



## OPERATOR'S MANUAL MAINTENANCE MANUAL PARTS LIST

# **TURFCO**®

# WIDESPIN<sup>™</sup> 1530 TM Truck Mounted Broadcast Top Dresser

Product Number 85811 and 85812 Starting Serial Number E00101

US Patent 6,149,079, 6,508,419 and 6,817,552

Manual Number 662890-GB



**DANGER –** IF INCORRECTLY USED THIS MACHINE CAN CAUSE SEVERE INJURY. THOSE WHO USE AND MAINTAIN THIS MACHINE SHOULD BE TRAINED IN ITS PROPER USE, WARNED OF ITS DANGERS, AND SHOULD READ THE ENTIRE MANUAL BEFORE ATTEMPTING TO SET-UP, OPERATE OR SERVICE THE MACHINE.

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WIDESPIN 1530 TM

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Registered Trademark and Patents TURFCO<sup>®</sup> WIDE SPIN <sup>™</sup> 1530 TM is covered by US Patent 6,149,079, 6,508,419 and 6,817,552. TURFCO<sup>®</sup>, WIDE SPIN <sup>™</sup> and Mete-R-Matic<sup>®</sup> are registered trademarks of Turfco Manufacturing, Inc. HEAVYSPREAD<sup>™</sup> and LIGHTSPREAD<sup>™</sup> are trademarks of Turfco Manufacturing, Inc.

**Specifications** 

CE Intended Use: The WideSpin 1530 TM is intended to be used for the application of properly prepared organic top dressing material. The WideSpin 1530 TM is NOT intended to be used for any purpose other than the application of properly prepared organic top dressing material. Properly prepared top dressing is organic material with a controlled moisture content that has been screened to remove debris, rocks, and excessive sized top dressing material. Operation is intended to be at properly prepared worksites only. The WideSpin 1530 TM is intended only to be mounted to trucks having adequate weight, brakes, and horsepower to safely control the top dresser. The proper Mounting Kit must be used to attach the WideSpin 1530 TM to the truck. The WideSpin 1530 TM is intended to be used only when the operator is present at the drivers position on the truck. The WideSpin 1530 TM is intended to be operated only when the truck and top dresser are moving. The WideSpin 1530 TM is not intended to be operated unless it is properly attached to the truck. The WideSpin 1530 TM is NOT designed for or intended to accept riders.

Dimensions: (Spinner Assembly Attached, Without Mounting Kit Installed)

Width	1.29 Meter (50.75" Inches)
Height (Bottom of Spinner to Top of Hopp	per) 1.07 Meter (42.25" Inches)
Length	1.96 Meter (77.25" Inches)
Henner Conscitu	E4 Cubic Motor 816 E Kg (10 Cubic East 1 800 Doundo)
Minimum (Maximum Crune ed Wildth	0.54 Cubic Meter - 616.5 Kg. (19 Cubic Feel - 1,600 Pourids)
winimum/waximum Spread width 3	8.04 Meter to 9.14 Meter (10 to 30 Feet)
Operator Controls H	land Held Spinner and Conveyor Belt ON/OFF Control,
S	Spinner Speed Control, Conveyor Belt Speed Control,
А	Adjustable Metering Gate, Spinner Assembly Tilt Control,
а	and Heavy Spread Diverter
Operating Ground Speed	R Km/h (5 MPH)
Transport Speed	P Km/h (5 MPH)
	2 Volt DC, Negative Ground, 15 AMP
	Electricity Supplied By Truck
Minimum Hydraulic Requirements 2	26.5 Liters Per Minute at 10,342 kPa (7 GPM at 1,500 PSI)
Н	lydraulic Power and Fluid Supplied By Truck
Weight Empty 2	299 Kg (660 Pounds)
Weight Loaded 1	115.5 Kg (2.460 Pounds)
Maximum Angle of Operation	5° Dogroop
	J Degrees
Noise Emission Level:	
Operator Position	



Sound Pressure (LpA) = 84.7 dBA Sound Pressure Level (LwA) = 100.9 dBA

#### **Operating Conditions:**

Truck Engine Full Throttle, Spinner and Conveyor Belt Operating, Hopper Empty, Unit Stationary

Product Records					
IMPORTANT: Record the information from the serial number plate of your Turfco WideSpin 1530 TM Broadcast					
Top Dresser. It will be necessary to furnish your Product Number	and Serial Number when ordering parts.				
Model Designation WideSpin 1530 TM Broadcast T	op Dresser				
Product Number (Check One) 🗌 85811 (With Cooler)	Date Purchased				
<b>85812</b> (Without Cooler)					
Serial Number					
Purchased From					

SAFETY



#### **General Safety Practices**

Safety on the job should always be a top priority. Training and experience are important factors in the safe operation of equipment. Please consider the following information and realize that safe operation is a matter of using common sense as it relates to the machine, its maintenance, the operator, the training, and the operating conditions. These are general safety instructions that apply to most turf maintenance equipment.

This list includes many general safety instructions as they relate to turf equipment. This list does not encompass all hazards. Common sense must always be used to determine the safest way to operate a machine under specific conditions.

#### TRAINING:

- Always read the manual before operating a machine for the first time.
- Always read the warning decals before operating a machine for the first time.
- Always check the location and use of each control before operating a machine for the first time.
- Practice operating the machine in a safe area with no obstructions until becoming familiar with the controls.
- If you have questions, ask your supervisor or call the factory.

#### CLOTHING:

- Clothes should be snug fit. Loose fitting clothing is hazardous because it may get caught in the mechanism during service or operation.
- Remove jewelry before operation. Jewelry may get caught in the mechanism.
- Wear shoes that will protect your feet. Sneakers do not protect and do not provide the protection of leather shoes or boots. Steel toed safety shoes should be considered for many situations.

- Hard Hat: The use of a hard hat should be considered when using equipment on a golf course. The danger of being hit by a golf ball should be a major concern as well as protection while operating under trees.
- Eye Protection: Safety glasses and/or face shields should be considered when operating, as well as working in close proximity to high speed rotary equipment. Watch for rotary mowers, edgers, brush and string trimmers. Rotary mowers can throw debris at speeds up to 200 mph (320 Km/h).
- Hearing: If the noise level of the equipment is too loud, consider the use of ear protection.
- Do not use stereo headsets during operation. This is a distraction that may lead to an accident. Headsets also make it difficult to hear other people and equipment while operating the machine.
- Respirators: When operating in dusty, windy conditions, wear a respirator. This is also an important consideration if operating equipment while spraying chemicals and fertilizers.
- Gloves: Use gloves when handling sharp or hazardous objects.

#### THE OPERATOR:

- The operator should never use a machine while under the influence of alcohol or drugs.
- The operator should be aware of the hazards of working in the sun and should take proper precautions to avoid heat stress and dehydration. Use sun screen products when necessary.
- The operator should never attempt to ride a machine that is not designed for that propose. Do not allow others to ride a machine that is not designed for passengers. If designed to carry passengers, do not allow more passengers to ride a machine than the machine was designed to carry.
- Care should always be taken when mounting and dismounting a riding machine. Prevent injuries and falls by making sure the operator does not slip. Unless it is an emergency, do not jump off a machine. Injury may result when an operator's foot slips trying to jump from a machine.

#### WIDES*PIN*° 1530 TM

- Do not operate any equipment at unsafe speeds. Speeds should be reduced when turning or operating on slopes. The operator must use common sense to determine a safe speed based on the equipment, the load, the slope, the surface, and other conditions that may affect safe operation.
- The operator must be aware of the conditions around the area. Be aware of other people and machines.
- Beware of slippery conditions. Wet turf can be encountered on slopes, when turning or stopping, or at higher speeds.
- Keep hands and feet away from cutting devices and drive components. Shut off the engine and remove the key or ignition wire when servicing cutting devices or drive components.
- If required to lift, an operator should ask for help if the object is too heavy. The operator should lift with his or her legs instead of the back. Care should be taken to avoid twisting the back while lifting a heavy load.
- Never allow children to operate the machine.

#### THE MACHINE:

- Tow vehicles must have adequate tow hitches and brakes to control any towed machine. Check the weight and capacity of the machine that will be towed by that vehicle. *Trucks used to carry equipment must have adequate load capacity and brakes. Check the weight and capacity of the machine that will be towed by that vehicle.*
- Do not overload machinery. The components are designed for certain weights and capacities. Overloading the machine will cause unsafe conditions.
- Make sure the brakes are operating properly.
- Check to assure that all controls are in good operating condition.
- Inspect to insure that all guards are in place. Do not operate a machine without all guards in place.
- Always check the machine to make sure it is in good working order. Do not place hands or feet near moving or rotating parts.
- Check the tire pressure.
- Check the condition of the hydraulic hoses. Leaks and worn hoses should be fixed or replaced before the machine is put into service. Do not use your fingers or hands to check for hydraulic leaks. High pressure leaks can puncture the skin and force oil into the body. This can cause severe injury or death.
- Shut off the engine before servicing the machine. It is best to check machines on a level area. Machines on a slope may roll when the engine is off.
- Do not modify the machine in any manner. Refer unfamiliar repairs and adjustments to mechanics that have been trained to do them properly.
- Replace decals that are damaged or unreadable.

#### THE ENGINE:

 Prevent accidental starting by removing the spark plug wire when servicing the engine or the equipment. Disconnect the negative wire from the battery terminal if the engine is equipped with an electric starting system.

- Do not strike the flywheel with a hammer or any hard object. This may cause the flywheel to shatter in operation.
- Pull the starter cord slowly until resistance is felt. Then pull the cord rapidly to avoid kickback and to prevent hand or arm injury.
- Do not run the engine in an enclosed area. The exhaust gases contain carbon monoxide, an odorless and deadly poison. The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- Do not store, spill, or use gasoline near an open flame, nor near an appliance like a stove, furnace, or water heater that uses a pilot light or can create a spark.
- Do not refuel indoors or in an unventilated area. Check the fuel level. Do not over fill. Do not add fuel while the machine is hot because spilled fuel may cause a fire. Allow the engine to cool before refueling.
- Do not transport the machine with fuel in the tank.
- Do not remove the fuel tank cap or fill the fuel tank while the engine is hot or running.
- Do not operate the engine if gasoline is spilled, when the smell of gasoline is present, or when other explosive conditions exist. Move the equipment away from the spill and avoid any ignition until the gasoline has evaporated.
- Do not choke the carburetor to stop the engine. Whenever possible, gradually reduce the engine speed before stopping.
- Do not tamper with the governor springs, links or other parts to increase the engine speed. Run the engine at the speed set by the equipment manufacturer.
- Do not check for a spark with the spark plug removed. Use an approved tester. Use the correct tools to service the machine.
- Do not crank the engine with the spark plug removed. If the engine is flooded, place the throttle in fast and crank until the engine starts. Avoid damage to electric starter by cranking intermittently until engine starts.
- Do not operate the machine without a muffler. Inspect the muffler periodically and replace it if it is leaking or worn. Replace it with correct muffler. Do not touch a hot muffler, cylinder, or cooling fin.
- Do not operate the engine with an accumulation of grass, leaves, or other combustible material in the muffler area.
- Keep the cylinder cooing fins and the governor parts free of dirt, grass, and other debris.
- Do not use the engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed in the muffler. In the State of California, a spark arrester is required by law. Other states may have similar laws. Federal laws apply on federal lands.
- Do not start the engine with the air cleaner or the air cleaner cover removed.
- Use fresh gasoline. Stale fuel can gum the carburetor and can cause leakage. Check the fuel lines and fittings frequently for cracks and leaks.

#### DESCRIPTION

WIDESPIN" 1530 TM

#### How To Obtain Parts and Service

To order parts, or to arrange repair service, contact the nearest authorized TURFCO dealer. For a list of authorized TURFCO dealers in your area, or for additional information regarding the WideSpin 1530 TM Broadcast Top Dresser, direct inquiries to:

TURFCO Mfg. Inc. 1655 101st. Avenue North East Minneapolis, MN. 55449-4420 USA

Telephone (763) 785-1000 FAX (763) 785-0556 E-Mail - service@turfco.com Internet - www.turfco.com To ensure safety and proper operation, always purchase genuine TURFCO replacement parts from an authorized TURFCO dealer. Replacement parts from other sources may damage the WideSpin 1530 TM Broadcast Top Dresser and/or create a safety hazard. Always refer repairs to properly trained service personnel.

DO NOT ALTER the WideSpin 1530 TM Broadcast Top Dresser in any manner. Unauthorized alterations may affect its operation, performance, and may result in injury or death to the operator as well as other individuals in the work area.

#### **Product Identification**

• Locate the Turfco serial tag **[A]** on the front of the machine (refer to Figure 1). Check the first 5 numbers. Product numbers will be 85811 or 85812.

• Product number 85811 has a factory installed hydraulic cooler **[B]**, product number 85812 does not have the cooler.



#### WIDE*SPIN* 1530 TM

#### **Truck and Mounting Kit Requirements**

#### TRUCK REQUIREMENTS

Before operating the top dresser, assure that the truck is properly equipped and designed to carry, operate, and control the weight of a fully loaded 1530 TM top dresser. The truck must have enough payload capacity to handle 1,115.5 Kg (2,460 pounds) plus the weight of the driver/operator. Truck must also have adequate and functional brakes. Hydraulic and electrical power supplied by the truck must meet the minimum requirements. Refer to Specifications table on page 3 of this manual.



TO AVOID SERIOUS INJURY, and Damage to the Truck and the WideSpin 1530 TM Top Dresser, The Truck Must Be Rated for Proper Payload Capacity, and Have Adequate Functional Brakes and Provide Proper Hydraulic and Electrical Power.

#### WIDESPIN 1530 TM MOUNTING KIT REQUIREMENTS

Never attempt to mount or install the WideSpin 1530 TM to any truck it was not designed to fit. The proper mounting kit must be used to install the WideSpin 1530 TM to the truck. Never modify or alter any mounting kit. Serious Injury and damage to the truck can result form improper installation. Refer to the manual for the mounting kit for more information.

Before operating the top dresser, assure that the WideSpin 1530 TM is securely mounted to the truck. Check the mounting brackets, the mounting bracket hardware, and the mounting pins. Ensure that all mounts and mounting hardware are tight and secure. Refer to the manual for the mounting kit for more information.



TO AVOID SERIOUS INJURY, and Damage to the Truck and the WideSpin 1530 TM Top Dresser, Do Not Attempt to Mount the WideSpin 1530 TM to any Truck that it was Not Designed To Fit. Never Modify or Alter Any Components of the Mounting Kits.

#### THE TOP DRESSER AND THE TRUCK

The operator must read and understand the entire manual for the truck used to carry the WideSpin 1530 TM top dresser. The operator must be trained in the operation of the truck and knowledgeable in its safe operation. *The operator must be aware of the extra* 

#### weight placed on the truck when combined with the

*top dresser.* The extra weight will effect the handling, balance, and braking performance of the truck.



TO AVOID SERIOUS INJURY, Do Not Drive or Operate the Truck and Top Dresser On Slopes Steeper Than 15° Degrees.

The operator must operate the truck in a safe manner and know the operating limits of the truck in relation to the weight, performance, center-of-gravity, and operating characteristics of the top dresser.



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TO AVOID SERIOUS INJURY, Read and Understand the Entire Operator's Manual Before Operating The WideSpin 1530 TM and the Truck.

#### REMOVING WIDESPIN 1530 TM FROM TRUCK

Always refer to the Installation Manual for the Mounting Kit that was used to install the WideSpin 1530 TM top dresser to the truck. Review the steps that were used to install and connect the top dresser to the truck.



To Avoid Serious Injury, Never Attempt To Lift the Top Dresser Manually. Serious Bodily Injury Could Result From Lifting The Top Dresser By Hand.

The Weight And Balance Of The Machine Requires Approved Hoists And Lifting Devices.

The Top Dresser weighs 299 Kg (660 lbs) when empty. Ensure that the hoist or lifting device, and its rigging are rated to safely lift and suspend the weight of the top dresser. The hopper of the top dresser must be empty when the machine is lifted.

Always use the lifting brace to pick up the top dresser. The lifting brace was designed to protect the hopper and is located to provide for even balance of the top dresser when the spinner assembly is installed on the rear of the top dresser.

Never attempt to install or remove a top dresser that is filled with top dressing material. The hopper must always be empty. Never attempt to pick up the top dresser when top dressing is in the hopper.

Disconnect all electrical and hydraulic connections to the truck before lifting the top dresser. Refer to the Operators Manual for the truck to properly reattach any hydraulic or electrical connections to that part of the truck.

#### Description

#### WIDE SPIN 1530 TM BROADCAST TOP DRESSER

The Turfco WideSpin 1530 TM Broadcast Top Dresser is a truck mounted broadcast top dresser. The WideSpin 1530 TM is designed to distribute a uniform application of properly prepared top dressing material to the turf. Top dressing is the introduction of new soils to existing turf.

A conveyor belt carries the top dressing from the hopper, through an adjustable metering gate, and into rotating spinner wheels. Top dressing material is spread at an adjustable width of 3.04 to 9.14 meters (10' to 30' feet) at an operating ground speed up to 8 Km/h (5 mph).

#### INTENDED USE AND FUNCTION

The WideSpin 1530 TM is intended to be used for the application of properly prepared organic top dressing material. The WideSpin 1530 TM is NOT intended to be used for any purpose other than the application of properly prepared organic top dressing material. Properly prepared top dressing is organic material with a controlled moisture content that has been screened to remove debris, rocks, and excessive sized top dressing material.

Operation is intended to be at properly prepared worksites only. The WideSpin 1530 TM is intended only to be mounted to trucks having adequate weight, payload capacity, brakes, and horsepower, and hydraulic power to safely control the top dresser. The proper mounting kit must be used to mount the top dresser to the truck.

The WideSpin 1530 TM is intended to be used only when the operator is present at the drivers position on the truck. The WideSpin 1530 TM is intended to be operated only when the truck and top dresser are moving. The WideSpin 1530 TM is not intended to be used when the truck and top dresser are stationary. The WideSpin 1530 TM is not intended to be operated unless it is properly attached to the truck. The 1530 TM is NOT designed for or intended to accept riders.

- Do Not Use With Unscreened Top Dressing Material.
- Do Not Use With Non-Organic Top Dressing Material.
- Do Not Use With Rocks.
- Do Not Allow Anyone To Stand Behind the 1530 TM When the Spinners Are Operating.

- Do Not Allow Riders On or In the 1530 TM.
- Do Not Operate On Slopes Over 15° Degrees.
- Do Not Transport or Operate At Ground Speeds Higher Than 8 Km/h (5 mph).

#### DESCRIPTION OF THE WIDESPIN 1530 LIGHTSPREAD AND HEAVYSPREAD SETTINGS

The WIDESPIN 1530 has two settings to control top dressing material volume rates and the spread patterns. The LIGHTSPREAD setting is used for frequent top dressing applications and provides the widest broadcast pattern with a "light" volume of top dressing material. The HEAVYSPREAD setting is used for narrower broadcast pattern with a "heavy" volume of top dressing material. Changing between Lightspread and Heavyspread requires repositioning the spread diverter, changing spinner speed control setting, changing the metering gate setting, and repositioning the spinner wheel vane angles.

#### LOCATION AND DESCRIPTION OF THE WIDE SPIN 1530 TM BROADCAST TOP DRESSERS MAJOR COMPONENTS

See Figure 2 and 3 for the location of the major components of the top dresser. Do not modify the WideSpin 1530 TM or its spinner assembly in any manner. Do not operate the WideSpin 1530 TM with damaged or inoperable components.

*Manual Tube:* The manual tube **[C]** is located on the side panel of the hopper. The tube is used to store the operators manual.

*Front and Rear Mounting Points:* The mounting points **[D]** on the WideSpin 1530 TM frame are designed to accept the proper mounting kit for the specific truck being used to carry the top dresser. The mounting kit must be installed to these points for proper installation.

*Lifting Brace:* The detachable lifting brace **[E]** is used to pick up the WideSpin 1530 TM during mounting or removal of the top dresser from the truck. The brace should be removed during operation. The WideSpin 1530 TM hopper should always be empty before lifting the top dresser. The spinner assembly should be attached to the WideSpin 1530 TM during lifting to provide proper balance of the machine.



*Hopper:* The hopper **[F]** holds 0.54 cubic meters (19 cubic feet) of top dressing material. The maximum allowable weight of the top dressing material is 816.5 Kg (1800 Pounds). Do not over fill the hopper. The excess weight can create a safety hazard, damage the components of the WideSpin 1530 TM, cause damage to the truck, and cause the truck tires to leave tracks and depressions in the turf.

**Conveyor Belt:** The rough surfaced conveyor belt **[G]** carries the top dressing material from the hopper, through the metering gate, and in to the spinner assembly. Power to the belt is provided by the hydraulic conveyor belt drive motor. The speed of the conveyor belt is adjustable. Conveyor belt tension adjusters **[H]** are provided to change the tension to correct tracking or slipping problems.

**Spinner Assembly:** The spinner assembly **[I]** broadcasts the flow of top dressing material being discharged from the conveyor belt. The spinner assembly is equipped with a spread diverter to control the spread pattern during Heavyspread operations and is also equipped with a tilt control to further enhance or vary the spreading pattern. The spinner assembly can also be removed to allow the 1530 to be used as a material handler for top dressing material.

Left and Right Hand Spinner Wheels: The hydraulically powered spinner wheels [J] are rotating wheels equipped with vanes. The rotating motion of the wheels broadcasts the top dressing material. The mounting angle of the vanes on the wheels is adjustable and provides adjustment/correction to spread patterns. Vane adjustment is required when changing between Lightspread and Heavyspread. The left and right hand spinner wheels rotate in opposite directions.



*Hydraulic Fluid Cooler:* The hydraulic cooler **[K]** is located on the left side of the top dresser. The cooler is standard equipment on product no. 85811 and optional equipment on 85812. The cooler has an electric fan that will blow air in an outward direction. The cooler fan will start to operate as soon as the trucks hydraulic power to the top dresser is activated and will continue to operate until hydraulic power is turned off. The fan will always operate regardless of the position of the Hand Held ON/OFF Switch.

*Electrical Power Supply Connection:* The power supply connection **[L]** is designed to be plugged into the Electrical Power Supply Harness. The harness is part of the mounting kit and is sized to fit the type of truck being used to carry the WideSpin 1530 TM. Electrical connection to the truck is at trucks battery. A 12 volt DC, negative ground power source is needed to operate the hydraulic solenoids in the WideSpin 1530 TM hydraulic system and to operate the hydraulic cooler fan. A 15 AMP fuse is located in a holder on the positive (+) power connection of the harness.

#### WIDE*SPIN*° 1530 TM

## LOCATION AND DESCRIPTION OF THE WIDESPIN 1530 TM OPERATOR POSITION

**Operator Position:** The proper location for the operator of the WideSpin 1530 TM Top Dresser is seated in the trucks seat. Always stop the trucks engine, lock the brakes, and disengage the hydraulic power before leaving the operator's seat. Do not stand behind or allow anyone to stand behind the WideSpin 1530 TM top dresser when the spinner attachment is operating.



TO AVOID SERIOUS INJURY, Move To the Operator's Position At The Truck Before Engaging the Spinner Assembly.

## LOCATION AND DESCRIPTION OF THE WIDESPIN 1530 TM OPERATOR CONTROLS

#### Hand Held Spinner and Conveyor Belt ON/OFF



*Switch:* The hand held ON/OFF switch [M] controls the ON/OFF operation of the conveyor belt and the spinner assembly. The switch has 3 positions:

1. Spinners ON, Conveyor Belt ON

2. Spinners ON, Conveyor Belt OFF 3. Spinners OFF, Conveyor Belt OFF

Always be at the operator's position before engaging the ON/OFF switch.

Always keep the hand held switch in a secure place. When not in use, hang the control box on the front of the hopper. If the control box drops to the ground, the wiring harness can become tangled in the trucks axles and wheels. DO NOT put the hand held switch in the hopper. Severe damage to the switch, switch cable, conveyor belt, and spinner wheels will result if the control box becomes tangled in the conveyor belt and spinner assembly.

Spinner Speed Hydraulic Flow Control: The



hydraulic speed control **[N]** varies the speed of the spinner wheels by regulating the amount of hydraulic flow sent to the hydraulic motors. Increasing or decreasing the speed of the spinners does not change the

volume of material being spread, it only effects the width of the spreading pattern. The control has settings from 0 to 4 (settings above 4 are locked out). Heavyspread control setting should be at 3 or less, Lightspread should be at 4. **Spinner Assembly Tilt Control Handle and Locking Handle: [O]** The tilt of the spinner assembly can be changed by moving the tilt control handle. Total movement is approximately 15° degrees. The tilt angle can changed up or down to vary or correct the width of spread without changing the speed of the spinner wheels. The tilt angle of the assembly can be also be changed to correct for the difference in hitch heights of different tow vehicles. The locking handle will keep the spinner assembly locked into position. During Heavyspread operations, the spinner assembly should be adjusted to be level with the ground.

*Heavyspread Diverter and Diverter Locking Knob:* The Heavyspread Diverter **[P]** changes the spread pattern during Heavyspread operation. The diverter should be in the lowered position and securely locked with the diverter locking knob. During light application, the diverter should be locked in the raised position.

Conveyor Belt Speed Control: The speed control [Q]



regulates the amount of hydraulic flow to the conveyor belt motor and regulates the speed of the conveyor belt. The speed of conveyor belt

controls the amount of top dressing material that is moved and discharged thru the metering gate. Changing the conveyor belt speed control <u>does not</u> affect the operating speed of the spinner assembly spinner wheels.

The normal conveyor belt speed control setting during Heavyspread operation is 1-1/4 to 2-1/2 turns (counterclockwise) of the knob from a fully closed (clockwise) position. For Lightspread operation, set at 1-1/4 to 1-1/2 turns.

Metering Gate and Metering Gate Adjusting



Handle: The Metering gate regulates the amount of top dressing material released from the hopper. The metering gate is manually controlled by moving the metering gate handle [**R**]. The marks on the decal are for reference

only, they do not represent any measured amounts of top dressing material. The metering gate opening size is controlled in two calibrations, Lightspread and Heavyspread. The metering gate stop pull pin on the side of the metering gate mount must be pulled out to allow the metering gate to be moved into the larger opening size for Heavyspread. If the amount of material being deposited on the spinner assembly needs to be corrected, adjust the metering gate opening. Operation



Â <u>/</u>) WARNING

TO AVOID SERIOUS INJURY, Read and Understand the Entire Operator's Manual Before Operating The WideSpin 1530 TM and the Truck.

Read and Follow all Safety Decals and Warnings. TO AVOID SERIOUS INJURY, Always operate the WideSpin 1530 TM Top Dresser Safely and Wear the Appropriate Personal Safety Equipment. TO AVOID SERIOUS INJURY, Keep Hands, Feet, and Clothing Away From Rotating Spinner Wheels TO AVOID SERIOUS INJURY, Do Not Allow Riders In or On The Top Dresser

#### WIDE SPIN 1530 TM OPERATOR POSITION

The proper location for the WideSpin 1530 TM operator is seated on the truck seat. Always stop the trucks engine, set the trucks brakes, and disengage hydraulic power to the conveyor belt and the spinner assembly before leaving the trucks seat. Do not stand behind the WideSpin 1530 TM when it is operating.



TO AVOID SERIOUS INJURY, Always Operate the WideSpin 1530 TM From the Operators Position at the Trucks Seat.

Always Stop the Trucks Engine, Set the Trucks Brakes, and Disengage Hydraulic Power to the WideSpin 1530 TM Spinners and Conveyor Belt Before Leaving the Trucks Seat.

DO NOT Allow Anyone To Stand Behind the 1530 TM Spinner Assembly When It Is Operating.



#### WIDESPIN 1530 TM OPERATING SPEEDS

When the 1530 TM top dresser is mounted to the truck, the *maximum ground speed of the truck should not exceed 8 Km/h (5 MPH)*. Safety concerns and excessive stress on the truck and the top dresser will occur if speeds are in excess of 8 Km/h (5 MPH).



#### TO AVOID SERIOUS INJURY and To Avoid Damage to the truck and 1530 TM top dresser, DO NOT Drive or Operate the 1530 TM Top Dresser At Speeds Over 8 Km/h (5 MPH).

The ground speed of the truck must be constant to ensure an even and equal distribution of top dressing material. The trucks engine speed must be maintained to ensure a constant and even supply of hydraulic power. Choose a gear and throttle/governor setting that will give a maximum ground speed of 8 Km/h (5 MPH). If top dressing speed exceeds 8 Km/h (5 MPH), poor and uneven top dressing application will result as well as unsafe operating conditions. For best results, the 1530 TM should be moving before the spinner assembly is engaged.

## WIDE*SPIN* 1530 TM MAXIMUM ANGLES OF OPERATION

Do not drive or operate the truck and WideSpin 1530 TM on side slopes over  $15^{\circ}$  degrees. Do not drive or operate the truck and WideSpin 1530 TM up or down slopes over  $15^{\circ}$  degrees. Do not drive or operate the truck and WideSpin 1530 TM with an overfilled or overloaded hopper. Tipping or rolling over of the machine can occur.



TO AVOID SERIOUS INJURY and To Avoid Damage to the WideSpin 1530 TM Top Dresser and the Truck, Do Not Operate on Slopes Over 15° Degrees.

#### LOADING OF HOPPER

The maximum hopper capacity is 0.54 cubic meters (19 cubic feet). Maximum weight of the load in the hopper is 816.5 Kg (1800 pounds). Kg). Never overfill or overload the hopper. Overloading will create a safety hazard and cause undue stress to the truck and top dresser components. Overloading may also cause the trucks tires to sink into the turf and leave tracks. Never modify the hopper to hold extra top dressing. Do not add side boards to the hopper. An overloaded hopper will cause the top dresser to be top heavy or out-of-balance, and will increase the possibility of the truck and top dresser tipping or rolling over if operated on too steep of a slope.

The hopper can be loaded with a small front end loader, however do not drop the load into the hopper from too high of a height. Slowly load the hopper to avoid damage to the hopper and conveyor belt.

#### WIDE*SPIN*" 1530 TM

#### **PRE-OPERATION CHECK LIST**

- Check Temperature Refer to the Operators Manual for the truck to determine if the temperature is too cold or too hot to operate the trucks hydraulic system. Determine if the trucks hydraulic system requires a warm-up period before operating the WideSpin 1530 TM.
- Check Level of hydraulic fluid in trucks reservoir tank. Correct level to full if needed.
- Check Level of oil in trucks engine crankcase. Correct level to full if needed.
- Check Check the hydraulic connections from the top dresser to the truck. Connections must be proper and secure. Refer to the manual for the mounting kit for more information.
- Check Inspect for damage, wear, and missing parts. Do not operate the 1530 TM top dresser with a damaged or defective parts. Refer any needed repairs to the proper service personnel.
- Check Visual check for hydraulic leaks.



DANGER TO AVOID SERIOUS INJURY,

Do Not Use Your Fingers Or Hands To **Check For Hydraulic Leaks. High** Pressure Leaks Can Puncture The Skin And Force Oil Into The Body. This Can Cause Severe Injury Or Death. WEAR EYE PROTECTION.

- **Check -** The hand held ON/OFF switch is secure at the operator position. DO NOT put hand held switch inside of the hopper.
- Check The hand held ON/OFF switch is in the OFF (**O**) position for both the conveyor belt and the spinner assembly.

- Check Power supply harness is plugged into the 1530 TM and is properly attached to the trucks battery.
- **Check** All guards and deflectors are in place.
- **Check -** All hardware on the mounting brackets. Hardware must be tight, pins must be securely inserted.
- Check Visually inspect the inside of the 1530 TM hopper for tools, shovels, rocks or debris remaining from earlier use. Hopper must be empty.

#### HAND HELD SPINNER AND CONVEYOR BELT **ON/OFF SWITCH (See Figure 4)**



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The switch controls the activation of both the conveyor belt and the spinner assembly. Refer to Figure 4 for switch positions. Before starting the engine, place the switch in the OFF (**O**) position for both the conveyor belt and the spinners. If the switches are in the ON (I) position, the belt and the spinners will start to

operate as soon as the engine is started and the hydraulic system is activated.

Start and stop operation will happen as soon as the switch is placed on the ON (I) position, there is no time delay in operation. The switch operates the same in Lightspread or Heavyspread.

During operation, keep the switch box at the operator's position on the tow vehicle. When not is use, hang the switch box on the top of the hopper. DO NOT place the switch box in the hopper!! Damage will occur if the switch box becomes tangled in the spinner wheels.



HAND HELD SPINNER AND CONVEYOR BELT ON/OFF SWITCH

#### SETTING CONTROLS FOR LIGHTSPREAD OR HEAVYSPREAD OPERATIONS (See Figures 5, 6 and 7)

Changes to the settings of the spinner speed control, the metering gate, spinner diverter, spinner wheel vane mounting angles, and the conveyor belt speed control are required when changing between Lightspread and Heavyspread top dressing operations.



TO AVOID SERIOUS INJURY, Always Disengage the Hydraulic Power and Stop the Truck Engine Before Making Any Lightspread/Heavyspread Adjustments.

#### (1)Setting WIDESPIN 1530 TM Metering Gate



The metering gate opening size is controlled in two calibrations, Lightspread and Heavyspread. The metering gate stop pull pin on the side of the metering gate mount must be pulled out to allow

the metering gate to be moved into the larger opening size for Heavyspread.

Use the following settings for Lightspread and Heavyspread operations –

- LIGHTSPREAD Set metering gate in zones "A" thru "D".
- HEAVYSPREAD Pull metering gate pull pin and set gate in zones "E" thru "H".

The marks on the decal are for reference only, they do not represent any measured amounts of top dressing material.

Because moisture content and varying weights of top dressing can effect the flow of material thru the metering gate, adjustments may be needed to maintain an equal distribution and an even spread pattern.

If the amount of material being deposited on the spinner assembly needs to be corrected, adjust the metering gate opening. To increase the volume of top dressing material, increasing the metering gate opening will have better spreading results than increasing the conveyor belt speed. For less volume of top dressing material, decreasing the metering gate opening will have better results than decreasing the speed of the conveyor belt.

## ②Setting WIDESPIN 1530 TM Spinner Hydraulic Speed Control



The speed control varies the speed of the spinner wheels. Increasing the speed increases the spread width, decreasing narrows the width. Changing the speed does not effect the volume of material being spread,

however, the thickness of application will change as the spread changes. Use the following speed settings for Lightspread or Heavyspread operations –

- **LIGHTSPREAD** Set and lock the spinner speed control at "4".
- **HEAVYSPREAD** Set and lock the spinner speed control at "3 or less".

In the Heavyspread setting, the speed control should be at 3 or less. Do Not exceed 3 during Heavyspread operation, limit any changes to setting the control to <u>under</u> 3 along with changes to the conveyor speed control or the metering gate setting.

Moisture content and the type of top dressing material are variables that will affect the setting of the speed control. Use a slower setting for dry top dressing material that flows easily. Increase setting to handle heavier types of top dressing or to increase the spread range. Increasing the speed will broadcast the top dressing over a larger area. Experimentation by the operator will help to determine the proper setting. The spinner speed control <u>does not</u> effect or change the speed of the conveyor belt.

#### ③ Setting HEAVYSPREAD Diverter (See Figure 5 & 6)

The Heavyspread Diverter changes the spread pattern during Heavyspread operation. For Heavyspread, the diverter should be in the lowered position and securely locked with the diverter locking knob. During light application, the diverter should be locked in the raised position.



#### WIDESPIN 1530 TM

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**OPERATION** 



#### WIDE*SPIN*" 1530 TM

#### Adjusting Spinner Wheel Vanes (See Figures 6 and 7)

Changing the vane mounting angle is necessary during the changeover between Lightspread and Heavyspread operations.



TO AVOID SERIOUS INJURY, Always Stop the Engine Before Making Adjustments to the Spinner Vanes.

**LIGHTSPREAD** - Readjust spinner to maximum mounting angle (to inside of slot).

**HEAVYSPREAD** – Readjust spinner to minimum mounting angle (to outside of slot).



The mounting angle is adjusted by loosening the inside locking screw on the vane (it is not necessary to loosen the screw on the outside), sliding the vane to the other end of the slot on the vane, and retightening the screw. *NOTE:* Because the right and left spinner wheels rotate in opposite direction, the right and left vanes are a mirror image of each other. See Figure 6 for the location and direction of adjustment for each individual vane.

#### (5)Setting WIDESPIN 1530 Conveyor Belt Speed Control



Turning the control knob counterclockwise increases the belt speed – clockwise slows the belt speed.

Use the following speed

settings for Lightspread or Heavyspread operations. The settings are from a fully closed (clockwise) position.

LIGHTSPREAD - Set the belt speed control at "1-1/4 to 1-1/2" turns open.

**HEAVYSPREAD** - Set the belt speed control at "1-1/4 to 2-1/2" turns open. Moisture content and the type of top dressing material are variables that may require additional adjustments to the setting of the speed control.

Changing the conveyor belt speed control does not affect the operating speed of the spinner assembly spinner wheels.

#### TOP DRESSING OPERATION

Forward speed is an important part of top dressing. Moderate and constant speed will provide the best top dressing results. A varying ground speed will create an unwanted varied thickness and pattern. Ground speed during top dressing should not exceed 8 Km/h (5 MPH). Undesired top dressing patterns and excessive stress on the machine will occur if speeds are in excess of 8 Km/h (5 MPH). Maximum driving speed when empty is 8 Km/h (5 MPH).



#### TO AVOID SERIOUS INJURY, and To Avoid Damage to the Truck and the 1530 TM Top Dresser, Do Not Drive or Operate At Speeds Over 8 Km/h (5 MPH).

Start and stop the top dressing operation using the hand-held ON/OFF switch. The top dresser should be moving before putting the switch in the ON (I) position. Put the switch in the OFF (O) position before stopping movement of the top dresser.

For best results, top dress in straight lines. A gradual turn can be made without difficulty or undesired top dressing results. On too sharp of a turn, uneven distribution of top dressing material will occur. A sharp turn will result in more top dressing being applied to the inside ground surface of the turn than on the outside surface.

To make a sharp turn without top dressing, the turn should be taken very slowly. Too fast of a turn will increase the possibility of damage to the turf caused by the trucks wheels skidding or cutting into the turf. Also, if a turf is too soft, the tires may sink into the turf and leave tracks.



TO AVOID SERIOUS INJURY,

#### To Avoid Damage to the WideSpin 1530 TM Top Dresser and the Truck, Do Not Operate the Top Dresser On Side Slopes Over 15° Degrees, or Up and Down Slopes Over 15° Degrees.

Do not operate the top dresser on side slopes over 15° degrees. Do not operate the top dresser up and down side slopes over 15° degrees. Do not operate the top dresser with an over filled or overloaded hopper. Tipping or rolling over of the machine can occur.

#### WIDESPIN" 1530 TM



#### To Avoid Damage To The 1530 TM Top Dresser Do Not Place the Hand Held ON/OFF Switch Inside of the Hopper.

Do not place the hand-held ON/OFF switch in the hopper. Severe damage to the hand held ON/OFF switch, the conveyor belt, and the spinner assembly can result if the switch box becomes tangled in the conveyor belt or spinner wheels.



DO NOT Allow Anyone To Stand Behind the 1530 Spinner Assembly When It Is Operating.

#### WIDESPIN 1530 TM TOP DRESSER SHUTDOWN

After operation, stop the hydraulic power to the conveyor belt and the spinner assembly. To avoid draining the trucks battery, the hand held switch must be in the "OFF" ( $\mathbf{O}$ ) position. After shutdown, check the following:

- Hopper is empty.
- Trucks hydraulic power supply control has been placed in the OFF positions.
- Hand Held switch is in the OFF (**O**) position for both the conveyor belt and the spinner assembly. Hand held switch should be hung on side hopper panel.
- Set trucks brakes. Block tires to prevent uncontrolled rolling.
- Disconnect the power supply harness to the truck.

If the WideSpin 1530 TM is going to be removed from the truck, refer to the manual for the Mounting Kit Manual.

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#### WIDESPIN" 1530 TM

#### **Operator Daily Inspection**



#### WARNING

TO AVOID SERIOUS INJURY, Do Not Attempt To Perform Any Inspection, Adjustment, or Service Procedure With Any Part of the Top Dresser or Spinner Assembly Operating.

Work Safely and Wear the Appropriate Safety Gear When Inspecting, Making Adjustments, or Servicing The WideSpin 1530 TM Top Dresser.

#### Follow All Safety Hazard Warnings and Decals.

Before and after each use, check the following items:

- Inspect for damaged or missing guards on the WideSpin 1530 TM and the spinner assembly. Do not operate any machine with missing or damaged guards.
- Inspect entire WideSpin 1530 TM and the spinner assembly for damaged or inoperable components. Do not operate any machine with damaged or inoperable components. Inspect the entire machine for loose fasteners. Retighten as required.
- Inspect all WideSpin 1530 TM operator controls for proper operation.
- Inspect the spinner assembly spinner wheels. Check for proper alignment, damage, wear, and missing hardware.
- Check for a buildup of top dressing material on spinner assembly components. Check for a buildup on and under the spinner wheels. Check for debris caught in spinner wheels.
- Check for a buildup of top dressing material on components under the WideSpin 1530 TM rear deflector, bottom dirt shield pan, hopper and conveyor belt.
- Inspect the conveyor belt for adjustment and tracking. If adjustment is required, refer to Service Level Personnel. Check the conveyor belt adjustment and tracking frequently during operation.
- Check the level of hydraulic fluid in the trucks reservoir. Refill as needed.
- Visually check for hydraulic leaks. <u>NEVER</u> USE HANDS TO CHECK FOR LEAKS!!
- Maintain proper daily lubrication intervals on the WideSpin 1530 TM top dresser.
- Visually inspect the inside of the hopper for tools, shovels, rakes, rocks or debris remaining from earlier use.

#### **Troubleshooting Table**

PROBLEM	POSSIBLE CAUSE
Poor Spreading Results	Trucks Engine RPM Speed Too Slow To Provide Hydraulic Power To Top Dresser. Trucks Governor Setting Too Low To Allow Engine To Provide Hydraulic Power To Top Dresser.
	Spinner Speed Control Setting Wrong. Refer To Operation Section in This Manual.
	Conveyor Belt Speed Control Setting Wrong. Refer To Operation Section In This Manual.
	Metering Gate Setting Wrong. Refer To Operation Section In This Manual.
	Moisture Level In Top Dressing Too High.
	Vane Angle Adjustment Wrong For Top Dressing Type Or Moisture Level. Refer To Service Level Personnel.
	Diverter in Wrong Position. Refer To Operation Section In This Manual.
	Unscreened Material In Hopper. Debris or Rocks Blocking Metering Gate.
	Unscreened Material In Spinner Attachment Deflector. Debris or Rocks Blocking Spinner Wheels.
	Build-Up Of Top Dressing Material On Spinner Wheels or 1530 Components.
	Damaged Spinner Wheels or Damaged Spinner Assembly Components. Refer Repair to Service Personnel.
Spinner Assembly or Conveyor Belt Not Operating	No Electrical Power From Tow Vehicle To Operate ON/OFF Switch or Hydraulic Valve Block Solenoids. Check All Connections and Grounds. Check Fuse In Power Supply Cable.
	Spinner Speed Control Set Too Low.
	Trucks Engine RPM Speed Too Slow To Provide Hydraulic Power To Top Dresser. Trucks Governor Setting Too Low To Allow Engine To Provide Hydraulic Power To Top Dresser.
	Trucks Hydraulic Flow Selector On Wrong Setting
	Spinner Assembly Hydraulic Hoses and Quick Release Fittings Not Properly Connected To the Spinner Assembly or the WideSpin 1530 Valve Block.
	Conveyor Belt Speed Control Set Too Slow For Weight Of Top Dressing.
	Defective Hydraulic Valve Block Components. Refer To Service Level Personnel.
	Defective Spinner Assembly Hydraulic Motors. Refer To Service Level Personnel.

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#### SERVICE LEVEL MAINTENANCE

#### Storage

TO STORE THE WIDESPIN 1530 TM OVER AN EXTENDED PERIOD, perform a complete inspection. Refer any needed service or repair to service level personnel. Clean the hopper, both sides of the conveyor belt and completely clean the spinner assembly. Use low pressure wash on the top dresser, DO NOT use high pressure wash. Apply a film of light machine oil to the spinner wheels to control rust. Release the tension of the conveyor belt. To protect the conveyor belt, rubber and plastic parts, store the WideSpin 1530 TM out of direct sunlight.

# TO RETURN TO SERVICE AFTER EXTENDED STORAGE, inspect the entire machine for any damage that may have occurred during storage. Refer any needed correction to service level personnel.

Reset the tension of the conveyor belt. Refer adjustment to service level personnel.

Perform a complete lubrication procedure. Refer any needed service or repair to service level personnel.

## Operator Level Adjustment and Service



WARNING A

TO AVOID SERIOUS INJURY, Do Not Attempt To Adjust, Inspect, or Service any Part of the WideSpin 1530 TM When It Is Operating.

#### Be Aware of High Hydraulic Oil Temperatures. Serious Burns and Injuries Are Possible.

Properly Secure The WideSpin 1530 TM Before Starting Any Inspection, Service or Adjustment Procedures.

Operator Level Adjustment and Service is limited to:

- Cleaning
- Inspection
- Storage

Refer all other service, adjustments or repairs to qualified service personnel.

#### HYDRAULIC FLUID

The hydraulic fluid in the WideSpin 1530 TM top dresser is supplied by the truck. When refilling the truck, check the type of fluid used (vegetable or petroleum based).

#### CLEANING

Wash the excess top dressing material from the conveyor belt, hopper and spinner assembly. Wash excess top dressing material from all components on the bottom of the top dresser, especially the inside surface of the conveyor belt and the conveyor belt rollers. <u>Use only low pressure wash to clean the top dresser</u>.

After extended periods of use, the spinner wheels may collect a buildup of top dressing material. This buildup may cause excessive vibration or poor spreading results. During operation, periodically inspect and remove any buildup of top dressing material from the spinner wheels, the spinner assembly deflectors, the guards, and the shields.

#### INSPECTION

After the WideSpin 1530 TM has been cleaned, inspect for damage. Look for loose or missing hardware. Inspect the spinner wheels for loose or missing vanes. Visually inspect for hydraulic leaks on the motors, hoses and the hydraulic fittings. Refer any needed repair work to gualified service personnel.



WEAR SAFETY GLASSES!!

EUROPEAN LUBRICANTS, FUEL, AND PARTS DISPOSAL NUMBERS

Motor Oil	54112
Gear Oil	54112
Grease	54202
Plastic Parts	57127





Ε.





DOMESTIC AND CE

G.



- D. STINNEN NEEF HAND AND FEELAWAY" WAKNING DI C. UVNDALILIC DECCUDE HAZADD WADNING DECAL
- C. HYDRAULIC PRESSURE HAZARD WARNING DECAL
- D. CENTER-OF-GRAVITY DECAL
- E. MAXIMUM ANGLE OF OPERATION WARNING DECAL
- F. MAXIMUM HOPPER CAPACITY AND MAXIMUM LOAD WEIGHT WARNING DECAL
- G. HIGH HEAT WARNING DECAL
- H. READ MANUAL INSTRUCTION DECAL
- I. WIDESPIN 1530 TM CE SPECIFICATION DECAL
- J. LIGHTSPREAD/HEAVYSPREAD METERING GATE POSITION DECAL
- K. PART IDENTIFICATION DECAL (LOCATED ON LIFTING BRACKET)
- L. CONVEYOR BELT SPEED CONTROL DECAL
- M. HAND HELD CONTROL BOX "ON/OFF" DECAL
- N. SPINNER ASSEMBLY HYDRAULIC HOSE ROUTING DECAL
- O. SPINNER SPEED CONTROL DECAL
- P. LIGHTSPREAD/HEAVYSPREAD INSTRUCTION DECAL

Decals



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Service Level Maintenance



THE FOLLOWING SERVICE AND ADJUSTMENT PROCEDURES ARE FOR QUALIFIED SERVICE LEVEL PERSONNEL ONLY. TO AVOID SERIOUS INJURY, Do Not Attempt To Service any Part of the

WideSpin 1530 TM Top Dresser When It Is Operating.

TO AVOID SERIOUS INJURY, Always Follow All Safety Hazard Warnings. Work Safely And Wear The Appropriate Safety Gear When Servicing The WideSpin 1530 TM.

Properly Secure The WideSpin 1530 TM Top Dresser Before Starting Any Adjustment, Service or Lubrication Procedures.

#### LUBRICATION

All the bearings on the WideSpin 1530 TM Top Dresser are sealed and require no further lubrication. Periodically inspect the bearings on the front and rear conveyor belt rollers and the spinner wheels for wear, damage, or a build up of dirt or debris. Clean as required. The tilting swivel points on the spinner assembly should be periodically cleaned, inspected for wear or damage, and lightly coated with machine oil for rust and moisture protection.

#### **INSPECTION PANEL**

Access to view the inside surface of the conveyor belt can be gained by removing the inspection panel. The inspection panel is located on the right side of the frame. The inspection panel can also be used to aid in the cleaning of the top of the dirt shield.

#### **CONVEYOR BELT CARE**

The conveyor belt is a PVC composition belt with a splice. Check the condition of the belt surface, look for wear, cuts, and deep scrapes. Check the splice, the splice wire should be in good condition. The splice should not be catching on the hopper seals or the metering gate. Replacement of the conveyor belts may be necessary if it has been damaged, is worn, or will no longer stay in proper alignment or adjustment.

Top dressing material can pass through the splice causing a build-up of top dressing material on the inside of the conveyor belt, on the conveyor pan and on the rollers. Inspect and clean any buildup of top dressing material from the inside surfaces of the conveyor belt. To prolong the life of the conveyor belt, store the WideSpin 1530 TM with the hopper empty, belt cleaned, and out of direct sunlight.

#### **CONVEYOR BELT SCRAPER**

The scraper should lightly rub on the belt. Check for a buildup of top dressing material in and around the springs. If the plastic conveyor belt scraper is worn and no longer touches the belt, the plastic blade can be removed, flipped over, and replaced to restore contact with the belt.

## CONVEYOR BELT TENSION ADJUSTMENTS (See Figure 8)

The tension on the conveyor belt must be adequate to assure that the conveyor belt moves at the same rate as the rear drive roller. After extended use, top dressing material may build up on the front and rear rollers causing undue tension on the conveyor belt or off-center tracking problems. Clean the rollers before adjusting the conveyor belt tension.

Conveyor belt tension is adjustable by tightening or loosening the conveyor belt adjusters. The adjusters are located on both sides of the frame near the front of the hopper.

Before adjusting the conveyor belt for tension or tracking problems, check the following:

- Check for a buildup of top dressing material on the inside of the conveyor belts.
- Check for a buildup of top dressing material on the surfaces of the idler and drive conveyor belt rollers.
- Look for damaged, worn or loose bearings on the idler and drive conveyor belt rollers.
- Look for broken or damaged conveyor belt tension adjusters.

Initial adjustment is measured at the ends of the adjuster screws. The initial setting should be 25 mm (1" inch).



If the belt still slips under load, tighten conveyor belt adjusting screws equally at 1/2 turn intervals until

#### WIDE*SPIN*° 1530 TM

slippage stops. If belt still does not operate properly, reset the screws to 25 mm (1" inch) and check for problems elsewhere.

## CONVEYOR BELT TRACKING AND CENTERING ADJUSTMENTS (See Figure 9)

If tracking or centering problems occur, first check for unequal tension measurement on the conveyor belt tension adjusters. Also check for a buildup of top dressing material under the belt or on the conveyor belt rollers.

It is very important during the first 10-15 hours of operation to frequently check the WideSpin 1530 TM conveyor belt for misalignment. All conveyor belts have break-in periods to train the conveyor belt to track properly. During break-in, some irregular movement can be expected. After the break-in period, only normal inspection and adjustment will be necessary.

The conveyor belt scraper assembly should be inspected to insure that the scraper blade is applying uniform pressure across the belt.

**Step 1.** Set each conveyor belt tension adjuster screw so that 25 mm (1") of thread is visible behind the nut. Operate the machine with the hopper empty. If the belt is not tracking properly, make quarter (1/4) turn adjustments to one tensioner until the belt tracks true. It is very important to give the conveyor belt enough time (minimum of 10 rotations) to move into its new position after turning the adjuster screws. When the conveyor belt starts to run true, continue running (with empty hopper) for fifteen minutes.

- Step 2. Fully load the WideSpin 1530 hopper with top dressing material and operate the conveyor belt. It is normal for the conveyor belt to slightly move from side to side when the hopper is loaded. Check tracking and make small adjustments if needed. Both ends of the rear roller should be visible when the conveyor belt is running true. It is very important to give the conveyor belt enough time (minimum of 10 rotations per adjustment) to move into its new position before making any additional adjustments.
- **Step 3.** After this initial conveyor belt break-in and training period, use the top dresser as instructed in the manual. Check the conveyor belt after every load and make small corrective adjustments as needed After 10 15 hours of use the conveyor belt should be broken-in and tracking correctly.
- **Step 4.** After extended use, top dressing material may build up on the front and rear conveyor belt rollers causing undue tension on the conveyor belt or cause tracking problems. Clean the rollers before adjusting the conveyor belt tension. Before adjusting the belt, check the following:
- Check for a buildup of top dressing material on the inside of the conveyor belt.
- Check for a buildup of top dressing material on the idler and drive conveyor belt rollers.
- Look for damaged, worn or loose bearings on the idler and drive conveyor belt rollers.
- Look for loose, broken or damaged conveyor belt tension adjusters.



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#### SERVICE LEVEL MAINTENANCE

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#### Hydraulic System (See Figure 10)

#### INSPECTING HYDRAULIC HOSES AND FITTINGS

Do not attempt to inspect the hydraulic hoses or fittings with the truck engine running, the truck hydraulic power engaged, the spinner motors operating, or the conveyor drive motor operating.

Check the condition of the hydraulic hoses. The hoses have a protective covering to control leakage in the event of a hose breaking. Leaks and worn hoses should be fixed or replaced before the machine is put into service. The hydraulic system has pipe thread fittings on some of the components. If disassembled, reseal the pipe thread fitting with Teflon<sup>®</sup> tape or pipe dope.



#### A DANGER

TO AVOID SERIOUS INJURY, Never Service Any Part Of The Hydraulic System With The Engine and Pump Operating. High Hydraulic Pressure And High Oil Temperatures Can Cause Serious Injury Or Death.

Do Not Use Your Fingers Or Hands To Check For Hydraulic Leaks. High Pressure Leaks Can Puncture The Skin And Force Oil Into The Body. This Can Cause Severe Injury Or Death.

Be Aware of High Hydraulic Oil Temperatures. Serious Burns and Injuries Are Possible.

#### HYDRAULIC FLUID

The machine was factory tested using "vegetable" based biodegradable hydraulic fluid. Approximately 1.9 liters (1/2 gallon) of vegetable based fluid can remain in the WideSpin 1530 TM hydraulic system after testing. This fluid will mix well with mineral based fluids. However, when vegetable fluid is mixed with mineral fluids, it can have a minor effect on the overall fluid properties. If this fluid is not compatible with the fluid in the truck, or if concerns of contamination to the trucks system are present, flush the hydraulic system in the WideSpin 1530 TM before attaching the hoses to the truck. See section "Draining Hydraulic System". *This procedure is meant for qualified service personnel only.* 



TO AVOID CONTAMINATION OR DAMAGE TO THE TRUCKS HYDRAULIC SYSTEM, Properly Identify the Type of Hydraulic Fluid Being Used Before Refilling the Trucks Reservoir. The trucks hydraulic system provides all of the hydraulic power and fluid to operate the WideSpin 1530 TM. The WideSpin 1530 TM does not have its own separate hydraulic fluid reservoir. Check the trucks system for the type of fluid to use (vegetable or mineral) before replenishing the trucks hydraulic system.

Refer to the operators manual for the truck to determine the proper type of hydraulic fluid to use and for the maximum operating temperature range for the type of fluids being used.

#### DRAINING HYDRAULIC SYSTEM

The hydraulic system is self-bleeding and does not normally store or retain any pressure when the trucks pump is not in operation. However, in the event of failure of certain components, hydraulic pressure can be trapped in the system. Before servicing any component, check for any remaining hydraulic pressure.

- Allow time for the hydraulic oil in the system to cool.
- Disconnect the quick release fittings from the spinner assembly.
- Do Not Start Engine To Use The Hydraulic Pump To Pump The Hydraulic Oil Out Of The System.



#### TO AVOID SERIOUS INJURY, Be Aware of the Possibility of Trapped High Pressure in the Hydraulic System. DO NOT USE HANDS TO CHECK FOR LEAKS!! WEAR SAFETY GLASSES!!

To drain the system, remove the quick release fitting from the end of the "pressure out" hydraulic hose that connects to the truck. Be prepared to safely catch and contain approximately 1.9 liters (1/2 gallon) of hydraulic oil. Do Not Use The Trucks Hydraulic Pump To Pump The Hydraulic Oil Out Of The System.

Some hydraulic oil will always remain in the system and in the components. Always be prepared to properly catch and contain any remaining hydraulic oil when servicing the hydraulic system components.

#### MANIFOLD VALVE BLOCK

The manifold valve block contains a relief valve, the hydraulic cooler fan pressure switch (85811 only), the conveyor belt speed control, and the S1 and S2 solenoid valve bodies that control hydraulic flow to the conveyor belt motor and the spinner assembly motors.

**Relief Valve:** Located in port "RV" in the block. The relief valve is installed to prevent hydraulic pressure from becoming too high in the system. The relief valve is a

#### WIDESPIN" 1530 TM

#### SERVICE LEVEL MAINTENANCE

non-adjustable type valve that routes excess pressure back to the truck through the "Pressure Out" hose.

The relief valve does not have any user serviceable parts. If the valve is malfunctioning, it will need replacement.

*Hydraulic Cooler Fan Switch:* Located in port "G1" in the valve block. The switch controls electrical power to

the cooler fan motor. The switch will close, completing the electrical circuit, as soon as hydraulic pressure is sensed in the manifold valve block. Refer to the "Electrical System" section in the maintenance section of this manual for more information on the fan switch. *Note: Hydraulic Cooler Fan Switch is standard equipment on* 85811, optional equipment on 85812.



#### WIDESPIN 1530 TM

**Conveyor Belt Speed Control:** Located in port "FC" in the block. The conveyor belt speed control controls the speed of the conveyor belt by regulating the amount of hydraulic flow and pressure to the motor.

The conveyor belt speed control valve does not have any user serviceable parts. If the valve is malfunctioning, it will need replacement.

**S1 and S2 Solenoid Valve Bodies:** Located in ports "S1" and "S2" in the block. These valves control the hydraulic flow to the hydraulic conveyor belt motor (S2) and the spinner wheel hydraulic motors (S1). Both S1 and S2 are electrically operated valves, controlled by the switch on the hand held ON/OFF control box.

The valves are a "normally open" type valve allowing the hydraulic flow to bypass the spinner wheel motors and the conveyor belt motor. When the hand-held switch is in the ON (I) position, the solenoid is activated. Electrical activation closes the valves and directs the hydraulic flow to the motors.

The solenoids are a replaceable service part. The valve bodies do not have any user serviceable parts. If the valves are malfunctioning, they will need replacement.

If the solenoids fails to operate, check the following:

- Trucks throttle and/or governor set too low to provide adequate hydraulic flow or electrical power.
- Bad electrical connection with the truck. Insufficient electrical power to activate solenoid. Bad ground connections.

Refer to the "Electrical Systems" maintenance section in this manual for information about servicing the electrical connections or the hand-held ON/OFF control box.

#### CONVEYOR BELT MOTOR

The conveyor belt motor powers the conveyor belt. The motor is mounted at the rear of the top dresser, on the right side of the frame. ON/OFF operation of the motor is controlled at the hand held ON/OFF control box. Hydraulic power to the motor is controlled at the manifold valve block by solenoid S2. The speed of the motor is controlled by the conveyor belt speed control (FC) in the manifold valve block.

The motor rotates only in a clockwise direction (as viewed from the left side of the machine) If the motor is operating in reverse, check the possibility of reversed connections at the motor (ports A and B) or at the manifold valve block (ports M1 and MR).

If the conveyor belt motor fails to operate, check the following:

- Conveyor belt speed control turned down too far.
- Bad electrical connection with the truck.
- Trucks throttle and/or governor set too low to provide adequate engine RPM and hydraulic flow.
- Trucks hydraulic flow selector on wrong setting.

- Non-operational hand held ON/OFF switch. Check for electrical power at solenoid S2 on manifold valve block.
- Non-operational S2 valve. Valve must close for hydraulic flow to go to motor.
- Relief valve (RV) is bypassing all hydraulic power back to the tank.
- Hydraulic fluid level in tank too low.
- Pump not operating.
- Damaged or non-functional motor.
- Pump drive coupling between engine and pump is inoperable.
- Mechanical problems, check for loose or out-of-line motor, sheared keys on coupler or broken chain on coupler (between motor and drive roller shaft).

Hydraulic flow leaving the conveyor motor returns to the manifold valve block, entering at port "MR". Flow is routed through the block, sent to the hydraulic cooler assembly, and returned to the truck.

#### SPINNER SPEED CONTROL

The control regulates the amount of hydraulic power going to the spinner motors. The dial of the control is calibrated 0 through 4. The numbers on the dial are calibrated to correspond to percentage of flow; 0 = 0% flow, 1 = 10%, 2 = 20%, 3 = 30%, 4 = 40% flow. The numbers 5 through 10 are blocked from use by a stop plate. Do not remove the stop plate from the speed control. The hydraulic flow above 4 is being used to power the conveyor belt motor through the exhaust (EX) port. Normal setting for operation is 3 to 4.

The hydraulic flow enters the speed control at the input port (IN). Flow comes from the manifold valve block (port PF).

The controlled flow going out of the speed control at the controlled flow port (CF) goes to the spinner assembly to power the spinner wheel hydraulic motors.

The hydraulic flow going out of the speed control at the exhaust port (EX) is directed back to the manifold valve block (port EX) and is used to power and control the conveyor belt motor.

The spinner speed control does not have any user serviceable parts. If the valve is malfunctioning, it will need replacement.

## LEFT AND RIGHT HAND SPINNER WHEEL HYDRAULIC MOTORS

The spinner wheel hydraulic motors receive hydraulic power from the manifold valve block solenoid valve S1. Activation of the solenoid valve S1 is controlled at the hand held ON/OFF switch. Hydraulic flow from the block (port PF) is routed through the spinner speed control. The controlled flow from the speed control (port CF) is sent to the left hand motor port "A". Flow leaves the left WIDE*SPIN*' 1530 TM

hand motor through port "B" and enters the right hand motor at port "B". Flow out of the right hand motor joins the case drain from the left hand motor and returns to the the manifold valve block at port "SR".

The direction of rotation is opposite from each other. The right hand spinner wheel rotates counterclockwise, the left hand spinner wheel rotates clockwise (as viewed from above the WideSpin 1530 TM). The spinner wheels are a direct drive from the hydraulic motors.

If the spinner or the spinner motors fail to operate, check the following:

- Quick-disconnects not attached. Check one at port "SR" on the manifold valve block and one on the opposite end of the hose connected to port "CF" on the spinner speed control valve.
- Spinner Speed Control set too low.
- Trucks throttle and/or governor set too low to provide adequate engine RPM and hydraulic flow.
- Trucks hydraulic flow selector on wrong setting.
- Check for restricted operation with other components. Check for a buildup of top dressing material or obstructions caught under the spinner wheels. Spinner wheels should not rub on the directional shields.
- Check for loose hydraulic motors or out-of-position hydraulic motors.
- Relief valve is bypassing all hydraulic power back to the tank.
- Trucks Pump not operating.
- Damaged or non-functional motors.
- Mechanical problems with the motor and the spinner wheel coupler. Check for sheared keys or damaged coupling spider.
- Loose motor, check mounting screws and mounting position.

Hydraulic flow leaving the spinner motors returns to the manifold valve block, entering at port "SR". Flow is routed through the valve block and sent to the hydraulic cooler assembly.

#### HYDRAULIC COOLER ASSEMBLY

The hydraulic cooler assembly is designed to help maintain a low operating temperature of the hydraulic fluid. Heat is removed by passing the fluid through a air cooled finned radiator. All hydraulic flow in the WideSpin 1530 TM system is routed through the cooler. *Note: Hydraulic Cooler Assembly is standard equipment on* 85811, optional equipment on 85812.

The cooler fan is automatic and operates as long as hydraulic pressure is present at the fan switch in the valve block (G1). Air flow from the fan will blow out. Refer to the "Electrical System" section in the maintenance section of this manual for more information on the fan and the fan switch.

Maintenance is limited to cleaning excess dirt, dust or debris from the cooler fins. Clean as needed with low pressure air. Do Not clean with high pressure air or water. High pressure water may enter the electric fan motor and cause damage. High pressure water or air may damage the fins on the cooler radiator.

The hydraulic cooler radiator does not have any user serviceable parts. If the cooler radiator is leaking or blocking hydraulic flow, it will need replacement.

Hydraulic flow leaving the hydraulic cooler is returned to the truck through the "Pressure Out" hydraulic hose and quick disconnect fitting.

#### PRESSURE OUT HYDRAULIC HOSE

The pressure out hose is part of the mounting kit. Refer to the mounting kit manual for proper hose routing and connection.

The quick disconnect on the pressure out hose must be properly and completely connected to the truck. If the quick disconnect is not properly connected to the truck, excessive pressure can build up in the WideSpin 1530 TM resulting in a safety hazard and causing serious damage to the top dressers hydraulic system.



TO AVOID SERIOUS BODILY INJURY and To Avoid Serious Damage to the WideSpin 1530 TM, Both Hydraulic Hoses Must Be Properly and Completely Connected To the Truck.

#### SECURELY CONNECT ALL QUICK DISCONNECT FITTINGS!!

HOSES MUST BE PROPERLY CONNECTED TO THE TRUCK. THE CONNECTION MUST BE SECURE. IF THE PRESSURE OUT HOSE IS NOT CONNECTED PROPERLY, EXCESSIVE PRESSURE WILL DEVELOP IN THE WIDESPIN 1530 TM HYDRAULIC COOLER AND CAUSE SERIOUS DAMAGE.

#### SERVICE LEVEL MAINTENANCE

#### **Electrical System**

Before servicing the electrical system, check the following:

- Check the power supply at the truck. Ensure that the truck is supplying the proper voltage. Power requirement is 12 Volt DC negative (-) ground service.
- Check the power supply harness connection to the trucks battery for proper contact. Check the trucks battery, the problem may be a weak battery.
- Check the polarity at the trucks battery. WideSpin 1530 TM power supply connections are red wire for positive (+), black wire for ground (-).
- Check the in-line fuse in the WideSpin 1530 TM red power supply connection wire. Proper fuse is a 15 AMP, type AGC-15.

//WARNING

TO AVOID SERIOUS INJURY And To Avoid Damage To The Electrical Components, DISCONNECT THE POWER SUPPLY CONNECTIONS FROM THE TRUCK Before Servicing the Electrical System.



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## ELECTRICAL POWER SUPPLY HARNESS AND CONNECTIONS (SEE FIGURE 12)

The electrical power supply harness supplies power to the WideSpin 1530 TM top dressers electrical system. The harness is part of the mounting kit and is sized to fit the truck being used to carry the WideSpin 1530 TM. The positive (+) wire (red) on the harness has an in-line fuse holder. Check the holder for a fuse, the proper size is 15 AMP, type AGC-15. Check the connection to the main wiring harness.

Connection to the truck is made directly to the trucks battery. The black wire is attached to the negative battery (-) terminal, and the red wire is attached to the positive (+) battery terminal.

## HAND HELD ON/OFF CONTROL BOX WIRING (See Figure 13)

The hand-held ON/OFF switch controls the electrical power to the manifold valve block solenoid valves. ON/OFF switching is controlled by the switch interrupting the power to the solenoids. All wires in the switch are positive (+). Refer to Figure 13 for the proper color coding to rewire the control box switch. The terminals on the bottom of the switch are numbered for identification.

Verify that the power supply connection is unplugged before opening the switch box. Never disassemble the switch box with electrical power present at the switch. If the terminals are accidentally shorted out, damage to the electrical components of the manifold valve block will occur.

After reassembling the control box switch, check the operation of the switch. The switch must operate according to the decal. Check that the "I" and "O" (ON/OFF) position of the switch matches the "I" and "O" positions of the decal on the holder, and that the WideSpin 1530 TM conveyor belt and spinner assembly operate accordingly. If operation is in reverse of the decal, check that the switch housing has not been reinstalled up side down. If the housing is in the correct position, remove the switch and rotate 180° degrees. Reinstall and check for proper operation.



SERVICE LEVEL MAINTENANCE

#### WIDESPIN" 1530 TM



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#### MAIN WIRING HARNESS (See Figures 11, 12, and 14)

The main electrical harness provides electrical connections for the electrical power supply connection, chassis ground, manifold solenoid wiring connections, the hydraulic cooler fan motor connection, and the hand-held ON/OFF switch wiring harness. The main electrical harness starts near the front of the WideSpin 1530 TM frame and ends at the hydraulic manifold block.

#### MANIFOLD BLOCK WIRING CONNECTIONS (See Figures 11, 12 and 13)

The manifold solenoid wiring connections provide electrical power to the solenoids (solenoids S1 and S2 and the hydraulic cooler fan pressure switch.

The connector with the black and green wires goes to solenoid S1. The connector with the black and black wires goes to solenoid S2. The black wires from both connectors are attached to the WideSpin 1530 TM frame to provide ground ( - ) for the circuit.

The hand held control box switch must be in the ON (I) position (for both the conveyor belt and the spinner assembly) to test for voltage at solenoids S1 and S2. During operation, when the solenoids are activated, they close the valves allowing hydraulic flow to power the hydraulic motors. No electrical power is present at the solenoids when the hand held switch is in the OFF (**O**) position. Hydraulic pressure is not needed to check the solenoids or the electrical connections.

#### HYDRAULIC COOLER FAN CIRCUIT AND **CONNECTIONS, PRODUCT NO. 85811 ONLY** (See Figures 11, 12 and 14)

The hand held control box switch does not need to be in an ON (I) position to check the fan motor circuit. For safety reasons, the switch should be in the OFF (**O**) position during testing.

To test for voltage at the manifold block fan switch, hydraulic power must be present. For safety reasons, the hand held control box switch must be in the OFF (**O**) position (for both the conveyor belt and the spinner assembly) to test for voltage.

At the wiring connection to the switch, positive (+) voltage should always be present at the input side of the connection (white wire). When hydraulic pressure is sensed at the switch, the switch closes and completes the circuit to the fan motor. When the switch is closed, positive (+) voltage should be present on the other side of the connection (yellow wire).

At the wiring connection to the fan motor (yellow wire), positive (+) voltage should only be present when positive (+) voltage is present at the hydraulic pressure switch (yellow wire). The other connection at the fan is the ground (-) wire (black wire). The housing for the fan provides the ground to the WideSpin 1530 frame.

NOTE: On product no. 85812, the electrical connectors for the hydraulic cooler fan and fan switch are left unplugged. Unplugged connectors are protected by a sealed blank plug.

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#### Adjusting Spinner Wheel Vanes

(See Figure 15 and 16)

/ſ\ WARNING

#### TO AVOID SERIOUS INJURY, Always Stop the Engine Before Making Any Lightspread/Heavyspread Adjustments to the Spinner Vanes.

Changing the vane mounting angle varies the width and pattern of the overall spread and is necessary during the changeover between Lightspread and Heavyspread operations.

The mounting angle is adjusted by loosening the inside locking screw on each vane (it is not necessary to loosen the screw on the outside of the vane), sliding the vane to the other end of the slot on the vane, and retightening the screw. *NOTE:* Because the right and left hand spinner wheels rotate in opposite direction, the right and left hand vanes are a mirror image of each other. See Figure 16 for the location and direction of adjustment for each individual vane.







#### Removal Of The Spinner Assembly

If the spinner assembly is removed, the WideSpin 1530 TM can be used as a material handler for top dressing material. With the spinner assembly removed, top dressing material will drop out of the back of the unit and not be spread. Material handling rates are adjustable by using the metering gate and the conveyor belt speed control.

Use the following steps to remove the spinner assembly. Refer to Figure 17:

- Step 1. Turn the WideSpin 1530 TM spinner speed control back to "Zero".
- Step 2. Remove the deflector from the rear of the WideSpin 1530 TM.
- Step 3. Disconnect the spinner assembly's two quick-disconnect hydraulic hoses. One hose is connected to the spinner assembly's left spinner wheel motor, the other is connected to the WideSpin 1530 TM manifold valve block (located under the left side of the frame, behind the conveyor belt speed control knob).
- holding the spinner assembly to the WideSpin 1530 TM frame.

- Step 5. Lift the spinner assembly up and remove from the rear member of the WideSpin 1530 TM frame. Use caution not to bend or damage the small hopper assembly located on the top of the spinner assembly. The spinner assembly weights 68 Kg (150 pounds). Use proper lifting equipment and techniques.
- Step 6. Pull the hydraulic hose that is hanging out of the rear of the WideSpin 1530 TM back through the hole in the frame. Connect the quick-release from that hose to the manifold valve block. Connect to the fitting on the block that was previous used by the other spinner assembly hose. Refer to the decal on the rear of the WideSpin 1530 TM frame.
- Step 7. Replace the deflector to the rear of the WideSpin 1530 TM.



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#### SERVICE LEVEL MAINTENANCE

#### Conveyor Belt Replacement

Replacement of the conveyor belt may be necessary if it is worn, has been damaged, or will no longer stay in proper alignment and adjustment. Refer to Figure 18.



TO AVOID SERIOUS INJURY, Work Safely!! Wear the Appropriate Safety Gear. Do Not Attempt to Service or Adjust Any Part of the Top Dresser When it is Operating.

#### **REMOVAL OF OLD CONVEYOR BELT**

**Step 1.** Operate the conveyor until the splice in the belt is in line with the hole in the rear of the frame. Check that the splice wire can be removed through the hole without interference from the frame. For safety, stop the trucks engine and disconnect the electrical connections from the truck.



#### TO AVOID SERIOUS INJURY, Disconnect The Electrical Connection From The Truck.

- Step 2. Remove the rear deflector.
- Step 3. Open the metering gate to the largest opening.
- Step 4. Remove the conveyor belt scraper.
- **Step 5.** Release the tension on the conveyor belt by loosening both conveyor belt adjusting screws. Push the front roller towards the back of the machine to ensure that all tension is released.
- **Step 6.** Locate the splice wire. Straighten the ends so that it can be removed. Remove the splice wire through the hole in the frame.
- Step 7. Remove the belt by pulling it out from the top.

**Step 8.** Clean the pan and plastic pan cover. Inspect for wear and sharp edges that may damage the new conveyor belt. Clean and inspect the front conveyor belt idler roller and the rear conveyor drive roller. Check the bearings on the front and rear rollers.

#### INSTALLATION OF THE NEW CONVEYOR BELT

**Step 9.** The conveyor belt is directional and must be inserted in the proper direction to ensure that the splice does not catch on other components. Identify the difference in the belt ends by looking for the end without the 45 degree angle cut. This end (without the 45° cut) will be inserted into the WideSpin 1530 TM first.

With the pattern up, insert the belt past the metering gate, and into the hopper. Make sure that the conveyor belt is under the hopper seals. Continue to insert the belt over the pan and around the front idler roller. Continue under the pan until the two ends meet at the rear roller.

- Step 10. Align the ends of the conveyor belt near the splice removal hole in the frame. Join the ends of the belt at the splice. *NOTE: Both outside edges of the belt must be perfectly alined with each other or tracking and belt alignment problems will result.* Insert the splice wire and link the two ends of the conveyor belt together. Slightly bend both ends of the splice wire to secure it in the conveyor belt.
- Step 11. Reset conveyor belt tension to both conveyor belt adjuster screws. Refer to the "Conveyor Belt Tension Adjustment" section in this manual.
- **Step 12.** Replace and adjust the conveyor belt scraper. Replace the rear deflector. Reinstall the electrical connection to the tow vehicle.
- Step 13. Operate the conveyor and check the belt. The belt must not catch on the hopper seals, or rub on any frame or drive component. Refer to the "Conveyor Belt Tracking Adjustment" sections in this manual. Follow instructions for tracking adjustments and "Break-In" procedures.





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## Conveyor Belt, Pan and Rollers

ltem No.	Part No.	Description Qty	y.
1	661422	Poller Idler 1530	
י 2	653303	Spacer Idler Boller	,
2	655174	Boaring Dillow Block	I
3 1	/00051	Set Screw 1/4" 28 x 1/4" 8	2
4	499031	Set Sciew, $1/4 - 20 \times 1/4$	) I
5	400444	Nut Hox 1/0" 20 Eloylog	I
7	444010 650072	Nut, Hex, 1/2 -20 Flexibe	· >
0	660040	Rolt Tan 5/0" 11 x 6" Convoyor Rolt Tonsion Adjuster	>
0	660040	Spacer Topsion Adjuster	)
9 10	400422	Nut Hay 5/0" 11 Elaylaa	)
10	49940Z	Pollor Drive 1520	
10	657000	Rollel, Dilve, 1550 I Spacer Elared	,
12	440104	Space, Flared   1/0"   4     Polt   Corrigge 1/0"   1/0"   4	I
10	440194	Doil, Gainage, 1/2 - 15 X 1 - 1/2 4   Weeber Leek 1/0" 4	, I
14	440104	Washer, Lock, 1/2	/ 1
10	440110	Nul, $\exists x, 1/2 = 15$	
10	403031	Ney, Woodiuli, 1/4 X 1 1	,
10	661000	Pall, 1550	
10	400005	Cover, Parl	
19	499025	Screw, Machine, Parl Heau, 1/4 - 20 X 5/8 (Service Parl)	) )
20	499413	Nut, Hex, 1/4 -20 KEPS (Service Part)	j N
21	00//00	Bolt, Carriage, 3/8 – 16 X 3/4	j N
22	440142	Washer, Lock, 3/8	j N
23	443110	Nut, Hex, 3/8 – 10	;
24	001370	Beit, Spinner Conveyor	
25	655363	Splice, Conveyor Belt	

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Conveyor Belt Hydraulic Motor, Conveyor Belt Scraper, Rear Deflector, and Inspection Panel



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#### Conveyor Belt Hydraulic Motor, Conveyor Belt Scraper, Rear Deflector, Dirt Shield and Inspection Panel

ltem No.	Part No.	Description	Qty.
1	659388	Motor Hvdraulic. Convevor Belt Drive	1
2	463031	Kev. Woodruff. 1/4" x 1"	2
3	661439	Brace, Belt Motor	1
4	400444	Screw, Hex Head, 1/2"-20 x 1-3/4"	2
5	446154	Washer, Lock, 1/2"	2
6	443120	Nut, Hex, 1/2"-20	2
7	661372	Coupling Half, Sprocket, 1" Bore	1
8	415519	Screw, Set, 5/16"-18 x 3/8"	2
9	661371	Coupling Half, Sprocket, 1-1/4" Bore	1
10	415509	Screw, Set, 1/4"-20 x 1/4"	2
11	661373	Chain, Coupling, Includes Link Pin	1
12	400262	Screw, Hex Head, 3/8"-16 x 1"	4
13	446142	Washer, Lock, 3/8"	4
14	443110	Nut, Hex, 3/8"-16	4
15	661430	Guard, Motor Mount	2
16	661619	Screw, Hex Head, 1/4"-20 x 5/8" Whiz-Lock	8
17	659276	Nut, Clip, 1/4"-20	4
18	662789	Shield, Spinner (Rear Deflector)	1
19	661620	Nut, Hex, 1/4"-20 Whiz-Lock	4
20	661579	Bracket, Scraper	1
21	661582	Scraper, Plastic	1
22	400108	Screw, Hex Head, 1/4"-20 x 3/4"	5
23	446128	Washer, Lock, 1/4"	5
24	443102	Nut, Hex, 1/4"-20	5
25	661463	Spring, Scraper Tension	2
26	657671	Screw, Hex Head, 3/8"-16 x 4"	2
27	452006	Washer, Flat, 3/8" ID x 7/8" OD x 5/64" Thick	2
28	443110	Nut, Hex, 3/8"-16	2
29	444810	Nut, Hex, 3/8"-16 Flexloc	2
30	661406	Grommet, Rubber	3
31	661032	Panel, Inspection	1
32	661056	Screw, Thread Cutting, 10-32 x 1/2"	4
33	499410	Nut, Clip, 1/4"-20	8



## Spinner Speed Control and Manifold Valve Block

ltem No.	Part No.	Description	Qty.
1	661368	Manifold Valve Block Assembly	. 1
2	657671	Screw, Hex Head, 3/8"-16 x 4"	. 2
3	446142	Washer, Lock 3/8"	. 2
4	443110	Nut, Hex, 3/8"-16	. 2
5	662728	Control, Flow, Spinner Speed	. 1
6	662729	Stop, Flow Control Lever	. 1
7	452002	Washer, Flat, 1/4" ID x 9/16" OD x 3/64" Thick	. 2
8	660164	Screw, Hex Head, 1/4"-20 x 3"	. 1
9	446128	Washer, Lock, 1/4"	. 2
10	443102	Nut, Hex, 1/4"-20	. 2
11	658172	Screw, Hex Head, 1/4"-20 x 2-1/2"	. 1
12	662196	Grommet, Rubber, 1" ID	. 2
13	661406	Grommet, Rubber, 1-45/64"	. 1
14	662657	Knob, Locking, Flow Control	. 1
15	444804	Nut, Hex, #10–32 Flexloc	. 1

No.

No.



1	662247	Cooler, Hydraulic Fluid	1
2	002225	Bracket, Mounting, Hydraulic Cooler, Left Hand	1
3	662222	Bracket, Mounting, Hydraulic Cooler, Right Hand	1
4	400184	Screw, Hex Head, 5/16"-18 x 3/4"	4
5	446134	Washer, Lock, 5/16"	4
6	443106	Nut, Hex, 5/16"-18	4
7	662206	Guard, Hydraulic Cooler	1
8	661619	Screw, Hex Head, 1/4"-20 x 5/8" Whiz-Lock	5
9	661620	Nut, Hex, 1/4"-20 Whiz-Lock	3
10	659276	Nut, Clip, 1/4"-20	2
11	661397	Hose Assembly,	1
12	660680	Adapter, 1-1/16"-12 Male O-Ring to 3/4"-16 Male 37 Degree Flare	1
13	660679	Elbow, 1-1/16"-12 Male O-Ring to 3/4"-16 Male 37 Degree Flare	1
14	662194	Switch, Pressure	1
15	662220	Elbow, 9/16"18 Male O-Ring to 1/4" Pipe	1
16	662367	O-Ring (For Elbow in G1)	1



Hopper, Lifting Bracket, Conveyor Belt Scraper, and Metering Gate Assembly

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#### Hopper, Lifting Bracket, Conveyor Belt Scraper, and Metering Gate Assembly

lterr No.	n Part No.	Description Qt	t <b>y</b> .
1	662203	Panel, Hopper, Left Hand Side, 1530 TM	1
2	662202	Panel, Hopper, Right Hand Side, 1530 TM	1
3	662201	Panel, Hopper, Front, 1530 TM	1
4	662882	Panel, Hopper, Rear, 1530	1
5	662205	Seal. Hopper. Side	2
6	662204	Seal. Hopper. Front	1
7	661619	Screw. Hex Head. 1/4"-20 x 5/8" Whizloc	5
8	661620	Nut, Hex, 1/4-20 Whizlock	3
9	662046	Screw, Hex Head, 1/4"-20 x 3/4" Whiz-Lock	2
10	499410	Nut, Clip, 1/4"-20 Tinnerman	4
11	661610	Retainer, Seal Strip	2
12	662318	Plate, Tube	2
13	662317	Pin, Hinge	2
14	460310	Hairpin, Cotter, 1/8"	2
15	662250	Lifting Brace	1
16	662885	Tube, Manual	1
17	662901	Clamp, Manual Tube	2
18	662797	Bracket, Metering Gate, Left Hand	1
19	662781	Bracket, Metering gate, Right Hand	1
20	400258	Screw, Hex Head, 3/8"-16 x 3/4"	4
21	446142	Washer, Lock, 3/8"	4
22	443110	Nut, Hex, 3/8"-16	4
23	661418	Gate, Metering	1
24	657208	Grip, Handle, Metering Gate	1
25	660962	Screw, Hex Head, 3/4"-16 x 1-1/4"	2
26	659984	Nut, Hex, 3/4"-16, Nylock Thin	2
27	661020	Washer, Special, Metering Gate, 1/4" Wide Plastic	2
28	400106	Screw, Hex Head, 1/4"-20 x 5/8"	3
29	444830	Nut, Hex, 1/4"-20 Flexloc	3
30	662777	Seal, Metering Gate	1
31	662776	Strip, Metering Gate	1
32	662752	Plunger, Metering Gate	1

AR = As Required





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#### WIDESPIN" 1530 TM

#### WIDE SPIN Spinner Assembly

ltem No.	Part No.	Description	Qty.
1	661722	Support, Spinner, Includes Plastic Bearings	1
2	661400	Bearing, Flange, Plastic,	2
3	661507	Insert, Cap, Rectangular	4
4	659126	Handle, Blade Locking	1
5	657208	Grip, Handle	1
6	661687	Spacer, Handle	1
7	661020	Washer, Special, Metering Gate	1
8	661686	Handle, Spinner Pivot	1
9	661698	Bolt, Carriage, 5/8"-11 x 2-1/2"	1
10	658240	Bolt, Carriage, 5/16"-18 x 3/4"	14
11	452006	Washer, Flat, 3/8" ID x 7/8" OD x 5/64" Thick	4
12	444808	Nut, Hex, 5/16"-18 Flexloc	14
13	400406	Screw, Hex Head, 1/2"-13 x 1-1/4"	4
14	499052	Washer, Flat, 33/64" ID x 7/8" OD x 1/16" Thick	4
15	446154	Washer, Lock, 1/2"	4
16	443118	Nut, Hex, 1/2"-13	4
17	661515	Pivot	2
18	400186	Screw, Hex Head, 5/16"-18 x 7/8"	20
19	446134	Washer, Lock, 5/16"	20
20	443106	Nut, Hex, 5/16"-18	20
21	661460	Motor, Hydraulic, Spinner, 1530	2
22	499101	Key, Square, 3/16" x 11/16"	2
23	400146	Screw, Hex Head, 1/4"-28 x 3/4"	10
24	446128	Washer, Lock, 1/4"	10
25	661378	Coupling, Half, 5/8" Bore SEE NOTE A	4
26	415505	Screw, Set, 1/4"-20 x 3/4" SEE NOTE A	8
27	661379	Coupling, Spider	2
28	661513	Coupler, Spinner	2
29	661374	Bearing	4
30	661514	Shaft, Drive	2
31	499496	Key, Square, 3/16" x 3/4"	2
32	661512	Plate, Spinner	2
33	661510	Vane, Spinner, Left Hand	3
34	661509	Vane, Spinner, Right Hand	3
35	661526	Guide, Spinner	1
36	400258	Screw, Hex Head, 3/8"-16 x 3/4"	8
37	446142	Washer, Lock, 3/8"	8
38	443110	Nut, Hex, 3/8"-16	9
39	662735	Spinner Hopper Assembly, WideSpin	1
40	661521	Frame, Spinner	1
41	661406	Grommet, Rubber	2
42	662747	Diverter, Heavy Spread	1
43	662516	Knob, Locking	1
44	452004	Washer, Flat, 5/16" ID x 3/4" OD x 1/16" Thick	6
45	658529	Screw, Hex Head, 3/8"-16 x 2-1/2"	1

LEFT HAND SPINNER WHEEL





SPINNER WHEEL

#### WIDESPIN" 1530 TM

#### Main Hydraulic System



PARTS LIST

Main Hydraulic System

ltem No.	n Part No.	Description Qty.	
1	658641	Coupling, Quick Disconnect, Female, 3/8" 1	
2	657250	Adapter, 7/8"-14 Male O-Ring / 3/4"-16 Male 37 Degree Flare 4	
3	662220	Elbow, 9/16"-18 Male O-Ring / 1/4" Female Pipe	
4	662194	Switch, Pressure (Hydraulic Cooler Fan)	
5	657538	Elbow, 3/4"-16 Male O-Ring / 9/16"-18 Male 37 Degree Flare 2	
6	661401	Hose Assembly, Manifold Valve Block to Conveyor Motor	
7	661403	Adapter, 7/8"-14 SAE O-Ring / 9/16"-18 37 Degree Flare	
8	659388	Motor, Hydraulic, Conveyor Belt Drive	
9	661399	Hose Assembly, Manifold Valve Block to Flow Control	
10	662728	Flow Control (Spinner Speed Control) 1	
11	661396	Elbow, 7/8"-14 SAE O-Ring / 9/16"-18 Male 37 Degree Flare 2	
12	661404	Hose Assembly, Hydraulic,	
		Flow Control to Spinner Quick Disconnect	
13	662221	Hose Assembly, Manifold Valve Block to Flow Control	
14	657539	Adapter, 3/4"-16 Male O-Ring / 9/16"-18 Male 37 Degree Flare 1	
15	661397	Hose Assembly, Hydraulic Filter to Tank	
		(Manifold Valve Block to Hydraulic Cooler)	
16	660680	Adapter, 1-1/16"-12 Male O-Ring / 3/4"-16 Male 37 Flare	
17	662247	Cooler, Hydraulic Fluid 1	
18	660679	Elbow, 1-1/16-12 Male O-Ring / 3/4"-16 Male 37 Degree	
19	658642	Coupling, Quick Release, Male, 3/8" 1	
20	661395	Adapter, 3/4"-16 SAE O-Ring / 3/8"-18 Male NPT	
21	661368	Manifold, Hydraulic Valve Block, SP-1530 1	

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Spinner Assembly Hydraulics



#### AS VIEWED FROM TOP

ltem No.	n Part No.	Description Qt	t <b>y</b> .
1	661460	Motor Hydroulia Spinner 1520	2
ו ר	657526	Notor, Hydraulic, Spiriller, 1550 $\dots$ 27 Degree Elere	<u>~</u> 1
2	057550		I
3	657660	Adapter, 9/16"-18 Male O-Ring to 9/16"-18 Male 37 Degree Flare 1	1
4	658641	Coupling, Quick Disconnect, Female, 3/8"1	1
5	658642	Coupling, Quick Disconnect, Male, 3/8" 1	1
6	661389	Adapter, 3/8"-24 SAE O-Ring to 7/16"-20 Male 37 Degree Flare 1	1
7	661390	Adapter, 9/16"-18 SAE O-Ring to 3/8"-18 Male NPT 1	1
8	661391	Tee, 9/16"-18 SAE O-Ring to 9/16"-18 Male 37 Degree Flare 1	1
9	661392	Hose Assembly, Hydraulic Motor Drain	1
10	661393	Hose Assembly, Hydraulic Motor to Hydraulic Motor	1
11	661394	Hose Assembly, Hydraulic Motor to Quick Disconnect	1

### WIDE*SPIN*' 1530 TM



5	658022	Connector, 1/4" Push-On, Double Male	2
6	657970	Body, Control Box	1
7	657956	Screw, Machine, 8-32 x 3/8" Phillips Pan Head	2
8	657951	Rod, Tie, Control Box	2
9	661776	Plate, Switch	1
10	657957	Screw, Machine, 8-32 x 3/8" Phillips Flat Head	2
11	658156	Gasket, Rocker Switch	1
12	661493	Switch, Rocker, SPTT	1
13	658155	Actuator, Rocker Switch	1
14	657603	Locknut, Bonding, 1/2" NPT	1
		-	

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**Control Box Assembly** 



ltem No.	Part No.	Description	Qty.
1	661565	Cartridge, Solenoid Valve (S1 and S2) S1 – Spinner "Start and Stop" S2 – Conveyor Belt "Start and Stop"	2
2	660606	Coil, Solenoid Valve (S1 and S2)	. 2
3	661566	Seal Kit, Solenoid Valve (S1, S2, and RV)	. 3
4	661567	Cartridge, Relief Valve (RV)	. 1
5	661568	Cartridge, Flow Control Regulator (FC)	. 1
6	661569	Seal Kit, Flow Control Regulator (FC)	. 1
7	661606	Knob, Flow Control Regulator (FC)	. 1
8	662220	Elbow, 9/16"-18 Male O-Ring / 1/4" Female Pipe (G1)	. 1
9	662194	Switch, Pressure (Hydraulic Cooler Fan)	. 1
10	661570	Plug, 9/16"-18 SAE (G1 and G2)	. 2
11	662367	O-Ring (For Plug in G1 and G2 or Elbow in G1)	. 2





lter No.	n Part No.	Description	Qty.
1	662228	Main Wiring Harness, 1530 TM, Product No, 85811 Only	1
2	662919	Main Wiring Harness, 1530 TM, Product No. 85812 Only	1
3	657917	Holder. Fuse (Service Part)	1
4	657640	Fuse, 15 Amp, AGC-15A (Service Part)	1
5	662230	Wiring Harness, Control Box, 1530 TM, Includes Base Plate, Cord	
		Connectors, and Locknuts (Does Not Include Switch or Control Bo	x)1
6	657603	Locknut, 1/2" NPT	2
7	657953	Connector, Cord	1
8	657950	Base Plate, Control Box	1
9	658101	Cable Tie, Black Nylon	4



**Electrical System** 



#### WIDE*SPIN* 1530 TM

#### Decals

ltem No.	Part No.	Description C	⊋ty.
1	661555	Decal, "ON/OFF", Hand Held Control Box	1
2	662914	Decal Sheet, WideSpin1530 TM, Includes Items 3 thru 8	1
3		Decal, WideSpin 1530 TM Logo	2
4		Decal, WideSpin Logo, Diverter	1
5		Decal, Turfco Logo, 7-1/2"	1
6		Decal, Turfco Logo, 10"	1
7		Decal, Product Identification, Product No. 85811	1
8		Decal, Product Identification, Product No. 85812	1
9	662226	Decal Sheet, WideSpin TM, Revision A, Includes Items 10 thru 17	
10		Decal, Lifting Bracket Identification	1
11		Decal, Read Manual	1
12		Decal, High Heat Warning (85811 only)	1
13		Decal, Hydraulic Pressure Hazard Warning	1
14		Decal, Spinner "STAY CLEAR" Thrown	
		Objects Danger Warning	1
15		Decal, Center-Of-Gravity	1
16		Decal, Maximum Angle of Operation Warning	1
17		Decal, Maximum Hopper Capacity and Load Weight Warning	1
18	662755	Decal Sheet, WideSpin, Includes Items 19 thru 24	1
19		Decal, Metering Gate Position	1
20		Decal, Lightspread/Heavyspread Instruction	1
21		Decal, "KEEP HANDS AND FEET AWAY" Warning	2
22		Decal, Spinner Speed Control	1
23		Decal, Conveyor Belt Speed Control	1
24		Decal, Spinner Assembly Hydraulic Hose Routing SEE NOTE	Α
25	662890	Manual, Operator's and Parts List, WideSpin 1530 TM	1

**NOTE A:** This Decal Shows The Proper Re-routing Of The Hydraulic Hoses If The Spinner Assembly Has Been Removed. The Decal Is Located On The Rear Of The Frame And Is Only Visible When The Spinner Assembly Is Removed.

# Image: Constraint of the second se

#### **Optional Trench Filling Attachment - Product Number 86150**

ltem No.	Part No.	Description Qty.	
1	661755	Mounting Bracket, Trench Filling Attachment	
2	661756	Chute, Trench Filling Attachment1	
3	658240	Bolt, Carriage, 5/16"-18 x 3/4" 4	
4	446134	Washer, Lock, 5/16" 4	
5	443106	Nut, Hex, 5/16"-18	
6	659259	Pin, Hitch, 5/8", Includes Hairpin 1	
7	660076	Hairpin, Cotter, 0.148" Wire x 2-3/4" Long 1	
8	661757	Installation Manual and Parts List1	
9	661758	Decal, Product Identification1	

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