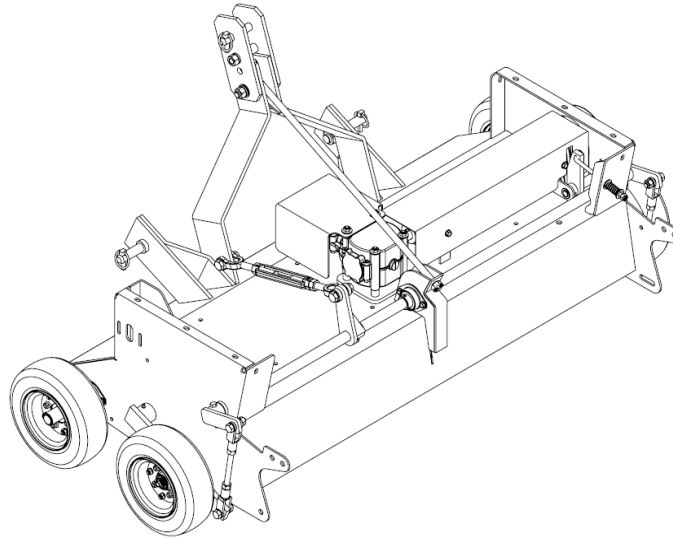


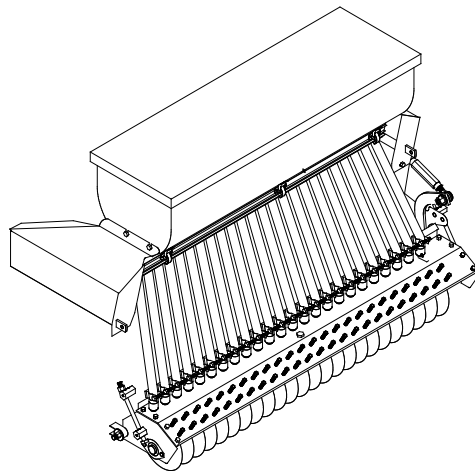


Dethatcher/Overseeder Operation & Maintenance Manual

For units built after January 1, 2012



2848D12 Dethatcher



2848SS Seeder and Disk Assembly

Gandy Company
528 Gandrud Road
Owatonna, MN 55060

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Introduction

Thank you for purchasing the Gandy Dethatcher/Overseeder. You will like its precise metering for even seed distribution and its pneumatic tires that make it easier to trail without damage.

Before operation thoroughly read and understand this entire manual.

Pay attention to the safety information listed below.

Completely familiarize yourself with all controls mechanisms for this unit.

We at Gandy want to be sure you obtain the most satisfactory performance possible with your Dethatcher/Overseeder. If you have any problems or questions, or if we can assist you in any way, please see your dealer or call us at 1-800-443-2476.

Safety Information

1. Keep all guards in place.
Moving parts, especially tractor power take-offs, are extremely dangerous.
2. Keep hands, feet and loose clothing away from moving parts.
3. Do not let others near equipment while it is in operation.
4. Never permit riding on the Dethatcher/Overseeder while in transport or operation.
5. Before servicing unit:
Park on level surface.
Put tractor in park.
Turn off engine and remove key.
Disconnect PTO.
6. All operators must use their best judgment and follow safe operating practices when using this unit. Be extremely cautious when working on hills and uneven terrain.
7. Failure to safely use and or follow all safety instructions could result in damage to unit or serious injury or even death.

Table of Contents

Section	Page
Dethatcher Package	
Pre-Operation	3-4
Operation	5
Maintenance	6-7
Overseeder Package	
Seeder Hopper Assembly	8-10
Seeder and Disk Assembly	11-12
Operation	13-15
Maintenance	16-17
Optional Roller Attachment	
Assembly	18
Operation	18
Optional Brush attachment	
Assembly	19
Operation	19
Trouble Shooting	20
Specifications	21

Note:

All photos and drawing in this manual are for illustrative purposes only. In some drawings the guards and other parts have been removed to show a particular detail. Never operate this unit without guards in place.

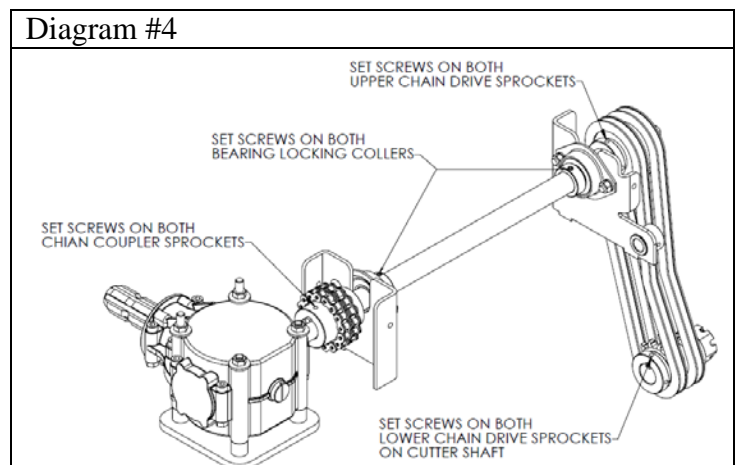
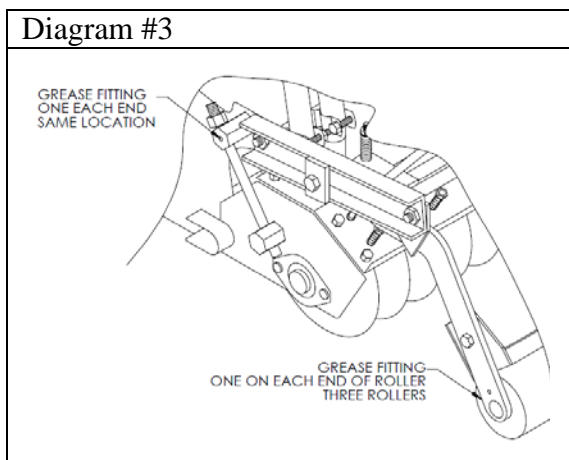
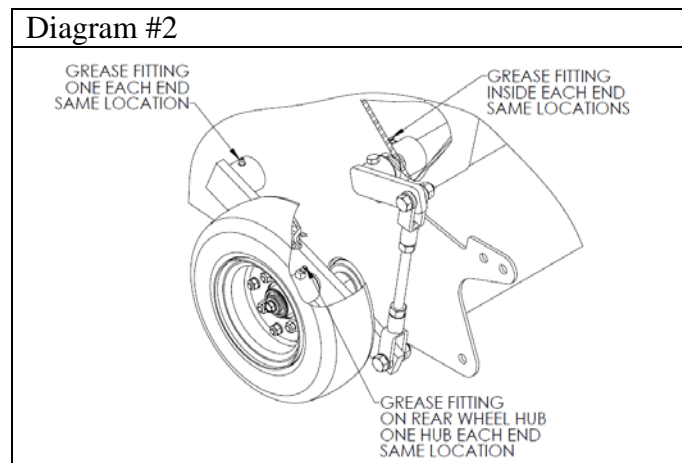
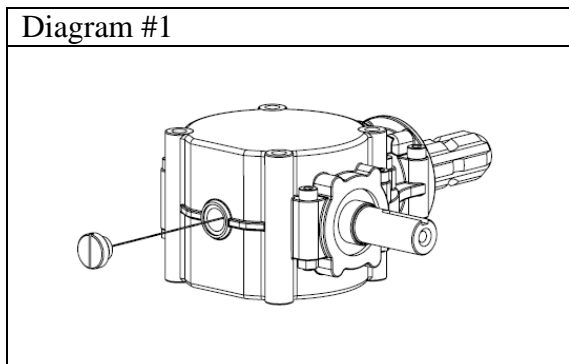
The manufacturer of this equipment reserves the right to make changes or improvements to this product without notice or obligation in respect to previously manufactured products.

Dethatcher Package

Pre-operation

Before operation, check all lubrication points.

- 1) The gear box has been filled at the factory with approximately 18 oz. of SAE 90 E.P. gear lube. The gear box is full when the oil level is up to the bottom of the filler plug hole. (See Diagram #1) Remove the filler plug at the rear of the gear box and check for proper level before operating.
- 2) Lubricate all grease fittings prior to first use and periodically after that. There are six grease fittings on the 2848D12 dethatcher. (See Diagram #2) There are two grease fittings on the optional 2848SS hopper disc attachment. (See Diagram #3) There are six grease fittings on the optional 2895 roller attachment. (See Diagram #3)
- 3) Check the chain drive periodically to maintain proper adjustment. Apply a thread locker (blue) to set screws on chain drive sprocket, drive shaft sprockets and chain coupler sprockets. (See Diagram #4)
- 4) Check all tires for proper air pressure. Fill tires to the recommended pressure stated on tires.



Pre-Operation (continued)

Tractor Hook-Up

The unit is designed for attachment to Category I tractors with at least 18 horsepower with a 540-rpm PTO. In some cases small tractors may need weight added to the front end to promote safe operation when lifting the Dethatcher/Overseeder. Hook the PTO after attaching the three-point hitch.

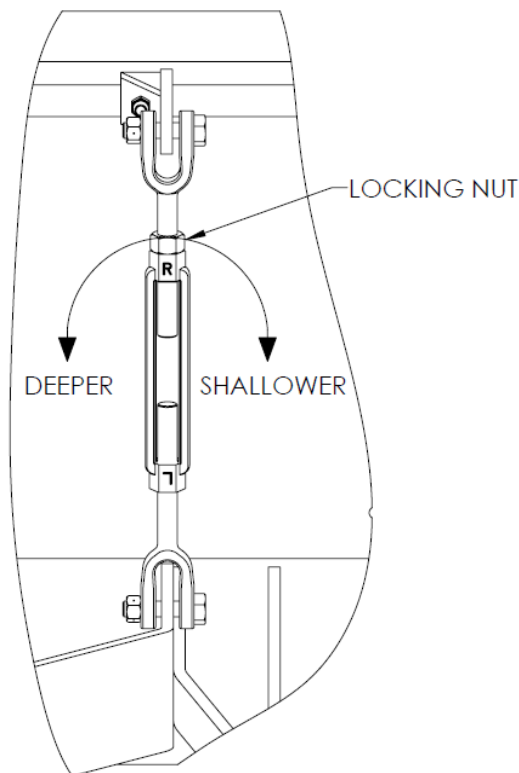
Dethatcher Depth Adjustment

To adjust turnbuckle (see diagram below) loosen locking nut and turn counter-clockwise to increase the depth of cutting action, or clockwise to make it shallower. Tighten locking nut when finished to lock depth height in place.

Note: That as the rear wheels are raised by moving the turnbuckle, the blades are set deeper.

Travel

For convenience keep the unit in a raised position on the tree-point hitch while traveling to and from the work site.



Dethatcher Package

Operation

- 1) Engage PTO to put the cutter blades in motion.
- 2) Begin forward travel and then lower the unit completely down.

FOR BEST OPERATION:

It is better to have slower ground speed and faster engine RPM, than it is to have a faster ground speed with lower engine RPM.

It is strongly recommended that you test the depth at which the cutter blades are set on a small patch of ground, **before** starting full operation.

Adjust the turnbuckle as necessary for desired results.

WARNING:

The PTO is equipped with a slip clutch.

If a foreign object becomes stuck in the dethatcher, **STOP AND DISENGAGE THE PTO.**

Park on level surface.

Put tractor in park.

Turn off engine and remove key.

Remove the object.

Be careful as the cutter blades are sharp and object may have sharp edges.

IMPORTANT:

For proper operation and to prevent further damage, inspect the blades for damage and replace if necessary.

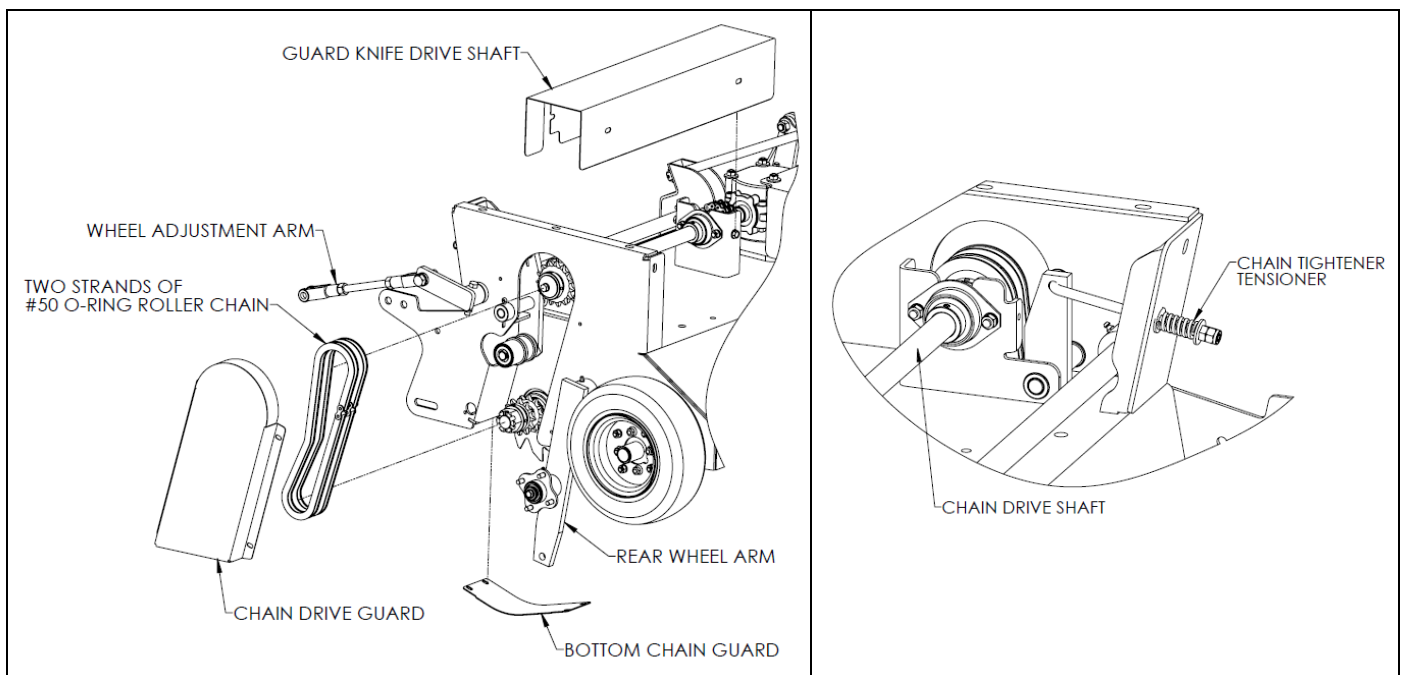
Maintenance

Chain Drive

The chain is exceptionally rugged and durable.

If the chain needs to be removed or replaced:

1. **Disconnect the PTO shaft.**
Park on level surface.
Put tractor in park.
Turn off engine and Remove key.
2. Remove rear tire.
Disassemble the wheel adjustment arm from the wheel lift arm and pivot the wheel lift arm out of the way. (See diagram below)
4. Remove the three guards as shown.
5. Loosen the chain tightener tensioner.
Disconnect the chain connector link from each chain and remove the two roller chains.
In some cases, the bearing bolts securing the chain drive shaft may have to be removed in order to lower the shaft, providing enough slack to remove chain connector links.
Chain tightener idler pulley may need to be removed if added slack is needed to remove the connector links.
6. Replace chain and reverse the above steps to reassemble.



Maintenance (cont.)

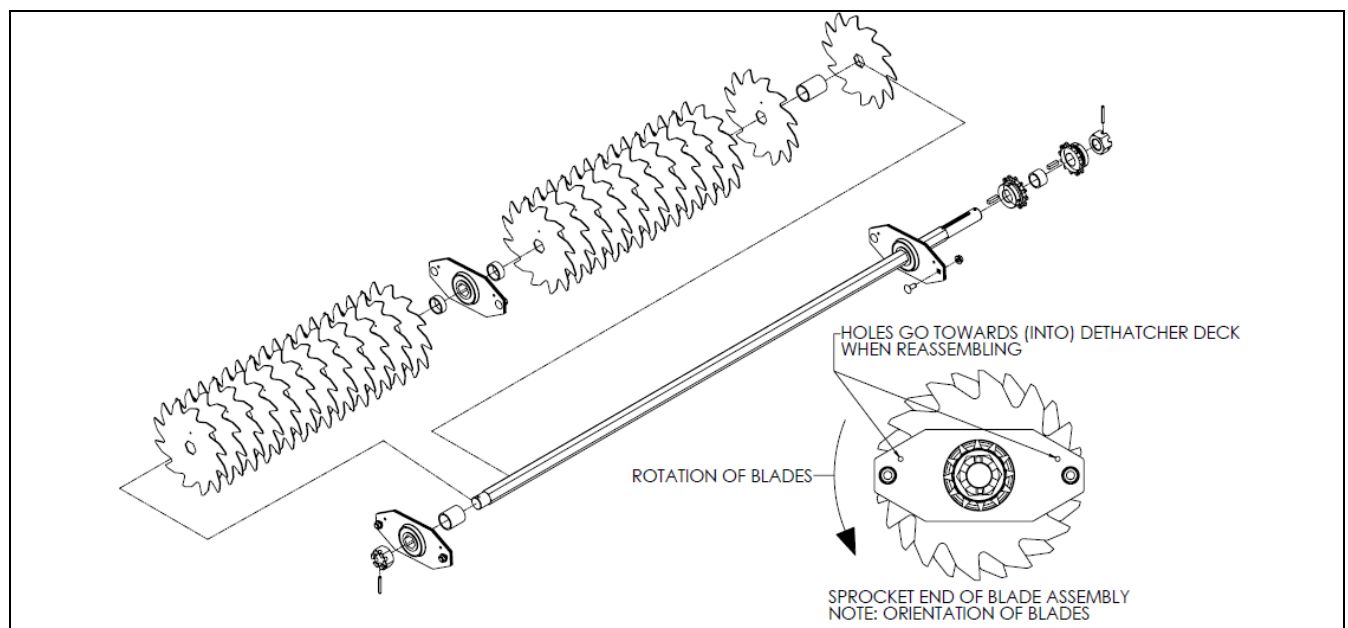
Cutter Blade Replacement

The cutter blades are heat-treated, spring steel. There are two circular blades in alternating order. If they need to be replaced:

1. Disconnect the PTO shaft and detach unit from the tractor.
Disconnect and remove the PTO shaft from the dethatcher.
Disconnect the hopper extension handle from the hopper.
2. Remove the chain as instructed in the previous section.
3. Remove the spring pin from the castellated nut on the end opposite the drive sprockets.
Loosen castellated nut, but do not remove.
4. The cutter blade assembly is held in place by two carriage bolts on each on the 3 flange bearings, these will have to be removed.
CAUTION: The blades are sharp and must be handled with care to prevent injury.
5. Remove blades and spacers as needed. For replacement parts see Parts & Packing List shipped with unit or view online at www.gandy.net.
IMPORTANT:
Cutter blades are mounted in alternating order.
Remove and replace in same alternating order to maintain proper blade performance.
One blade has a 3/16 diameter hole for reference.
Keep track of where spacers go so they can be reassembled in the same order.
6. Reverse the above steps to reassemble the blades and chain drive.

NOTE:

The flange bearings are installed with the 3/16 diameter holes **towards (into)** the dethatcher deck.



Overseeder Package

Seeder Hopper Assembly – 2848SS and 2848SA

1. Install left and right upper fenders (Figure 7), using three 3/8" x 3/4" carriage bolts and whiz flange nuts along the seam and two 3/8" x 3/4" carriage bolts and whiz flange nuts in the forward and rear flanges. Leave bolts loose.
2. Assemble chain tightener, drive bearings, lower sprocket and chain. (Figure 8).

Figure 7

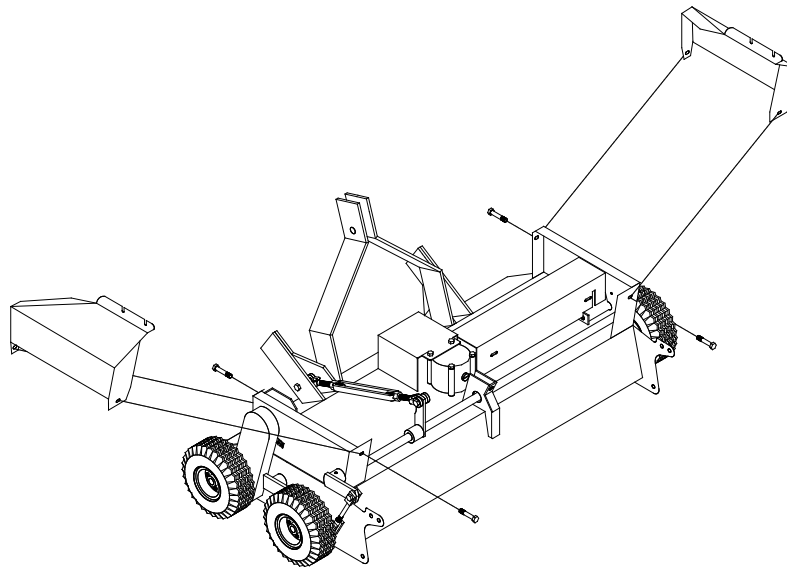
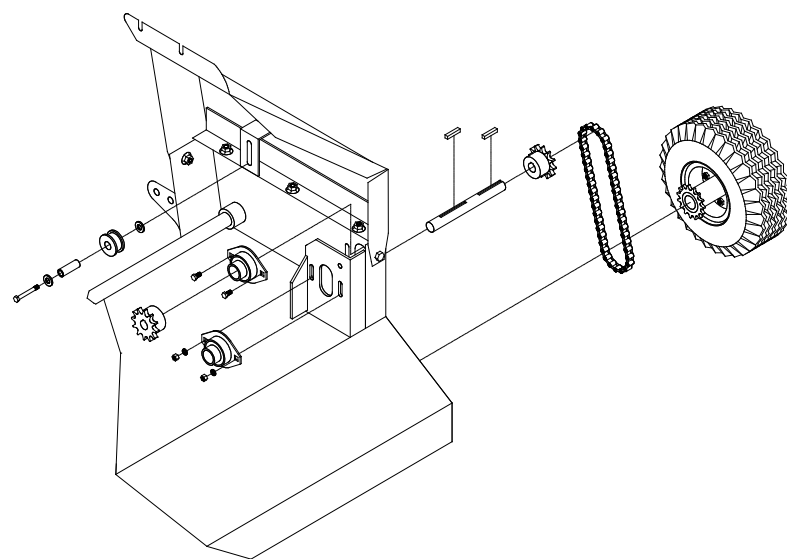


Figure 8



Overseeder Package

Seeder Hopper Assembly-2848SS and 2848SA (cont.)

3. Tighten chain to proper tension by lifting on the bearing shaft and tightening bearing shaft bolts. Install chain guard (Figure 9).
4. Install seed hopper in slots on fenders (Figure 10) and tighten all bolts on fenders that were left loose in Step #1.

Figure 9

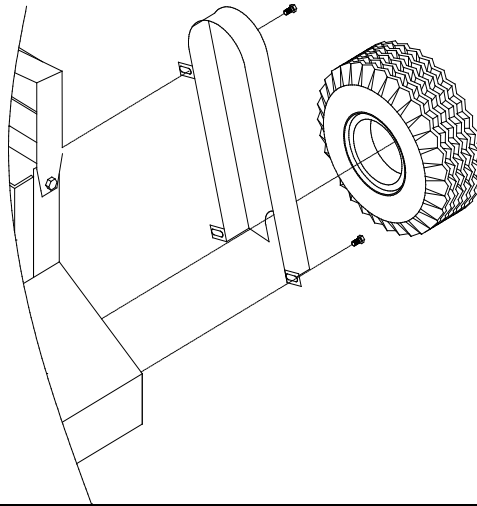
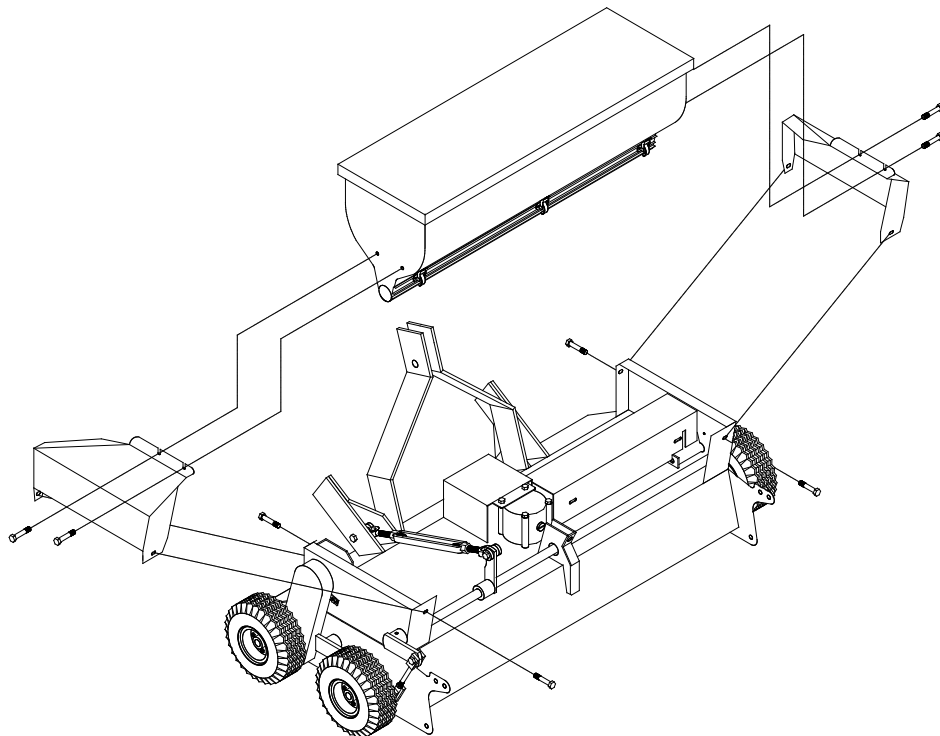


Figure 10



Overseeder Package

Seeder Hopper Assembly-2848SS and 2848SA (cont.)

WARNING: Check hopper for any foreign objects, and make sure that the rotor turns freely before mounting and before any operation. Any obstruction could damage rotor blades.

5. Place hopper sprocket on the rotor bar and secure in place using 1/4" x 1/4" square head set screw. (Figure 11)
6. Install the drive chain. Tighten chain with roller assembly. (Figure 12)

Figure 11

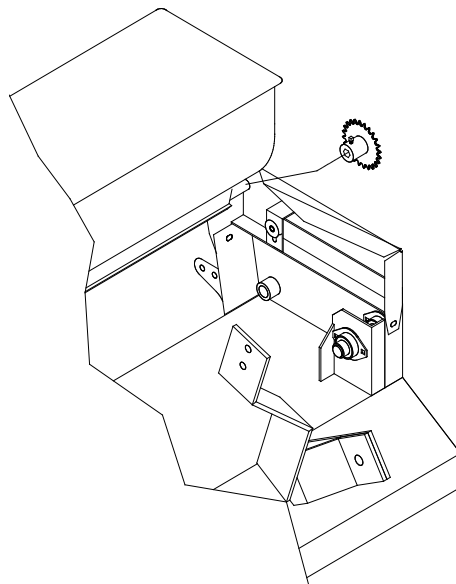
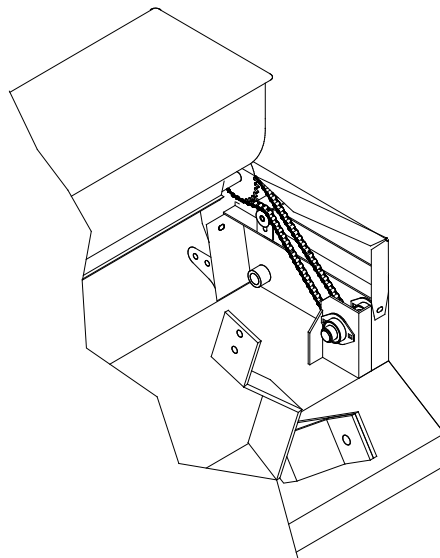


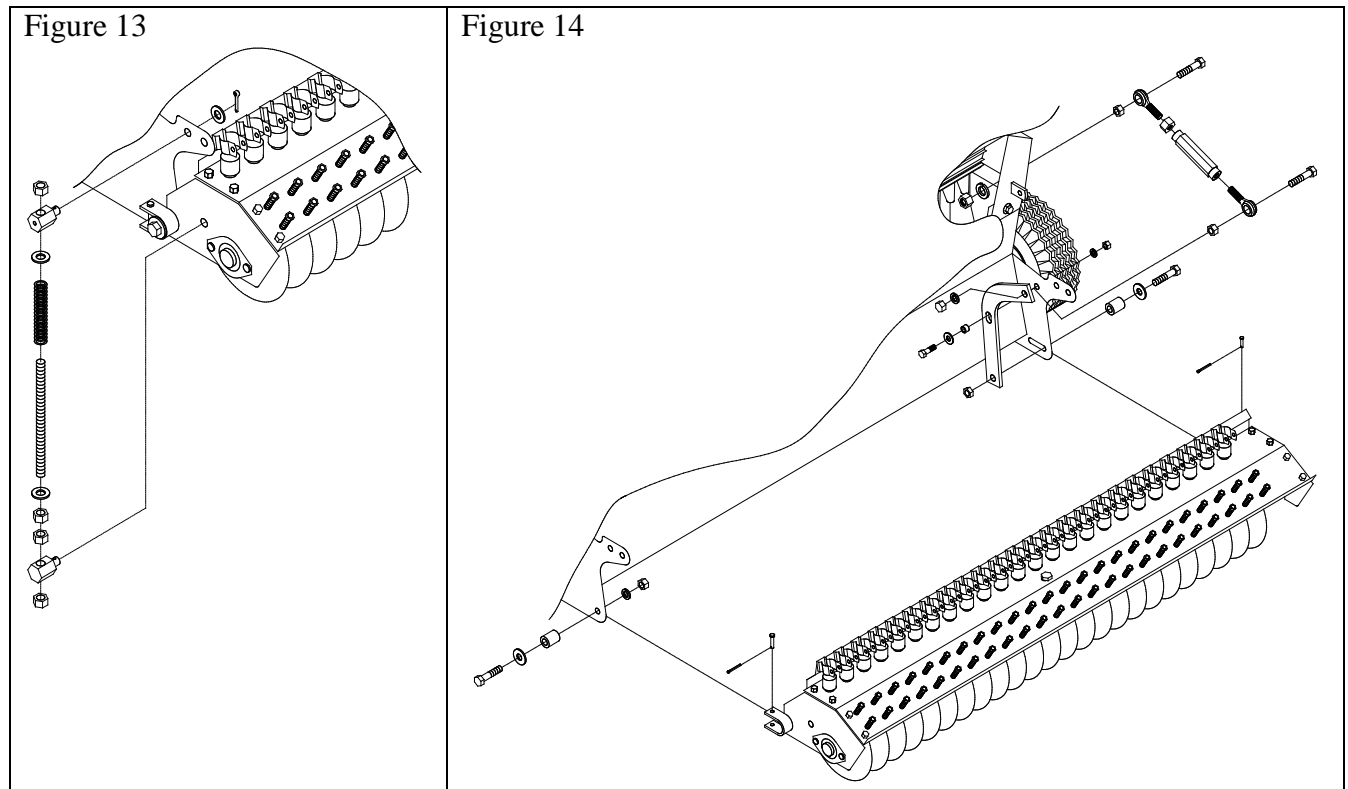
Figure 12



Overseeder Package

2848SS Seeder and Disc Assembly

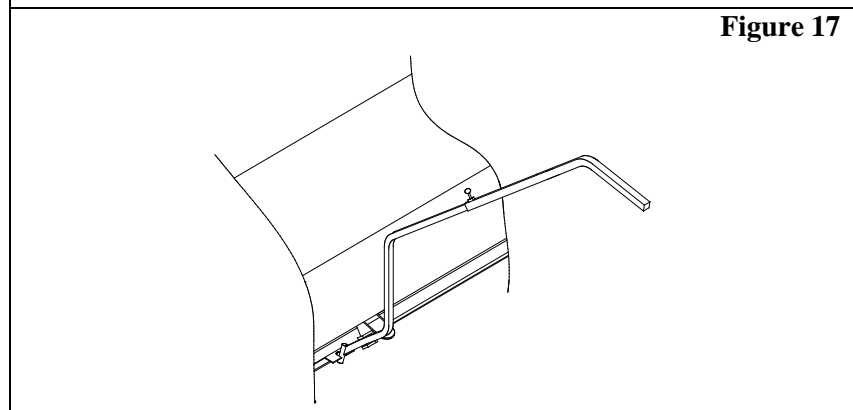
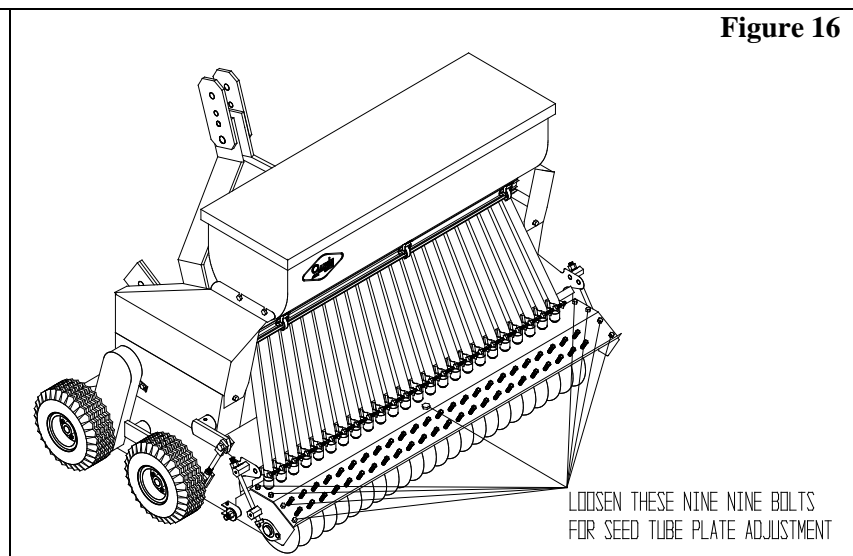
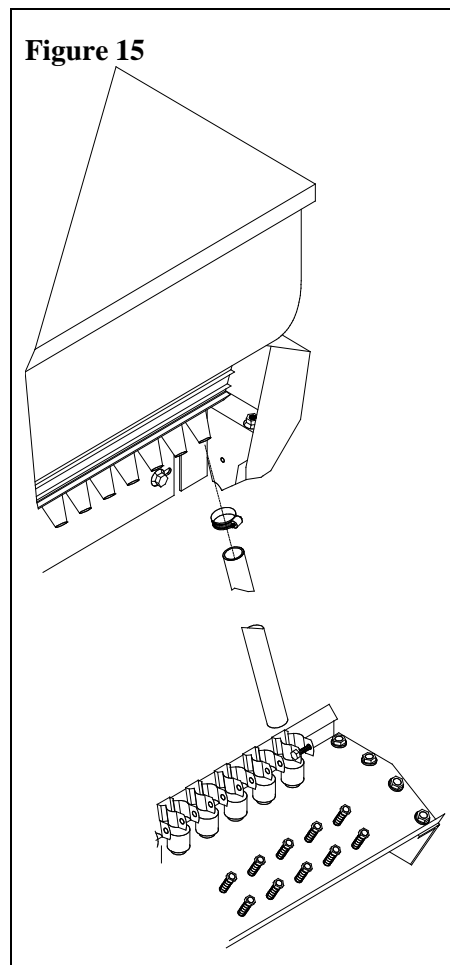
1. Assemble disc adjustment stabilizers on each side of disc assembly (Figure 13). Thread two lock nuts onto 1/2" x 8" bolt approximately 1-1/2" from end of rod. Slide on lower stabilizer block. Thread lower lock nut loosely onto end of bolt. Over upper end of bolt, slide SAE washer, spring, SAE washer, upper stabilizer block and then thread upper lock nut over upper end. Pressure may be increased by threading third lock nut from lower end further onto rod.
2. Attach disc adjustment arm to right side of unit using 3/8" x 1-1/4" bolt, wrought washer, bushing, and secure in place with 3/8" lock washer and nut. (Figure 14) Attach bushing to lower end of disc adjustment arm using 1/2" x 2-1/4" bolt, through 1/2" wrought washer, bushing and through slot in frame and thread into tapped hole in arm. Secure in place by 1/2" lock jam nut. Mount disc assembly, using 1/4" x 1-3/4" clevis pin and 3/32" x 3/4" cotter pins on each end. Attach disc stabilizer blocks (Figure 14) to forward hole of main frame on left side by using 1/2" SAE washer and one 5/32" x 1" cotter pin. Adjust and lock nuts on adjusting bolts so that the disc assembly is allowed to travel freely in cutter slits.
3. Attach turnbuckle using 1/2" x 2-1/4" bolts and securing in place with 1/2" nut. Attach lower rod end to upper hole in upper fender and secure with 1/2" lock washer and nut. Attach lower rod end to upper hole in disc adjustment arm, secure in place with 1/2" lock washer and nut.



Overseeder Package

2848SS Seeder and Disc Assembly (cont.)

4. Install material feed tubes (Figure 15). It is recommended that the disc end be installed first by spiraling it into the fitting and securing it in the holder with a 1/4" x 3/4" bolt and 1/4" whiz flange nut.
5. Check alignment of discs and tubes for desired placement of seed within slit. The entire seed tube plate can be adjusted closer to or further away from the disc, by loosening the nine bolts marked in Figure 16. Adjustment may be necessary with a variance in seed size. The angling feature shown in Figure 18A (page 14) will create a larger slit to accommodate a larger seed. Placement of the seed tube too close to the disc may result in seed bouncing off the disc and missing the slit; too far, and it will place the seed along side of the slit.
6. The discs can be aligned with the knife blades by adjusting the inner disc adjustment nuts. See Figure 20 on page 20.
7. Attach hopper handle (Figure 17).



Operation

1. Check hopper for any foreign objects to make sure the rotor bar is free to turn. Check tires on dethatcher deck.
2. Check the rate according to the charts for seed type, and set the cam gauge on hopper bottom for the desired rate. All rates are calibrated for 1,000 square feet at 2.5 mph.

When setting the gauge, use the top surface of the stop as the indicator to tell where the gauge is set.

NOTE: Always move the gauge away from the stop before attempting to set the gauge.

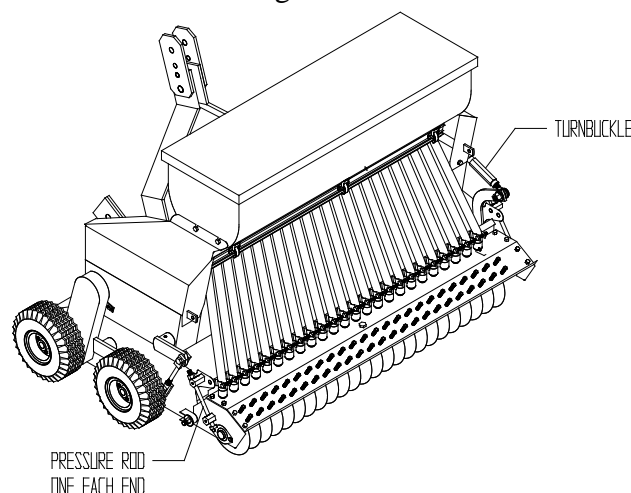
See next section for recommended testing procedures.

3. Make sure the hopper slide is closed and fill the hopper with seed.
4. To prevent possible damage to turf, it is necessary to first engage PTO to put the Dethatcher/Overseeder mechanisms in motion. Then, after beginning forward movement with the tractor, lower the unit and open hopper slide to start dispensing seed.

A TEST RUN IS RECOMMENDED TO CHECK FOR PROPER SEED PLACEMENT

5. After operation, it is recommended that the rotor in the hopper be removed and cleaned of all fines. See maintenance section.
6. Overseeder disc assembly down pressure rods and springs (Figure 18A): This feature adds the ability to provide greater down pressure on the disc gang section to hold the disc at the bottom of the slit permitting more seed to enter the slit.
7. Disc section angle adjustment (Fig. 18A): This turnbuckle adjustment can angle the gang section to various degrees creating a wider slit if desired. The wider slit can accommodate larger seeds or a higher percentage of seed

Figure 18A



Testing the Rate

It is strongly recommended that you test the seed rate on a small patch of ground before you begin full operation. The rate chart will serve only as a guide, because atmospheric conditions alone, can affect the flow of materials.

Rates are expressed in terms of pounds applied per thousand square feet. Check the rate as follows:

Pan Method

1. Remove the drop tubes from the down spouts by loosening the hose clamps.
2. Suspend a calibration or catch pan below the spouts.
3. Travel a known area, such as 1,000 square feet.
4. Weigh contents of calibration pan and adjust setting up or down as necessary and check rate again.

Known-Volume Method

1. Completely fill the hopper with a known volume of material.
2. Treat a known area, such as 1,000 square feet.
3. Weigh enough material to more than refill the hopper to the original level.
4. Refill the hopper to the original level and weigh the remaining material to calculate how much was applied.
5. Adjust gauge as necessary and retest.

Calibration of Hopper

1. Determine speed

Feet

88	per minute equals 1 mph
179	per minute equals 2 mph
264	per minute equals 3 mph
352	per minute equals 4 mph
440	per minute equals 5 mph
528	per minute equals 6 mph

2. Set Gauge

Refer to rate charts accompanying this manual.

Remember the setting in the charts are starting guides.

You should check your rate with the procedures outlined previously.

You can fine-tune the gauge with extreme precision. The first half of the gauge is marked with increments of one. (Second half has increments of five). If you tune to a tenth of one gauge stop, setting at 27.8, instead of 27.7, the slide will open approximately one thousandth of an inch more. Such positive movement is possible, because the gauge is attached directly to the slide.

There is no linkage slack.

Maintenance

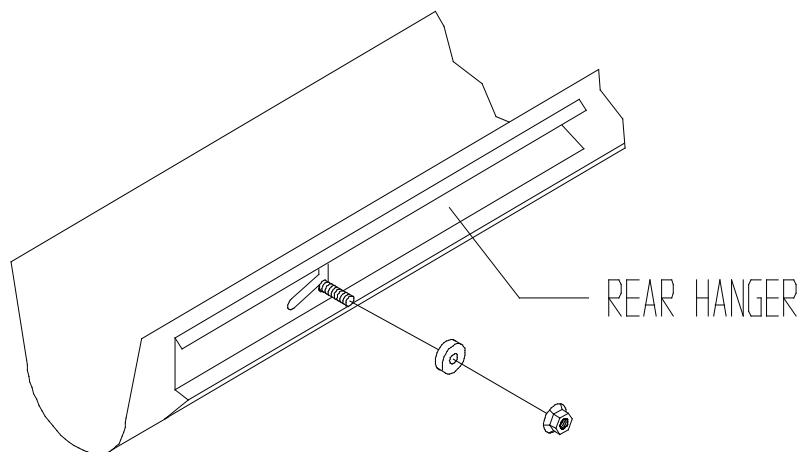
Cleaning the Hopper

1. Loosen six latches that secure bottom and slide to hopper.
2. Loosen wing nuts on bearing retainers and remove bottom.
3. Remove rotor and clean. It may be necessary to oil rotor bearings to prevent material fines from working into them.
4. Some materials may build up on the hopper bottom, especially under humid conditions. If necessary, remove slide from hopper for cleaning by loosening the four nuts, nylon washers and slide hanger.

IMPORTANT:

To obtain proper slide tension, when reassembling slide onto bottom, gently drive the hanger to the right (Fig. 19) using a screwdriver against the tab at the left end of the hanger. When the end of the hanger lines up with the scribed line on the hopper bottom, slide tension is correct, and the bottom is ready for re-installation.

Figure 19



Maintenance (cont.)

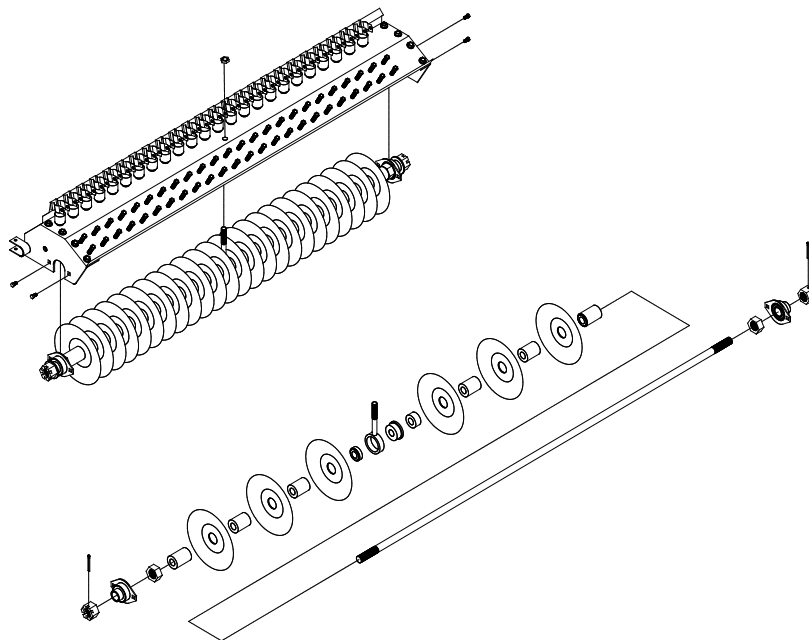
Disc Opener and Bearing Replacement

1. **Park on level surface.**
Put tractor in park.
Turn off engine and remove key.
Be careful as the disc blades are sharp and possible injury could occur if mishandled.
2. Remove bearing bolts on each end and center bearing nut. (Figure 20)
Disc assembly will drop out of housing.
CAUTION: Discs are sharp and possible injury could occur if mishandled.
3. Remove cotter pin and castellated nut from end of disc shaft. (Figure 20)
4. Remove end bearing.
5. Remove nuts, spacers and discs, as necessary from disc shaft. Maintain the order as originally assembled. When reassembling maintain proper order. Make sure the spring-loaded disc scrapers are in their proper position as the disc assembly is replaced into the housing.
6. Note: By adjusting the inner nuts on the disc shaft the discs can be precisely aligned with the cutter blades.

Drop Tube Replacement

1. Loosen hose clamp on top of drop tube and detach tube from spout.
2. Loosen bolt holding bottom of drop tube. Twist tube free.
3. Replace by reversing procedure.

Figure 20



2895 Roller Attachment (Optional)

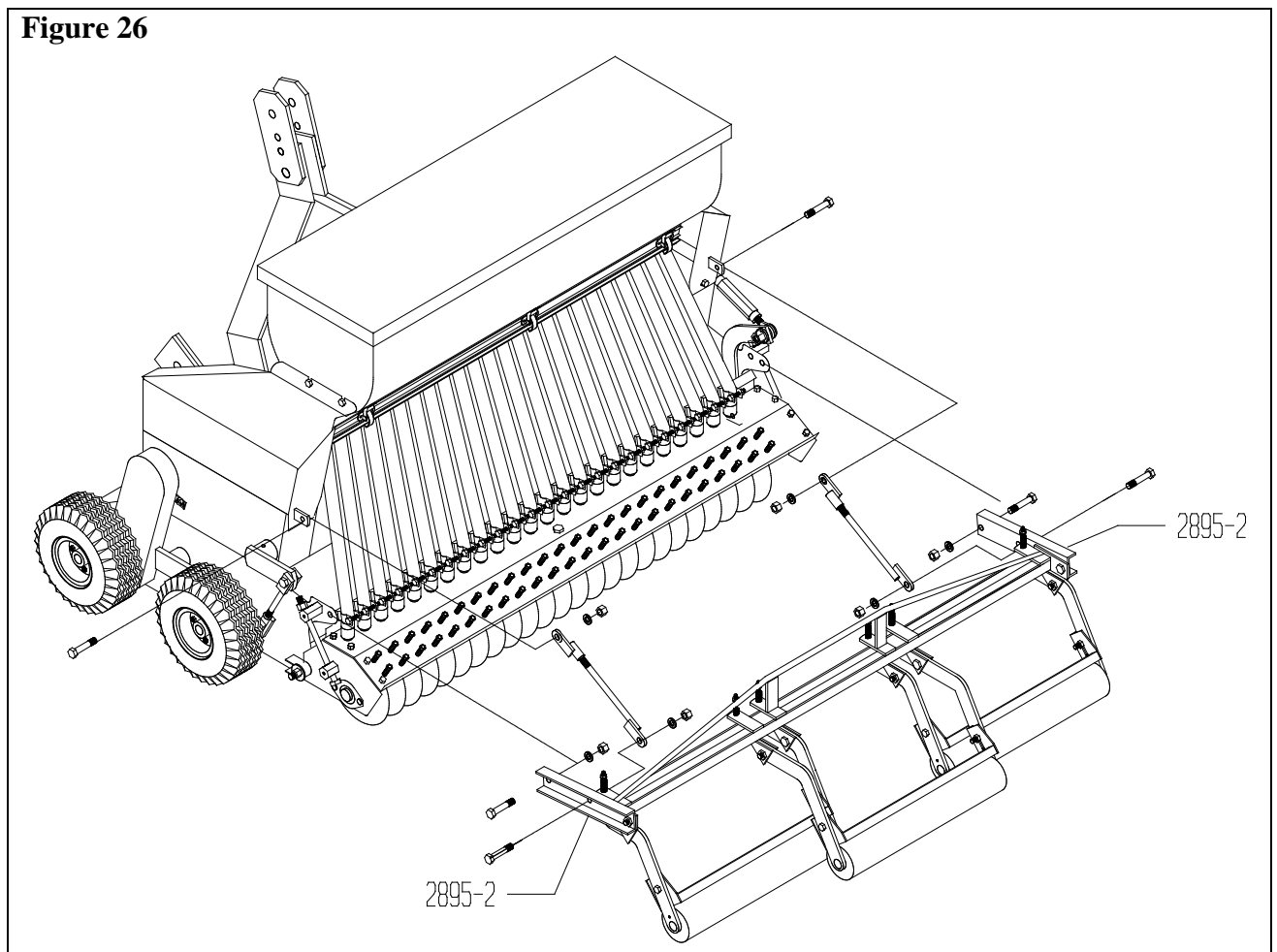
Assembly

1. Attach the two end brackets (2895-2) of the roller assembly to the rear hole of the tab on the dethatcher deck using hardware provided (Figure 26).
2. Attach the two roller adjusting rods loosely to the inside of the center hole of each end bracket using 1/2" x 1" bolt, lock washer and hex nut. Attach the upper end of the adjustment rod to the tabs on the rear of the upper fenders using 1/2" x 1-1/4" bolt, lock washer, and hex nut.
3. The three roller assemblies are mounted to the roller cross bar as shown in

Operation

To decrease or increase pressure of rollers, lengthen or shorten adjusting rod. This should be done when adjusting depth of cutter knives.

Figure 26



2897 Brush Attachment (Optional)

Assembly

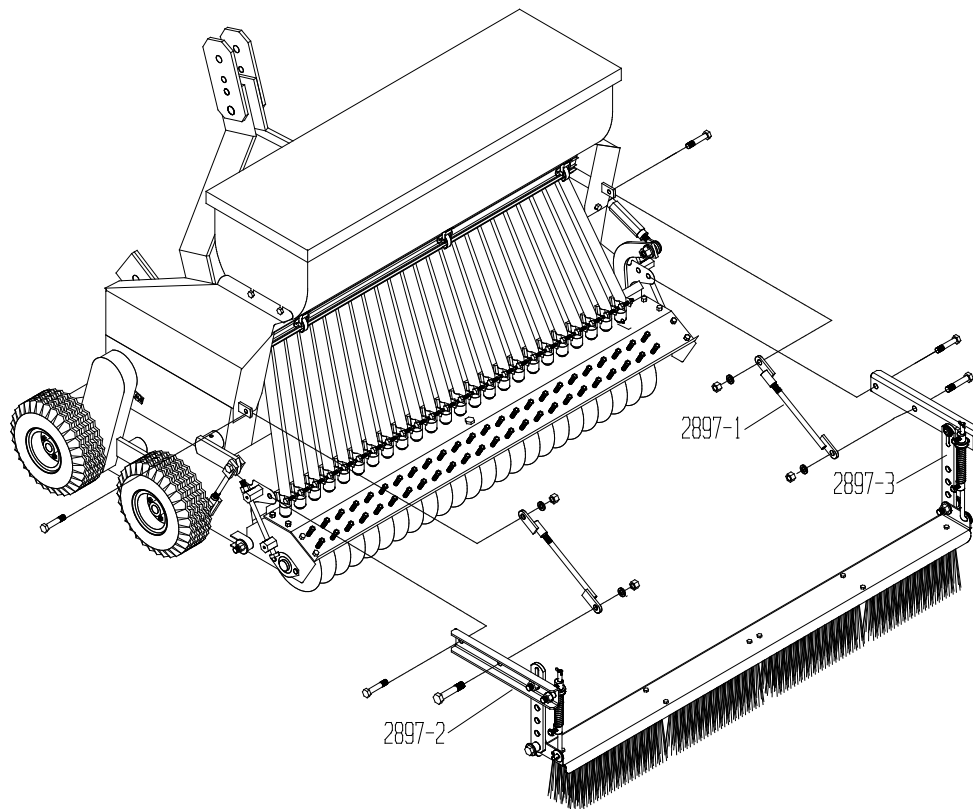
1. Attach the two end brackets (2897-2) of the brush assembly to the rear of the tab on the dethatcher deck using hardware provided (Figure 27).
2. Attach the two brush adjusting rods (2895-1) loosely to the inside of the center hole of each end bracket using 1/2" x 1" bolt, lock washer, and hex nut. Attach the upper end of the adjustment rod to the tabs on the rear of the upper fenders using 3/8" x 1" bolt, lock washer, and hex nut.
3. The brush assembly is attached to the end brackets with the slotted bar strap (2897-3) at the forward hole on the brush assembly. A down-pressure spring is assembled in the rear hole on the brush assembly held in place by an eye bolt assembled through the rear hole in each end bracket (2897-2). Be sure to assemble in the following order: locking collar, spring, washer, eye bolt, washer, and second locking collar.

Operation

Greater downpressure can be created by adjusting the spring tension between the locking collars. Bristles of brush may be flat to ground or may be angled by adjusting height in strap or by adjusting locking collars of downpressure springs.

NOTE: If downpressure is too harsh, the downpressure springs may be removed (leave rods in place), so the bristles float to lightly brush the ground surface.

Figure 27



Trouble Shooting	
Problem	Solution
Unit will not slice ground	<p>A. If unit equipped with rollers,</p> <ol style="list-style-type: none"> 1. Loosen spring tension on roller. 2. Shorten up the rod side braces. <p>B. If too much spring tension on sides, loosen spring tension to allow movement of opening unit.</p> <p>C. Check center link of 3-pt hitch holding up rear of unit and readjust if necessary.</p> <p>D. Check depth adjustment turnbuckle and adjust for desired depth.</p>
No seed in slit	<p>More angle on disc assembly will create a wider slit.</p> <p>A. Check to see that openers are correctly aligned with slit.</p> <p>B. Check to see that seed tube is correctly oriented to disc by sliding the seed tube plate either closer to or further from disc (Watch to see that seed drops onto the disc).</p> <p>C. Check to see if seed tubes have plugged. If seed tubes are too long cut shorter. If operating under muddy conditions, watch for buildup of mud in tube. Clear obstruction.</p> <p>D. Check for foreign material in hopper and remove or clean so metering apertures are not obstructed. Use only clean material.</p> <p>E. Check for rotation of internal rotor. Realign or tighten chain or replace pin if broken.</p>

Specifications

Dethatcher Model: 2848D12

Specifications

Frame	Steel Plate, 7 Gauge, 3/16-inch
Hitch	Self-leveling, 3-point Category 1
PTO	540-RPM with Slip Clutch for 18-HP Tractor and up
Drive	PTO to Gear Box to #50 O-Ring Chain to Blade Shaft
Gear Box	Right Angle 1 to 2 Ratio
Blades	24 Blades Spaced 2-inches apart: anneal Spring Steel, Heat-Treated, 14 Gauge, Sawtooth, 8-inch Diameter
Blade Shaft	1-inch Hex
Bearings	Sealed, Self-Aligning
Tires	4-Ply Sawtooth 410/350
Depth Adjustment	0 to 1-1/2 Inches (0-37.5 mm)
Overall Width	66-inches (168 cm)
Weight	442 lbs. (200 kg)

Overseeder Model: 2848SS Disc Assembly

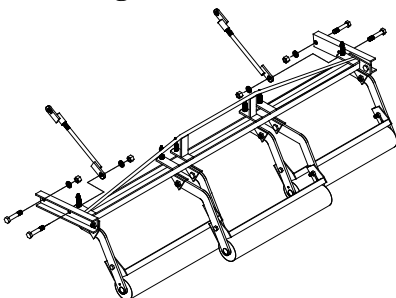
Specifications

Hopper	Steel 20-Gauge, 42-inch w/Cover
Hopper Capacity	Volume 3.5 Cubic Feet (98dm), 100-125 lbs. Seed
Hopper Bottom & Slide	Stainless Steel Bottom & Slide Micro-Precision Mated, 24 Triangular Openings Uniform for All Gauge Settings, Snap Off of Easy Cleaning
Rate Gauge	Precision Cam Gauge, Part of Rate Control Slide
Seed Spacing	Seed Rows, 2-inch (5.08 cm) Apart
Seed Hopper Drive	#41 Chain From Left Front Wheel to Shaft to Hopper
Rotor	Precision Resilient Neoprene Flo0Control w/Large Flight Capacity
Rotor Bearings	Nylatron w/ Oil-Lite Journal
Shut-Off	Hand On-Off Lever Located Within Easy Reach
Discs	Steel 7-Gauge (17.18 cm) w/ Spring Loaded Scrapers
Tubes	Flexible Plastic
Weight	Approximately 165 lbs. (74.84 kg)
Rate Charts	Furnished (Additional material calibrated upon request if material is supplied.)

Options

Roller Assembly Package 2895	3-Section Roller, Adjustable
Brush Assembly Package 2897	Synthetic-Fiber Mildew-Resistant Brush, Adjustable

2895 Roller Package



2897 Brush Package

