8100RT / 9100RT GRAIN KIT

Installation / Operator’s Supplement Manual
1.0 IMPORTANT INFORMATION

Prior to 2016 model year, the serial number plate is stamped on the left hand side of the rear panel enclosure. For 2016 model year and later, the serial number plate is riveted on the left hand side of the rear panel enclosure. Please enter the model, serial number and additional information in the space provided for future reference.

Model No. ____________________________
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

EXAMPLE: 14TP013

Model Year / Model / Sequence Of Build

14  TP  013

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

Over 70 years of service to our customers
2.0 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

This manual is a Supplement Manual to the 8100 RT or 9100 RT Owner's Operator's manual. Both manuals need to be read and understood by all parties operating this equipment.

The Grain Kit is an attachment mounted to the back of the 8100 or 9100 RT forage box used to discharge grains.

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.

REPAIR PARTS: At the back of this manual is the repair parts section. All replacement parts are to be obtained from or ordered through your Meyer dealership. When ordering repair parts, refer to the parts section and give complete information including quantity, correct part number, detailed description and even Model No. and Serial No. of the grain kit which needs repair parts.

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

The Meyer Grain Kit is manufactured with operator safety in mind. Located on the grain kit are various safety signs to aid in operation and warn of danger or caution areas. Pay close attention to all safety signs on the grain kit.

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 grain kit, read and study the following safety information. In addition, make sure that every individual who operates or works with the grain kit, 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 grain kit itself warn you of dangers 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.

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

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

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

- DO NOT allow anyone to install, operate, service, inspect or otherwise handle this grain kit until all operators have read and understand all of the instructional materials in this Installation And Operator’s 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 forage box or grain kit.

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

- DO NOT step up on any part of the grain kit at any time.

- DO NOT adjust, clean or lubricate while the grain kit 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 FORAGE BOX before starting it!

- Make certain everyone is clear of the FORAGE BOX 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 3.3 SHUTOFF & LOCKOUT POWER on page 11.)

- 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.

- Stay away from overhead power lines. Electrocution can occur without direct contact.

- Use only properly rated undercarriage and tires.
Safety Precautions For Installation:

- Use lifting equipment with sufficient capacity to handle this unit.
- Park the forage box on a stable, level ground and securely chock all wheels.
- Keep work area clean and free of oily or slippery materials to prevent slipping or falling while working on this equipment.
- Do not work under any machine on this unit.
- Wear head, eye, and foot protection.
- Keep your body away from potential pinch points during installation.
- Beware of heavy weights of components when handling them.
- Be sure that any component is well balanced and secured with adequate strength chains or lifting straps while lifting.

Safety Precautions For Truck Mounted Units:

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

Safety Precautions For Hydraulic System:

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

Read all safety signs on the Grain Kit 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.
3.3 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.

3.3.1 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 - Inform everyone involved, including those working on or around this machine, that work is being done which involves keeping this machine safely “OFF”.

3. Power Sources
   a. LOCKOUT - Shut off engines and take the key, or physically lock the start/on switch or control. Disconnect any power sources which are meant to be disconnected (i.e. electrical, hydraulic, and PTO of pull-type units).
   b. TAGOUT - Place a tag on the machine noting the reason for the power source being tagged out and what work is being done. This is particularly important if the power source is not within your sight and/or will need to be isolated for a longer period of time.

4. Stored Energy - Neutralize all stored energy from its power source. Ensure that this machine is level, set the parking brake, and chock the wheels. Disconnect electricity, block moveable parts, release or block spring energy, release pressure from hydraulic and pneumatic lines, and lower suspended parts to a resting position.

5. Test - Do a complete test and personally double check all of the above steps to verify that all of the power sources are actually disconnected and locked out.

6. Restore Power - When the work has been completed, follow the same basic procedures, ensuring that all individuals working on or around this machine are safely clear of the machine before locks and tags are removed and power is restored.

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

4.1 REAR GATE BELTING INSTALLATION

Use the following 2 steps to install the rear gate belting:

**STEP 1 (8100 SWING GATE ONLY)**

1. Place belting (Item 1) and steel strap (Item 2) onto the back side of the frame. Position the belting so the top side of the belting touches the bottom side of the apron chain. Clamp or hold the strap onto the bottom side of the belting. Use a 9/32" drill bit, drill and bolt into place using 1/4 x 3/4" machine bolts and 1/4" spin locknuts.

**STEP 2**

Prior to SN 1581310, 1591263
(Standard equipment after these serial numbers.)

1. Loosen the far left and right vertical columns of screws and the screws in the corners on the front side of the backgate. The small belting pieces go in the corners. Close the gate then measure the gap. When installing the belting allow the belting to hang out 1/4” more than the gap measurement. Repeat on the other side. Re-fasten the cladtuff to the backgate frame to hold the belting in place.

**STEP 3**

1. Next install the side shield panels (Item 1) on both gearbox cover shields. Slide the shield up under the main roller tight to the main roller cover. Position to minimize any gap around the main roller. Then mark and drill the two holes. Install bolts (Item 2) and tighten.

2. Repeat procedure on the other side.
4.2 GRAIN HOPPER INSTALLATION

Use the following 6 steps to install the grain hopper to the forage box:

**STEP 1 (SWING GATE MODEL)**

1. Position the hook (Item 1) so it lifts from the lifting loop at the center of the grain hopper. Lift the grain hopper from the ground and position the grain hopper at the rear of the forage box.
2. Lubricate the rubber seals (Item 2) on the grain hopper with soap water to aid in installation of the grain kit.

**STEP 1 (DOUBLE DOOR MODEL)**

1. Position the hook (Item 1) so it lifts from the lifting loop at the center of the grain hopper. Lift the grain hopper from the ground and position the grain hopper at the rear of the forage box.

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

Position the hook (Item 1) so it lifts from the lifting loop at the center of the grain hopper. Lift the grain hopper from the ground and position the grain hopper at the rear of the forage box.

Lubricate the rubber seals (Item 2) on the grain hopper with soap water to aid in installation of the grain kit.

**WARNING**

Crushing Hazard

Do Not work under suspended or blocked parts.

**WARNING**

Crushing Hazard

Do Not work under suspended or blocked parts.
STEP 2 (SWING GATE MODEL SHOWN)

Raise the grain hopper until the grain hopper hanger mounts (Item 1) are aligned with the forage box slots (Item 2) on both sides.

Slightly lower the grain hopper and verify the grain hopper hanger mounts have properly seated into the slots on the forage box.

STEP 3

With the aid of an additional person, have the person push in on the rubber seals (Item 1) located on each side of the grain hopper, then continue to lower the grain hopper and remove the lifting device.
Continue the following steps to install the grain hopper to the forage box:

**STEP 4 (SWING GATE MODEL SHOWN)**

Push down and inward on the back of the grain hopper (Item 1) until the grain hopper bottoms out to the rear frame plate of the forage box.

**STEP 5**

After the grain hopper is in place, install the eyebolt (Item 1) into the slot on the forage box frame.

Tighten the handle nut (Item 2).

Repeat procedure on opposite side.

**STEP 6**

Locate the electrical connection inside the frame rail. If you have a pull-type unit find the connection behind the Converter module. Take the Y-harness from the kit and install the single leg to the front of the box and one of the Y-legs of the harness to the rear harness. Take the 2nd leg of the Y and install the grain kit light harness. Secure any excess wire or cable.

IMPORTANT: Your Stop/Tail/Turn lights may not function correctly if not installed properly. Check your lights to make sure all lights are operating properly when connecting or disconnecting this plug (Item 1).
4.2.1 Storing Stabilizing Legs

Use the following 2 steps to place the stabilizing legs into the storage location:

**STEP 1**
Remove the retaining pin (Item 1) and remove the stabilizing leg (Item 2).

**STEP 2**
Place the stabilizing leg (Item 2) into the storage position and install the retaining pin (Item 1).

Repeat procedure for the other stabilizing leg.
4.2.3 Installing The Flow Control

Use the following step to install the flow control:

**STEP 1 (8100)**

When facing the forage box from the left rear side, locate the formed angle (Item 1). Center the flow control (Item 2) between the 2nd and 3rd forage box uprights from the rear of the forage box.

(8100RT) Fit the mounting plate on top of the angle and 2” from the cross channel. Drill 13/32” holes and bolt the mounting plate to the angle with 3/8” x 1” bolts and 3/8” lock-nuts. Mount the flow control to the mounting plate with 1/4” x 2-1/2” bolts and 1/4” lock-nuts.

**STEP 1 (9100)**

When facing the forage box from the left rear side, locate the formed angle (Item 1). Center the flow control (Item 2) between the 2nd and 3rd forage box uprights from the rear of the forage box.

(9100RT) Fit the mounting plate to the angle and mark the two holes. Drill 13/32” holes and bolt the mounting plate to the angle with 3/8 x 1” bolts and 3/8” locknuts. Mount the flow control to the mounting plate with 1/4” x 2-1/2” bolts and 1/4” locknuts.
4.2.4 Plumbing The Flow Control

Use the following schematic to plumb the flow control:
Use the following 2 schematics to plumb the flow control:

**DUAL DRIVE FLOW CONTROL SYSTEM**

**9100T DUAL DRIVE FLOW CONTROL SYSTEM**
5.0 OPERATION

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

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

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

Do not overload the machine.

5.1 LOADING

**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.

**IMPORTANT**
Overloading may cause failure of axles, tires, structural members, hitches, loss of vehicle control. **DO NOT** exceed maximum gross weight.

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

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

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

Set the flow control (Item 1) to 0 position.
Disengage the latch (Item 1) on the turn wheel (Item 2). Open the grain hopper unloading door with the turn wheel.

Engage the hydraulics on the unit. Slowly open the flow control to start apron movement and to open the rear vertical door. Regulate the level of grain in the hopper by using the flow control to slow down, stop, or speed up the apron chain.

The grain kit plexi-glass window (Item 1) will give you visibility of the grain level.

**NOTE:** The grain level should always be lower than the return apron chain to minimize carry back and spillage under the box.

As the box gets empty, increase the speed on the flow control to finish unloading. After grain is completely unloaded, the rear vertical gate will go back to the closed position.

Turn the flow control back to the 0 position and shut down the hydraulics.

Close the grain kit unloading door, and engage the latch on the turn wheel.
6.0 MAINTENANCE

6.1 LUBRICATION

HOW TO ORDER

6.1 LUBRICATION

SHUTOFF & LOCKOUT POWER before adjusting, cleaning, lubricating or servicing the machine. (See 3.3 SHUTOFF & LOCKOUT POWER on page 11.)

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.

DAILY or every 8-10 loads:

NOTE: Always use a good quality lithium base grease when lubricating the grain kit.

• Grease the three (3) bearings (Item 1).

• Apply oil to the door slide gate and inspect components for wear or damage. Repair and replace components as necessary.
6.4 STORING THE GRAIN KIT

LOCKOUT / TAGOUT the machine / forage box. (See 3.3 SHUTOFF & LOCKOUT POWER on page 11.)

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

- Fully clean out all forage or grain from the grain kit. (See 5.0 OPERATION on page 21.)
- Thoroughly clean the equipment.
- Lubricate the equipment. (See 6.1 LUBRICATION on page 23.)
- Apply oil to the sliding door and inspect all grain kit components for wear or damage. Repair and replace components as necessary.
- Make appropriate adjustments to equipment.
- 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.
- Replace worn or damaged parts.
- Touch up all paint nicks and scratches to prevent rusting.
- Place the equipment in a dry protected shelter.
- Place the equipment flat on the ground.

6.5 RETURNING THE GRAIN KIT TO SERVICE

After the Meyer grain kit 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 any damaged parts. Repair as needed.
- Install onto forage box.
6.6 REPLACEMENT PARTS

Before servicing this equipment, insures 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.

Inspect the chassis’ axles, o-beams, spindles, tires, hitches & all safety shielding, safety signs and safety lighting regularly. These parts if not watched closely could pose potential injury or death. If any part is found in need of repair, follow the SHUTOFF & LOCKOUT POWER recommendations and have qualified personnel repair immediately.

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.

6.6.1 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 - Inform 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.
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.
- The use of hoists and/or supports may be needed to handle heavy components.
- If the implement is being repaired in the field, make sure the parking brake of the tractor is engaged, the implement is on solid and level ground.
- Welding and torching should be done by properly trained individuals who have proven their skills.

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

NOTE: For parts breakdown, see your manual for your 8100 or 9100 RT forage box. Manual part numbers PB-8100-RT & PB-9100-RT.
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