





9500

Crop Max 9520 • 9524 • 9530 Series
Attachment Models S100 • S200 • S300 • S400



Owner / Operator's Manual



1.0 IMPORTANT INFORMATION

The spreader body serial number plate is located on the front left hand side.

The attachment serial number is located on the left hand side of the frame on the attachment.

Please enter the model, serial number and additional information in the space provided for future reference.





Always use your serial number when requesting information or when ordering parts.

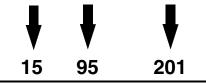


HOW TO READ YOUR SERIAL NUMBER

SPREADER BODY

EXAMPLE: 1595201

Model Year / Model / Sequence Of Build

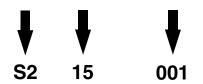


ATTACHMENT

EXAMPLE: S215001

2016 Model Year And Later Attachment Location

Model / Model Year / Sequence Of Build



Meyer Manufacturing Corporation 674 W. Business Cty Rd A Dorchester, WI 54425 Phone: 1-800-325-9103 Fax: 715-654-5513

Email: parts@meyermfg.com
Website: www.meyermfg.com







2.0 PRE-DELIVERY & DELIVERY CHECK LIST

9500 Check List

Meyer Manufacturing Corporation

Phone: 715-654-5132 • Toll-Free: 1-800-325-9103 • P.O. Box 405 • Dorchester,

This Pre-Delivery & Delivery Check List must be gone through by the Selling Party and the Customer to validate the Owner's Registration Form.

PRE-DELIVERY CHECK LIST

After the New Meyer Crop Max has been completely set-up, check to be certain it is in correct running order before delivering it to the customer.

The following is a list of points to inspect:

Check off each item as you have made the proper adjustments and found the item operating satisfactorily. Any adjustments made, MUST be according to specifications defined in this manual.

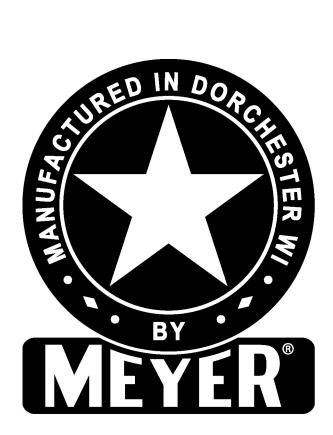
All shields and guards are in place and securely fastened.
All bolts and other fasteners are secure and tight.
All mechanisms operate trouble free.
All grease fittings have been lubricated, gear boxes filled to proper levels, and all roller chains are oiled. See "Lubrication" section of this manual.
PTO shields turn freely.
Main Apron Chains are at proper tension. See "Adjustments" section in this manual.
All roller chain springs adjusted properly for automatic tensioning. See "Adjustments" section in this manual.
Lights are positioned to be visible from the rear.
All stop/tail/turn lights work properly.
Masking is removed from SMV decal on pull-type units.
All decals are in place and legible.

DELIVERY CHECK LIST

The following check list is an important reminder of valuable information that MUST be passed on to the customer at the time the unit is delivered.

Check off each item as you explain it to the customer.

Explain to the customer that pre-delivery check list was fully completed.					
Give customer the Owner & Operator's Manual. Instruct to read and completely understand its contents BEFORE attempting to operate the Crop Max.					
Explain and review with customer the New Meyer Crop Max manufacturer's warranty.					
Show the customer where to find the serial number on the implement.					
Explain and review with the customer "Safety Precautions" section of this manual.					
Explain and review with customer the proper "Start-up and Operating Procedures" sections of this manual.					
Demonstrate the PTO Shaft Locking Device and proper PTO shaft storage. Also, demonstrate proper hydraulic hose storage and tip holder used to keep system clean from contaminants.					
Explain that regular lubrication and proper adjustments are required for continued proper operation and long life of the Crop Max. Review with the customer the "Lubrication" and "Adjustments" sections of this manual.					
Explain and review with customer the recommended loading and unloading procedures for different types of manure.					
Fully complete this "PRE-DELIVERY &					



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3.0 INTRODUCTION

Congratulations on your purchase of a new Meyer farm equipment product. Undoubtedly you have given much consideration to your purchase and we're proud that you have selected Meyer. Pride in craftsmanship, engineering and customer service have made Meyer products the finest in the farm equipment industry today.

There is no substitute for quality. That is why thousands of people like you have purchased Meyer farm equipment. They felt it was the best equipment to serve their farming needs, now and in years to come. We ask that you follow our policy of "safety first", and we strongly suggest that you read through the "Owner / Operator's Manual & Parts Book" before operating your Meyer farm equipment. Meyer Manufacturing Corporation wants to thank you for not compromising quality. We are determined to offer excellence in customer service as well as provide you with the very best value for your dollar.

Sincerely,

All Employees of MEYER MANUFACTURING CORPORATION

The Model 9500 Crop Max is available as a truck or an ag. cart mounted unit or mounted to an ag cart or wagon running gear pulled and powered by a farm tractor.

When the PTO is referred to, it means power take off from the truck.

The Model 9500 Crop Max may be referred to as 9500, Crop Max, spreader or implement in this manual.



IMPORTANT: You are urged to study this manual and follow the instructions carefully. Your efforts will be repaid in better operation and service as well as a savings in time and repair expense. Failure to read this manual and understand the machine could lead to serious injury. If you do not understand instructions in this manual, contact either your dealer or Meyer Manufacturing Corp. at Dorchester, WI 54425.



WARRANTY: At the front of this manual is an "Owner's Registration Form". Be sure your dealer has completed this form and promptly forwarded a copy to Meyer Manufacturing to validate the manufacturer's warranty. The product model and serial number are recorded on this form and on the inside of the front cover for proper identification of your Meyer Crop Max Spreader by your dealer and the manufacturer when ordering repair parts. The serial number is stamped in the front upright of the left-hand side.



REPAIR PARTS: At the back of this manual is the repair parts section. All replacement parts are to be obtained from or ordered through your Meyer dealership. When ordering repair parts, refer to the parts section and give complete information including quantity, correct part number, detailed description and even model number and serial number of the Crop Max which needs repair parts.

Manufacturer's Statement: Meyer Manufacturing Corporation reserves the right to make improvements in design, or changes in specifications at any time, without incurring any obligation to owners of units previously sold. This supersedes all previous published instructions.

FEATURES

DESCRIPTION	9520 PULL TYPE	9520 TRUCK MOUNT	9524 PULL TYPE	9524 TRUCK MOUNT	9530 PULL TYPE	9530 TRUCK MOUNT
Front 36" Folding Guard/Deflect	STD	STD	STD	STD	STD	STD
Transport Lights w/Cord	STD	STD	STD	STD	STD	STD
Reversing Apron Package	STD	STD	STD	STD	STD	STD

OPTIONS

DESCRIPTION	9520 PULL TYPE	9520 TRUCK MOUNT	9524 PULL TYPE	9524 TRUCK MOUNT	9530 PULL TYPE	9530 TRUCK MOUNT
Rear Attach S-100/200/300/400	OPT	OPT	OPT	OPT	OPT	OPT
Sileage Extension Package	OPT 36"	OPT 36"	OPT 36"	OPT 36"	OPT 36"	OPT 36"
Scale Packages	OPT	OPT	OPT	OPT	OPT	OPT
Nutrient Tracking Management Solutions	OPT	OPT	OPT	OPT	OPT	OPT
Fender Flare Package	OPT	N/A	OPT	N/A	OPT	N/A

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4.0 MANUFACTURER'S WARRANTY

6/2014

MEYER 9500 Crop Max Spreader

- I. The "Product Registration & Inspection Certificate" along with the original billing invoice "Owner's Registration Form" must be completed in full and promptly returned to Meyer Mfg. Corp. for this warranty to become both valid and effective. All warranties on New Meyer Crop Max Spreaders shall apply only to the original retail customer from an authorized Meyer Mfg. Corp. dealership.
- II. This warranty shall <u>not</u> apply to any Meyer Crop Max Spreader which has been subjected to misuse, negligence, alteration, accident, <u>incorrect</u> operating procedures, or which shall have been repaired with parts other than those obtained through Meyer Mfg. Corp.
- III. Meyer Mfg. Corp. warrants New Crop Max Spreaders to be free from defects in material and workmanship under recommended use and maintenance service, as stated in the Owners/Operator's Manual and Parts Book, as follows:
 - A. Meyer Mfg. Corp. will repair or replace F.O.B. Dorchester, WI, as Meyer Mfg. Corp. elects, any part of a new Crop Max Spreader which is defective in material or workmanship:
 - i. Without charge for either parts or labor during the first (1) year from purchase date to the original retail customer.
 - B. In addition to the above basic warranty, Meyer Mfg. Corp. will repair or replace F.O.B. Dorchester, WI as Meyer Mfg. Corp. elects:
 - i. Any part of the following which is defective in material or workmanship (not neglect to recommended use and service) with a "pro-rated" charge for parts only (not labor) during the stated time period from date of purchase to the original retail customer:
 - a. Seven (7) Years: After a period of (1) year, the spreader tank body is warranted against rust-through for an additional period of (6) years. (Pro-Rated Parts Only). Parts included, front and rear end panels, side panels.
- IV. COMMERCIAL USE: Coverage as in paragraph III.A.i. ONLY, except warranty coverage is for (90) days for parts and labor to the original commercial retail customer.
- V. Repairs eligible for labor warranty must be made by Meyer Mfg. Corp. or an authorized Meyer dealership. The original retail customer is responsible for the transportation of the spreader to the dealership for warranty service or for any service call expenses.
- VI. Except as stated above, Meyer Mfg. Corp. shall not be liable for injuries or damages of any kind or nature, direct, consequential, or contingent, to persons or property. This warranty does not extend to loss of crop or for any other reasons.
- VII. No person is authorized to give any other warranties or to assume any other obligation on Meyer Mfg. Corp.'s. behalf unless made or assumed in writing by Meyer Mfg. Corp. This warranty is the sole and exclusive warranty which is applicable in connection with the manufacture and sale of this product and Meyer Mfg. Corp.'s responsibility is limited accordingly.
- VIII. This warranty is effective on all sales of Meyer Crop Max Spreaders made after June 1, 2008.

Purchased Product Warranty:

This warranty does not apply to component parts not manufactured by Meyer such as but not limited to wheels, tires, tubes, PTO shafts, clutches, hydraulic cylinders, scales, tarps, etc.



5.0 SAFETY

The Meyer Crop Max Spreader is manufactured with operator safety in mind. Located on the spreader are various safety signs to aid in operation and warn of danger or caution areas. Pay close attention to all safety signs on the spreader.

Carefully follow the operating and maintenance instructions in this manual and all applicable safety laws. Failure to follow all safety procedures may result in serious injury or death.

Before attempting to operate this spreader, read and study the following safety information. In addition, make sure that every individual who operates or works with the spreader, whether family member or employee, is familiar with these safety precautions.

Meyer Mfg. Corp. provides guards for exposed moving parts for the operator's protection; however, some areas cannot be guarded or shielded in order to assure proper operation. The operator's manual and safety signs on the spreader itself warn you of dangers and must be read and observed closely!



This symbol is used to call attention to instructions concerning personal safety. Be sure to observe and follow these instructions. Take time to be careful!



The signal word DANGER on the machine and in the manual identifies a hazardous situation which, if not avoided, WILL result in death or serious injury.



The signal word WARNING on the machine and in the manual indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



The signal word CAUTION on the machine and in the manual indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

Danger, Warning, Caution, and instructional decals and plates are placed on the equipment to protect anyone working on or around this machine, as well as the components of the machine. All personnel operating or maintaining this equipment must familiarize themselves with all Danger, Warning, Caution, and instructional decals and plates.

5.1 SAFETY PRECAUTIONS





All individuals who will operate this Spreader must read and completely understand this Operator's And Parts Manual. Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

- DO NOT allow anyone to operate, service, inspect or otherwise handle this spreader until all operators have read and understand all of the instructional materials in this Operator's And Parts Manual and have been properly trained in its intended usage.
- For an operator to be qualified, he or she must not use drugs or alcohol which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.
- Make sure all personnel can READ and UNDERSTAND all safety signs.
- DO NOT allow minors (children) or inexperienced persons to operate this spreader.
- DO NOT operate until all shields and guards are in place and securely fastened.
- DO NOT step up on any part of the spreader at any time.
- DO NOT adjust, clean or lubricate while the spreader is in motion.
- Inspect when first delivered and regularly thereafter; that all connections and bolts are tight and secure before operating.
- Know how to stop operation of the spreader before starting it!
- Make certain everyone is clear of the spreader before applying power.
- Keep hands, feet and clothing away from moving parts. Loose or floppy clothing should not be worn by the operator.
- Observe all applicable traffic laws when transporting on public roadways (where legal to do so). Check local laws for all highway lighting and marking requirements.
- Shut off and lock out power before adjusting, servicing, maintaining or clearing an obstruction from this machine. (See
 5.3 SHUTOFF & LOCKOUT POWER on page 19.)
- Always enter curves or drive up or down hills at a low speed and at a gradual steering angle.
- Never allow riders on either tractor / truck or equipment.
- Keep tractor / truck in a lower gear at all times when traveling down steep grades.
- Maintain proper brake settings at all times (if equipped).
- Stay away from overhead power lines. Electrocution can occur without direct contact.
- Use only properly rated undercarriage and tires.

Safety Precautions For Tractor Towed Units:

- Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
- Always install a SMV emblem on pull-type equipment when transporting on roadways and keep clean and bright.
- Always yield to oncoming traffic in all situations and move to the side of the road so any following traffic may pass.

Safety Precautions For Truck Mounted Units:

• Comply with state and local laws governing highway safety and movement of machinery on roadways.

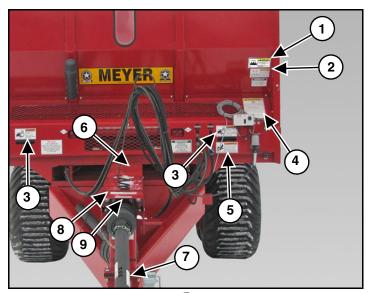
Safety Precautions For Hydraulic System:

- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use hands to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.



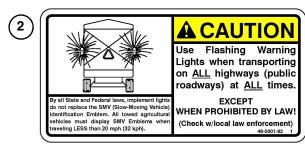
Read all safety signs on the spreader and in this manual. Keep all safety signs clean and replace any damaged or missing safety signs before operating the equipment. Do not remove any safety signs. Safety signs are for operator protection and information.

FRONT OF SPREADER



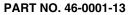


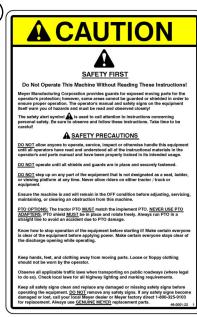
PART NO. 46-0001-35



PART NO. 46-0001-62 (Pull Type Only)







9

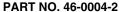


PART NO. 46-0001-4



PART NO. 46-8500-7







PART NO. 46-3600-9

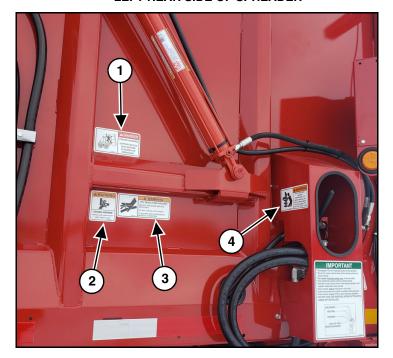


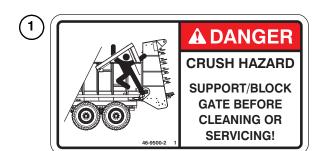
6

PART NO. 46-3600-2 (Located Under Shield)

PART NO. 46-0001-22

LEFT REAR SIDE OF SPREADER





PART NO. 46-9500-2



PART NO. 46-0001-205



PART NO. 46-8500-7



PART NO. 46-9500-17

MODEL S200





PART NO. 46-3600-1

SIDE OF SPREADER





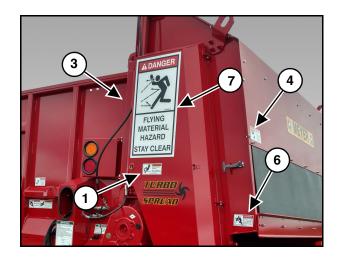
SIDE OF SPREADER



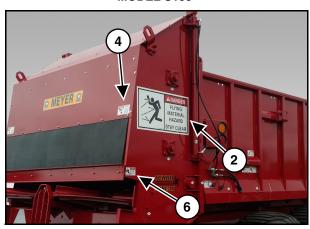


PART NO. 46-9100-4

MODEL S100



MODEL S100



MODEL S200





PART NO. 46-0001-4



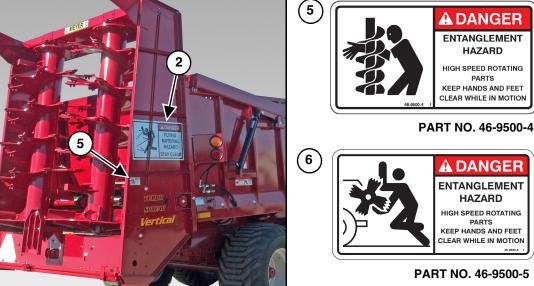
PART NO. 46-9500-1



PART NO. 46-0001-26 (Located Under Shield)



PART NO. 46-3600-1



A DANGER **FLYING MATERIAL HAZARD** STAY CLEAR

PART NO. 46-9500-22

MODEL S300





PART NO. 46-0001-4





PART NO. 46-9500-5

NOTE: Safety Signs illustrated on implement are typical for Model S400 also.

5.3 SHUTOFF & LOCKOUT POWER

Any individual that will be adjusting, servicing, maintaining, or clearing an obstruction from this machine needs to ensure that this machine stays safely "OFF" until the adjustment, service, or maintenance has been completed, or when the obstruction has been cleared, and that all guards, shields, and covers have been restored to their original position. The safety of all individuals working on or around this machine, including family members, are affected. The following procedure will be referred to throughout this manual, so be familiar with the following steps.

5.3.1 Shutoff & Lockout Power Recommendations

1. Think, Plan and Check

- a. Think through the entire procedure and identify all the steps that are required.
- b. **Plan** what personnel will be involved, what needs to be shut down, what guards / shields need to be removed, and how the equipment will be restarted.
- c. **Check** the machine over to verify all power sources and stored energy have been identified including engines, hydraulic and pneumatic systems, springs and accumulators, and suspended loads.
- 2. Communicate Let everyone involved, including those working on or around this machine, that work is being done which involves keeping this machine safely "OFF".

3. Power Sources

- a. **LOCKOUT -** Shut off engines and take the key, or physically lock the start/on switch or control. Disconnect any power sources which are meant to be disconnected (i.e. electrical, hydraulic, and PTO of pull-type units).
- b. TAGOUT Place a tag on the machine noting the reason for the power source being tagged out and what work is being done. This is particularly important if the power source is not within your sight and/or will need to be isolated for a longer period of time.
- **4. Stored Energy -** Neutralize all stored energy from its power source. Ensure that this machine is level, set the parking brake, and chock the wheels. Disconnect electricity, block moveable parts, release or block spring energy, release pressure from hydraulic and pneumatic lines, and lower suspended parts to a resting position.
- 5. **Test -** Do a complete test and personally double check all of the above steps to verify that all of the power sources are actually disconnected and locked out.
- 6. Restore Power When the work has been completed, follow the same basic procedures, ensuring that all individuals working on or around this machine are safely clear of the machine before locks and tags are removed and power is restored.



It is important that everyone who works on this equipment is properly trained to help ensure that they are familiar with this procedure and that they follow the steps outlined above. This manual will remind you when to Shutoff & Lockout Power.



6.0 PRE-OPERATION



DO NOT allow anyone to operate, service, inspect or otherwise handle this spreader until all operators have read and understand all of the instructional materials in this Operator's and Parts Manual and have been properly trained in its intended usage.

Verify that the spreader is securely fastened to the tractor / truck.

Verify that all electrical / hydraulic connections and bolts / hardware are tight and securely fastened before operating the spreader.

Always keep all shields and guards in place and securely fastened.

Keep hands, feet and clothing away.

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Tools are being used.

6.1 STATIC INSPECTION



Hydraulic fluid escaping under pressure can have sufficient force to cause injury. Keep all hoses and connections in good serviceable condition. Failure to heed may result in serious personal injury or death.

Before operating the spreader for the first time and each time thereafter, check the following items:

- 1. Check that all safety signs are in good and legible condition.
- 2. Inspect the spreader for proper adjustments. (See 8.2 ADJUSTMENTS on page 53.)
- 3. Lubricate the equipment. (See 8.1 LUBRICATION on page 45.)
- 4. Make sure that all guards and shields are in place, secured and functioning as designed.
- 5. Check condition of all hydraulic components for leaks. Repair or replace as required.
- 6. Check the hydraulic and gear box oil level. (See 8.1 LUBRICATION on page 45.)
- 7. Remove any twine, wire or other material that has become entangled around the rear attachment spinners. (If Equipped)
- 8. Check to see that no obstructions are present in the spreader. Be sure that there are no tools laying on or in the spreader.
- 9. Verify that all electrical and hydraulic connections are tight and secure before operating.
- 10. Check that all hardware is in place and is tight.
- 11. Watch for any worn or cracked welds. If found, have qualified personnel repair immediately or replacement is necessary.
- 12. Check all bearings for wear. Replace as needed.
- 13. Check that the rear gate is completely closed.

6.2 LIGHT HOOK-UP

Truck Mounted Models: A 4 pin electrical socket (Not Shown) is provided to connect the electrical control plug from your truck. This will operate signal, tail, clearance and brake lights.

NOTE: Depending on make and model of the truck, it may be necessary to install a light converter. (Meyer part #56-0028). The converter allows signal lights and brake lights to operate according to DOT Lighting Standards.

6.3 HYDRAULIC HOOK-UP



Hydraulic fluid escaping under pressure can have sufficient force to cause injury. Keep all hoses and connections in good serviceable condition. Failure to heed may result in serious personal injury or death.

Hydraulic input to the 9500 spreader requires 25 GPM @ 3000 PSI. If truck mounted, install a relief valve set at 3000 PSI. An in-line pressure gauge has been provided for system pressure reference (Item 1). Set up hydraulic system on Truck mounted units with a 40 gallon reservoir minimum. Call the factory for further information.



Do not exceed maximum PSI or a motor failure could result.

NOTE: The PTO horsepower and/or hydraulic requirements may not reflect adequate tractor size for towing the machine.

Truck Mounts: Connect the hydraulic pressure and return lines from the wet kit to the pressure and return lines on the implement.

6.4 PTO DRIVELINE (\$100 / \$200 / \$300)



Shutoff and lockout power before adjusting, servicing, maintaining, or clearing an obstruction from this machine. Failure to heed may result in serious personal injury or death.



Do not operate without PTO guard on implement and tractor. Maintain PTO drive shaft guard tubes in good operating condition. Replace them if damaged and not turning freely. Failure to heed may result in serious personal injury or death.

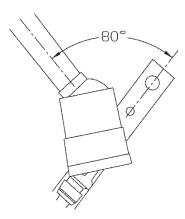
The tractor half of the PTO drive shaft assembly must be locked securely to the tractor output shaft and the implement half of the PTO drive shaft assembly must be locked securely to the Crop Max driveline. This includes S400 even though PTO is not used, to protect the shaft from damage.

See your PTO Installation, Service, and Safety Instruction Manual for additional PTO details. For a replacement manual, call the factory at 1-800-325-9103.

See your ADMA Safety Manual for further safety situations and precautions that you should familiarize yourself and those that may be operating this equipment. For a replacement manual, call the factory at 1-800-325-9103.



DO NOT EXCEED THE MAXIMUM 80° TURNING ANGLE ON THE CONSTANT VELOCITY PTO DRIVELINE. EXCEEDING THE TURNING ANGLE WILL DAMAGE THE CONSTANT VELOCITY "CENTER HOUSING" AND WILL EXERT EXCESSIVE PRESSURES ON THE PTO INPUT CENTER SHAFT AND RELATED BEARINGS.



S400 ATTACHMENT NOTE: There is no adjustment on the torque disconnect.

6.5 TRACTOR DRAWBAR SETUP

This spreader is to be operated with 1000 RPM PTO ONLY. No PTO adapter may be used to alter speed or geometry.

Set your tractor drawbar to conform to the standard dimensions as shown, Figure 1. This will ensure that the PTO drive shaft will not be over extended.

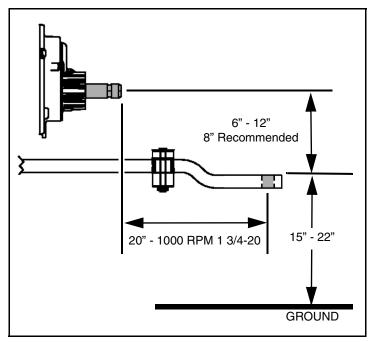


FIGURE 1. TRACTOR DRAWBAR & PTO SPECIFICATION

An improperly located hitch point may cause damage to the universal joints of the PTO drive shaft. Conforming to the standard 16" or 20" drawbar & PTO relationship will ensure that the PTO drive shaft will not become overextended.

WITH INITIAL HOOK-UP TO YOUR NEW MEYER SPREADER TEST PTO TRAVEL BY TURNING EQUIPMENT IN BOTH DIRECTIONS OBSERVING THE MINIMUM (A) AND MAXIMUM (B) TRAVEL DIMENSIONS AS SHOWN, FIGURE 2.

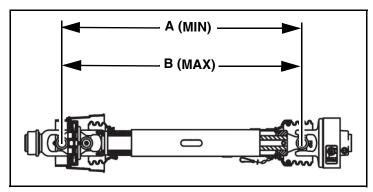


FIGURE 2. PTO DRIVELINE

PTO PART NUMBER	Α	В
618-0102	40.16	54.69
618-0202	41.34	55.71
918-0410	40.16	52.95

6.6 S100 EXPELLER ATTACHMENT

6.6.1 Swing Arm End Gate

The swing arm end gate is standard on the S100 attachments. When the gate reaches the full open position the apron will begin to travel. The flow control must be set to start the apron. If the material is free flowing, the gate can be set partially open, allowing the material to flow under the gate until the initial flow of manure has been spread. Then the gate must be fully opened so the apron will start and continue to unload the spreader.

6.6.2 Vertical Slide End Gate

The optional vertical slide gate is used to regulate the discharge rate of manure. The gate can be set partially open to restrict the flow by allowing the apron to undercut the load and only allow what material the gate allows out underneath. The flow control must be set to start the apron.

6.7 S200 EXPELLER ATTACHMENT

The swing arm end gate on the S200 can only be operated with the rear end gate fully open. The flow control in the cab must be set to start apron.

6.8 S300 EXPELLER ATTACHMENT

When the swing arm end gate on the S300 reaches the full open position the apron will begin to travel. The flow control must be set to start the apron. If the material is free flowing, the gate can be set partially open, allowing the material to flow under the gate until the initial flow of manure has been spread. Then the gate must be fully opened so the apron will start and continue to unload the spreader.

6.9 S400 GRAIN HOPPER ATTACHMENT

The S400 rear grain hopper attachment unloads grain by free flow and gravity. The PTO driveline is not needed to unload grain. Attach the driveline to the tractor to prevent damage to the driveline during grain unloading.

A hand wheel on the hopper unit is used to open the hopper discharge gate and regulate the grain unloading rate. The electronic cab controller is designed to be removed from the cab of the tractor/truck and move to the rear of the Crop Max and mount on the receiver bracket that is supplied with the grain hopper attachment. Fasten receiver bracket on the left rear corner of the box. Unplug both leads from the controller in the tractor/truck cab and remove the cab controller. Plug the two remaining leads together in the cab. At the left rear corner on the Crop Max unplug the wire harness that is routed from the front of the unit and is plugged into the electronic flow control under the box. The grain hopper came with two leads. Plug the first lead into the lead from the front of the box and route to the outside of the box and plug into the cab controller. Plug the second lead into the other lead coming out of the cab controller and route back under the box and plug into the electronic flow control. Leave enough slack in the wire to enable the controller to mount onto the receiver bracket. Once done using the attachment, simply unplug the cab controller, plug the two leads together and move the controller back to the cab of the tractor/truck and secure wires.

The hydraulic driven apron is operated slowly or intermittently to advance the grain load toward the hopper but must not be used to force grain into the hopper unit. By keeping the grain level in the hopper lower than the apron returning on the underside of the box, the carry back of material will be minimal. A viewing window is located in the rear left corner of the hopper for observing hopper grain level.

If your machine is an original equipped grain unit or a conversion from a S100 spreader, it will be assembled with a top pivoting end gate. If it is a conversion from a S200 or S300 spreader it will be assembled with a swing arm end gate.

Top pivoting end gates have a hinged latch at the lower edge, both sides. When the grain is unloaded, the gate swings shut by gravity and the latches engage in the apron chains. When the apron is started, the chain travel automatically disengages the latches and the advancing grain load will swing the gate open to a small angle, allowing grain to discharge through the gate opening.

The swing arm end gate at the rear of the spreader is raised and lowered. This end gate is designed to be fully open in order for the apron to advance. As the gate reaches its full open position it activates a mechanical control valve to allow the apron to advance provided that the flow control is set to start the apron. PTO drive is not used for this attachment.

6.10 HITCHING TO TRACTOR

Move to the operator's position, start the engine and release the parking brake.



Do not allow anyone to stand between the tongue or hitch and the tractor when backing up to the spreader.

Move the tractor in front of the spreader. Slowly move the tractor backwards towards the spreader and align the drawbar with the implement's hitch.

NOTE: Lower or raise the spreader jack to properly align the drawbar and hitch.

Fasten the spreader hitch to the tractor drawbar with a properly sized hitch pin with safety retainer. (Reference ANSI/ASABE AD6489-3 Agricultural vehicles - Mechanical connections between towed and towing vehicles - Part 3: Tractor drawbar.) (See your Trailer / Chassis manual for further details.)

Before operation and after hitching the tractor to the implement, connect the hydraulic hoses, light cord and PTO drive shaft to the tractor. Connect any optional equipment as needed.

NOTE: When operating this spreader with the S400 attachment, install the PTO to protect the shaft from being damaged.

6.10.1 Model S100, S200 And S300 Swing Arm End Gate

For Model S100, S200 and S300 with the swing arm end gate, connect the two hydraulic hoses for the apron drive and the two hoses for end gate to a pair of the tractor's hydraulic system ports. Route hydraulic hoses, flow control, electrical cable, and tail light cord through the hose support rod which is mounted to the trailer's hitch frame.

- NOTE: It is recommended that the end gate hoses are connected to the tractor so pulling the spool valve lever back raises the gate and pushing the valve lever forward closes the gate. If the controls operate the gate in the opposite direction, reverse the hydraulic hose connections at the tractor.
- NOTE: A check valve in the spreader hydraulic circuit will prevent the apron from operating in the wrong direction, but how the two hoses are connected to the tractor remote ports will affect which direction the spool valve lever is move to start the apron.

Uncoil the electric cable for the flow control and put the electric flow controller in the tractor cab. Make the electrical connection by plugging the power cord into a 12-volt accessory plug.

Plug the electric plug into the tractor electrical receptacle for lights.

6.10.2 Model S100 With Vertical Slide End Gate

For Model S100 with optional vertical slide end gate, connect the two hydraulic hoses for the apron drive and the two hoses for end gate to a pair of the tractor's hydraulic system ports. Route hydraulic hoses, flow control, electrical cable, and tail light cord through the hose support rod which is mounted to the trailer's hitch frame.

- NOTE: It is recommended that the end gate hoses are connected to the tractor so pulling the spool valve lever back raises the gate and pushing the valve lever forward closes the gate. If the controls operate the gate in the opposite direction, reverse the hydraulic hose connections at the tractor.
- NOTE: A check valve in the spreader hydraulic circuit will prevent the apron from operating in the wrong direction, but how the two hoses are connected to the tractor remote ports will affect which direction the spool valve lever is move to start the apron.

Uncoil the electric cable for the flow control and put the electric flow controller in the tractor cab. Make the electrical connection by plugging the power cord into a 12-volt accessory plug.

Plug the electric plug into the tractor electrical receptacle for lights.

6.10.3 Model S400

For Model S400 the control is mounted to a receiver bracket on the right rear corner of the box.

NOTE: When operating this spreader with the S400 attachment, the PTO driveline is not needed. Install the PTO to protect the shaft from being damaged.



DO NOT allow anyone to operate, service, inspect or otherwise handle this spreader until all operators have read and understand all of the instructional materials in this Operator's And Parts Manual and have been properly trained in its intended usage.

Before operating the spreader, look in all directions and make sure no bystanders, especially small children are in the work area.



Disengage the hydraulic power, engage the machine's parking brake, stop the engine and make sure all moving components are completely stopped before connecting, disconnecting, adjusting or cleaning this equipment.

Always keep all shields and guards in place and securely fastened.

Keep hands, feet and clothing away.

6.11.1 Start-Up

Enter the tractor or truck and start the engine.

Slowly engage the PTO / hydraulics and operate at idle speed.

6.11.2 Shut-Down

Disengage the PTO / hydraulics.

Park the tractor / truck on a flat, level surface.

Engage the parking brake, stop the engine and exit the tractor or truck.

6.12 OPERATIONAL CHECKS



Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine. See 5.3 SHUTOFF & LOCKOUT POWER.

DO NOT allow anyone to operate, service, inspect or otherwise handle this spreader until all operators have read and understand all of the instructional materials in this Operator's And Parts Manual and have been properly trained in its intended usage.

Before operating the spreader, look in all directions and make sure no bystanders, especially small children are in the work area.



Before operating the spreader, look in all directions and make sure no bystanders, especially small children are in the work area.



Make certain all personnal are clear of the spreader and the rotating spinners or beaters before applying power. Failure to heed may result in serious personal injury or death.

Before filling the spreader, slowly engage the hydraulics and operate at idle speed to ensure that the spreader is operating properly.

Before running material through the spreader for the first time and each time thereafter, follow the steps listed below.

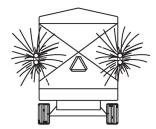
- 1. Make sure spreader is empty.
- 2. Follow the Start-Up procedure section See 6.11.1 Start-Up.
- 3. Raise and lower the gate a couple times.
- 4. Operate the spreader for approximately 5-10 minutes.
- 5. Follow the Shut-Down procedure section See 6.11.2 Shut-Down.
- 6. Check drive components to be sure components are not abnormally hot.
- 7. Check all hydraulic components for leaks.
- 8. Adjust and lubricate equipment as needed. (See 8.2 ADJUSTMENTS) & (See 8.1 LUBRICATION).



AVOID SERIOUS INJURY OR DEATH

- Read and understand owner's manual before using. Review safety precautions annually.
- Before operating the spreader, look in all directions and make sure no bystanders, especially small children are in the work area.
- No riders allowed when transporting.
- Do not drink and drive.
- Before moving, be sure required lights and reflectors are installed and working.
- Before maintenance or repair, stop vehicle, set parking brake, and remove ignition key.
- Place safety stands under frame and chock wheels before working on tires or chassis.
- Maintain wheel bolts at torque as recommended in the manual.
- If equipped with brakes, maintain proper adjustment.





Pull-Type Units

- Use flashing warning lights when transporting on ALL highways (public roadways) at ALL times (Tractor towed models) EXCEPT WHEN PROHIBITED BY LAW! (Check w/local law enforcement).
- By all state and federal laws, implement lights do not replace the SMV (Slow-Moving Vehicle) identification emblem. All towed agricultural vehicles must display SMV emblems when traveling LESS than 20 mph (32 kph).
- Check for traffic constantly. Be sure you can see that no one is attempting to pass you and that all traffic is sufficiently clear from you before making any turns.
- Securely attach to towing unit. Use a high strength appropriately sized hitch pin with mechanical retainer and attach safety chain.
- Do not exceed 20 mph (32 kph). Slow down for corners and rough terrain.











To Prevent Serious Injury Or Death

- Keeps hands and body out of the hitch area when attaching towing vehicle.
- Keep body clear of crush point between towing vehicle and load.

To Prevent Serious Injury Or Death

- Shift to lower gear before going down steep grades.
- Avoid traveling on slopes or hills that are unsafe.
- Keep towing vehicle in gear at all times.
- Never exceed a safe travel speed (which may be less than 20 MPH.).



You must observe all applicable traffic laws when transporting on public roadways. Check local laws for all highway lighting and marking requirements. Failure to heed may result in serious personal injury or death.



(Tractor Powered) Do not <u>tow</u> at speeds in excess of 20 mph. Failure to heed may result in serious personal injury or death.

IMPORTANT

Verify that the rear discharge door is in the closed position before traveling on roadways.

IMPORTANT

If you will travel on public roads and it is legal to do so, you must know all rules governing such operation. This will include lighting and brake requirements in addition to traffic rules.

NOTE: An optional highway lighting package is available to assist in meeting these requirements. See your Meyer dealer for details.

6.13.1 Safety Chain

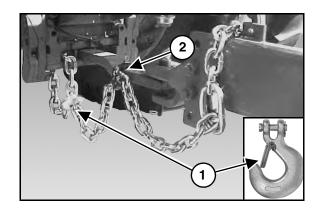


A safety chain must be installed to retain the connection between the tractor (or other towing vehicle) and implement whenever traveling on public roads in case the hitch connection would separate.

The chain must be of adequate size to hold the weight of the loaded spreader. See your ag cart or wagon owner / operator's & parts book, which is also available at www.meyermfg.com.

NOTE: If using a grab hook at the end(s) of the chain to secure the chain to itself, a hook latch (Item 1) must be installed.

The length of the safety chain is not to be any longer than necessary to turn without interference. If any chain links or attachment hardware are broken or stretched, repair before using. Store chain so it does not corrode or become damaged. Do not use this chain for other implements because the strength and length of the chain may not be adequate. Identify this chain for use on this particular spreader.



NOTE: Do not use the intermediate support (Item 2) as the attaching point.

IMPORTANT

If you do not have a safety chain, or a replacement safety chain is needed, see your local Meyer dealer and do not operate on public roads until you are able to travel with the safety chain properly installed.

6.13.2 Brake Information

See your trailer / chassis manual for brake and braking Information.

6.13.3 Tractor Towing Size Requirements

Use the following charts to help calculate the minimum tractor weight when towing without implement brakes. The minimum tractor weight, up to 20 mph (33 kph) needs to be two thirds of the box Gross Weight (GW). Gross Weight is calculated by the empty weight of the box and undercarriage combined added to the Load Weight. Then take the Gross Weight and multiply it by 0.667 and you will get the Minimum Required Weight of the Tractor.

Spreader Loaded Weight x .667 = Minimum Tractor Weight Up to 20 mph

Model	MAXIMUM SPREADER GROSS WEIGHT (LBS)	MINIMUM TRACTOR WEIGHT UP TO 20 MPH (LBS)
9520	50,000	33,500
9524	60,000	40,250
9530	99,000	66,250

6.14 ATTACHMENT UNIT CHANGE OVER

Installing or swapping attachments is done best in good lighting conditions with 2 people and a lifting device having the capacity to lift the attachment safely.

When lifting the attachment ensure that the lifting device has the capacity at the lifting point to lift a minimum of 5,500 pounds with the attachment being clean and empty.

NOTE: The spreader features quick change over to convert to four different attachment units.

S100 - (Dual horizontal beater with dual lower spinner disks) manure expeller unit for spreading dry, low bedding applications such as poultry manure and compost.

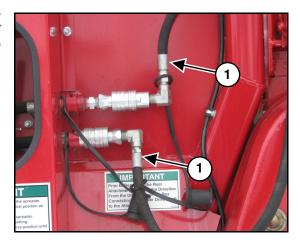
S200 - (Double vertical beater) manure expeller unit for tough applications such as long bedding, pen manure, and other hard to handle manures.

S300 - (Triple horizontal beater) manure expeller unit for tough applications such as long bedding, pen manure, and other hard to handle manures where spread width is not as critical.

S400 - (Grain hopper) for transporting and unloading grain.

6.14.1 Hydraulic Disconnect

On each side of the rear sides of the spreaders unhook the hoses (Item 1) from the quick disconnect couplers attached to the box. Cover both the male and female couplers with the provided plugs/covers to keep clean.



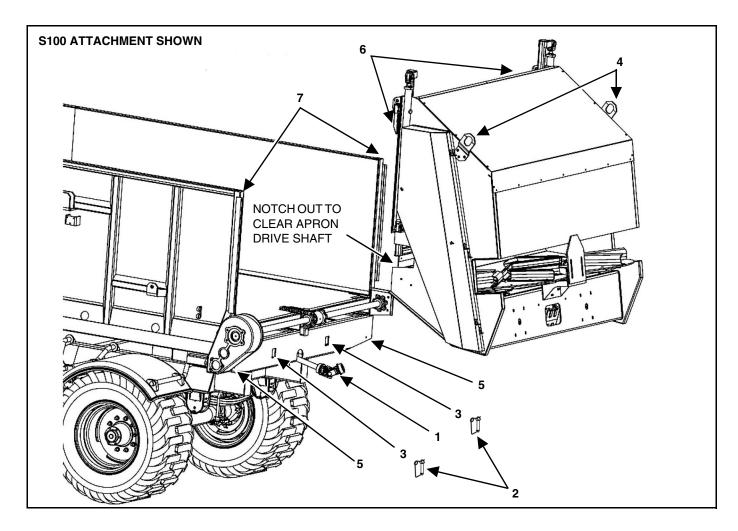
6.14.2 Attachment Removal

Unhook the rear drive shaft (Item 1) from the center gearbox on spreader attachment and from the input shaft on the spreader.

NOTE: Use a lifting device and chains that are in good condition and of adequate size to lift the attachment.

Connect a lifting device and chains or straps to the lifting eyes (Item 4) on the attachment. Install the stabilizer legs.

There are two pins (Item 2) that retain the lower part of the attachment to the receptacles (Item 3) on the box frame. Remove these pins.





Working under suspended equipment presents a crush hazard. DO NOT work under suspended equipment.

NOTE: When removing the S400 attachment, connect the gate retaining chain. (See 6.14.4 S400 Grain Hopper Only on page 35.)

Remove the two bolts (Item 5) that secure the lower side of the attachment to the box frame.

Slowly raise the attachment until the attachment guide stakes (Item 6) disengage from the rear box uprights (Item 7). The lower end of the attachment will swing away from the box, slightly. Then slowly back the attachment away from the box.

Move the attachment to the storage location. Lower the attachment to the ground and remove the lifting device.

6.14.3 Attachment Installation

NOTE: When installing the S400 attachment, also see (See 6.14.4 S400 Grain Hopper Only on page 35.) for special instructions.

NOTE: Use a lifting device and chains that are in good condition and of adequate size to lift the attachment.

Connect the lifting device and chains or straps to the lifting eyes on the attachment.



Working under suspended equipment presents a crush hazard. DO NOT work under suspended equipment.

NOTE: PTO power is not required for the S400 **attachment**, so remove the rear PTO drive shaft (if installed) from under the box and place it in storage.

NOTE: When installing the S400 attachment, connect the gate retaining chain. (See 6.14.4 S400 Grain Hopper Only on page 35.)

Slightly raise the attachment off the ground. Remove the stabilizer legs and place the legs in the storage location.

Move the attachment to the rear of the spreader. Slowly raise the attachment until the attachment guide stakes are above the rear box uprights. Move the attachment forward until the attachment guide stakes are aligned with the rear box uprights.

Slowly lower the attachment until the attachment guide stakes engage the rear box uprights. Continue to lower the attachment until the attachment swings in to meet the bottom of the box.

Install the two bolts that secure the lower side of the attachment to the box frame.

Reinstall the two pins into the rear uprights that retain the attachment guide stakes to the box.

S400 ATTACHMENT NOTE: Disconnect the gate retaining chain.

Remove the lifting device.

Connect the rear drive shaft on spreader attachments.

On each side of the rear sides of the spreaders connect the hoses to the quick couplers attached to the box.

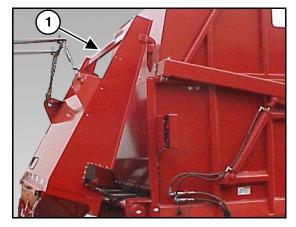
6.14.4 S400 Grain Hopper Only

NOTE: PTO power is not required, so remove the rear PTO drive shaft (if installed) from under the box and place it in storage.

If a top pivoting end gate is to be installed, i.e., not converting from a S200 or S300 with swing arm end gate, which is part of the box assembly, bolt the top of the gate to the plates near the top corners on each side of the hopper, with two bolts and flange nuts.

Because the grain hopper (Item 1) will lift at aproxiamately a 45° angle, secure the pivoting end gate to the hopper assembly with the retaining chain (Item 2).

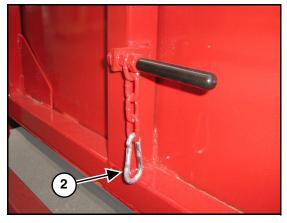
NOTE: When the grain hopper is installed to the box, unhook the gate retaining chain.



At the front (when converting from spreader models) unplug the two electrical cords from the electric apron controller and plug the cords to each other.

Move the electric controller box to the right rear of the machine where a receiver bracket is provided on the box.

Plug the power cord from under the box to the controller to provide 12 VDC. Plug the power cord from the flow control to the controller to regulate the apron speed.





7.0 OPERATION



DO NOT allow anyone to operate, service, inspect or otherwise handle this spreader until all operators have read and understand all of the instructional materials in this Operator's and Parts Manual and have been properly trained in its intended usage.

Before operating the spreader, look in all directions and make sure no bystanders, especially small children are in the work area.

Do not climb or step on any part of the spreader at any time.

Turn on level ground. Slow down when turning.

Go up and down slopes, not across them.

Keep the heavy end of the machine uphill.

Do not overload the machine.

Check for adequate traction.



7.1 LOADING



Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine. Refer to section 5.3 SHUTOFF & LOCKOUT POWER.

IMPORTANT

Do not use the jack except when the implement is empty. The jack will not support added weight. Unbalanced weight may result in unexpected "TIP UP" of the implement.

IMPORTANT

Overloading may cause failure of axles, tires, structural members, hitches, loss of vehicle control. <u>DO NOT</u> exceed maximum gross weight.

IMPORTANT

This machine is not intended to be a bale grinder, hay chopper or bedding machine. Failure to comply may damage the drivetrain and void the warranty.

IMPORTANT

Filling the spreader evenly from the front to rear will ensure there is downward force on the tractor hitch and provide traction for the tractor wheels.

IMPORTANT

It is unlawful to allow manure to splash or leak onto public roads.

NOTE: Heaping material over the sides of the box will add a significant amount of weight to the load.

NOTE: To prevent damage to spinners and drivelines, foreign objects (stones, concrete, timber, metal or large frozen chunks of manure) should never be loaded into the spreader.

Before loading, especially in freezing weather, make sure the apron chain, spinners or beaters are free to move and the rear gate moves freely up and down.

When the spreader is parked for loading, shift the tractor to neutral or park and set the brakes.

NOTE: Check and be sure that the rear end gate is completely closed before loading. This gate must be closed during loading to prevent packing of material into the beaters and to help prevent leakage during transport.

MATERIAL ESTIMATED WEIGHT PER CUBIC FOOT			
MATERIAL	(LBS / CU. FT.)		
Lime Sludge	110 - 115 lbs.		
Dry Feedlot Manure	63 - 65 lbs.		
Chicken Litter	63 - 65 lbs.		
Cake Sludge	62 - 65 lbs.		
Semi-Solid Manure	58 - 60 lbs.		
Pen Packed Manure	30 - 35 lbs.		
Grain	37 - 50 lbs.		
SAE D384.2			

NOTE: Maximum Gross Weight is the lesser value between the implement, chassis or tires.

NOTE: Overloading can have detrimental effects on the integrity of the spreader and its safe use. Some materials such as lime sludge may not be able to be filled to struck level. Overloading will void warranty and increase risk to the operator's safety. Always be aware of your gross weight.

MODEL	MAXIMUM SPREADER GROSS WEIGHT	TOTAL NET WEIGHT (LBS)	CU. FT. CAPACITY
9520	50,000	15,000	755
9524	60,000	19,000	925
9530	99,000	26,000	1150

^{**} Struck capacity, heaped loads significantly increase weight.

NOTE: The front of the spreader is equipped with plexiglass windows to monitor levels from the operator's seat.

Drive alongside the loading vehicle. Fill the spreader evenly to properly distribute the load while loading. When dumping into the box with an end-loader, center the bucket just forward of the axle to properly distribute the load while loading.

7.2 UNLOADING



Make certain all personnel are clear of the spreader and the rotating spinners or beaters before applying power. Failure to heed may result in serious personal injury or death.

Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine.Refer to section 5.3 SHUTOFF & LOCKOUT POWER.

The unloading process described is to be performed by the operator alone. This will eliminate unexpected "start-ups" and minimize other hazards that could result by more than one person in control.

If any component fails, shut off all power to the spreader and move the spreader to a safe work area. Repair or replace damaged components before proceeding with unloading of the material.

NOTE: Unloading is best observed from the operator's seat.

NOTE: The front of the spreader is equipped with plexiglass windows to monitor levels from the operator's seat.

7.2.1 Unloading For Slide End Gate (S100 Attachment)

- 1. Enter the tractor / truck, start the engine, release the parking brake. Move the tractor / truck and spreader to the unloading area.
- 2. Place all tractor / truck controls in neutral, engage the parking brake and SLOWLY engage the tractor PTO to start the spinners and beaters. Gradually increase the engine speed to 1000 RPM.
- 3. Release the parking brake and begin moving forward.
- 4. Open the rear end gate with the tractor hydraulic lever.

NOTE: Until you become familiar with the manure being spread, it is advisable to open the end gate fully and then gradually close the gate down to regulate the discharge rate.

5. Start the hydraulic driven apron with the tractor hydraulic lever.

NOTE: Starting the apron and regulating the rear end gate can be done while traveling forward to avoid a heavier application of manure at the edge of the field.



6. Turn the electric flow controller (Item 1) ON and slowly increase the control knob CW to increase the apron speed and discharge rate. Once you determine the correct combination of apron speed, end gate opening (S-100 only) and ground speed for a particular manure type, reference that speed for the next load. When load is almost fully unloaded you may increase apron speed for faster clean out. Return controller to 0 or off position for next load.



Fine control of the application rate for semi-solid manure can be obtained by regulating the end gate opening (S100 Only). For solid manure (dry, pen-packed or manure containing long straw or hay) the rear end gate MUST be completely open.

NOTE: The spread pattern will vary for each specific condition. The factors that contribute most to differing patterns will be moisture content and the amount and length of bedding material. For most typical conditions, the spread pattern should be uniform and about 40-60 ft wide. The spread pattern on the S100 and S200 is adjustable. (See 8.2.2 Attachment Spread Pattern Adjustment (S100, S200) on page 54.)

NOTE: Further control of the application rate is possible by the relationship of tractor engine speed to ground speed (transmission gear selection). For optimum, trouble-free performance it is recommended to operate at or near engine PTO speed.

7.2.2 Unloading For Swing Arm End Gate (S100, S200 And S300 Attachments)

- 1. Enter the tractor / truck, start the engine, release the parking brake. Move the tractor / truck and spreader to the unloading area.
- 2. Place all tractor / truck controls in neutral, engage the parking brake and SLOWLY engage the tractor PTO to start the spinners and beaters. Gradually increase the engine speed to 1000 RPM
- 3. Release the parking brake and start moving forward.
- 4. Fully open the rear end gate with the tractor hydraulic lever.
- NOTE: When the rear end gate opens fully, the hydraulic driven apron will start automatically provided that the flow control in the cab is set to start the apron.
- NOTE: Opening the rear end gate and starting the apron can be done while traveling forward to avoid a heavier application of manure at the edge of the field.



5. Turn the electric flow controller (Item 1) ON and slowly increase the control knob CW to increase the apron speed and discharge rate. Once you determine the correct combination of apron speed, end gate opening and ground speed for a particular manure type, reference that speed for the next load. When load is almost fully unloaded you may increase apron speed for faster clean out. Return controller to 0 or off position for next load.

NOTE: The spread pattern will vary for each specific condition. The factors that contribute most to differing patterns will be moisture content and the amount and length of bedding material. For most typical conditions, the spread pattern should be uniform and about 40-60 ft wide. The spread pattern on the S100 and S200 is adjustable. (See 8.2.2 Attachment Spread Pattern Adjustment (S100, S200) on page 54.)



NOTE: Further control of the application rate is possible by the relationship of tractor engine speed to ground speed (transmission gear selection). For optimum, trouble-free performance it is recommended to operate at or near engine PTO speed.

7.2.3 Unloading Grain (S400 Attachment)

NOTE: The rear grain hopper attachment unloads grain by free flow and gravity.

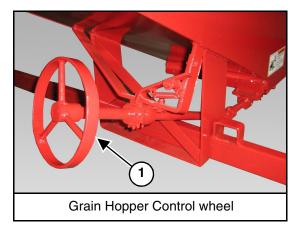
NOTE: The PTO is not used for this attachment. The PTO must be connected and secured to the tractor PTO to prevent damage.

- 1. Enter the tractor / truck, start the engine, release the parking brake. Move the tractor / truck and grain unit to the unloading area and park as required for unloading grain.
- 2. Turn the electric flow control off. Place all tractor / truck controls in neutral, engage the parking brake.

- 3. Turn the hand wheel (Item 1) on the hopper unit to open the discharge gate and regulate the grain unloading rate.
- 4. If equipped with a swing arm end gate, slowly open the gate with the tractor hydraulic lever to allow grain to flow under it and into the hopper. Continue opening the gate until it is fully open.

NOTE: When the gate opens completely, the hydraulic driven apron will start automatically, provided that the flow control in the cab is set to start the apron.

NOTE: Applies when unit has a top pivoting end gate: When the apron is started, the chain travel automatically disengages the latches and the advancing grain load will swing the gate to a small angle, allowing grain to discharge through the gate opening.



- 5. Turn on and operate the hydraulic driven apron slowly or intermittently to advance the grain load toward the hopper. Do not allow the apron to force grain into the hopper unit.
- 6. When the load is emptied, close the swing arm gate. A top pivoting end gate closes by gravity. Turn the electric flow control off.

7.2.4 PTO Cutout Clutch

Spreaders are equipped with a cutout type clutch on the implement half of the PTO driveline. The clutch is designed to limit the amount of torque transferred to the machine through the driveline. If excessive torque is developed the clutch will disengage. A loud ratcheting sound will be heard and the transfer of power to the machine will be disrupted. To re-engage the machine, turn the cab controller to 0 or off position. Turn the PTO to off and allow the driveline to come to a stop. The PTO can then be re-engaged to restart the spreader. The cutout clutch will either re-engage upon shut down of the PTO or just before it comes to a complete stop.

The cutout clutch will disengage if start up is done in an abrupt or reckless manner. It will also disengage from foreign materials entering the expeller area of the spreader. It may also disengage if the apron speed is too fast for the expellers to properly remove the manure from the spreader. If PTO clutch fails to re-engage it will be necessary to remove the foreign object from the spreader before restarting.

7.3 SHUT DOWN (S100, S200 AND S300 ATTACHMENTS)

Swing Arm End Gate: Return the tractor hydraulic lever to neutral and then move the lever in the opposite direction to stop the apron and close the gate. The lever will return to neutral when the gate closes.

Slide End Gate: With the two separate tractor hydraulic levers, stop the apron and close the end gate .

Top Pivoting End Gate: A top pivoting end gate closes by gravity. Turn the electric flow control off.

Reduce engine speed to idle and disengage the PTO.

Move the tractor / truck and spreader to the designated area. Place all tractor / truck controls in neutral, engage the parking brake.

Exit the tractor / truck and verify that the door latches have engaged the apron chain links properly, securing the door in the closed position.

7.4 SHUT DOWN (S400 ATTACHMENT)

Swing Arm End Gate: Return the tractor hydraulic lever to neutral and then move the lever in the opposite direction to stop the apron and close the gate. The lever will return to neutral when the gate closes.

Top Pivoting End Gate: A top pivoting end gate closes by gravity. Turn the electric flow control off.

Reduce engine speed to idle and disengage the PTO.

Move the tractor / truck and spreader to the designated area. Place all tractor / truck controls in neutral, engage the parking brake.

Exit the tractor / truck and verify that the door latches have engaged the apron chain links properly, securing the door in the closed position.

7.5 FREEZING WEATHER OPERATION

Allow spreader to completely empty the last of its contents, shutoff and lockout power, and allow all movement to stop before attempting to clean the spreader.

Scrape clean any remaining debris from the attachment, the main drive roller, and the rear gate. Make certain that all personnel are clear of the spreader and the rotating spinners or beaters before slowly engaging the PTO. Operate the spreader several minutes to clean manure scrapings and to allow any remaining manure and the spreader to freeze dry. Hydraulically run the rear gate up and down to clean the guillotine gate slides. Park the spreader with the gate halfway open.

Before loading in freezing weather, make sure the apron chains and slats are not frozen to the floor, the spreader spinners or beaters are free to rotate and the rear gate moves freely up and down.

7.6 REVERSE APRON FEATURE

NOTE: Do not run the reverse apron with grain kit attachment installed.

If excessive torque is developed the clutch will disengage. A loud ratcheting sound will be heard.

- 1. IMMEDIATELY turn the cab control for the apron speed to the 0 setting.
- 2. Turn the PTO to off and allow the driveline to come to a stop.
- 3. If the unload attachment does not re-engage on startup, run the reverse apron to allow the load to slowly move forward away from the unloading mechanism.
- 4. Disengage the PTO and hydraulic power to the spreader.
- 5. Move the three way control lever to the neutral position as shown on the operating decal (46-9500-16).
- 6. Re-engage hydraulic power only to the spreader.
- 7. Turn electronic speed control to 30-50 setting.
- 8. Manually hold the three way control lever in the reverse position until expeller obstruction has been cleared. STOP REVERSE BEFORE LOAD JAMS IN BOX FRONT.



Make certain all personnel are clear of the spreader and the rotating spinners or beaters before applying power. Failure to heed may result in serious personal injury or death.

Engage PTO to start discharge expellers.



Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine. Refer to section 5.3 SHUTOFF & LOCKOUT POWER.

7.6 UNHOOKING THE TRACTOR

- 1. Park the implement on level ground. Put the tractor controls in neutral, set the parking brake, and turn the engine off before dismounting.
- 2. Place wheel chocks in front and in back of the implement wheels on opposite sides to prevent the implement from rolling after the tractor is unhooked.
- 3. Remove the hydraulic hose ends from the tractor hydraulic ports and secure the hose ends on the front of the box to keep them clean.
- 4. Remove the light cords and any optional equipment connections.
- 5. Remove the PTO drive shaft yoke from the splined tractor PTO shaft and store in the provided support bracket.
- Pull Type Models: Remove the jack from the storage mount and install it on the hitch tongue. Crank the jack down until the hitch lifts off the tractor draw bar.



Jack is not designed to support the implement when it is loaded.

- 7. Pull Type Models: Remove the hitch pin.
- 8. Pull Type Models: Unhook safety chain from tractor drawbar and intermediate support.
- 9. Pull Type Models: Slowly drive the tractor away from the implement.

8.0 MAINTENANCE

8.1 LUBRICATION



Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine. Refer to section 5.3 SHUTOFF & LOCKOUT POWER.

IMPORTANT

Fluid such as hydraulic fluid, grease, etc., must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.

IMPORTANT

Failure to grease the CV center housing and telescoping members will reduce the life of the CV joint.

IMPORTANT

Check regularly for any lubricant leakage of the (3) gear boxes at the rear of the spreader.

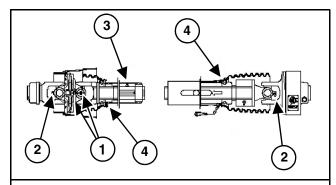
NOTE: If telescoping members become hard to slide during normal operation, it is recommended the shaft be taken apart, cleaned with solvent and recoated with grease before reassembling. As a minimum it is important this be done monthly.

NOTE: Use a grease type that is composed of a high quality lithium complex or better, unless otherwise stated. We recommend using a #1 grade in colder temperatures or a #2 grade in warmer temperatures.

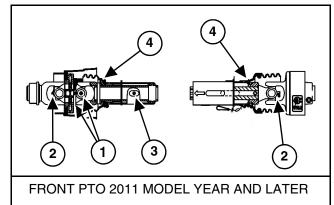
NOTE: Estimating 5 minutes of run time per load.

8.1.1.1 Daily Lubrication (Every 8-10 loads*)

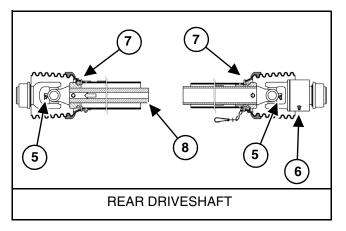
- CV center housing (Item 1) add grease until it is evident around the center sliding disk (CV gets greased through the cross and bearing - SN 1795244 & Later).
- Cross and bearings (Item 2) add grease until it is purged around the seals.
- Telescoping members (Item 3) add grease until it adequately covers the sliding members. Take apart occasionally to make sure adequate lubrication is being added. Take apart each season to be cleaned with solvent and re-coated with grease before re-assembling.
- Shield bearings (Item 4) add 2-3 pumps.



FRONT PTO 2010 MODEL YEAR AND EARLIER

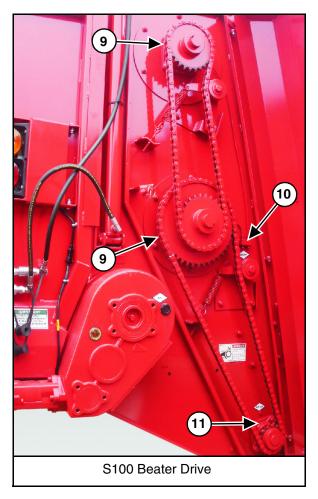


- Grease the cross bearings on yokes (Item 5), both ends, of rear telescoping drive shaft one pump.
- Grease the over-running clutch (Item 6).
- Shield bearings (Item 7) add 2-3 pumps.
- Telescoping members (Item 8) add grease until it adequately covers the sliding members. Take apart occasionally to make sure adequate lubrication is being added.



- Model S100 Oil horizontal beater roller chain drives (Item 9) with light weight machine oil. Roller chains are accessible by opening drive cover and securing it in the open position with the rubber T-latch.
- Model S100 Grease (2) horizontal beater bearings (Item 10) at each end. Also grease (1) bearing (Item 11) on the gearbox output shaft. Do not over grease. The bearings on the drive side are accessible by opening the drive cover and securing it in the open position with the rubber T-latch.

NOTE: When performing lubrication inside the drive cover, inspect that the springs on the tensioners are extended 2 inches from their 5 inch neutral length. If necessary tighten the eye bolt anchors to increase the spring tension. (See 8.2.3 Beater Drive Chains (S100/S300) on Page 54.)

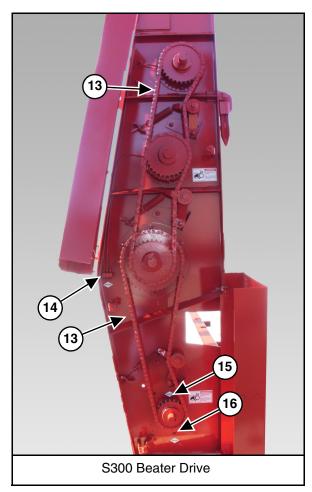


 Model S200 - Grease the two top bearings (Item 12) on each vertical beater via grease on the RH side of the expeller unit. Do not over grease.

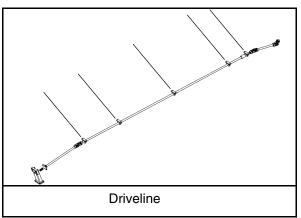


- Model S300 Oil horizontal beater roller chain drives (Item 13) with light weight machine oil. Roller chains are accessible by opening drive covers and securing them in the open position.
- Model S300 Grease (3) horizontal beater bearings (Item 14).
 Theses bearings are greased via a grease bank located under
 the drive covers and one on the left side of the expeller unit. Also
 grease (1) bearing (Item 15) on the gearbox output shaft and (1)
 bearing (Item 16) each end on the lower auxiliary beater.

NOTE: When performing lubrication inside the drive covers, inspect that the springs on the tensioners are extended 2 inches from their 5 inch neutral length. If necessary tighten the eye bolt anchors to increase the spring tension. (See 8.2.3 Beater Drive Chains (S100/S300) on Page 54.)

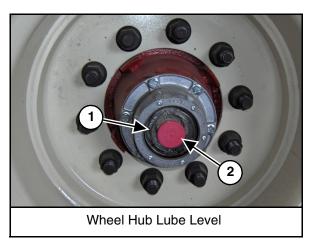


8.1.1.2 Weekly Lubrication (Every 65-70 hours*)

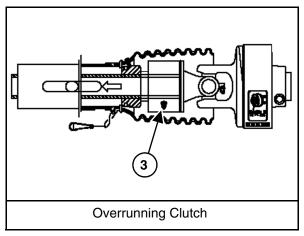


- •Grease all driveline bearings. They are accessible via grease lines on RH side of box.
- •Grease one bearing on the front driveline shaft and grease the cross bearings on universal yoke at the other end of this shaft. Do not over grease.

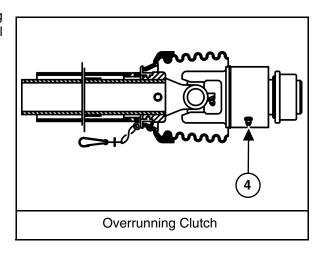
 Check the oil level in each wheel hub. The oil level should be 1/2" high in the sight glass (Item 1). If low, add EP80/90 gear lube through the pop out rubber plug (Item 2) at the center of the hub.



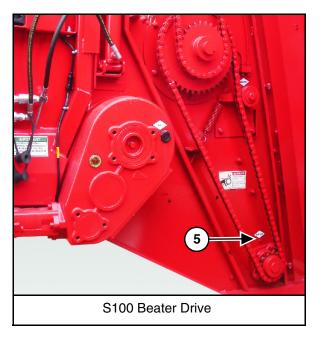
• (2010 model year and earlier) - Grease (1) integral overrunning clutch (Item 3) at rear of the front PTO input shaft assembly. The zerk is on the yoke of the cut out clutch.



• (2011 model year and later) - Grease (1) integral overrunning clutch (Item 4) at rear of the rear PTO shaft assembly. Use Shell Super Duty or an equivalent lithium grease.



- Not Illustrated. Optional slide end gate, with the gate opened, grease the edges of the gate. Over greasing is not possible. In freezing weather pour used motor oil down each slide guide once a week or more often if needed.
- Model S100 Grease the upper bearing (Item 5) of the two
 expeller gearboxes until you see grease exiting the breather
 fitting located next to the grease fitting. They are accessible via
 2 grease lines on the RH side or 1 grease line on the RH side
 and the other on the LH side, located on the lower side panels
 of the attachment assembly.

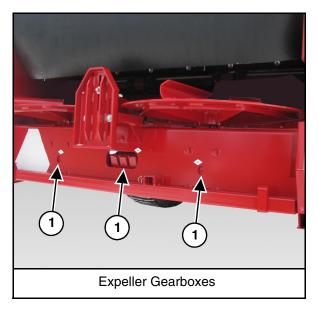


- Model S200 Grease the upper bearing (Item 6) of the two
 expeller gearboxes until you see grease exiting the breather
 fitting located next to the grease fitting. They are accessible via
 2 grease lines on the RH side or 1 grease line on the RH side
 and the other on the LH side, located on the lower side panels
 of the attachment assembly.
- Model S200 Grease 3 or 4 apron drive shaft bearings at the rear of spreader. The RH bearing is accessible (Item7) LH and center bearings (Item 8) are greased via grease lines on the rear lower RH side of the frame,.

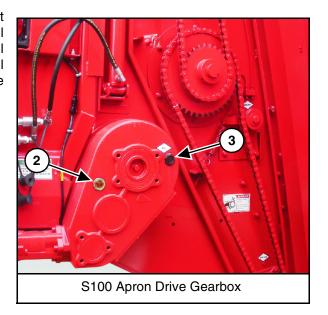


8.1.1.3 Monthly Lubrication (Every 260-300 Loads*)

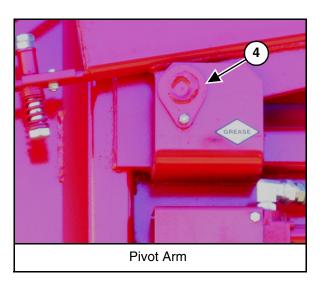
• Maintain oil level in the expeller gearbox(s) at the check plug (Item1). Check regularly for any observable oil leakage. If oil leakage is excessive, replace required input/output shaft oil seals. Use ONLY EP #80-90 weight gear lube oil or an equivalent. Lighter weight gear lube oil may be used in temperatures lower than 20°F. Change oil in the gearboxes after the first season of use and regularly thereafter.



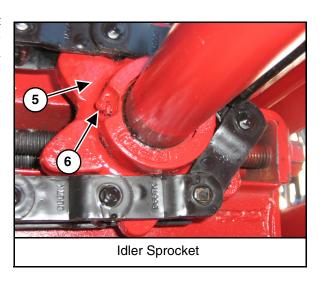
 Maintain the lube level visible in the apron drive gearbox sight glass (Item 2). Check regularly for any observable leakage. If oil leakage is excessive, replace required input/output shaft oil seals. Use ONLY SAE 90 EP gear lube oil or an equivalent. A fill plug (Item 3) is provided. Change oil in the gearboxes after the first season of use and regularly thereafter.



 Standard swing arm end gate, grease the pivot arms (Item 4), both sides of the spreader.



Grease the four or six front idler sprockets (Item 5) on the front
of the machine under the screened shield. Run the apron so the
grease zerks (Item 6) are facing towards the rear of the box at a
downward angle. Reach up from the underside and grease the
four idler sprockets. By having the zerks in the sprockets rotated
toward the rear the sprocket will accept grease easily. Overgreasing is not possible.



8.1.2 Truck Mount Mechanical Drive

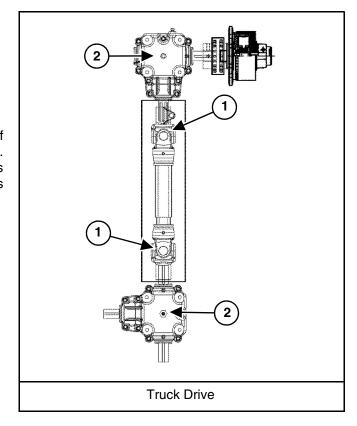
8.1.2.1 Daily Lubrication (Every 8-12 loads*)

Grease PTO driveline (Item 1).

8.1.2.2 Monthly Lubrication (Every 260-300 loads*)

 Keep the upper and lower gearboxes (Item 2) 1/2 full of 75W90 Synthetic oil, capacity approximately 125 oz. Check regularly for any observable leakage. If leakage is excessive, replace required input/output shaft seals as needed.

NOTE: Use only synthetic 75W90 oil.



8.2 ADJUSTMENTS

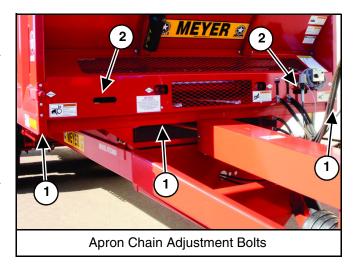


Shutoff and lockout power before performing machine service, adjusting, maintaining, or clearing an obstruction from this machine.Refer to section 5.3 SHUTOFF & LOCKOUT POWER.

8.2.1 Apron Chains

Each apron conveyor chain is adjusted with two adjuster bolts (Item 1) at the front of the box. These adjuster bolts pull the apron idler shafts toward the front, thereby removing slack from the chains. Each apron conveyor chain has its own idler shaft. Tighten the adjuster bolts at the ends of each idler shaft equally. If adjuster bolt(s) reaches maximum travel, remove equal links from each strand. Removable links are provided in the chain.

Correct tension on the apron chains is when the apron chain slat is 1/8" to 1/4" off the return slides (three feet from the front of the box). Slots (sight holes) (Item 2) in the front idler shaft cover permit observing the slats during adjustment.

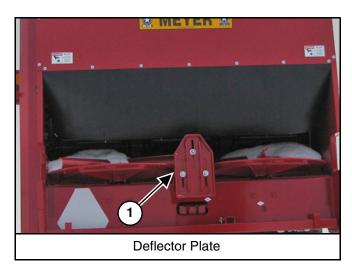


8.2.2 Attachment Spread Pattern Adjustment (S100, S200)

\$100/\$200 - Have a center deflector plate (Item 1) across the opening at the rear of the expeller spinners. Adjusting the deflector up or down will affect the amount of material spread directly behind the spreader.

If manure has bedding, high moisture, heavy, stringy and is generally "tougher", slide the plate downward to allow more material to eject straight back. It may also narrow the overall spread pattern width.

For dry, lighter, low bedding, granular manure such as poultry manure, move the plate up. This will block manure from ejecting straight back and will increase the width of the pattern.

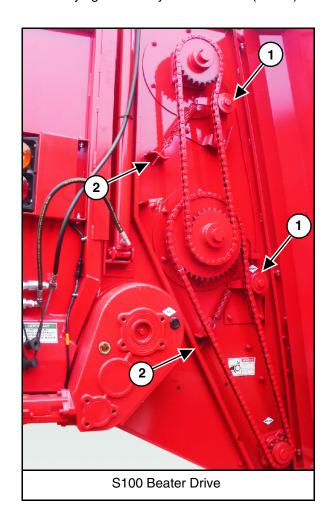


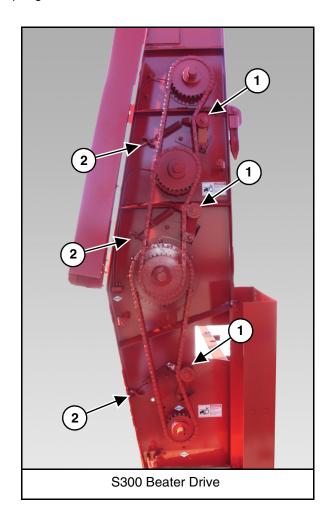
8.2.3 Beater Drive Chains (\$100/\$300)

The chains are tensioned during normal operation by spring loaded tensioners (Item 1).

NOTE: Springs on the tensioners are normally extended 2 inches from their 5 inch neutral length.

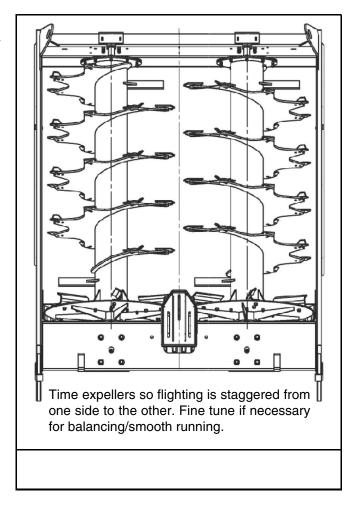
If necessary tighten the eye bolt anchors (Item 2) to increase the spring tension.





8.2.4 Timing of Spinners (S200)

Verify that the spinners are timed when performing repairs or adjustments on the S200 attachment.



8.2.5 Balance of Spinners (S100-S200)

Review the rear spinners (S200), or the rear spinner disks (S100), to make sure all paddles are in place and securely fastened. The loss of a paddle or tooth (S200) can cause the spinner to be unbalanced, causing damage such as cracking to occur to the frame of the attachment. If the spinners are out of balance do not operate until corrective action has been taken.

8.2.6 PTO Cutout Clutch Connection

The cutout clutch end of the PTO driveline must always be attached to the implement. The PTO driveline is equipped with a 1-3/4 x 20 spline on the implement half for attaching to the spreader. Remove the M17-hexagon bolt from the splined hub and slide the PTO onto the implement splined input shaft. Install the hexagon bolt through the hub being sure the bolt is falling into the groove on the splined shaft. Torque tight using a metric size M17 6-point socket and torque down to 75 ft. lbs. A M17 6-POINT METRIC SOCKET MUST BE USED AS ROUNDING OF HEXAGON BOLT AND INACCURACY OF TORQUE SETTINGS COULD OCCUR.

If removal of the M-17 hexagon bolt is necessary, use the same M-17 6-point socket and loosen bolt 1/2 turn. Insert a 1/4" drift punch in the hole on the opposite side of the hexagon bolt and tap to loosen the seated portion of the bolt from the splined hub. Loosen in 1/4 turn increments and tapping to loosen. After bolt seat has been released, remove the bolt. If bolt is not unseated, damage to the hexagon bolt will occur.

Attach the shield safety chain to a suitable area on the spreader, preferably to the implement PTO steel shield.

8.3 STORING THE SPREADER

LOCKOUT / TAGOUT the machine / spreader when preparing for storage. (See 5.3 SHUTOFF & LOCKOUT POWER on page 19.)

Sometimes it may be necessary to store your Meyer spreader for an extended period of time. Below is a list of items to perform before storage.

- Fully empty the material from the spreader. (See 7.0 OPERATION on page 37.)
- Thoroughly clean the equipment.
- Lubricate the equipment. (See 8.1 LUBRICATION on page 45.)
- Apply oil to the apron chains and inspect all spreader components for wear or damage. Repair and replace components as necessary.
- Make appropriate adjustments to equipment. (See 8.2 ADJUSTMENTS on page 53.)
- Place hydraulic hoses and 7-pin connector in the storage brackets (if equipped).
- Inspect the hitch and all welds on the equipment for wear and damage.
- · Check for loose hardware, missing guards, or damaged parts.
- Check for damaged or missing safety signs (decals); replace if necessary.
- Replace worn or damaged parts.
- Touch up all paint nicks and scratches to prevent rusting.
- Place the equipment in a dry protected shelter.
- · Place the equipment flat on the ground.

8.4 RETURNING THE SPREADER TO SERVICE

After the Meyer spreader has been in storage, it is necessary to follow a list of items to return the equipment to service.

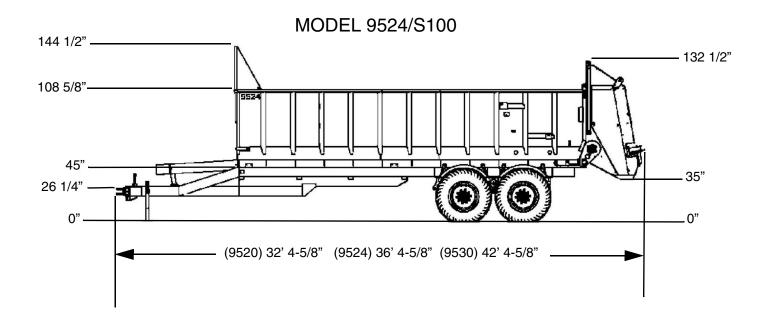
- · Be sure all shields and guards are in place.
- Lubricate the equipment.
- Connect to a truck (if required) and operate the truck and equipment; verify all functions operate correctly.
- Connect to a tractor (if required) and operate equipment; verify all functions operate correctly.
- Check for leaks; repair as needed.

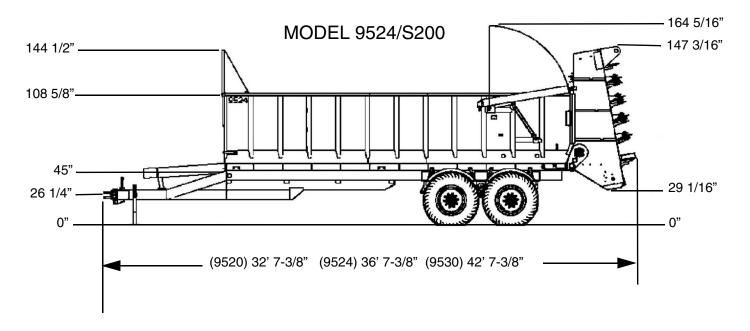
9.0 SPECIFICATIONS

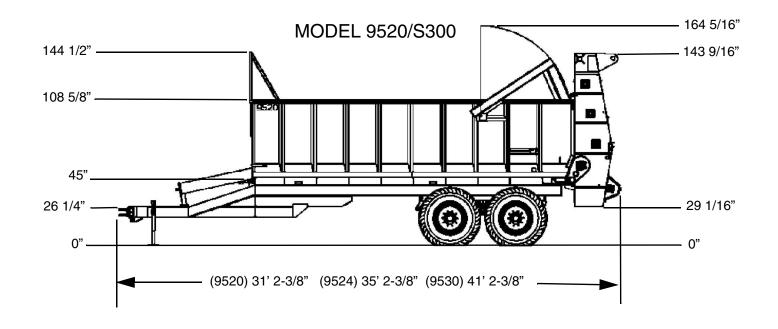
DIMENSIONS/SPECS	9520 PULL	9520 TRUCK	9524 PULL	9524 TRUCK	9530 PULL	9530 TRUCK
	TYPE	MOUNT	TYPE	MOUNT	TYPE	MOUNT
Box Inside Length	20'	20'	24'	24'	30'	30'
Overall Length w/S-100	32' 5" w/XTS2400 600/50	24' 10" w/gearbox	36' 5" w/XTS3000 600/50	28' 10" w/gearbox	42' 5" w/XTS4500 600/50	34' 10" w/gearbox
Inside Width	90-3/4"	90-3/4"	90-3/4"	90-3/4"	90-3/4"	90-3/4"
Overall Width-Box/Box w/Tires	102"/111"	102"	102"/111"	102"	102"/111"	102"
Inside Height	47-1/2"	47-1/2"	47-1/2"	47-1/2"	47-1/2"	47-1/2"
Overall Height w/S-200	12' 1" w/XTS2400 600/50	8' 4.5" + truck height	12' 1" w/XTS3000 600/50	8' 4.5" + truck height	9' 3.25" w/trailer	8' 4.5" + truck height
Capacity Heaped	600 / 755 Cu. Ft.	600 / 755 Cu. Ft.	720 / 925 Cu. Ft.	720 / 925 Cu. Ft.	900 / 1,180 Cu. Ft.	900 / 1,180 Cu. Ft.
Loading Height	9' with trailer	63.5" + truck height	9' with trailer	63.5" + truck height	9' with trailer	63.5" + truck height
Weight (approx.) w/S-200	17,340# w600/50 x 22.5	12,300#	19,760# w600/50 x 22.5	13,340#	26,320#	11,000#
Minumum Required HP	200 HP	300 Hp + call factory	220 HP	350 HP + call factory	250 HP	400 HP + call factory
Apron Chains	D667K/3- Aprons	D667K/3- Aprons	D667K/3- Aprons	D667K/3- Aprons	D667K/3- Aprons	D667K/3- Aprons
Slats Per Apron	31/93 Per Box	31/93 Per Box	37/111 Per Box	37/111 Per Box	46/138 Per Box	46/138 Per Box
Apron Drive	Hydraulic - Variable	Hydraulic - Variable	Hydraulic - Variable	Hydraulic - Variable	Hydraulic - Variable	Hydraulic - Variable
Floor	Super Slide Solid Poly	Super Slide Solid Poly	Super Slide Solid Poly	Super Slide Solid Poly	Super Slide Solid Poly	Super Slide Solid Poly
Box Sides	Steel - 10 gauge	Steel - 10 gauge	Steel - 10 gauge	Steel - 10 gauge	Steel - 10 gauge	Steel - 10 gauge
Front 36" Folding Guard Deflect	Standard	Standard	Standard	Standard	Standard	Standard
Transport Lights w/Cord	Standard	Standard	Standard	Standard	Standard	Standard

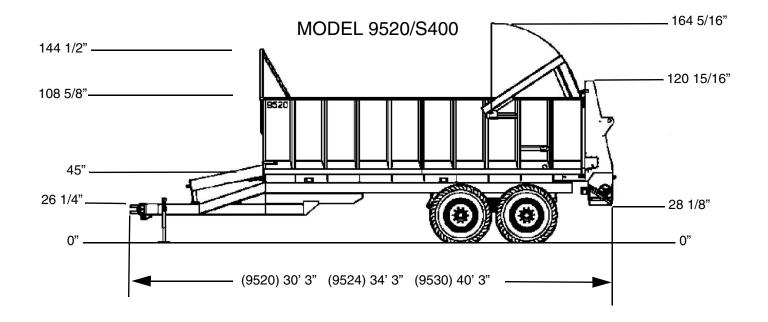
REAR ATTACHMENTS	S100 / COMBO	S200 / VERTICAL	S300 / HORIZONTAL	S400 GRAIN HOPPER
PTO Speed (RPM)	1000 RPM	1000 RPM	1000 RPM	N/A
PTO Protection Cut-out Style Automatic Clutch	Standard	Standard	Standard	Standard
Vertical Expeller Diameter	N/A	44"	N/A	N/A
Flighting Thickness	N/A	1/2"	N/A	N/A
Horizontal Beater	2 Standard	N/A	3 Standard / 4th Optional	N/A
Expeller/Beater Speed	400 RPM - Lower Disk	400 RPM		N/A
Tips/Paddles-Replaceable	AR400	AR400	AR400	N/A
Gate Style	Swing Arm Style - Sandard	Swing Arm Style	Swing Arm Style	Swing Arm Style
	Guillotine - Opt			

See the "Spreader Truck Mount Specifications and Mounting Instructions" for additional information. These instructions may also be found at www.meyermfg.com/specifications.php.











MAINTENANCE RECORD

MODEL NO. _____ SERIAL NO. ____

DATE	SERVICE PERFORMED

DATE	SERVICE PERFORMED



Manufactured by:

Meyer Manufacturing Corporation

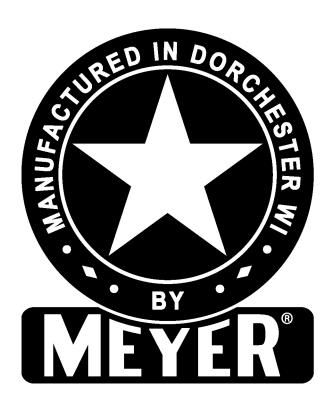
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