

REGISTER YOUR ECOLAWN  
[www.ecolawnapplicator.com](http://www.ecolawnapplicator.com)

SERIAL NUMBER: \_\_\_\_\_



## Operator's Manual

[www.ecolawnapplicator.com](http://www.ecolawnapplicator.com)

Model Eco 150

Brigg's & Stratton Vanguard 6.5 hp

Self-Propelled



**THANK YOU** for purchasing an Ecolawn Top Dresser. Your new machine has been carefully designed and manufactured to provide years of reliable and productive service. This manual will provide you with safety instructions and general maintenance tips that will help to keep your machine in top running order. Please read this manual and assembly part/list carefully before assembling, operating, or servicing your equipment.

**Here are 5 Ecolawn Basic Rules of Operations:**

1. Use quality screened material or compost;
2. Use appropriate load size and weight;
3. Load hopper gently, prevent loading compaction;
4. Think and plan application pass before attempting the field especially on slopes;
5. Run the spreader empty first as a test. A good application is preparing ahead of time. Make small adjustments in the field and eliminate major repairs.

**Please visit our website or call with any questions.**

Website: [www.ecolawnapplicator.com](http://www.ecolawnapplicator.com)

Tel: 1-866-326-5296

**A good application is preparing ahead of time!**

## TABLE OF CONTENTS

<b><u>ENGINE AND WARRANTY</u></b>	<b><u>4</u></b>
<b><u>SAFETY INSTRUCTIONS</u></b>	<b><u>5</u></b>
1. GENERAL	
2. GUARDS	
3. ENGINE	
4. HOPPER	
5. DECALS	
<b><u>OPERATING INSTRUCTIONS</u></b>	<b><u>6</u></b>
1. PROPER TOPDRESSING	
2. OPTIMAL OPERATION	
3. MAIN USES	
<b><u>USING THE ECOLAWN FOR THE FIRST TIME</u></b>	<b><u>7</u></b>
<b><u>OPERATING THE ECOLAWN APPLICATOR</u></b>	<b><u>8</u></b>
<b><u>CHOOSING AN APPROPRIATE SUBSTANCE</u></b>	<b><u>11</u></b>
1. QUALITY AND CHARACTERISTICS	
2. FRIABILITY	
3. MOISTURE CONTENT	
<b><u>TROUBLESHOOTING AND ADJUSTMENTS</u></b>	<b><u>12</u></b>
<b><u>GENERAL MAINTANCE</u></b>	<b><u>15</u></b>
1. SHAFT BEARING	
2. ENGINE OIL/FILTER	
3. V-BELTS	
<b><u>SAND DEFLECTOR</u></b>	<b><u>16</u></b>
<b><u>ASSEMBLY STEPS</u></b>	<b><u>17</u></b>



## Engine

The Ecolawn Applicator's gear casing is filled with oil (SAE 30) before shipping, but the oil level must be checked to ensure that it is filled to the proper level before operation. The **engine does not** have oil and must be filled to proper level before starting. Use lead-free gasoline only. **DO NOT USE OIL/GAS MIXTURE.** Please refer to the Engine Manual for additional information.

Ecolawn Applicator® One Year Limited Warranty

Terms: Ecolawn Applicators are guaranteed to be free of defects in materials or workmanship for one year from the registered purchase date. To qualify, the applicator must be registered online at [www.ecolawnapplicator.com](http://www.ecolawnapplicator.com) (under the product tab). This one-year warranty is extended only to the original, registered purchaser of the Ecolawn Applicator.

Starting from the registered purchase date, Ecolawn will replace, free of charge, any part(s) on the machine (excluding the engine\*) that Ecolawn or its approved agent deems to be defective in material and/or workmanship upon examination.

\* Note: The engine is covered by its own warranty; see engine manual for details.



## Safety Instructions

This manual describes the operation of the ECO 150 Ecolawn Applicator spreader only. Engine operation is not included in this manual. Please consult the engine manual for relevant information.

### 1. General

- Never allow children to operate power equipment.
- Do not use the Ecolawn Applicator on any grade that is above 10-15 Degrees.
- Do not modify the Ecolawn Applicator. Any alterations to the machine will void the warranty.
- Use the Ecolawn Applicator ONLY for its intended purpose.
- Keep hands and objects out of the hopper and away from the agitator/mixer while the motor is running.
- Use only original Ecolawn parts to repair the Ecolawn Applicator.

### 2. Guards

Do not run the engine or operate the machine when any of the guards have been removed. This may result in severe injury and/or damage to the unit.

### 3. Hopper

The hopper's maximum load is 440 lb (200 kg). Never exceed the maximum load capacity; this may damage the spreader.

### 4. Decals

Replacement safety decals are available at no cost from Ecolawn.



## Operating Instructions

### 1. Proper Topdressing

When topdressing, follow the same pattern you would use when mowing. Start with the sections of lawn that are farthest away from the supply source to avoid repeated traffic over the areas that have already been topdressed.

Type of Spreading Material:

- Screened compost

### 2. Optimal Operation

Never exceed the maximum load capacity of the hopper (440 lb/200 kg). Some substrates (such as sand or soil) are much denser than others, so it is not possible to judge load size visually. The same volume of sand or soil can weigh significantly more than compost. Overloading the hopper may damage the spreader.

Comparative: Materials and Weights

Material Volume Weight

Compost (60% humidity) 10 cubic feet 300 lbs

Mix Blend: 50% compost, 50% sand 10 cubic feet 550 lbs

Sand 10 cubic feet 800 lbs

### 3. Main Uses

The Eco 150 Broadcast Compost Spreader is designed to spread compost, soil amends and seeds for lawn restoration and renovation. To learn more about compost topdressing, please visit our website at [www.ecolawnapplicator.com](http://www.ecolawnapplicator.com).



## Using the Ecolawn Applicator for the First Time

Before using the spreader for the first time, check the oil and gas levels on the engine, the gear box reducer and the fuel tank. While the spreader has been factory adjusted for immediate use, some minor adjustments may be necessary. We recommend the following start up procedure to ensure that the machine is properly adjusted before use.

Step 1. The spreader's belts are new, so they may not adhere perfectly to the pulleys; they may slip when the machine is started for the first time. Before loading the spreader with substrate, start the engine and run it around empty for about 10 minutes to allow the belts to become seated properly on the pulleys.

Step 2. Fill the hopper to 1/3 capacity (see Page 8, Step 1), then run the spreader until empty and refill to this level for the first 3 or 4 loads.

Step 3. Fill the hopper to its maximum capacity (440 lb/200 kg) and begin using the spreader normally.

Step 4. After one hour of use, visually inspect the spreader. Vibrations combined with a heavy load may occasionally cause nuts and bolts to loosen. Tighten these when necessary.

Step 5. After 8 hours of use, inspect the nuts and bolts again and tighten if necessary.

If pulleys do not run correctly after these trials, please refer to Ecolawn Application: Troubleshooting and Adjustments.

## Operating the Ecolawn Applicator

### Step 1. Filling the Hopper

Before filling the hopper, first ensure that the Feed Flap (Figure 1) is properly closed by pushing the Feed Flap Lever all the way down (Figure 2).

Fill the hopper with the substrate to be spread. Note: Never exceed the hopper's maximum load capacity (440 lbs/200 kg); this can damage the machine.

Figure 1

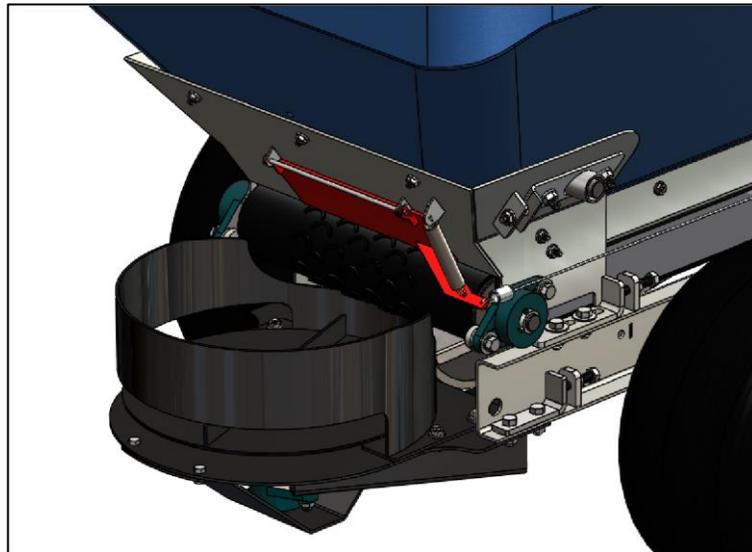


Figure 2



## Step 2. Starting the Engine

Before starting the engine, make sure the conveyor system is not engaged. Be sure that the Conveyor Action Lever (Figure 3) is pulled up and the Feed Flap is properly closed, then start the engine. For additional information about operating or troubleshooting the engine, consult the Engine Manual.



Figure 3

## Step 3: Topdressing with a Substrate

After loading the machine, start the engine. Before moving forward, open the Feed Flap with the lever shown in Figure 2.

Pull the Conveyor Activation Lever toward you and squeeze the Self-Propel Handle (Figure 4) to move

the spreader forward and spread the substrate.

Note: The engine's speed determines the ground speed and the width over which the substrate is spread. The angle at which the feed flap is open determines the thickness at which the substrate is spread. Do not operate the spreader with the conveyor on and the feed flap closed, as this causes the substrate to compact against the feed flap and may totally block the flow of substrate to spread.

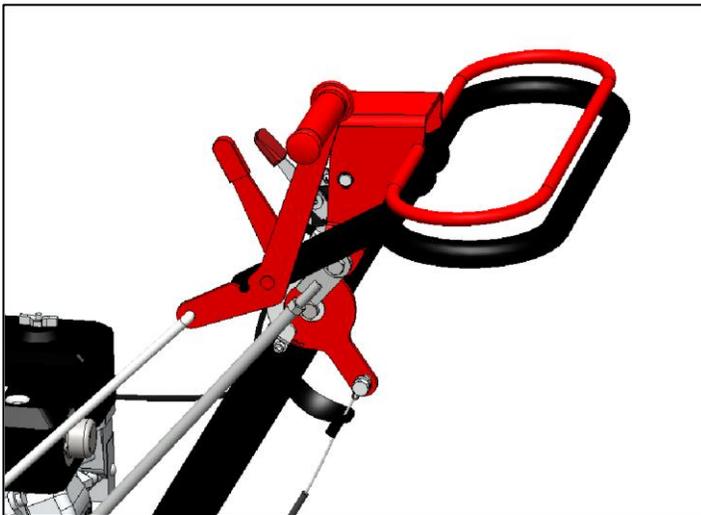


Figure 4

## Step 4. Stopping the Spreader



When the hopper is empty, release the Conveyor activation Lever to disengage the conveyor belt. Close the Feed Flap with the Feed Flap Lever. If filling the hopper again, propel the machine to the substrate source and release the Self-Propel Handle to stop the spreader, turn the engine off, and then refill the hopper.



## Choosing an Appropriate Substrate

### 1. Quality and Characteristics

It is very important to choose a high-quality topdressing substrate. For greatest cost efficiency, Ecolawn recommends using a bulk substrate which is friable, has a moisture content lower than 65%, and contains no inorganic matter (plastic, glass, or concrete, etc.) or raw organic matter (such as pieces of wood, raw manure).

### 2. Friability

A friable material is one that crumbles easily into small fragments. A substrate that is not very friable appears to be composed of numerous, compact pieces which do not readily break down. Screening a substrate makes it much more friable. Additionally, a substrate containing 10% sand is more friable and will flow more smoothly and efficiently through the applicator.

### 3. Moisture Content

A substrate with a moisture content greater than 65% will tend to stick to the inside walls of the hopper and other parts of the spreader. When working with a substrate with a high moisture content, coat the insides of the hopper, as well as the spreading disk, with a graphite-based lubricant. Consult the SLIP Plate Lubricant website at [www.slipplate.com](http://www.slipplate.com) for more information.

To help the substrate flow freely from the hopper, stop the machine and loosen with shovel. This will loosen the substrate so that it can flow freely from the hopper.

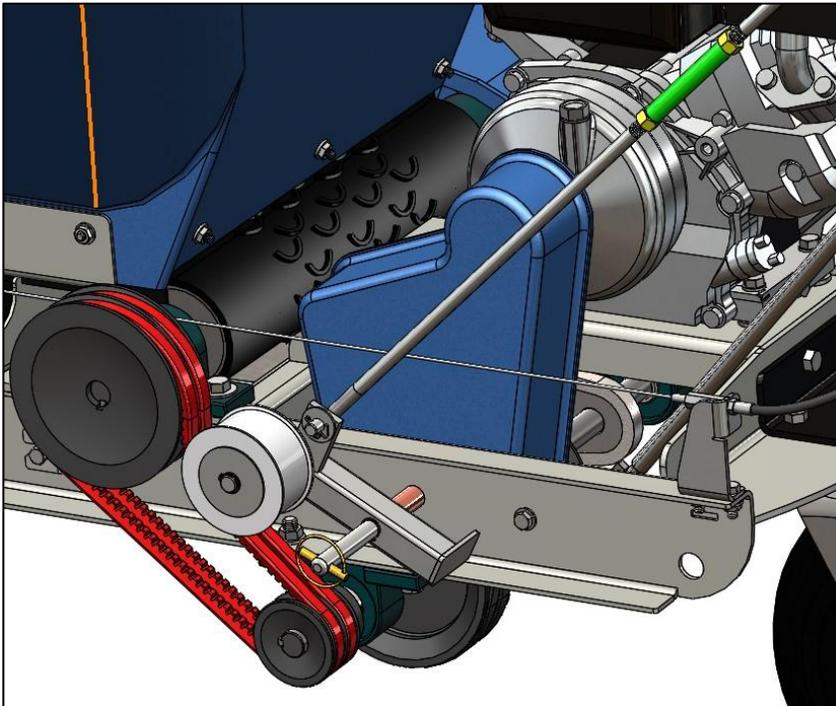
## Troubleshooting and Adjustments

**Important: Be sure the engine is turned off before performing any adjustments or maintenance on the spreader.**

The most frequently encountered problems involve the conveyor, but these can be easily resolved with a few simple solutions. Check the following issues for your particular problem, and make the corresponding adjustments as needed.

**Issue: The V-belts are slipping. The spreader's hopper is full. The conveyor has been activated by pulling the conveyor activation lever toward you, but the conveyor belt does not work because the V-belts are slipping.**

**Solution:** The V-belts are not tight enough. First remove the guards from the stretcher and check the tension of the belts, which may be slipping on the pulleys that power the conveyor belt drive roller. If the tension is incorrect, adjust it by lengthening the tension rod of the conveyor activation clutch, a few turns at a time, as follows:



1. Loosen the (Yellow) jam nuts to adjust the tension of the tensioner rod.
2. Turn the (green) stretcher adjuster collar counter clockwise to increase tension, or clockwise to reduce it.
3. Tighten the (yellow) jam nuts to maintain the tension at the proper level.

**Issue: The spreader's hopper is full. The conveyor has been activated by pulling the conveyor activation lever toward you, but the conveyor belt is not turning even though the tension rod has been adjusted properly and the conveyor drive roller is turning.**

**Solution:** Adjust the tension bolts of the conveyor belt system on each side, 1/2 turn at a time on both sides equally, to increase the tension on the conveyor belt. Do as follows:

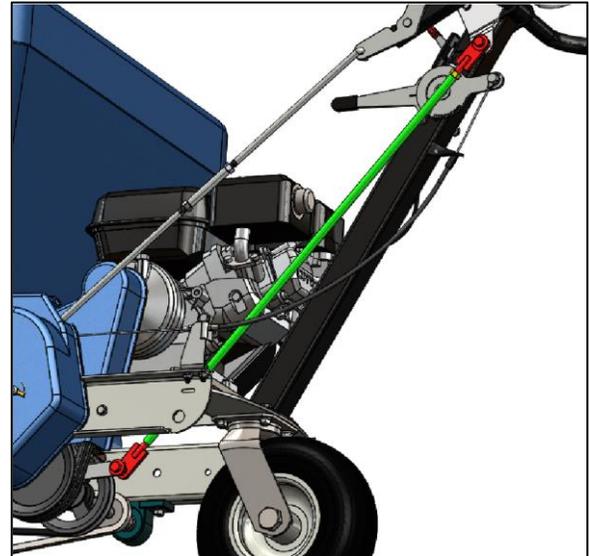


1. Loosen the 2 vertical (yellow) nuts on each side.
2. Loosen the (yellow) jam nut and tighten the horizontal bolt to push the conveyor belt roller forward a 1/2 turn at a time.
3. Now tighten down the two vertical nuts on both sides to hold the front system in place and tighten the jam nuts to lock the tension bolts.
4. Test the machine and re-adjust if necessary.

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

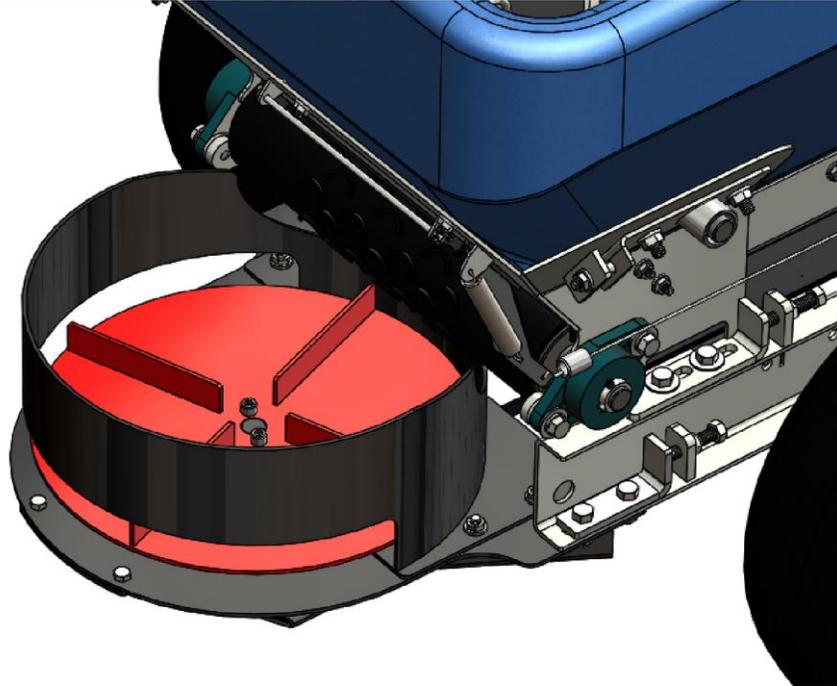
Solution: An adjustment to the tension of the activation arm of the Self-Propel Handle may be necessary:

1. Loosen the (yellow) jam nut.
2. Turn the (green) adjustment collar clockwise to increase belt tension, or counter clockwise to decrease tension.
3. Tighten the (yellow) jam nut to lock and hold the desired tension.



**Issue: The spreader moves forward and the conveyor works, but the spreading disk does not spin.**

Solution: To free the disk, turn the machine off, and then turn the spinner disk backward manually to remove any debris. Visually inspect the pulleys and clean them as needed. If the pulley groove used to turn the spinner disk has collected substrate, it may cause the belt to come off. Clean out the pulley groove under the spinner, then re-mount the belt in the pulley groove.



## General Maintenance

### 1. Shaft Bearings

Grease the two crankshaft ball bearings after every 50 hours of operation.

### 2. Engine Oil/Filter

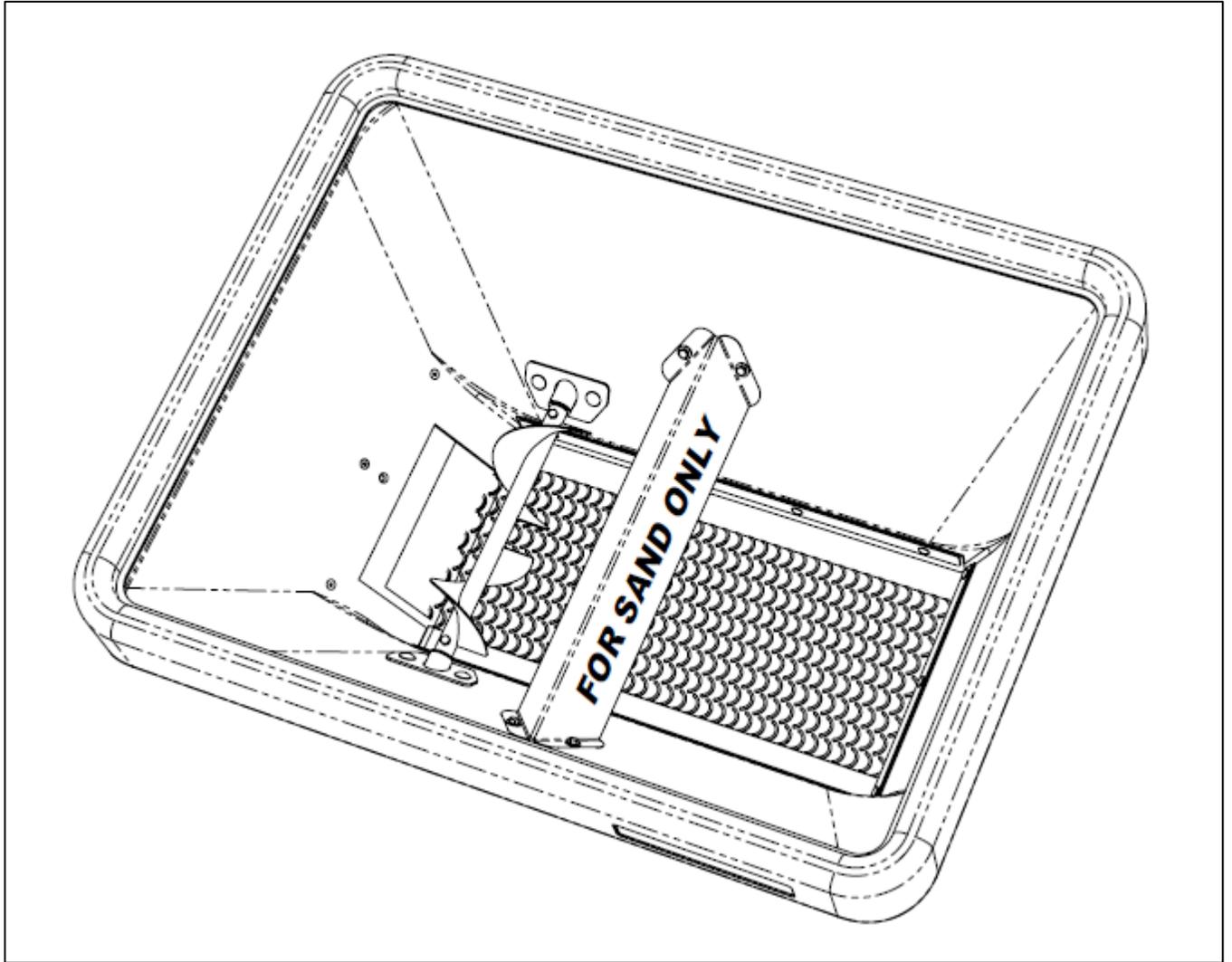
Change the oil and filter after every 50 hours of operation. See the engine manufacturer's instructions.

### 3. V-belts

The proper belt tension is tight enough that the belts will not slip during operation. Occasionally, belt tension must be readjusted. Do not over-adjust the tension, as this may damage other parts.



## Sand Deflector



## Assembly Steps

### Assembly Steps ECO150&250

**Step #1:**

Install pre-assembled steering column assembly (01) on the frame, put the 3/8-16 x 1" lg bolts and nuts (13x) (02) and the swivel wheels and tighten the 4 pieces together.

**Note:** Make sure that the adjustable clutch rod (03) is inserted in the frame correctly in order to attach to the clutch assembly.

**Note:** FOR ECO-150 THERE IS ONLY ONE SWIVEL WHEEL THAT IS INSTALLED LINED UP UNDER THE STEERING COLUMN.

THE BOLTS ARE 3/8-16 X 1 1/4" LG AND NUTS (5x)

**Step #2:**

Tighten the adjustable clutch rod (03) to the clutch assembly using the 3/8"-16 x 1.5" lg. nut and bolt (1x) (04).

**Note:** The rod is pre-set to approximate measurement.

**Step #3:**

Install the pivot rod for feed trap opening (05) using spacers in the steering column hole and in the feed trap-support lever (06).

Attach it to the frame using Hex 1/4"-20 x 3/4" lg bolts and nuts (2x) (07).

**Note:** Make sure to properly aligned.

**Step #4:**

Install rod (01) for feeding trap mechanism into the feed trap handle (12)

and in the lever opening trap (11) for feeding trap opening hole.

Install using 3/32" cutter pins and washers Ø 3/8"(2x).

**Step #5:**

Install the adjustable feed trap rod (09), insert the long end in the lever

opening trap (05) and the short end in the lever opening (11)

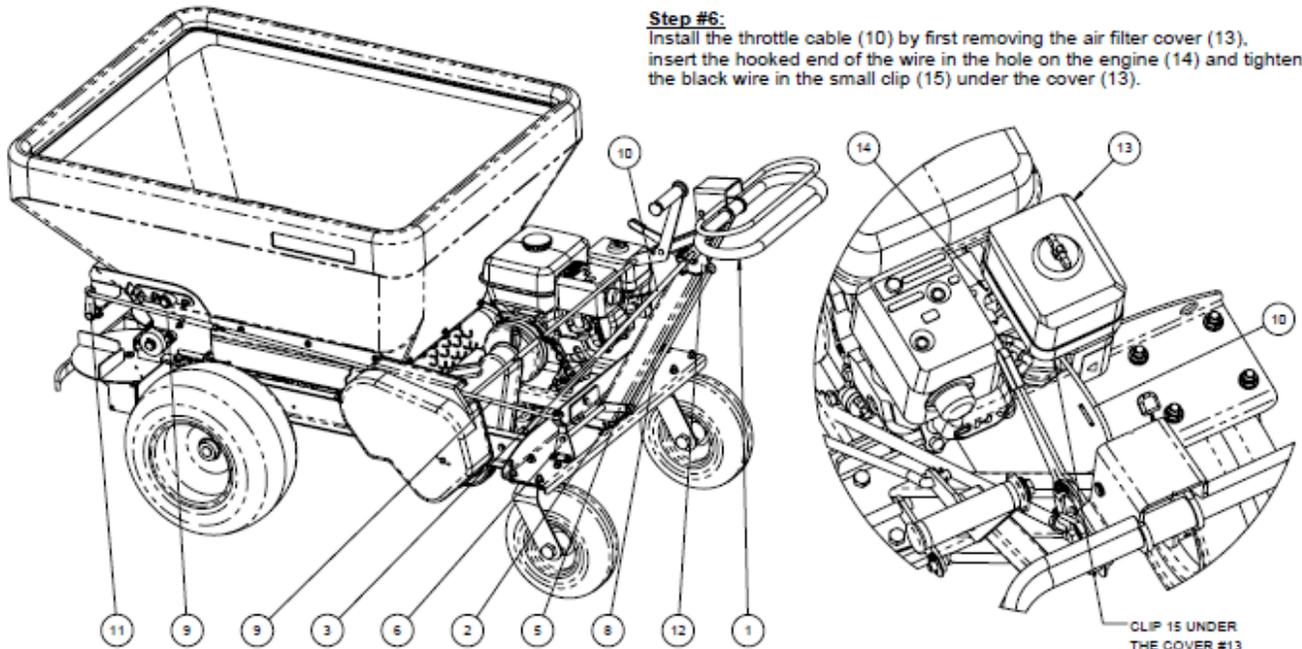
in the front of the machine.

**Note:** The length of the rod has been pre-set.

**Step #6:**

Install the throttle cable (10) by first removing the air filter cover (13),

insert the hooked end of the wire in the hole on the engine (14) and tighten the black wire in the small clip (15) under the cover (13).



CLIP 15 UNDER THE COVER #13

**Assembly Steps ECO150&250**

