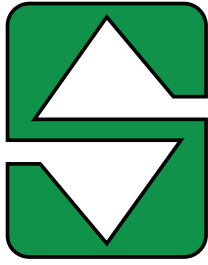


8Z1101D - SW4350 (Superweeder)

8Z1101D - SW4350 (Superweeder)



SUMMERS®

Operator's Manual



SW4350
(Superweeder)

IMPORTANT

THE OPERATOR IS RESPONSIBLE FOR ADJUSTING THE MACHINE SINCE MACHINE DOES NOT COME "FIELD READY" FROM FACTORY.



CAUTION

READ & UNDERSTAND OPERATOR'S MANUAL BEFORE USING MACHINE.

See www.summersmfg.com for latest version of all Summers Operator's Manuals.

SUMMERS MANUFACTURING CO., INC.

WEB SITE: www.summersmfg.com

DEVILS LAKE, NORTH DAKOTA 58301

(701) 662-5391

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Preface

This manual is intended for use with Superweeder for Summers® Manufacturing Company, Inc.

This book is composed of these basic sections: Safety, Operation & Maintenance, Troubleshooting and Parts. The safety section provides complete instructions for the proper safe operation of a Summers Mfg. product. The Operation & Maintenance section provides information for the proper operation and maintenance. A complete parts breakdown is provided in the Parts section.

Parts are referenced in each drawing with the Summers Manufacturing part number. Use this part number when ordering replacement parts from your Summers dealer. See the back section of the manual for description of each part.

Reference to “Right” and “Left” in this book is determined when the machine is viewed from the rear.

Disclaimer

It is the policy of this company to improve its products whenever possible and practical to do so. We reserve the right to make changes or improvements in the design or construction of parts at any time without incurring the obligation to install such changes on products previously delivered.

Summers Manufacturing Company, Inc. strongly recommends that each operator READ and UNDERSTAND the Operator’s Manual before using the machine. In addition, the Operator’s Manual should be REVIEWED at least Annually thereafter.

Contact Information

Summers Manufacturing Company, Inc.

103 Summers St. NW

Devils Lake, ND 58301

Toll Free: 1-800-732-4392

Local: 1-701-662-5391 (Devils Lake, ND)

1-605-226-3644 (Aberdeen, SD)

www.summersmfg.com



Owner Registration Information

Bring this information when ordering parts (Serial Number is located at front of hitch).

Name _____

Address _____

City _____

State/Prov. _____

Mail Code _____

Size _____

Serial Number _____

(located by the hitch)

Date Purchased _____

Dealer _____

WARRANTY

Summers warrants only products of its manufacture against operational failure caused by defective materials or workmanship which occur during normal use within 36 months from the date by the end user from Summers' dealer.

Summers' obligation is to replace, free of charge, any part of the product that Summers inspection shows to be defective excluding transportation charges to Maddock, ND or Devils Lake, ND and return and also excluding all transportation costs from Summers' dealer to the dealer's customer and all other costs, such as removal and installation expense.

Summers shall not be liable for loss of time, manufacturing costs, labor, material, loss of profits, consequential damages, direct or indirect, because of defective products whether due to rights arising under the contract of sale or independently thereof, and whether or not such claim is based on contract, tort or warranty.

Written permission for any warranty claim return must be first obtained from authorized Summers' personnel. All returns must be accompanied with a complete written explanation of claimed defects and the circumstances of operational failure.

Written warranty for all component parts used in the manufacture of Summers products is available upon request. Warranty of such component parts will be determined by said component manufacturer upon their inspection of the claimed defective part.

This express warranty is the sole warranty of Summers. There are no warranties, which extend beyond the warranty therein expressly set forth. The sales for products of Summers under any other warranty or guarantee express or implied is not authorized. This warranty voids all previous issues.

Summers® Manufacturing Co., Inc.
Devils Lake, ND 58301

01/16

Safety Information



This safety alert symbol is used to denote possible danger and care should be taken to prevent bodily injury. When you see this symbol it means ATTENTION, BECOME ALERT! and/or YOUR SAFETY IS INVOLVED!

WARNING: Safe practices must be followed when working on or operating this equipment. All personnel involved must:



- Read and understand the instructions and manuals for this machine.
- Be instructed in the safe use of tools and all lifting devices involved in the assembly of this equipment.
- Clear the area of all personnel not involved in the assembly of this machine.

General Safety Practices

1. READ and UNDERSTAND the Operator's Manual before using any equipment. Review at least annually thereafter.
2. VERIFY all safety devices and shields are in place before using any equipment.
3. KEEP hands, feet, hair and clothing away from moving parts.
4. STOP engine, place all controls in neutral, set parking brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, maintaining or unplugging.
5. BE CAREFUL when working around high pressure hydraulic system.
6. DO NOT ALLOW RIDERS.

Safety During Transportation

1. ONLY TOW at a safe speed. Use caution when making corners and meeting traffic.
2. USE safety chain between tractor drawbar and implement hitch when transporting on public roads.
3. ALWAYS use transport locks when transporting on public roads.
4. COMPLY with local lighting, marking and oversize regulations when transporting on highways.
5. FREQUENTLY check for traffic from rear, especially during turns.

Safety Decals



Indicates an immediate hazardous situation that will result in death or serious injury. The color associated with Danger is RED.



Indicates a potentially hazardous situation that could result in death or serious injury. The color associated with Warning is ORANGE.



Indicates a potentially hazardous situation that may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

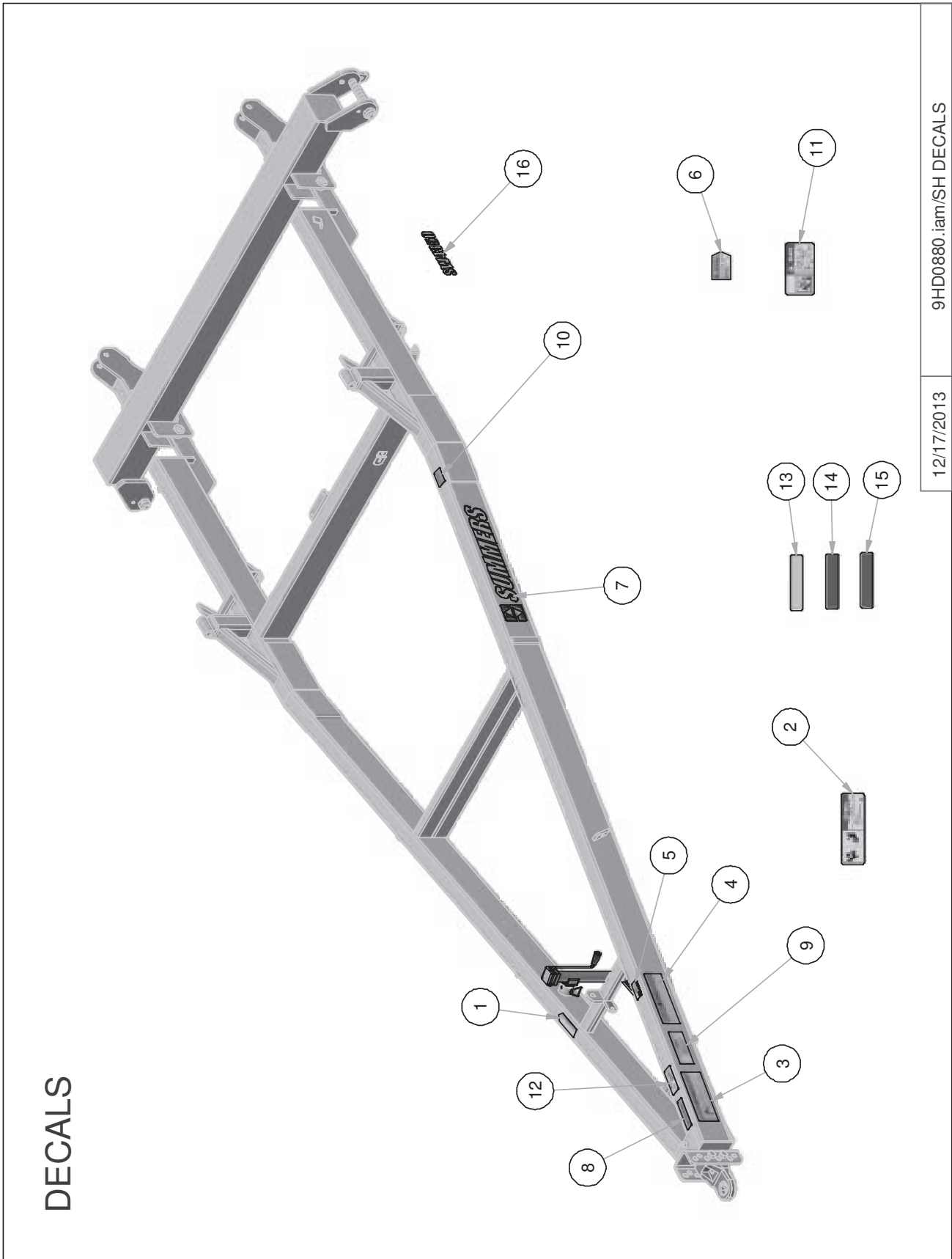
The Notice decals and statements in this manual are to inform the operator of the correct fluids or operational practices for this machine. Failure to follow these notices will result in damage to the machine. The color associated with Notice is GREEN.

1. Keep safety signs clean and legible at all times.
2. Replace safety signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety signs are available from your dealer's parts department or the factory.

How to install safety signs?

1. Be sure that the installation area is clean and dry.
2. Be sure the temperature is above 50° F (10° C).
3. Decide on the exact position before removing the backing paper.
4. Remove the smallest portion of the split backing paper.
5. Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
6. Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
7. Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.




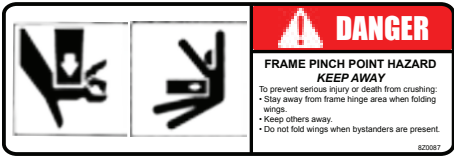
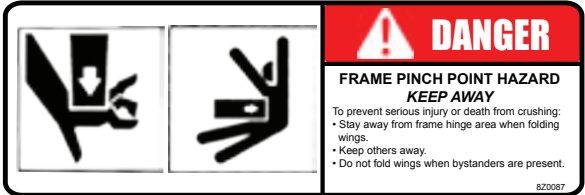
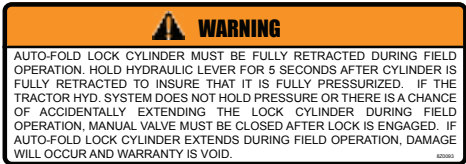



Safety Decal Locations

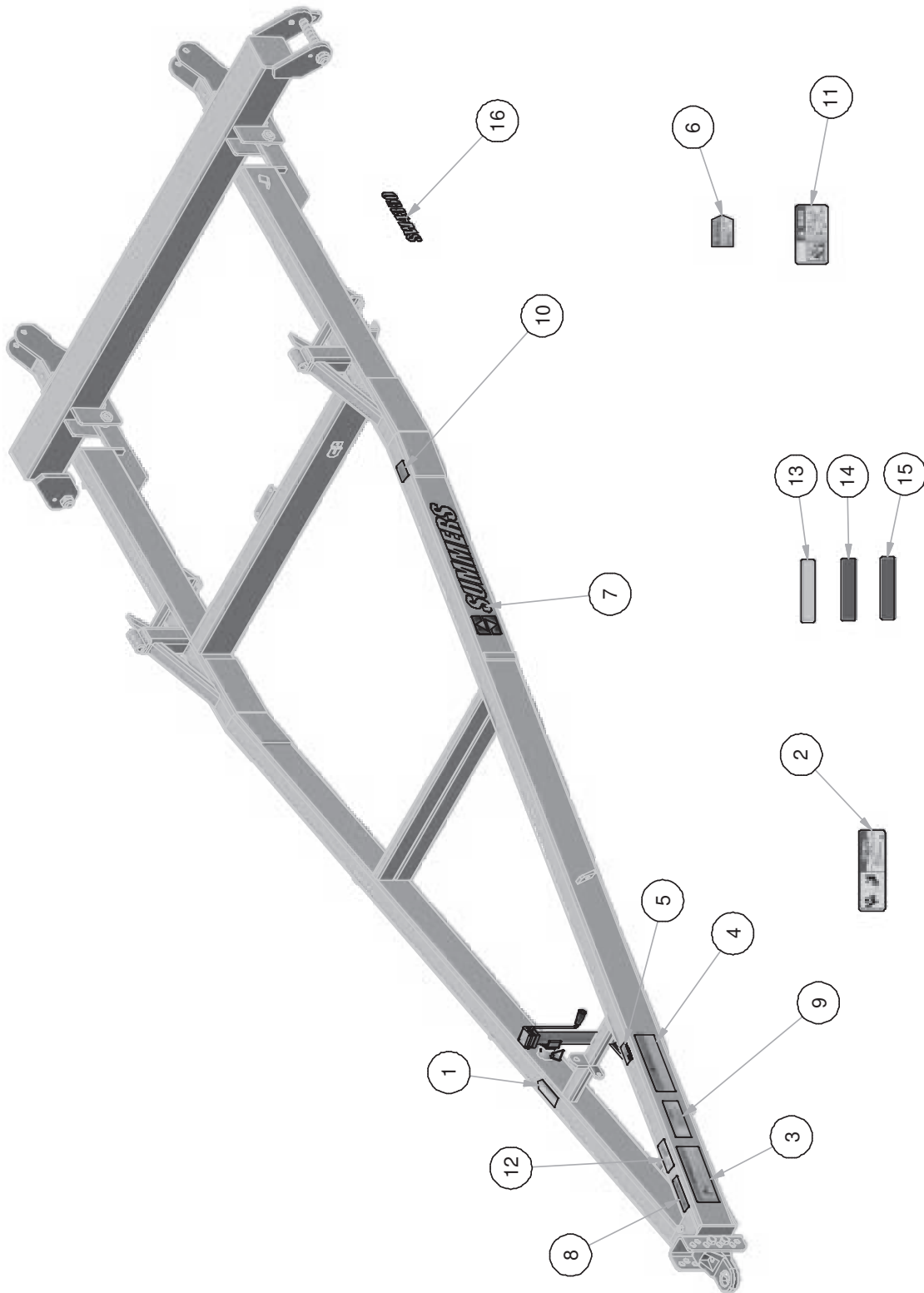
The types of safety signs and locations on the equipment are shown in the illustrations below. Good safety requires that you familiarize yourself with the various safety signs, the type of WARNING and the area or particular function related to that area, that requires your SAFETY AWARENESS.

IMPORTANT: If Safety Signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.

Safety Decals



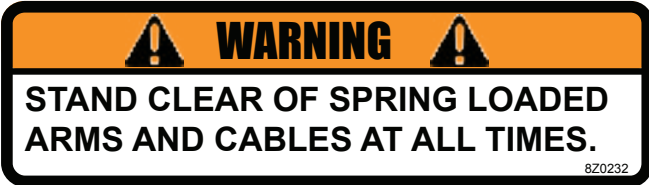
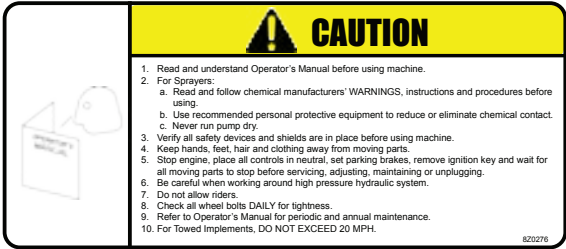


DECALS				
ITEM	PN	QTY	DESCRIPTION	
1	8Z0075	1	TRANSPORT LOCK DECAL	
2	8Z0087	2	“WARNING” PINCH POINT	
3	8Z0092	1	“WARNING” HITCH DECAL	
3	8Z0093	1	“WARNING” AUTO-FOLD DECAL	
4	8Z0100	1	MADE IN THE USA DECAL	

DECALS

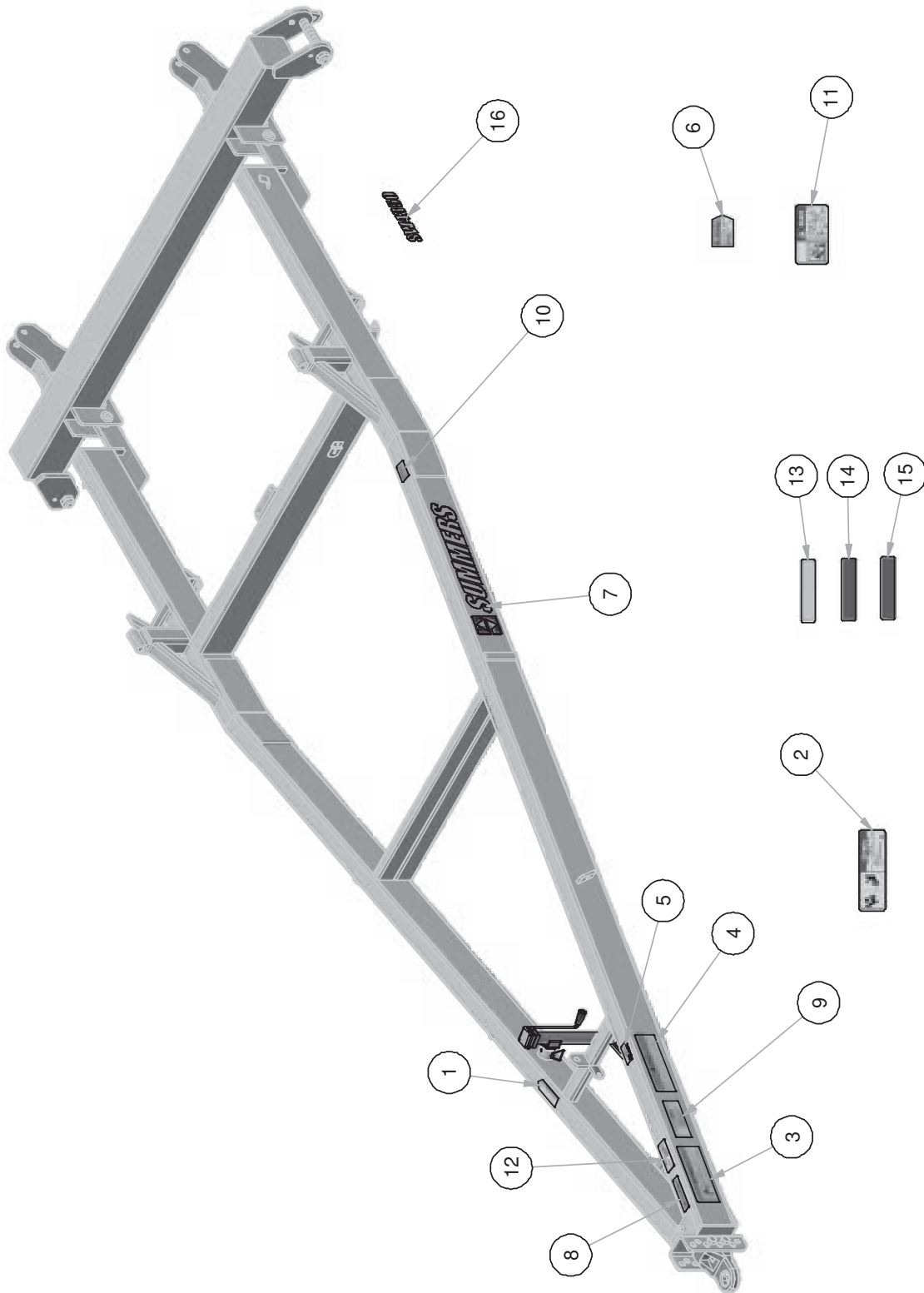


9HD0880.iam/SH DECALS
12/17/2013

Safety Decal Locations (cont'd)

5	8Z0102	1	"IMPORTANT" REAR JACK(S)	
6	8Z0204	2	5.5" SUMMERS DECAL	
7	8Z0232	1	"WARNING" AUTO-FOLD DECAL	
8	8Z0276	1	GENERAL MACHINE CAUTION DECAL	
9	8Z0342	1	INSTALL CYL LOCKS DECAL	
10	8Z0344	1	WING DANGER DECAL	






DECALS



9HD0880.i.am/SH DECALS

12/17/2013

Safety Decal Locations (cont'd)

11	8Z0346	1	ELECTROCUTION-TILLAGE EQUIP. DECAL	
12	8Z0800	14	REFLECTOR - YELLOW - ADHESIVE BACKED	
13	8Z0805	4	REFLECTOR - RED-ORANGE ADHESIVE BACKED	
14	8Z0810	6	REFLECTOR - RED - ADHESIVE BACKED	
15	8Z2120	2	SW4350 DECAL	

Safety Light Operation

Figure 1

The Summers Safety Light Kit is equipped with a 7 pin connector which meets SAE J560 specification. To protect 7 pin connector, store in dust cap (8K8067) when not attached to towing vehicle.



General Maintenance Safety Practices

NOTE: Read the entire section before beginning work.

Before You Begin

- **YOU ARE RESPONSIBLE** for the safe maintenance of the chisel plow.
- **DO NOT ALLOW CHILDREN** or other unauthorized persons within the chisel plow operational area.
- **WEAR PERSONAL PROTECTIVE EQUIPMENT** which includes a hard hat, eye protection, work gloves and steel toed boots with slip resistant soles.
- **DO NOT MODIFY** the equipment or substitute parts in any way. Unauthorized modifications may impair the function and/or safety of the machine.
- **USE SUITABLE LIFTING DEVICE** for components which could cause personal injury.
- **BLOCK UP ANY RAISED PART** of the machine. Be sure machine is stable after blocking.
- **ALWAYS INSPECT LIFTING CHAINS AND SLINGS** for damage or wear.
- **BE SURE LIFTING DEVICE IS RATED TO HANDLE THE WEIGHT.**
- **STOP ENGINE**, place all controls in neutral, set parking brake, remove ignition key and wait for all moving parts to stop before servicing or adjusting.
- **BE SURE PRESSURE IS RELIEVED** from hydraulic circuits before servicing or disconnecting from tractor.
- **USE EXTREME CARE** when assembling, servicing or adjusting.

TRANSPORT TO FIELD POSITION

1. Hitch machine to tractor drawbar using a locking hitch pin and safety chain. Connect hydraulic hoses and wiring. Retract jacks and rotate into storage position.
2. Select a level area to lower machine into field position.
3. **IMPORTANT:** Remove transport locks. Store locks in storage guide shown in Figure 8.

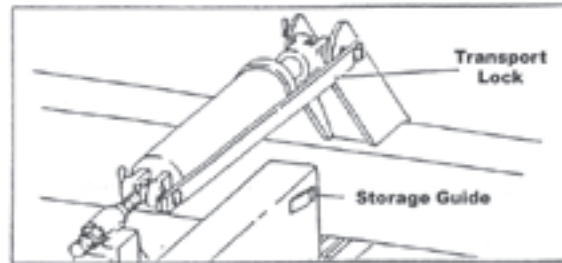




Fig. 8: Transport Lock in Locked Position

4. Back up machine slowly, maneuvering so wings open evenly. If wings do not open evenly, pull ahead and repeat procedure. Cables must not catch on machine while backing up. If cable becomes caught on machine, drive forward until wings are in transport position and carefully unhook cable from obstruction. See WARNING 8Z0232 below and 8Z0276 on page 1-4.




WARNING



STAND CLEAR OF SPRING LOADED
ARMS AND CABLES AT ALL TIMES.

8Z0232

Open wings until auto-fold arms rest on hitch and cables become slack. Fully retract auto-fold lock cylinder (See Warning in Figure 9).



WARNING

AUTO-FOLD LOCK CYLINDER MUST BE FULLY RETRACTED DURING FIELD OPERATION. HOLD HYDRAULIC LEVER FOR 5 SECONDS AFTER CYLINDER IS FULLY RETRACTED TO INSURE THAT IT IS FULLY PRESSURIZED. IF THE TRACTOR HYD. SYSTEM DOES NOT HOLD PRESSURE OR IF THERE IS A CHANCE OF ACCIDENTALLY EXTENDING THE LOCK CYLINDER DURING FIELD OPERATION, MANUAL VALVE MUST BE CLOSED AFTER LOCK IS ENGAGED. IF AUTO-FOLD LOCK CYLINDER EXTENDS DURING FIELD OPERATION, DAMAGE WILL OCCUR AND WARRANTY IS VOID.

8Z0093

Fig. 9: Auto-Fold Warning

5. Extend main lift cylinders to lower machine into field position. If pull cables become tight before transport wheel is off the ground, back up to provide slack in cable.

6. **Hinged wing machines only:** Remove 1-1/4" hinge lock pins and store in holes provided.

LIFT ARM ADJUSTMENT

To level individual lift arms in field position, loosen top nut of lift arm attach u-bolt and adjustment bolt jam nut. Turn adjustment bolt until lift arm is correctly positioned. Retighten nuts.

Machine must not be adjusted to exceed a maximum S-tine tillage depth of 5" in loose soil conditions. In hard soil conditions, S-tines must not exceed 3" tillage depth.

HYDRAULIC DEPTH ADJUSTMENT (HDA) OPTION

To set depth, install stroke control collars (purchase locally) on 3-1/2" X 8" stroke (HDA) cylinders located on hitch. Collars of identical thickness must be installed on both cylinders. Rephasing cylinders are used for hydraulic depth adjustment. Do not operate HDA cylinders fully extended. Immediately after fully raising hydraulic depth adjustment cylinders, quickly lower 1/2". If hydraulic depth adjustment cylinders are left in fully raised position, they will settle. If machine has settled unevenly, fully extend hydraulic depth adjustment cylinders and hold hydraulic lever until machine levels. After it levels, quickly lower 1/2".

CABLE PULL BRACKETS

Under severe conditions (heavy machine draft due to deep penetration or high field speed) cable pull brackets may slide on drawbar wing tube resulting in improper cable adjustment. The solution to this problem is to relocate cable pull brackets at desired position and then weld a stop on drawbar next to cable pull brackets.

Never rotate S-tines forward or backward with machine in transport position.

FIELD TO TRANSPORT POSITION

1. Stop in a level area and back tractor up to provide slack in pull cables.
2. Open manual lock valve on auto-fold lock cylinder. Fully extend auto-fold lock cylinder.
3. Fully retract hydraulic depth adjustment cylinders (if so equipped).
4. Hinged wing machines only: Install 1-1/4" hinge lock pins.
5. Fully retract lift cylinders to raise sections.
6. While machine is resting on its transport wheels, drive tractor forward. Wings should fold to transport position. NOTE: Transport wheels must rotate against "toe-in" adjustment bolts and follow directly behind knuckles. Transport wheel "toe-in" can be adjusted by moving outside 3/4" adjustment set screws (8X0665, page 6-5). "Toe-in" and proper lubrication of pivot will make it easier to unfold machine into field position.
7. **IMPORTANT:** Install transport locks.

Always be sure transport locks are engaged when making adjustments on machine in raised or transport position.

UNHITCHING MACHINE

1. Park machine on a level area. Block wheels to prevent machine from rolling.
2. Follow steps outlined in **WARNING – NEGATIVE HITCH WEIGHT** on page 1-2.



Fig. 9: Hitch Warning

This hitch WARNING Decal (PN 8Z0092) must be installed at location indicated by arrow (Fig. 10).

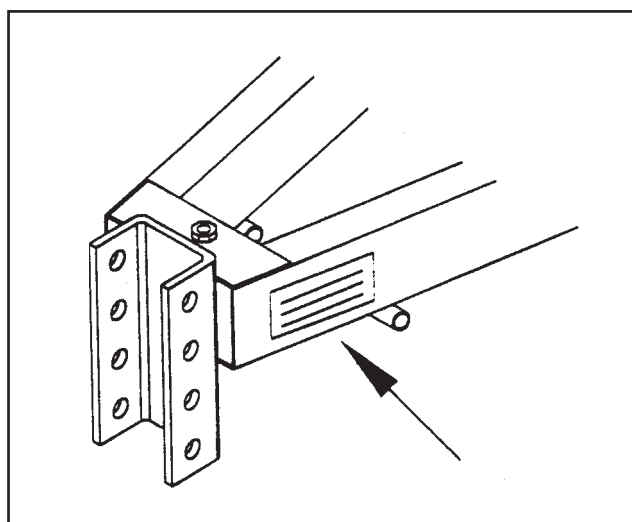


Fig. 10: Hitch Warning Decal Location

If decal is missing from machine, contact your Summers Dealer for replacement.

As stated in Hitch Warning Decal, machine must be secured to a large farm tractor before lowering machine to field position.

Operation



Never unhitch a 4-Rank Superweeder that has been opened up into field position but has not been completely lowered to the ground.

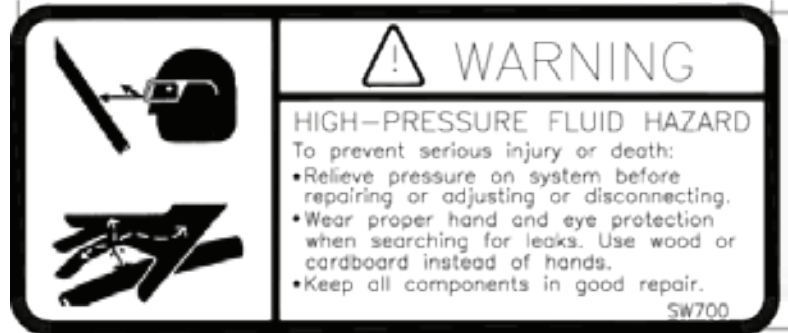
Always park machine in a very level area, block hitch and transport tires so machine cannot roll.

Daily Maintenance:

Check all wheel bolts for tightness.

Daily Greasing:

Two zerks on each knuckle.
 Two zerks on each cable fold arm.
 One zerk on each transport axle pivot.
 60 & 70 Ft. machines only: One zerk on each Hinged Wing Pivot.



Weekly Maintenance:

Inspect wheel bearings for tightness.

Seasonal Maintenance:

Disassemble, clean and repack wheel bearings.
 Lubricate all zerks with a good grade of general purpose grease.
 Inspect entire machine for loose or worn fasteners. Tighten or replace as required.

Over Winter:

Coat extended hydraulic cylinder rods with grease to prevent corrosion. Remove this grease before retracting cylinders.

**TIRE INFLATION:
 rated at**

Hitch Tires: 11L X 15 LRF – 80 PSI
 Opt. 31 X 13.5 – 35 PSI
 Wing Support Tires: 11L X 15 LRF – 38 PSI
 Transport Tires: LT RADIAL X 16 – 80 PSI

IMPORTANT:

Implement tires are

20 MPH maximum. Exceeding this speed voids warranty.

TROUBLESHOOTING

1. Wings trail too far apart in transport.	Insufficient transport wheel toe-in.	Adjust transport wheel toe-in.
2. Wings are not pulling evenly in field position.	Cable pull brackets are improperly located.	Relocate cable pull brackets so wings slightly lead center.
3. Auto-Fold arms do not rotate into transport position.	Improper pivot bracket adjustment.	Adjust pivot bracket with bolts to provide clearance between the cable fold arm bottom guide and hitch tube. (6-4)
4. Wings of machine bounce.	Improper wing support tire inflation.	Inflate tires to proper pressure.
5. Harrow sections not riding level.	Top pull chains are improperly adjusted.	Adjust top pull chain by placing pin in different adjustment hole on lift arm.
6. S-tines tend to rotate out of the ground	Hydraulic cylinder leaking.	Repair or replace hydraulic cylinder.
	Tractor hydraulic circuit not holding pressure.	Repair tractor valve.

Maintenance & Specifications



PROPER BOLT USE

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

		ft-lbs	N • m	ft-lbs	N • m
1/4"	7/16" or 3/8"	7	9.5	12	17
5/16"	1/2"	15	20	25	34
3/8"	9/16"	30	41	45	61
7/16"	5/8" or 11/16"	45	61	70	95
1/2"	3/4"	70	95	105	142
9/16" wheel bolts	7/8"	170	231		
5/8"	15/16"	170	231	210	285
5/8" wheel nuts	1-1/16"	240	325		
3/4"	1-1/16"* or 1-1/8"	250	339	375	509
7/8"	1-5/16"	350	475	600	814
1"	1-1/2"	450	610	880	1193
1-1/4"	1-7/8"	500	678		
1-1/2"	2-1/4"	570	773		
2"	3-1/8"	1200	1627		

*Nylon Lock Nut

3/8/12 TILLAGE

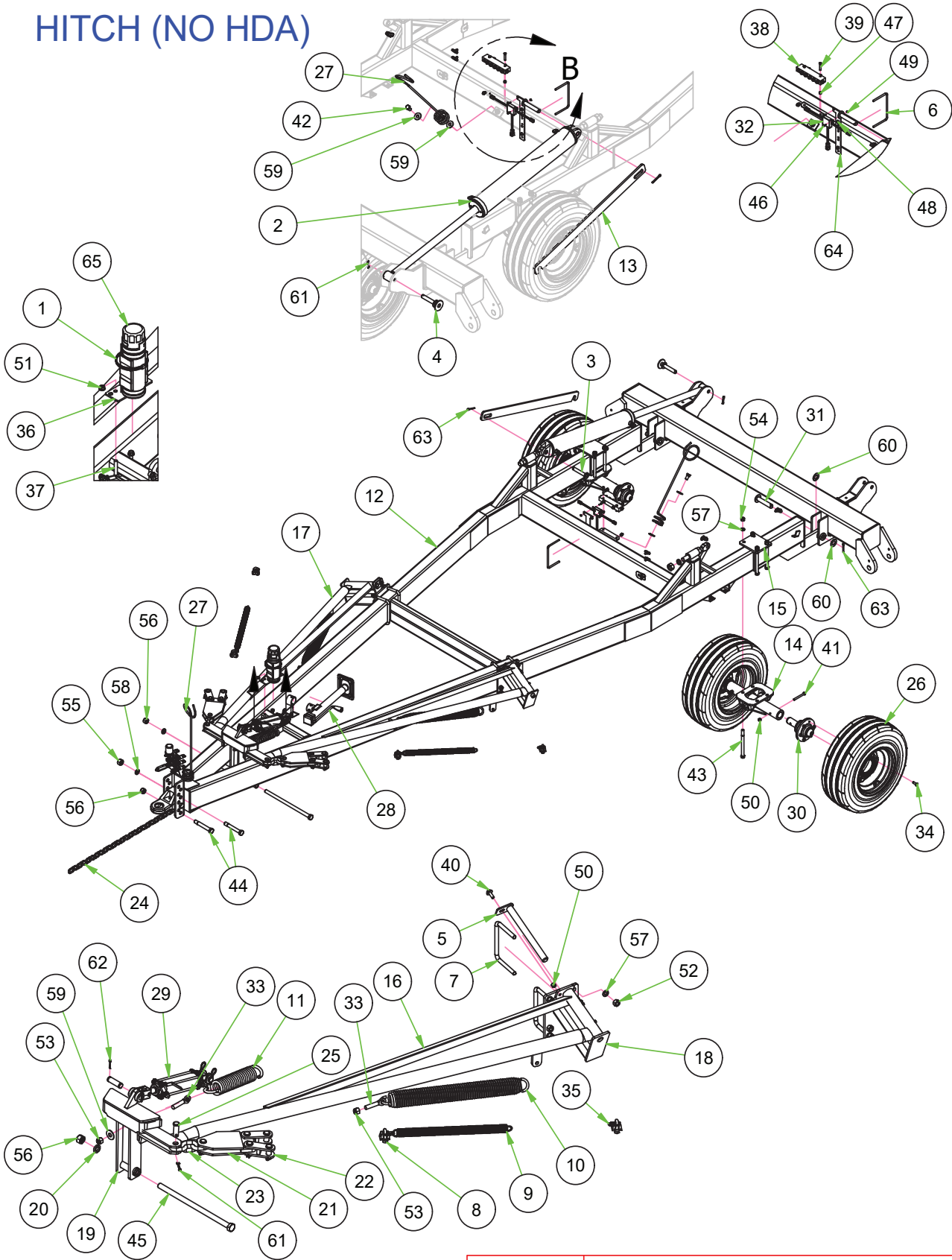


SAE
GRADE 5



SAE
GRADE 8

HITCH (NO HDA)

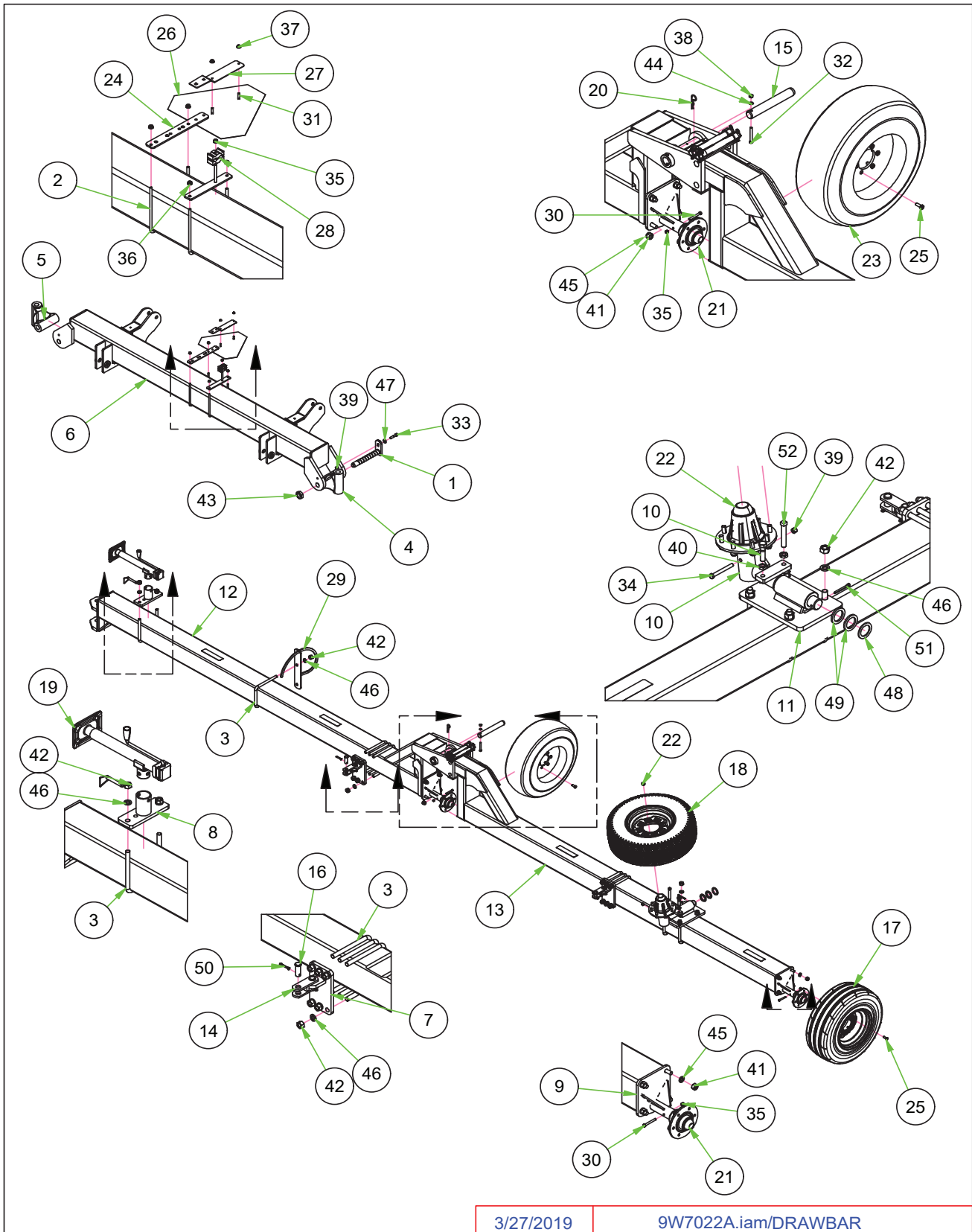


3/21/2019

9W7022A.iam/HITCH (NO HDA)

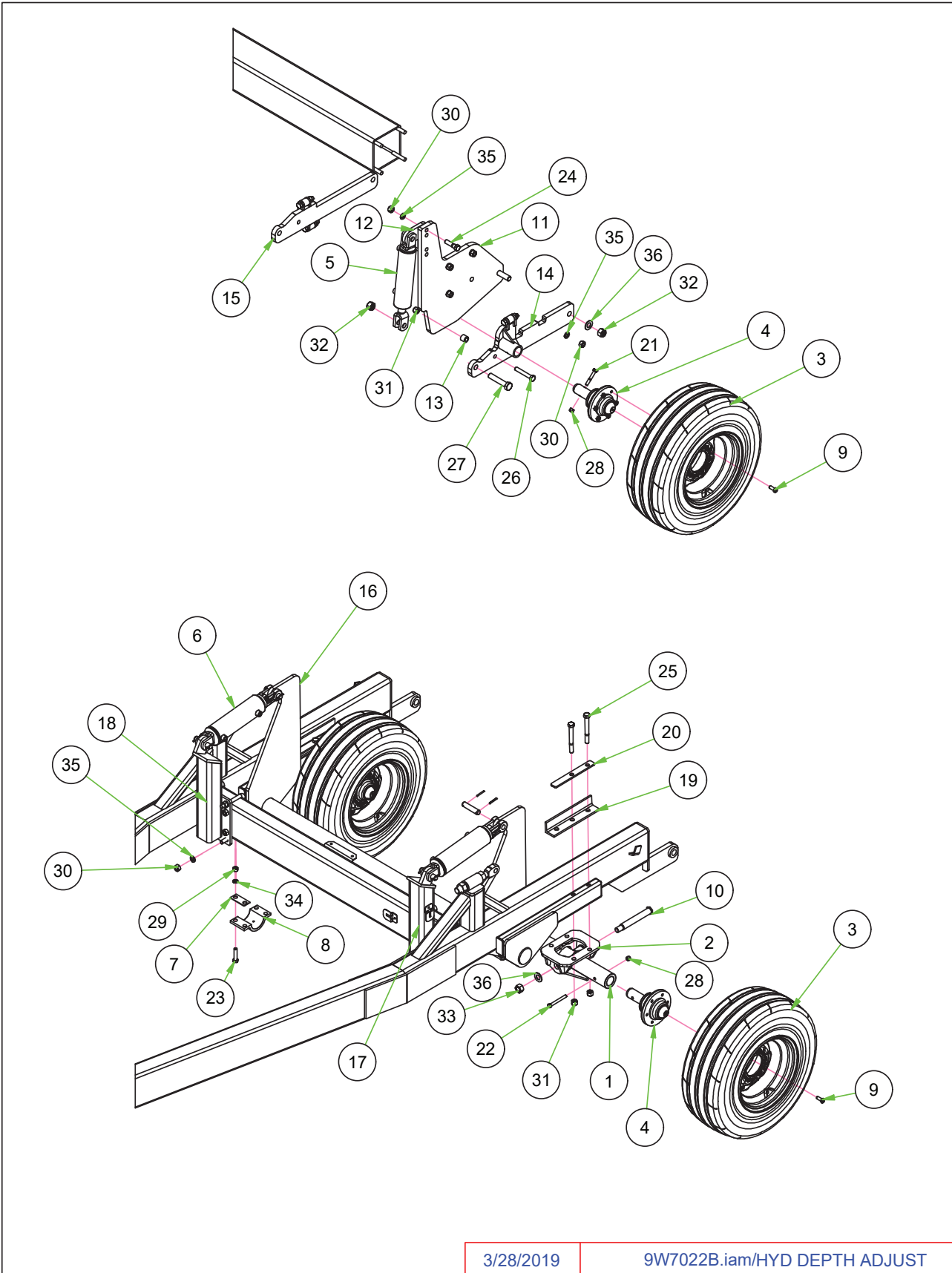
HITCH PARTS LIST

ITEM	PN	DESCRIPTION	57	8X0306	LOCKWASHER 3/4" YLW ZNC
1	8A1004	CLAMP HOSE 5" #72	58	8X0309	LOCKWASHER 1" YLW ZNK
2	8C0532	HYD CYL 5" X 32" 3500PSI	59	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
3	8C1420	PIN 1 X 5-7/8" 22'HTCH 90-	60	8X0327	WASHER 1-1/4" SAE FLAT YZ
4	8C1452	PIN 1 X 6-1/2" CYL DBLWSHR	61	8X0414	COTTER PIN 1/4 X 2" YZ
5	8C1470	PIN 1-1/4 X 14" PIVOT	62	8X0415	COTTER PIN 3/16 X 1-1/2"
6	8C1702	U-BOLT 3/8 X 8 X 5" SQ	63	8X0418	COTTER PIN 5/16 X 2-1/2" YZ
7	8C1760	U-BOLT 3/4 X 8-1/16 X 6" SQ	64	8X0803	LIGHT MODULE BRACKET
8	8C1900	CLAMP 1/2" WIRE ROPE	65	8Z1000	MANUAL-PAK 3DIA X 11.75" 09-
9	8C1920	SPRING AFLDCABL 1.56"OD GLVNZD			
10	8C1940	SPRING AUTOFOLD ARM RAW			
11	8C1950	SPRING AFOLD LOCK 3"OD BLACK			
12	8C2200	22' HITCH			
13	8C2246	TRNSPRT LOCK 1/2X3X32"CYL			
14	8C2314	OSCILLATING AXLE ASSY			
15	8C2318	SPACR BRCKT HTCH AXL ATTCH			
16	8C2600	ARM A-FLD LEFT 20&22'HTCH			
17	8C2610	ARM A-FLD RGHT 20&22'HTCH 90-			
18	8C2620	PIVOT BRCKT A-FLD 22'HTCH			
19	8C2650	LOCK ASSY AUTOFLD 22'HTCH 90-			
20	8C2660	BUSHING A-FOLD LOCK- 5/16"			
21	8C2690	FRONT ATTCH DUAL CABLE			
22	8D0312	CLEVIS FOR EYE-EYE CABLE 99-			
23	8D2402	CHAIN 3 LINK .625"DIA. ALLOY Z			
24	8D2460	SAFETY CHAIN 3/8" X 4'			
25	8D2730	PIN 1 X 2-3/4" CABLE PLATED			
26	8D3046	IF280/70R15 134D ON 15X10X6WHL			
27	8D8502	HYD HOSE HOLDER PNTD BLK 91-			
28	8D8537	JACK 7000# SIDE CRANK 15" LIFT			
29	8D9118	HYD CYL 2.5 X8" W/O DPTHCNTRL			
30	8K1100	HUB&AXLE ASSY 614(GBGI-2"RCVR)			
31	8K1620	PIN 1-1/4 X 6-1/8"			
32	8K8030A	MODULE AG ENHNCDW/BRAKE			
33	8R6145	EYEBOLT 3/4"-10NC X 5/8"EYE			
34	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.25"			
35	8S1076	QUICKLINK 1/4" YELLOW ZINC			
36	8T4385	HOLDER MANUAL-PAK			
37	8W1204	U-BOLT 1/2 X 3 X 3" SQ			
38	8W1360	MANIFOLD BLOCK ALUMINUM			
39	8X0008	BOLT 3/8-16NC X 2" GR5 ZDI			
40	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ			
41	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI			
42	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ			
43	8X0125	BOLT 3/4-10NC X 10" GR5 ZDI			
44	8X0140	BOLT 1-8NCX7" W/1.5"THDGR5 YZ			
45	8X0150	BOLT 1-8NC X 20" GR5 YZ			
46	8X0170	SCREW 8 X .75" FLANGE HD			
47	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ			
48	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ			
49	8X0208	NUT 8-32 HEX YZ SER FLNG			
50	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ			
51	8X0246	NUT 1/2"-13NC SERFLANG GR2 YZ			
52	8X0260	NUT 3/4"-10NC HEX GR2 YZ			
53	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ			
54	8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ			
55	8X0280	NUT 1"-8NC HEX GR2 YZ			
56	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ			



DRAWBAR PARTS LIST

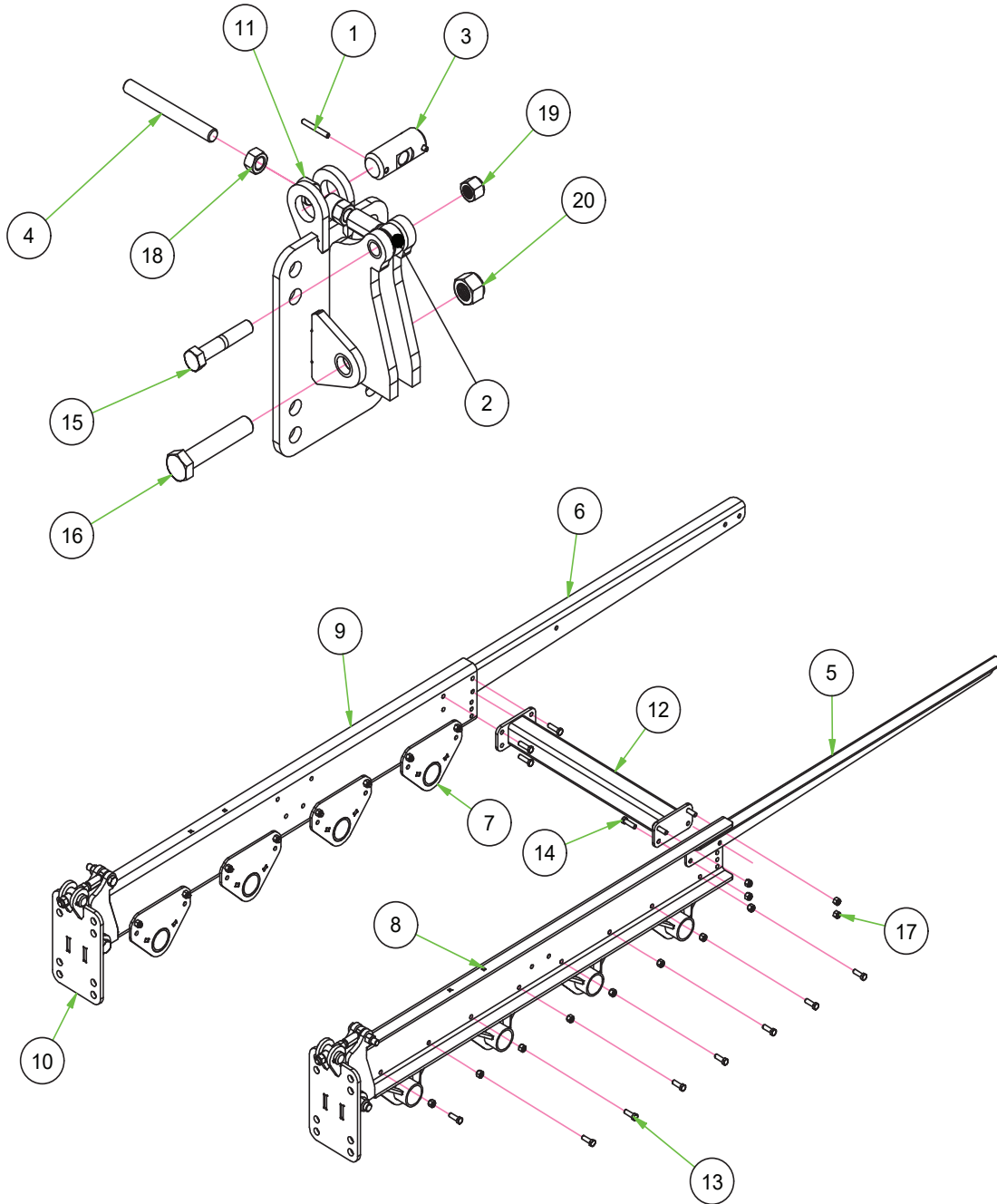
ITEM	PN	DESCRIPTION
1	8C1480	PIN 1-1/2 X 11-1/2" KNCKL
2	8C1710	U-BOLT 3/8 X 8 X 9" SQ
3	8C1780	U-BOLT 7/8 X 8-1/16 X 10" SQ
4	8C1800	KNUCKLE 88.25° OFFSET LEFT
5	8C1802	KNUCKLE 88.25° OFFSET RIGHT
6	8C2212	CENTER 22' HTCH 8"SQ-10'
7	8C2260	BRCKT CABLE PULL 8"SQ WNG
8	8C2280	JACK ATTCH BRCKT- WING
9	8C2352P	AXLE W/FLAT 611 1.5"RCVR 8SQ -P
10	8C2422P	TRNSPRT AXLE W/2.5"RCVR 2"PIN -P
11	8C2450	PIVOT W/ PLATE 812TRNSPRT
12	8C3500	WINGTUBE15' X 8SQ 60°&70°HP+4RN\
13	8C3600	WINGTUBE 15' PRT2 (70')4RNKSW
14	8D0312	CLEVIS FOR EYE-EYE CABLE 99-
15	8D1660	PIN 1-3/4 X 12-1/4" HARDND
16	8D2730	PIN 1 X 2-3/4" CABLE PLATED
17	8D3046	IF280/70R15 134D ON 15X10X6WHL
18	8D3049	LT265/75R16 RAD ON 16X8X8 WHL
19	8D8537	JACK 7000# SIDE CRANK 15" LIFT
20	8D9110	HAIR PIN CLIP LARGE(1"CYL PIN)
21	8K1096	HUB&AXLE ASSY 611(1.5"RCVR)
22	8K1105	HUB&AXLE ASSY HD812(2.5"RCVR)
23	8K7033	11L X 15 LRF ON 15X8X6 WHEEL
24	8K8200	BRCKT SMV ATTCH 4-8"FRAME98-
25	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.25"
26	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
27	8S1126	MNT SPADE W/HRDWR SMV SIGN
28	8S2990	HYD HOSE CLAMP-LARGE-NYLON
29	8W1750	CABLE GUIDE BRACKET
30	8X0016	BOLT 3/8-16NC X 3" GR5 ZDI
31	8X0021B	BOLT 5/16-18NC X 1-1/4"GR5 YZ
32	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 ZDI
33	8X0068	BOLT 1/2-13NC X 2-1/2" GR5 YZ
34	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI
35	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
36	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
37	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
38	8X0232	NUT 7/16"-14NC HEX GR2 ZDI
39	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
40	8X0259	NUT JAM 3/4"-10NC GR2 ZDI
41	8X0260	NUT 3/4"-10NC HEX GR2 YZ
42	8X0268	NUT 7/8"-9NC HEX GR2 YZ
43	8X0286	NUT 1-1/2"-6NC JAM GR2 YZ
44	8X0302	LOCKWASHER 7/16" YLW ZNC
45	8X0306	LOCKWASHER 3/4" YLW ZNC
46	8X0307	LOCKWASHER 7/8" YLW ZNC
47	8X0330	WASHER 17/32"ID X 1.25"OD YZ
48	8X0362	WASHER 2.03IDX2-7/8ODX 9GA PLN
49	8X0366	WASHER 2.03IDX2-7/8ODX 1/4"PLN
50	8X0414	COTTER PIN 1/4 X 2" YZ
51	8X0418	COTTER PIN 5/16 X 2-1/2" YZ
52	8X0665	SET SCRW SQ HD 3/4-10X4.5" YZ



HYDRALIC DEPTH ADJUST

ITEM	PN	DESCRIPTION
1	8C2302	OSC AXLE W/2" RCVR 18-
2	8C2323	MNT BRCKT OSC 18-
3	8D3046	IF280/70R15 134D ON 15X10X6WHL
4	8K1100	HUB&AXLE ASSY 614(GBGI-2"RCVR)
5	8K8430	HYD CYL 3" X 8" RPHS 1.5" ROD
6	8K8435	HYD CYL 3.5" X 8" RPHS 1.75" ROD
7	8R6060	STL 12GA X 1.75- 4" W/HLS 08-
8	8R6065	PILLOWBLOCK CAP W/ZERK CAST
9	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.25"
10	8T3300	PIVOT BOLT CHSLTRP&WNG LFT YZ
11	8W1652	PVT PLATE WNG-1" 7W1652 PNTD
12	8W1800	CYL ATTCH WNG 7W1610 W/HLS
13	8W1806	SPACER TUBE 1.25X.76- 1-1/16"
14	8W1817H	PIVOT W/SPNDL HLDR WNG HD LFT
15	8W1826	PVT INNER WING W/ROLLRS LEFT
16	8W1850	HITCH PIVOT ASSY 22' HDA
17	8W1860	CYL ATTCH HTCH UBLT LEFT
18	8W1862	CYL ATTCH HTCH UBLT RHT
19	8W1884	L UHMW 2.5X2.5X3/8- 13" W/HLS
20	8W1886	FLAT 5/16X 1.5 - 11-3/8"
21	8X0070	BOLT 1/2-13NC X 3-1/4" GR5 YZ
22	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI
23	8X0092	BOLT 5/8-11NC X 2-3/4" GR5 YZ
24	8X0114	BOLT 3/4-10NC X 3" GR5 YZ
25	8X0121	BOLT 3/4-10NC X 6-1/2" GR5 YZ
26	8X0122	BOLT 3/4-10NC X 4-1/2" GR5 YZ
27	8X0143	BOLT 1-8NC X 5" GR5 YZ
28	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
29	8X0250	NUT 5/8"-11NC HEX GR2 YZ
30	8X0260	NUT 3/4"-10NC HEX GR2 YZ
31	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
32	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
33	8X0282	NUT 1"-14TPI TOPLOCK GR B Z
34	8X0304	LOCKWASHER 5/8" YLW ZNC
35	8X0306	LOCKWASHER 3/4" YLW ZNC
36	8X0316	WASHER 1" SAE FLAT YZ

LIFT ARMS

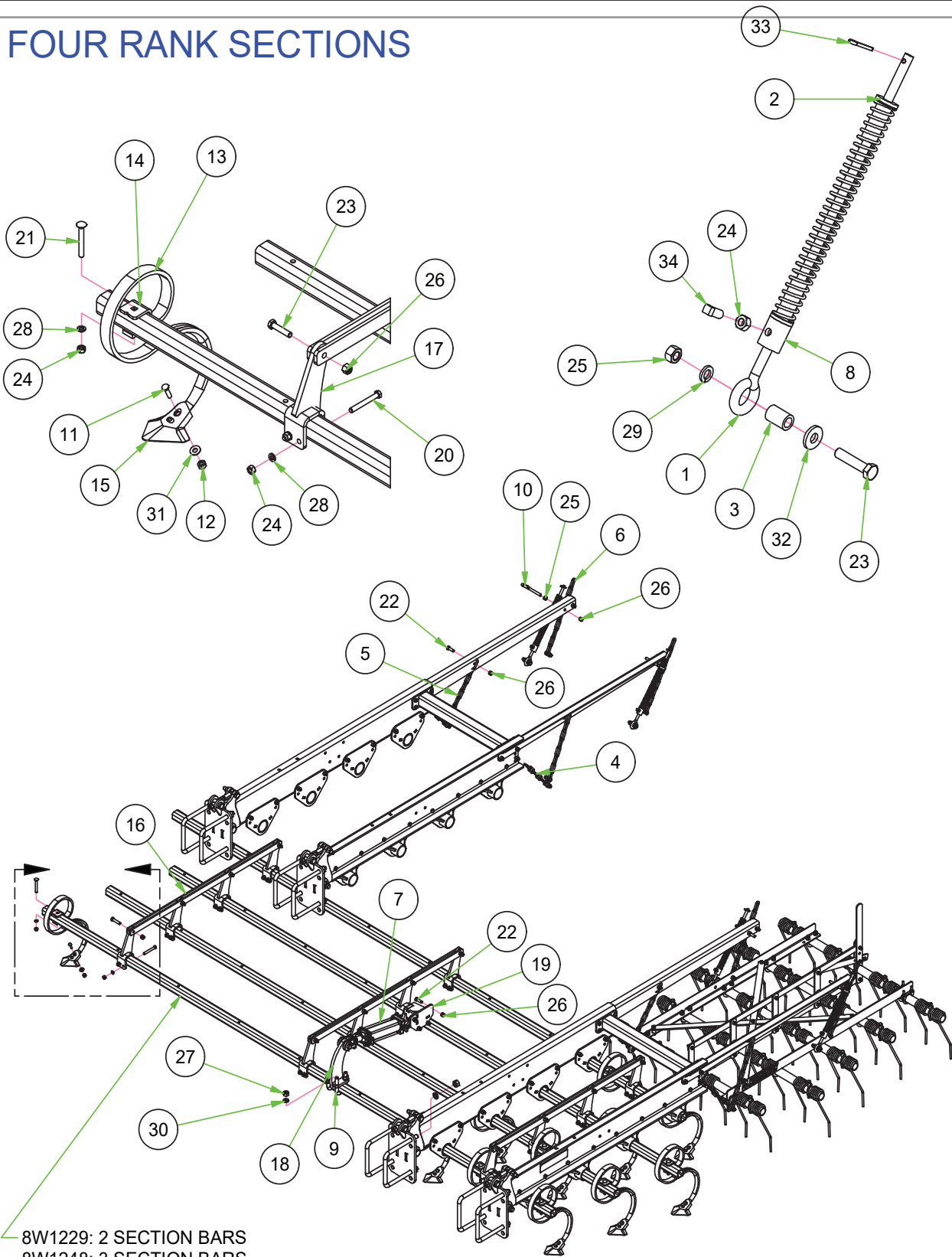


3/27/2019 8W1730.iam/LIFT ARM 18-

LIFT ARMS PARTS LIST

ITEM	PN	DESCRIPTION
1	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
2	8W1017	ROD END BEARING-F 3/4" F_THRD
3	8W1018	PIVOT PIN 1.5" W 3/4"HL YZ 18-
4	8W1019	RND 3/4 X 16 UNF - 6.75" YZ
5	8W1278	STL 1/2X54.5" WDR EXT ARM-L 18-
6	8W1279	STL 1/2X54.5" WDR EXT ARM-R 18-
7	8W1310P	BUSHING 2" SQ TUBE PAINTED
8	8W1708P	LIFT ARM LFT BDY 4RNK WDR-P 18-
9	8W1709P	LIFT ARM RGT BDY 4RNK WDR-P 18-
10	8W1713P	WDR ARM MNTG HEAD -P 18-
11	8W1807	TUBE 1.25ODX3/4"ID 7/8"SPCR-P
12	8W1859P	CROSS TUBE BLT ON P 18-
13	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ
14	8X0066	BOLT 1/2-13NC X 1-3/4" GR5 ZDI
15	8X0118	BOLT 3/4-10NC X 4" GR5 ZDI
16	8X0143	BOLT 1-8NC X 5" GR5 YZ
17	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
18	8X0260F	NUT 3/4"-10NC HEX GR2 YZ
19	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
20	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ

FOUR RANK SECTIONS

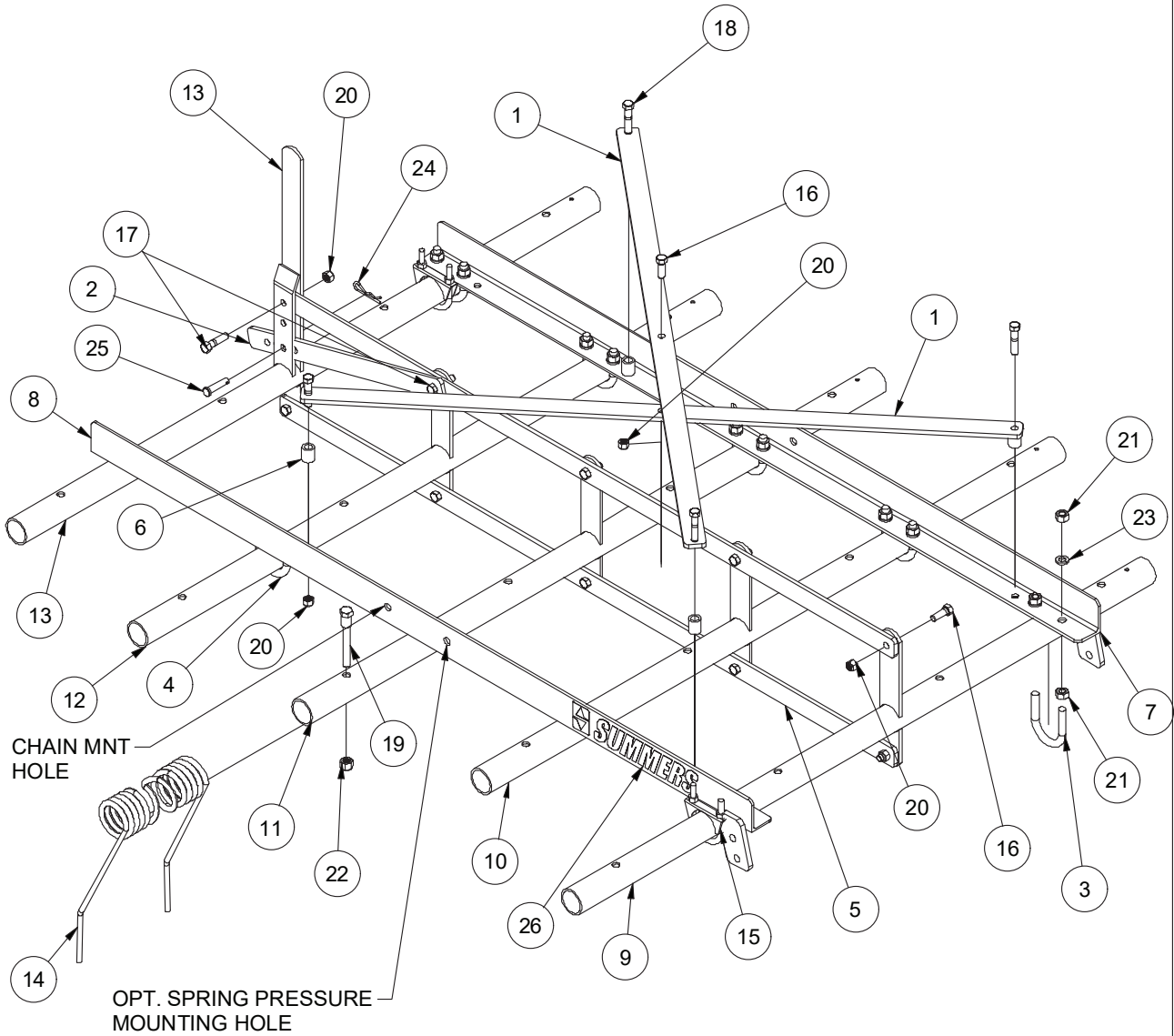


8W1229: 2 SECTION BARS
 8W1248: 3 SECTION BARS

FOUR RANK SECTIONS PARTS LIST

ITEM	PN	DESCRIPTION
1	8D1720	EYE BOLT LONG 1/2" DIA
2	8D1740	PIPE 1/2" SCH80- 2-1/8" W/WSHR
3	8D1750	PIPE 1/2" SCH80- 1-1/4" -07
4	8D2100	CHAIN 6 LINK CASE HARDEND-12.5"
5	8D2210	CHAIN 8 LINK CASE HARDEND-17"
6	8D2300	CHAIN 9 LINK SECTION LIFT-19"
7	8D9116	HYD CYL 2.5 X 8" SP W/ DEPTH CNTRL
8	8H1320	TUBE
9	8K5505	U-BOLT 3/4 X 2-1/8 X 4-1/4" SQ
10	8L0300	EYE BOLT 1/2"-13NC X 1" EYE X 4"
11	8W1006	PLOWBOLT 3/8" X 1.5"
12	8W1007	3/8" HVY NUT
13	8W1011	S-TINE STANDARD
14	8W1014	STL 1/4" CLAMP STND S-TINE-P 18-
15	8W1021	SHOVEL 1/4 X 4" STINE
16	8W1264	FLAT 3/8X1.5- 50" 4RNK SW 91-
17	8W1271P	LEVER 2" SQ TUBE SW-P 18-
18	8W1281P	CYL ATTCH LVR ROD SW -P 18-
19	8W1282P	CYL ATTCH BOLT PLATE PAINTED
20	8X0044	BOLT 7/16-14NC X 3-1/2" GR5 ZDI
21	8X0048	CRG 7/16-14NC X 3-1/2" GR5 ZDI
22	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ
23	8X0067	BOLT 1/2-13NC X 2-1/4" GR5 ZDI
24	8X0232	NUT 7/16"-14NC HEX GR2 ZDI
25	8X0240	NUT 1/2"-13NC HEX GR2 YZ
26	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
27	8X0260	NUT 3/4"-10NC HEX GR2 YZ
28	8X0302	LOCKWASHER 7/16" YLW ZNC
29	8X0303	LOCKWASHER 1/2" YLW ZNC
30	8X0306	LOCKWASHER 3/4" YLW ZNC
31	8X0320	WASHER 3/8" (7/16" ID) FLAT ZDI
32	8X0330	WASHER 17/32" ID X 1.25" OD YZ
33	8X0415	COTTER PIN 3/16 X 1-1/2"
34	8X0605	SET SCRW SQ HD 7/16-14X 1" ZDI

5 FT. HARROW SECTION - 5 BAR (3/8" Dia. Tooth - 8H0795)

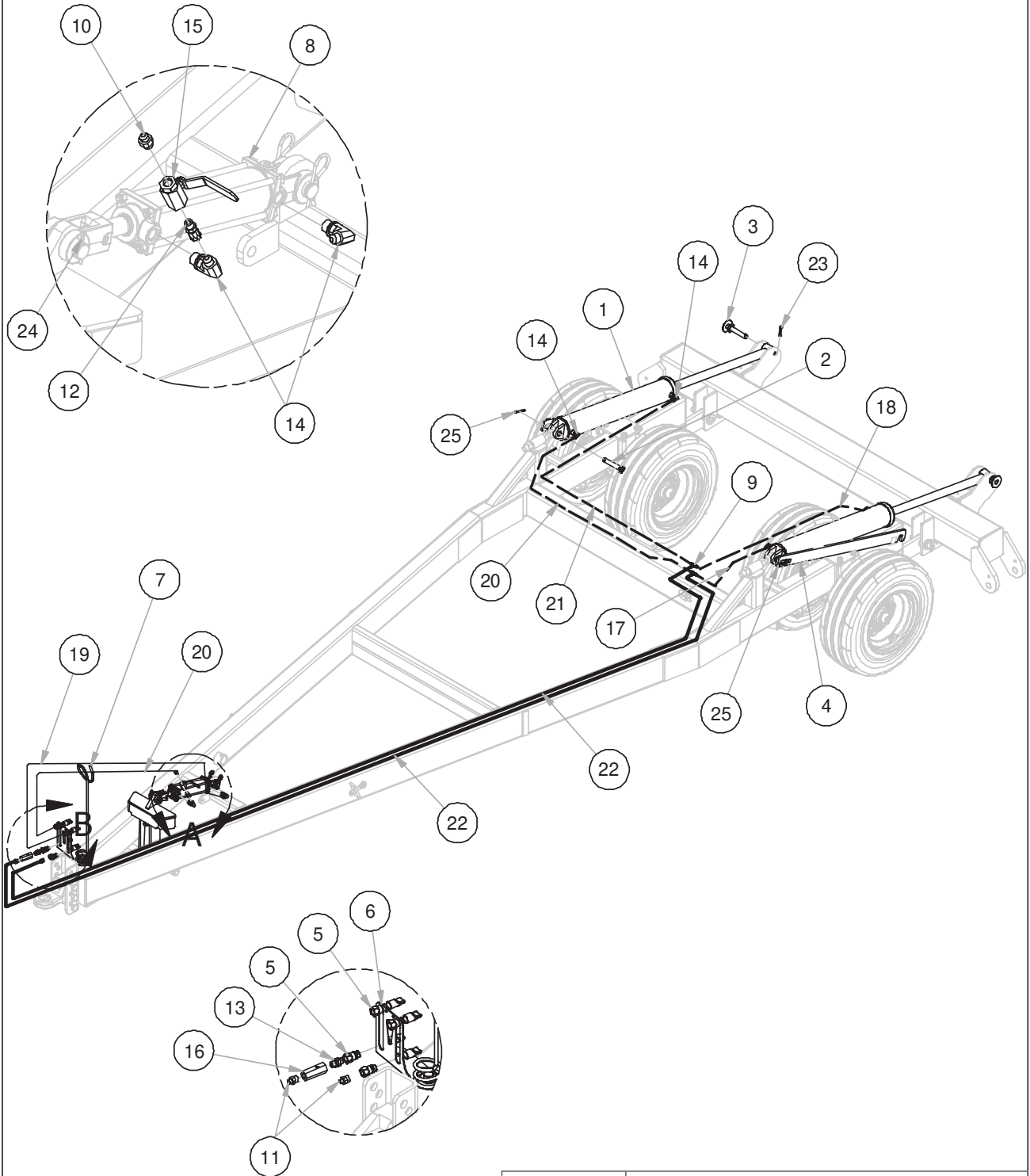


8/7/2018	8H0795.iam/5 BAR 5' HRRW SECTION
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5 FT. HARROW SECTION PARTS LIST

ITEM	PN	DESCRIPTION
1	8H0232	FLAT 5/16 X 1.5 - 47.5" (5')
2	8H0260	FLAT 5/16 X 1.5 -18.5"CULTI
3	8H0350	U-BOLT 1/2 X 2 X 3" RND
4	8H0352	U-BOLT 1/2 X 2 X 3" RND W/NUTS
5	8H0370	FLAT 5/16X1.5- 57" (5 BR)
6	8H0390	PIPE 1/2" SCH 80- 1" (5 BR)
7	8H0410	SIDE ANGLE LEFT 5 BAR
8	8H0411	SIDE ANGLE RGHT 5 BAR
9	8H0641	1ST PIPE W/LEVER 5' 5 BAR
10	8H0642	2ND PIPE W/LEVER 5' 5 BAR
11	8H0643	3RD PIPE W/LEVER 5' 5 BAR
12	8H0644	4TH PIPE W/LEVER 5' 5 BAR
13	8H0645	REAR PIPE W/LEVER 5' 5 BAR
14	8H1110	HARROW TOOTH 3/8X 14"CULTIHRRW
15	8S0080	PIPE CLAMP, 1.90" ID PLATED
16	8X0033	BOLT 7/16X1.25 5/8"THD GR5 ZDI
17	8X0034	BOLT 7/16X1.75 W/1"THD GR5 ZDI
18	8X0036	BOLT 7/16-14NC X 2" GR5 ZDI
19	8X0079	BOLT 1/2-13X4-1/8"SHOULDR GR2ZDI
20	8X0234	NUT 7/16"-14NC NY-LOCK GR2 ZDI
21	8X0240	NUT 1/2"-13NC HEX GR2 YZ
22	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
23	8X0303	LOCKWASHER 1/2" YLW ZNC
24	8X0400	HAIR PIN CLIP 1/8 X 1-15/16"
25	8X0420	CLEVIS PIN 7/16 X 1-3/4" ZDI
26	8Z0101	2" SUMMERS DECAL

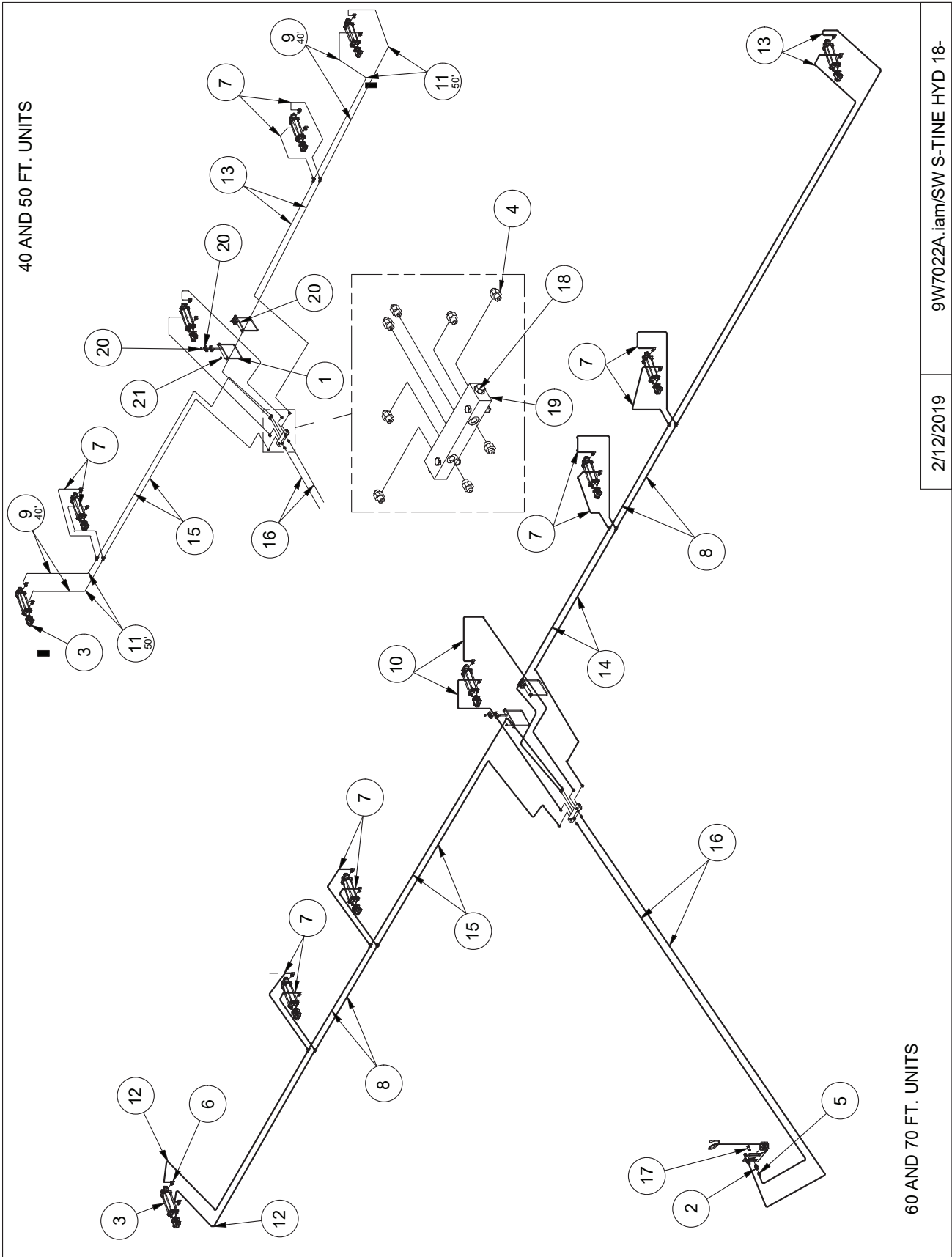
HITCH HYDRAULICS



2/11/2019 9W7022A.iam/HTCH HYDRAULICS 18-

HITCH HYDRAULICS PARTS LIST

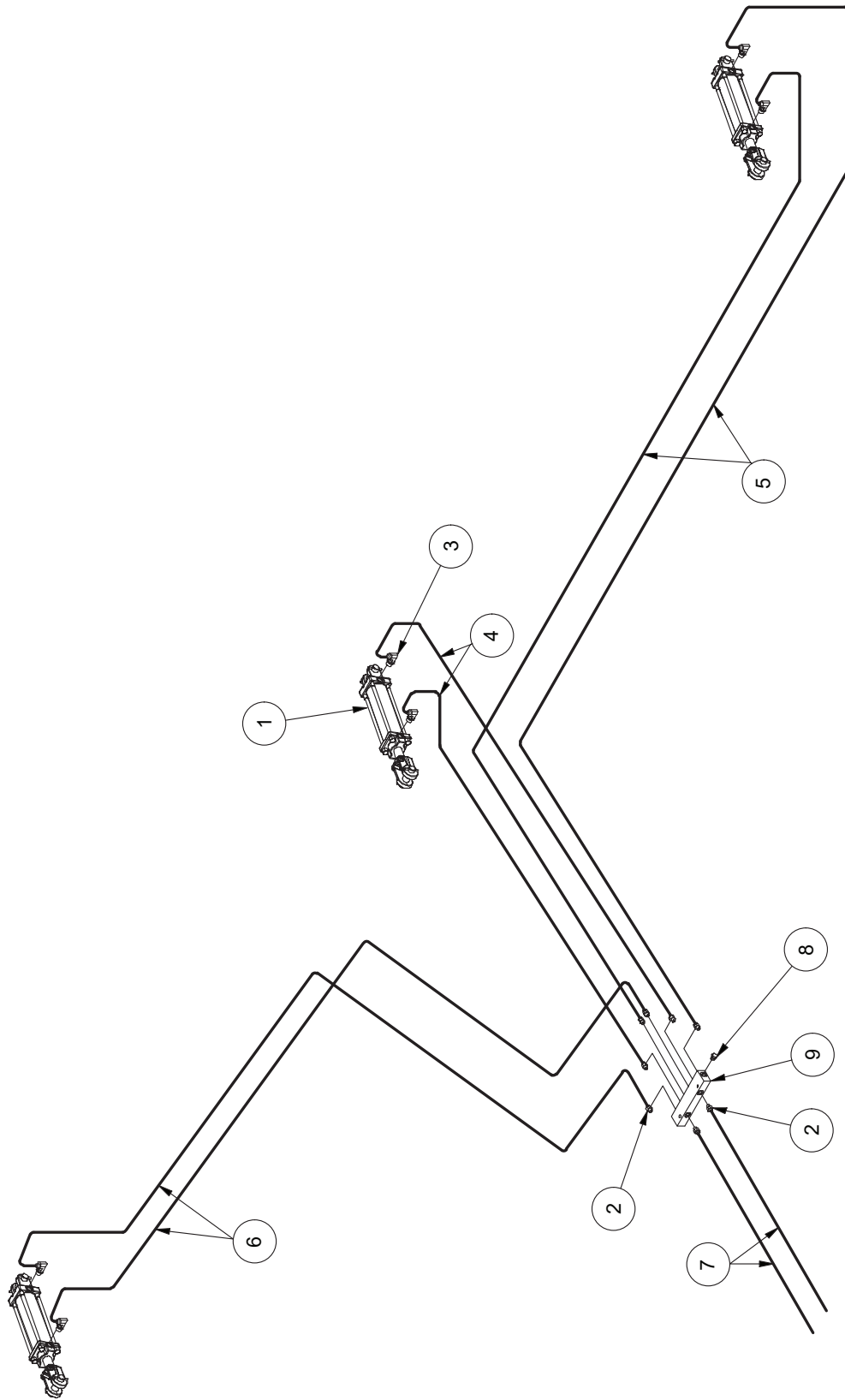
ITEM	PN	DESCRIPTION
1	8C0532	HYD CYL 5" X 32" 3500PSI
2	8C1420	PIN 1 X 5-7/8" 22°HTCH 90-
3	8C1452	PIN 1 X 6-1/2" CYL DBLWSHR
4	8C2246	TRNSPRT LOCK 1/2X3X32"CYL
5	8D3212	MALE TIP 3/4"-16 ORB PIONEER
6	8D8490	PIONEER/ISO TIP HLDR BNT
7	8D8502	HYD HOSE HOLDER PNTD BLK 91-
8	8D9118	HYD CYL 2.5 X8" W/O DPTHCNTRL
9	8J5300	TEE #6 JIC (MALE) 3X
10	8J5500	9/16"-18 ORB X #6 JIC(M) STR
11	8J5510	3/4"-16 ORB X #6 JIC(M) STR
12	8J5600	9/16"-18 ORB X #6 JIC(F-SW)STR
13	8J5680	3/4"-16 ORB X 3/4"-16ORB UNION
14	8J6010	3/4"-16 ORB X #6 JIC(M)90°ADP
15	8J7000	BALL VALVE HYD 9/16"-18ORB(2X)
16	8J7116	3/4"-16 ORB(2X)1WAY 1/16"RESTR
17	8N3018	HYD HOSE 3/8 X 18"
18	8N3048	HYD HOSE 3/8 X 48"
19	8N3084	HYD HOSE 3/8 X 84"
20	8N3096	HYD HOSE 3/8 X 96"
21	8N3124	HYD HOSE 3/8 X 124"
22	8N3252	HYD HOSE 3/8 X 252"
23	8X0414	COTTER PIN 1/4 X 2" YZ
24	8X0415	COTTER PIN 3/16 X 1-1/2"
25	8X0418	COTTER PIN 5/16 X 2-1/2" YZ



40'-70' S-TINE HYDRAULICS PARTS LIST

ITEM	PN	DESCRIPTION
1	8C1710	U-BOLT 3/8 X 8 X 9" SQ
2	8D3212	MALE TIP 3/4"-16 ORB PIONEER
3	8D9116	HYD CYL 2.5 X 8" SP W/ DEPTH CNTRL
4	8J5500	9/16"-18 ORB X #6 JIC(M) STR
5	8J5510	3/4"-16 ORB X #6 JIC(M) STR
6	8J6010	3/4"-16 ORB X #6 JIC(M)90*ADP
7	8N2024	1/4 X 24" HYD HOSE #6FJX3000PSI
8	8N2050	1/4 X 50" HYD HOSE #6FJX3000PSI
9	8N2076	1/4 X 76" HYD HOSE #6FJX3000PSI
10	8N2110	1/4 X 110" HYD HOSE #6FJX3000PSI
11	8N2120	1/4 X 120" HYD HOSE #6FJX3000PSI
12	8N2135	1/4 X 135" HYD HOSE #6FJX3000PSI
13	8N2190	1/4 X 190" HYD HOSE #6FJX3000PSI
14	8N2210	1/4 X 210" HYD HOSE #6FJX3000PSI
15	8N2250	1/4 X 250" HYD HOSE #6FJX3000PSI
16	8N3312	3/8 X 312" HYD HOSE #6FJX3000PSI
17	8S3095	CAPLUG FITS ISO HYD COUPLR 08-
18	8W1357	HEX HEAD PLUG 9/16"-18 ORB
19	8W1360	MANIFOLD BLOCK ALUMINUM 10PORT
20	8W1398	HOLDDOWN HOSE 8" WPTH
21	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ

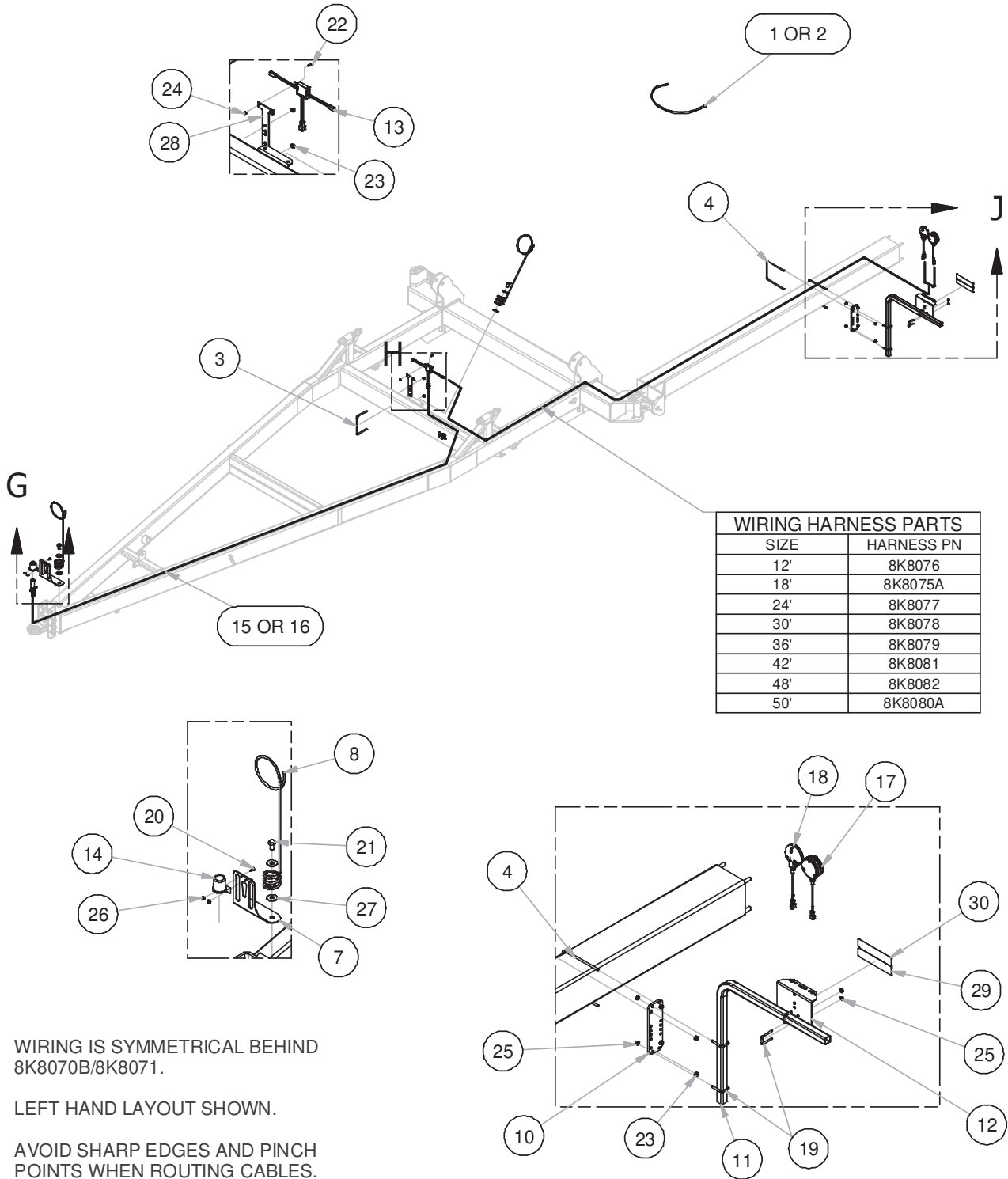
30 FT. UNIT



2/12/2019 SW 30' S-TINE HYDRAULICS 18-

30' S-TINE HYDRAULICS PARTS LIST

ITEM	PN	DESCRIPTION
1	8D9116	HYD CYL 2.5 X 8" SP W/ DEPTH CNTRL
2	8J5500	9/16"-18 ORB X #6 JIC(M) STR
3	8J6010	3/4"-16 ORB X #6 JIC(M)90*ADP
4	8N2110	1/4" X 110" HYD HOSE #6FJX3000PSI
5	8N2190	1/4" X 190" HYD HOSE #6FJX3000PSI
6	8N2250	1/4" X 250" HYD HOSE #6FJX3000PSI
7	8N3288	3/8" X 288" HYD HOSE #6FJX3000PSI
8	8W1357	HEX HEAD PLUG 9/16"-18 ORB
9	8W1360	MANIFOLD BLOCK ALUMINUM 10PORT

LIGHT KIT, 8"SQ DRAWBAR


WIRING IS SYMMETRICAL BEHIND 8K8070B/8K8071.

LEFT HAND LAYOUT SHOWN.

AVOID SHARP EDGES AND PINCH POINTS WHEN ROUTING CABLES.

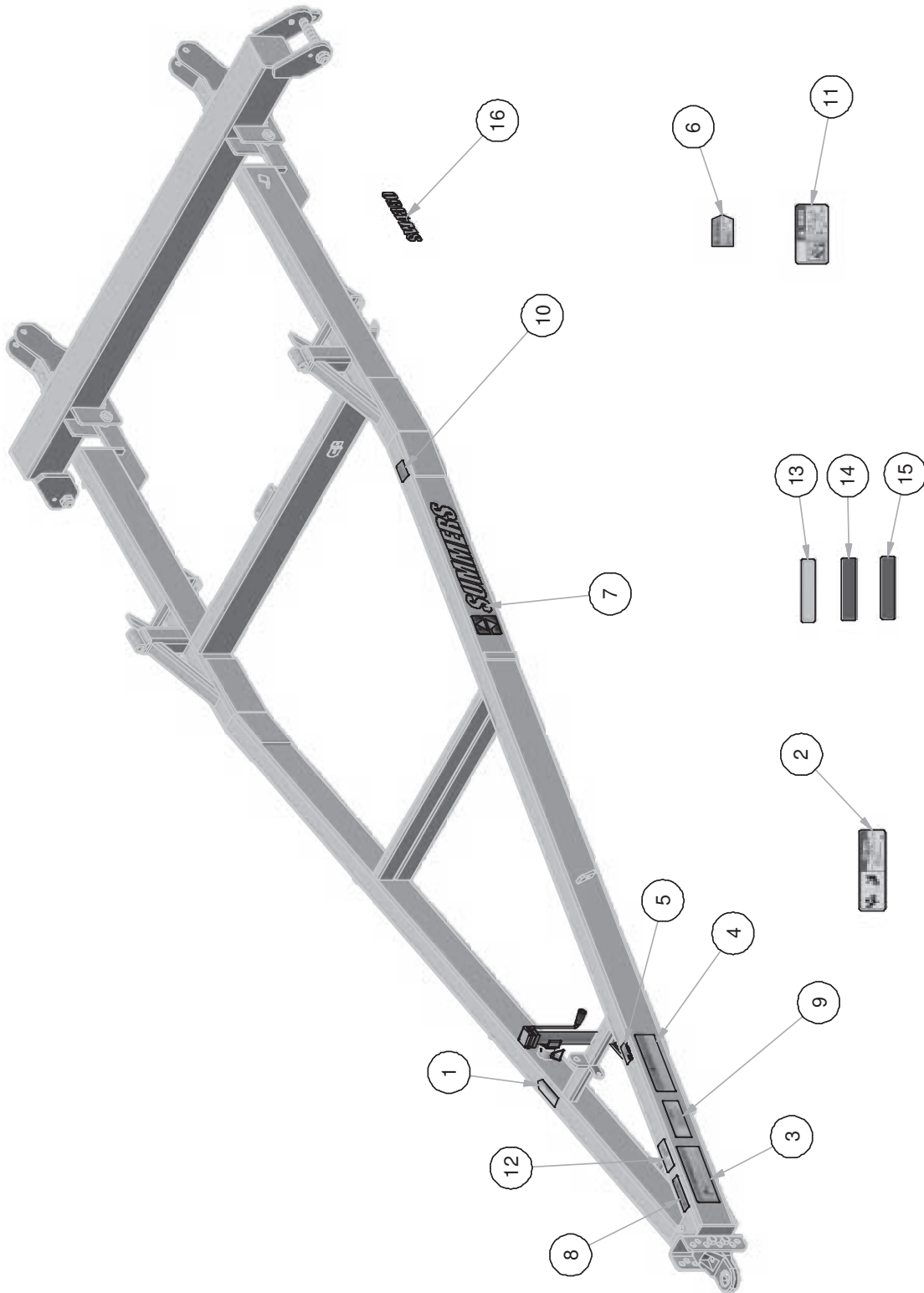
LEAVE SLACK AT HINGES AND KNUCKLES. SECURE WITH NYLON TIES.

10/3/2016

LIGHT KITS, 8"SQ DRWBR

30' S-TINE HYDRAULICS PARTS LIST

ITEM	PN	DESCRIPTION
1	8A4048	11" NYLON TIE
2	8A4052	15-1/4" NYLON TIE
3	8C1702	U-BOLT 3/8 X 8 X 5" SQ
4	8C1710	U-BOLT 3/8 X 8 X 9" SQ
5	8C2200	22' HITCH
6	8C2210	CENTER 22' HTCH 8"SQ-10'
7	8D8490	PIONEER/ISO TIP HLDR BNT
8	8D8500	HYD HOSE HOLDER PNTD BLK 91-
9	8HD6620	WINGTUBE 11'0" (36'SH+) 8"SQ
10	8K8000	STL 7K2045 3/8X3.5 PNTDLGHT
11	8K8010	TUBE LGHT BRCKT1.5SQ55.5"00-
12	8K8020	MOUNTNG BRCKT LIGHT 00-
13	8K8030A	MODULE AG ENHNCDW/BRAKE6PIN08-
14	8K8067	DUST CAP FOR 7PIN CONNECT00-
15	8K8070B	7 PIN MAIN HARNESS - 32'
16	8K8071	7 PIN MAIN HARNESS - 26'
17	8K8090B	LIGHT LED AMBER 2WR DTSCH 12-
18	8K8095B	LIGHT LED RED 3WIRE DTSCH 12-
19	8L0258	U-BOLT 5/16 X 1-1/2 X 2-1/2"SQ
20	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ
21	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
22	8X0170	SCREW 8 X .75" FLANGE HD
23	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
24	8X0208	NUT 8-32 HEX YZ SER FLNG
25	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
26	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
27	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
28	8X0803	LIGHT MODULE BRACKET
29	8Z0805	REFLCTR REDORANGE ADHSVBK99-
30	8Z0810	REFLECTOR RED ADHSV-BACK 98-

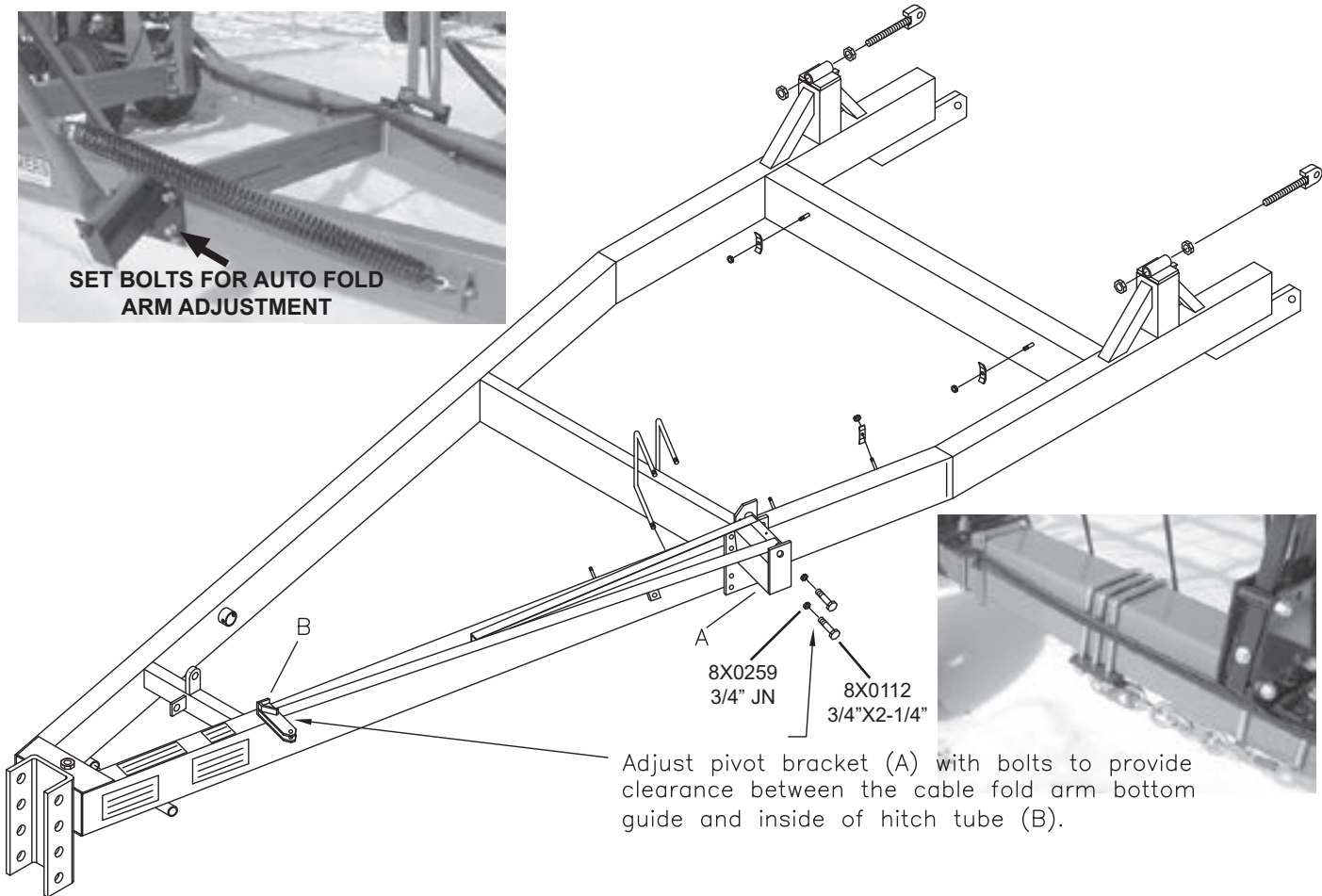
DECALS


9HD0880.iam/SH DECALS

12/17/2013

DECAL PARTS LIST

ITEM	PN	DESCRIPTION
1	8Z0075	TRANSPORT LOCK DECAL
2	8Z0087	DECAL "WARNING" PINCH POINT
3	8Z0092	"WARNING" HITCH DECAL
4	8Z0093	"WARNING" AUTO-FOLD DECAL
5	8Z0100	MADE IN THE USA DECAL
6	8Z0102	DECAL "IMPORTANT" REAR JACK(S)
7	8Z0204	5.5" SUMMERS DECAL
8	8Z0232	"WARNING" AUTO-FOLD DECAL
9	8Z0276	GENERAL MACHINE CAUTION DECAL
10	8Z0342	INSTALL CYL LOCKS DECAL
11	8Z0344	DECAL WING DANGER
12	8Z0346	ELECTROCUTION-TILLAGE EQUIP. DECAL
13	8Z0800	REFLECTOR AMBER ADHSVBCK98-
14	8Z0805	REFLECTOR RED/ORANGE ADHSVBK99-
15	8Z0810	REFLECTOR RED ADHSV-BACK 98-
16	8Z2120	SUPERWEEDER DECAL



22' HITCH — 8" SQUARE DRAWBAR
Specification Chart

Machine Size	Cable Length	PN-Cable	PN-Wing Part 1	PN-Hinged Wing - End	PN-Lift Cylinder
4-RANK SUPERWEEDER					
30'	227"	8D1850	8C3100		8C0432
40'	262"	8D1870	8C3150		8C0432
50'	Inside	246"	8D1860	8C3200	8C0532
	Outside	281"	8D1880		
60'	Inside	262"	8D1870	8C3500	8C0532*
	Outside	324"	8D1900		
70'	Inside	262"	8D1870	8C3500	8C0532*
	Outside	341"	8D1910		

* Install 8R6808 Split Steel Bushings before assembly.

PN	DESCRIPTION	PN	DESCRIPTION
8A1004	CLAMP HOSE 5" #72	8C3500	WINGTUBE 15' #1LEFT60&70' 4RNKSW
8A4048	11" NYLON TIE	8C3510	WINGTUBE 15' #1RGHT60&70' 4RNKSW
8A4052	15-1/4" NYLON TIE	8C3550	WINGTUBE 10' PRT2 (60') 4RNKSW
8C0432	HYD CYL 4 X 32" 3000PSI	8D0312	CLEVIS FOR EYE-EYE CABLE 99-
8C0532	HYD CYL 5" X 32" 3500PSI	8D1242	PIN
8C1420	PIN 1 X 5-7/8" 22'HTCH 90-	8D1660	PIN 1-3/4 X 12-1/4" HARDND
8C1452	PIN 1 X 6-1/2" CYL DBLWSHR	8D1703	SPRING PRSSR ASSY-CULTHRRW 18-
8C1470	PIN 1-1/4 X 14" PIVOT	8D1720	EYE BOLT LONG 1/2" DIA
8C1480	PIN 1-1/2 X 11-1/2" KNCKL	8D1730	SPRING PRESS 3/8" C-HRRW OPT
8C1702	U-BOLT 3/8 X 8 X 5" SQ	8D1740	PIPE 1/2"SCH80- 2-1/8" W/WSHR
8C1710	U-BOLT 3/8 X 8 X 9" SQ	8D1750	PIPE 1/2" SCH80- 1-1/4" -07
8C1760	U-BOLT 3/4 X 8-1/16 X 6" SQ	8D1850	CABLE 1/2 X 227"E-E PLUS CHAIN
8C1780	U-BOLT 7/8 X 8-1/16 X 10" SQ	8D1860	CABLE 1/2 X 246"E-E PLUS CHAIN
8C1800	KNUCKLE 88.25° OFFSET LEFT	8D1870	CABLE 1/2 X 262"E-E PLUS CHAIN
8C1900	CLAMP 1/2" WIRE ROPE	8D1880	CABLE 1/2 X 281"E-E PLUS CHAIN
8C1920	SPRING AFLDCABL 1.56"OD GLVNZD	8D1900	CABLE 1/2 X 324"E-E PLUS CHAIN
8C1940	SPRING AUTOFOLD ARM RAW	8D1910	CABLE 5/8 X 324"E-E PLUS CHAIN
8C1950	SPRING AFOLD LOCK 3"OD BLACK	8D2100	CHAIN 6 LINK CASE HARDND-12.5"
8C2200	22' HITCH	8D2210	CHAIN 8 LINK CASE HARDEND-17"
8C2210	CENTER 22' HTCH 8"SQ-10'	8D2300	CHAIN 9 LINK SECTION LIFT-19"
8C2212	CENTER 22' HTCH 8"SQ-10'	8D2402	CHAIN 3 LINK .625"DIA. ALLOY Z
8C2246	TRNSPRT LOCK 1/2X3X32"CYL	8D2460	SAFETY CHAIN 3/8" X 4'
8C2260	BRCKT CABLE PULL 8"SQ WNG	8D2730	PIN 1 X 2-3/4" CABLE PLATED
8C2280	JACK ATTCH BRCKT- WING	8D3046	IF280/70R15 134D ON 15X10X6WHL
8C2314	OSCILLATING AXLE ASSY	8D3049	LT265/75R16 RAD ON 16X8X8 WHL
8C2318	SPACR BRCKT HTCH AXL ATTCH	8D3212	MALE TIP 3/4"-16 ORB PIONEER
8C2422P	TRNSPRT AXLE W/2.5"RCVR 2"PIN -P	8D8490	PIONEER/ISO TIP HLDR BNT
8C2450	PIVOT W/ PLATE 812TRNSPRT	8D8500	HYD HOSE HOLDER PNTD BLK 91-
8C2600	ARM A-FLD LEFT 20&22'HTCH	8D8502	HYD HOSE HOLDER PNTD BLK 91-
8C2610	ARM A-FLD RGHT 20&22'HTCH 90-	8D8537	JACK 7000# SIDE CRANK 15" LIFT
8C2620	PIVOT BRCKT A-FLD 22'HTCH	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
8C2650	LOCK ASSY AUTOFOLD 22'HTCH 90-	8D9110	HAIR PIN CLIP LARGE
8C2660	BUSHING A-FOLD LOCK- 5/16"	8D9116	HYD CYL 2.5 X 8" SP W/ DEPTH CNTRL
8C2690	FRONT ATTCH DUAL CABLE	8D9118	HYD CYL 2.5 X8" W/O DPTH CNTRL
8C3100	WINGTUBE 10' X 8SQ 30'HP+4RNKSW	8H0232	FLAT 5/16 X 1.5 - 47.5" (5')
8C3150	WINGTUBE 15' X 8SQ 40'HP+4RNKSW	8H0260	FLAT 5/16 X 1.5 -18.5"CULTI
8C3200	WINGTUBE 20' X 8SQ 50'HP+4RNKSW	8H0350	U-BOLT 1/2 X 2 X 3" RND
8C3298	WINGTUBE 28' 6.5" 70' WEEDER	8H0352	U-BOLT 1/2 X 2 X 3" RND W/NUTS

PN	DESCRIPTION	PN	DESCRIPTION
8H0370	FLAT 5/16X1.5- 57" (5 BR)	8N2076	1/4 X 76" HYD HOSE #6FJX3000PSI
8H0390	PIPE 1/2" SCH 80- 1" (5 BR)	8N2110	1/4 X 110" HYD HOSE #6FJX3000PSI
8H0410	SIDE ANGLE LEFT 5 BAR	8N2120	1/4 X 120" HYD HOSE #6FJX3000PSI
8H0411	SIDE ANGLE RGHT 5 BAR	8N2135	1/4 X 135" HYD HOSE #6FJX3000PSI
8H0641	1ST PIPE W/LEVER 5' 5 BAR	8N2190	1/4 X 190" HYD HOSE #6FJX3000PSI
8H0642	2ND PIPE W/LEVER 5' 5 BAR	8N2210	1/4 X 210" HYD HOSE #6FJX3000PSI
8H0643	3RD PIPE W/LEVER 5' 5 BAR	8N2250	1/4 X 250" HYD HOSE #6FJX3000PSI
8H0644	4TH PIPE W/LEVER 5' 5 BAR	8N3018	3/8 X 18" HYD HOSE #6FJX3000PSI
8H0645	REAR PIPE W/LEVER 5' 5 BAR	8N3048	3/8 X 48" HYD HOSE #6FJX3000PSI
8H1110	HARROW TOOTH 3/8X 14"CULTIHRRW	8N3084	3/8 X 84" HYD HOSE #6FJX3000PSI
8H1320	TUBE	8N3096	3/8 X 96" HYD HOSE #6FJX3000PSI
8HD6620	WINGTUBE 11'0" (36'SH+) 8"SQ	8N3124	3/8 X 124" HYD HOSE #6FJX3000PSI
8J5300	TEE #6 JIC (MALE) 3X	8N3252	3/8 X 252" HYD HOSE #6FJX3000PSI
8J5500	9/16"-18 ORB X #6 JIC(M) STR	8N3288	3/8 X 288" HYD HOSE #6FJX3000PSI
8J5510	3/4"-16 ORB X #6 JIC(M) STR	8N3312	3/8 X 312" HYD HOSE #6FJX3000PSI
8J5600	9/16"-18 ORB X #6 JIC(F-SW)STR	8R6145	EYEBOLT 3/4"-10NC X 5/8"EYE
8J5680	3/4"-16 ORB X 3/4"-16ORB UNION	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.25"
8J6010	3/4"-16 ORB X #6 JIC(M)90*ADP	8S0080	PIPE CLAMP, 1.90" ID PLATED
8J7000	BALL VALVE HYD 9/16"-18ORB(2X)	8S1076	QUICKLINK 1/4" YELLOW ZINC
8J7116	3/4"-16 ORB(2X)1WAY 1/16"RESTR	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
8K1100	HUB&AXLE ASSY 614(GBGI-2"RCVR)	8S1126	MNT SPADE W/HRDWR SMV SIGN
8K1105	HUB&AXLE ASSY HD812(2.5"RCVR)	8S2990	HYD HOSE CLAMP-LARGE-NYLON
8K1620	PIN 1-1/4 X 6-1/8"	8S3095	CAPLUG FITS ISO HYD COUPLR 08-
8K5505	U-BOLT 3/4 X 2-1/8 X 4-1/4" SQ	8W1006	PLOWBOLT 3/8"X1.5"
8K8000	STL 7K2045 3/8X3.5 PNTDLGHT	8W1007	3/8" HVY NUT
8K8010	TUBE LGHT BRCKT1.5SQ55.5"00-	8W1011	S-TINE STANDARD
8K8020	MOUNTNG BRCKT LIGHT 00-	8W1014	STL 1/4" CLAMP STND S-TINE-P 18-
8K8030A	MODULE AG ENHNCDW/BRAKE6PIN08-	8W1017	ROD END BEARING-F 3/4" F_THRD
8K8067	DUST CAP FOR 7PIN CONNECT00-	8W1018	PIVOT PIN 1.5" W_3/4"HL YZ 18-
8K8070B	7 PIN MAIN HARNESS - 32'	8W1019	RND 3/4 X 16 UNF - 6.75" YZ
8K8071	7 PIN MAIN HARNESS - 26'	8W1021	SHOVEL 1/4 X 4" STINE
8K8090B	LIGHT LED AMBER 2WR DTSCH 12-	8W1204	U-BOLT 1/2 X 3 X 3" SQ
8K8095B	LIGHT LED RED 3WIRE DTSCH 12-	8W1248	TUBE SQ 2 X 4T -168"-P 18-
8K8200	BRCKT SMV ATTCH 4-8"FRAME98-	8W1264	FLAT 3/8X1.5- 50" 4RNK SW 91-
8K8430	HYD CYL 3" X 8" RPHS 1.5" ROD	8W1271P	LEVER 2"SQ TUBE SW-P 18-
8L0258	U-BOLT 5/16 X 1-1/2 X 2-1/2"SQ	8W1279	STL 1/2X54.5" WDR EXT ARM-R 18-
8N2024	1/4 X 24" HYD HOSE #6FJX3000PSI	8W1281P	CYL ATTCH LVR ROD SW -P 18-
8N2050	1/4 X 50" HYD HOSE #6FJX3000PSI	8W1282P	CYL ATTCH BOLT PLATE PAINTED

PN	DESCRIPTION	PN	DESCRIPTION
8W1310P	BUSHING 2" SQ TUBE PAINTED	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
8W1357	HEX HEAD PLUG 9/16"-18 ORB	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
8W1360	MANIFOLD BLOCK ALUMINUM 10PORT	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
8W1398	HOLDDOWN HOSE 8" WDTH	8X0208	NUT 8-32 HEX YZ SER FLNG
8W1652	PVT PLATE WNG-1" 7W1652 PNTD	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
8W1709P	LIFT ARM RGT BDY 4RNK WDR-P 18-	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
8W1711	LIFT ARM LVL ADJ 4RNK SPRWDR LFT	8X0232	NUT 7/16"-14NC HEX GR2 ZDI
8W1713P	WDR ARM MNTG HEAD -P 18-	8X0234	NUT 7/16"-14NC NY-LOCK GR2 ZDI
8W1730	LIFT ARM H-FRM 30.5" C-C 18-	8X0240	NUT 1/2"-13NC HEX GR2 YZ
8W1750	CABLE GUIDE BRACKET	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
8W1806	SPACER TUBE 1.25X.76- 1-1/16"	8X0246	NUT 1/2"-13NC SERFLANG GR2 YZ
8W1807	TUBE 1.25ODX3/4"ID 7/8"SPCR-P	8X0259	NUT JAM 3/4"-10NC GR2 ZDI
8W1817H	PIVOT W/SPNDL HLDR WNG HD LFT	8X0260	NUT 3/4"-10NC HEX GR2 YZ
8W1826	PVT INNER WING W/ROLLRS LEFT	8X0260F	NUT 3/4"-10NC HEX GR2 YZ
8W1859P	CROSS TUBE BLT ON P 18-	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
8X0008	BOLT 3/8-16NC X 2" GR5 ZDI	8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ
8X0033	BOLT 7/16X1.25 5/8"THD GR5 ZDI	8X0268	NUT 7/8"-9NC HEX GR2 YZ
8X0034	BOLT 7/16X1.75 W/1"THD GR5 ZDI	8X0280	NUT 1"-8NC HEX GR2 YZ
8X0036	BOLT 7/16-14NC X 2" GR5 ZDI	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
8X0044	BOLT 7/16-14NC X 3-1/2"GR5 ZDI	8X0286	NUT 1-1/2"-6NC JAM GR2 YZ
8X0048	CRG 7/16-14NC X 3-1/2" GR5 ZDI	8X0302	LOCKWASHER 7/16" YLW ZNC
8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ	8X0302	LOCKWASHER 7/16" YLW ZNC
8X0066	BOLT 1/2-13NC X 1-3/4" GR5 ZDI	8X0303	LOCKWASHER 1/2" YLW ZNC
8X0067	BOLT 1/2-13NC X 2-1/4" GR5 ZDI	8X0306	LOCKWASHER 3/4" YLW ZNC
8X0068	BOLT 1/2-13NC X 2-1/2" GR5 YZ	8X0307	LOCKWASHER 7/8" YLW ZNC
8X0070	BOLT 1/2-13NC X 3-1/4" GR5 YZ	8X0309	LOCKWASHER 1" YLW ZNC
8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI	8X0316	WASHER 1" SAE FLAT YZ
8X0079	BOLT 1/2-13X4-1/8"SHOULDR GR2ZDI	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ	8X0320	WASHER 3/8" (7/16" ID)FLAT ZDI
8X0114	BOLT 3/4-10NC X 3" GR5 YZ	8X0327	WASHER 1-1/4" SAE FLAT YZ
8X0118	BOLT 3/4-10NC X 4" GR5 ZDI	8X0330	WASHER 17/32"ID X 1.25"OD YZ
8X0122	BOLT 3/4-10NC X 4-1/2" GR5 YZ	8X0362	WASHER 2.03IDX2-7/8ODX 9GA PLN
8X0125	BOLT 3/4-10NC X 10" GR5 ZDI	8X0366	WASHER 2.03IDX2-7/8ODX 1/4"PLN
8X0140	BOLT 1-8NCX7" W/1.5"THDGR5 YZ	8X0400	HAIR PIN CLIP 1/8 X 1-15/16"
8X0143	BOLT 1-8NC X 5" GR5 YZ	8X0414	COTTER PIN 1/4 X 2" YZ
8X0150	BOLT 1-8NC X 20" GR5 YZ	8X0415	COTTER PIN 3/16 X 1-1/2"
8X0170	SCREW 8 X .75" FLANGE HD	8X0418	COTTER PIN 5/16 X 2-1/2" YZ

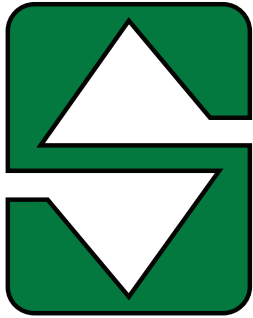
PN DESCRIPTION

8X0420	CLEVIS PIN 7/16 X 1-3/4" ZDI
8X0605	SET SCRW SQ HD 7/16-14X 1" ZDI
8X0665	SET SCRW SQ HD 3/4-10X4.5" YZ
8X0803	LIGHT MODULE BRACKET
8Z0075	TRANSPORT LOCK DECAL
8Z0092	"WARNING" HITCH DECAL
8Z0093	"WARNING" AUTO-FOLD DECAL
8Z0100	MADE IN THE USA DECAL
8Z0101	2" SUMMERS DECAL
8Z0102	DECAL "IMPORTANT" REAR JACK(S)
8Z0204	5.5" SUMMERS DECAL
8Z0232	"WARNING" AUTO-FOLD DECAL
8Z0276	GENERAL MACHINE CAUTION DECAL
8Z0342	INSTALL CYL LOCKS DECAL
8Z0344	DECAL WING DANGER
8Z0346	ELECTROCUTION-TILLAGE EQUIP. DE- CAL
8Z0800	REFLECTOR AMBER ADHSVBCK98-
8Z0805	REFLCTR REDORANGE ADHSVBK99-
8Z0805	REFLECTOR RED/ORANGE ADHSVBK99-
8Z0810	REFLECTOR RED ADHSV-BACK 98-
8Z0810	REFLECTOR RED ADHSV-BACK 98-
8Z1000	MANUAL-PAK 3DIA X 11.75" 09-
8Z2120	SUPERWEEDER DECAL SW4350

History of Summers Manufacturing Co., Inc.

- 1965 – Summers Manufacturing is founded by Harley Summers, who purchases patent rights for Goebel truck and pickup hoists from the Goebel Brothers of Lehr, ND. These hoists, produced in Harley Summers' blacksmith shop the first year, were distributed nationwide by a Cincinnati, Ohio, dealer. With increasing sales, the company soon outgrows the small shop. Summers wins the Herman harrow contract, beginning the company's Herman culti-harrow line. Summers builds a 7,200 square-foot factory in Maddock to meet the demand for truck and pickup hoists, as well as Herman harrows.
- 1969 – Firm incorporates and becomes officially known as Summers Manufacturing Company, Inc.
- 1970 – Summers purchases rights to manufacture/market the Herman Harrow.
- 1973 – Company builds new 20,000 square-foot plant and offices in Maddock, adding a 20,000 square-foot assembly plant in the fall of 1975 (completed in January 1976), bringing total square footage of Maddock factories to 47,000.
- 1977 – Summers introduces the Agri-sprayer, used in conjunction with the Herman culti-harrow to incorporate herbicides and liquid fertilizer.
- 1980 – Company purchases manufacturing and distributing rights to Crown rockpickers from Crown Manufacturers of Regina, Saskatchewan. This forces another expansion project – a 26,000 square foot factory on a 24 acre site in Devils Lake, ND Industrial Park.
- 1981 – Company establishes a branch facility in Regina, Saskatchewan.
- 1982 – Devils Lake plant begins operations in January, manufacturing supersprayers and rockpickers. The Maddock factory begins producing the Superweeder, a combination cultivator and harrow.
- 1983 – Summers buys manufacturing and distributing rights to the Fargo Field Sprayer line from Mid America Steel (formerly Fargo Foundry), Fargo. This field sprayer line is manufactured at the Devils Lake plant. Harley Summers is selected North Dakota's small-businessman of the year by the Small Business Administration.
- 1984 – Herman Diamond Disk, a disk harrow made in a diamond shape to reduce blade breakage from rocks, comes off the assembly line.
- 1985 – Summers signs a contract with Melroe Company of Bismarck to obtain exclusive manufacturing rights to the Melroe harrow line.
- 1989 – Summers purchases TorMaster Company of Hordean, Manitoba, giving the company a line of rolling packer equipment, comprised of harrow packers and hydraulic fold coil packers.
- 1992 – A new engineering office/parts department is added to the Devils Lake factory.
- 1993 – Company adds two new products: a pickup-mounted sprayer with booms of 80 and 90 feet, and the Summers Superharrow, an extra-heavy-duty residue-management tool designed for the minimum and no-till farmer.
- 1994 – a 50 by 125 foot addition to the Maddock factory is completed. Construction begins on a 24,576 square-foot addition to the Devils Lake factory, which enables the company to increase production of truck-mounted and pull-type supersprayers and rockpickers.
- 1996 – 1500 square foot office area added to the Maddock plant. Company introduces Chisel Plow with floating hitch and 700# trip assembly. Introduced 2-point sprayer.
- 1997 – 16,800 square foot warehouse in Maddock purchased from local business.
- 1999 – Company introduces the Ultimate suspended boom trailer sprayer with hydraulic folding booms. Additional sizes added to the Chisel Plow line, now ranging from 28' to 54'.
- 2000 – Company introduces the Supercoulter, the innovative solution for excessive field residue management on no-till, minimum-till, and conventional-till farming operations.
- 2001 – Cold storage building completed at Devils Lake. Company extends boom lengths up to 110 feet on the Ultimate Supersprayer.
- 2002 – Company adds a warehouse and service man in Aberdeen, SD.
- 2003 – Company introduces the Ultimate NT Supersprayer featuring a bolt on axle for easier adjustment, and a new family of tanks that feature a drainable sump and a common width dimension.
- 2004 – A 124 ft. x 310 ft. addition is added onto the current Devils Lake plant.
- 2005 – The Summers Superroller is added to the "Field Tested Tough" product line. Additional sizes of 56', 58' and 60' are added to the Superchisel line. Ultimate-Ultra NT Supersprayer introduced featuring 120' & 133' booms.
- 2006 – The Summers Coulter-Chisel, Rolling Choppers and 30' Superroller were included in product line.
- 2007 – 62' & 84' 5 Section Landrollers and a 20' Coulter-Chisel were introduced.
- 2008 – Disk-Chisels, ranging from 16' to 40' widths, are added to product line.
- 2009 – M105 and M108 Mounted Harrows added to selection of Mounted Attachments. SuperHarrow 2650, 50' SuperCoulter, Hydraulic Fold Rolling Chopper and 36" diameter Landrollers introduced.
- 2010 – Rolling Basket and 47" Diamond Disk added to product line. A 124 ft. x 310 ft. addition to Devils Lake factory built for a state of the art paint system.
- 2011 – Additional Supercoulter sizes were added along with larger tires for tillage implements. Ultimate and Ultra Supersprayers received an additional tank size of 1650 gallons. Front Caster Wheel option was made available for chisel implements.
- 2012 – 41', 46' & 53' Trail Type Landroller added to product line. Additional Superchisel sizes of 16' & 20' were added.
- 2013 – DT9530 added to product line. Internal Scraper in Rolling Baskets introduced. Finishing Coulter Gang becomes standard on the Diamond Disk and 2510 DT. Corporate offices opened at Devils Lake plant. New building and location for the Aberdeen warehouse.
- 2014 – Introduced the VRT2530 (Variable Rate Tillage).
- 2015 – Introduced the VT Flex Applicator and Spray Fill Xpress.
- 2016 – Introduced the 8-Bar Superharrow.
- 2018 – Introduced the VRT Renegade.

Summers distributes on a wholesale level to dealers and distributors throughout markets in North Dakota, South Dakota, Minnesota, Montana, Iowa, Washington, Idaho, Oregon, Utah, Colorado, Kansas, Nebraska, Oklahoma, Texas, Manitoba, Saskatchewan, Alberta, British Columbia, Kazakhstan, Russia and Australia, making it an international company.



SUMMERS[®]

... Field Tested TOUGH!



Tillage



Rock Picker



Land Rollers/Packers



Cultivators/Harrows



Mounted Attachments



Sprayers



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