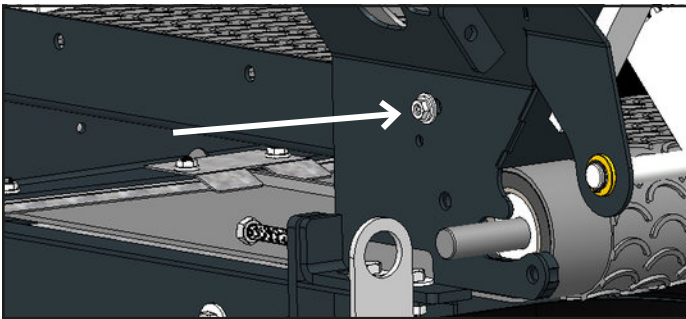


Figure 13.5

- Change the conveyor belt.
- Reinstall the plate onto the feed mechanism support.

## 13.6 Install the rollers

### 13.6.1 Front Roller Installation

- Install the front roller (Fig 13.6.1-1)

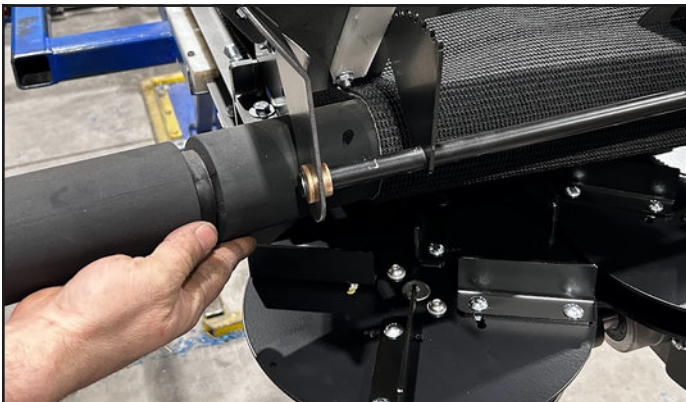


Figure 13.6.1-1

- Slide flange bearings onto each shaft. Ensure grease fittings will be accessible after reassembly.
- Install all four bolts but do not tighten.
- Wedge a pry bar between the conveyor and feed support mechanism, then tighten the top bolts first. (Fig. 13.6.1-2)
  - ECO 50-S gap: 1/16" between feed support and conveyor

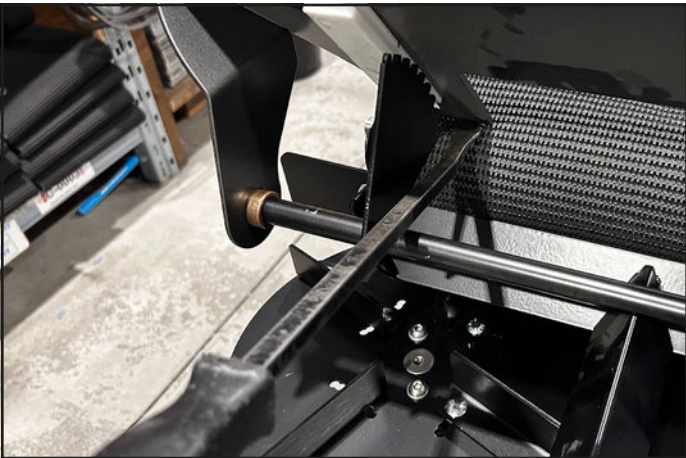


Figure 13.6.1-2

- Install the from nose deflector so it sits 1-7/8" from the disk (Fig 13.6.1-3).

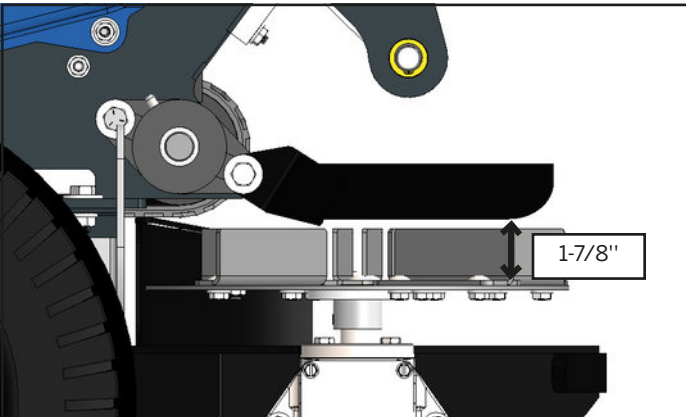


Figure 13.6.1-3

- Center the roller in the assembly and tighten flange bearing set screws.

## 13.6.2 Drive Roller Installation

- Install the drive roller.
- Mount pillow block bearings at the edge of the welded support to ensure that the roller is square to the frame (Fig 13.6-2).

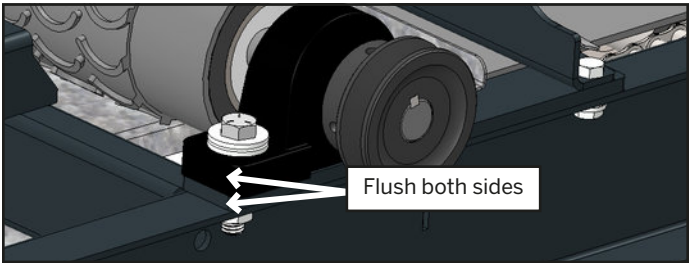


Figure 13.6.2

## 13.7 Install the Scrapers

- Install the **conveyor scraper assembly**.
  - Ensure it's centered on the belt and not in > contact with the belt guide.
- Install the **drive roller scraper**:
  - Mount between two washers using the pillow block bolts.
  - Maintain a very small gap (1/32") between the roller and scraper.
  - Confirm it is centered with the V-groove and not touching the roller.

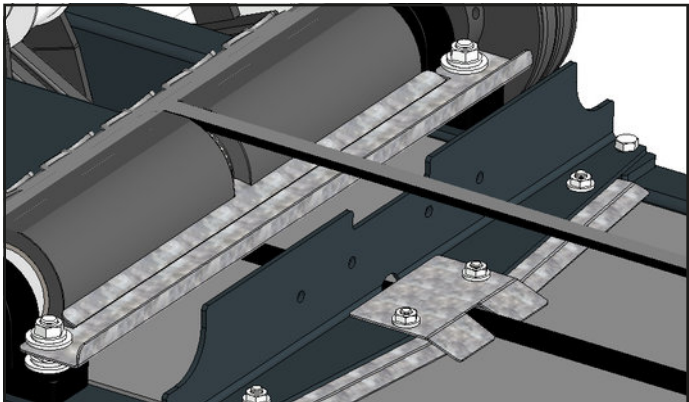


Figure 13.7

## 13.8 Reinstall the hopper

- Install the 3 front bolts.
- Install the mixer supports, leaving slack for the mixer V-belt.
- Install the side flaps:
  - Use the two longer carriage bolts on the **right-hand side** (front-most and rear-most holes).
  - These bolts are used to reattach the mixer guard later.

## 13.9 Reinstall the mixer assembly

- Install the shafts (pulley-side shaft goes on the **right**).
- Install the mixer belt.
- Adjust the mixer tension (see **Mixer Adjustment**, Section 11.7.5).
- Reinstall the mixer guard.

## 13.10 Adjust the conveyor belt

See **Section 11.7.1 – Conveyor Belt Adjustment** for full instructions.

## 14 ADJUSTABLE SPINNERS VANES

The ECO 50-S includes optional scooped vanes for improved control when spreading fine materials.

### Installing Scooped Vanes:

- Note the orientation of the scoops:
  - One scoop is designed for **Clockwise (CW)** rotation
  - The other for **Counter-Clockwise (CCW)** rotation
- Ensure correct placement based on the rotation direction of each spinner.

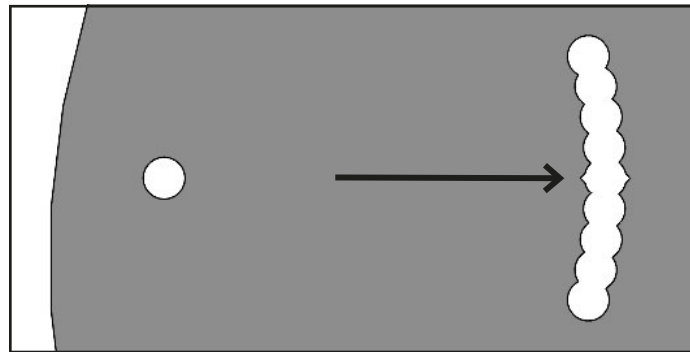


Fig 14.1 - Vane adjustment slot

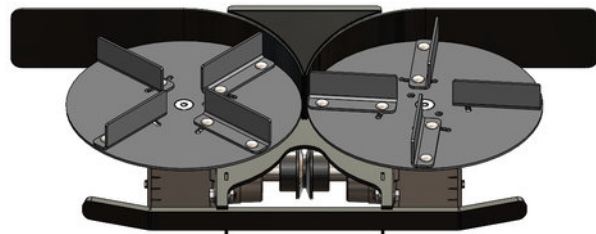


Fig 14.2 – Flat Vane configuration

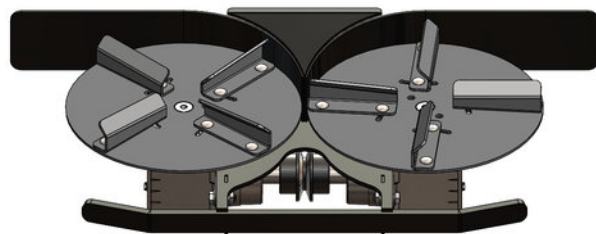


Fig 14.3 - Scoop configuration

### Adjustment Settings:

- The spinner disc (**D-0200**) features a slotted mounting path for vane or scoop installation.
- The **center hole**, marked by **diamond points**, represents the default setting.
- Adjusting vane or scoop positions within the slot affects the spread pattern:
  - Wider, lighter spreads for finer materials
  - Narrower, heavier spreads for denser substrates



Fig 14.4 - D-0203 – Flat Vane

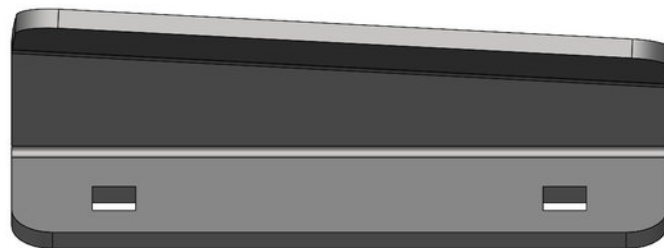


Fig 14.5 - D-0202 – CCW Scoop

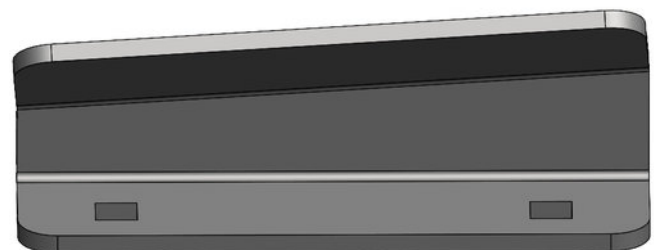


Fig 14.6 - D-0201 – CW Scoop

## 15 ACCESSORIES

### ECO SEEDER | Part #: E-0004

The ECO Seeder turns a multi-step task into a single operation by spreading seeds and compost at the same time.

### FEATURES:

Self-propelled broadcast top dresser

- The stainless-steel container holds 5 to 6 pounds of seed. It can also be used for synthetic fertilizer, bio-char blends, and other products.
- Its adjustable and precise opening mechanism allows the operator to adjust the flow as desired.
- The Eco Seeder fits all Ecolawn Applicator models.



### HOPPER FUNNEL | Part #: E-0001

Introducing the New Hopper Funnel by Ecolawn Applicator —the perfect solution for easy, efficient loading.

### FEATURES:

The new Hopper Funnel fits all models

- Designed to accommodate loading by buckets, this funnel extends the opening up to 54 inches, making the process faster and hassle-free.
- Not only does it simplify loading, but it also serves as a protective shield for your engine, preventing material from accidentally dropping on it during the process. Enhance your efficiency and protect your equipment with the New Hopper Funnel by Ecolawn Applicator.





16 SPARE PARTS

Order parts through your local dealer or distributor, have your model and serial numbers ready when ordering parts. Only use OEM parts, failure to do so will void the warranty.

PART #	DESCRIPTION
C-0004	DIFFERENTIAL
C-0005	DOUBLE GROOVE V-BELT PULLEY 2MA53-3/4"
C-0007	DOUBLE GROOVE V-BELT PULLEY (TO CONVOYER) 2MA 25 3/4"
C-0008	EXTENSION SPRING 3.25"
C-0009	FLANGE BEARING 3/4"
C-0010	BEARING (SUPPORT DIFFERENTIAL)
C-0019	OILITE BUSHING OD 7/8" X ID 5/8" X 1/2" LG
C-0021	OILITE BUSHING OD 1" X ID 3/4" X 3/4" LG
C-0026	SINGLE GROOVE V-BELT PULLEY MA25-3/4"
C-0027	SINGLE GROOVE V-BELT PULLEY MA30-3/4"
C-0028	SINGLE GROOVE V-BELT PULLEY MA 43 3/4 - I.D. 3/4 "
C-0029	SPROCKET 48 TEETH
C-0030	SPROCKET 14 TEETH
C-0040	GEAR BOX PGM 1000-026D
C-0041	SINGLE GROOVE V-BELT PULLEY MA25 - 7/8
C-0042	WOODRUFF KEY NO. 6, 5/32" W X 5/8"
C-0043	WOODRUFF KEY NO. 9, 3/16" W X 3/4"
C-0045	V-BELT-ECO 250 -A81
C-0046	NOTCHED V-BELT AX28 (TO CONVEYOR)
C-0047	PILLOW BLOCK 1"
C-0048	PILLOW BLOCK 3/4"
C-0060	IDLER SPROCKET O.D. 2" FOR 10 MM
C-0070	CHAIN 71 5/8" (Includes C-0014)
C-0082	HITCH PIN AND CLIP ASSEMBLY
C-0082-1	HITCH PIN 1/2 X 4
C-0082-2	HITCH PIN CLIP (C-0082-A)
C-0101	BEARING FLANGE (LOCKING COLLAR)
C-0106	TURF SAVER TIRE AND BLACK RIM 16" X 7.50"
C-0107	Spherical Rod End 3/8-24 w/nut BZ/P
C-0108	Spherical Rod End 3/8-24 LH w/nut BZ/P
C-0110	GUIDED CONVEYOR BELT ROUGH TOP 61 3/8" X 13 3/4"
C-0112	3/8 ROD COLLAR
C-0113	Compression Spring, 5" Long
C-0115	FEMALE SPHERICAL ROD END 3/8-24
C-0152	CONVEYOR (CLUTCH) BELT GUARD
C-0152-03	CONVEYOR (CLUTCH) BELT GUARD ECO50 SAND
C-0153	PULLEY AND BELT GUARD

PART #	DESCRIPTION
C-0154	CONVEYOR BELT ROUGH TOP. 61 3/8" X 13 3/4"
C-0159	HOPPER ECO
C-0160	V-BELT A55 (SMOOTH)
C-0166	GRIP (RUBBER) ID 7/8"
D-0028	STAND ECO 50
D-0109	DIFFERENTIAL SUPPORT BRACKET
D-0111	DEFLECTOR FOR BELT
D-0113	CENTRAL WEIGHT DEFLECTOR
D-0114	ANTI-FRICTION PLATE GUIDED CONVEYOR -> USED WITH S-1183 <-
D-0115	GUIDED DRIVE ROLLER scraper
D-0124	HITCH PIN BRACKET
D-0129	COVER PLATE
D-0168	ANGLE BRACKET
D-0177	FEED TRAP_250
D-0184	SHORT FLAP CLIP
D-0185	LONG FLAP CLIP
D-0186	CHAIN TENSION BRACKET
D-0194	AGITATOR SUPPORT PLATE
D-0200	ADJUSTABLE DISC PLATE
D-0201	SCOOP CW FOR D-0200
D-0202	SCOOP CCW FOR D-0200
D-0203	FLAT BLADE FOR D-0200 DISC
D-0268	FEED TRAP ADJUSTER BRAKET
D-0666	LEFT SIDE LIFT HOOK
D-0667	RIGHT SIDE LIFT HOOK
D-1125	CONVEYOR SCRAPER UPPER -                GUIDED
D-1162	CONVEYOR SCRAPER LOWER SIDE - GUIDED -> USED WITH D-1125
D-1162-02	CONVEYOR SCRAPER CENTER BLADE w/SLOT - GUIDED
MIC-003_50	S/A Clutch arm 50
MIC-006_150_250	S/A Conveyor cluth arm
MIC-009_50S	S/A Shipping kit 50 Sand
MIC-015	S/A Agitator support
MIC-020_250	S/A Hopper Eco 250
MIC-025	ADJUSTBLE FEED TRAP STOPPER
MIC-104	scraper ASSEMBLY GUIDED
MIC-119	S/A CONVEYOR SUPPORT PLATE GUIDED
MIC-124	CLUTCH ADJUSTER 50
MIC-125	FEED TRAP ROD 50S
Q-0002	EXTERNAL RETAINING RING 5/8"



## 16 SPARE PARTS

PART #	DESCRIPTION
Q-0006	SNAP RETAINING RING 1/2"
Q-0007	FLAT HEAD 1/4-20 X 1"
Q-0008	FENDER WASHER 1/2" X 2"
Q-0009	FLAT WASHER 1/4"
Q-0011	FLAT WASHER 3/8"
Q-0015	HEX BOLT 1/4-20 X 3/4"
Q-0016	CARRIAGE BOLT 1/4-20 X 1"
Q-0018	COIL NAIL 9M 2.5" (300 NAILS)
Q-0019	HEX BOLT 3/8-16 X 1"
Q-0020	HEX BOLT 3/8-16 X 1 1/4"
Q-0022	HEX BOLT 3/8-16 X 2"
Q-0023	HEX BOLT 3/8-16 X 3"
Q-0025	NYLOCK #10-24
Q-0026-R	HEX NUT 3/8-16 RIGHT THREADED
Q-0029	LINCH PIN 1/4" X 1 3/4"
Q-0030	LINCH PIN 5/16" X 1 3/4" LG
Q-0031	LOCK WASHER 3/8"
Q-0033	NYLOCK 3/8-16
Q-0036	SET SCREW 1/4-20 X 1/4" LG
Q-0037	SET SCREW 5/16-18 X 1/4" LG
Q-0039	ROUND HEAD SCREW #10-24 X 3/4"
Q-0040	SERRATED FLANGE HEX LOCKNUT 1/4-20
Q-0041	SERRATED FLANGE HEX LOCKNUT 3/8-16
Q-0042	COTTER PIN 3/32" X 1 1/2"
Q-0043	SERRATED FLANGE HEX LOCKNUT 5/16-18
Q-0046	TWO HOLE STRAP
Q-0047	HEX BOLT 5/16-18 X 1"
Q-0049	SPRING PIN 3/16 X 1
Q-0050	HEX BOLT ZINC 3/8-16 X 2 1/4"
Q-0051	LOCK WASHER 5/16"
Q-0052	MACH SCREW T.P. 1/4-20 X 1/2"
Q-0053	BUTTON SOCKET CAP SCREW 5/16-18 X 1/2"
Q-0054	SNAP RETAINING RING 3/8"
Q-0055	CARRIAGE BOLT 1/4-20 X 1/2" LG
Q-0063	FLAT WASHER 3/4 X 1.25" OD
Q-0064	CARRIAGE BOLT 1/4-20 X 3/4"
Q-0096	0.093" x 1-5/8" OAL ZINC PLATED HAIRPIN COTTER
Q-0109	SUSPENSION STRAP 100' X 3/4"
Q-0113	SETSCREW 1/4-28 x1/4 SSS

PART #	DESCRIPTION
Q-0119	Black Phenolic Plastic Knob, 1/4"-20 Threaded Hole, 7/8" Diameter Head
Q-0120	Black Phenolic Plastic Knob, 1/4"-20 Threaded Hole, 1-1/4" Diameter Head
Q-0126	NYLOCK SS 1/4-20
Q-0130	FLAT HEAD 1/4-20 X 1 1/2"
Q-0131	SQUARE SAFETY PIN 3/8_2-1/2
Q-0151	HEX BOLT 5/16-18 X 1 1/2"
Q-0152	CARRIAGE BOLT 1/4-20 X 1 1/2"
Q-0154	HEX BOLT 3/8-16 X 1 3/4"
Q-0155	MACH. SCREW 1/4-20 X 3/4"
Q-0156	CARRIAGE BOLT 3/8-16 X 1 1/4"
Q-0157	HEX BOLT 1/4-20 X 1 1/4"
Q-0269	METAL SCREW HEX TECK #10-16 X 5/8"
S-0009	RIGHT THREADED UPPER CLUTCH ROD ATTACHMENT
S-0021	DEFLECTOR FOR DOUBLE PLATE (LONG)
S-0026	DOUBLE PLATE EJECTION SUPPORT ECO 250
S-0027	CONVOYER CLUTCH ARM
S-0031	FEED TRAP MECHANISM-ECO 250
S-0034	PLATE EJECTION HUB
S-0059	U SHAPED HANDLE
S-0060	CLUTCH ARM ECO-50
S-0070	FRAME ECO 50 SAND
S-0076	4 PRUNG AGITATOR
S-0082	MIXER BLENDER SUPPORT
S-0253	FEED TRAP-SUPPORT-ECO 250
S-0279	LEVER OPENING ECO-250
S-1167	Neoprene Guided Front Roller
S-1168	Neoprene Guided Drive Roller
S-1183	CONVEYOR SUPPORT PLATE GUIDED
SA-001_50S	S/A FEED TRAP 50 SAND
SA-003_50S	S/A draw bar hitch 50 SAND
SA-004_50S	S/A drive shaft 50 SAND
SA-005_50_150_250	S/A Differential
SA-006	S/A Plate ejection adjustable disc
SA-007_50	S/A Support tensioner chain 50
SA-012_250	S/A Gearbox 250
SA-013_50S	S/A FEED TRAP MECHANISM 50S
SA-102	S/A DRIVE ROLLER GUIDED
U-0009	BUSHING OD 5/8 X ID 3/8 X 5/16 THICK
U-0011	KEY STOCK 3/16" X 1 1/4"

16 SPARE PARTS

PART #	DESCRIPTION
U-0034	TENSIONER WHEEL
U-0047	FEED TRAP GUIDE
U-0072	DRAW BAR
U-0073	PIN CLUTCH ARM ECO 50
U-0082	CHAIN TENSIONER PIVOT SHAFT
U-0096	NON-SLOTTED AGITATOR SHAFT
U-0155	MIXER BLENDER - KEYED SHAFT
U-0157	RUBBER FLAP 26-5/8 X 2-3/8 WITH HOLES
U-0158	RUBBER FLAP 14 X 2-3/8 WITH HOLES
U-0162	DRIVE SHAFT
U-1009	CLUTCH TUBE 50
U-1011	THREADED TRAP ROD 50S
U-1111	ECO 50S TRAP ROD
U-1112	ECO 50S TRAP PIVOT
U-1113	ECO 50S TRAP ROD SPRING GUIDE
U-1114	FEED TRAP ADJUSTABLE STOPPER
X-0053	WARNING STICKER
X-0054	HOPPER STICKER ECO 050
X-0255	HOPPER STICKER/ 1ST CHOICE (4 PO. X 10 PO.)
X-0666	HOOK STICKER

17 FAQ

WHAT IS TOP DRESSING?

Top dressing is an application of compost or a blend of soil/compost/sand onto existing turf. For best results, a top dressing blend should have a higher content of compost than any other material.

WHAT MATERIAL SHOULD I USE FOR TOP DRESSING?

Compost significantly increases soil's water retention, improves the overall soil structure, stimulates microbial activity, breaks down thatch, and neutralizes the soil's pH. A natural, slow-releasing soil amendment, containing everything turf needs to thrive.

Quality screened compost is best! The compost must have a fine crumbly structure and a homogeneous texture. It must be well-screened and have a high content of stable, organic matter. Finally, but not least of all, it must be weed-seed free. For efficient and easy application, the compost moisture should be maintained at around 50%.

WHY IS TOP DRESSING WITH COMPOST SO EFFECTIVE?

Compost significantly increases soil's water retention, improves the overall soil structure, stimulates microbial activity, breaks down thatch and neutralizes the soil's pH. It is simply the best, natural, slow-releasing soil amendment, containing everything turf needs to thrive.

WHAT ARE THE STEPS INVOLVED IN COMPOST TOP DRESSING?

1. Mow the lawn to 1.75 in. (4.5 cm)

2. If needed, aerate and overseed

3. Fill the Ecolawn hopper with compost or a compost/soil blend
4. Spread evenly, working from the farthest point back

5. Repeat until the entire lawn is covered

6. Water for two days to fully activate the compost

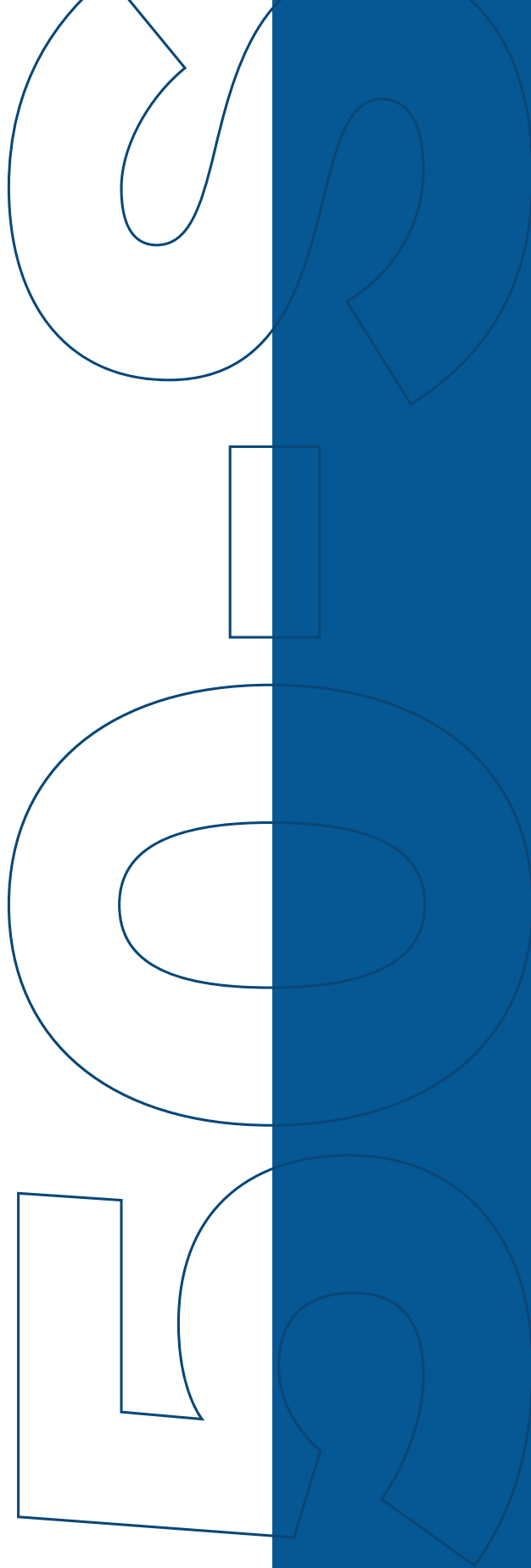
WHEN SHOULD I TOP DRESS AND HOW FREQUENTLY?

You can top dress at any time during the year. Usually, top dressing is recommended during growing season, but not during extreme heat waves.

As a general rule, we recommend top dressing with compost at least once a year. However, there are two factors that determine the frequency of top dressing:

- The amount of usage that a lawn gets;
- The health of the soil which it is growing.

Heavily used lawns and unhealthy soils may benefits from more frequent applications.



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