

MERIDIAN

OPERATOR'S MANUAL



FOR BIN FILL CONVEYORS

www.MeridianMFG.com



PRODUCT WARRANTY
REGISTRATION FORM - BIN FILL CONVEYOR



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

Conveyor Model # _____

Serial Number # _____

DEALER INSPECTION REPORT

___ Conveyor frame raises and lowers properly

___ All guards/shields installed correctly

___ Conveyor belt properly aligned

___ All safety signs installed and legible

___ Conveyor belt properly tensioned

___ Reflectors in place and clean

___ Conveyor drive belts properly tensioned

___ Safety and operating instructions reviewed

___ Unit lubricated where necessary

___ Inspect customer's hitch for 1-7/8" ball

___ Air pressure correct in tires

___ Verified the receipt of all options ordered

___ Raise and lower A-frame

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 ____/____/____

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

CERTIFICATE OF ORIGIN BIN FILL CONVEYOR

LICENSING INFORMATION

Date: ____/____/____

DEALER :

_____ Business
_____ Contact
_____ Address
_____, ____ City, State, Zip

SOLD TO :

_____ Business
_____ Contact
_____ Address
_____, ____ City, State, Zip

CONVEYOR MODEL # _____

CONVEYOR SERIAL # _____

Bin Fill Conveyors models.

- SL-E-55 (55 foot)
- SL-E-65 (65 foot)
- SL-E-75 (75 foot)

- SL-H-55 (55 foot)
- SL-H-65 (65 foot)
- SL-H-75 (75 foot)

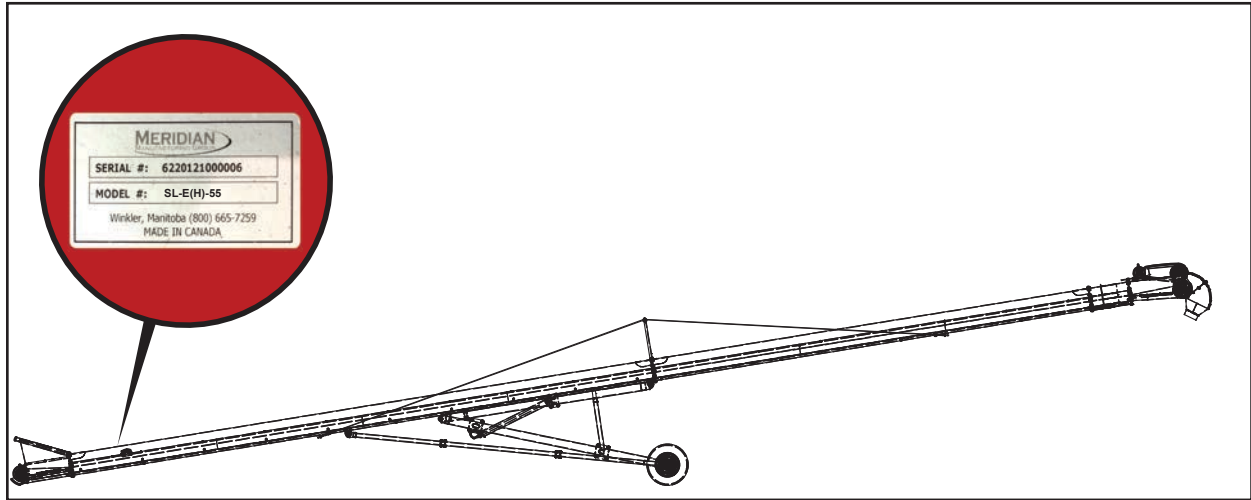
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IMPORTANT INFORMATION

SERIAL NUMBER LOCATION

Please provide the serial number of your Meridian Conveyor when ordering parts or requesting service or other information.

The serial number plates are located where indicated. Please record the numbers in the space provided below for easy reference.



Model Number: _____

Serial Number: _____

PATENT INFORMATION



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

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1.0 INTRODUCTION

1.1 CONGRATULATIONS

Congratulations on your choice of a Meridian Conveyor. This conveyor 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.

Safe, efficient, and trouble-free operation of your conveyor requires that you and anyone else who will be operating or maintaining the site, read and understand the Safety, Operation, Maintenance, and Troubleshooting information contained within this manual.

This manual covers the start-up procedures, operating procedures and maintenance of the conveyor designed by Meridian. Use the Table of Contents as a guide to locate required information.

1.2 INTENDED USE

This 55', 65', and 75' conveyors are designed to elevate grain into a bin. It is not intended to convey any other product, such as fertilizer.



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 conveyor. Follow all safety instructions exactly. Safety is everyone's business. By following 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 conveyor.

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 the conveyor. It is the responsibility of the owner or operator

to read this manual and to train all operators before they start working with the conveyors. Follow all safety instructions as provided in this manual.

Keep this manual accessible for easy reference. Call your Meridian 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.

1.4 OWNERSHIP CHANGES

If any of the equipment associated with this conveyor changes ownership, then the new owner(s) must be given all applicable documentation associated with all the components/equipment on the site. The new owners need to notify the individual manufactures of the ownership change so that updates to product, or documentation, can be forwarded to the new owner(s). This should be done even if the equipment is out of warranty because many manufacturers supply update notifications as long as they have valid ownership information.

1.5 END OF LIFE DISPOSAL

When a piece of equipment, or one of its components, reaches its end of life usability, then dispose of the device in accordance with all local, state, and federal laws and regulations.

WARNING

DO NOT use an entire assembly, or even a component of an assembly, for anything other than the manufacture's original intended use. Not only is the warranty voided, but the component can fail in the unintended application creating a hazard to the conveyor and the personnel using that conveyor.

1.6 REPORTING HAZARDS

If any of the equipment associated with this conveyor appears to pose a hazard, then it is the duty of the individual to report it immediately. If the hazard is the conveyor, then the manufacture and site manager must be notified. If the hazard is a process, then the site manager must be notified. Unreported hazards can lead to serious injury, or death, to personnel.

2.0 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 equipment and in the manuals. 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, Inc. 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 conveyor. **YOU** must ensure that you and anyone else who is going to operate, maintain, or work on the site 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 conveyor.








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 conveyor 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.

- Conveyor owners must give operating instructions to operators and employees before allowing them to operate the conveyor, and then annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety feature on this conveyor 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 conveyor. 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 conveyor in any way. Unauthorized modification may impair the function and/or safety of the components and systems and could affect the life of the conveyor, possibly invalidating the warranty coverage.
- Improper operation, lubrication, maintenance or repair of this conveyor can be dangerous and could result in injury or death.
- Think **SAFETY!** Work **SAFELY!**

2.1 GENERAL SAFETY

1.  Read and understand the Operator's Manual for all safety signs before operating or maintaining the conveyor.
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 on the conveyor when it is moving.
5. When working around or operating this conveyor, 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 the conveyor as it can be caught in moving parts.
 7.  Install and secure all guards before starting the conveyor.
 8.  Stop the conveyor 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 the conveyor.
 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 conveyor.

2.2 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a conveyor. 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, the conveyor 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 conveyor. Consult your doctor about operating this conveyor while taking prescription medications.
4. Under no circumstances should young children be allowed to work with this conveyor. Do not allow persons to operate or assemble this conveyor until they have read this manual and have developed a thorough understanding of the safety precautions and how the conveyor works. Review the safety instructions with all users annually.
5. This conveyor 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 conveyor'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 the conveyor. If its ability to do a job, or to do so safely, is in question - **DO NOT TRY IT.**
7. Do not modify the conveyor in any way. Unauthorized modification may result in serious injury or death and may impair the function and life of the conveyor.

8. In addition to the design and configuration of this conveyor, 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 conveyor. Also refer to safety messages and operation instruction in manuals for the auxiliary equipment. Make sure all Safety Signs are affixed to the auxiliary equipment.

2.3 SAFETY TRAINING

1. Safety is a primary concern in the design and manufacture of our conveyor. Unfortunately, our efforts to provide a safe conveyor can be cancelled by a single careless act of an operator or bystander.
2. In addition to the design and configuration of conveyor, 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 conveyor.
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 conveyor can lead to injuries. Read this manual, as well as the manual for any auxiliary equipment, before assembling or operating to acquaint yourself with the conveyor. If this conveyor 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 the, conveyor belt, 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 conveyor. A person who has not read and understood all operating and safety instructions is not qualified to operate the conveyor. An untrained operator exposes himself and bystanders to possible serious injury or death.

2.4 SAFETY SIGNS

Refer to the Safety Signs (Section 3.0) for safety information.

2.5 ASSEMBLY INSTRUCTIONS

Refer to the Assembly section (Section 6.0) for safety information.

2.6 TRANSPORT SAFETY

Refer to the Towing section (Section 7.0) for safety information.

2.7 PRE-OPERATING INSTRUCTIONS

Refer to the Pre-Operating section (Section 8.0) for safety information.

2.8 OPERATING SAFETY

Refer to the Operation section (Section 9.0) for safety information.

2.9 ELECTRICAL AND HYDRAULIC SAFETY

Refer to the Operation section (Section 9.0) for safety information.

2.10 STORAGE SAFETY

Refer to the Storage section (Section 10.0) for safety information.

2.11 MAINTENANCE SAFETY

Refer to the Maintenance section (Section 11.0) for safety information.

2.12 LOCK-OUT OR TAG-OUT SAFETY

Refer to the Maintenance section (Section 11.0) for safety information.

2.13 SIGN-OFF FORM

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

Do not allow anyone to operate this conveyor until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your conveyor. We believe an untrained operator is unqualified to operate this conveyor.

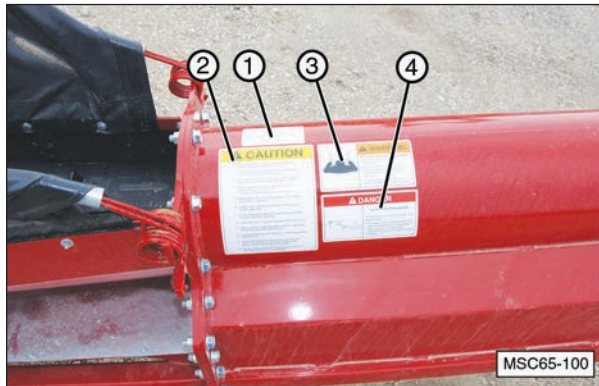
A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the conveyor have read and understand the information in the Operator’s Manual and have been instructed in the operation of the conveyor.


SIGN-OFF FORM		
Date	Employee’s Signature	Employer’s Signature

3.0 SAFETY SIGNS

3.1 SAFETY SIGN LOCATIONS

The types of safety signs and locations on the conveyor 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.



- 

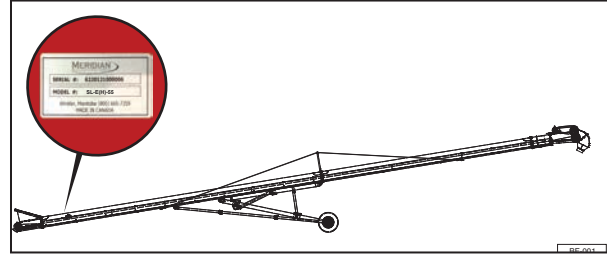
If safety signs have been damaged, removed, become illegible, or parts replaced without signs, new signs must be applied.
- Replacement parts that displayed a safety sign should also display the current sign.
- Replacement safety signs (labels) are available from your authorized Dealer Parts Department or the factory at no cost.

3.2 HOW TO INSTALL SAFETY SIGNS

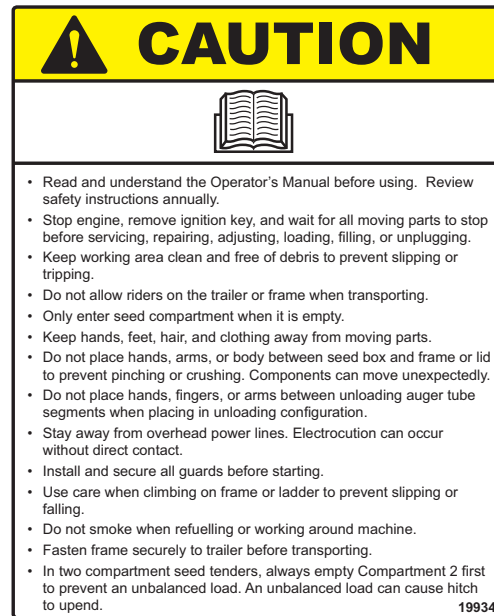
- Be sure the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Determine exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the 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.

3.3 DECAL LOCATIONS

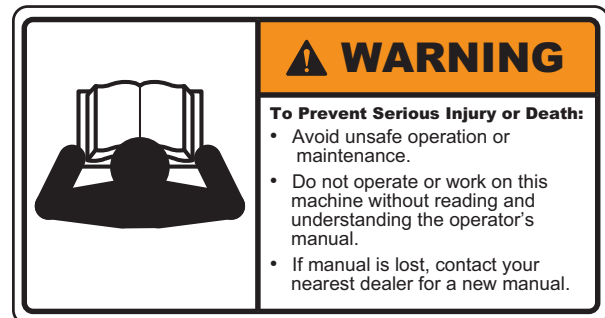
- Product Serial Number Decal (#19984)



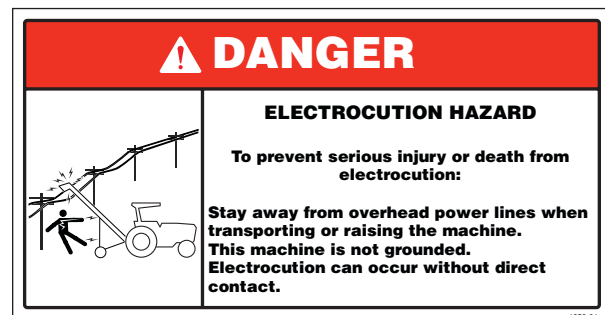
- CAUTION — Read and Understand (#19934)



- WARNING — Read and Understand (#1654)



- DANGER: Electrocutation Hazard (1656-01)



5. DANGER: Upending Hazard (1655-00-01)

DANGER



UPENDING HAZARD

The intake end of the machine must always have downward weight.

Always test it before releasing it from the vehicle or holddown.

Lift the intake slowly and keep it no higher than the tractor tow bar when attaching or releasing it.

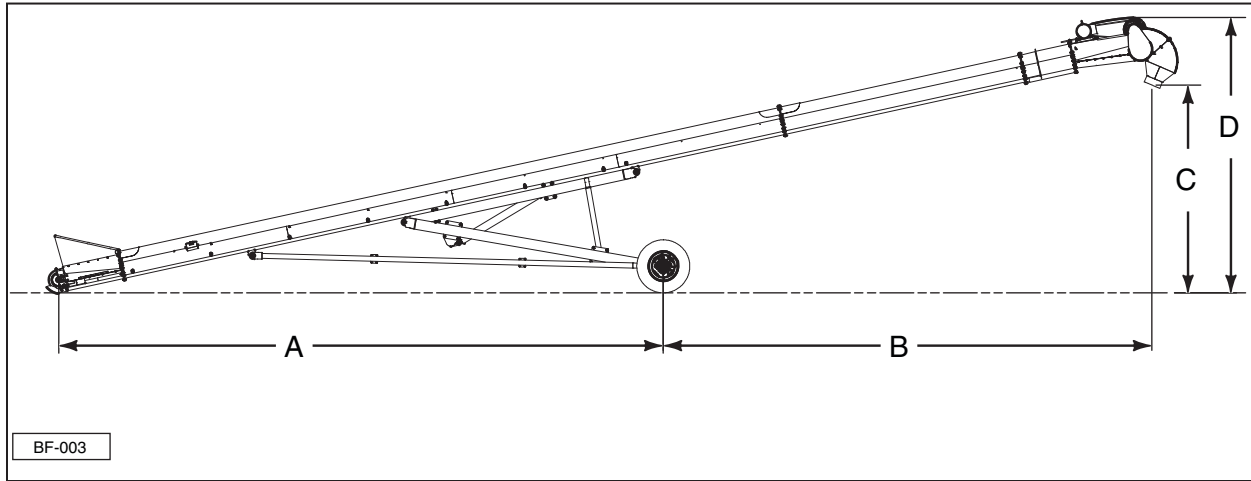
Immediately lower the machine to transport position before moving.

Failure to do so will cause upending, which will result in serious injury or death.

1655

4.0 SPECIFICATIONS

4.1 OVERALL SPECIFICATIONS



Model	Dimension	Minimum	Maximum
55' SL-E(H)-55	A	320" (813 cm)	361" (917 cm)
	B	158" (401 cm)	291" (739 cm)
	C	121" (307 cm)	461" (1171 cm)
	D	163" (414 cm)	491" (1247 cm)
65' SL-E(H)-65	A	355" (902 cm)	406" (1031 cm)
	B	256" (650 cm)	367" (932 cm)
	C	128" (325 cm)	494" (1255 cm)
	D	169" (429 cm)	525" (1334 cm)
75' SL-E(H)-75	A	401" (1019 cm)	495" (1257 cm)
	B	318" (808 cm)	401" (1019 cm)
	C	131" (323 cm)	553" (1404 cm)
	D	172" (437 cm)	583" (1480 cm)

4.2 ELECTRICAL SPECIFICATIONS

ELECTRICAL MOTOR SPECIFICATIONS			
CONVEYOR LENGTH	MOTOR SIZE AND VOLTAGE	MOTOR PART NUMBER	FULL LOAD AMPS
55'	10HP 1PH 220V	18374	39.24
	10HP 3PH 220V	18375	25
	10HP 3PH 460V	18375	12.5
	10HP 3PH 600V	18376	10
65'	10HP 1PH 220V	18374	39.24
	10HP 3PH 220V	18375	25
	10HP 3PH 460V	18375	12.5
	10HP 3PH 600V	18376	10
75'	10HP 1PH 220V	18374	39.24
	10HP 3PH 220V	18375	25
	10HP 3PH 460V	18375	12.5
	10HP 3PH 600V	18376	10

4.3 BOLT SPECIFICATIONS

⚠ WARNING

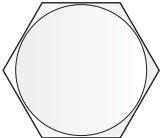


The torque value for bolts and capscrews are identified by their head markings. Replacing higher “Grade” bolts (Grade 8) with lower “Grade” bolts (Grade 5) will lead to conveyor failure and can result in injury or death. Always use replacement bolts with the same Grade markings as the removed bolt.

4.3.1 Bolt Torque Values

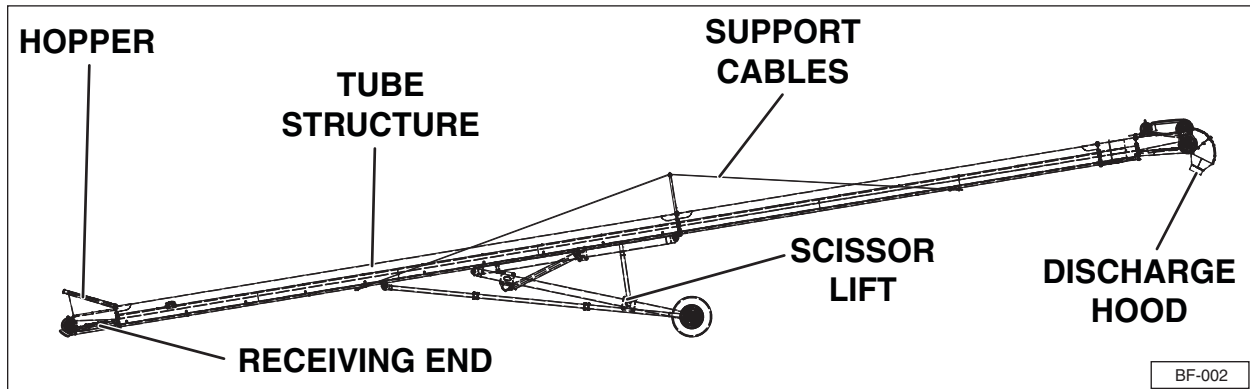
Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise instructed in this manual. When using locking elements, increase torque values by 5%.

Bolt Diameter “A”	SAE Grade 2 N·m (ft-lbs)		SAE Grade 5 N·m (ft-lbs)		SAE Grade 8 N·m (ft-lbs)	
	N·m	(ft-lbs)	N·m	(ft-lbs)	N·m	(ft-lbs)
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

5.0 CONVEYOR COMPONENT NOMENCLATURE



The end of the conveyor that would be connected to a towing vehicle is the back, or **Rear**, end of the conveyor.

The Discharge Hood is the upper end of the conveyor and is considered the **Front** end of the conveyor.

The frame that has the lift cylinders and trailer tires is called the **Scissor Lift**.

The **Hopper** is located at the rear end of the conveyor where the grain is deposited from the transport vehicle.

When standing at the hopper end, facing toward the front end of the conveyor, the side to the left is considered the **Left Side** of the conveyor. The side to the right is considered the **Right Side** of the conveyor.

6.0 ASSEMBLY INSTRUCTIONS

6.1 REQUIRED TOOLS AND EQUIPMENT

The following are the minimum tools that are required to assemble the conveyor:

- 1/2" Impact wrench
- 1/2" Torque wrench
- At least one lifting strap at least 9 ft. long and rated for at least 5,000 lbs.
- At least one lifting strap at least 12 ft. long and rated for at least 5,000 lbs.
- Two lifting units (forklifts, cranes, front end loaders, etc.) with a minimum lifting capacity of 5,000 lbs. each
- 1/4 inch stranded cable or equivalent rope to feed the belt through the conveyor tube (the length should be 5' longer the length of the conveyor).
- String or twine used to feed the cable through the conveyor tube (the length should be 5' longer the length of the conveyor).
- Wrench and socket set
- Needle nose pliers
- Mechanics wire

1. Remove the upper section from the truck using lifting straps.
2. Place one long strap over the hopper end of the tube structure of the lower section and attach it to the lifting unit.
3. Place a second strap around the scissor lift and over the tube structure and attach it to the lifting unit.
4. Lift the lower section until the load has cleared the truck bed. Pull the truck away and lower the load toward the ground.
5. Install the wheels and tires. Lower this section to the ground.
6. Disconnect the straps.

6.2 UNLOADING INSTRUCTIONS

The conveyor will be shipped in two sections. The lower portion (bottom end) will include everything except the upper end of the conveyor tube, the conveyor belt, and the tires. The upper portion includes the upper end of the conveyor tube and the discharge hood.



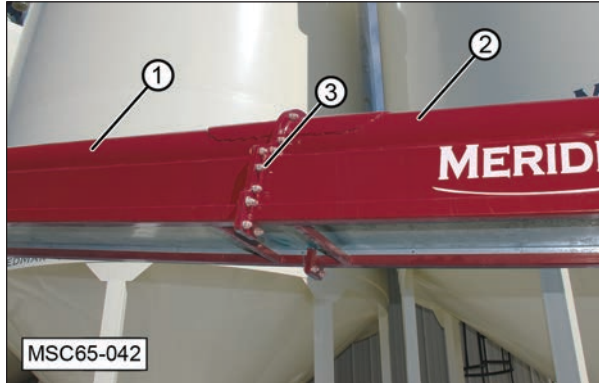
LIFTING HAZARD

Review the following chart to determine the weight of the load before making the lifts in the next procedures. Failure to have a properly rated lifting device can cause the load to fall, resulting in property and/or person injury, even death.

Approximate Load Weights		
Model	Front (upper) End	Rear (lower) End
55' Hyd.	917 lbs (416 kg)	3110 lbs (1411 kg)
65' Hyd.	1166 lbs (529 kg)	3109 lbs (1410 kg)
75' Hyd.	1338 lbs (607 kg)	3322 lbs (1507 kg)

6.3 ASSEMBLE THE SECTIONS

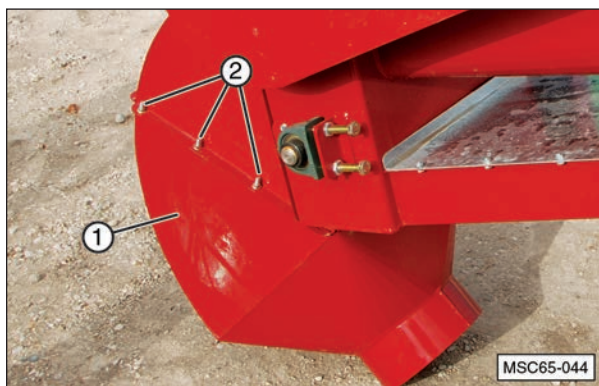
- Using properly rated lifting tools, raise the lifting frame to elevate the hopper end of the rear section until the conveyor tube is parallel with the ground.
- Attach front and rear sections together.



- Attach the second lifting unit to front section (1) and lift the section parallel to the ground.
- Align the front (1) and rear (2) sections.
- Before bolting the sections together, feed a cable or rope through both sections to install the delivery belt.
- Install bolts (3) and evenly tighten them to the torque specifications shown in the chart in this manual.

Note: The 75' conveyor has an additional bracket that needs to be included when bolting the flanges together. This bracket supports the tension cables that support the front end of the conveyor.

- Remove bolts (2) and discharge hood (1) to access the upper belt roller.



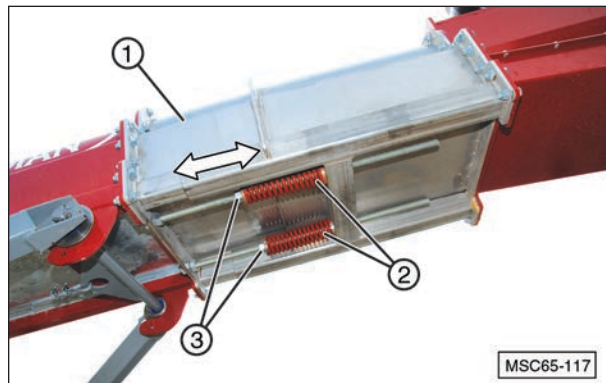
- Open lower access cover (1) by releasing latches (2) on each side of the conveyor tube to access the lower belt roller.



- Attach one end of the conveyor belting to the 1/4" cable or rope, using wire through the loops of the belt connector.

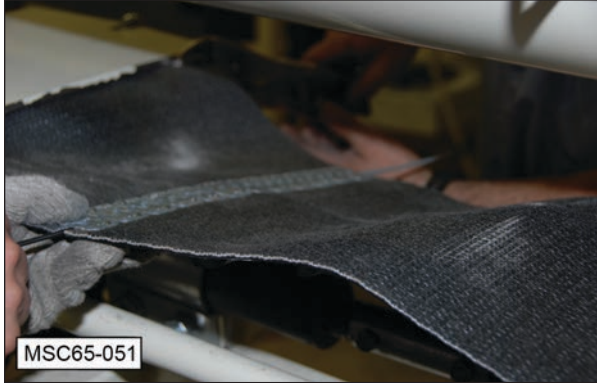


- Pull the conveyor belt into the tube structure with the cable or rope.
- Feed the cable or rope back through the lower chamber of the conveyor tube.
- Pull the conveyor belt back through the lower chamber so that both ends of the belt are accessible.
- Using nuts (3), loosen the tension on springs (2) and slide belt tensioner unit (1) together enough to allow the ends of the belt to be connected.

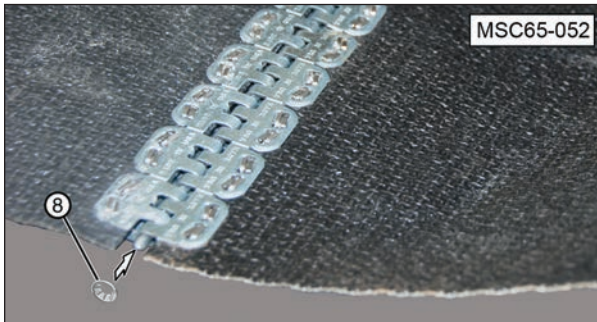


10. Join the two ends of the belt together by feeding the plastic covered steel cable through the connector loops.

Note: An Allen wrench or small rod can be inserted to help align the loops while pushing the cable in from the opposite side.



11. Once installed, place a retainer washer on each end of the cable and crimp it in place to hold the cable.



6.4 TENSIONING CONVEYOR BELT

The belt tensioner section contains two springs to provide the appropriate amount of tension on the conveyor belt, and guarding against over-tightening the belt, which can reduce belt service life.



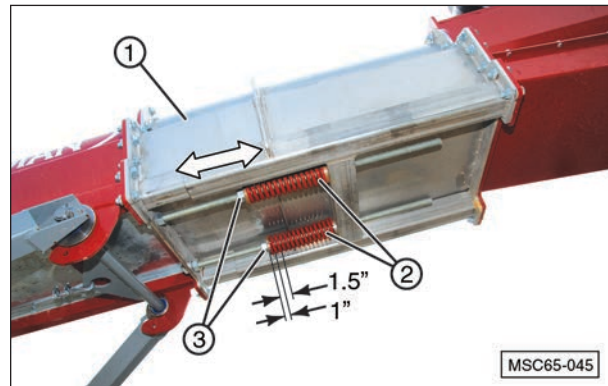
⚠ WARNING



Spring Tension Hazard

Compressed springs can contain enough energy to cause serious bodily injury and even death. Use extreme caution when working around springs that are compressed.

1. Turn adjusting nuts (3) clockwise toward springs (2) until the nut is snug against the spring.



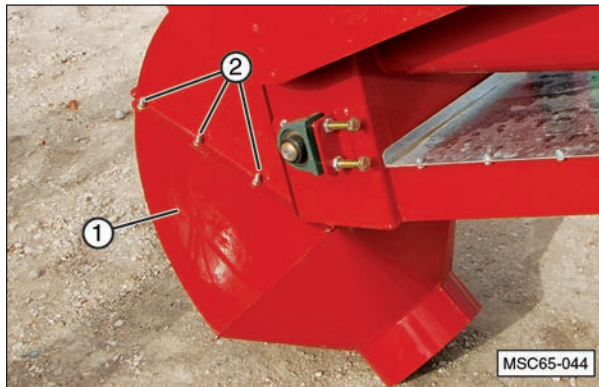
2. Place a mark on the underside of the conveyor tube at the end of the spring near the adjusting nut.
3. Measure 1" (25 mm) from the mark toward the other end of the spring and make a second mark.
4. Measure 1-1/2" (38 mm) from the original mark toward the other end of the spring and make a third mark.
5. The second and third marks are 1/2" (12 mm) apart and will locate the end of the spring when the belt is properly tensioned.

Note: These two marks will provide reference points when making future belt tension checks.

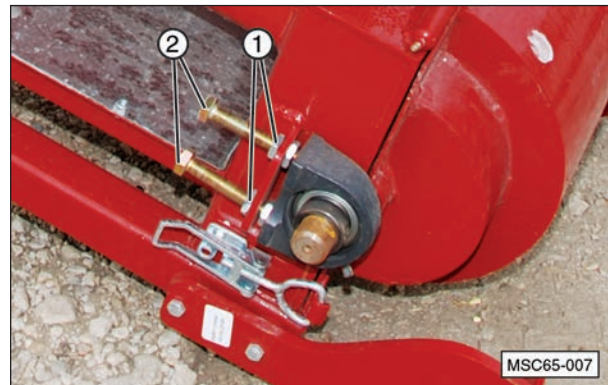
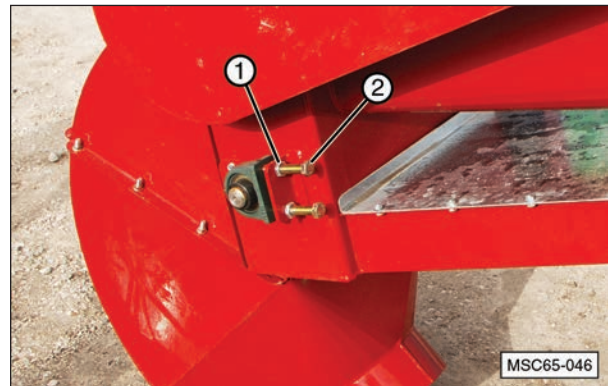
6. Thread nuts (3) equal amounts to place approximately the same tension on each spring.
7. After nuts (3) move approximately 1" (25 mm) (and every 1" (25 mm) thereafter), move the discharge end of the conveyor up and down a few times to allow the tension system to slide out.
8. Tighten the belt until the ends of both springs (2) are between mark #2 and mark #3.

6.5 ADJUST CONVEYOR BELT TRACKING

1. Start the belt moving while listening for any unusual noises. Stop the conveyor immediately if unusual noises are heard.
2. If necessary, remove discharge hood (1) by removing bolts (2). Open lower cover (1) by releasing latches (2).



Note: The upper and lower roller tracking adjustments for the belt are on both sides of the conveyor tube.



3. The belt should track in the middle of the top and bottom rollers, as shown.



5. Turn adjusting screws (2) to adjust the tracking of the belt.
6. Once the belt tracking is adjusted, tighten jam nuts (1).
7. Recheck the belt tension.
8. Close the lower access cover and lock the latches in place.



4. Loosen jam nuts (1) on both sides of the conveyor tube.

9. If removed, reinstall the discharge hood.

6.6 INITIAL CONVEYOR ASSEMBLY

Meridian Bin Fill Conveyors come mostly assembled. A minimum amount of tools are required to check the conveyor before the first use.

Complete the Final Check and Testing in the next section to ensure all fasteners are tight and the conveyor assembly is ready to use.

6.7 FINAL CHECK AND TESTING



All the items below must have the “Yes” column checked before operating the conveyor. If the line refers to an option item that is not installed on the conveyor being tested, then “n/a” should be placed on that line.


ITEM TO CHECK	YES	NO
All covers/shields are in place.		
Conveyor belt tracks in the center of the top roller.		
Conveyor belt tension is correct.		
Drive belt tension is correct.		
Bottom rubber scraper is in place.		
Bottom belt guide is installed.		
Hopper canvas is installed.		
Height support arm secures conveyor height properly.		
Electric drive motor functions properly (if equipped).		
Conveyor belt operates in the proper direction (electric motor option).		
Gasoline engine runs properly (if equipped).		
Engine oil at proper level (gasoline engine only).		
Touch up paint is applied where needed.		
All hazard labels are attached.		
Tires are properly inflated.		

7.0 TOWING

7.1 GENERAL TOWING SAFETY

SAFETY INSTRUCTIONS

-  Comply with local, state, and federal laws governing safety and conveyance of farm machinery on public roads.
- Ensure all lights, reflectors, and other lighting requirements are installed and in good working condition.
-  Stay away from overhead power lines (minimum 10 feet). Electrocutation can occur without direct contact.


⚠ DANGER	
	ELECTROCUTION HAZARD To prevent serious injury or death from electrocution: Stay away from overhead power lines when transporting or raising the machine. This machine is not grounded. Electrocutation can occur without direct contact.

1656-01

- Plan your route to avoid heavy traffic.
- Fully lower the lift frame before transporting.
- Do not drink and drive.
- 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.
- Use approved accessory lighting, flags, or other warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.
- When towing the conveyor on the road or highway, use flashing amber warning lights and/or a slow moving vehicle (SMV) identification emblem.

7.2 MAXIMUM TOWING SPEED






SAFETY INSTRUCTIONS

- Do not exceed a towing speed of more than 20 mph (32 KPH).
-  Remember, tires supplied by the manufacturer are designed to operate LESS THAN 20 mph (32 KPH). Do not exceed or tire failure may occur.

- Ensure your speed will enable an emergency stop. Keep speed to a minimum. Reduce speed prior to turns to avoid the risk of overturning. Avoid sudden uphill turns on steep slopes.


7.3 INSPECTION BEFORE TOWING

SAFETY INSTRUCTIONS

- Be sure the conveyor is securely hitched to the towing vehicle and a retainer pin or padlock is used through the hitch. Always attach a safety chain between the hitch and the towing vehicle.
- Make sure the hitch and coupling on the towing vehicle are rated equal to or greater than the unit's "gross vehicle weight rating" (GVWR).
-  Check the tires for tread wear, inflation pressure, and overall condition.
-  Inspect the hitch and coupling for wear or damage. DO NOT tow the conveyor using a defective hitch or coupling!
-  Make sure the lug nuts holding the wheels are tight (torque to specifications) and that none are missing.
-  When towing the conveyor on the highway, make sure the "Slow Moving Vehicle" placard is clearly visible.
-  Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the conveyor.



7.4 SAFETY CHAINS

SAFETY INSTRUCTIONS

- If the conveyor will be transported on a public highway, the safety chain must be attached to the tow vehicle.
-  Always follow state and local regulations regarding a safety chain when towing farm equipment on a public highway.

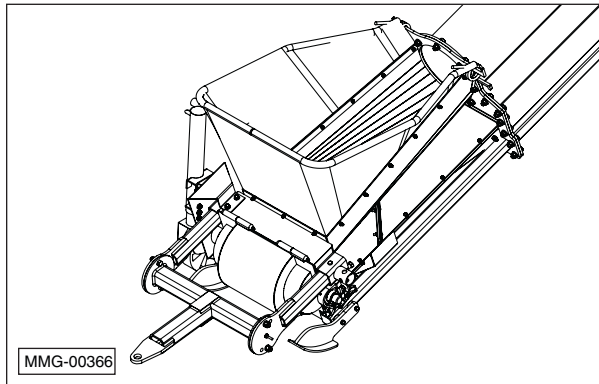
7.5 BYSTANDERS

SAFETY INSTRUCTIONS

-  Make sure the area is clear of children, animals, and other obstacles before using/moving the conveyor! This is particularly important in areas with high noise levels, as you may not hear people shouting.
-  Never allow riders on the conveyor.

7.6 CONNECTION TO TOW VEHICLE

1. Insert the tow hitch into the frame bracket and install the keeper pins.



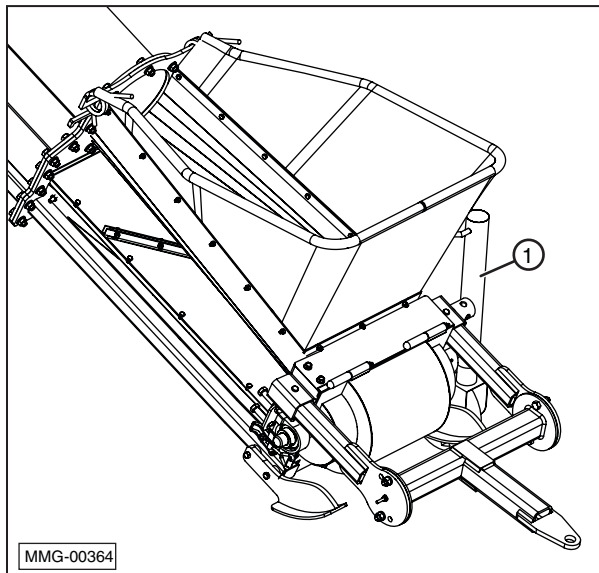
CAUTION



Lifting Hazard

The end of larger model conveyors can be too heavy for one person to lift. If not equipped with a jack, get help to connect conveyor to the tow vehicle.

2. Adjust the height using the jack with its attached jockey wheel (1).



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

CAUTION



Crush Hazard

Use care when lifting or attaching the conveyor to the tow vehicle. Never place any part of your body under the tongue assembly.






4. Lower the pintle onto a 1-7/8 inch ball and secure.



5. Place the jack in its stowed position.

8.0 PRE-OPERATING INSTRUCTIONS

8.1 SAFETY

-  Never operate the conveyor system or 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 conveyor 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 80 dB. 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 conveyor is properly positioned, adjusted, and in good operating condition.
-  Ensure all guards, shielding, and safety signs are properly installed and in good condition.
-  Before starting, give the conveyor a "once over" for any loose bolts, worn parts, cracks, leaks, frayed belts, and make necessary repairs. Always follow maintenance instructions.

8.2 MACHINE BREAK-IN PERIOD

A special break-in procedure has been developed to ensure the integrity of the conveyor 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.

8.2.1 Before Starting

- Read and follow the instructions in the Meridian Operator's Manuals.
- Review and follow the Pre-operation Checklist before starting conveyor.
- 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.
- Start the conveyor and check the controls. Be sure they function properly.

8.2.2 Inspections for 1/2, 5, and 10 Hours

- Recheck the tension and alignment of the conveyor belts.
- Recheck hardware and fasteners; all fasteners, and wheel bolts. Tighten to their specified torque.

8.3 DAILY PRE-OPERATION CHECKLIST

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

A preoperational checklist is provided for the operator. It is important for both personal safety and maintaining the efficient operation of the conveyor that this checklist be followed.

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

- Lubricate the conveyor, as outlined and shown in the lubrication photos in the Maintenance section of this manual. Follow the prescribed schedule.
- Check hardware and fasteners; conveyor frame to transport wheels, bolts, hitch bolts, and all other fasteners. Tighten to their specified torque.
- Make sure the wheel bolt lug nuts are tight.
- Check the tires and ensure that they are inflated to their specified pressure.
- Remove all entangled material.
- Visually inspect the conveyor belts, conveyor belt tube, and delivery spout for damage.
- Check the tension of the conveyor belt. Follow the instructions in the manual to correct the tension and/or alignment.

9.0 OPERATION

9.1 SAFETY

WARNING

To prevent serious injury or death, follow these safety instructions



Entanglement Hazard

Keep hands and clothing clear of moving parts.



Crush Hazard (rollover)

Do not clean, lubricate, or make adjustments without blocking the wheels.



Overturn Hazard

Choose a level (flat) route when transporting the conveyor. Avoid the edges of ditches, gullies, or steep hillsides.



Safe Distance

Keep all bystanders, pets, and livestock clear of the work area, particularly when moving the conveyor.

SAFETY INSTRUCTIONS



Make sure anyone operating the conveyor or working on or around the conveyor reads and understands all the operating, maintenance, and safety information in the operator's manual and other related OEM equipment manuals before using or towing the conveyor.

9.2 BEFORE EACH USE

1. Ensure all safety guards are in place.
2. Ensure bystanders are away from moving parts.
3. If equipped, check all electrical cords for damage and bare wires. Repair, or replace, damaged wiring before using the conveyor.
4. Check the belts for any tears and signs of wear. Replace if necessary.

9.3 CONVEYOR BELT OPERATION

The conveyor belt operates on 220, 460, or 600 Volts AC. An owner installed ON/OFF switch, similar to the one shown below, can be used to start and stop the conveyor belt. This particular switch can be padlocked in the OFF position to prevent unwanted usage of the conveyor.



Potential ON/OFF Switch

Use an owner supplied control switch to start and stop the conveyor belt.

WARNING



Ensure all workers in the area of the conveyor have been instructed on how to stop the conveyor in case of emergency.

9.4 RAISING AND LOWERING

9.4.1 Hydraulic Safety

WARNING



Ensure all personnel operating this conveyor, and associated equipment, have been trained in the recognition of potential hydraulic system risks.



If the electrical and hydraulic components are not properly maintained, risk of injury or even death can arise during operation of the system.



Burn Hazard
Hot hydraulic oil will cause severe burns if it contacts your skin.



Do not test for hydraulic leaks with your hand because high pressure fluid can be injected into your blood stream. Use a piece of paper to test for leaks. Oil introduced to the blood stream can cause gangrene which can lead to loss of limb and/or death. Seek medical attention immediately if sprayed with high pressure fluid.

9.4.2 Hydraulic Power Supply

A separate hydraulic power supply must be used to raise and lower the bin fill conveyor. This power supply can be the hydraulic system of a tractor or a self-contained unit having an engine, a hydraulic pump, and a control valve.

The hydraulic power supply should have at least a 2 HP motor and be capable of 1500 psi (10350 kPa) of pressure to properly operate the lift cylinders.

The two hydraulic cylinders on the bin fill conveyors need a minimum of 6 gallons (27 liters) of hydraulic fluid to fully extend. This means the reservoir must have that amount of fluid available.

NOTICE

The conveyor cylinders hold approximately 6 gallons (27 liters) of oil. If a tractor or self-contained power supply is used to raise the conveyor, it must have enough fluid to raise the cylinders without causing damage to the pump due to a lack of oil from the reservoir. If the conveyor remains in a raised position, then the hydraulic reservoir will need to be refilled to a proper operating level.

If a tractor or self-contained power supply is used to lower a conveyor, then the excess fluid [6 gallons (27 liters)] must be removed from the reservoir as the conveyor is being lowered to prevent reservoir damage from overfilling.

10.0 STORAGE

10.1 STORAGE SAFETY



Crush Hazard

Use care when lifting or attaching the conveyor to the tow vehicle.

Never place any part of your body under the tongue assembly.

10.2 GENERAL INFORMATION

After harvesting, or when the conveyor will not be used for a period of time, completely inspect all major systems of the conveyor. Replace or repair any worn or damaged components to prevent unnecessary downtime during the next use.

10.3 PLACING IN STORAGE

1. Remove all seed from the conveyor.
2. Store the conveyor in a dry, level area.
3. Thoroughly wash the conveyor with a pressure washer or water hose to remove all dirt, mud, or debris. Inspect rotating parts for entangled material. Remove all entangled materials.
4. Check the condition of the conveyor belts and delivery spout. Replace or adjust, as required.
5. Touch up paint nicks and scratches to prevent rusting.
6. It is best to store the conveyor inside and if that is not possible, cover with a waterproof tarp and tie down securely.

10.4 REMOVING FROM STORAGE

When removing the conveyor from storage, follow this procedure:

















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



11.0 MAINTENANCE

11.1 SAFETY





11.1.1 General Safety

SAFETY INSTRUCTIONS

1. Good maintenance is your responsibility. Poor maintenance is an invitation for trouble.
2. Follow good shop practices. Keep service area clean and dry. Be sure electrical outlets and tools are properly grounded. Use adequate light.
3.  Never work under conveyor unless it is securely blocked.
4.  Always use personal protection devices, such as eye, hand, and hearing protectors, when performing any service or maintenance.
5.  Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your conveyor to the original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
6.  A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this conveyor.
7.  Periodically tighten all bolts, nuts, and screws and ensure all cotter pins are properly installed to ensure the conveyor is in safe condition.
8.  When completing a maintenance or service function, make sure all safety shields and devices are installed before placing the conveyor in service.
9.  Turn OFF all electrical power and tag-out or lock-out the power source before performing any electrical test or before connecting or disconnecting valve coils or other electrical loads.
10.  Never operate or test any function of the conveyor when people are in an area of a potential crush hazard.
11.  Block the wheels before performing maintenance or repairs.
12.  Use support blocks or safety stands rated to support the load when changing tires or performing maintenance.
13.  Keep hands, feet, clothing, jewelry, and long hair away from any moving parts to prevent them from getting caught.
14.  Understand the service procedure before performing the work. Keep area clean and dry.
15.  Replace all worn or damaged safety and instruction decals.
16.  Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts.
17.  Do not leave tools lying on the conveyor.
18.  Do not modify conveyor or safety devices. Do not weld on the conveyor. Unauthorized modifications may impair its function and safety.

If conveyor has been altered in any way from the original design, the manufacturer does not accept any liability for injury or warranty.
19.  Never replace hex bolts with less than Grade 5 bolts unless otherwise specified.
20.  Before attempting repairs and/or maintenance on this conveyor, ensure the electrical ON/OFF switch on the hydraulic power unit is switched OFF. Use a pressure gauges to ensure the system is depressurized.

11.1.2 Lock-Out or Tag-Out Safety

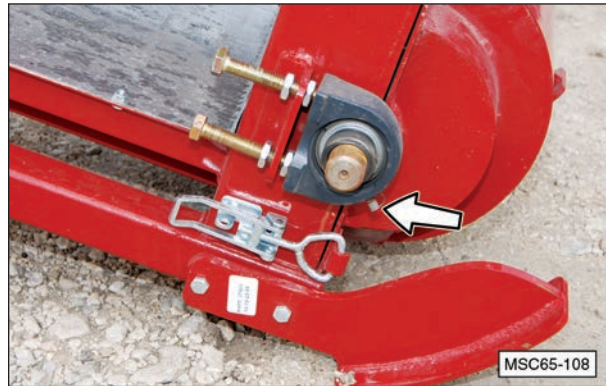
1.   Establish a formal Lock-Out or Tag-Out program for your operation.
2.  Train all operators and service personnel before allowing them to work around the conveyor.
3.  Provide tags on the conveyor and a sign-up sheet to record tag-out details.

11.2 LUBRICATION

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 the bearings and lead to early failures.
3. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
4. Replace broken fittings immediately.
5. If fittings will not take grease, remove and clean thoroughly. Also, clean lubricant passageway. Replace damaged fittings.
6. Clean up any spilled fluids immediately to eliminate the slip/fall hazard.

The following images show areas where lubrication is needed.



Conveyor Belt Lower Roller

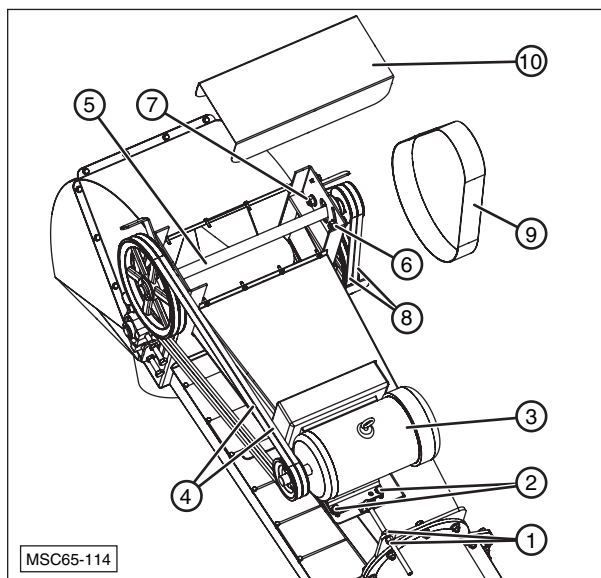


Conveyor Belt Upper Roller



Scissor Lift Pivots

11.3 REPLACE OR TIGHTEN DRIVE BELTS



WARNING

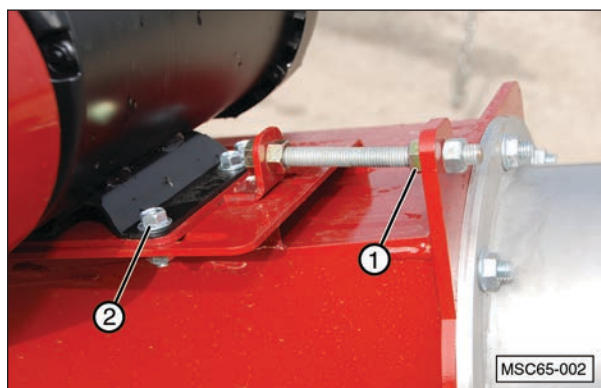
OEM Replacement Parts Only
Using parts from other manufacturers can result in failure of that part, causing conveyor damage and possible serious injury or death.

There are two sets of matched V-belts (4 and 8) used to drive the conveyor belt drive roller at the discharge end of the conveyor tube.

This speed reduction provides the proper speed to move the seed and also provides the torque needed to drive the conveyor belt while not overloading the electric motor.

11.3.1 Adjusting Drive Belt Tension

1. Remove covers (9 and 10).



To tighten left side belts (4):

- a. Loosen motor mounting bolts (2) enough to slide the motor.
- b. Loosen jam nut (1) and tighten the adjusting bolt.
- c. Use hand pressure to push on the belts halfway between the pulleys. The amount of deflection should be approximately 1/2" (1.27 cm).

NOTICE

Do not overtighten the belts. Overtightening can reduce belt and bearing life.

- d. When correctly adjusted, tighten the jam nuts.
 - e. Tighten motor mounting bolts (2).
2. To tighten right side drive belts (8):
 - a. Loosen pivot bolt (7).
 - b. Loosen bolt (6) at the adjusting slot enough that it will slide in the slot.
 - c. Place a pry bar under speed reducer shaft (5) and move the shaft to place tension on drive belts (8).
 - d. Tighten adjuster bolt (6) while holding tension on the belts.
 - e. Use hand pressure to push on the belts halfway between the pulleys. The amount of deflection should be approximately 1/2" (1.27 cm).

NOTICE

Do not overtighten the belts. Overtightening can reduce belt and bearing life.

- f. Tighten pivot bolt (7).
- g. Reinstall covers (9 and 10).

11.3.2 Replacing Drive Belts

To replace the belts, loosen the belt tension, replace the belts, and adjust them using the Adjusting Drive Belt Tension procedure.

Note: These belts must be replaced as a matched set or the service life of the belts will be dramatically reduced.

11.4 MAINTENANCE INTERVALS

10.4.1 Daily (8 Hours)

1. Initially check wheel bolt torque at 10, 25, and 50 hours of operation.
2. Check conveyor belt for proper tension and tracking.

10.4.2 Weekly (50 Hours)

1. Check the tension on the conveyor belt. Adjust tension as needed.
2. Check the tire pressure. Inflate the tires to the recommended pressure stated on the tire.

10.4.3 Annually (400 Hours)

1. Check wheel bolt torque.
2. Repack the wheel bearings and check for excessive end play in the bearings.
3. Check frame and conveyor tube for cracks and damage.
4. Thoroughly clean the entire conveyor.

11.5 TIRES

11.5.1 Tire Safety



Explosive Separation Hazard

Do not attempt to mount tires unless you have the proper equipment and experience to do the job. Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosive separation, which may result in serious injury or death.



Explosive Hazard

Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure, resulting in a tire explosion. Welding can structurally weaken or deform the wheel.



Flying Objects Hazard

Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires

When inflating tires, use a clip-on chuck and extension hose. Always stand to the side of the tire when inflating, and NOT in front of or over the tire assembly.

Make sure the tires are inflated evenly.



Crush Hazard

Make sure the conveyor is completely supported with suitable stands before removing a wheel assembly.



Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.



Check tires for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.



Do not exceed 20 mph (32 kph) or tire failure will occur.



Keep wheel lug nuts tight.

11.5.2 Wheel Bearings

Each hub for the trailer tires has wheel bearings that are lubricated with grease.

NOTICE

To prevent damage, use only wheel bearing grease when repacking the wheel bearings.

The wheel bearings should be checked and repacked annually for excessive end play.

To adjust the wheel bearings.

1. Block the other wheel and raise the axle with a jack enough to allow the wheel and tire to freely rotate.
2. Remove the dust cap (shown by arrow).
3. Remove the cotter pin from the castle nut and turn the castle nut clockwise until no play exists in the wheel bearings.
4. Then rotate the castle nut counter-clockwise until the next available slot in the nut is aligned to the hole in the axle shaft.
5. Install the cotter pin, bend over the ends of the cotter pin to retain it.
6. Install the dust cap.
7. Lower the conveyor to the ground.



11.6 WELDING REPAIRS



Repair welding must be done with care and with procedures that may be beyond the capabilities of the ordinary welder.

Before performing any type of welding repair to the conveyor, contact Meridian for approval.

WARNING



Personal Injury Hazard

Repairs or modifications to the conveyor can result in serious injury or death should these repairs fail.

IMPORTANT NOTICE

Anyone performing a welding repair should be certified in accordance to the American Welding Society (AWS) standards.

11.7 WHEEL BOLT TORQUE REQUIREMENTS

1. Initially check the wheel bolt torque at 10, 25, and 50 miles and after each wheel removal.

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

CAUTION



EXPLOSIVE FORCE HAZARD

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 tightened wheel nuts prevent loose wheels and broken studs.

2. Tighten the wheel nuts in a clockwise, cross-axle alternating pattern to no more than to 135 N·m (100 lb.ft.).

11.8 CONVEYOR SERVICE RECORD

Date:																			
Serviced by:																			
<u>8 hours or daily</u>																			
Inspect Tire Inflation.																			
Check Conveyor Belt Tension and Alignment.																			
Lubricate All Bearings.																			
<u>50 Hours or Weekly</u>																			
Check Tire Pressure.																			
Check Conveyor Belt Tension and Alignment.																			
<u>400 hours or annually</u>																			
Check Wheel Bolt Torque.																			
Check Scissor Lift for Cracks and Damage.																			
Check All Lift Linkage Pivot Pins for Damage and make sure Retaining Pins are in Place.																			
Check conveyor belt for damage.																			
Check Conveyor Tube for Damage.																			
Check All Roller Bearings for Unusual Noise While Belt Is Operating.																			
Check/Grease Wheel Bearings.																			
Inspect Axle Grease Seal.																			
Inspect Tires for Damage.																			
Check Hopper Canvas for Damage.																			
Thoroughly Clean Conveyor.																			

12.0 TROUBLESHOOTING

12.1 TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
Conveyor belt will not start.	No electrical power.	Connect electric motor to proper power supply.
	Electrical control broken.	Repair or replace control.
	Drive motor belts are slipping.	Adjust drive belt tension.
	Drive motor belts are broken.	Replace matched set of belts.
	Speed reducer to drive roller belts are slipping.	Adjust belt tension.
	Speed reducer to drive roller belts are broken.	Replace matched set of belts.
	Drive roller slipping on conveyor belt.	Increase conveyor belt tension.
	Drive motor defective.	Check electrical supply to motor. If supply is correct, then repair or replace motor.
Conveyor belt rubbing side of conveyor tube.	The belt is not properly aligned.	See Adjust Conveyor Belt Tracking in this manual.
Scissor Lift will not lift the discharge end of conveyor.	Broken lift cable.	Repair or replace lift cable.
	No electrical power to electric winch.	Connect electric cable to proper power supply.
	Control switch of electric winch broken.	Repair or replace control switch.
	Electric winch motor defective.	Repair or replace motor.
	Hand-crank winch is defective.	Repair or replace hand-crank winch.

13.0 WARRANTY

13.1 WARRANTY STATEMENT

Limited Materials and Workmanship Warranty For Conveyors

Meridian Manufacturing Group (hereinafter referred to as the Manufacturer) hereby warrants the Conveyor(s) sold by it to be free from defect in material or workmanship under normal use and service for a period of one (1) year parts and labor and a subsequent one (1) year on parts only effective from the date of retail sale. 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 conveyor 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 conveyor. 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 conveyor, 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 entitles 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

NOTES

14.0 PARTS

14.1 GENERAL INFORMATION

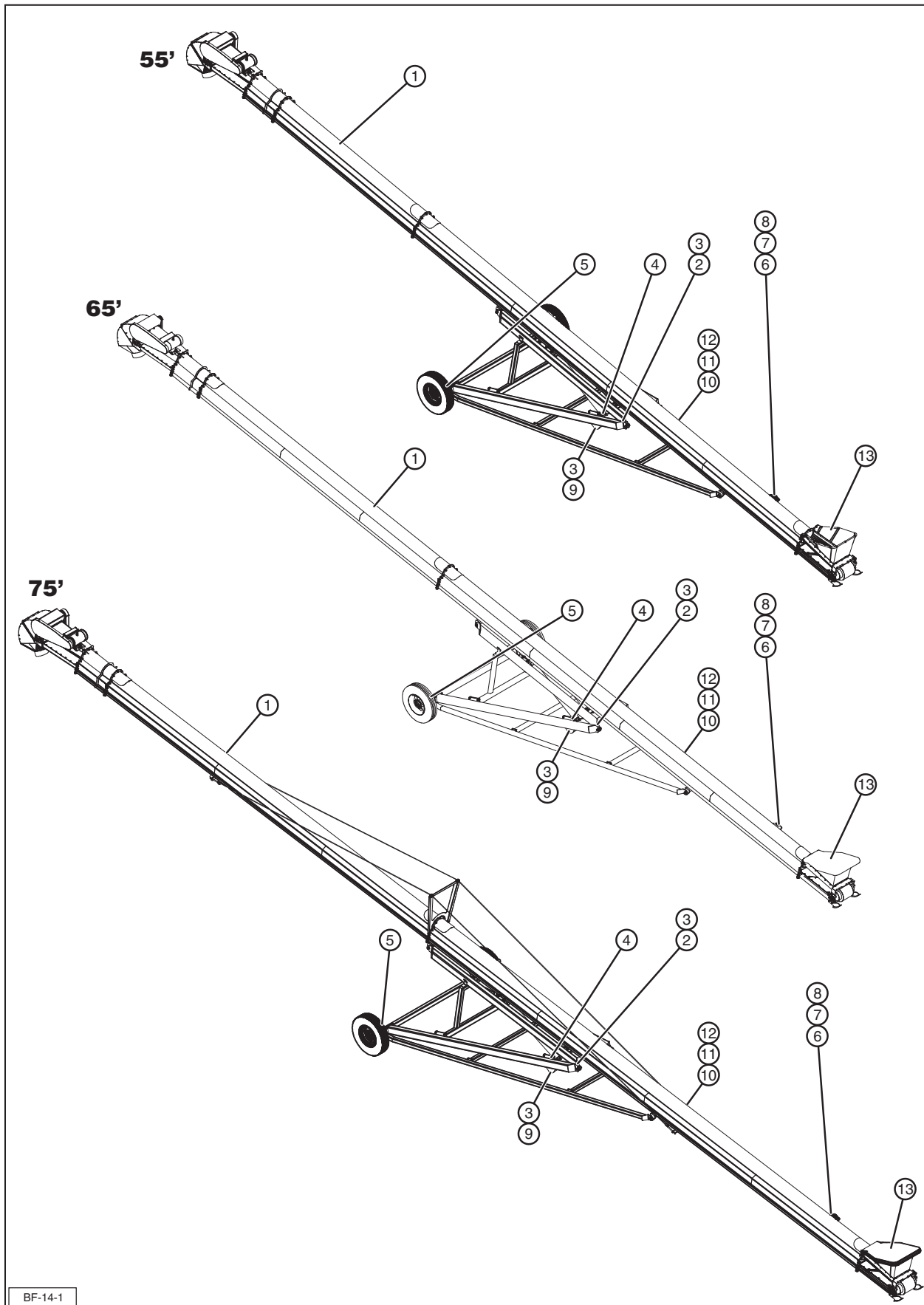
The following pages contain a list of serviceable parts for the Bin Fill Conveyors. Three models, 55', 65', and 75'.

Parts are available from your authorized Dealer Parts Department.

14.2 DISPOSAL OF EQUIPMENT AT END OF USEFUL LIFE

The Meridian conveyors are designed for the specific purpose of conveying grain. When this conveyor is no longer capable of doing its designed purpose, it should be dismantled and scrapped. Do not use any materials or components from this conveyor for any other purpose.

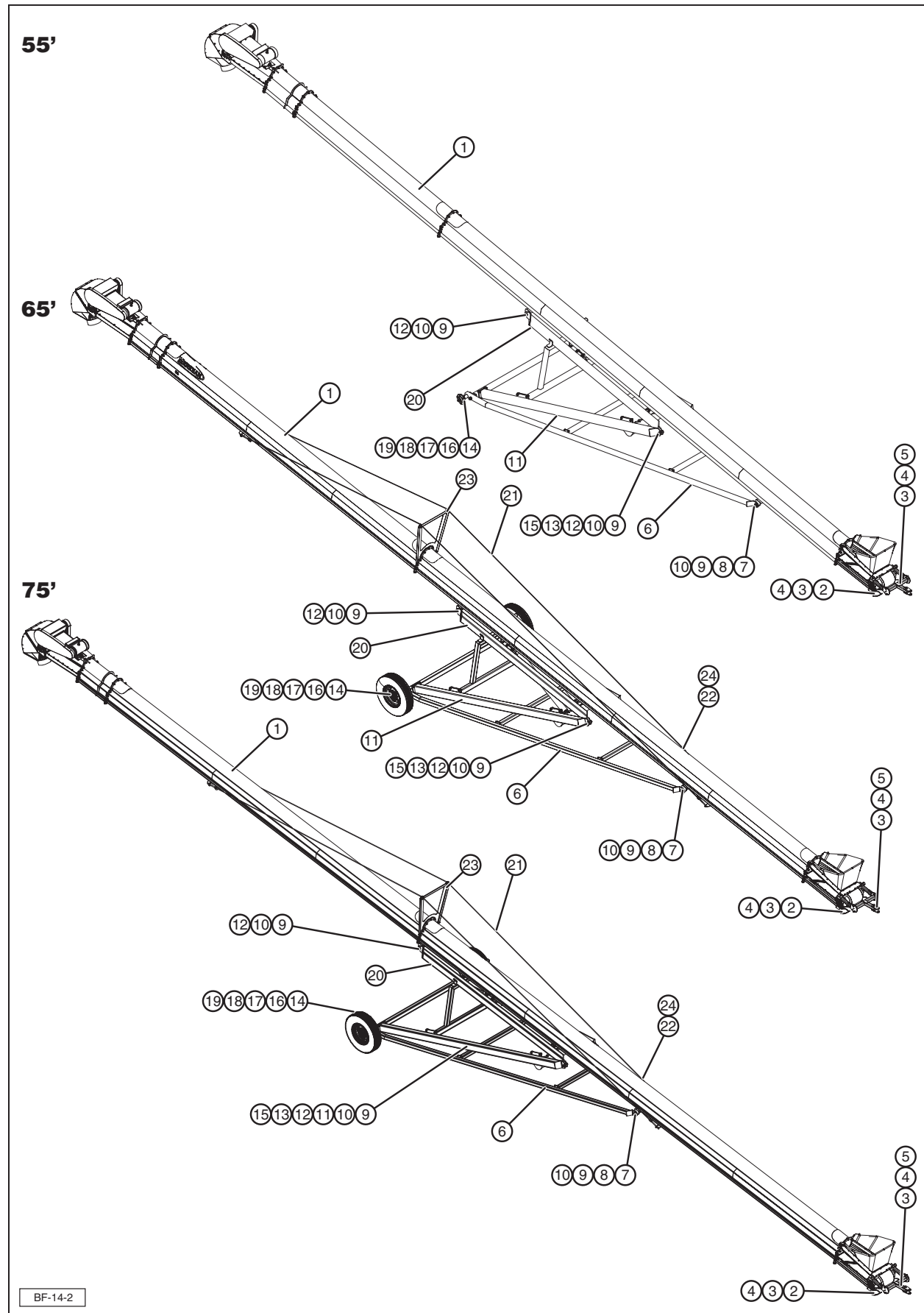
14.3 BIN FILL CONVEYOR, COMPLETE (55', 65', 75')



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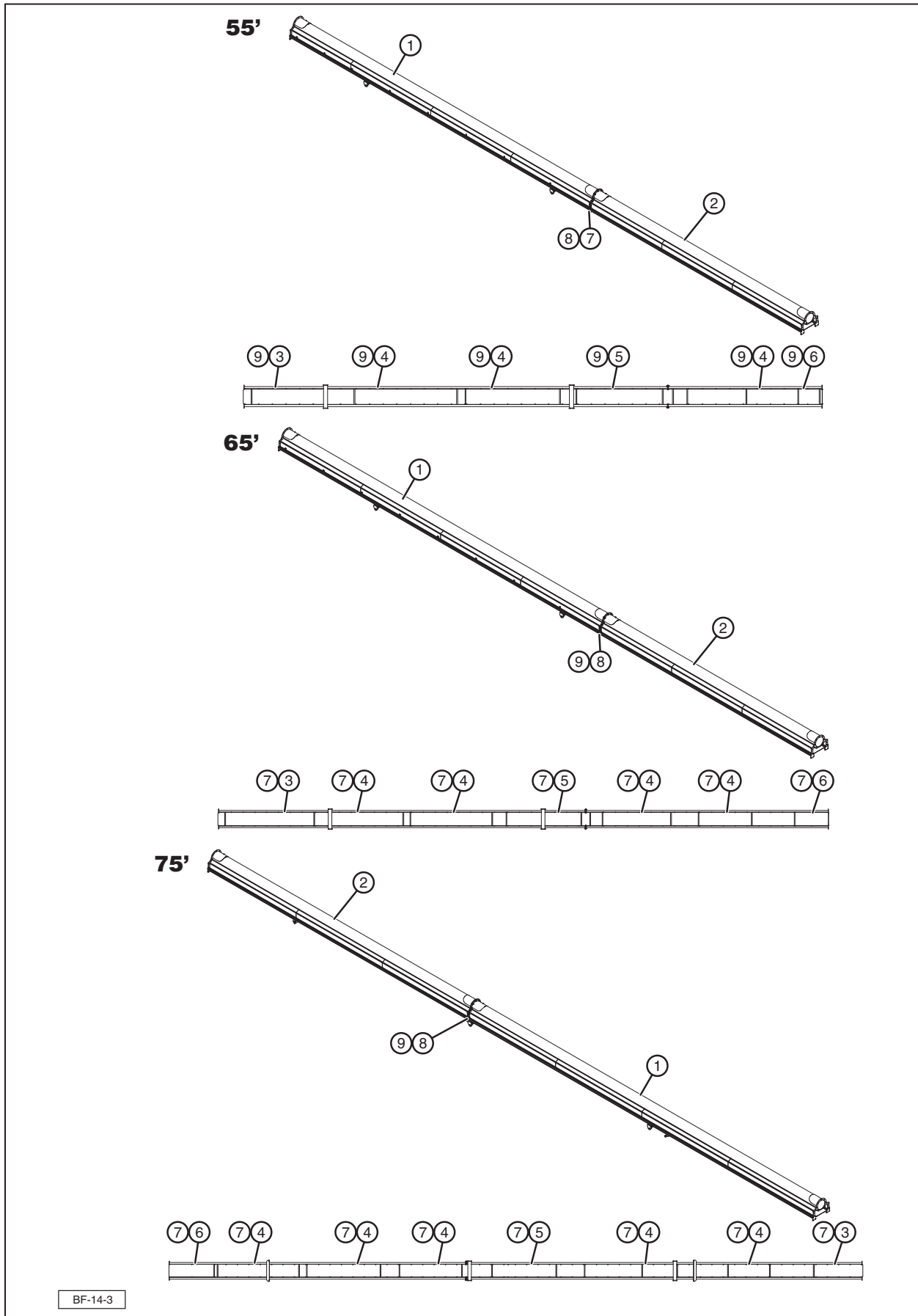
Item	Qty	Part #	Description
1	1	37726 37733 37711	Sub-Assembly, 55' Conveyor Red Sub-Assembly, 65' Conveyor Red Sub-Assembly, 75' Conveyor Red
2	2	37693	Pin, Assembly 6" Gray
3	4	27578	Pin, Hairpin Cotter
4	2	27572	Cylinder, Hydraulic 4in-48
5	2	37696	Assembly, Tire And Rim
6	1	27575	Switch, Moeller (owner-supplied)
7	15	27576	Clamp, Cable 7/8 In
8	15	18482	Screw, Hex, Self-Tap 10-24 x 0.5
9	2	37695	Pin, Assembly 4 In Gray
10	1	27577	Tube, SS 3/8 In Hyd Line
11	1	27590	Tube, Hydraulic Line
12	10	27499	Tube, Clamp 3/8" Standard Series
13	1	27793	Anti-Splash Cover W/Hold Downs (optional)
NS	1	27549 27550 27551	Main Conveyor Belt 55' (Not Shown) Main Conveyor Belt 65' (Not Shown) Main Conveyor Belt 75' (Not Shown)

14.4 BIN FILL CONVEYOR SUB-ASSEMBLY (55', 65', 75')



ITEM	QTY	PART #	DESCRIPTION
1	1	37710 37732 37722	Assembly, Tube W/Ends 75' Red Assembly, Tube W/Ends 65' Red Assembly, Tube W/Ends 55' Red
2	4	19564	Nut, Hex, Flanged, 3/8-16
3	4	19331	Bolt, Hex, 3/8-16 x 3.5
4	1	37650	Support, Boot, Left Red
5	1	37651	Support, Boot, Right Red
6	1	37678	A-Frame, Lower 55/65/75
7	2	18459	Hex, Structural, A325 1-8 x 3-1/2" Steel, Mild
8	4	27552	Hinge Bushing
9	6	18457	Washer, Helical Spring Lock 1" Steel, Mild
10	6	18789	Nut, Hex 1-8 Steel, Mild
11	1	37671 37671 37712	Arm Scissor, Bottom 55' Arm Scissor, Bottom 65' Arm Scissor, Bottom 75'
12	4	18458	Bolt, Hex, 1-8 x 3-1/2" Steel, Mild
13	4	27553	Hinge Bushing Spacer
14	2	37604	3/4" Bolt With 1/4" Grease Zerk
15	2	27887	Plate, Reinforcement
16	2	37696	Assembly, Tire And Rim
17	2	37691	Assembly, Hub And Spindle
18	2	19330	Bolt, Hex, 3/8-16 x 3 Steel, Mild
19	2	19343	Nut, Hex 3/8-16
20	1	37687 37687 37721	Arm Scissor Top 55' Arm Scissor Top 65' Arm Scissor Top 75'
21	2	27585	Cable, Tension
22	4	27587	Eyebolt 5/8" x 8" Shank
23	1	27584	Plate, Cable Tension System
24	2	18360	Clamp, 1/2" Cable
25	2	27634	Bushing, Spacer Scissor Lift Conveyor Frame

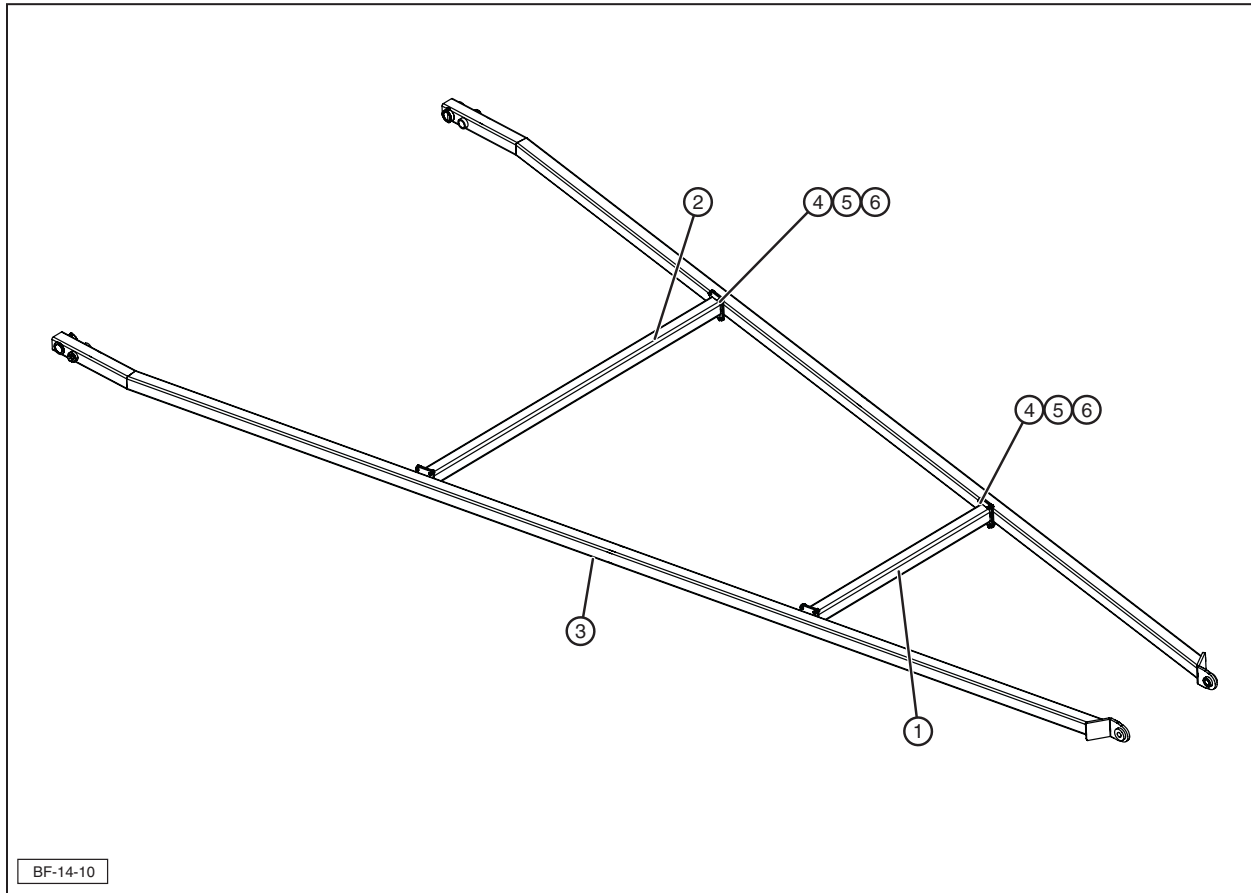
14.5 TUBE CENTER ASSEMBLY (55', 65', 75')



ITEM	QTY	PART #	DESCRIPTION
1	1	37707	Tube Bottom
2	1	37708	Tube Top
3	—	27783	10" Tube, Galvanized Cover
4	—	27785	10" Tube, Bottom Galvanized Cover
5	—	27503	10" Tube, Galvanized Cover
6	—	27504 27508 27516	10" 55' Tube Galvanized Cover 10" 65' Tube Galvanized Cover 10" 75' Tube Galvanized Cover
7	—	19597	1/4-14 x 3/4" Hex Washer Head Self Drilling Screw
8	—	19595	Nut, Hex, Flanged, 1/2-13
9	—	19575	Bolt, Hex, Flanged, 1/2-13 x 1-1/2"

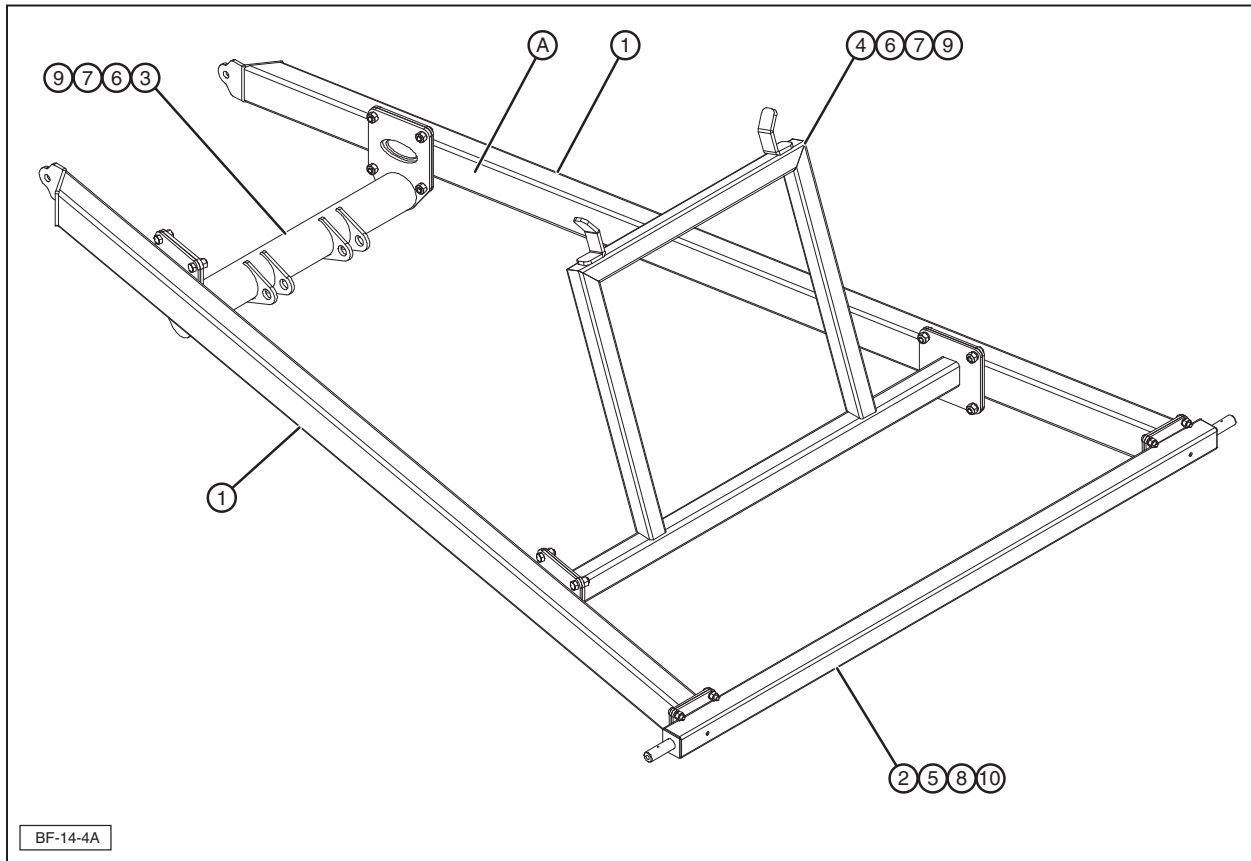
14.6 ARM SCISSOR ASSEMBLY

14.6.1 A-Frame, Lower (55', 65', 75')



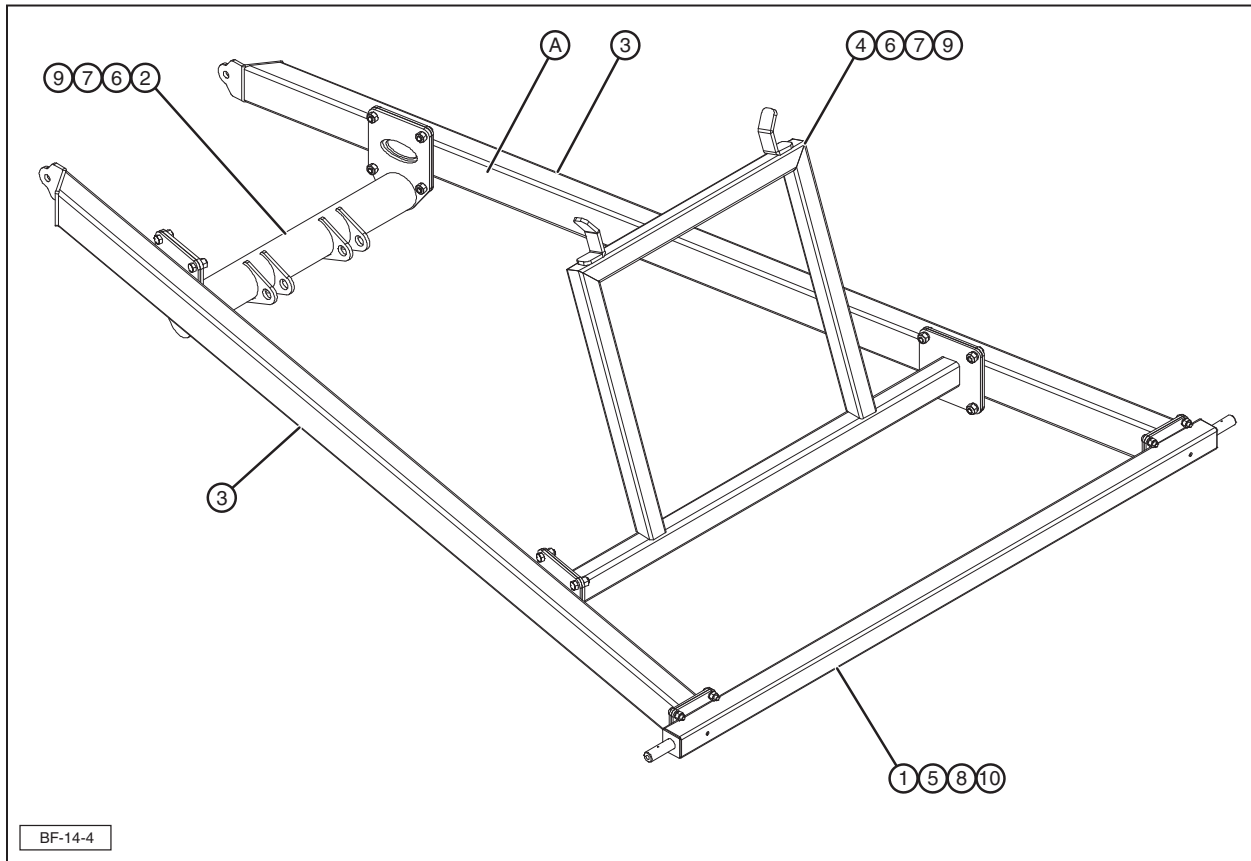
ITEM	QTY	PART #	DESCRIPTION
1	1	37675	Crossmember, A-Frame Top Gray
2	1	37677	Crossmember, Lower Bottom Gray
3	2	37673	Arm Side, A-Frame Lower Gray
4	16	19325	Bolt, Hex, 3/8-16 x 1
5	16	18355	Washer, Regular Helical Spring Lock, 3/8"
6	16	19343	Nut, Hex, 3/8-16

14.6.2 Arm Scissor Assembly, Bottom (55', 65')



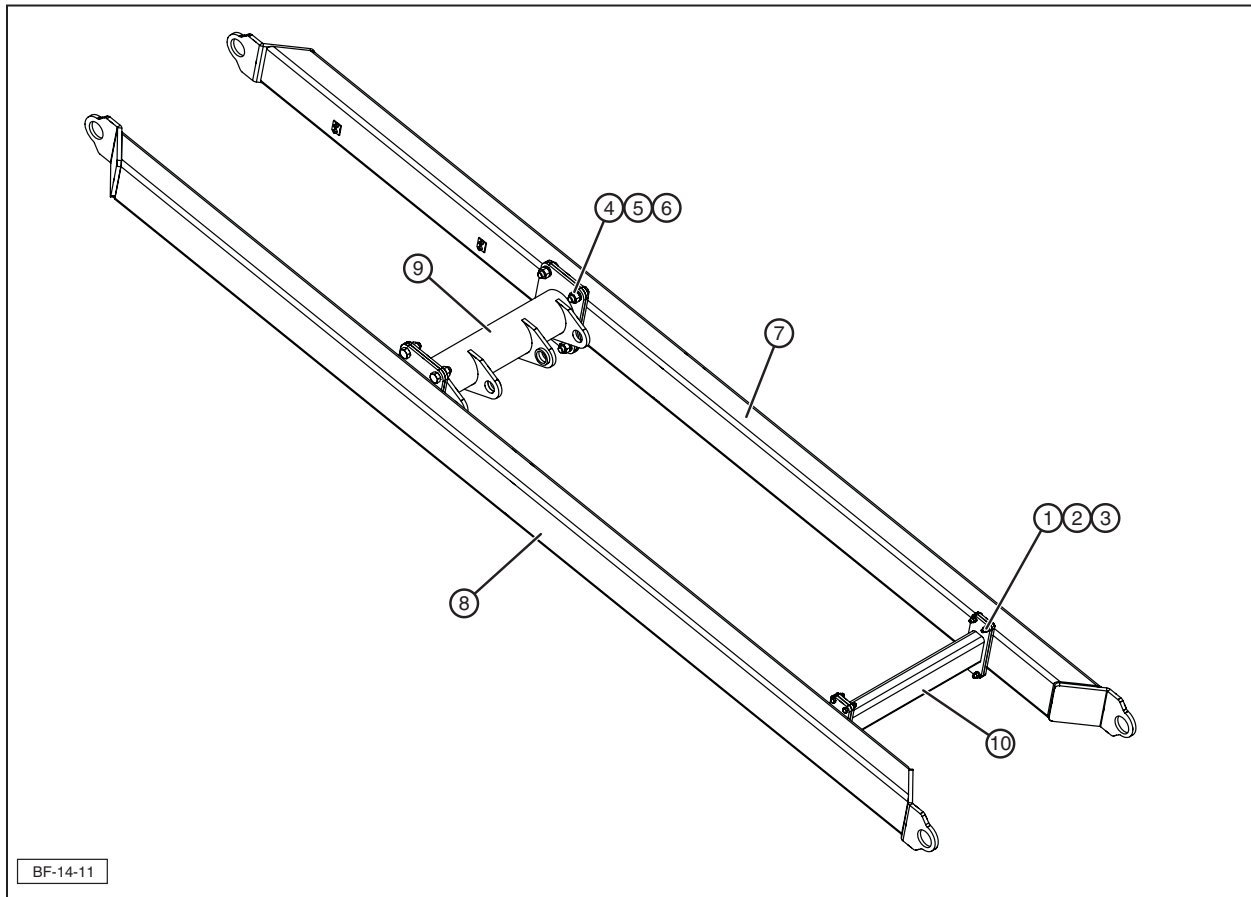
ITEM	QTY	PART #	DESCRIPTION
A	1	37671	Arm Scissor Assembly (55' And 65')
1	2	37663	Arm Rh Scissor Bottom Gray
2	1	37670	Axle 55' And 65' Electric Gray
3	1	37667	Mount Cyl Arm Scissor Gray
4	1	37690	Assembly Conveyor Hold-Up Gray
5	8	19375	Bolt, Hex, 5/8-11 x 2 Steel, Mild
6	16	19388	Bolt, Hex, 3/4-10 x 2
7	16	19396	Washer, Helical Spring Lock 3/4 Steel, Mild
8	8	18460	Washer, Helical Spring Lock 5/8 Steel, Mild
9	16	19652	Nut, Hex, Heavy 3/4-10
10	8	18489	Nut, Hex, Heavy 5/8-11

14.6.3 Arm Scissor Assembly, Bottom (75')



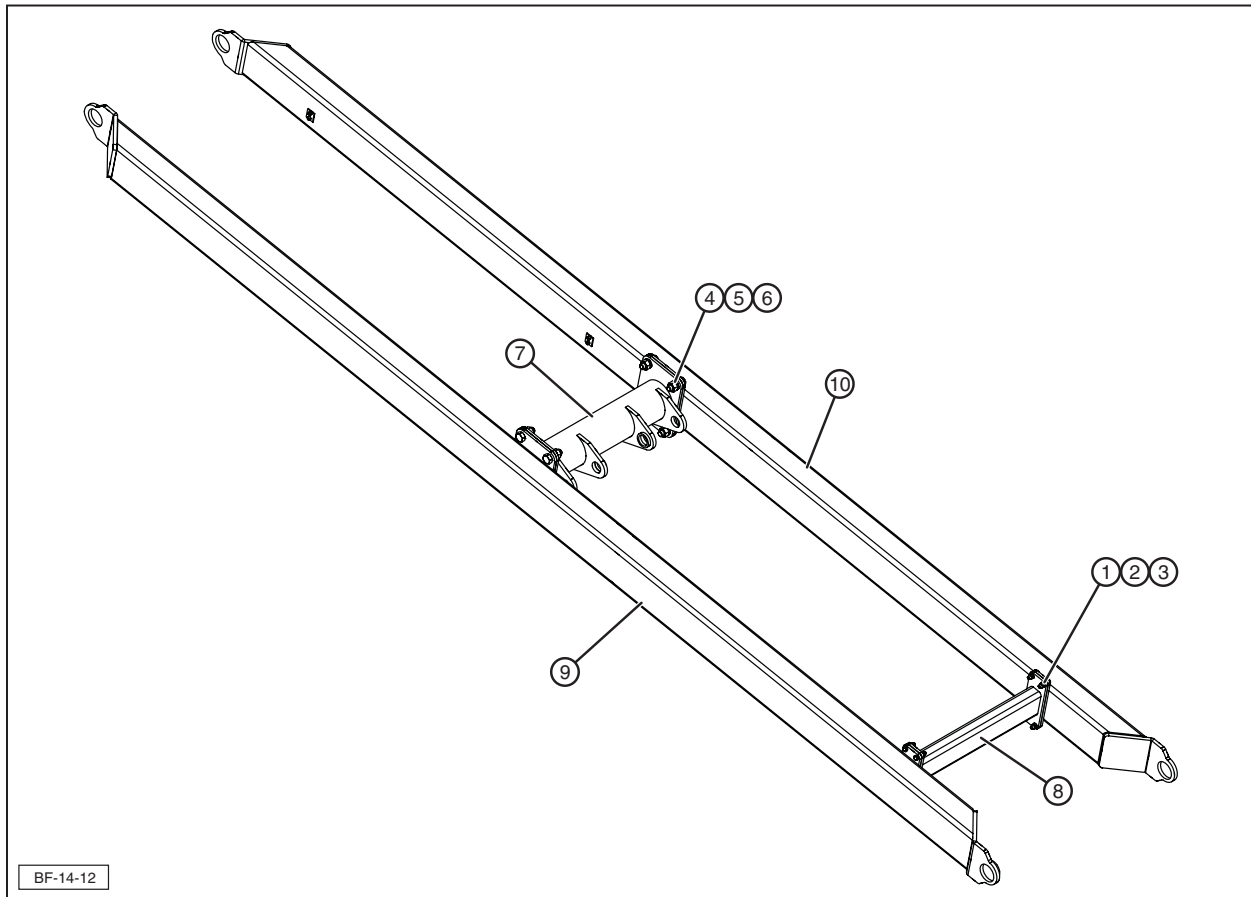
ITEM	QTY	PART #	DESCRIPTION
A	1	37712	Arm Scissor Assembly (75')
1	1	37670	Axle 75' Electric Gray
2	1	37716	Mount Cyl Arm Scissor Bottom Gray
3	2	37714	Assy Arm Rh Scissor Bottom Gray
4	1	37718	Crossmember A-Frame Lower Gray
5	8	19375	Bolt, Hex, 5/8-11 x 2 Steel, Mild
6	16	19388	Bolt, Hex, 3/4-10 x 2
7	16	19396	Washer, Helical Spring Lock 3/4 Steel, Mild
8	8	18460	Washer, Helical Spring Lock 5/8 Steel, Mild
9	16	19652	Nut, Hex, Heavy 3/4-10
10	8	18489	Nut, Hex, Heavy 5/8-11

14.6.4 Arm Scissor Assembly, Top (55', 65')



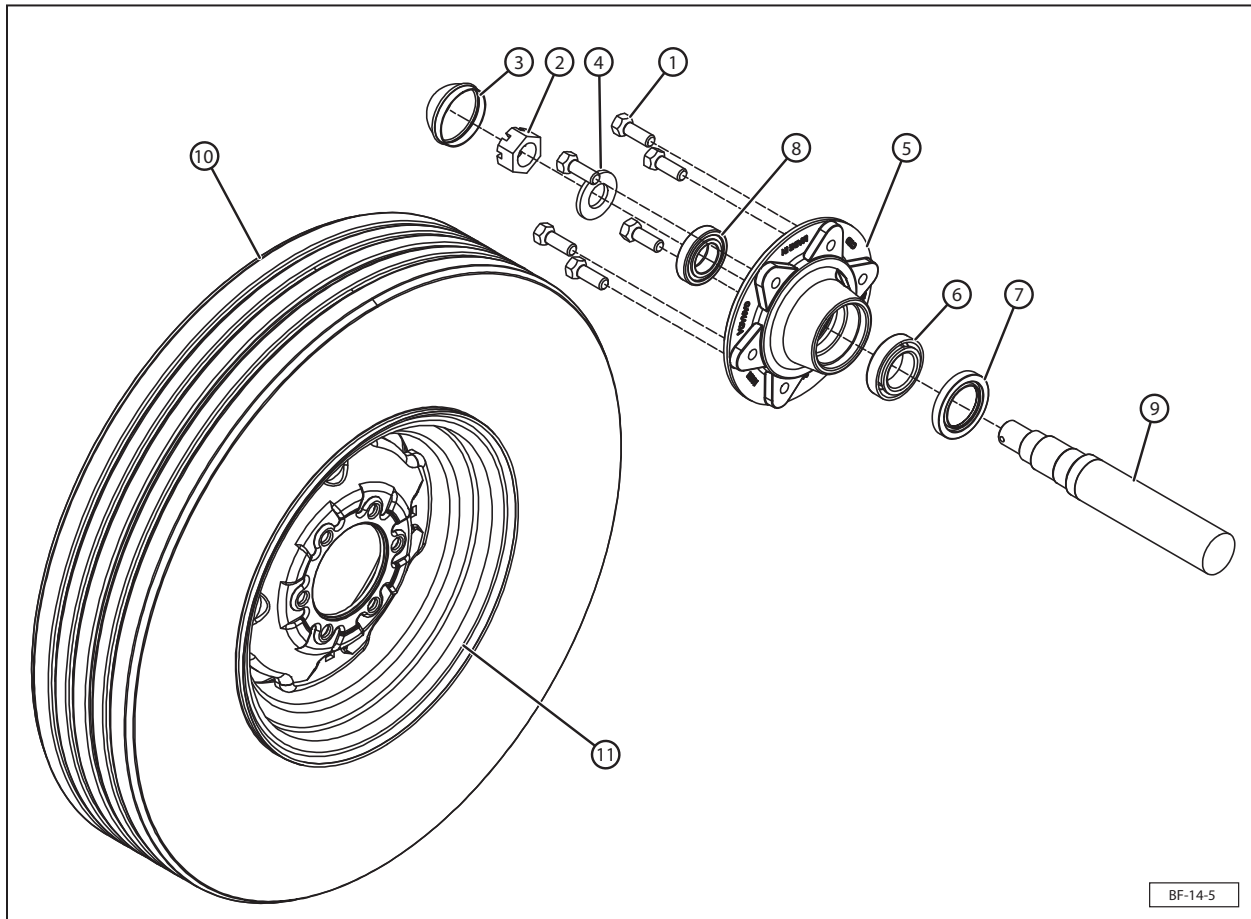
ITEM	QTY	PART #	DESCRIPTION
1	8	18355	Washer, Regular Helical Spring Lock, 3/8"
2	8	19327	Bolt, Hex, 3/8-16 x 1-1/2
3	8	19343	Nut, Hex, 3/8-16
4	8	19388	Bolt, Hex, 3/4-10 x 2
5	8	19394	Nut, Hex, Steel, Mild, 3/4-10
6	8	19396	Washer, Helical Spring Lock, Steel, Mild, 3/4
7	1	37680	Side Arm Scissor Top Gray
8	1	37682	Side Arm Scissor Top Gray
9	1	37684	Mount Cylinder Arm Scissor Top Gray
10	1	37686	Crossmember Scissor Upper Top Gray

14.6.5 Arm Scissor Assembly, Top (75')



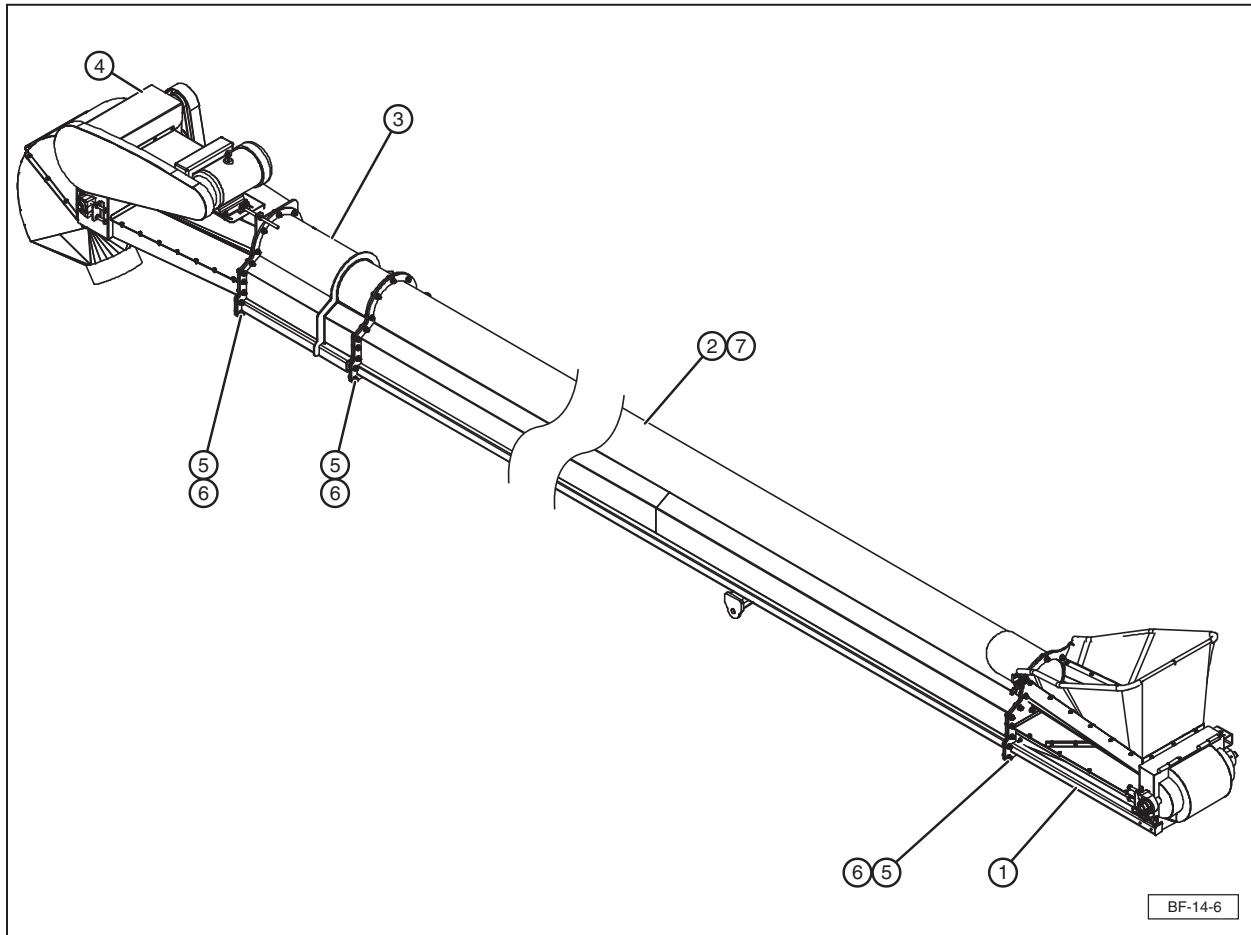
ITEM	QTY	PART #	DESCRIPTION
1	8	18355	Washer, Regular Helical Spring Lock, 3/8"
2	8	19327	Bolt, Hex, 3/8-16 x 1-1/2
3	8	19343	Nut, Hex, 3/8-16
4	8	19388	Bolt, Hex, 3/4-10 x 2
5	8	19394	Nut, Hex, Steel, Mild, 3/4-10
6	8	19396	Washer, Helical Spring Lock, Steel, Mild, 3/4
7	1	37684	Mount Cylinder Arm Scissor Top Gray
8	1	37686	Crossmember Scissor Upper Top Gray
9	1	37720	Side Arm Scissor Top 75' Gray
10	1	38782	Side Arm Scissor Top 75' Hyd Gray

14.7 HUB, SPINDLE, TIRE, AND RIM ASSEMBLY (55', 65', 75')



ITEM	QTY	PART	DESCRIPTION
1	6	27565	Hub Wheel Bolt
2	1	27566	Hub Spindle Nut
3	1	27560	Dust Cap Hub
4	1	27567	Hub Spindle Washer
5	1	27561	Hub 6-Bolt
6	1	27563	Hub Inner Bearing
7	1	27564	Hub H611 Grease Seal
8	1	27562	Hub Outer Bearing
9	1	27568	Spindle
10	1	27573	16" Tire
11	1	27574	16" Rim

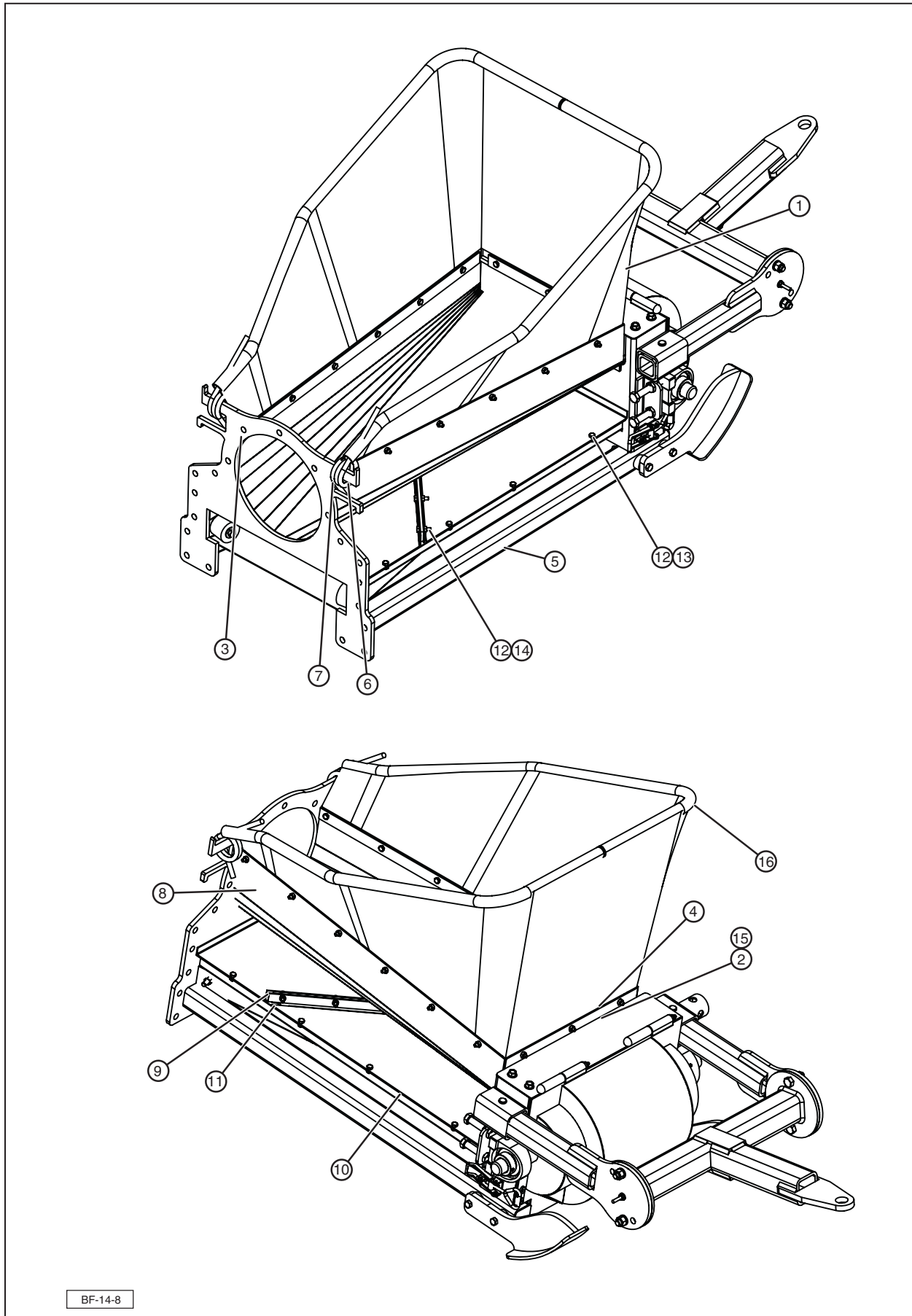
14.8 TUBE ASSEMBLY WITH ENDS (55', 65', 75')



ITEM	QTY	PART #	DESCRIPTION
1	1	37637	Receiving End Red
2	1	—	Tube Center Assembly
3	1	38592	Tension System Assm
4	1	37641	Discharge Assembly Red
5	59	19575	Bolt, Hex, Flanged, 1/2-13 x 1-1/2"
6	59	19595	Nut, Hex, Flanged, 1/2-13
7	1	27549 27550 27551	Belt Meridian 55' Conveyor Belt Meridian 65' Conveyor Belt Meridian 75' Conveyor

NOTES

14.9 RECEIVING END (55' 65' 75')



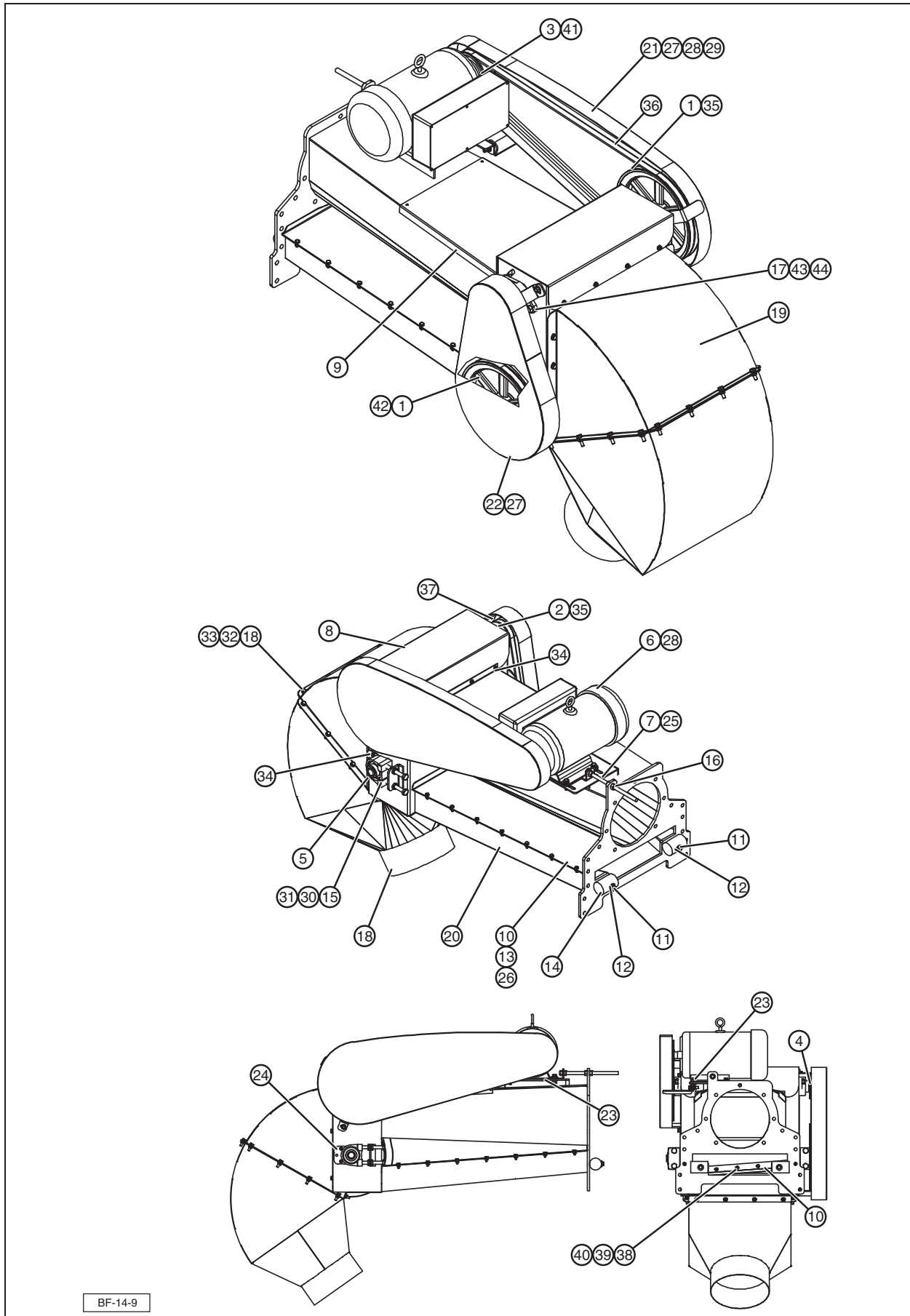
ITEM	QTY	PART #	DESCRIPTION
1	1	27792 11048 17723 17724	Hopper, Canvas (Tall, Narrow) Hopper, Canvas (Short, Narrow) Hopper, Canvas (Short, Wide) Hopper, Canvas (Tall, Wide)
2	1	27456	4" Brush
3	2	27790	Canvas Hopper, Hold Down Plate
4	1	27791	Canvas Hopper, Back Hold Down Plate
5	1	37638	Receiving End Assm Red
6	2	27468	Spring New Holland Left
7	2	27477	Spring New Holland Right
8	1	27794	Bottom Belt Cover, Galvanized
9	1	27798	Scraper Holder
10	1	27796	Bottom Belt Cover, Galvanized
11	1	27799	Rubber Scraper
12	29	19305	Nut, Hex 1/4-20
13	8	19300	Bolt, Hex, 1/4-20 x 1/2" Steel, Mild
14	21	19301	Bolt, Hex, 1/4-20 x 1"
15	1	27518	Brush Hold Down 15-3/4"
16	1	36006	Receiving Canvas Tube

Note: If you wish to change from the narrow canvas hopper to a wide hopper, you can purchase one of the following kits:

Part #38658 - Tall/Wide Hopper Kit (includes wide canvas tube and wide/tall canvas)

Part #38659 - Short/Wide Hopper Kit (includes wide canvas tube and wide/short canvas)

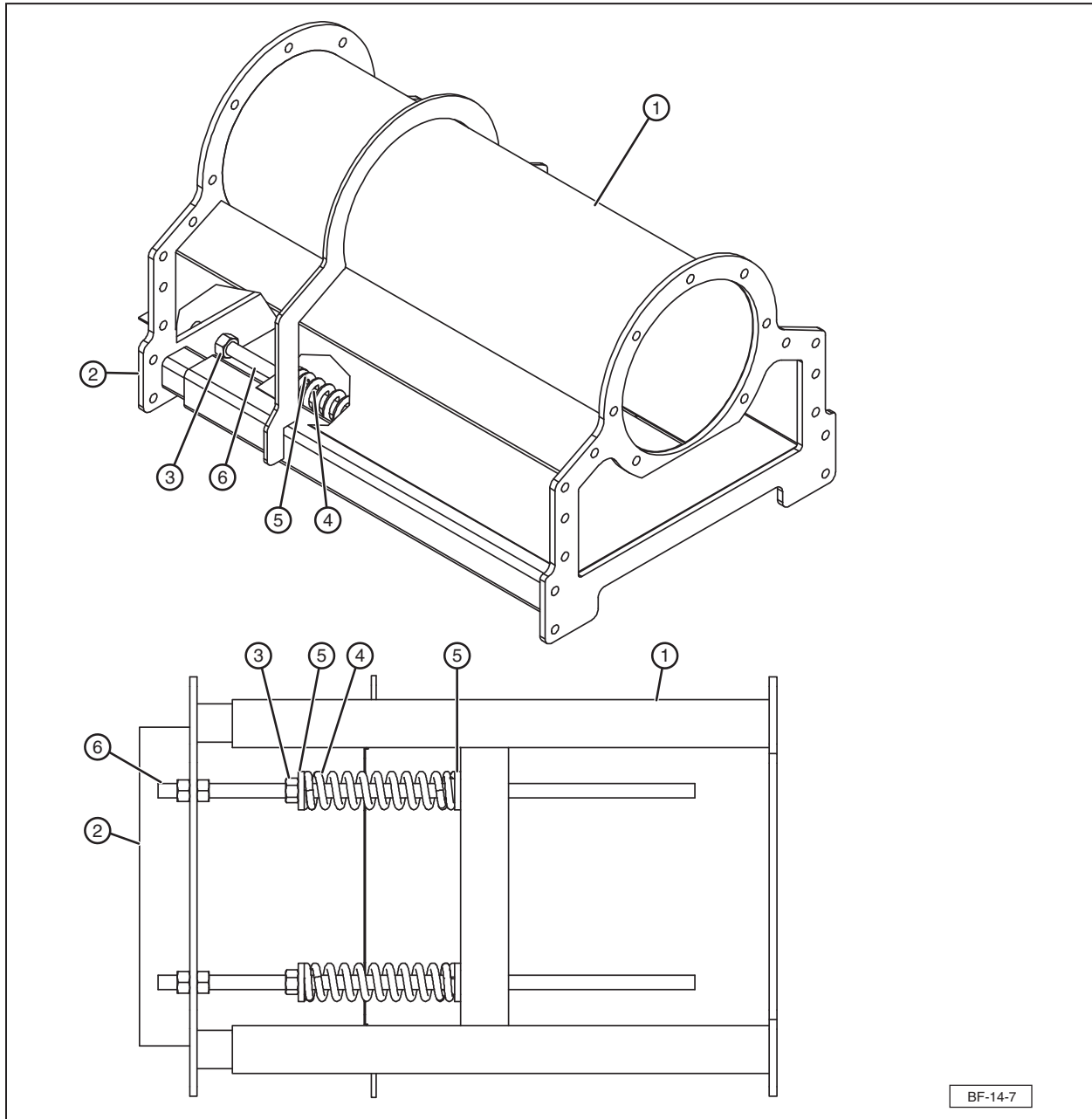
14.10 DISCHARGE END (55', 65', 75')



BF-14-9

ITEM	QTY	PART #	DESCRIPTION
1	2	18345	12" Double Belt B Belt Pulley
2	1	27466	4-1/4" Double Belt B Belt Pulley
3	1	27465	5" Double Belt B Belt Pulley
4	1	27844	Speed Reducer Shaft
5	1	27845	Inclined Conveyor Driving Roller
6	1	—	Motor, (See Section 4.2 for Part Numbers)
7	1	27849	Electric Motor V-Belt Tension Rod
8	1	27731	Speed Reducer Shaft Cover
9	1	27733	Removable Top Cover
10	1	27781	Meridian Belt Tray Cover
11	2	19330	Bolt, Hex, 3/8-16 x 3 Steel, Mild
12	2	18473	Washer, 3/8 - Wide - Type A Steel, Mild
13	14	18484	Bolt, Hex, 1/4-20 x 5/8" Steel, Mild
14	2	27756	Discharge End, Plastic Belt Guide
15	2	27467	Bearing Block Assembly Kal-Pa206
16	4	19369 MS	Nut, Hex 1/2-13 Steel, Mild
17	2	27441	Two-Bolt Flange Bearing Assembly
18	1	37646	Discharge Chute Weldment Red
19	1	37648	Discharge Chute Transition Red
20	1	37642	Discharge Weldment Red
21	1	37644	Motor V-Belt Cover Red
22	1	37643	Roller V-Belt Cover Red
23	2	37645	Electric Motor Bolt Weldment Red
24	2	37647	Roller Insert Cover Red
25	1	27632	Electric Discharge Motor Slide Red
26	19	19305	Nut, Hex 1/4-20
27	4	18478	Screw, Flanged, Self-Tapping Type D 3/8-16 x 3/4" Plain Indented Washer
28	5	18680	Bolt, Hex, Flanged, Steel, Mild 3/8-16 x 1-1/4"
29	1	19564	Nut, Hex, Flanged, 3/8-16
30	4	18475	Hex Head Bolt M14 x 100
31	8	18474	Hex Jam Nut - Metric M14 x 2
32	22	19581	Bolt, Hex, Flanged, 5/16-18 x 1
33	16	19318	Nut, Hex, Flanged, 5/16-18
34	12	19597	1/4-14 x 3/4" Hex Washer Head Self Drilling Screw
35	2	27517	Bushing Split Taper H114
36	2	18358	V-Belt B83
37	2	18426	V-Belt B48
38	1	27779	Rubber Scraper
39	1	27931	Scraper Holder, Discharge End
40	5	—	Bolt, 1/4-20 x 1-1/4"
41	1	17843	Bushing Split Taper H138
42	1	17839	Bushing Split Taper H1
43	4	18464	Bolt, Hex, 1/2-13 x 1-1/2", Steel, Mild
44	4	19595	Nut, Hex, Flanged, 1/2-13

14.11 TENSION SYSTEM ASSEMBLY (55', 65', 75')



ITEM	QTY	PART	DESCRIPTION
1	1	38594	Top, Tension System Assm
2	1	38593	Tension System Assm
3	6	19394	Nut, Hex 3/4-10 Steel, Mild
4	2	18683	Spring, Compression, 8" Long 2-3/16" O.D.
5	4	27896	Tension System Spring Holder Galvanized.
6	2	27716	Tension System, Tension Rod

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MERIDIAN MANUFACTURING INC.

With over 65 years of experience,
Meridian is your storage and handling expert.



AGRICULTURAL



INDUSTRIAL



OIL & GAS

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TF: 800.830.2467
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Winkler Office

Box 760, 275 Hespler Ave.
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