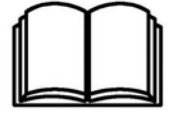


MEYER

FORMULA IIII



PB-MIXER-STAT



FORMULA MIXER

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



Owner / Operator's Manual

2020 Model Year & Later



1.0 IMPORTANT INFORMATION

The mixer serial number plate is located on the left hand side of the mixing tub. Please enter the model, serial number and additional information in the space provided for future reference.



Model No. _____

Mixer Serial No. _____

Date of Purchase _____

Dealership _____

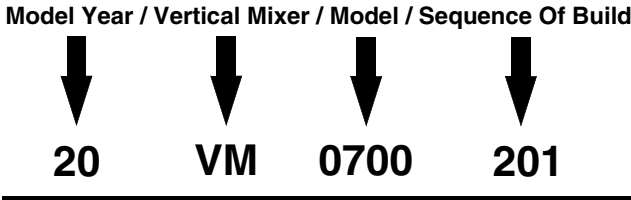
Dealership Phone No. _____

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

HOW TO READ YOUR SERIAL NUMBER

MIXER

EXAMPLE: 20VM0700201



Meyer Manufacturing Corporation
674 W. Business Cty Rd A
Dorchester, WI 54425
Phone: 1-800-325-9103
Fax: 715-654-5513
Email: sales@meyermfg.com
Website: www.meyermfg.com



2.0 PRE-DELIVERY & DELIVERY CHECK LIST

PB Mixer Check List

Meyer Manufacturing Corporation

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

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

PRE-DELIVERY CHECK LIST

After the New Meyer Mixer has been completely set-up, check to be certain it is in correct running order.

The following is a list of points to inspect:

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

- All shields and guards are in place and securely fastened.
- All bolts and other fasteners are secure and tight.
- All mechanisms operate trouble free.
- All grease fittings have been lubricated, gear boxes filled to proper levels, and all roller chains are oiled. See "Lubrication" section of this manual.
- Cross Conveyor Belt or Chain are at proper tension. See "Adjustments" section in this manual.
- All decals are in place and legible.

DELIVERY CHECK LIST

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

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

- Explain to the customer that pre-delivery check list was fully completed.
- Give customer the Owner & Operator's Manual. Instruct to read and completely understand its contents **BEFORE** attempting to operate the 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.
- Explain the importance of optional 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 CHECK LIST" 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: sales@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

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 serial number is stamped in the front left-hand side of the mixing tub. On F700 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
2-Speed	STD	STD	STD	STD	STD	STD	STD
Straight Drive	STD	STD	STD	STD	STD	STD	STD
Heavy-Duty Gearboxes	STD	STD	STD	STD	STD	STD	STD

OPTIONS

DESCRIPTION	F355	F470	F585	F700	F815	F1015	F1215
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
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 119-16-13.4-1, 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, tarps, 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)
- Stay away from overhead power lines. Electrocutation can occur without direct contact.

Safety Precautions For Hydraulic System:

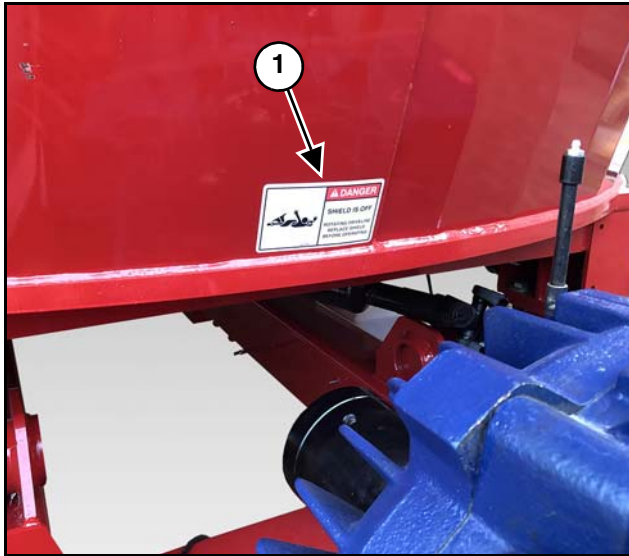
- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use hands to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel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

5.2 SAFETY SIGNS



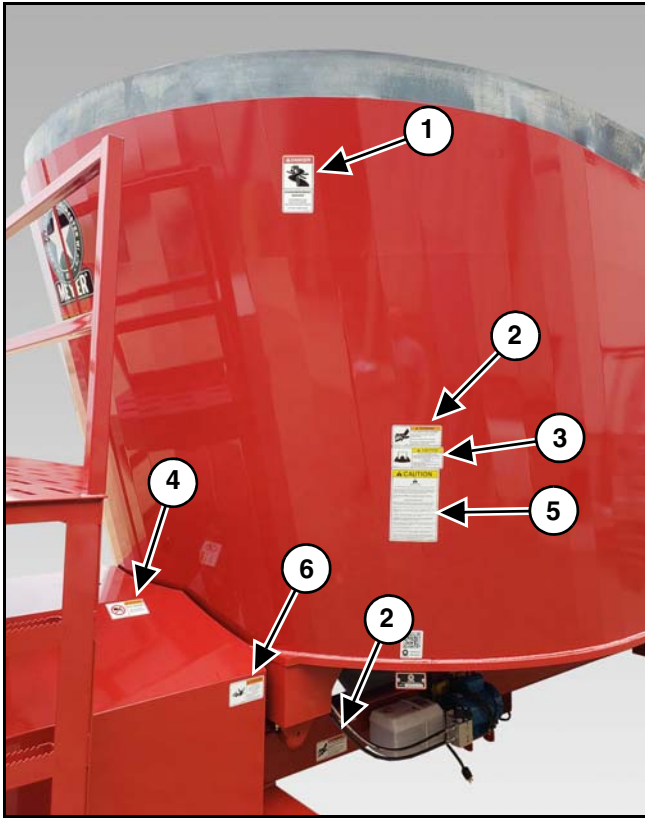
Read all safety signs on the equipment and in this manual. Keep all safety signs clean and replace any damaged or missing safety signs before operating the equipment. Do Not remove any safety signs. Safety signs are for operator protection and information.

FRONT OF MIXER WITH SHIELD REMOVED



PART NO. 46-3600-2

FRONT OF MIXER



PART NO. 46-0001-213



PART NO. 46-8500-7



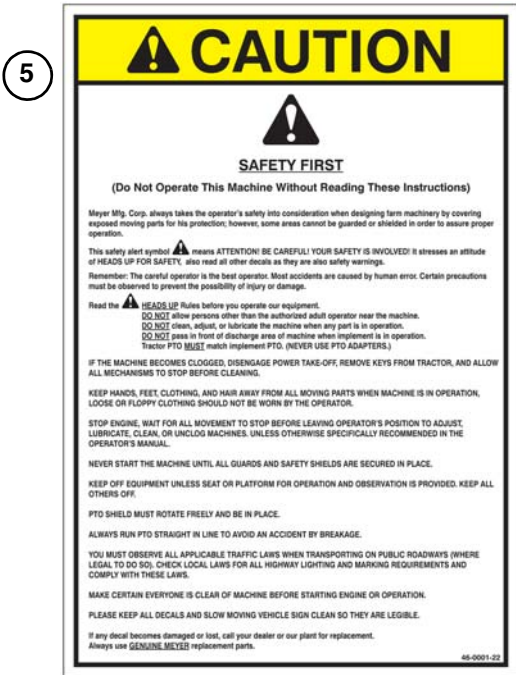
PART NO. 46-0001-35



PART NO. 46-0001-209



PART NO. 46-3600-9



PART NO. 46-0001-22

LEFT SIDE OF MIXER



1



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

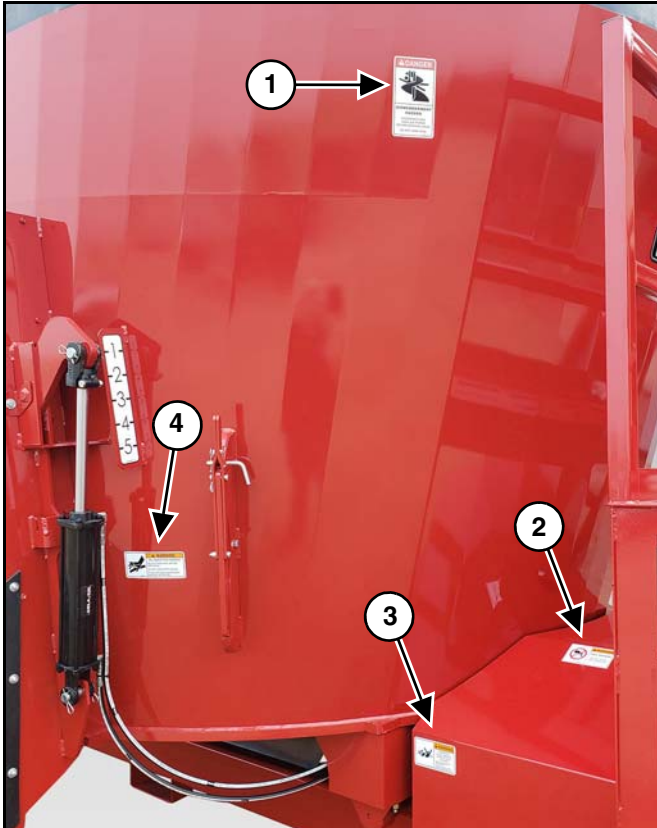


PART NO. 46-0001-212

RIGHT SIDE OF MIXER



RIGHT SIDE OF MIXER



1



PART NO. 46-0001-213

2



PART NO. 46-0001-209

3



PART NO. 46-3600-9

4



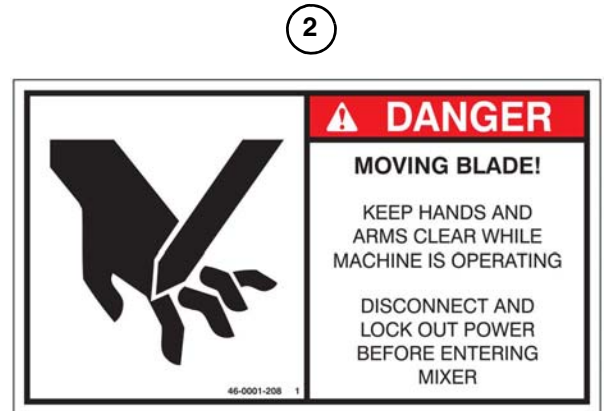
PART NO. 46-8500-7

BACK OF MIXER



PART NO. 46-0001-213

MIXER DOOR



PART NO. 46-0001-208

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 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.

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

1. Check that all safety signs are in good and legible condition.
2. Inspect the mixer for proper adjustments. (See 8.2 ADJUSTMENTS)
3. Lubricate the equipment. (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 hydraulic and gear box 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.
12. Inspect any wear items. i.e.: Knives, scrapers, kicker wear plate. Replace as required.

6.2 ELECTRICAL HOOK-UP

Recommendation: Install circuit breaker disconnect per the rated amperage prior to the incoming power of the VFD Control Cabinet located on the mixer.

Electrical Requirements: Supply 300 amps / 460VAC / 60Hz / 3-Phase to VFD Control Cabinet. Supply a 110 Volt outlet for the remote hydraulic system.

Call the factory if additional information is needed.

6.3 START-UP AND SHUT-DOWN



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.

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER)



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

6.3.1 Start-Up

Before Loading The Mixer:

Check to see that the discharge door is closed.

Be sure no one is inside the mixer.

Select the green "ON" power button and then select the "SLOW" speed button.

6.3.2 Shut-Down

Select red power "OFF" button.

Fully lower all doors.

Check drive components to be sure components are not abnormally hot.

6.4 OPERATIONAL CHECKS



CAUTION

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER).

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.



WARNING

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

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 6.3.1.
2. Test the on/off function to make sure it is working properly.
3. Raise and lower the door several times.
4. Operate the mixer, varying between high and low speed, for approximately 5-10 minutes.
5. Follow the Shut-Down procedure section 6.3.2.
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).

6.4.1 Controls

The controls for the mixer are located on the door of the VFD Control Cabinet.

Item 1: The green power “ON” button turns the electrical control box inside the VFD Control Cabinet on.

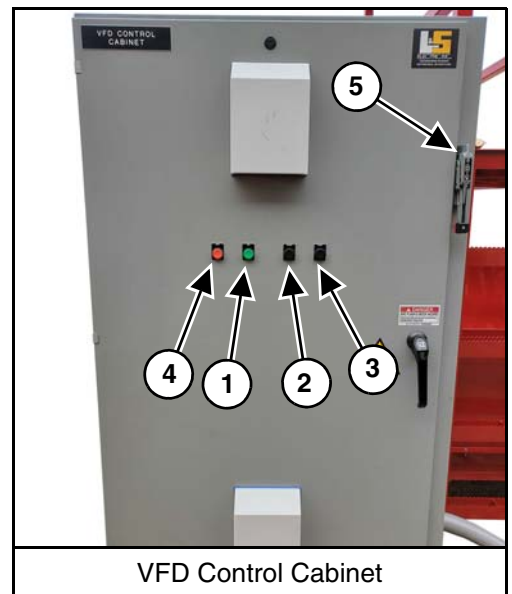
Item 2: The button labeled “SLOW” powers the mixer motor to approximately 645 RPM.

Item 3: The button labeled “FAST” powers the mixer motor to approximately 1050 RPM.

Item 4: The red power “OFF” button turns the electrical control box inside the VFD Control Cabinet off stopping the mixer.

The control for the mixer door is attached to the remote hydraulic power pack with a long cord. The button labeled “UP” raises the door. The button labeled “DOWN” lowers the door.

VFD Control Error Reset: If the mixer has become unresponsive due to a VFD Control error it will need to be reset. Inspect the mixer for any obstructions. Turn the main VFD Control Cabinet switch (Item 5) off for five minutes to clear error. If resetting the VFD Control does not fix the problem call Meyer Mfg. at 1-800-325-9103 to receive further assistance.



VFD Control Cabinet

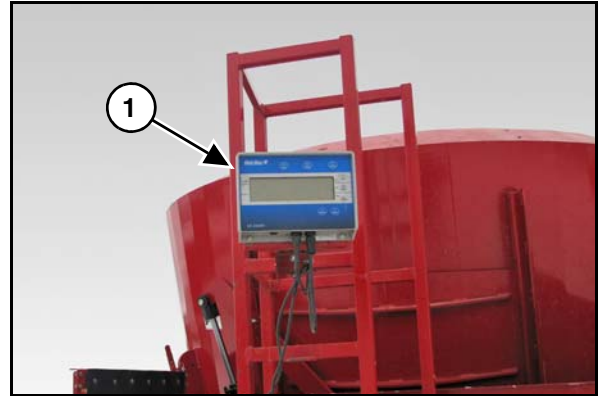
6.5 OPTIONAL EQUIPMENT

6.5.1 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 overload the machine.



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

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

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 mixer 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.

7.2 LOADING



CAUTION

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

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER)



WARNING

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.



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 18.)

IMPORTANT

Overloading may cause failure of structural members. **DO NOT** exceed maximum gross weight. (See 9.0 SPECIFICATIONS on page 37.)

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.

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

1. Set hay stops according to the instructions in this manual. (See 7.6 Hay Stop Adjustment).
2. Follow the Start Up procedure 6.3.1.
3. Load baled hay into the center of the mixer.
4. 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 selectable controls, roughages can be processed in “SLOW” or “FAST” depending on how fast the bale needs to be processed.



CAUTION

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.

IMPORTANT

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

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 18.)

IMPORTANT

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

7.4 UNLOADING



SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 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 18.)

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

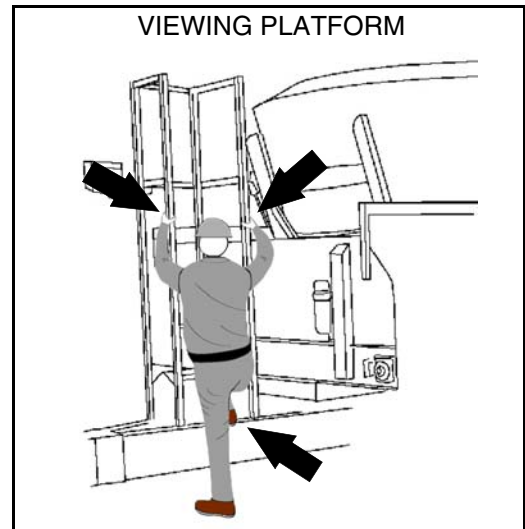
1. Select the "SLOW" speed to ease the start of a full load for unloading.
2. Open discharge door slowly to adjust the amount of material to be discharged. Adjust door height for desired flow of feed.
3. The mixer can be selected to "FAST" during the unloading process. This will help remove any feed remaining on the augers and assist in keeping an even feed flow until the mixer is empty.
4. When finished unloading, follow the Shut Down procedure 6.3.2.



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

7.5 PLATFORM OPERATION

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 platform.



7.6 HAY STOP ADJUSTMENT



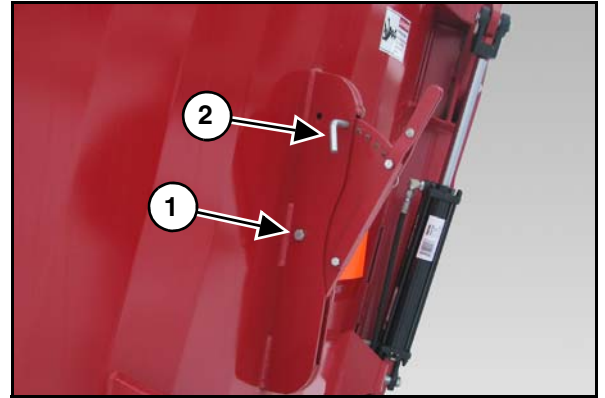
CAUTION

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.

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

7.6.1 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



7.7 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.
Spillage is Occurring	<ul style="list-style-type: none"> • Reduce load size. • Reduce 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.
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.

8.0 MAINTENANCE

8.1 LUBRICATION



CAUTION

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 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.

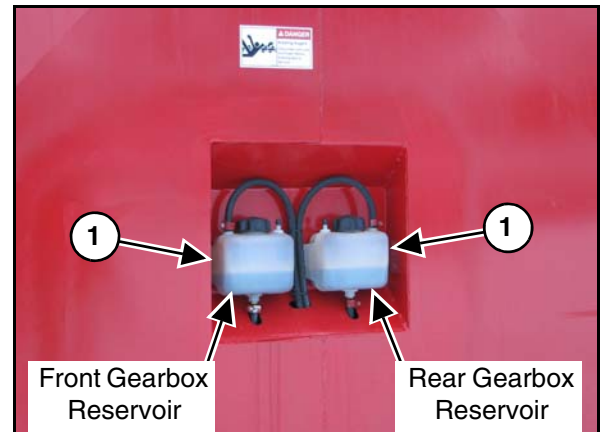
NOTE: Over lubrication is a major cause of bearing failures. Please relubricate conservatively when unsure of bearing requirements.

8.1.1 Daily or every 8-10 loads:

NOTE: See Specifications, Page 33 for proper oil type and capacities.

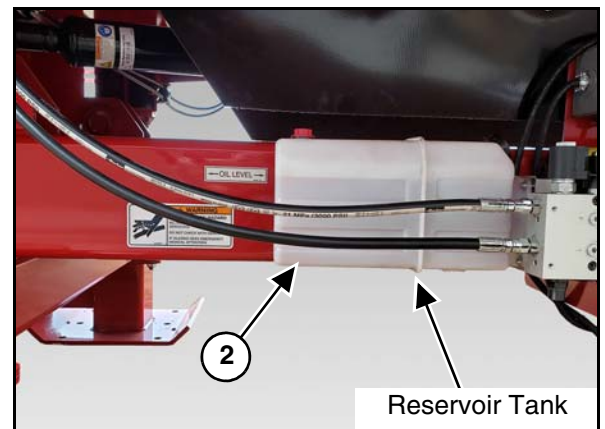
Check the planetary gearbox oil levels daily to prevent abnormal component wear. Add new oil to the reservoir tank (Item 1) if the oil level is not at the oil reservoir mark.

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



With all cylinders retracted, check the remote hydraulic power unit oil level. Add new oil to the reservoir tank (Item 2) if the oil level is not at the oil reservoir mark.

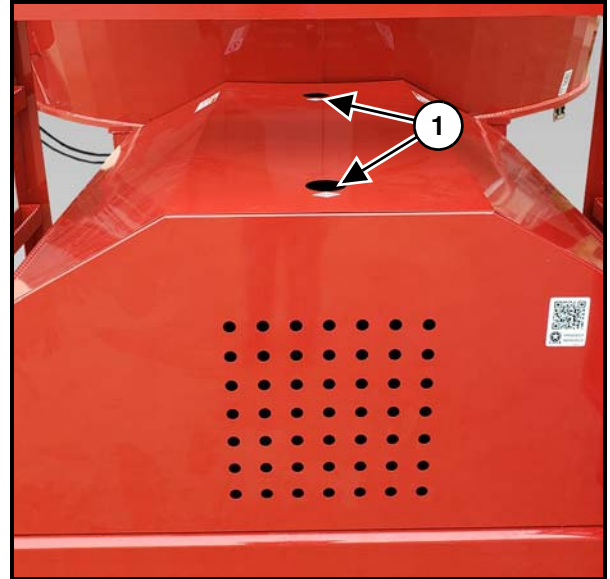
Check for any oil leaks. If leaks occur, correct the source of the leak.



8.1.2 Monthly:

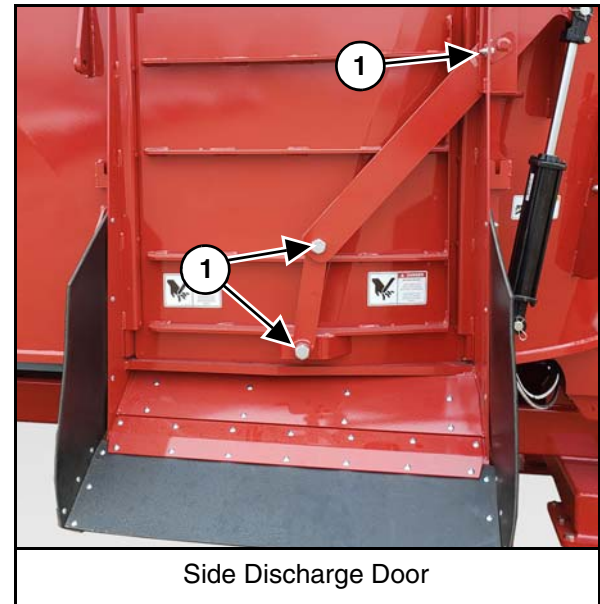
Electric Motor

Grease both electric motor bearings (Item 1).



8.1.3 Every 40 hours:

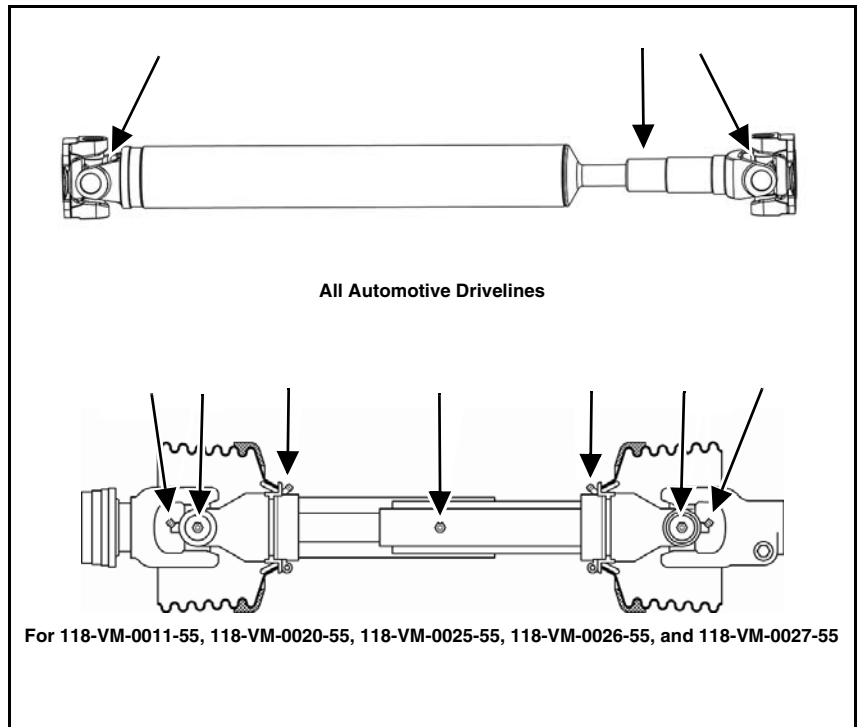
Oil Door Pivots (Item 1).



8.1.4 50 hours:

First oil change in the planetaries. (See page 32).

Grease all PTO driveline zerks.



8.1.5 Annually (1500 hours):

Change oil in the planetaries. (See page 32).

8.1.6 Gearbox Oil Change



SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER on page 18.)

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:

- 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.

8.1.6.1 Planetary Gearbox

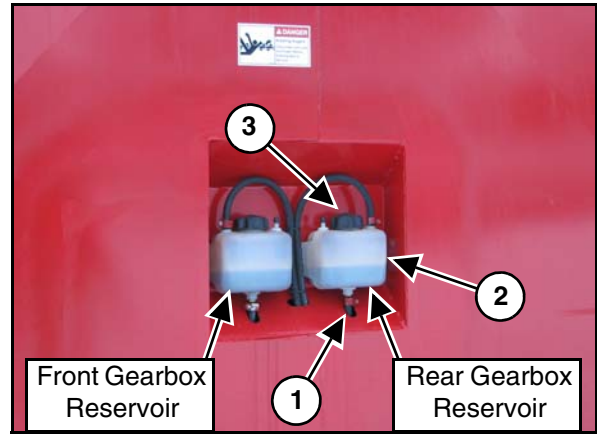
Draining

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 loosening the hose clamp and removing the hose.

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:

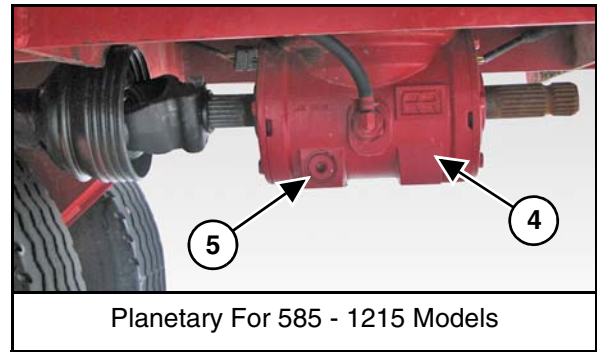
(Call the factory to purchase an oil pump kit, Part #: VA-OP.)

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 33.

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



PLANETARY LUBRICATION SPECIFICATIONS				
Model	Part Number	Description	Oil Type	Capacity
355 / 470	119-16-13.4-1	1600 Planetary 13.4:1	Synthetic ISO 220 Or Equivalent	Approx. 23.5 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
1215	119-32-24.8-1	3200 Planetary 24.8:1	Synthetic ISO 220 Or Equivalent	Approx. 24.3 Quarts

8.2 ADJUSTMENTS



CAUTION

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER)

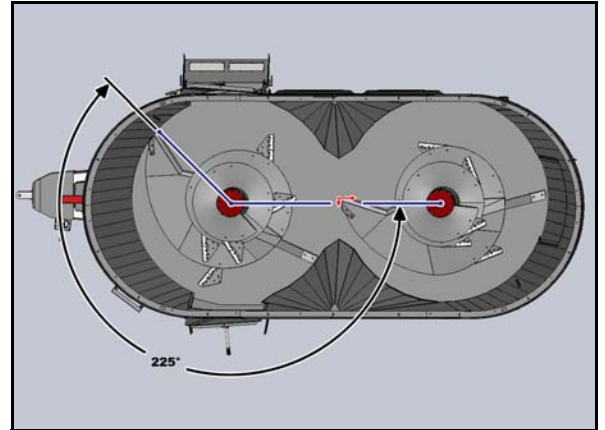
If work must be done inside the mixer put a protective cover over the auger knives to avoid injury. The hopper and flighting may be slippery. Use caution when stepping on or standing inside the mixer.

8.2.1 Auger Scraper Bar

Check the auger scraper monthly for proper clearance with the side panel. Clearance should not exceed 1/2". If gap exceeds 1/2", the scraper should be adjusted.

8.2.2 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.



8.2.3 Knives



CAUTION

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

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.

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.

8.2.3.1 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.

8.2.3.2 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.

8.2.3.3 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.

8.2.3.4 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.

8.2.3.5 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.

8.3 STORING THE MIXER

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

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 7.4 UNLOADING on page 26.)
- Thoroughly clean the mixer inside and outside.
- Remove all material build-up.
- Lubricate the equipment. (See 8.1 LUBRICATION on page 29.)
- 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 33.)
- Place hydraulic hoses and 7-pin connector in the storage brackets (if equipped).
- Inspect 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.
- Cover the equipment.

8.4 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.
- Verify all functions operate correctly.
- Check for leaks, worn, or damaged components. Repair as needed.

8.5 REPLACEMENT PARTS



WARNING

Before servicing this equipment, ensure that all personnel, including family members are familiar with the equipment and the safety hazards that are present, along with the safety practices that should be observed while working in this equipment.



CAUTION

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 5.3 SHUTOFF & LOCKOUT POWER)

Inspect the chassis' axles, o-beams, spindles, tires, hitches & all safety shielding, safety signs and safety lighting regularly.

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.

At times parts on this implement will become worn or damaged. Performing repairs on this implement can pose a risk of injury including death. To reduce risk, the party that will be doing the repair should be very knowledgeable of the implement and the equipment that they will be using to do the repair.

- Review the repair so that a plan can be put together and the proper equipment can be used to repair this implement safely and correctly.
- Personal safety equipment may include items such as safety glasses, protective footwear, hearing protection, gloves, fire retardant clothes, etc.



WARNING

Crushing Hazard

Do Not work under suspended or blocked parts.



- The use of hoists and/or supports may be needed to handle heavy components.
- Welding and torching should be done by properly trained individuals who have proven their skills.

IMPORTANT

Call the factory for any additional details you may need to perform the repair. Some parts may come with instruction sheets to assist in the repair. Instructions sheets may be provided with your parts order, otherwise, if available, instruction sheets can be e-mailed or faxed for you convenience.

NOTE: Be environmentally friendly and dispose of any waste materials properly. Recycle when appropriate.

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 - Base Machine			
Overall Height - Belt Extensions			
Overall Height - Hay Retention Ring			
Transport Width - side conveyor - w/36" ext.			
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 - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)			
Max Discharge Height - Side Slide Tray			
Max Discharge Height - Side Belt Extension			

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 - side discharge - lbs (Option Sensitive)			
Maximum Net Load - lbs			
Auger Qty.	2	2	2
Auger Diameter	68"	68"	88"
Auger Speed - standard / high speed			
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
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"
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 - Floor Thickness	1/2"	1/2"	5/8"
Tub - Sidewall Thickness	1/4"	1/4"	1/4"
Tub - Scale System	3-point	3-point	4-point

9.2 MODELS F700, F815, F1015 AND F1215

DIMENSIONS	F700	F815	F1015	F1215
Overall Length - side door	288"	326"	330"	334"
Mixing Chamber Length	217"	254"	261"	269"
Overall Height - Base Machine				
Overall Height - Belt Extensions				
Overall Height - Hay Retention Ring				
Transport Width - side conveyor - w/36" ext.				
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 - Side Conveyor - 24" / 36" / 48" / 60" / 72" (In Down Position)				
Max Discharge Height - Side Slide Tray				
Max Discharge Height - Side Belt Extension				

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 - side discharge - lbs (Option Sensitive)				
Maximum Net Load - lbs				
Auger Qty.	2	2	2	2
Auger Diameter	88"	107"	107"	107"
Auger Speed - standard / high speed				
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
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 - Floor Thickness	5/8"	3/4"	3/4"	1"
Tub - Sidewall Thickness	1/4"	1/4"	1/4"	1/4"
Tub - Scale System	4-point	4-point	4-point	4-point



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