

# Installation Instructions

# Direct Drive Hydraulic Replacement Tailgate Spreader



#### **REPLACEMENT TAILGATE SPREADER WARRANTY**

This warranty replaces all previous warranties and no employee of this company is authorized to extend any additional warranties, or agreements, or implications not explicitly covered herein. Buyers Products Company warrants all parts of the product to be free from defects in material and workmanship for a period of (1) one year from the date of original installation. Parts must be properly installed and used under normal conditions. Normal wear is excluded.

Any part which has been altered, including modification, misuse, accident, or lack of maintenance will not be considered under this warranty. The sole responsibility of Buyers Products Company under this warranty is limited to repairing or replacing any part(s) which are returned, prepaid, 30 days after such defect is discovered, and returned part(s) are found to be defective by Buyers Products Company.

Authorization from Buyers Products Company must be obtained before returning any part. The following information must accompany defective parts returned to Buyers Products Company: RMA#, spreader model, serial number, date installed, and distributor from whom it was purchased. Buyers Products Company shall not be liable for damage arising out of failure of any unit to operate properly, or failure, or delay in work, or for any consequential damages. No charges for transportation or labor performed on any part will be allowed under this warranty.

#### **Table of Contents**

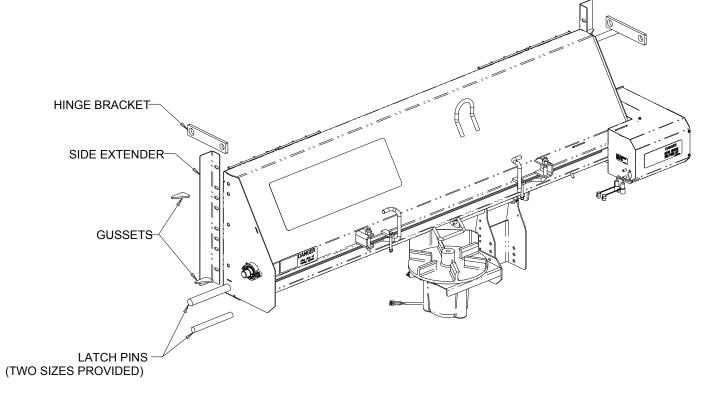
Spreader Installation Instructions	1-2
Spinner Assembly Instructions	3-4
Spinner Assembly Drawing	4
Hydraulic Installation	4-5
Operating Instructions	5-6
Parts lists	7-8

Note: These instructions are for typical installation. Your truck application may require additional fabrication.

### **WARNING**

During installation ensure that the truck is on level ground and the spreader will be safely supported the entire process.





#### 1. Aligning and Mounting the Spreader:

**A.** Remove the truck's tailgate and store it in a safe location.

**B.** Position the spreader at the rear of the truck, centered, and with the spreader slightly above the surface of the bed.

#### NOTE: The spreader should be lifted using the hook welded to the body. Clamp the spreader in this position.

**C.** The spreader is supplied with two sizes of hinge pins and hinge brackets with two sizes of holes.

**D.** Determine which parts best work with your truck body and fit them up and tack weld in place.

# **NOTE:** If required, different size pins or brackets are the responsibility of the installer.

**E.** Remove the spreader from the body and fully weld the mounting components to the spreader.

NOTE: It is the responsibility of the installer to ensure that the final installation is completed properly and as secure as the original tailgate.

**F.** Cut off any extra material as desired then reattach the spreader to truck in order to mount the spinner assembly.

#### 2. Alternate Mounting:

**A.** Another option for mounting is to use the included side extenders. These are to be bolted to the sides of the spreaders using the included carriage bolts and should be mounted flush with the truck side surface of the spreader.

NOTE: Side Extenders should be attached so slotted holes line up with existing holes in the spreader body. This will allow clearance for positioning the bottom hinge pin.

**B.** Use the included gussets, 2 per side, to reinforce the side extenders as close to the mounting hardware as possible.

**C.** If desired, additional gussets or supports may be added. *(NOT SUPPLIED)* 



**3. Spinner assembly installation:** (See installation drawings on pages 3 and 4.)

**A.** Attach the spinner shield (Item 2) to the spinner frame (Item 1) using (2) 5/16-18 x 1-1/4 cap screws, 5/16 flat washers and (2) 5/16-18 hex flange nuts.

**B.** Attach the spinner disk sub assembly to the hydraulic motor on the spinner frame and tighten the set screw in the disk collar.

# Note: Be sure to lubricate the hydraulic motor shaft generously with Never Seez lubricant before assembling.

**C.** Attach the spinner frame assembly to the lower tray of the spreader with the hinge rod and attach (2) hairpin cotter pins.

**D.** The leveling mechanism may now be mounted. Park truck on flat, level surface. With spinner assembly in level position, carefully measure "L" and "D" distances. Use any of 3 available holes in height adjustment bracket. Locate bar or spinner lug such that ½" hole will position with D1=D and L1=L. Modify angle if necessary.

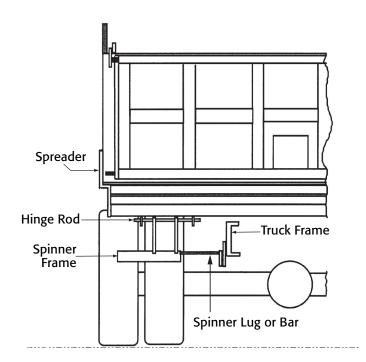
**E.** Secure bar or spinner lug to the truck frame.

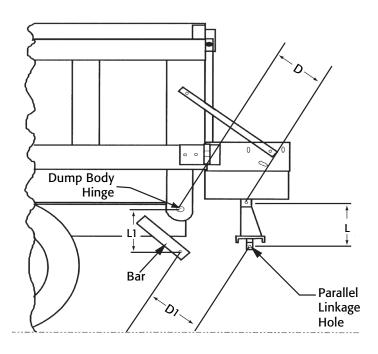
**F.** Attach parallel linkage rods to heights adjustment bracket and angle. Secure them using ½" washers and hair pins.

**G.** Clamp parallel linkage rods together. To verify leveling action, slowly raise the dump. Be sure that spinner motor assembly and linkages do not have any interference with truck body and it does not have contact with the road. After checking weld parallel linkage bars together.

**H.** Keeping the spinner assembly level, remove the set screw from the clamp collar and secure the spinner frame in place using the spinner assembly lock.

#### Parallel Linkage, Spinner Frame & Bar Installation Drawings



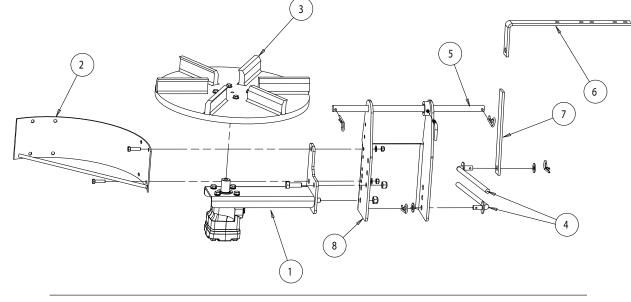




#### Parallel Linkage, Spinner Frame & Bar Installation Drawings (cont.)

#### **Bill of Materials**

ITEM	QTY.	DESCRIPTION	STAINLESS	ITEM	QTY.	DESCRIPTION	STAINLESS
1	1	Spinner Frame Assy.	3018416	5	1	Hinge Rod	3006646
2	1	Spinner Shield	3006659	6	1	Spinner Lug	3006645
3	1	Spinner Disk Assy.	3001472A	7	1	Bar	924F0014
4	2	Linkage Rods, Welded	924F0012	8	1	Height Adjustment Bracket	3017175
		<b>U</b>					



### **Hydraulic Installation Instructions**

**A.** During assembly take precautions to keep all hydraulic components as clean as possible.

**B.** Allow enough hose length to prevent kinking and stretching of the hoses and to permit raising the dump body. Support long hoses with wire ties or clamps.

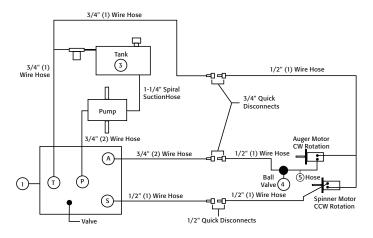
**C**. Protect hoses from wear caused by sliding and/or vibration.

**D.** For proper rotation of auger and spinner motors, hoses may be reversed.

#### Note: Use of a pipe joint sealant compatible with hydraulic oil is recommended for all screw fittings.

E. Use swivel type hose ends to connect hoses to flow valve. Damage to valve body may occur if the fittings in flow valve are over tightened
F. To achieve a positive shutoff of the auger motor, the inlet flow must pass through the ball valve (premounted to the spreader) & the supplied hose must connect the ball valve to the auger's hydraulic motor as shown in the figures on the bottom of page 4. (Inspection of this hose is recommended to ensure no damage has occurred during shipping)

#### **Hydraulic Flow Diagram**

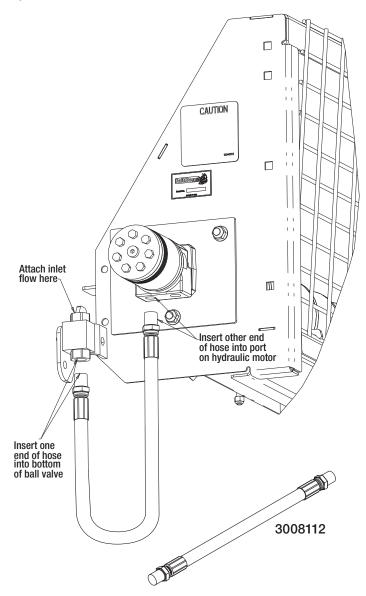


#### **Bill of Materials**

ITEM	PART NO.	QTY.	DESCRIPTION
1	HV715	1	Dual Flow Regulator Valve
2	HVC1	1	Dual Flow Regulator Console
3	SMR15	1	15 Gallon Reservoir
4	3008523	1	Ball Valve Assembly
5	3008112	1	Hose



**G.** Using hose number 3008112, insert one end into the bottom of the ball valve assembly. Insert the other end into the LH port (when looking from rear) of the hydraulic motor.



## **Operating Instructions**

# 

A. Be sure everyone is standing clear.

B. Be alert for anything that may require shutting down the system.

C. Before working in or around spreader equipment, be sure all hydraulic controls are moved to off position.

#### 1. Pre-start up.

**A.** Use high grade non foaming hydraulic oil to fill reservoir about 3/4 full.

**B.** Position valve on/off lever to off.

**C.** Move auger and spinner knobs on the valve to the open position.

**D.** Engage PTO and circulate hydraulic oil for several minutes to warm up.

**E.** Move valve on/off lever to on.

F. Inspect hydraulic system for leaks.

**G.** Check auger and spinner to see if they are working properly.

**H.** Refill reservoir to 3/4 full.

I. Hydraulic system should now be ready for use.

#### 2. Initial use of spreader

**A.** Shut off spinner and auger knobs and position the on/off lever to on. Engage the PTO and allow the hydraulic system to warm up.

**B.** Open the cover plate and secure vertically with locking brackets.

**C.** Open dump body tailgate as wide as possible from bottom without bearing against cover plate. Set stop chains.

**D.** Position spinner assembly to the far left (drivers side), tighten clamp. Determine placement of material at various spinner and auger speeds by spreading a small amount of material (Far left position used to spread (3) three or (4) four lane highway from right lane).

**E.** Position spinner assembly to the far right (passenger side), tighten clamp. Determine placement of material at various spinner and auger speeds by spreading a small amount of material (Far right position used to spread (4) four lane highway from left lane).

**F.** Changing auger and spinner speeds on the valve and placing spinner at various positions from left to right will produce various spread patterns.



#### 3. Using the Auger Lock-out System

**A.** Shut off spinner and auger and position the main hydraulics on/off lever to off.

**B.** Remove the lock-out pin, rotate the handle, and insert the pin through the holes in the handle and the bracket to prevent accidental engagement of the hydraulics. (see illustration below)

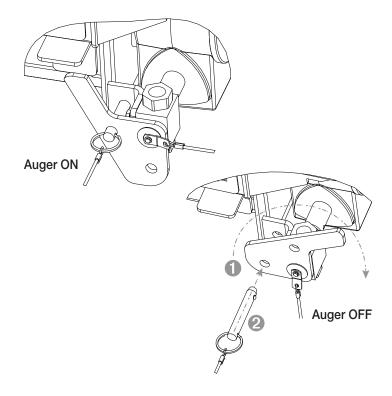
**C.** The lower tray may now be opened for servicing the auger.

**D.** After servicing, first close and lock the tray then reverse the steps to move the handle and pin back to their original positions. **BE SURE TO REINSERT THE LOCK-OUT PIN THROUGH THE HOLES IN THE HANDLE AND THE BRACKET.** 

**E.** Turn the main hydraulics back on and the spreader is ready for operation.

# 

Before working in or around the auger area, the valve control lever must be in the off position. Disengage PTO, shut off engine, and follow the auger lock-out instructions. MAKE SURE THE LOCK-OUT PIN IS ALWAYS USED IN BOTH THE ON AND OFF POSITIONS. After servicing is complete, reverse the process to restore the spreader function. NEVER PUT ANY PART OF YOUR BODY INSIDE THE AUGER AREA OF SPREADER.



#### 4. Miscellaneous

**A.** Valve setting changes may be made with truck in motion.

**B.** By moving on/off lever to the off position, spinner and auger may be stopped at the same time without changing their valve settings.

**C.** Close cover plate flat over spreader trough and lock in place for normal use of dump truck. Tailgate may be opened from top or bottom.

**D.** When truck is used for extensive hauling the spinner assembly should be removed.

**E.** If auger clogs, shut off spinner, open auger knob valve and increase the engine speed. With the engine at a higher speed, move the valve lever from the on to the off positions rapidly; repeat as needed. This action may unclog the auger. If this action fails to free the auger, manual unclogging will be required.

# 

Position the valve on/off control lever in the off position when the spreader is not in use or is removed. In the event the valve on/off control lever is left in the on position, a heat problem may occur as the pump continues to pump oil to the hydraulic valve. This could cause a hose to burst spraying hot oil.

#### **Recommended Maintenance**

**A.** Warm up hydraulic system before using.

**B.** Keep the reservoir 3/4 full with high grade nonfoaming hydraulic oil.

**C.** Use precautions to keep contaminants from getting in reservoir when filling.

- **D.** Quick connects are a prime source of contamination.
  - 1. Clean quick connects before connecting or disconnecting them.
  - **2.** Protect quick connects from contaminates.

**E.** Lubricate all bearings with suitable type grease on a regular basis. More frequent lubrication is recommended during periods of heavy use.

**F.** Lubricate the spinner hinge rod periodically.

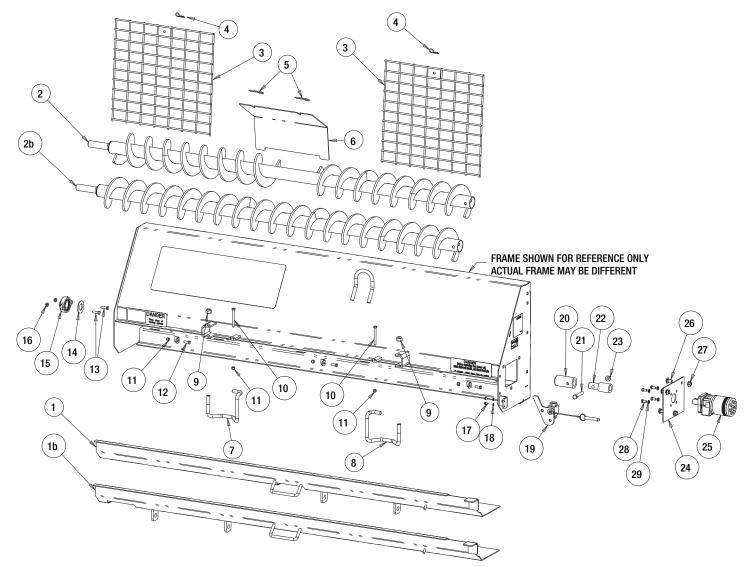
**G.** Maintain the proper lubrication level in all gearboxes with SAE 90 gear lubricant.

**H.** When not in use, keep the spreader tray empty to prevent freezing of material around auger in extremely cold weather.

- I. To extend the life of your spreader:
  - 1. Hose down and clean after each use.
  - 2. Repaint and/or oil after each season.



#### **Spreader Assembly Parts List**



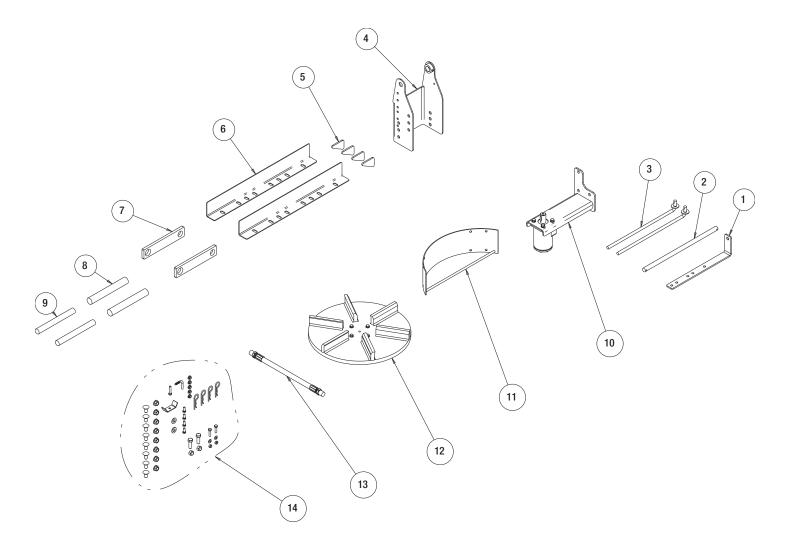
#### **Bill of Materials**

ITEM	PART NO.	QTY.	DESCRIPTION	
1	3032173	- 1	Bottom Tray - Center Discharge	
1B	3032206	I	Bottom Tray - Driver Side Discharge	
2	3032188	- 1	Auger - Center Discharge	
2B	3032191	- 1	Auger - Driver Side Discharge	
3	3032179	2	Screen	
4	1420016	2	Cotter Pin	
5	HP12	2	Cotter Pin	
6	3032181	1	Plate,Anti-Spill	
7	3027109	1	Cam Handle - CW	
8	3027110	1	Cam Handle - CCW	
9	3001247	2	Nut,Nylon Locking 5/8-11	
10	3001249	2	Screw,Hex Head Cap, 3/8-16 x 3	
11	FNE038016044SS	5	Nut,Nylon Locking 3/8-16	
12	FCS038016100SS	7	Screw, Hex Head Cap, 3/8-16 X 1	
13	FCS038016125SS	2	Screw, Hex Head Cap, 3/8-16 X 1.25	
14	9240087	1	Gasket,Felt	

ITEM	PART NO.	QTY.	DESCRIPTION
15	9240087	1	Bearing
16	3014756	2	Nut,Nylon Locking,7/16-14
17	3008549	2	Screw, Hex Head Cap, 1/4-20 x 1/2
18	FWL025050006SS	2	Washer,Locking,1/4
19	3008523	1	Ball Valve Assembly
20	9240083	1	Sleeve, Auger Adapter
21	3001250	1	Screw,Hex Head Cap,1/2-13 x 3
22	924F0084	1	Adapter, Motor
23	3001253	1	Nut,1/2-13
24	3001367	1	Plate,Motor Mount
25	CM074P	1	Motor
26	3001522	3	Bolt,Carriage,1/2-13 x 1
27	3001523	3	Nut,1/2-13
28	FCS038016075SS	4	Screw, Hex Head Cap, 3/8-16 x 3/4
29	FWL038069009SS	4	Washer,Locking,3/8



#### Hardware Box Parts List -Part No. 3032219



#### **Bill of Materials**

ITEM	PART NO.	QTY.	DESCRIPTION
1	3006645	1	Angle,Spinner Lug
2	3006646	1	Rod,Hinge
3	924F0012	2	Parallel Linkage
4	3017175	1	Bracket, Height Adjustment
5	3032180	4	Gusset,Side Extension
6	3032177	2	Plate,Side Extension
7	3032176	2	Bar,Pivot
8	3032175	2	Pin,Pivot,1.25 Diameter
9	3032204	1	Pin,Pivot,1.00 Diameter
10	3018416	1	Frame Asm, Spinner Motor
11	3006659	1	Deflector, Spinner
12	3001472A	1	Spinner Disk Asm
13	3008112	1	Hose,Motor
14	3032222	1	Hardware Bag