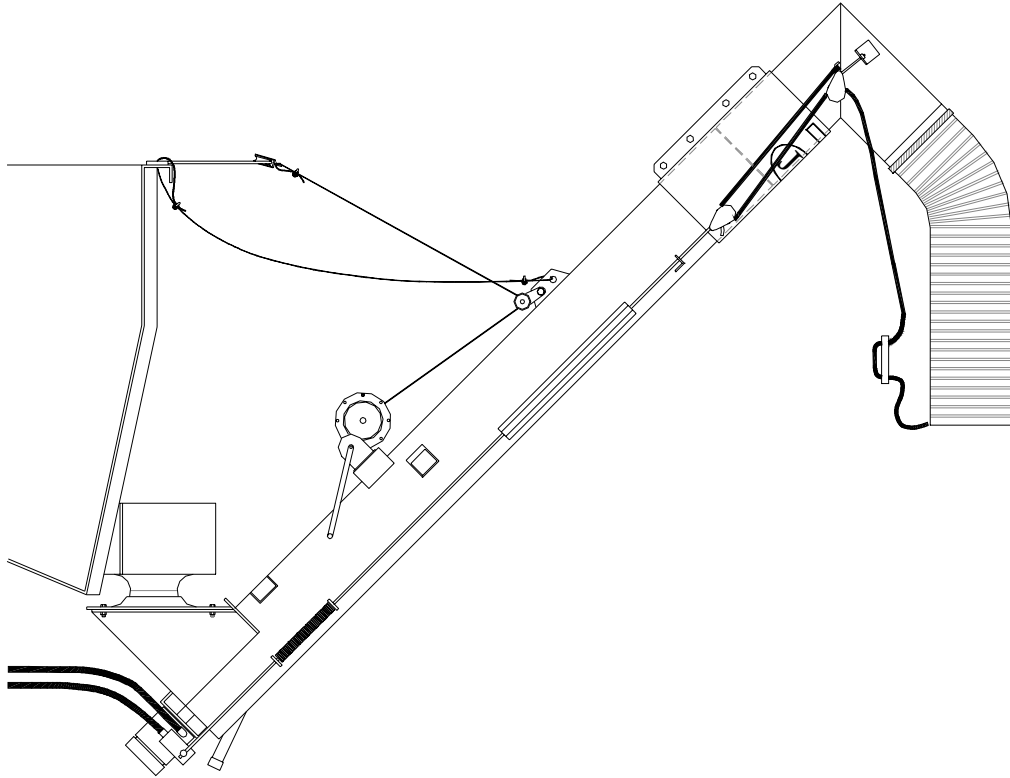


# OPERATOR'S MANUAL

and Set-Up Instructions for

# UNI-SWIVEL\*\* AUGERS



**USA-15S**

**USA-15P**



**J. & M. Mfg. Co., Inc.**

P.O. Box 547 Ft. Recovery, OH 45846

Ph: (419) 375-2376 Fax: (419) 375-2708

[www.jm-inc.com](http://www.jm-inc.com)

JMMAN0101 (Rev. 04/02/09)

\*\* Registered Trademark

**TO THE DEALER:**

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

The dealer must complete the Warranty Registration Card attached to the front inside cover of this manual and return to J. & M. Mfg. Co., Inc. at the address indicated on the card. **Warranty claims will be denied if the Warranty Registration Card has not been completed and returned.**

**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 remanufactured 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 (attached to the inside of the Operator’s Manual) 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 Warranty does not transfer to the third party purchaser in any way. J. & M. Mfg. Co. Inc. makes no warranty, express or 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 upkeep. 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 the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

**Serial No.:** \_\_\_\_\_ **Date of Purchase:** \_\_\_\_\_

**Purchased From:** \_\_\_\_\_

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

## UNI-SWIVEL HYDRAULIC AUGERS SPECIFICATIONS

SPECIFICATIONS	USA-15
Diameter	6"
Sizes - Length	15'
Hopper	Adjustable to fit almost any make gravity box
Auger Tube	14 Ga. Seamless Steel Tube
Winch	Standard
Auger Pivot	Uni-Swivel Design (Patent #5,615,990)
Sump Design Hopper	Yes
Unloading Height (to steel spout)	
Maximum	11 1/2'
Minimum	7'
Height of Auger in Saddle (on 385SD Box to steel spout)	10'
Maximum Swing Left and Right	31'
Maximum Unloading Distance Out	13'
Bristle Flighting	Optional
Poly-Cup Plastic Flighting	Optional
Discharge Rate (corn)*	15 bu./min.
Discharge Rate (soybeans)*	15 bu./min.
Discharge Rate (fertilizer)*	1,000 lbs./min.

\* Your rate may differ due to the quality of material, the auger unloading height angle, and variable tractor hydraulic output.

### GENERAL INFORMATION

#### TO THE OWNER:

The purpose of this manual is to assist you in operating and maintaining your header transport 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!**



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



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.



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

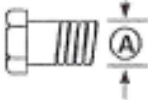
Always tighten hardware to these values unless a different torque or tightening procedure is listed for a specific application.

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.




**SAE SERIES TORQUE CHART**




SAE Bolt Head Identification

**SAE Grade 2 (No Dashes)**

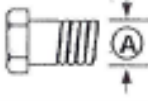


**SAE Grade 5 (3 Radial Dashes)**




**SAE Grade 8 (6 Radial Dashes)**

Diameter (Inches) <sup>(A)</sup>	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		Lbs.-Ft.	N-m	Lbs.-Ft.	N-m	Lbs.-Ft.	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**



Metric Bolt Head Identification

**Metric Grade 8.8**



**Metric Grade 10.9**

Diameter & Thread Pitch (Millimeters) <sup>(A)</sup>	Wrench Size	COARSE THREAD				FINE THREAD				Diameter & Thread Pitch (Millimeters) <sup>(A)</sup>
		MARKING ON HEAD								
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	Lbs.-Ft.	N-m	Lbs.-Ft.	N-m	Lbs.-Ft.	N-m	Lbs.-Ft.	
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 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 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

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## **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, judgement, 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.

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** operating this machine. 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 needed as designated by local laws and regulations.

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 your hydraulic auger, always keep the auger in the stow position and make sure that it is properly fastened in the transport bracket. Use care when moving or operating the hydraulic auger near electric lines as serious injury or death can result from contact.

Never adjust, service, clean or lubricate the hydraulic auger until all power is shut off.

Keep all safety shields in place. Keep hands, feet, and clothing away from moving parts while the unit is in operation.

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

Never position yourself or others underneath the auger. Be sure that the safety cable is secured properly along with the winch cable.

Make sure that the gravity box is properly fastened to the running gear. Be sure that the gravity box and attached running gear is large enough to support the weight of the auger when the auger is extended so as to prevent tipping over of the unit. Do not operate the unit on a slope or side of a hill as tipping of the unit could occur.

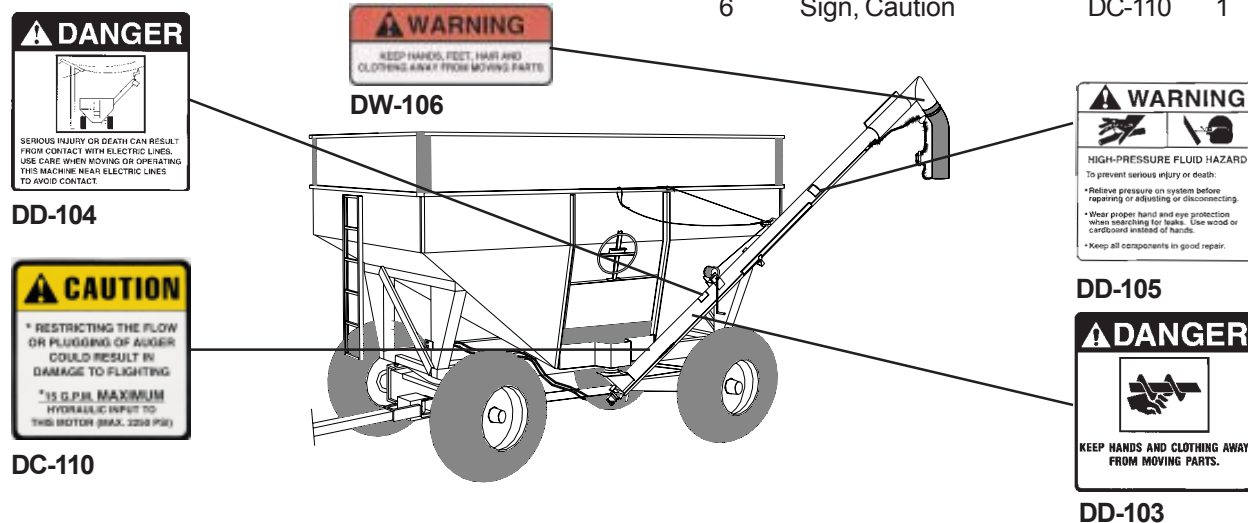
## SAFETY SIGNS

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

**Replace Immediately If Damaged or Missing!**

**IMPORTANT:** Install new safety signs if the old signs are destroyed, lost, painted over or cannot be read. When parts are replaced that have safety signs, make sure you install a new sign with each new part. New signs are available from the manufacturer or your authorized dealer.

Ref. #	Description	Part #	Req'd
1	Sign, Danger	DD-103	1
2	Sign, Danger	DD-104	1
3	Sign, Warning	DW-106	1
4	Sign, J&M	DI-114	2
5	Sign, Warning	DW-105	1
6	Sign, Caution	DC-110	1



### Set-Up of Uni-Swivel Hydraulic Augers

**Comes complete with the following:**

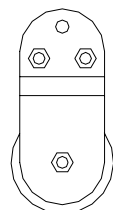
1 - Auger Tube, Swivel Assembly, with control rod, top spout

1 - Parts Carton - consists of:

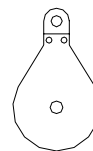
- 1 - 6" diameter rubber spout x 4' long
- 1 - 6" hose clamp
- 2 - 1/2" hydraulic hose x 84"
- 1 - winch assembly
- 1 - 1/2" curved rod x 40"
- 1 - transport bracket w/ ratchet and tie-down strap
- 1 - coupler bracket
- 2 - Flat Attaching Brackets
- 1 - 3 piece adjustable hopper
- 1 - hose holder bracket
- 1 - owners manual (set-up) w/winch parts list

1 - Parts Bag - consists of:

- |                                |                                    |                                |
|--------------------------------|------------------------------------|--------------------------------|
| 1 - 3/8" J-Bolt                | 2 - 3/8" x 1 1/2" Hex Bolts - Gr 2 | 2 - 3/8" Lockwashers           |
| 1 - 6" rubber strap with hooks | 35 - 3/8" Hex Lock Nuts            | 2 - 3/4" Flatwashers           |
| 1 - 9" rubber strap with hooks | 20 - 3/8" Hex Nuts                 | 2 - 3/16" Hair Pin Clips       |
| 1 - 3/16" pulley (zinc)        | 6 - 3/8" x 3/4" Hex Bolts - Gr 2   | 2 - 3/8" x 1" Tab Bolt         |
| 2 - 5/16" pulley (zinc) small  | 27 - 3/8" Flat Washers             | 2 - 5/16" Shackles             |
| 1 - 1/2" pulley (black)        | 18 - 3/8" x 1/2" Stove Bolts       | 2 - 3/8" Wing Nuts             |
| 1 - 3/16" cable x 11' (winch)  | 1 - 1/4" Rope Clamp                | 27 - 3/8" x 1" Hex Bolts - Gr5 |
| 1 - 3/16" cable x 7' (safety)  | 1 - Plastic Rope Handle            | 1 - 5/16" Rope x 15'           |
| 3 - 3/16" cable clamps         | 1 - 3/8" x 3/4" Hex Bolt - Gr 8    | 1 - 3/8" Lock Nut - Gr 8       |



1/2" Pulley  
(black)



3/16" Pulley  
(zinc)



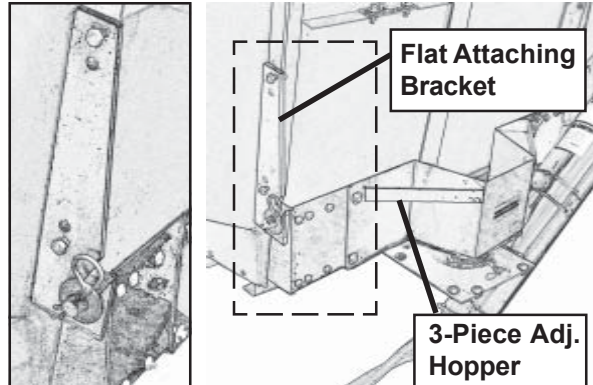
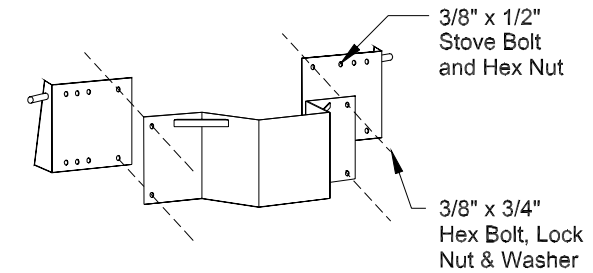
5/16" Pulley  
(zinc)

**Tools Required** - Hammer, Screwdriver, Drill with 13/32" Bit, 2 Vise-Grips, 2 - 9/16" wrenches, 1 - 7/16" Wrench (Two persons are needed for set-up)

## UNI-SWIVEL HYDRAULIC AUGER INSTALLATION

**1**

Measure the distance between the angle irons to the left and right of the door on your gravity box. Adjust the dimensions of your hopper to best fit between the angle irons. Use (6) - 3/8" x 3/4" hex bolts and lock nuts and 12 washers to fasten the adjusting ends of the hopper to the center base. Use the 3/8" x 1/2" stove bolts and nuts to "plug" holes not used in the adjustment. Attach the Flat Attaching Brackets to the existing hole in the door angle iron using the bottom hole in the Flat Attaching Bracket. Drill 13/32" hole into the door angle iron and secure the top of the Flat Attaching Bracket using (2) - 3/8" hex bolts and lock nuts. (Some adjustment may be required on some makes of gravity boxes). Place newly assembled Quick-Attach hopper on the gravity box by guiding the 1-3/4" pins of the hopper wings down the slots in the Flat Attaching Brackets. Secure 3/4" Flat Washers on the outside of the Flat Attaching Bracket by inserting 3/16" hair pins into the 1-3/4" pins on the hopper wings. Clip 3/8" x 1" Tab Bolt with Wing Nut to bottom flange of hopper and attach to angle iron of box under door.



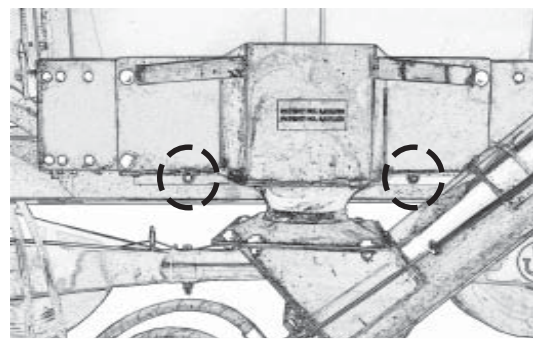
**2**

Place the 1/2" curved rod weldment to the top lip of the gravity box by centrally locating it above the door. Drill (4) - 13/32" holes through the top lip of the box (also through sideboard lip if so equipped) using the end tap holes as guides. Attach using (4) - 3/8" x 1" hex bolts, lock nuts and washers. Secure (1) - 5/16" Shackle to the center hole in the curved rod weldment. Loop the 3/16" safety cable through the shackle and securely clamp together using a 3/16" cable clamp. Position the auger on the ground below the hopper. (Place on blocks to raise the auger up.) Lay the safety cable under the 1/2" curved rod and attach the safety cable to the auger using the top hole of the auger cable mounting tab by looping the end of the 3/16" cable through the hole and securing using a 3/16" cable clamp. Lift the base of the auger up to the bottom of the 3-Piece Adjustable Hopper, align holes, and attach using (6) - 3/8" x 1" hex bolts and lock nuts. (Note: Place the front two bolts and lock nuts in first, then vise-grip both sides of the hopper to the flange on the auger, then complete bolting together.)

3/8" x 1" Stove Bolt w/ Reg. Nut

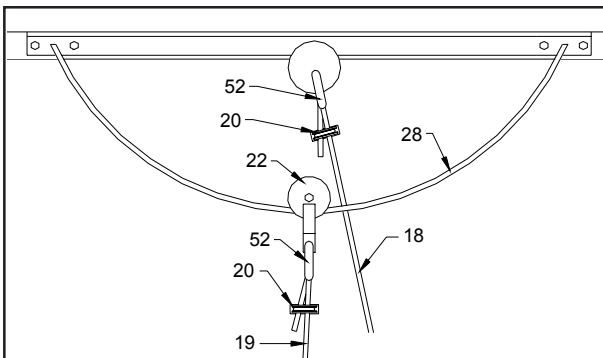
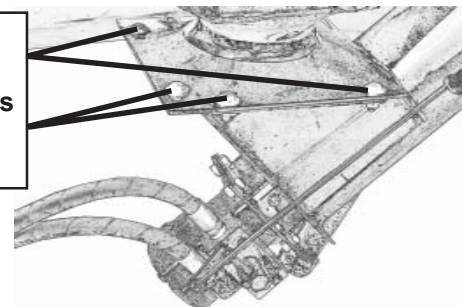
3/8" x 1" Bolt (Gr 5) w/ washers and lock nut

Overhead View of 3-Piece Adj. Hopper



3/8" x 1" Bolt (Gr 5) w/ washers and lock nut bolted to box angle iron located beneath door

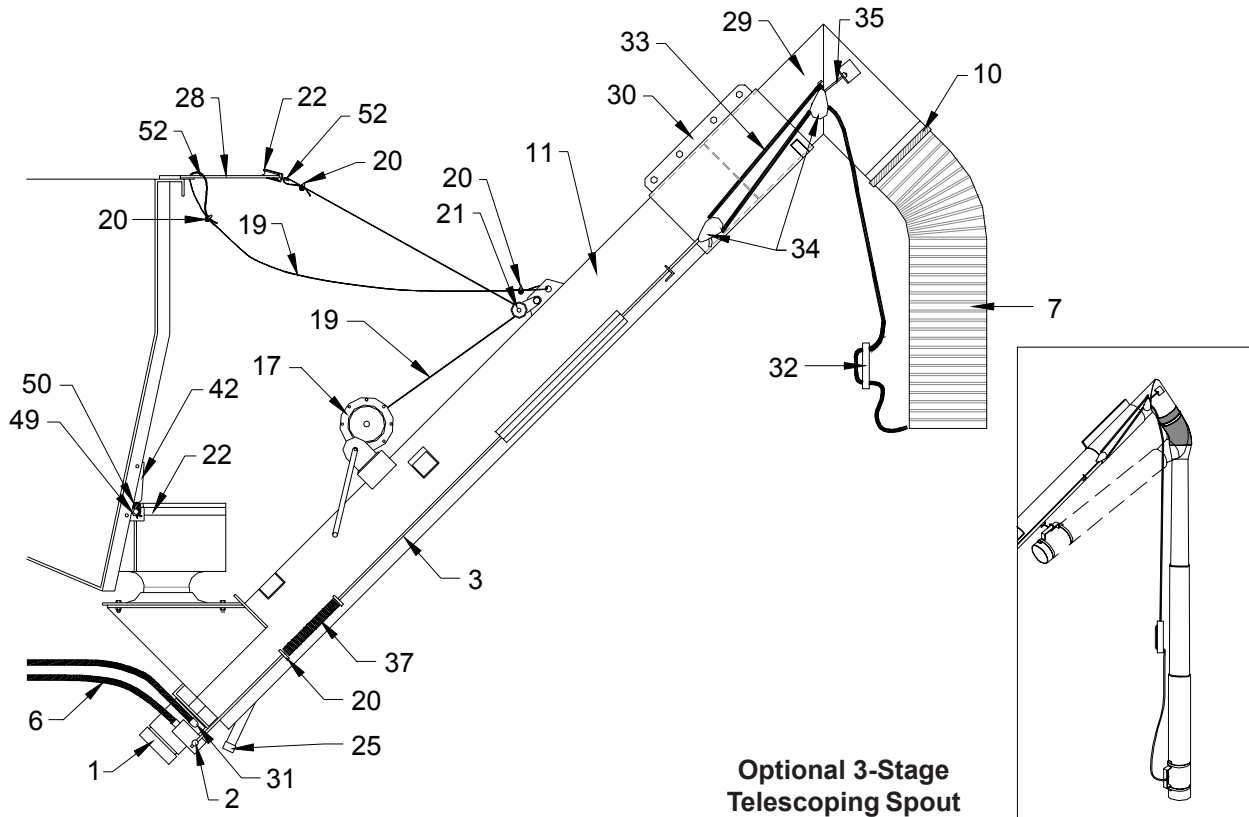
3/8" x 1" Bolt (Gr 5) w/ washers and lock nut



## UNI-SWIVEL HYDRAULIC AUGER INSTALLATION

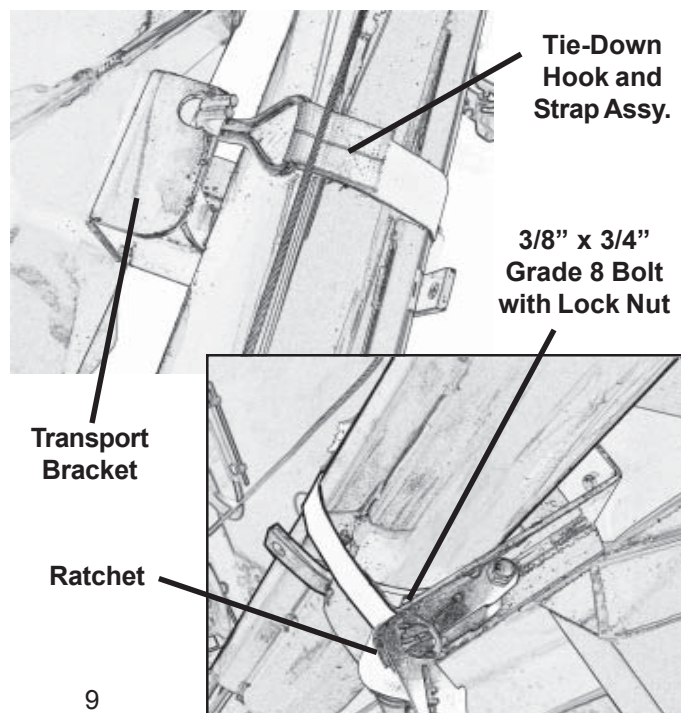
**3**

Attach the winch assembly to the auger bracket (for normal mounting, the winch handle is on the left side of the auger when facing the box) using (3) - 3/8" x 1" hex bolts, flat washers and lock nuts. Attach the end of the cable to the winch using the clip on the side of the winch. Spool several rounds of cable onto the winch drum as per instructions on the winch. Attach the 3/16" pulley (zinc) to the bottom hole of the auger cable mounting tab using a 3/8" x 1" hex bolt and lock nut. Loop the cable through the 3/16" pulley. Remove the 3/8" bolt from the center of the 1/2" black pulley and position the 1/2" curved rod between the pulley and the pulley bracket. Reattach the 3/8" bolt and lock nut. (Do not overtighten.) Attach one 5/16" Shackle to the end of the 1/2" black pulley bracket. Loop the winch cable through the shackle and secure using a 3/16" cable clamp.



**4**

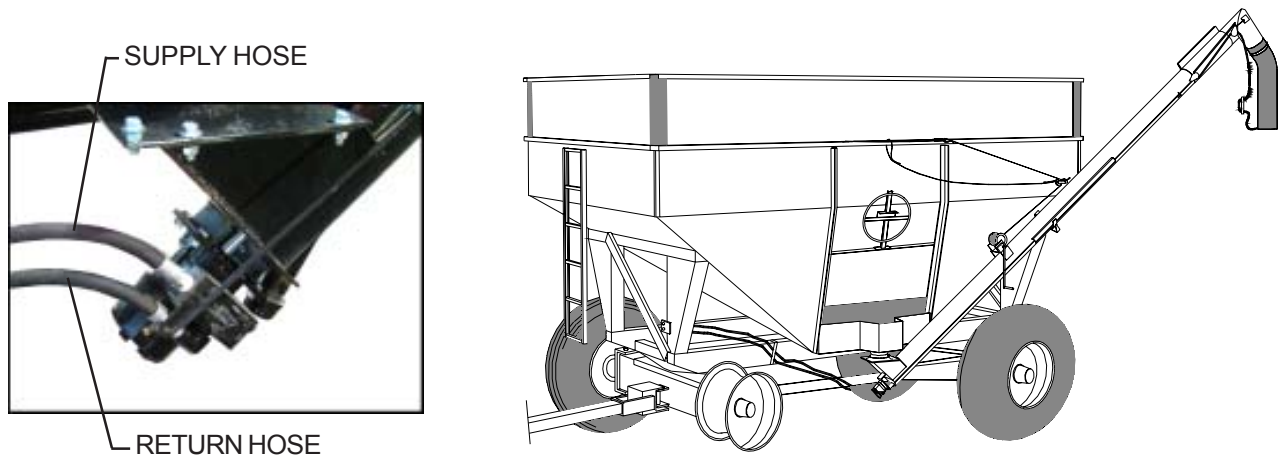
Swing the auger into the stow position (winch handle out). Place the transport bracket under the reinforcing channel of the auger and against the side of the gravity box. (NOTE: For increased support, position the transport bracket as close as possible to the triangular corner on the front of the gravity box. Be sure to allow enough room for the reinforcing back plate which is positioned inside the gravity box.) Using the Transport Bracket as a template, drill (4) 13/32" holes into the side of the gravity box and attach the Transport Bracket and Backing Plate using four 3/8" x 1" bolts and lock nuts. Attach the Ratchet to the Transport Brackets as shown using one 3/8" x 3/4" Grade 8 Bolt and 3/8" Grade 8 Lock Nut. Secure the Auger to the Transport Bracket by wrapping the tie-down strap around the auger and inserting the hook through the hole on top of the Transport Bracket. Ratchet the strap until the auger is firmly secured.



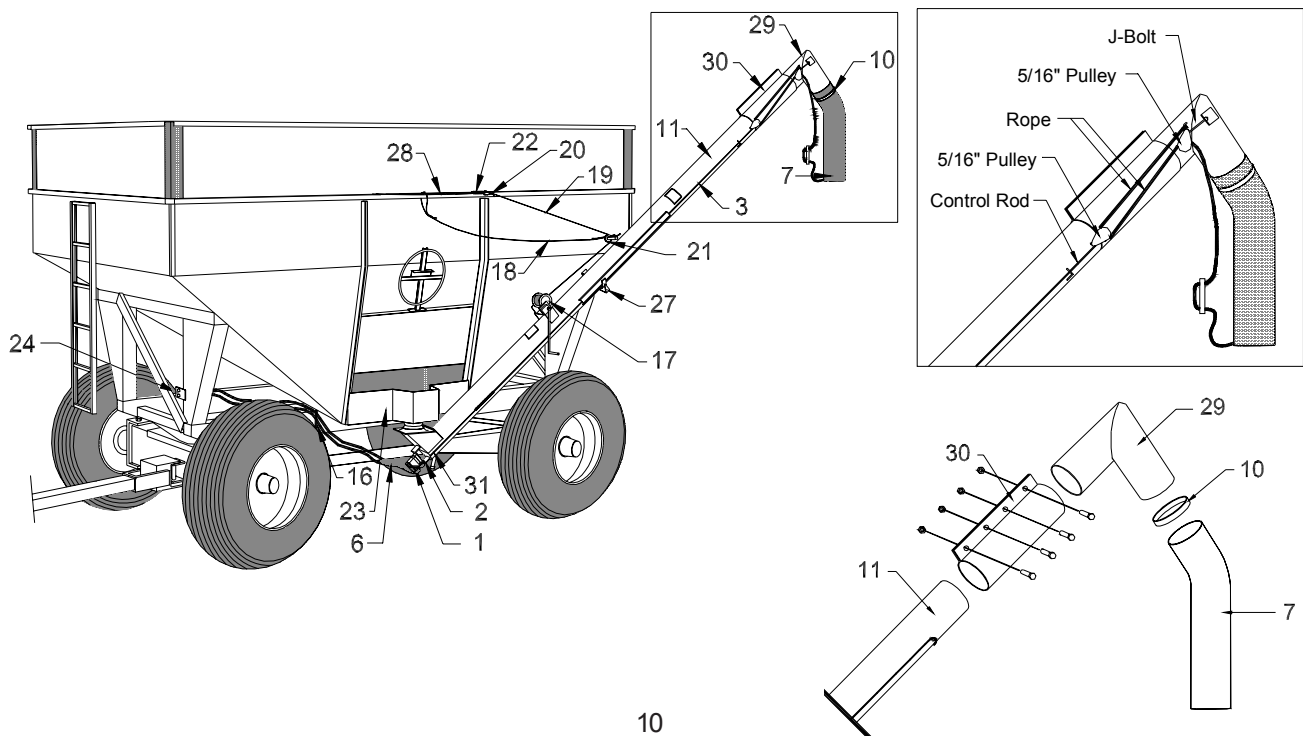
## UNI-SWIVEL HYDRAULIC AUGER INSTALLATION

- 5** Remove the plastic plugs from the hydraulic motor at the base of the auger and attach the two 1/2" hydraulic hoses. **(NOTE: The SUPPLY hose will be the one connected directly to the motor valve and the RETURN hose will be the one connected to the motor valve.)** Attach the coupler bracket to the brace inside front leg of the gravity box using one 3/8" x 1" bolt and lock nut. Attach hydraulic hoses. Secure the hydraulic hoses to the box runner using the 9" rubber strap. (Place the rubber strap as close to the center of the box as possible to keep the hydraulic lines away from the tire.)

Position the Hose Holder Bracket to the side rail (far side) of the ladder. 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" bolts and nuts.



- 6** Winch the auger down to the lowest position. Attach the 6" rubber spout (or optional 3-Stage Telescoping Spout) using the 6" black clamp. Clamp together using on 3/8" x 1 1/2" bolt and one 3/8" lock nut. Attach the J-Bolt to the top bracket with hook end on the same side as the control rod. Attach one 5/16" pulley to the J-Bolt. Attach the other pulley to the control rod. Loop the 5/16" rope through the pulleys and attach to the J-Bolt. Slip the Plastic Rope Handle onto the rope through the small holes in the handle. Adjust the handle along the length of the rope to the end of either the 4' rubber spout or the 3-Stage Telescoping Spout.



## UNI-SWIVEL HYDRAULIC AUGER PARTS LIST

#	USA-15 Part #	Description	Qty
1	HS-0405	Hydraulic Motor	1
2	DL-86	Valve with handle	1
3	14-CR	Control Rod	1
4	HS-0405S	Seal Kit - Motor	1
5	DL-86V	Seal Kit - Valve	1
6	HH-7	1/2" Hydraulic Hose x 84"	2
7	6RS-4	6" Diameter Rubber Spout x 4'	1
8	6RS-6	6" Diameter Rubber Spout x 6'	1
9	6RS-12	6" Diameter Rubber Spout x 12'	1
10	HC-6	6" Clamp	1
11	6ST-12	6" Steel Tube with Flange	1
12	SF-15	Steel Flighting complete	1
13	BF-15	Bristle Flighting complete	1
14	PF-15	Plastic Flighting complete	1
15	RA-1	Ratchet	1
16	RS-9	9" Rubber Strap	1
17	WA-1	Winch Assembly	1
18	316C-7	3/16" Cable x 7' (safety)	1
19	316C-10	3/16" Cable x 11' (winch)	1
20	316CC	3/16" Cable Clamp	3
21	316-P	3/16" Pulley (zinc)	1
22	12-P	1/2" Pulley (black)	1
23	3AH	3 Piece Adjustable Hopper	1
24	CA-12	Coupler Bracket	1
25	2C-1	2" Cap for Clean-Out Pipe	1
26	DP-1	Complete Decal Package	1
27	TB-2	Transport Bracket w/backing plate	1
28	12-RW	1/2" Curved Rod Weldment	1
28	12-RWSS	1/2" Curved Rod Weldment (for straight sided box)	1
29	6TS-42	6" Top Spout	1
30	SS-12	6" Sleeve x 12"	1
31	38M-12F	Street Elbow	1
32	1PRH	Plastic Rope Handle	1
33	516R15	5/16" Rope x 15'	1
34	516-P	5/16" Pulley (small)	3
35	384JB	3/8" x 4" J-bolt	1
36	HHB-1	Hose Holder Bracket	1
37	51617	Compression Spring	1
38	HW-S	Hopper Wing, Short, for tapered box	2
39	HW-L	Hopper Wing, Long, for tapered box	2
40	HW-SS	Hopper Wing, short, for straight sided box	2
41	HW-LS	Hopper Wing, Long, for straight sided box	2
42	FAB-1	Flat Attaching Bracket	2
43	38112HB	3/8" x 1 1/2" Hex Bolt - Gr 2	2
44	3812SB	3/8" x 1/2" Stove Bolt	18
45	381-HB	3/8" x 1" Hex Bolt	23
46	38LN	3/8" Lock Nut	31
47	38WN	3/8" Wing Nut	2
48	38LW	3/8" Lock Washer	2
49	34FW	3/4" Flat Washer	2
50	316HP	3/16" Larg Hair Pin Clips	2
51	381TB	3/8" x 1" Tab Bolt	2
52	516-S	5/16" Shackle	2
53	38HN	3/8" Hex Nut	20
54	3834HB	3/8" x 3/4" Hex Bolt	6
55	38-FW	3/8" Flat Washer	27
56	TDS-1	Tie Down Strap and Hook Assembly	1
57	3834G8B	3/8" x 3/4" Grade 8 Hex Bolt	1
58	38LNG8	3/8" Lock Nut (Grade 8)	1

## INITIAL OPERATION / MAINTENANCE

### **WARNING**

**BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE HYDRAULIC AUGER.**

IMPORTANT - Make sure that your tractor delivers a minimum of 9 gallon per minute (1,500 psi), but does not exceed 15 gallon per minute (2,250 psi). At no time should you operate at 15 gallon per minute and 2,250 psi at the same time.

**Before the hydraulic auger is put into service:**

Has the gravity box been fastened properly to the running gear?

Have all nuts, bolts, and braces been properly fastened?

Has all debris and foreign objects been removed from the gravity box and hydraulic auger?

Have the safety instructions been read and clearly understood by the operator(s) of this machine?

## OPERATING INSTRUCTIONS

### **WARNING**

**BE CERTAIN THAT ALL POWER IS SHUT OFF WHEN CONNECTING HYDRAULIC LINES TO THE TRACTOR.**

**Preparing the Hydraulic Auger for Use.**

Attach the hydraulic lines to the service outlet on the tractor. Make sure that the lines are properly connected for correct auger rotation. Flighting may become damaged if the system is run backwards. Make sure that all air is bled from the hydraulic lines.

Run the auger EMPTY before actual use.

A control rod runs the length of the auger tube. Operate the auger from this rod or pull rope. When possible, try to completely auger out the material from the auger tube after each unloading. This will reduce stress on the hydraulic system and increase the motor life. Never transport the unit with the auger tube full of material. If the auger becomes clogged or you option to change the flighting (i.e. steel flighting to plastic flighting) make sure all power is shut off before servicing.

After use, make sure to clean out well and coat the inside of the auger with oil to inhibit rusting, especially after handling fertilizer. Also, open the auger cleanout port at the base of the auger tube.

## CHANGING THE FLIGHTING

### **WARNING**

**BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE CHANGING THE FLIGHTING.**

With the power off, loosen the (4) - 3/8" x 1 1/2" bolts and nuts from the top bracket of the auger. Pull off the top spout. At the hydraulic motor, remove the 3/8" x 1 3/4" bolt and nut from the motor shaft. Pull out the flighting from the top. Replace and reattach the flighting to the motor shaft and also reattach the upper spout.

**NOTE:** PLUGGING THE AUGER EQUIPPED WITH PLASTIC FLIGHTING MAY DAMAGE THE FLIGHTING. IN ADDITION, DO NOT RUN AN AUGER EMPTY FOR AN EXTENDED PERIOD OF TIME WHEN EQUIPPED WITH PLASTIC FLIGHTING.

