# **OPERATORS MANUAL**





J. & M. Mfg. Co., Inc. 284 Railroad Street - P.O. Box 547 Fort Recovery, OH 45846 Ph: (419) 375-2376 Fax: (419) 375-2708 www.jm-inc.com

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#### To The Dealer

Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration found on the Dealer Portal website located at dealer.jm-inc.com and return it to J. & M. Mfg. Co., Inc. at the address indicated on the form. Warranty claims will be denied if the Warranty Registration has not been submitted.

#### **EXPRESS WARRANTY:**

J. & M. Mfg. Co. Inc. warrants against defects in construction or materials for a period of ONE year. We reserve the right to inspect and decide whether material or construction was faulty or whether abuse or accident voids our guarantee.

Warranty service must be performed by a dealer or service center authorized by J. & M. Mfg. Co., Inc. to sell and/or service the type of product involved, which will use only new or re-manufactured parts or components furnished by J. & M. Mfg. Co., Inc. Warranty service will be performed without charge to the purchaser for parts or labor based on the Warranty Labor Times schedule. Under no circumstance will allowable labor times extend beyond the maximum hours indicated in the Warranty Labor Times schedule for each warranty procedure. The purchaser will be responsible, however, for any service call and/or transportation of the product to and from the dealer or service center's place of business, for any premium charged for overtime labor requested by the purchaser, and for any service and/or maintenance not directly related to any defect covered under the warranty. Costs associated with equipment rental, product down time, or product disposal are not warrantable and will not be accepted under any circumstance.

Each warranty term begins on the date of product delivery to the purchaser. Under no circumstance will warranty be approved unless (i) the product warranty registration card has been properly completed and submitted to the equipment manufacturer, and (ii) a warranty authorization number has been issued by the equipment manufacturer. This Warranty is effective only if the warranty registration card is returned within 30 days of purchase.

This warranty does not cover a component which fails, malfunctions, or is damaged as a result of (i) improper modification or repair, (ii) accident, abuse or improper use, (iii) improper or insufficient maintenance, or (iv) normal wear or tear. This warranty does not cover products that are previously owned and extends solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this implied, with respect to tires or other parts or accessories not manufactured by J. & M. Mfg. Co., Inc. Warranties for these items, if any, are provided separately by their respective manufacturers.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

In no event shall J. & M. Mfg. Co., Inc. be liable for special, direct, incidental or consequential damages of any kind. The exclusive remedy under this Warranty shall be repair or replacement of the defective component at J. & M. Mfg. Co., Inc's. option. This is the entire agreement between J. & M. Mfg. Co., Inc. and the Owner about warranty and no J. & M. Mfg. Co., Inc. employee or dealer is authorized to make any additional warranty on behalf of J. & M. Mfg. Co., Inc.

The manufacturer reserves the right to make product design and material changes at any time without notice. They shall not incur any obligation or liability to incorporate such changes and improvements in products previously sold to any customer, nor shall they be obligated or liable for the replacement of previously sold products with products or parts incorporating such changes.

#### **SERVICE:**

The equipment you have purchased has been carefully manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and maintenance. Lubricate the unit as specified. Observe all safety information in this manual and safety signs on the equipment.

For service, your authorized J. & M. dealer has trained mechanics, genuine J. & M. service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine J. & M. service parts. Substitute parts may void warranty and may not meet standards required for a safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model No:	Serial No:	Date of Purchase:
Purchased From:		

Provide this information to your dealer to obtain correct repair parts.

#### **Specifications**

Model USA-15 Specifications	
Diameter	6 inch
Length	15'-0"
Flighting	Steel or Poly-Cup Plastic
Hopper	Adjustable to fit almost any box
Auger Tube	14 GA seamless steel tube
Winch	Standard
Auger Pivot	Patented Uni-Swivel Design
Sump Design Hopper	Yes
Unloading Height	11'-0" (maximum); 7'-0" (minimum)
Height of Auger in Saddle	10'-0" (on 385 box to steel spout)
Maximum Swing Left and Right	43'-0" (with 3-Stage Telescoping Spout)
Maximum Unloading Distance Out	19'-0" (with 3-Stage Telescoping Spout)
Discharge Rate (corn/soybeans)*	15 bushels per minute
Discharge Rate (fertilizer)*	1,000 lbs. per minute

<sup>\*</sup> Your rate may differ due to the quality of the material, the auger unloading height angle, and variable tractor hydraulic output. NOTE: Always operate the auger system with a tractor hydraulic requirement of 9 gpm (minimum) to 15 gpm (maximum) (2,250 psi)

#### **General Information**

#### TO THE OWNER:

The purpose of this manual is to assist you in operating and maintaining your Uni-Swivel Auger in a safe manner. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance and help maintain safe operating conditions. If this machine is used by an employee or is loaned or rented, make certain that the operator(s), prior to operating:

- 1. Is instructed in safe and proper use.
- 2. Reviews and understands the manual(s) pertaining to this machine.

Throughout this manual, the term IMPORTANT is used to indicate that failure to observe can cause damage to equipment. The terms CAUTION, WARNING and DANGER are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.

⚠ This Safety-Alert symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

▲ DANGER Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

★ WARNING Indicates a potentially hazardous situation that, if not avoided, will result in death or serious injury, and includes hazards that are exposed when guards are removed.

⚠ CAUTION Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

**IMPORTANT** Indicates that failure to observe can cause damage to equipment.

**NOTE** Indicates helpful information.

### **General Information**

#### **BOLT TORQUE CHART**

Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for Metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 & J1701M (JUL 96)

	□ <u></u>	SAE SERIES	SAE Bolt Head	
Д //// W TORQUE		//// (A) TORQUE	Identification	
	<b>→</b>	→ CHART		SAE Grade 8 6 Radial Dashes

$\overline{(A)}$	\\/	MARKING ON HEAD						
Diameter	Wrench Size	SA	SAE 2 SAE 5		SAE 2 SAE 5 SAE		νE 8	
(Inches)	3.20	LBSFT.	N-m	LBSFT.	N-m	LBSFT.	N-m	
1/4	7/16"	6	8	10	13	14	18	
5/16	1/2"	12	17	19	26	27	37	
3/8	9/16"	23	31	35	47	49	67	
7/16	5/8"	36	48	55	75	78	106	
1/2	3/4"	55	75	85	115	120	163	
9/16	13/16"	78	106	121	164	171	232	
5/8	15/16"	110	149	170	230	240	325	
3/4	1-1/8"	192	261	297	403	420	569	
7/8	1-5/16"	306	416	474	642	669	907	
1	1-1/2"	467	634	722	979	1020	1383	

METRIC SERIES TORQUE CHART	8.8  Metric Grade 8.8	Metric Bolt Head Identification	Metric Grade 10.9

Diameter		COARSE THREAD				FINE THREAD			Diameter	
& (Millimeters)	Wrench		MARKING ON THREAD			MARKING ON THREAD		N THREAD		
Thread Pitch	Size	Metri	Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12.1.75	18 mm	68	50	94	70	75	55	103	76	12.1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

### **Safety Rules**



#### ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be erased by an operator's single careless act. In addition, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Make certain that the operator(s), prior to operating is instructed in safe and proper use and reviews and understands the manual(s) pertaining to this machine. Also make certain that the operator(s) reviews and understands the operator's manual of the tractor prior to hooking up or operating the grain cart.

Read this manual before you operate this machine. If you do not understand any part of this manual, or need more information, contact the manufacturer or your authorized dealer.

#### **SAFETY**

Understand that your safety and the safety of other persons is measured by how you service and operate this machine. Know the positions and functions of all controls before you try to operate them. Make sure to check all controls in a safe area before starting your work.

The safety information given in this manual does not replace safety codes, federal, state or local laws. Make certain your machine has the proper equipment as designated by local laws and regulations.

A frequent cause of personal injury or death is from persons falling off equipment and being run over. Do not permit persons to ride on this machine.

Travel speeds should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments and holes. Reduce speed when turning, crossing slopes and rough, slick or muddy surfaces.

Collision of high speed road traffic and slow moving machines can cause personal injury or death. On roads, use flasher lights according to local laws. Keep slow-moving-vehicle emblem visible. Pull over to let faster traffic pass.

Hydraulic oil leaking under pressure can penetrate skin and cause infection or other injury. To prevent personal injury,

- Relieve all pressure, before disconnecting fluid lines,
- Before applying pressure, make sure all connections are tight and components are in good condition.
- Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose.
- If injured by leaking fluid, see your doctor immediately.

When transporting the gravity wagon, always keep the auger in the stow position.

Use care when moving or operating the grain cart near electric lines, as serious injury or death can result from contact.

Never adjust, service, clean, or lubricate the grain cart until all power is shut off. Keep all safety shields in place. Keep hands, feet, hair and clothing away from moving parts while the grain cart is in operation.

The service ladder is for service work only. If you must climb into the grain tank, be certain that all power is shut off and then use extreme caution when climbing into the grain cart.

Make sure that everyone is clear of equipment before applying power or moving the machine.

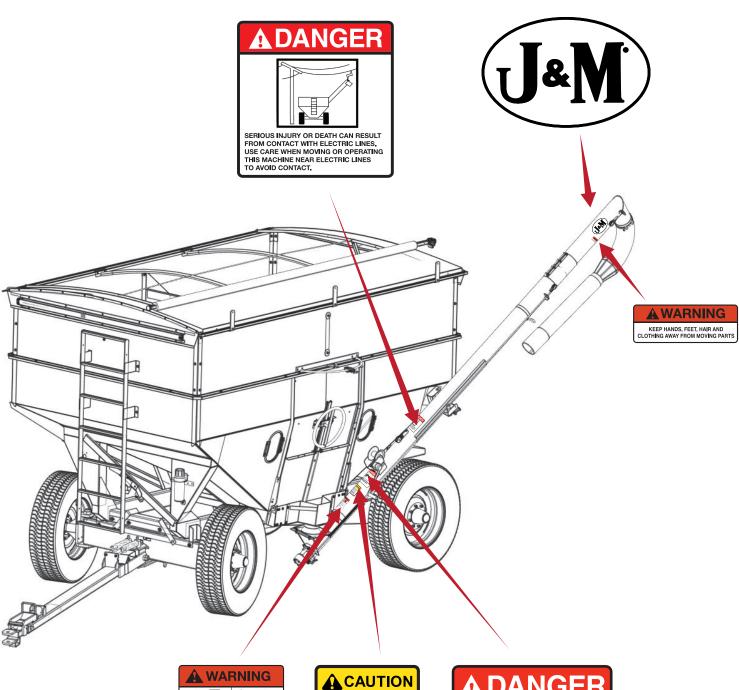
Before filling the gravity wagon, make certain that no one is inside the gravity wagon tank. Never allow children or anyone in, near, or on the gravity wagon during transport or during loading and unloading of grain. Be aware that moving grain is dangerous and can cause entrapment, resulting in severe injury or death by suffocation.

Never operate the auger system with anyone inside the grain tank. Hands, feet, hair and clothing can fit through the openings in and around the grate. Contact with the auger can cause severe injury or death. Make certain that all power is shut off before service work is performed.

### **Safety Signs**

### **⚠**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! **⚠**

#### **Replace Safety Decals Immediately If Damaged or Missing**





- HIGH PRESSURE FLUID HAZARD

  To prevent serious injury or death:
- Relieve pressure on system before repa or adjusting or disconnecting
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.

RESTRICTING THE FLOW OR PLUGGING OF AUGER
COULD RESULT IN DAMAGE TO FLIGHTING

\*15 G.P.M. MAXIMUM HYDRAULIC INPUT TO THIS MOTOR (MAX. 2250 PSI)



#### • Flat Attaching Brackets

- Attach the Flat Attaching Bracket to outside of the door.
- Use (2) 3/8" x 1" SF Hex Bolts and (2) 3/8" SF Hex Nuts.
- Tighten hardware.
- Note: For the 250 box ONLY use the hole that is second from the top on the Flat Attaching Bracket.
- Repeat on opposite side of door.

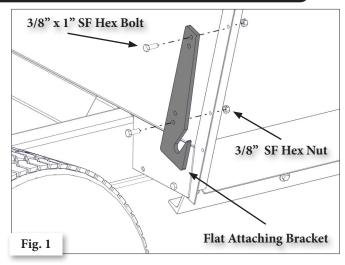
#### Assemble Quick Attach Hopper

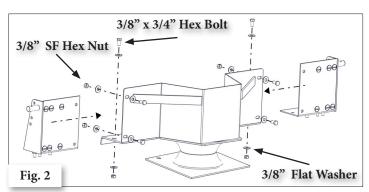
- Measure the distance between both Flat Attaching Brackets.
- Adjust the Quick Attach Hopper width to match the measurement between brackets.
- Assemble the Quick Attach Hopper using (6) 3/8" x 1/2" hex bolts, (12) 3/8" Flat Washers and (6) 3/8" SF hex nuts.
- Fill the remaining 1/2" holes with 3/8" x 1/2" stove bolts and 3/8" lock nuts.

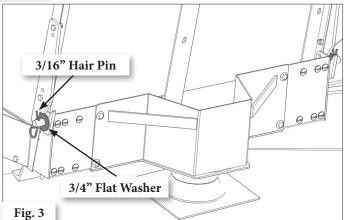
Note: These bolts are used only to stop grain flow through the holes.

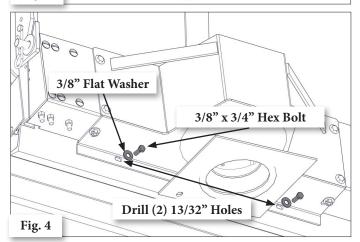
#### Attach The Quick Attach Hopper

- Guide the pins located on each end of the Quick Attach Hopper into the Flat Attaching Brackets slots.
- Secure a 3/4" flat washer on each pin using a 3/16" hair pin.
- Apply pressure to the bottom of the Quick Attach Hopper to locate the bottom of the assembly onto the c-channel below the door.
- Use the 2 slotted holes as your guide to drill (2) 13/32" holes.
- Secure the Quick Attach Hopper using (2) 3/8" x 1" SF hex bolts, and (2) 3/8" SF hex nuts.









#### Attach the 1/2" Curved Rod Weldment

#### 250 & 385 Gravity Wagons

- Match Curved Rod Weldment with holes located above the door where the sideboard and shell weldment attach to one another.
- Secure 1/2" Curved Rod Weldment using (4) 3/8" x 1" SF Hex Bolts, and (4) 3/8" SF Hex Nuts.

#### 440 & 540 Gravity Wagons

- Place the Curved Rod Weldment below the top ripple.
- Mark the 4 holes facing the shell of the gravity wagon.
- Use these marks to drill (4) 13/32" holes.
- Secure 1/2" Curved Rod Weldment using (4) 3/8" x 1" SF
   Hex Bolts on the outside of the shell and (4) 3/8" x 2-1/4" flat washers and (4) 3/8" SF Hex Nuts on the inside of the shell.

#### 680, & 760 Gravity Wagons

- Place the Curved Rod Weldment below the bottom ripple.
- Mark the 4 holes facing the shell of the gravity wagon.
- Use these marks to drill (4) 13/32" holes.
- Secure 1/2" Curved Rod Weldment using (4) 3/8" x 1" SF Hex Bolts on the outside of the shell and (4) 3/8" x 2-1/4" flat washers and (4) 3/8" SF Hex Nuts on the inside of the shell.

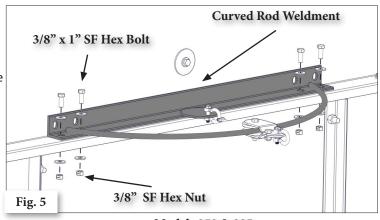
#### 455 and 555 Gravity Wagon

- Place the Curved Rod Weldment above the ripple.
- Mark the 4 holes facing the shell of the gravity wagon.
- Use these marks to drill (4) 13/32" holes.
- Secure 1/2" Curved Rod Weldment using (4) 3/8" x 1" SF Hex Bolts on the outside of the shell and (4) 3/8" x 2-1/4" flat washers and (4) 3/8" SF Hex Nuts on the inside of the shell.

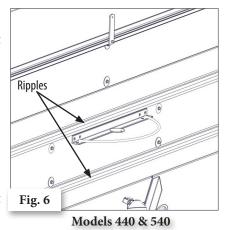
#### 655 and 755 Gravity Wagon

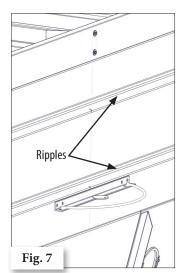
- Place the Curved Rod Weldment in the center of the ripple and the bend. Mark the 4 holes facing the shell of the gravity wagon.
- Use these marks to drill (4) 13/32" holes.
- Secure 1/2" Curved Rod Weldment using (4) 3/8" x 1" SF Hex Bolts and (8) 3/8" x 2-1/4" flat washers on the outside of the shell. (4) 3/8" x 2-1/4" flat washers and (4) 3/8" SF Hex Nuts on the inside of the shell.

Note: The purpose of the (8) washers is to provide space for the Curved Rod Weldment to set on top of the Seam Strap.

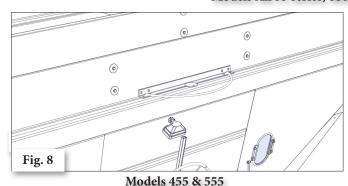


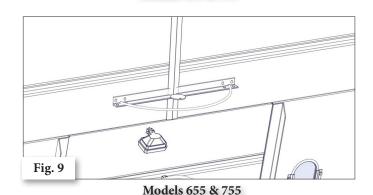
Models 250 & 385





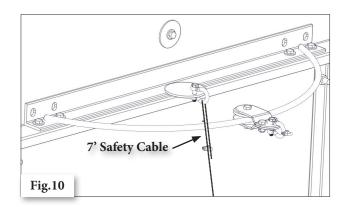
Models All 55 series, 680 & 760





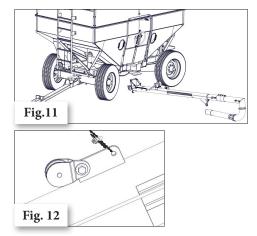
### • Install the 7' Safety Cable

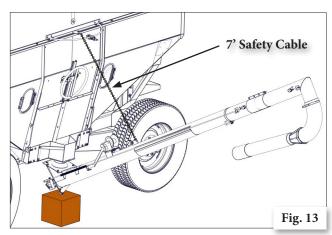
- Secure a 5/16" Shackle to the center hole of the Curved Rod Weldment.
- Fasten 7' Safety Cable to the inside shackle using a 3/16" cable clamp.



#### • Position the Auger

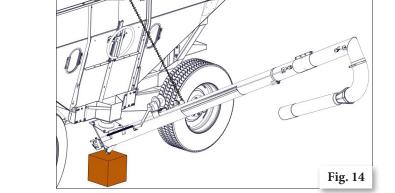
- Position the Auger on the ground in front of the Gravity Wagon as shown in Fig.11.
- Fasten the 7' Safety Cable end to the auger with a 3/16" cable clamp. Route cable through hole shown in Fig. 12.
- Place below the bottom of the auger a piece of wood to get it closer to the Quick Attach Hopper. Fig. 13





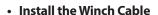
#### · Attach the Auger to the Quick Attach Hopper

- Connect the Auger to the Quick Attach Hopper using (6) 3/8" x 1" SF Hex Bolts and (6) 3/8" SF Hex Nuts.
- First install the 2 front bolts. Once installed use 2 vice grips to clamp the Auger to the Quick Attach Hopper. Now install the remaining hardware.
- Tighten hardware once installed.

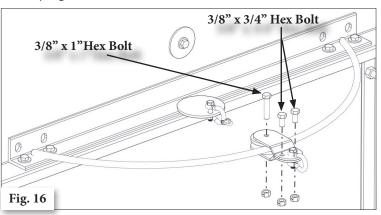


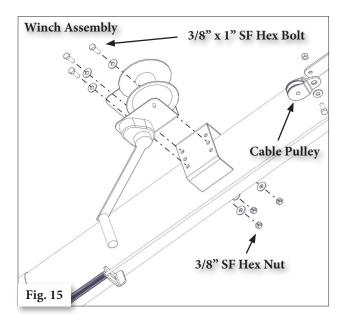
#### • Install the Winch Assembly & Cable Pulley

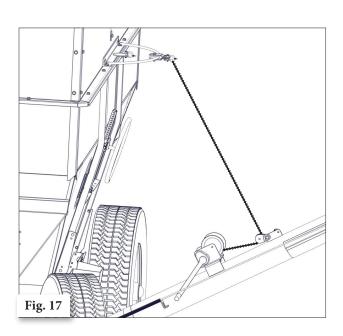
- Attach the Winch Assembly using (3) 3/8" x 1" SF Hex Bolts, and (3) 3/8" SF Hex Nuts. (Fig. 15)
- Attach the Cable Pulley using a 3/8" x 1" SF Hex Bolts, and 3/8" SF Hex Nut.
- Tighten hardware once installed.
- Install the Pulley & Shackle onto Curved Rod Weldment.
- Secure the 1/2" Black Pulley Assembly to the Curved Rod
   Weldment as shown in Fig. 16 using a 3/8" x 1" hex bolt, (2)
   3/8" x 3/4" hex bolts and (3) 3/8" centerlock hex nuts.
- Secure a 5/16" Shackle to the Pulley Assembly as shown in Fig. 16.



- Attach the 3/16" x 11' Cable to the Winch using the clip on the side of the Winch and spool several rounds of cable on the Winch drum.
- Route the cable through the pulley on the auger, then up towards the Curved Rod Weldment and then through the shackle. Secure cable to the shackle using a 3/16" cable clamp Fig 17.



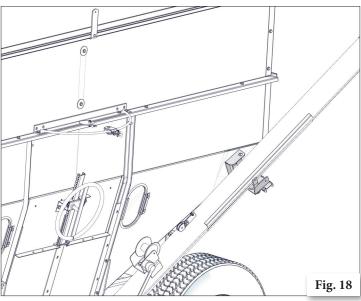




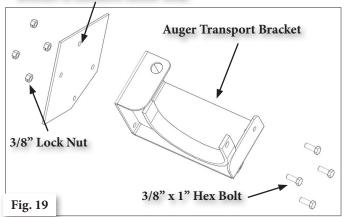
- Install the Auger Transport Bracket & Ratchet Strap
- Swing the auger towards the rear of the wagon.
- Place the Auger Transport Bracket in position according to Fig.18.

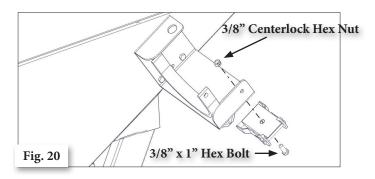
Note: For increased support, position the transport bracket as close as possible to the triangular corner of the gravity wagon. Be sure to allow enough room for the reinforcing back plate, which is installed inside the tank.

- Using the Auger Transport Bracket as a guide, drill (4) 13/32" holes into the side of the gravity wagon.
- Attach the Auger Transport Bracket and Reinforcing Bracket using (4) 3/8" x 1" Hex Bolts and (4) 3/8" Lock Nuts. Fig.19.
- Tighten Hardware.
- Attach the Ratchet to the Auger Transport Bracket using a 3/8" x 1" hex bolt and a 3/8" Centerlock Hex Nut. Fig. 20.
- Tighten Hardware.
- Secure Auger to Auger Transport Bracket using the tie-down strap. Wrap strap around auger and secure using top hole on Auger Transport Bracket.
- Ratchet the strap until the strap is firmly secured.
- If unit is NOT equipped with the Optional Auger-Mate Hydraulic Motor go to page 14. If equipped with Optional Auger-Mate Hydraulic Motor go to page 15.



#### Bracket is installed inside tank.





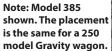
### **Installation (If using tractor hydraulics)**

#### • Install Coupler Bracket & Hose Holder Bracket.

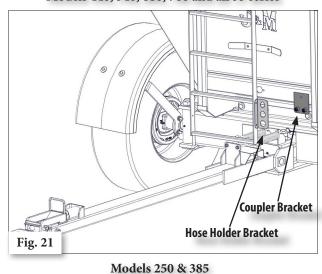
- Install the Coupler Bracket. Position bracket according to Figures 21 or 22. Hold the Coupler Bracket in place and make a mark where the hole is.
- Drill a 13/32" hole through the mark. Attach the bracket using a 3/8" x 1" SF hex bolt and a 3/8" SF hex nut.
- Position the Hose Holder Bracket Figures 21 or 22. Using the Hose Holder Bracket as a template drill (2) 13/32" holes.
- Sandwich the tractor hydraulic hoses (not included) between the side rail of the ladder and the Hose Holder Bracket using (2) 3/8" x 1 1/2"hex bolts and (2) 3/8" lock nuts.
- Remove both plastic plugs from the hydraulic motor at the base of the auger.
- Connect both hoses to the hydraulic motor. The supply hose connects directly to the motor valve and the return hose connects to the 90 degree elbow fitting.
- Secure the Hydraulic hoses to the to the box runner using a 9" zip tie.

Note: Place the zip tie as close to the center of the box as possible the keep the hydraulic hoses away from the tire.

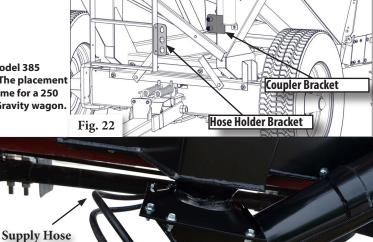
Attach the Hydraulic hoses to the Coupler Bracket.

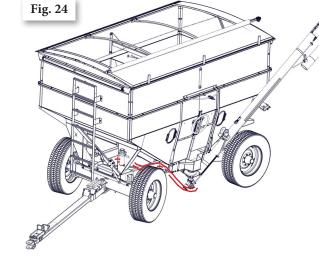


Models 440, 540, 680, 760 and all 55 series









## Installation (If using Hydraulic Auger-Mate)

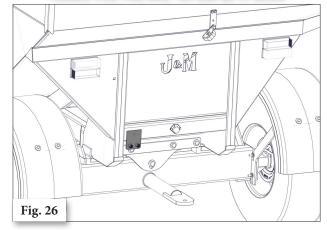
- Install Coupler Bracket .
- Install the Coupler Bracket. Position bracket according to Figures 26 or 27. Hold the Coupler Bracket in place and make a mark where the hole is.
- Drill a 13/32" hole through the mark. Attach the bracket using a 3/8" x 1" SF hex bolt and a 3/8" SF hex nut.
- Remove both plastic plugs from the hydraulic motor at the base of the auger.
- Connect both hoses to the hydraulic motor. The supply hose connects directly to the motor valve and the return hose connects to the 90 degree fitting.
- Attach the Hydraulic hoses to the Coupler Bracket.
- Secure the Hydraulic hoses to the to the box runner using a 9"zip tie.

Note: Place the zip tie as close to the center of the box as possible the keep the hydraulic hoses away from the tire.

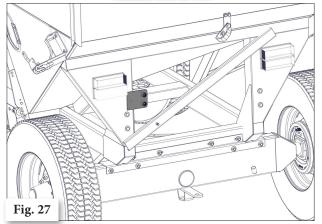
- Refer to Hydraulic Auger -Mate manual for installation instructions.



Models 440, 540, 680, 760 and all 55 series



Models 250 & 385



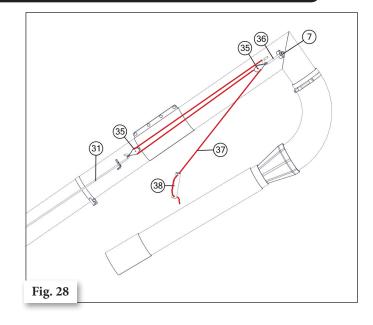
Note: Model 385 shown. The placement is the same for a 250 model Gravity wagon.

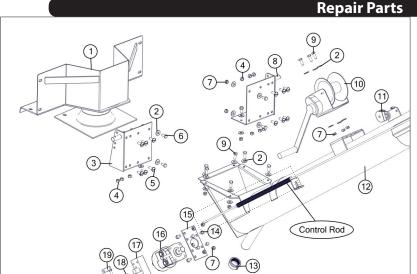
#### Attaching the Spout

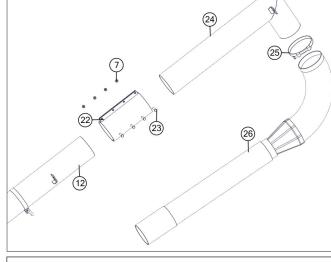
- With the auger down to the lowest position, slide the 6" steel sleeve half way on the auger and insert the 6" top spout into the sleeve. Tighten sleeve using (4) 3/8" x 1-1/2" Hex Bolts and (4) 3/8" Lock nuts.
- Attach the 6" rubber spout or optional 3-Stage Telescoping Spout using the 6" Clamp.
- Attach a J-bolt to the Top Auger, with the hook facing the control rod, using (2) 3/8" serrated hex flange nuts. Tie the 5/16" rope to the J-bolt.
- Attach a 5/16" pulley to the J-bolt.
- Attach the other 5/16" pulley to the control rod. Feed the rope through the bottom pulley and then through the top pulley.
- Slip the Plastic Rope Handel on to the rope through the small holes in the handle and adjust the handle to the same length as the end of the spout.
- Place a 6" clamp around the auger 3" above the channel that the control rod runs through.
- Tighten clamp using a J-bolt and (2) 3/8" serrated hex flange nuts.

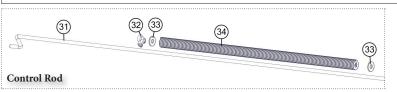
Note: Make sure that the J-bolt is sticking out towards you when the auger is in the stow position.

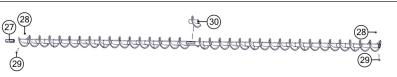
- Hang the handle of the of the telescoping spout and the plastic rope handle from the J-bolt when not in use.

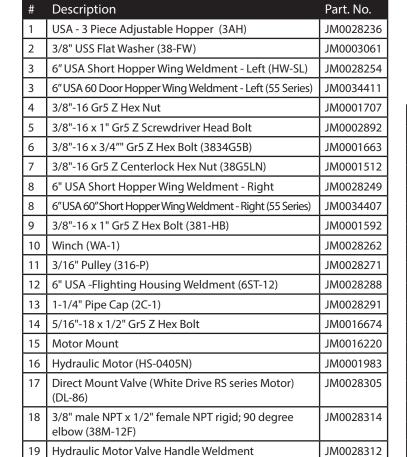






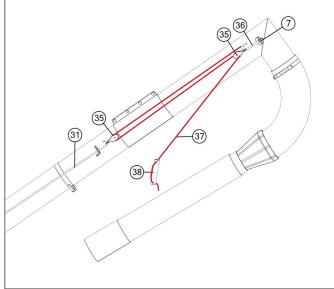






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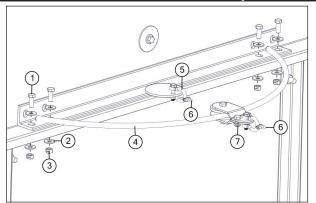
5/16"-18 Gr5 Z Centerlock Hex Nut

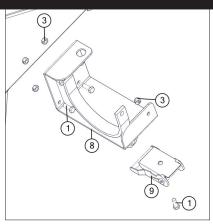


#	Description	Part. No.
21	5-16"-18 x 2" Gr5 Z Hex Bolt	JM0002096
22	6" USA Spout Sleeve Weldment (SS-12)	JM0028299
23	3/8"-16 x 1-1/2" Gr5 Z Hex Bolt	JM0001659
24	6" Top Spout Weldment (6TS-42)	JM0028285
25	6" Dia. Spout Clamp (HC-6)	JM0028349
26	6"Tele Spout 11'L with Handle	JM0030254
27	Hex/Round Coupling to flighting (APF-1)	JM0028302
28	3/8"-16 Gr5 Z Nylon Locking Hex Nut	JM0001664
29	3/8"-16 x 2-1/4" Gr5 Z Hex Bolt	JM0001660
30	5in Polycup Center Module	JM0028333
31	6" USA - 1/4" Control Rod (14-CR)	JM0028315
32	3/16" Cable Clamp	JM0001514
33	1/4" ID, 3/4"" OD Z Flat Washer (14-W)	JM0003090
34	Compression Spring x 17" (for control rod)	JM0028318
35	5/16" Pulley	JM0028275
36	3/8"-16 Gr5 Z J-Bolt	JM0001519
37	5/16" Rope x 15' (516R15)	JM0036110
38	6" USA - Plastic Rope Handle (1PRH)	JM0028276

JM0002143

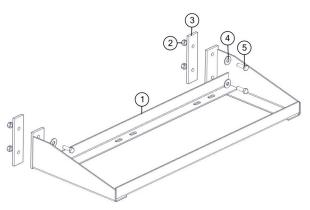
# **Repair Parts**





#	Description	Part. No.
1	3/8"-16 x 1" Gr5 Z Hex Bolt (381-HB)	JM0001592
2	3/8" USS Flat Washer (38-FW)	JM0003061
3	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512
4	1/2" Curved Rod Weldment (12-RW)	JM0028244
5	5/16" Shackle (516-S)	JM0028279
6	3/16" Cable Clamp	JM0001514
7	6" USA - 1/2" Pulley (12-P)	JM0028267
8	Transport Bracket with Plate for Uni-Swivel Auger (TB-2)	JM0028240
9	2" Tie-down Ratchet (10,000 lb.) (RA-1)	JM0003084

# Auger-Mate (Optional)



#	Description	Part. No.
1	Augermate Mounting Frame	JM0028320
2	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0003061
3	Auger Mate Bracket	JM0036207
4	1/2" USS Flat Washer	JM0003082
5	1/2"-13 x 1-1/2" Gr5 Z Hex Bolt	JM0002100