

MERIDIAN

BULK SEED TENDER OPERATOR'S MANUAL



SEED EXPRESS
FOR OWNERS AND OPERATORS OF MODEL 375



PRODUCT WARRANTY REGISTRATION FORM



WARRANTY REGISTRATION

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery. Please mail or fax the completed form for validation of the equipment registration.

Customer's Name _____

Address _____

City, State, Postal Code _____, _____, _____

Phone Number (_____) _____ - _____

PRODUCT INFORMATION

Tender Model # _____

Serial Number # _____

DEALER INSPECTION REPORT

- | | |
|---|--|
| <input type="checkbox"/> Tender frame secured to trailer | <input type="checkbox"/> Reflectors and lights clean and working |
| <input type="checkbox"/> Check fuel level and gas shut-off | <input type="checkbox"/> Review safety and operating instructions |
| <input type="checkbox"/> Check crankcase oil level | <input type="checkbox"/> Inspect customer's hitch for 2 -5/16" |
| <input type="checkbox"/> Start Honda Engine | ball/gooseneck hitch |
| <input type="checkbox"/> Brake and lighting harness connection | <input type="checkbox"/> Verify receipt of all options ordered |
| <input type="checkbox"/> ON/OFF switch functions | <input type="checkbox"/> Check hydraulic reservoir oil level |
| <input type="checkbox"/> Conveyor platform pivots correctly | <input type="checkbox"/> Make sure compartment gates open and |
| <input type="checkbox"/> Lubricate unit where necessary | and close properly. |
| <input type="checkbox"/> Check air pressure in tires | <input type="checkbox"/> Check for hydraulic leaks from hoses and/or |
| <input type="checkbox"/> Electric brakes in working condition | fittings. |
| <input type="checkbox"/> All guards/shields installed correctly | <input type="checkbox"/> Tarp over seed compartments open and |
| <input type="checkbox"/> All safety signs installed and intact | close properly. |

I have thoroughly instructed the buyer on the above-described equipment, including review of the Operator's Manual content, equipment care, adjustments, operational use, safety procedures, and applicable warranty policy.

Dealer/Company Name _____

City, State, Postal Code _____, _____, _____

Dealer's Signature _____ Date ____/____/____

The above equipment and Operator's Manual have been received by me, and I have been thoroughly instructed as to care, adjustments, safe operation, and applicable warranty policy.

Owner's Signature _____ Date ____/____/____



2902 Expansion Blvd.
Storm Lake, IA 50588
Phone: 712-732-1780
Fax: 712-732-1028

CERTIFICATE OF ORIGIN

LICENSING INFORMATION

Date: ___/___/_____

DEALER:

SOLD TO:

Business

Contact

Address

City, State, Zip

Business

Contact

Address

City, State, Zip

TENDER MODEL # _____

TENDER WEIGHT _____

TENDER SERIAL # _____

TRAILER MODEL # _____

TRAILER SERIAL* # _____

TRAILER WEIGHT _____

**(*Only one serial number is issued for a complete tender package, which will include the trailer.
The trailer in these complete packages does not receive a separate serial number)**

375 (with bumper hitch) 80345

375 (with gooseneck) 80346

375 (with bumper hitch and scale kit) 80347

375 (with gooseneck and scale kit) 80348

375 (no trailer) 80349

Cut Here to Remove Page

CONTENTS

1. INTRODUCTION	11
1.1 Congratulations	11
1.2 Operator Orientation	11
1.3 Owner/Operator	11
2. SAFETY	12
2.1 general safety	13
2.2 Equipment Safety Guidelines	14
2.3 Safety Training	14
2.4 Safety Signs	15
2.4.1 How to Install Safety Signs	15
2.5 Preparation	15
2.6 Operating Safety	15
2.7 Maintenance Safety	16
2.8 Lock-Out or Tag-Out Safety	16
2.9 Storage Safety	17
2.10 Transport Safety	17
2.11 Refuelling Safety	17
2.12 Battery Safety	17
2.13 Sign-Off Form	18
3. SAFETY SIGN LOCATIONS	19
4. SPECIFICATIONS	22
4.1 Overall Seed Tender Specifications	22
4.2 Angle of Rotation	23
4.3 Bolt Specifications	24
4.3.1 Bolt Torque Values	24
4.3.2 Grade Markings Chart	24
5. MACHINE COMPONENTS AND CONTROLS	25
5.1 Component Nomenclature and Location	25
5.2 Engine and Controls	26
6. PRE-OPERATING INSTRUCTIONS	28
6.1 Machine Break-In Period	28
6.1.1 Before Starting	28
6.2 Pre-Operation Checklist	28
7. OPERATION	30
7.1 Connecting the Trailer	30
7.1.1 Bumper Hitch	30
7.1.2 Gooseneck Hitch	32
7.2 Opening and Closing Roll-Up Tarp	33
7.3 Operation	34
7.3.1 Loading (Filling the Seed Tender)	34
7.3.2 Unloading (Filling the Planter)	35
8. STORAGE	39
8.1 General Information	39
8.2 Placing in Storage	39
8.3 Removing from Storage	39
9. MAINTENANCE	40
9.1 Greasing	40
9.2 Grease Fitting Locations	40
9.3 Mounting Hardware	41

10. SERVICE PROCEDURES	42
10.1 Hydraulic System	42
10.1.1 Hydraulic Oil Change	42
10.1.2 Hydraulic Pressure Relief Valves	42
10.1.3 Hydraulic Motor Coupling	42
10.2 Engine	43
10.2.1 Approved Fuel	43
10.2.2 Engine Oil	43
10.2.3 Change Engine Oil	43
10.2.4 Clean Air Cleaner	44
10.3 Belt Delivery Tube	44
10.3.1 Unplugging	44
10.3.2 Belt Tension Adjustment	44
10.3.3 Belt Tracking Adjustment	45
10.3.4 Belt Replacement	45
10.4 Trailer BreakAway System	46
10.4.1 Testing the Battery	46
10.4.2 Changing Battery	46
10.5 Wheel Bolt Torque Requirements	46
10.6 Trailer Hitch Bolts	47
10.7 Service Record Chart	47
10.7 Service Record Chart (Continued)	48
10.8 Service Checks	49
10.8.1 Daily (8 Hours)	49
10.8.2 Weekly (50 Hours)	49
10.8.3 Annually (400 Hours)	49
10.9 Axle Maintenance	50
10.9.1 First 200 Miles	50
10.9.2 3,000 Miles or 3 Months	50
10.9.3 6,000 Miles or 6 Months	50
10.9.4 12,000 Miles or 12 Months	50
10.10 Tires	50
11. OEM LITERATURE	51
11.1 Honda® Engine	51
11.2 Retractable Compartment Tarp	51
11.3 Axle	51
12. TROUBLESHOOTING	52
12.1 Troubleshooting Chart	52
13. WARRANTY	53
13.1 Warranty Statement	53

14. PARTS	54
14.1 Seed Tender Frame	54
14.1.1 375 Conveyor Swivel Assembly	55
14.1.2 Hold-Downs and Load Cells.	56
14.1.3 Ladder Detail	56
14.1.4 Sample Slide Gate Detail	57
14.1.5 Slide Gate Detail	58
14.2 Power System.	59
14.3 Trailer and Hitch Assembly	60
14.3.1 Trailer	60
14.3.2 Bumper Hitch	61
14.3.3 375 Gooseneck Detail.	62
14.4 Seed Tender Tarp kit	63
14.5 Conveyor System	64
14.5.1 Conveyor - Lower End	64
14.5.2 Tube Assembly	65
14.5.3 Spout (options) (Flex, 2-Tier).	65
14.5.4 Discharge Assembly	66
14.6 Lights and Decals	67
14.7 375 Hydraulics	68

1. INTRODUCTION

1.1 CONGRATULATIONS

Congratulations on your choice of a Meridian Manufacturing Group 375 Seed Express Bulk Seed Tender to complement your seed delivery system in your farming operation. This equipment has been designed and manufactured to meet the exacting standards for such equipment in the agricultural industry and will keep your seed delivery system at optimum efficiency.



The Bulk Seed Tender system is designed to handle any kind of bulk seed, quickly transport it, and then transfer it into planters and drills, as required.

Safe, efficient, and trouble-free operation of your Bulk Seed Tender requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Maintenance, and Troubleshooting information contained within this Operator's Manual.

This manual covers the 375 models manufactured by Meridian Manufacturing Group, Inc. The differences are explained where appropriate. Use the Table of Contents and Index as a guide to locate required information.

1.2 OPERATOR ORIENTATION

The directions left, right, front, and rear, as mentioned throughout this manual, are as seen from the truck drivers' seat and facing in the direction of travel.

1.3 OWNER/OPERATOR

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business. By following the recommended procedures, a safe working environment is provided for the operator, bystanders, and the area around the work site. Untrained operators are not qualified and must not operate the machine.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment. It is the responsibility of the owner or operator to read this manual and to train all operators before they start working with the machine. Follow all safety instructions as laid out in this manual.

Keep this manual handy for easy reference and to pass on to new operators or owners. Call your Meridian Manufacturing Group, Inc. dealer if you need assistance, information, or additional copies of the manuals.

The information, specifications, and illustrations in this manual are those in effect at the time of printing. We reserve the right to change specifications or design at any time without notice.



2. SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means
ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!



The Safety Alert symbol identifies important safety messages on the Meridian Bulk Seed Tender Models and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

WHY IS SAFETY IMPORTANT TO YOU?

3 Big Reasons

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

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING**, and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

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

WARNING - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

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

If you have any questions not answered in this manual, require additional copies of the manual, or the manual is damaged, please contact your dealer or Meridian Manufacturing Group, 2902 Expansion Blvd., Storm Lake, Iowa, 50588, toll free 1-800-437-2334, phone (712) 732-1780, or fax (712) 732-1028.

YOU are responsible for the **SAFE** operation and maintenance of your Meridian Manufacturing Group bulk seed tender Model 275 DX or 375 DX Seed Express delivery system. **YOU** must ensure that you and anyone else who is going to operate, maintain, or work around the Bulk Seed Tender be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alert you to all good safety practices that should be adhered to while operating the Bulk Seed Tender system.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follow all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Bulk Seed Tender system owners must give operating instructions to operators or employees before allowing them to operate the machine, and then annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety feature on this equipment is a **SAFE** operator. It is the operator's responsibility to read and follow **ALL** Safety and Operating instructions in the manual. Most accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. Always be and stay alert to any possible unsafe operating or maintenance procedures or conditions.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety of the components and systems and could affect the life of the equipment, possibly invalidating the warranty coverage.
- Think **SAFETY!** Work **SAFELY!**

2.1 GENERAL SAFETY

1.  Read and understand the Operator's Manual and all safety signs before operating, maintaining, adjusting, filling, unloading, or unplugging the Bulk Seed Tender system.
2.  Have a first aid kit available for use should the need arise and know how to use it.
3.  Have a fire extinguisher available for use should the need arise and know how to use it.
4.  Do not allow riders.
5. When working around or operating this equipment, wear appropriate personal protective equipment. This list includes but is not limited to:







 - A hard hat
 - Protective shoes with slip resistant soles
 - Protective goggles, glasses, or face shield
 - Heavy gloves and protective clothing
 - Respirator
6.  Do not allow long hair, loose fitting clothing, or jewelry around equipment.
7.  Install and secure all guards before starting.
8.  Stop engine, remove ignition key, and wait for all moving parts to stop before servicing, repairing, adjusting, loading, filling, or unplugging.
9.   Establish a lock-out or tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures. Lock-out or tag-out all power sources before working around loading/unloading equipment.
10.  Clear the area of people, especially small children, before starting.
11.  Review safety related items annually with all personnel who will be operating, using, or maintaining the bulk seed tender system.

2.2 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a machine. 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. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them.
2. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.
3. Never use alcoholic beverages or sedative drugs while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
4. Under no circumstances should young children be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how it works. Review the safety instructions with all users annually.
5. This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained, and physically able person familiar with farm machinery and trained in this equipment's operations. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.
6. Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**
7. Do not modify the equipment in any way. Unauthorized modification may result in serious injury or death and may impair the function and life of the equipment.

8. In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer to Safety Messages and operation instruction in each of the appropriate sections of the auxiliary equipment and machine Manuals. Note all Safety Signs affixed to the auxiliary equipment.

2.3 SAFETY TRAINING

1. Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.
2. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of this equipment.
3. The best safety feature is an informed, careful operator. It is the operator's responsibility to read and comply with ALL Safety and Operating instructions in the manual. Accidents can be avoided.
4. Working with unfamiliar equipment can lead to injuries. Read this manual, as well as the manual for your auxiliary equipment, before assembling or operating to acquaint yourself with the machines. If this machine is used by any person other than yourself, it is your responsibility to make certain that the operator reads and understands the operator's manuals and is instructed in safe and proper use.
5. Know your controls and how to immediately stop augers, conveyors, and any other auxiliary equipment in an emergency. Read this manual and the one provided with all auxiliary equipment.
6. Train all new personnel and review instructions frequently with employees. Be certain only a properly trained and physically able person will operate the machinery. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.

2.4 SAFETY SIGNS

-  Keep safety signs clean and legible at all times. Replace any safety sign or instruction sign that is missing or not legible. Refer to the Safety Sign Location section for additional information.
- Replacement parts that displayed a safety sign should also display the current sign.
- Replacement safety signs (labels) are available from your authorized Dealer Parts Department or the factory at no cost.

2.4.1 How to Install Safety Signs

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Determine exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using a piece of sign backing paper.

2.5 PREPARATION

-  Never operate the seed delivery system and auxiliary equipment until you have read and completely understand this manual, the auxiliary equipment Operator's Manual, and each of the Safety Messages found on the safety signs on the delivery system and auxiliary equipment.

-  **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!** Motors or equipment can be noisy enough to cause permanent or partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the operator's position exceeds 80db. NOTE: Hearing loss from loud noise (tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime with uncertain natural recovery.

-  Clear working area of debris, trash, or hidden obstacles that might be hooked or snagged, causing injury, damage, or tripping.
- Operate only in daylight or good artificial light.
- Be sure machine is properly attached to the trailer, adjusted, and in good operating condition.
-  Ensure that all guards, shielding, and safety signs are properly installed and in good condition.
-  Before starting, give the machine a "once over" for any loose bolts, worn parts, cracks, leaks, frayed belts, and make necessary repairs. Always follow maintenance instructions.

2.6 OPERATING SAFETY

-  Make sure that anyone who will be operating the bulk seed delivery system or working on or around the unit reads and understands all the operating, maintenance, and safety information in the operator's manual.
-  Keep all bystanders, especially children, away from the machine when loading or unloading, or when authorized personnel are carrying out maintenance work.
-  Establish a lock-out or tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures. Lock-out or tag-out all power sources before servicing the unit or working around loading/unloading equipment.

4.  Stop engine, remove ignition key, and wait for all moving parts to stop before servicing, repairing, adjusting, loading, filling, or unplugging.
5.   Keep working area clean and free of debris to prevent slipping or tripping.
6.  Do not allow riders on the trailer or frame when transporting.
7.  Keep hands, feet, hair, and clothing away from rotating parts.
8.  Do not place hands, fingers, or arms between moving parts.
9.  Stay away from overhead power lines. Electrocutation can occur without direct contact.
10.  Install and secure all guards before starting.
11.  Use care when climbing on frame or ladder to prevent slipping or falling.
12.  Fasten frame securely to trailer before transporting.
13. Always empty compartment 2 first to prevent an unbalanced load. An unbalanced load can cause the tender to upend.
14.  Review safety related items annually with all personnel who will be operating, using, or maintaining the seed delivery system.

2.7 MAINTENANCE SAFETY

1. Good maintenance is your responsibility. Poor maintenance is an invitation for trouble.
2. Follow good shop practices.
3.  Ensure proper ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.
4.  Before working on this machine, shut off the engine and remove the ignition keys.
5.  Never work under equipment unless it is securely blocked.

6.     
Always use personal protection devices, such as eye, hand, and hearing protectors, when performing any service or maintenance.
7.  Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to the original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
8.   A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this equipment.
9.  Periodically tighten all bolts, nuts, and screws and ensure all cotter pins are properly installed to ensure unit is in safe condition.
10.  When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.
11.  Turn OFF all electrical power and tag or lockout the power source before performing any electrical test or before connecting or disconnecting valve coils or other electrical loads.
12.  Never operate or test any function of the equipment when people are in an area of a potential crush hazard.

2.8 LOCK-OUT OR TAG-OUT SAFETY

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

2.9 STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks, if required.

2.10 TRANSPORT SAFETY

1.  Comply with local, state, and federal laws governing safety and conveyance of farm machinery on public roads.
2. Ensure all lights, reflectors, and other lighting requirements are installed and in good working condition.
3. Ensure that the trailer is equipped with brakes that are in good working order. Be familiar with their operation.
4. Do not exceed a safe travel speed. Slow down for rough terrain and when cornering.
5.  Fasten frame securely to trailer before transporting.
6. Be sure the trailer is securely hitched to the towing vehicle and a retainer is used through the hitch jaws. Always attach a safety chain between the hitch and the towing vehicle.
7.  Stay away from overhead power lines. Electrocutation can occur without direct contact.
8. Plan your route to avoid heavy traffic.
9. Install auger spout transport lock before transporting.
10. Do not drink and drive.
11. Be a safe and courteous driver. Yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
12.  Never allow riders on the tender or the trailer.

2.11 REFUELLING SAFETY

1.  Handle fuel with care. It is highly flammable.
2.  Allow engine to cool for five minutes before refuelling. Clean up spilled fuel before restarting engine.
3.  Do not refuel the machine while smoking or when near open flame or sparks.
4. Fill fuel tank outdoors.
5.  Prevent fires by keeping machine clean of accumulated trash, straw, grease, and debris.

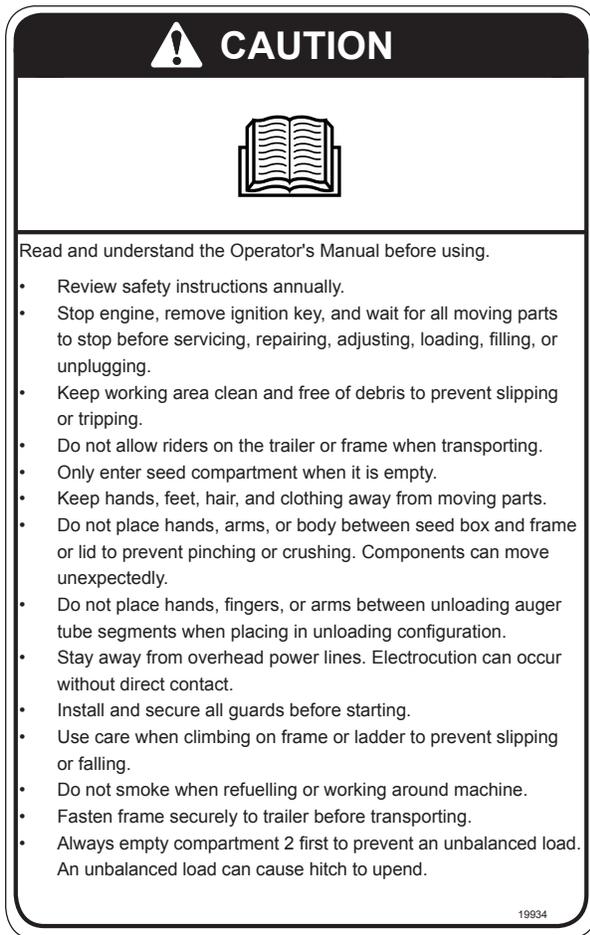
2.12 BATTERY SAFETY

1.  Keep all sparks and flames away from batteries, as gas given off by electrolyte is explosive.
2. Avoid contact with battery electrolyte: wash off any spilled electrolyte immediately.
3.  Wear safety glasses when working near batteries.
4. Do not tip batteries more than 45 degrees, to avoid electrolyte loss.
5.  To avoid injury from spark or short circuit, disconnect battery ground cable before servicing any part of electrical system.

3. SAFETY SIGN LOCATIONS

The types of safety signs and locations on the equipment are shown in the following pages. Good SAFETY AWARENESS requires that you familiarize yourself with the various safety signs, the type of warning and the area, or a particular function related to that area.

REMEMBER - If safety signs have been damaged, removed, become illegible, or parts replaced without signs, new signs must be applied. New safety signs are available from your authorized dealer free of charge.





3. Product Serial Number Decal

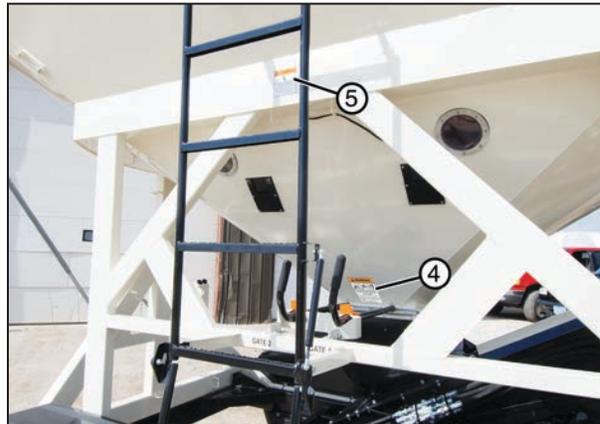


1. CAUTION — Read and Understand (#19934)

CAUTION

- Read and understand the Operator's Manual before using. Review safety instructions annually.
- Stop engine, remove ignition key, and wait for all moving parts to stop before servicing, repairing, adjusting, loading, filling, or unplugging.
- Keep working area clean and free of debris to prevent slipping or tripping.
- Do not allow riders on the trailer or frame when transporting.
- Only enter seed compartment when it is empty.
- Keep hands, feet, hair, and clothing away from moving parts.
- Do not place hands, arms, or body between seed box and frame or lid to prevent pinching or crushing. Components can move unexpectedly.
- Do not place hands, fingers, or arms between unloading auger tube segments when placing in unloading configuration.
- Stay away from overhead power lines. Electrocutation can occur without direct contact.
- Install and secure all guards before starting.
- Use care when climbing on frame or ladder to prevent slipping or falling.
- Do not smoke when refuelling or working around machine.
- Fasten frame securely to trailer before transporting.
- In two compartment seed tenders, always empty Compartment 2 first to prevent an unbalanced load. An unbalanced load can cause hitch to upend.

19934



2. NOTICE — Product Warranty (#19944)

NOTICE

Product Warranty

Meridian Manufacturing Group (hereinafter "Meridian") warrants all products manufactured by it to be free of defect in material and workmanship for a period of (1) year from the date of purchase.

This Meridian warranty does not cover:

1. Accessories supplied by Meridian but manufactured by others. Meridian will facilitate the other manufacturer warranty for the benefit of the purchaser but will not be bound thereby (example: augers, trailers, agitators, etc.).
2. Products that have been altered by anyone other than a Meridian employee or are used by the purchaser for the purposes other than what was intended at time of manufacture or used in excess of the "built specifications".
3. Products that are custom manufactured by Meridian utilizing the purchaser's design which deviates from the Meridian normal production line manufacture or customized features of the products.
4. Malfunction or damages to the product from misuse, negligence, customer alteration, accidents or product abuse due to incoming material or poor material flow ability or lack of required performance or required maintenance (e.g., poor material flow ability caused by incoming wet fertilizer or hot soybean meal, etc.).
5. Loss of time, inconvenience, loss of material, down time or any other consequential damage.
6. Product used for a function that is different than designed intent (e.g., storing soybean meal in grain bin, unacceptable material in the bin such as hot bean meal when product originally designed for other application, etc.).

To activate this warranty, the purchaser must make contact in writing with Meridian within one (1) year of date of purchase. After contact, Meridian has the right to determine the cause and qualify the legitimacy of the claim. Meridian, upon acceptance of a warranty claim shall have a reasonable time to plan any repair or replacement and may effect repair or replacement out of its factory or through contract with a local repair service. If a purchaser after warranty notice is made chooses to make the repair itself, Meridian must approve any expenses before they are incurred to be responsible for customer reimbursement.

Meridian shall be liable on a warranty claim for repair or replacement of any defective products and this is the purchaser's sole and exclusive remedy. Meridian will not be liable for any other or further remedy including claims for personal injury, property damage or consequential damage. The law of the State of Iowa shall govern and any such claim and any issues with regard to the same shall be resolved in the Iowa District Court for Buena Vista County, Iowa.

18432



4. WARNING — Rotating Parts (#19936)

⚠ WARNING		
ROTATING PART HAZARD KEEP AWAY		
<p>To prevent serious injury or death from rotating parts:</p> <ul style="list-style-type: none"> • Stop engine, remove ignition key, and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging. • Install and secure all guards before operating. • Do not operate with rotating parts exposed. 		
		19936



6. WARNING — Hot Surface (#20088)

⚠ WARNING	
BURN HAZARD	
	<p>Hot surfaces or oil can cause severe burn injuries.</p> <ul style="list-style-type: none"> • Do not touch hydraulic tank or hoses during operating. • Avoid contact with hot oil.

7. WARNING — Crush/Electrocution Hazard (#17509)

⚠ WARNING ⚠		
	<p>CRUSH HAZARD</p> <p>Keep hands and arms clear of conveyor tube when placing it in storage position. Weight of tube will cause crushing injuries.</p>	
		<p>ELECTROCUTION HAZARD</p> <p>Avoid contact with overhead power lines or electrically powered objects.</p> <ul style="list-style-type: none"> • Be aware of your surroundings when raising or lowering conveyor. • Maintain at least 20 feet between equipment and any electrical hazard. • Contact with electricity can result in serious personal injury or death.

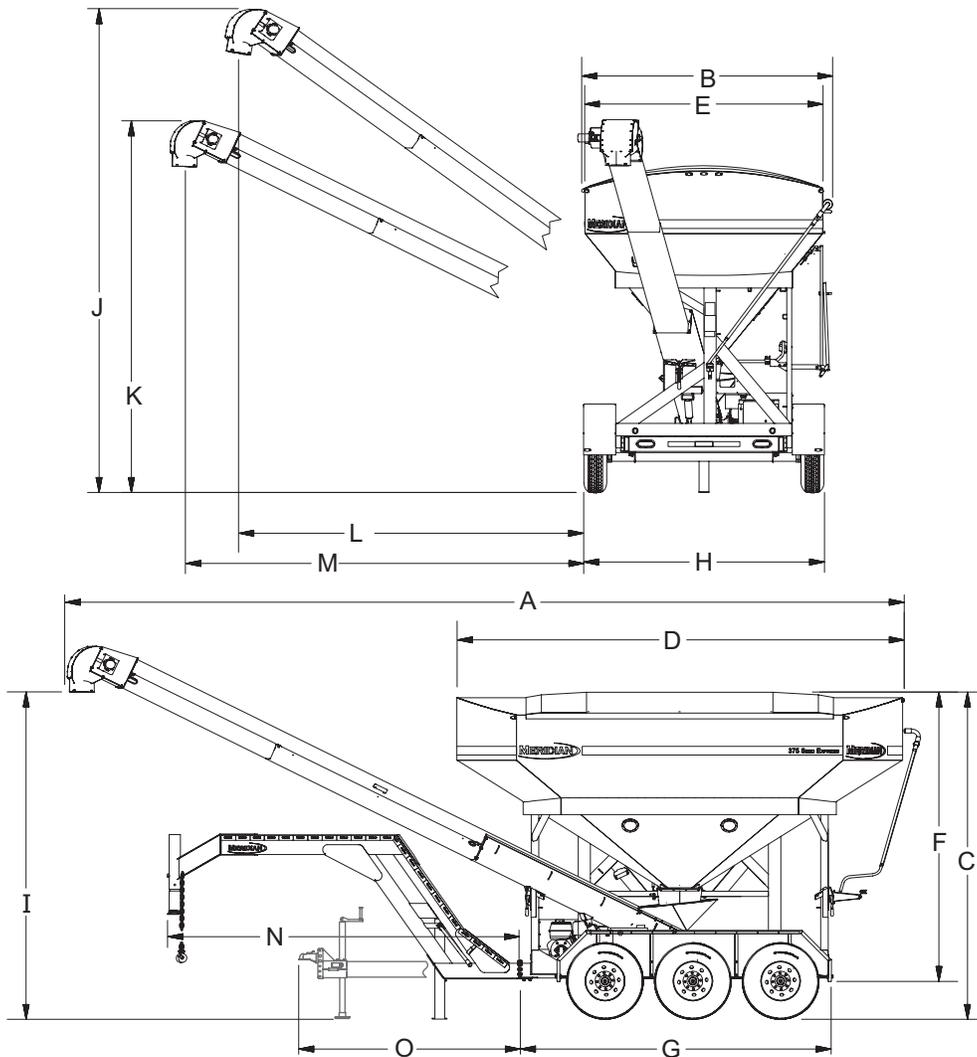
5. WARNING — Fall Hazard (#19939)

⚠ WARNING	
FALLING HAZARD	
<p>Avoid serious injury or death from falling:</p> <p>Gri the ladder ith oh hands hen lim ing to revert sli ing or falling</p> <p>ee rungs lean to revert sli ing</p>	
19939	

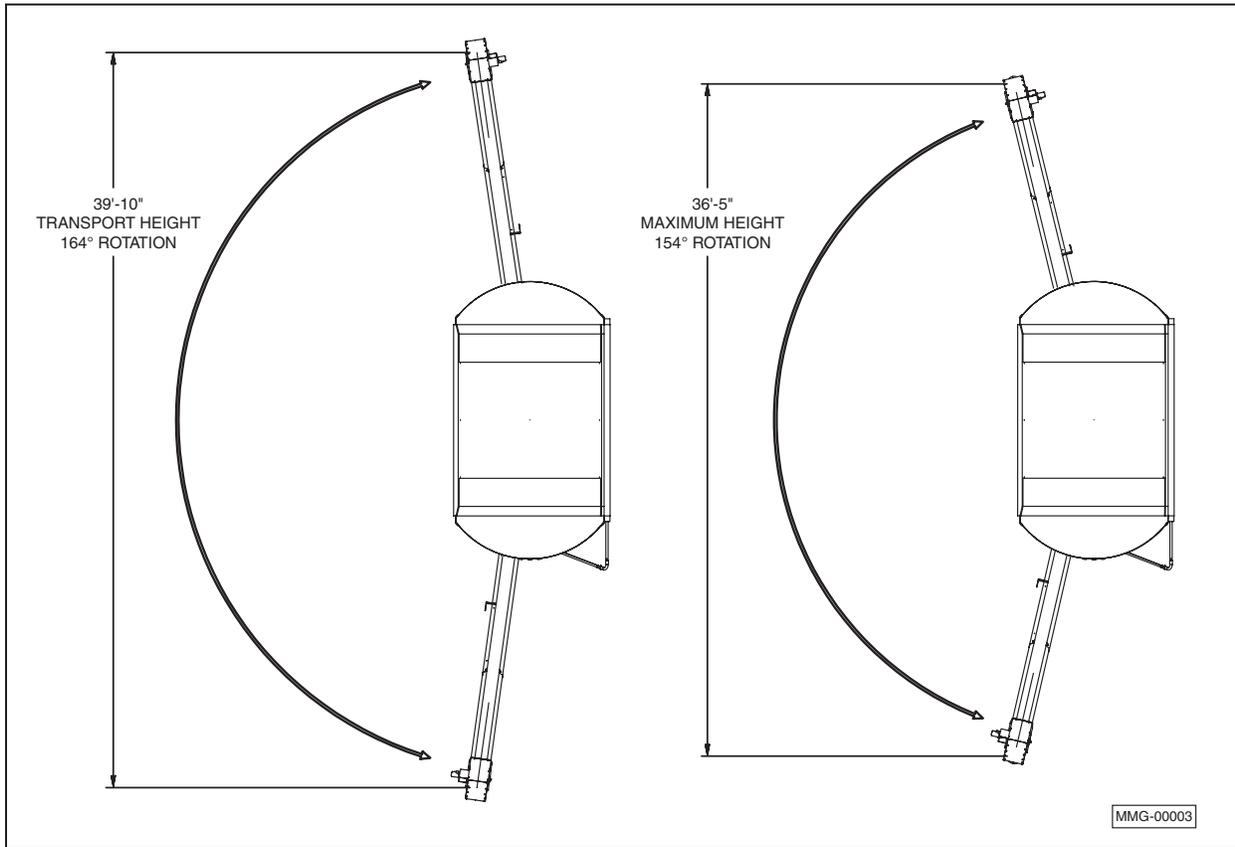
4. SPECIFICATIONS

4.1 OVERALL SEED TENDER SPECIFICATIONS

		375 Seed Express
A	Overall Length	
B	Overall Width	
C	Overall Height	
D	Motor Band Length	5
E	Motor Band Width	
F	Motor Band Height	
G	Base Length	5
H	Base Width	
I	Ceiling Height to Sprayer	
J	Ceiling Height to Max. D	5
K	Ceiling Height to Motor	d
L	Ceiling Height to Max. D	
M	Ceiling Height to Motor	d 7
N	Ground to H Le	
O	Overall Height to Le	7 5



4.2 ANGLE OF ROTATION



4.3 BOLT SPECIFICATIONS

⚠ WARNING

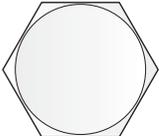
The torque value for bolts and capscrews are identified by their head markings. Replacing higher “Grade” bolts (Grade 8) with lower Grade bolts (Grade 5) will lead to equipment failure and can result in injury or death. Always use replacement bolts with the same Grade markings as the removed bolt.

4.3.1 Bolt Torque Values

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise instructed in this manual. When using locking elements, increase torque values by 5%.

Bolt Diameter “A”	SAE Grade 2		SAE Grade 5		SAE Grade 8	
	N·m (lb-ft)		N·m (lb-ft)		N·m (lb-ft)	
1/4"	8	(6)	12	(9)	17	(12)
5/16"	13	(10)	25	(19)	36	(27)
3/8"	27	(20)	45	(33)	63	(45)
7/16"	41	(30)	72	(53)	100	(75)
1/2"	61	(45)	110	(80)	155	(115)
9/16"	95	(70)	155	(115)	220	(165)
5/8"	128	(95)	215	(160)	305	(220)
3/4"	225	(165)	390	(290)	540	(400)
7/8"	230	(170)	570	(420)	880	(650)
1"	345	(225)	850	(630)	1320	(970)

4.3.2 Grade Markings Chart

 No Marking	Grade 2 Low or Medium Carbon Steel
 3 Radial Lines	Grade 5 Medium Carbon Steel Quenched and Tempered
 6 Radial Lines	Grade 8 Medium Carbon Alloy Steel, Quenched and Tempered

5. MACHINE COMPONENTS AND CONTROLS

5.1 COMPONENT NOMENCLATURE AND LOCATION

The Meridian 375 Seed Express models are designed as bulk seed transfer units to transfer large amounts of seed into a planter or drill.

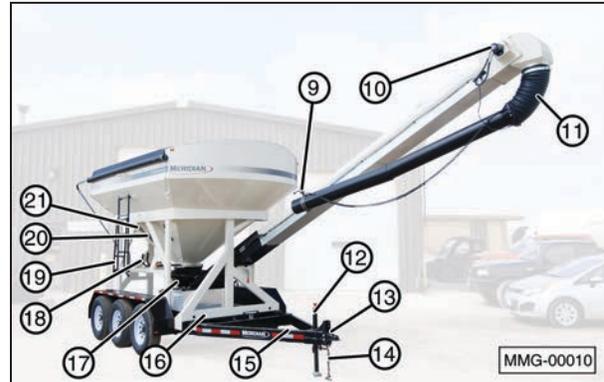
Large bulk seed containers are loaded into the seed tender compartments (1 & 2) using two methods. The seed can be dumped into one of two compartments from a seed box or other means. Center-mounted conveyor (8) then transfers the seed from the compartments into planters or drills. Slide gate levers (18) on the compartments control the flow of seed into the conveyor.

Gasoline engine (22) mounted on the frame powers a hydraulic pump, which operates the hydraulic motor for the conveyor and the control cylinders (raise, lower, and rotate the conveyor; open and close the slide gates).

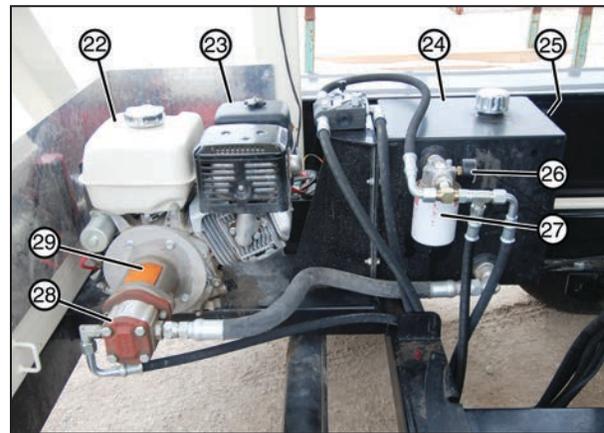
The conveyor is mounted on pivot platform (33) that rotates up to 164°. An optional spout on the end of the conveyor allows for convenient distribution.



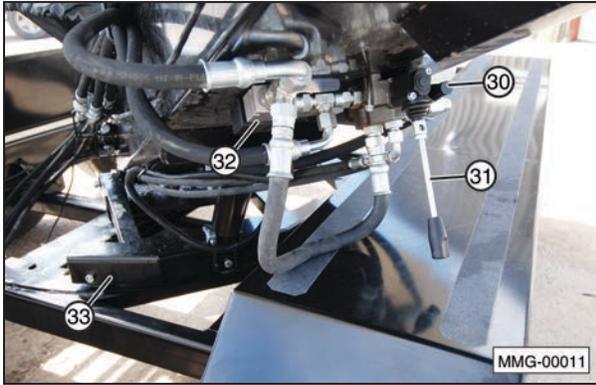
- (1) Compartment 1. (2) Compartment 2.
- (3) Roll Tarp and Open/Close Bar. (4) Seed Tender Frame. (5) Trailer. (6) Seed Pan and Pan Cover. (7) Trailer (Standard or Gooseneck). (8) Center-Mounted Conveyor.



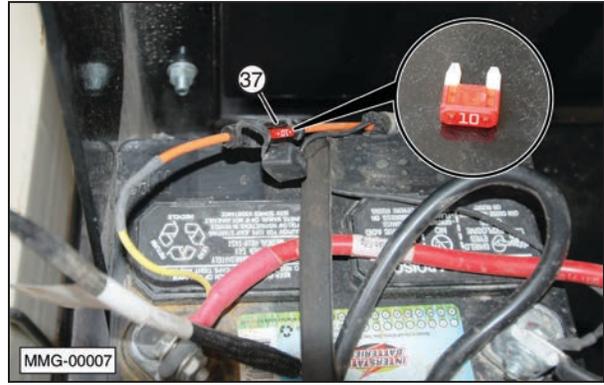
- (9) Conveyor On/Off Switch. (10) Conveyor Motor. (11) Three-Tier Delivery Spout. (12) Jack. (13) Adjustable Hitch. (14) Safety Chain. (15) Breakaway Brake System. (16) Tender-to-Frame Clamps. (17) Seed Pan and Pan Cover. (18) Slide Gate Levers. (19) Ladder. (20) Sample Gate. (21) View Window.



- (22) Gasoline Engine to Power Hydraulic Pump. (23) Air Cleaner. (24) Hydraulic Tank. (25) Hydraulic Tank Oil Level Site Gauge. (26) Dirty Filter Indicator. (27) Hydraulic Oil Filter. (28) Hydraulic Pump. (29) Coupling (Engine to Pump).



(30) Relief Valve. (31) Conveyor Tube Raise/Lower Valve. (32) On/Off Solenoid Valve. (33) Pivot Platform.

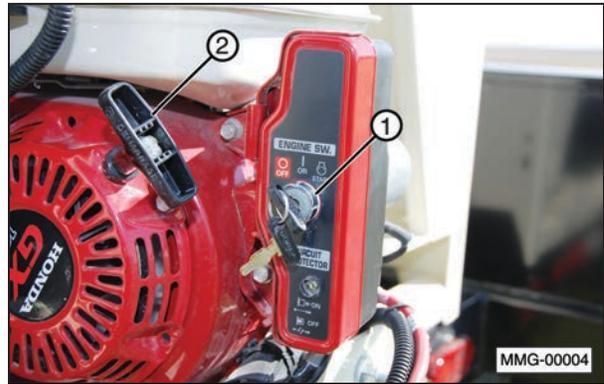


(37) Electrical System Fuse (10 Amp).



(34) Trailer Jack for Additional Support.

5.2 ENGINE AND CONTROLS

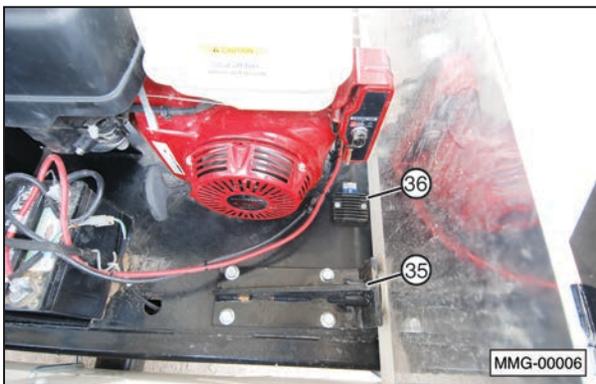


1. Engine Key Switch

Turn the key switch to the START position to start the engine. When the engine starts, then release the key and allow it to return to the ON position.

2. Starting Rope

This retracting rope and T-bar is an optional method used to start the engine. Grasp the T-bar firmly and pull the rope sharply to start the engine. The key on master control must be ON for the engine to start.



(35) Frame-to-Trailer Hold-down Brackets. (36) Rectifier (charges battery when engine is running).



3. Fuel Shut-Off Valve

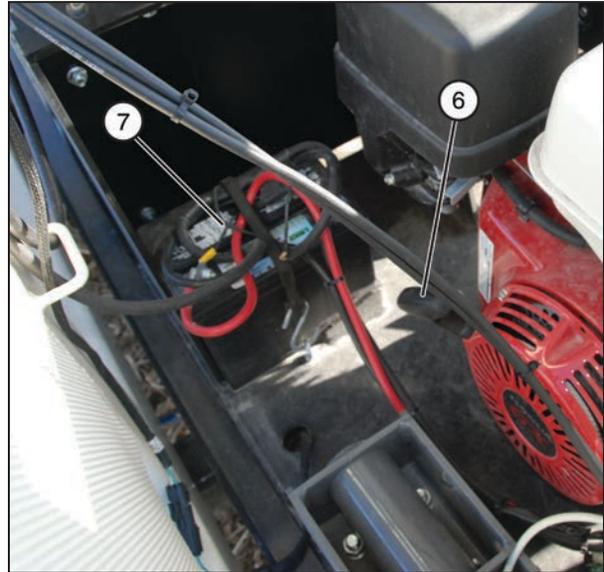
Each engine is equipped with a valve between the fuel tank and the carburetor. Slide the fuel valve toward the block to turn ON and away for OFF. Turn the fuel OFF when not in use or before transporting.

4. Throttle Lever

This lever controls the engine RPM. Move the lever laterally to increase or decrease the RPM. Always run at maximum throttle while operating.

5. Choke Lever

The choke lever controls the fuel/air mixture to the engine. Close the choke when starting if the engine is cold. Open the choke as the engine warms. Always open the choke fully during operation.



6. Starting Rope

This retracting rope and T-bar is an optional method used to turn the engine over for starting. Grasp the T-bar firmly and pull the rope sharply to start the engine. Key on master control must be ON to pull-start.

7. Battery (12 Volt)

A 12 Volt battery supplies the power to start the gasoline engine. When the engine is operating, a trickle charge is sent to the battery to keep it fully charged.

6. PRE-OPERATING INSTRUCTIONS

6.1 MACHINE BREAK-IN PERIOD

A special break-in procedure has been developed to ensure the integrity of the seed tender when first put into service. Follow the Before Starting instructions and then follow the Inspections for 1/2, 5, and 10 Hours instructions at the appropriate interval.

After completing these instructions, follow the normal service schedule in the Maintenance section and engine manual.

6.1.1 Before Starting

1. Read and follow the instructions in the Honda® engine and the Meridian Operator's Manuals.
2. Review and follow Set-Up Instructions and the Pre-operation Checklist before starting machine.
3. Initially check wheel bolt torque and then again at 10, 25, and 50 miles. Refer to the Wheel Bolt Torque Requirements section in this manual for tightening instructions.

WARNING



CRUSH HAZARD

The hitch must be bolted to the frame with two bolts. The use of only one bolt could cause the receiver assembly to separate from the trailer, resulting in injury or death to bystanders.

4. If needed, adjust the height of the hitch assembly. Refer to the appropriate hitch section in this manual for either the standard bumper hitch or the gooseneck hitch.



5. Start the engine and check the controls. Be sure that they function properly.

6. 6.1.2 Inspections for 1/2, 5, and 10 Hours

1. Recheck the machine fluid levels. Refill, as required.
2. Recheck the tension and alignment of the delivery belt.
3. Recheck hardware and fasteners; frame to trailer tie-downs, all fasteners, and wheel bolts. Tighten to their specified torque.
4. At 10 hours, change the engine oil with the specified oil.

6.2 PRE-OPERATION CHECKLIST

Efficient and safe operation of the Meridian Bulk Seed Tender system requires that each operator reads and follows the operating procedures and all related safety precautions outlined in this section.

A pre-operational checklist is provided for the operator. It is important for both personal safety and maintaining the efficient operation of the delivery system that this checklist be followed.

Before operating the delivery system and each time thereafter, the following areas should be checked:

1. Lubricate the machine, as outlined and shown in the Grease/Lubrication Location Diagram in the Maintenance section of this manual. Follow the prescribed schedule.
2. Check the engine fluid levels, fuel, and crankcase oil. Add, as required.

IMPORTANT

The engine warranty is void if the engine is run without oil.

3. Check hardware and fasteners; seed tender frame to trailer tie-downs, hitch bolts, trailer hitch to trailer bolts, and all other fasteners. Tighten to their specified torque.
4. Make sure the wheel bolt lug nuts are tight.
5. Check the tires and ensure that they are inflated to their specified pressure.
6. Remove all entangled material.
7. Visually inspect the conveyor and frame for damage.

-
8. Test the Breakaway brake unit and the trailer brakes.
 - Make sure the trailer brakes are operating properly.
 - Make sure the trip wire to the breakaway switch is connected to the tow vehicle.
 - Make sure the pin is correctly installed in the breakaway switch.
 - Press the Test button. The indicator should illuminate green. If the red light illuminates, the battery charge is low. Refer to the Breakaway System in the Maintenance section for instructions on charging the battery.
 9. Check the fluid level in the hydraulic tank. Add fluid, as needed.
 10. Start the engine and check the filter status indicator. Replace the filter if indicated.
 11. Check the tension of the delivery belt. Follow the instructions in the manual to correct the tension and/or alignment.
 12. When the machine is operating, check the alignment of the delivery belt. Follow the instructions in the manual to correct the tension and/or alignment.

7. OPERATION

OPERATING SAFETY

- Make sure that anyone operating the seed delivery system or working on or around the unit reads and understands all the operating, maintenance, and safety information in the Operator's Manual.
- Keep all bystanders, especially children, away from the machine when loading or unloading is being done, or 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 loading/unloading equipment.
- Stop engine, remove ignition key, and wait for all moving parts to stop before servicing, repairing, adjusting, loading, filling, or unplugging.
- Keep working area clean and free of debris to prevent slipping or tripping.
- Do not allow riders on the trailer or frame when transporting.
- Keep hands, feet, hair, and clothing away from moving parts.
- Do not place hands, arms, or body between the seed box and frame or lid to prevent pinching or crushing. Components can move unexpectedly.
- Stay away from overhead power lines. Electrocution can occur without direct contact.
- Install and secure all guards before starting.
- Use care when climbing on frame or ladder to prevent slipping or falling.
- Do not smoke when refueling or working around machine.
- Fasten frame securely to trailer before transporting.
- Review safety related items annually with all personnel who will be operating, using, or maintaining the seed delivery system.

7.1 CONNECTING THE TRAILER

WARNING



To prevent serious injury or death from upending hazard, do not stand over hitch when unhooking the trailer from the tow vehicle. Load or fill compartment 1 first to keep weight on the hitch. Unload or empty compartment 2 first to keep weight on the hitch.

7.1.1 Bumper Hitch

1. Complete the Pre-operation Checklist.

WARNING



CRUSH HAZARD
Ensure that all bystanders, especially small children, are clear of the working area. Ensure there is enough room and clearance to safely back up to the machine.

2. Use the trailer jack to lift the hitch above the height of the receiver on the tow vehicle (standard hitch assembly shown).





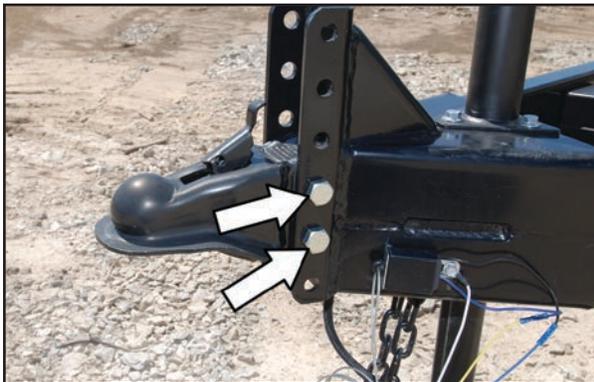
⚠ WARNING

⚠ CRUSH HAZARD
 The receiver must be bolted to the frame with two bolts. The use of only one bolt could cause the receiver assembly to separate from the trailer, resulting in injury or death to bystanders.

5. Slowly back the tow vehicle until the hitch and ball are aligned.



3. If equipped with an adjustable hitch, adjust the receiver height to make the trailer level with the tow vehicle. Tighten the bolts to standard torque for this size bolt.



6. Lower the hitch onto the ball.



7. Raise the jack and place it in its stowed position.

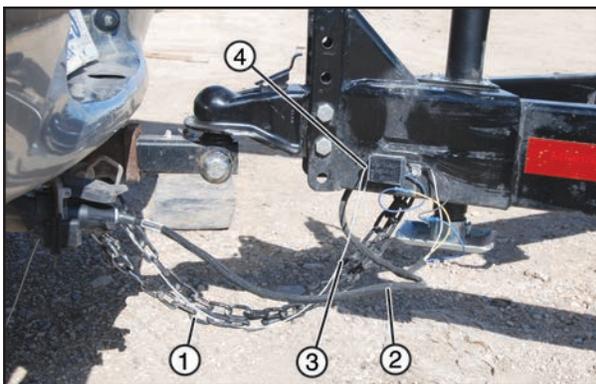
4. Remove the retainer pin. Release or open the receiver.



- Close the receiver locking collar using the lever. Install the retainer clip to prevent unwanted opening of the receiver.



- Attach safety chains (1) securely to the tow vehicle to prevent unexpected separation. Cross the chains when attaching.
- Connect wiring harness (2) for the lights and brakes.
- Connect breakaway system cable (3) to the tow vehicle. Make sure key (4) on the end of the cable is properly plugged into the receiving unit.



- Route all the cables in a manner that will prevent snagging. Be sure to provide slack for turning.

7.1.2 Gooseneck Hitch



- Adjust the trailer jack to set the trailer in a level position.



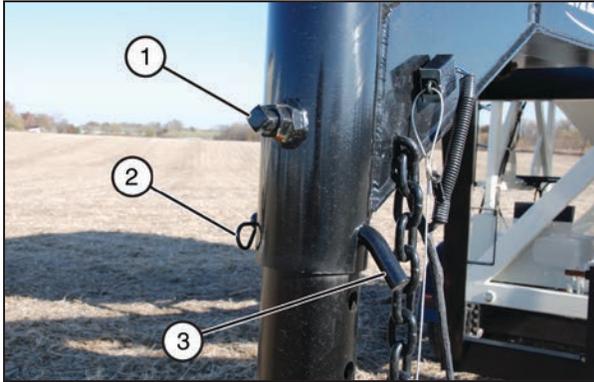
CAUTION



CRUSH HAZARD

The adjustable height tube in Step 2 is very heavy and can cause severe injury if it falls free. Once the lock bolt is loosened and the hitch pin is removed, the tube is free to fall to the ground if not properly supported.

- Loosen lock bolt (1) on the adjustable height tube. Remove keeper pin (2) and remove tube lock pin (3).



- Adjust the tube height for the tow vehicle, which would keep the trailer in a level position.
- Reinstall the pin and keeper. Tighten the tube lock bolt.
- Raise the gooseneck ball hitch to go over the lowered tailgate of the tow vehicle and to clear the height of the gooseneck ball.
- Open the clamp latch on the gooseneck coupler.

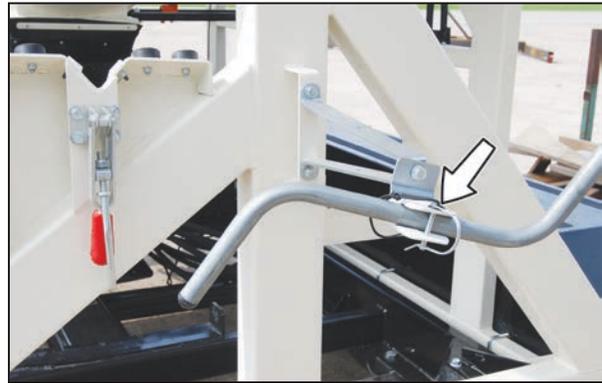


- Position the trailer's coupler directly over the ball in the bed of the tow vehicle.
- Lower the gooseneck trailer into position and latch the clamp.
- Attach the safety chains.
- Connect the trailer light wiring to your vehicle's connector and check all of your lights, including your brake lights.
- Completely raise the trailer jack to the storage/transport position.

7.2 OPENING AND CLOSING ROLL-UP TARP



- Remove the retaining pin from the crank holder. Using both hands, carefully remove the crank from the holder.



- Extend the crank handle assembly to a comfortable operating position.
- Roll the tarp to the fully opened position.



- Place the crank back in the holder and reinsert the pin.



- Two cables (1) are used to provide proper tarp tension. Use ratchet tighteners (2) to adjust the cable tension.



7.3 OPERATION

7.3.1 Loading (Filling the Seed Tender)

This Operation section provides a step-by-step procedure for first loading seed into the seed tender using the conveyor at the farm and then unloading it in the field.

⚠️ WARNING

The following safety instructions can and will result in serious injury and possibly even death if they are not understood and followed.



Read And Understand Manual
Never load the seed tender without reading and completely understanding this manual.

⚠️ WARNING



Crush Hazard (Bystander)
When loading the seed tender, make sure all bystanders, especially small children, stay clear of the working area.



Crush Hazard (Chock Wheels)
Always block (chock) the front and rear of the seed tender wheels when loading if the unit is not connected to a tow vehicle. Make sure the seed tender is completely stable before loading.



Tow Vehicle
Before loading the seed tender, make sure the engine of the tow vehicle is stopped, transmission is placed in park, the key is removed, and the parking brake is set.

- Before unloading, shut off the engine of the tow vehicle, set the parking brake, and remove the ignition key.
- Before loading seed, make sure the two slide gates are in the closed position with the slide gate clamps in the locked position.



- Open the roll-up tarp.
- The seed compartments can be loaded from a storage box, storage bag, or other means directly into the seed tender.

⚠️ CAUTION



Upending Hazard
Always load compartment 1 first to maintain a positive tongue weight. Negative tongue weight can cause the hitch to rapidly swing upward if not securely fastened to the tow vehicle, which can result in personal injury.

- When the seed tender is filled, move it to the location of the planting equipment following all safe towing practices.

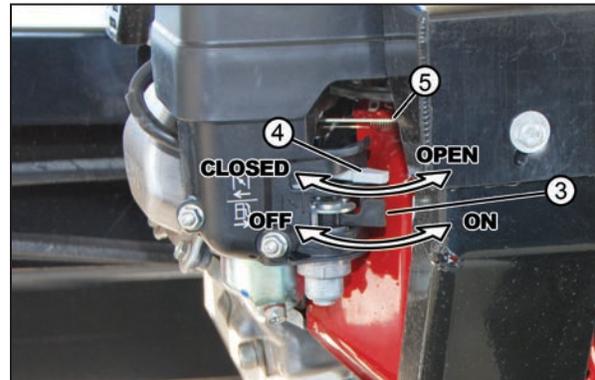
NOTE: Two sample slide gates, one in each compartment, can be used to retrieve samples of the seed from the compartment.



- Remove the protective cover from the seed pan.



- Start the gas engine.
 - Move fuel valve lever (3) to the ON position.
 - To start a cold engine, move choke lever (4) to the CLOSED position.



7.3.2 Unloading (Filling the Planter)

WARNING

Crush Hazard
The weight of the seed tender can cause crushing injuries if it is not properly restrained from moving. Before loading the seed tender, make sure the engine of the tow vehicle is stopped, transmission is placed in park, the key is removed, and the parking brake is set.

- Before unloading, shut the engine off on the tow vehicle, set the parking brake, and remove the ignition key.
- Release the conveyor tube locking lever.



- Turn the key switch to the START position.



5. Remove the hairpin clip from the retaining bracket.



8. Manually rotate (pull or push) the conveyor to place the delivery spout over the planter.



6. Remove the delivery spout from the retaining bracket and rest it on the ground.



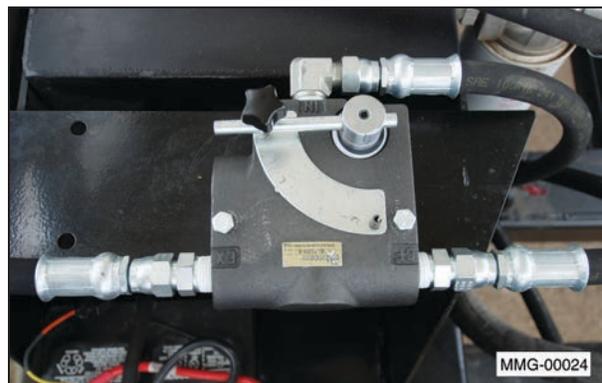
9. Raise or lower the conveyor tube to the desired height.



7. Using the conveyor tube raise/lower lever, slightly raise the conveyor out of the storage cradle.



10. Set the conveyor belt speed control lever to the desired setting; 0 (zero) being no movement and 10 being full speed.



Speed control set at 10.



Speed control set at 0 (zero).

CAUTION



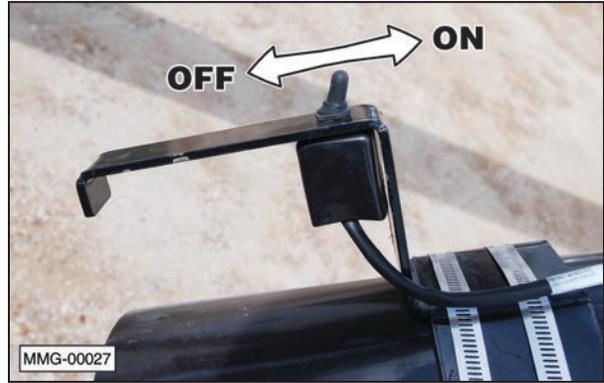
Upending Hazard

Always unload compartment 2 first to maintain a positive tongue weight. Negative tongue weight can cause the hitch to rapidly swing upward if not securely fastened to the tow vehicle, which can result in personal injury.

- Open the slide gate for either compartment 1 or compartment 2 for the desired seed flow. If possible, always empty compartment 2 first.



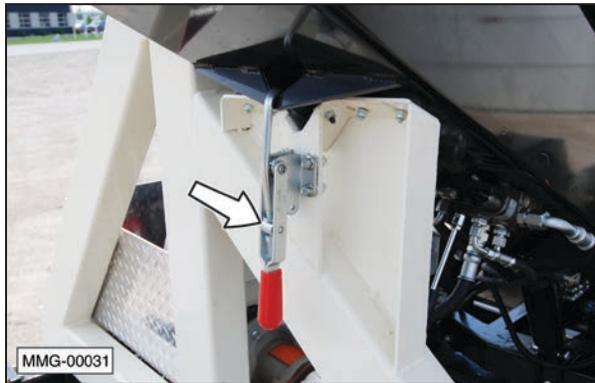
- Hold the delivery spout handle and manually start the conveyor by moving the switch to the ON position.



- Prior to filling the final seed box on the planter, close the slide gate and allow the seed to be removed from the conveyor tube. Once the seed is completely removed, then stop the conveyor belt.



14. Return the conveyor to the transport position and attach and lock the clamp. Place the delivery spout onto the retaining bracket and install the hairpin clip.



NOTE: When placing the conveyor tube in the storage position, make sure the pivot wheels are firmly seated against the platform. If too much downward pressure is applied to the conveyor tube, the pivot wheels will raise off the platform, as shown.



Pivot wheels are seated firmly against platform.



Pivot wheels are raised off the platform.

IMPORTANT

During transport, the conveyor tube and swing mechanism can be damaged if the pivot wheels are not seated firmly on the platform.

15. Place the throttle lever in the low idle position and then the engine's fuel lever in the OFF position before towing the seed tender on the open road.



8. STORAGE

8.1 GENERAL INFORMATION

After planting or when the machine will not be used for a period of time, completely inspect all major systems of the seed tender. Replace or repair any worn or damaged components to prevent unnecessary downtime at the beginning of the next season.

IMPORTANT

To prevent component damage, store the seed tender in a dry, level area. If the seed tender is not attached to a trailer, support the frame with planks to raise the unit off the ground.

8.2 PLACING IN STORAGE

CAUTION



Store the unit in an area away from human activity. To prevent the possibility of serious injury, do not permit children to play on or around the stored machine.

1. Remove all seed from the seed tender.



2. Move the gasoline engine fuel valve to the OFF position.
3. Thoroughly wash the machine with a pressure washer or water hose to remove all dirt, mud, or debris.
4. Inspect rotating parts for entangled material. Remove all entangled material.
5. Check the condition of the conveyor belt. Replace or adjust, as required.
6. Check the condition of the hydraulic pump to engine shaft connectors and spider. Replace or adjust, as required.

7. Touch up paint nicks and scratches to prevent rusting.
8. Remove the ignition key and store in a secure place.
9. Remove the battery and store it in a cool, dry area on wooden blocks or a wooden pallet. Charge it monthly to maintain an adequate charge.
10. It is best to store the machine inside and if that is not possible, cover with a waterproof tarp and tie down securely.

8.3 REMOVING FROM STORAGE

When removing the machine from storage, follow this procedure:

1. Remove the tarp, if covered.
2. Install and connect the battery.
3. Review and follow the Pre-Operation Checklist.
4. Review and follow the Service Checks in the Maintenance section.

IMPORTANT

If the machine has been stored for more than twelve months, warm the engine by running it for two to three minutes and drain the oil. Change the oil while the oil is warm to remove any condensation. Refer to the Engine Oil Change in the Maintenance section.

9. MAINTENANCE



MAINTENANCE SAFETY

- Good maintenance is your responsibility.
- Follow good shop practices.
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light.
- Make sure there is plenty of ventilation. Never operate the engine in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this machine, shut OFF the engine and remove the ignition keys.
- Never work under equipment unless it is securely blocked.
- Always use personal protection devices, such as eye, hand, and hearing protectors, when performing any service or maintenance.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to the original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
- A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this equipment.
- Periodically tighten all bolts, nuts, and screws and check that all cotter pins are properly installed to ensure the unit is in a safe operating condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.

9.1 GREASING

Use the Service Checks information in the Maintenance section to keep a record of all scheduled maintenance.

1. Use an SAE multi-purpose high temperature grease or a multi-purpose lithium base grease.
2. Use only a handheld grease gun for all greasing. An air-powered greasing system can damage the seals on bearings and lead to early failures.
3. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
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.

9.2 GREASE FITTING LOCATIONS

1. The platform wheels and the lift cylinder are equipped with grease zerks; four grease zerks total.



2. Each axle is equipped with a grease zerk under the center dust cap.



3. Make sure the conveyor tube pivot nut is correctly tightened and locked in place with the cotter pin.



4. Make sure the tarp roll up cable is tensioned correctly. Refer to the OEM manual for additional information.



9.3 MOUNTING HARDWARE

Annually check the torque on the hold-down assemblies, axle mounting bolts, and fender mounting U-bolts.



10. SERVICE PROCEDURES

10.1 HYDRAULIC SYSTEM

10.1.1 Hydraulic Oil Change



An oil and filter change is recommended annually or every 400 hours of operation using an AW HVI Hydraulic ISO 32 oil.

IMPORTANT

Never run the hydraulic pump unless the hydraulic oil tank is full (indicated in sight level gauge).

1. Place a large waste oil container under the inlet hose. The hydraulic tank holds approximately ten gallons of oil.
2. Drain the hydraulic tank by removing the inlet hose from the pump. Allow the tank to drain completely.
3. Remove and replace the oil filter. Apply a thin coat of oil to the rubber seal of the new oil filter. Hand-tighten only.
4. Reconnect the inlet hose to the pump.
5. Fill the tank to the fill line at the top of the gauge with approximately ten gallons of AW HVI Hydraulic ISO 32 oil. Replace the cap.
6. Start the engine and cycle all the cylinders several times.
7. Recheck the oil level in the tank and add oil, as needed.

10.1.2 Hydraulic Pressure Relief Valves

IMPORTANT

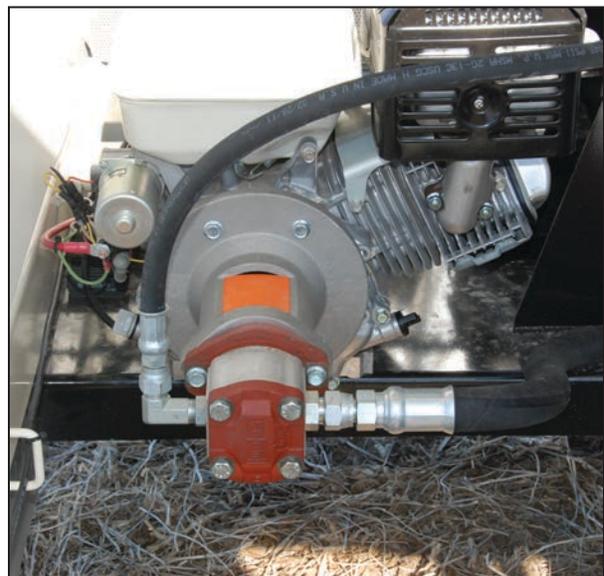
There is one pressure relief valve which has been factory preset for the most efficient operation of the seed tender. **DO NOT** adjust the relief valve.

If the unit is not operating properly, refer to the Troubleshooting section, call an authorized dealer, or call the factory.



10.1.3 Hydraulic Motor Coupling

Changing the pump coupling does not require the hydraulic tank to be drained. If the pump must be disconnected, drain the hydraulic tank and be prepared to catch any oil that remains in the two hydraulic hoses.



1. Remove the orange protective cover from the adapter assembly.

2. Remove the two pump mounting bolts.
3. Pull the pump away from the adapter to separate the coupling halves.



4. Loosen the setscrews in each coupling half and remove the old couplings.
5. Install new couplings on the engine shaft and the pump shaft. When completely assembled, the shaft length in each coupling half should be the same. Tighten the pump end setscrews to 78 - 87 lb-in. Do not tighten the engine shaft coupling at this time.
6. Place the urethane spider in the pump coupling. Align and install the pump and pump coupling.
7. Tighten the pump bolts to a "Grade 5" bolt torque for that size of bolt. Refer to the 4.2 Bolt Specifications section.
8. Slide the engine coupling against the other coupling half and tighten the setscrew.
9. Replace the orange protective cover.

NOTE: If the adapter plate was removed, tighten the four retaining bolts to "Grade 5" bolt torque for that size of bolt.

10.2 ENGINE

For any questions concerning the Honda® engine not provided in this manual, refer to the OEM manual that was provided with the seed tender.

To contact Honda®, refer to the OEM Literature section in this manual.

10.2.1 Approved Fuel

Use a regular unleaded automotive gasoline for all operating conditions. The fuel tank capacity is 1.0 liter (2.1 US pints).

10.2.2 Engine Oil

Use a typical SAE 10W-30 or 10W-40 multi-viscosity motor oil for normal operating conditions. Consult your engine manual for the recommended oil in cold temperatures. The crankcase capacity is 1.1 liters (1.16 US qt.).

10.2.3 Change Engine Oil

1. Review the engine's Operator's Manual.
2. Allow the engine to cool before changing oil. Draining works best when oil is warm.

⚠ CAUTION



Burn Hazard.
Hot engine oil can burn skin.

3. Be sure the engine key switch is in the OFF position and the fuel valve is turned OFF.
4. Place a pan under the drain plug.
5. Remove the drain plug and allow oil to drain for ten minutes.
6. Reinstall the engine drain plug and tighten.
7. Dispose of the oil in an approved container. Follow industrial disposal regulations.
8. Fill the engine with SAE 10W-30 oil for general usage. If the engine is operated in more extreme conditions, refer to the OEM manual for oil recommendations.
9. Run the engine for one minute and recheck the oil level. Add oil, as needed.

10.2.4 Clean Air Cleaner

Check the air cleaner daily before each usage. Clean it every three months or 50 hours of operation (clean it more frequently when used in dusty conditions).



10.3 BELT DELIVERY TUBE

10.3.1 Unplugging

If the conveyor becomes plugged, follow this procedure:

1. Position the conveyor with easy access to both ends.
2. Stop the engine and remove the ignition key. Place a lock-out tag on the control box to prevent accidental starting of the conveyor.
3. Open the lower access door at the bottom of the conveyor and/or open the delivery spout cover.



4. Remove obstruction.
5. Close and secure the lower access door and delivery spout cover.

10.3.2 Belt Tension Adjustment



1. Loosen the locknut on each side of the belt tension mechanism.
2. Tighten the two adjusting bolts equally to 23 lb-ft. While holding the adjusting bolt in place, retighten both locking nuts.
3. Start the conveyor and make sure the belt is tracking in the center of the drive drum. If the belt is not tracking properly, use the Belt Tracking Adjustment procedure to correct the problem.

IMPORTANT

The drive drum at the bottom of the conveyor must be square (drive shaft must be equal distance from end of unit) for the belt to track properly.

10.3.3 Belt Tracking Adjustment



1. Loosen the locknuts on the adjusting bolt.
2. Tighten or loosen the bolt to correct the tracking problem.
3. Place both locking nuts on either side of the lock plate and tighten the locking nuts together.
4. Start the conveyor and make sure the belt is tracking in the center of the drive drum. Readjust, if needed.

10.3.4 Belt Replacement

If the belt is unbroken, use the old belt to thread the new belt into the delivery tube.

1. Open lower access door.



2. Position the crimped belt fastener in the opening.



3. Loosen the lower drive drum adjusting bolts to their loosest position.
4. Disconnect the two ends of the conveyor belt.
5. Attach the replacement belt to the end of the old conveyor belt.
6. Slowly pull the old belt out of the delivery tube and thread the new one into position.
7. Disconnect the old belt and connect the ends of the new belt together.
8. Readjust the belt tension.
9. Start the conveyor to make sure the belt is tracking properly.
10. Recheck the tension and alignment of the belt frequently during the first ten hours of operation and adjust, as needed.

NOTE: Then, resume regular maintenance. Typically a belt will seat itself during the first ten hours of operation and then require less or no adjustment.

10.4 TRAILER BREAKAWAY SYSTEM



10.4.1 Testing the Battery

1. Disconnect the trailer plug from the tow vehicle; otherwise, you are testing the tow vehicle's battery.
2. Press the green TEST button on the control box located inside the frame of the trailer. The green indicator light should illuminate if the battery is fully charged. If the yellow or red indicator lights illuminate, the unit's battery should be charged before towing the trailer.

IMPORTANT

If the battery is weak or dead (red indicator, even after charging), as indicated by the indicator light, the battery must be replaced.

3. Plug the trailer into the tow vehicle. The yellow "Charging" light should be ON.
4. Test the system by pulling the pin out of the breakaway switch. The battery will activate the brakes. (**Note:** Do not use this kit as a parking brake). The battery should be charged and tested prior to each trailer outing.



10.4.2 Changing Battery

The battery in the breakaway system is rechargeable, but not replaceable. If the battery will not hold a charge, replace the unit.

10.5 WHEEL BOLT TORQUE REQUIREMENTS



1. Initially check the wheel bolt torque at 10, 25, and 50 miles and after each wheel removal. Refer to the Wheel Bolt Torque Requirements section in this manual for tightening instructions.

NOTE: Torque wrenches are the best method to ensure the proper amount of torque is being applied to a wheel nut.

⚠ CAUTION



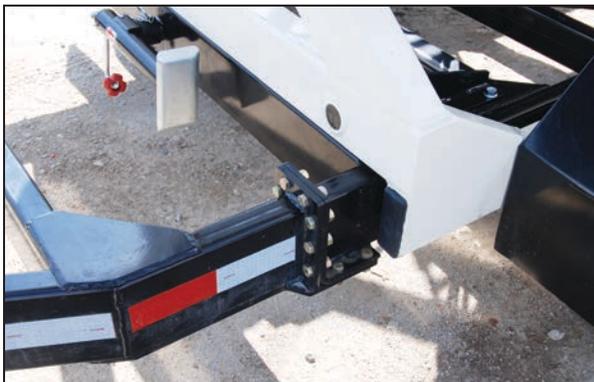
To prevent injury due to possible dangerous separation of wheels from the axle, the wheel nuts must be maintained at the proper torque levels. Properly maintained wheel nuts prevent loose wheels and broken studs.

2. Tighten the wheel nuts in three stages.
 - First stage: 20 to 25 foot pounds.
 - Second stage: 50 to 60 foot pounds.
 - Third stage: 90 to 120 foot pounds.
3. Tighten the wheel nuts in a clockwise, cross-axle alternating pattern.

10.6 TRAILER HITCH BOLTS

The front hitch section of the seed tender is bolted to the trailer frame. This design allows the same trailer to use either a standard hitch assembly or a gooseneck trailer hitch. These hitch assemblies are interchangeable, if needed.

Check the torque on the trailer hitch bolts at least once per year. Tighten the bolts to 115 lb-ft.



10.7 SERVICE RECORD CHART

The chart on the following page should be copied and filled out as maintenance is performed on the machine. Refer to the Lubrication, Maintenance, and Service sections for additional instructions.

10.8 SERVICE CHECKS

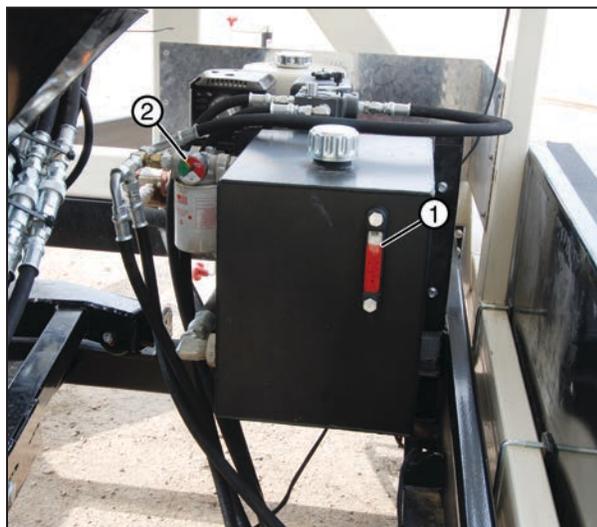
10.8.1 Daily (8 Hours)

WARNING



Gasoline is a highly combustible fuel. Improper use, handling, or storage of gasoline can be dangerous. Never touch or fill a hot engine. **DO NOT** fill the engine's fuel tank near an open flame while smoking or while engine is running. **DO NOT** fill tank in an enclosed area with poor ventilation. Wipe up spills immediately.

1. Check engine oil level and fill, as needed.
2. Check engine fuel level and fill, as needed.
3. Check hydraulic fluid level (1) and fill, as needed.



4. Check the filter life indicator. Change the filter if the indicator needle is in the yellow or red area.



5. Test trailer breakaway system. Refer to section 10.4 in this manual.
6. Initially check wheel bolt torque at 10, 25, and 50 miles. Refer to 10.5 Wheel Bolt Torque Requirements section in this manual for tightening instructions.
7. Check delivery belt for proper tracking. Refer to section 10.3.2 on adjusting the belt in this manual.

10.8.2 Weekly (50 Hours)

1. Change engine oil.
2. Clean or change engine air filter.



3. Check the tension on the delivery belt. Adjust tension, if needed. Refer to section 10.3.2 in this manual for instructions.
4. Check tire pressure. Inflate the tires to the recommended pressure stated on the tire.

10.8.3 Annually (400 Hours)

1. Check wheel bolt torque. Refer to 10.5 Wheel Bolt Torque Requirements section in this manual for tightening instructions.
2. Check frame and trailer hold-down assembly bolts.
3. Check hydraulic motor to engine shaft coupling and spider. Refer to the Changing Hydraulic Motor Coupling section for instructions.
4. Check and grease turntable nylon rollers.
5. Thoroughly clean the seed tender.
6. Check the tires for wear, and replace if needed.

10.9 AXLE MAINTENANCE

10.9.1 First 200 Miles

1. Adjust brakes. Refer to OEM manual for procedure.

10.9.2 3,000 Miles or 3 Months

1. Adjust brakes. Refer to OEM manual for procedure.
2. Check torque on wheel nuts. Refer to the Wheel Bolt Torque Requirements section in this manual.
3. Inspection tires for wear. Refer to OEM manual for procedure.

10.9.3 6,000 Miles or 6 Months

1. Inspect brake magnets for wear. Refer to OEM manual for procedure.
2. Inspect suspension parts for wear. Refer to OEM manual for procedure.

10.9.4 12,000 Miles or 12 Months

1. Inspect brake lining wear, check brake cylinder for leaks, and inspect brake wiring for damage. Refer to OEM manual for procedure.
2. Grease the wheel bearings and check the hub for wear. Refer to OEM manual for procedure.
3. Inspect grease seal for leakage. Refer to OEM manual for procedure.

10.10 TIRES

Check the tires for normal and/or abnormal tire wear. Replace tires that are damaged or worn beyond normal tread life. Refer to the axle OEM manual for a Tire Wear Diagnostic Chart.

Replace the tires with Meridian part number 18131 or an equivalent tire:

ST235/80R16

TR643

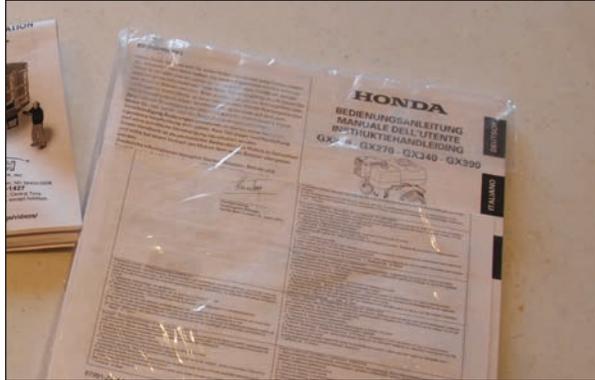
Load Range E

For Trailer Service Only

11. OEM LITERATURE

11.1 HONDA® ENGINE

For any questions concerning the Honda® engine, refer to the OEM manual that was provided with the seed tender.



Additional information can be obtained from:

United States Power Equipment Division
Customer Relations Office
4900 Marconi Drive
Alpharetta, GA 30005-8847
(770) 497-6400

Honda® Canada, Inc.
715 Milner Avenue
Toronto, ON M1B 2K8
(888) 946-6329

11.2 RETRACTABLE COMPARTMENT TARP

For any questions concerning the Agri-Cover, refer to the OEM manual that was provided with the seed tender.



Three decals are also provided showing the correct operation and maintenance for the tarp. Attaching these decals is the responsibility of the purchaser.



Additional information can be obtained from:
ACI Agri-Cover
PO Box 508
Jamestown, ND 58402

Phone: (866) 414-5422
Fax: (701) 251-1512
customerrelations@agricover.com

11.3 AXLE

For any questions concerning the Axis Products axle, refer to the OEM manual that was provided with the seed tender. An Owner's Manual and parts listing is provided with the seed tender.

Additional information can be obtained from:
Axis Products, Inc.
3403 Reedy Drive
Elkhart, IN 46514
Phone: (574) 266-8282

12. TROUBLESHOOTING

12.1 TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
Engine will not start.	No fuel.	Fill the fuel tank.
	Low engine oil.	Fill the crankcase with oil.
	Cold engine.	Open choke.
	Ignition key switch off.	Turn ignition key switch on.
	Battery dead.	Recharge or replace battery.
	Engine problem.	Refer to engine manual.
Conveyor belt will not start.	No power.	Start engine and increase speed above 1400 RPM.
	Drive motor coupling.	Repair or replace coupling.
	Belt tension.	Increase belt tension.
	No hydraulic oil.	Check oil level.
Electrical or hydraulic functions are not working properly.	Battery cable or battery.	Check battery cable and make sure battery is fully charged.
	Improper ground.	Check for proper grounding electrical circuit.
	Hydraulic valve or motor.	Ensure hydraulic pump is working properly and hydraulic tank is filled with oil.

13. WARRANTY

13.1 WARRANTY STATEMENT

Limited Materials and Workmanship Warranty For Bulk Seed Tenders

Meridian Manufacturing Group (hereinafter referred to as the Manufacturer) hereby warrants the Bulk Seed Tender(s) sold by it to be free from any defect in material or workmanship under normal use and service for a period of one (1) year from the date of shipment. The Manufacturer's obligation under this warranty shall be limited to the repair or replacement only, FOB the original point of shipment, of any defective parts or portions of the seed tender or accessories manufactured by Meridian. Any warranty claim must be reported to the Manufacturer within one (1) year from the date of shipment.

THIS WARRANTY IS SUBJECT TO THE FOLLOWING LIMITATIONS, PROVISIONS AND CONDITIONS:

1. This warranty does not apply:
 - a) To any product sold by the Manufacturer where it is used in areas exposed to corrosive or aggressive conditions including salt water, acids, alkaloid, ash, cement dust, animal waste or other corrosive chemicals from either inside or outside the bin.
 - b) For failures or defects arising out of damage during shipment or during storage on site.
 - c) To materials replaced or repaired under this warranty except to the extent of the remainder of the applicable warranty.
 - d) To damage resulting from misuse, negligence, accident or improper site preparation by others.
 - e) If the product has been altered or modified by others.
 - f) If in the case of coating failures the failure is the result of damage, lack of proper maintenance or failure to remove road salt or other contaminants that may have come in contact with the bin surface.
 - g) To loss of time, inconvenience, loss of material, down time or any other consequential damage.
 - h) For a function that is different than original designed intent.
2. The obligation of the Manufacturer under this warranty shall not arise unless the Manufacturer 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 owner and within one (1) year from the shipment date. The Manufacturer in its sole 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.
3. The coating warranty is based on the manufacturer's performance specification for Polyester Powder finishes and does not include repair of minor blemishes or rusting that is normally part of the general maintenance of the seed tender. This warranty does not cover excessive wear on interior coatings. See attachment for full Performance Specification details on Polyester Powder Finishes.
4. The obligation of the Manufacturer hereunder extends only to the original owner and to the Meridian dealer to whom the materials may have been initially sold. This warranty shall not be subject to any assignment or transfer without the written consent of the Manufacturer.
5. The customer shall acknowledge that it has made its own independent decision to approve the use of the supplied materials and also the specific fabrication and construction procedures utilized to complete the seed tender, and has satisfied itself as to the suitability of these products for this particular application.
6. The foregoing sets forth the only warranties applicable to said materials and said warranties are given expressly and in lieu of all other warranties, expressed or implied, statutory or otherwise, of merchantability or fitness for a particular purpose and all warranties which exceed or differ from said warranties herein are disclaimed by the Manufacturer.
7. The owners sole and exclusive remedy against the Manufacturer shall be limited to the applicable warranty set forth herein and the endorsements, if any, issued together with this document and no other remedy (including but not limited to the recovery of assembly or disassembly costs, shipping costs, direct, incidental, special, indirect or consequential damages for lost profits, lost sales, injury to person or property or any other loss, whether arising from breach of contract, breach of warranty, tort, including negligence, strict liability or otherwise) shall be available to the owner or Meridian Dealer or any other person or entities whether by direct action or for contribution or indemnity or otherwise.
8. The financial obligation of the Manufacturer under this warranty shall be limited to the repair or replacement of the product as originally supplied and in no event shall exceed the original cost of the product supplied.
9. The Manufacturer shall not have any obligation under any warranty herein until all accounts for materials, installation and erection of the said product thereof and for labor and other work performed by the Manufacturer or its dealers have been paid in full by the owner.

Warranty Claim Procedure

1. Registering product with Meridian Manufacturing.
2. Contact the dealer unit was purchased from upon discovery of any defects.
3. A completed warranty claim form submitted by dealer to Meridian warranty representative for review and course of action.
4. Warranty repair work will only be performed by Meridian, the dealer or an approved representative. No warranty work completed prior to approval. Failure to follow procedure may affect any or all reimbursement.
5. Claims will be adjudicated at the sole discretion of the manufacturer and in accordance with the terms and conditions of the applicable limited warranty.
6. A complete list of warranty procedures can be procured from the Warranty Department or found in your owner's manual.

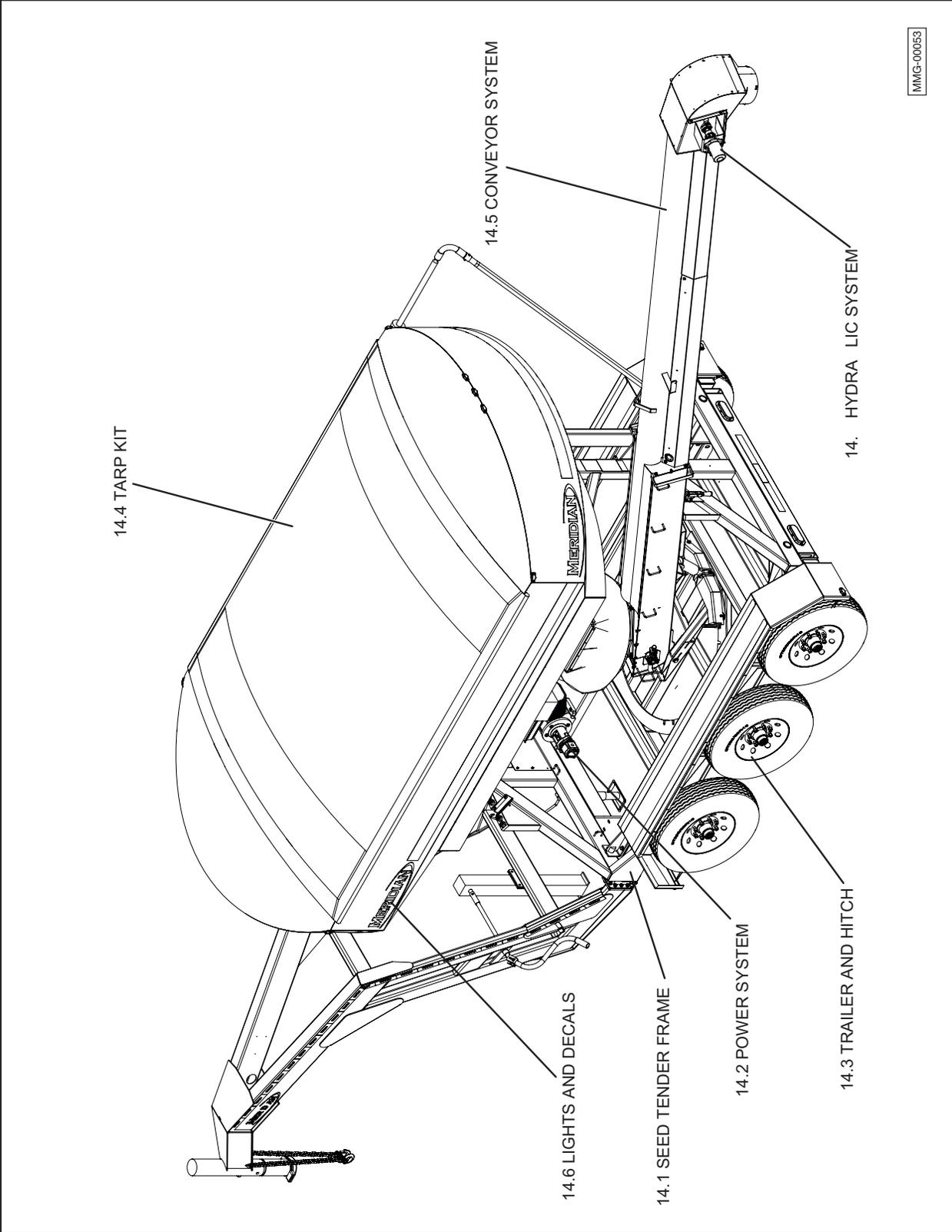
Effective July 1, 2009

14. PARTS

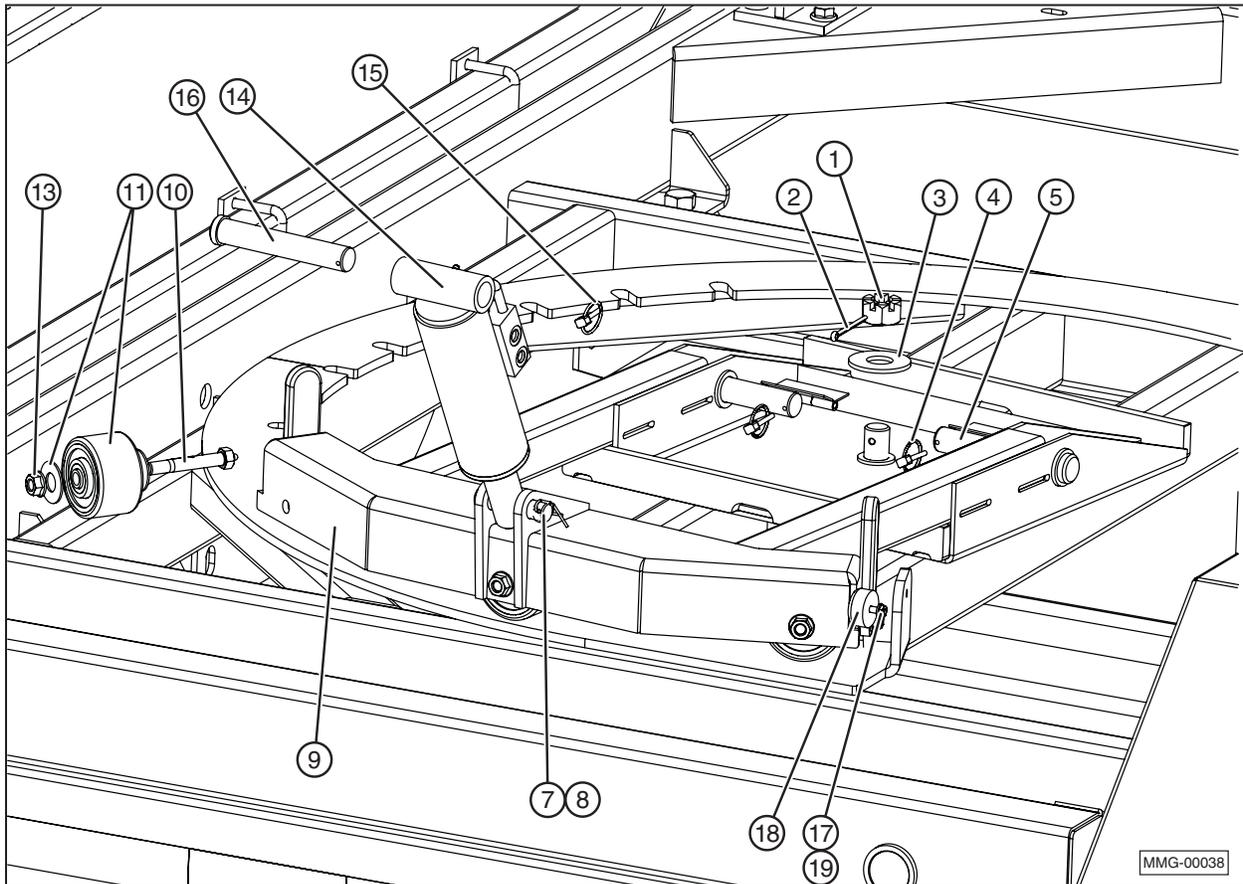
The following pages contain a list of serviceable parts for both the 375 Seed Express units.

Parts are available from your authorized Dealer Parts Department.

14.1 SEED TENDER FRAME



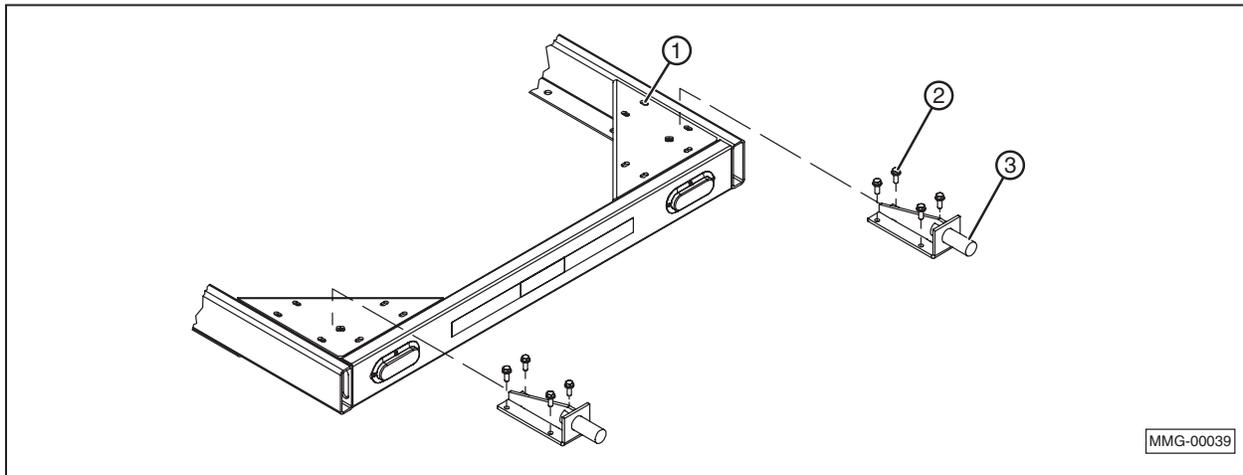
14.1.1 375 Conveyor Swivel Assembly



1	1	26091	Castle Nut
2	1	26092	Cotter Pin
3	1	26090	Washer
4	2	19794	Lynch Pin, 3/16 x 1"
5	2	19774	Pin, Clevis, 1" x 5-45/64" Effective Length
5	—	—	—
7	3	19774	Pin, Clevis, 1" x 5-45/64" Effective Length
8	1	19785	Pin, Cotter
9	1	31507	Turret Assembly 2011, Manual
10	3	18451	Wheel Axle, 1/2" Dia x 3-3/8", Greased

11	3	18448	Roller, Polyurethane, 3-1/4" x 2" with flat washers
12	—	—	—
13	3	19595	Nut, Hex, Flanged, 1/2-13
14	1	19150	Lift Cylinder
15	1	19794	Lynch Pin, 3/16 x 1"
16	1	19777	Clevis Pin, 3/4" x 3-49/64" Effective Length
17	2	19301	Bolt
18	2	19133	Stop, Rubber
19	2	19123	Nut

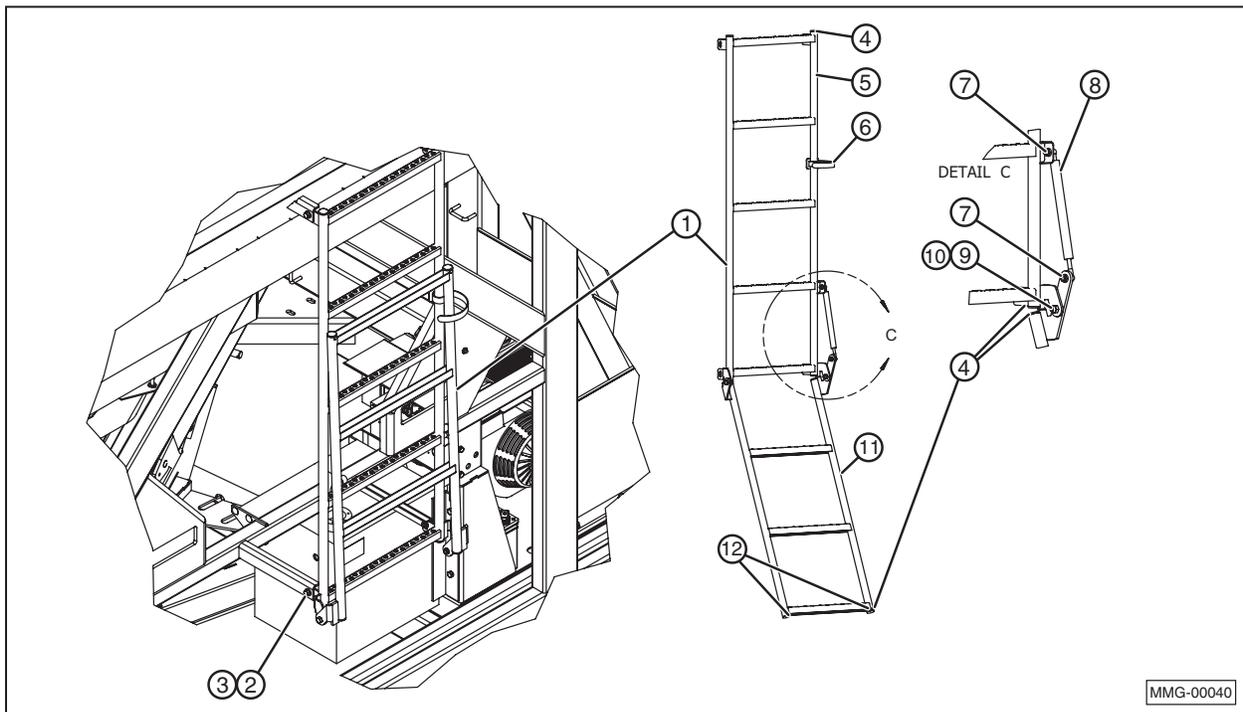
14.1.2 Hold-Downs and Load Cells



MMG-00039

1	16	16595	Nut, Hex, Flanged, 1/2-13
2	16	18943	Bolt, Hex, Flanged, 1/2-13 x 1-1/4" long
3	4	25318	Pin Assembly, Undercarriage

14.1.3 Ladder Detail

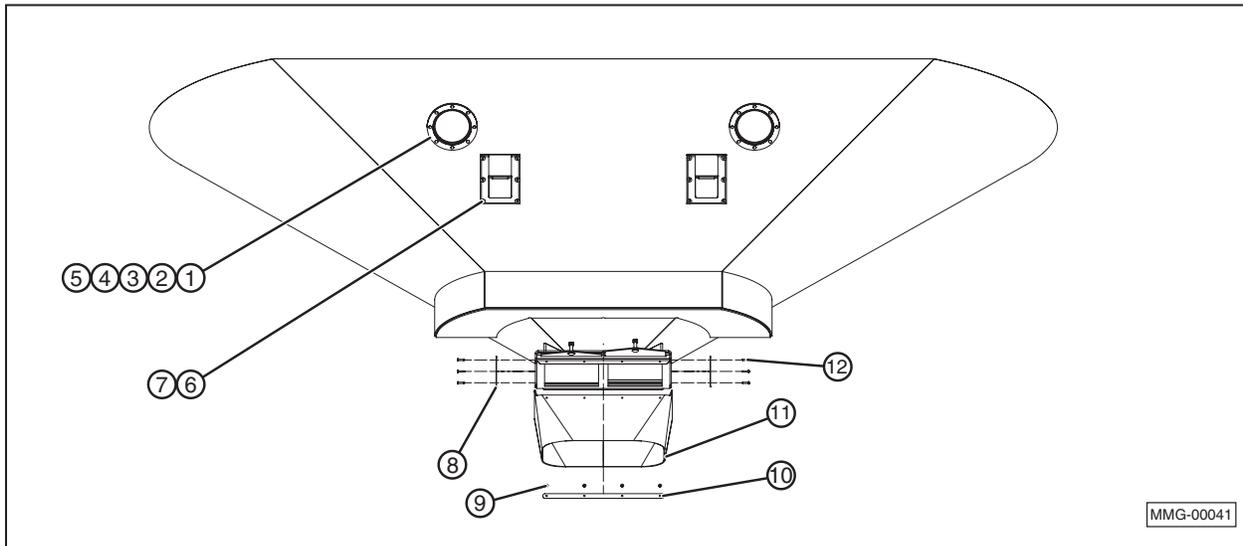


MMG-00040

1	1	25899	Ladder Assembly
2	4	19564	Nut, Hex, Flanged, 3/8-16
3	4	19577	Bolt, Hex, Flanged, 3/8-16 x 3/4" long
4	8	19063	1" Tube Plug
5	1	25673	Top Ladder Assembly
6	1	19138	Self Gripping Velcro Cable

7	2	19318	Nut, Hex, Flanged, 5/16-18
8	1	19064	120 lb. Gas Spring Assist Shock
9	2	19347	3/8-16 Nylon Locknut
10	2	19325	Bolt, Hex, 3/8-16 x 1
11	1	25674	Swing Ladder Assembly
12	2	19067	Rubber Pad

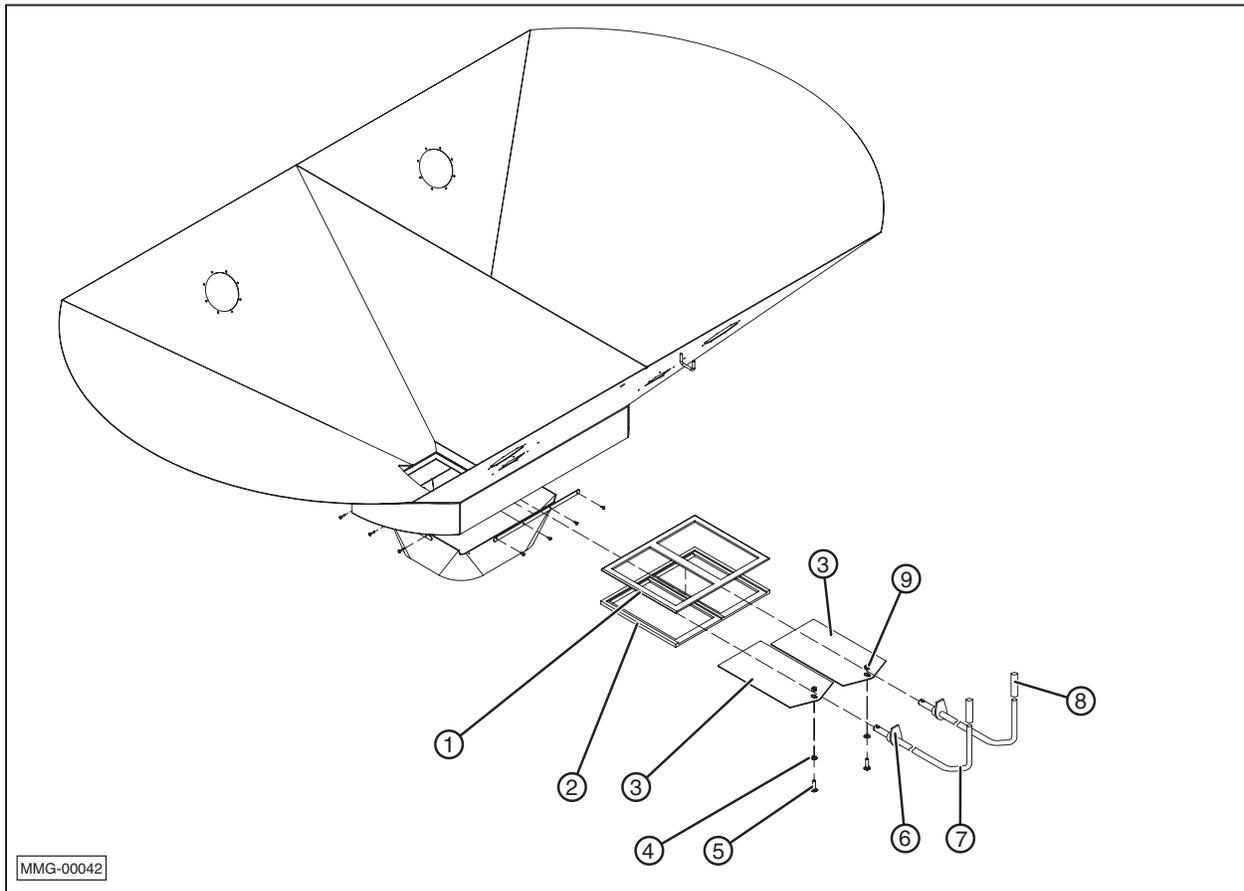
14.1.4 Sample Slide Gate Detail



1	4	47008	View Glass, Stainless Steel Ring Assy. (Includes Items 2-5)
2	1	19445	Gasket, View Glass
3	1	19423	Glass, Lexan View
4	1	20828	Ring, View Glass
5	6	19129	Rivet, 3/16"
6	12	19129	Rivet, 3/16" x 1/2"

7	2	36150-00	Gate, Sample
8	2	25279	Retainer, Gate Skirt (Side)
9	4	19699	Screw, Self Drilling, 8-32 x 1/2"
10	2	25276	Retainer, Gate Skirt
11	1	25662	Skirt, Gate
12	10	19779	Screw, Self Drilling, Zinc, 8-18 x 3/4"

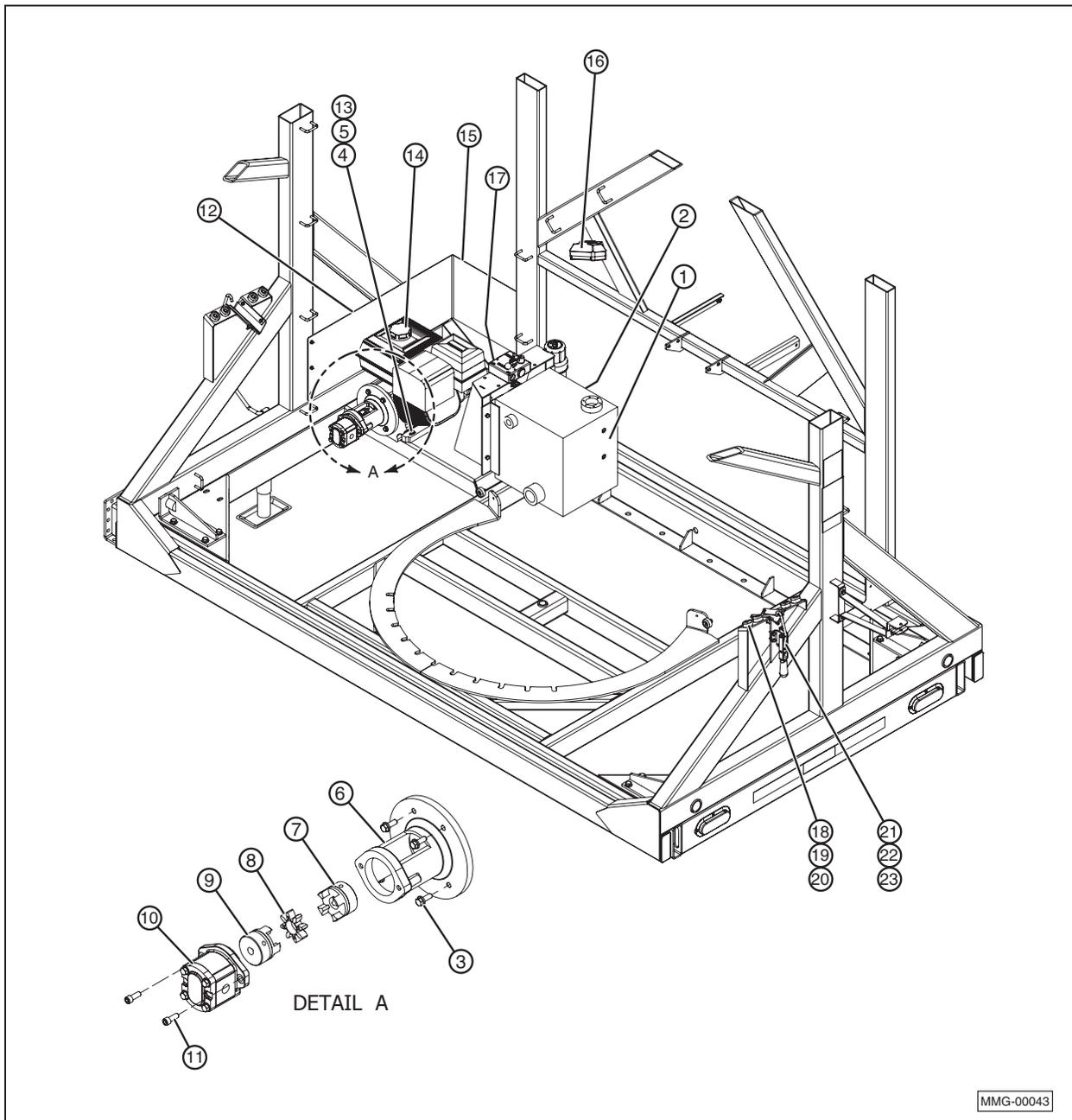
14.1.5 Slide Gate Detail



4	1	25747	Guide Top
2	1	25746	Slide, Guide Bottom
3	2	25745	Slide, Gate
4	2	19348	Washer, Flat, 3/8
5	2	19335	Bolt, Carriage, 3/8-16 x 1-1/2"

6	2	17996	Lock, Slide Gate Handle
7	2	25897	Handle, Slide Gate
8	2	19447	Grip, Handle
9	2	19347	Locknut, Nylon, 3/8-16

14.2 POWER SYSTEM



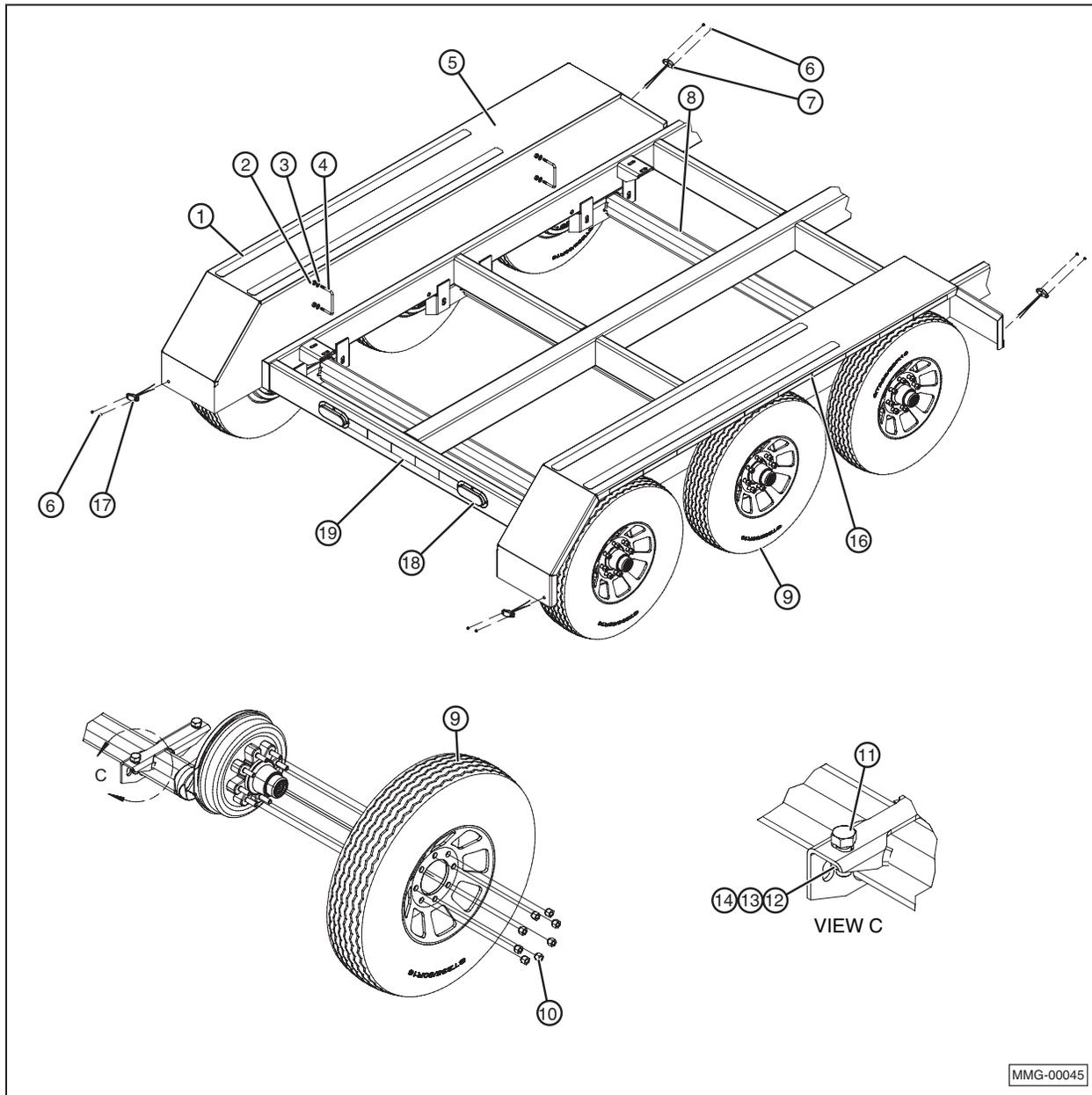
MMG-00043

1	1	19178	Tank, Hydraulic with Filter 2012
2	1	20088	Decal, Warning Hot Surface
3	4	19569	Bolt, Hex, Flanged, 3/8-16 UNC x 1"
4	4	19347	Locknut, Nylon, 3/8-16
5	4	19348	Washer, Flat, 3/8
6	1	19289	Housing, Bell
7	1	19247	Coupling with Setscrew, Engine
8	1	19290	Coupler, Spider, Black
9	1	19248	Coupling with Setscrew, Pump
10	1	19295	Pump, Hydraulic
11	2	18577	Cap screw, Socket Head
12	1	26119	Trim, Edge (10-5/8")

13	4	19618	Bolt, Hex, 3/8-16 UNC x 1-3/4" Steel, Mild
14	1	21270	Engine, Honda® GX340
15	1	26120	Trim, Edge (27-5/16")
16	1	19188	Light, Work (Optional)
17	1	21286-00	Battery, SP-30
18	8	19133	Stop, Rubber
19	8	19301	Bolt
20	8	19126	Nut
21	2	19123	Latch, Assembly
22	8	19309	Bolt
23	8	19318	Nut

14.3 TRAILER AND HITCH ASSEMBLY

14.3.1 Trailer

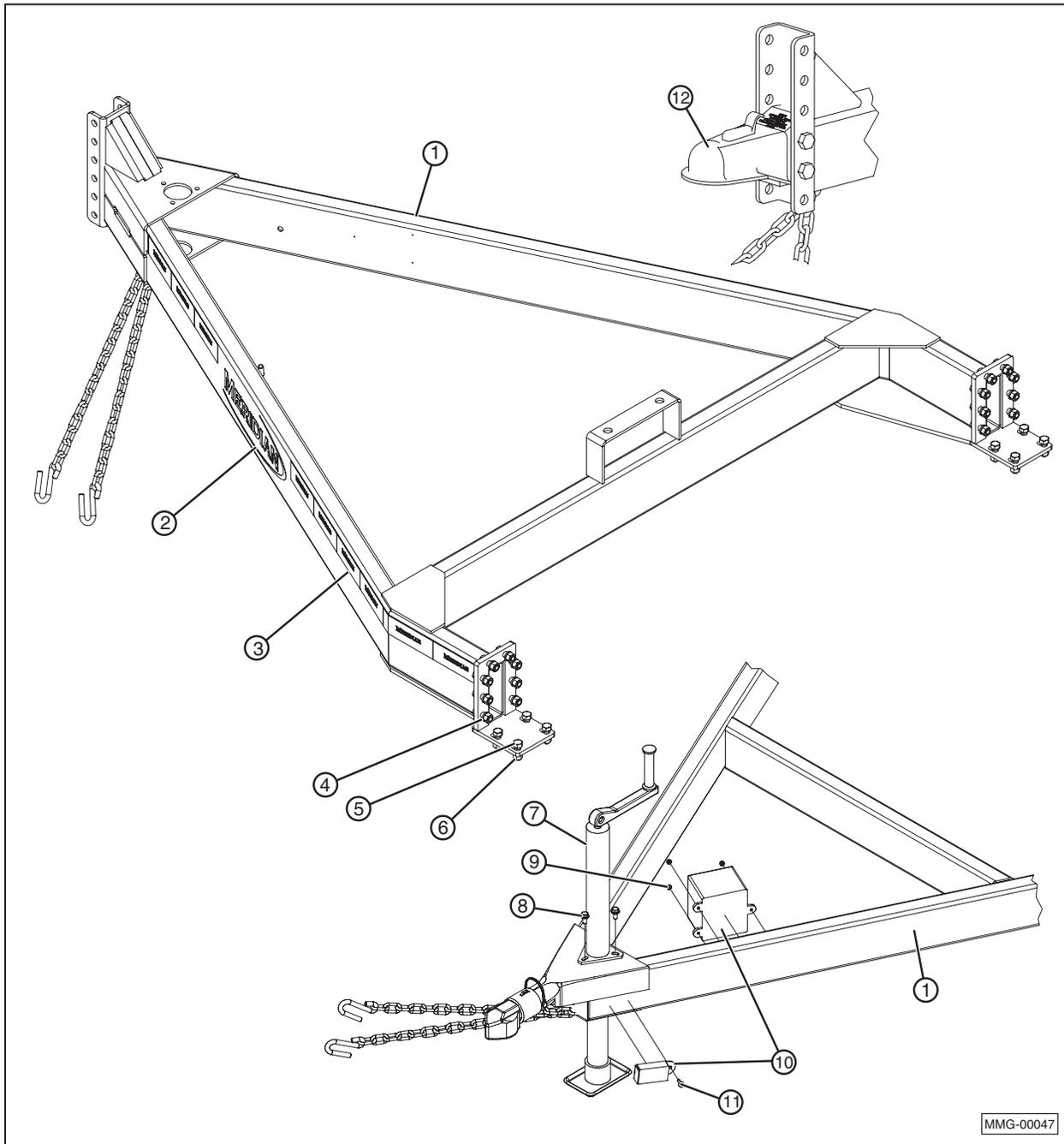


MMG-00045

1	4	18118	Tape, Anti-Slip
2	8	19343	Nut, Hex 3/8-16
3	8	19349	3/8" Lock Washer
4	4	19119	U-Bolt 5 x 3 x 3/8"
5	1	32315	Fender
6	8	19779	#8-18 x 3/4" Self Drilling Zinc Screw
7	2	18151	Light, Amber Clearance
8	3	18193	Axle, 7000 lbs.
9	6	18131	Tire, ST235/80R16
10	48	18991	Nuts, Lug, 9/16 - 18 UNC

11	12	19388	Bolt, Hex, 3/4-10 x 2"
12	12	19394	Nut, Hex, Mild Steel, 3/4-10
13	12	19396	Washers, Helical Spring Lock
14	12	18097	Washer, Narrow, 3/4"
15	—	—	—
16	2	18153	Tape, Fender Reflective
17	2	18229	Red Clearance Light
18	2	18117	Light, Tail with 10 Diodes (LED STL-78RB)
19	1	18119	Tape, Rear Reflective

14.3.2 Bumper Hitch

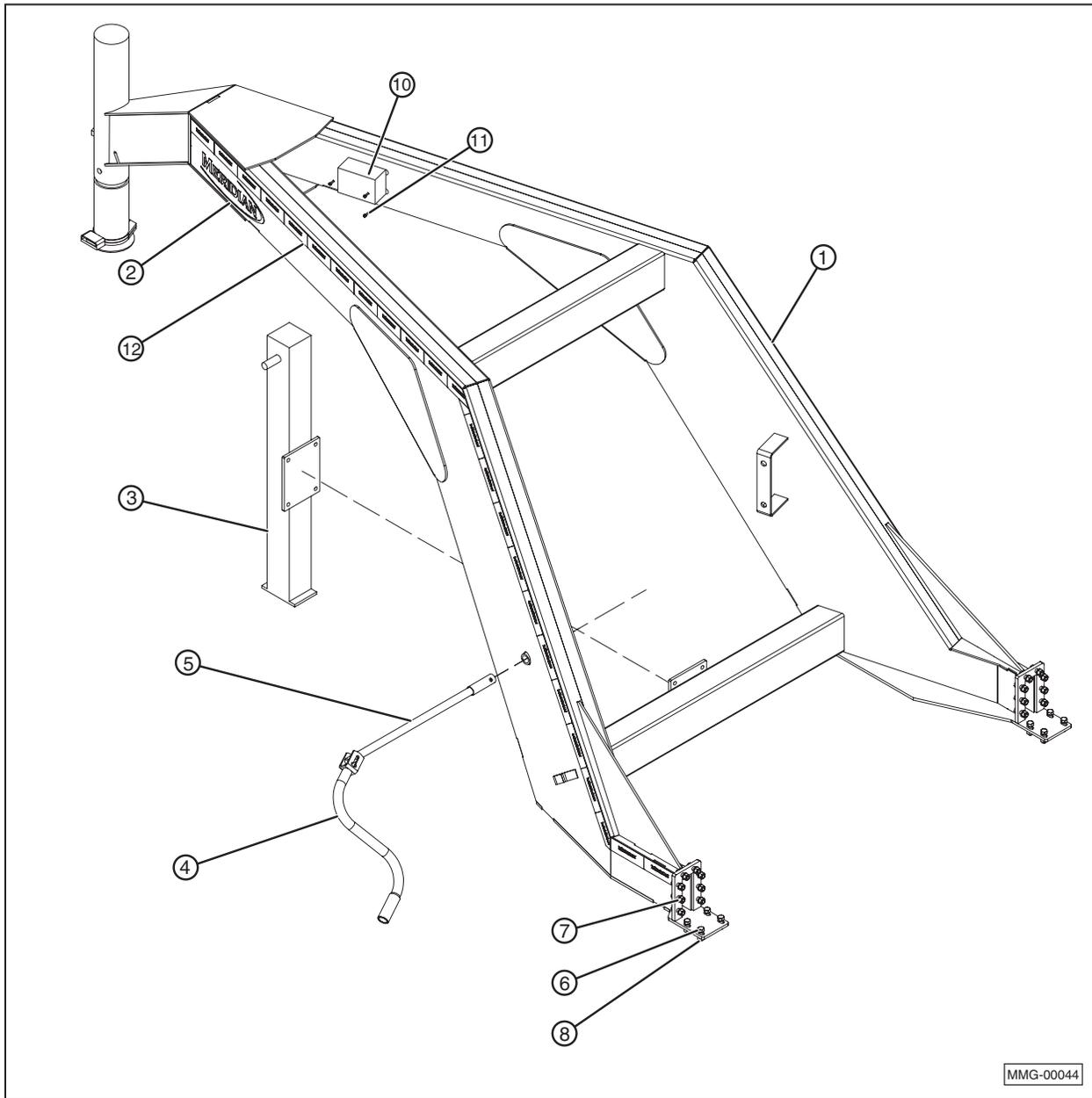


MMG-00047

1	1	25851	Bumper Hitch Weldment
2	2	19911	Meridian Trailer White Decal
3	21	18096	Tape Reflective Meridian 2 x 6 x 6"
4	24	19373	1/2" Lock Washer
5	24	19116	Bolt, Hex, 1/2-13 x 1-1/2" long Grade 8
6	24	19115	Nut, Hex 1/2-13, Grade 8
7	1	18192	Jack, Top Wind A-Frame

8	3	19577	Bolt, Hex, Flanged, 3/8-16 x 3/4"
9	15	19142	Nut, Hex Flanged, Mild Steel, #8-32
10	1	19275	Battery, Breakaway
11	1	19597	Screw, Self Tapping, 1/4-14 x 3/4"
12	1	19298	Coupler, Hitch 2-5/16 Adjustable (with two bolts and locknuts)

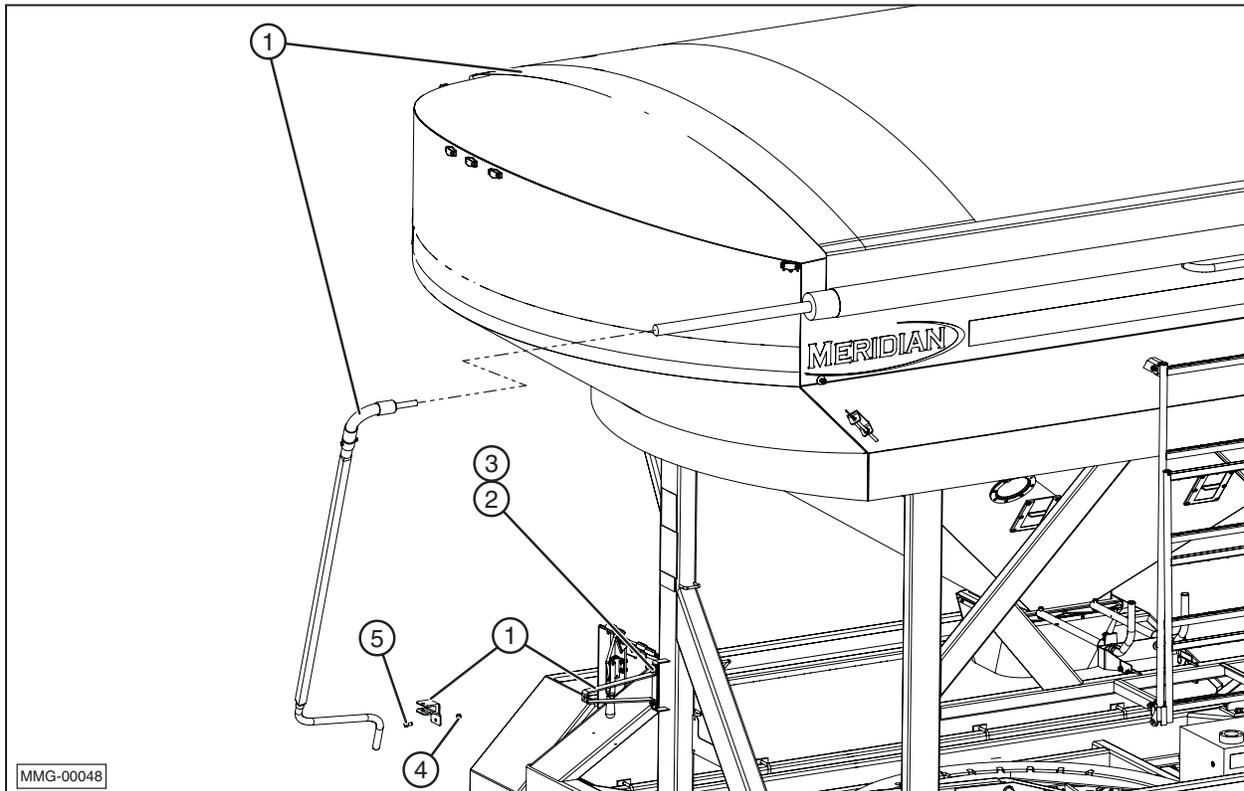
14.3.3 375 Gooseneck Detail



1	1	25261	Gooseneck Hitch
2	2	19911	Meridian Trailer White Decal
3	1	25322	Drop Leg Jack Gooseneck
4	1	18197	Crank Handle Gooseneck Jack
5	1	25325	Handle Extension Gooseneck Jack
6	24	19116	Bolt, Hex, 1/2-13 x 1-1/2" long Grade 8

7	24	19373	1/2" Lock Washer
8	24	19115	Nut, Hex 1/2-13, Grade 8
9	1	14043	375/275 GN Tongue Wire Harness (NS)
10	1	19275	Battery Breakaway BA10-150 (NS)
11	3	19142	Nut, Hex Flanged, 8-32
12	34	18096	Tape Reflective Meridian 2 x 6 x 6"

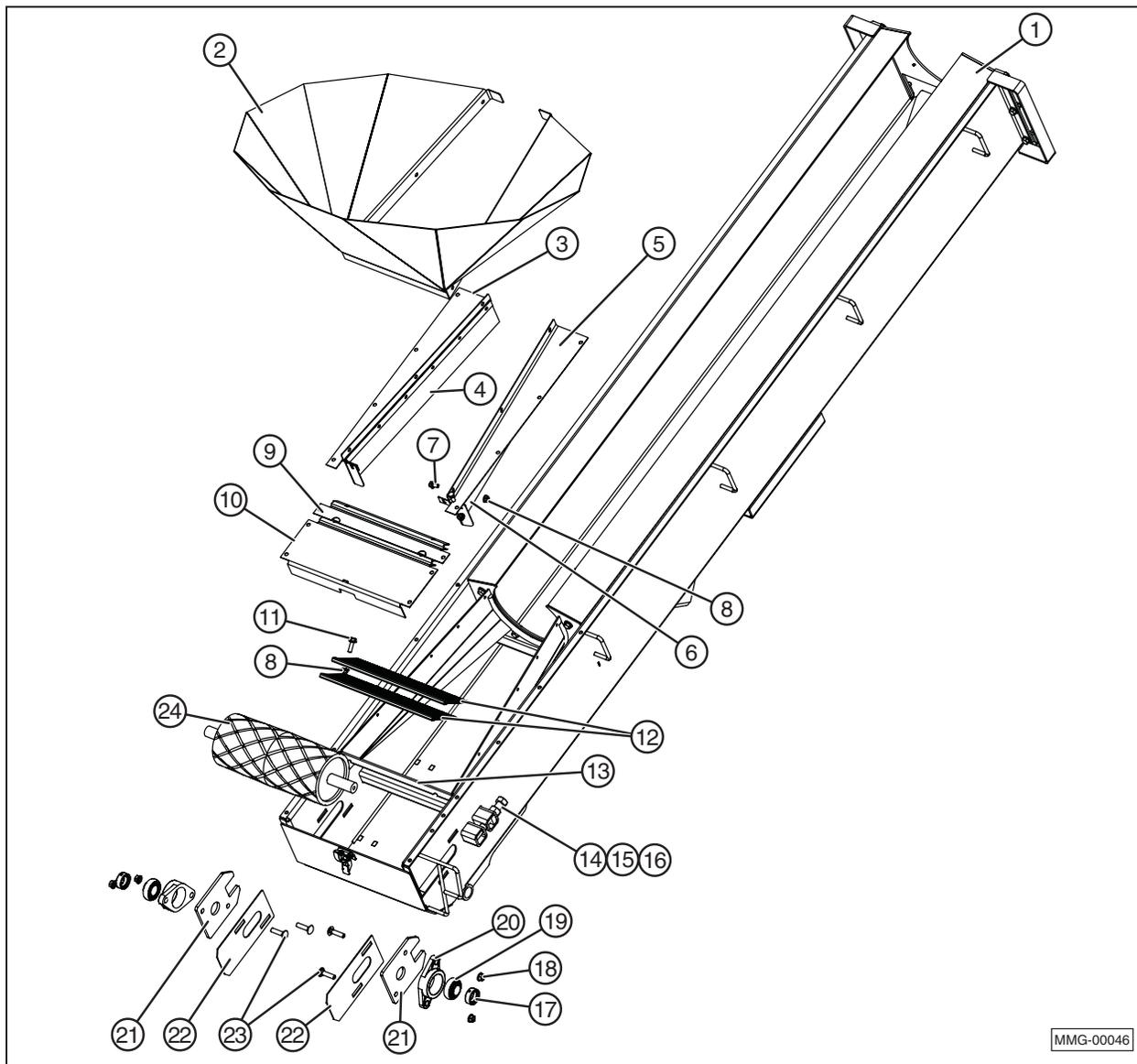
14.4 SEED TENDER TARP KIT



1	1	19984	Tarp Kit
2	2	19318	Nut, Hex, Flanged, 5/16-18
3	2	19568	Bolt, Hex, Flanged, 5/16-18 x 3/4"
4	1	19347	Locknut, Nylon, 3/8"-16
5	1	19541	Bolt, Hex, 3/8-16 x 3/4", Stainless Steel

14.5 CONVEYOR SYSTEM

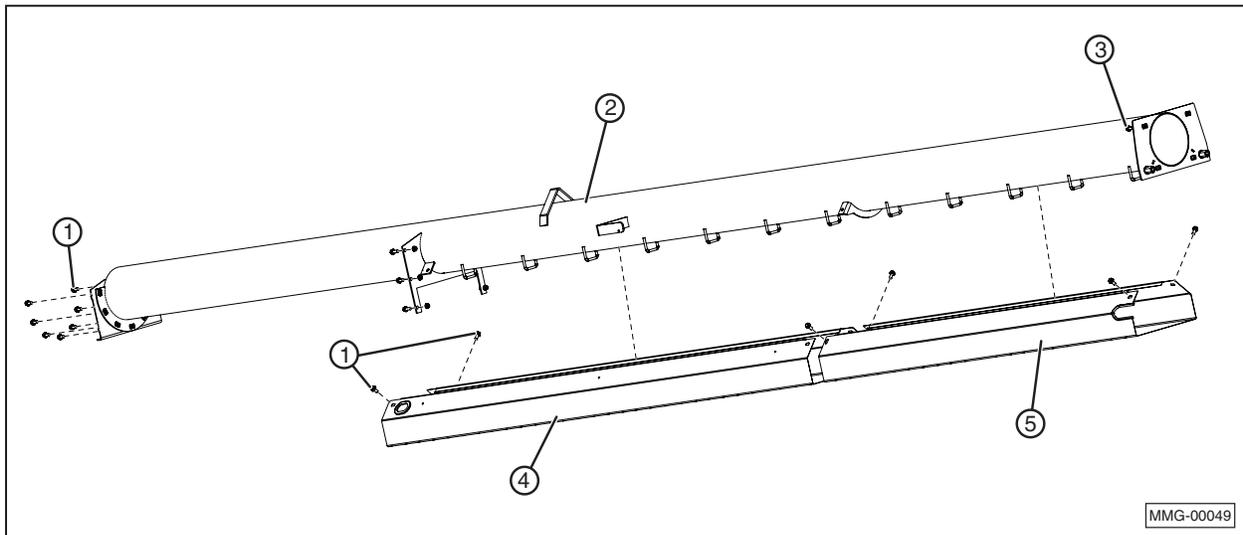
14.5.1 Conveyor - Lower End



1	1	23324-00	Assembly, Conveyor Pan
2	1	29393	Conveyor Boot, 6"
3	1	23336-00	Plate, Left Cap
4	1	29400	Plate, Skirt Retain, Right Side
5	1	23337-00	Plate, Right Cap
6	1	29401	Plate, Left Side Skirt Retain
7	2	19560	Bolt, Hex, 1/4-20 x 3/4"
8	12	19128	Nut, Hex, Nylon, 1/4-20
9	1	27009-00	Clamp, Brush Holder
10	1	23335-00	Plate, Brush Holder
11	1	19560	Bolt, Hex, 1/4-20 x 3/4"
12	1	27051-00	Brush

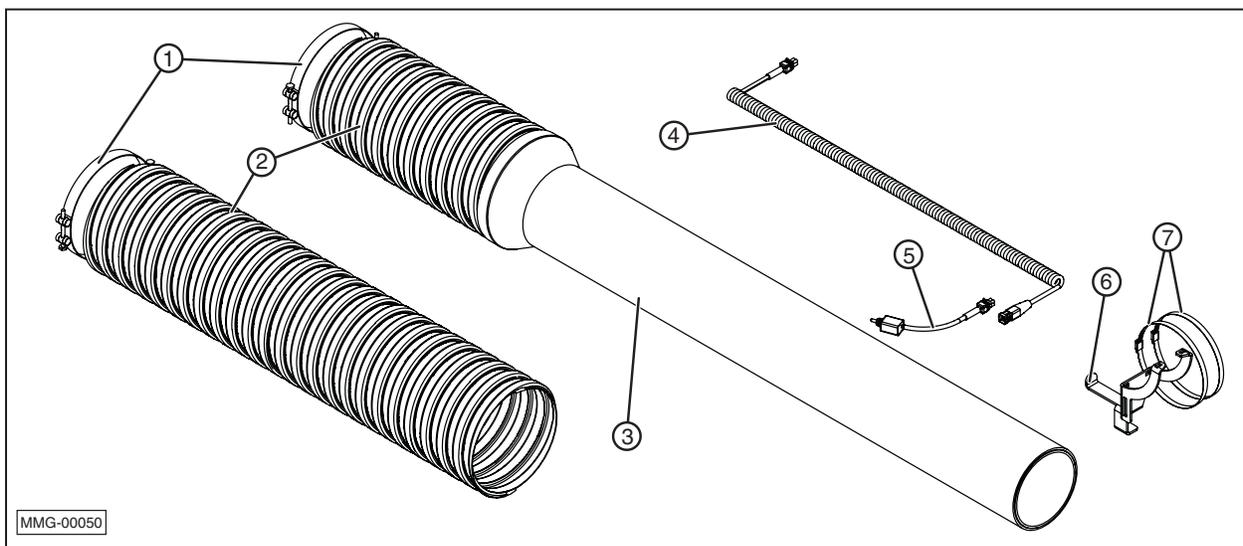
13	1	23338-00	Plate, End Skirt Retain
14	2	19380	Bolt, Hex, 5/8"-11 x 4-1/2"
15	2	19663	Nut, Square, 5/8-11
16	2	19382	Nut, Hex, 5/8-11
17	2	212588-00 C	Collar, Bearing
18	9	19564	Nut, Hex, Flanged, 3/8-16
19	2	21258-00	Bearing
20	2	27040-00	Housing, Roller Bearing
21	2	23687-00	Weldment, Roller Slide Plate
22	2	23341-00	Plate, Roller Cover
23	4	19335	Bolt, Carriage, 3/8"-16 x 1-1/2"
24	1	36201-02	Assembly, Idler Roller

14.5.2 Tube Assembly



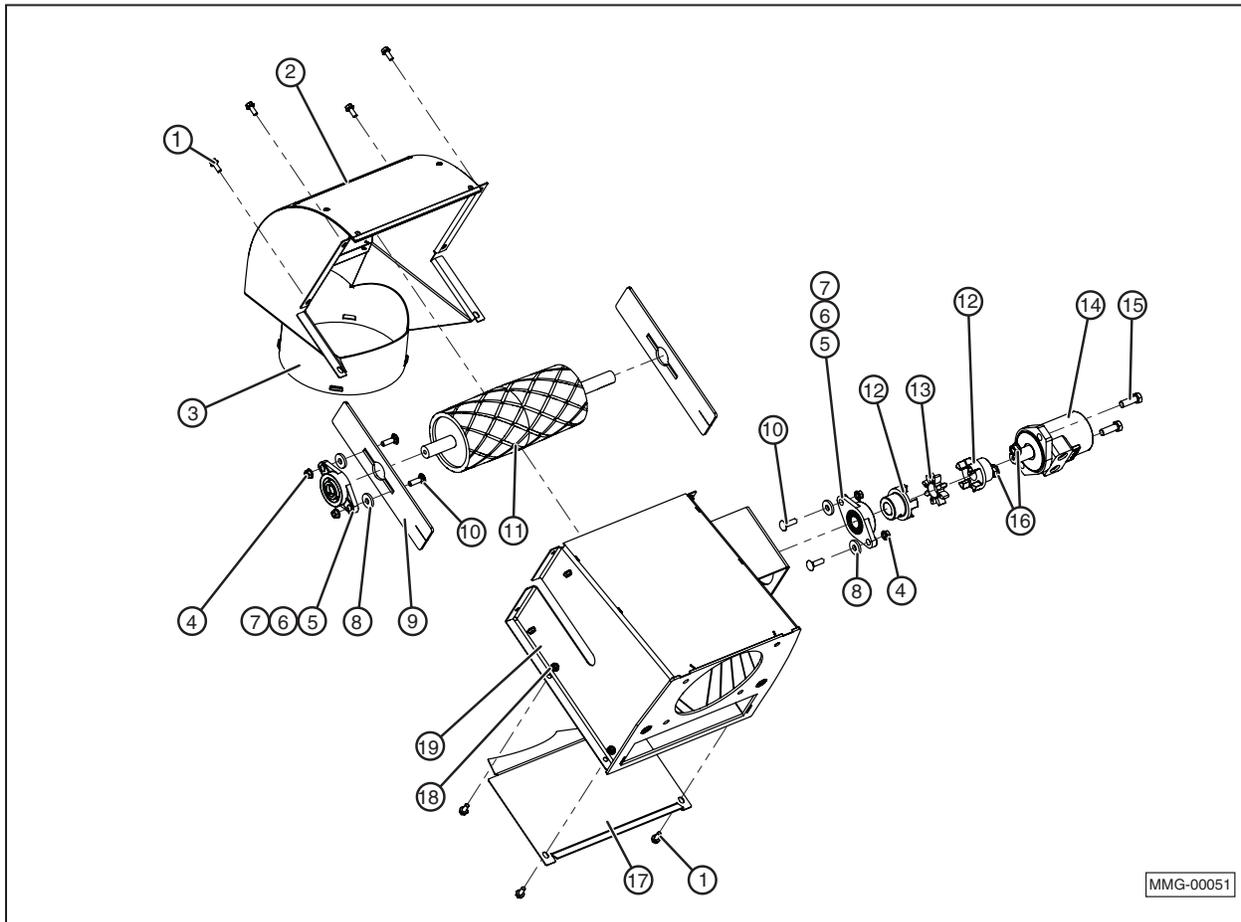
1	12	19577	Bolt, Hex, Flanged, 3/8-16 UNC x 3/4"
2	1	25788	Weldment, Conveyor Tube
3	6	19569	Bolt, Hex, Flanged, 3/8-16 UNC x 1
4	1	25847	Guard, Belt Galvanized
5	1	25806	Guard, Belt Galvanized

14.5.3 Spout (options) (Flex, 2-Tier)



1	1	18710	Clamp, 10 Inch T-Bolt
2	1	38548	Flex Spout Assembly
3	1	31505	Spout, 2 Tier
4	1	14057	Cord, Curly, 4 Foot
5	1	14058	Harness, Wire, Pigtail with Switch
6	1	21240-04	Throttle Handle
7	2	20084	Clamp

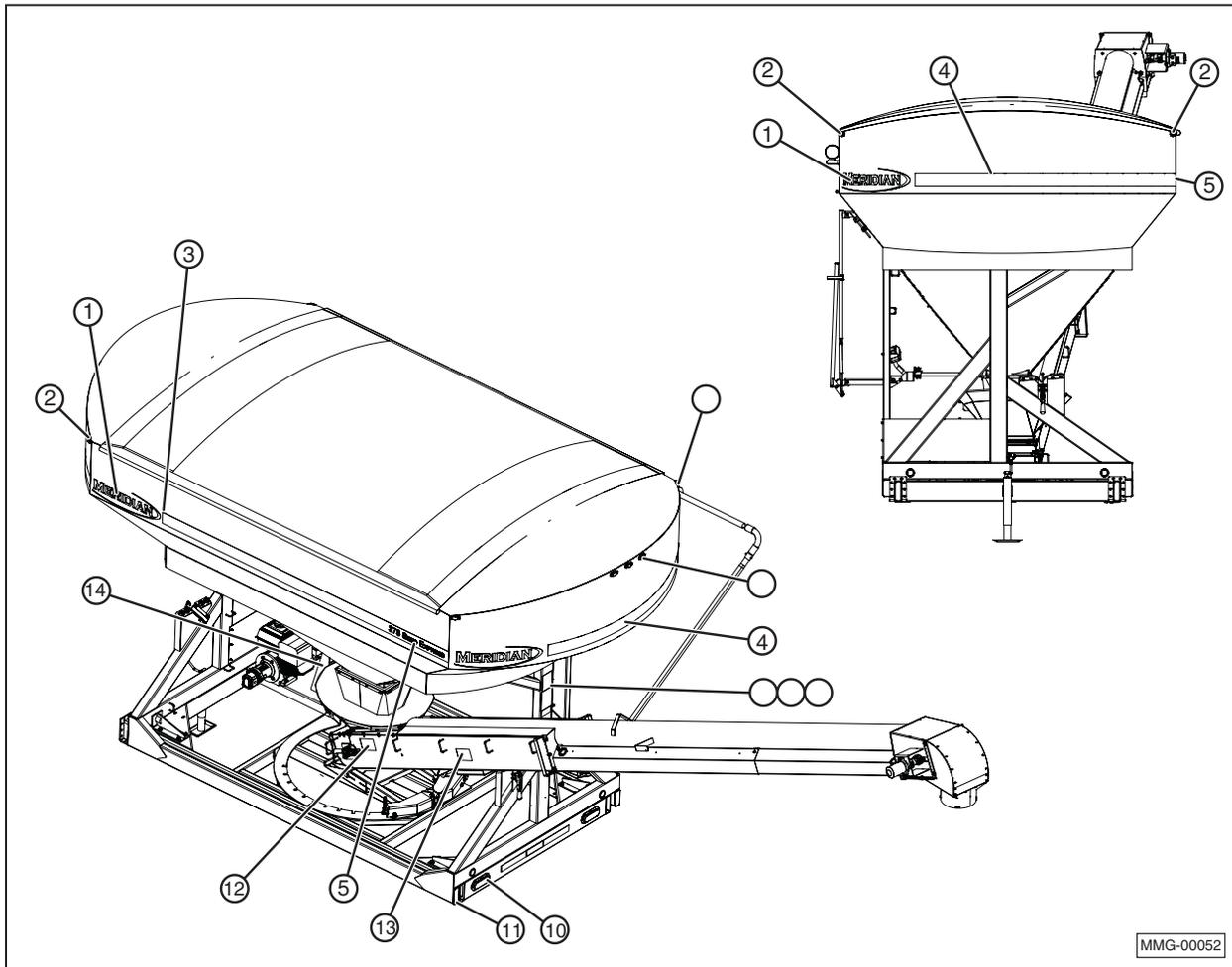
14.5.4 Discharge Assembly



MMG-00051

1	10	19568	Bolt, Hex, Flanged, 5/16-18 UNC x 3/4"
2	1	25829	Weldment, Discharge Hood
3	1	25827	Weldment, Discharge Hood Transition
4	4	19564	Nut, Hex, Flanged, 3/8-16 UNC
5	4	21258-00C	Bearing Collar
6	4	21258-00	Bearing
7	4	27040-00	Housing, Roller Bearing
8	4	27019	Washer
9	1	25838	Plate, Transition Seal
10	4	19695	Carriage Bolt, 3/8-16 UNC x 1-1/4"
11	1	19533	Drive Roller Assembly
12	2	19249	Coupler, Lovejoy
13	1	19291	Coupling, Red Spider
14	1	19768	Hydraulic Motor, 4.5 In ³
15	2	19355	Cap Screw, 1/2-13 UNC x 1-1/2"
16	2	19595	Nut, Hex, Flanged, 1/2-13 UNC
17	1	25799	Plate, Discharge Bottom
18	8	19318	Nut, Hex, Flanged, 5/16-18 UNC
19	1	25805	Weldment, Discharge Transition

14.6 LIGHTS AND DECALS



MMG-00052

1	4	20082	Decal, Meridian
2	2	18151	Light, Amber Clearance
3	2	20090	Decal, Gradient
4	2	20089	Decal, Gradient
5	2	19175	Decal, 375 Seed Express
6	5	18229	Light, Red Clearance
7	1	19984	Decal, Serial Number

8	1	19944	Decal, Warranty Notice
9	1	19934	Decal, Caution Read Manual
10	2	18117	Light, Tail
11	4	19619	Plug, Tube, 5" x 2"
12	2	20087	Decal, Pinch Point Hand
13	1	17509	Decal, Crush / Electrocutation Hazard
14	1	20088	Decal, Warning Hot Surface

1	1	32419	Hose
2	1	18287	Adapter Hyd 1/2"-14 NPT to 3/4"-16 SAE 37 Deg
3	1	18294	Flow Control Valve
4	2	18423	Adapter Hyd Elbow 1/2"-14 NPT to 3/4"-16 SAE 37 Deg
5	1	32423	Hose
6	1	32421	Hose
7	1	32422	Hose
8	1	32424	Hose
9	1	—	Tee (part of Item 18)
10	2	18281	Adapter Hyd 7/8"-14 Male SAE O-Ring to 7/8"-14 Male SAE 37 Deg
11	2	18290	Adapter Hyd Tee 7/8"-14 Female SAE 37 Deg Bulkhead, 7/8"-14 Male SAE 37 Deg, 7/8"-14 Male SAE 37 Deg
12	1	19295	Hydraulic Pump
13	1	18292	Adapter Hyd Elbow 7/8"-14 Male SAE O-Ring Boss (Long) to 7/8"-14 Male SAE 37 Deg
14	1	32420	Hose
15	1	18285	Adapter Hyd 1-1/16"-12 Male SAE O-Ring Boss to 1-1/16"-12 Male SAE 37 Deg
16	1	32317	Hose
17	1	32418	Hose
18	1	19294	10 Gallon Oil Tank - Hydraulic Package
19	1	19768	Hydraulic Motor, 4.5 in ³
20	2	17999	Adapter Hyd 45 Deg 7/8-14 SAE O-Ring Boss to 3/4"-16 SAE 37 Deg
21	2	18284	Adapter Hyd Elbow 7/16"-20 SAE O-Ring Boss to 7/16"-20 SAE 37 Deg
22	2	32426	Hose
23	1	19150	Lift Cylinder
24	1	18286	Adapter Hyd 3/4-16" Male SAE O-Ring Boss to 3/4"-16 Female SAE 37 Deg Swivel
25	1	18289	Adapter Hyd Tee 3/4"-16 Female SAE 37 Deg Bulkhead, 3/4"-16 Male SAE 37 Deg, 3/4"-16 Male SAE 37 Deg
26	1	18282	Adapter Hyd 3/4-16 Male SAE O-Ring Boss to 3/4-16 Male SAE 37 Deg
27	1	18293	Raise/Lower Valve Section
28	2	18283	Adapter Hyd 3/4"-16 Male SAE O-Ring Boss to 9/16"-18 Male SAE 37 Deg
29	1	18295	Conveyor On/Off Solenoid
30	1	18280	Adapter Hyd 3/4"-16 Male SAE O-Ring to 7/8"-14 Male SAE 37 Deg

NOTES

EXPERIENCE THE ADVANTAGES OF MERIDIAN BUILT STORAGE SOLUTIONS



AGRICULTURAL



INDUSTRIAL



OIL & GAS

Camrose Office
4232 - 38 St.
Camrose, AB T4V 4B2
PH: 780.672.4516
TF: 800.830.2467
FX: 780.672.4759

Lethbridge Office
3125 - 24 Ave. N.
Lethbridge, AB T1H 5G2
PH: 403.320.7070
TF: 800.661.1436
FX: 403.320.7579

Storm Lake Office
2902 Expansion Blvd.
Storm Lake, IA 50588
PH: 712.732.1780
TF: 800.437.2334
FX: 712.732.1028

Winkler Office
Box 760, 275 Hespler Ave.
Winkler, MB R6W 4A8
PH: 204.325.7883
TF: 800.665.7259
FX: 204.325.5556

MERIDIAN
MANUFACTURING GROUP
www.meridianmfg.com