

Installation Instructions



1515, 2015, 2515, 2015P and 2515P Lift Assist Option

Used with:

- 1515 Soybean Machine
- 2015 Soybean Machine
- 2515 Soybean Machine
- 2015P Bean Machine
- 2515P Bean Machine



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

General Information

These instructions explain how to install the Lift Assist Option. The Lift Assist helps raise the 3-point soybean machine so smaller tractors can be used to operate the soybean machine. The Lift Assist raises the soybean machine for transport and field turns.

These instructions apply to:

124-034A Bean Machine Lift Assist Package

Manual Update

Refer to the soybean machine operator's manual for detailed information on safely operating, adjusting, troubleshooting and maintaining the Lift Assist Option. Refer to the parts manual for part identification.

Manual Numbers

173-159M	1515, 2015 and 2515 Operator's Manual
173-159P	1515, 2015 and 2515 Parts Manual
173-208M	2015P and 2515P Operator's Manual
173-208P	2015P and 2515P Parts Manual

Before You Start

Page 7 is a detailed listing of parts included in the Lift Assist Option package. Use this list to inventory parts received.

Assembly Instructions

Row Unit Stop (for 2015P and 2515P only)

If you have a 2015P or 2515P Precision Bean Machine, you will need to do the following so the Lift Assist arms will not damage the seed meters.

Remove the two stops (1), Figure 1, on each of the two center rows, shown in Figure 2. Replace the four stops with the new longer stops (2), Figure 1, included in your Lift Assist kit.

NOTE: The new stops (2) must be positioned with the two notches up, see inset in Figure 1.

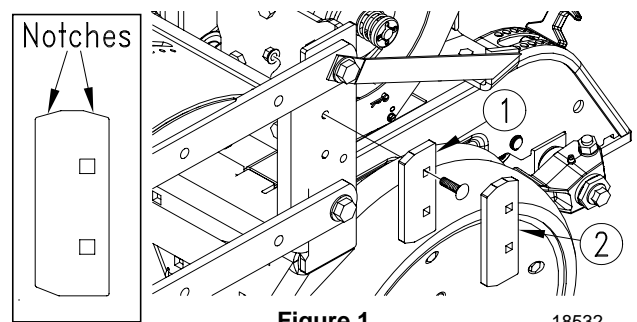


Figure 1
Row Unit Stop on 2015P and 2515P

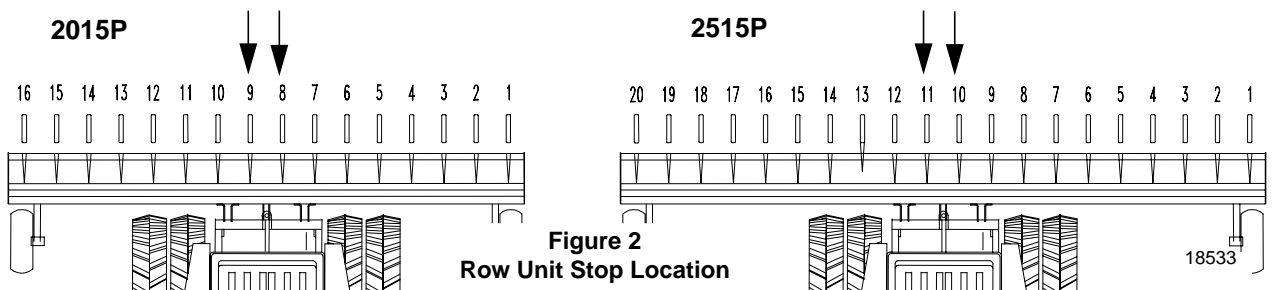


Figure 2
Row Unit Stop Location

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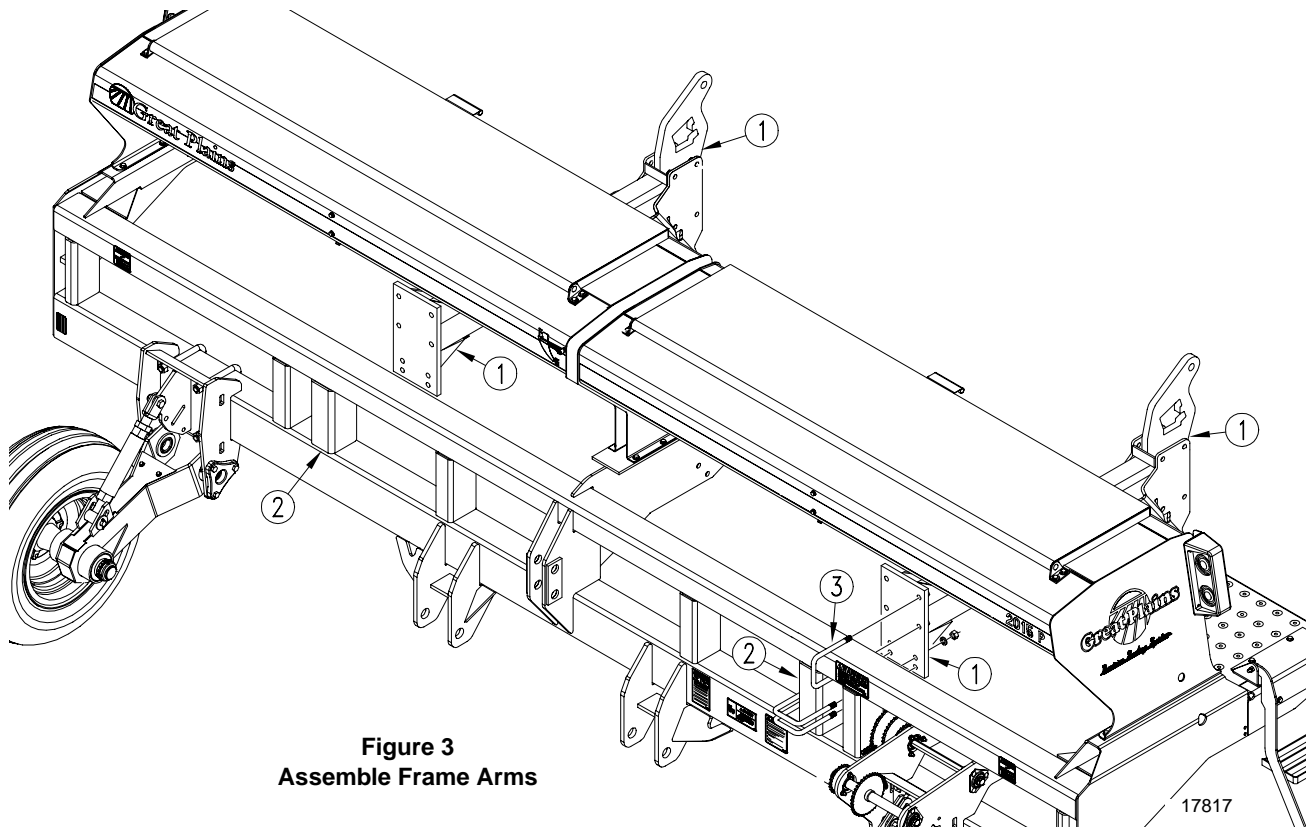


Figure 3
Assemble Frame Arms

Refer to Figure 3.

1. Assemble frame arms (1) onto vertical 4 x 5 inch frame tubes (2). Loosely bolt arms to tubes using 5/8 inch u-bolts, lock washers and nuts.

NOTE: Secure u-bolt (3) around horizontal tube on the outside of the vertical tube.

Refer to Figure 4.

2. Remove the two walkboard support brackets (1) from under walkboards at center of soybean machine. Discard support brackets, u-bolts (2) and u-bolt hardware (3). Save retainers (4), 3/8 inch (5) bolts, lock washers and nuts for later use.

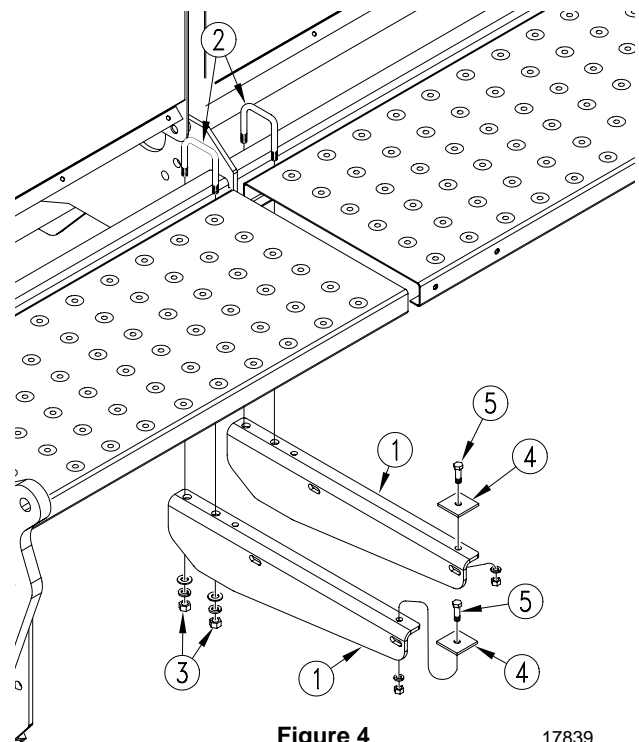


Figure 4
Remove Walkboard Support Brackets

Refer to Figure 5.

3. Loosely bolt braces (1) to center of soybean machine (2) under walkboards using 5/8 x f2 1/2 inch bolts, lock washers and nuts.
4. Loosely bolt braces to frame arms (3) using 5/8 x 1 3/4 inch bolts, lock washers and nuts.
5. Tighten all hardware on frame arms and braces.
6. Install weight-bracket tube (4) in frame-arm plates. Install tube so either the John Deere bracket (5) or Case-IH bracket (6) faces up depending on what type of weights will be used. When installing tube, turn tube so its tabs (7) fit in plate notches (8). After tube is installed, turn tube so tabs secure tube in plates.
7. U-bolt support bar (9) to weight-bracket tube where soybean machine walkboards meet at center of soybean machine. Secure support bar to walkboards by placing retainer (10) over walkboard lip and support bar. Bolt all three together with 3/8 inch bolt, flat washer, lock washer and nut saved in step 2.
8. At front of walkboards at center of soybean machine, secure walkboards together by placing retainers (11) saved in step 2 on top and under walkboards. Bolt retainers and walkboards together with 3/8 inch bolt, lock washers and nuts saved in step 2.

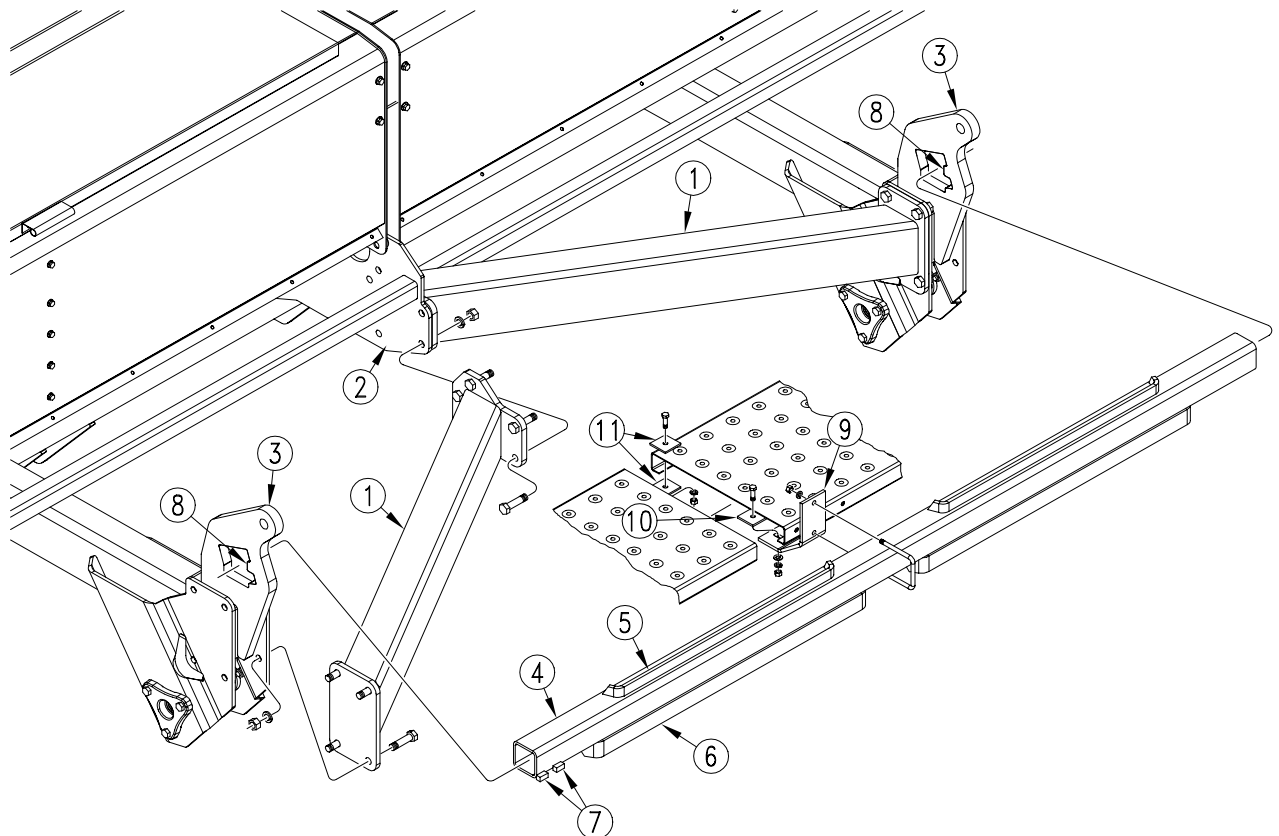
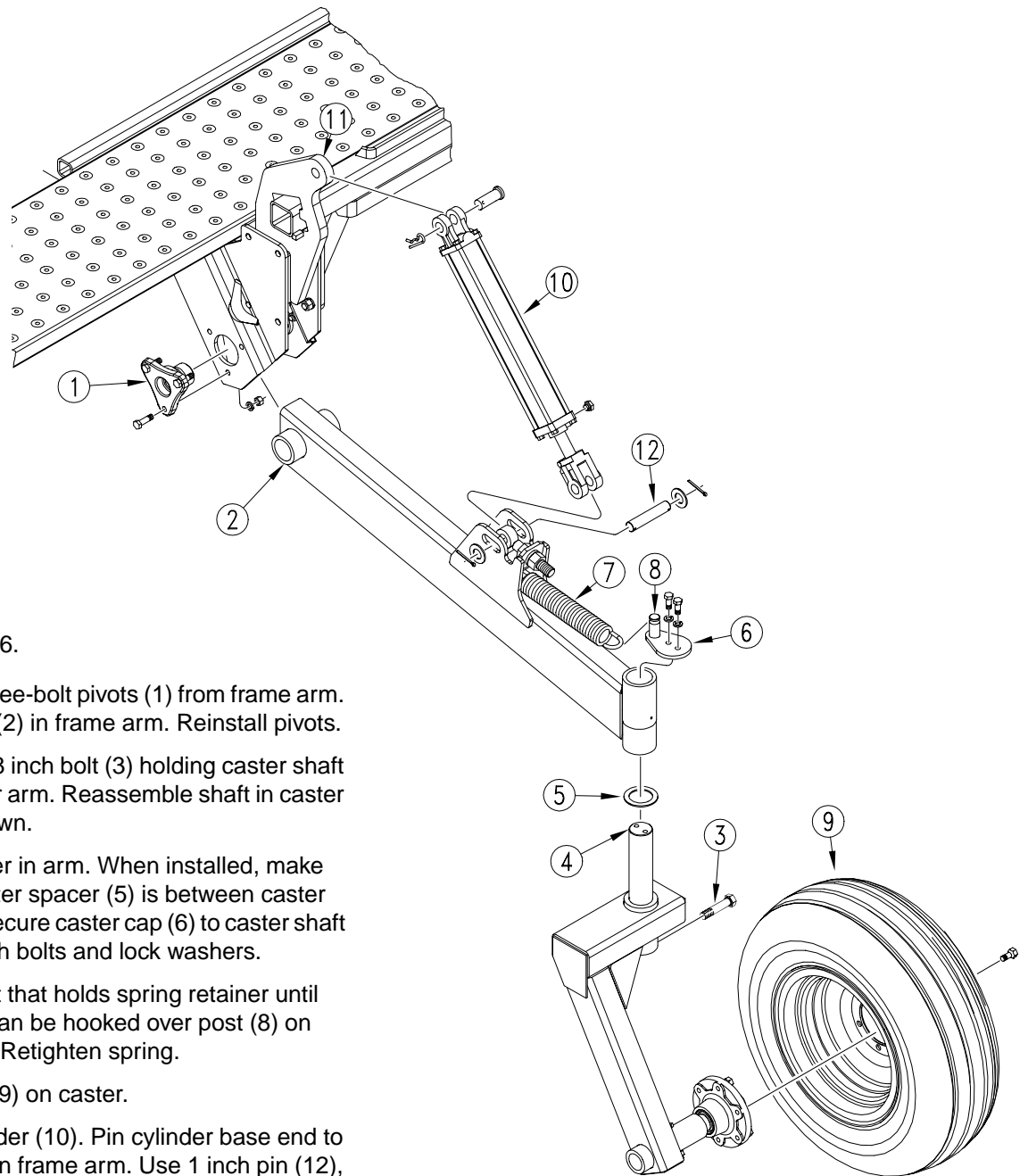


Figure 5
Install Weight-Bracket Tube and Braces

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Refer to Figure 6.

9. Remove three-bolt pivots (1) from frame arm. Install arm (2) in frame arm. Reinstall pivots.
10. Remove 5/8 inch bolt (3) holding caster shaft (4) in caster arm. Reassemble shaft in caster arm as shown.
11. Install caster in arm. When installed, make certain caster spacer (5) is between caster and arm. Secure caster cap (6) to caster shaft with 1/2 inch bolts and lock washers.
12. Loosen bolt that holds spring retainer until spring (7) can be hooked over post (8) on caster cap. Retighten spring.
13. Mount tire (9) on caster.
14. Install cylinder (10). Pin cylinder base end to plate (11) on frame arm. Use 1 inch pin (12), washers and cotter pins to secure cylinder rod end to arm.
15. Repeat steps 9 through 14 for other lift-assist arm.

Figure 6
Install Arms and Wheels

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Refer to Figure 7.

16. Using one 70-inch hose, connect elbow fitting (1) to base-end port on cylinder. Connect elbow fitting (2) on other 70-inch hose to base-end port on other cylinder.
17. Thread hoses from cylinders over weight-bracket tube, between braces and walkboard, and under walkboard. At center of soybean machine, connect 70-inch hoses to tee-fitting (3). Place tee fitting on soybean machine frame between soybean machine boxes. Connect 84-inch hose (4) to tee fitting. Route 84-inch hose between boxes to tractor outlet.
18. Secure 70-inch hoses to lift-assist braces (5) with large cable ties (6).
19. Secure 70-inch hoses to 2 x 2 inch frame tube with small cable ties (7).
20. Plug rod-end ports on cylinders with breathable plugs (8).
21. Bleed hydraulics as explained under "Bleeding Lift Assist Hydraulics," page 6.

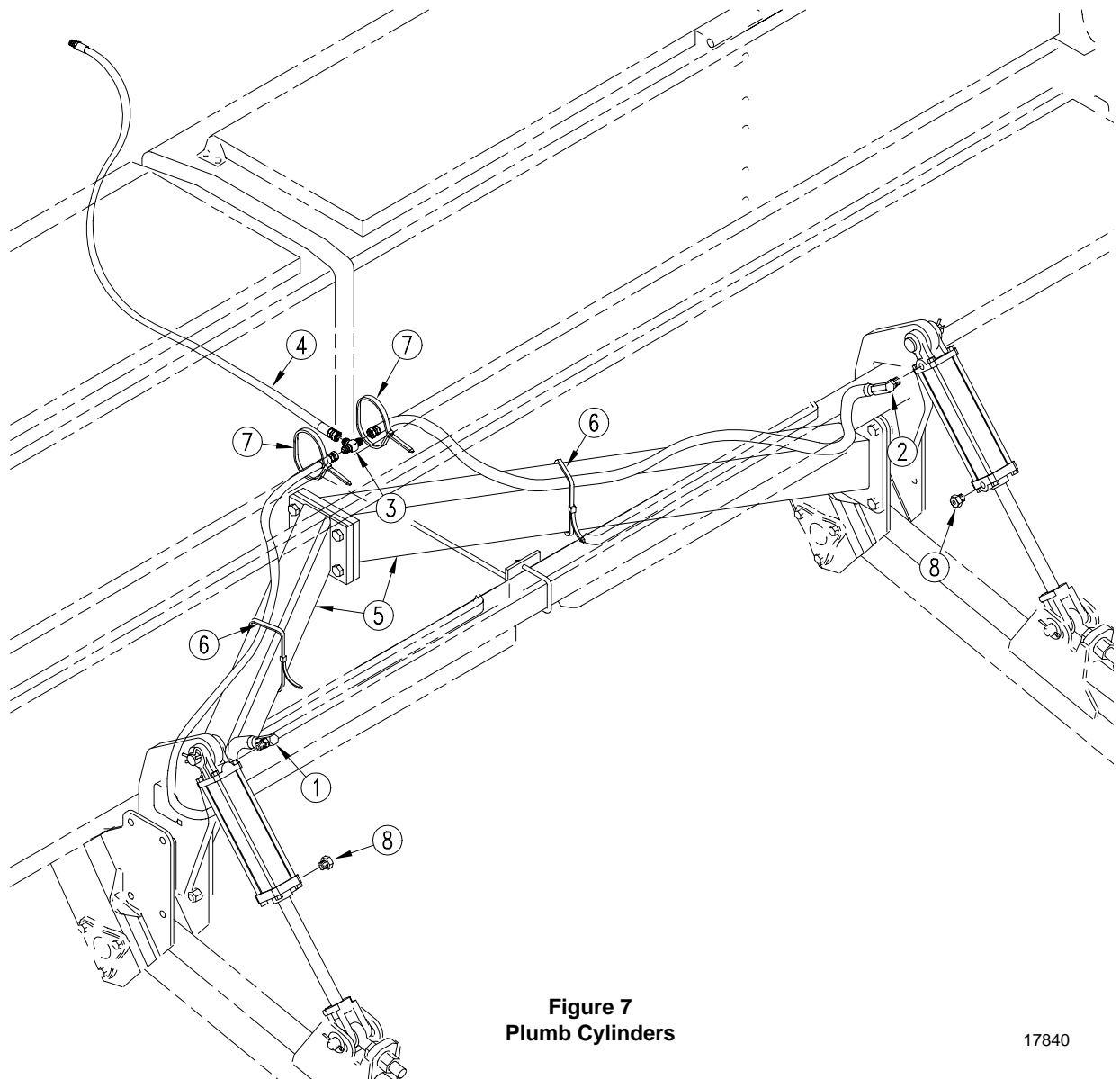


Figure 7
Plumb Cylinders

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Refer to Figure 8.

22. Pin cylinder lock channels (1) over extended cylinder rods.
23. Install grease zerks (2) in casters and arm pivots.
24. Place amber reflectors (3) on outside of arms at locations shown.

25. Place warning decals (4) on outside of frame-arm plates at locations shown.

26. Place lubrication decals (5) at locations shown.

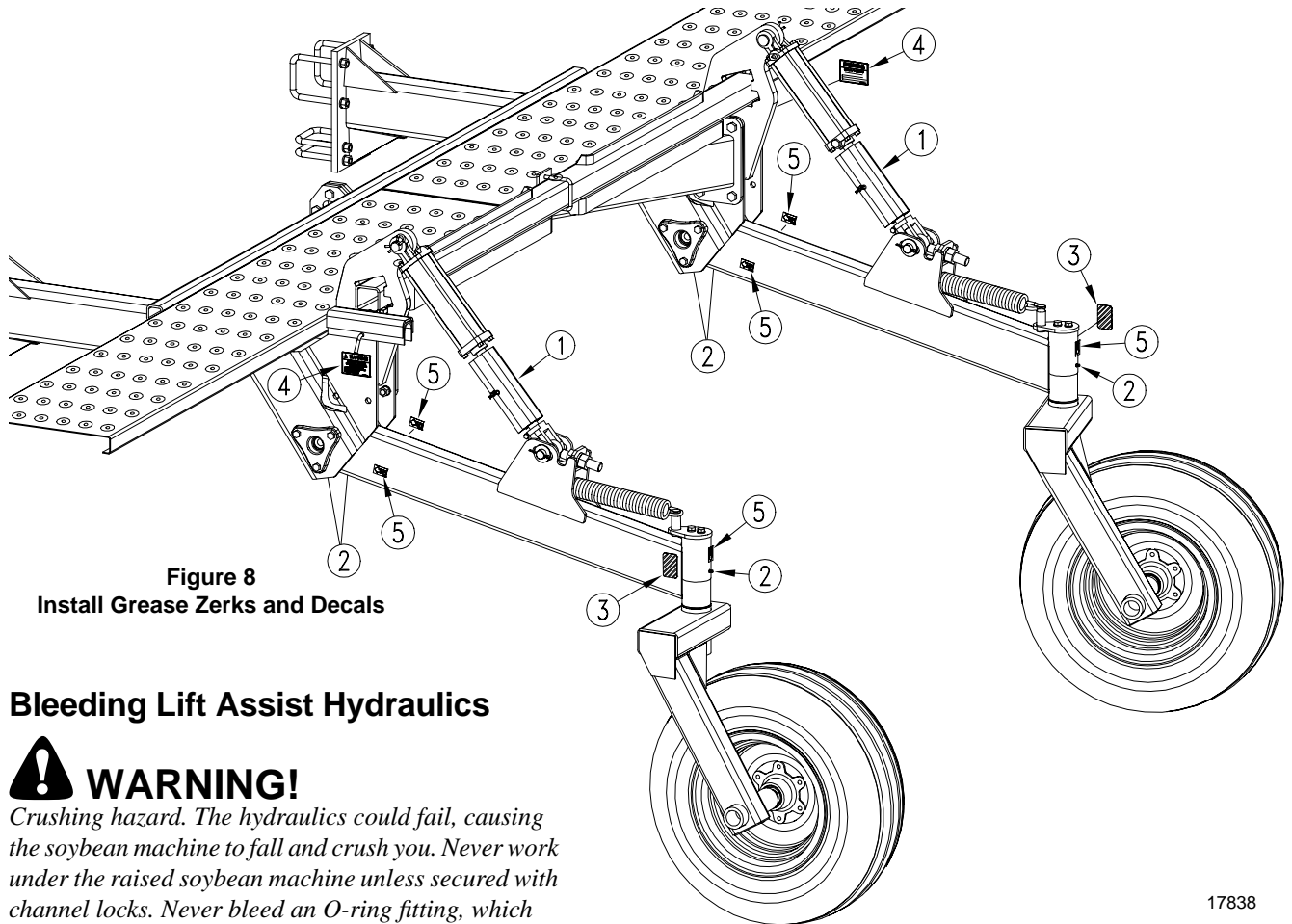


Figure 8
Install Grease Zerks and Decals

Bleeding Lift Assist Hydraulics

WARNING!

Crushing hazard. The hydraulics could fail, causing the soybean machine to fall and crush you. Never work under the raised soybean machine unless secured with channel locks. Never bleed an O-ring fitting, which could damage the seal and cause the implement to drop rapidly.

The lift-assist hydraulics must be free of air. If the lift assist raises with jerky, uneven motions, or if a hydraulic component is replaced during the life of the lift assist, follow these steps to bleed air from the hydraulics.

1. Check that the tractor hydraulic reservoir is full.
2. Loosen tee fitting on one side of tee. Engage tractor hydraulic lever for the lift assist until oil appears at loosened fitting. Tighten fitting.

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124-034A Bean Machine Lift Assist Package

Your kit includes:

Qty.	Part No.	Part Description
2	113-248D	PIN 1 OD X 4.34 USABLE
1	119-032D	3-PT STEP RETAINER
4	120-223D	3 BOLT PIVOT CAST MACHINED
2	124-029H	L.A. FRAME ARM
2	124-030H	L.A. FRAME ARM ANGLE BRACE
2	124-031H	L.A. ARM
1	124-033H	L.A. WEIGHT BRACKET TUBE
1	124-123D	WALKBOARD SUPPORT BAR
2	161-045H	SINGLE WHEEL CASTER 10 IN.
2	161-056D	CASTER SPACER
2	161-062H	CASTER CAP SPRING ARM
2	161-073H	CYLINDER LOCK CHANNEL-LONG
2	161-116D	LIFT ASSIT CASTER SHAFT
2	164-018D	FRONT SPRING RETAINER CHANN
2	164-032D	FRONT SPRING HOOK TUBE
2	194-129H	6 1/8 EYE BOLT
1	201-009D	6 BOLT SINGLE ENDED SPINDLE
4	404-182D	BM PSS UP DOWN STOP-CENTER
6	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	800-060C	CABLE TIE.19X14.25 3DIA 50
2	800-082C	CABLE TIE 21" LONG
4	802-034C	HHCS 1/2-13X1 1/4 GR5
8	802-053C	HHCS 5/8-11X1 3/4 GR5
6	802-058C	HHCS 5/8-11X2 1/2 GR5
2	802-060C	HHCS 5/8-11X4 GR5
1	802-079C	HHCS 3/8-16X1 1/4 GR5
12	802-082C	HHCS 1/2-13X1 3/4 GR5
2	802-099C	HHCS 1/2-13X3 1/4 GR5
6	802-104C	WHEEL 1/2-20X1 GR5
2	802-129C	RHSNB 1/2-13X2 GR5
2	802-130C	HHCS 1/2-13X2 1/2 GR5
3	803-014C	NUT HEX 3/8-16 PLT
2	803-019C	NUT LOCK 1/2-13 PLT
16	803-020C	NUT HEX 1/2-13 PLT
30	803-021C	NUT HEX 5/8-11 PLT
2	803-024C	NUT LOCK 5/8-11 PLT
4	803-031C	NUT HEX 1-8 PLT
1	804-012C	WASHER FLAT 3/8 SAE PLT
3	804-013C	WASHER LOCK SPRING 3/8 PLT
20	804-015C	WASHER LOCK SPRING 1/2 PLT
30	804-022C	WASHER LOCK SPRING 5/8 PLT
2	804-027C	WASHER LOCK SPRING 1 PLT
4	804-029C	WASHER FLAT 1 SAE
4	805-058C	PIN COTTER 3/16 X 2
2	805-152C	BENT PIN 3/8 X 2 1/2 USE
1	806-021C	U-BOLT 3/8-16 X 3 1/32 X 4
8	806-080C	U-BOLT 5/8-11 X 4 1/32 X 6
2	807-016C	SPRING RESET HOE
2	810-200C	CYL 2.5X8X1.12 ROD (TIE)1 P
1	811-312C	TE 9/16MJIC
2	811-722C	BREATHER PLUG 9/16-18 MORB

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124-034A Bean Machine Lift Assist Package, cont'd

Your kit includes:

Qty.	Part No.	Part Description
1	811-723C	HH1/4R2 070 9/16FJIC9/16MOR
1	811-724C	HH1/4R2 084 1/2MNPT 9/16FJI
1	813-027C	14X24 WOVEN POLYPROPYLENE B
1	813-041C	48 SQUARE PALLET
2	814-008C	WHEEL 8 X 15 X 6 BOLT
2	814-026C	TIRE 9.5L X 15 6 PLY RIB IM
1	815-077C	HUB 6 BOLT 4 5/8 PILOT 3600
2	816-035C	VALVE STEM TR415X.625X1 1/4
2	818-229C	DECAL AMBER REFLECTOR
2	818-349C	DECAL GREASE 10 HRS LH
4	818-402C	DECAL GREASE 10 HRS RH
2	838-057C	DECAL WARNING GEN TRANSP LO
4	890-072C	BUSHING 2 1/2 X 2 1/4 X 2 L