

MERIDIAN[®]

**MRDN 10 • SLMD 12 •
MRDN 13 • AUGER 14**
SWING AUGER



meridianmfg.com/swing-auger

OPERATOR'S MANUAL

SIGN-OFF FORM

Meridian Manufacturing Inc. follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE), and the Occupational Safety and Health Administration (OSHA). Anyone who will be using or maintaining the bin must read and clearly understand ALL Safety and Maintenance information presented in this manual.

Review this information annually, before the season start-up.

Make these periodic reviews of SAFETY and USAGE a standard practice for all of your equipment.

This form is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in this manual. Copy this page to continue record.

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PRODUCT REGISTRATION FORM



Attention Dealers:

You can register products online through the Dealer Login: <http://dealers.meridianmfg.com/login/>

It is mandatory to register your product in order to qualify for future warranties that may arise. Knowingly falsifying information on this form will result in the voiding of the product warranty.

You may scan/photograph this completed form (must be legible), email it to: register@meridianmfg.com

A copy of this form may also be mailed to Meridian Manufacturing Inc.

Buyer's Name _____	Dealer's Name _____
Address _____	Address _____
City, Prov/State _____	City, Prov/State _____
Postal Code/Zip Code _____	Postal Code/Zip Code _____
Phone Number _____	Phone Number _____

Note: Registering a product in multiple entry format is only allowed when the product has the same model number and the same dealer, however each serial number must be legibly listed for each unit. Delivery dates for a multiple entry must be within a one month time frame.

Product Information: _____

Model Number _____ Serial Number _____

Invoice Date _____

Important: Please send this form to the Meridian Manufacturing Inc. location which built this product being registered. If you require further assistance call you're dealer or the Meridian outlet nearest to your location.

We want to thank you for purchasing a Meridian manufactured product. Whether this is your first Meridian purchase or you have been a customer for years, you are now part of the Meridian community of customers and we appreciate your business.

It is important that you now complete the product registration information and this form indicating you have received delivery. This registration and information is necessary to ensure you have access to warranty and product updates in the event it be required in the future.

Registration can be completed by using this form or visiting your dealer who will complete the form online. You will be given access to the Meridian community and become eligible for updates, special offers and prizes.

Again thank you for choosing Meridian.

I have thoroughly instructed the buyer on the above described equipment. The review included the content of this manual, equipment care, adjustments, safe operation and warranty policy.

Date _____ Dealer's Signature _____

The above equipment and this manual have been received by me. I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date _____ Buyer's Signature _____

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Section 1: INTRODUCTION

Thank you for choosing a Meridian® Swing Auger.

DECLARATION OF CONFORMITY

We the Manufacturer:
Meridian Manufacturing Inc.
PO Box 1996, 2800 Pasqua Street North
Regina SK, Canada S4P 3E1

Declare that the Augers listed herewithin conform to the 2006/42/EC Machinery Directive.

The equipment we design and manufacture meet the exacting standards of the agricultural industry. This Swing Drive Auger and Tube Assembly is designed for the movement of Grains and Cereals.

Keep this manual for future reference. Call your dealer, distributor or our office if you need assistance, information, additional/replacement copies, or a digital copy of this document.

Information provided herein is of a descriptive nature. Meridian Manufacturing Inc. reserves the right to modify the machinery design and specifications without any preliminary notice.

Performance quality may depend on the product being handled, weather conditions and other factors.

SERIAL NUMBER LOCATION

Always give your dealer the serial number when ordering parts, requesting service or asking for other information. The serial number is located on the Boot.

- Use the space provided for easy reference:

Auger Model No: _____

Auger Serial No: _____

Aux. Equip. Model No: _____

Aux Equip. Serial No: _____



Fig 1 - Serial number location



Meridian Manufacturing Inc. continuously enhances its product offering through product improvements and new product innovations. Marketplace feedback, technological innovation, new materials and manufacturing methods, and a philosophy of continuous improvement constantly challenge the company to develop new and better ways of addressing market needs. Meridian is committed to innovation and reinvestment and as a result, the company maintains a portfolio of patents and intellectual property. For more information on our patents please see our website:

www.meridianmfg.com/patents

Section 2: SAFETY

3 Big Reasons why safety is important to you:

- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

The Safety Alert Symbol means:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

The Safety Alert Symbol identifies important safety messages on the auger and in this manual.

The following signal words are used in this manual to express the degree of hazard for areas of personal safety.

When you see the symbol and/or the signal words described below, obey the accompanying message to avoid possible injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations. Typically for machine components which, for functional purposes, cannot be guarded.



Indicates a hazardous situation, if not avoided, could result in death or serious injury. This word identifies hazards that are exposed when guards are removed. It may be used to alert against unsafe practices.



Indicates a hazardous situation, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.



Indicates practices or situations which may result in the malfunction of, or damage to equipment.



Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

2.1 SAFETY ORIENTATION

YOU are responsible for the SAFE operation and maintenance of your Meridian® auger. Be sure that everyone who will operate, maintain or work around it, is familiar with the safety, operating and maintenance procedures.


This manual will take you step-by-step through your working day. It will alert you to all the safe practices that should be adhered to while operating the auger.

Remember, you are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a regular part of your safety program. Be certain that everyone who will work with this equipment follows these procedures.


Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.


- Auger owners must give operating instructions to operators or employees before allowing them to operate the machine.
 - Procedures must be reviewed annually thereafter, as per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
 - The operator must be responsible, properly trained and physically able. You should be familiar with farm machinery in general.
- Think SAFETY! Work SAFELY!

2.2 GENERAL SAFETY

- Read and understand the Operator's Manual and all safety decals before operating, maintaining, adjusting or unplugging the auger. 

- Only trained, competent persons shall operate the auger. An untrained person is not qualified to operate the machine.

- Have a first-aid kit available for use should the need arise. 

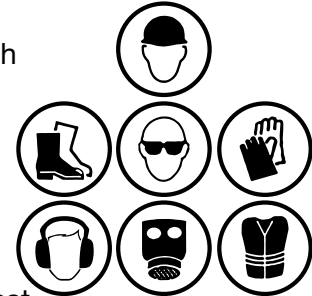
- Provide a fire extinguisher for use in case of an accident. Store in a highly visible place. 

- Do not allow riders.

- Do not allow children, spectators or bystanders within hazard area around the machine.

- Wear personal protective equipment (PPE). This list may include but is not limited to:

- Hard hat
- Protective shoes with slip resistant soles
- Eye protection
- Work gloves
- Hearing protection
- Respirator or filter mask
- Hi-Visibility safety vest



- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment.
 - Consult your doctor about operating this machine while taking prescription medications.

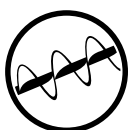
- If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.

- Review safety related items annually with all personnel who will be operating or maintaining the auger.

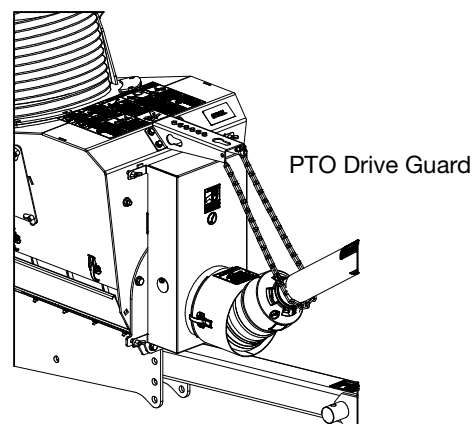
2.3 EQUIPMENT SAFETY GUIDELINES

Safety of the operator and bystanders is one of the main concerns when designing and developing this auger. However, every year many accidents occur which could have been avoided by a few seconds of thought, and a more careful approach to handling equipment.

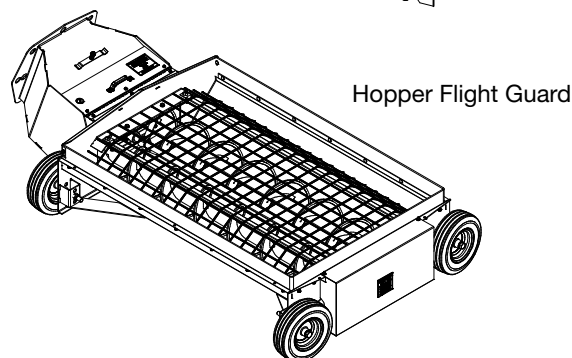
- In order to provide a better view, certain images in this manual may show an assembly with safety guards removed.
 - Equipment should never be operated in this condition. All guards must be in place. If removal becomes necessary for repairs, replace the guard prior to use.
- This equipment is dangerous to children and persons unfamiliar with its operation.
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - DO NOT TRY IT.
- Do not modify the equipment in any way. Unauthorized modification result in serious injury or death and may impair the function and life of the equipment.
- The design and configuration of this auger includes safety decals and equipment. They need to be clean, readable and in good condition.



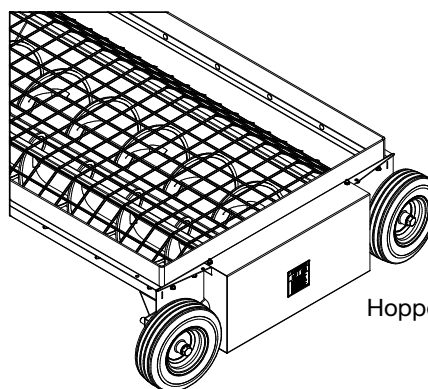
- Safety guard locations:



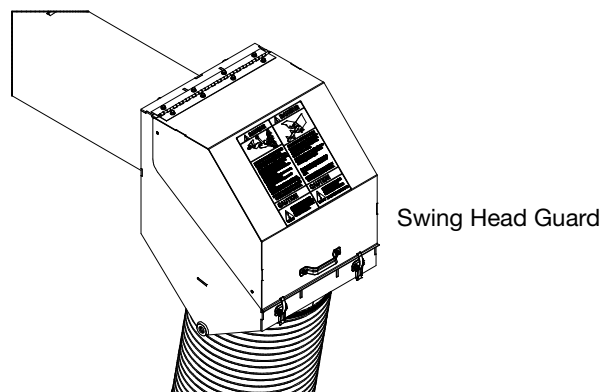
PTO Drive Guard



Hopper Flight Guard



Hopper Drive Guard



Swing Head Guard

2.4 WORK PREPARATION

- Never operate the auger and its engine until you have read this manual, and understand the information.
- Be familiar with the safety messages found on the decals around this unit.

- Personal protective equipment (PPE) include:

- Hard hat
- Eye protection
- Protective shoes
- Work gloves



They are recommended during installation, placement, operation, maintenance and removal of the equipment.

- Do not allow long hair, loose fitting clothing or jewelry to be around equipment.
- **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

Agricultural equipment can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80 db.



Noise over 85 db on a long-term basis can cause severe hearing loss.

Noise over 90 db adjacent to the operator over a long-term basis may cause permanent, total hearing loss.

Note:

Hearing loss from loud noise (tractors, chain saws, radios, etc.) is cumulative over a lifetime without hope of natural recovery.

- Clear working area of stones, branches or hidden obstacles that might be hooked or snagged, causing injury or damage.
- Operate only in daylight or good artificial light.
- Be sure machine is in a stable position, is adjusted and in good operating condition.
- Ensure that all safety guards and safety decals are properly installed and in good condition.
- Before starting, inspect the unit for any loose bolts, worn parts, cracks, leaks or frayed belts. Make the necessary repairs.
 - Always follow the maintenance instructions.

2.5 PLACEMENT SAFETY

- Stay away from overhead power lines when operating or moving the auger. Electrocuting can occur without direct contact.
- Keep auger as low as possible.
- Chock auger wheels before operating.
- Position auger providing enough space for trucks to load or unload.
- Operate auger on level ground, free of debris.

2.6 LOCK-OUT TAG-OUT SAFETY

- Establish a formal Lock-Out Tag-Out program for your operation.
- Train all operators and service personnel before allowing them to work around the area.
- Provide tags on the machine and a sign-up sheet to record tag-out details.

2.7 PTO SAFETY

- Never use a PTO driveline without a rotating shield in good working order.
- Ensure PTO shields turn freely on the driveline.
- PTO driveline must be securely attached at both ends before operating.
- Keep body, hair, and clothing away from rotating PTO driveline.
- Keep U-joint angles small and equal.
 - Do not exceed recommended operating length for PTO driveline.
- Before starting tractor, turn power to PTO to the off position (where applicable).



2.8 TIRE SAFETY

- Failure to follow procedure when mounting a tire on a wheel or rim can produce an explosion and may result in serious injury or death.
- Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Have a qualified tire dealer or repair service perform required tire maintenance.
- When replacing worn tires, make sure they meet the original tire specifications. Never undersize.



2.9 SAFETY DECALS

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible.
- Replaced parts must display the same decal(s) as the original parts.
- All safety decals have a part number in the lower right hand corner. Use this part number when ordering replacements.
- Safety decals are available from your authorized distributor, dealer's parts department or from Meridian Manufacturing Inc.

2.9.1 Applying Decals:

1. Be sure the application area is clean and dry. Ensure the surrounding temperature is above 10°C (50°F).
 - a. Remove all dirt, grease, wax from surface.
 - b. Clean the area with a non-ammonia based cleaner.
 - c. Wipe the clean surface with isopropyl alcohol on paper towel, and allow to dry.
2. Determine the exact position before you remove the backing paper.
3. Peel a small portion of the split backing paper.
4. Align the decal over the specified area. Use a squeegee to carefully press the small portion, with the exposed adhesive backing, into place.
5. Slowly peel back the remaining paper and carefully smooth the rest of the decal into place.
6. Small air pockets can be pierced with a pin and smoothed out using the squeegee, or a piece of sign backing paper.

2.10 DECAL LOCATION

The following illustration shows the general location of decals on this auger. The position of decals may vary depending on the machine's options. Decals are not shown at actual size.

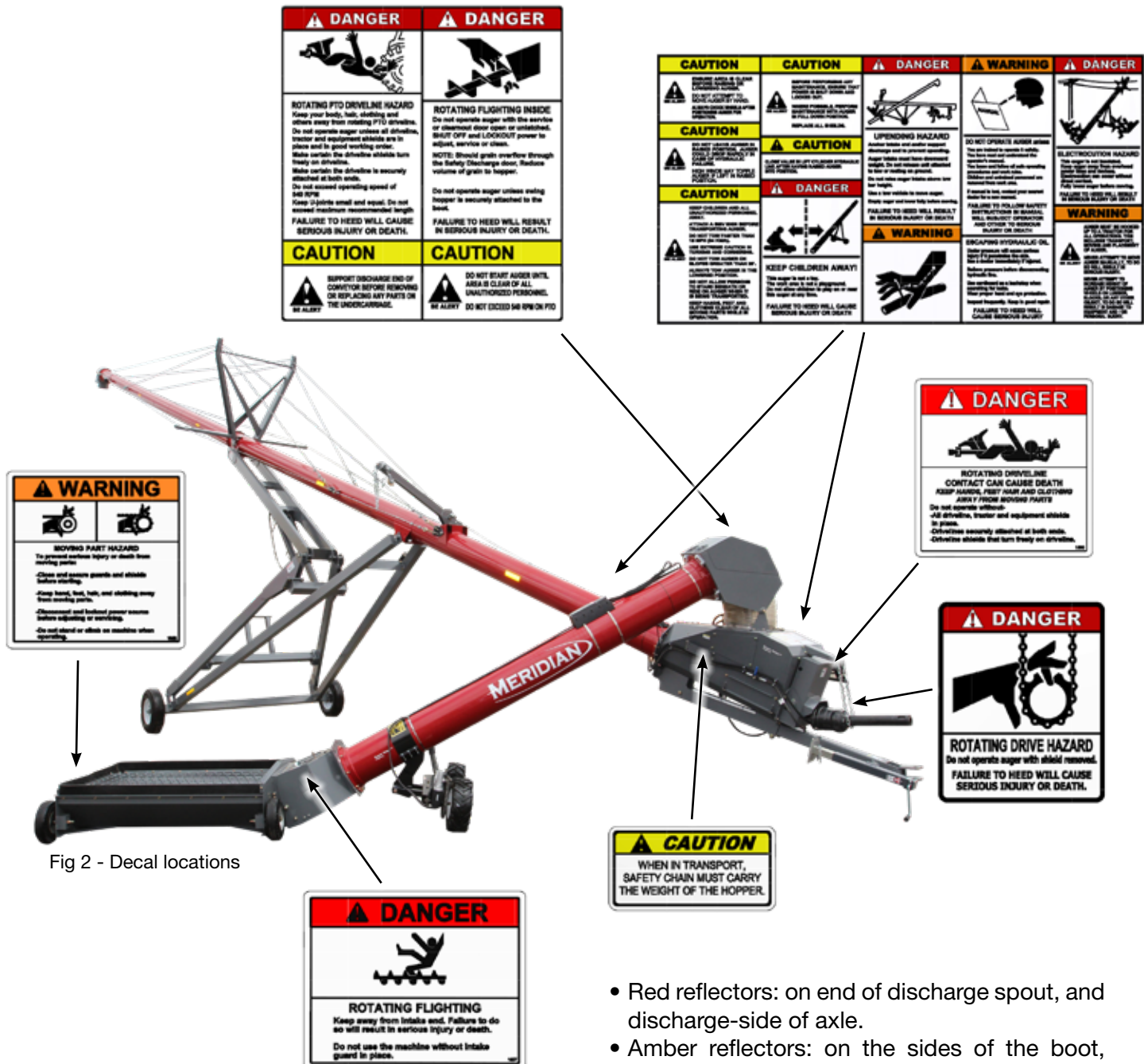

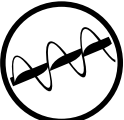



Fig 2 - Decal locations

- Red reflectors: on end of discharge spout, and discharge-side of axle.
- Amber reflectors: on the sides of the boot, discharge, boot-side of axle, and at less than 15 ft intervals along the tube.


REMEMBER - If safety decals have been damaged, removed, become illegible, or parts were replaced without signage, new ones must be applied. New decals are available from your authorized dealer.

2.11 OPERATING SAFETY

- Anyone who will be operating this auger, or working around it, must read this manual. They must know operating, maintenance, safety info.
 - Review the manual annually.
- Clean or replace all safety decals if they cannot be clearly read and understood.
- Place all controls in neutral, and stop the engine. Remove the ignition key. Wait for all moving parts to stop before adjusting, repairing or unplugging.
- Keep all bystanders, especially children, away from the machine when running.
 - Also, when authorized personnel are carrying out maintenance work.
- Establish a Lock-Out, Tag-Out policy for the work site. Be sure all personnel are trained in and follow all procedures.
 - Lock-out, tag-out all power sources before servicing the unit or working around equipment.
- Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
- Keep hands, feet, hair and clothing away from all moving/rotating parts.
- Do not allow riders on the auger when moving or transporting it.
- Keep working area clean and free of debris to prevent slipping/tripping.
- Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
- Do not operate the auger when any guards are removed.
- Chock wheels of auger before starting.

- Be sure that auger tube is empty before raising or lowering.
- High winds may overturn auger. To avoid damage to structures and equipment, do not raise auger fully in windy conditions.
 - Do not leave auger raised, when not in use.

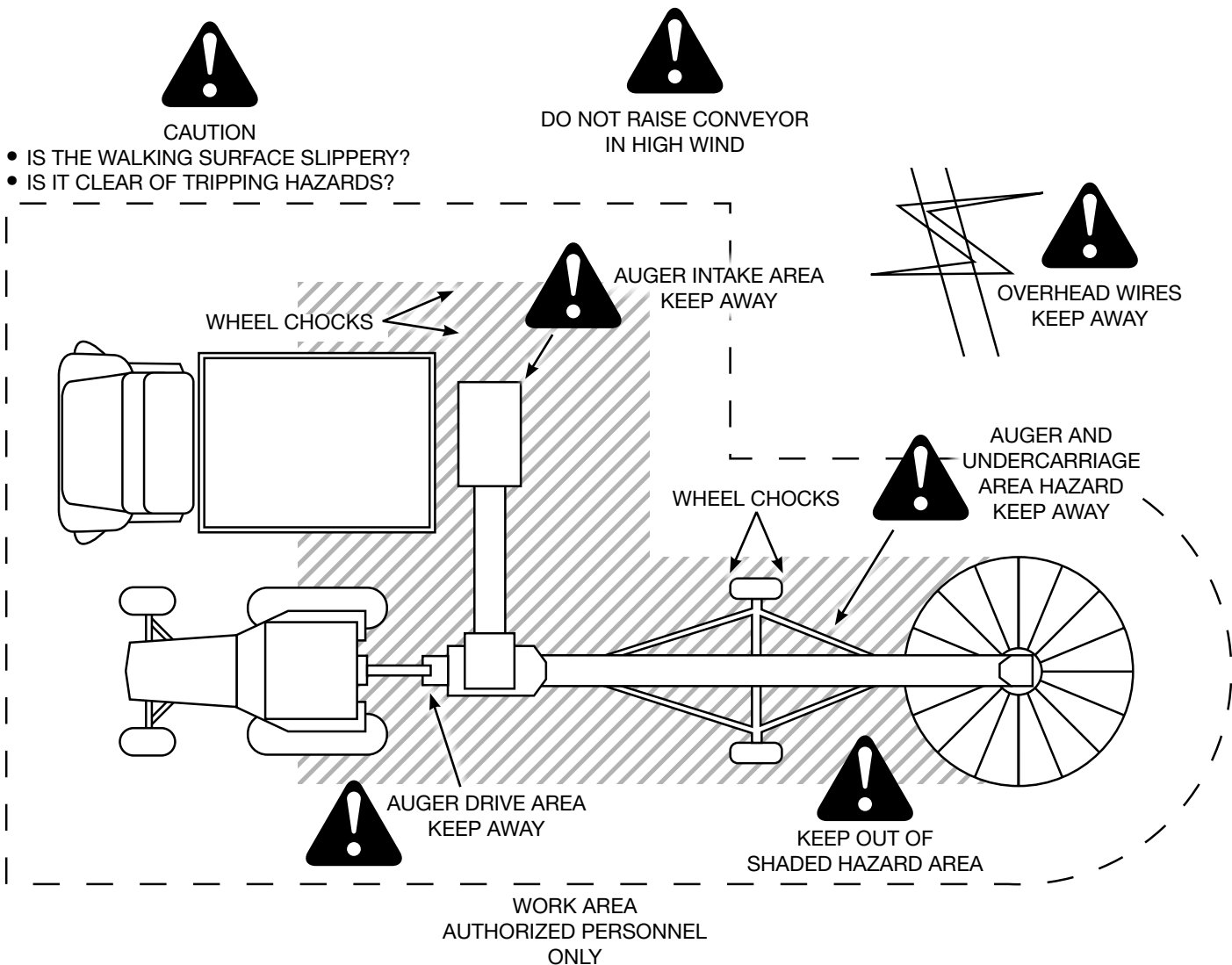
2.12 MAINTENANCE SAFETY

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Follow good shop practices.
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for job at hand.
- Review safety related items annually with all personnel who will be operating, using or maintaining the equipment.
- Use personal protection devices such as eye, hand, breathing and hearing protection, when performing any services or maintenance work.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.
- Periodically tighten all bolts, nuts and screws to ensure the unit is in safe condition.
- Disable the motor/engine before any service and maintenance, so the equipment can not be accidentally turned on.
- Establish a Lock-Out/Tag-Out procedure.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.

2.13 WORKPLACE HAZARD AREA

The following illustration shows the designated work areas. This area shall be marked off with coloured nylon or plastic rope hung by portable barriers to define the designated work areas.

- Under no circumstances should children and/or other persons not involved in the operation of the equipment be allowed to trespass into the work area.
- Trespass into the area by anyone not involved in the actual operation, or trespass into a hazard area by anyone shall result in a immediate shutdown by the operator.
- It is the responsibility of the operators to see that the work area has secure footing, is clean and free from all debris and tools which may cause accidental tripping and/or falling.



2.14 TRANSPORT SAFETY

- The auger must be empty before raising or lowering the tube.
- Always transport the auger in collapsed position.
- Ensure all lights, reflectors, other lighting requirements are installed and in good condition.
- Never allow riders on the auger.
- Comply with all local laws governing safety and transporting equipment on public roads.
- Do not exceed a safe travel speed. Slow down for rough terrain and when cornering.
- Stay away from overhead power lines. Electrocutation can occur without direct contact.
- Plan your route to avoid heavy traffic.
- Do not drink and drive.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when driving near or crossing roadways.

2.15 STORAGE SAFETY

- Store the auger on a firm, level surface.
- Store in an area away from human activity.
- If required, make sure the unit is solidly blocked up.
- Remove the battery and store in dry location. Do not sit battery on a cold, concrete floor.
- Make certain all mechanical locks are safely and positively connected before storing.
- Do not permit children to play on or around the stored machinery.



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Section 3: OPERATION

WARNING

- Read and understand the Operator's Manual, and all safety decals, before using.
- Stop the engine/motor. Place all controls in neutral, remove ignition key and wait for all moving parts to stop before servicing, adjusting, or repairing or unplugging.
- Clear the area of bystanders, especially children, before starting.
- Keep working area clean and free of debris to prevent slipping or tripping.
- Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- Do not remove or modify auger flighting guards, keep in good working order.
- Do not operate the auger without all guards, doors, and covers in place.
- Do not allow riders on the auger.
- Stay away from overhead obstructions and power lines during operation. Electrocution can occur without direct contact.
- Chock wheels of auger before starting.
- Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear area before restarting.
- Establish a lock-out, tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures. Lock-out tag-out all power sources before servicing the unit.

The Meridian® auger has many features incorporated into it as a result of suggestions made by customers like you.

Hazard controls and accident prevention are dependent upon the personnel operating and maintaining the equipment. Their awareness, concern, prudence and proper training are crucial.

It is the responsibility of the owner and operators to read this manual and to train all personnel before they start working with the machine. By following recommended procedure, a safe working environment is provided for the operator, co-workers and bystanders in the area around the work site.

By following the operating instructions, in conjunction with a good maintenance program, your auger will provide many years of trouble free service.

3.1 MACHINE COMPONENTS

The swing auger is powered by either a 540 or 1000 rpm PTO drive.

- Components may vary, and their positions may change depending on the options which in the auger contains.
- Not all components appear on all augers.

Here is a list of the main components:

- a. Main Auger Tube with Truss System
- b. Discharge with blow-out doors
- c. Undercarriage Frame
- d. Swing Hopper
- e. Swing Electric Mover
- f. Electric Mover Control Box
- g. Swing Head
- h. Boot with PTO Gearbox
- i. Swing Hopper Lift Arm

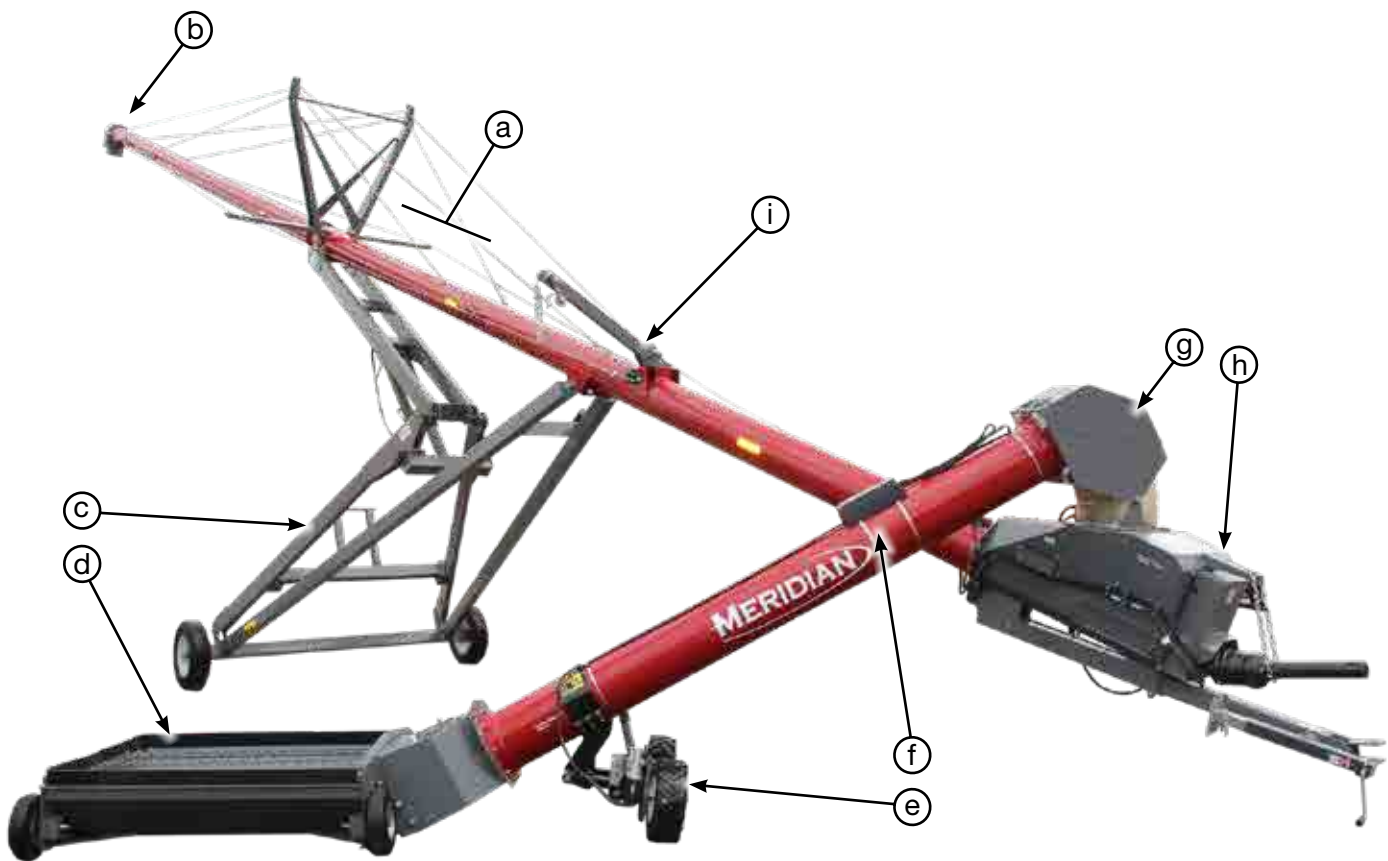


Fig 3 - Swing auger components

3.2 COMPONENTS AND CONTROLS

Auger Boot with PTO Drive:

The auger boot contains the PTO drive. There are two drive options which are not available on all auger models:

- 540 rpm PTO drive.
- 1000 rpm PTO with a speed reducing gearbox.

Continuous Super-Edge™ Flighting:

All Meridian augers are equipped with this high capacity flighting.

Heavy-Duty Undercarriage Frame:

All augers are built with durable undercarriage frames.

- The MRDN 10 and 13 frames fold inward.
- The SLMD 12 auger frame folds outward.
- The Auger 14 frame folds inward.

There are patents on the undercarriage frame.

Hopper Lift Arm with Winch:

Store the swing hopper in the raised position when not in use. Attach the chains to release the weight from the winch cable.

- The position of the winch will vary depending on the auger model.



Fig 4 - Auger 14 boot and swing head



Fig 5 - 13" Auger boot with 540 rpm PTO



Fig 6 - 13" Auger boot with 1000 rpm PTO



Fig 7 - Auger 14 Hopper lift arm



Fig 8 - SLMD Hopper lift arm

Standard Swing Auger:

The swing auger can be manually moved around the side of the auger into position for loading.

Swing Auger with Mover (Optional):

This swing is powered by an electric mover kit. Its control box is fastened to the swing tube. The kit comes with aggressive treaded drive wheels, and a 12V remote control.



Fig 9 - Swing auger with mover

Extendible Swing Auger (Optional):

This swing features an extendible auger tube.

- A 13" diameter swing is available for the MRDN 13 auger.
- A 16" Swing is available for the Auger 14.
- Refer to the swing manual for instructions on its operation. The document holder is located on the swing head.



Fig 10 - Extendible swing auger



Fig 11 - Extendible swing's document holder

Truss System and Side Cables:

The cable truss system needs to be adjusted periodically to keep it straight side-to-side, and a slight upward bow (a smile) in the auger tube for proper, long-lasting operation.

LED Light Package (Optional):

a light package is available to illuminate the discharge and hopper ends.



Fig 12 - MRDN 13 truss system



Fig 13 - Auger 14 truss system

Discharge:

- SLMD 12 head-end bearings are sealed and do not require greasing.



Fig 14 - SLMD 12 Discharge

Discharge with patented Blow-Out Doors:

The MRDN 10, 13 and Auger 14 are equipped with patented Grain Auger Blow-Out Doors.

- **Note:** The head-end bearings, on this discharge, are NOT sealed and DO require yearly greasing.



Fig 15 - MRDN 13 Discharge with Blow-Out Doors

3.3 TRANSPORTATION

DANGER

ELECTROCUTION HAZARD

- This auger is not insulated.
- Be alert to overhead obstructions and electrical wires. Electrocution can occur without direct contact.
- Do not raise or lower auger until hazardous area is cleared.
- Failure to maintain proper clearance can result in serious injury or death.

IMPORTANT:

If auger wheels are stuck in grain, mud, dirt, or snow, remove the restraining material before transport.

Failure to do so could damage the auger.

1. Remove wheel chocks, so wheels are free to move.
2. All Meridian augers have minimum clearance positions when in transport mode.
 - The auger must be fully collapsed.
 - The auger tube should be seated in the A-Frame cradle.
3. Put hitch pin in place, and ensure that the safety chain is properly attached.
 - Use a type of hitch pin that will not allow the auger to detach itself from the tractor.
4. Store PTO driveline and lock it into place.
5. Put swing hopper into transport position.
 - Lock it into place with the safety chains.
 - If swing hopper is not in transport position, the hopper will be damaged during transport.
6. After the auger is hitched to the vehicle, put jack in raised transport position and lock into place.
 - Use caution when working with hitch jack.
7. If the auger is equipped with a light package, make sure the connections are fastened securely and not dragging on the ground.
8. Move auger with a tractor only.
 - Never attempt to move by hand.
9. Do not allow riders on the auger.
10. Transport the auger no faster than 15 mph.
 - When roads are rough or surfaces are uneven, slow down to ensure safe travel.
11. DO NOT transport the auger on slopes greater than 20 degrees. This could cause auger to tip, resulting damage to it.
12. When visibility is reduced, use caution and add extra lights to the auger.
 - Consider using a pilot vehicle for safer travel.
13. Use extreme caution when turning or cornering with the auger in tow.
14. Check regulations with local authorities regarding auger transportation.
 - Follow all over-width regulations.
 - Equip the auger with all necessary lighting, and use hazard warning flashers on your tractor, when required by law.

3.4 AUGER PLACEMENT

Once the auger has been transported to the work site, it can be moved to its working position.

DANGER

ELECTROCUTION HAZARD

- This auger is not insulated.
- Be alert to overhead obstructions and electrical wires. Electrocution can occur without direct contact.
- Do not raise or lower auger until hazardous area is cleared.
- Failure to maintain proper clearance can result in serious injury or death.

1. Before raising or lowering your auger, check that the area is clear of obstructions, children and unauthorized personnel.
2. Ensure that your auger is on level ground that is free of debris.
 - If ground is very uneven, auger can tip and cause damage to the equipment.

WARNING

Never place risers under the wheels of the auger to increase height. This includes: wood, cement blocks, bricks, etc. Attempting this could result in damage to the equipment and personal injury or death.

3. Ensure the auger wheels are free to move before raising or lowering the auger.
 - Remove dirt, snow, grain, etc. which may obstruct the auger movement.
4. Be sure the hitch is secured to the tractor.
5. Use tractor hydraulics to raise the auger.
 - Open the hydraulic valve to the lift cylinder.
6. Raise auger to desired height.

7. Slowly back the auger into position until the spout is over the opening of the bin or storage facility.
8. Lower the spout into the opening.
9. When the auger is in position:
 - Close the hyd. valve to the lift cylinders.
 - Chock the auger wheels on both sides.

CAUTION

If valve remains open, a loss of hydraulic pressure within the tractor system will allow the auger to lower by itself. This could cause damage to the auger and injury to the operator.

NOTICE

Never use the auger as a hoist or crane. This may damage the auger and void the warranty.

3.4.1 Once work is complete:

10. Be sure auger tube is empty.
11. Raise the auger. Ensure that the discharge end is above the bin or storage facility.
12. Remove wheel chocks and ensure area is clear of personnel and obstructions.
13. Drive forward, pulling auger slowly away from the bin or storage facility.
14. Be sure that the wheels are free to move.
15. Lower the auger to its fully collapsed position before transporting.

3.5 PRE-OPERATION CHECKLIST

Efficient and safe operation of the auger requires that each operator knows the operating procedures.

It is important for both the personal safety and maintaining the good mechanical condition of this machine that this checklist is followed

Before operating the auger, the following areas should be checked:

- All safety shields are in place, secure, and in good working order.
- Cables are secure.
- Fasteners are secure.
- PTO driveline is securely attached to driveshaft and tractor.
- PTO driveline rotates freely.
- PTO driveline telescopes easily.
- Tube alignment is straight.
- Auger wheels and tractor wheels are chocked.
- Intake hopper and discharge spout are free of any obstructions.
- A second qualified person is present during operation.
- All operators have read manual and are aware of safety precautions.
- Maintenance has been performed properly.
- Power to PTO and hydraulic system is in off position before starting tractor.
- Hydraulic system has been thoroughly checked for leaks.
- All Gearboxes are filled with oil.

3.6 NEW MACHINE BREAK-IN

Meridian Manufacturing Inc. recommends that before you start moving grain with a new auger that you should do the following:

1. Double check that the intake hopper is properly positioned and the PTO drive on the tractor is in the off position.

NOTICE

UPENDING HAZARD

When starting the auger for the first time, be prepared for an emergency shutdown in case of excessive vibration or noise.

- It may run roughly until the tube is polished.
2. Run the auger at approximately 1/2 the normal operating speed (normal operating speed = 540 RPM) without adding grain to the intake for approximately 5 minutes.
 3. Bring auger up to full operating speed (540 RPM). Slowly add grain to the hopper.
 4. Continue to add grain slowly until approximately 1000 bushels (28 tonnes) has been run through the auger.
 - This will "shine up" the flighting and tube.
 5. The operator should be attentive to any unusual vibrations or noises.
 - Find the source.
 - Turn off and LOCK-OUT the power source.
 - Adjust the auger until it runs smoothly.
 6. Upon completion of initial run, slow down until the tube is empty of grain, then stop the auger.
 - Lock out the power source and conduct a complete inspection of the auger, following the pre-operation checklist.
 - After the initial start up and inspection, the auger should be shut down and inspected at least three times during the first hours of operation.

3.7 OPERATING ON SITE

WARNING

OPERATION HAZARD

- Keep hands, clothing, and other objects away from intake hopper, drive chains, and all moving parts to avoid personal injury.
- Never use your hands to clean out debris.

CAUTION

POWER TAKE-OFF SAFETY

- Maintain a minimum 4 inch overlap on the tumbler shields.
- Do not engage PTO until all personnel are clear of tractor, tumbler shaft and auger.
- Ensure ends are fastened securely to the auger and tractor.
- When installing PTO, ensure CV end goes to tractor.
- Do not move auger with PTO driveline attached to the tractor.

NOTICE

HIGH WIND HAZARD

Do not operate or leave auger fully raised, in high winds. It may blow over, damaging structures and equipment.

3.7.1 Auger Drive and Lock-Out:

Proper operation of this auger requires that the operator pre-inspect the drive system, know how to shut down the system in an emergency, and generally monitor the system during operation.

• Drive System and PTO Driveline:

- Ensure that the PTO drive on the tractor is in the off position before starting the tractor.
- Stay clear of PTO hazard area.
- Maintain the following distances between the tractor stub and machine stub:
 - MRDN 10: distance must be 39 - 44"
(refer to decal #130000011657)
 - SLMD 12: 36 - 38"
(refer to decal #13000003296)
 - MRDN 13 - 540 rpm drive: 43 - 48"
(refer to decal #130000011656)
 - MRDN 13 - 1000 rpm drive: 51 - 53"
(refer to decal #130000011656)
 - Auger 14: 34.5 - 42.5"
(refer to decal #13000005401)

• Lock-Out and Shutdown of PTO Driveline:

- Turn off engine.
- Remove ignition key from tractor.
- If for some reason, you cannot remove the key, remove the PTO driveline from the tractor.

3.7.2 Emergency Shut-Down:

1. Should the auger be shut-down under load, lock-out the power source.
 - Disconnect the PTO shaft.

IMPORTANT:

Never use your hands to clean out product from the auger.
use a small shovel or other tool.

2. Remove product from the hopper and auger tube using a small shovel or other tool.
 - **Note:** Starting the auger under load may result in damage to the auger.
3. Before restarting, make certain everyone is clear of the designated work area.
4. Start auger at a reduced speed.

3.7.3 Everyday Operation:

1. Complete the pre-operation checklist.
2. Have another trained operator present to monitor the operation and help with a shutdown in case of an emergency.
 - Monitor the auger during operation for vibration and abnormal noises.
 - If anything out of the ordinary is noted, shut-down and lock-out the auger.
 - Determine the source, and correct before continuing operation.
3. Observe work area restrictions.
 - Refer to Workplace Hazard Area diagram.
4. Keep all safety guards and shields in place.
5. Keep hands, feet away from all moving parts.
6. Run at 540 RPM for maximum capacity.
7. Keep the hopper full.
 - Pour grain in the middle of hopper, closest to the tube for best results.
8. Run the auger only when moving material.
 - Running the auger without grain moving through it causes unnecessary wear.
9. Lock-Out power source to adjust, service or clean the auger.
10. Make certain everyone is clear before operating or moving the machine.

3.7.4 Normal Shut-Down:

1. Be sure that the hopper and auger tube are empty before stopping the unit.
2. Lock-out power source and remove PTO shaft.

3.8 HYDRAULICS

WARNING

HYDRAULICS HAZARD

- Wear proper face and hand protection when searching for hydraulic leaks. Fluid can escape under pressure, causing infection or toxic reaction on skin.
 - See a doctor immediately if injured.
- If valve remains open, a loss of hydraulic pressure could allow the auger to lower unexpectedly, causing damage to the auger and personal injury.

NOTICE

- Dirt in the hydraulic system can damage the cylinder o-rings. This may cause leakage and possible system failure.
- After valves are opened, the auger lowers by gravity. As the auger nears the full down position, the rate of descent will increase.
- Be sure that all safety precautions and proper operation procedures are fully understood before connecting the auger hydraulic hoses.
 - Meridian strongly recommends doing a daily visual check for damage to the hoses and connectors.
 - Replace any damaged parts before operation.
- Leaking hydraulic fluid can be nearly invisible under high pressure. Use some type of backdrop when searching for leaks.
 - Do not use your hand to search for leaks.
- Meridan Augers have a velocity fuse for hydraulic safety. If the hydraulic line breaks, it locks the system.
 - Our shut-off valve is equipped with a flow restrictive orifice.
 - After the hydraulic hose is repaired, the system resets itself and is ready for operation.
- There are various types of tractor hydraulic systems; the quick connect couplers are supplied by the owners.
 - Please consult your tractor manual for the proper couplers.
- Before connecting the hydraulic hoses, check that the quick connect couplers on the auger and tractor are clean and free of dirt and debris.
 - Use a clean cloth to wipe them.
- Do not disconnect the hydraulic coupler when the system is under pressure.
 - Relieve all pressure and then disconnect.
- Be sure that the tractor has enough hydraulic capacity to run the auger:
 - MRDN 10 requires a minimum of 10 litres (2.6 US Gallons) of hydraulic fluid.
 - SLMD 12 requires at least 12 L (3.2 US G) of hydraulic fluid.
 - MRDN 13 requires at least 19 L (5 US G).
 - Auger 14 requires at least 32 L (8.5 US G).
- Check that the valve to the lift cylinder is open.
 - Start the tractor and engage hydraulics.
 - Raise the auger to desired height, and close hose valve.
 - You must turn valve while the hydraulic system is pressurized; do not disconnect hydraulic couplers.
- To lower the auger, reconnect hose couplers to the tractor.
 - Ensure the area is clear and wheels are free to move.
 - Open the hose valve, start your tractor, and engage hydraulics.
 - The auger is fully lowered when the tube is resting on the tube saddle.

3.9 STORAGE

After the season's use, or when the auger will not be used for an extended period of time, it should be thoroughly inspected and prepared for storage.

Repair or replace any worn or damaged components to prevent unnecessary down-time next season.

For a long, trouble-free life, this procedure should be followed when preparing the machine for storage:

1. Remove all left over product or residue from the intake hopper and inside tube.
2. Remove barriers, anchors and wheel chocks.
3. Disengage the power source, and remove the PTO shaft.
4. Move auger slowly out of work area.
5. Lower the auger to fully collapsed position.
6. Wash the entire machine thoroughly using a water hose or pressure washer to remove all dirt, mud, debris or residue.
 - Clean inside the tube.
7. Inspect all hydraulic hoses, fittings, lines, couplers and valves.
 - Tighten any loose fittings.
 - Replace any hose that is badly cut, nicked or abraded or is separating from the crimped end of the fitting.
8. Lubricate all grease fittings.
 - Ensure all grease cavities have been filled with grease to remove any water residue from having been washed.
9. The auger should be stored fully collapsed with the hopper in the tipped position.
10. Do not attempt to pull auger out of snow bank in winter.
 - This will cause damage.
11. Ensure that there is no snow build up on the auger tube while in storage to prevent damage..

⚠ WARNING

STORAGE HAZARD

- Do not leave auger in raised position when not in use. Auger could drop rapidly in case of hydraulic failure.
- High winds may upset the auger.
- Because hydraulic scissor lift is faster than a hand crank system, use extra caution and clear area of personnel before raising or lowering the auger.



Fig 16 - Auger in fully collapsed position

Section 4: SERVICE AND MAINTENANCE

WARNING

- Review the Operator's Manual and all safety items before maintaining the auger.
- Clear the area of bystanders, especially children, before repairing or adjusting.
- Before servicing, repairing or unplugging; place controls in neutral, stop engine, remove ignition key and wait for moving parts to stop.
- Follow good shop practices:
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for the job at hand.
- Relieve pressure from the hydraulic circuit before servicing.
- Before applying pressure to a hydraulic system, make sure all components are tight, hoses and couplings are in good condition.
- Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- Make sure there is plenty of ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.
- Place stands or blocks under frame before working beneath the unit.
- When maintenance is complete, before resuming work, install and secure all guards.
- Keep decals clean, replace if not readable.

By following the operating instructions, in conjunction with a good maintenance program, your auger will provide many years of trouble free service.

4.1 FLUIDS AND LUBRICANTS

Grease:

Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable, SAE multipurpose lithium based grease.

Storing Lubricants:

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants.

Store them in an area protected from dust, moisture and other contaminants.

4.1.1 Greasing:

NOTICE

GREASING HAZARD

Too much grease causes excessive overheating.
Under-greasing accelerates equipment wear.

No grease should be seen around bearings.
If there is, too much grease was applied
and the seal has ruptured!

IMPORTANT:

Grease bearings only one pump per month
under normal usage conditions.

Bearing greasing frequency should be
determined by usage and conditions.

1. Use a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
3. All bearings are greasable, but require only minimal grease.

Recommended greasing is one small stroke
every month. Be careful not to over-grease
as this may push the seal out.

4. Replace and repair broken fittings immediately.
5. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.



13000006014

Fig 17 - Lubricate decal

4.2 SERVICING INTERVALS

The following recommended periods are based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication and oil changes.

Schedules may vary depending on options and engine model contained in your equipment.

- After maintenance is completed, replace and secure all safety shields, safety devices, service doors and cleanout covers. Refer to Section 2.3 for safety guard locations.
- Refer to Section 3.8 for hydraulics information on maintenance of the hoses.
- Refer to Section 4.3 for Lubrication Locations.
- All hopper bearings are pre-lubricated and do not require further lubrication.

4.2.1 Every 10 Hours or Daily:

1. Remove PTO Driveline guard cover.
 - Grease universal joint.
 - Lubricate the centre portion of the driveline on a yearly basis.
 - The first lube maintenance should be done in the first 16 to 24 hours of operation. Then follow a regular schedule of lubing.
 - Check PTO universal joint retain bolt and retighten if necessary.
2. Lubricate the cross and bearing in the U-joint.
3. Grease Hopper universal joints and bushings.

4.2.2 Every 50 Hours or Weekly:

4. Grease Boot knuckles.
5. Lubricate Boot chain.
6. Grease Boot bearings.
7. Grease Feed Head knuckle.
8. Grease the Hopper chain.
9. Grease the Hopper knuckle.
10. Grease the Hopper bushings.

4.2.3 Every 100 Hours or Monthly:

11. Check tire pressure.
 - The recommended tire pressure should be maintained at 40 to 45 psi.

4.2.4 Every 200 Hours or Annually:

12. Change oil in the gearbox.
13. Oil Drive Chain with #130 grade oil.
14. Fill Boot inside gearbox with 80W-90 gearlube oil.
 - Fill to the bottom of plug hole.
15. Fill Boot chain gearbox with 85W-90 gearlube oil.
 - Fill to the bottom of plug hole.
16. Fill Feed Head gearbox with 80W-90 gearlube oil.
 - Fill to the bottom of plug hole.
20. Grease the Frame wheel hubs.
21. Grease the Frame pivot points.
22. Grease the Frame cylinder pins.
23. Lubricate telescoping cross members.
24. Discharge (head-end) bearings:
 - SLMD 12: Bearings are sealed and DO NOT require greasing.
 - MRDN 10, 13 and Auger 14: Grease the Discharge (head-end) bearing hubs.
25. Check and repack wheel hub bearings to lengthen the life of the hubs.

IMPORTANT: Do not over fill with oil.

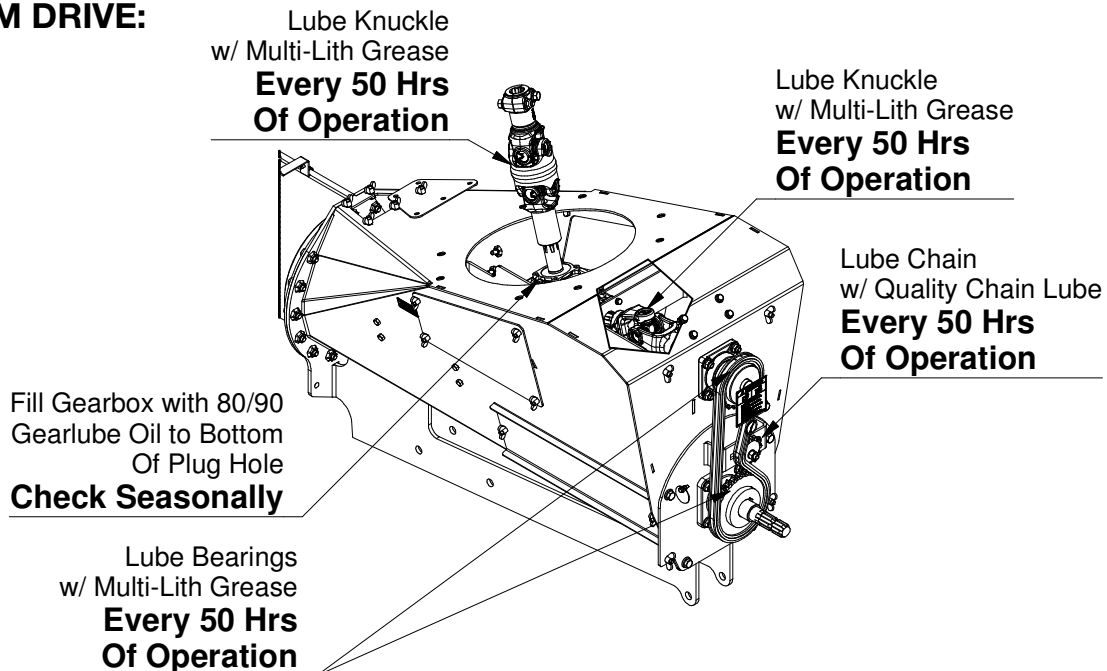
Table 1 - Gearbox Oil Details

AUGER SIZE	QUANTITY	OIL TYPE
10" Top & Bottom Gearbox	1.15 Litre (39 oz)	80W-90
13" Top & Bottom Gearbox	1.15 Litre (39 oz)	80W-90
13" Reducing Gearbox	6 Litre (203 oz)	85W-90
SLMD 12 Top & Bottom Gearbox	1.1 litre (37 oz)	80W-90
SLMD 14 Top & Bottom Gearbox	1.1 litre (37 oz)	80W-90
SLMD 14 Gearbox Reducer	4 Litre (140 oz)	85W-90

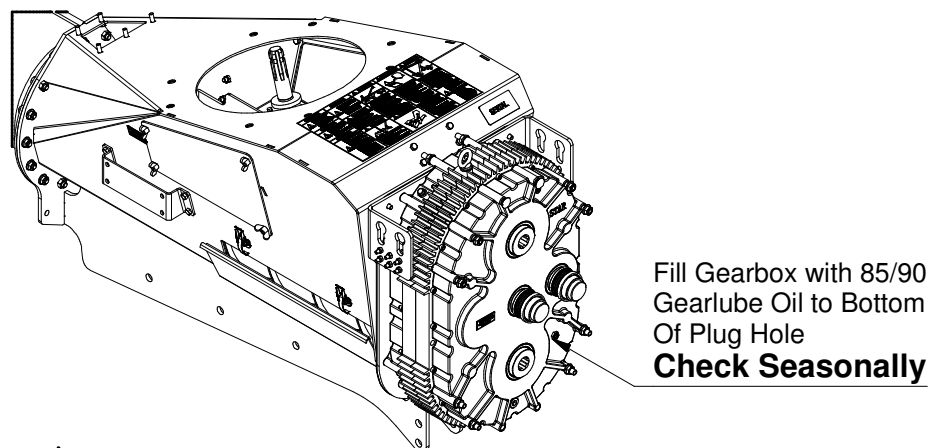
17. Grease the Hopper tire bolts.
18. Oil the Hopper Lift cable rollers.
19. Lubricate PTO Driveline centre portion.

4.3 LUBRICATION LOCATIONS

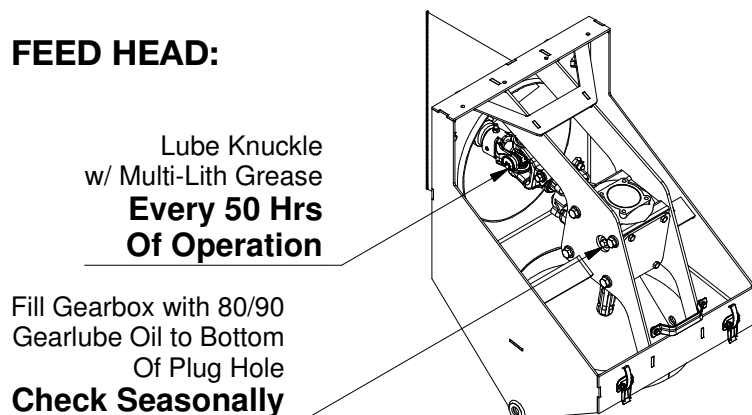
BOOT, 540 RPM DRIVE:



BOOT, 1000 RPM DRIVE W/ REDUCER:

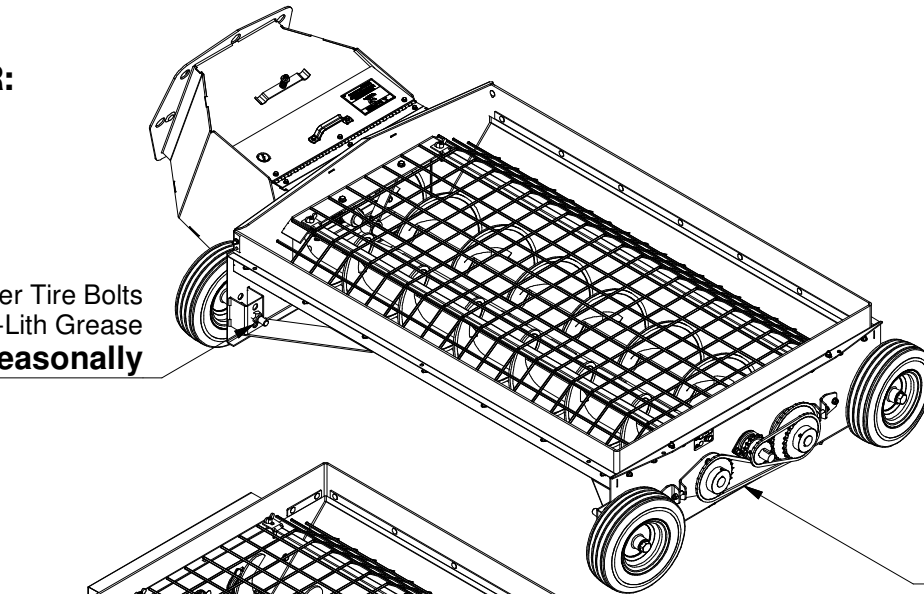


FEED HEAD:

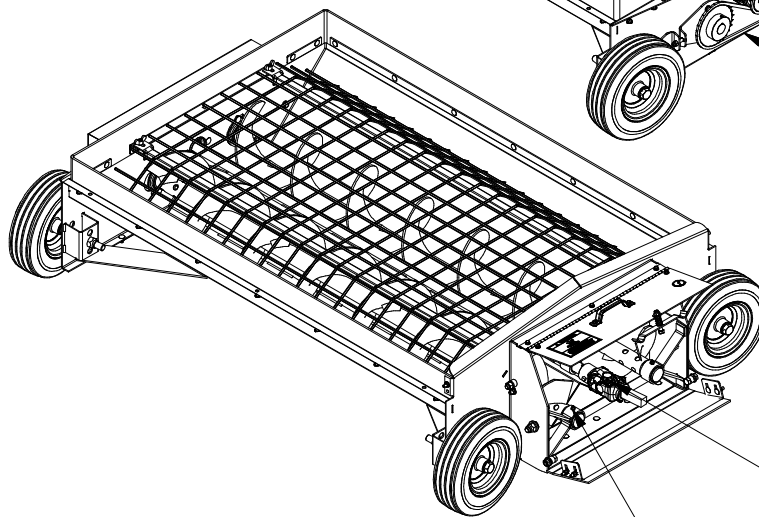


HOPPER:

Lube Hopper Tire Bolts
w/ Multi-Lith Grease
Check Seasonally



Lube Chain
w/ Quality Chain Lube
**Every 50 Hrs
Of Operation**

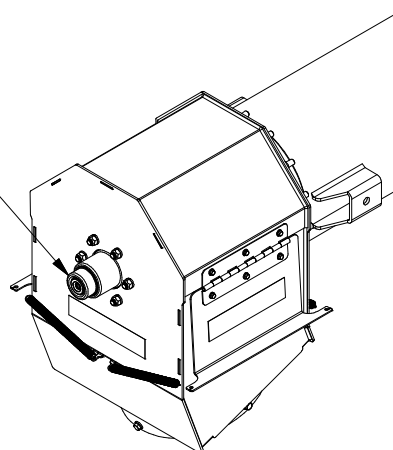


Lube Knuckle
w/ Multi-Lith Grease
**Every 50 Hrs
Of Operation**

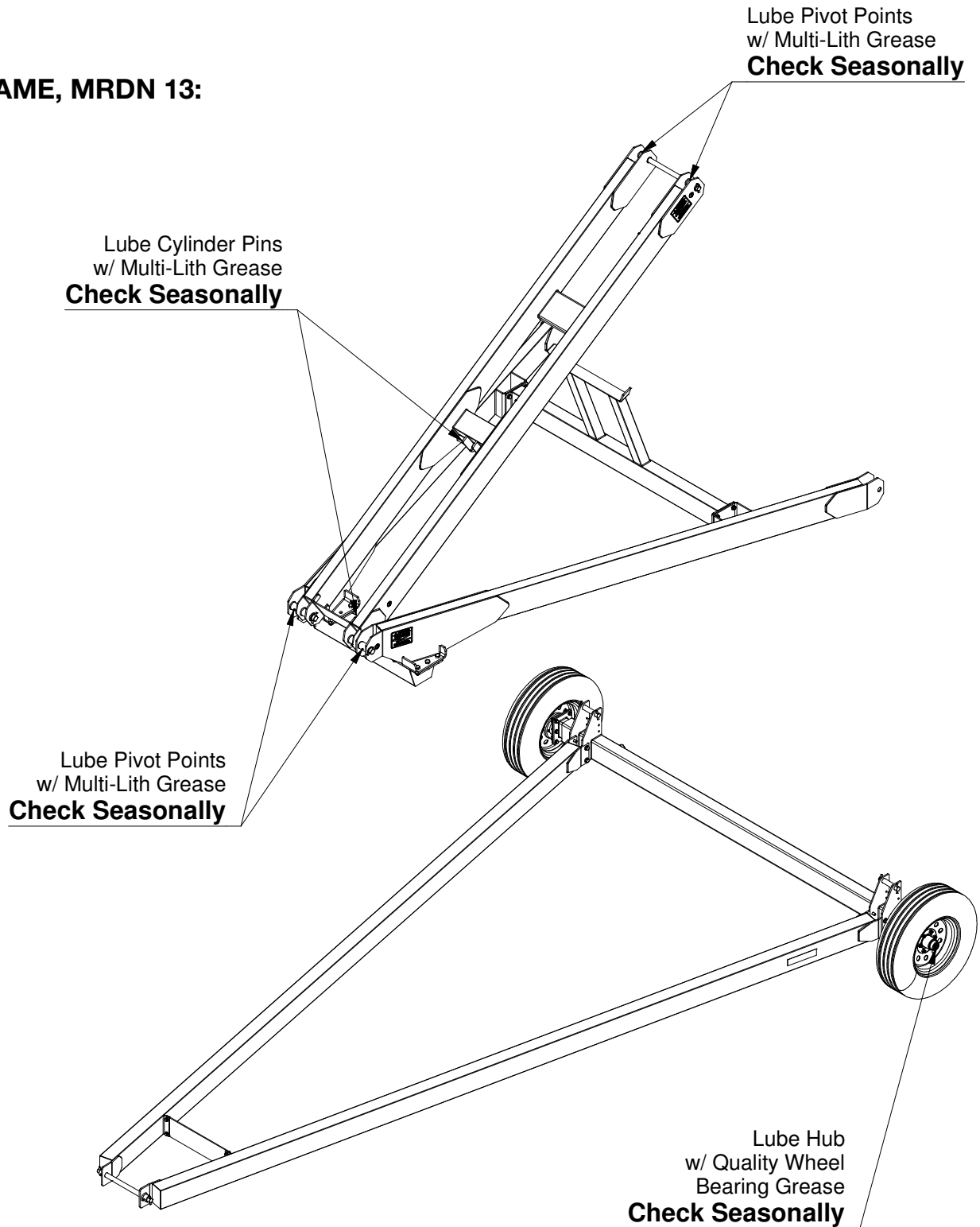
Lube Bushings
w/ Multi-Lith Grease
**Every 50 Hrs
Of Operation**

Lube Hub
w/ Quality Wheel
Bearing Grease
Check Seasonally

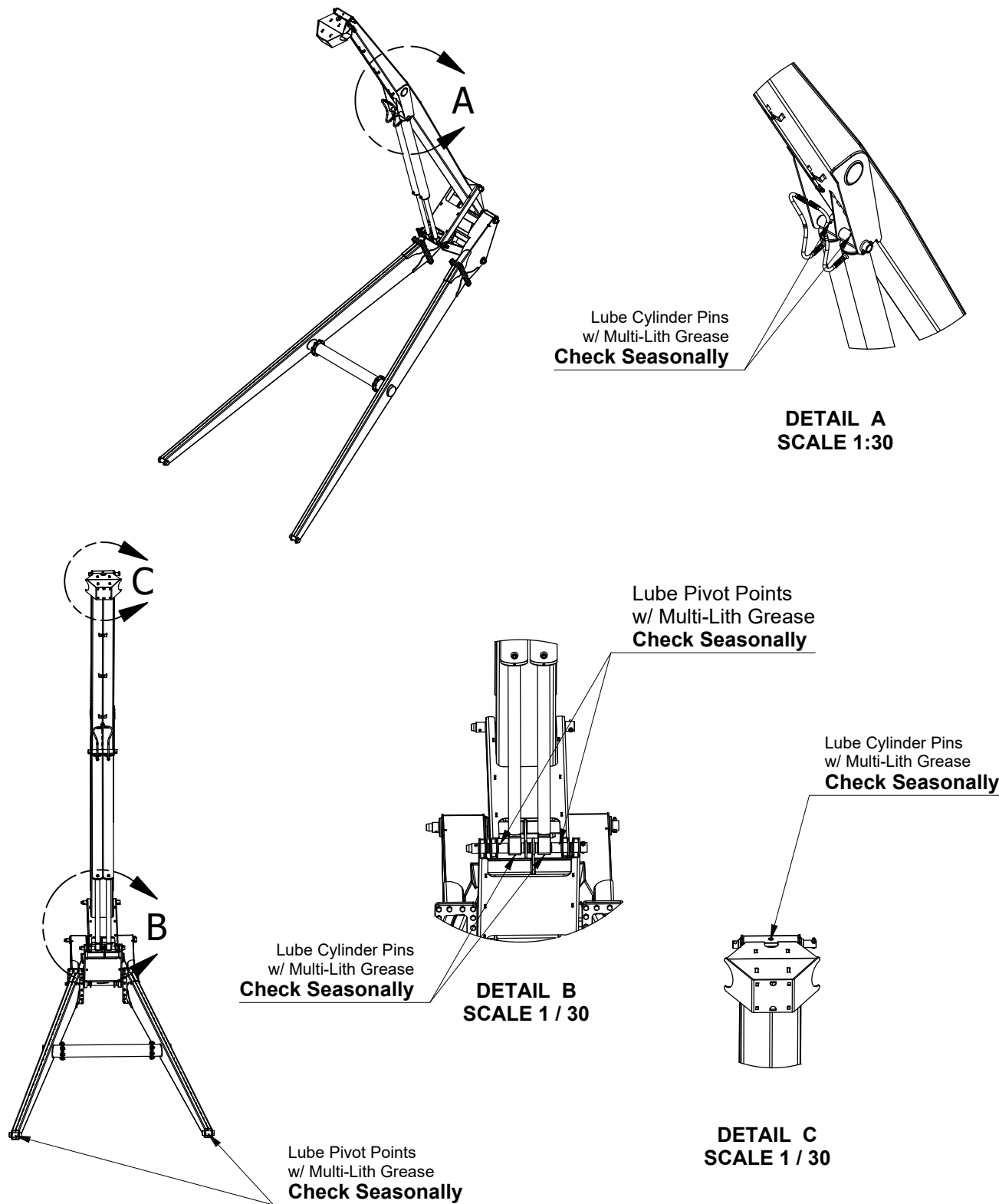
DISCHARGE:



FRAME, MRDN 13:



FRAME, AUGER 14:



4.4 MAINTENANCE PROCEDURES

NOTICE

Replacement parts are not lubricated.
When you receive these parts,
be sure to lubricate and tighten screws.

- Always replace damaged or worn parts before using the auger.
- Use only replacement parts manufactured by Meridian.
 - Use of unauthorized parts will void the warranty of your auger.
 - Contact your Meridian dealer to order parts.
- Meridian Augers are designed and tested for a safe, efficient operation.
 - Do not modify the equipment in any way.
 - Modifications to the auger can create an unsafe working condition, affect the life of the equipment, and will void your warranty.
- Before performing maintenance on your auger, shut down and lock out all power.
- Disconnect the PTO driveline from the tractor.
- Support the auger tube before attempting maintenance on the undercarriage.
- The auger should be in its fully collapsed position before attempting maintenance.

4.4.1 Mechanical Chain Drive:

1. Loosen the four bolts on the lower bearing.
2. Adjust so that the drive chain tension has 1/4" deflection.
3. Oil the chain frequently enough to keep a film of oil on the chain.
 - This must be done through the maintenance portal.
4. Retighten the bolts.
5. Replace shield after maintenance.

4.4.2 Truss Cable Adjustment:

The truss cables require adjusting periodically as they will stretch over time and use. Simply transporting the auger from one location to another can cause the truss cables to stretch.

- The procedure for adjusting truss cables is basically the same for all auger models although the amount of adjustment may differ.

1. **IMPORTANT:** Lubricate the cable clamps (on the truss risers) and the eyebolt lock nuts (at the bottom of the cable), to prevent damage.
2. Loosen cable clamps on the truss risers.
3. Loosen the lock nuts on both eyebolts (at the bottom of the cables).
4. To tighten the cables:
 - Slowly and evenly, tighten each eyebolt nut.
 - Two turns on one side, then two turns on the other side until required adjustment is achieved.
 - **IMPORTANT:** Hold the eyebolts to keep the cable straight.
5. Once adjusted, there should be an upward bow (a smile) in the auger tube.
 - Look up the auger tube from the intake towards the discharge. The centre of the auger should be lower than the two ends.
 - **Note:** Refer to the table for measurements of the "smile" for different tube lengths.
6. When the adjustment is complete, tighten the eyebolt lock nuts.
7. Tighten the truss riser cable clamps.



Use this QR code to watch the video



Fig 18 - Upward bow in auger tube

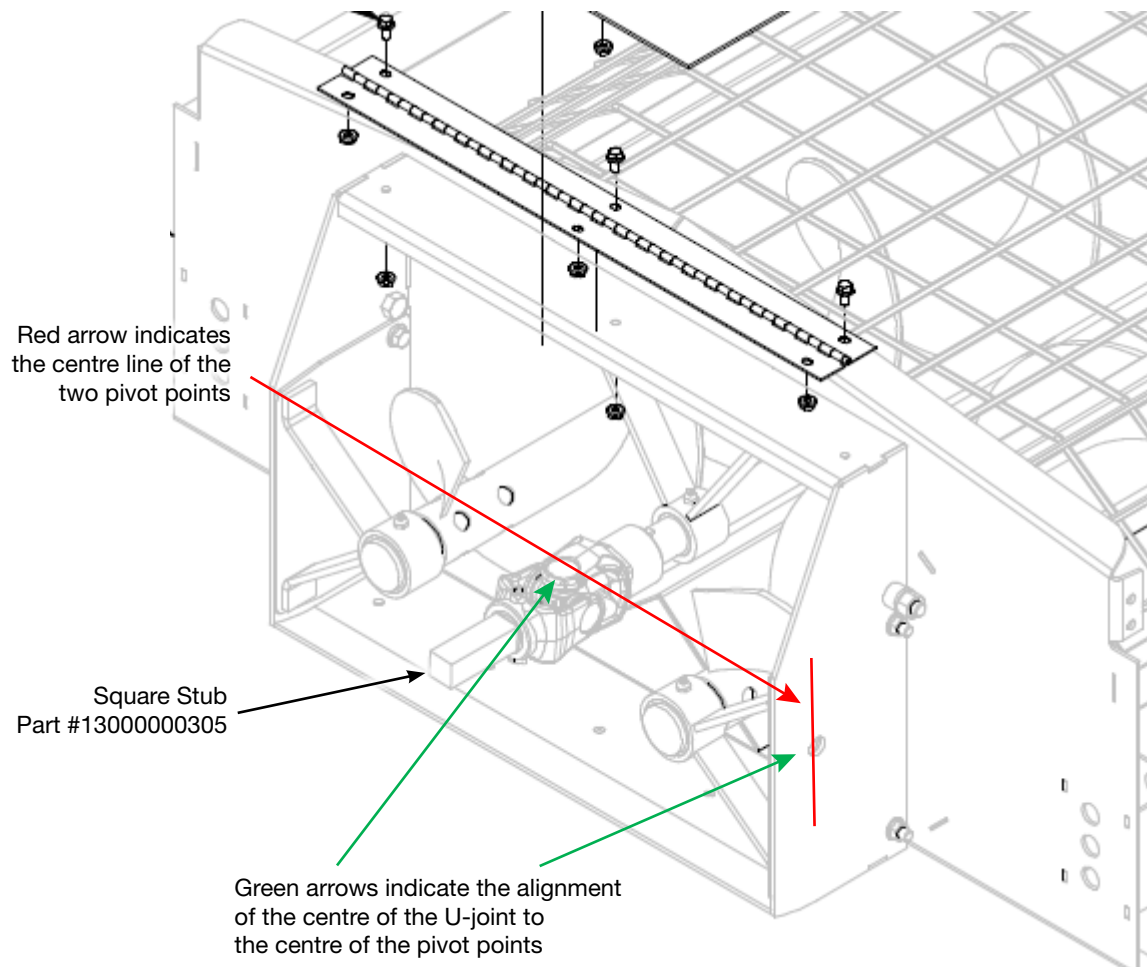


Fig 19 - Truss cable eyebolt

Table 2 - Measurement of Rise at Discharge

AUGER LENGTH	"SMILE" IN THE TUBE (RISE AT DISCHARGE)
53 ft	2 to 3 in
59 ft	3 to 4 in
66 ft	3 to 4 in
72 ft	4 to 5 in
75 ft	4 to 5 in
79 ft	5 to 7 in
85 ft	5 to 7 in
95 ft	6 to 8 in
105 ft	6 to 8 in
115 ft	9 to 12 in

4.4.3 Hopper U-Joint & Pivot Alignment:



- It is critical that the U-joint is centered with the pivot points of the hopper.
- Alignment is achieved by adjusting the U-joint position on the hopper driveshaft.

Note:

If the U-joint is not centered it will cause excessive wear to the U-joint, the square stub and the feed flight where the square stub fits into.



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Section 5: TROUBLESHOOTING

This section contains a list of common problems, causes and offers quick solutions to those issues. If problems are confronted which are difficult to solve, even after having read through this section, please contact your authorized dealer, distributor or Meridian manufacturing Inc.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Main flight not turning.	Shear bolt(s) broken in PTO shaft.	Replace shear bolt(s) and determine what caused shear bolts to break.
Main flight turns but feed flight not turning.	Drive chain in boot has come apart or broken.	Repair and or replace drive chain in boot. May require new sprockets also if worn.
	Key missing / sheared from input shaft to gearbox in boot.	Replace with new key on input shaft to gearbox in boot.
	Gearbox in boot failed.	Repair or replace gearbox in boot.
	Bolt came out of U-joint or U-joint failed between the boot gearbox and feed tube gearbox.	Install bolt back into U-joint and or replace the U-joint between the boot gearbox and feed tube gearbox.
	Gearbox in feed tube head failed.	Repair or replace gearbox in feed tube head.
	Bolt came out of U-joint or U-joint failed between the between top gearbox and feed flight.	Install bolt back into U-joint and or replace the U-joint between the top gearbox and feed flight.
Feed flight is turning but hopper flights not turning.	Square stub came out of the U-joint between feed flight and lower U-joint on the hopper.	Replace square stub if worn and install new retaining bolt on stub to the lower U-joint.
	U-joint between the feed flight and the hopper drive shaft has failed.	Replace the U-joint between the feed flight and the hopper drive shaft.
	Chain and/or sprockets came apart on hopper.	Replace chain, sprockets, chain guide and adjust chain to proper tension. May also require bearing replacement on flight shafts.
Main flight very noisy and seems to turn heavy & may break shear bolts.	Truss cables too loose and auger is drooping down causing flight to flex and drag in tube.	Tighten truss cables to give the auger tube an upward bow (a smile). Refer to Section 4.4.2
	Tube & flight may be very rusty sitting through the season and can cause excessive drag for the first 5000 bushels or more.	Run a lesser amount of product through until tube and flight get polished up.

Feed tube noisy and vibrates.	Worn U-joint at feed tube head-end.	Replace U-joint at head-end of feed tube.
	Worn U-joint at feed tube hopper-end.	Replace U-joint at hopper-end of feed tube.
	Square stub worn and loose at hopper end of feed tube.	Replace square stub and may require replacement of U-joint and feed flight.
	U-joints at each end of feed flight are "out-of-phase".	Check alignment of U-joints and ensure they are installed "in-phase".
Noise in throat/pivot to hopper.	Throat flight contacting inner throat wiper.	Replace worn throat hanger bushing or complete hanger.
	Worn throat pivot bolts to hopper.	Replace throat pivot bolts to hopper and or replace complete throat if holes are worn badly.
	Bottom of throat bent upwards and contacting throat flight.	Straighten bottom of throat to clear flight or replace complete throat if not repairable.
	The hopper U-joint and pivot are out of alignment.	Adjust U-joint on hopper driveshaft to align center of U-joint to the center of pivot. Refer to Section 4.4.3
Turns heavy but not noisy & may break shear bolts.	Auger may have remnants of oil seed left in which can turn sticky and cause drag next time used to move product.	Run a lesser amount of product through until tube and flight get polished up.
Volume dropped since new.	Main flight partially collapsed on core due to plugging auger.	Replace flight section that is damaged.
	Intake flight worn or damaged.	Replace intake flight.
	Feed flight worn or damaged.	Replace feed flight.
	Worn throat flight or damaged.	Replace throat flight.
Head cover pops open.	Worn or damaged hopper flights and or extensions.	Replace hopper flights and or extensions.
	Hopper running too fast.	Add slow down kit to hopper. • Slow-down kit for 10" PN 13000004707 • Slow-down kit for 12" PN 13000004693
Main flight not filling sufficiently.	Worn or damaged main intake flight and cannot move product quick enough.	Replace intake flight on main tube.
	Hopper running too slow.	Add fast drive kit to hopper. • Fast-drive kit for 10" PN 13000004987 • Fast-drive kit for 12" PN 13000004943
Auger will not run-in reverse mode.	Drive chain in boot is loose allowing the reverse sprocket to skip over chain.	Adjust and tighten drive chain. May require new chain and sprockets if worn too bad.

Auger leans bad to the side with swing.	The Anti-twist tie rod requires adjustment or replacement with new Anti-twist kit.	<ol style="list-style-type: none"> 1. Lubricate treaded tie rod. 2. Loosen off the tie rod to allow swivel washers to be lifted away from seat. 3. Apply grease between swivel washer and seat. 4. Retighten tie rod to pull frames straight. 5. Note: If still leans to side, then a solution kit can be installed. <ul style="list-style-type: none"> - For 10" use PN 13000007414 - For 12" use PN 13000007347
Auger unstable side-to-side.	Tire pressure low.	Inflate tires to recommended pressure as indicated on side wall of tire.
Auger will not raise.	Ball valve closed.	Move ball valve to open position.
	Hydraulic couplers mis-matched to tractor.	Check couplers and fit with matching couplers to tractor.
	Auger was lowered with product still in tube.	Run auger to remove product before trying to lift.
	Tractor has too low of hydraulic pressure.	Have tractor serviced to raise pressure or use different tractor with greater pressure.
	The reducer orifice fitting or velocity fuse is plugged on base end of the lift cylinder.	Unplug or replace the reducer orifice fitting or velocity fuse on base end of lift cylinder. <ul style="list-style-type: none"> • 10" and 12" auger reducer orifice PN 13000002997 • 13" auger velocity fuse PN 1300030097
Auger seeps down while in use.	Ball valve not closed.	Close ball valve.
	Ball valve closed but leaking internally.	Replace ball valve.
	Hydraulic cylinder leaking internally.	Install seal kit or replace cylinder.
	Hydraulic leak at fittings, hoses, or tube lines.	Repair or replace leaking fittings, hoses, or tube lines.
Constant velocity joint failure.	Lack of lubrication.	Replace CV joint or complete PTO assembly. Lubricate daily.
	Moving auger without disconnecting PTO from tractor.	Disconnect PTO from tractor before moving auger.
	Hitch length not adjusted correctly to tractor.	Adjust hitch on auger to proper length to tractor.
	PTO angle too great between auger and tractor.	The PTO shaft angle should not be greater than 30 degrees

* Remember to follow proper break-in procedures, refer to Section 3.6. The auger may run rough until the tube is polished. If noise is extreme from the outset or continuous after several loads of grain are fed, continue with troubleshooting.



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Section 6: REFERENCE

For information not included here, or for a digital copy of this manual, please call your dealer, or Meridian Manufacturing Inc. directly for assistance: (833) 944-2345.

Specifications and measurements are subject to change without notice.

Table 3 - MRDN 10 and 13 Swing Auger Specifications

		1065	1075	1085	1375	1385	1395	13115
A	Tube Length	65' (19.8m)	75' (22.8m)	85' (25.9m)	75' (22.8m)	85' (25.9m)	95' (28.9m)	115' (35m)
B	Raised	24'-9" (7.5m)			24'-7" (7.5m)		33'-1" (10.1m)	
	Lowered	6'-9" (2.1m)			6'-6" (1.8m)		6'-4" (1.9m)	
C	Raised	39'-3" (11.9m)	45' (13.7m)	50'-9" (15.5m)	44'-4" (13.5m)	49'-7" (15.1m)	59'-4" (18.1m)	71'-7" (21.8m)
	Lowered	9'-4" (2.8m)	10'-7" (3.2m)	11'-10" (3.6m)	10'-1" (3.1m)	11'-6" (3.5m)	10'-5" (3.2m)	14'-11" (4.5m)
D	Raised	30'-2" (9.2m)			32'-3" (9.8m)		39'-5" (12m)	
	Lowered	38'-4" (11.7m)			40' (12.2m)		49'-11" (15.2m)	
E	Raised	23'-5" (7.1m)	31'-7" (9.6m)	39'-7" (12.1m)	30'-6" (9.3m)	39'-5" (12m)	37' (11.2m)	52'-10" (16.1m)
	Lowered	27'-2" (8.2m)	37'-1" (11.3m)	47' (14.3m)	36' (11m)	45'-11" (14m)	45'-8" (13.1m)	65'-6" (20m)
F	Raised	14'-6" (4.4m)			14'-10" (4.5m)		14'-8" (4.5m)	
	Lowered	15'-4" (4.7m)			15'-10" (4.8m)		15'-10" (4.8m)	
Transport Height		12'-6" (3.8m)	12'-6" (3.8m)	13'-5" (4.1m)	13'-1" (4m)	13'-9" (4.2m)	14'-2" (4.3m)	15' (4.6m)
Transport Length		66'-7" (20.3m)	76'-6" (23.3m)	86'-5" (26.3m)	77'-1" (23.5m)	87'-2" (26.6m)	97'-1" (29.6m)	116'-10" (35.6m)
Transport Width		9'-9" (3m)			12'-4" (3.6m)		14'-10" (4.5m)	
Axle Extension Width		12'-9" (3.9m)			15'-4" (4.7m)		18'-10" (5.7m)	
HP Required		100 HP	110 HP	120 HP	125 HP	125 HP	175 HP	185 HP
Hitch Weight		1060lb (481kg)	1250lb (567kg)	1440lb (653kg)	1480lb (671kg)	1780lb (807kg)	2780lb (1261kg)	2360lb (1070kg)

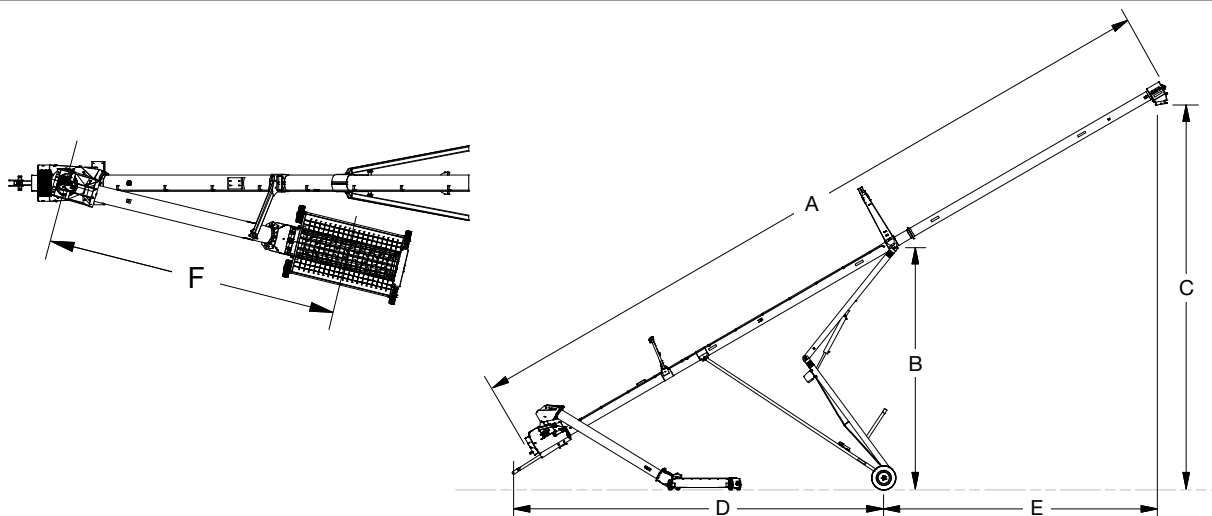
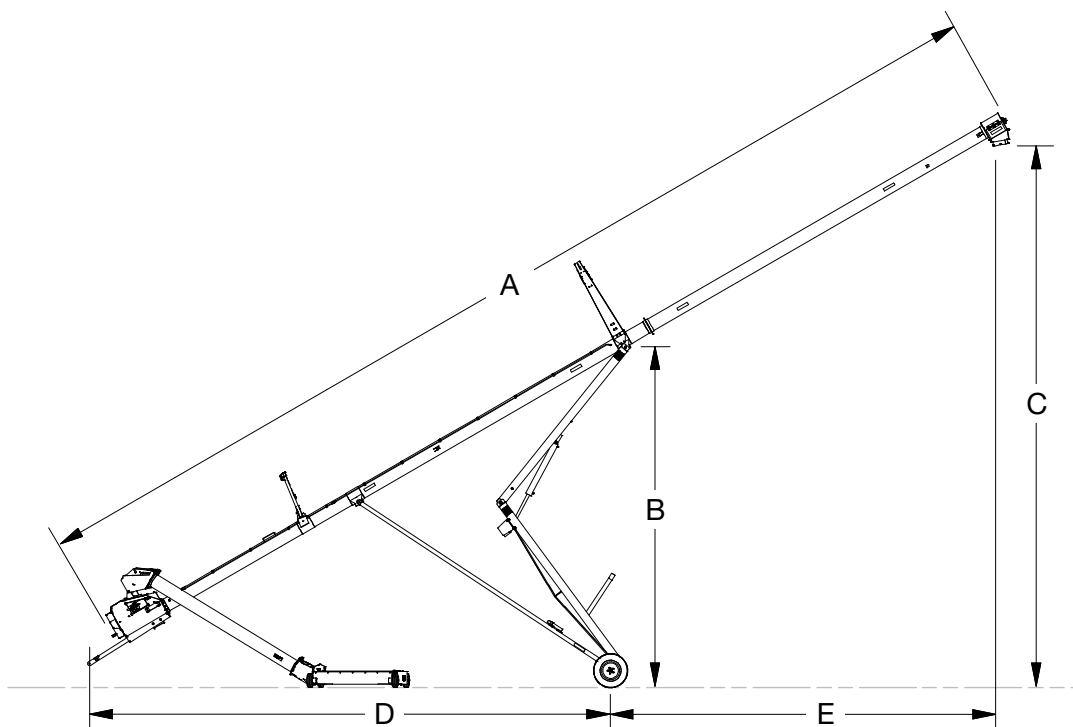


Table 4 - SLMD 12 and AUGER 14 Specifications

		SLMD 12-72	SLMD 12-79	SLMD 12-85	SLMD 12-95	AUGER 14-95	AUGER 14-105	AUGER 14-115	
								AXLES RETRACTED	AXLES EXTENDED
A	Tube Length	72'-6" (22m)	79' (24m)	85'-7" (26.1m)	95'-7" (29.1m)	95' (29m)	105' (32m)	115' (35.1m)	
B	Raised	25'-4" (7.7m)	25'-4" (7.7m)	29'-4" (8.9m)	29'-4" (8.9m)	36'-2" (11m)	36'-2" (11m)	36'-5" (11.1m)	36'-9" (11.2m)
	Lowered	6'-7" (2m)	6'-7" (2m)	6'-7" (2m)	6'-7" (2m)	5'-3" (1.6m)	5'-3" (1.6m)	5'-11" (1.8m)	6'-6" (2m)
C	Raised	45'-6" (13.9m)	49'-6" (13.9m)	53'-7" (16.3m)	57'-1" (17.4m)	69'-3" (21.1m)	76'-4" (23.3m)	83'-3" (25.4m)	84'-2" (25.7m)
	Lowered	10'-9" (3.3m)	10'-9" (3.3m)	10'-9" (3.3m)	14'-6" (4.4m)	9'-4" (2.8m)	10'-3" (3.1m)	12'-1" (3.7m)	13'-3" (4m)
D	Raised	30'-6" (9.3m)	33'-2" (10.1m)	35'-9" (10.9m)	35'-9" (10.9m)	37' (11.3m)	37' (11.3m)	37' (11.3m)	37' (11.3m)
	Lowered	39'-9" (12.1m)	43'-1" (13.1m)	46'-5" (14.1m)	46'-5" (14.1m)	46' (14m)	46' (14m)	46'-5" (14.1m)	46'-5" (14.1m)
E	Raised	25'-8" (7.8m)	28'-3" (8.6m)	30'-10" (9.4m)	40'-10" (12.4m)	29'-8" (9m)	36'-9" (11.2m)	42'-10" (13.1m)	41'-11" (12.8m)
	Lowered	31'-5" (9.6m)	34'-9" (10.6m)	38' (11.6m)	52' (15.8m)	46'-7" (14.2m)	56'-8" (17.3m)	66'-2" (20.2m)	66' (20.1m)
Transport Height		n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Transport Length		n/a	n/a	n/a	n/a	96'-4" (29.4m)	106'-5" (32.4m)	116'-4" (35.5m)	
Transport Width		13'-9" (4.2m)				13' (4m)		14'-3" (4.3m)	
Axle Extension Width		15'-9" (4.8m)				---	---	17' 5" (5.3m)	
HP Required		100 HP	100 HP	120 HP	120 HP	200 HP	250 HP	250 HP	
Hitch Weight		1400lb (635kg)	1420lb (644kg)	1440lb (653kg)	1400lb (635kg)	3010lb (1365kg)	2585lb (1172.5kg)	2160lb (980kg)	
Auger Weight		6015lb (2728kg)	6214lb (2819kg)	6462lb (2931kg)	6506lb (2951kg)	11420lb (5180kg)	11715lb (5314kg)	12030lb (5457kg)	



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LIMITED WARRANTY STATEMENT

1. Meridian Manufacturing Inc warrants each new Meridian Manufacturing Inc product (the "Goods") to be free from defects in material and workmanship under normal use and service for a period of one (1) year or ninety (90) days in the case of commercial use, from the shipment date from the Meridian dealer (FCA).
2. Meridian warrants replacement parts and components either manufactured or sold by, will be free from defects in materials or workmanship under normal use and service for thirty (30) days from the shipment date from the Meridian dealer (FCA), or the remainder of the original warranty period on the Goods, whichever is longer.
3. This warranty does not apply to:
 - a. to any merchandise or components thereof, which in the sole and unfettered opinion of Meridian, have been subject to misuse, unauthorized modifications, alteration, accident, negligence, product abuse or lack of required maintenance.
 - b. if repairs have been made with parts or by persons other than those parts or persons approved by Meridian.
 - c. to parts and accessories not manufactured by Meridian including, but not limited to, engines, batteries, tires, belts, PTO shafts or other trade accessories. Such parts shall be covered by the warranty given by the actual manufacturer, if any.
 - d. to failure of parts; or failure of parts to perform due to wear under normal or excessive service conditions; or to failure due to use by the Purchaser for purposes other than originally intended at time of manufacture, including without limitation using the Goods for mixing fertilizer, etc.; or used in excess of the built specifications.
 - e. to Goods used in areas exposed to corrosive or aggressive conditions including, but not limited to, salt water from either inside or outside the Goods.
 - f. to failures or defects arising out of damage during shipment or during storage.
 - g. to materials replaced or repaired under this warranty, except to the extent of the remainder of the applicable warranty.
4. The obligation of Meridian under this warranty shall not arise unless Meridian is notified and this warranty is presented together with a written statement specifying the claim or defect within thirty (30) days after the failure is first detected or made known to the Purchaser and within: (i) one (1) year, or ninety (90) days in the case of commercial use; or (ii) thirty (30) days in the case of replacement parts and components manufactured by Meridian; from the shipment date from the Meridian dealer (FCA). Meridian in its sole and unfettered discretion shall determine if the claim is valid and whether correction of the defect or failure shall be made by repair or replacement of the materials.
5. Title to any replaced materials Meridian wishes to have pass to it, shall pass to Meridian.
6. The obligation of Meridian hereunder extends only to the original Purchaser or Buyer to whom the Goods were initially sold. This warranty shall not be subject to any assignment or transfer without the written consent of Meridian.
7. The purchaser acknowledges that it has made its own independent decision to approve the use of the Goods and also the specific fabrication and construction procedures utilized to complete the Goods, and has satisfied itself as to the suitability of these products for its use.
8. This warranty is subject to the following limitations, provisions and conditions:
 - a. Meridian shall have no liability hereunder for any claims, including field re-work.

- b. Meridian shall not be liable for any incidental loss or damage, however caused, including, without limitation, normal wear and tear.
 - c. Meridian makes no express or implied warranties of any nature whatsoever except for such express warranties as set out herein. The warranty provided herein is in lieu of and excludes all other warranties, guarantees or conditions pertaining to the Goods, written or oral, statutory, express or implied, (except the warranty as to title) including any warranty as to the merchantability or fitness for any particular purpose. Meridian expressly disclaims all other representations, conditions or warranties, expressed or implied, statutory or otherwise and any representations, warranties or conditions that may arise from a course of dealing or usage of trade. The warranty provided herein shall constitute Meridian's sole obligation and liability and the Purchaser's sole remedy for breach of warranty. No other warranty has been made by any employee, agent, or representative of Meridian and any statements contained in any other printed material of Meridian is expressly excluded herefrom. Meridian shall not be responsible for any warranty offered by the Purchaser to its customers with respect to the Goods and the Purchaser shall indemnify Meridian with respect to same if any of those customers makes a claim against Meridian relating to any such warranty.
 - d. Subject to Meridian's obligations contained in paragraphs 1 and 2 herein, none of Meridian, its officers, directors, servants or agents shall be liable, or responsible for any loss or damage (including strict liability and liability for loss or damage due to items which the manufacturing processes are designed to identify) whether such loss or damage is caused by negligence in any manner whatsoever (including gross negligence, error, misrepresentation, misstatement, imprudence, lack of skill or lack of judgement).
9. The sole financial obligation of Meridian under this warranty shall be limited to the repair or replacement of the Goods as originally supplied and in no event shall they exceed the original cost of the Goods supplied.
10. Meridian shall not have any obligation under any warranty herein until all accounts have been paid in full by the Purchaser.
11. The construction and interpretation of this Warranty shall be governed by the laws of the Province of Saskatchewan.

Register your product at: www.meridianmfg.com
For warranty information send an email to: warranty@meridianmfg.com

WARRANTY REQUEST PROCEDURE

- The product must be registered with Meridian Manufacturing Inc.
- The purchaser must contact the dealer, from where the unit was purchased, immediately upon discovery of any defects.
- A completed Warranty Request (Claim) Form must be submitted by the dealer to Meridian's warranty representative for review and any subsequent course of action.
 - Warranty requests must be completed with ALL required information in order it to be considered for approval.
 - Send photographs of the entire piece of equipment, and of the specific area of concern.
- Warranty repair work will only be performed by Meridian or an approved representative of Meridian. Warranty work completed prior to Meridian's approval will NOT be honoured. Failure to follow this procedure may affect any or all of this warranty.
- All warranty requests will be adjudicated at the sole discretion of Meridian and in accordance with the terms and conditions of the warranty.



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