

MERIDIAN

OPERATOR'S MANUAL



FLOOR MOUNT CONVEYOR

www.MeridianMFG.com



PRODUCT WARRANTY

REGISTRATION FORM - FLOOR MOUNT 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 is securely fastened to the floor

___ Unit lubricated where necessary

___ Conveyor belt properly aligned

___ All guards/shields installed correctly

___ Conveyor belt properly tensioned

___ All safety signs installed and legible

___ Conveyor drive belts properly tensioned

___ Safety and operating instructions reviewed

___ Conveyor is properly connected and grounded to an electrical source

___ Verified the receipt of all options ordered

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 FLOOR MOUNT CONVEYOR

LICENSING INFORMATION

Date: ___/___/___

DEALER:

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

SOLD TO:

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

CONVEYOR MODEL # _____

CONVEYOR SERIAL # _____

(There are six different models of Floor Mount Conveyors as listed below).

- AF-E-20 (20 foot)
- AF-E-25 (25 foot)
- AF-E-30 (30 foot)
- AF-E-35 (35 foot)
- AF-E-40 (40 foot)
- AF-E-45 (45 foot)

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IMPORTANT INFORMATION

SERIAL NUMBER LOCATION

Please provide the serial number of your Meridian Titan 2 SE Seed Tender and engine when ordering parts or requesting service or other information.

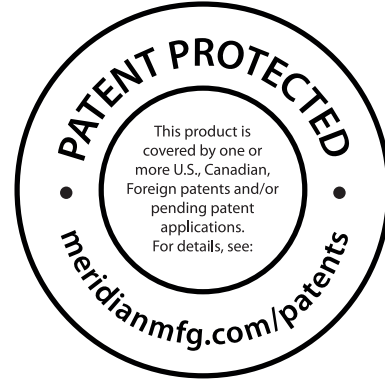
The serial number plates are located where indicated. Please record the numbers in the space provided below for easy reference.



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

CONTENTS

1.0	INTRODUCTION	10
1.1	Congratulations	10
1.2	Intended Use	10
1.3	Owner/Operator	10
1.4	Ownership Changes	10
1.5	End of Life Disposal	10
1.6	California Codes	10
1.7	Reporting Hazards	10
2.0	SAFETY	11
2.1	General Safety	12
2.2	Equipment Safety Guidelines	13
2.3	Safety Training	13
2.4	Safety Sign	14
2.5	Pre-operating Instructions	14
2.6	Operating Safety	14
2.7	Maintenance Safety	14
2.8	Lock-Out or Tag-Out Safety	14
2.9	Sign-Off Form	15
3.0	SAFETY SIGNS	16
3.1	Safety Sign Locations	16
3.2	How to Install Safety Signs	16
3.3	Decal Locations	16
4.0	SPECIFICATIONS	17
4.1	Overall Specifications	17
4.2	Electrical Specifications	18
4.3	Bolt Specifications	19
4.3.1	Bolt Torque Values	19
4.3.2	Grade Markings Chart	19
5.0	CONVEYOR NOMENCLATURE	20
6.0	ASSEMBLY INSTRUCTIONS	21
6.1	Initial Conveyor Assembly	21
6.2	Anchoring The Conveyor	21
6.3	Final Check and Testing	21
7.0	PRE-OPERATING INSTRUCTIONS	22
7.1	Safety	22
7.2	Conveyor Break-In Period	22
7.2.1	Before Starting	22
7.2.2	Inspections for 1/2, 5, and 10 Hours	22
7.3	Daily Pre-Operation Checklist	22
8.0	OPERATION	23
8.1	Safety	23
8.2	Before Each Use	23
8.3	Operating Controls	23
8.3.1	On/Off Control Box (Owner Supplied)	23
8.4	Conveyor Belt Operation	23

9.0	MAINTENANCE	24
9.1	Safety	24
9.1.1	General Safety	24
9.1.2	Lock-Out or Tag-Out Safety	24
9.2	Lubrication	25
9.3	Conveyor Service Record	26
9.3.1	Daily (8 Hours)	26
9.3.2	Weekly (50 Hours)	26
9.3.3	Annually (400 Hours)	26
9.4	Welding Repairs	27
9.5	Conveyor Belt Replacement	27
9.6	Tensioning Conveyor Belt	28
9.7	Adjust Belt Tracking	29
9.8	Replace or Tighten Drive Belts	30
9.8.1	Adjusting Drive Belt Tension	30
9.8.2	Replacing Drive Belts	31
10.0	TROUBLESHOOTING	32
10.1	Troubleshooting Chart	32
11.0	WARRANTY	33
11.1	Warranty Statement	33
12.0	PARTS	34
12.1	General Information	34
12.2	Conveyor Assembly	34
12.3	Tube Assembly with Ends (All Conveyors)	35
12.3.1	37641 Discharge End (All Conveyors)	36
12.3.2	37637 Receiving End (All Conveyors)	38
12.3.3	Tube Assembly (20', 25', 30', 35', 40', And 45')	40
12.3.4	38592 Tension System Assembly (All Conveyors)	42
12.4	Support Frame Assemblies	43
12.4.1	Support Frame Assembly For 20' Conveyor	43
12.4.2	Support Frame For 25 to 45' Conveyors	44
12.4.3	Support Frame Assembly For 25 to 40' Conveyors	46
12.4.4	Support Frame Assembly For 45' Conveyors	48

1.0 INTRODUCTION

1.1 CONGRATULATIONS

Congratulations on your choice of a Meridian Manufacturing 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 conveyor, read and understand the Safety, Operation, Maintenance, and Troubleshooting information contained within this manual.

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

1.2 INTENDED USE

The Floor Mount Conveyor is designed to transport seed or grain from one location to another, normally within or into a building. They can be used in conjunctions with a seed bin, seed box, or even from a grain truck. Many seed treatment facilities use varying lengths of conveyors to move the seed from one processing machine to another. This conveyor is not intended to move 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 the conveyor, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, 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 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.

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 changes so that updates to product, or documentation, can be forwarded to the new owner(s). This should be done even if the conveyor is out of warranty because many manufacturers supply update notifications as long as they have valid ownership information.

1.5 END OF LIFE DISPOSAL

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.

WARNING

DO NOT use this conveyor, or one of its components, for anything other than the manufacture's original intended use. Not only will the warranty be voided, but the component can fail in the unintended application, creating a hazard to the conveyor and the personnel using the conveyor.

1.6 CALIFORNIA CODES

If this conveyor is assembled in the state of California, then there are some specific codes and warnings that need to be noted. Contact the State of California to determine which codes and warnings apply to the components of the conveyor.

1.7 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 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 conveyor. **YOU** must ensure that you and anyone else who is going to operate, maintain, or work on the conveyor 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 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.   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.
9.  Clear the area of people, especially small children, before starting.
10.  Review safety related items annually with all personnel who will be operating, using, or maintaining the conveyor.


2.2 EQUIPMENT SAFETY GUIDELINES

-  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.
-  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.
-   Never use alcoholic beverages or sedative drugs while operating this conveyor. Consult your doctor about operating this conveyor while taking prescription medications.
-  Under no circumstances should young children be allowed to work with this conveyor. Do not allow persons to operate or maintain 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.
-  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.**
-  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.

-  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 auxiliary equipment and conveyor manuals. Make sure all Safety Signs are affixed to the auxiliary equipment.

2.3 SAFETY TRAINING

-  Safety is a primary concern in the design and manufacture of our conveyors. Unfortunately, our efforts to provide a safe conveyor can be cancelled out by a single careless act of an operator or bystander.
-  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.
-  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.
-  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 equipment. 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.
-  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 SIGN

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

2.5 PRE-OPERATING INSTRUCTIONS

Refer to the Pre-Operating Instructions section (Section 7.0) for safety information.

2.6 OPERATING SAFETY

Refer to the Operation section (Section 8.0) for safety information.

2.7 MAINTENANCE SAFETY

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

2.8 LOCK-OUT OR TAG-OUT SAFETY

Refer to the Maintenance section (Section 9.1) for safety information.

2.9 SIGN-OFF FORM

Meridian Manufacturing Group 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 equipment. 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

1. Product Serial Number Decal



2. 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

3. WARNING — Read and Understand (#1654)



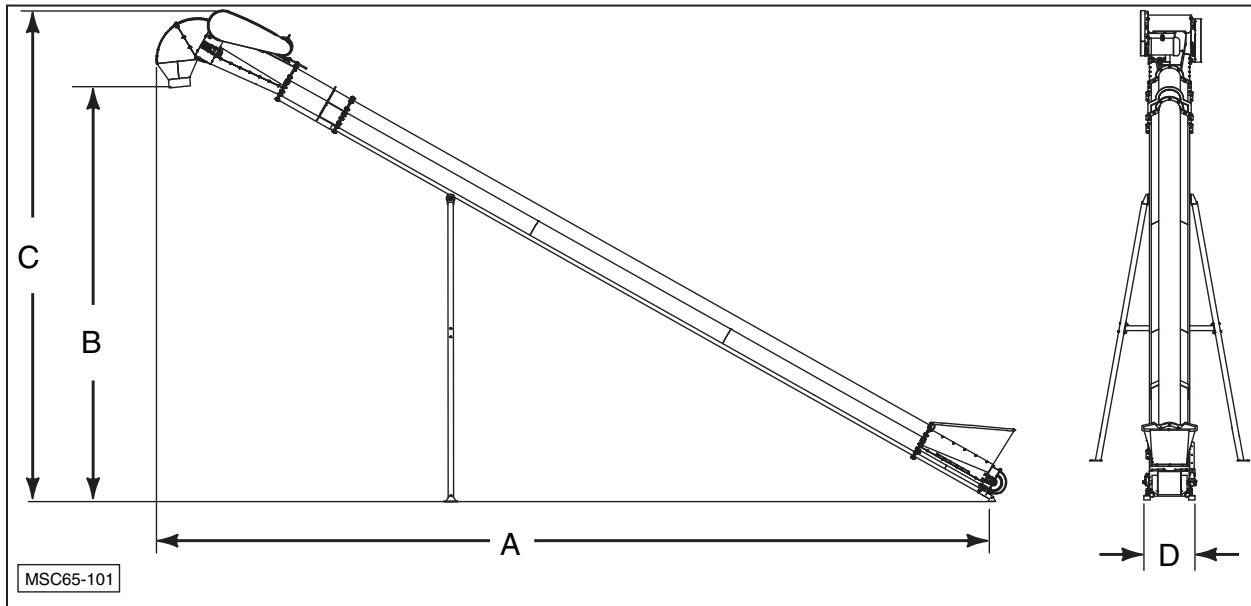
 **WARNING**

To Prevent Serious Injury or Death:

- Avoid unsafe operation or maintenance.
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.

4.0 SPECIFICATIONS

4.1 OVERALL SPECIFICATIONS



Model	Dimension	Minimum	Maximum
20' AF-E-20	A	at 45° = 204"	at 0° = 268"
	B	at 0° = 0"	at 45° = 163"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	
25' AF-E-25	A	at 45° = 245"	at 0° = 328"
	B	at 0° = 0"	at 45° = 205"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	
30' AF-E-30	A	at 45° = 288"	at 0° = 388"
	B	at 0° = 0"	at 45° = 247"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	
35' AF-E-35	A	at 45° = 331"	at 0° = 448"
	B	at 0° = 0"	at 45° = 290"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	
40' AF-E-40	A	at 45° = 374"	at 0° = 508"
	B	at 0° = 0"	at 45° = 332"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	
45' AF-E-45	A	at 45° = 416"	at 0° = 568"
	B	at 0° = 0"	at 45° = 374"
	C	at 0° = 30"	at 45° = 47"
	D	23.5"	

4.2 ELECTRICAL SPECIFICATIONS

There are different Voltage and phase options available for the conveyors. The table below lists these various options and the corresponding part numbers. These components must be purchased separately.

Electrical Motor Options And Specifications			
Conveyor Length	Motor Size and Voltage	Motor Part Number	Full-Load Amps
20',25',30',35'	5HP 1PH 220V	27362	20.5
20',25',30',35'	5HP 3PH 220V	18369	12.8
20',25',30',35'	5HP 3PH 460V	18369	6.4
20',25',30',35'	5HP 3PH 600V	18370	5.1
40',45'	7.5HP 1PH 220V	18371	33.6
40',45'	7.5HP 3PH 220V	18372	18.6
40',45'	7.5HP 3PH 460V	18372	9.3
40',45'	7.5HP 3PH 600V	18373	7.4

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

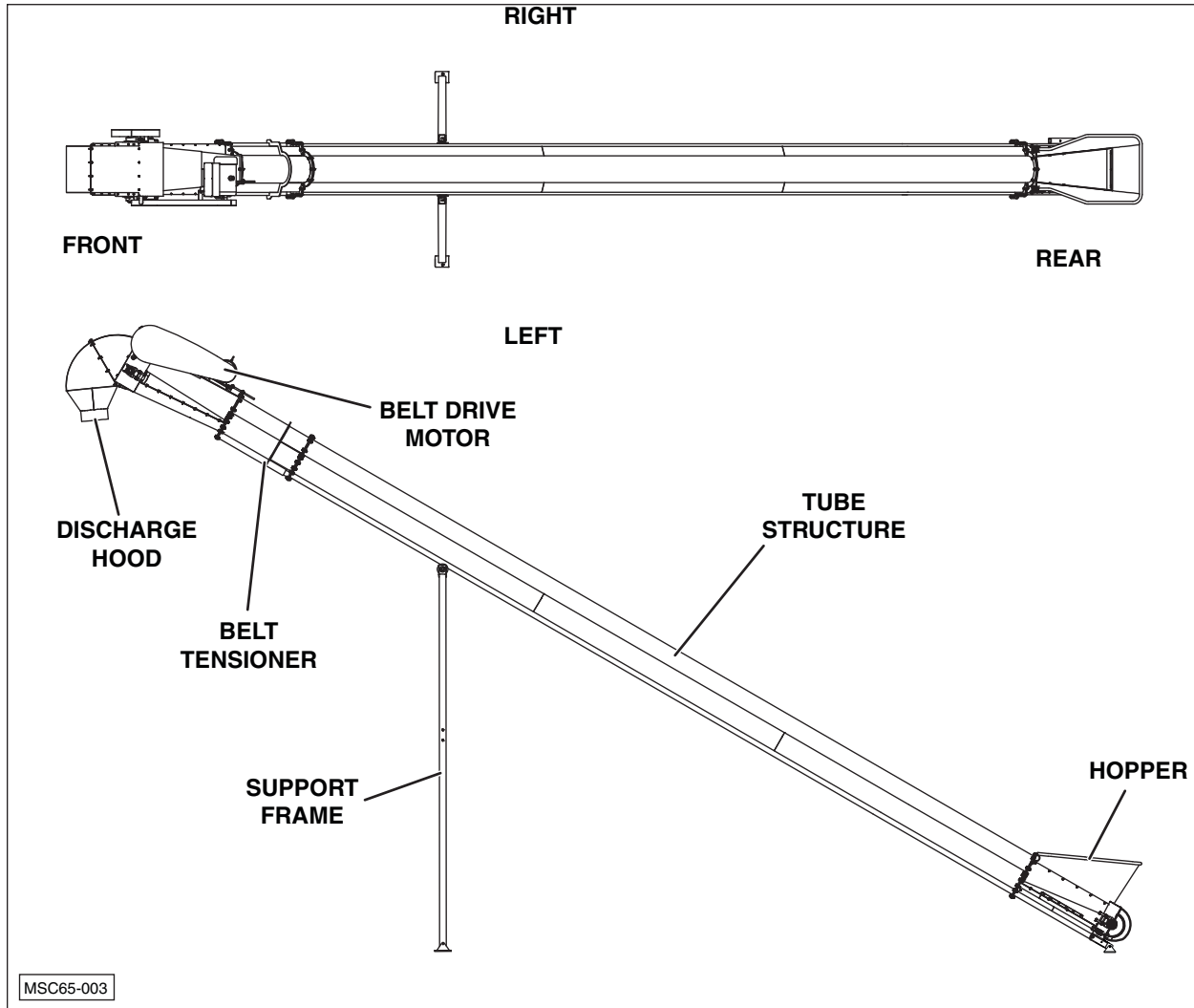
Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise instructed in this manual. When using locking elements, increase torque values by 5%.

Bolt Diameter A	SAE Grade 2		SAE Grade 5		SAE Grade 8	
	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 NOMENCLATURE



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

The hopper end of the conveyor is the back or **Rear**. The discharge or upper end of the conveyor is the **Front**.

The **Tube Structure** guides the conveyor belt and keeps the grain from spilling from the belt.

The **Belt Drive Motor** is used to propel the conveyor belt. A pair of V-belts attach the drive motor to the conveyor belt drive roller.

The **Discharge Hood** gathers the seed coming off the conveyor belt and directs it downward.

The **Hopper** is where the grain is deposited from a transport vehicle or another conveyor. The hopper has a spring loaded bale that allows the canvas sides of the hopper to collapse if contacted by the dumping vehicle.

The **Belt Tensioner** is a telescoping section of the tube structure used to properly tension the conveyor belt. The belt tensioner has two springs which provide the necessary force to keep the belt tight.

6.0 ASSEMBLY INSTRUCTIONS

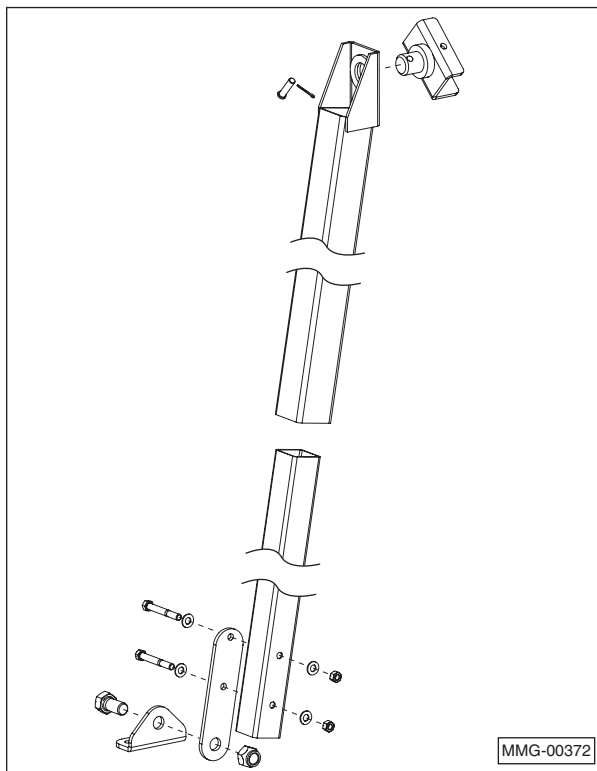
6.1 INITIAL CONVEYOR ASSEMBLY

Meridian Floor Mount Conveyors come fully assembled with the exception of the support frame. A minimum amount of tools are required to check the conveyor before the first use, but no assembly is required.

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

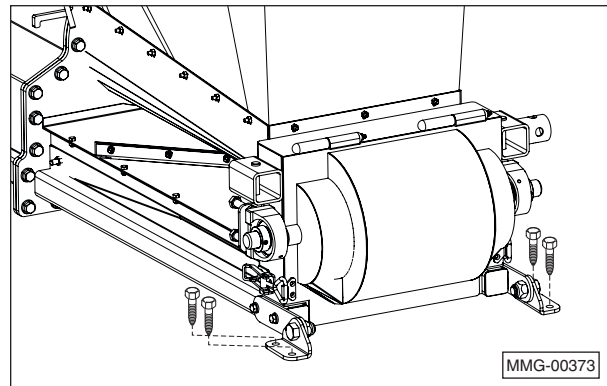
6.2 ANCHORING THE CONVEYOR

1. Assemble the floor mount tubes



1. Determine the location where the conveyor will be anchored. The conveyor should be placed on a concrete floor or concrete pad large enough to safely support the structure.

2. Mount the conveyor to the concrete floor/pad. Use the largest size concrete anchor that will fit through the holes in the mounting plates.



WARNING



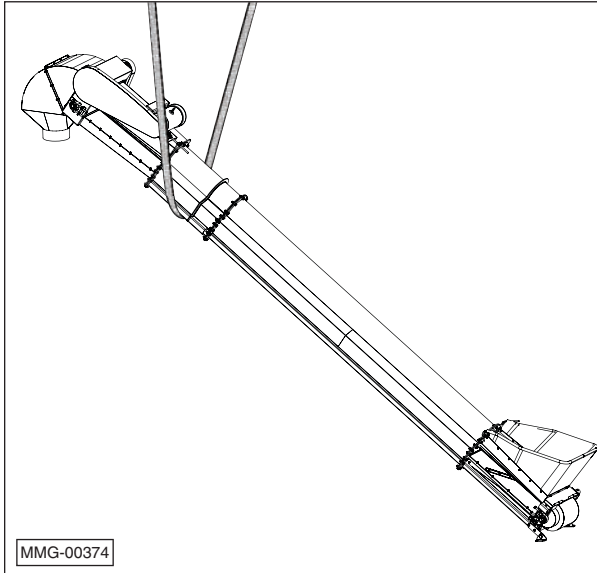
Crush Hazard

To prevent serious injury or death, make sure the conveyor is securely fastened to a stable, concrete surface able to support its weight. The anchors used to hold the conveyor in place must be installed, using the OEM manufacturers recommended instructions, in such a way as to prevent the conveyor from falling or tipping sideways.

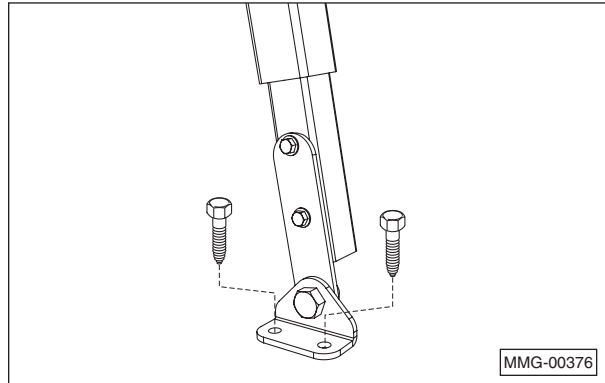
Regardless of the model, the weight of the conveyor will cause serious injury or death should it fall on someone. It is the installers responsibility to make sure the anchors used for installation will prevent the conveyor from falling or tipping.

3. Drill and secure the mounting plates of the conveyor frame to the floor. **Install an anchor through ALL the holes in the mounting plate.**
4. Once all the anchor bolts are installed and tightened, make a final check to be certain they are completely tightened or tightened to the manufacturer's specifications.

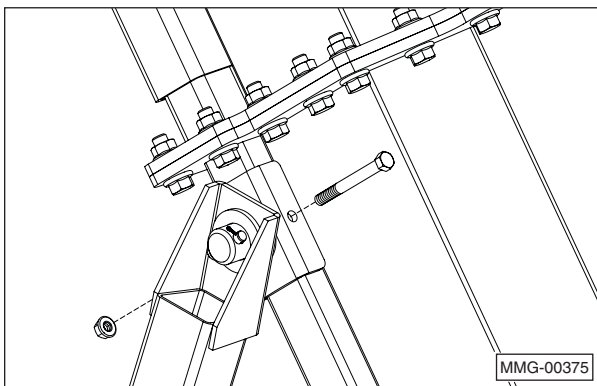
5. Position the conveyor at the desired angle using a forklift or similar. Care should be taken that the straps are properly positioned to prevent the conveyor from slipping while positioning.



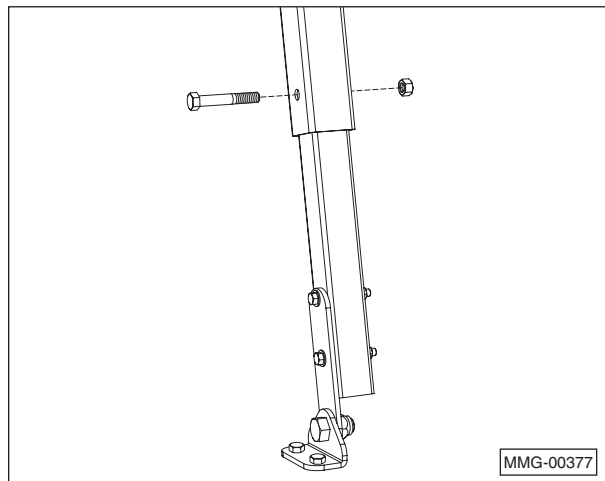
7. Anchor the floor supports (in a similar fashion as the receiving end)



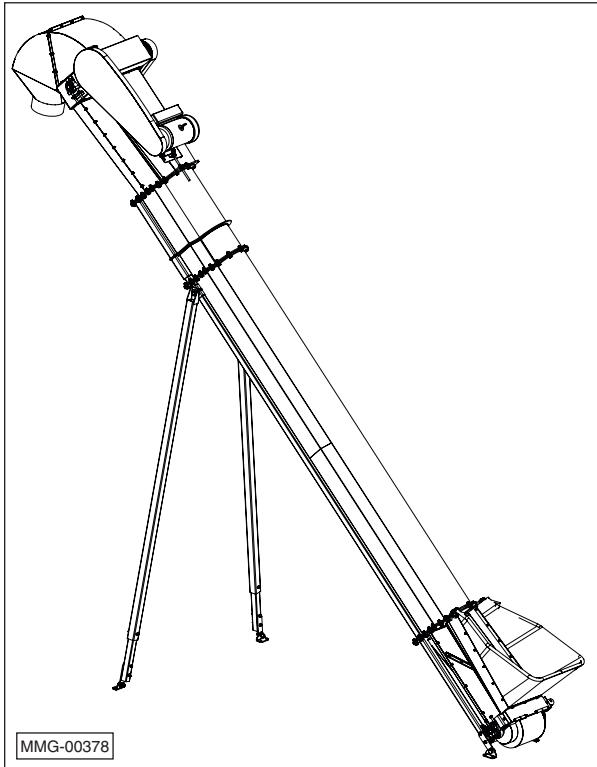
6. Position the leg support brackets at the desired location. Drill a hole through the square tubing of the conveyor and put the bolt through the support bracket and the conveyor tubing



8. Drill a hole through the inside tubing and install the bolt. At this point the straps can be removed.



9. Fully installed








6.3 FINAL CHECK AND TESTING

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

Item to Check	Yes	No
Conveyor is correctly bolted to the floor.		
Conveyor is properly connected to an electrical source.		
Conveyor is properly grounded.		
Conveyor belt operates in the proper direction (electric motor option).		
Conveyor belt tracks in the center of the top roller.		
Conveyor belt tension is correct.		
Drive belt tension is correct (electric motor option).		
Hopper canvas is in place.		
All covers/shields are in place.		
All hazard labels are attached.		
Touch up paint is applied where needed.		

7.0 PRE-OPERATING INSTRUCTIONS

7.1 SAFETY

-  Never operate the conveyor until you have read and completely understand this manual, the engine's Operator Manual, and each of the Safety Messages found on the safety signs.
-  **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 the 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, visually inspect the conveyor for loose bolts, worn parts, cracks, leaks, or frayed belts. Make necessary repairs and always follow maintenance instructions.

7.2 CONVEYOR 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.

7.2.1 Before Starting

- Read and follow the instructions in the Operator's Manual.
- Review and follow the Daily Pre-Operation Checklist below before starting the conveyor.
- Start the conveyor and check the controls. Be sure they function properly.

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

- Recheck the tension and alignment of the conveyor belt.
- Recheck all fasteners. Tighten to their specified torque.

7.3 DAILY PRE-OPERATION CHECK-LIST

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 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:

- Lubricate the conveyor, as outlined and shown in the Maintenance section of this manual.
- Check hardware and fasteners; support frame, bolts, and all other fasteners. Tighten to their specified torque.
- 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.

8.0 OPERATION

8.1 SAFETY

WARNING

To prevent serious injury or death, follow these safety instructions



Entanglement Hazard

Keep hands and clothing clear of moving parts.



Safe Distance

Keep all bystanders, pets, and livestock clear of the work area.

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.

8.2 BEFORE EACH USE

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

8.3 OPERATING CONTROLS

8.3.1 On/Off Control Box (Owner Supplied)

The conveyor belt motor 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.



8.4 CONVEYOR BELT OPERATION

1. Install an owner supplied control switch to start and stop the conveyor belt.
2. Install some type of emergency stop button or switch to stop the conveyor in an emergency situation.

WARNING


















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





9.0 MAINTENANCE



9.1 SAFETY

9.1.1 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.     
Always use personal protection devices, such as eye, hand, and hearing protectors, when performing any service or maintenance.
4.  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.
5.   A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this conveyor.
6.  Periodically tighten all bolts, nuts, and screws and ensure all cotter pins are properly installed to ensure the conveyor is in safe condition.
7.  When completing a maintenance or service function, make sure all safety shields and devices are installed before placing the conveyor in service.
8.  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.
9.  Never operate or test any function of the conveyor when people are in an area of a potential crush hazard.
10.  Keep hands, feet, clothing, jewelry, and long hair away from any moving parts to prevent them from getting caught.
11.  Understand the service procedure before performing the work. Keep area clean and dry.
12.  Replace all worn or damaged safety and instruction decals.

13.  Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts.
14.  Do not leave tools lying on the conveyor.
15.   Do not modify conveyor or safety devices. Do not weld on the conveyor. Unauthorized modifications may impair its function and safety.

If the conveyor has been altered in any way from the original design, the manufacturer does not accept any liability for injury or warranty.
16.  Never replace hex bolts with less than Grade 5 bolts unless otherwise specified.
17.  Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore the conveyor to original specifications. The manufacturer will not claim responsibility for damages as a result of the use of unapproved parts.

9.1.2 Lock-Out or Tag-Out Safety

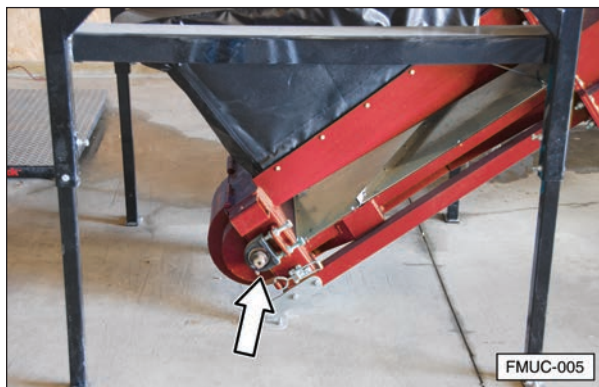
1.   Establish a formal Lock-Out or Tag-Out program for your operation.
2.  Train all operators and service personnel before allowing them to work around the seed delivery system.
3.  Provide tags on the conveyor and a sign-up sheet to record tag-out details.

9.2 LUBRICATION

Use the Conveyor Service Record 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 (both sides)



Conveyor Belt Upper Roller (both sides)

9.3 CONVEYOR SERVICE RECORD

Date:																			
Serviced by:																			
<u>8 hours or daily</u>																			
Check Conveyor Belt Alignment.																			
Lubricate All Roller Bearings.																			
<u>50 Hours or Weekly</u>																			
Check Conveyor Belt Tension.																			
<u>400 hours or annually</u>																			
Check Frame for Cracks or Other Damage.																			
Check Conveyor Belt for Damage.																			
Check Conveyor Tube for Damage.																			
Check All Roller Bearings for Unusual Noise While Belt Is Operating.																			
Check Hopper Canvas for Damage.																			
Thoroughly Clean Conveyor.																			

9.3.1 Daily (8 Hours)

1. Check conveyor belt for proper tracking.

9.3.2 Weekly (50 Hours)

1. Check the tension on the conveyor belt.
Adjust tension as needed.

9.3.3 Annually (400 Hours)

1. Check frame and conveyor tube for cracks and damage.
2. Thoroughly clean the entire conveyor.
3. Check all roller bearings for damage.
4. Check the conveyor belt for wear or damage.

9.4 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



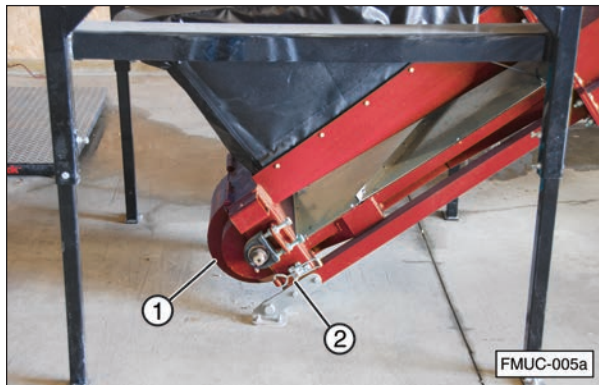
Personal Injury Hazard
Repairs or modifications to the support frame can result in serious injury or death should these repairs fail.

IMPORTANT NOTICE

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

9.5 CONVEYOR BELT REPLACEMENT

1. Open lower access cover (1) by releasing latch (2) on both sides.

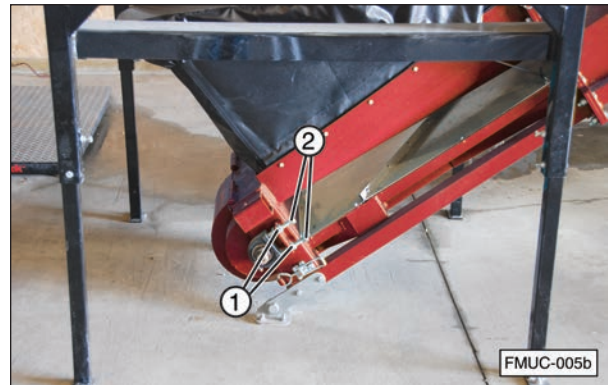


2. It may not be necessary to remove the upper discharge housing to replace the worn conveyor belt.
 - a. If the old belt is in place, attach the new belt to the old one at the splice. Pull the new conveyor belt into place using the old belt.
 - b. If the old belt is no longer inside the conveyor tube, follow the steps below.

3. Attach a 1/4 cable or rope to the loops of the belt splice connector.



4. Pull the conveyor belt into the tube structure with the cable or rope.
5. Feed the cable or rope back through the lower chamber of the conveyor tube. This can be done by connecting a weight to a string and letting the weight slide down through the conveyor tube.
6. Use the string to pull the cable or rope through the conveyor tube. Then pull the conveyor belt back through the tube so that both ends of the belt are accessible.
7. Loosen jam nuts (1) and loosen adjusting bolts (2).



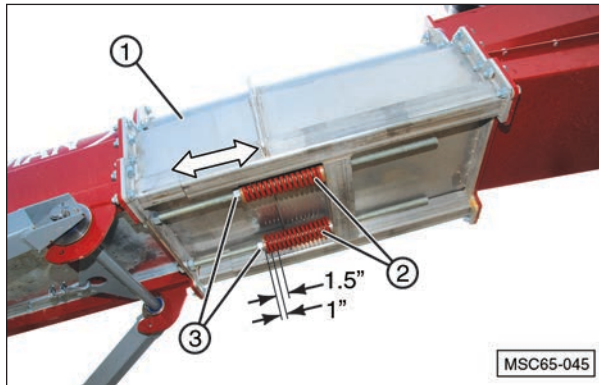
⚠️ WARNING



Spring Tension Hazard

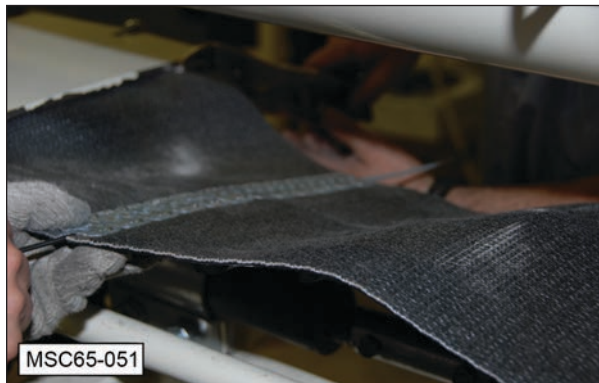
Compressed springs can contain enough energy to cause serious bodily injury and even death. Use extreme caution when working around springs that are compressed.

- Loosen the tension on springs (2) and slide belt tensioner unit (1) together enough to allow the ends of the belt to be connected. Rotate nuts (3) counterclockwise to loosen the spring tension.

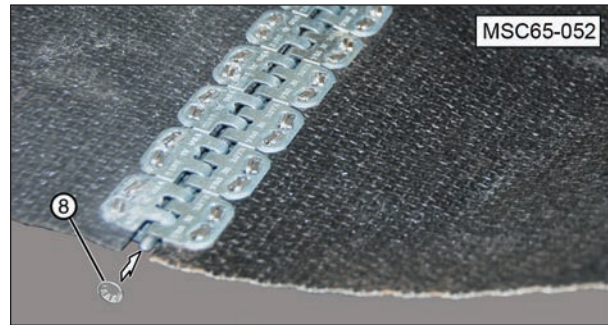


- Join the two ends of the belt together by feeding the plastic covered steel cable through the connector loops.

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



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



9.6 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.



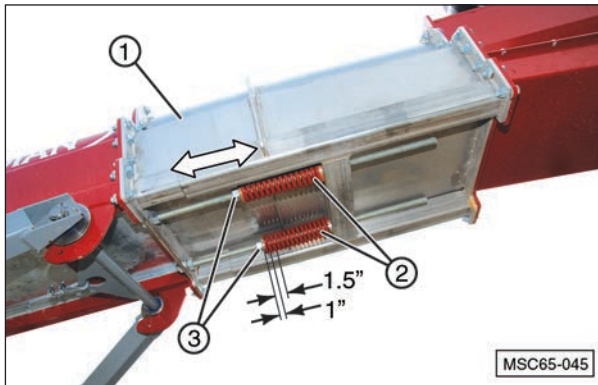
⚠️ WARNING



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.

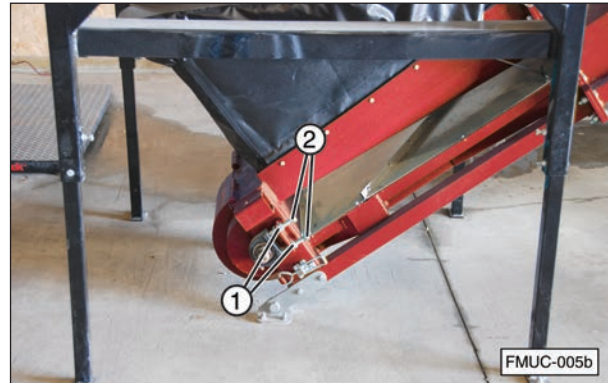
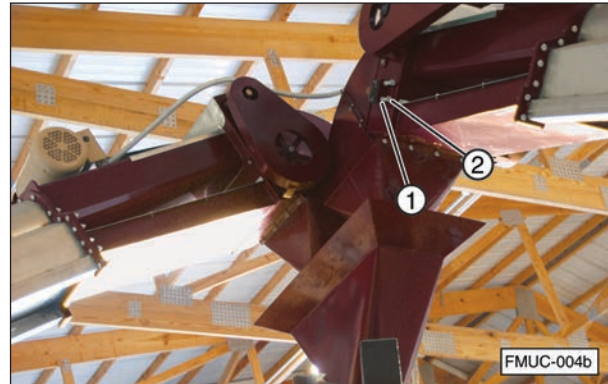
Note: These two marks will provide reference points when making future belt tension checks.

6. Thread nuts (3) equal amounts to place approximately the same tension on each spring.
7. After nuts (1) 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.

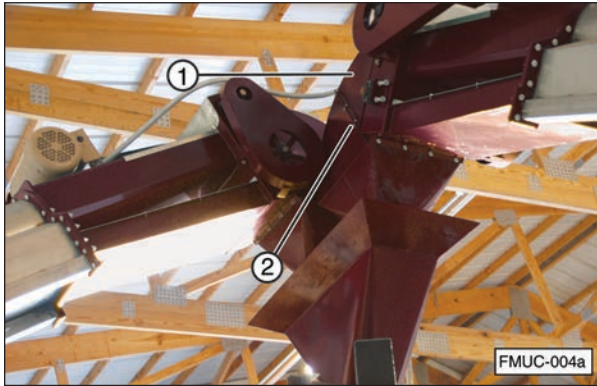
9.7 ADJUST BELT TRACKING

1. Start the belt moving while listening for any unusual noises. Stop the conveyor immediately if unusual noises are heard.

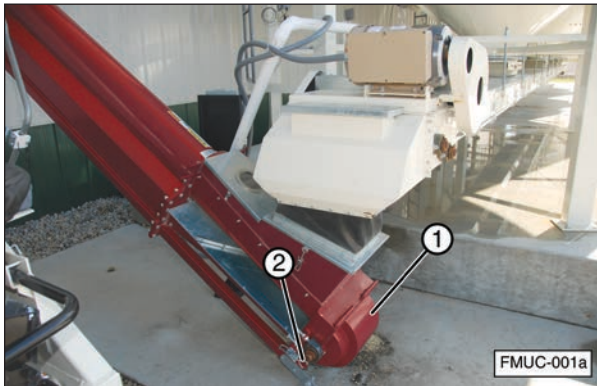
Note: The upper and lower roller tracking adjustments for the belt are on both sides of the conveyor tube.



- If necessary, remove discharge hood (1) by removing bolts (2). Open lower cover (1) by releasing latches (2).



FMUC-004a



FMUC-001a

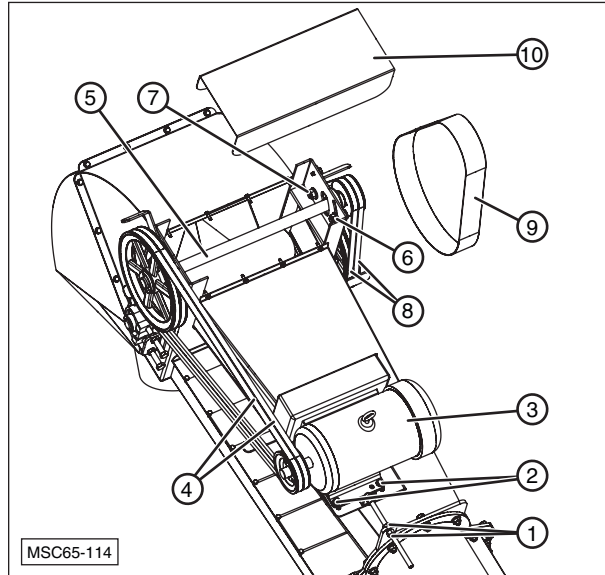
- The belt should track in the middle of the top and bottom rollers, as shown.



FMUC-007

- Loosen jam nuts (1) on both sides of the conveyor tube.
- Turn adjusting screws (2) to adjust the tracking of the belt.
- Once the belt tracking is adjusted, tighten jam nuts (1).
- Recheck the belt tension.
- Close the lower access cover and lock the latches in place.
- If removed, reinstall the discharge hood.

9.8 REPLACE OR TIGHTEN DRIVE BELTS



MSC65-114

⚠ WARNING

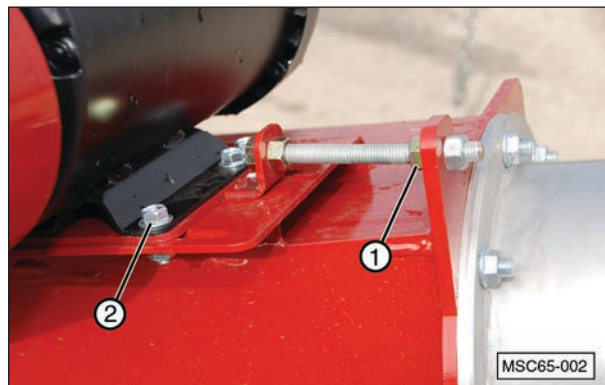
OEM Replacement Parts Only
 Using parts from other manufacturers can result in failure of that part, causing equipment damage and possible serious injury or death.

There are two sets of matched V-belts (items 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.

9.8.1 Adjusting Drive Belt Tension

- Remove covers (9 and 10).



MSC65-002

-
2. 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).
3. 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).

9.8.2 Replacing Drive Belts

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

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

10.0 TROUBLESHOOTING

10.1 TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
Conveyor belt will not start.	No electrical power.	Connect electric cable 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 Belt Tracking in this manual.

11.0 WARRANTY

11.1 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 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, 2012

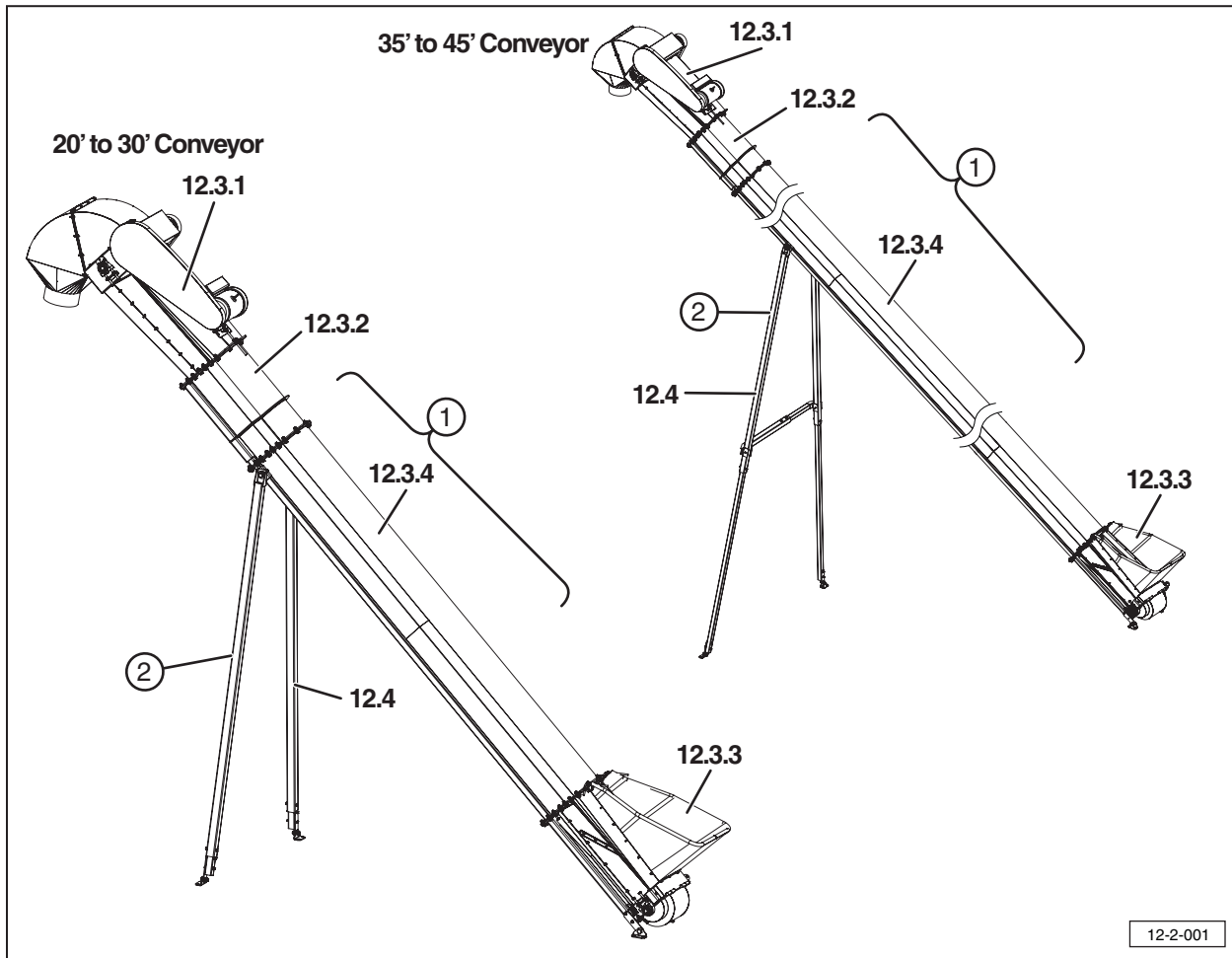
12.0 PARTS

12.1 GENERAL INFORMATION

The following pages contain a list of serviceable parts for the Transport Conveyor. There are six models: 20', 25', 30', 35', 40', and 45'.

Replacement parts are available from your authorized Dealer Parts Department.

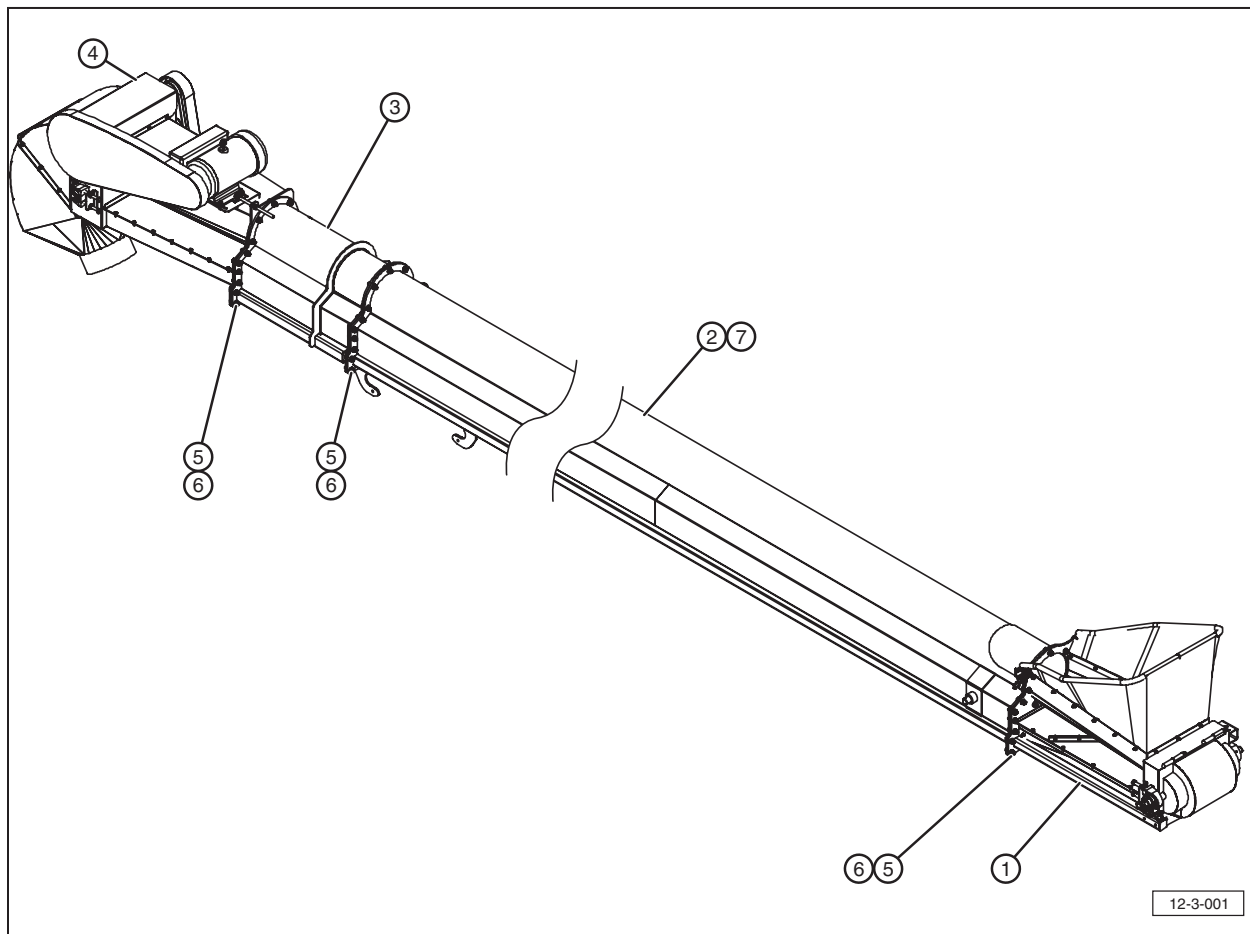
12.2 CONVEYOR ASSEMBLY



12-2-001

ITEM	QTY	PART #	DESCRIPTION
—	1	47355 47335 47336 47337 47339 47341	Floor Mount Conveyor, 20' Floor Mount Conveyor, 25' Floor Mount Conveyor, 30' Floor Mount Conveyor, 35' Floor Mount Conveyor, 40' Floor Mount Conveyor, 45'
1	1	37843 37697 37702 37705 37753 37783	Conveyor Assembly, Red, 20' Conveyor Assembly, Red, 25' Conveyor Assembly, Red, 30' Conveyor Assembly, Red, 35' Conveyor Assembly, Red, 40' Conveyor Assembly, Red, 45'
2*	2 2 2 1 1 1	37846 37554 37554 34153 34153 34153	Support Frame, 20' Support Frame, 25' Support Frame, 30' Support Frame, 35' Support Frame, 40' Support Frame, 45'

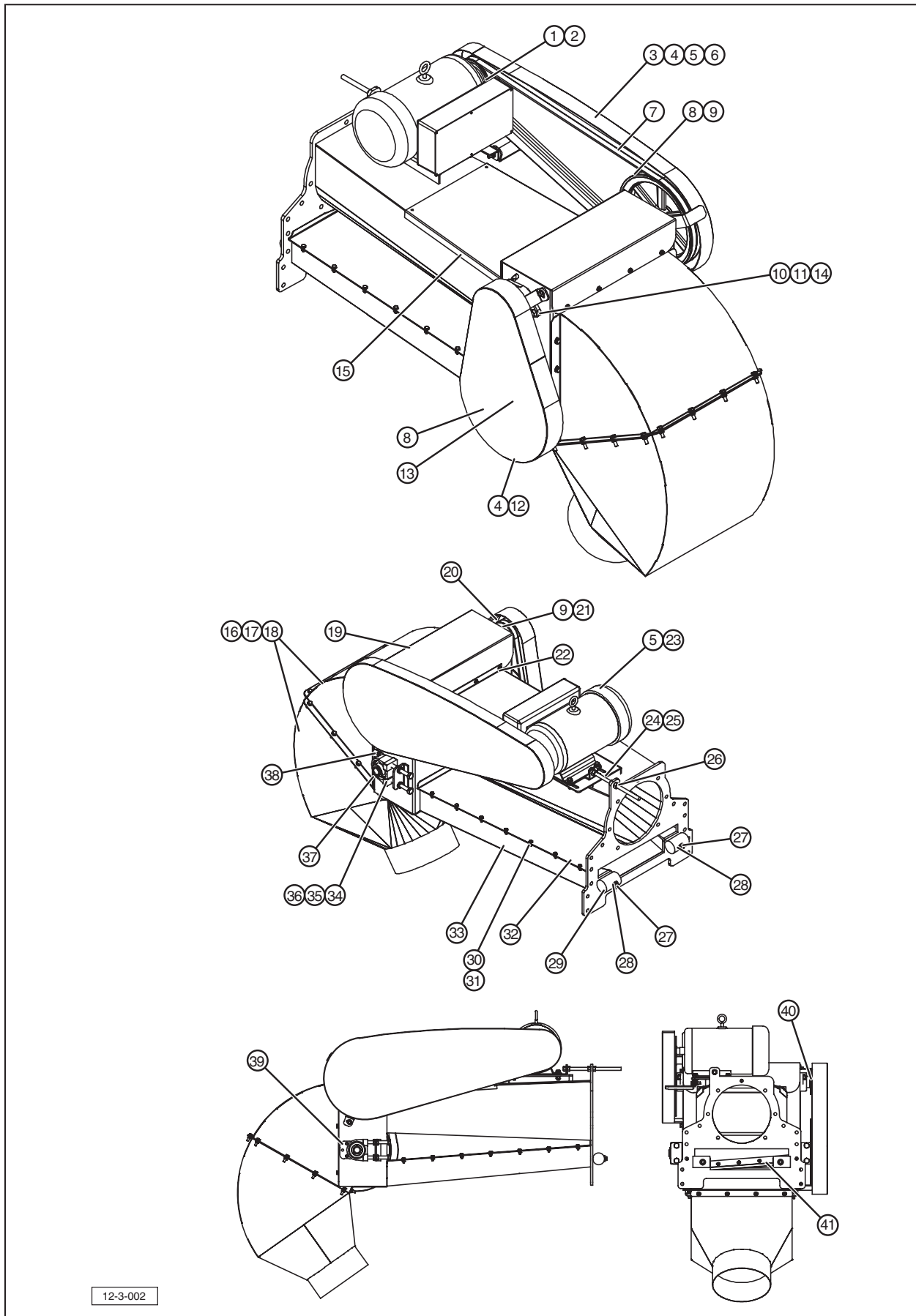
12.3 TUBE ASSEMBLY WITH ENDS (ALL CONVEYORS)



ITEM	QTY	PART #	DESCRIPTION
1*	1	37637	Receiving End, Red
2*	1	37845	Center Assembly, Tube, 20', Red
		37699	Center Assembly, Tube, 25', Red
		37701	Center Assembly, Tube, 30', Red
		37704	Center Assembly, Tube, 35', Red
		37752	Center Assembly, Tube, 40', Red
		37782	Center Assembly, Tube, 45', Red
3*	1	38592	Assembly, Tension System
4*	1	37641	Assembly, Discharge, Red
5	—	19575	Bolt, Hex, Flanged, 1/2-13 x 1-1/2"
6	—	19595	Nut, Hex, Flanged, 1/2-13
7	1	27622	Belt, Meridian 20' Conveyor
		27543	Belt, Meridian 25' Conveyor
		27544	Belt, Meridian 30' Conveyor
		27545	Belt, Meridian 35' Conveyor
		27546	Belt, Meridian 40' Conveyor
		27547	Belt, Meridian 45' Conveyor

* See separate section for additional parts.

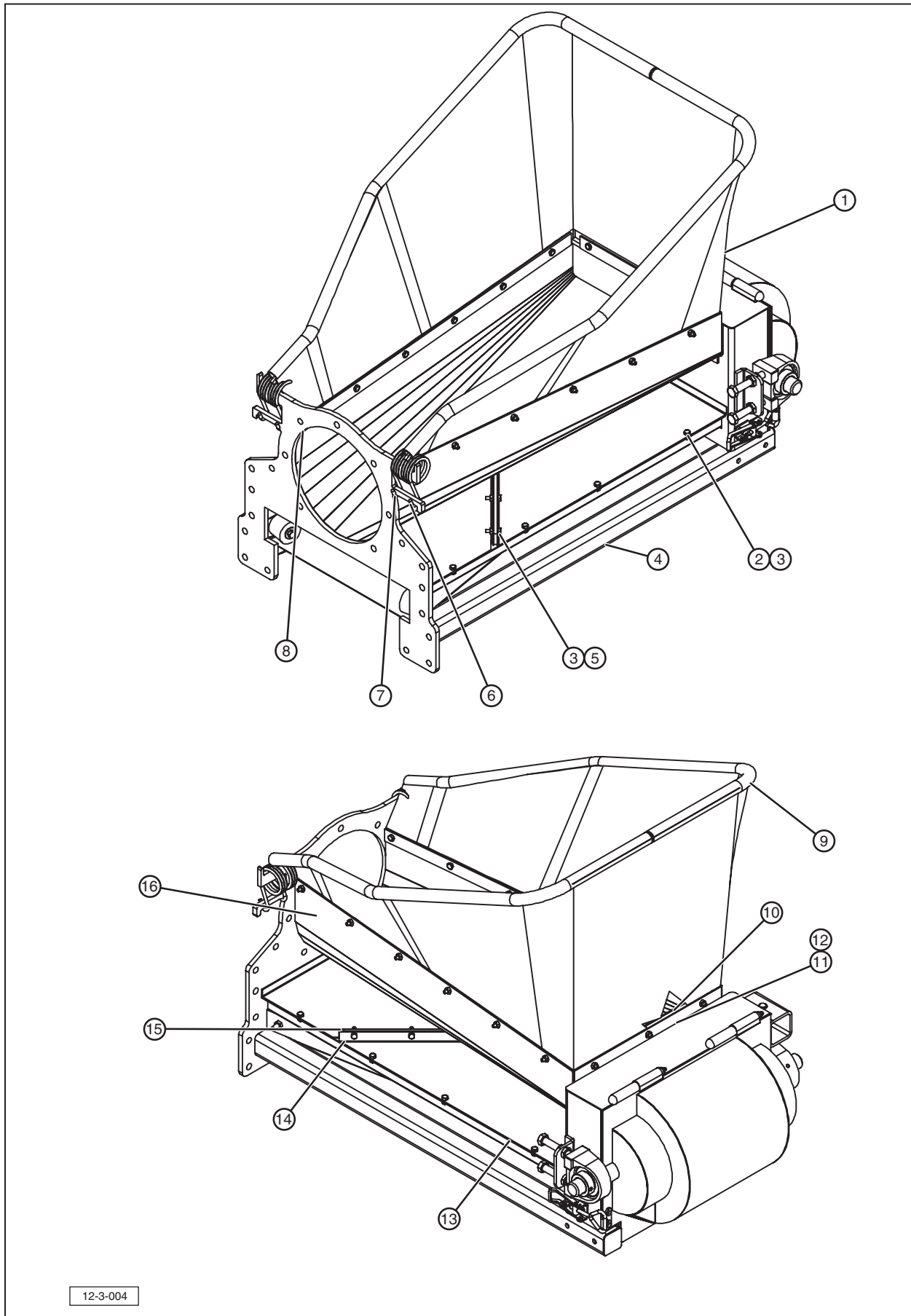
12.3.1 37641 DISCHARGE END (ALL CONVEYORS)



12-3-002

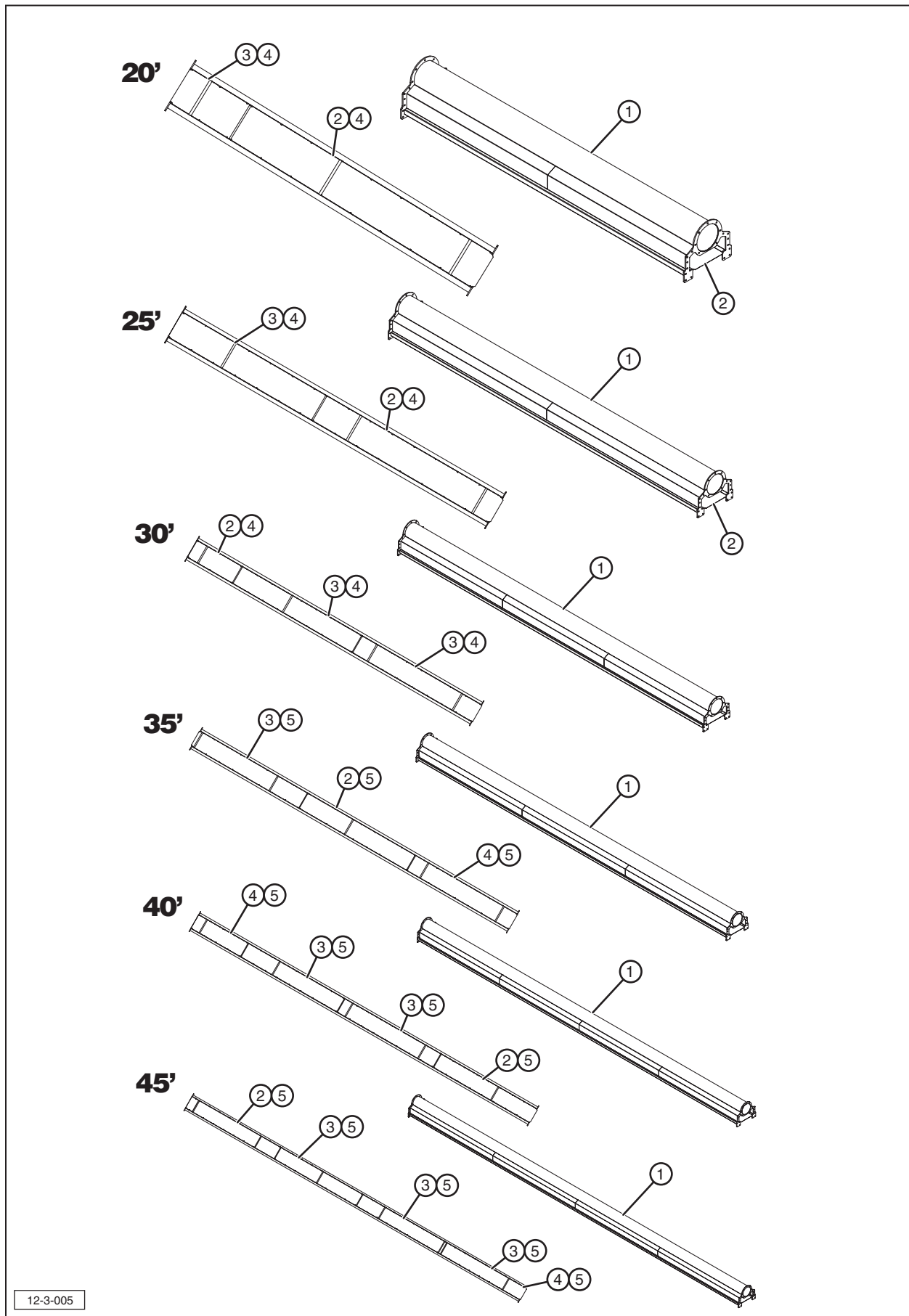
ITEM	QTY	PART #	DESCRIPTION
1	1	27465	Pulley, 5" Double Belt B Belt
2	1	17840 17843	Bushing, Split Taper H118 (5 HP) Bushing, Split Taper H138 (7.5 HP)
3	1	37644	Motor, V-Belt Cover Red
4	4	18478	Screw, Flanged, Self-Tapping Type D 3/8-16 x 3/4" Plain Indented Washer
5	5	18680	Bolt, Hex, Flanged, Steel, Mild 3/8-16 x 1-1/4"
6	1	19564	Nut, Hex, Flanged, 3/8-16
7	2	18358	V-Belt, B83
8	2	18345	Pulley, 12" Double Belt B Belt
9	2	27517	Bushing, Split Taper, H114
10	2	27441	Flange, Two-Bolt Bearing Assembly
11	4	18464	Bolt, Hex, 1/2-13 x 1-1/2", Steel, Mild
12	1	37643	Cover, Roller V-Belt, Red
13	1	17839	Bushing, Split Taper, H1
14	4	19595	Nut, Hex, Flanged, 1/2-13
15	1	27733	Cover, Removable Top
16	16	19318	Nut, Hex, Flanged, 5/16-18
17	22	19581	Bolt, Hex, Flanged, 5/16-18 x 1"
18	1	37646	Chute, Discharge Weldment, Red
19	1	27731	Cover, Speed Reducer Shaft
20	2	18426	V-Belt, B48
21	1	27466	Pulley, 4-1/4" Double Belt B Belt
22	12	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling
23	1	—	Motor, (See Section 4.2 for Part Numbers)
24	1	27849	Rod, Electric Motor V-Belt Tension
25	1	27632	Slide, Electric Discharge Motor, Red
26	4	19369 MS	Nut, Hex 1/2-13 Steel, Mild
27	2	19330	Bolt, Hex, 3/8-16 x 3 Steel, Mild
28	2	18473	Washer, 3/8 - Wide - Type A Steel, Mild
29	2	27756	Belt Guide, Discharge End, Plastic
30	19	19305	Nut, Hex 1/4-20
31	14	18484	Bolt, Hex, 1/4-20 x 5/8" Steel, Mild
32	1	27781	Cover, Meridian Belt Tray
33	1	37642	Weldment, Discharge, Red
34	2	27467	Block, Bearing Assembly Kal-Pa206
35	4	18475	Bolt, Hex Head M14 x 100 Din En Iso 4017
36	8	18474	Nut, Hex Jam - Metric M14 x 2
37	1	27845	Driving Roller, Inclined Conveyor
38	12	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling
39	2	37647	Roller, Insert Cover, Red
40	1	27844	Speed Reducer Shaft
41	1	27779	Scraper, Rubber

12.3.2 37637 RECEIVING END (ALL CONVEYORS)



ITEM	QTY	PART #	DESCRIPTION
1	1	27792	Hopper, Canvas
2	29	19305	Nut, Hex 1/4-20
3	8	19300	Bolt, Hex, 1/4-20 x 1/2" Steel, Mild
4	1	37638	Assembly, Receiving End, Red
5	21	19301	Bolt, Hex, 1/4-20 x 1"
6	1	27468	Spring, Left
7	1	27477	Spring, Right
8	1	27794	Cover, Bottom Belt, Galvanized
9	1	36006	Tube, Receiving Canvas
10	1	27791	Plate, Canvas Hopper, Back Hold Down
11	1	27518	Hold Down, Brush 15-3/4"
12	1	27456	Brush, 4"
13	1	27796	Cover, Bottom Belt, Galvanized
14	1	27799	Scraper, Rubber
15	1	27798	Holder, Scraper
16	2	27790	Plate, Canvas Hopper, Hold Down
		11048	Short/Narrow Hopper Canvas
		38658	Tall/Wide Hopper Kit (Canvas Tube & Canvas)
		38659	Short/Wide Hopper Kit (Canvas Tube & Canvas)
		38677	Tube for Wide Hopper
		17723	Canvas for Wide/Short Hopper
		17724	Canvas for Wide/Tall Hopper

12.3.3 TUBE ASSEMBLY (20', 25', 30', 35', 40', AND 45')



12-3-005

37845 TUBE ASSEMBLY 20'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37844	Tube, Painted 20' A-Frame, Red
2	1	27783	Cover, 10" Tube, Galvanized
3	1	27621	Cover, 10" Tube, Galvanized
4	24	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

37699 TUBE ASSEMBLY 25'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37698	Tube, Painted 25' A-Frame, Red
2	1	27783	Cover, 10" Tube, Galvanized
3	1	27475	Cover, 10" Tube, Galvanized
4	32	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

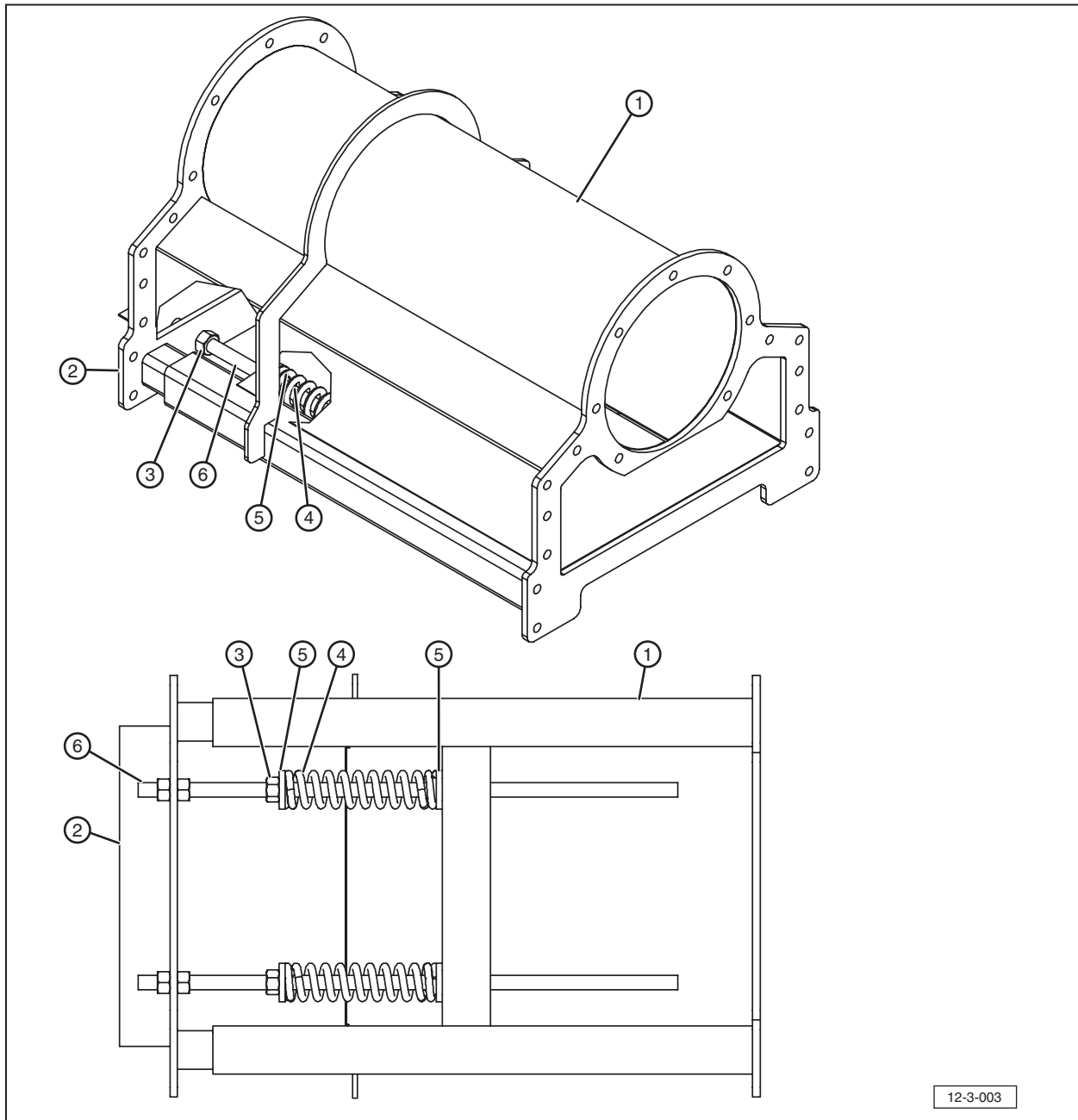
37701 TUBE ASSEMBLY 30'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37700	Tube, Painted 30' A-Frame, Red
2	1	27459	Cover, 10" Tube, Galvanized Bottom
3	1	27785	Cover, 10" Tube, Galvanized Bottom
4	42	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

37704 TUBE ASSEMBLY 35'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37703	Tube, Painted 35' A-Frame, Red
2	1	27785	Cover, Galvanized Bottom 10" Tube
3	1	27783	Cover, 10" Tube, Galvanized
4	1	27476	Cover, 10" Tube, Galvanized
5	52	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

37752 TUBE ASSEMBLY 40'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37751	Tube, Painted 40' A-Frame, Red
2	1	27783	Cover, 10" Tube, Galvanized
3	1	27785	Cover, 10" Tube, Galvanized Bottom
4	1	27592	Cover, 10" Tube, Galvanized 40'
5	64	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

37782 TUBE ASSEMBLY 45'			
ITEM	QTY	PART #	DESCRIPTION
1	1	37781	Tube, Painted 45' A-Frame, Red
2	1	27783	Cover, 10" Tube, Galvanized
3	1	27785	Cover, 10" Tube, Galvanized Bottom
4	1	27598	Cover, 10" Tube, Galvanized 45'
5	74	19597	Screw, 1/4-14 x 3/4" Hex Washer Head Self Drilling

12.3.4 38592 TENSION SYSTEM ASSEMBLY (ALL CONVEYORS)

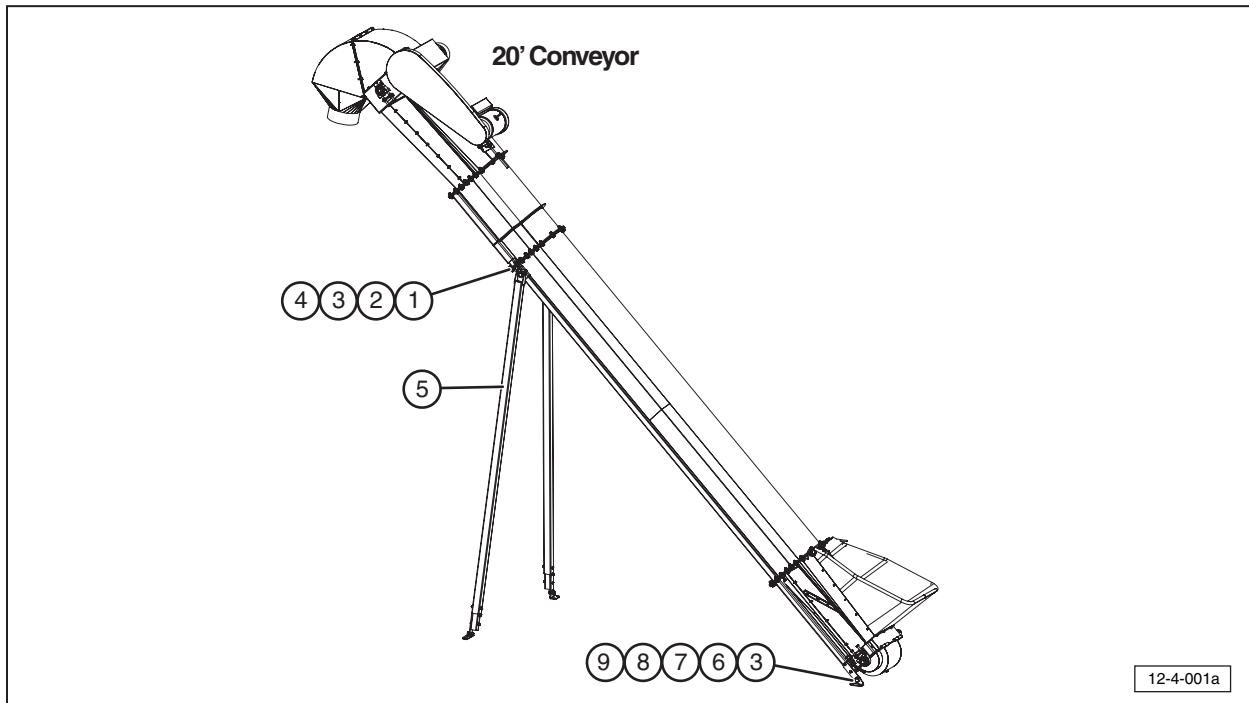


12-3-003

ITEM	QTY	PART	DESCRIPTION
1	1	38594	Assembly, Top, Tension System
2	1	38593	Assembly, Tension System
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	Holder, Tension System Spring, Galvanized
6	2	27716	Rod, Tension, System Tension

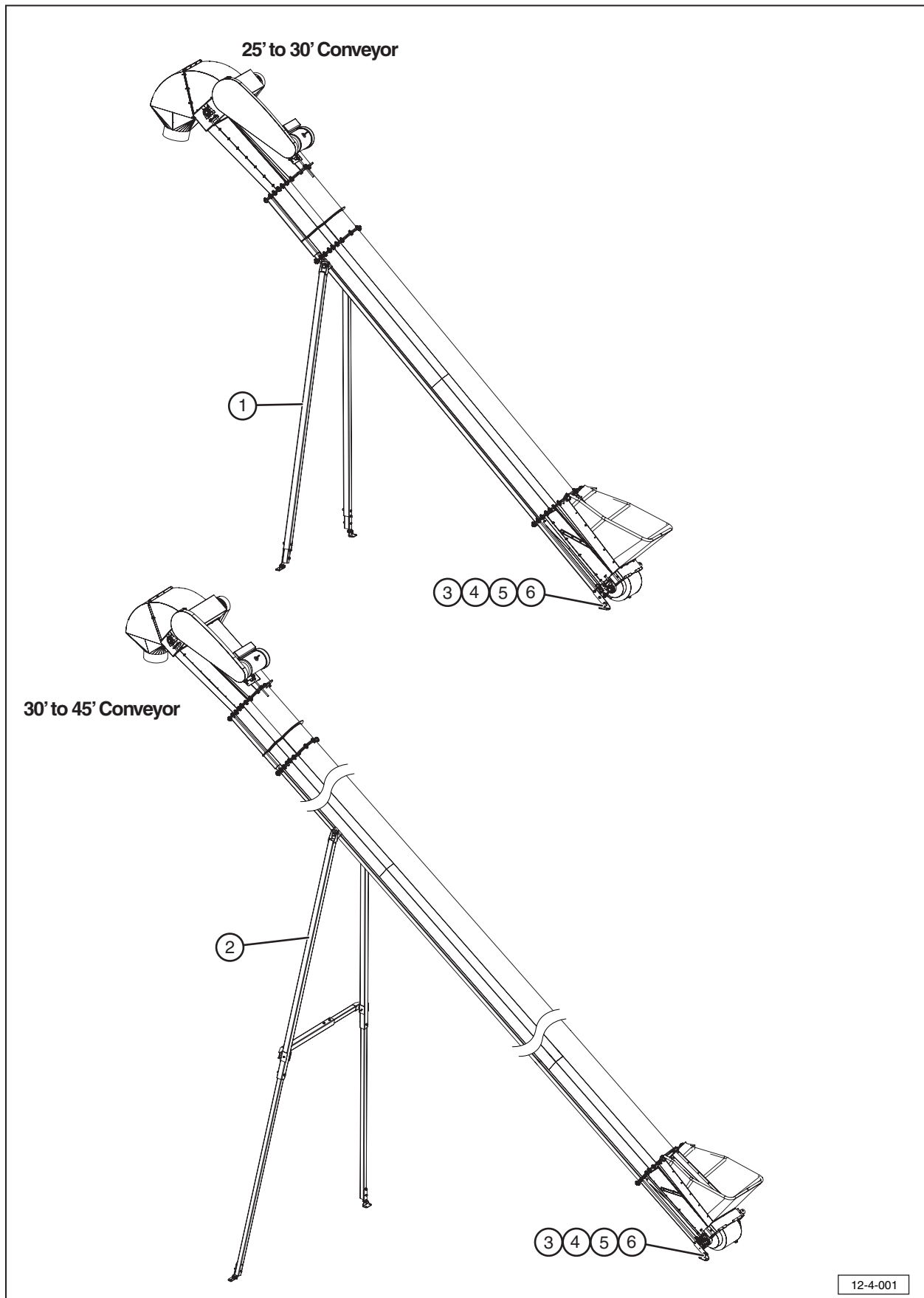
12.4 SUPPORT FRAME ASSEMBLIES

12.4.1 Support Frame Assembly For 20' Conveyor



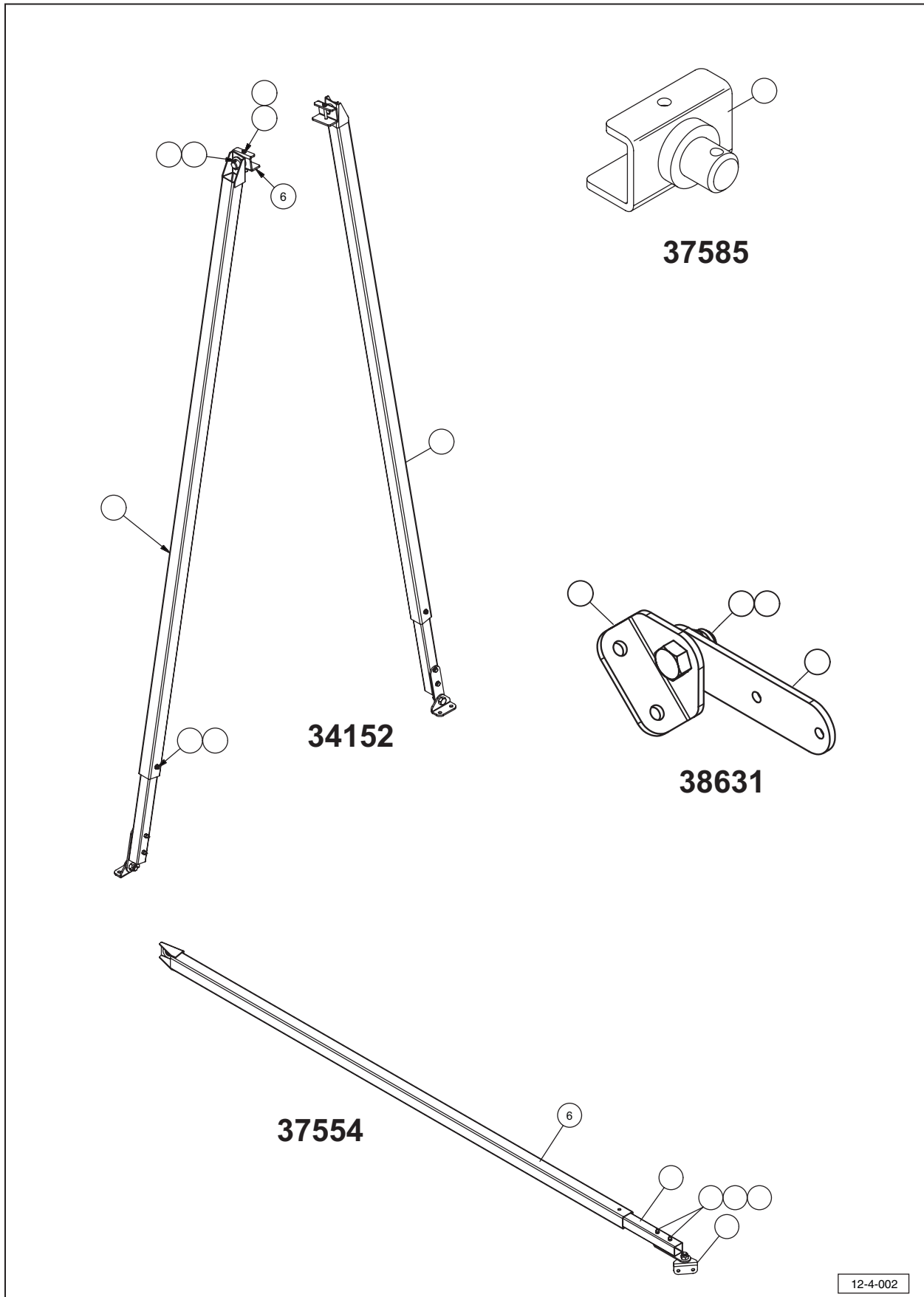
20' FLOOR MOUNT FRAME			
ITEM	QTY	PART #	DESCRIPTION
1	2	18471	Pin, Clevis, 0.375" x 1.5", Steel, Mild
2	2	19331	Bolt, Hex, 3/8-16 x 3.5"
3	4	19564	Nut, Hex, Flanged, 3/8-16
4	2	37585	Tube, Floor Mount, Pivot, Gray
5	2	37846	Tube, Floor Mount, Telescopic
6	2	19539	Bolt, Hex, Flanged, 3/8-16 x 3"
7	2	38631	Pivot Assembly Floor Mount Receiving End
8	4	18355	3/8" Regular Helical Spring Lock Washers
9	4	19343	Nut, Hex 3/8-16"

12.4.2 Support Frame For 25 to 45' Conveyors



SUPPORT FRAME FOR 25 TO 45' CONVEYORS			
ITEM	QTY	PART #	DESCRIPTION
1	1	34152	Floor Mount Frame, 25 to 30'
2	1	34153	Floor Mount Frame, 35 to 45'
3	2	38631	Pivot Assembly Floor Mount Receiving End
4	4	19330	Bolt, Hex, 3/8-16 x 3" Steel, Mild
5	4	18355	3/8" Regular Helical Spring Lock Washers
6	4	19343	Nut, Hex 3/8-16"

12.4.3 Support Frame Assembly For 25 to 40' Conveyors



12-4-002

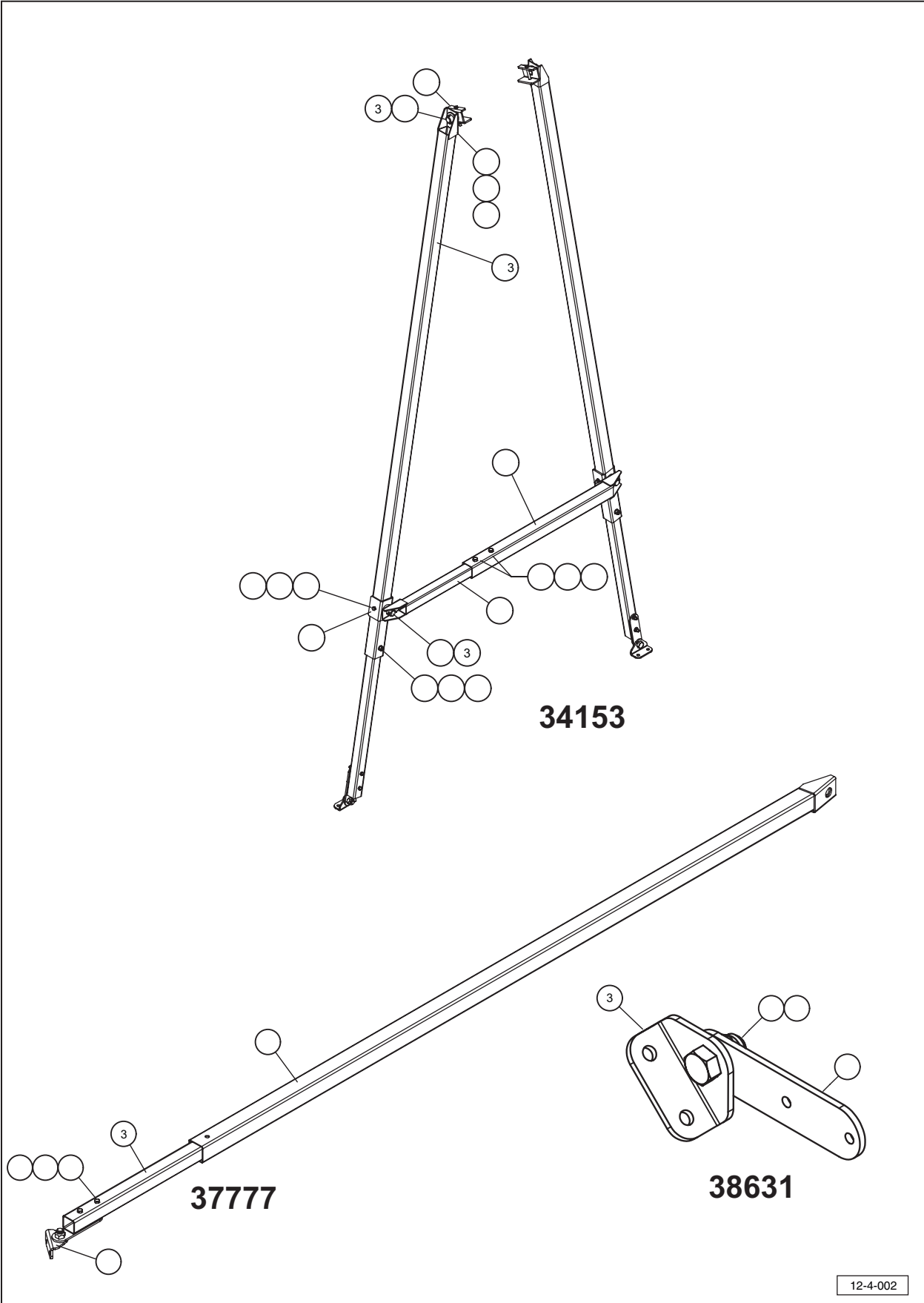
34152 FLOOR MOUNT FRAME			
ITEM	QTY	PART #	DESCRIPTION
1	2	18471	Pin, Clevis, 3/8" x 1-1/2", Steel, Mild
2	2	19331	Bolt, Hex, 3/8-16 x 3-1/2"
3	2	19539	Bolt, Hex, Flanged, 3/8-16 x 3"
4	4	19564	Nut, Hex, Flanged, 3/8-16
5	2	37554	Tube, Floor Mount, Telescopic
6	2	37585	Tube, Floor Mount, Pivot, Gray
7	2	13073702016	Pin, Cotter, 1/16 x 1/2"

37585 FLOOR MOUNT TUBE PIVOT			
ITEM	QTY	PART #	DESCRIPTION
1	2	37585	Tube, Floor Mount, Pivot, Gray

38631 FLOOR MOUNT PIVOT ASSEMBLY			
ITEM	QTY	PART #	DESCRIPTION
1	1	18476	Bolt, Hex, 3/4-10 x 1-1/2" Steel, Mild
2	1	18472	Nut, Hex, Nylock, 3/4-10 Steel, Mild
3	1	27479	Bracket Floor Mount Floor, Gray
4	1	27480	Bracket Floor Mount Tube, Gray

37554 TELESCOPIC FLOOR MOUNT TUBE			
ITEM	QTY	PART #	DESCRIPTION
1	1	38631	Pivot Assembly Floor Mount Receiving End
2	2	19068	Washer, Plain (Inch)
3	2	19343	Nut, Hex, 3/8-16
4	2	19330	Bolt, Hex, 3/8-16 x 3" Steel, Mild
5	1	27450	Support Tube Floor Mount, Gray
6	1	37580	Telescopic Frame Top Tube, Gray

12.4.4 Support Frame Assembly For 45' Conveyors



12-4-002

34153 FLOOR MOUNT FRAME			
ITEM	QTY	PART #	DESCRIPTION
1	4	18355	Washer, Regular, Helical Spring Lock, 3/8" (Inch Series)
2	4	18456	Bolt, Hex, 1/2-13 x 3-1/4", Steel, Mild
3	4	18471	Pin, Clevis, 3/8 x 1-1/2", Steel, Mild
4	4	18486	Washer, Regular, Helical Spring Lock, 1/2" (Inch Series)
5	2	19331	Bolt, Hex, 3/8-16 x 3-1/2"
6	4	19343	Nut, Hex, 3/8-16
7	4	19369 MS	Nut, Hex, 1/2-13, Steel, Mild
8	2	19596	Bolt, Hex, 3/8-16 x 4"
9	2	37585	Pivot Floor Mount Tube, Gray
10	1	37772	Telescopic Top Tube, Gray
11	1	37774	Telescopic Frame Top Tube, Gray
12	2	37776	Cross Brace Swivel Point, Gray
13	2	37777	Telescopic Floor Mount Tube Assembly
14	4	13073702016	Pin, Cotter, 1/16 x 1/2"

37777 TELESCOPIC FLOOR MOUNT TUBE			
ITEM	QTY	PART #	DESCRIPTION
1	1	38631	Pivot Assembly, Floor Mount Receiving End
2	1	37580	Telescopic Frame Top Tube, Gray
3	1	37778	Tube, Telescopic, 45 ft, Gray
4	2	19330	Bolt, Hex, 3/8-16 x 3", Steel, Mild
5	2	19068	Washer, Plain (Inch), Type A And B
6	2	19343	Nut, Hex, 3/8-16

38631 FLOOR MOUNT PIVOT ASSEMBLY			
ITEM	QTY	PART #	DESCRIPTION
1	1	18476	Bolt, Hex, 3/4-10 x 1-1/2 " Steel, Mild
2	1	18472	Nut, Hex, Nylock, 3/4-10 Steel, Mild
3	1	27479	Bracket Floor Mount Floor, Gray
4	1	27480	Bracket Floor Mount Tube, Gray

NOTES

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