

Operator's Manual



RH8410 & RH8420

(Superroller)

IMPORTANT

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



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

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 of purchase by the end user from Summers' dealer.

Summers' obligation is to replace free of charge any part of any product that Summers inspection shows to be defective excluding transportation charges to 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 herein 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, NORTH DAKOTA 58301

1/16

INTRODUCTION

This manual provides the following information about your Summers Land Roller.

SECTION CONTENTS

- Section 1 <u>SAFETY</u> explains important safety precautions and familiarizes the Operator with the decals and their locations.
- Section 2 <u>LAND ROLLER OPERATION</u> provides necessary information for the operation and adjustment of the machine.
- Section 3 <u>MAINTENANCE</u> covers recommended mechanical maintenance. <u>TROUBLESHOOTING</u> provides a quick reference to solving problems. <u>SPECIFICATIONS</u> lists important dimensions, capacities and other technical information.
- Section 4 PARTS

OTHER ITEMS OF IMPORTANCE

- A. Summers Mfg. Co., Inc. strongly recommends that each Land Roller Operator <u>READ and UNDERSTAND</u> the Operator's Manual before using the machine. In addition, this Operator's Manual should be <u>REVIEWED at least ANNUALLY thereafter</u>.
- B. It is the policy of this company in 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 obligations to install such changes on products previously delivered.
- C. Reference to "right" and "left" in this manual is determined when machine is viewed from the rear.
- D. 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 back section of manual for description of each Part Number.
- E. <u>WARNING DO NOT ATTEMPT</u> to raise machine into transport position if mud has built up on rollers or if machine weight has been increased by any other means. Mechanical failure may occur.
- F. Ability to safely operate the Summers Superroller is determined by both tractor horsepower and weight. The minimum tractor weight for operating this implement is 16,000 lb. Minimum tractor engine horsepower is 125. Dual tires or single tires set at maximum width are required for safe operation of Land Roller.
- G. Never tow this implement with less than an 16,000 lb. vehicle. Tongue weight in transport and field positions 1150 lbs.
- H. NEVER ALLOW anyone to work under Land Roller.

Scan code to the right for the latest version of all Summers Operator's Manuals.

OWNI	ER REGISTER
Name	Size
Address	Serial Number
City	(located by the hitch piece)
State/Prov.	Date Purchased
Mail Code	Dealer

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TRANSPORT SAFETY

1. Road speed should not exceed 20 mph (32 km/hr).



- 2. Do not tow if the implement's towing vehicle ratio is greater than 1.5:1. See Specifications Section for implement weights.
- 3. If more than one implement is to be pulled by a towing vehicle, it is recommended that each implement is to be a maximum of 50% of the weight of the preceding implement. If it is not possible to reach this weight limit, transport the implements separately.
- 4. When approaching rough roads/ground (such as entering a road), slow down to a safe driving speed.
- 5. Check all lights and reflectors to ensure ALL regulations are met. Make sure the SMV emblem is attached to the implement and is clearly visible from the rear.



SMV emblems are only attached to vehicles traveling slower than 25 mph (40 km/hr). The most hazardous conditions to drive in are a daybreak and dusk. The use of a pilot car is recommended.

- 6. Always install ALL safety locks before transporting an implement.
- 7. Always park implements on a firm, level surface.

SAFETY-ALERT SYMBOL



This symbol is used to denote possible danger and care should be taken to prevent bodily injury. This symbol means:

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Definition of each **Signal Word** used in conjunction with the **Safety-Alert** symbol.



indicates an imminently hazardous situation which, if not avoided, <u>will result in death</u> <u>or serious injury</u>. This signal word is to limited to the most extreme situations.



indicates a potentially hazardous situation which, if not avoided, <u>could result in death</u> or serious injury.



indicates a potentially hazardous situation which, if not avoided, <u>may result in minor</u> or moderate injury. It may also be used to alert against unsafe practices.

GENERAL SAFETY PRACTICES

- 1. <u>READ AND UNDERSTAND</u> Operator's Manual before using machine. Review at least annually thereafter.
- 2. VERIFY all safety devices and shields are in place before using machine.
- 3. KEEP hands, feet, hair and clothing away from moving parts.
- 4. <u>STOP</u> 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. <u>ALWAYS</u> make sure Land Roller is lowered into field position (cylinders extended), it is blocked to prevent movement and that pressure is relieved from hydraulic circuits <u>before servicing</u>.
- 7. DO NOT ALLOW RIDERS.
- 8. <u>USE EXTREME CARE</u> when making adjustments.
- 9. KEEP CHILDREN AWAY from machinery at all times.
- 10. NEVER ALLOW anyone to work under Land Roller.
- 11. <u>WARNING DO NOT ATTEMPT</u> to raise machine into transport position if mud has built up on rollers or if machine weight has been increased by any other means. Mechanical failure may occur.

SAFETY DURING TRANSPORT

- 1. Ability to safely operate the Summers Superroller is determined by both tractor horsepower and weight. The minimum tractor weight for operating this implement is 16,000 lbs. Minimum tractor engine horsepower is 125. Dual tires or single tires set at maximum width are required for safe operation of Land Roller.
- 2. ONLY TOW at a safe speed 20 MPH MAXIMUM. Use caution when making corners or meeting traffic.
- 3. USE Safety Lights and Safety Chain between tractor drawbar and implement hitch when transporting on public roads.
- ALWAYS install hitch safety chains and close wing lock hydraulic valve before transporting on public roads.
- 5. FOLLOW ALL local laws governing transporting of farm machinery.
- Use additional caution and reduce speed when towing under adverse conditions, when turning and when on unlevel surfaces. Frequently check for traffic from rear, especially during turns.
- 7. Stay clear of overhead lines and other overhead obstructions.

SAFETY DECALS

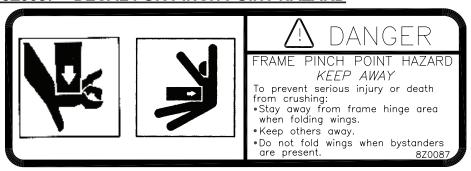
- 1. KEEP SAFETY DECALS CLEAN.
- 2. REPLACE missing or unreadable decals. New decals are available from your Summers dealer by ordering correct part number (PN) located on the decal.

DECALS AND THEIR LOCATIONS

1. PN 8Z0075 - DECAL FOR REMOVING TRANSPORT LOCKS



2. PN 8Z0087 - DECAL FOR PINCH POINT HAZARD



3. PN 8Z0100 - MADE IN THE USA DECAL



4. PN 8Z0202 - 3.5" SUMMERS DECAL



5. PN 8Z0204 - 5.5" SUMMERS DECAL



6. PN 8Z0276 - DECAL FOR GENERAL CAUTION



- 1. Read and understand Operator's Manual before using machine.
- 2. For Sprayers:
 - a. Read and follow chemical manufacturers' WARNINGS, instructions and procedures before using.
 - b. Use recommended personal protective equipment to reduce or ellminate chemical contact.
 - c. Never run pump dry.
- 3. Verify all safety devices and shields are in place before using machine.
- 4. Keep hands, feet, hair and clothing away from moving parts.
- 5. 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.
 6. Be careful when working around high pressure hydraulic system.
- 7. Do not allow riders.
- 8. Check all wheel bolts DAILY for tightness.
- 9. Refer to Operator's Manual for periodic and annual maintenance.
 10. For Towed Implements; DO NOT EXCEED 20 MPH.

8Z0276

7. PN 8Z0342 - INSTALL CYL LOCKS DECAL



8. PN 8Z0800 - AMBER REFLECTOR



11. PN 8Z2190 - SUPERROLLER ID DECAL



11. PN 8Z2192 - SUPERROLLER ID DECAL

SAFETY LIGHT OPERATION

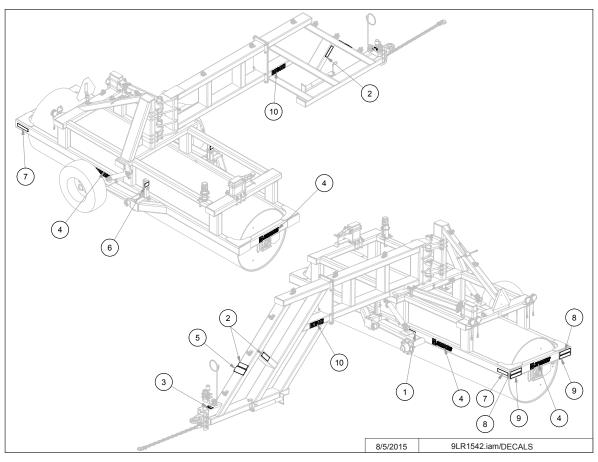
The Summers Safety Light Kit is equipped with a 7 pin connector which meets SAE J560 specification. To protect 7 pin connector, store in dust cap (8K8067) when not attached to towing vehicle.

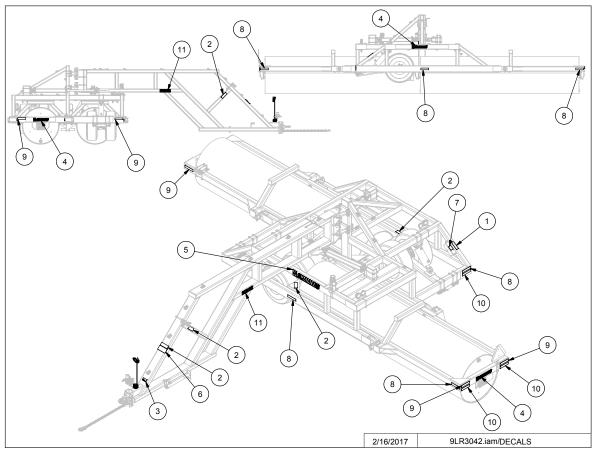
On most towing vehicles WITHOUT brake lights: Amber lights will turn on with flashers or turn signals. Red lights will turn on with parking, road or field lights.

On most towing vehicles WITH brake lights:

Amber lights will turn on with flashers, turn signals OR when brake is applied.

Red lights will turn on with parking or road lights.





SECTION 2 – OPERATION

LAND ROLLER OPERATION SAFETY

- 1. <u>READ AND UNDERSTAND</u> Operator's Manual before using machine. Review at least annually thereafter.
- 2. <u>VERIFY</u> all safety devices and shields are in place before using machine.
- 3. <u>KEEP</u> hands, feet, hair and clothing away from moving parts.
- 4. <u>STOP</u> 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. <u>BE CAREFUL</u> when working around high pressure hydraulic system.
- 6. <u>ALWAYS</u> make sure Land Roller is lowered into field position, it is blocked to prevent movement and that pressure is relieved from hydraulic circuits <u>before servicing</u>.
- 7. DO NOT ALLOW RIDERS.
- 8. <u>USE EXTREME CARE</u> when making adjustments.
- 9. KEEP CHILDREN AWAY from machinery at all times.
- 10. NEVER ALLOW anyone to work under Land Roller.
- 11. <u>WARNING DO NOT ATTEMPT</u> to raise machine into transport position if mud has built up on rollers or if machine weight has been increased by any other means. Mechanical failure may occur.

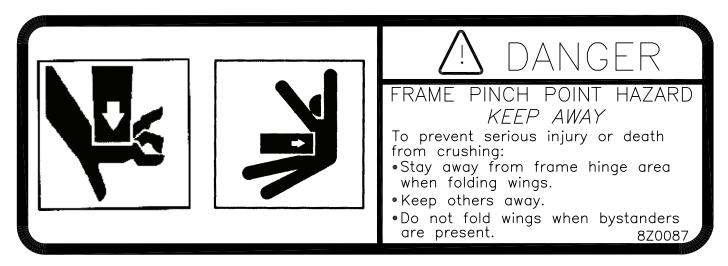
STEPS PRIOR TO OPERATION:

- COMPLETE WARRANTY REGISTRATION CARD.
 - A. Complete and return <u>WARRANTY REGISTRATION CARD</u> located at the beginning of this manual. Returning this card entitles you to a free gift.
 - B. Complete the OWNER REGISTER also located at the beginning of this manual (Serial Number is located by the front of the hitch). Owner register information may be needed when ordering parts.

2. VERIFY TRACTOR REQUIREMENTS.

- A. <u>WARNING:</u> Land Roller must be attached directly to tractor drawbar and not an intermediate towed vehicle or implement. Loss of control could result causing serious injury or death to you or others.
- B. Ability to safely operate the Summers Land Roller is determined by both tractor horsepower and weight. The minimum tractor weight for operating this implement is 10,500 lbs. for the 15' and 21' Landroller and 16,000 lbs. for the 30' Land Roller. Minimum tractor engine horsepower is 125. Dual tires or single tires set at maximum width are required for safe operation of the Land Roller.
- C. The Summers Land Roller must be connected to a tractor drawbar with a locked draw pin. The tractor drawbar must be able to withstand 1400 lbs for 15' & 21' Land Roller and 2000 lb. for 30' Land Roller of tongue weight during transport and field operation.

INITIAL HOOKUP:



- 1. Make tractor to hitch connection with locking draw pin and safety chain.
- 2. Retract jack and rotate into storage position.
- 3. Plug Hitch Cylinder hoses into desired tractor outlet, adjust hydraulic flow rate to 35% of maximum. Insure that tips and couplers are CLEAN.
- 4. Plug Lift Cylinder hoses into desired tractor outlet, adjust hydraulic flow rate to 35% of maximum.
- 5. Connect safety Light Kit wiring harness to 7 pin receptacle.
- 6. If Land Roller is in Transport Position, follow "Steps Required to Unfold from Transport to Field Position".
- 7. INITIAL CHECK with machine in Field Position
 - A. After receiving or assembling your Land Roller, it is a good practice to double check the entire machine so all fasteners are securely tightened.
 - B. Make sure all grease fittings are in place and greased properly.
 - C. Inflate tires to recommended inflation pressure (see page 3-2), check that wheel nuts are tightened to 170 ft-lb and check that wheel bearings are correctly adjusted.

SECTION 2 – OPERATION

STEPS REQUIRED TO UNFOLD FROM TRANSPORT TO FIELD POSITION:

- 1. WARNING: Land Roller must be attached directly to tractor drawbar and not an intermediate towed vehicle or implement. Loss of control could result causing serious injury or death to you or others. Never tow this implement with less than an 10,500 lb. vehicle for the 15' & 21' Land Roller and a 16,000 lb. vehicle for the 30' Land Roller.
- 2. Ability to safely operate the Summers Land Roller is determined by both tractor horsepower and weight. The minimum tractor weight for operating this implement is 10,500 lbs. for the 15' & 21' Land Roller and 16,000 lbs. for 30' Landroller. Minimum tractor engine horsepower is 110 for 15' & 21' and 125 for the 30'. Dual tires or single tires set at maximum width are required for safe operation of the Land Roller.
- 3. The Summers Land Roller must be connected to a tractor drawbar with a locked draw pin. The tractor drawbar must be able to withstand 2000 lb of tongue weight during transport and field operation.
- 4. Park tractor and Land Roller on a firm level surface with enough open area that will allow unfolding Land Roller without contacting obstructions.
- 5. <u>Unhook Hitch Pivot Safety Lock Chains</u>. Hook Chains onto storage Rings located on the main hitch. <u>Open pivot lock hydraulic valve</u>.
- 6. Operate tractor hydraulics from operator station only. Do not allow anyone to stand near the Land Roller when folding or unfolding. Do not raise or lower Land Roller when implement is moving.
- 7. Place tractor in Neutral as the folding procedure may cause the tractor to roll.
- 8. Activate the lift cylinder hydraulic valve. Lower the machine completely to the ground; fully retract lift cylinders so wheels rise off the ground.
- 9. Activate the hitch cylinder hydraulic valve. Fully cycle the pivot cylinders until the Land Roller no longer rotates. During rotation the entire Land Roller may move to the right side of the tractor, the tractor may also roll.

SECTION 2 – OPERATION

LAND ROLLER FIELD OPERATION:

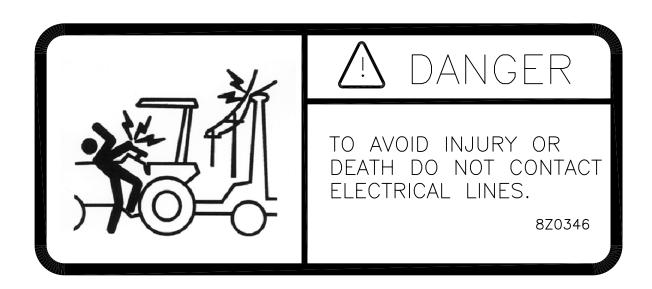
- 1. If Land Roller is in Transport Position, follow "Steps Required to Unfold Land Roller from Transport to Field Position", page 2-3.
- 2. Choose an operating speed which achieves desired results. Operating at over 7 MPH will decrease effectiveness and increase chance of immovable rocks denting roller tube. Denting of roller tube is NOT covered by warranty.

STEPS REQUIRED TO FOLD FROM FIELD TO TRANSPORT POSITION:

- 1.WARNING: Land Roller must be attached directly to tractor drawbar and not an intermediate towed vehicle or implement. Loss of control could result causing serious injury or death to you or others. Never tow this implement with less than an 10,500 lb. vehicle for the 15' & 21' Landroller and a 16,000 lb vehicle for the 30' Land Roller.
- 2. The Summers Land Roller must be connected to a tractor drawbar with a locked draw pin. The tractor drawbar must be able to withstand 1400 lb. of tongue weight for the 15' & 21' Land Roller and 2000 lb of tongue weight for the 30' Land Roller during transport and field operation.
- 3. Park tractor and Land Roller on a firm level surface with enough open area that will allow folding Land Roller without contacting obstructions. Operate tractor hydraulics from the operator station only. Do not allow anyone to stand near the Land Roller when folding or unfolding.
- 4. WARNING: DO NOT ATTEMPT to raise machine into transport position if mud has built up on rollers or if machine weight has been increased by any other means.
- 5. Activate the hitch cylinder hydraulic valve. Fully cycle the pivot cylinders until the Land Roller no longer rotates. During rotation the entire Land Roller may move to the right side of the tractor. The tractor may also roll.
- 6. Activate the lift cylinder hydraulic valve. Raise machine completely fully extending lift cylinders so the rollers rise off the ground.
- 7. Install Hitch Pivot Safety Lock Chains and close pivot lock hydraulic valve.

TRANSPORTING LAND ROLLER:

- 1. If Land Roller is in Field Position, follow "Steps Required to Fold Land Roller from Field to Transport Position", page 2-4.
- 2. Ability to safely operate the Summers Superroller is determined by both tractor horsepower and weight. The minimum tractor weight for operating this implement is 16,000 lbs. Minimum tractor engine horsepower is 110 for the 15' & 21' and 125 for the 30'. Dual tires or single tires set at maximum width are required for safe operation of Land Roller.
- 3. ONLY TOW at a safe speed 20 MPH MAXIMUM. Use caution when making corners or meeting traffic.
- 4. USE Safety Lights and Safety Chain between tractor drawbar and implement hitch when transporting on public roads.
- 5. ALWAYS install hitch pivot transport safety chains/locks and lift cylinder locks.
- 6. FOLLOW ALL local laws governing transporting of farm machinery.
- 7. Use additional caution and reduce speed when towing under adverse conditions, when turning and when on unlevel surfaces.
- 8. Stay clear of overhead lines and other overhead obstructions.
- 9. Frequently check for traffic from rear, especially during turns.



UNHOOKING LAND ROLLER FROM TRACTOR IN FIELD POSITION:

- 1. <u>NEVER</u> unhook Land Roller if positioned hydraulically <u>between</u> Field and Transport Position.
- 2. Choose a firm level surface.
- 3. With Land Roller in Field Position; shut off tractor, engage parking brake and relieve hydraulic pressure by cycling remote lever.
- 4. Block rollers to prevent movement after hitch pin is removed.
- 5. Check that hitch pin is not bound with sideways or front to back pressure. If hitch pin is not free, carefully reposition tractor.
- 6. Rotate jack into vertical position and extend jack until hitch piece lifts off tractor drawbar.
- 7. Disconnect wiring harness, hydraulic hoses and safety chain.
- 8. Recheck that hitch pin is free, if so, stand to the side of the hitch and remove hitch pin.
- 9. Carefully drive ahead.

UNHOOKING LAND ROLLER FROM TRACTOR IN TRANSPORT POSITION:

- 1. <u>NEVER</u> unhook Land Roller if positioned hydraulically <u>between</u> Field and Transport Position.
- 2. DO NOT ALLOW ANYONE TO WORK UNDER LAND ROLLER.
- 3. Choose a very firm level surface.
- 4. Block tires to prevent movement after hitch pin is removed.
- 5. Check that hitch pin is not bound with side or front to back pressure. If hitch pin is not free, carefully reposition tractor
- 6. Rotate jack into vertical position, place sturdy block under jack to distribute load over larger area and extend jack until hitch piece just lifts off tractor drawbar.
- 7. Disconnect wiring harness, hydraulic hoses and safety chain.
- 8. Recheck that hitch pin is free, if so, stand to the side of the hitch and remove hitch pin.
- 9. Carefully drive ahead.

MAINTENANCE SAFETY

- 1.STOP engine, place all controls in neutral, set parking brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting or maintaining.
- 2.BE CAREFUL when working around high pressure hydraulic system.
- 3. ALWAYS make sure that Land Roller is lowered into field position, it is blocked to prevent movement and pressure is relieved from hydraulic circuits before servicing.
- 4. USE EXTREME CARE when making adjustments.
- 5. KEEP CHILDREN AWAY from machinery at all times.
- 6. NEVER ALLOW anyone to work under Land Roller.



MAINTENANCE FOR AFTER THE FIRST FOUR HOURS OF OPERATION

- 1. Grease wing and hitch pivots.
- 2. Check all hydraulic components for leaks. (SEE HIGH-PRESSURE FLUID WARNING ABOVE.)
- 3. Check tightness of wheel nuts. Recommended torque 170 ft. lbs.
- 4. Check tightness of wheel bearings.
- 5. Check tightness of all hardware. Pay special attention to hitch and pivot pin retaining bolts.
- 6. Check tire pressures. Recommended air pressure is 90 PSI.

DAILY MAINTENANCE

- 1. Grease wing and hitch pivots.
- 2. Check all hydraulic components for leaks. (SEE HIGH-PRESSURE FLUID WARNING ABOVE.)
- 3. Check tightness of all wheel nuts. Recommended torque 170 ft. lbs.
- 4. Check tire air pressure. Recommended air pressure is 90 PSI.

ROLLER BEARINGS: To maximize bearing life, grease bearings at mid day or end of day when bearings are at operating temperature. **Every 20 hours:** Add three strokes (approx. .14 oz.) of grease.

PERIODIC MAINTENANCE

- 1. Repack wheel bearings and check tightness.
- 2. Check the tightness of all hardware. Pay special attention to hitch and pivot pin retaining bolts.
- 3. Check Land Roller for damaged or worn parts. Replace as needed.

STORAGE

- 1. Follow steps outlined in "UNHOOKING LAND ROLLER FROM TRACTOR IN FIELD POSITION".
- 2. Clean and remove all excessive dirt and grease from Land Roller.
- 3. Grease all zerks.
- 4. To prevent rusting, repaint any areas that have been worn, chipped or scratched.
- 5. Apply grease* to any exposed part of cylinder shafts.

*NOTE: Before returning Land Roller into service, all grease must be removed from cylinder shafts to prevent damage to seals.

SPECIFICATIONS

Working Width	Transport Width	Transport Height	Transport Length	Machine Weight	Roller Diameter
15'	98"	8'6"	24'10"	9,300#	42"
21'	98"	8'6"	30'10"	11,200#	42"
30'	11'6"	9'11"	35'8"	18,600#	42"

Tire Size	Rating	Recommended Inflation Pressure
340/60R 16.5	145 Load Index	73 PSI

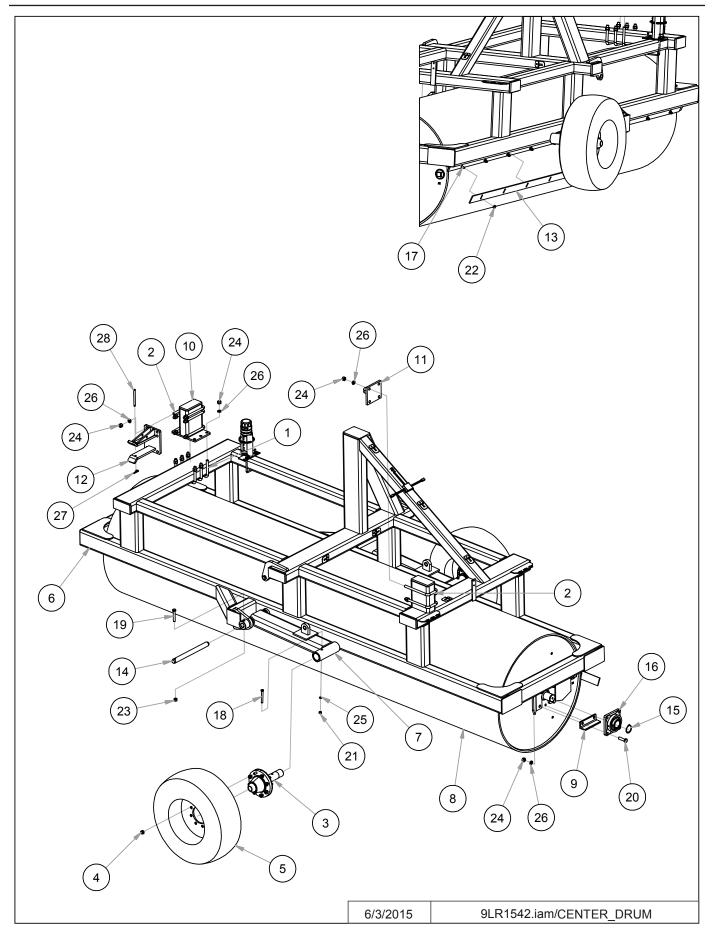
Hub Size	Rating	Recommended Wheel Nut Torque	Recommended Axle Nut Torque
HD812	6100 LB. 20 MPH Maximum	170 ftlbs.	45 ftlbs., loosen until first slot is aligned with hole in axle, install cotter pin, bend to retain.
HD817	6400 LB. 30 MPH Maximum	240 ftlbs.	45 ftlbs., loosen until first slot is aligned with hole in axle, install cotter pin, bend to retain.

*APPROXIMATE WEIGHTS OF COMPONENTS

PN	DESCRIPTION	WEIGHT (LB)
8P5990	15' & 21' HITCH	705
8P1542	15' MAINFRAME	2410
8P2142	21' MAINFRAME	2800
8P4215	ROLLER, 15'	4285
8P4221	ROLLER, 21'	5456

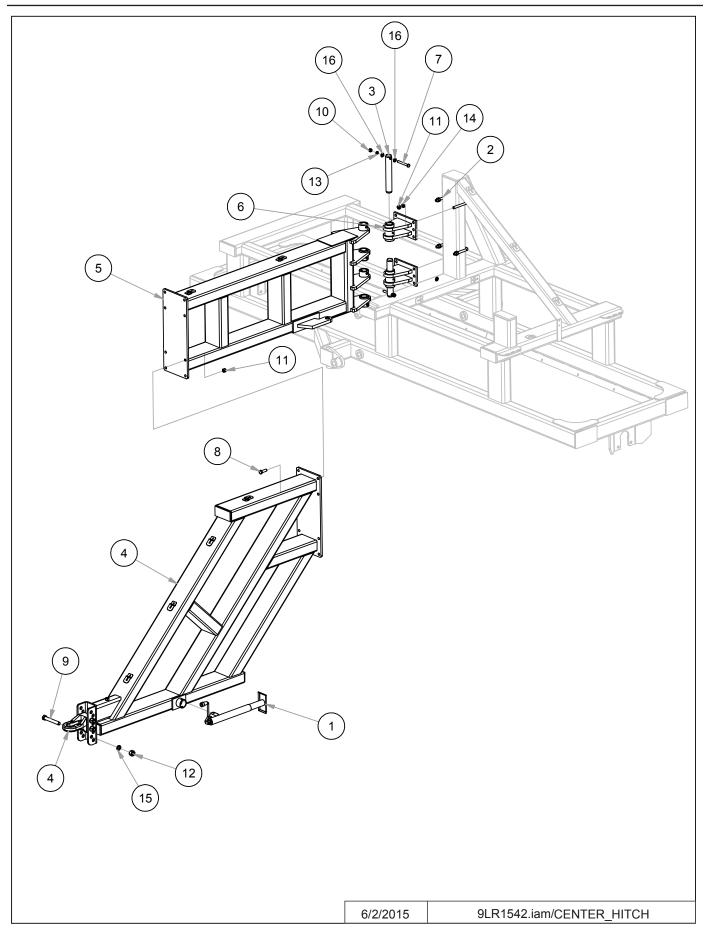
8P8615	15' BOX HARDWARE PARTS	604
8P8621	21' BOX HARDWARE PARTS	634
8P6000	30' HITCH	1780
8P6030	30' CENTER SECTION	3950
8P6115	30' WING LEFT AND RIGHT	1166
8P8630	30' BOX HARDWARE PARTS	1250

REMEMBER TO BRING YOUR OWNER REGISTER IN-FORMATION LOCATED AT THE BEGINNING OF THIS MANUAL WHEN ORDERING PARTS (SERIAL NUMBER IS LOCATED BY THE FRONT OF THE HITCH).



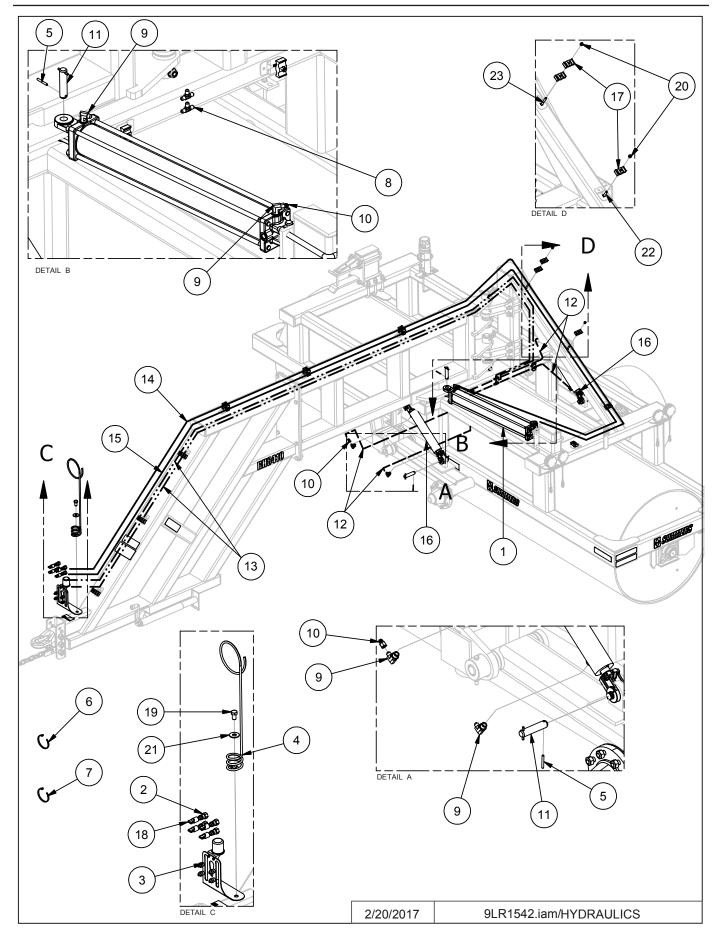
15' & 21' CENTER

ITEM PART NUMBER DESCRIPTION 1 8C1760 U-BOLT 3/4 X 8-1/16 X 6" SQ 2 8D0350 U-BOLT 3/4 X 4-1/16 X 10" SQ 3 8K1106 HUB&AXLE ASSY HD817 (2.5"RCVR) 4 8K7123 NUT WHEEL BOLT 5/8-18UNF 97- 5 8K7520 IF320/70R15	
2 8D0350 U-BOLT 3/4 X 4-1/16 X 10" SQ 3 8K1106 HUB&AXLE ASSY HD817 (2.5"RCVR) 4 8K7123 NUT WHEEL BOLT 5/8-18UNF 97-	
3 8K1106 HUB&AXLE ASSY HD817 (2.5"RCVR) 4 8K7123 NUT WHEEL BOLT 5/8-18UNF 97-	
4 8K7123 NUT WHEEL BOLT 5/8-18UNF 97-	
5 8K7520 IF320/70R15	
6 8P1541W 15' LAND ROLLER FRAME (SHOWN) 8P2141W 21' LAND ROLLER FRAME	
7 8P2032L LFT LIFT ARM SINGLE DRUM ROLLER (SHO 8P2032R RGHT LIFT ARM SINGLE DRUM ROLLER	OWN)
8 8P4215 ROLLER 42"DIAMETER 15' (SHOWN) 8P4220 ROLLER 42"DIAMETER 21'	
9 8P5080 ANGLE BRNG 3/8X2.5X2.5- 7-7/8"	
10 8P5970 TRANSPORT REST STOP	
11 8P6210 CYL ATTCH U-BLT ON 1"ID 06-	
12 8P6225 TRANSPORT LOCK	
13 8P6990 SCRAPER 42" ROLLER 90° 09-	
14 8P7260 PIN 2 X 17-1/2" HARDENED	
15 8R8005 SNAP RING .078"FOR 2-1/2"DIA.	
16 8R8010 BEARING 2-1/2"FLNG 4BLT-49/64"	
17 8X0064 CRG 1/2-13NC X 1-1/2" GR 5 YZ	
18 8X0074 BOLT 1/2-13NC X 4-1/2" GR5 ZDI	
19 8X0096 BOLT 5/8-11NC X 4" GR5 ZDI	
20 8X0111A BOLT 3/4-10NC X 2-3/4" GR5 ZDI	
21 8X0240 NUT 1/2"-13NC HEX GR2 YZ	
22 8X0246 NUT 1/2"-13NC SERFLANG GR2 YZ	
23 8X0253 NUT 5/8"-11NC NY-LOCK GR2 YZ	
24 8X0260 NUT 3/4"-10NC HEX GR2 YZ	
25 8X0303 LOCKWASHER 1/2" YLW ZNC	
26 8X0306 LOCKWASHER 3/4" YLW ZNC	
27 8X0402 HAIR PIN CLIP 1/8 X 2-9/16"	
28 8X0432 CLEVIS PIN 1/2 X 6" ZDI	



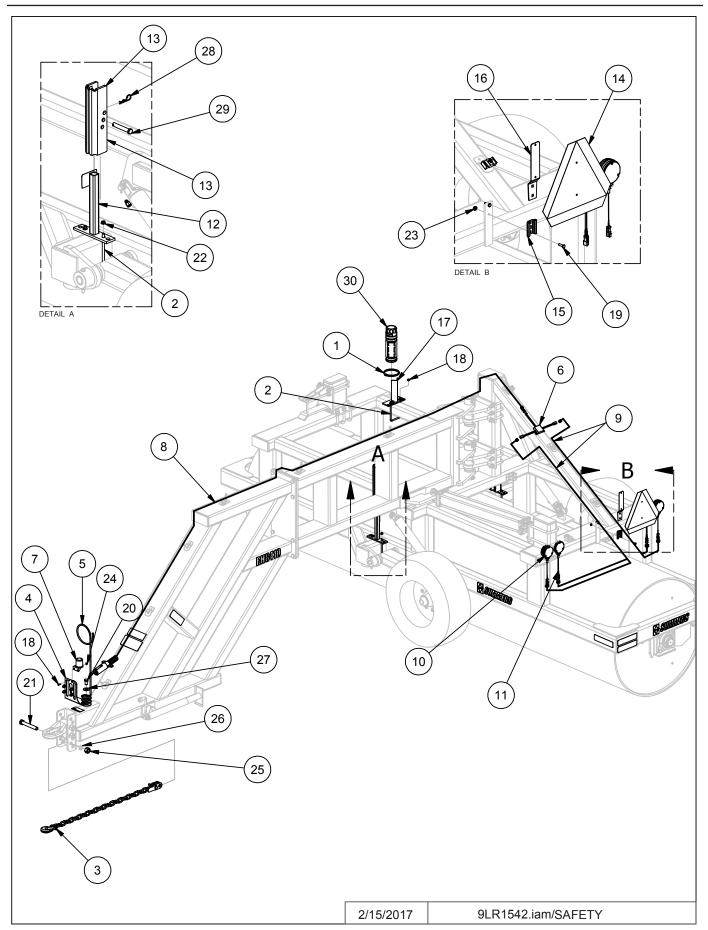
15' & 21' HITCH

ITEM	PART NUMBER	DESCRIPTION
1	3TM-15-5	Bulldog Implement Jack
2	8C1760	U-BOLT 3/4 X 8-1/16 X 6" SQ
3	8P3910	PIN 2 X 13-1/2" HARDENED
4	8P5989	15 & 21' FRONT HITCH RAW
5	8P5995 8P5997	15' LR REAR HITCH 21' LR REAR HITCH
6	8P6220	PIVOT HTCH SWNG FLD U-BLT 06-
7	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
8	8X0112	BOLT 3/4-10NC X 2-1/4" GR5 YZ
9	8X0140	BOLT 1-8NCX7" W/1.5"THDGR5 YZ
10	8X0250	NUT 5/8"-11NC HEX GR2 YZ
11	8X0260	NUT 3/4"-10NC HEX GR2 YZ
12	8X0280	NUT 1"-8NC HEX GR2 YZ
13	8X0304	LOCKWASHER 5/8" YLW ZNC
14	8X0306	LOCKWASHER 3/4" YLW ZNC
15	8X0309	LOCKWASHER 1" YLW ZNC
16	8X0323	WASHER 5/8" SAE FLAT YZ



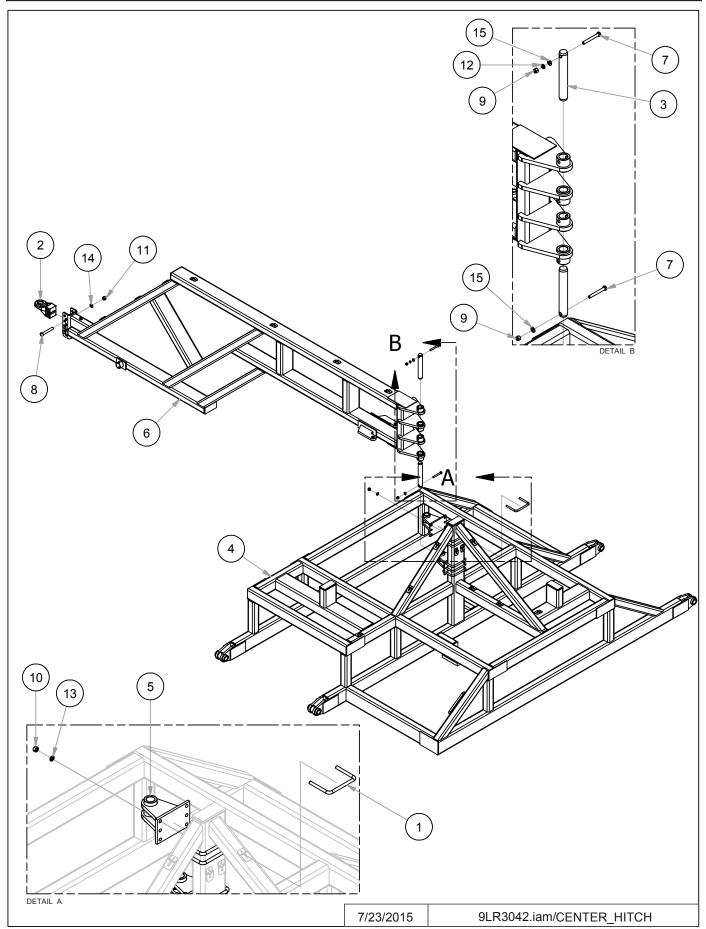
15' & 21' HYDRAULICS

ITEM	PART NUMBER	DESCRIPTION
1	8C0432	HYD CYL 4 X 32" 3000PSI
2	8D3212	MALE TIP 3/4"-16 ORB PIONEER
3	8D8490	PIONEER/ISO TIP HLDR BNT
4	8D8500	HYD HOSE HOLDER PNTD BLK 91-
5	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
6	8G2284	NYLON TIE .187 X 7-1/2" YELLOW
7	8G2285	NYLON TIE .187 X 7-1/2" GREEN
8	8J5300	TEE #6 JIC (MALE) 3X
9	8J6010	3/4"-16 ORB X #6 JIC(M)90*ADP
10	8J7216	#6JIC(M)X6JIC(F)1/16"RSTR GOLD
11	8K9102	PIN 1 X 4" CYL-FOR1/4"ROLL PIN
12	8N3048	3/8" X 48" HYD HOSE #6FJX3000PSI
13	8N3360	3/8" X 360" HYD HOSE #6FJX3000PSI (15')
13	8N3390	3/8" x 390" HYD HOSE #6FJX3000PSI (21')
14	8N3408	3/8" X 408" HYD HOSE #6FJX3000PSI (15')
	8N3432	3/8" X 432" HYD HOSE #6FJX3000PSI (21')
15	8N3432	3/8" X 432" HYD HOSE #6FJX3000PSI (15')
	8N3462	3/8" X 462" HYD HOSE #6FJX3000PSI (21')
16	8P0280	2.5 X 12" PRINCE CYLINDER
17	8S2990	HYD HOSE CLAMP-LARGE-NYLON
18	8S3095	CAPLUG FITS ISO HYD COUPLR 08-
19	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
20	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
21	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
22	8X1120	CRG 3/8-16NC X 2" GR2 ZN
23	8X1130	CRG 3/8-16NC X 3" GR2 ZN



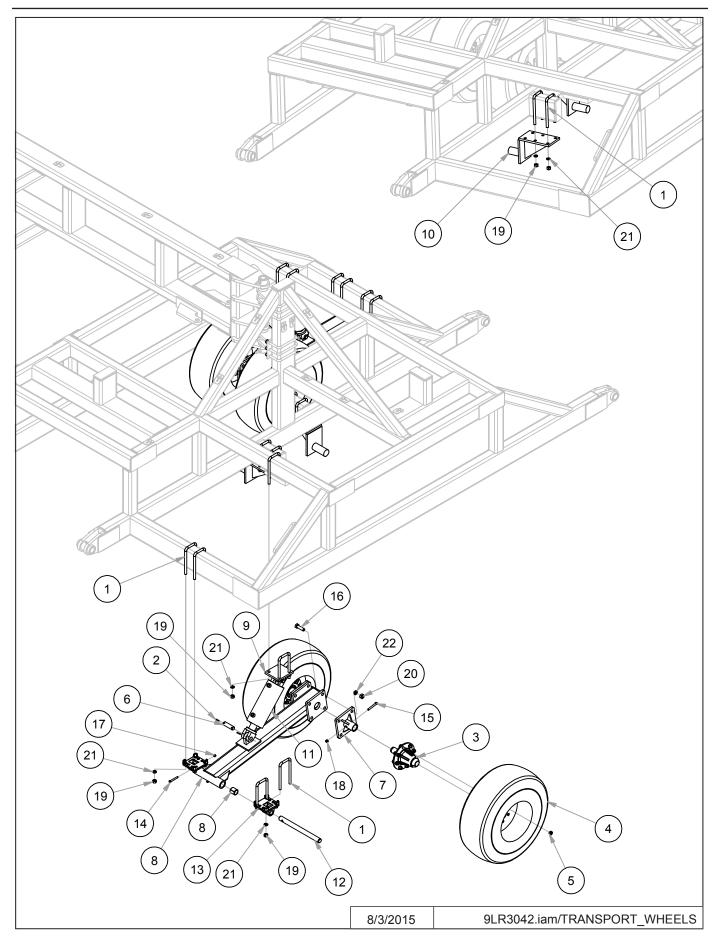
15' & 21' SAFETY

ITEM	PART NUMBER	DESCRIPTION
1	8A1004	CLAMP HOSE 5" #72
2	8A1157	U-BOLT 3/8 X 4-1/16 X 7" SQ
3	8D2440	SAFETY CHAIN 11000# 1/4" X 84"
4	8D8490	PIONEER/ISO TIP HLDR BNT
5	8D8500	HYD HOSE HOLDER PNTD BLK 91-
6	8K8030A	MODULE AG ENHNCDW/BRAKE6PIN08-
7	8K8067	DUST CAP FOR 7PIN CONNECT00-
8	8K8070B 8K8071	MAIN HRNSS 7PNLNG W/BRAKE 09- (21' & 30') MAIN HRNSS 7PN 26' W/BRAKE 09- (15')
9	8K8075A 8K8075Z	EXT HARNESS 18' DEUTSCH 07- (30') EXT HARNESS 6' DEUTSCH 17- (15' & 21')
10	8K8090B	LIGHT LED AMBER 2WR DTSCH 12-
11	8K8095B	LIGHT LED RED 3WIRE DTSCH 12-
12	8P0200	TRANSPORT STOP STORAGE BRACKET
13	8P0340	TRNS LCK W/UHMW 12.3"(1.7RD) 15-
14	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
15	8S1124	MOUNTING SOCKET SMV SIGN ZDI
16	8S1126	MNT SPADE W/HRDWR SMV SIGN
17	8T4385	HOLDER MANUAL-PAK 3/4/6MNT09-
18	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ
19	8X0021A	BOLT 5/16-18NC X 1" GR5 ZDI
20	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
21	8X0140	BOLT 1-8NCX7" W/1.5"THDGR5 YZ
22	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
23	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
24	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
25	8X0280	NUT 1"-8NC HEX GR2 YZ
26	8X0309	LOCKWASHER 1" YLW ZNC
27	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
28	8X0402	HAIR PIN CLIP 1/8 X 2-9/16"
29	8X0440	CLEVIS PIN 5/8 X 3-7/8" ZDI
30	8Z1000	MANUAL-PAK 3DIA X 11.75" 09-



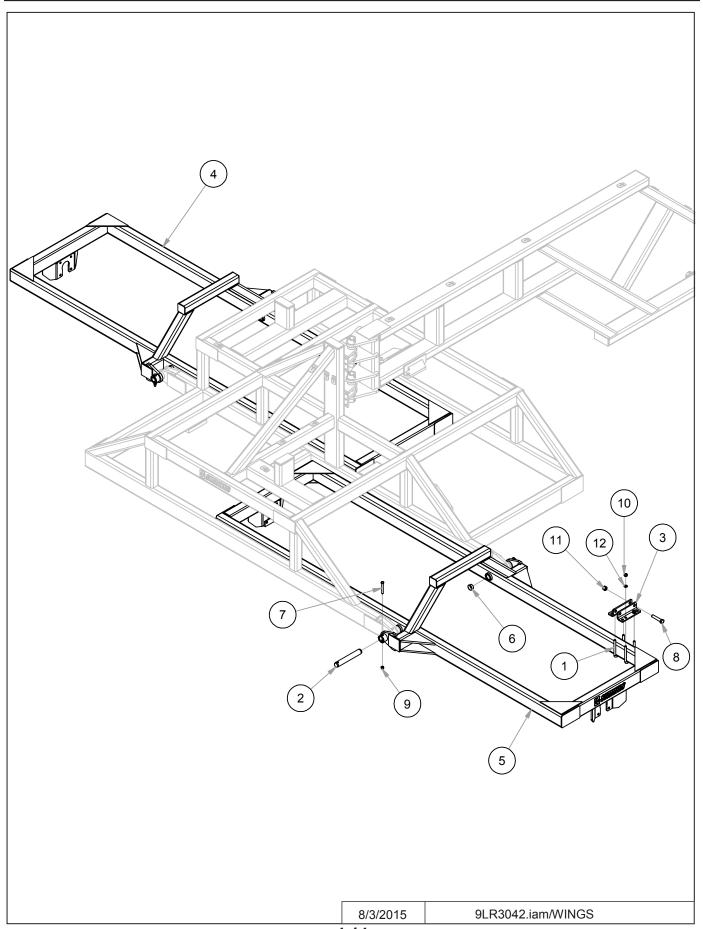
30' CENTER & HITCH

ITEM	PART NUMBER	DESCRIPTION
1	8C1760	U-BOLT 3/4 X 8-1/16 X 6" SQ
2	8D0720	HITCH PIECE CAST CAT.3 CTD
3	8P3910	PIN 2 X 13-1/2" HARDENED
4	8P6030	CENTER FOR 30' SWING FOLD
5	8P6220	PIVOT HTCH SWNG FLD U-BLT 06-
6	8P6000	HITCH
7	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
8	8X0140	BOLT 1-8NCX7" W/1.5"THDGR5 YZ
9	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
10	8X0260	NUT 3/4"-10NC HEX GR2 YZ
11	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
12	8X0304	LOCKWASHER 5/8" YLW ZNC
13	8X0306	LOCKWASHER 3/4" YLW ZNC
14	8X0309	LOCKWASHER 1" YLW ZNC
15	8X0323	WASHER 5/8" SAE FLAT YZ



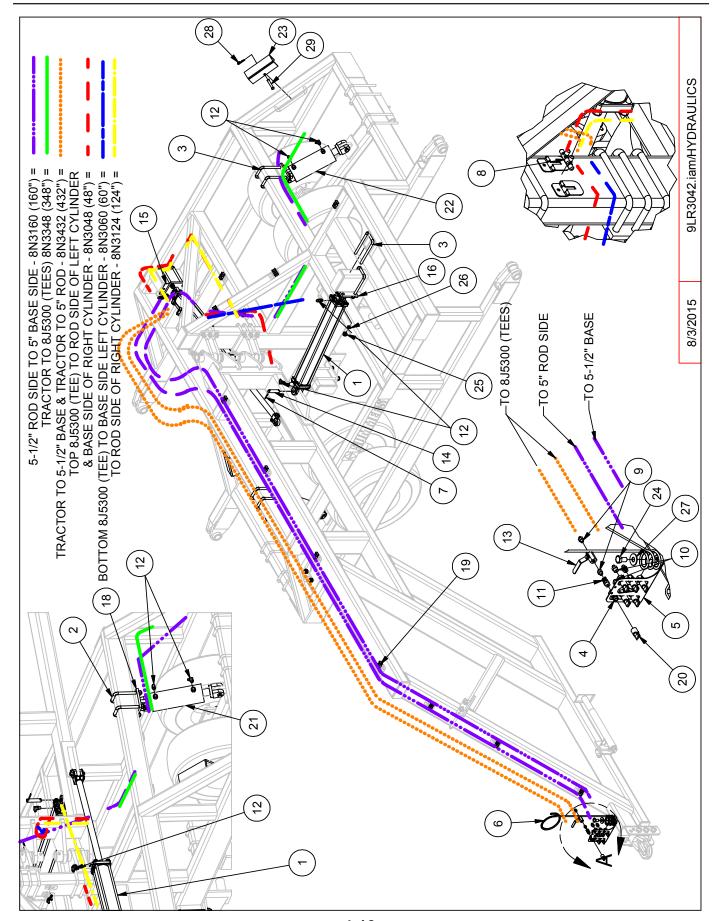
30' TRANSPORT WHEELS

ITEM	PART NUMBER	DESCRIPTION
1	8D0350	U-BOLT 3/4 X 4-1/16 X 10" SQ
2	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
3	8K1105S	HUB&AXLE ASSY HD812 (2"RCVR)
4	8K7520	IF320/70R15
5	8K7123	NUT WHEEL BOLT 5/8-18UNF 97-
6	8K9106	PIN 1-1/4 X 4-3/8" HARDENED
7	8P6105	BLT-ON RCVR LR LIFTARM
8	8P6110	LIFTARM W/ BLT-ON RCVR
9	8P6215	CYL ATTCH U-BLT ON 1-1/4"ID06-
10	8P6230	STOP W/RND U-BLT SWNG FLD 06-
11	8T1055	HYD CYL 5.5 X 10" REPHASE 96-
12	8T3640	PIN 1-1/2 X 19" HARDENED 98-
13	8T4100	CAST PIVOT W/BLTPLATE PTD
14	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 ZDI
15	8X0072	BOLT 1/2-13NC X 3-3/4" GR5 YZ
16	8X0133	BOLT 7/8-9NC X 3" GR5 ZDI
17	8X0234	NUT 7/16"-14NC NY-LOCK GR2 ZDI
18	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
19	8X0260	NUT 3/4"-10NC HEX GR2 YZ
20	8X0268	NUT 7/8"-9NC HEX GR2 YZ
21	8X0306	LOCKWASHER 3/4" YLW ZNC
22	8X0307	LOCKWASHER 7/8" YLW ZNC



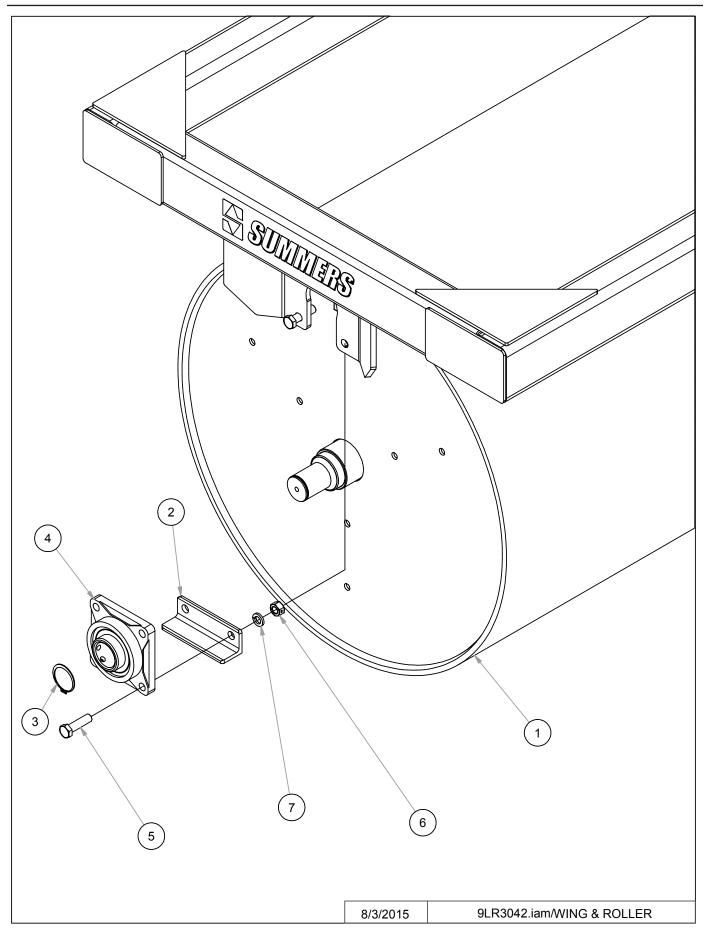
30' WINGS

ITEM	PART NUMBER	DESCRIPTION
1	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
2	8P3910	PIN 2 X 13-1/2" HARDENED
3	8P5070	ANGLE, WING LOCK
4	8P6115L	WING 15'-30' SWNG FLD LEFT 06-
5	8P6115R	WING 15'-30' SWNG FLD RGHT 06-
6	8S3059	CAPLUG FITS 2.067"ID TUBE96-
7	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
8	8X0143	BOLT 1-8NC X 5" GR5 YZ
9	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
10	8X0260	NUT 3/4"-10NC HEX GR2 YZ
11	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
12	8X0306	LOCKWASHER 3/4" YLW ZNC



30' HYDRAULICS

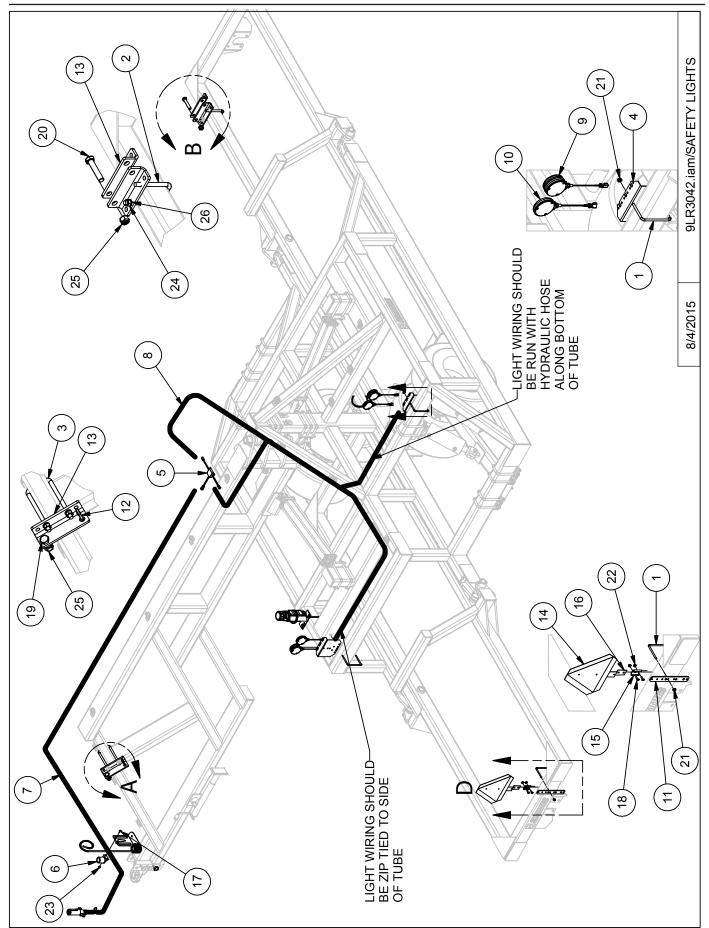
ITEM	PART NUMBER	DESCRIPTION
1	8C0432	HYD CYL 4 X 32" 3000PSI
2	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
3	8D0350	U-BOLT 3/4 X 4-1/16 X 10" SQ
4	8D3212	MALE TIP 3/4"-16 ORB ISO
5	8D8490	PIONEER/ISO TIP HLDR BNT
6	8D8500	HYD HOSE HOLDER PNTD BLK 91-
7	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
8	8J5300	TEE #6 JIC (MALE) 3X
9	8J5500	9/16"-18 ORB X #6 JIC(M) STR
10	8J5510	3/4"-16 ORB X #6 JIC(M) STR
11	8J5620	3/4" -16 ORB X #6 JIC(F-SW) STR
12	8J6010	3/4"-16 ORB X #6 JIC(M)90*ADP
13	8J7000	BALL VALVE HYD 9/16"-18ORB(2X)
14	8K9102	PIN 1 X 4" CYL-FOR1/4"ROLL PIN
15		
	8P6020	STL 10GA X 5 X 8"
16	8P6210	CYL ATTCH U-BLT ON 1"ID 06-
17	8P6211	CYL ATTCH U-BLT ON 1"ID 06-
18	8P6215	CYL ATTCH U-BLT ON 1-1/4"ID06-
19	8S2990	HYD HOSE CLAMP-LARGE-NYLON
20	8S3095	CAPLUG FITS ISO HYD COUPLR 08-
21	8T1050	HYD CYL 5.0 X 10" REPHASE 96-
22	8T1055	HYD CYL 5.5 X 10" REPHASE 96-
23	8T4350	CYL LOCK
24	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
25	8X0260	NUT 3/4"-10NC HEX GR2 YZ
26	8X0306	LOCKWASHER 3/4" YLW ZNC
27	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
28	8X0402	HAIR PIN CLIP 1/8 X 2-9/16"
29	8X0440	CLEVIS PIN 5/8 X 3-7/8" ZDI



SECTION 4 - PARTS

30' WING & DRUM

ITEM	PART NUMBER	DESCRIPTION
1	8P4215	ROLLER 42"DIAMETER 15'
2	8P5080	ANGLE BRNG 3/8X2.5X2.5- 7-7/8"
3	8R8005	SNAP RING .078"FOR 2-1/2"DIA.
4	8R8010	BEARING 2-1/2"FLNG 4BLT-49/64"
5	8X0111A	BOLT 3/4-10NC X 2-3/4" GR5 ZDI
6	8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ
7	8X0306	LOCKWASHER 3/4" YLW ZNC

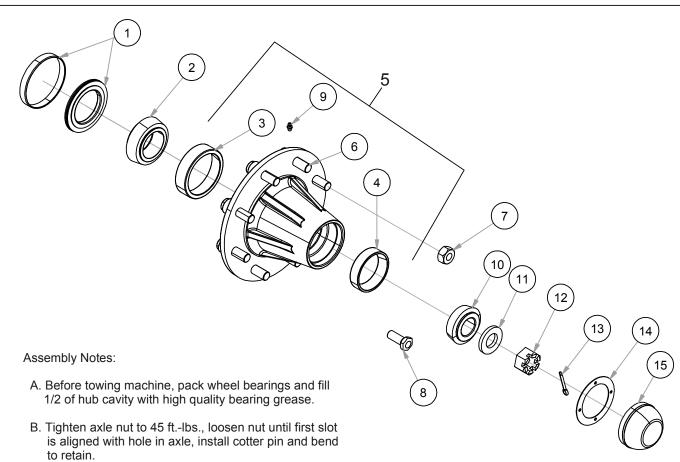


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SECTION 4 - PARTS

30' SAFETY

ITEM	PART NUMBER	DESCRIPTION
1	8A1155	U-BOLT 3/8 X 6-1/16 X 5" SQ
2	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
3	8D0350	U-BOLT 3/4 X 4-1/16 X 10" SQ
4	8K8020	MOUNTNG BRCKT LIGHT 00-
5	8K8030A	MODULE AG ENHNCDW/BRAKE6PIN08-
6	8K8067	DUST CAP FOR 7PIN CONNECT00-
7	8K8070B	MAIN HRNSS 7PNLNG W/BRAKE 09-
8	8K8075A	EXT HRNSS NONDRAWBR DTSCH 07-
9	8K8090B	LIGHT LED AMBER 2WR DTSCH 12-
10	8K8095B	LIGHT LED RED 3WIRE DTSCH 12-
11	8K8200	BRCKT SMV ATTCH 4-8"FRAME98-
12	8L1060	QUICKLINK 3/8" YEL ZINC
13	8P5070	ANGLE, WING LOCK
14	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
15	8S1124	MOUNTING SOCKET SMV SIGN ZDI
16	8S1126	MNT SPADE W/HRDWR SMV SIGN
17	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ
18	8X0021A	BOLT 5/16-18NC X 1" GR5 ZDI
19	8X0139	BOLT 1-8NC X 3" GR5 ZDI
20	8X0143	BOLT 1-8NC X 5" GR5 YZ
21	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
22	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
23	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
24	8X0260	NUT 3/4"-10NC HEX GR2 YZ
25	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
26	8X0306	LOCKWASHER 3/4" YLW ZNC



HUB	1 SEAL	2. INNER BEARING	3. INNER RACE	4. OUTER RACE	5. HUB ASSY	6. WHEEL STUD	7. WHEEL NUT	8. WHEEL BOLT	9. HUB ZERK	10. OUTER BEARING		12. AXLE NUT	B. COTTER PIN	14. HUB CAP GASKET	15. HUB CAP	16. HUB CAP BOLT	
H211	8G8220	8G8217	8G8230	8G8230	8G8211	N/A	N/A	8D5114	8X0708	8G8217	8D5119	8D5112	8X0410	N/A	8G8213	N/A	
HZII	SE10	L44643	8L44610	L44610	HDA211	N/A	N/A	WB 10	1/4-28NF	L44643	3/4" ID.	3/4"-16	3/16XI"	N/A	DC11		
H517	8D5234	8D5217	8D5332	8D5336	8D5210	8D5215	8D5214	N/A	8X0708	8D5117	8D5219	8D5212	8X0415	N/A	8D5213	N/A	
H51/	8D5236 8D5238	LM48548	LM48510	LM67010	H517	WB 16	1/2-20UNF	N/A	1/4-28NF	LM67048	7/8" ID.	7/8"-14	3/16XI-1/2"	N/A	DCB	N/A	
H611	8D5221	8D5317	8D5334	8D5336	8D5311-09 8D531610-	N/A	N/A	8D51l4 WB10-09	8X0708	8D5117	8D5319	8D5312	8X0415	N/A	8D5213	N/A	
	SEB	LM29749	LM29710	LM67010	H611			8R6914 WB12 10-	1/4-28NF	LM67048	l" I.D.	1'-14	3/16XI-1/2"		DCB		
77/14	8R6922**	8R6917	8R6925	8D5332	8R6911	27/4	27/4	8R6914	8X0708	8D5217	8D5319	8D5312	8X0415	27/4	8R6913	27/4	
H614	SEEGBGI INSTRUCTIONS	LM603049	LM603011	LM48510	H614	N/A	N/A	WB 12	1/4-28NF	LM48548	1" ID.	ľ'-14	3/16X1-1/2"	N/A	DCB	N/A	
	8K7127***	SE77 8K7117 8K7130	8K7130	8K7132	8K7111	8K7115-9/16"*	8K7116-9/16"*	_	8X0708	8X0708 8K7118	8D5319	8D5312	8X0415		8K71B		
HD812	SEALSE77		010.00			8K7122-5/8"	8K7123-5/8"			01410	0			N/A		N/A	
TIDOL	8K7128*** SLEEVE	LM3780	LM3720	LM2720	HD812	WB41	WB40	WB40	10/1	1/4-28NF	LM2790	I" I.D.	ľ'-14	3/16X1-1/2"	1071	DC17	1071
	SE77-1					WB46	WB 118										
HD817	8K7344	8K7342	8K7346	8K7347	8K7340	8K7122-5/8"	8K7123-5/8"	N/A	8X0708	8K7343	8X0328	8D5314	8X0414	N/A	8K7341	N/A	
	SE42	LM387AS	382A	LM501310	HD817	WB46	WB 118		1/4-28NF	LM501349	1312 ID.	1-1/4"-12	1/4X2"		DC26		
H1010	8K7220	8K7217	8K7230	8K7232	8K7211	8K7215	8K7216	N/A	8X0708	8K7218	8X0328	8D5314	8X0414	8K7212	8K72 B	8K7214	
LT	SE48	39585	39520	453A	H1010-9	WB51	WB52	1011	1/4-28NF	460	1.312 ID.	1-1/4"-12	1/4X2"	SE49	DC27	WB53	
H1010	8K7221	8K7219	8K7231	8K7232	8K7210	8K7215	8K7216	N/A	8X0708	8K7218	8X0328	8D5314	8X0414	8K7212	8K7213	8K7214	
HVY	SE67	33275	33462	453A	H1010-11	WB51	WB52	IVA	1/4-28NF	460	1312 ID.	1-1/4"-12	1/4X2"	SE49	DC27	WB53	
H1020	8K7320	8K7317	8K7330	8K7332	8K7209	8K7215	8K7216	N/A	8X0708	8K7318	8X0366	8D5318	8X0418	8K7312	8K73 B	8K7214	
	SE55	HM218248	HM218210	HM212010	HDA1020	WB51	WB52	IWA	1/4-28NF	HM212049	2.03" ID	2" - 12WB65	5/16 X2-1/2"	SE59	DC28	WB53	
	00 (Not Shown), 8 006 8K7 120 (S		Lip (Shown)					CD2\MAN	UALS\10 2-2	6 HUB-AXI	E COMP ON	IENTS	LASTRE	VISION: 1/17/	2011	

8/13/2014

8K1105S.iam/HUB&AXLE ASSY

SUMMERS MFG. CO., INC.

2/28/17

INSTALLATION AND OPERATION INSTRUCTIONS FOR 8K1800 ACRE METER FOR SUPERROLLER

- 1. If Roller Shaft is not tapped, weld ½"-20 UNF nut at center of left pivot shaft of middle roller. Position external taper of nut toward shaft. Insure that threads are not damaged by weld heat or spatter. Allow weld to cool.
- 2. Attach Acre Meter with ½" lock washer. Tighten to 260-390 in-lbs.
- * For accurate logging of acres, it is important that meter is mounted concentrically on roller shaft.
- * Do not use chemical agents such as thinner, solvents or mineral spirits to clean Acre Meter cover.
- * Do not attempt to open meter! Attempting to do so can cause injury and may destroy Acre Meter.

CONVERSION FACTOR

NOTE: METER READING MUST BE MULTIPLIED BY CONVERSION FACTOR FOR ACTUAL ACRES.

MACHINE WIDT	H FORMULA
15'	READING $x 1.4 = ACRES$
21'	READING $x 1.9 = ACRES$
30'	READING x $2.7 = ACRES$
34'	READING x $2.99 = ACRES$
41'	READING $x 3.6 = ACRES$
45'	READING $x 4 = ACRES$
46'	READING $x 4.1 = ACRES$
50' (36")	READING $x 3.8 = ACRES$
53'	READING x $4.7 = ACRES$
62'	READING $x 5.5 = ACRES$
68'	READING $x 6.03 = ACRES$
84' (36")	READING $x 6.5 = ACRES$

84' (42") READING x 7.5 = ACRES

91'

READING \times 8.07 = ACRES







4-23

Stock Code	e <u>Description</u>	Stock Code	<u>Description</u>
8A1004	CLAMP HOSE 5" #72	8K7111	HUB HD812 W/CUPS&ZRK 8BLT3LIP
8A1155	U-BOLT 3/8 X 6-1/16 X 5" SQ	8K7113	HUB CAP HD812 DC17
8A1157	U-BOLT 3/8 X 4-1/16 X 7" SQ	8K7117	BEARING INNER HD812 LM3780
8A4048	NYLON TIE .18 X 11"	8K7118	BEARING OUTER HD812 LM2790
8A4050	NYLON TIE .30 X 8-7/8"	8K7120	SEAL 2-1/2"ID HD812 SE17 -06
8A4052	NYLON TIE .30 X 15-1/4"	8K7122	STUD WHEEL 5/8-18UNFX2.5"97-
8C0270	SPLITSTEELBUSH1.375ODX1"ID-1"	8K7123	NUT WHEEL BOLT 5/8-18UNF 97-
8C0432	HYD CYLINDER 4" X 32"	8K7127	SEAL TRPL LIP EXTRNL HD812 06-
8C1760	U-BOLT 3/4 X 8 X 6" SQ	8K7128	SEAL SLEEVE FOR 3X LIP 812 06-
8C1780	U-BOLT 7/8 X 8 X 10" SQ	8K7130	RACE INNER HD812 LM3720
8D0330	U-BOLT 5/8 X 6-1/16 X 5-5/8"SQ	8K7132	RACE OUTER HD812 LM2720
8D0340	U-BOLT 3/4 X 4 X 7-3/4" SQ	8K7150S	AXLE HD812X 11.5" (2"DIA.RCVR)
8D0350	U-BOLT 3/4 X 4 X 10" SQ	8K7450	340/60R16.5
8D0720	HITCH PIECE CAST CAT.3CTD PNTD	8K8000	FLAT LGHT BRCKT3/8X3.5-11.38"
8D0722	PERFECT HTCH BACKSTOP W/HDWE	8K8010	TUBE LGHT BRCKT1.5SQ55.5"00-
8D0724	CLEVIS OPT.HITCH CAT.3CTD99-	8K8020	MOUNTNG BRCKT LIGHT 00-
8D0730	URETHANE CUSHION PERFCTHTCH	8K8030A	MODULE AG ENHNCD W/BRAKE 6PIN 08-
8D2440	SAFETY CHAIN 11000#X 84"	8K8060	EXT HRNSS 12' 3PIN WTHRPCK -07
8D2460	SAFETY CHAIN 3/8" X 4' 20200#	8K8067	DUST CAP FOR 7PIN CONNECT00-
8D2470	SAFETY CHAIN 7/16" X 5' 30400#	8K8070B	MAIN HRNSS7PN 32' W/BRAKE 09-
8D3212	MALE TIP 3/4"-16 ORB ISO	8K8071	MAIN HRNSS 7PN 26' W/BRAKE 09-
8D5314	NUT HEX SLOT 1.25"-12 GR2 PLN	8K8075A	EXT HARNESS 18' DEUTSCH 07-
8D8490	PIONEER/ISO TIP HLDR BNT 97-	8K8075Z	EXT HARNESS 6' DEUTSCH 17-
8D8500	HYD HOSE HOLDER PNTD BLK 91-	8K8088	LENS ONLY AMBER GROTE LGHT 00-
8D8522	JACK 5000# TOP CRANK 15"LIFT	8K8090B	LIGHT AMBER 2WIREWTHRPCK 12-
8D9102	PIN 1 X 4" CYL CTTR OR HAIRPIN	8K8092	LENS ONLY RED GROTE LIGHT 00-
8D9108	ROLL PIN 1/4 X 2" YLW ZNC	8K8094	LIGHT RED 2WIRE WTHRPCK 00-07
8G2284	NYLON TIE .187 X 7-1/2" YELLOW	8K8095B	LIGHT RED 3WIRE WTHRPCK 12-
8G2285	NYLON TIE .187 X 7-1/2" GREEN	8K8200	BRCKT SMV ATTCH 4-8"FRAME98-
8J5100	#6 JIC(M) X #6 JIC(M) UNION	8K9102	PIN 1 X 4" CYL-FOR1/4"ROLL PIN
8J5110	#10 JIC(M) X #10 JIC(M) UNION	8K9106	PIN 1-1/4 X 4-3/8" HARDENED
8J5200	#10 JIC(F) X #6 JIC(M)HEX BUSH	8L1060	QUICKLINK 3/8" ZDI
8J5300	#6 JIC (MALE) 3X TEE	8N3018	3/8X 18"HYD HOSE #6FJX3000PSI
8J5310	#10 JIC (MALE) 3X TEE	8N3028	3/8X 28"HYD HOSE #6FJX3000PSI
8J5500	9/16"-18 ORB X #6 JIC(M) STR	8N3035	3/8X 35"HYD HOSE #6FJX3000PSI
8J5510	3/4"-16 ORB X #6 JIC(M) STR	8N3048	3/8X 48"HYD HOSE #6FJX3000PSI
8J5520	3/4"-16 ORB X #10 JIC(M) STR	8N3060	3/8X 60"HYD HOSE #6FJX3000PSI
8J5600	9/16"-18 ORB X #6 JIC(F-SW)STR	8N3070	3/8X 70"HYD HOSE #6FJX3000PSI
8J5620	3/4"-16 ORB X #6 JIC(F-SW)STR	8N3084	3/8X 84"HYD HOSE #6FJX3000PSI
8J5680	3/4"-16 ORB X 3/4"-16ORB UNION	8N3096	3/8X 96"HYD HOSE #6FJX3000PSI
8J5690	3/4-16X3/4-16 ORB M-SW90*UNION	8N3124	3/8X 124"HYD HOSE #6FJX3000PSI
8J5700	#6 JIC(F-SW) X #6 JIC(M)90*ADP	8N3136	3/8X 136"HYD HOSE #6FJX3000PSI
8J5710	#10 JIC(F-SW)X#10 JIC(M)90*ADP	8N3150	3/8X 150"HYD HOSE #6FJX3000PSI
8J6010	3/4" -16 ORB X #6 JIC(M)90*ADP	8N3156	3/8X 156"HYD HOSE #6FJX3000PSI
8J6020	3/4"-16 ORB X #10 JIC(M)90*ADP	8N3160	3/8X 160"HYD HOSE #6FJX3000PSI
8J6060	3/4"-16ORB X #6JIC(F-SW)90*ADP	8N3180	3/8X 180"HYD HOSE #6FJX3000PSI
8J7000	BALL VALVE HYD 9/16"-18ORB(2X)	8N3204	3/8X 204"HYD HOSE #6FJX3000PSI
8J7040	THERMAL RELIEF MANIFLD 4000PSI	8N3216	3/8X 216"HYD HOSE #6FJX3000PSI
8J7116	3/4"-16 ORB(2X)1WAY 1/16"RESTR	8N3228	3/8X 228"HYD HOSE #6FJX3000PSI
8J7216	#6JIC(M)X6JIC(F)1/16"RSTR GOLD	8N3252	3/8X 252"HYD HOSE #6FJX3000PSI
8J7232	#6JIC(M)X6JIC(F)1/32"RSTR SLVR	8N3288	3/8X 288"HYD HOSE #6FJX3000PSI
8K1105S	HUB&AXLE ASSY HD812 (2"RCVR)	8N3312	3/8X 312"HYD HOSE #6FJX3000PSI
8K1106	HUB&AXLE ASSY HD817 (2.5"RCVR)	8N3330	3/8X 330"HYD HOSE #6FJX3000PSI
8K5350	SPLITSTEELBUSH 2"ODX1.5"ID- 2"	8N3348	3/8X 348"HYD HOSE #6FJX3000PSI
8K5515 8K7020	U-BOLT 3/4 X 4 X 6" SQ	8N3360	3/8X 360"HYD HOSE #6FJX3000PSI
	WHEEL 15 X 10" 8 BOLT-VLV GRD	8N3390	3/8X 390"HYD HOSE #6FJX3000PSI
8K7028 8K7042	TIRE 12.5L X 15" LRF TL HWYSRV 12.5L X 15" LRF ON 8 BLT WHEEL	8N3408 8N3432	3/8X 408"HYD HOSE #6FJX3000PSI 3/8X 432"HYD HOSE #6FJX3000PSI
ok/044	12.3L X 13 LRF ON 8 BLI WHEEL 5-		5/0A 452 111D 11OSE #0FJA3000F31

Stock Code	Description	Stock Code	
8N3462	3/8X 462"HYD HOSE #6FJX3000PSI	8T1050	HYD CYL 5.0 X 10" REPHASE 96-
8N3534	3/8X 534"HYD HOSE #6FJX3000PSI	8T1055	HYD CYL 5.5 X 10" REPHASE 96-
8N3570	3/8X 570"HYD HOSE #6FJX3000PSI	8T1150	SEAL KIT 5.0 X 10" RAM 98-
8N3606	3/8X 606"HYD HOSE #6FJX3000PSI	8T1155	SEAL KIT 5.5 X 10" RAM 98-
8N4016	1/2X 16"HYD HOSE#10FJX3000PSI	8T2986	CLAMP 1/2" WIRING MTL/RUB BCK
8N4060	1/2X 60"HYD HOSE#10FJX3000PSI	8T3640	PIN 1-1/2 X 19" HARDEND 98-
8N4114	1/2X 114"HYD HOSE#10FJX3000PSI	8T4100	PIVOT W/BLTPLATE LIFTARM 96-
8N4120	1/2X 120"HYD HOSE#10FJX3000PSI	8T4350	LOCK CYLINDER 10.5"(2.5ROD)96-
8N4138	1/2X 138"HYD HOSE#10FJX3000PSI	8T4385	HOLDER MANUAL-PAK 3/4/6MNT09-
8N4198	1/2X 198"HYD HOSE#10FJX3000PSI	8T5345	SPLITSTEELBUSH2"ODX1.5"ID-1.5"
8N4216	1/2X 216"HYD HOSE#10FJX3000PSI	8X0000	BOLT 1/4-20X3/4"FLLTHDGR5 ZDI
8N4228	1/2X 228"HYD HOSE#10FJX3000PSI	8X0000B	BOLT 1/4-20NC X 1" GR5 ZDI
8N4546	1/2X 546"HYD HOSE#10FJX3000PSI	8X0001	BOLT 3/8-16NC X 3/4" GR5 ZDI
8N4624	1/2X 624"HYD HOSE#10FJX3000PSI	8X0002	BOLT 3/8-16NC X 1" GR5 ZDI
8P0200	TRANSPORT STOP STORAGE BRACKET	8X0003	BOLT 1/4-20NC X 4-1/2" GR5 ZDI
8P0280	2.5 X 12" PRINCE CYLINDER	8X0004	BOLT 3/8-16NC X 1-1/4" GR5 ZDI
8P0340	TRNS LCK W/UHMW 12.3"(1.7RD) 15-	8X0005	BOLT 1/4-20NC X 3-3/4" GR5 ZDI
8P1541W	15' LAND ROLLER FRAME	8X0006	BOLT 3/8-16NC X 2-1/2" GR5 ZDI
8P2032L	LFT LIFT ARM SINGLE DRUM ROLLER	8X0007	BOLT 3/8-16NC X 1-1/2" GR5 ZDI
8P2032R	RGHT LIFT ARM SINGLE DRUM ROLLER	8X0007B	BOLT 3/8-16NC X 1-3/4" GR5 ZDI
8P2141W	21' LAND ROLLER FRAME	8X0008	BOLT 3/8-16NC X 2" GR5 ZDI
8P3010	PLUG 2-1/2" NPT SQUARE HD STL	8X0009	BOLT 1/4-20NC X 2" GR5 ZDI
8P3500	TUBE 2-1/4ODX 1.268ID- 2-1/4"	8X0010	BOLT 1/4-20NC X 1-1/4" GR5 ZDI
8P3900	PIN 2 X 11-1/8" HARDENED	8X0013	BOLT 1/4-20NC X 2-1/2" GR5 ZDI
8P3910	PIN 2 X 13-1/2" HARDENED	8X0014	BOLT 1/4-20NC X 3" GR5 ZDI
8P4215	ROLLER 42"DIAMETER 15' 05-	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 ZDI
8P4220	ROLLER 42" DIAMETER 21'	8X0016	BOLT 3/8-16NC X 3" GR5 ZDI
8P5070	ANGL WNG LCK 1/2X3X3.5- 10.25"	8X0017	BOLT 3/8-16NC X 5" GR5 ZDI
8P5080	ANGLE BRNG 3/8X2.5X2.5- 7-7/8"	8X0019	BOLT 3/8-16NC X 4-1/2" GR5 ZDI
8P5970	TRANSPORT REST STOP	8X0020	BOLT 3/8-16X3.5"FULLTHDGR5 ZDI
8P6000	HITCH 30' SWING FOLD LR 06-	8X0021	BOLT 5/16-18NC X 3/4" GR5 ZDI
8P6020P	FLAT 10 GA 5"X8" PAINTED 07-	8X0021A	BOLT 5/16-18NC X 1" GR5 ZDI
8P6030	CENTER 30' SWING FOLD LR 06-	8X0021B	BOLT 5/16-18NC X 1-1/4"GR5 ZDI
8P6100	LIFTARM W/RCVR SWNGFLD 06-	8X0023	BOLT 5/16-18NC X 2" GR5 ZDI
8P6100S	LIFTARM W/RCVR SWNGFLD SHRT06-	8X0030	BOLT 5/16-18NC X 5" GR5 ZDI
8P6105	BLT-ON RCVR LR LIFTARM	8X0031	BOLT 7/16-14NC X 1" GR5 ZDI
8P6110	LIFTARM W/BLT-ON RCVR	8X0033	BOLT 7/16X1.25 5/8"THD GR5 ZDI
8P6115L	WING 15'-30' SWNG FLD LEFT 06-	8X0034	BOLT 7/16X1.75 W/1"THD GR5 ZDI
8P6115R	WING 15'-30' SWNG FLD RGHT 06-	8X0036	BOLT 7/16-14NC X 2" GR5 ZDI
8P6210	CYL ATTCH U-BLT ON 1" ID 06-	8X0038	BOLT 7/16-14NC X 2-1/2"GR5 ZDI
8P6211	CVL ATTACH U-BOLT ON 1"ID 06-	8X0041	BOLT 7/16-14NC X 3" GR5 ZDI
8P6215	CYL ATTCH U-BLT ON 1-1/4"ID06-	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 ZDI
8P6220	PIVOT HTCH SWNG FLD U-BLT 06-	8X0045	BOLT 7/16-14NC X 4-1/2"GR5 ZDI
8P6225	TRANSPORT LOCK	8X0046	BOLT 7/16-14NC X 7-1/4"GR5 ZDI
8P6230	STOP W/RND U-BLT SWNG FLD 06-	8X0047	BOLT 7/16-14NC X 6" GR5 ZDI
8R6808	SPLITSTEELBUSH1.25 X 1"ID75"	8X0061	BOLT 1/2-13NC X 1-1/4" GR5 ZDI
8R6810	SPLITSTEELBUSH1.62X1.25"ID- 1"	8X0062	BOLT 1/2-13NC X 2" GR5 ZDI
8P6990	SCRAPER 42" ROLLER 90DEG 09-	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 ZDI
8P7260	PIN 2 X 17-1/2" HARDENED	8X0064	CRG 1/2-13NC X 1-1/2" GR5 YZ
8R8005	SNAP RING .078"FOR 2-1/2"DIA.	8X0066	BOLT 1/2-13NC X 1-3/4" GR5 ZDI
8R8010	BEARING 2-1/2"FLNG 4BLT-49/64"	8X0067	BOLT 1/2-13NC X 2-1/4" GR5 ZDI
8S1120	SIGN SLOW MOVING VEHICLE	8X0068	BOLT 1/2-13NC X 2-1/2" GR5 ZDI
8S1124	MOUNTING SOCKET SMV SIGN ZDI	8X0069	BOLT 1/2-13NC X 3" GR5 ZDI
8S1126	MNT SPADE W/HRDWR SMV SIGN	8X0070	BOLT 1/2-13NC X 3-1/4" GR5 ZDI
8S2980	HYD HOSE CLAMP-SMALL-NYLON	8X0071	BOLT 1/2-13X 3"SHOULDR GR2 ZDI
8S2990	HYD HOSE CLAMP-LARGE-NYLON	8X0072	BOLT 1/2-13NC X 3-3/4" GR5 ZDI
8S3059	CAPLUG FITS 2.067"ID TUBE	8X0073	BOLT 1/2-13NC X 5" GR5 ZDI
8S3095	CAPLUG FITS ISO HYD COUPLR 08-	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI
	E	2	

Stock Code	Description	Stock Code	Description
8X0075	BOLT 1/2-13NC X 6" GR5 ZDI	8X0212	NUT NY-LOCK 5/16"-18NC GR2 ZDI
8X0076	BOLT 1/2-13NC X 5-1/2" GR5 ZDI	8X0218	NUT SQ 1/4"-20NC GR2 SS
8X0077	BOLT 1/2-13NC X 7-1/2" GR5 ZDI	8X0220	NUT HEX 1/4"-20NC GR2 ZDI
8X0078	BOLT 1/2-13X3.5"SHOULDR GR2ZDI	8X0222	NUT NY-LOCK 1/4"-20NC GR2 ZDI
8X0080	BOLT 1/2-13NC X 11" GR5 ZDI	8X0223	NUT SER FLANG 1/4"-20NC GR2ZDI
8X0082	BOLT 1/2-13NC X 6-1/2" GR5 ZDI	8X0232	NUT HEX 7/16"-14NC GR2 ZDI
8X0083	BOLT 1/2-13NC X 8" GR5 ZDI	8X0234	NUT NY-LOCK 7/16"-14NC GR2 ZDI
8X0084	BOLT 1/2-13NC X 9" GR5 ZDI	8X0240	NUT HEX 1/2"-13NC GR2 ZDI
8X0087	BOLT 5/8-11NC X 1-1/2" GR5 ZDI	8X0242	NUT NY-LOCK 1/2"-13NC GR2 ZDI
8X0090	BOLT 5/8-11NC X 2-1/4" GR5 ZDI	8X0246	NUT SER FLANG 1/2"-13NC GR2 YZ
8X0091	BOLT 5/8-11NC X 1-3/4" GR5 ZDI	8X0250	NUT HEX 5/8"-11NC GR2 ZDI
8X0092	BOLT 5/8-11NC X 2-3/4" GR5 ZDI	8X0251	NUT JAM 5/8"-11NC GR2 ZDI
8X0093	BOLT 5/8-11NC X 2" GR5 ZDI	8X0253	NUT NY-LOCK 5/8"-11NC GR2 ZDI
8X0095	BOLT 5/8-11NC X 5" GR5 ZDI	8X0256	NUT SER FLANG 5/8"-11NC GR2 YZ
8X0096	BOLT 5/8-11NC X 4" GR5 ZDI	8X0259	NUT JAM 3/4"-10NC GR2 ZDI
8X0098	BOLT 5/8-11X 3.5"FULLTHDGR5ZDI	8X0260	NUT HEX 3/4"-10NC GR2 ZDI
8X0099	BOLT5/8-11X6.75"W/3.5THDGR5ZDI	8X0261	NUT NY-LOCK 3/4"-10NC GR2 ZDI
8X0101	BOLT 5/8-11NC X 8" GR5 ZDI	8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ
8X0102	BOLT 5/8-11NC X 9" GR5 ZDI	8X0268	NUT HEX 7/8"-9NC GR2 ZDI
8X0106	BOLT 3/4X2.75"W/1.38THD GR8ZDI	8X0269	NUT JAM 7/8"-9NC GR2 ZDI
8X0107	BOLT 3/4-10NC X 2" GR5 ZDI	8X0277	NUT JAM 1"-8NC GR2 ZDI
8X0110	BOLT 3/4-10NC X 1-1/4" GR5 ZDI	8X0278	NUT JAM TOP LOCK1"-8NC GR2 ZDI
8X0111	BOLT 3/4-10NC X 2-1/2" GR5 ZDI	8X0280	NUT HEX 1"-8NC GR2 ZDI
8X0111A	BOLT 3/4-10NC X 2-3/4" GR5 ZDI	8X0281	NUT NY-LOCK 1"-8NC GR2 ZDI
8X0112	BOLT 3/4-10NC X 2-1/4" GR5 ZDI	8X0283	NUT JAM 1.25"-7NC GR2 ZDI
8X0113	BOLT 3/4-10NC X 5" GR5 ZDI	8X0284	NUT HEX 1.25"-7NC GR2 ZDI
8X0114	BOLT 3/4-10NC X 3" GR5 ZDI	8X0285	NUT HEX 1.5"-6NC GR2 ZDI
8X0115	BOLT 3/4-10NC X 3-1/2" GR5 ZDI	8X0286	NUT JAM 1.5"-6NC GR2 ZDI
8X0115A	BOLT 3/4NCX 3.5"FULLTHD GR5ZDI	8X0290	NUT HEX SLOT 1.25"-7NC GR2 ZDI
8X0115B	BOLT 3/4-10NC X 3-1/2" GR8 ZDI	8X0300	LOCKWASHER 5/16" YLW ZNC
8X0116	BOLT 3/4-10NC X 6" GR5 ZDI	8X0301	LOCKWASHER 3/8" YLW ZNC
8X0117	BOLT 3/4-10NC X 7" GR5 ZDI	8X0302	LOCKWASHER 7/16" YLW ZNC
8X0118	BOLT 3/4-10NC X 4" GR5 ZDI	8X0303	LOCKWASHER 1/2" YLW ZNC
8X0118A	BOLT 3/4-10NC X 4-1/4" GR5 ZDI	8X0304	LOCKWASHER 5/8" YLW ZNC
8X0119	BOLT 3/4-10NC X 7-1/2" GR5 ZDI	8X0306	LOCKWASHER 3/4" YLW ZNC
8X0120	BOLT 3/4-10NC X 9" GR5 ZDI	8X0307	LOCKWASHER 7/8" YLW ZNC
8X0121	BOLT 3/4-10NC X 6-1/2" GR5 ZDI	8X0308	LOCKWASHER 1/4" YLW ZNC
8X0122	BOLT 3/4-10NC X 4-1/2" GR5 ZDI	8X0309	LOCKWASHER 1" YLW ZNC
8X0123	BOLT 3/4-10NC X 5-1/2" GR5 ZDI	8X0311	LOCKWASHER 1-1/4" YLW ZNC
8X0125	BOLT 3/4-10NC X 10" GR5 ZDI	8X0315	LOCKWASHER 1-1/2" YLW ZNC
8X0130	BOLT 7/8-9NC X 2" GR5 ZDI	8X0316	WASHER SAE FLAT 1" ZDI
8X0132	BOLT 7/8-9NC X 2-1/2" GR5 ZDI	8X0317	WASHER SAE FLAT 3/4" ZDI
8X0133	BOLT 7/8-9NC X 3" GR5 ZDI	8X0318	WASHER 3/4(13/16"ID)FLAT YZ
8X0138	BOLT 1-8NC X 5-1/2" GR5 ZDI	8X0320	WASHER FLAT 3/8 (7/16" ID) ZDI
8X0139	BOLT 1-8NC X 3" GR5 ZDI	8X0323	WASHER SAE FLAT 5/8" ZDI
8X0140	BOLT 1-8NCX7" W/1.5"THDGR5ZDI	8X0327	WASHER SAE FLAT 1-1/4" ZDI
8X0143	BOLT 1-8NC X 5" GR5 ZDI	8X0329	WASHER FLAT 5/16"(3/8" ID) ZDI
8X0144	BOLT 1-8NC X 9-1/2" GR5 ZDI	8X0330	WASHER 1.25 X 17/32" ID ZDI
8X0145	BOLT 1-8NC X 10-1/2" GR5 ZDI	8X0364	MACH BSHNG 3.5 X2.5IDX14GA PLN
8X0149	BOLT 1-8NC X 18" GR5 ZDI	8X0366	WASHER 3-1/16"OD X 2"ID X 1/4"
8X0201	NUT HEX 3/8"-16NC GR2 ZDI	8X0368	WASHER SAE FLAT 1-1/2" PLN
8X0202	NUT NY-LOCK 3/8"-16NC GR2 ZDI	8X0370	WASHER 3.934 X 3.016"ID X 14GA
8X0203	NUT SER FLANG 3/8"-16NC GR2ZDI	8X0380	WASHER 4.25 X 3-1/16 ID X3/16"
8X0204	NUT HEX 3/8"-16NC GR2 GALV	8X0400	HAIR PIN CLIP 1/8 X 1-15/16"
8X0205	NUT HEX 10-24 ZDI	8X0402	HAIR PIN CLIP 1/8 X 2-9/16"
8X0210	NUT HEX 5/16"-18NC GR2 ZDI	8X0414	COTTER PIN 1/4 X 2" ZDI
8X0211	NUT SER FLANG5/16"-18NC GR2ZDI		

Stock Code	<u>Description</u>	Stock Code	<u>Description</u>
8X0415	COTTER PIN 3/16 X 1-1/2"	8X0725	ZERK 1/8" MPT STR ZDI
8X0418	COTTER PIN 5/16 X 2-1/2" ZDI	8X0727	ZERK 1/8" MPT 90 DEG ZDI
8X0420	CLEVIS PIN 7/16 X 1-3/4" ZDI	8X1120	CRG 3/8-16NC X 2" GR2 ZN
8X0422	CLEVIS PIN 1/2 X 2-1/4" ZDI	8X1130	CRG 3/8-16NC X 3" GR2 ZN
8X0425	CLEVIS PIN 1/2 X 3" ZDI	8Z0075	TRANSPORT LOCK DECAL
8X0428	CLEVIS PIN 1/2 X 5-1/4" ZDI	8Z0079	DECAL "SUMMERS" 5 X 20"
8X0432	CLEVIS PIN 1/2 X 6" ZDI	8Z0087	DECAL"WARNING"PINCH POINT03-
8X0440	CLEVIS PIN 5/8 X 3-7/8" ZDI	8Z0100	MADE IN THE USA DECAL
8X0462	CLEVIS PIN 3/8 X 3" W/HL ZDI	8Z0202	3.5" SUMMERS DECAL
8X0520	ROLL PIN 3/16 X 2"ZDI OR CAD-Y	8Z0204	5.5" SUMMERS DECAL
8X0523	ROLL PIN 5/16 X 2-1/2" PLN	8Z0276	DECAL GENERAL CAUTION 91-
8X0605	SET SCRW SQ HD 7/16-14X 1" ZDI	8Z0342	INSTALL CYL LOCKS DECAL
8X0614	SET SCRW SQ HD 5/8-11 X 2" PLN	8Z0800	REFLECTOR AMBER ADHSV-BCK98-
8X0632	SET SCRW SCKT 7/16-14X 1.5"PLN	8Z0805	REFLCTR REDORANGE ADHSVBK99-
8X0640	SET SCRW SQ HD 1/2-13X 1.5"PLN	8Z0810	REFLECTOR RED ADHSV-BCK 98-
8X0665	SET SCRW SQ HD 3/4-10X4.5" ZDI	8Z1000	MANUAL-PAK 3DIA X 11.75" 09-
8X0708	ZERK 1/4"-28 NF STR ZDI	8Z1075	15', 21' & 30' SUPERROLLER MANUAL
8X0710	ZERK 1/4"-28 NF 90 DEG ZDI	8Z2190	RH8420 ID DECAL
8X0721	ZERK 5/16"-24 NF STR ZDI	8Z2192	RH8410 ID DECAL

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.
- 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.

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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