

Manual

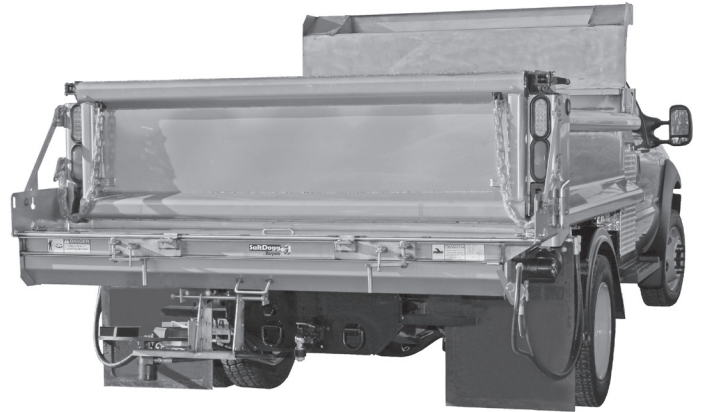
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Direct Drive & 5:1 Gear Reduction Under Tailgate Spreaders

NOTE: This manual applies to spreaders with a top screen.

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Installation Instructions

NOTE: The left and right end plates may, on occasion, get bent through improper handling during shipment or storage. If this should happen, square and true the left and right end plates before installation.

1. Aligning the spreader:

A. Position the spreader with the truck such that the auger drive is located on the right side of the truck (passenger side).

B. Lift the spreader up and under the dump body tailgate, positioning the spreader forward as close as possible to the dump body. The tailgate of the dump body should lay down horizontally over the spreader.

C. Support the spreader solidly and securely when positioning for mounting.

2. Attach mounting brackets: (See hardware installation drawing on page 2.)

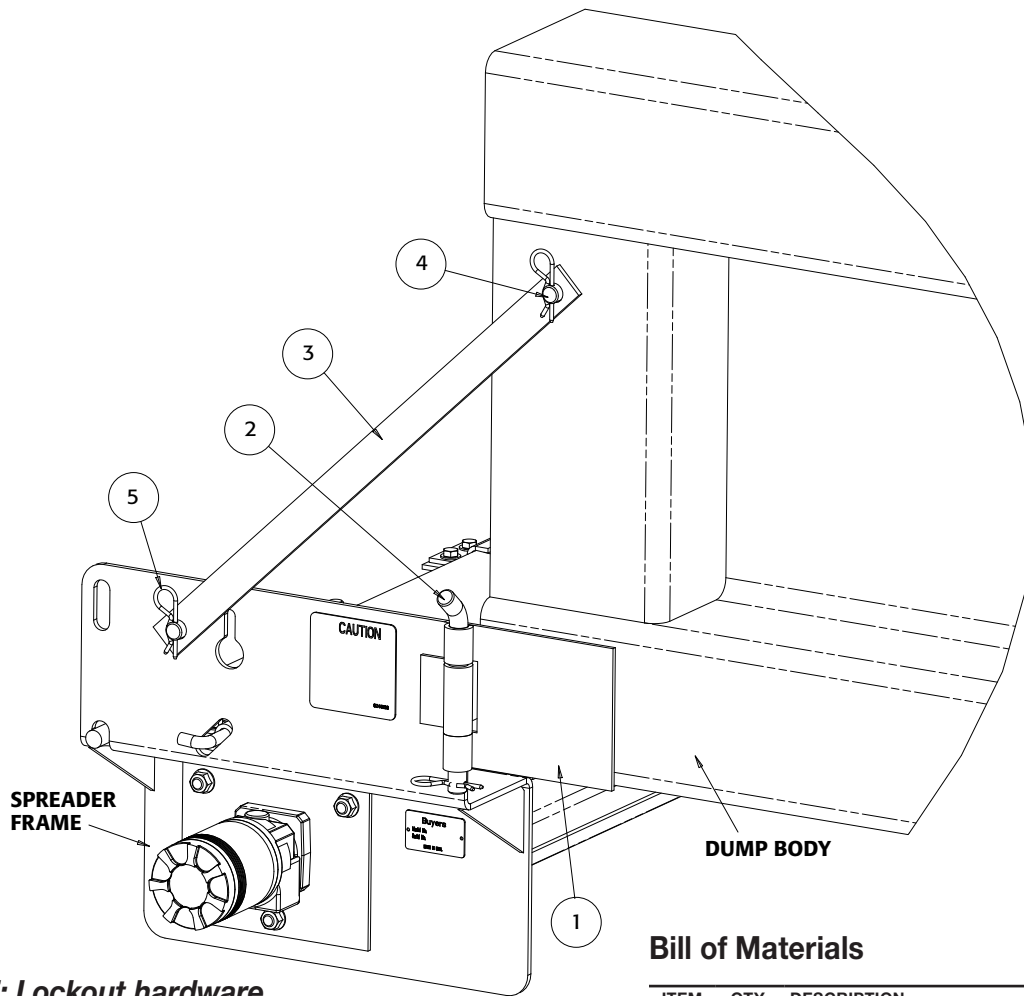
A. Attach a quick detach plate, (Item 1) to both sides of the spreader frame using hinge pins (Item 2) and a hairpin cotter pins (Item 5).

B. Position the (2) quick detach plates over the dump body rub rails and flush with rear edge of dump body.

C. Weld the (2) quick detach plates to the dump body rub rails. Weld the plates continuously around (3) sides of each plate. Do not weld along the edge of the plates next to the attachment pin.

D. Align the pin brace (Item 4) on the dump body using the iron brace (Item 3) for exact positioning. For

Mounting Hardware Installation Drawing



NOTE: Lockout hardware is not shown

Bill of Materials

ITEM	QTY.	DESCRIPTION	CARBON	STAINLESS
1	2	Quick Detach Plate	924F0102	3009526
2	2	Hinge Pin	924F0103	3011139
3	2	Hanger Iron Brace	924F0101	3011137
4	2	Pin Brace	9240021B	3000210
5	6	Hair Pin Cotter 5/32"	HP12	HP12

proper fit, hanger iron brace may require some minor bending.

E. Weld the (2) pin braces (Item 4) to the dump body sides, all around.

F. Attach the iron braces (Item 3) to the pin braces on the sides of the dump body and the sides of the spreader using (2) hairpin cotter pins (Item 5).

G. If there is a gap between the spreader and the dump body, weld or bolt a steel strip to the forward edge of the spreader to cover the gap.

H. If you have purchased the tailgate side shields (purchased separately as P/N 924F0106PR or 924F0106SSPR, Stainless), bolt or weld them to the inside of the tailgate to prevent material spillage at the ends of the spreader.

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 1/2” hole will position with $D1=D$ and $L1=L$. Modify angle if necessary.

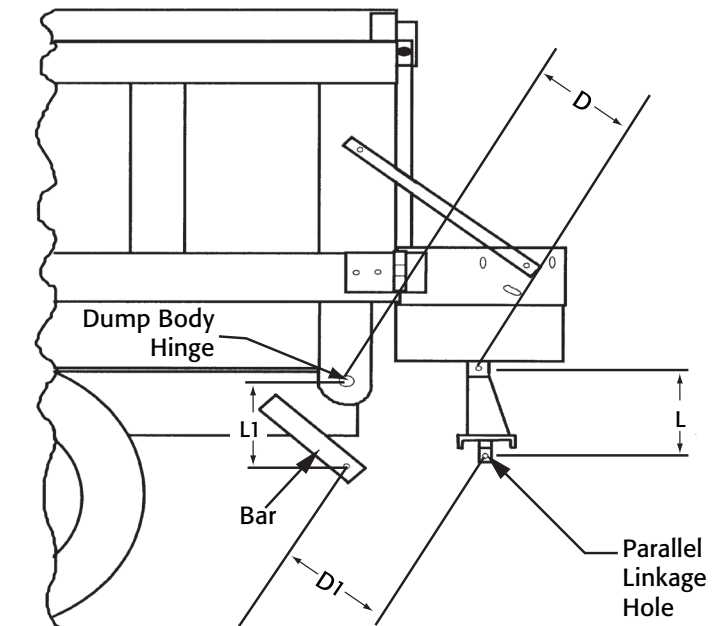
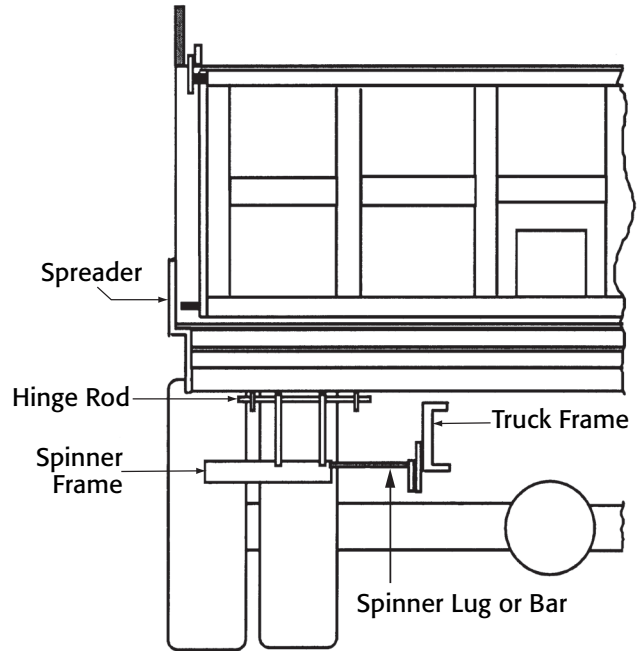
E. Secure bar or spinner lug to the truck frame.

F. Attach parallel linkage rods to heights adjustment bracket and angle. Secure them using 1/2” 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

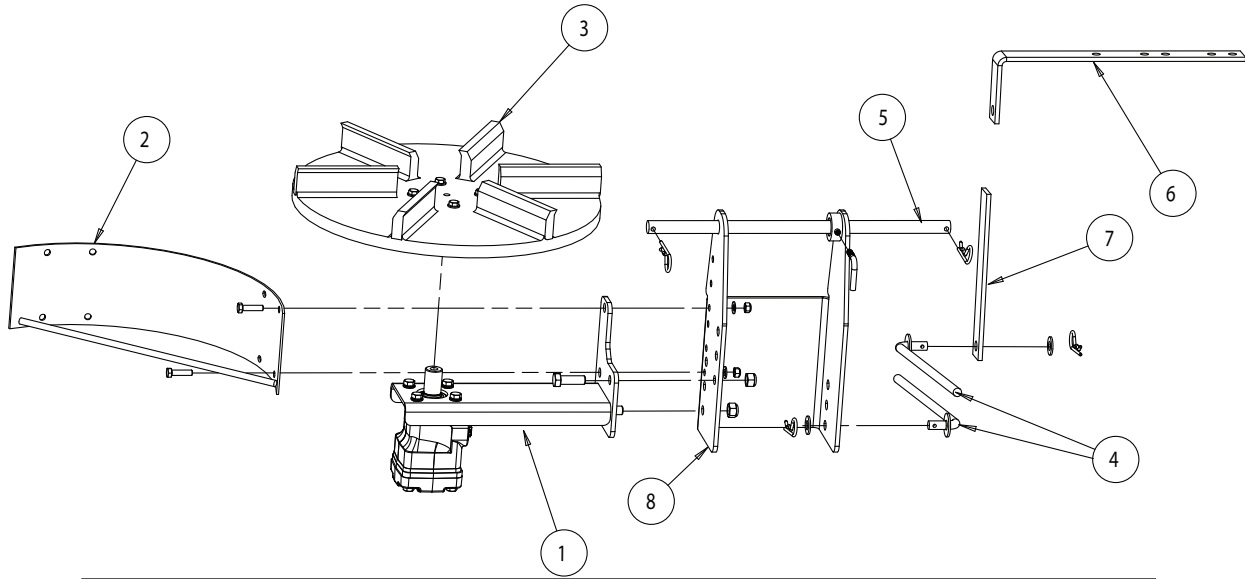


Parallel Linkage, Spinner Frame & Bar Installation Drawings (cont.)

Bill of Materials

ITEM	QTY.	DESCRIPTION	CARBON	STAINLESS
1	1	Spinner Frame Assy.	3020184	3018416
2	1	Spinner Shield	924F0015	3006659
3	1	Spinner Disk Assy.	3001472A	3001472A
4	2	Linkage Rods, Welded	924F0012	924F0012

ITEM	QTY.	DESCRIPTION	CARBON	STAINLESS
5	1	Hinge Rod	924F0018	3006646
6	1	Spinner Lug	924F0013	3006645
7	1	Bar	924F0014	924F0014
8	1	Height Adjustment Bracket	3020185	3017175



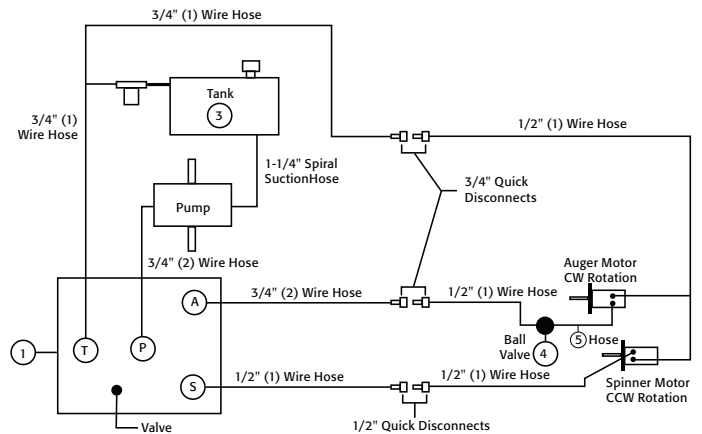
Hydraulic Installation Instructions

- 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 (pre-mounted 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

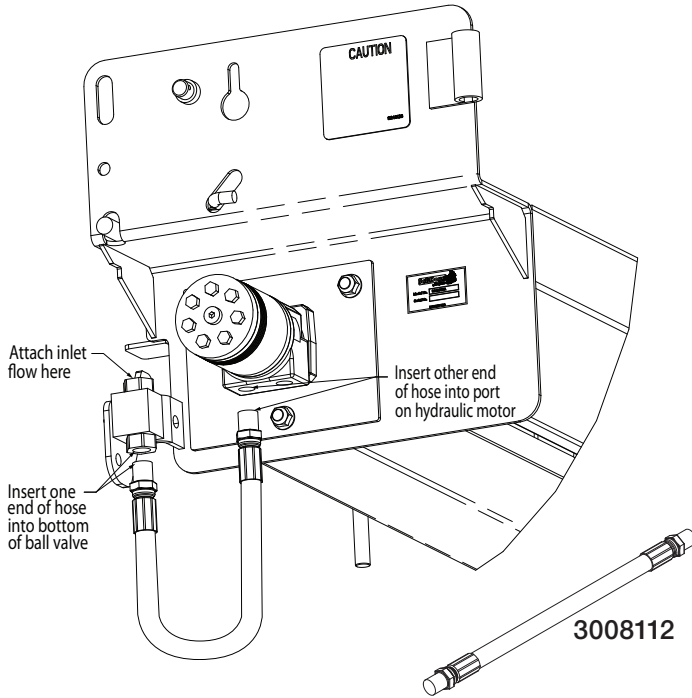


Bill of Materials

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	3008112/308113	1	Hose (Direct Drive/5:1 Gearbox)

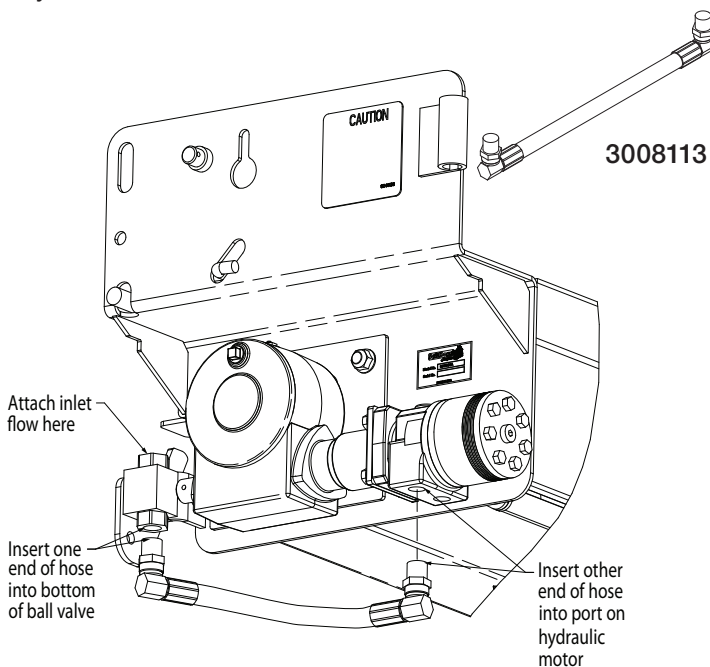
Direct Drive Under Tailgate Spreaders

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.



5:1 Gearbox Under Tailgate Spreaders

Using hose number 3008113, 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

CAUTION

- 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

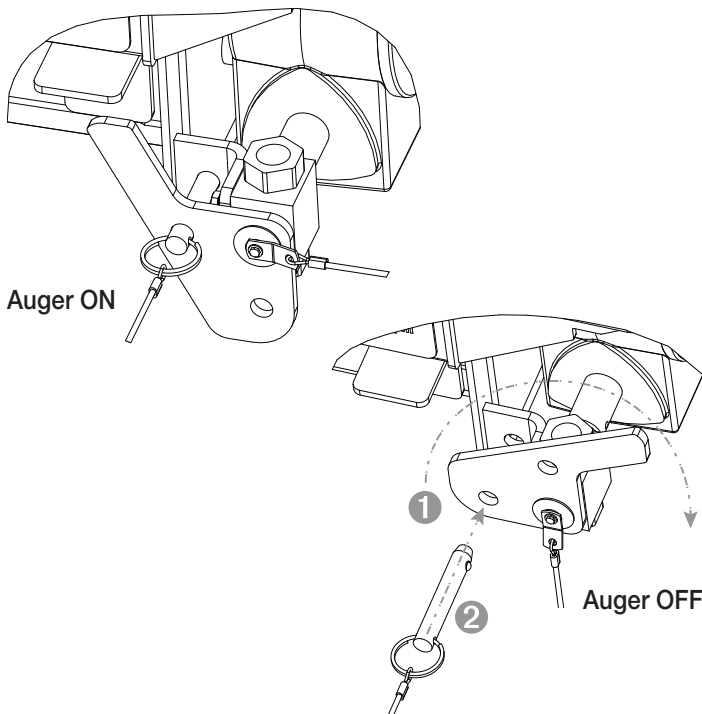
- A. Shut off spinner and auger knobs and position the on/off lever to on. Engage the PTO and allow the hydraulic system to warm up.
- B. Open the cover plate and secure vertically with locking brackets.
- C. Open dump body tailgate as wide as possible from bottom without bearing against cover plate. 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.

⚠ DANGER

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.

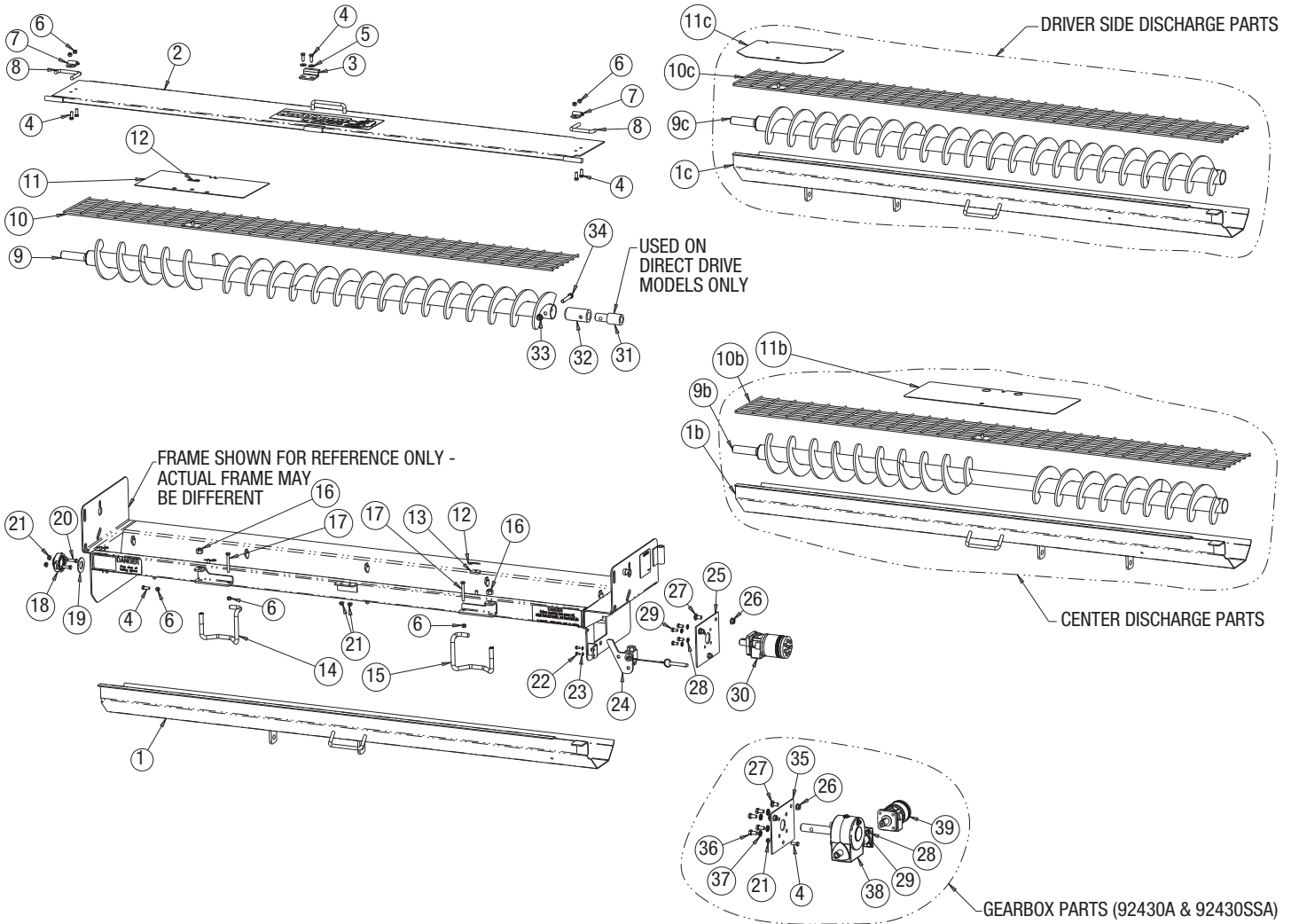
⚠ CAUTION

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

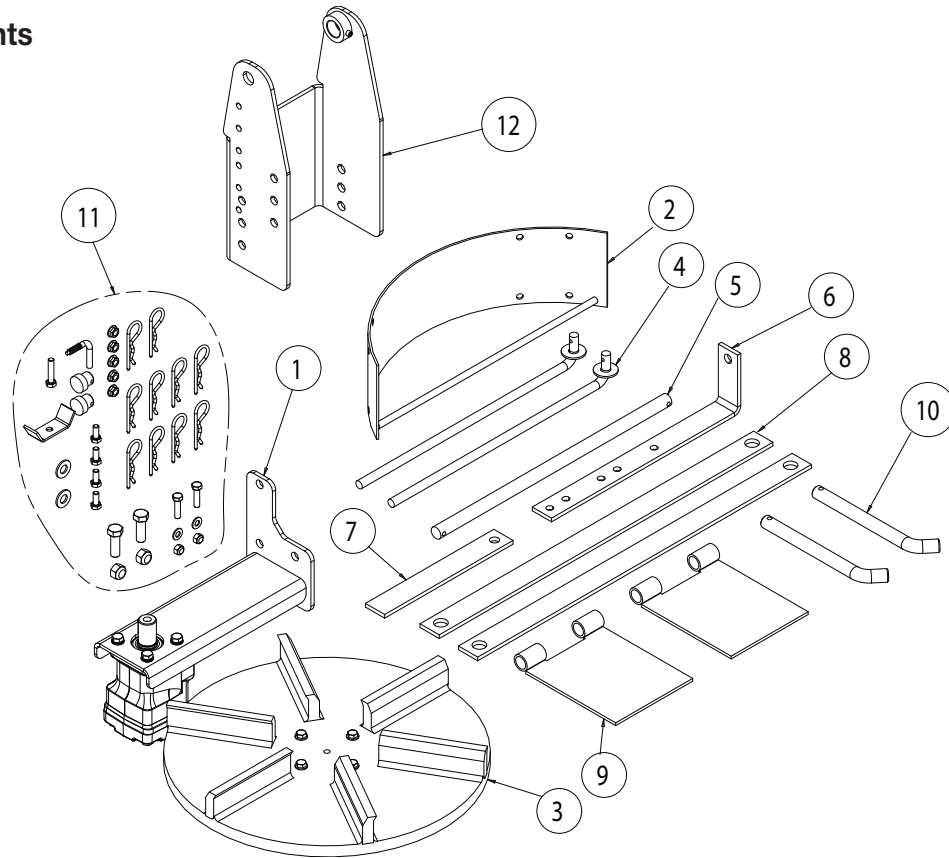


Bill of Materials

ITEM	QTY.	DESCRIPTION	CARBON	STAINLESS
1	1	Bottom Tray - Standard Discharge	3008429	3024301
1b	1	Bottom Tray - Center Discharge	-	3024515
1c	1	Bottom Tray - Driver Side Discharge	-	3017489
2	1	Top Cover	3026624	3025122
3	1	Bracket, Cover Mount	3008430	3008447
4	9/10	Screw, Hex Head Cap, 3/8-16 X 1	FCS038016100	FCS038016100SS
5	2	Washer, Flat, 3/8in	FWF038100007	FWF038100007SS
6	9	Nut, Nylon Locking, 3/8-16	FNE038016044	FNE038016044SS
7	2	Bracket, Cover Latch	3006965	3006968
8	2	Latch Handle	9240063	3000268
9	1	Auger - Standard Discharge	924F0081	924F0081
9b	1	Auger - Center Discharge	-	3024512
9c	1	Auger - Driver Side Discharge	-	3017487
10	1	Screen - Standard Discharge	3024306	3024306
10b	1	Screen - Center Discharge	-	3024518
10c	1	Screen - Driver Side Discharge	-	3023297
11	1	Plate, Anti-Spill - Standard Discharge	3026623	3022531
11b	1	Plate, Anti-Spill - Center Discharge	-	3024517
11c	1	Plate, Anti-Spill - Driver Side Discharge	-	3023298
12	4	Hairpin Cotter	1420016	1420016
13	2	Bracket, Screen Mount	3026629	3022533
14	1	Cam Handle - CW	3027935	3027109
15	1	Cam Handle - CCW	3027936	3027110
16	2	Nut, Nylon Locking 5/8-11	FNE063011069	3001247

ITEM	QTY.	DESCRIPTION	CARBON	STAINLESS
17	2	Screw, Hex Head Cap, 3/8-16 x 3	FCS038016300	3007068
18	1	Bearing, 1-1/4 Flange 2 Hole	9240086	9240086
19	1	Gasket, Felt Bearing	9240087	9240087
20	2	Screw, Hex Head Cap, 3/8-16 X 1-1/4	FCS038016125	FCS038016125SS
21	4/5	Nut, Hex Flange, 3/8-16	92401211	3001255
22	2	Screw, Hex Head Cap, 1/4-20 X 1/2	3008549	3008549
23	2	Washer, Locking, 1/4	FWL025050006SS	FWL025050006SS
24	1	Ball Valve Assembly	3008523	3008523
25	1	Plate, Motor Mount	3000458	3001367
26	2	Nut, Hex Flange, 1/2-13	92401212	3001523
27	3/2	Bolt, Carriage, 1/2-13 x 1	FCB050013100	3001522
28	4	Washer, Locking, 3/8	FWL038069009	FWL038069009SS
29	4	Screw, Hex Head Cap, 3/8-16 x 3/4	9240125	FCS038016075SS
30	1	Hydraulic Motor - Direct Drive Models Only	CM074P	CM074P
31	1	Motor Adapter	924F0084	924F0084
32	1	Sleeve, Auger Adapter	9240083	9240083
33	1	Nut, Hex, Reversible, Locking 1/2-13	92401213	3001253
34	1	Screw, Hex Head Cap, 1/2-13 x 3	FCS050013300	3001250
35	1	Plate, Gearbox Mount	3000457	3001366
36	4	Screw, Hex Head Cap, 1/2-13 x 1	FCS050013100	FCS050013100SS
37	4	Washer, Locking, 1/2	FWL050088013	FWL050088013SS
38	1	Gearbox	9240089	9240089
39	1	Hydraulic Motor - Gearbox Model Only	CM034P	CM034P

Hardware Box Contents

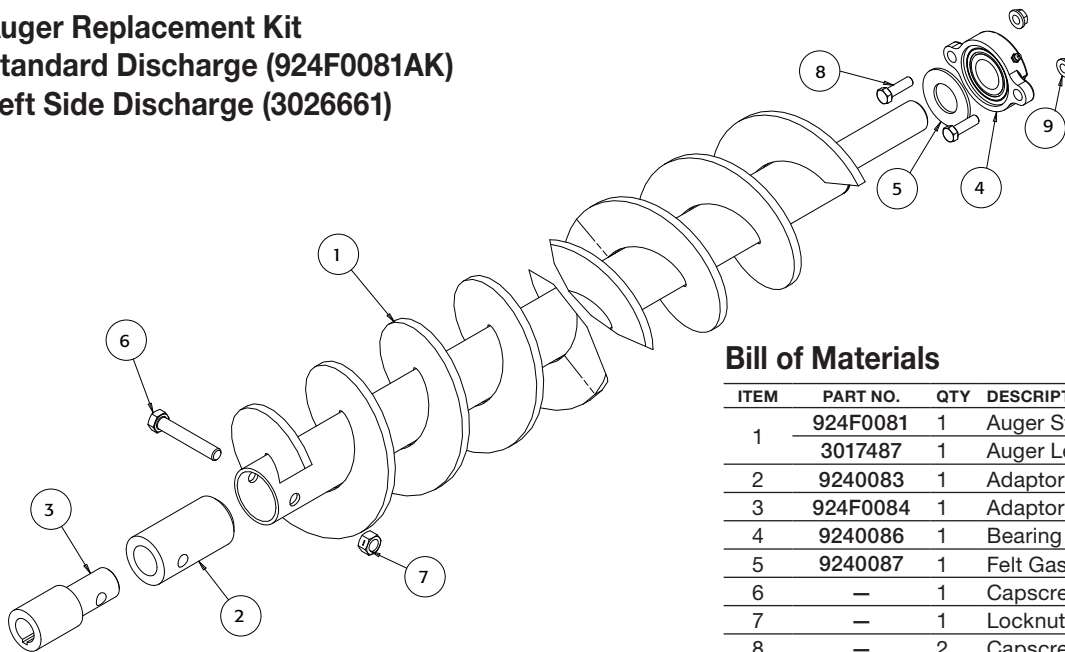


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2	1	Spinner Shield	924F0015	3006659
3	1	Spinner Disk Assy.	3001472A	3001472A
4	2	Linkage Rods, Welded	924F0012	924F0012
5	1	Hinge Rod	924F0018	3006646
6	1	Spinner Lug	924F0013	3006645

ITEM	QTY	DESCRIPTION	CARBON	STAINLESS
7	1	Bar	924F0014	924F0014
8	2	Bar, Hanger Brace	924F0101	3011137
9	2	Detach Mounting Plate	924F0102	3009526
10	2	Hinge Pin	924F0103	3011139
11	1	Hardware Bag	3015630	3017834
12	1	Height Adjustment Bracket	3020185	3017175

**Auger Replacement Kit
Standard Discharge (924F0081AK)
Left Side Discharge (3026661)**



Bill of Materials

ITEM	PART NO.	QTY	DESCRIPTION
1	924F0081	1	Auger Standard Discharge
	3017487	1	Auger Left Side Discharge
2	9240083	1	Adaptor Sleeve
3	924F0084	1	Adaptor Shaft
4	9240086	1	Bearing
5	9240087	1	Felt Gasket
6	—	1	Capscrew
7	—	1	Locknut, Reversible Hex
8	—	2	Capscrew
9	—	2	Nut, Serrated Flange