**OPERATORS AND PARTS MANUAL NO. 01-4-SI** 



INDUSTRIAL SERIES TWIN EXPELLER SUPER SPREADER MODEL 5570

> PATENTED U.S. PATENT NO. 5,368,236 5,501,404



DO NOT OPERATE EQUIPMENT UNTIL THIS MANUAL HAS BEEN READ AND UNDERSTOOD

MEMBER





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July 1, 2000

### NEW MEYER INDUSTRIAL SPREADER MANUFACTURER'S WARRANTY

- I. The "Product Registration & Inspection Certificate" along with the original billing invoice "Owners 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 Super Spreaders shall apply <u>only</u> to the original retail customer from an authorized Meyer Mfg. Corp. dealership.
- II. This warranty shall <u>not</u> apply to any Meyer Super 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 Meyer Super Spreaders to be free from defects in material and workmanship under recommended use and maintenance service, as stated in the Operator's and Parts Manual," 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 Meyer Super Spreader which is defective in material or workmanship:
    - 1. 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:
    - Ten (10) Years: After a period of (1) year, the spreader tank body is warranted against rust-through for an additional period of (9) years. (Pro-Rated Parts Only). Parts included, front and rear end panels, side panels, and auger trough.
- IV. COMMERCIAL USE: Coverage as in paragraph III A1 ONLY, <u>except warranty coverage is for (90) days</u> 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 super 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 Super Spreaders made after January 1, 1992.

# 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's manual 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.

#### **REMEMBER:**

### FARM EQUIPMENT BUYERS TRUST THE NAME MEYER!

Sincerely,

All Employees of MEYER MANUFACTURING CORPORATION

Meyer Mfg. Corp. 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.

#### **IMPORTANT:**

At the front of this manual is a <u>Product Registration and</u> <u>Inspection Certificate</u>. Be sure your dealer has completed this certificate and promptly forwarded a copy to Meyer Mfg. to validate the manufacturer's warranty. The product model and serial number are recorded on this certificate and below for proper identification of your Meyer Industrial Spreader by your dealer and the manufacturer when ordering repair parts. The serial number plate is found on the upper left front corner of the spreader tank or stamped in the left front frame channel.

Model No.

Serial No.

**Date of Purchase** 

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 No. and Serial No. of the Meyer Industrial Spreader which needs repair parts.

**NOTE:** All references to right hand (RH), left hand (LH), front and rear apply to the product as viewed from the rear of the spreader.

# SAFETY PRECAUTIONS

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!

WARNING: 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.

Require anyone who will operate this spreader to read and completely understand this Owner's Manual. Give necessary instructions!

DO NOT operate, service, inspect or otherwise handle this spreader until all operators have read this Owner's Manual and have been properly trained in the intended usage of the spreader.

Do not allow minors (children) or inexperienced persons to operate this spreader.

If the spreader becomes clogged, shut off the tractor engine and allow all mechanisms to stop. Disconnect PTO shaft and hydraulic hoses (relieve hydraulic pressure). Then, clean or work on the spreader as required.

Always shut off power and disconnect PTO drive shaft and unhook hydraulic hoses (relieve hydraulic pressure) from tractor to prevent accidental startup or unexpected movement before working on machine.

Do not clean, adjust, or lubricate while spreader is in motion.

Make sure all hydraulic fittings are tight and that all hoses are in good condition. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and cause serious injury. Never investigate for hydraulic leaks by using a part of the body to feel for escaping fluid.

Inspect when first delivered and regularly thereafter; that all connections and bolts are tight and secure before operating.

Know how to stop the spreader before starting it!

Do not operate until all shields, covers, and guards are in place.

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.

Stay well clear of the spreader's rear discharge spinners while operating.

Do not step up on any part of the spreader at any time. Do not use PTO guard as a step.

Do not step over the power take-off shaft. Stay clear of the PTO at all times.

Keep PTO shaft telescoping tube shields turning freely. Keep PTO master shield on tractor. Replace shields missing or damaged.

Never operate PTO above normal 540 or 1000 RPM rating. Tractors PTO MUST match implement PTO.

Use only properly rated tires.

Do not tow at speeds in excess of 20 MPH when transporting this spreader. Never exceed a safe travel speed.

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.

Always install a SMV emblem on this spreader for transporting on roadways and keep the emblem clean and bright.

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 DECALS ON THE MACHINE ITSELF WARN YOU OF DANGERS AND MUST BE READ AND OBSERVED CLOSELY.

#### STUDY THE ABOVE SAFETY RULES FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



A brief definition of signal words that may be used in this manual is as follows:

A DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in serious injury or death.

**WARNING** Indicates a potentially hazardous situ-

ation which, if not avoided, COULD result in death or serious injury, and includes hazards that are exposed when guards are removed.

### A CAUTION

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It is also used to alert against unsafe practices.



READ ALL DECALS ON THE SPREADER AND IN THIS MANUAL. KEEP THESE DECALS CLEAN AND REPLACE ANY LOST OR DESTROYED DECALS. BECOME FAMILIAR WITH ALL TRACTOR AND SPREADER CONTROLS.



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

DO NOT REMOVE ANY DECALS. IF DECALS ARE LOST, DAMAGED OR IF MANURE SPREADER IS REPAINTED, REPLACE DECALS. REMEMBER: DECALS ARE FOR YOUR PROTECTION AND INFORMA-TION.



WARNING **Close or replace** guard before operating DECAL C. PART NO. 46-0001-26 ROTATING DRIVELINE CONTACT CAN CAUSE DEATH KEEP AWAY! DO NOT OPERATE WITHOUT -ALL DRIVELINE, TRACTOR AND EQUIPMENT SHIELDS IN PLACE DRIVELINES SECURELY ATTACHED AT BOTH ENDS DRIVELINE SHIELDS THAT TURN FREELY ON DRIVELINE DECAL D. PART NO. 46-001-13 NOT A STEP! s is a PTO Gua outation th rotating PTO shaf DECAL G. PART NO. 46-004-2



DECAL B. PART NO. 46-3600-9



DECAL E. PART NO. 46-0001-4



**DECAL H.** PART NO. 46-3600-8



DECAL K. PART NO. 46-0001-35



DECAL L. PART NO. 46-5570-3

READ ALL DECALS ON THE SPREADER AND IN THIS MANUAL. KEEP THESE DECALS CLEAN AND REPLACE ANY LOST OR DESTROYED DECALS. BECOME FAMILIAR WITH ALL TRACTOR AND SPREADER CONTROLS

# **PRE-OPERATION**

### **WARNING:** BEFORE OPERATING, READ THIS OWNERS MANUAL COMPLETELY. PAY PARTICULAR ATTENTION TO THE "SAFETY PRECAUTION" AND "SAFETY FIRST" PAGES. READ ALL SAFETY MESSAGES HIGHLIGHTED BY "SAFETY ALERT SYMBOLS" THROUGHOUT THE MANUAL.

This spreader can be operated with 540 or 1000 RPM PTO. The hitch of the spreader is designed for a standard tractor drawbar. Adjust the drawbar at 13 to 20 inches above the ground. Extend or shorten the drawbar so horizontal distance from end of tractor PTO shaft to center of the hitch pin hole is 16 inches. Secure the drawbar so that the hitch pin hole is located directly below the PTO drive line. See figure 1 for location of standard measurements.

An improperly located hitch point may cause damage to the universal joints of the PTO drive shaft. Conforming



to the standard 16" drawbar & PTO relationship will ensure that the PTO drive shaft will not become over-extended.

DANGER: DO NOT OPERATE WITHOUT PTO GUARD ON SPREADER AND ON TRACTOR. MAINTAIN PTO DRIVE SHAFT GUARD TUBES IN OPERATING CONDITION. REPLACE THEM IF DAM-AGED AND NOT TURNING FREELY. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL IN-JURY OR DEATH.

WARNING: INSPECT REGULARLY THAT ALL CONNECTIONS AND BOLTS ARE TIGHT AND SECURE BEFORE OPERATING. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH. Check for proper assembly and adjustment and make sure that all bolts are tightened. Securely retighten after a few hours of operation, as bolts can loosen up on new

machinery. Check wheel lug nuts upon delivery and periodically thereafter. Lug nuts should be tightened at 250-265 ft./lbs. of torque. Check the tires and inflate to the recommended pressure (21.5Lx16.1 tires to 36 psi, 425/65x22.5 tubeless tire to 75 psi).

Inspect all adjustments on the spreader to be sure they are proper and to provide maximum performance. Lubricate the spreader completely if it is required and check the level of <u>oil</u> in the right rear corner gear box, and the <u>gear grease</u> in the expeller gear boxes.

#### WARNING: DO NOT OPERATE WITHOUT ALL SHIELDS, GUARDS AND COVERS INSTALLED. FAILURE TO HEED MAY RESULT IN SERIOUS PER-SONAL INJURY OR DEATH.

Fasten the spreader hitch to the tractor drawbar with a hitch pin that cannot bounce out. Use a 1-1/4" to 1-3/8" diameter hitch pin to pull spreader.

Remove the weight from the jack (jack is not to be used when spreader is loaded). Remove the jack from square mount tube and move to the transport storage tube on the left front side of the frame channel. Store in a horizontal position.

Before operation and after hitching the tractor to the spreader, connect the PTO drive shaft to the tractor. Slide spring loaded locking collar on PTO yoke rearward, and slide yoke onto the tractor PTO shaft. Release spring loaded collar. Be sure pins fall into groove of tractor PTO shaft and collar snaps forward into locking position.

### **CAUTION:** DO NOT USE A STEEL HAMMER TO AID IN JOINING PTO PARTS.

Route hydraulic hoses through the hose support rod which is mounted to the hitch frame, figure 2. Connect the hydraulic hoses for the flow control rear gate to the tractor's double acting valve hydraulic system. Move the tractor hydraulic controls to observe proper flow gate operation. If the controls operate the gate in opposite directions to what you expect, reverse the hydraulic hose connections at the tractor. WARNING: HYDRAULIC FLUID ESCAPING UNDER PRESSURE CAN HAVE SUFFICIENT FORCE TO PENETRATE SKIN. KEEP ALL HOSES AND CONNECTIONS IN GOOD SERVICEABLE CON-DITION. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH.

Before loading spreader, <u>slowly</u> engage the tractor PTO and operate machine at idle speed for several minutes to insure the spreader is lubricated and operating properly.

### TRANSPORTING

Check that the flow control rear gate is <u>completely</u> closed. It is unlawful to allow slurry to splash or leak onto public roads.

WARNING: DO NOT TOW AT SPEEDS GREATER THAN 20 MPH. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

Operating speed is dictated by the terrain over which you are traveling. Always use caution. Avoid traveling on slopes or hills that are unsafe.

WARNING: OBSERVE ALL APPLICABLE TRAFFIC LAWS WHEN TRANSPORTING ON PUB-LIC ROADWAYS. CHECK LOCAL LAWS FOR ALL HIGHWAY LIGHTING AND MARKING REQUIRE-MENTS.



**FIGURE 2. SPREADER HOOKUP** 

### WARNING: INSTALL A SMV EMBLEM ON REAR OF SPREADER FOR TRANSPORTING ON ROADWAYS AND KEEP THIS EMBLEM CLEAN AND BRIGHT. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH.

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. You may also be required to install a safety chain device on the spreader.

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.

### FREEZING WEATHER OPERATION

Allow spreader to completely empty last of manure contents and disengage tractor PTO. Shut off tractor, remove the ignition key and allow all movement to stop <u>before</u> attempting to clean the spreader.

### WARNING: DO NOT CLEAN, ADJUST OR LUBRICATE WHILE SPREADER IS IN MOTION. FAILURE TO HEED MAY RESULT IN SERIOUS PER-SONAL INJURY OR DEATH.

Scrape clean any remaining manure from inside the rear of spreader. Clean all manure from ends of augers, flow control rear gate and spinners.

WARNING: MAKE CERTAIN EVERYONE IS CLEAR OF THE SPREADER BEFORE APPLYING POWER. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH.

Slowly engage the PTO. Operate the spreader several minutes to clean manure scrapings and to allow any remaining manure and the spreader to <u>freeze dry</u>. Hydraulically run the flow control rear gate up and down to clean gate slide guides. Park spreader with flow control rear gate approximately <u>halfway</u> open.

Before loading in freezing weather, make sure augers and spinners are free to rotate, and the flow control rear gate moves freely up and down.

**DANGER:** KEEP AWAY AND KEEP OTHERS CLEAR OF ROTATING SPINNERS AT REAR OF SPREADER. SERIOUS INJURY OR AM-PUTATION COULD RESULT. FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH.

# OPERATION

### LOADING

**CAUTION:** TO PREVENT DAMAGE TO AU-GERS, SPINNERS, AND DRIVE LINES, FOREIGN OBJECTS (STONES, CONCRETE, TIMBER, METAL OR <u>LARGE</u> FROZEN CHUNKS OF MANURE) SHOULD NEVER BE LOADED INTO THE SPREADER.

**DANGER:** NEVER ENTER THE SPREADER BOX FOR ANY REASON WITHOUT FIRST DISCON-NECTING PTO SHAFT FROM TRACTOR. DO NOT ALLOW OTHERS IN THE BOX. ROTATING AUGERS CAN CRUSH AND DISMEMBER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

**CAUTION:** DO NOT USE JACK EXCEPT WHEN SPREADER IS EMPTY. JACK WILL NOT SUPPORT ADDED WEIGHT. UNBALANCED WEIGHT MAY RESULT IN UNEXPECTED "TIP UP" OF SPREADER.

Before loading, especially in freezing weather, make sure the augers and spinners are free to rotate and the flow control rear gate moves freely up and down.

Check and be sure that the flow control rear gate is <u>completely closed</u> before loading.

When the spreader is parked for loading, shift the tractor to neutral or park and set the brakes. The moisture content of the manure will determine how full the spreader can be loaded so that no manure spills out.

You will probably be able to load solid manure at least level with the top of the box while semi-liquid and liquid manure will have to be less than full in the spreader box. It is unlawful to allow manure to splash or leak onto public roads.

A liquid manure kit is available for installation around the top of the box on your spreader which will aid in the containment of liquids.

### UNLOADING

WARNING: MAKE CERTAIN EVERYONE IS CLEAR OF SPREADER BEFORE APPLYING POWER. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OF DEATH.

**DANGER:** KEEP AWAY AND KEEP OTHERS CLEAR OF ROTATING SPINNERS AT REAR OF SPREADER. SERIOUS INJURY OR AMPUTATION COULD RESULT. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OF DEATH.

When you are ready to begin spreading application on the field, open the hydraulic flow control rear gate and slowly engage the tractor PTO clutch. This can be done while traveling forward to avoid a heavier application of liquid manure at the edge of the field than desired.

For liquid and semi-liquid manure, the application rate can be controlled by the amount the flow control rear gate is opened. The height of the gate indicator bar above the rear edge of the box and the gate indicator on the front of the box will provide a ready reference for the amount of opening. For solid manure (dry, pen-packed or manure containing long straw or hay) the flow control rear gate MUST be completely open since this material is not free flowing.

The rear spinners have been designed and tested to provide the best spread pattern for most liquids and semi solid manure. However, the pattern will vary for each specific condition. The factors that contribute most to differing patterns will be moisture content and the



FIGURE 3. FLOW CONTROL GATE INDICATOR

amount and length of bedding material. For most typical conditions, the spread pattern should be uniform and about 15 ft. wide. When this is the case, plan your spreading patterns so you do not have to travel over previously spread manure which will be slippery, resulting in poor traction. Traction on wet grass is also poor. When the resulting pattern may require that you overlap during spreading, use precautions on slopes and hills where you could experience a loss of traction by traveling over ground with previously spread manure.

**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.

When the spreader is empty, idle the tractor and stop the PTO. Close the flow control rear gate.

### WARNING: <u>NEVER</u> OPERATE PTO ABOVE ITS NORMAL 540 or 1000 RPM RATING. TRAC-TOR'S PTO <u>MUST</u> MATCH IMPLEMENT PTO.

**NOTE:** Failure to idle the tractor before disengaging the PTO will cause roller chain over-running and damage to the chain tighteners.

**NOTE:** Maximum life of the PTO shaft universal joints will result if you stop the PTO while making turns at the end of the field.

**CAUTION:** DO NOT EXCEED THE MAXI-MUM 80° TURNING ANGLE ON THE CONSTANT VE-LOCITY 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.



# 

**WARNING:** DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES BEFORE CLEANING, ADJUSTING, OR SERVICING THIS MA-CHINE. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH.

Before storing this spreader for an extended period of time perform the following:

Allow the spreader to completely clean out the last load. Thoroughly hose off all manure from the outside of the spreader and the inside of the box, particularly getting the flow control rear gate mechanism clean. The wash water can be drained into your manure storage pit, or if the gate is left closed, the water can be spread on the field. After cleaning, completely lubricate the entire spreader to exclude moisture from bearings and to prevent condensation from forming during storage. See "Lubrication" pages 15 and 16.

Oil the roller chains by running the spreader at idle speed while opening the rear gate to activate the automatic oiler system. It is also a good time to inspect all adjustments and check for parts that need repair or replacement. Performing these tasks now will guarantee that the spreader is ready for use at the beginning of the next season.

# **ADJUSTMENTS**

**WARNING:** DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRESSURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS SPREADER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

### "RUN IN" READJUSTING THE <u>WEASLER</u> "MULTI DISC" PTO SLIP CLUTCH

#### <u>"Run In" of the Multi Disc Clutch is necessary for all new clutches and any clutch</u> which has not been used for approximately 30 days.

Before first use or after storage of more than one month, all spring adjusting cap screws should be loosened, the clutch slipped, discs smoked and cooled, and the clutch spring length readjusted. This procedure is to "run in" the clutch. If this is not performed, the setting of the clutch will increase by 15% after it slips enough from normal use and will alter your setting.

**Tools required:** 1/4" Hex Allen Wrench or hex extension for ratchet and <u>Meyer Mfg. Corp. part number #918-0004-33 (2.170" Gauge)</u>

#### 4 DISC, 6 SPRINGS (1000 RPM ONLY) Proceed as Follows:

1. Shut off the tractor and be certain the PTO is disengaged.

2. Disconnect the PTO drive line from the tractor.

**NOTE:** Clutch is accessible by flipping up PTO shield, figure 4.

3. Locate the six cap screws in the lock ring on the clutch. Reduce the load on the screws uniformly to avoid damaging the clutch. Loosen the six cap screws ½ turn per screw at a time, until all screws are loosened. DO NOT OVER LOOSEN! The six springs on the inside of the clutch canister can move out of position if the screws are loosened too much. If this should occur, reposition the springs so one spring is centered under each of the three, 3/8" access holes. Equally space the three remaining springs between the three centered springs and keep them as close to the wall of the can as possible.

Recheck and make sure all springs are pushed as close to the can wall as possible but do not contact the hub. The internal overrunning clutch must turn freely in one direction.

WARNING: STAY SEATED ON THE TRAC-TOR AND ALLOW NO ONE NEAR THE SPREADER WHILE PREFORMING THE FOLLOWING PROCE-DURE. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH.

#### 4 DISCS, 9 SPRINGS, (540 RPM ONLY) Proceed as Follows:

1. Shut off the tractor and be certain the PTO is disengaged.

2. Disconnect the PTO drive line from the tractor.

**NOTE:** Clutch is accessible by flipping up PTO shield, figure 4.

3. Locate the six cap screws in the lock ring on the clutch. Reduce the load on the screws uniformly to avoid damaging the clutch. Loosen the six cap screws ½ turn per screw at a time, until all screws are loosened. DO NOT OVER LOOSEN! The nine springs on the inside of the clutch canister can move out of position if the screws are loosened too much. If this should occur, reposition the springs so one spring is centered under each of the three, 3/8" access holes. Equally space the six remaining springs between the three centered springs and keep them as close to the wall of the can as possible.

Recheck and make sure all springs are pushed as close to the can wall as possible but do not contact the hub. The internal overrunning clutch must turn freely in one direction.

WARNING: STAY SEATED ON THE TRAC-TOR AND ALLOW NO ONE NEAR THE SPREADER WHILE PREFORMING THE FOLLOWING PROCE-DURE. FAILURE TO HEED MAY RESULT IN SERI-OUS PERSONAL INJURY OR DEATH. 4. Attach the drive line to the tractor PTO. Wedge a block of wood between the spinners at the rear of the spreader. **STAY CLEAR OF THE REAR OF THE SPREADER WHILE SLIPPING THE CLUTCH.** Start the tractor, engage the PTO drive line and run for a few minutes, or until the clutch visibly starts to smoke (3-5 seconds). Disengage the tractor PTO, shut off the tractor, and disconnect the PTO drive line from the tractor. Allow the clutch to cool.

5. **Retighten the six cap screws uniformly.** Tighten 1/2 turn per cap screw until the correct spring length is reached. The correct PTO horsepower setting on the Meyer Industrial Spreader is obtained by measuring a spring length of 2.170". Using the gauge, measure the spring length through the three, 3/8" access holes located at the rear of the clutch canister. Alternate inserting the 2.170" gauge between the three access holes while tightening the six cap screws until the head of the gauge starts to move away from the clutch canister. Recheck all three access holes with the gauge to make sure the cap screws are adjusted uniformly.

**CAUTION:** Be as accurate as possible. A measurement of 1/64" from the correct 2.170" spring length measurement can cause a difference of up to 15% in torque.

Loosen all six cap screws 1/4 turn and recheck to have equal spring length with the gauge through the three, 3/8" access holes. The clutch is set correctly when the gauge is inserted and the head of the gauge just makes contact with the clutch canister.

Remember to remove the block of wood from between the spinners at the rear of the spreader before operating.

# 6. IMPORTANT! Re-grease (1) integral overrunning clutch assembly at rear of the PTO drive line. See Lubrication section.

If the clutch smokes during operation or if you observe very regular slippage, the springs require more tightening. If regular slippage is allowed to continue, the clutch will wear out.



**FIGURE 4. PTO SHIELD FLIPPED UP** 





# **ADJUSTMENTS**

WARNING: DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRESSURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS SPREADER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

### FRONT DRIVE ROLLER CHAINS

There are six roller chain drives located at the front of the spreader. Regularly check that all tensioning springs are in serviceable condition for automatic roller chain tightening. Manually adjust spring tensioners (as needed) by turning double locknuts on all tensioning bolt/idler assemblies. Proper roller chain tension is when  $\frac{1/4"}{1/4"}$  to  $\frac{1}{2"}$  deflection occurs on the slack side of the chain or when there is about 1/16" to 1/8" gap between coils in the tightener springs. Regularly <u>re-check</u> all roller chain tensions. Keep all roller chains tight at all times! For clarity purposes, the following illustrations detail each roller chain reduction separately.

**NOTE:** The side bars of the roller chains will wear into the idler nylon rollers up to the rollers of the roller chain forming grooves. These grooves will serve as a guide when the roller chain loosens due to normal use. From this point on, after tightening, the idler nylon rollers should run for hundreds of hours without any noticeable wear.



The first chain drive (PTO input shaft to the large RH top sprocket, figure 7) is automatically tensioned by a spring loaded idler nylon roller. The extension spring should extend  $3/4^{"}$  from its neutral 4" total length.

Manual adjustment for the automatic tensioning idler, nylon roller assembly is located at the <u>left rear</u> of the spreader's front bearing mounting plate.

The second chain drive (large RH top sprocket to the large LH top sprocket, figure 8) is automatically tensioned by a spring loaded idler nylon roller. The extension spring should extend 3/4" from its neutral 4" total length.

Manual adjustment for the automatic tensioning idler, nylon roller assembly is located at the <u>left rear</u> of the spreader's front bearing mounting plate.



The third chain drive is automatically tensioned by a spring-loaded nylon idler roller. The extension spring should extend 3/4" from its neutral 4" total length. See figure 9.

Manual adjustment for the automatic tensioning idler, nylon roller assembly is located on the extended arm of the mount channel assembly.

The RH auger chain drive, figure 10, is automatically tensioned by a spring loaded idler nylon roller. The extension spring should extend 3/4" from its neutral 4" total length.

Manual adjustment for the automatic tensioning idler, nylon roller assembly is located at the <u>right front lower</u> <u>corner</u> of the spreader tank.

The LH and third auger chain drive is automatically tensioned by a spring loaded heavy compression spring and sliding idler sprocket assembly, figure 11. The heavy compression spring should be compressed to 3-1/2" to 4" in length.

Manual adjuster bolt for the automatic tensioning idler assembly is located at the <u>right front</u> upper corner of the spreader tank.



The side shaft chain drive (PTO input shaft to the side line shaft drive sprocket, figure 12) is automatically tensioned by a spring loaded idler nylon roller. The extension spring should extend 3/4" from its neutral 4" total length.

Manual adjustment for the automatic tensioning idler, nylon roller assembly is located at the <u>right rear</u> of the spreader's front bearing mounting plate.

### **SPINNER MATERIAL GUIDES**

Regularly inspect and adjust two spinner material guides located at both the left rear and right rear of the spreader. Create a <u>1/4-1/2</u>" clearance between material guides and spinner teeth, figure 13. Maintain the recommended clearances for maximum spreading pattern. Adjust to prevent excessive manure build-up on material guide inner surfaces. Adjust to prevent manure chunks or foreign object lodging between material guides and spinner teeth.

**NOTE:** Excessive lodging can cause premature spinner tooth wear, "bent-over" or even breakage.

Adjustments for the 1/4-1/2" clearance of each material guide to spinner tooth is made by tightening or loosening the 1" nut on the material guide spring linkage shaft assembly. Tighten nut to increase clearance and loosen nut to decrease clearance between the material guides. Once recommended clearance is obtained turn spinners over by hand in the direction by which the spreader would turn to check clearance. Do not turn in the opposite direction as front chain tightener damage could occur.



# LUBRICATION

WARNING: DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRESSURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS SPREADER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

#### DAILY LUBRICATION (every 8-12 loads)

(L1) Grease (2) rear spinner lower bearings. These bearings are grease line fitted to the LR frame channel of the spreader.

# (2)

Oil (6) roller chain drives with automatic oiler at the front of spreader with clean 30 weight oil. The roller chains are accessible by opening the front steel shielding cover.

#### (L3)

Grease PTO Drive line (6) places with Moly grease every 8 hours.





Grease (7) bearings supporting the three large jack shaft reduction sprocket weldments, and the third auger drive shaft on the front drive. The zerks are accessible by opening the front steel shielding cover and through the access holes in front plate. <u>Be careful not to over grease.</u>

# (L5)

Grease (2) auger shaft bearings. These bearings are grease line fitted to the LF and RF frame channels of the spreader. Over greasing is not possible.

**IMPORTANT:** Check regularly for any observable lubricant leakage of the (3) gearboxes at the rear of the spreader. See L12 & L14 under *Monthly Lubrication* 

#### WEEKLY LUBRICATION (every 25-30 loads)

Grease (2) PTO input shaft bearings. These bearings are grease line fitted to the RF frame channel of the spreader.



Grease (5) bearings on the RH side line shaft. The <u>front</u> bearing is zerk accessible through the RF steel shielding. The remaining <u>rear</u> bearings are located along the RH side of the spreader tank, zerks accessible through the steel shielding.

(L8) Grease (6) tandem wing pivots. Effectively grease by jacking up the spreader to relieve pressure points on the pivot shaft and tandem wing collar. <u>Over greasing is not possible</u>.

(L9) Grease (2) flow control rear gate and lifting arm pivot points. Grease gate pivot at center of flow control rear gate. Grease lifting arm pivot support at LR of spreader. <u>Over greasing is not possible</u>. Apply grease to slot in gate lift arm.

Grease (2) flow control rear gate slide guides. With the flow control rear gate <u>opened</u>, grease the slide guides from top side. Allow grease to lubricate flow control rear gate ends and slide guide surfaces. In freezing weather dump used motor oil down each slide guide once a week or more often if needed. <u>Over</u> <u>greasing is not possible</u>.

(L11) Grease (1) integral overrunning clutch at rear of the PTO drive line. The zerk is on the yoke of the friction slip clutch. Use Shell Super Duty or an equivalent lithium grease. <u>Be careful not to over grease</u>.



#### MONTHLY LUBRICATION

Maintain oil level in the corner gearbox at the <u>centerline</u> of the input shafts. Check regularly for any observable oil leakage. If oil leakage is excessive, replace required input/output shaft oil seals. Use ONLY <u>EP #80-90 wt. gear lube oil</u> or an equivalent in corner box, only Lighter weight gear lube oil may be used in temperatures lower than 20°F. <u>Change</u> oil in the gearboxes after the first season of use and regularly thereafter.



Grease (1) brass bushing supporting the rear shaft of the 3rd auger assembly. This zerk is located inside the rear spreader tank above the 3rd auger mounting bracket assembly.

(L14) Maintain the lube level in the (2) spinner gearboxes at 3/4 full. Check regularly for any observable leakage. If leakage is excessive, replace required input/output shaft seals. Lubricate with Semi-Fluid, EP Lithium Base, Gear Grease.

Clean and repack the wheel hubs with axle grease annually.



(SHIELDS REMOVED FOR ILLUSTRATIVE PURPOSES ONLY.)

# **REPAIR PARTS**

### 918-0004 **PTO DRIVE SHAFT ASSEMBLY** 35R (CAT 4 80° C.V., 540 RPM)



		KEY	MEYER PART N	ю.	OEM PART NO.	DESCRIPTION
			918-000	4	244-17880ASBL	Assembly Complete
		1	918-000	1-11	26-15120	Slide Lock Yoke, Lock Repair Kit
		1A	918-000	1-12	24-10013	Slide Lock Yoke, Lock Retaining Ring
		1B	918-000	1-13	23-10012	Slide Lock Yoke, Lock Spring
		1C	918-000	1-14	06-10011	Slide Lock Yoke, Lock Collar
		1D	918-000	1-15	33-10014	Slide Lock Yoke, Lock Pawl
		2	918-000	4-10	35181-1895	Slide Lock Yoke (540 RPM)
		3	918-000	4-7	03-14519	CAT 4 Cross & Bearing Kit
		4	918-000	4-30	26-10190	Center Housing
		5	918-000	4-31	36-13435	Bell Extension w/Nylon Centralizer
		6	918-000	4-4	99-17880	Yoke & Shaft
		7	918-000	4-8	19-11104	Nylon Repair Kit
		8	918-000	1-22	13-10021	Outer Safety Decal (not illustrated)
		9	918-000	4-6	97-17880	Outer Guard
		10	918-000	4-5	96-17880	Inner Guard
		11	918-000	1-23	13-10022	Inner Safety Decal (not illustrated)
		12	918-000	4-9	19-11105	Nylon Repair Kit
		13	918-000	4-2	98-17880	Yoke, Tube & Slip Sleeve
		14	918-000	1-7	03-10045	35R Cross & Bearing Kit
		15	918-000	4-16	38-10054	Multi-Disc Friction OR-Clutch
		16	918-000	4-1	92-17880	Joint & Tube Half Asm. w/Guard (Spreader Half)
		17	918-000	4-3	93-17880	Joint & Shft Asm. w/Guard (Tractor Half, 540 RPM)
KEY	MEYER	OEM				3
	PART NO.	PART	NO.	DESCR	IPTION	$\int_{1}^{3} 5 7$
	918-0004-16	38-100	54	Multi-Dis	sc Friction OR-Clutch	
1	918-0004-17	26-115	85	Housing	Assembly	
2	918-0004-18	20-123	37	Lock Rir	ng	
3	918-0004-19	26-130	76	Yoke & I	Plate	
4	918-0004-20	06-123	46	Overrunı Hub	ning Friction Clutch O	uter
5	918-0004-21	20-123	41	Plate, O	uter Engaged	
6	918-0004-22	20-123	42	Plate, In	ner Engaged	
7	918-0004-23	19-444	21	Friction	Disc Repair Kit	
	918-0004-24	11-111	67	Disc		
	918-0004-25	23-101	11	Spring		
	918-0004-26	11-134	29	Bolt, 5/1	6-18x.875" LG SHCS	
8	918-0004-27	19-444	11	Overrun	ning Clutch Repair Ki	
9	918-0004-28	38-300	04	Inner Dr	ive Hub & Extension	
10	918-0004-29	06-134	92	*Clamp	Hub	12
11	918-0004-33			2.170" G	Bauge	

(2.170 Spring Length)

**\*IMPORTANT:** Equally torque each clamp hub bolt to 120 ft. lbs.

Seal Face

11-12345

12

918-0004-32



KEY	MEYER	OEM	DESCRIPTION
	PART NO.	PART NO.	
1	918-0001-11	26-15120	Slide Lock Yoke, Lock Repair Kit
1A	918-0001-12	24-10013	Slide Lock Yoke, Lock Retaining Ring
1B	918-0001-13	23-10012	Slide Lock Yoke, Lock Spring
1C	918-0001-14	06-10011	Slide Lock Yoke, Lock Collar
1D	918-0001-15	33-10014	Slide Lock Yoke, Lock Pawl
2	918-0006-10	35181-2318	Slide Lock Yoke, 1-3/8" Bore, 21 Spline (Standard)
	918-0006-10-SP	35181-2281	Slide Lock Yoke, 1-3/4" Bore, 20 Spline (Optional)
3	918-0004-7	03-14519	CAT 4 Cross & Bearing Kit
4	918-0004-30	26-10190	Center Housing
5	918-0004-31	36-13435	Bell Extension w/Nylon Centralizer
6	918-0004-4	99-17880	Yoke & Shaft
7	918-0004-8	19-11104	Nylon Repair Kit
8	918-0001-22	13-10021	Outer Safety Decal (not illustrated)
9	918-0004-6	97-17880	Outer Guard
10	918-0004-5	96-17880	Inner Guard
11	918-0001-23	13-10022	Inner Safety Decal (not illustrated)
12	918-0004-9	19-11105	Nylon Repair Kit
13	918-0004-2	98-17880	Yoke, Tube & Slip Sleeve
14	918-0001-7	03-10045	35R Cross & Bearing Kit
15	918-0006-16	38-10063	Multi-Disc Friction OR-Clutch
16	918-0006-1	92-17880	Joint & Tube Half Asm w/Guard(Spreader Half)
17	918-0006-3	93-18367	Joint & Shft Asm w/Guard (Tractor Half, 1000 RPM)

KEY 1 2 3 4 5 6 7 8 9 10 11 12	MEYER PART NO. 918-0006-16 918-0004-17 918-0004-18 918-0004-20 918-0004-20 918-0004-21 918-0004-22 918-0004-23 918-0004-23 918-0004-25 918-0004-25 918-0004-27 918-0004-28 918-0004-29 918-0004-33 918-0004-32	OEM PART NO. 38-10063 26-11585 20-12337 26-13076 06-12346 20-12341 20-12342 19-44421 11-11167 23-10111 11-13429 19-44411 38-30004 06-13492 11-12345 Equally torque	DESCRIPTION Multi-Disc Friction OR-Clutch Housing Assembly Lock Ring Yoke & Plate Overrunning Friction Clutch Outer Hub Plate, Outer Engaged Plate, Inner Engaged Plate, Inner Engaged Friction Disc Repair Kit Disc Spring - Qty 6 per Clutch Bolt, 5/16-18 x .875" LG SHCS Overrunning Clutch Repair Kit Inner Drive Hub & Extension *Clamp Hub 2.170" Gauge Seal Face The full to 120 ft. lbs.
	<u>"IMPORTANT:</u>	Equally torque	

# AUGER DRIVE THIRD REDUCTION



aring Plate Assy. ring 4-Bolt Veldment 2-1/2" Shaft ' Machine Bolt itch Chain /asher Zinc coller Complete
ring 4-Bolt Veldment 2-1/2" Shaft ' Machine Bolt itch Chain /asher Zinc coller Complete
Veldment 2-1/2" Shaft ' Machine Bolt itch Chain /asher Zinc coller Complete
' Machine Bolt itch Chain /asher Zinc coller Complete
itch Chain /asher Zinc coller Complete
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oller Complete
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ve
n Tightener Weldment
n Tightener Mount Weldment
nk For Tightener
Holder
Holder
Holder
n Assembly
Veldment 2-1/2"
16 x 5" / 4" Thread Length
Spring
earing
Coupler
Close Nipple
( 90 Dearee Zerk



KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	925-3703	Front Bearing Plate Assembly	18	851-7510-3.5Z	3/4-10 x 3-1/2" Machine Bolt Zinc
1A	32-0018-1	Heavy Duty Latch	19	805-0075-Z	3/4" Flat Washer Zinc
1B	32-0018-2	Keeper Latch	20	911-0039-D	#80-107 Pitch Chain
2	925-3706	Right Hand Front Support	21	923-3705	1-1/2" Front Side Shaft
3	924-3701	Right Front Shield Assembly	22	35-0010	3/8 x 3/8 x 1-1/2" Square Key
4	924-3702	Front Top Cover W/Hinges & Latches	23	925-3732	#140 Chain Tightener Bolt As- sembly
5	952-0001-3	Oil Brush Holder	24	925-3731	#140 Chain Tightener Adjust-
6	925-3841	Outer Spring Tightener Guide			ment Angle
7 8	29-0009 925-3719	Compression Spring #140 Tightener Bracket Assembly	25	808-150-300-10	10 Ga. X 1.5 I.D. x 3 O.D. Ma- chine Bushing
9	80875-1.25-14	3/4"ID x 1-1/4"OD Machine Bushing 14 Ga	26	910-0036	80B24 Sprocket 1-1/2" Bore, 3/8" Keyway
10	912-0008	#140 Reverse Idler Assembly	27	901-3701-36	#140 Chain Tightener Slide Weldment
104	910-0006-1	Bearing 3//" ID x 2" OD (2-Re-	28	952-0001-1-25	Oiler Brush Assembly
IUA	510-0000-1	auired)	29	925-3704	Left Hand Side Support Plate
11	925-3719-4	3/4-10 x 3-1/2" Machine Bolt	30	929-3601	Extension Spring
		Lathed	31	925-3822-6	2-Chain Link For Tightener
12	925-3718	Side Shaft Tightener Arm	32	933-3804	Eyebolt, 5/16 x 5" / 4" Thread
13	924-3702-3	Gas Shock Spacer/Hinge Sleeve			Length
14	933-3621	3/4-10 Jam Nut	33	813-3118-Z	5/16" Regular Nut
15	912-0013	2" Nylon Roller Complete	34	952-0001-1-18	Oil Reservoir Two Quart Tank
15A	912-0013-1	2" Nylon Roller Only	35	955-3703	Front Cover Gas Lift Assist
15B	912-0013-2	Inner Sleeve			Spring
16	910-0015	80B18 Sprocket 1-1/2" Bore, 3/8"	36	925-3734	Cover Spring Mount Bracket
		Keyway	37	851-2520-22	1/4-20 x 2" Grade 5 Shear Bolt
17	925-3705	Right Hand Top Side Support	38	815-2520-Z	1/4-20 Nylon Insert Locknut
			39	33-0044	Manual Holder W/Caps

# AUGER DRIVE FIRST REDUCTION



PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
14-0031	2" Bearing 4-Bolt	18	914-3602	1-1/2" Bearing, 4-Bolt
851-2520-2Z	1/4-20 x 2" Grade 5 Shear Bolt	19	910-0033	80B15 Sprocket 1-1/2" Bore, 3/8"
910-0058	2" Shear Sprocket Weldment			Keyway 8.5 RPM Auger Speed
815-2520-Z	1/4-20 Nylon Insert Locknut		910-0015	80B18 Sprocket 1-1/2" Bore, 3/8"
910-0054	Shear Sprocket Assembly (1000			Keyway 10 RPM Auger Speed
	RPM)		910-0039	80B22 Sprocket 1-1/2" Bore, 3/8"
910-0066	Shear Sprocket Assembly (540 RPM)			(Standard)
913-3602-2	2" I.D. x 2-1/4" O.D. x 2" Bronze Bushing		910-0067	80B30 Sprocket 1-1/2" Bore, 3/8" Keyway 17 RPM Auger Speed
808-2-3-14	2" I D x 3" O D x 14 Ga Machine	20	925-3601	Front Bearing Plate
0002011	Bushing	21	931-3810	CV/OR PTO Shield Assembly
933-3702	2" Retaining Ring	22	30-0009	1/8" NPT Coupler
851-7510-2Z	3/4-10 x 2" Machine Bolt	23	808-1.5-2.25-10	1-1/2" ID x 2-1/4" OD Machine Bushing
80875-1.25-14	3/4" I.D. x 1-1/4" O.D. Machine	24	35-0015	3/8 x 3/8 x 3" Square Key
	Bushing 14 Ga.	25	923-3706	1-1/2" Input Drive Shaft
912-0015	1-3/8" Nylon Roller Complete	26	35-0010	3/8 x 3/8 x 1-1/2"" Square Key
912-0015-1	1-3/8" Nylon Roller Only	27	30-0002	1/8" NPT Straight Zerk
912-0015-2	Inner Sleeve	28	930-3602	Male Connector Brass Compression
925-3717	Tightener Arm Assembly (1000			Fitting
	RPM)	29	73525CT	1/4" Copper Tube Grease Line (By
925-3739	Tightener Arm Assembly (540 RPM)	00		
38-0013	5/16 x 1-3/4" Roll Pin	30	30-0009	1/8" NPT Coupler
911-0040-D	#80-90 Pitch Chain (1000 RPM)	31	30-0016	1/8" NPT Close Nipple
911-0046-D	#80-76 Pitch Chain (540 RPM)	32	30-0006	1/8" NPT x 90 Degree Zerk
929-3601	Extension Spring			
925-3822-6	2-Chain Link For Tightener			
933-3804	Eyebolt, 5/16 x 5" / 4" Thread Length			
813-3118-Z	5/16" Regular Nut			
	PART NO. 14-0031 851-2520-2Z 910-0058 815-2520-Z 910-0054 910-0066 913-3602-2 808-2-3-14 933-3702 851-7510-2Z 80875-1.25-14 912-0015-1 912-0015-1 912-0015-2 925-3739 38-0013 911-0040-D 911-0046-D 929-3601 925-3822-6 933-3804 813-3118-Z	PART NO.         DESCRIPTION           14-0031         2" Bearing 4-Bolt $851-2520-2Z$ $1/4-20 \times 2$ " Grade 5 Shear Bolt $910-0058$ 2" Shear Sprocket Weldment $815-2520-Z$ $1/4-20$ Nylon Insert Locknut $910-0054$ Shear Sprocket Assembly (1000 RPM) $910-0066$ Shear Sprocket Assembly (540 RPM) $913-3602-2$ 2" I.D. x 2-1/4" O.D. x 2" Bronze Bushing $808-2-3-14$ 2" I.D. x 3" O.D. x 14 Ga. Machine Bushing $933-3702$ 2" Retaining Ring $851-7510-2Z$ $3/4-10 \times 2$ " Machine Bolt $808-75-1.25-14$ $3/4$ " I.D. x 1-1/4" O.D. Machine Bushing 14 Ga. $912-0015$ $1-3/8$ " Nylon Roller Complete $912-0015-1$ $1-3/8$ " Nylon Roller Only $912-0015-2$ Inner Sleeve $925-3717$ Tightener Arm Assembly (1000 RPM) $80-013$ $5/16 \times 1-3/4$ " Roll Pin $911-0040-D$ $#80-90$ Pitch Chain (1000 RPM) $911-0046-D$ $#80-76$ Pitch Chain (540 RPM) $925-3822-6$ $2$ -Chain Link For Tightener $933-3804$ Eyebolt, $5/16 \times 5" / 4"$ Thread Length $813-3118-Z$ <	PART NO.DESCRIPTIONKEY $14-0031$ 2" Bearing 4-Bolt18 $851-2520-2Z$ $1/4-20 \times 2"$ Grade 5 Shear Bolt19 $910-0058$ 2" Shear Sprocket Weldment19 $815-2520-Z$ $1/4-20$ Nylon Insert Locknut19 $910-0054$ Shear Sprocket Assembly (1000 RPM)RPM) $910-0066$ Shear Sprocket Assembly (540 RPM)20 $808-2-3-14$ 2" I.D. x 2-1/4" O.D. x 2" Bronze Bushing21 $933-3702$ 2" Retaining Ring21 $808-2-3-14$ 2" I.D. x 2" Machine Bolt23 $808-2-3-14$ 2" Retaining Ring22 $851-7510-2Z$ $3/4-10 \times 2"$ Machine Bolt23 $808-75-1.25-14$ $3/4"$ I.D. $x 1-1/4"$ O.D. Machine24 $Bushing$ 14 Ga.25 $912-0015$ $1-3/8"$ Nylon Roller Complete26 $912-0015-1$ $1-3/8"$ Nylon Roller Only27 $912-0015-1$ $1-3/8"$ Nylon Roller Only27 $912-0015-2$ Inner Sleeve28 $925-3739$ Tightener Arm Assembly (540 RPM)30 $38-0013$ $5/16 \times 1-3/4"$ Roll Pin30 $911-0040-D$ $#80-90$ Pitch Chain (1000 RPM)31 $911-0046-D$ $#80-76$ Pitch Chain (540 RPM)32 $929-3601$ Extension Spring92-3822-6 $92-5.3822-6$ $2$ -Chain Link For Tightener93-3804 $933-3804$ Eyebolt, $5/16 \times 5" / 4"$ Thread Length813-3118-Z	PART NO.DESCRIPTIONKEYPART NO.14-00312" Bearing 4-Bolt18914-3602 $851-2520-2Z$ $1/4-20 \times 2$ " Grade 5 Shear Bolt19910-0033 $910-0058$ 2" Shear Sprocket Weldment910-0015 $815-2520-Z$ $1/4-20$ Nylon Insert Locknut910-0015 $910-0054$ Shear Sprocket Assembly (1000 RPM)910-0039 $910-0066$ Shear Sprocket Assembly (540 RPM)910-0067 $913-3602-2$ 2" I.D. x 2-1/4" O.D. x 2" Bronze Bushing910-0067 $808-2-3-14$ 2" I.D. x 3" O.D. x 14 Ga. Machine Bushing20925-3601 $933-3702$ 2" Retaining Ring2230-0009 $851-7510-2Z$ $3/4-10 \times 2$ " Machine Bolt23 $808-1.5-2.25-10$ $80875-1.25-14$ $3/4"$ I.D. x 1-1/4" O.D. Machine Bushing 14 Ga.25923-3706 $912-0015$ $1-3/8"$ Nylon Roller Complete26 $35-0010$ $912-0015-2$ Inner Sleeve28930-3602 $925-3717$ Tightener Arm Assembly (1000 RPM)29 $73525CT$ $925-3729$ Tightener Arm Assembly (540 RPM)3130-0009 $911-0040-D$ #80-90 Pitch Chain (1000 RPM)3130-0006 $929-3601$ Extension Spring3230-0006 $929-3801$ Extension Spring3230-0006 $929-3804$ Eyebolt, 5/16 x 5" / 4" Thread Length4" Thread Length $813-3118-Z$ $5/16"$ Regular Nut $5/16"$ Tightener Nut

# AUGER DRIVE SECOND REDUCTION



KEY	PART NO.	DESCRIPTION
1	14-0031	2" Bearing 4-Bolt
2	851-2520-2Z	1/4-20 x 2" Grade 5 Shear Bolt
3	910-0058	2" Shear Sprocket Weldment
4	815-2520-Z	1/4-20 Nylon Insert Locknut
5	910-0054	Shear Sprocket Assembly (1000 RPM)
	910-0066	Shear Sprocket Assembly (540 RPM)
5A	913-3602-2	2" I.D. x 2-1/4" O.D. x 2" Bronze Bushing
6	808-2-3-14	2" I.D. x 3" O.D. x 14 Ga. Machine Bushing
7	933-3702	2" Retaining Ring
8	851-7510-3Z	3/4-10 x 3" Machine Bolt Zinc
9	80875-1.25-14	3/4"ID x 1-1/4"OD Machine Bush- ing 14 Ga.
10	911-0041-D	#80-91 Pitch Chain
11	912-0013	2" Nylon Roller Complete
11A	912-0013-1	2" Nylon Roller Only
11B	912-0013-2	Inner Sleeve
12	925-3720	Second Reduction Tightener Arm Assembly
13	929-3601	Extension Spring
14	925-3822-6	2-Chain Link For Tightener
15	813-3118-Z	5/16" Regular Nut

KEY	PART NO.	DESCRIPTION
16	933-3804	Eyebolt, 5/16 x 5" / 4" Thread Length
17	910-0056-HD	Second Reduction Sprocket Weldment
18	73525CT	!/4" Copper Tube Grease Line (By The Foot)
19	930-3602	Male Connector Brass Compres- sion Fitting
20	30-0002	1/8" NPT Straight Zerk
21	30-0009	1/8" NPT Coupler
22	30-0016	1/8" NPT Close Nipple
23	30-0006	1/8" NPT x 90 Degree Zerk

### **RH AUGER DRIVE FINAL REDUCTION**



KEY	PART NO.	DESCRIPTION	KEY	PART NO.
1	933-3701	3" Retaining Ring	19	925-3711
2	910-0057	2-1/2" Auger Drive Sprocket Weldment		
3	910-0055	140B28 Splined Auger Drive Sprocket	20	30-0009
4	813-3118-Z	5/16" Regular Nut	21	30-0016
5	933-3804	Eyebolt, 5/16 x 5" / 4" Thread Length	22	30-0006
6	925-3701	Right/Left Auger Bearing Assy. W/Bush- ing	23	933-3704
7	913-3701	Auger Bushing 3"ID x 4"OD x 3-3/8" Long		
8	14-0031	2" Bearing 4-Bolt		
9	80875-1.25-14	3/4"ID x 1-1/4"OD Machine Bushing 14 Ga.		
10	912-0015	1-3/8" Nylon Roller Complete		
10A	912-0015-1	1-3/8" Nylon Roller Only		
10B	912-0015-2	Inner Sleeve		
11	925-3716	#140 Right Auger Chain Tightener Bracket		
12	929-3601	Extension Spring		
13	911-0044-D	#140-42 Pitch Chain		
14	851-7510-2Z	3/4-10 x 2" Machine Bolt Zinc		
15	914-3807A	2-1/2" Round 4-Bolt Bearing		
16	38-0013	5/16" x 1-3/4" Roll Pin		
17	925-3822-6	2-Chain Link For Tightener		
18	933-3710	Auger Sprocket Spacer 3.031ID x 40D x 1"		

#### DESCRIPTION

#140 Right Auger Chain Tightener Channel Assy. 1/8" NPT Coupler 1/8" NPT Close Nipple 1/8" x 90 Degree Zerk Front Auger Washer Steel

# LH AUGER DRIVE FINAL REDUCTION



KEY	PART NO.	DESCRIPTION
1	925-3701	Right/Left Auger Bearing Assy. W/Bushing
2	913-3701	Auger Bushing 3"ID x 4"OD x 3-3/8" Long
3	910-0055	140B28 Splined Auger Drive Sprocket
4	933-3701	3" Retaining Ring
5	910-0057	2-1/2" Auger Drive Sprocket Weldment
6	14-0031	2" Bearing 4-Bolt
7	851-7510-3.5Z	3/4-10 x 3-1/2" Machine Bolt
8	912-0008	#140 Reverse Idler Assembly W/Bearings
8A	910-0006-1	Bearing 3/4" ID x 2" OD (2-Required)
9	911-0043-D	#140-70 Pitch Chain
10	910-0061	140B16 Sprocket 2" Bore, ½" Keyway
11	933-3704	Front Auger Washer Steel
12	35-0024	½ x ½ x 2-1/2" Square Key
13	914-3807A	2-1/2" Round 4-Bolt Bearing

### **BOX, AUGERS & SIDE SHAFT**



# UNLOADING GATE AND GATE INDICATOR



KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	955-3802-1	Hydraulic Cylinder	24	36-0009	1/8" Stainless Steel Cable, 25'
2	901-3712	Gate Lift Arm W/Indicator			Required
3	913-3807	Bushing, 954 Bronze	24A	36-0010	1/8" Swage Cable Crimp
4	925-3807-3	Punchout Retaining Washer	25	901-3701-31	Cable Guide Insulator Bracket
5	30-0001	1/4-28 Straight Grease Zerk	26	901-3701-30	Cable Guide Insulator
6	33-0030-RH	1/2 x 3/4" Drilled Grease Bolt	27	901-3706-4	Outer Gate Guide Plate
7	805-0125	1-1/4" I.D. Washer	28	925-3702	Corner Gearbox Mount Plate
8	901-3705	Back Gate Assembly	29	901-3853	Gearbox Mount Plate Gusset
9	901-3838-2	Arm Shaft, Gate Pivot	30	925-3729	Back Gate Arm Pivot Shaft Assembly
10	901-3838-3	Shaft Sleeve, Gate Pivot	31	822-0050-Z	1/2" Split Lock-Washer
11	912-0001	Nylon Roller	32	925-3743-1	Left Mount Plate Assembly
12	949-3702	Poly Gate Seal	33	925-3743-2	Left Material Guide Assembly
13	38-0010	Roll Pin 1/4 x 2"	34	29-0009	Spring, Adjustment
14	925-3853	Gate Pivot Arm Support	35	925-3768-2	Spring Pivot Pin Assembly
15	925-3728	Gate Guide Roller Shaft Assy. W/Roller	36	925-3768-3	Spring Shaft Assembly
16	949-3701	Back Gate Slide Poly Slick	37	925-3768-4	Spring Pivot Sleeve Assembly
17	901-3706-9	Upper Back Gate Guide Plate	38	815-1008-Z	1-8 Nylon Insert Locknut
18	925-3743	Left Material Guide Assembly	39	805-0010-Z	1" Flat Washer Zinc
		Complete	40	82318-1.25Z	3/16 x 1-1/4" Cotter Pin
19	925-3744	Right Material Guide Assembly	41	925-3744-1	Right Mount Plate Assembly
~~	005 0707		42	925-3744-2	Right Material Guide Assembly
20	925-3727	Rear Shield Mount Plate			
21	925-3707	Gearbox Mount Strap			
22	901-3701-20	Spinner Bearing Mount Channel			
23	901-3701-13	Gearbox Mounting Channel			



KEY	PART NO.	DESCRIPTION
1	901-3834-1	RH, 4-Point Tooth Paddle, 3/8" 6-Per RH
		Spinner (Lower) 2-Per LH (Upper)
2	901-3835-1	LH, 4-Point Tooth Paddle, 3/8" 6-Per LH
		Spinner (Lower) 2-Per RH (Upper)
1	901-3834-1-AR	RH, 4-Point Tooth Paddle, 3/8" 6-Per RH
	Optional AR400	Spinner (Lower) 2-Per LH (Upper)(Op- tional)
2	901-3835-1-AR	LH, 4-Point Tooth Paddle, 3/8" 6-Per LH
	Optional AR400	Spinner (Lower) 2-Per RH (Upper)(Op- tional)
3	19-0029	Left Spinner Gearbox
4	35-0004	3/8 x 3/8 x 2" Square Key
5	937-0005	Shaft Coupler 1-3/4" Bore, (4-Required)
6	19-0030	Right Spinner Gearbox
7	19-0036	Corner Gearbox, (1000 RPM) Standard
	19-0035	Corner Gearbox, (540 RPM) Optional
8	901-3704	R.H. Spinner Assembly Less Paddles
8A	901-3704-6	Bottom Spinner Shaft Only (Welded In)
9	901-3703	L.H. Spinner Assembly Less Paddles
10	914-3602	1-1/2" 4-Bolt Bearing
11	937-0005K	1-1/2" Coupler Assy. Kit W/Bolts & Keys
12	924-3703	Rear Main Shield Assembly
13	924-3704	Right Rear Gearbox Shield Assembly
14	33-1002	SMV Sign Bracket

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KEY	PART NO.	DESCRIPTION
15	808-1.75-2.5-14	1-3/4I.D. x 2-1/2O.D. x 14 Ga. M.B.
16	933-3709	Gearbox Spinner Spacer
17	851-5013-1.5Z	1/2-13 x 1-1/2" Grade 5 Machine Bolt
18	815-5013-Z	1/2-13 Nylon Insert Locknut
19	901-3704-1	1-3/4" Bore x 3" Long Splined Hub
20	32-0021	2" Hair Pin Clip
21	32-0022	6" Lanyard
22	32-0023	3/8 x 3/4" Clevis Pin
23	851-3824-1.5Z	3/8-24 x 1-1/2" Fine Thread Grade 5 Bolt
24	815-3824-Z	3/8-24 Nylon Insert Locknut
25	930-3602	Male Connector Brass Compression Fitting
26	73525CT	Copper Tube Grease Line (By The Foot)
27	901-3834-2	Left Hand Paddle Mount Brackets
28	901-3835-2	Right Hand Paddle Mount Brackets
29	901-3704-8	Paddle Reinforcing Bracket (8-Per Spin- ner)
30	937-0004	Shaft Coupler, 1-1/2" Bore, 3/8 Keyway, W/4 Set Screws
31	35-0022	3/8 x 3/8 x 4-1/2" Key
32	921-0005	1-1/2" Set Collar One Piece

### #19-0029 SPINNER GEAR REDUCER - LEFT HAND (1:1)



USE *FLUID GEAR GREASE* <u>ONLY</u>. <u>DO NOT</u> USE OIL FOR LUBRICANT.

KEY	PART NO.	DESCRIPTION
1	19-0029-2	Casting, Machined (Thru Holes)
2	19-0029-1	Casting, Machined (Tapped Holes)
3	19-0029-3	Assy, Pinion Shaft/Gear
4	19-0029-4	Assy, Cross Shaft/Gear
5	19-0029-5	Bearing Cone
6	19-0029-6	Bearing Cup
7	19-0029-7	Bearing Cone
8	19-0029-8	Bearing Cup
9	19-0029-9	Seal 1-3/4"
10	19-0029-10	End Plug, Rubber Cover
11	19-0029-11	Retaining Ring, 1.750
12	19-0016-11	Bolt, 3/8-16 x 2.250 SHCS
13	19-0016-5	Plug, ½ NPT
14	19-0029-14	Bushing, 1/4 NPT to 1/8 NPT
15	19-0002-17	Plug, Pressure Relief, 5 PSI
16	19-0029-16	Bearing Cone

## #19-0030 SPINNER GEAR REDUCER - CENTER (1:1)



KEY	PART NO.	DESCRIPTION
1	19-0029-2	Casting, Machined (Thru Holes)
2	19-0029-1	Casting, Machined (Tapped Holes)
3	19-0029-3	Assy, Pinion Shaft/Gear
4	19-0030-1	Assy, Cross Shaft/Gear
5	19-0029-5	Bearing Cone
6	19-0029-6	Bearing Cup
7	19-0029-7	Bearing Cone
8	19-0029-8	Bearing Cup
9	19-0029-9	Seal 1-3/4"
11	19-0029-11	Retaining Ring, 1.750
12	19-0016-11	Bolt, 3/8-16 x 2.250 SHCS
13	19-0016-5	Plug, 1⁄2 NPT
14	19-0029-14	Bushing, 1/4 NPT to 1/8 NPT
15	19-0002-17	Plug, Pressure Relief, 5 PSI
16	19-0029-16	Bearing Cone

## **CORNER GEAR REDUCER - RIGHT HAND**



# USE #80-90 WT. GEAR LUBE OIL <u>ONLY</u>. <u>DO NOT</u> USE GREASE FOR LUBRICANT.

	1000 RPM DRIVE	540 RPM DRIVE	
KEY	PART NO.		DESCRIPTION
	19-0036	19-0035	Complete Gearbox
1	19-0031-1	19-0031-1	Casting, Machined (Tapped Holes)
2	19-0031-2	19-0031-2	Casting, Machined (Thru Holes)
3	19-0036-1	19-0035-1	Assy, Cross Shaft/Gear
4	19-0031-4	19-0035-2	Assy, Pinion Shaft/Gear
5	19-0029-5	19-0029-5	Bearing Cone
6	19-0029-6	19-0029-6	Bearing Cup
7	19-0029-7	19-0029-7	Bearing Cone
8	19-0029-8	19-0029-8	Bearing Cup
9	19-0029-9	19-0029-9	Seal 1-3/4"
10	19-0029-10	19-0029-10	End Plug, Rubber Cover
11	19-0029-11	19-0029-11	Retaining Ring, 1.750
12	19-0016-11	19-0016-11	Bolt, 3/8-16 x 2.250 SHCS
13	19-0016-5	19-0016-5	Plug, ½ NPT
14	19-0023-2	19-0023-2	Bushing, 1/2 NPT to 1/8 NPT
15	19-0002-17	19-0002-17	Plug, Pressure Relief, 5 PSI
16	19-0031-5	19-0031-5	Dip Stick
17	19-0029-16	19-0029-16	Bearing Cone

#### HUBS, AXLE & TANDEM ASSEMBLY 17、 Ь Ô Ó ٦O U) Ì. DESCRIPTION KEY PART NO.

1	75-0211	Hub Assembly (complete),
	15,000 lbs	
2	75-0211-2	Seal
3	75-0211-3	Bearing Cone
4	75-0211-4	Bearing Cup
5	75-0208-5	Bearing Cup
6	75-0208-6	Bearing Cone
7	75-0208-7	Washer
8	75-0208-8	Nut
9	75-0208-9	Cotter Pin
10	75-0208-10	Hub Cap
11	75-0208-11	Lug Nut - Flanged
12	75-0208-12	Stud Bolt
13	75-0211-1	Hub Only w/Races & Studs
14	75-0208-13	Hub Cap Bolt
15	75-0208-14	Hub Cap Gasket
16	30-0006	Zerk 1/8"NPTx90°
17	901-3867-2	Locking Collar
18	881-5013-6.5	HHCS, 1/2-13 x 6.5" GR8
19	814-5013-Z	Locknut 1/2-13 Center
20	901-3873-3	Left O-Beam, w/o Hubs
21	901-3874-3	Right O-Beam, w/o Hubs
22	901-3864-2	Nylon Bushing
23	901-3872	Tandem Axle Assembly Only

KEY	PART NO.	DESCRIPTION
24	75-0269	Wheel Rim, 12.25 x 22.5 - 10
	Hole (Used 425/	65/R22.5 Tire)
	75-0270	Wheel Rim, SW18C x 16.1 -
	10 Hole (21.5 x 1	16.1 Tire)
25	30-0002	Zerk, 1/8" NPT Straight
26	930-3602	Male Connector Brass Com
		pression
27	73525CT	Grease Line (By the foot)
28	75-0111	Spindle Assembly
29	30-0008	Nipple 1/8" NPT
30	30-0009	Coupler 1/8" NPT



KEY	PART NO.	DESCRIPTION
1	925-3807-3	Punchout Retaining Washer
2	815-5013-Z	1⁄2" -13 Nylon Insert Lock Nut
3	805-0050	Washer, 1⁄2" Flat
4	933-3706	Spring
5	36-0009	1/8" Stainless Steel Cable (25' Required)
5A	36-0010	1/8" Crimp Sleeve
6	925-3723	Gate Indicator
7	46-5570-2	Gate Indicator Decal
8	901-3707	Ladder
9	901-3701-38	Ladder Hanger Weldment
10	930-3602	Male Connector Brass Compression
11	926-3703	3rd Auger Complete
12	933-3606	Bronze Washer
13	913-3602-2	Bronze Bushing
14	925-3865	3rd Auger Bushing Assy (Includes Item 13)
15	30-0002	Zerk, Straight
16	901-3810-8	3rd Auger Spacer Channel
17	901-3832-2	Support Pipe Strap
18	901-3711	3rd Auger Support Pipe
19	73525CT	Grease Line, Spinner Shaft (By the foot)

### INSTRUCTIONS FOR AUTOMATIC CHAIN OILER

#### WARNING: DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES (RELIEVE HYDRAULIC PRES-SURE) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS SPREADER. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

The automatic chain oiler attachment gives a squirt of clean oil to all roller chains every time that the spreaders rear gate, hydraulic cylinder is activated. In this way, the spreaders roller chains get oiled in direct proportion to the number of hydraulic cylinder cycles of the rear gate. This assures adequate lubrication.

New 30 weight oil, which is placed in the reservoir tank mounted on the spreader, is all that is needed to properly lubricate all roller chains and sprockets. The automatic chain oiler does not use any oil from the tractors hydraulic system. The hydraulic hose connected to the bottom of the oiler pump only serves to power the piston in the pump every time that the spreaders rear gate is opened.

Should the oil reservoir tank run dry, pour about a  $\frac{1}{2}$  cup of clean 30 weight oil into the tank. Allow time for the oil to run down into the oiler pump slowly and allow air to escape. After thirty minutes to one hour has passed, finish filling the reservoir tank. Make sure that all fittings and brackets are tight when finished filling the tank.

### WARNING: HYDRAULIC FLUID ESCAPING UNDER PRESSURE CAN HAVE SUFFI-CIENT FORCE TO PENETRATE SKIN. KEEP ALL HOSES AND CONNECTIONS IN GOOD SERVICEABLE CONDITION. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL IN-JURY OR DEATH.

While running the tractors hydraulics <u>only</u>, open and close the spreaders rear gate several times. This will cycle the hydraulic cylinder leading to the oiler pump. Keep cycling until oil can be seen in all of the oil lines leading to the oiler brushes. (If you experience problems priming the oiler pump, you may need to bleed air out of the hydraulic hose where it is connected to the pump. Crack the fitting until oil comes out then re-tighten.) The hydraulic cylinder that the oiler pump is tied into is double acting and must reach 300 PSI of pressure to actuate the pump.

When replacing oiler brushes into brush holders, use regular  $\frac{1}{2}$ "-20 nuts. Tighten nut finger tight initially as some adjustment may be needed later. For best results, place brush holders over top of roller chains and directly on top of sprockets. Adjust brush holders so oiler brushes are pushed down into the roller chain approximately  $\frac{1}{2}$ ". Carefully tighten up the  $\frac{1}{2}$ "-20 nuts on the oiler brushes. <u>DO NOT over tighten as damage to the brush will occur.</u> The plastic threads of the oiler brush will crack and then break off from the brush body.

# IMPORTANT! The 5/32" oil line tubing can only be removed from an oiler brush by pushing in on the red plastic ring and pulling the tubing out while holding the ring down.

The oiler pump is set at the factory to deliver the maximum amount of oil per cycle. If less oil is desired, loosen the jam nut on the bottom of the pump and screw in the adjusting shaft 1/4" or approximately 5 turns. It is not recommended to screw the shaft into the bottom of the oiler pump more than 15 turns as this may not allow for proper lubrication of the roller chains.

# IMPORTANT! Always use new 30 weight oil. In cold weather, use a SAE 10 or a mixture of two parts of 30 weight oil to one part diesel fuel.

OIL-KIT



KEY	PART NO.	OEM	DESCRIPTION
		PART NO.	
1	952-0001-1-1	1001-6-B	Oiler Body 6 Port Black
2	952-0001-1-2	1518-B	Adj End Cap Oil Black
3	952-0001-1-3	4511	Plunger, Brass Adj End Cap
4	952-0001-1-4	1033	Piston, 2 Groove Alum, Short
5	952-0001-1-5	1004	Spring, Oiler
6	952-0001-1-6	1006	Washer, Rubber Lube Minder
7	952-0001-1-7	5011	O Ring, Adj End Cap Plunger
8	952-0001-1-8	1008	O Ring, Oiler Piston 2-022 90 Dur
9	952-0001-1-9	1012	One Way Valve (Schrader Valve)
10	952-0001-1-10	1019	Screen Flat Oiler .906 Dia
11	952-0001-1-11	3520	Bearing, 7/16" Stainless
12	952-0001-1-12	1017	Decal, Lube Minder Body
13	952-0001-1-33	4515	Holder, Manifold Valve Assembly
14	952-0001-1-14	2511	5/32 Push In Insert (Nycoil)
15	952-0001-1-15	6002	90° Degree 1/8" St Elbow
16	952-0001-1-16	6010	1⁄2-20 Jam Nut
17	952-0001-1-17	2016	Bracket Oiler Mtg Pump
18	952-0001-1-18	2550	Reservoir Two Quart Tank
19	952-0001-1-19	M-4555	Hydraulic Hose Assembly Meyer Mfg.
20	952-0001-1-20	7010	Tubing 5/8" ID Clear Polybraid
21	952-0001-1-21	7012	Tubing 5/32" Nylon (Feet)
22	952-0001-1-25	4514	Brush Assembly No 5/32 Insert
22A	813-5020-Z		1/2 20 Plated Nut
24	952-0001-1-27	576895	Sleeve Nut Brass
25	952-0001-1-28	576894	5/32 Brass Ferrule
27	952-0001-1-30		1" Hose Clamp
28	952-0001-1-31	4517	U-Bolt Assembly #13
29	952-0001-1-32	219P-2	1/8" Hex Head Pipe Plug
30	952-0001-2		#80 Brush Holder
31	952-0001-3		Left #120 Auger Chain Brush Holder
32	952-0001-4		Right #120 Auger Chain Brush Holder
33	952-0001-5		Oiler Tank Mount Plate
34	952-0001-6		#80 Center Shaft Chain Brush Holder
36	955-3803		BM Pipe Tee 3/8 x 3/8 x 3/8
37	08-0050		5/16" Closed "J" Clip

# MEYER INDUSTRIAL SPREADER "TROUBLE SHOOTING"

	SYMPTOM	PROBLEM	SOLUTION
AUGERS	Augers shake or chatter	Stiff roller chains - dry Loose roller chains Worn sprockets/chain Dry auger trough	Lubricate roller chains Tighten roller chains Replace sprockets/chains Load auger trough w/manure
	Augers wobble/lift up & down	Worn auger shaft bushings Worn auger hold down nylon bearings	Replace auger shaft bushings Replace auger hold down nylon bearings
	Will not lift	No hydraulic supply Froze tight w/build-up	Supply hydraulic power Thaw frozen build-up
GATE	Will not close/seal	Lodged foreign object/dirty	Remove foreign object/clean
	Sticks/binds	Dirty/dry slide guides Worn slide guides Worn out slide guide polyslick	Clean/lubricate slide guides Replace slide guides Replace slide guide polyslick
GEAR BOXES	Clunking sounds	Gears/bearings wearing Low oil or fluid gear grease	Replace gears/bearings Fill with #80-#90 wt. Gear lube oil or fluid gear grease
	Excessive oil use	Worn out oil seals Dry manure & twine wrapping	Replace oil seals Clean & remove build-up at seal areas
	Gear damage	High speed/full load start-up Worn out gears	Slow start-up, fill with oil Replace gears
MATERIAL GUIDES	Dirty/build-up	Too slow spinner RPM's	Operate spreader at recom- mended RPM's
PTO SHAFT	Whips/shakes	Over extended or bent PTO	Adjust tractor drawbar length - See Page 7
	Vibrates up & down	Spreader center shaft bent	Replace center shaft
	Worn Universal Joints	Lack of lubrication/used	Lubricate joints daily replace joint
ROLLER CHAINS AND	Excessive chain wear	Lack of lubrication Out of alignment/loose	Lubricate/align/tighten
SPROCKETS	Roller chain breakage	Loose roller chain Worn sprockets	Tighten roller chains Replace sprockets
	Sprocket teeth tipped over	Worn roller chain Bad roller bearings	Replace roller chain Replace bearings
SPINNERS	Spinners turn hard/squeak	Bad lower spinner bearings	Replace lower spinner bearings
PADDLES/	Shake at high RPM's (excessive vibration)	Spinner bent/out of balance	Straighten/balance/replace spinner
	Excessive paddle damage	Wobbled out lower spinner shaft	Replace or reweld lower spinner shaft
		Too slow spinner RPM's Lodging of manure	Operate spreader at recom- mended RPM's Adjust material guides Straighten/replace paddles
		Spreading foreign objects	Avoid loading foreign objects

# **MEYER INDUSTRIAL SPREADER "MAINTENANCE RECORD"**

Model No.\_\_\_\_\_ Serial No.\_\_\_\_\_

Delivery Date:\_\_\_\_\_

DATE	SERVICE PERFORMED		DATE	SERVICE PERFORMED
		-		
		-		

### **MEYER EQUIPMENT WHEEL TORQUE**

BOLT/STUD SIZE	SOCKET SIZE	PRESS FORMED WHEEL CENTER	BOLT TYPE	HEAVY DUTY WHEEL CENTER
1/2	3/4	80 ft Ibs	Lug Bolt	85 ft lbs
9/16	7/8	80 ft Ibs	Lug Bolt	120 ft lbs
5/8	15/16	100 ft lbs	Bevel or Flange Nut	160 ft lbs
3/4	1-1/8		Flange Nut	265 ft lbs

TIRE SIZE	PLY	PSI
11L-15	6	28
11L-15	8	36
11L-15	10	44
11L-15	12	52
12.5L-15	8	36
12.5L-15	10	44
12.5L-15	12	52
14L-16.1	8	32
14L-16.1	12	52
16.5L-16.1	8	28
16.5L-16.1	10	36
21.5L-16.1	10	36
21.5L-16.1	14	40
11R/22.5	used truck	75
425/65x22.5	used truck	75

#### TIRE INFLATION

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# MEYER INDUSTRIAL SPREADER "SPECIFICATIONS"

Standard Equipment Specifications			
	Model 5570		
Bushels	550 (no ht. ext.)	700 (with ht. ext.)	
Gallon	2630	3400	
Cubic Foot	350	454	
Weight	10,975 lbs	11,445 lbs.	
Overall Height w/21.5L Tire	81" (No ht. ext.)	90" (with ht. ext.)	
Tank Length	18'		
Overall Width w/21.5L Tire	110"		
Main Drive Chain	#140		
Tank Steel - copper bearing	1/4"		
Frame construction (channel)	8"		
Spindle Size	3 1⁄2"		
Hub Size	10 Bolt 15,000 lbs.		
Expeller Size	20"		
Expeller Speed	665 RPM Standard		
Auger Speed	12.5 RPM Standard		
Tractor PTO Speed (Max.)	1000 or 540 RPM		
Auger Diameter	20"		
Overall Length	26'5"		
Automatic Oiler	Standard		
3rd Auger (tough pen manure)	Stan	Standard	

## SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MEMBER



Manufactured by: Meyer Mfg. Corp. County Hwy. A West

P.O. Box 405 Dorchester, Wisconsin 54425-0405 Phone 715-654-5132 FAX 715-654-5513 1-800-325-9103



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