

MEYER

FORMULA IIII



FORMULA MIXER

Models F355 • F470 • F585 • F700 • F815 • F1015 • F1215

Owner / Operator's Manual

2019 Model Year & Later



1.0 IMPORTANT INFORMATION

The mixer serial number plate is located on the left hand side of the mixing tub. The trailer serial number plate (Model F585-F1215) is located on the left hand side of the trailer hitch. Please enter the model, serial number and additional information in the space provided for future reference.



Mixer Body
Serial Number

Model No. _____

Mixer Serial No. _____

Trailer Serial No. _____

Date of Purchase _____

Dealership _____

Dealership Phone No. _____



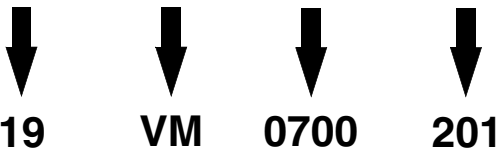
Trailer Serial Number

Always use your serial number when requesting information or when ordering parts.
HOW TO READ YOUR SERIAL NUMBER

MIXER

EXAMPLE: 19VM0700201

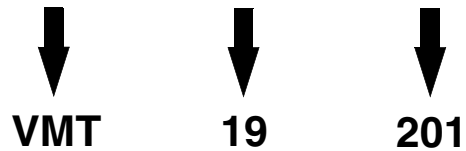
Model Year / Vertical Mixer / Model / Sequence Of Build



TRAILER (Model F585-F1215)

EXAMPLE: VMT19201

Vertical Mixer Trailer / 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 CHECKLIST

PB Mixer Checklist

Meyer Manufacturing Corporation

Phone: 715-654-5132 • Toll-Free: 1-800-325-9103 • P.O. Box 405 • Dorchester, WI 54425

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

PRE-DELIVERY CHECKLIST

After the New Meyer Mixer 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 PTO shields turn freely.
- 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.
- Cross Conveyor Belt or Chain are at proper tension. See "Adjustments" section in this manual.
- All decals are in place and legible.
- All stop/tail/turn lights work properly.

DELIVERY CHECKLIST

The following checklist 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 checklist was fully completed.
- Give customer the Owner & Operator's Manual. Instruct to read and completely understand its contents BEFORE attempting to operate the mixer.
- Explain and review with customer the New Meyer mixer 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.
- Explain and review with customer the recommended loading and unloading procedures.
- Demonstrate the start-up and shutdown controls, proper hydraulic hose storage and tip holder used to keep system clean from contaminants.
- Explain the importance of cross conveyor chain or belt tension, and the need to watch and tighten during the break-in period.
- Explain that regular lubrication and proper adjustments are required for continued proper operation and long life of the mixer. Review with the customer the "Lubrication" and "Adjustments" sections of this manual.
- Fully complete this "PRE-DELIVERY & DELIVERY CHECKLIST" with the customer.



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

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 Operator's & Parts 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.

Sincerely,

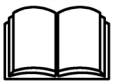
*All Employees of
MEYER MANUFACTURING CORPORATION*

When the PTO is referred to, it means power takeoff from the tractor.

The formula mixer may be referred to as mixer, implement, equipment or machine 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 the 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 equipment by your dealer and the manufacturer when ordering repair parts. The mixer serial number plate is located on the left hand side of the mixing tub. On F585 model and larger the Trailer has a serial number located on the left hand side of the hitch.

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	F355	F470	F585	F700	F815	F1015	F1215
Twin Mixing Augers	STD	STD	STD	STD	STD	STD	STD
Replaceable Scrapers	STD	STD	STD	STD	STD	STD	STD
Hardened Knives	STD	STD	STD	STD	STD	STD	STD
Hay Stops	STD	STD	STD	STD	STD	STD	STD
Ladder	STD	STD	STD	STD	STD	STD	STD
Jack Stand	STD	STD	STD	STD	STD	STD	STD
Torque Disconnect PTO's	STD	STD	STD	STD	STD	STD	STD
2-Speed (Electric Shift)	N/A	N/A	STD	STD	STD	STD	STD
Straight Drive	STD	STD	N/A	N/A	N/A	N/A	N/A
Heavy -Duty Gearboxes	STD	STD	STD	STD	STD	STD	STD
Single Axle Trailer	STD	STD	STD	STD	STD	STD	STD

OPTIONS

DESCRIPTION	F355	F470	F585	F700	F815	F1015	F1215
Tandem Axle Trailer	N/A	N/A	OPT	OPT	OPT	OPT	OPT
Side Discharge Door Right/Left	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Front Discharge Door	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Rear Discharge Door	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Front Cross Conveyor	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Side Door Conveyor	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Viewing Platform	N/A	OPT	OPT	OPT	OPT	OPT	OPT
Slide Tray	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Safety Chain	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Magnets	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Hay-Retention Ring	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Capacity Belt Extension	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Hardened Knives (Additional)	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Tank Liner	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Baffle Liner	OPT	OPT	OPT	OPT	OPT	OPT	OPT

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4.0 MANUFACTURER'S WARRANTY

4/2014

MEYER FORMULA MIXER

- I. The "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 Mixers shall apply only to the original retail customer from an authorized Meyer Mfg. Corp. dealership.
- II. This warranty shall not apply to any Meyer Mixer which has been subjected to misuse, negligence, alteration, accident, incorrect operating procedures, has been used for an application not designed for or pre-authorized by Meyer in writing, has had the serial numbers altered, or which shall have been repaired with parts other than those obtained through Meyer Mfg. Corp. Meyer is not responsible for the following: Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow the operator's manual recommendations or normal maintenance parts and service. Meyer is not responsible for rental of replacement equipment during warranty repairs, damage to a power unit (including but not limited to a truck or tractor), loss of earnings due to equipment down time, or damage to equipment while in transit to or from the factory or dealer.
- III. Meyer Mfg. Corp. warrants New Meyer Mixer to be free from defects in material and workmanship under recommended use and maintenance service, as stated in the operator's and parts manuals, 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 Mixer 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. 1st year 100%, 2nd year 100%, 3rd year 50%, 4th year 25%, 5th year 10%
 - a. The Formula Mixer Planetary Gearbox. Meyer Part #'s 119-1680-13.5-1, 119-1680-24.18-1, 119-18-13.92-1, 119-21-25.57-1, 119-32-24.8-1.
- 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 any service call and/or transportation of the mixer to the dealership or the factory for warranty service.
- 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.

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, etc.



5.0 SAFETY

Meyer Mfg. Corp. equipment is manufactured with operator safety in mind. Located on the equipment are various safety signs to aid in operation and warn of hazardous areas. Pay close attention to all safety signs on the equipment.

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 equipment, read and study the following safety information. In addition, make sure that every individual who operates or works with the equipment, 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 equipment itself warn you of hazards and must be read and observed closely!



Safety Alert Symbol

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!



DANGER

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.



WARNING

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.



CAUTION

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 equipment, as well as the components of the equipment. 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 equipment 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 equipment until all operators have read and understood 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 equipment.
- DO NOT operate until all shields and guards are in place and securely fastened.
- DO NOT step up on any part of the equipment that is not designated as a ladder or viewing platform at any time.
- DO NOT adjust, clean or lubricate while the equipment 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 equipment before starting it!
- Make certain everyone is clear of the equipment 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 24.)
- 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.
- 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.
- Comply with state and local laws governing highway safety and movement of machinery on roadways.

Safety Precautions For Hydraulic System:

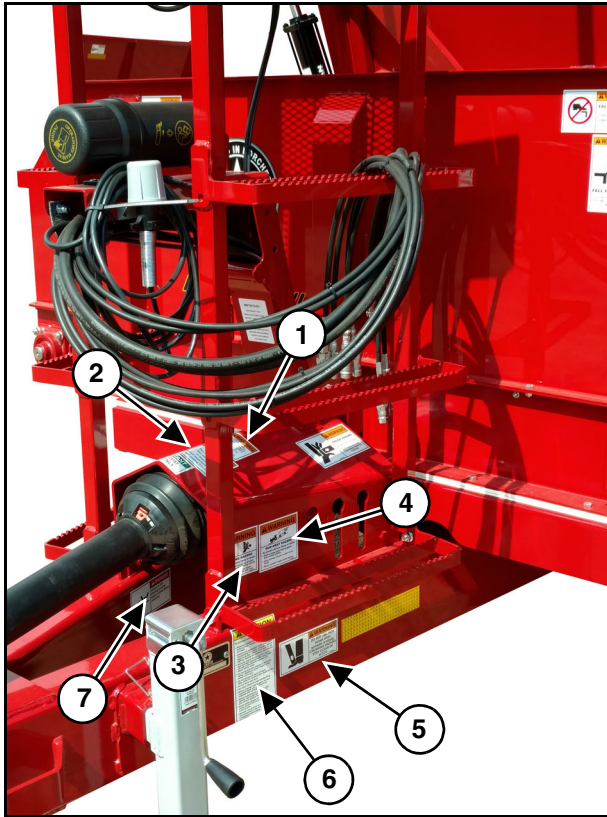
- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use hands to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel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

5.2 SAFETY SIGNS

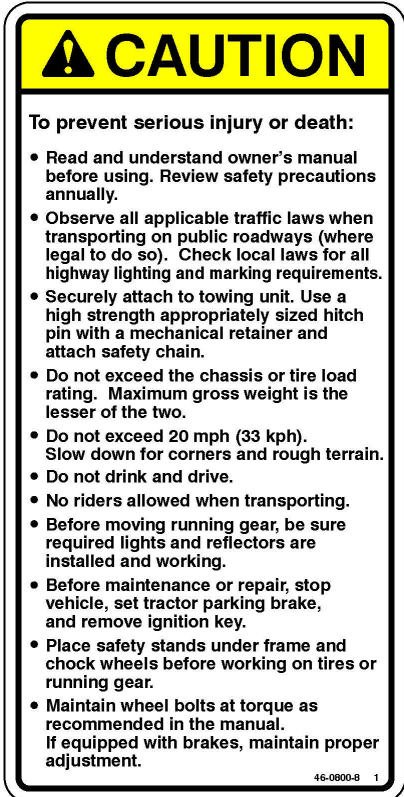


Read all safety signs on the equipment and in this manual. Keep all safety signs clean and replace any damaged or missing safety signs before operating the equipment. Do Not remove any safety signs. Safety signs are for operator protection and information.

FRONT OF MIXER



6



PART NO. 46-0800-8

2



PART NO. 46-3600-9

3



PART NO. 46-0800-6

5



PART NO. 46-3600-6

7



PART NO. 46-3600-2

(Located on trailer frame underneath housing)

4



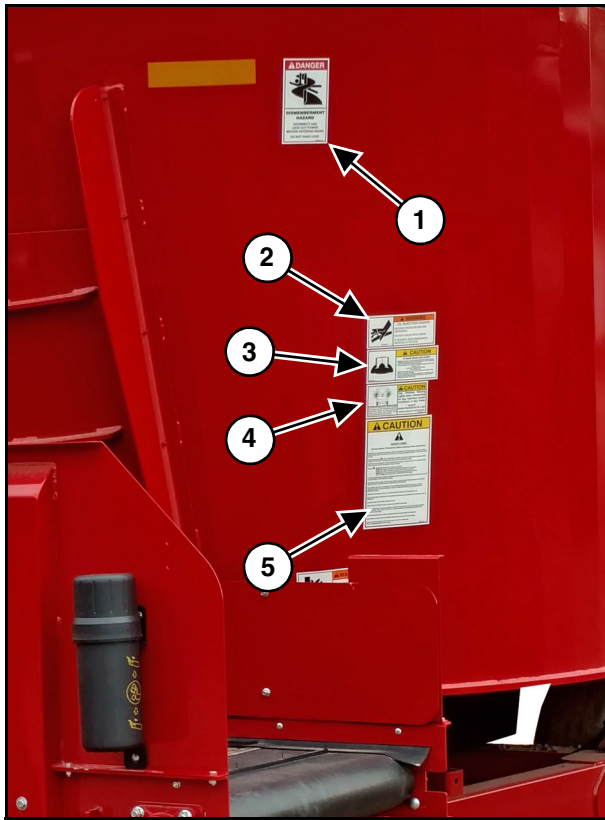
PART NO. 46-0800-7

1



PART NO. 46-0004-2

FRONT OF MIXER



5


CAUTION



SAFETY FIRST

Do Not Operate This Machine Without Reading These Instructions!

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

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

SAFETY PRECAUTIONS

DO NOT allow anyone to operate, service, inspect or otherwise handle this equipment until all operators have read and understood all of the instructional materials in the operator's and parts manual and have been properly trained in its intended usage.

DO NOT operate until all shields and guards are in place and securely fastened.

DO NOT step up on any part of the equipment that is not designated as a seat, ladder, or viewing platform at any time. Never allow riders on either tractor / truck or equipment.

Ensure the machine is and will remain in the OFF condition before adjusting, servicing, maintaining, or clearing an obstruction from this machine.

PTO OPTIONS: The tractor PTO **MUST** match the implement PTO. **NEVER USE PTO ADAPTERS.** PTO shield **MUST** be in place and rotate freely. Always run PTO in a straight line to avoid an accident due to PTO damage.

Know how to stop operation of the equipment before starting it! Make certain everyone is clear of the equipment before applying power. Make certain everyone stays clear of the discharge opening while operating.

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.

Keep all safety signs clean and replace any damaged or missing safety signs before operating the equipment. **DO NOT** remove any safety signs. If any safety signs become damaged or lost, call your local Meyer dealer or Meyer factory direct 1-800-325-9103 for replacement. Always use **GENUINE MEYER** replacement parts.

46-0001-22 1

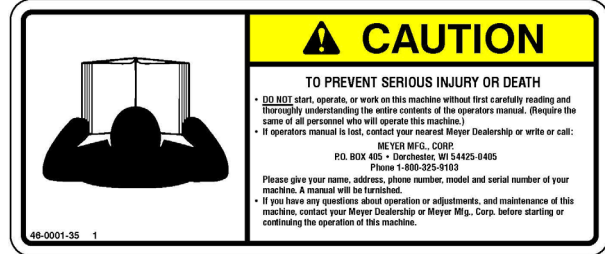
PART NO. 46-0001-22

1



PART NO. 46-0001-213

3



PART NO. 46-0001-35

4



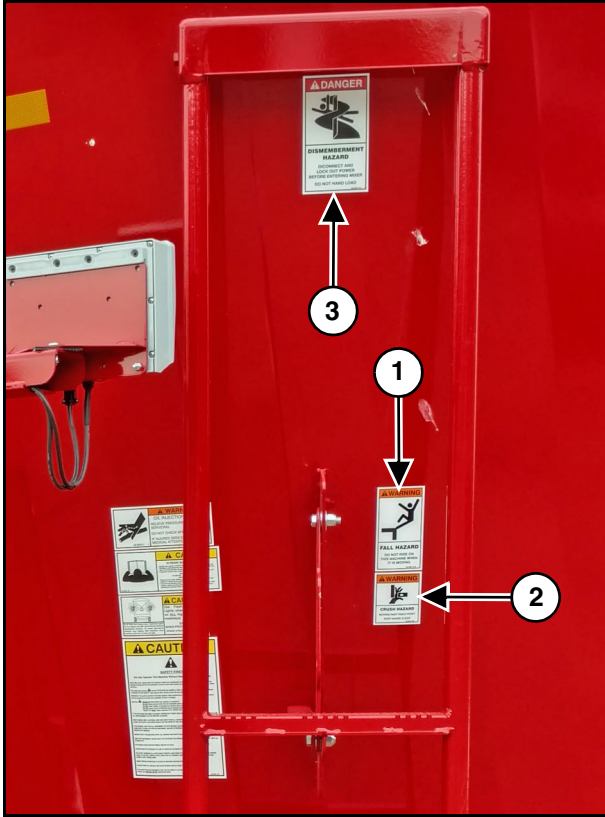
PART NO. 46-0001-62

2



PART NO. 46-8500-7

FRONT OF MIXER



1



PART NO. 46-0001-210

2



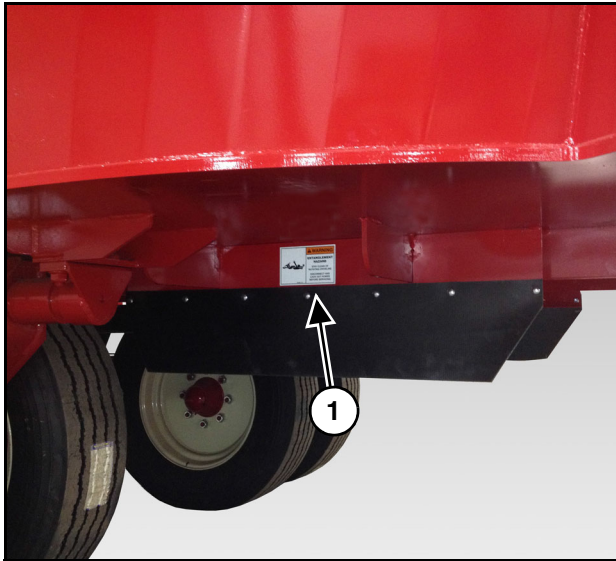
PART NO. 46-0001-205

3

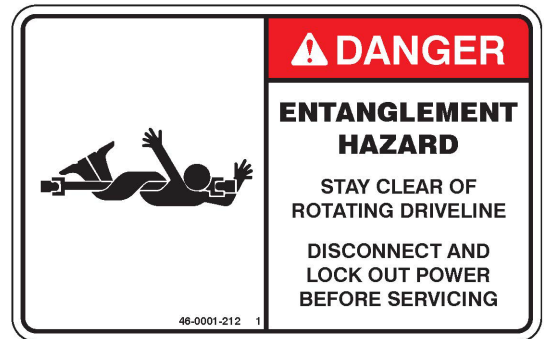


PART NO. 46-0001-213

LEFT SIDE OF MIXER

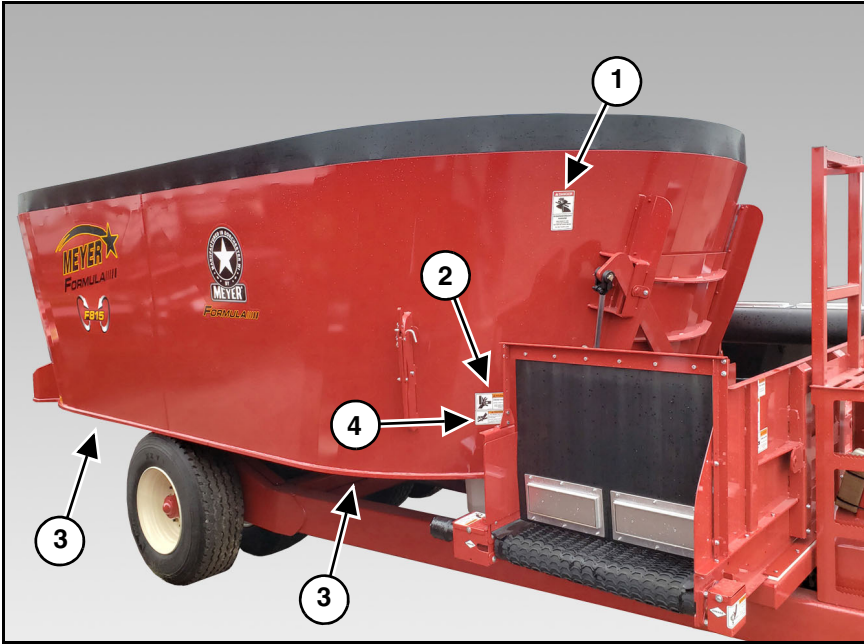


PART NO. 46-0001-211
(Located under mixing tub)



PART NO. 46-0001-212

RIGHT SIDE OF MIXER



1



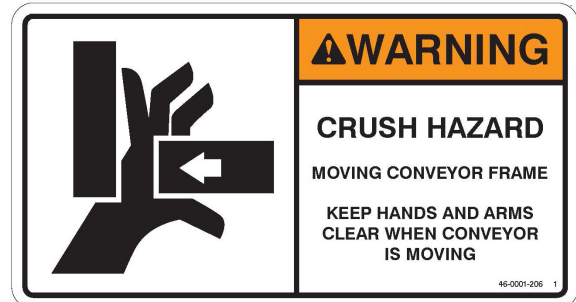
PART NO. 46-0001-213

3



PART NO. 46-0001-211
(Located under mixing tub)

2



PART NO. 46-0001-206
(Both sides on some models)

3



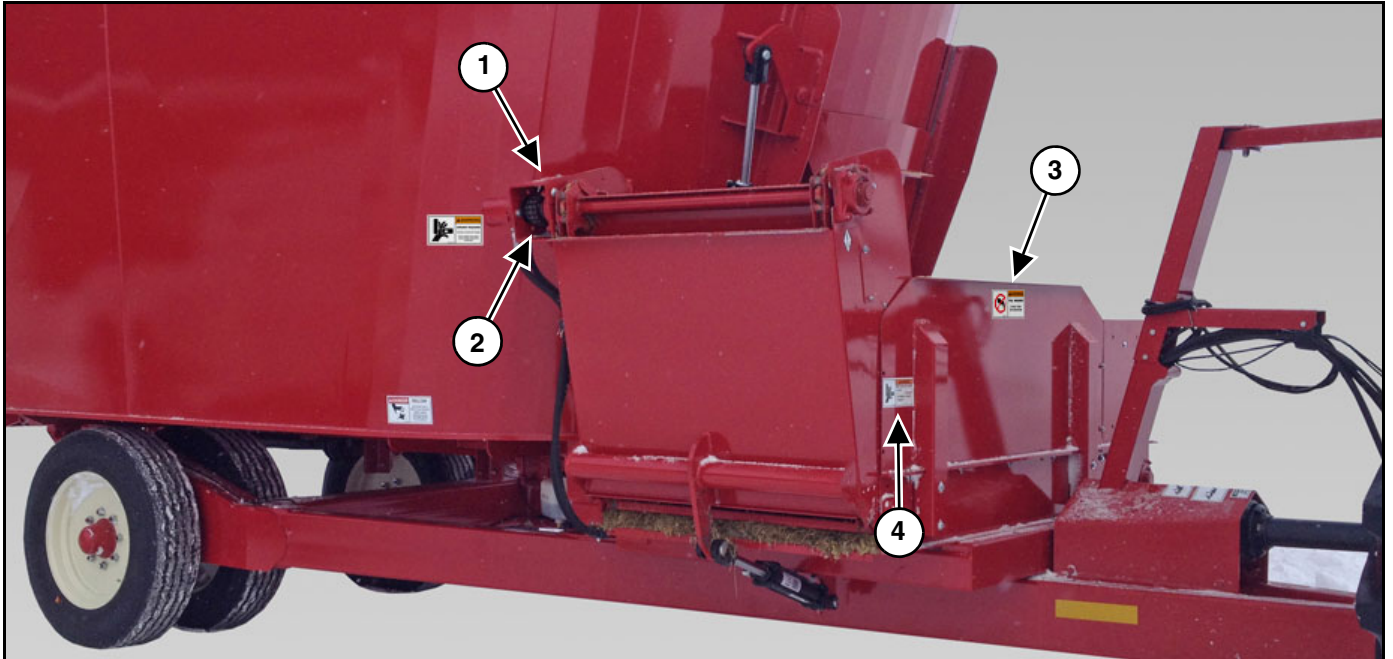
PART NO. 46-0001-212
(Behind Belting - Not Shown)

4



PART NO. 46-8500-7

RIGHT SIDE OF MIXER

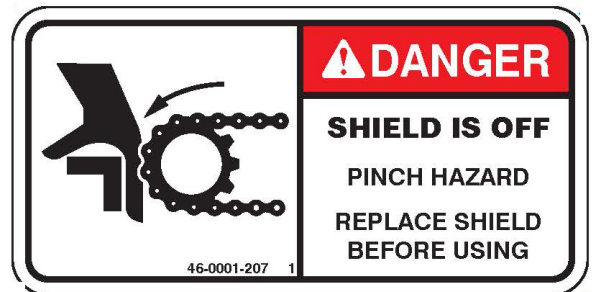


1



PART NO. 46-0001-4
(Located on top of shield)

2



PART NO. 46-0001-207
(Located under shield)

3



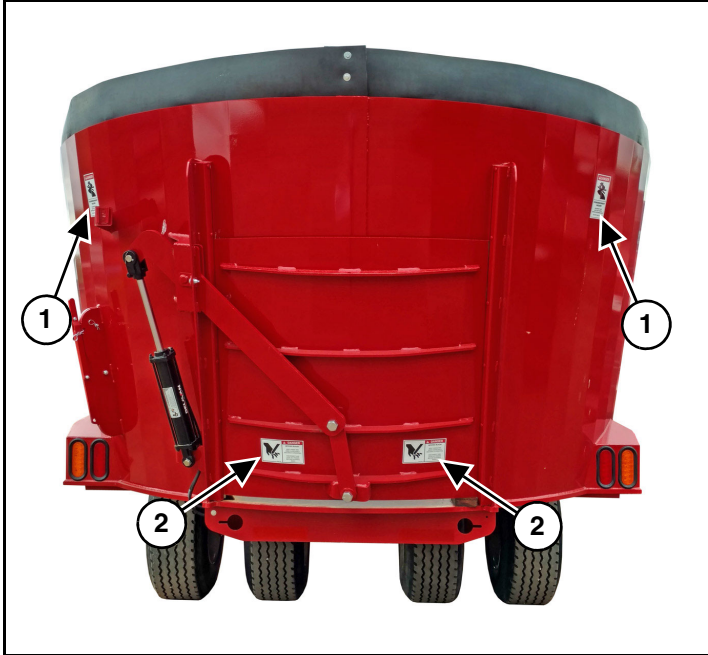
PART NO. 46-0001-209

4



PART NO. 46-0001-205

BACK OF MIXER



1



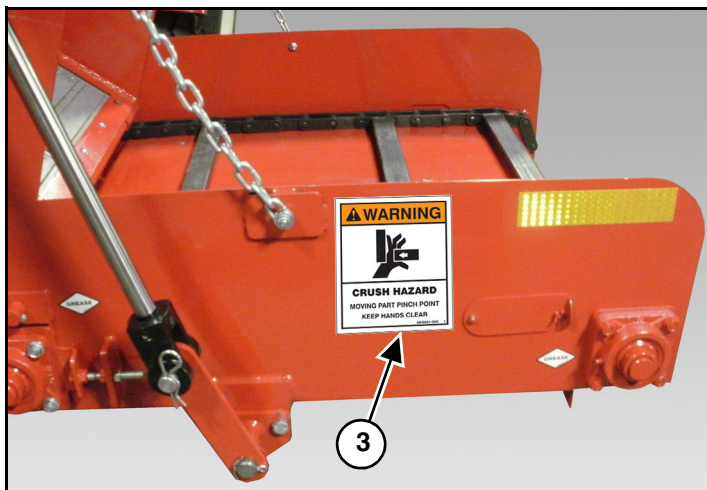
PART NO. 46-0001-213

2



PART NO. 46-0001-208

SIDE DOOR CONVEYOR (OPTION)

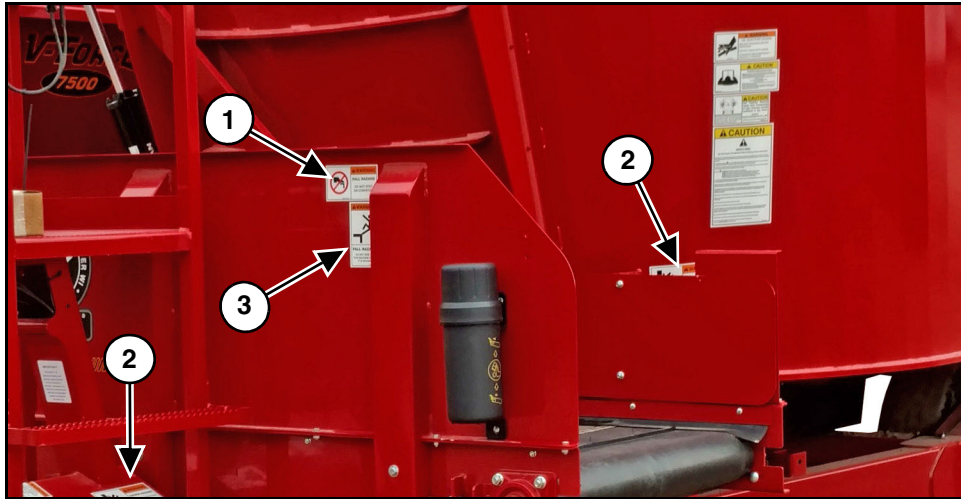


3

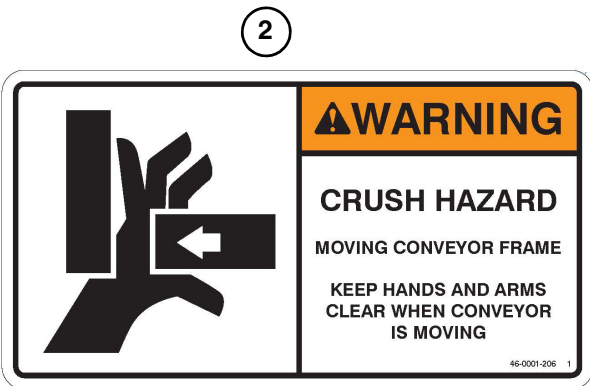


PART NO. 46-0001-205

LEFT SIDE OF MIXER



PART NO. 46-0001-209



PART NO. 46-0001-206
(Both sides on some models)



PART NO. 46-0001-210

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.

IMPORTANT

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



CAUTION

DO NOT allow anyone to operate, service, inspect or otherwise handle this equipment 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 equipment is securely fastened to the tractor.

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

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



WARNING

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

Keep all electrical cords and cables in good serviceable condition. Failure to heed could result in serious personal injury or death.

IMPORTANT

Check that all gear cases and oil bath enclosures contain oil and that bearings and joints have been greased. (See maintenance section).

Before operating the mixer 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 mixer for proper adjustments.(See 8.2 ADJUSTMENTS)
3. Check that all lubrication has been completed. (See 8.1 LUBRICATION)
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 and electrical cords and cables for wear. Repair or replace as required.
6. Check the planetary gearbox and 2-speed gearbox reservoirs for proper oil level. (See 8.1 LUBRICATION)
7. Check for and remove any foreign objects in the mixing chamber and discharge opening.
8. Be sure that there are no tools laying on or in the mixer.

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. Replace as needed.
13. Inspect any wear items. i.e.: Knives, scrapers, kicker wear plate. Replace as required.
14. Inspect the tires for excessive wear or damage and inflate to the recommended pressure. (See 8.4.3 Tire Inflation)
15. Inspect the condition of axles, o-beams, spindles, and safety lighting. Repair or replace as required.
16. Check that the brakes are clean and clean them if necessary.(Brake Option Only) (See 8.3 BRAKES (OPTIONAL))

6.2 LIGHT HOOK-UP

NOTE: The lighting system provided is intended for being transported by an agricultural tractor.

Ensure that lights and indicators are clean and in good working order. When attaching to a towing vehicle other than a tractor always check lighting for proper operation as wiring may vary. Connect to the standardized 7-pin socket located at the back of the tractor.

Color	Function	SAE Terminal	SAE Connector
Red	Ground	1	 <p>Viewed From Back</p>
	Not Used	2	
Yellow	Left Turn & Hazard	3	
	Not Used	4	
Green	Right Turn & Hazard	5	
Brown	Tail Lights	6	
	Auxiliary Power	7	

NOTE: The brake wire should only be connected to the #4 terminal if the #4 terminal on the tractor is confirmed to be a brake light terminal. If the tractor does not have a brake light terminal, cap / seal off the end of the brake wire of the implement (secure to other wires).

6.3 HYDRAULIC HOOK-UP

Pull Type: Requires 25 GPM @ 3000 PSI.

Call the factory if additional information is needed.

IMPORTANT

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



WARNING

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

6.4 PTO DRIVELINE



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.



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 mixer drive line.

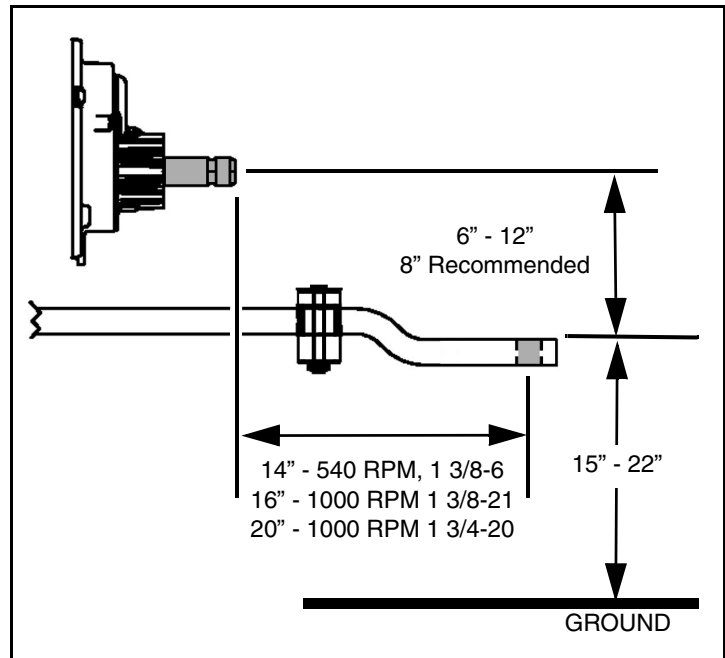
See your PTO Installation, Service, and Safety Instruction Manual for additional PTO details. Call the factory for a replacement manual at 1-800-325-9103.

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

6.4.1 Tractor Drawbar Setup

This mixer may be either 540 or 1000 RPM depending on the model. Do not operate 540 RPM implements at 1000 RPM, or 1000 implements at 540 RPM.

Set your tractor drawbar to conform to the standard dimensions as shown. An improperly located hitch point may cause damage to the universal joints of the PTO drive shaft. This will ensure that the PTO drive shaft will not be over extended.



6.5 HITCHING TO TRACTOR

Before hitching to the tractor, make sure that there is sufficient ballast on the front axle of the tractor.

Depending on conditions, the ballast weight needs to be adjusted to optimize tractor drive. The front axle load must never, under any circumstances, be less than 20% of the tractor's unladen weight.

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



WARNING

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

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



WARNING

Keep hands, legs and feet from under tongue and hitch until jack is locked into place.

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

Fasten the mixer 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.)

Connect the tractor half of the PTO drive shaft assembly. The PTO 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 mixer drive line.

Before operation and after hitching the tractor to the implement, connect the hydraulic hoses (if applicable) and light cord to the tractor. Place the jack into the storage position. (See 6.5.1 Jack Storage on page 29.)

6.5.1 Jack Storage



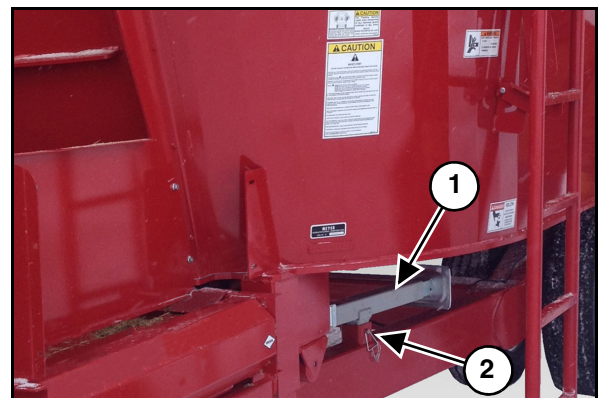
WARNING

Keep hands, legs and feet from under tongue and hitch until jack is locked into place.

After hitching the mixer to the tractor.

Using the handle, raise the jack off the ground and remove the pin. Move the jack (Item 1) to the storage mount under the left hand side of the mixing tub. Reinstall the pin (Item 2) to lock the jack into the transport position.

NOTE: Keeping jack stored in proper position will keep it from getting damaged during transportation.



6.6 START-UP AND SHUT-DOWN



CAUTION

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.

DO NOT allow anyone to operate, service, inspect or otherwise handle this equipment 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 equipment, look in all directions and make sure no bystanders, especially small children are in the work area.



WARNING

Always keep all shields and guards in place and securely fastened. Keep hands, feet and clothing away.

6.6.1 Start-Up

Be sure there is no one inside the mixer and that the mixer is empty.

Enter the tractor and start the engine.

Set the parking brake.

Check to see that the discharge door is closed.

Slowly engage the PTO and operate at idle speed.

Bring PTO RPM up to its rated RPM.

6.6.2 Shut-Down

Disengage PTO.

Turn off conveyor, if equipped.

Fully lower all doors.

Raise slide trays or conveyors, if equipped.

Park the mixer on a flat, level surface.

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

6.7 OPERATIONAL CHECKS



CAUTION

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.

DO NOT allow anyone to operate, service, inspect or otherwise handle this equipment 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 equipment, look in all directions and make sure no bystanders, especially small children are in the work area.



WARNING

Always keep all shields and guards in place and securely fastened. Keep hands, feet and clothing away.

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

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

1. Follow the Start-Up procedure section 6.6.1 Start-Up.
2. Raise and lower the door several times.
3. Lower and raise mixer slide trays or conveyors, if equipped.
4. Operate the mixer augers for approximately 5-10 minutes.
5. Follow the Shut-Down procedure section 6.6.2 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 8.1 LUBRICATION) & (See 8.2 ADJUSTMENTS).

6.7.1 Controls (585-1215)

IMPORTANT

Do not shift the 2-speed gearbox while the tractor PTO is still spinning or gearbox failure could result.

A control box is provided with the mixer. There is a single 2-position switch, one position to shift the 2-speed gearbox to “Low” (Item 1) and one to shift the 2-speed gearbox to “High” (Item 2). Turn the PTO off and wait 10 seconds before attempting to shift the 2-speed gearbox.



6.8 TRANSPORTING



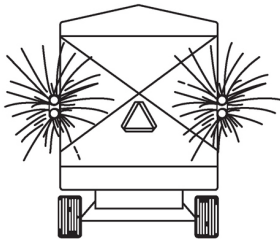
CAUTION

AVOID SERIOUS INJURY OR DEATH

- Read and understand owner's manual before using. Review safety precautions annually.
- Before operating the mixer, 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.



CAUTION



Pull-Type Units

- You must observe all applicable traffic laws when transporting on public roadways. Check local laws for all highway lighting and marking requirements.
- 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 25 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.



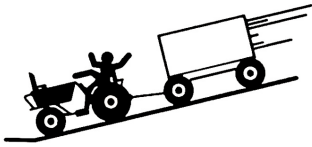
WARNING



To Prevent Serious Injury Or Death

- Keep hands and body out of the hitch area when attaching towing vehicle.
- Keep body clear of crush point between towing vehicle and load.
- Keep hands, legs and feet from under tongue and hitch until jack is locked into place.

WARNING



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.).
- Check that the braking and lighting systems are in good condition. Be sure that the tractor has adequate brakes to stop the loaded mixer.

IMPORTANT

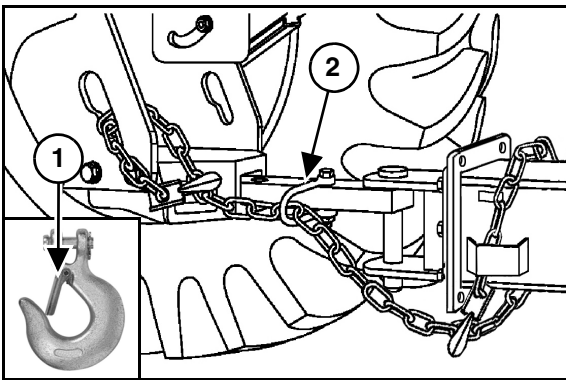
If you will travel on public roads and it is legal to do so, you must know all rules governing such operation. This will include lighting and brake requirements in addition to traffic rules.

NOTE: For Truck Mounted models, an Optional Highway Lighting Package is available to assist in meeting these requirements. See your Meyer Dealer for Details.

6.8.1 Safety Chain

WARNING

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 mixer.

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 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 mixer.

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 who will supply you with the proper chain for your application. Do not operate on public roads until you are able to travel with the safety chain properly installed.

6.8.2 Brake Information (Optional)

A brake system is recommended for any mixer operated on public roads and may be a requirement.

6.8.2.1 Pedal Operated Hydraulic Brakes



At no time should the brake system be used as a parking brake. With loss of hydraulic pressure, the brakes will lose their holding power.

This brake system is a one hose system. The single hydraulic hose must be connected to the tractor remote pedal port.

Applying The Brakes - Gradually apply the tractor brake pedal to apply the brakes.

Releasing The Brakes - Release the tractor brake pedal to release the brakes.

6.8.3 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 2/3's 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. A tractor with this recommended weight for your machine is normally adequate for towing the loaded machine under average conditions. Unit weight will vary depending on door and option selected.

Gross Weight

MIXER WEIGHT, EMPTY (LBS)		UNDERCARRIAGE WEIGHT (LBS)		LOAD (LBS)		GROSS WEIGHT (GW) (LBS)
	+		+		=	GW
	+		+		=	
	+		+		=	
	+		+		=	

Minimum Required Weight of the Tractor

2/3		GROSS WEIGHT (GW) (LBS)		MINIMUM TRACTOR WEIGHT (LBS)
0.667	x	GW	=	TW
	x		=	

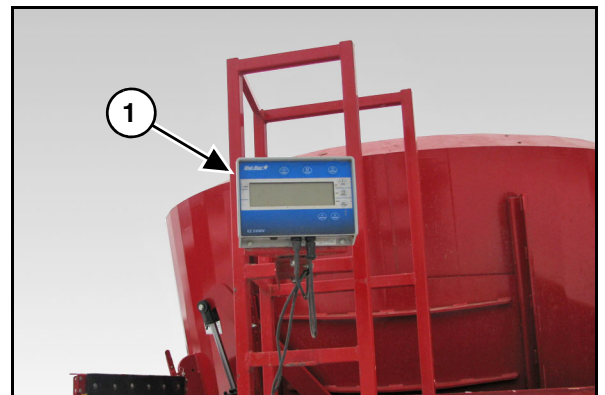
6.9 OPTIONAL EQUIPMENT

Digital Scale Indicator

Refer to scale indicator (Item 1) manufacturer's operator manual for operation and maintenance.

NOTE: Some scale drift may occur after the scale is turned on but should level out within 10 to 15 minutes. Temperature changes may also cause some drifting.

See your Digi-Star manual for additional scale information.





7.0 OPERATION



CAUTION

DO NOT allow anyone to operate, service, inspect or otherwise handle this mixer 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 mixer, look in all directions and make sure no bystanders, especially small children are in the work area.

Do not climb or step onto the platform or ladder before the parking brake has been applied.

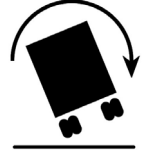
Turn on level ground. Slow down when turning.

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 GENERAL

The mixer is designed for blending dairy and beef rations. The mixer performance can vary according to the difference in material, loading sequence, mixing speed and unloading methods. The following guidelines should be understood before operating the mixer.

A new mixer will need an initial run-in period to polish the augers and mixer sides to achieve correct material movement inside the mixer. Until the unit is polished inside the user may experience material spillage, dead spots, or increased horsepower requirements. The load size may need to be reduced until the unit is polished inside.

IMPORTANT

Always operate at the rated PTO speed but DO NOT EXCEED THE RATED PTO SPEED. If the mixer is operated faster than the rated PTO speed the strain on the drive train and mixer is greatly increased.

IMPORTANT

Do not force hay into the auger with loader or any other device.

IMPORTANT

Be aware of the overall size of the mixer to allow clearance through doorways.

IMPORTANT

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

7.1.1 Material



WARNING

Never hand feed material into mixer while it is running. Augers may cut or grab hands, clothing, or material being loaded, causing severe injury. Always stop the tractor's engine before hand loading materials.

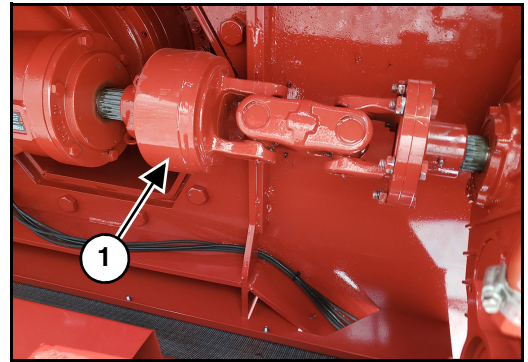
Some feed materials will need to be processed alone in the mixer before they can be efficiently mixed with other feed materials.

- Large square or round bales of alfalfa
- Large square or round bales of high moisture content
- Large square or round bales of long mixed grasses, wheat or oat hay and crop residue bales (straw or soybean stubble)
- Very light and bulky feed material

NOTE: Always remove any twine, net, or plastic wrap from bales before loading into mixer.

7.1.2 Cutout Clutch (F585-F1215 Models)

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. This may occur when mixing or unloading a heavy mix or if an obstruction has lodged within the mixer. This is to protect the driveline from damage. To re-engage the machine, simply shut down the PTO and allow the driveline to come to a stop. The PTO can then be re-engaged to restart the mixer. The cutout clutch will either re-engage upon shut down of the PTO or just before it comes to a complete stop.



7.1.3 Shear Bolt PTO, Primary (F355/F470)

The primary driveline on the F355 & F470 has a shear bolt design. When the torque reaches its maximum load, the shear bolt will shear to protect the system. Replace the 3/8"-16 x 1" grade 5 shear bolt and 3/8-16 locknut to reset the PTO.

7.2 LOADING



DO NOT ENTER MIXER CHAMBER WHILE MIXER IS RUNNING! Shut off and lock out power before attempting to clear an obstruction or to perform work inside the mixing chamber. (See 5.3 SHUTOFF & LOCKOUT POWER on page 24.)



Be aware of power lines and other overhead obstructions when loading with a telescopic arm or loader. Failure to obey warnings could cause serious injury or death.



Comply with the safety instructions stipulated in the User Manuals for the operation / handling equipment used for loading the mixer.

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.

Do not climb or step onto the platform or ladder before the parking brake has been applied.



Overloading may cause failure of axles, tires, structural members, hitches, loss of vehicle control. **DO NOT** exceed maximum gross weight. (See 9.0 SPECIFICATIONS on page 67.)

NOTE: Overloading can have detrimental effects on the integrity of the implement and it's safe use. Overloading will void warranty and increase risk to the operator's safety. Always be aware of your gross weight.

MAXIMUM FORMULA MIXER GROSS WEIGHT	
MODEL	LBS
F355	
F470	
F585	
F700	
F815	
F1015	
F1215	

MATERIAL ESTIMATED WEIGHT PER CUBIC FOOT	
MATERIAL	LBS / CU.FT.
Soybeans	47 lbs.
Cotton Seed (Dry)	20 lbs.
Corn (Shelled)	45 lbs.
Corn Silage	30 lbs.
Haylage	20 lbs.

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

When loading material into the mixer with an end-loader, dump the material into the center of the mixer.

1. Be sure that mixer is parked on a level surface.
2. The tractor should be straight in line with the mixer.
3. Completely close the mixer discharge door(s).
4. Set hay stops according to the instructions in this manual.
5. Enter the tractor and start the engine.
6. Engage the PTO / hydraulics.
7. Set the tractor engine to operate at approximately 3/4 of rated PTO speed.
8. Load baled hay into the center of the mixer.
9. Allow mixer enough time to process the bale before adding other ingredients (4-10 minutes).

NOTE: Processing of long stem forages will continue as other materials are added and mixed. Be careful not to over process these materials before adding other ingredients.

NOTE: Using the mixer two speed shiftable gearbox, roughages can be processed in “Low” or “High” depending on how fast the bale needs to be processed.



When loading from a raised bay or platform, adopt the necessary measures (safety rails, etc.) to avoid people or equipment from falling into the machine.

7.2.1 Loading Steps

NOTE: The loading sequence could vary.

The following is an example of a typical loading sequence:

1. Load and process long stemmed materials.
2. Load haylage and corn silage.
3. Load minerals, proteins, and other small quantity ingredients.
4. Load grains, wet and dry commodities, etc.
5. Load all liquid fats, water, other liquids. Always load liquids at the center of the mixing chamber.



Load all ingredients as quickly as possible. Allow a final mix time of 3-7 minutes, or whenever the load looks consistently mixed.



Never load long stem bales last. They will not be processed or mixed into the ration and may cause unloading difficulties or spillage.

7.3 MIXING

Normal mixing speed is 3/4 to full PTO speed. Time available to mix, thoroughness of the mix, and ingredients are all factors that must be considered when deciding on when and how fast to operate the mixer.



DANGER

DO NOT ENTER MIXER CHAMBER WHILE MIXER IS RUNNING! Shut off and lock out power before attempting to clear an obstruction or to perform work inside the mixing chamber. (See 5.3 SHUTOFF & LOCKOUT POWER on page 24.)

IMPORTANT

Always operate at the rated PTO speed but DO NOT EXCEED THE RATED PTO SPEED. If the mixer is operated faster than the rated PTO speed the strain on the drive train and mixer is greatly increased.

IMPORTANT

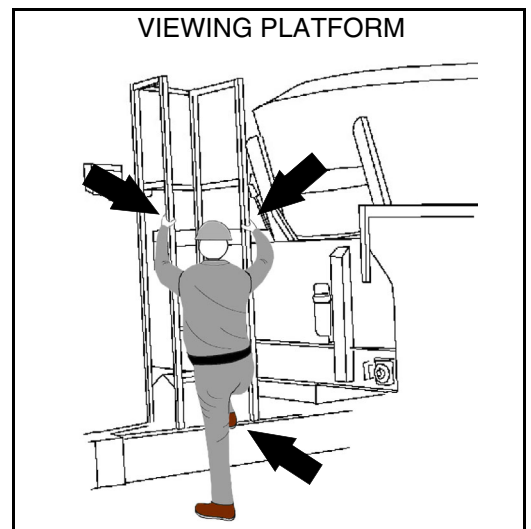
Do not force hay into the auger with loader or any other device.

7.4 PLATFORM OPERATION

Park the tractor on a flat, level surface.

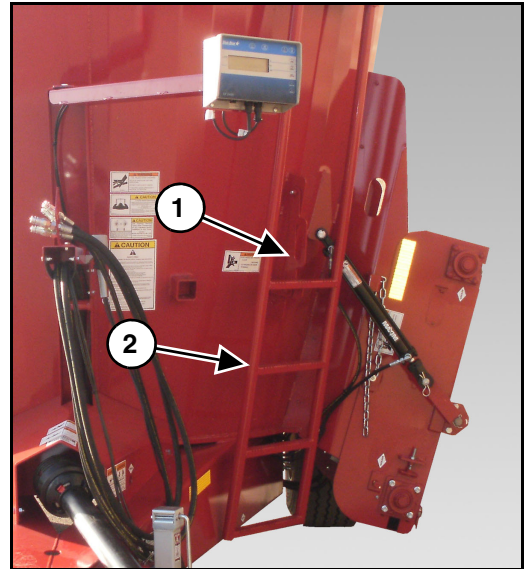
Engage the parking brake.

NOTE: Always maintain a three-point contact at all times when getting on and off the ladder. Use the ladder rails and steps when climbing the ladder.



7.5 FOLDING LADDER

To unfold the ladder, release latch (Item 1) and pull ladder fully out (Item 2). To return ladder to storage position, pull ladder out to “unlock” it and guide the ladder support back up to its original position. Replace latch.



7.6 UNLOADING



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.



DO NOT ENTER MIXER CHAMBER WHILE MIXER IS RUNNING! Shut off and lock out power before attempting to clear an obstruction or to perform work inside the mixing chamber. (See 5.3 SHUTOFF & LOCKOUT POWER on page 24.)

NOTE: Unload the mixed ration within a short time of mixing. A fully loaded mixer which is bounced over rough terrain or allowed to settle will require more horsepower during start-up.

1. Enter the tractor, start the engine, release the parking brake.
2. Move the tractor and mixer to the unloading area.
3. Be sure that mixer is parked on a level surface.
4. The tractor should be straight in line with the mixer.
5. Shift hydraulic sliding base discharge into working position, or lower slide tray / incline extension / chain and slat (if equipped).
6. Using the two speed shiftable gearbox, shift the gearbox into “Low” to ease the start of a full load for unloading.
7. Engage the PTO.
8. Set the tractor engine to operate at approximately 1/2 of rated PTO speed.
9. Open discharge door slowly to adjust the amount of material to be discharged. Adjust door height or conveyor speed for desired flow of feed.
10. After the load begins to discharge, increase the tractor RPM to full rated PTO speed to ensure fast and thorough clean out while driving forward along the discharge path.

NOTE: The mixer PTO MUST be stopped before shifting the 2-speed gearbox to prevent damage to the gearbox.

11. The 2-speed gearbox can be shifted into “HIGH” during the unloading process. Stop the PTO prior to shifting. This will help remove any feed remaining on the augers and assist in keeping an even feed flow until the mixer is empty.
12. When finished unloading, reduce engine speed to idle and disengage the PTO / hydraulics.
13. Move the mixer forward, away from the unloaded material.
14. Close the discharge door.

15. Shift hydraulic sliding base discharge into storage position, or raise slide tray / incline extension / chain and slat (if equipped).
16. Park the mixer on a flat, level surface.
17. Engage the parking brake, stop the engine and exit the tractor.
18. Disconnect the driveline.

7.7 UNHOOKING THE TRACTOR



WARNING

Keep hands, legs and feet from under tongue and hitch until jack is locked into place.

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 in the key slot holes on the front of the mixer to keep them clean.
4. Remove the light cords and any optional equipment connections.
5. Remove the jack from the storage mount and reinstall the jack to the mount. Crank the jack down until the hitch lifts off the tractor draw bar.
6. Remove the hitch pin.
7. Unhook safety chain from tractor drawbar and intermediate support.
8. Slowly drive the tractor away from the implement.

7.8 HAY STOP ADJUSTMENT



CAUTION

Do not adjust the hay stops while the mixer is running. Moving feed inside the mixer can make the hay stop move suddenly causing injury to the person making the adjustment.

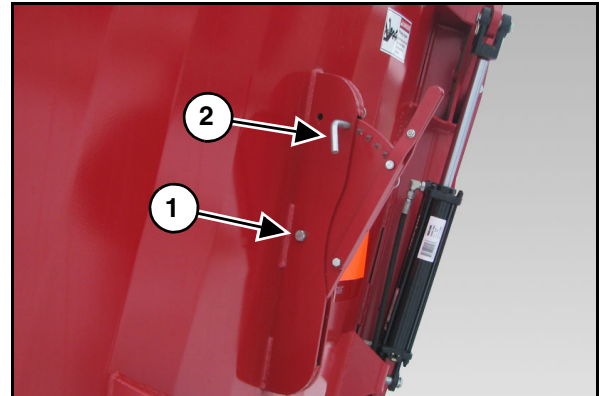


CAUTION

Never operate the mixer without the hay stop lock bolt installed.

7.8.1 Hay Stop Lock Bolt

The hay stop lock bolt (Item 1) prevents the hay stop from rotating past the intended range of operation. If the hay stop bolt and the positioning pin (Item 2) are removed, the hay stop could contact the moving auger and cause damage to the hay stop and auger.



Position	Setting	Material
A	High	Light and bulky material (dry grasses)
B	Medium High	Alfalfa bales and other forages
C	Neutral	Unrestrained movement of feed
D	Medium Low	Heavier rations
E	Low	Aggressive cutting

**Hay Stop
Position A**



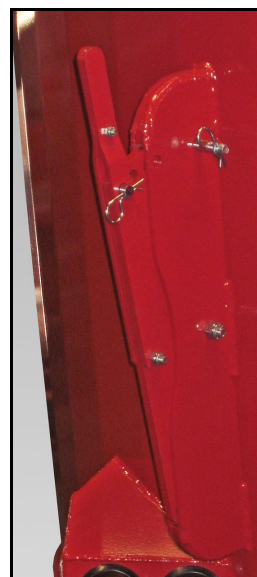
**Hay Stop
Position B**



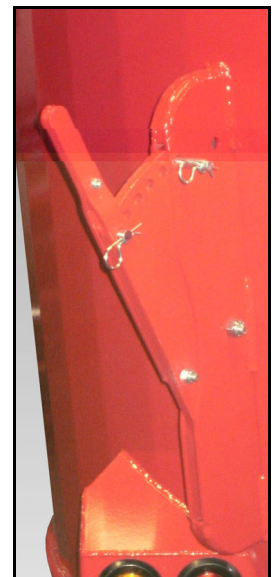
**Hay Stop
Position C**



**Hay Stop
Position D**



**Hay Stop
Position E**



7.9 MIXER TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE SOLUTIONS
Forage is Cut Too Short	<ul style="list-style-type: none"> • Reduce the initial processing time. • Adjust hay stops to a less aggressive or neutral position. • Reduce total loading time. • Reduce the mixer RPM to limit aggressiveness in processing. • Modify the knife type, quantity, setting or placement. • If the machine is equipped with a 2 speed shiftable gearbox, shift into “Low”.
Spillage is Occurring	<ul style="list-style-type: none"> • Reduce load size. • Reduce tractor and/or mixer RPM. • Make sure machine is level. • The load size may need to be reduced until the unit is polished inside. • Adjust hay stops to a less aggressive or neutral position. • Adjust knives to a less aggressive position. • If spillage still occurs, the optional side extensions or hay retention ring may need to be installed.
Requiring High Horsepower	<ul style="list-style-type: none"> • Reduce load size. • Adjust hay stops to a less aggressive or neutral position. • The load size may need to be reduced until the unit is polished inside. • Modify the knife type, quantity, setting, or placement. • If the machine is equipped with a 2 speed shiftable gearbox, shift into “Low”.
Dead Spots	<ul style="list-style-type: none"> • The load size may need to be reduced until the unit is polished inside. • The auger scraper may need to be adjusted. (See the Adjustments Section.)
Digital Scale Indicator	<ul style="list-style-type: none"> • Refer to scale manufacturer’s operator manual for operation and maintenance. • Some scale drift may occur after the scale is turned on but should level out within 10 to 15 minutes. • Temperature changes may also cause some drifting.
Planetary Reservoir is Overflowing	<ul style="list-style-type: none"> • Check oil level when cold. • Clean Breather. • Make sure hoses are not kinked or clogged. • Change oil.
2-Speed Reservoir is Overflowing	<ul style="list-style-type: none"> • Check oil level when cold. • Clean Breather. • Make sure hoses are not kinked or clogged. • Change oil.



8.0 MAINTENANCE

8.1 LUBRICATION



CAUTION

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.

NOTE: When welding do not allow electrical current to flow through bearings, roller chains, or scale weigh bars. Ground the welder directly to the part being welded. Always disconnect the power cord from scale indicator before welding.

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.

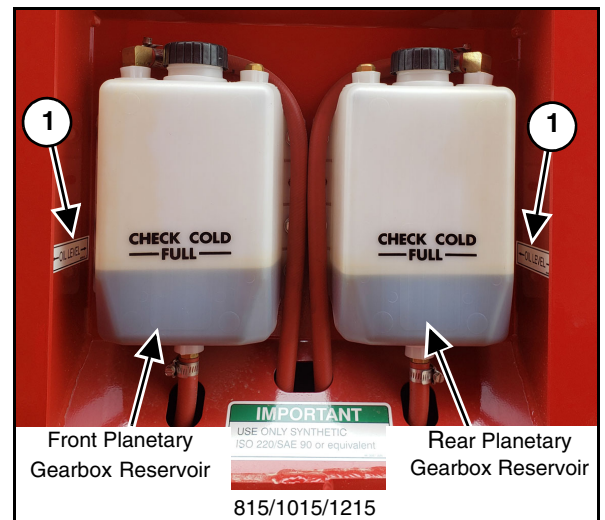
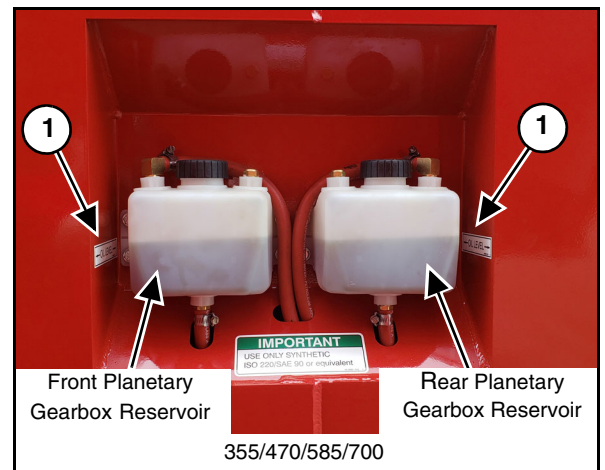
NOTE: Over lubrication is a major cause of bearing failures. Please relubricate conservatively when unsure of bearing requirements.

8.1.1.1 Daily:

NOTE: See Specifications, Page 56 for proper oil type and capacities.

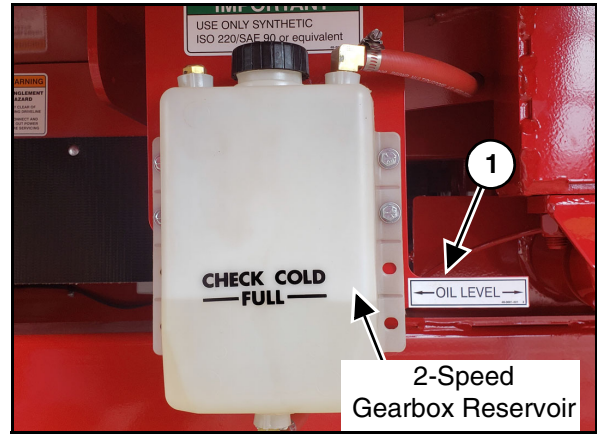
Check the planetary gearbox oil levels daily to prevent abnormal component wear. Add new oil to the planetary reservoir tank if the oil level is not at the oil reservoir mark (Item 1).

Check for any oil leaks. If leaks occur, correct the source of the leak.



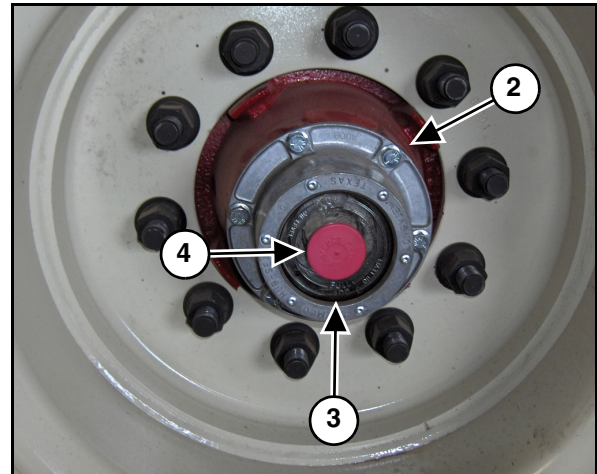
Check the 2-speed gearbox oil level daily to prevent abnormal component wear. Add new oil to the reservoir tank (Item 1) if the oil level is not at the oil reservoir mark.

Check for any oil leaks. If leaks occur, correct the source of the leak.



Oil Hubs

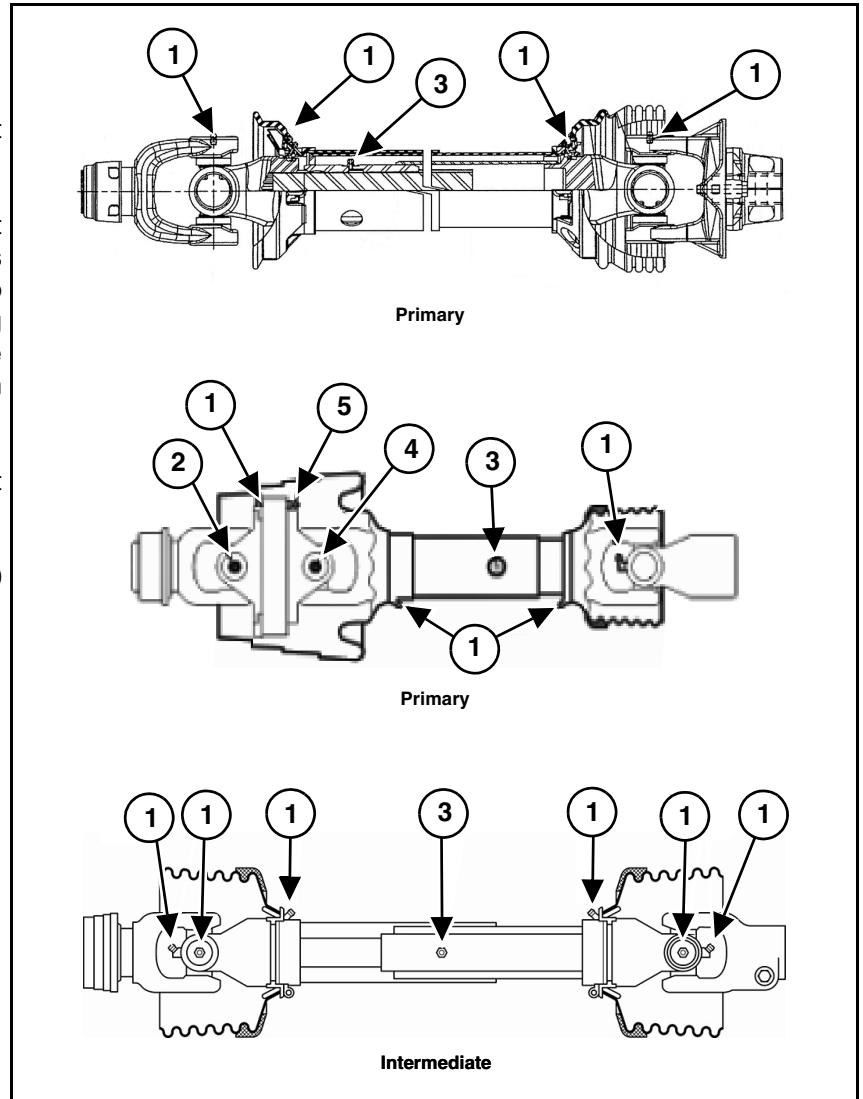
Check the oil level in each wheel hub (Item 2). The oil should be 1/2" high in the sight glass (Item 3). If low, add EP80/90 gear lube through the pop out rubber plug (Item 4) at the center of the hub.



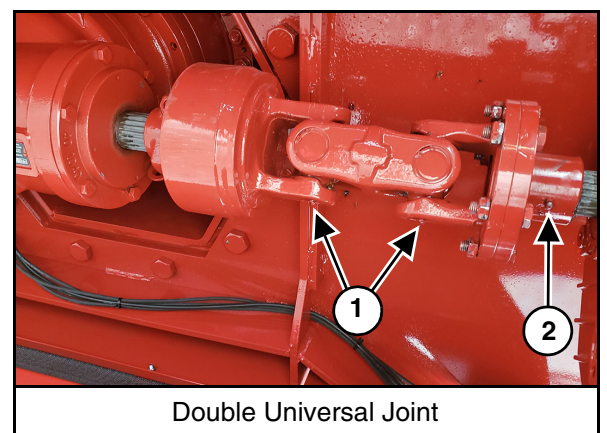
8.1.1.2 Every 8 Hours hours:

Grease all PTO driveline zerks

1. Grease PTO locations every 8 hours.
2. Lubricate the outer CV cross kit with about 5 pumps of grease every 8 hours.
3. Grease telescoping members until it adequately covers the sliding members every 8 hours. 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.
4. Lubricate the inner CV cross kit with about 15 pumps of grease every 8 hours.
5. Lubricate the double yoke with about 10 pumps of grease every 8 hours.

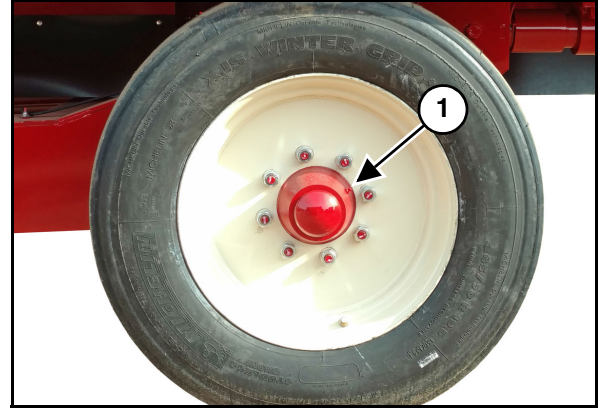


Grease all universal joints (Item 1) and the slide (Item 2).



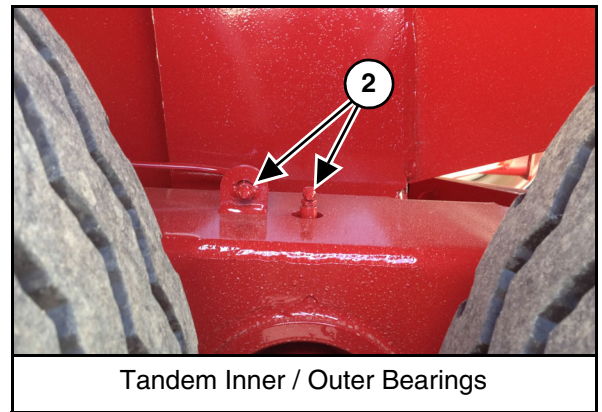
8.1.1.3 Monthly:

Grease the hubs through the zerk (Item 1) in each hub. Be careful not to over grease and force the seal out of the back side of the hub.

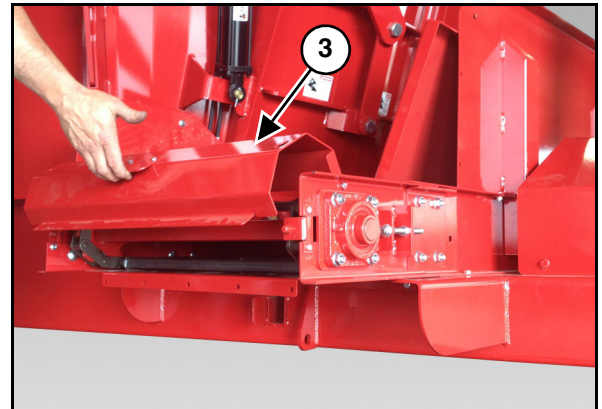


Optional Equipment Maintenance (If Equipped)

Grease the tandem inner / outer bearings (Item 2).

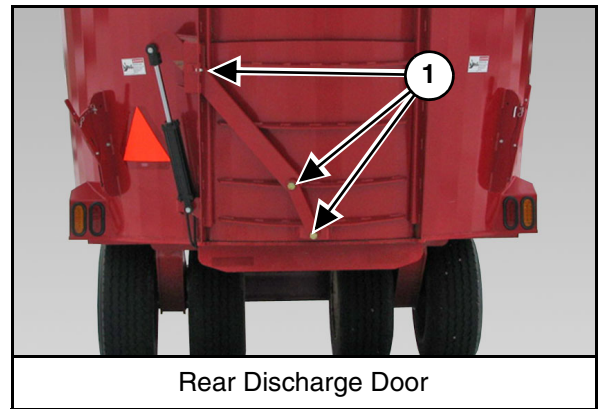


Clean out under chain return shield (Item 3).



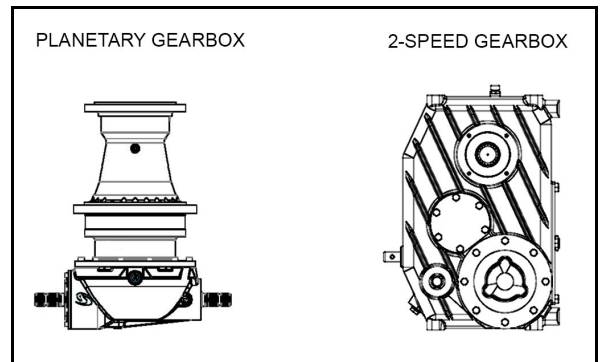
8.1.1.4 Every 40 hours:

Oil Door Pivots (Item 1).



8.1.1.5 First 50 hours:

First oil change in the planetaries (See 8.1.3.1 Planetary Gearbox) and 2-speed gearbox.(See 8.1.3.2 2-Speed Gearbox).



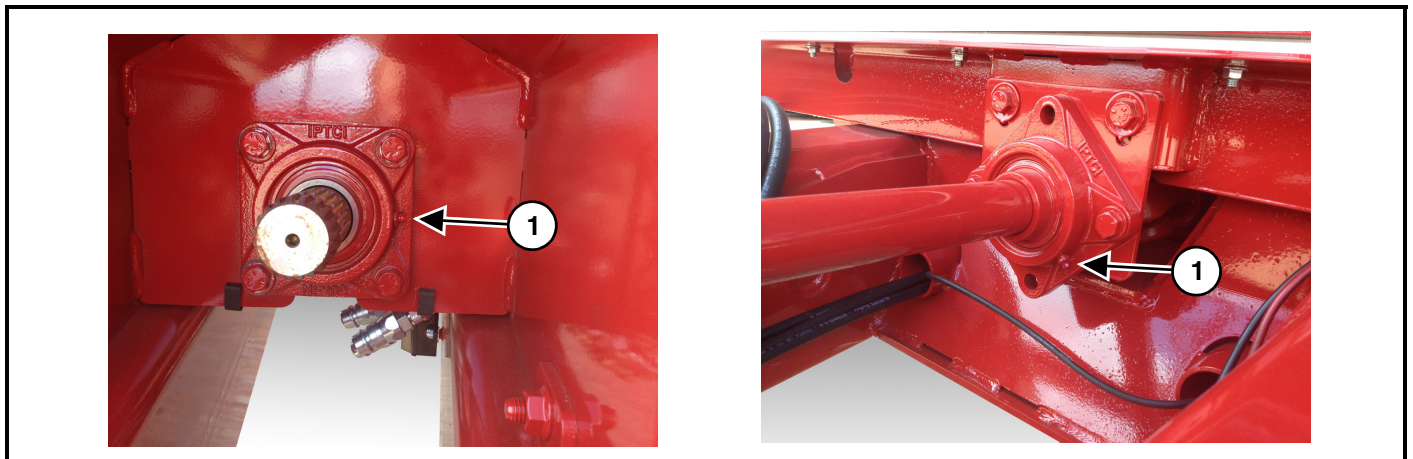
8.1.1.6 Every 250 Hours:

Driveline

NOTE: The number of input bearings will vary depending upon your model mixer.

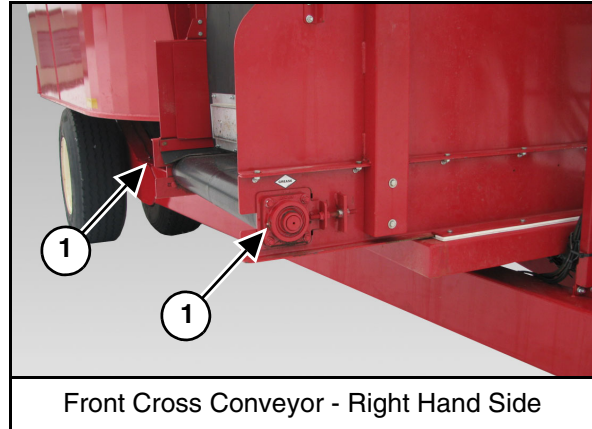
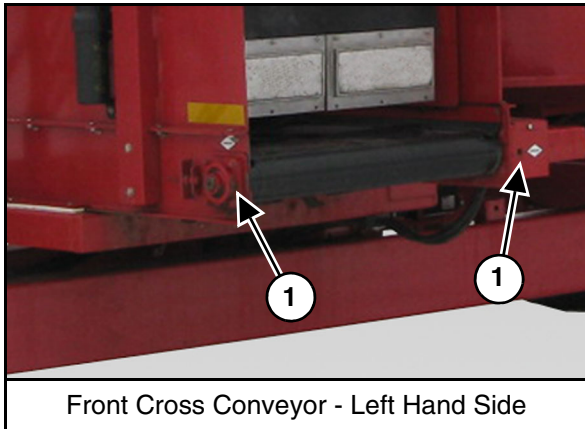
NOTE: Shielding has been removed for illustration purposes only.

Grease all input bearings with 1 pump of grease (Item 1). Be careful not to over grease.



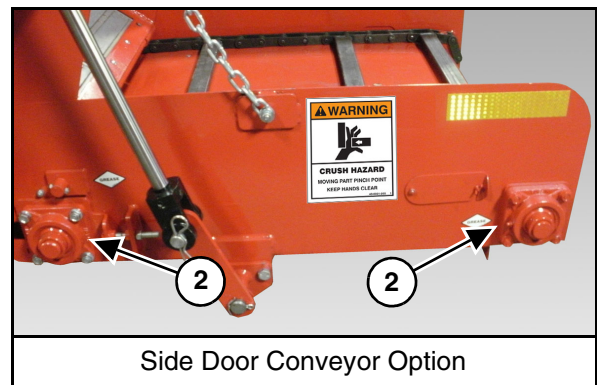
Optional Equipment Maintenance (If Equipped)

Grease the four (4) front cross conveyor bearings (Item 1).



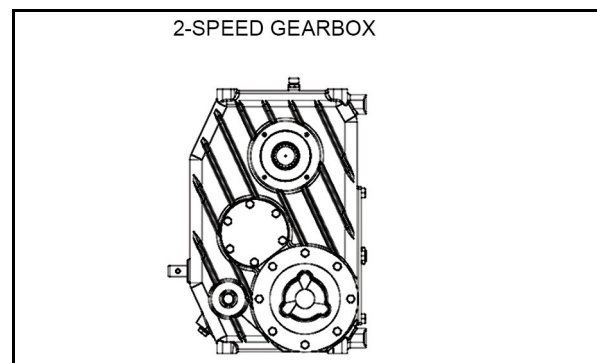
Side Door Conveyor (If Equipped)

Grease the four (4) side door conveyor bearings (Item 2) (both sides).



8.1.1.7 Semiannually or Every 500 - 600 hours (Whichever Is First):

Change oil in the 2-speed gearbox. (See 8.1.3.2 2-Speed Gearbox)

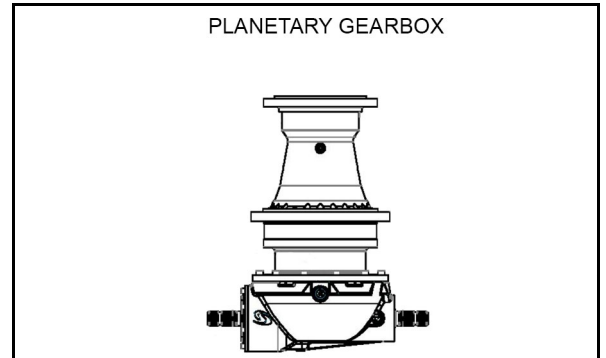


8.1.1.8 Annually:

Clean and repack the wheel hubs with axle grease. (See 8.1.2 Grease Packed Hubs)

8.1.1.9 Annually or Every 2000 Hours (Whichever is First):

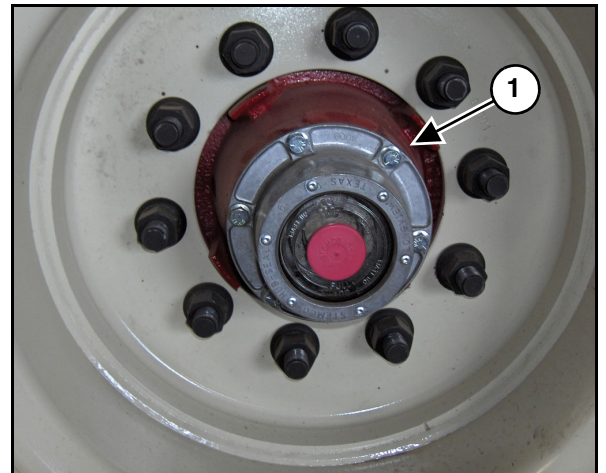
Change oil in the planetary gearboxes. (See 8.1.3.1 Planetary Gearbox)



8.1.1.10 Every Two Years or When Discolored:

Oil Hubs

Drain oil from wheel hubs (Item 1) and refill with EP80/90 oil every 2 years or if oil becomes discolored from water or other contamination.



8.1.1.11 Every 5000 Hours:

Replace all planetary bearings.

Change external planetary O-rings.

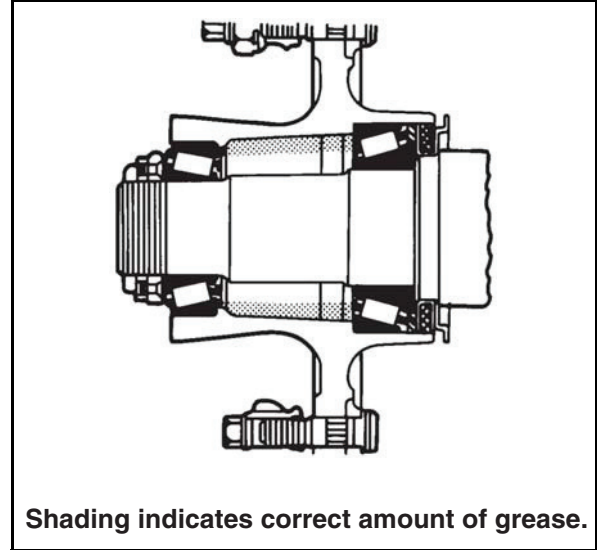
Check the extent of wear on all planetary gears.

8.1.2 Grease Packed Hubs

- Use a pressure packer to pack the bearing cones with grease by forcing grease into the cavities between the rollers and cage from the large end of the cone. If a pressure packer is not available, pack the bearings by hand.
- Apply a light coat of grease to the spindle bearing journals.



When you lubricate the wheel-end cavity with approved grease, pack the area of the hub between the two bearings with grease only up to the smallest diameter of the bearing cups. Do not install too much grease in the wheel-end cavity. Remove excess grease, which can contaminate the brakes and affect bearing life and braking performance. **Shading indicates correct amount of grease. Damage to components can result.**



- Pack the area of the hub between the two bearings with grease up to the smallest diameter of the bearing cups. Remove excess grease.
- Install and tighten the hub retention hardware. Apply a light coat of approved NLGI 1 or 2 grease to the hubcap interior and across the face of the outer locknut. This will indicate that NLGI 1 or 2 grease was used, as well as help prevent corrosion of these parts.

8.1.3 Gearbox Oil Change



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.



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.

NOTE:

- In order to avoid sludge deposits, change the oil while the gear unit is still warm.
- For an effective oil change, the unit should be flushed with a liquid detergent recommended by the lubricant supplier.
- The mixer should be level when changing gearbox oil.

8.1.3.1 Planetary Gearbox

Draining

All Models: Place a container of sufficient capacity under the gearbox (Item 4).

355 / 470 Models: Drain the planetary by removing the drain plug (Item 5).

585 / 700 / 815 / 1015 / 1215 Models: Drain the planetary by removing the drain plug (Item 6).

All Models: Rinse the bottom hose with clean oil to remove any metal particles or trapped water. Reattach hose, clamp, or drain plug. After the unit is completely drained, reinstall the drain plug or hose and hose clamp.

Filling

Filling with an oil pump:

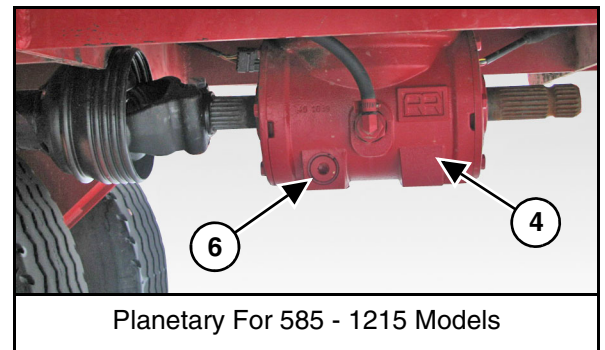
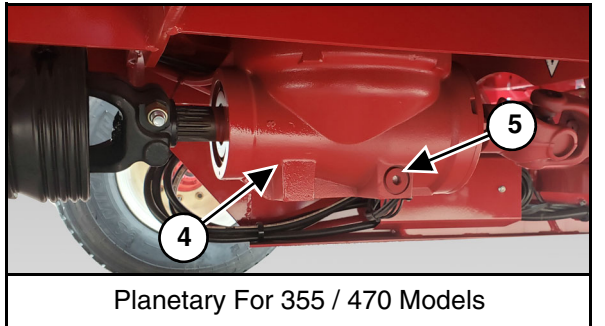
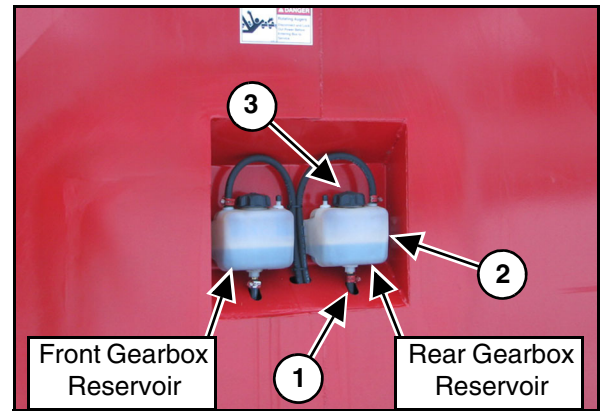
(Call the factory to purchase an oil pump kit, Part #: VA-OP.)

Loosen the hose clamp and detach the lower hose (1) on the reservoir (Item 2). Unbolt reservoir and lay so the top hose and reservoir is below the hose used for filling (1).

Connect oil pump to lower hose and fill with oil until the catch basin fills with approximately 2 quarts of oil. Discard this oil if it is dirty. Reattach the lower hose (1) with the hose clamp. Bolt the reservoir back in place. Fill the reservoir to the oil level mark and reinstall the cap (Item 3).

NOTE: See Planetary Lubrication Specifications on page 56.

Inspect the reservoirs breather, make sure it is not plugged, and check for leaks.



PLANETARY LUBRICATION SPECIFICATIONS				
Model	Part Number	Description	Oil Type	Capacity Per Planetary (Including Reservoir)
355 / 470	119-1680-13.5-1	1680 Planetary 13.5:1	Synthetic ISO 220 Or Equivalent	Approx. 12.68 Quarts
470 (Optional 1000 RPM)	119-1680-24.18-1	1680 Planetary 24.18:1	Synthetic ISO 220 Or Equivalent	Approx. 12.68 Quarts
585 / 700	119-18-13.92-1	1800 Planetary 13.92:1	Synthetic ISO 220 Or Equivalent	Approx. 14.8 Quarts
815 / 1015	119-21-25.67-1	2100 Planetary 25.67:1	Synthetic ISO 220 Or Equivalent	Approx. 18.5 Quarts
815P/1015P/1015C/1215	119-32-24.8-1	3200 Planetary 24.8:1	Synthetic ISO 220 Or Equivalent	Approx. 24.3 Quarts

8.1.3.2 2-Speed Gearbox

Draining

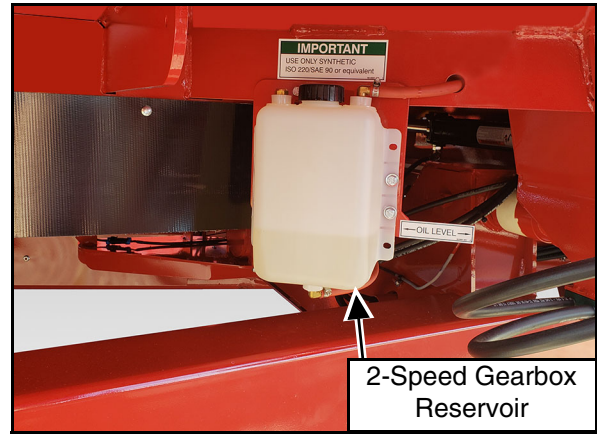
Place a container of sufficient capacity under the gearbox.

Drain the unit by removing the plug from the bottom of the gearbox. After the unit is completely drained, reinstall the plug.

Filling

Remove filler plug and fill with oil. for proper oil type and capacity.

Replace the filler plug.



IMPORTANT

Check the gearbox oil levels regularly to prevent abnormal component wear. Add oil to the reservoir tanks if oil level is not at the oil level mark.

2-SPEED GEARBOX LUBRICATION SPECIFICATIONS

Model	Part Number	Description	Oil Type	Capacity (Including Reservoir Tank)
585 / 700	119-2SP-1.5-2.7-1	1.5:1 / 2.7:1	Synthetic ISO 220 Or Equivalent	Approx. 10.5 Quarts
815 / 1015	119-2SP-1.0-1.5-6	1.0:1 / 1.5:1	Synthetic ISO 220 Or Equivalent	Approx. 10.5 Quarts
815P/1015P/ 1015C/1215	119-2SP-1.0-1.5-9	1.0:1 / 1.5:1	Synthetic ISO 220 Or Equivalent	Approx. 14 Quarts

8.2 ADJUSTMENTS



CAUTION

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.

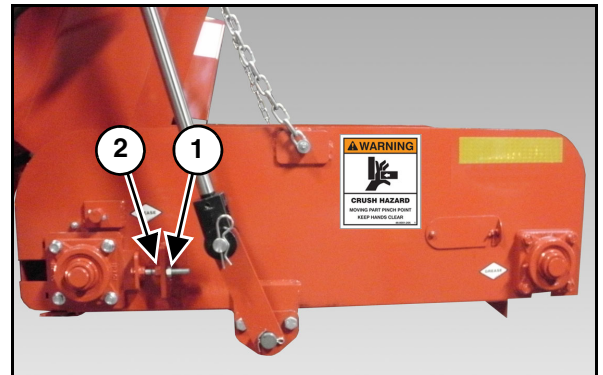


CAUTION

If work must be done inside the mixer put a protective cover over the auger knives to avoid injury. The hopper and flighting may be slippery. Use caution when stepping on or standing inside the mixer.

8.2.1 Side Discharge Conveyor

To adjust tension of the chain, loosen the inner nut (Item 1) and either tighten or loosen the outer nut (Item 2) as needed. Count the number of turns you are adjusting so you can adjust the other end. Once you have proper tension, retighten the inner nut (Item 1) on both sides.



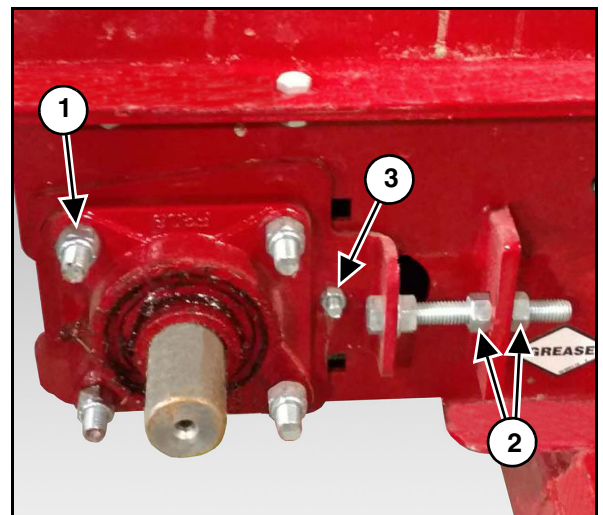
Side Discharge Conveyor

8.2.2 Tracking

NOTE: The primary discharge side for the two motor flat conveyor is the side that is used for discharge the most.

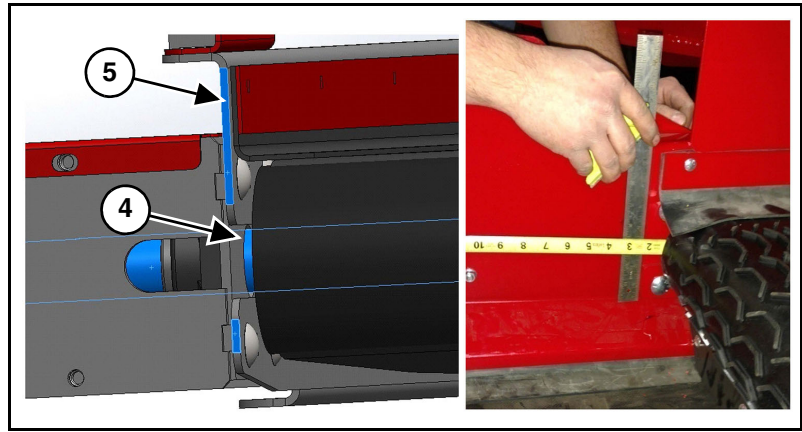
Step 1: Loosen the lock nuts (Item 1) holding the four bearings to the conveyor. Loosen the tightener nuts (Item 2) on all adjuster locations. Do not loosen the scraper bolts (Item 3).

Step 2: Locate the primary discharge side of the conveyor.



Step 3: Set the primary side as follows:

Use the primary side adjusters to remove at least half of the belts slack. Measure, as shown below, until both sides of the drive pulley shaft (Item 4) are set at exactly the same from the end of the conveyor frame (Item 5).



Step 4: Once the primary drive pulley is set and square, tighten the lock nuts on both primary drive pulley bearings. Lock both adjusters on the primary drive pulley.

Step 5: With the primary discharge drive pulley set, move to the other side of the conveyor. Start to evenly tighten the belt by alternating sides on the non-primary discharge pulley adjusters. Tighten until the lowest hanging part of the belt is flush with the bottom of the conveyor frame. Once the belt is tight (Do not over tighten belt), measure the distance from the non-primary discharge shaft to the end of the conveyor frame, same as shown in Step 3. Do that for both shaft ends of the non-primary discharge pulley.

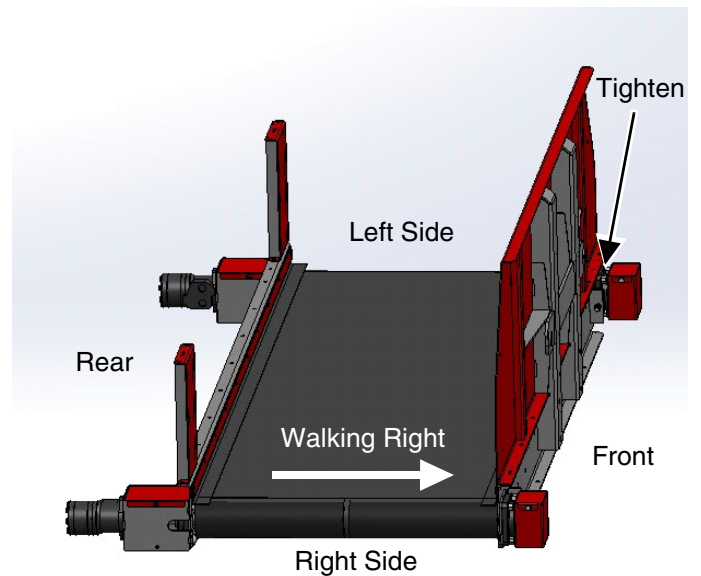
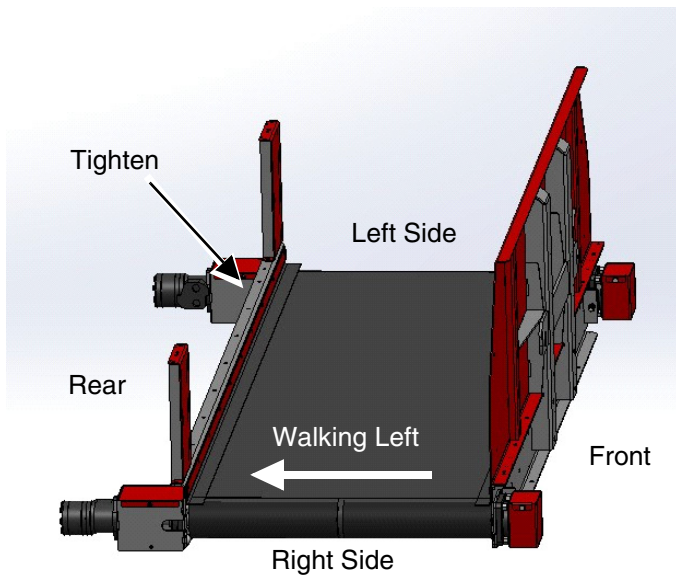
Step 6: Take the shortest measurement from either end and set both ends of the non-primary discharge pulley to the same measurement.

NOTE: If you run out of adjustment on the non-primary side, repeat Step 3 and remove more slack from the belt using the primary side.

Step 7: With the belt tight and the non-primary discharge pulley square with the conveyor frame, tighten the adjuster lock nuts for both non-primary discharge pulley bearings.

Step 8: Run the mixer conveyor for 2-3 minutes (both directions for front flat conveyors) at full RPM. If you notice the belt walking to the left or right while looking at the primary discharge end of the conveyor, stop the conveyor. Check your measurements to make sure both primary and non-primary discharge pulleys are square with the conveyor frame. If the conveyor pulleys are square but the belt continues to walk, use the images below to unlock and tighten the corresponding non-primary discharge pulley bearing adjuster (See Below). Continue to slightly adjust and run the conveyor until the belt stops walking.

NOTE: If the center v of the belt is completely out of the pulley groove, you may have to loosen both non-primary pulley adjusters to center the belt. Retighten to your measurement used in Step 6 before adjusting the conveyor as shown below.



NOTE: Both images are viewed as if the conveyor is a right primary discharge.

Step 9: With the belt conveyor tracking properly, make sure all bearing bolts are tight and adjusters are locked.

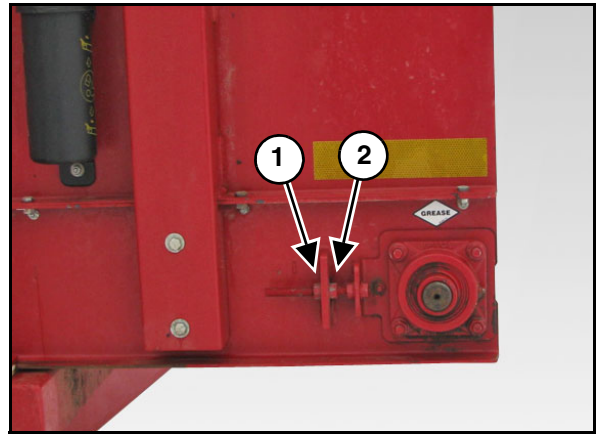
Step 10: Watch the conveyor when discharging your feed ration to make sure the belt doesn't slip. If the belt is slipping, evenly tighten the non-primary discharge side. Run and check belt alignment. Repeat as necessary.

Step 11: Watch the conveyor when discharging your feed ration to make sure the belt doesn't slip. If the belt is slipping, evenly tighten the non-primary discharge side. Run and check belt alignment. Repeat as necessary.

NOTE: If you run out of adjustment on the non-primary side, repeat Step 3 and remove more slack from the belt using the primary side.

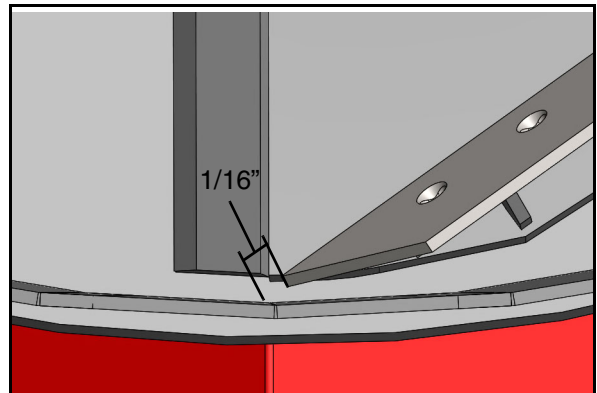
8.2.3 Front Discharge Conveyor - Chain

To adjust tension of the chain, loosen the inner nut (Item 1) and either tighten or loosen the outer nut (Item 2) as needed. Count the number of turns you are adjusting so you can adjust the other end. Once you have proper tension, retighten the inner nut (Item 1) on both sides.



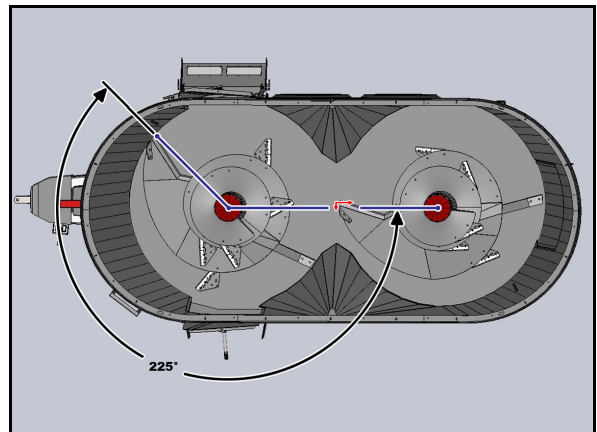
8.2.4 Auger Scraper Plate

Check the auger scraper monthly for proper clearance with the side panel. Locate the closest point along the augers rotation that the scraper comes to the baffles. Adjust the scraper to a 1/16" from the located closest point as shown in the image.



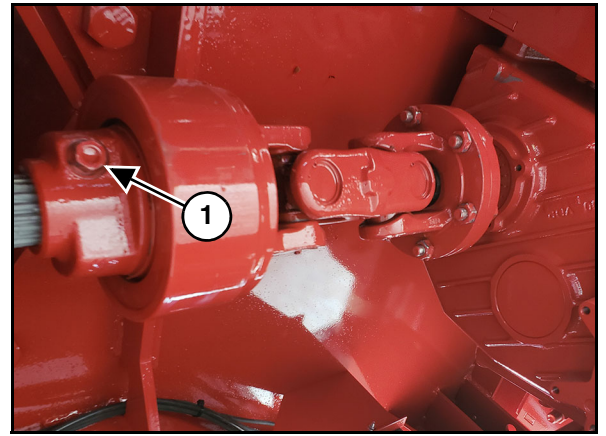
8.2.5 Auger Timing

Auger timing is critical. Whenever disconnecting the PTO connecting the two planetaries, it is critical that the front leading edge be 225° from the rear leading edge when the rear leading edge is pointing to the front auger.



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 (Item 1) 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.

8.2.7 Knives

Knives are designed and intended for processing and mixing rations that include long stem forages.

NOTE: Some rations may require adding or removing knives, or changing knife position to obtain the desired result.

8.2.7.1 Knife Removal

Individual knives may be removed from the auger if the ration does not include hay or includes very small amounts of small square bale hay or tub ground hay. Removing knives will decrease the aggressive cutting action on the stem length of the ration and may also reduce horsepower requirements.

8.2.7.2 Adding Knives

If the hay in your ration is not being processed enough or fast enough extra knives may be ordered through your dealer. Adding extra knives will help break down and process materials faster, but may increase the horsepower required to process and mix.

8.2.7.3 Knife Placement

The placement of knives towards the bottom of the auger will process the forage faster and make the stem length shorter but may require more horsepower. Placement of knives higher on the auger will assist in breaking up bales faster after initial loading.

8.2.7.4 Knife Position

"Out" Position

When the knives are in the "out" position they tend to move the long stem hay and lighter bulky materials best in the early stages of processing and mixing. This setting may result in feed spillage in certain materials. Knives placed in this setting are very aggressive in processing feed and will also cause an increase in horsepower requirement.

"In" Position

When the knives are in the "in" position they will slow down the long stem hay and lighter bulky materials in the early stages of processing and mixing. Less spillage will occur due to clearance between the knives. This setting is more desirable for heavy rations with long run time and where over processing can occur. Knives placed in this position are less aggressive in processing feed and will reduce the horsepower requirement.

8.2.7.5 Replacing Damaged or Worn Knives

When knives become worn and rounded on the leading edge their efficiency is greatly reduced. This results in longer processing times and increased horsepower requirements. Refer to your parts manual and contact your Meyer MFG dealer for replacement part ordering.

8.2.8 Brake Adjustment

Properly support wheel end to adjust the brakes with the tire assembly removed.

Excessive actuator travel (over one inch) is a sign that the brakes need to be adjusted. Jack wheel/tire off of the ground and rotate tire in the forward direction. The brake adjustment nut is located through a slot at the bottom of the backing plate. Insert brake tool or screwdriver into slotted hole with handle up and bit against the adjusting wheel, pull down on handle and rotate drum in forward direction while tightening. When you can no longer rotate drum in the forward direction, then loosen the large nut on the back side of the brake cluster, located at the 12 o'clock position, one turn, do not take nut completely off, just loosen to allow anchor pin to realign. Take dead blow hammer and tap on brake drum several times around the perimeter, now retighten the large anchor pin nut. Back off adjuster twenty clicks (notches) for two-wheel brake systems and fifteen clicks (notches) for four wheel brake systems, and back off shoe adjuster 10-15 clicks. If there is one spot where the wheel drags just slightly, this is acceptable. As soon as the brake linings are burnished (this requires several braking stops) the brakes will then be set correctly.

8.2.9 Wheel Bearing Preload

1. Chock all four wheels or hitch to tractor with engine off, key removed and parking brake set. Jack empty mixer off ground and support with adequate jack stands.
2. Push back and forth on each wheel assembly. If play is detected, bearings need adjusting.
3. If adjusting bearings, it is suggested the bearings be repacked as described previously.
4. Remove hub cap and remove cotter pin from spindle nut.
5. Tighten spindle nut to remove all play. It should be snug and slight drag can be felt while rotating the wheel.
6. If the cotter pin hole in the spindle does not line up with the notch in spindle nut, back off the spindle nut only enough to line up. Reinstall cotter pin. If cotter pin is damaged, replace it.
7. Replace hub cap and lower wheel to the ground.

8.3 BRAKES (OPTIONAL)

IMPORTANT

Before using any equipment equipped with brakes, the operation of the brakes should be checked. Brake linings should be replaced before the rivets or support plates come in contact with the wheel drum. Perform all necessary maintenance before using equipment.



WARNING

Any corrosive materials (salt, saltwater, fertilizers, etc.) are destructive to metals. To properly maintain the life of the brake system, flushing with a high pressure water hose is recommended. After washing, be sure to grease actuator bearings (slides) and oil all moving parts. At the end of season, it is recommended that the brake drums be removed and cleaned inside. Repack wheel bearings being careful not to contaminate the brake system with grease. Readjust the brakes.

Check and test the brakes before intensive use and every three months thereafter. Check the brake wear and the clearance between the brake linings and the drum visually. It is probable that the linings are worn when the brake travel has increased significantly. If the linings are worn to the minimum thickness, replace with new.

8.3.1 Brake Bleeding

Before bleeding brakes, fill the system with DOT 3 hydraulic brake fluid. Using a vacuum type brake bleeder (this type of brake bleeder is available at your local automotive store) follow manufacturer's directions for bleeding.

Install bleeder hose on first wheel cylinder to be bled, if tandem bleed rear axles first. Have loose end of hose submerged in a glass container of brake fluid to observe bubbling. By working the manual hand pump, you will draw the air out of the brake lines filling it with fluid.

By loosening the bleeder screw located in the wheel cylinder one turn, the system is open to the atmosphere through the passage drilled in the screw. When the bubbling stops in the glass container close the bleeder screw securely. Follow the same procedure at each wheel cylinder being sure to maintain the master cylinder fluid level at least one half full of brake fluid. After all wheels are bled fill the master cylinder to 3/8" below the full level.

8.4 WHEELS AND TIRES

8.4.1 Wheel Installation



CAUTION

THESE INSTRUCTIONS ARE NOT COMPLETE. READ AND FOLLOW ALL PROCEDURES IN USER'S GUIDE TO WHEELS AND RIMS BY "THE MAINTENANCE COUNCIL" #T0410. IF YOU HAVE QUESTIONS CALL WALTHER ENG. & MFG. COMPANY INC. (937) 743-8125.

- Clean adjoining surfaces.
- Start nuts to bring wheel and brake drum (If Equipped) flush to hub mounting surface.
- Avoid brake drum (If Equipped) and/or wheel binding on hub.
- Install remaining wheel nuts. Torque to 50 ft-lbs, then re-torque to required full torque (See section 8.4.2 Wheel torque).
- Re-torque wheel nuts after 50-100 miles.
- Check wheel nut torque every 10,000 miles and re-torque as necessary.

8.4.2 Wheel torque

BOLT/STUD SIZE	SOCKET SIZE	PRESS FORMED WHEEL CENTER	BOLT TYPE	HEAVY DUTY WHEEL CENTER
3/4	1-1/8 / 1-1/2	NA	Flange Nut	378 ft lbs
5/8	15/16 / 1-1/16	100 ft lbs	Bevel or Flange Nut	160 ft lbs

8.4.3 Tire Inflation

TYPE SIZE	PSI
385/65R x 22.5	100
245/70R x 19.5	100
380/60R x 16.5	73
380/55R x 16.5	73
435/50 x 19.5	100
12.5L-15	52

If tires are to operate for any length of time on roads or other hard surfaces and the draft load is not great, it is advisable to increase the pressure in the tire to the maximum recommendation in order to reduce the movement of the tread bars that causes excessive wiping action.

Inflation pressures should be checked at least every week. Recommended inflation pressures based on total load on tires should be used. For accurate inflation use a special low-pressure gauge with one-pound gradations. Gauges should be checked occasionally for accuracy. Always use sealing valve caps to prevent loss of air.

8.4.4 Implement Tires

Agricultural tires are designed to carry a specified load at a specified inflation pressure when mounted on a specified width rim. When these conditions are met, the deflection of the tire carcass is in the optimum range and maximum tire performance can be expected. If this combination of design factors is altered for any reason, tire performance will be reduced.

Tire Overload or Under Inflation

Tire overload or under inflation have the same effect of over-deflecting the tire. Under such conditions the tread on the tire will wear rapidly and unevenly, particularly in the shoulder area. Radial cracking in the upper sidewall area will be a problem. With under inflated drive tires in high torque applications sidewall buckles will develop leading to carcass breaks in the sidewall. While an under inflated drive tire may pull better in some soil conditions, this is not generally true and not worth the high risk of tire damage that such an operation invites.

Over Inflation

Over inflation results in an under-deflected tire carcass. The tread is more rounded, concentrates tread wear at the centerline area. Traction is reduced in high torque service because ground contact of the tread shoulder area is reduced and the harder carcass, with reduced flexing characteristics, does not work as efficiently. The tightly stretched overinflated carcass is more subject to weather checking and impact break damage.

Pressure Adjustments Required - Slow Speed Operation

Higher tire loads are approved for intermittent service operations at reduced speed. Under such conditions inflation pressure must be increased to reduce tire deflection and assure full tire service life. See Section 8.4.2.1 Tire Inflation for proper inflation.

Use of Proper Width Rims

If tires are mounted on rims of incorrect width, the following conditions can result:

- Use of a wider rim results in flattening of the tread face. This feature may improve traction in loose soil conditions. In hard soils, however, the flatter tread penetrates less effectively and tractive effort is reduced. Additional stresses concentrated in the shoulder area tend to increase the rate of shoulder tread wear. By spacing the tire beads farther apart the sidewalls are forced to flex in an area lower than normal and this can result in circumferential carcass breaks and/or separation.
- Use of a narrower rim brings potential mounting problems because the rim shield or flange cover molded into most drive tire designs tends to interfere with the seating of the tire beads on a narrow rim. Once mounted on a narrow rim, the tire shield applies undue pressure on the rim flange, with possible tire sidewall separation or premature rim failure at the heel radius. On a narrow rim the tread of the tire is rounded. As with the over-inflated tire tread wear will be concentrated in the center area of the tread and traction in the field will be reduced.

Roading Of Farm Implement Tires

- Tractor tires operate most of the time in field conditions where the lugs can penetrate the soil, and where all portions of the tread make contact with the ground. In operating on hard roads with low inflation pressure there is an undesirable distortion of the tire during which the tread bars squirm excessively while going under and coming out from under the load. On highly abrasive or hard surfaces, this action wipes off the rubber of the tread bars or lugs and wears them down prematurely and irregularly.

- Farm tractor and implement tires are designed for low-speed operations not exceeding 25 miles per hour. If tractors or implements are towed at high speeds on the highway high temperatures may develop under the tread bars and weaken the rubber material and cord fabric. There may be no visible evidence of damage at the time. Later a premature failure occurs which experience shows was started by the overheated condition that developed when the unit was towed at a high speed.

Care And Storage Of Tractor And Implement Tires

- All tires should be stored indoors in a cool, dark, dry area free from drafts. Both heat and light are sources of oxidation on the tire surfaces - a result of which is crazing and weather checking. Tires should never be stored on oily floors or otherwise in contact with solvents, oil or grease. Further, tires should not be stored in the same area with volatile solvents. Such solvents are readily absorbed by rubber and will damage and weaken it.
- Tires should be stored away from electric motors, generators, arc welders, etc. since these are active sources of ozone. Ozone attacks rubber - to cause crazing and weather checking.
- Unmounted tires should be stored vertically on tread. If stored for an extended period, tires should be rotated periodically to reduce stress concentrations in the area of ground contact. Tires should not be stored flat and "stove piped" as they will become squashed and distorted, making mounting on the rim difficult - particularly for tubeless tires.
- Inflated tires mounted on rims should be stored under conditions noted above, with inflation pressure reduced to 10 PSI.

8.5 STORING THE MIXER

LOCKOUT / TAGOUT the machine / mixer. (See 5.3 SHUTOFF & LOCKOUT POWER on page 24.)

Extended Storage

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

- Fully empty the material from the mixer. (See 7.6 UNLOADING on page 42.)
- Thoroughly clean the mixer inside and outside.
- Remove all material build-up.
- Lubricate the equipment. (See 8.1 LUBRICATION on page 47.)
- Inspect all mixer components for wear or damage. Repair and replace components as necessary.
- Make appropriate adjustments to equipment. (See 8.2 ADJUSTMENTS on page 57.)
- 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.
- 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.

8.6 RETURNING THE MIXER TO SERVICE

After the Meyer mixer 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.
- Check tire pressure and that the lug nuts are tight.
- Connect to a tractor and operate equipment; verify all functions operate correctly.
- Check for leaks. Repair as needed.

9.0 SPECIFICATIONS

9.1 MODELS F355, F470, F585

DIMENSIONS	F355	F470	F585
Overall Length - side door / front door	215" / 245"	219" / 249"	270" / 285"
Mixing Chamber Length			212"
Overall Height - Tire Option Used	385 / 65 x 22.5	385 / 65 x 22.5	245 / 70-19.5
Overall Height - Base Machine	84"	98"	97"
Overall Height - Belt Extensions	90"	104"	103"
Overall Height - Hay Retention Ring	90"	104"	103"
Tread Width	98"	98"	87"
Transport Width - front conveyor / side conveyor - w/36" ext.	98" / 110"	98" / 110"	99" / 113"
Max Discharge Reach - Front Cross Conveyor - flat	7"	7"	9"
Max Discharge Reach - Front Cross Conveyor - incline 24" / 36" / 48" (In Down Position)	17" / 29" / 40"	17" / 29" / 40"	23" / 34" / 45"
Max Discharge Reach - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)	22" / 33" / 45" / 56" / 67"	22" / 33" / 45" / 56" / 67"	35" / 46" / 57" / 68" / 79"
Max Discharge Reach - Side Slide Tray	5"	5"	21"
Max Discharge Reach - Side Belt Extension	3"	3"	16"
Max Discharge Height - Front Cross Conveyor - flat	26"	26"	32"
Max Discharge Height - Front Cross Conveyor - incline -24" / 36" / 48" (In Down Position)	27" / 30" / 33"	27" / 30" / 33"	34" / 37" / 40"
Max Discharge Height - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)	23" / 27" / 31" / 35" / 39"	23" / 27" / 31" / 35" / 39"	32" / 36" / 40" / 44" / 48"
Max Discharge Height - Side Slide Tray	8"	8"	15"
Max Discharge Height - Side Belt Extension	15"	15"	24"

SPECIFICATIONS	F355	F470	F585
Mixing Capacity - no extensions	355 Cu. Ft.	470 Cu. Ft.	585 Cu. Ft.
Mixing Capacity - extensions	400 Cu. Ft.	520 Cu. Ft.	647 Cu. Ft.
Unit Weight - front discharge - lbs (Option Sensitive)	N/A	N/A	N/A
Unit Weight - side discharge - lbs (Option Sensitive)	~9,000	~9,900	~13,080
Maximum Net Load - lbs	12,000	15,600	19,410
Auger Qty.	2	2	2
Auger Diameter	68"	68"	88"
Auger Speed - standard / high speed	27 / 40 RPM	27 / 40 RPM	27 / 40 RPM
Auger - Upper Flighting Thickness	1/2"	1/2"	5/8"
Auger - Lower Flighting Thickness	5/8"	5/8"	5/8"
Auger - Knives - adjustable - per auger	4	5	5
Planetary Drive	straight-drive	straight-drive	straight-drive
PTO Drive	540 RPM	540 RPM	1000 RPM
Drive Protection	shear-bolt	shear-bolt	torque-disconnect
Discharge Door Opening - Front	35" x 40"	42" x 40"	42" x 40"
Discharge Door Opening - Side	35" x 40"	42" x 40"	42" x 40"

SPECIFICATIONS	F355	F470	F585
Discharge Door Opening - Rear	35" x 40"	42" x 40"	42" x 40"
Discharge - Conveyor Width - front/side	30" / 36"	30" / 36"	36" / 42"
Discharge - Front Cross Conveyor Travel - left or right	8"	8"	8"
Tub / Trailer - Floor Thickness	1/2"	1/2"	5/8"
Tub / Trailer - Sidewall Thickness	1/4"	1/4"	1/4"
Tub / Trailer - Trailer or Subframe	single-axle	single-axle	single-axle
Tub / Trailer - Spindle Diameter	2 7/8"	2 7/8"	2 3/4"
Tub / Trailer - Scale System	3-point	3-point	4-point
Tongue Weight - % gross	10%	10%	10%
Tractor Requirement - PTO HP	75	90	110

9.2 MODELS F700, F815, F1015 AND F1215

DIMENSIONS	F700	F815	F1015	F1215
Overall Length - front door / side door	273" / 288"	296" / 326"	300" / 330"	304" / 334"
Mixing Chamber Length	217"	254"	261"	269"
Overall Height - Tire Option Used	245 / 70-19.5	385 / 65R x 22.5	385 / 65R x 22.5	385 / 65R x 22.5
Overall Height - Base Machine	107"	105"	117"	130"
Overall Height - Belt Extensions	113"	111"	123"	136"
Overall Height - Hay Retention Ring	113"	111"	123"	136"
Tread Width	87"	105"	105"	105"
Transport Width - front conveyor / side conveyor - w/36" ext.	101" / 115"	116" / 131"	117" / 132"	118" / 133"
Max Discharge Reach - Front Cross Conveyor - flat	9"	9"/0"	9"/0"	9"/0"
Max Discharge Reach - Front Cross Conveyor - incline - 24" / 36" / 48" (In Down Position)	23" / 34" / 45"	13" / 25" / 36"	13" / 25" / 36"	13" / 25" / 36"
Max Discharge Reach - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)	35" / 46" / 57" / 68" / 79"	35" / 46" / 57" / 68" / 79"	35" / 46" / 57" / 68" / 79"	35" / 46" / 57" / 68" / 79"
Max Discharge Reach - Side Slide Tray	21"	18"	18"	18"
Max Discharge Reach - Side Belt Extension	16"	15"	15"	15"
Max Discharge Height - Front Cross Conveyor - flat	32"	41"	41"	41"
Max Discharge Height - Front Cross Conveyor - incline - 24" / 36" / 48" (In Down Position)	32" / 37" / 40"	41" / 44" / 47"	41" / 44" / 47"	41" / 44" / 47"
Max Discharge Height - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)	32" / 36" / 40" / 44" / 48"	41" / 45" / 49" / 54" / 58"	41" / 45" / 49" / 54" / 58"	41" / 45" / 49" / 54" / 58"
Max Discharge Height - Side Slide Tray	15"	25"	25"	25"
Max Discharge Height - Side Belt Extension	24"	32"	32"	32"

SPECIFICATIONS	F700	F815	F1015	F1215
Mixing Capacity - no extensions	693 Cu. Ft.	818 Cu. Ft.	1016 Cu. Ft.	1215 Cu. Ft.
Mixing Capacity - extensions	760 Cu. Ft.	910 Cu. Ft.	1112 Cu. Ft.	1315 Cu. Ft.
Unit Weight - front discharge - lbs (Option Sensitive)	~14,660	N/A	N/A	~23,620
Unit Weight - side discharge - lbs (Option Sensitive)	N/A	~18,100	~20,800	~22,660
Maximum Net Load - lbs	22,800	27,300	33,360	39,450
Auger Qty.	2	2	2	2
Auger Diameter	88"	107"	107"	107"
Auger Speed - standard / high speed	27 / 40 RPM	27 / 40 RPM	27 / 40 RPM	27 / 40 RPM
Auger - Upper Flighting Thickness	5/8"	5/8"	5/8"	5/8" heat treated
Auger - Lower Flighting Thickness	5/8"	3/4"	3/4"	3/4" heat treated
Auger Knives - adjustable - per auger	6	6	7	7
Planetary Drive	straight-drive	straight-drive	straight-drive	straight-drive
PTO Drive	1000 RPM	1000 RPM	1000 RPM	1000 RPM
Drive Protection	torque-disconnect	torque-disconnect	torque-disconnect	torque-disconnect

SPECIFICATIONS	F700	F815	F1015	F1215
Discharge - Door Opening - Front	42" x 40"	46" x 40"	46" x 40"	46" x 40"
Discharge - Door Opening - Side	42" x 40"	42" x 40"	42" x 40"	42" x 40"
Discharge - Door Opening - Rear	42" x 40"	46" x 40"	46" x 40"	46" x 40"
Discharge - Conveyor Width - front/side	36" / 42"	36" / 42"	36" / 42"	36" / 42"
Discharge - Front Cross Conveyor Travel - left or right	8"	8"	8"	8"
Tub / Trailer - Floor Thickness	5/8"	3/4"	3/4"	1"
Tub / Trailer - Sidewall Thickness	1/4"	1/4"	1/4"	1/4"
Tub / Trailer - Trailer or Subframe	single-axle	single-axle	single-axle	single-axle
Tub / Trailer - Spindle Diameter	2.75"	3.50"	3.50"	4.50"
Tub / Trailer - Scale System	4-point	4-point	4-point	4-point
Tongue Weight - % gross	10%	10%	10%	10%
Tractor Requirement - PTO HP	110	140	160	200

MAINTENANCE RECORD

MODEL NO. _____

SERIAL NO. _____

DATE	SERVICE PERFORMED

DATE	SERVICE PERFORMED

Manufactured by:

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