

SUMMERS®

Operator's Manual

VRT2530/3530

Variable Rate Tillage™

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

MADDOCK, NORTH DAKOTA 58348
DEVILS LAKE, NORTH DAKOTA 58301

(701) 438-2855
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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

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GENERAL INFORMATION

This book is composed of four basic sections: Safety, Operation and Maintenance, and Parts. The Operation Section provides information for the proper operation and maintenance of your Summers VRT2530/3530. 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 back section of manual for description of each Part Number.

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

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 VRT2530 Operator READ and UNDERSTAND the Operator's Manual before using the machine. In addition, this Operator's Manual should be REVIEWED at least ANNUALLY thereafter.

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



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Section 2: OPERATION, MAINTENANCE AND SPECIFICATIONS

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Section 4: PART NUMBERS & DESCRIPTIONS

OWNER REGISTER

Name _____

Size _____

Address _____

Serial Number _____

City _____

(located by the hitch piece)

State/Prov. _____

Date Purchased _____

Mail Code _____

Dealer _____

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SAFETY 

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, will result in death or serious injury. This signal word is limited to the most extreme situations.



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



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

GENERAL SAFETY PRACTICES

1. READ AND UNDERSTAND 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. 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.
5. BE CAREFUL when working around high pressure hydraulic system.
6. DO NOT ALLOW RIDERS.

SAFETY DURING TRANSPORT

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 

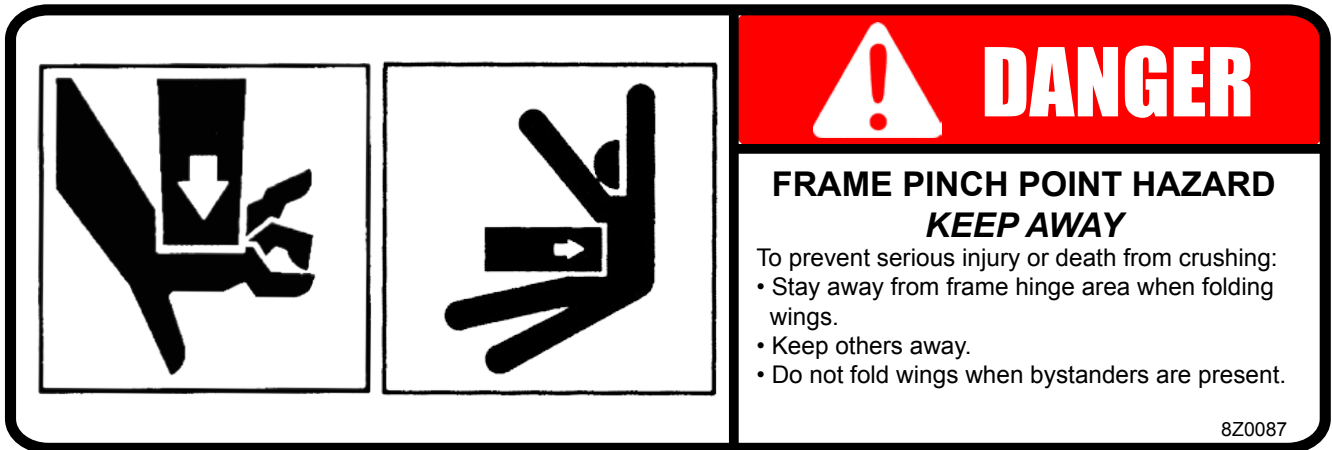
SAFETY DECALS

- A. KEEP SAFETY DECALS CLEAN.
- B. REPLACE missing or unreadable decals. New decals are available from your Summers dealer by ordering correct part number (PN) located on decal.
- C. Locations shown on Page 6.

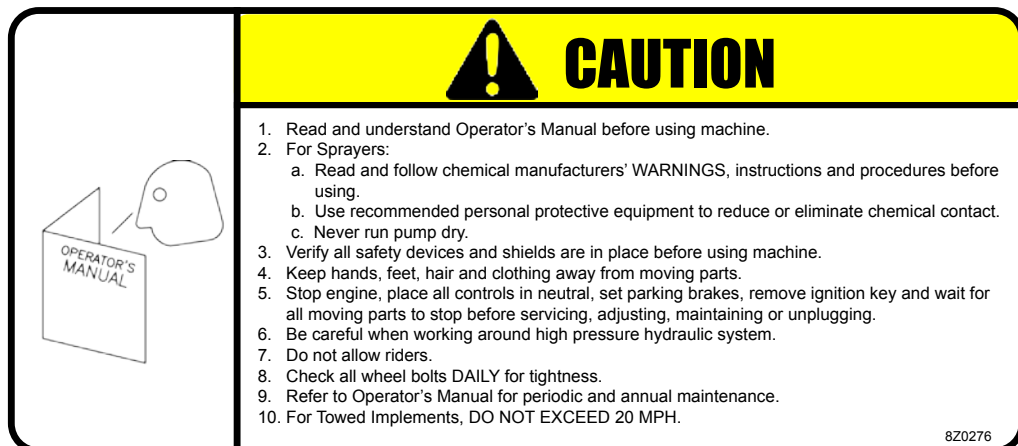
1. TRANSPORT LOCK WARNING DECAL (PN 8Z0075)



2. PINCH POINT DECAL (PN 8Z0087)



3. GENERAL CAUTION DECAL (PN 8Z0276)





4. REPHASING CYLINDERS DECAL (PN 8Z0340)

IMPORTANT

TO REPHASE CYLINDERS, RAISE MACHINE AND MAINTAIN HYDRAULIC PRESSURE TEN SECONDS AFTER CYLINDERS ARE FULLY EXTENDED. QUICKLY RETRACT CYLINDERS AT LEAST 1/2". REPHASING SHOULD BE DONE EVERY HOUR OF OPERATION TO MAINTAIN UNIFORM TILLAGE DEPTH.

8Z0340


5. INSTALLING CYLINDER LOCKS DECAL (PN 8Z0342)


 **WARNING**

TO AVOID INJURY INSTALL CYLINDER LOCKS BEFORE TRANSPORTING OR SERVICING MACHINE.

8Z0342

6. STAYING CLEAR OF WINGS DECAL (PN 8Z0344)



 **DANGER**

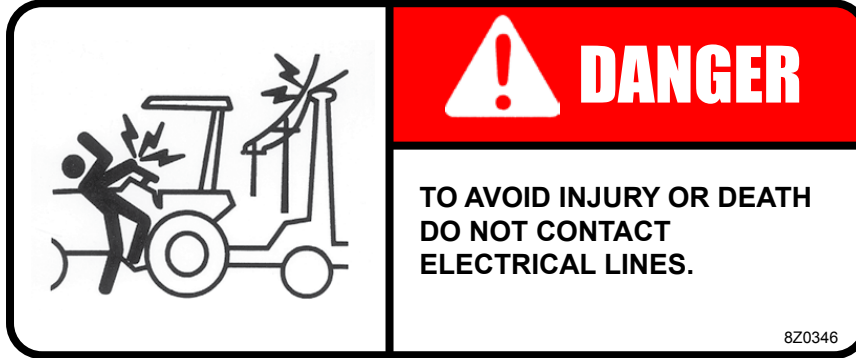
TO AVOID INJURY OR DEATH STAND CLEAR OF MACHINE WHEN WINGS ARE BEING RAISED AND LOWERED. MECHANICAL OR HYDRAULIC FAILURE CAN ALLOW WINGS TO FALL RAPIDLY.

8Z0344

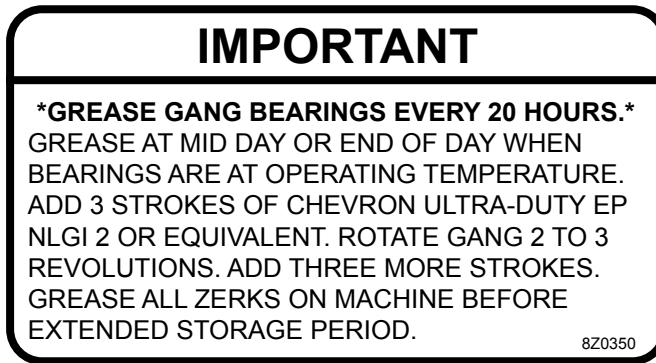
SAFETY



7. ELECTROCUTION DANGER DECAL (PN 8Z0346)



8. GANG BEARING GREASE (PN 8Z0350)



9. SUMMERS LOGO 8Z0202 (3.5" HIGH) AND 8Z0204 (5.5" HIGH)



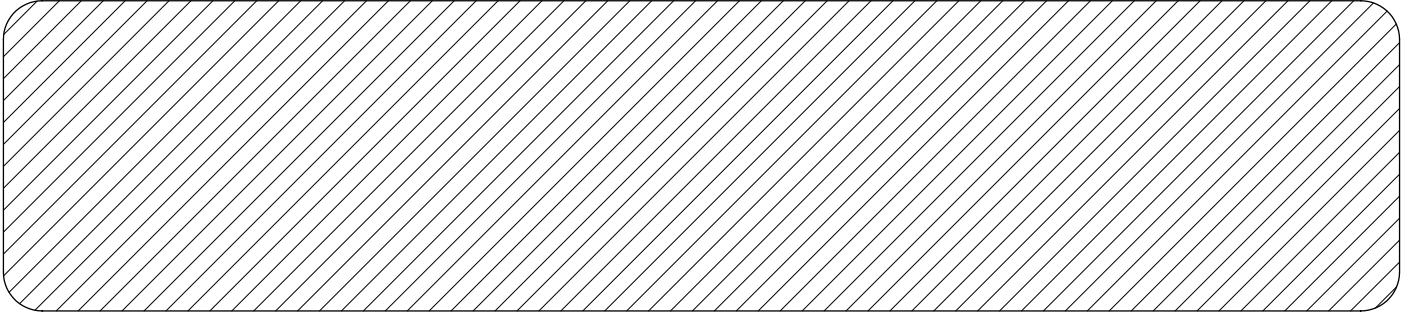
10. VRT DECAL 8Z2500 (VRT2530) AND 2Z2505 (VRT3530)



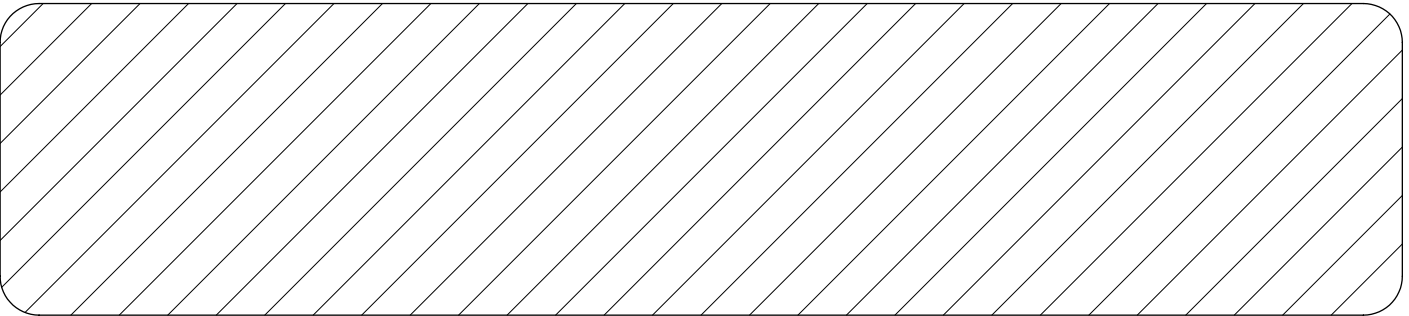
SAFETY



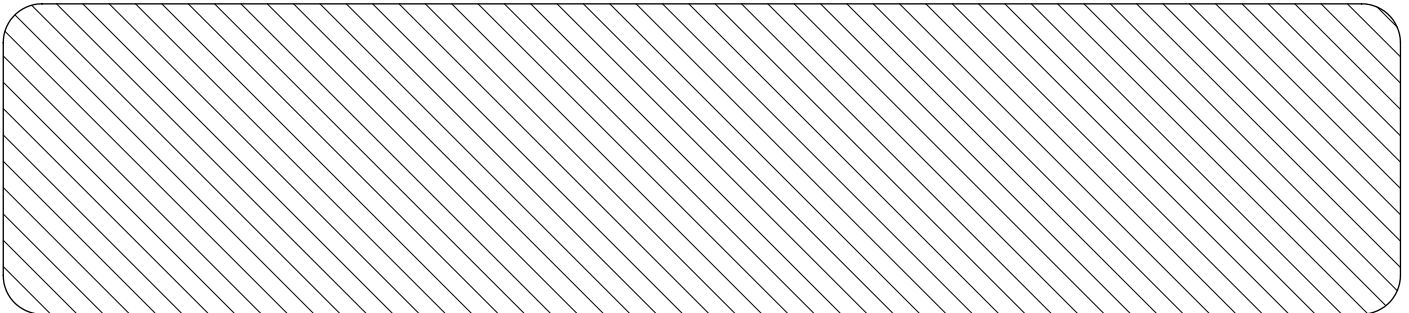
11. AMBER REFLECTOR (PN 8Z0800)



12. RED-ORANGE REFLECTOR (PN 8Z0805)



13. RED REFLECTOR (PN 8Z0810)

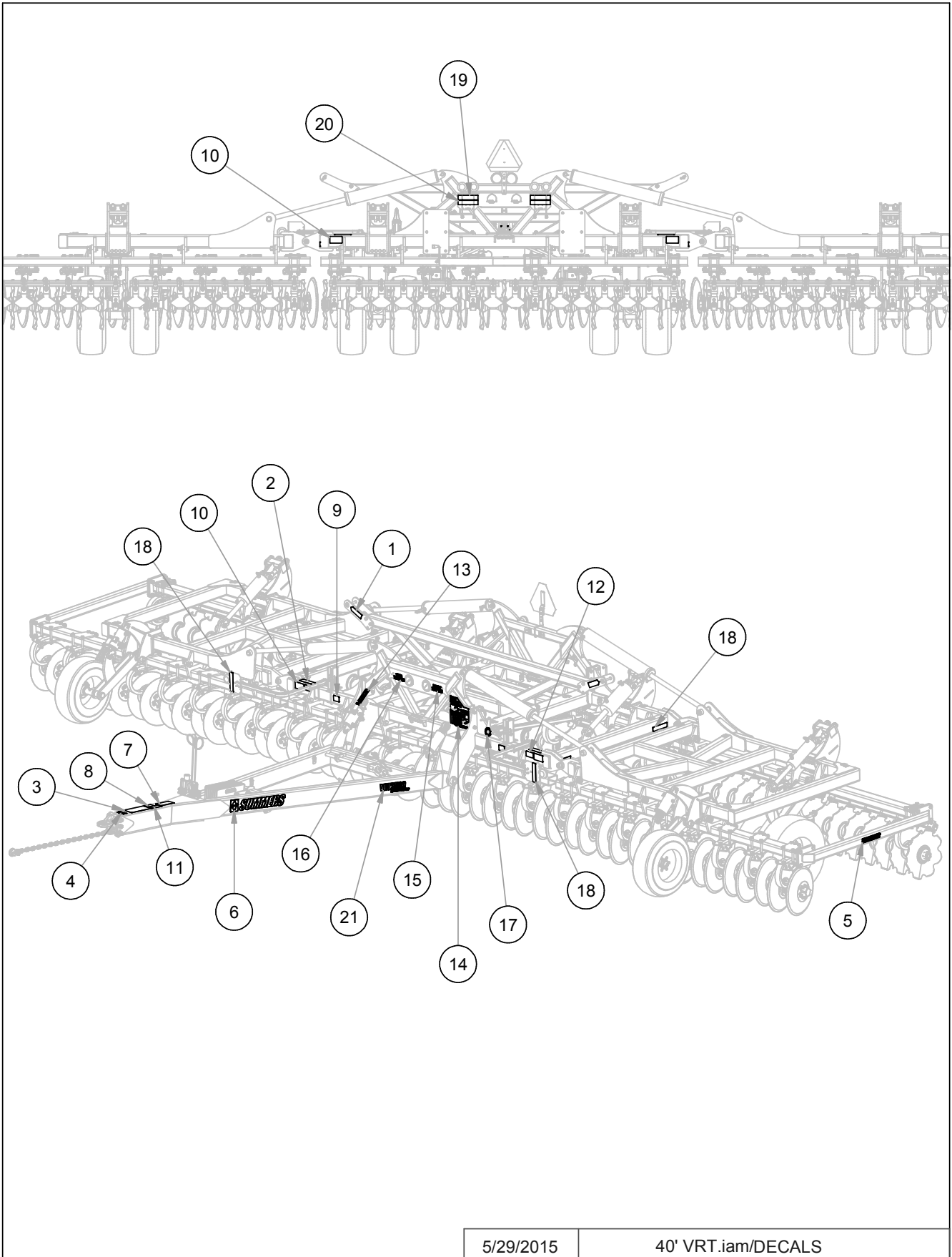


Safety Light Operation

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.



SAFETY



5/29/2015

40' VRT.iam/DECALS

SAFETY

ITEM	PART NUMBER	DESCRIPTION
1	8Z0075	TRANSPORT LOCK DECAL
2	8Z0087	DECAL "WARNING" PINCH POINT 03-
3	8Z0099	"WARNING" JACK DECAL
4	8Z0100	MADE IN THE USA DECAL
5	8Z0101	2" SUMMERS DECAL
6	8Z0204	5.5" SUMMERS DECAL
7	8Z0276	GENERAL MACHINE CAUTION DECAL
8	8Z0340	REPHASING CYLINDERS DECAL
9	8Z0342	INSTALL CYL LOCKS DECAL
10	8Z0344	DECAL WING DANGER
11	8Z0346	ELECTROCUTION-TILLAGE EQUIP. DECAL
12	8Z0350	GANG BEARING GREASE DECAL
13	8Z0365	DECAL DEPTH INDICATOR 11-
14	8Z0480	DECAL VALVE PANEL
15	8Z0481	DECAL BSKT PRESS VRT
16	8Z0482	DECAL WING PRESS VRT
17	8Z0490	DECAL DEPTH CRANK
18	8Z0800	REFLECTOR AMBER ADHSVBCK98-
19	8Z0805	REFLCTR REDORANGE ADHSVBK99-
20	8Z0810	REFLECTOR RED ADHSV-BACK 98-
21	8Z2500 8Z2505	VRT2530 DECAL VRT3530 DECAL



OPERATION & MAINTENANCE

START-UP AND HYDRAULIC OPERATION

INITIAL START UP PROCEDURE FOR VRT LIFT HYDRAULIC CYLINDERS

The VRT has Master-Slave Hydraulic Lift and Gauge Wheel Systems. Fully extend hydraulic cylinders and maintain hydraulic pressure for 30 seconds to insure all air is purged from system.

NOTE: As oil is pumped into the base end of master cylinder, oil is forced out of the rod end into the base end of each slave cylinder. To compensate for the smaller volume of oil in the rod end of the master cylinder, each slave cylinder is 1/2" smaller in diameter. When cylinders are fully extended, oil will bypass through a re-phasing slot on each cylinder in order to equalize the system. The tractor SCV lever must be held for a few seconds to accomplish this passage of oil through the system.

INITIAL START-UP PROCEDURE FOR WING LIFT HYDRAULIC CYLINDERS

The wing lift hydraulic cylinders on this disk must be charged with oil before attempting to raise the wings.

The best method of performing this is to disconnect the rod end of the fold cylinders from the wings and connect the hoses to the tractor's couplers. Make sure the tractor reservoir is full of manufacturer's recommended hydraulic oil. Extend and retract the cylinders until the action is positive and all air is purged from the system. Due to the amount of oil required to fill the cylinders and lines, additional hydraulic oil may be required. After cylinders have been filled with oil, reconnect the rod ends of the cylinders to the wings.



CAUTION: Stand clear whenever raising or lowering the wings.

Before lowering the wings, remove the safety lock pins and place them in the storage positions. After wings are lowered, extend cylinders fully.

BEFORE INITIAL OPERATION

1. After receiving or assembling your VRT, it is a good practice to double check entire machine so that all bolts are securely tightened.
2. Make sure all grease fittings are in place and greased properly.
3. Inflate all lift tires to the recommended inflation pressure and check wheel bolts. (See Maintenance for specifications.)

INITIAL HOOKUP AND FIELD OPERATION OF VRT

1. Make tractor to hitch connection with tractor clevis style drawbar, locking draw pin and safety chain.
2. Retract front and rear Jacks and rotate into storage position.
3. Ensure that hydraulic tips and couplers are CLEAN. The VRT requires 5 hydraulic remotes:
 - a. Main Lift Hydraulic Circuit, used for adjusting tillage depth and raising machine for transport.
 - b. Hydraulic Hitch Circuit, used for leveling machine front

to back.

- c. Wing Lift and Adjustable Down Pressure Circuit, run live in field position. Refer to tractor Operator's Manual for adjustments required for running live hydraulic circuit.

- d. Rolling Basket Lift and Adjustable Down Pressure Circuit, run live in field position. Refer to tractor Operator's Manual for adjustments required for running live hydraulic circuit.

- e. Gauge Wheel Circuit. Floatation assist in wet or soft field conditions.

Colored nylon ties near hydraulic tips match ties located on machine. Install hoses in desired tractor outlets.

4. Install Pressure Over Ride Switch Box (8N7012) in convenient location in cab. Connect to 12 volt power source and route 180" Pressure Over Ride Cable to rear of tractor. Pressure Over Ride is necessary to lower wings when wing down pressure is adjusted for typical field conditions.



Connect Safety Light Kit wiring harness in tractor 7 pin receptacle. Connect Pressure Over Ride Cables.

5. Remove Wing Safety Lock Pins and Transport Locks on Main Lift Cylinders. If Locks do not remove freely, ensure that cylinders are completely filled with hydraulic fluid and are supporting the load to be lowered. Place in their storage positions.

IMPORTANT: Operate tractor hydraulics from the operator station only. Do not allow anyone to stand near VRT when folding and unfolding. Do not raise or lower wings when implement is moving.

6. Activate Pressure Over Ride Switch and Lower Wings into field position.
7. Lower Main Lift Cylinders until blades rest on ground.
8. Engage Wing Down Pressure Circuit and Rolling Basket Down Pressure Circuits in continuous flow setting.



9. Loosen jam nut, adjust Wing Down Pressure Circuit to 200 psi and retighten jam nut.

OPERATION & MAINTENANCE



10. Loosen jam nut, adjust Rolling Basket Down Pressure Circuit to 200 psi and retighten jam nut.
11. Make a test pass in a level area of the field, running at desired depth and speed. Adjust Hydraulic Hitch for optimum performance and lower Gauge Wheels to just contact ground during this test pass.

Note: Blade penetration and soil action will increase as paint and rust wears off blades.

12. Abruptly stop machine leaving it at desired tillage depth. Items to check and adjust (if necessary):



a. Adjust Main Lift Hydraulic Depth Stop to desired setting. Adjust Main Lift Cylinder attachment eye-bolts, if necessary, to attain level machine operation.

b. Check that wings are running level with center section. If wings are high, increase wing down pressure in 25 psi increments until level operation is achieved. If wings are low, decrease wing down pressure in 25 psi increments until level operation is achieved.

c. Check that the Hydraulic Hitch is adjusted for desired individual gang depth and soil movement. In some conditions, the Hydraulic Hitch can be run in Hydraulic Float position al-

lowing gangs to follow ground contour. Test operation in float position during initial adjustment. The Hydraulic Hitch must be returned to the locked neutral position before road transport.

d. Check that Gauge Wheels are lightly contacting soil. Gauge wheels are designed to support machine weight in loose and soft soil conditions.

e. Check adjustment of Mounted Harrows. Harrow sections should run level or slightly higher at front to provide maximum residue flow. Adjust Tine Angle to provide desired tillage/leveling action.

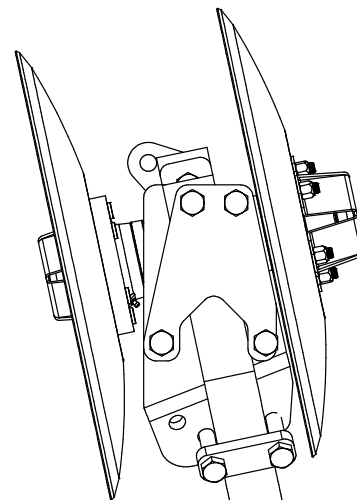
f. Check performance of Rolling Baskets. Adjust Down Pressure knob to achieve desired results.

IMPORTANT: Damage to VRT may occur if Wing Down Pressure Circuit or Rolling Basket Down Pressure Circuit are run in neutral/locked position. Damage caused by running in neutral/locked position is not covered by Summers warranty.

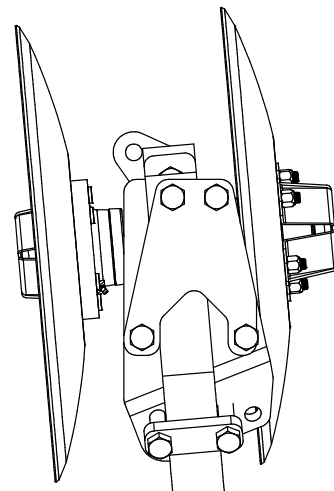
Monitor temperature of tractor hydraulic oil. Discontinue use of Wing Down Pressure and Rolling Basket Down Pressure if hydraulic oil become excessively hot. If this occurs, run these circuits in FLOAT POSITION ONLY until cause of overheating is resolved.

ADJUSTING DISK AGGRESSIVENESS

Standard setting is 12°
(see hardware locations in diagram to the right).



Low disturbance setting is 5°
(see hardware locations in diagram to the right).



OPERATION & MAINTENANCE

AFTER FIRST TWO HOURS OF OPERATION

1. Recheck wheel bolts for tightness and tighten spindle nuts if any side-play is evident in the bearings.
2. Check gang shafts for tightness (standard VRT only). This procedure should be repeated daily through the first twenty hours of operation. Gang shafts should be tightened to 1200 foot-pounds.

NOTE: A 1/4" spacer (PN 8X0366) is available and should be installed when the castle nut has been tightened past lock bolt.

3. Blades, Hubs and C-shaped shank mounting bolts should be checked for tightness. This procedure should also be repeated daily during the first twenty hours of operation.

MAINTENANCE

GANG BEARINGS:

Note: Zerks are installed on both front and back of gang bearing cast holders for your convenience. Both zerks lead to the bearing, only one needs to be greased.

To prevent contamination, insure that coupler and zerk are clean.

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 to gang bearing. Rotate gang 2 to 3 revolutions. Add an additional three strokes of grease.

TILLAGE HUB BEARINGS:

Every 50 hours: Add four strokes of grease to hub bearing. USE ONLY NLGI #2 grease.

GENERAL:

Daily: Grease all pivot points located on wing lift, main lift arms and hitch.

Check all wheel bolts/nuts for tightness. Recommended torque listed below:

Hub	Wheel Bolt/Nut Torque
614 - 6 Bolt	170 ft-lb
812 - 8 Bolt	240 ft-lb
817 - 8 Bolt	240 ft-lb

Tighten spindle nuts if any side-play is evident in the bearings.

Maintain disk gang torque at 1200 ft. lb.

Seasonally: Clean and repack wheel bearings.

TIRE INFLATION:

Recommended tire inflations listed below:

Size	Ply	Pressure
11L x 15	LRF	85 psi (Gauge wheels)
340/60R16.5	145A8	73 psi
340/65R18	148A8	78 psi

TRANSPORTING

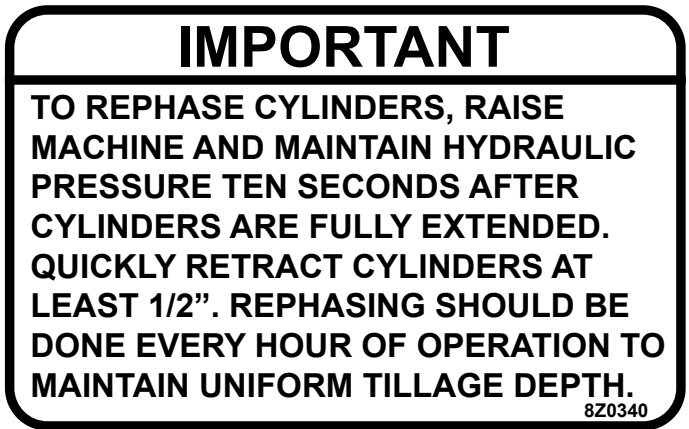
The Summers VRT is equipped with manual wing and center lift cylinder locks. The following procedure should be used to prepare VRT for transport.

1. Check that wing locks are in the storage positions.
2. Fully extend main lift cylinders, quickly lower VRT approximately 1", raise wings.
3. Install safety locks on wings and center lift cylinders.
4. USE a safety chain between tractor drawbar and VRT hitch when transporting on public roads.

5. Check wheel bolts / nuts after first 20 miles of road transport and every 60 miles there after.

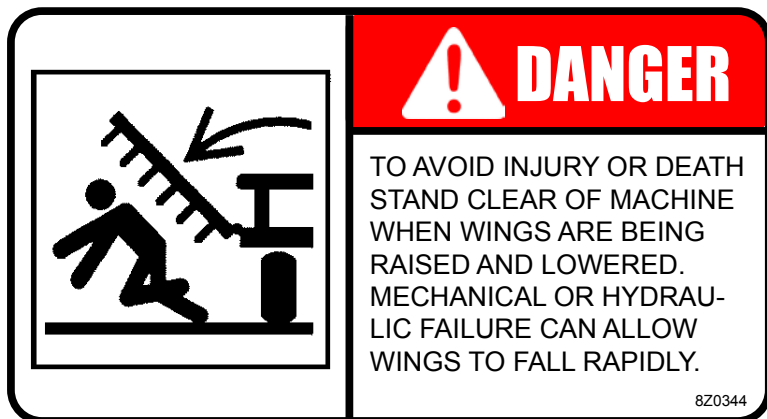
Road the implement at a reasonable speed not to exceed 20 miles per hour.

Always use an ASAE "Slow Moving Vehicle" emblem and Safety Lights when transporting on a road or highway. Comply with your state and local laws governing lighting and maximum width regulations. Transport during daylight hours only.



UNHOOKING VRT

1. Choose a very firm level surface to park VRT.
2. Either lower wings and blades to the ground OR install Wing Safety Lock Pins and Transport Locks on Main Lift Cylinders.
3. Check that hitch pin is not bound with sideways or front to back pressure. If hitch pin is not free, carefully reposition tractor.
4. Block tires to prevent movement after hitch pin is removed.
5. Lower front and rear Jacks and adjust until cast hitch piece is centered in drawbar clevis.
6. Disconnect wiring harnesses, hydraulic hoses and safety chain.
7. Recheck that hitch pin is free, if so, stand to the side of the hitch and remove hitch pin.
8. Carefully drive ahead.



STORAGE

Proper rust prevention treatment of equipment before placing in storage will not only lengthen its useful life, but will assist in maintaining optimum performance when put back into service.

The following list contains suggestions for preparing your implement for storage.

1. Clean entire machine. Remove all dirt and excessive grease implement.
2. Check VRT over thoroughly for damaged or worn parts, cracked or broken blades, and loose bolts.
3. Wheel bearings should be cleaned and repacked each year.
4. Grease all zerks on implement.
5. Block up to remove weight from tires.
6. If implement is lowered to the ground, place boards under blades.
7. Disconnect rods and fully retract the cylinders to prevent rusting of shafts and subsequent seal damage. If left extended, coat rods with grease to prevent corrosion. Remove grease prior to retracting cylinders.
8. For safety, do not store implement with wings folded up.
9. Clean and place a protective coating of heavy oil or grease on earth-working parts to prevent rusting.
10. Touch-up any spots where paint has been scratched or worn off.

OPERATION & MAINTENANCE

TROUBLESHOOTING

NO.	PROBLEM	CAUSE	CORRECTION
1	Wings not running level with center section.	Incorrect Wing Down Pressure adjustment.	Increase or decrease Wing Down Pressure in 25 PSI increments until machine runs level.
2	Inadequate penetration.	Wheels are holding VRT out of the ground.	Adjust Lift Cylinders to lift wheels off ground.
		Dry/Hard conditions.	Continue running until paint and/or rust is worn off blades.
3	Rephasing hydraulic cylinders not extending or retracting equally.	Hydraulic cylinders have drifted or air has entered system.	Hold hydraulic switch/lever with rephasing cylinders fully extended 15 seconds to synchronize.
4	Blades plugging with mud or residue.	Extremely wet field conditions.	Allow to dry if possible.
5	Unsatisfactory field finish.	Hydraulic Hitch not adjusted correctly.	Use Hydraulic Hitch to level machine for desired results.
6	Mounted Harrows plugging with residue.	Incorrect tine angle or section adjustment.	Adjust tine angle and/or section to provide desired tine action while allowing residue to flow through.
7	Too much or too little soil action and leveling from Rolling Baskets.	Incorrect Rolling Basket Down Pressure adjustment.	Increase or decrease Rolling Basket Down Pressure in 25 PSI increments until desired soil action and leveling is attained.
8	VRT pulling to one side.	Ground conditions causing greater resistance on the front blades from the uncut ground vs. the rear blades from the already cut ground.	Adjust hydraulic hitch to allow equal resistance on both front and rear blades thus straightening the pull of the VRT. OR input a correction factor in the auto-steer guidance system to compensate for the offset of the VRT pulling to one side.

DIMENSIONS

SIZE	APPROX. TRANSPORT WIDTH	APPROX. TRANSPORT HEIGHT	MACHINE WEIGHT	APPROX. LENGTH W/ ROLLING BSKTS
26'	15'	13'	25,000#	28'6"
30'	15'	16'6"	27,400#	28'6"
35'	19'8"	15'	28,000#	31'4"
40'	19'8"	17'	31,000#	31'4"

OPERATION & MAINTENANCE

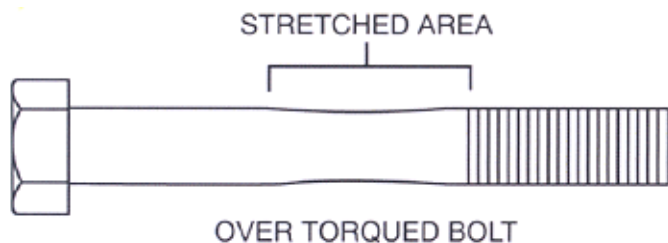
PROPER BOLT USE

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.

BOLT SIZE	WRENCH SIZE	GRADE 5		GRADE 8	
		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



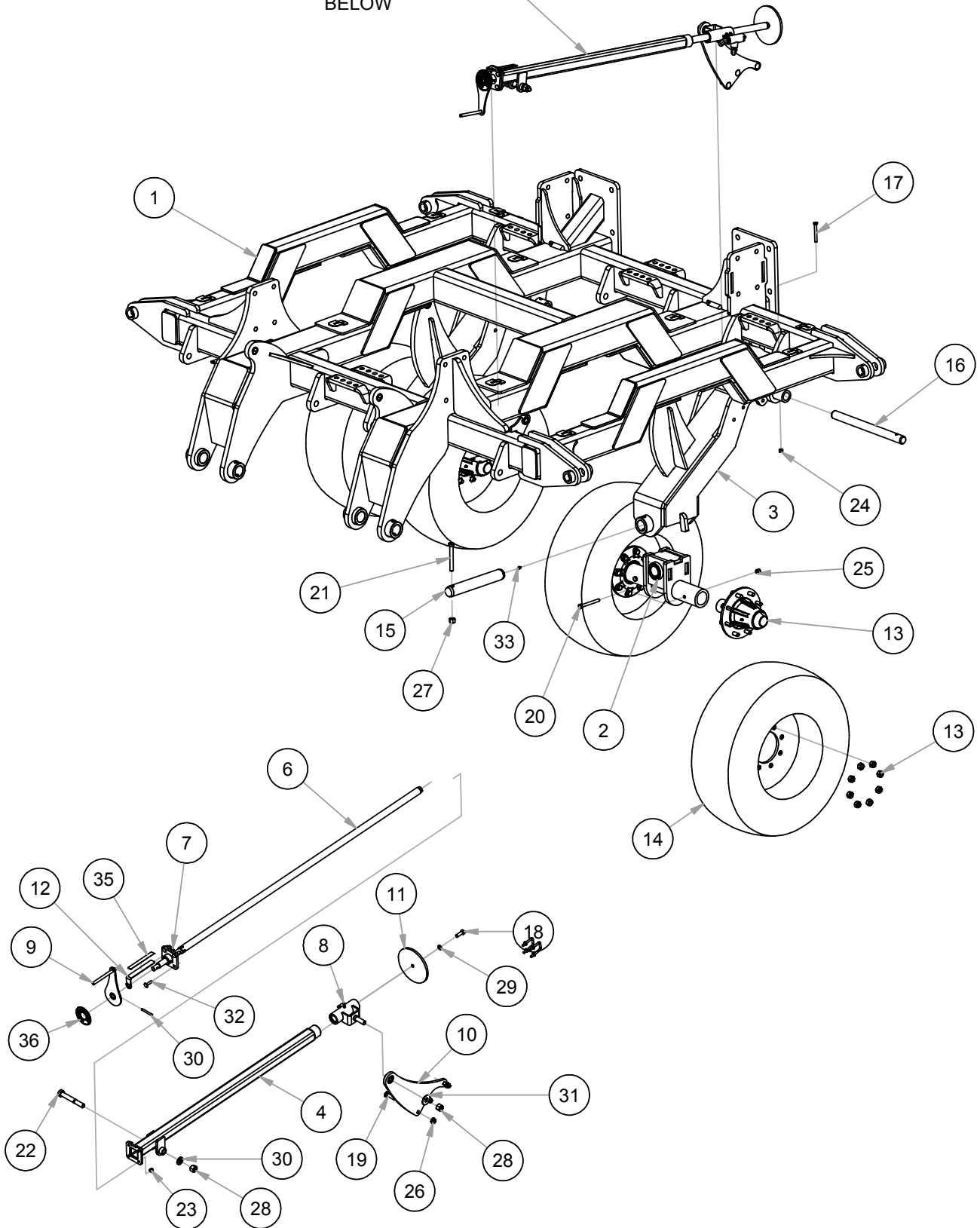
SAE
GRADE 8

BRING OWNER REGISTER INFORMATION LOCATED AT THE BEGINNING OF THIS MANUAL WHEN ORDERING PARTS (SERIAL NUMBER IS LOCATED AT FRONT OF VRT BY HITCH PIECE).

PARTS

26'-30'

SEE BREAKDOWN
BELOW



9/29/2015

26'-30' VRT CENTER-TRANSPORT

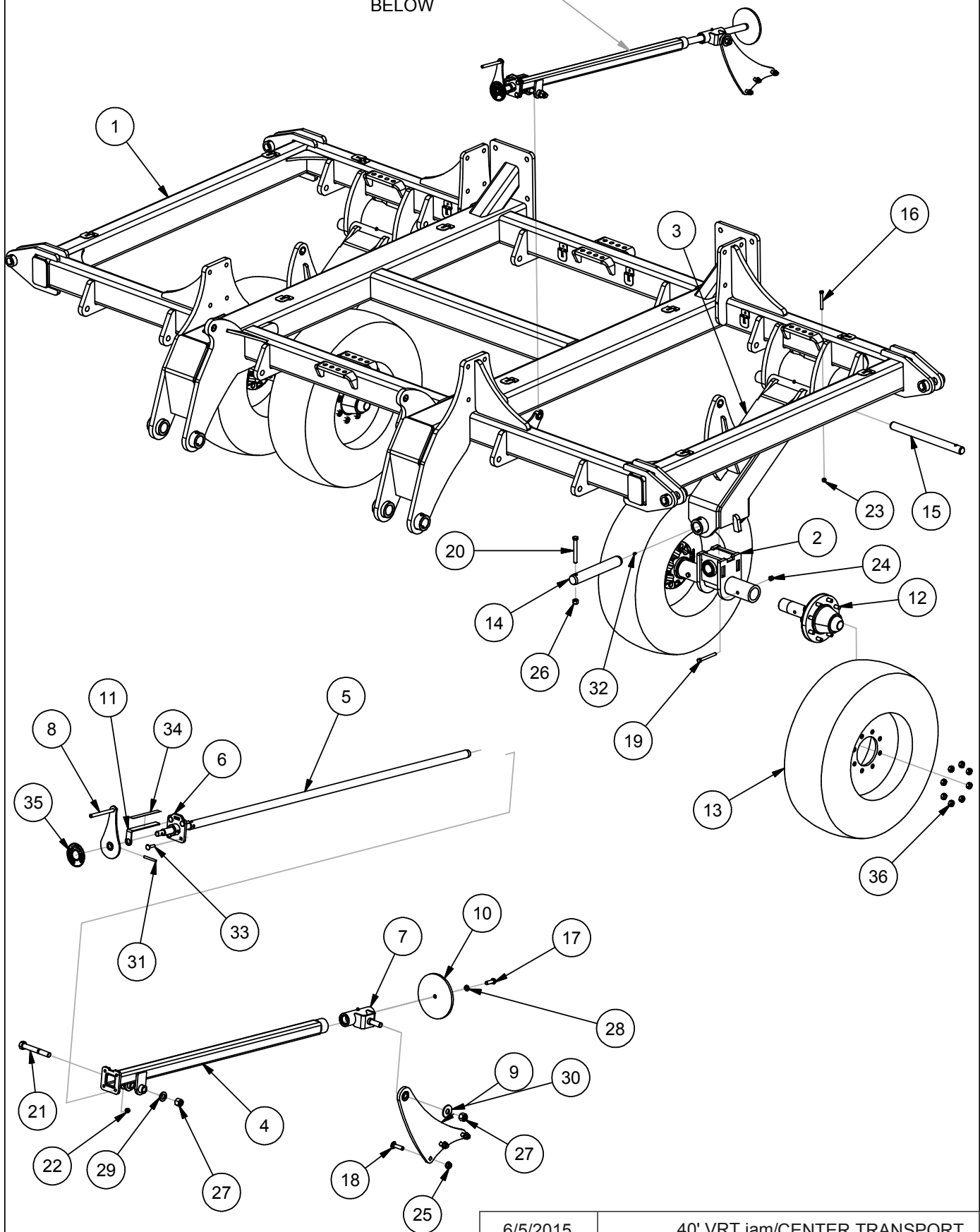
PARTS**26'-30' VRT CENTER & TRANSPORT**

ITEM	PART NUMBER	DESCRIPTION
1	8B1102P	FRAME CNTR VRT 20'-30' PNTD
2	8B1270	OSC AXLE SPNDLE HLDR 2.5"
3	8B1281	LIFTARM OSC AXLE VRT
4	8B1350	SNGL PNT DPTH SLIDE TUBE
5	8B1352	SNGL PNT DPTH SLIDE ROD
6	8B1352	SNGL PNT DPTH SLIDE ROD
7	8B1355	SNGL PNT DPTH NUT PLATE
8	8B1360	SNGL PNT DPTH POPPET MNT
9	8B1365	SNGL PNT DPTH CRANK HNDLE
10	8B1370	SNGL PNT DPTH SLIDE MNT-R
11	8B1372	SNGL PNT DPTH STOP PLATE
12	8B1374	SNGL PNT DPTH GAGE FLAT
13	8K1105	HUB&AXLE ASSY HD812(2.5"RCVR)
14	8K7450	340/60R16.5
15	8P3912	PIN 2 X 13-1/2" HARDENED GREASABLE
16	8T3640	PIN 1-1/2 X 19" HARDENED 98-
17	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 ZDI
18	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ
19	8X0065	CRG 1/2-13NC X 2" GR5 ZDI
20	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 ZDI
21	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
22	8X0123	BOLT 3/4-10NC X 5.5" GR5 ZDI
23	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
24	8X0234	NUT 7/16"-14NC NY-LOCK GR2 ZDI
25	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
26	8X0244	NUT 1/2"-13NC FLANG TOP LOCK Z
27	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
28	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
29	8X0303	LOCKWASHER 1/2" YLW ZNC
30	8X0317	WASHER 3/4" SAE FLAT YZ
31	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
32	8X0523	ROLL PIN 5/16 X 2-1/2" PLN
33	8X0721	ZERK 5/16"-24 NF STR YZ
34	8X1115	CRG 3/8-16NC X 1-1/2" GR2 ZN
35	8Z0348	GAUGE WHEEL DEPTH DECAL
36	8Z0490	DECAL DEPTH CRANK

PARTS

35'-40'

SEE BREAKDOWN BELOW



6/5/2015

40' VRT.iam/CENTER TRANSPORT

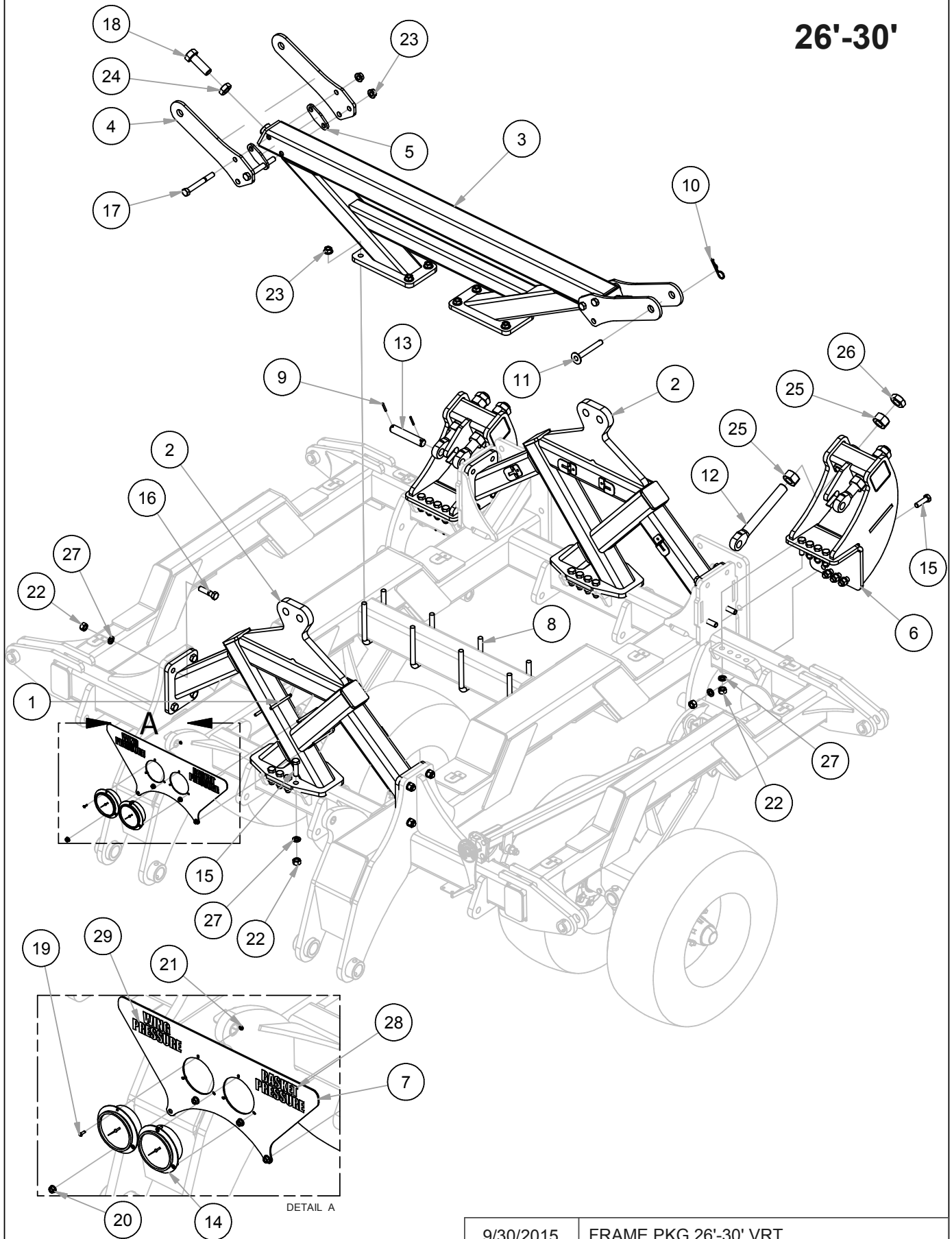
PARTS

35'-40' VRT CENTER & TRANSPORT

ITEM	PART NUMBER	DESCRIPTION
1	8B1100P	FRAME CNTR VRT 35'-40' PNTD
2	8B1270	OSC AXLE SPNDLE HLDR 2.5"
3	8B1281	LIFTARM OSC AXLE VRT
4	8B1350	SNGL PNT DPTH SLIDE TUBE
5	8B1352	SNGL PNT DPTH SLIDE ROD
6	8B1355	SNGL PNT DPTH NUT PLATE
7	8B1360	SNGL PNT DPTH POPPET MNT
8	8B1365	SNGL PNT DPTH CRANK HNDLE
9	8B1370	SNGL PNT DPTH SLIDE MNT
10	8B1372	SNGL PNT DPTH STOP PLATE
11	8B1374	SNGL PNT DPTH GAGE FLAT
12	8K1106	HUB&AXLE ASSY HD817 (2.5"RCVR)
13	8K7430	340/65R18 ON 18X11X8 WHL-1.5OF
14	8P3912	PIN 2 X 13-1/2" HARDENED GREASABLE
15	8T3640	PIN 1-1/2 X 19" HARDENED 98-
16	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 YZ
17	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 YZ
18	8X0065	CRG 1/2-13NC X 2" GR5 YZ
19	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 YZ
20	8X0095	BOLT 5/8-11NC X 5" GR5 YZ
21	8X0123	BOLT 3/4-10NC X 5.5" GR5 YZ
22	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
23	8X0234	NUT 7/16"-14NC NY-LOCK GR2 YZ
24	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
25	8X0244	NUT 1/2"-13NC FLANG TOP LOCK Z
26	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
27	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
28	8X0303	LOCKWASHER 1/2" YLW ZNC
29	8X0317	WASHER 3/4" SAE FLAT YZ
30	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
31	8X0523	ROLL PIN 5/16 X 2-1/2" PLN
32	8X0721	ZERK 5/16"-24 NF STR YZ
33	8X1115	CRG 3/8-16NC X 1-1/2" GR2 ZN
34	8Z0348	GUAGE WHEEL DEPTH DECAL
35	8Z0490	DECAL DEPTH CRANK
36	8K7123	NUT 5/8"-18UNF WHEEL BOLT 97-

PARTS

26'-30'



9/30/2015

FRAME PKG 26'-30' VRT

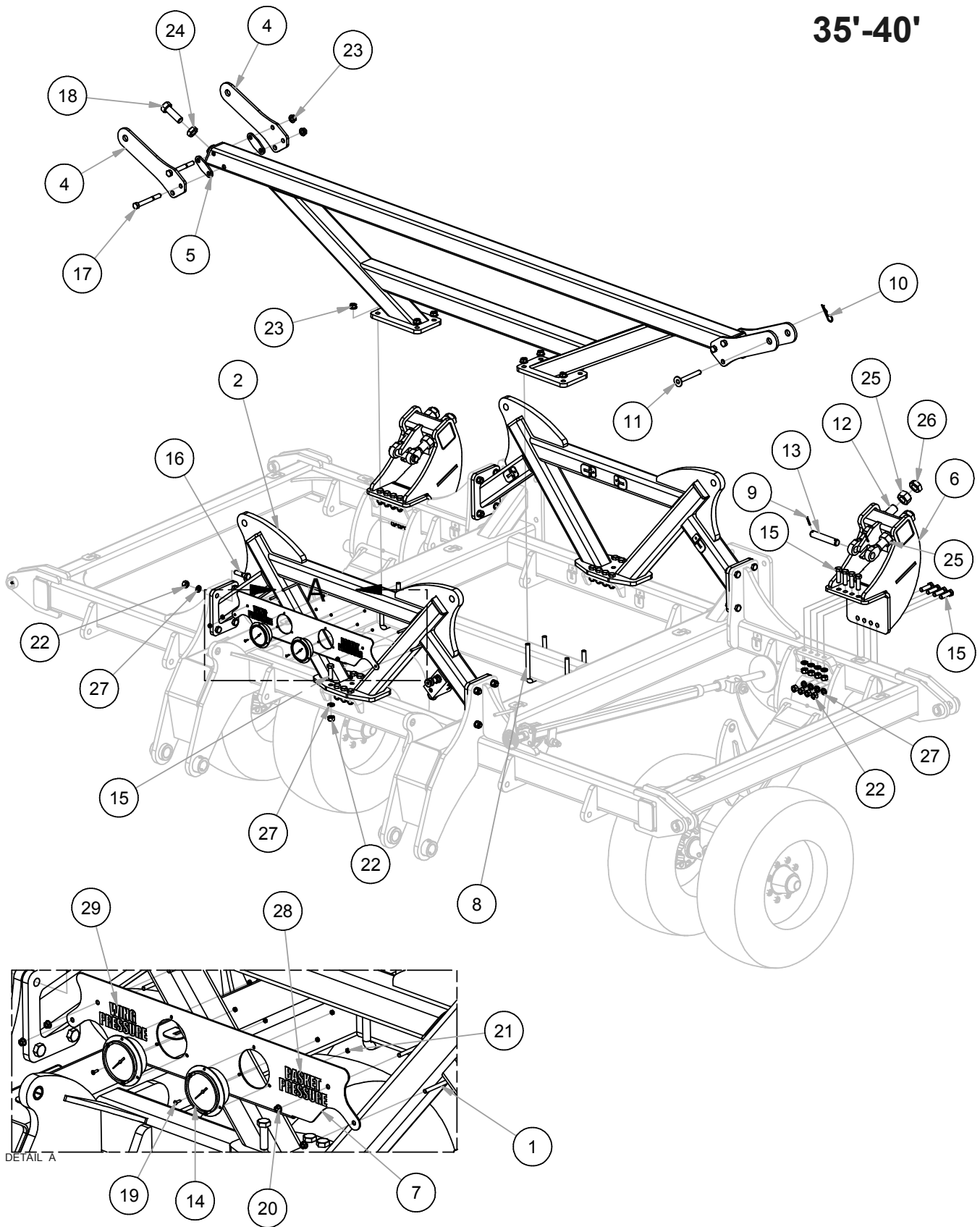
PARTS

26'-30' VRT CENTER

ITEM	PART NUMBER	DESCRIPTION
1	8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ
2	8B1198	CYL ATTACH VRT 26'-30'
3	8B1208	TRANS REST VRT 26-30'
4	8B1215	WING LOCK TAB VRT
5	8B1217	WING LOCK TAB SPCR
6	8B1250	LIFT CYL ATTACH MODULE VRT
7	8B1384	2 GAUGE PANEL VRT NRRW
8	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
9	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
10	8D9110	HAIR PIN CLIP LARGE(1"CYL PIN)
11	8K1610	PIN 3/4 X 6 1/4" SAFETYLOCK
12	8K1755	EYEBOLT 1.5DIA X 1.26"EYE X 14" YZ
13	8K9110	PIN 1-1/4 X 6-13/16" HRDND
14	8N0400	HYD PRESSURE GAGE 4" PANL MNT
15	8X0111	BOLT 3/4-10NC X 2-1/2" GR5 YZ
16	8X0114	BOLT 3/4-10NC X 3" GR5 YZ
17	8X0121	BOLT 3/4-10NC X 6-1/2" GR5 YZ
18	8X0152	BOLT 1-1/4-7NC X 3.75 FULLTHD
19	8X0160	SCREW NO. 10 X 24 - 5/8"
20	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
21	8X0205	NUT 10-24 HEX ZDI
22	8X0260	NUT 3/4"-10NC HEX GR2 YZ
23	8X0266	NUT 3/4"-10NC SER FLANG GR2 YZ
24	8X0283	NUT JAM 1.25"-7NC GR2 ZDI
25	8X0285	NUT 1-1/2"-6NC HEX GR2 YZ
26	8X0286	NUT 1-1/2"-6NC JAM GR2 YZ
27	8X0306	LOCKWASHER 3/4" YLW ZNC
28	8Z0481	DECAL BSKT PRESS VRT
29	8Z0482	DECAL WING PRESS VRT

PARTS

35'-40'



9/28/2015

40' VRT.iam/CENTER

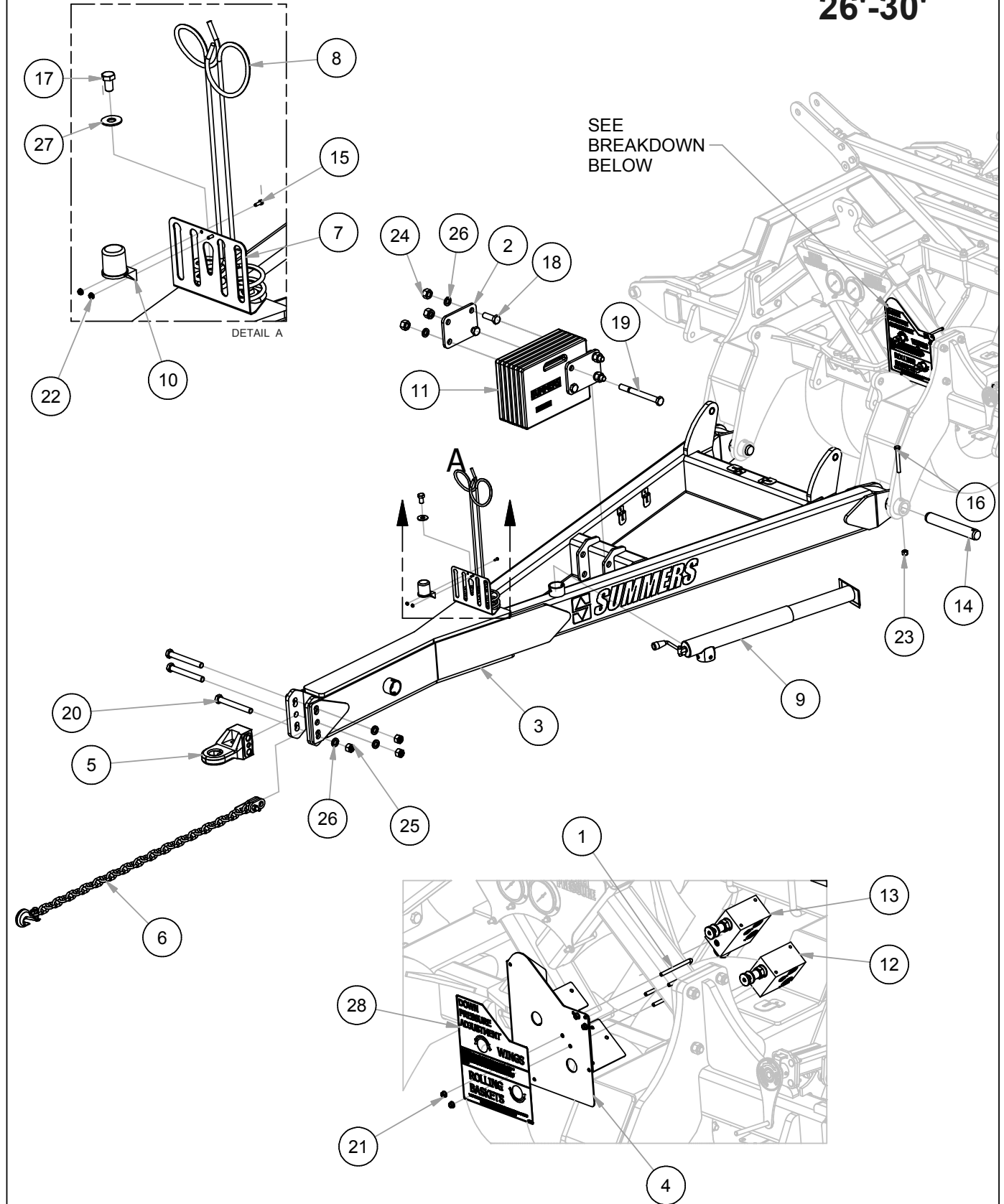
PARTS

35'-40' VRT CENTER

ITEM	PART NUMBER	DESCRIPTION
1	8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ
2	8B1200	CYL ATTACH VRT 35'-40'
3	8B1210	TRANS REST VRT 35-40'
4	8B1215	WING LOCK TAB VRT
5	8B1217	WING LOCK TAB SPCR
6	8B1250	LIFT CYL ATTACH MODULE VRT
7	8B1385	2 GAUGE PANEL VRT
8	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
9	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
10	8D9110	HAIR PIN CLIP LARGE(1"CYL PIN)
11	8K1610	PIN 3/4 X 6 1/4" SAFETYLOCK
12	8K1755	EYEBOLT 1.5DIA X 1.26"EYE X 14" YZ
13	8K9110	PIN 1-1/4 X 6-13/16" HRDND
14	8N0400	HYD PRESSURE GAGE 4" PANL MNT
15	8X0111	BOLT 3/4-10NC X 2-1/2" GR5 YZ
16	8X0114	BOLT 3/4-10NC X 3" GR5 YZ
17	8X0121	BOLT 3/4-10NC X 6-1/2" GR5 YZ
18	8X0152	BOLT 1-1/4-7NC X 3.75 FULLTHD
19	8X0160	SCREW NO. 10 X 24 - 5/8"
20	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
21	8X0205	NUT 10-24 HEX YZ
22	8X0260	NUT 3/4"-10NC HEX GR2 YZ
23	8X0266	NUT 3/4"-10NC SER FLANG GR2 YZ
24	8X0283	NUT JAM 1.25"-7NC GR2 YZ
25	8X0285	NUT 1-1/2"-6NC HEX GR2 YZ
26	8X0286	NUT 1-1/2"-6NC JAM GR2 YZ
27	8X0306	LOCKWASHER 3/4" YLW ZNC
28	8Z0481	DECAL BSKT PRESS VRT
29	8Z0482	DECAL WING PRESS VRT

PARTS

26'-30'



9/30/2015

HITCH 26'-30' VRT

PARTS

26'-30' VRT HITCH

ITEM	PART NUMBER	DESCRIPTION
1	8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ
2	8B0020	HITCH WGHT PLATE
3	8B1005P	HITCH HYD NRRW VRT PNTD
4	8B1380	2 VALVE PANEL ASSY VRT
5	8D0720	HITCH PIECE CAST
6	8D2470	SAFETY CHAIN 7/16" X 5'
7	8D8493	PIONEER/ISO TIP HLDR LARGE
8	8D8502	HYD HOSE HOLDER PNTD BLK 91-
9	8D8523	JACK 8000# DROPLEG 5/8X4.25PIN
10	8K8067	DUST CAP FOR 7PIN CONNECT00-
11	8K9230	SUITCASE WGHT PNTD 1.25"- 70#
12	8N7000	ADJ DOWN PRESSURE MANIFLD
13	8N7010	ADJ PRESS BLOCK
14	8P3910	PIN 2 X 13-1/2" HARDENED
15	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ
16	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
17	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
18	8X0139	BOLT 1-8NC X 3" GR5 ZDI
19	8X0145	BOLT 1-8NC X 10-1/2" GR5 ZDI
20	8X0146	BOLT 1-8NCX8.5" W/1.5"THD GR5ZDI
21	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
22	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
23	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
24	8X0280	NUT 1"-8NC HEX GR2 YZ
25	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
26	8X0309	LOCKWASHER 1" YLW ZNC
27	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
28	8Z0480	DECAL VALVE PANEL

PARTS

35'-40' VRT HITCH

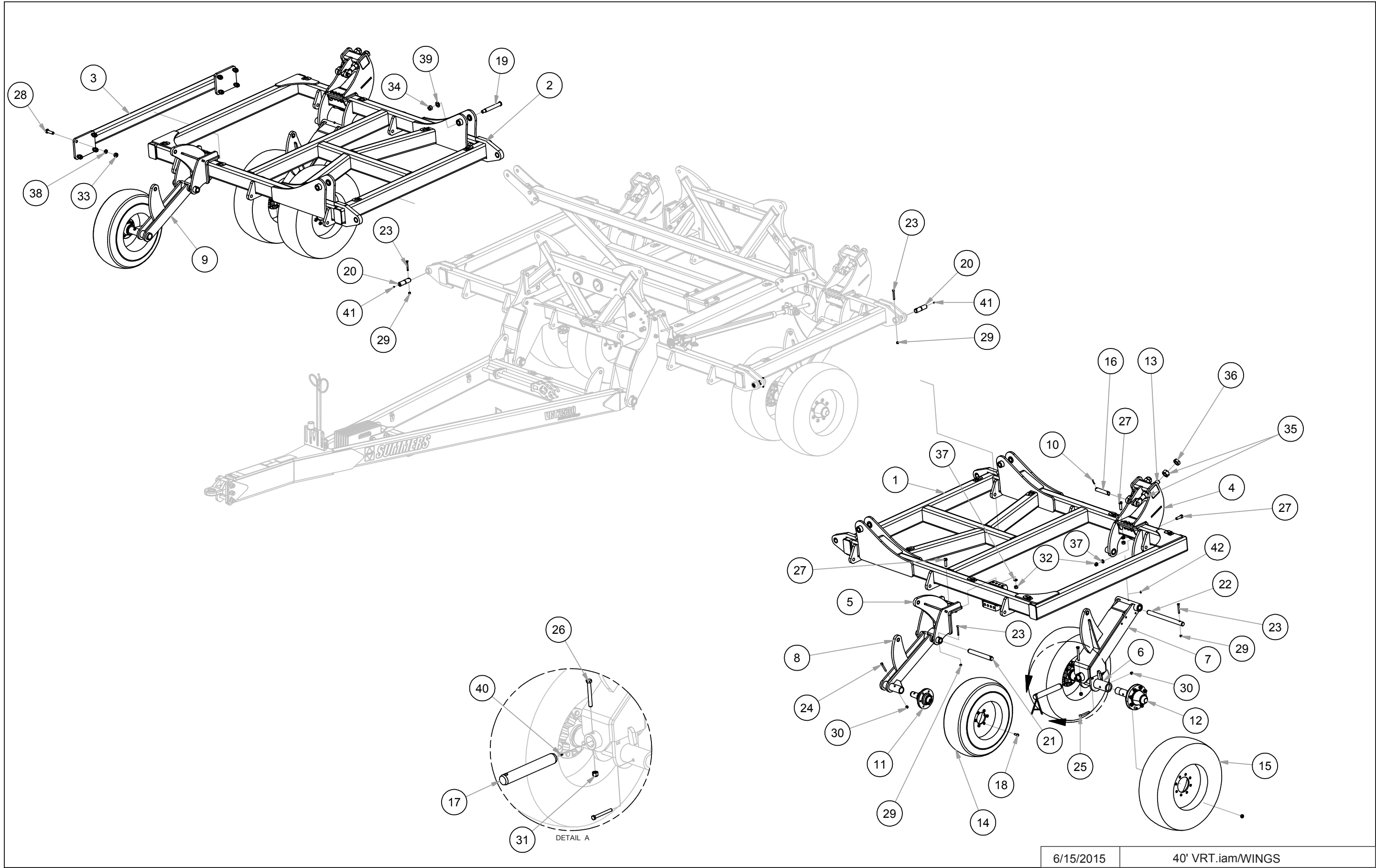
ITEM	PART NUMBER	DESCRIPTION
1	8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ
2	8B0020	HITCH WGHT PLATE
3	8B1000P	HITCH HYD VRT PNTD
4	8B1380	2 VALVE PANEL ASSY VRT
5	8D2470	SAFETY CHAIN 7/16" X 5'
6	8D8493	PIONEER/ISO TIP HLDR LARGE
7	8D8502	HYD HOSE HOLDER PNTD BLK 91-
8	8D8523	JACK 8000# DROPLEG 5/8X4.25PIN
9	8K3002	GANG WRENCH
10	8K8067	DUST CAP FOR 7PIN CONNECT00-
11	8K9230	SUITCASE WGHT PNTD 1.25"- 70#
12	8N7000	ADJ DOWN PRESSURE MANIFLD
13	8N7010	ADJ PRESS BLOCK W/ELECTRIC OVRIDE
14	8P3910	PIN 2 X 13-1/2" HARDENED
15	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5 YZ
16	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
17	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 YZ
18	8X0139	BOLT 1-8NC X 3" GR5 ZDI
19	8X0145	BOLT 1-8NC X 10-1/2" GR5 ZDI
20	8X0146	BOLT 1-8NCX8.5" GR5ZDI
21	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
22	8X0223	NUT 1/4"-20NC SERFLANG GR2 YZ
23	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
24	8X0280	NUT 1"-8NC HEX GR2 YZ
25	8X0281	NUT 1"-8NC NY-LOCK GR2 YZ
26	8X0309	LOCKWASHER 1" YLW ZNC
27	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
28	8Z0480	DECAL VALVE PANEL
29	8D0720	HITCH PIECE CAST
30	8X0327	WASHER 1-1/4" SAE FLAT ZY
31	8X0405	SNAPPER PIN 1/4 X 1.75"

PARTS

26'-40' VRT WINGS

ITEM	PART NUMBER	DESCRIPTION
1	8B1115P 8B1110P	FRAME WING VRT 26'-30' L PNTD FRAME WING VRT 35'-40' L PNTD
2	8P1117P 8B1112P	FRAME WING VRT 26'-30' R PNTD FRAME WING VRT 35'-40' R PNTD
3	8B1120	GANG TUBE TIE BAR VRT
4	8B1250	LIFT CYL ATTACH MODULE VRT
5	8B1255	HYD GAGEWHL CYL ATTCH VRT
6	8B1270	OSC AXLE SPNDLE HLDR 2.5"
7	8B1281	LIFTARM OSC AXLE VRT
8	8B1290	LIFTARM GAGEWHL VRT LEFT
9	8B1292	LIFTARM GAGEWHL VRT RIGHT
10	8D9108	ROLL PIN 1/4 X 2" YLW ZNC
11	8K1100	HUB&AXLE ASSY 614(GBGI-2"RCVR)
12	8K1106	HUB&AXLE ASSY HD817 (2.5"RCVR)
13	8K1755	EYEBOLT 1.5DIA X 1.26"EYE X 14" YZ
14	8K7033	11L X 15 LRF ON 15X8X6 WHEEL
15	8K7430	340/65R18 ON 18X11X8 WHL-1.5OF
16	8K9110	PIN 1-1/4 X 6-13/16" HRDND
17	8P3912	PIN 2 X 13-1/2" HARDENED GREASABLE
18	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.25"
19	8T3300	PIVOT BOLT CHSLTRP&WNLFT YZ
20	8T3606	PART 2 HINGE PIN 5 PLEX
21	8T3620	PIN 1-1/2 X 12-1/2" HRDND&ZINC
22	8T3640	PIN 1-1/2 X 19" HARDENED 98-
23	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 YZ
24	8X0072	BOLT 1/2-13NC X 3-3/4" GR5 YZ
25	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 YZ
26	8X0095	BOLT 5/8-11NC X 5" GR5 ZDI
27	8X0111	BOLT 3/4-10NC X 2-1/2" GR5 YZ
28	8X0133	BOLT 7/8-9NC X 3" GR5 YZ
29	8X0234	NUT 7/16"-14NC NY-LOCK GR2 YZ
30	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
31	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
32	8X0260	NUT 3/4"-10NC HEX GR2 YZ
33	8X0268	NUT 7/8"-9NC HEX GR2 YZ
34	8X0282	NUT 1"-14TPI TOPLOCK GR B Z
35	8X0285	NUT 1-1/2"-6NC HEX GR2 YZ
36	8X0286	NUT 1-1/2"-6NC JAM GR2 YZ
37	8X0306	LOCKWASHER 3/4" YLW ZNC
38	8X0307	LOCKWASHER 7/8" YLW ZNC
39	8X0316	WASHER 1" SAE FLAT YZ
40	8X0721	ZERK 5/16"-24 NF STR YZ
41	8X0708	ZERK 1/4"-28 NF STRAIGHT YZ
42	8X0710	ZERK 1/4"-28 NF 90° YZ

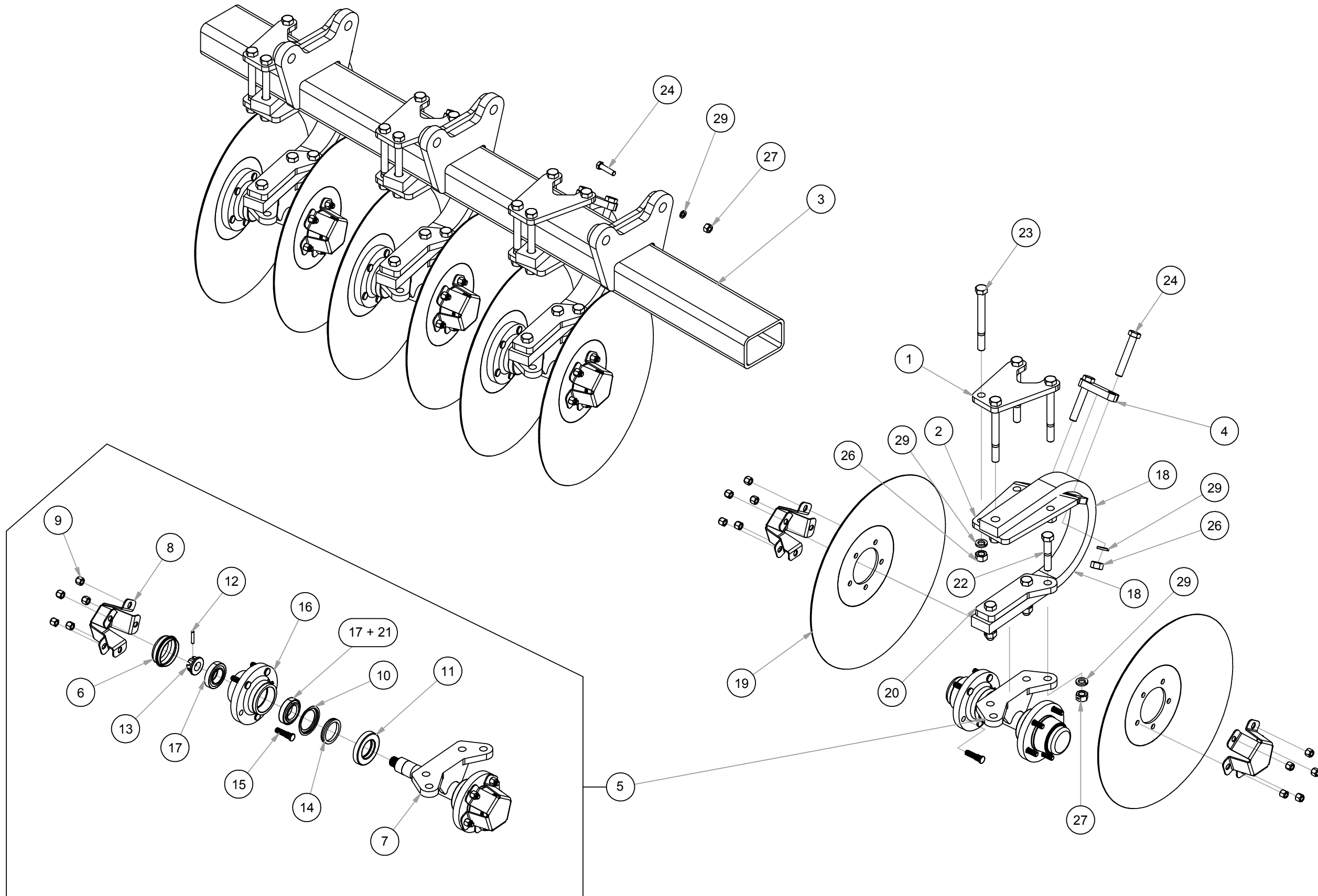
PARTS



6/15/2015

40' VRT.iam/WINGS

PARTS

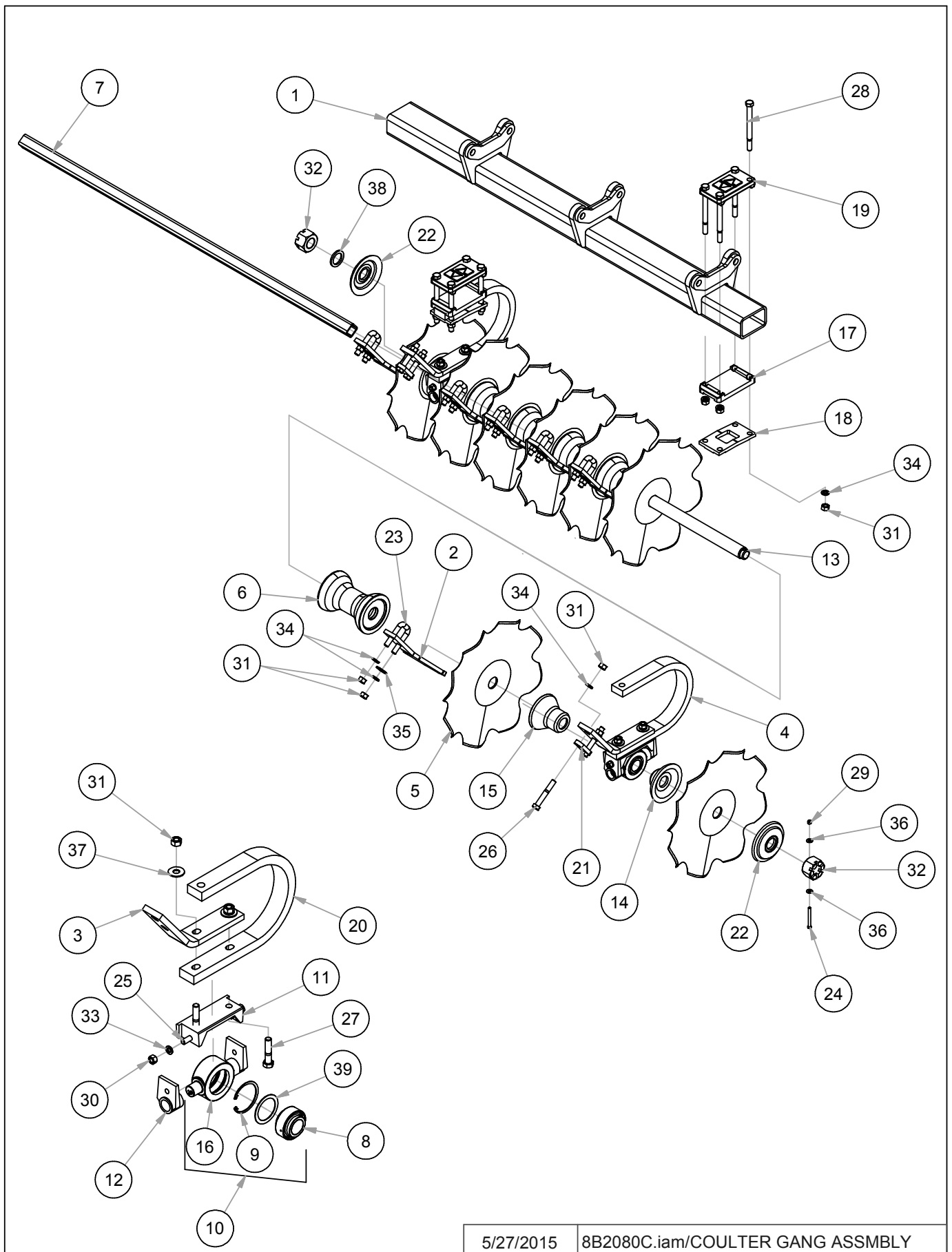


PARTS

VRT DISK ASSEMBLIES

ITEM	PART NUMBER	DESCRIPTION
1	7B0210	STL 5/8" VRT ADJ TOP PLATE
2	7B0215 7B0216	STL 5/8" VRT ADJ BTTM PLATE-L STL 5/8" VRT ADJ BTTM PLATE-R
3	8B1121 8B1122 8B1125 8B1126 8B1128 8B1130 8B1132	GANG TUBE CNTR REAR 62" GANG TUBE CNTR FRNT 62" GANG TUBE CNTR REAR 82" GANG TUBE CNTR FRNT 82" GANG TUBE 2ING 93.5" GANG TUBE WING 154.5" GANG TUBE WING 124.5"
4	8CC1510	DC BLADE ANGLE LOCK 10- (7CC0450)
5	8CC1620	DBL TILLAGE HUB ASSY 14-
6	8CC1587	DUST CAP GBGI TILL HUB 13-
7	8CC1592	DBL SPNDLE WLDMNT TILL HUB 14-
8	8CC1615	DUST CAP GUARD GBGI TILL 13-
9	8D5214	NUT 1/2"-20UNF WHEEL
10	8D5240	SEAL COUNTERFACE GBGI TILLAGE
11	8D5242	SEAL RETAINER GBGI TILLAGE 5BLT
12	8D5243	ROLL PIN 1/4 X 1-1/2"
13	8D5244	NUT FLANGE SLOTTED 1"-14
14	8D5246	V-SEAL GBGI TILL HUB 14-
15	8D5247	STUD 1/2"-NF GBGI TILL HUB
16	8D5250	HUB GBGI TILL AGE-BARE 14-
17	8K7343	BEARING OUTER HD817 LM501349
18	8K4400	SPRING SHANK GNG MNT 2.5"X1.25
19	8K4922S	BLADE DISK 1/4X22"5BLT4"ID LC
20	8K4946	CLAMP 3 HL DSKCHSL HD HUB 12- (7K3862)
21	8K7347	RACE GBGI & OUTR 817 LM501310
22	8X0118	BOLT 3/4-10NC X 4" GR5 YZ
23	8X0119	BOLT 3/4-10NC X 7.5" GR5 YZ
24	8X0122	BOLT 3/4-10NC X 4-1/2" GR5 YZ
25	8X0137	BOLT 1"-10NC X 4" GR5 YZ
26	8X0260	NUT 3/4"-10NC HEX GR2 YZ
27	8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ
28	8X0280	NUT 1"-10NC HEX GR2 YZ
29	8X0306	LOCKWASHER 3/4" YLW ZNC
30	8X0309	LOCKWASHER 1" YZ

PARTS



5/27/2015

8B2080C.iam/COULTER GANG ASSMBLY

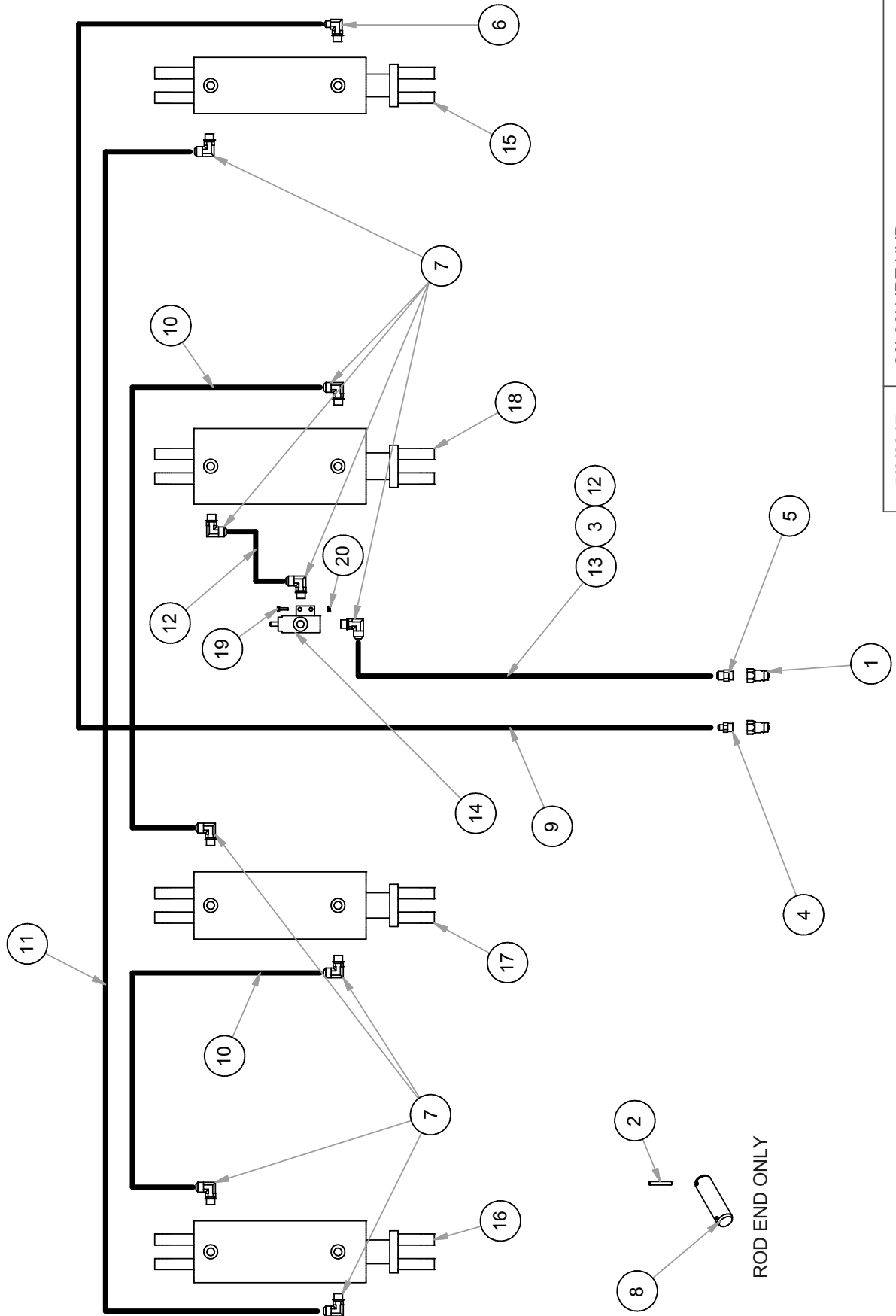
PARTS

VRT COULTER ASSEMBLIES

ITEM	PART NUMBER	DESCRIPTION
1	8B1125 8B1130	GANG TUBE CNTR REAR 82" GANG TUBE WING 154.5
2	8J0192	SCRAPER (7J0807)
3	8J0200	MNT FLAT SCRAPER SPRCLTR 00-
4	8J1000	SPRING SHANK W/BRG&MNTFLT00-
5	8J1021N	CLTR BLADE 8X1.75W NOTCH.26X22
6	8J3010	CAST FULL SPOOL - SUPERCOULTER
7	8J3276 8J3286	SCRAPER MNT TUBE-76" SCRAPER MNT TUBE-86"
8	8K2000	BEARING 211 X 2.02"ID 01-
9	8K2020	RETAINING RING GANG BRNG 84-
10	8K2050	GANG BRNG W/HOUSNG 211 X 2"+ID
11	8K2080	CAST BEARNG MNT BASE DRILLED
12	8K2090	CAST BEARING PIVOT TUBE DRILLED
13	8K2150 8K2160	GANG SHAFT 77" GANG SHAFT 87"
14	8K4009	SPOOL HALF SHORT CLTR DCTL 00-
15	8K4019	SPOOL HALF LONG CLTR DCTL 00-
16	8K4130	HOUSING BEARING
17	8K4200	CAST CLAMP GANG MNT W/PEG (8K4199)
18	8K4210	CAST CLAMP GANG MOUNT (8K4209)
19	8K4220	CAST CLAMP GANG MNT TOP (8K4219)
20	8K4400	SPRING SHANK GNG MNT 2.5"X1.25
21	8K4440	MOUNT PLATE FOR 2" SQ (7K2060)
22	8K5200	WASHER GANG BOLT 2.030"ID
23	8K5505	U-BOLT 3/4 X 2-1/8 X 4-1/4" SQ
24	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 YZ
25	8X0091	BOLT 5/8-11NC X 1-3/4" GR6 YZ
26	8X0113	BOLT 3/4-10NC X 5" GR5 YZ
27	8X0115	BOLT 3/4-10NC X 3-1/2" GR5 YZ
28	8X0120	BOLT 3/4-10NC X 9" GR5 YZ
29	8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ
30	8X0250	NUT 5/8"-11NC HEX GR 2 YZ
31	8X0260	NUT 3/4"-10NC HEX GR2 YZ
32	8X0292	NUT 2"-4.5 HVY HEXSLOT GR2 PLN
33	8X0304	LOCKWASHER 5/8" YLW ZNC
34	8X0306	LOCKWASHER 3/4" YLW ZNC
35	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
36	8X0320	WASHER 3/8" (7/16" ID)FLAT YZ
37	8X0325	WASHER 3/4" (13/16" ID) FLAT PLN
38	8X0366	WASHER 2.03IDX2-7/8ODX 1/4"PLN
39	8X0370	WASHER 3.016"IDX 3.93"ODX 14GA

26'-30' MAIN LIFT HYDRAULIC CIRCUIT

PARTS



5/3/2017 26'-30' VRT HYD

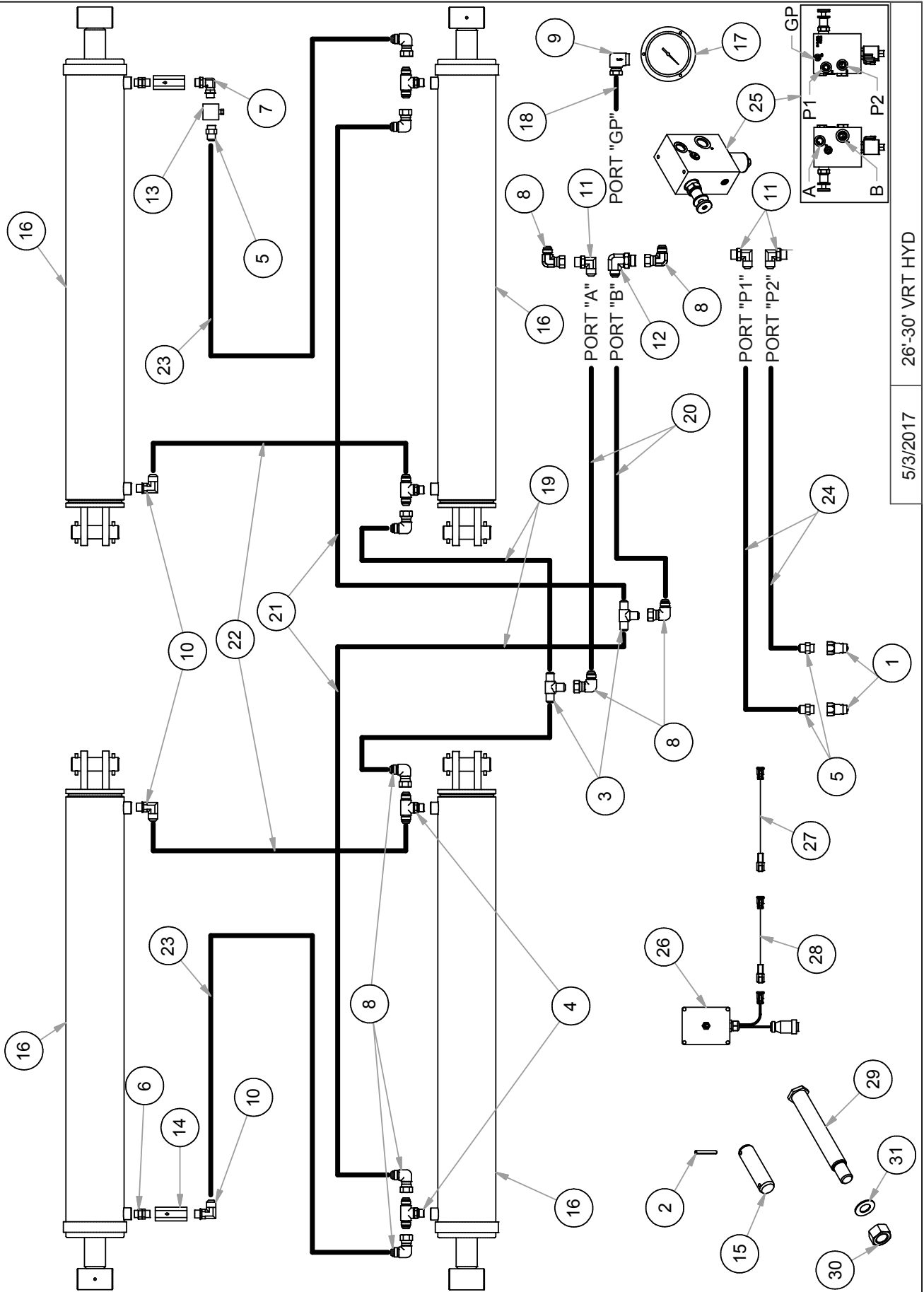
PARTS

26'-30' VRT MAIN LIFT HYDRAULICS PARTS LIST

ITEM	PART NUMBER	DESCRIPTION
1	8D3212	MALE TIP 3/4"-16 ORB ISO
2	8D9108	ROLL PIN 1/4 X 2" ZINC
3	8J5100	#6 JIC(M) X #6 JIC(M) UNION
4	8J5110	#10 JIC(M) X #10 JIC(M) UNION
5	8J5510	3/4"-16 ORB X #6 JIC(M) STR
6	8J5520	3/4"-16 ORB X #10 JIC(M) STR
7	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
8	8J6020	3/4"-16 ORB X #10 JIC(M)90°ADP
9	8K9106	PIN 1-1/4" X 4-3/8" HRDND 1/4HL
10	8N3060	3/8 X 60" HYD HOSE #6FJX3000PSI
11	8N3462	3/8 X 462" HYD HOSE #6FJX3000PSI
12	8N4114	1/2 X 114" HYD HOSE #10FJX3000PSI
13	8N4370	1/2 X 370" HYD HOSE #10FJX3000PSI
14	8N6030	3/4 X 30" HYD HOSE #10FJX3000PSI
15	8N6060	3/4 X 60" HYD HOSE #10FJX3000PSI
16	8N6354	3/4 X 354" HYD HOSE #10FJX3000PSI
17	8T1010	POPPET ASSY HD BLT-ON RAM02-
18	8T1045	HYD CYL 4.5 X 10" REPHASE 96-
19	8T1050	HYD CYL 5 X 10" REPHASE 96-
20	8T1055	HYD CYL 5.5 X 10" REPHASE 96-
21	8T1060A	HYD CYL 6 X 10" REPHASE 13-
22	8X0021A	BOLT 5/16"-18NC X 1" GR5 YZ
23	8X0211	NUT 5/16"-18NC SER FLANGE 7Z

PARTS

26'-30' WING FOLD/DOWNPRESSURE HYDRAULIC CIRCUIT



5/3/2017

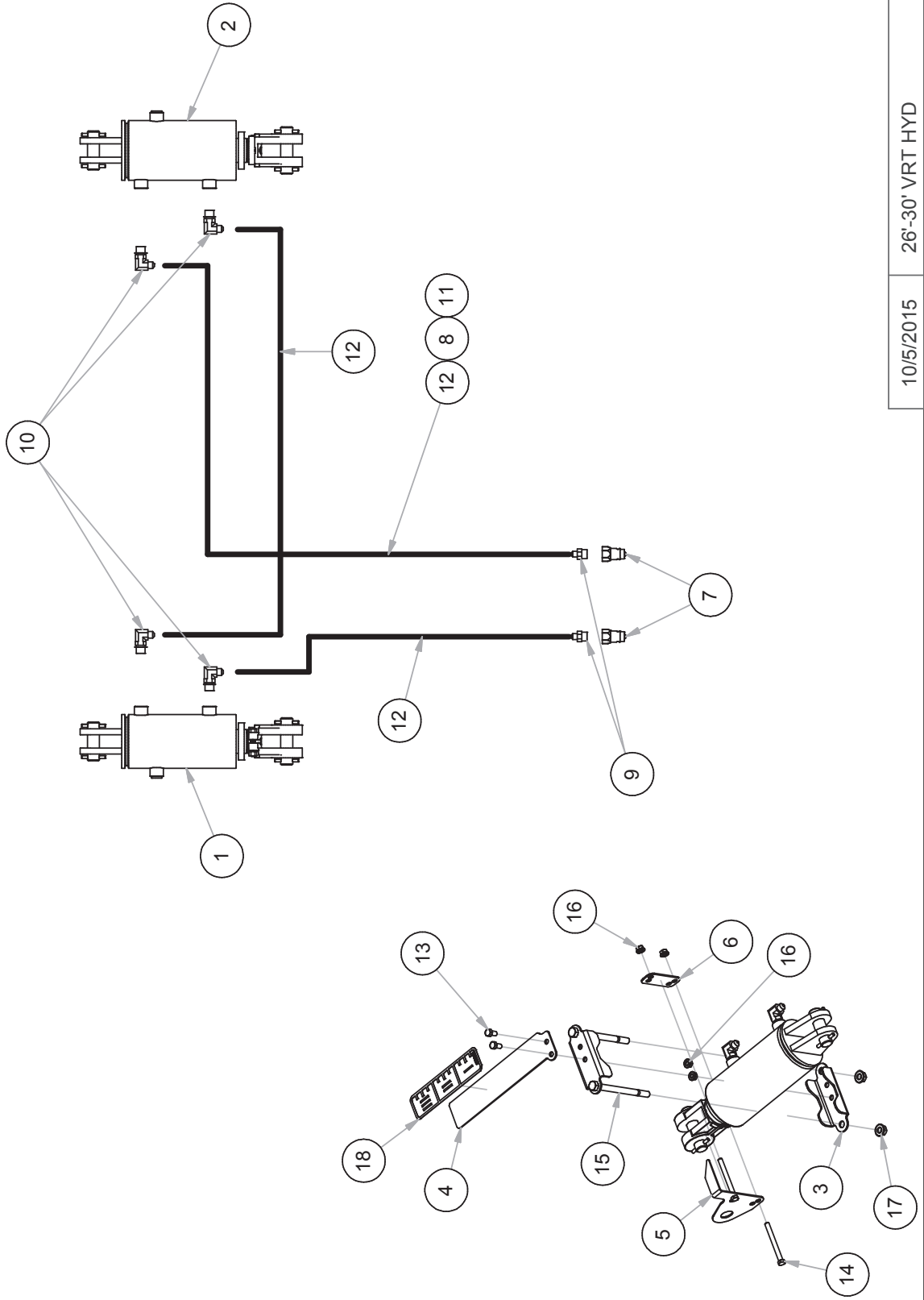
26'-30' VRT HYD

PARTS

26'-30' VRT WING FOLD/DOWN PRESSURE HYDRAULICS PARTS LIST

ITEM	PART NUMBER	DESCRIPTION
1	8D3212	MALE TIP 3/4"-16 ORB ISO
2	8D9108	ROLL PIN 1/4 X 2" ZINC
3	8J5310	TEE #10 JIC (MALE) 3X
4	8J5312	TEE #10 JIC (M2X)X3/4-16ORB BRNCH
5	8J5520	3/4"-16 ORB X #10 JIC(M) STR
6	8J5680	3/4"-16 ORB X 3/4"-16ORB UNION
7	8J5690	3/4-16X3/4-16 ORB M-SW 90° UNION
8	8J5710	#10 JIC(F-SW)X #10 JIC (M) 90°ADP
9	8J5812	1/2"FPT X 1/2" MPT (F-SW) 90°ADP
10	8J6020	3/4"-16 ORB X #10 JIC(M) 90°ADP
11	8J6030	7/8"X#10(M) 90° ADP
12	8J6050	1-1/16" - 12ORB X#10JIC(M) 90° ADP
13	8J7040	THERMAL RELIEF MANIFLD 4000PSI
14	8J7116	3/4"-16 ORB(2X) 1 WAY 1/16" RESTR
15	8K9106	PIN 1-1/4 X 4-3/8" HRDND 1/4HL
16	8K9650	HYD CYL 5 X 36" W/3" STOP TUBE & PIN
17	8N0400	HYD PRESSURE GAUGE 4" PANL MNT
18	8N1036	1/4" X 36" HYD GAUGE LINE 3000PSI
19	8N4035	1/2" X 35" HYD HOSE #10FJX3000PSI
20	8N4048	1/2" X 48" HYD HOSE #10FJX3000PSI
21	8N4120	1/2" X 120" HYD HOSE #10FJX3000PSI
22	8N4160	1/2" X 160" HYD HOSE #10FJX3000PSI
23	8N4300	1/2" X 300" HYD HOSE #10FJX3000PSI
24	8N7010	ADJ DN PRSSR MNFLD W/OVERRIDE
25	8N7012	PRSSR OVERRIDE SWITCHBOX
26	8N7013	PRSSR OVERRIDE CABLE 240"
27	8N7014	PRSSR OVERRIDE CABLE 180"
28	8T3300	BOLT PIVOT CHSL TRP&WNG LFT YZ
29	8X0282	NUT 1"-14TPI TOPLOCK GR 8 Z
30	8X0316	WASHER 1" SAE FLAT YZ

26"-30" GAUGE WHEEL HYDRAULIC CIRCUIT



PARTS

26'-30' VRT GAUGE WHEEL HYDRAULICS PART LIST

ITEM	PART NUMBER	DESCRIPTION
1	8B4040	HYD CYL 4 X 4" REPHASE 15-
2	8B4540	HYD CYL 4.5 X 4" REPHASE 15-
3	8CC0800	DEPTH INDICATOR CYL CLAMP 11-
4	8CC0805	DEPTH INDICATOR FLAT 11-
5	8CC0810	DEPTH INDICATOR POINTER 12-
6	8CC0815	DEPTH INDICATOR POINTRCLAMP
7	8D3212	MALE TIP 3/4"-16 ORB ISO
8	8J5100	#6 JIC(M) X #6 JIC (M) UNION
9	8J5510	3/4"-16 ORB X #6 JIC(M) STR
10	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
11	8N3348	3/8" X 348" HYD HOSE #6FJX3000SPI
12	8N3390	3/8" X 390" HYD HOSE #6FJX3000PSI
13	8N3432	3/8" X 432" HYD HOSE #6FJX3000PSI
14	8X0001	BOLT 3/8-16NC X 3/4" GR 5 YZ
15	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 YZ
16	8X0082	BOLT 1/2-13 NC X 6-1/2" GR5 YZ
17	8X0203	NUT 3/8"-16NC SERFLANG GR 2 YZ
18	8X0246	NUT 1/2"-13NC SERFLANG GR 2 YZ
19	8Z0365	DECAL DEPTH INDICATOR 11-

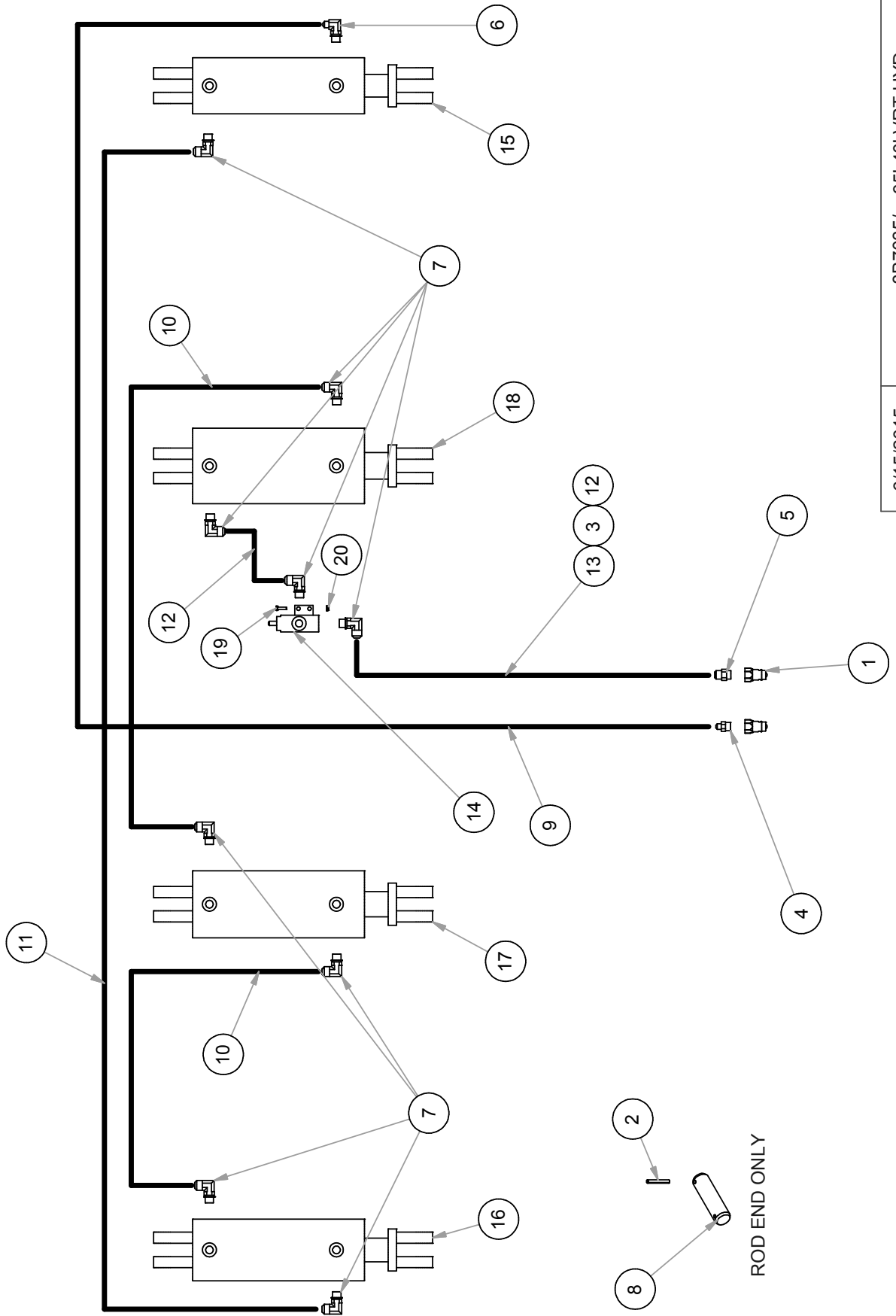
PARTS

26'-30' VRT HITCH HYDRAULICS PARTS LIST

ITEM	PART NUMBER	DESCRIPTION
1	8CC0800	DEPTH INDICATOR CYL CLAMP 11-
2	8CC0805	DEPTH INDICATOR FLAT 11-
3	8CC0810	DEPTH INDICATOR POINTER 12-
4	8CC0815	DEPTH INDICATOR POINTRCLAMP
5	8D3212	MALE TIP 3/4"-16 ORB ISO
6	8J5300	TEE #6 JIC (MALE) 3X
7	8J5510	3/4"-16 ORB X #6 JIC(M) STR
8	8J5700	#6 JIC(F-SW) X #6 JIC(M) 90°ADP
9	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
10	8J7216	#6JIC(M)X6JIC(F) 1/16" RSTR BLKZ
11	8N3028	3/8" X 28" HYD HOSE #6FJX3000PSI
12	8N3216	3/8" X 216" HYD HOSE #6FJX3000SPI
13	8T2040	HYD CYL 4X4" 3500PSI 99-
14	8X0001	BOLT 3/8-16NC X 3/4" GR 5 YZ
15	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 YZ
16	8X0082	BOLT 1/2-13 NC X 6-1/2" GR5 YZ
17	8X0203	NUT 3/8"-16NC SERFLANG GR 2 YZ
18	8X0246	NUT 1/2"-13NC SERFLANG GR 2 YZ
19	8Z0365	DECAL DEPTH INDICATOR 11-

PARTS

35'-40' MAIN LIFT HYDRAULIC CIRCUIT



6/15/2015

8B7035/ 35'-40' VRT HYD

PARTS

35'-40' VRT MAIN LIFT HYDRAULICS

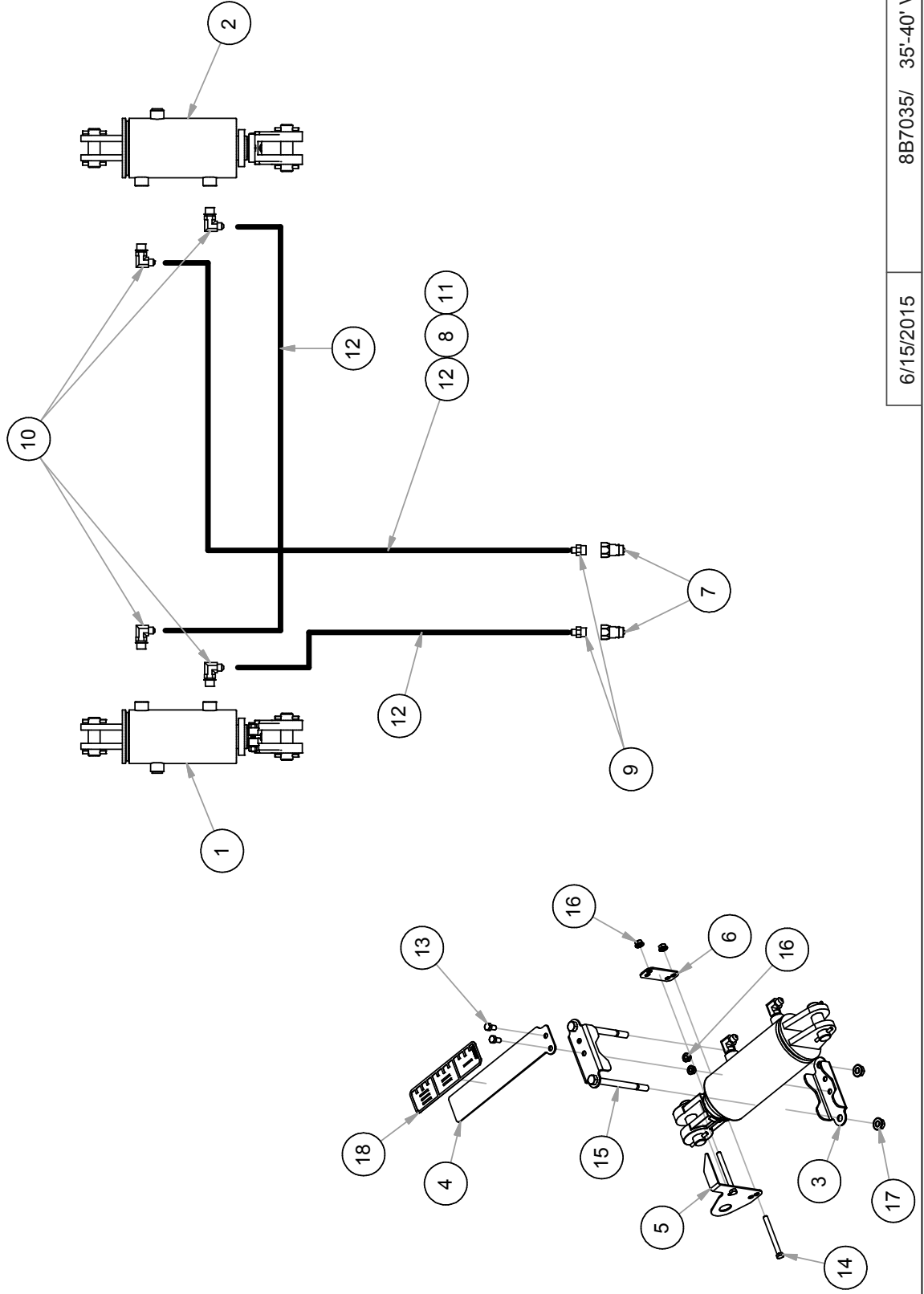
ITEM	PART NUMBER	DESCRIPTION
1	8D3212	MALE TIP 3/4"-16 ORB ISO
2	8D9108	ROLL PIN 1/4 X 2" ZINC
3	8J5110	#10 JIC(M) X #10 JIC(M) UNION
4	8J5510	3/4"-16 ORB X #6 JIC(M) STR
5	8J5520	3/4"-16 ORB X #10 JIC(M) STR
6	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
7	8J6020	3/4"-16 ORB X #10 JIC(M)90°ADP
8	8K9106	PIN 1-1/4" X 4-3/8" HRDND 1/4HL
9	8N3570	3/8 X 570" HYD HOSE #6FJX3000PSI
10	8N4138	1/2 X 138" HYD HOSE #10FJX3000PSI
11	8N4420	1/2 X 420" HYD HOSE #10FJX3000PSI
12	8N6060	3/4 X 60" HYD HOSE #10FJX3000PSI
13	8N6354	3/4 X 354" HYD HOSE #10FJX3000PSI
14	8T1010	POPPET ASSY HD BLT-ON RAM02-
15	8T1045	HYD CYL 4.5 X 10" REPHASE 96-
16	8T1050	HYD CYL 5 X 10" REPHASE 96-
17	8T1055	HYD CYL 5.5 X 10" REPHASE 96-
18	8T1060A	HYD CYL 6 X 10" REPHASE 13-
19	8X0000B	BOLT 1/4"-20NC X 1" GR5 YZ
20	8X0223	NUT 1/4"-20NC SER FLANGE 7Z

PARTS

35'-40' VRT HITCH HYDRAULICS

ITEM	PART NUMBER	DESCRIPTION
1	8CC0800	DEPTH INDICATOR CYL CLAMP 11-
2	8CC0805	DEPTH INDICATOR FLAT 11-
3	8CC0810	DEPTH INDICATOR POINTER 12-
4	8CC0815	DEPTH INDICATOR POINTRCLAMP
5	8D3212	MALE TIP 3/4"-16 ORB ISO
6	8J5300	TEE #6 JIC (MALE) 3X
7	8J5510	3/4"-16 ORB X #6 JIC(M) STR
8	8J5700	#6 JIC(F-SW) X #6 JIC(M) 90°ADP
9	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
10	8J7216	#6JIC(M)X6JIC(F) 1/16" RSTR BLKZ
11	8N3035	3/8" X 35" HYD HOSE #6FJX3000PSI
12	8N3288	3/8" X 288" HYD HOSE #6FJX3000SPI
13	8T2040 8T2041	HYD CYL 4X4" 3500PSI 99- SEAL KIT 4X4" CTD 8T2040 11-
14	8X0001	BOLT 3/8-16NC X 3/4" GR 5 YZ
15	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 YZ
16	8X0082	BOLT 1/2-13 NC X 6-1/2" GR5 YZ
17	8X0203	NUT 3/8"-16NC SERFLANG GR 2 YZ
18	8X0246	NUT 1/2"-13NC SERFLANG GR 2 YZ
19	8Z0365	DECAL DEPTH INDICATOR 11-

35'-40' GAUGE WHEEL HYDRAULIC CIRCUIT



8B7035/ 35'-40' VRT HYD

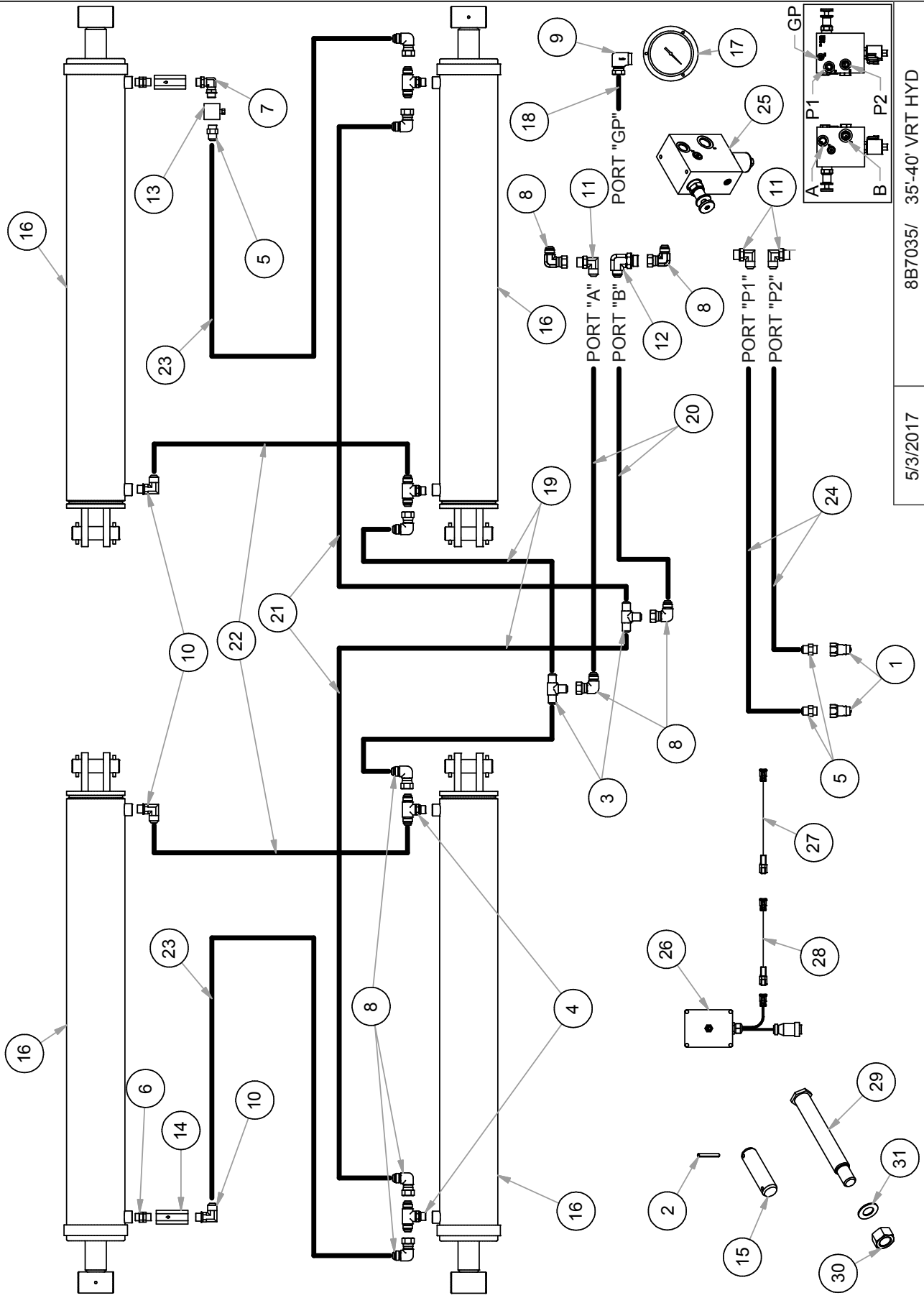
6/15/2015

PARTS

35'-40' VRT GAUGE WHEEL HYDRAULICS

ITEM	PART NUMBER	DESCRIPTION
1	8B4040 8B4038	HYD CYL 4 X 4" REPHASE 15- SEAL KIT 4.0 X 4"CTD 8B4040 15-
2	8B4540 8B4538	HYD CYL 4.5 X 4" REPHASE 15- SEAL KIT 4.5 X 4"CTD 8B4540 15-
3	8CC0800	DEPTH INDICATOR CYL CLAMP 11-
4	8CC0805	DEPTH INDICATOR FLAT 11-
5	8CC0810	DEPTH INDICATOR POINTER 12-
6	8CC0815	DEPTH INDICATOR POINTRCLAMP
7	8D3212	MALE TIP 3/4"-16 ORB ISO
8	8J5100	#6 JIC(M) X #6 JIC (M) UNION
9	8J5510	3/4"-16 ORB X #6 JIC(M) STR
10	8J6010	3/4"-16 ORB X #6 JIC(M) 90°ADP
11	8N3060	3/8" X 60" HYD HOSE #6FJX3000PSI
12	8N3432	3/8" X 432" HYD HOSE #6FJX3000SPI
13	8X0001	BOLT 3/8-16NC X 3/4" GR 5 YZ
14	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 YZ
15	8X0082	BOLT 1/2-13 NC X 6-1/2" GR5 YZ
16	8X0203	NUT 3/8"-16NC SERFLANG GR 2 YZ
17	8X0246	NUT 1/2"-13NC SERFLANG GR 2 YZ
18	8Z0365	DECAL DEPTH INDICATOR 11-

35'-40' WING FOLD/DOWNPRESSURE HYDRAULIC CIRCUIT



8B7035/ 35'-40' VRT HYD

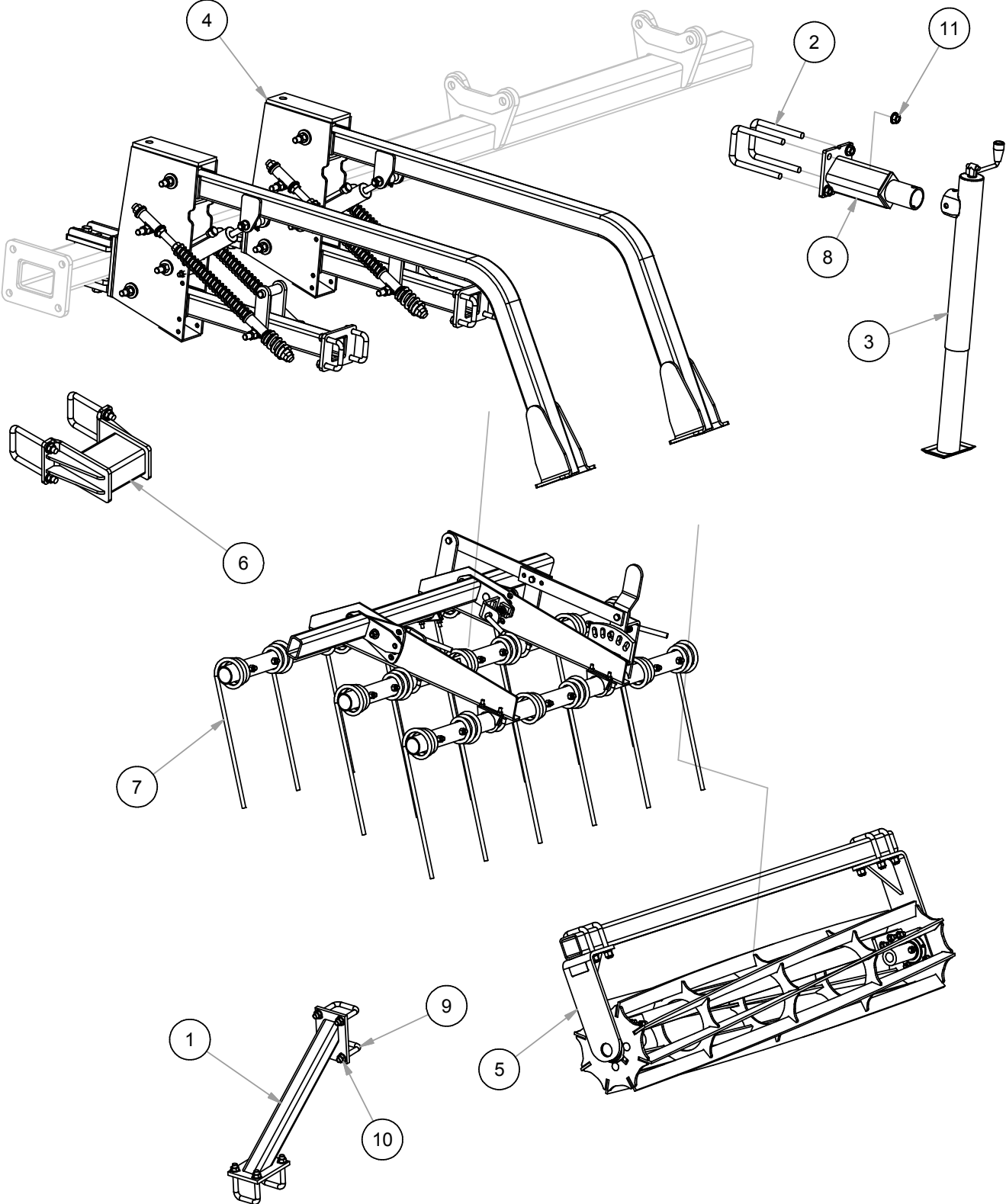
5/3/2017

PARTS

35'-40' VRT WING FOLD/DOWN PRESSURE HYDRAULICS

ITEM	PART NUMBER	DESCRIPTION
1	8D3212	MALE TIP 3/4"-16 ORB ISO
2	8D9108	ROLL PIN 1/4 X 2" ZINC
3	8J5310	TEE #10 JIC (MALE) 3X
4	8J5312	TEE #10 JIC (M2X)X3/4-16ORB BRNCH
5	8J5520	3/4"-16 ORB X #10 JIC(M) STR
6	8J5680	3/4"-16 ORB X 3/4"-16ORB UNION
7	8J5690	3/4-16X3/4-16 ORB M-SW 90° UNION
8	8J5710	#10 JIC(F-SW)X #10 JIC (M) 90°ADP
9	8J5812	1/2"FPT X 1/2" MPT (F-SW) 90°ADP
10	8J6020	3/4"-16 ORB X #10 JIC(M) 90°ADP
11	8J6030	7/8"X#10(M) 90° ADP
12	8J6050	1-1/16" - 12ORB X#10JIC(M) 90° ADP
13	8J7040	THERMAL RELIEF MANIFLD 4000PSI
14	8J7116	3/4"-16 ORB(2X) 1 WAY 1/16" RESTR
15	8K9106	PIN 1-1/4 X 4-3/8" HRDND 1/4HL
16	8K9650	HYD CYL 5 X 36" W/3" STOP TUBE & PIN
17	8N0400	HYD PRESSURE GAUGE 4" PANL MNT
18	8N1036	1/4" X 36" HYD GAUGE LINE 3000PSI
19	8N4035	1/2" X 35" HYD HOSE #10FJX3000PSI
20	8N4048	1/2" X 48" HYD HOSE #10FJX3000PSI
21	8N4070	1/2" X 70" HYD HOSE #10FJX3000PSI
22	8N4120	1/2" X 120" HYD HOSE #10FJX3000PSI
23	8N4160	1/2" X 160" HYD HOSE #10FJX3000PSI
24	8N4370	1/2" X 370" HYD HOSE #10FJX3000PSI
25	8N7010	ADJ DN PRSSR MNFLD W/OVERRIDE
26	8N7012	PRSSR OVRIDE SWITCHBOX
27	8N7013	PRSSR OVRIDE CABLE 240"
28	8N7014	PRSSR OVRIDE CABLE 180"
29	8T3300	BOLT PIVOT CHSL TRP&WNG LFT YZ
30	8X0282	NUT 1"-14TPI TOPLOCK GR 8 Z
31	8X0316	WASHER 1" SAE FLAT YZ

PARTS

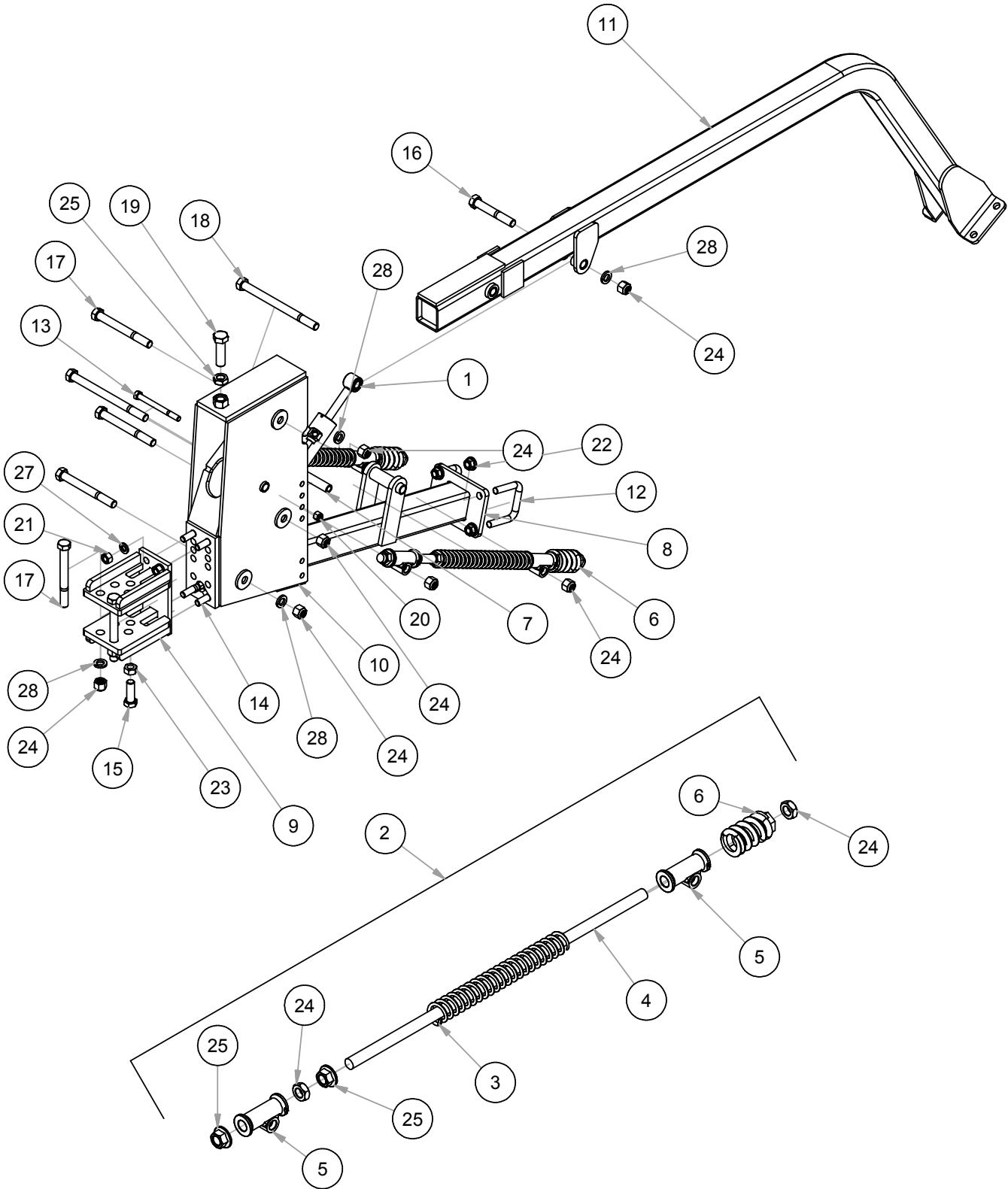


PARTS

VRT MOUNTED ATTACHMENTS

ITEM	PART NUMBER	DESCRIPTION
1	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4" SQ
2	8D8523	JACK 8000# DROPLEG 5/8X4.25PIN
3	8H2328	MNTG ARM ASSY HRRW HYD BSKT
4	8H2716 8H2718 8H2719	RLLNG BSKT ASSY 6FT (SHOWN) RLLNG BSKT ASSY 8FT RLLNG BSKT ASSY 10FT
5	8HD5205	SETBACK BRKT W/HRDWARE (26' & 30' ONLY)
6	8HD5361Q 8HD5381Q 8HD5401Q	6' 3BR M104SECT ASSY QADJ (SHOWN) 8' 3BR M104 SECT ASSY QADJ 10' 3BR M104 SECT ASSY QADJ
7	8J4290	REAR JACK ATTACH
8	8X0266	NUT 3/4"-10NC SER FLANG GR2 YZ

PARTS



5/24/2016

8H2328.iam/HYD MNTG ARM ASSY

PARTS

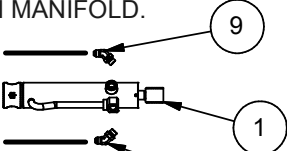
VRT HYDRAULIC MOUNTING ARMS

ITEM	PART NUMBER	DESCRIPTION
1	8CA1756	HYD CYL 1.25 X 6" TRIP
2	8H1396	ROD ASSY 7/8" DBL SWVL
3	8H1307	SPRING PRESS 1.54OD- 15" 70#/"
4	8H1316	ROD
5	8H1328	CAST SWVL 8H1327 PNTD
6	8H2131A	ADJ NUT W/WLDD SPRING 7/8
7	8H2015	PIPE SPACER 1/2 X 3-7/8" 10-
8	8H2135	CARRIER ARM 34" DUAL SPRING
9	8H2251	MTD ATTCH BRKT BOLTON NRRW
10	8H2612	MNTG BRKT HRRW/HYD BSKT
11	8H2619	MNTG ARM HYD RLLNG BSKT
12	8W1205	U-BOLT 5/8X3.06X 3.25" SQ
13	8X0076	BOLT 1/2-13NC X 5-1/2" GR5 ZDI
14	8X0093	BOLT 5/8-11NC X 2" GR5 YZ
15	8X0112	BOLT 3/4-10NC X 2-1/4" GR5 YZ
16	8X0113	BOLT 3/4-10NC X 5" GR5 YZ
17	8X0117	BOLT 3/4-10NC X 7" GR5 ZDI
18	8X0125	BOLT 3/4-10NC X 10" GR5 ZDI
19	8X0133A	BOLT 7/8-9NC X 3" GR5 FULL THD
20	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
21	8X0250	NUT 5/8"-11NC HEX GR2 YZ
22	8X0256	NUT 5/8"-11NC SER FLANG GR2 YZ
23	8X0259	NUT 3/4"-10NC JAM GR2 YZ
24	8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ
25	8X0269	NUT 7/8"-9NC JAM GR2 ZDI
26	8X0274	NUT 7/8"-9NC SERFLANG GR2 YZ
27	8X0304	LOCKWASHER 5/8" YLW ZNC
28	8X0306	LOCKWASHER 3/4" YLW ZNC

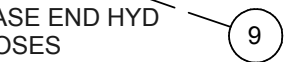
PARTS

26'-30'

ROD END HYD
HOSES
GO TO PORT A
ON MANIFOLD.



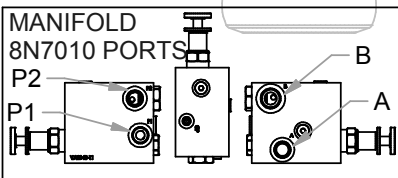
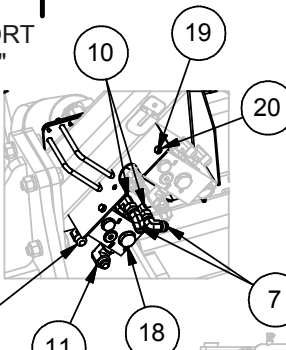
BASE END HYD
HOSES
GO TO PORT B
ON MANIFOLD.



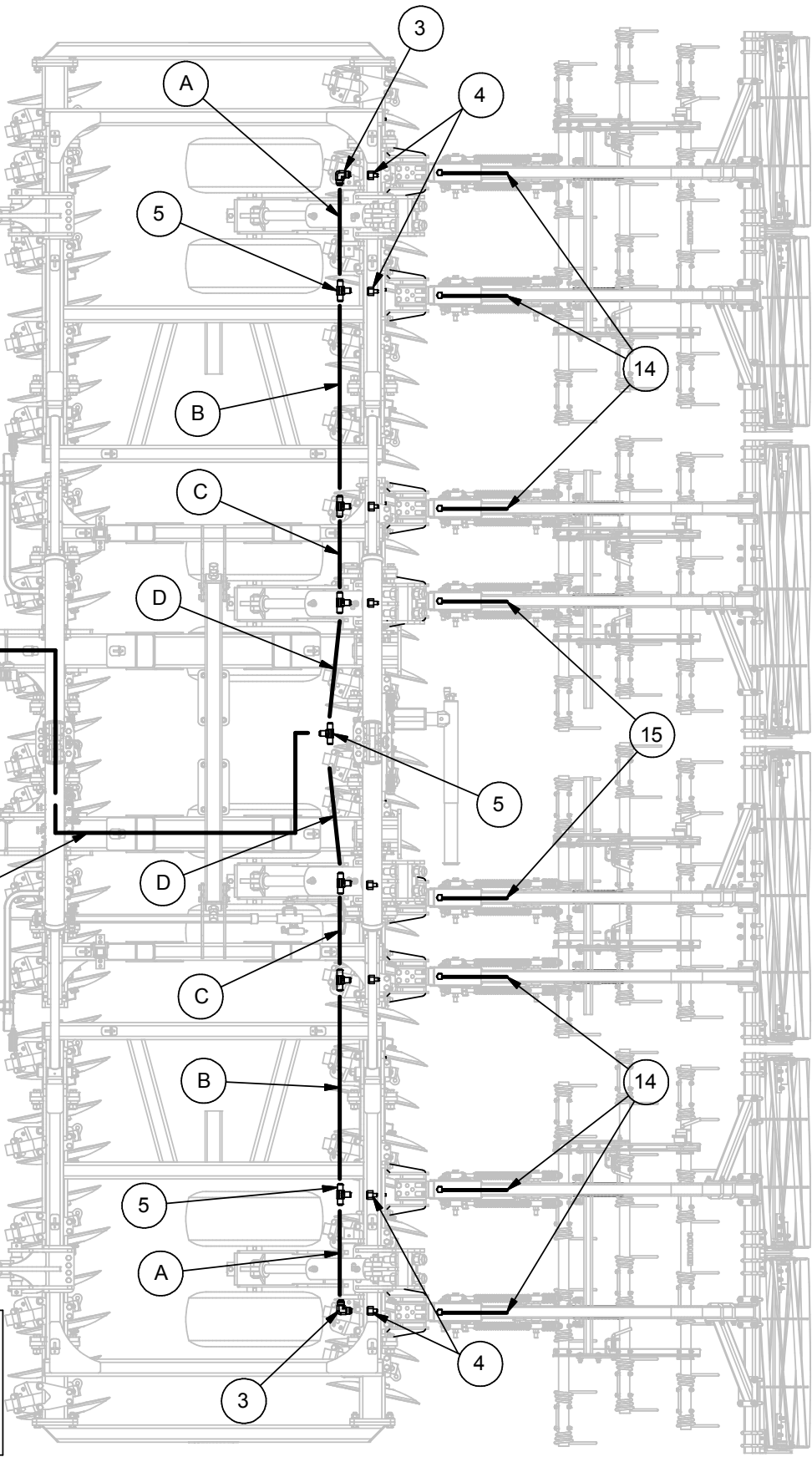
17 TO PORT P1 & P2
ON MANIFOLD



TO PORT
"GP"



NOTE: HOSE/FITTING LAYOUT IS SAME FOR ROD
AND BASE ENDS OF HYDRAULIC CYLINDERS.



10/22/2015

26' VRT.iam/HYD_MNTD_ARMS

PARTS

26'-30' VRT HYDRAULIC MOUNTING ARM HYDRAULICS

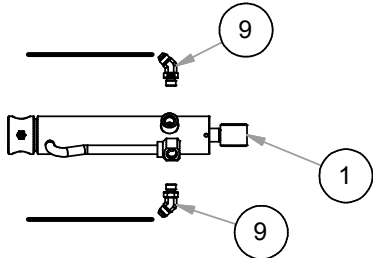
ITEM	PART NUMBER	DESCRIPTION
1	8CA1756	HYD CYL 1.75 X 6" HYD BSKT 10-
2	8D3212	MALE TIP 3/4"-16 ORB ISO
3	8J5112	#10 JIC(M) X #10 JIC(M) 90°
4	8J5200	#10 JIC(F) X #6 JIC(M) HEX BUSH
5	8J5310	TEE #10 JIC (MALE) 3X
6	8J5520	3/4"-16 ORB X #10 JIC(M) STR
7	8J5710	#10 JIC(F-SW)X#10 JIC(M)°ADP
8	8J5812	1/2"FPT X 1/2"MPT(F-SW)90°ADP
9	8J5995	9/16"-18 ORB X #6 JIC(M) 45°ADP
10	8J6030	7/8"-14 ORB X #10 JIC(M)90°ADP
11	8J6050	1-1/16" - 12ORB X #10JIC(M)90°ADP
12	8N0400	HYD PRESSURE GAUGE 4" PANL MNT
13	8N1036	1/4" X 36" HYD GAUGE LINE3000PSI
14	8N3048	3/8" X 48" HYD HOSE #6FJX3000PSI
15	8N3035	3/8" X 35" HYD HOSE #6FJX3000PSI
16	8N6124	3/4" X 124" HYD HOSE #10FJX3000PSI
17	8N6370	3/4" X 370" HYD HOSE #10FJX3000PSI
18	8N7000	ADJ DOWN PRESSURE MANIFLD 12-
19	8X0021	BOLT 5/16-18NC X 3/4" GR5 YZ
20	8X0300	LOCKWASHER 5/16" YLW ZNC
A		26' - 1/2" X 20" HYD HOSE W/#10JIC(F) SWVL ENDS 30' - 1/2" X 48" HYD HOSE W/#10JIC(F) SWVL ENDS
B		1/2" X 74" HYD HOSE W/#10JIC(F) SWVL ENDS
C		1/2" X 20" HYD HOSE W/#10JIC(F) SWVL ENDS
D		1/2" X 42" HYD HOSE W/#10JIC(F) SWVL ENDS

PARTS

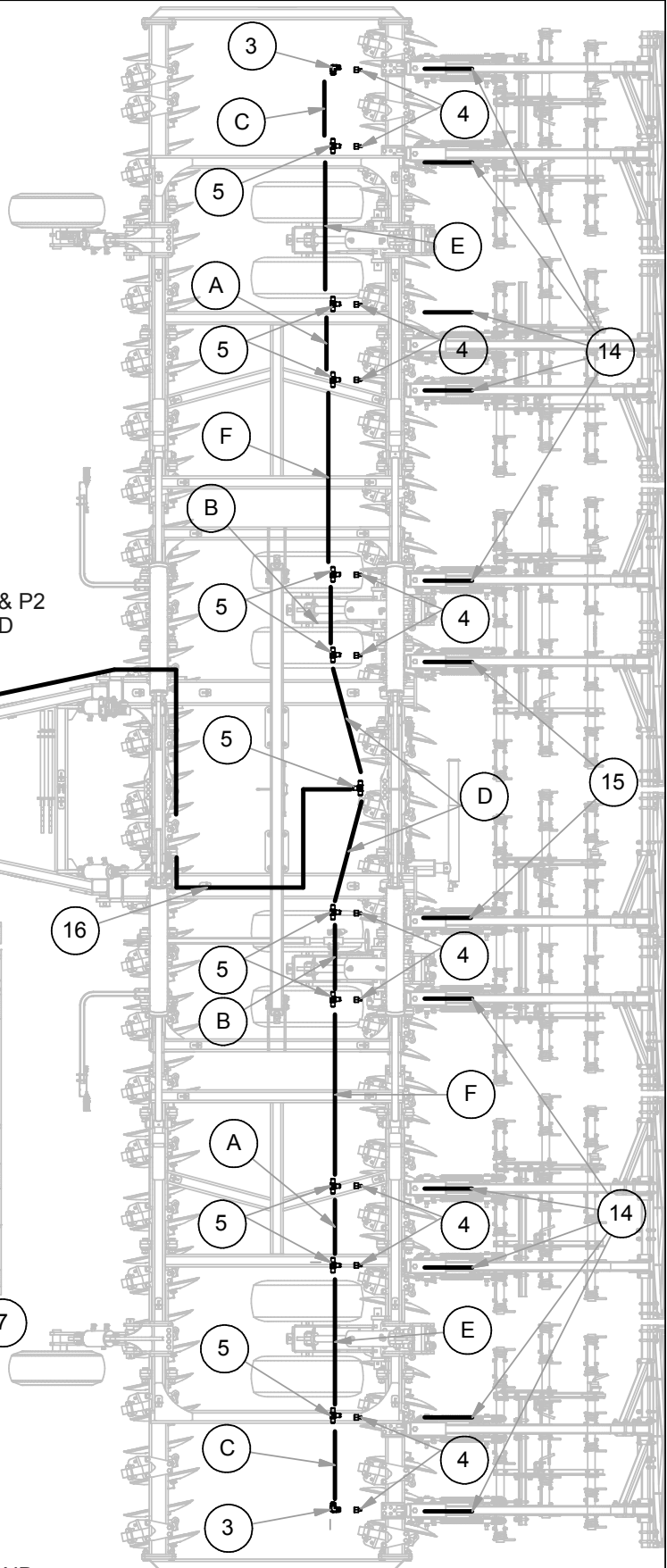
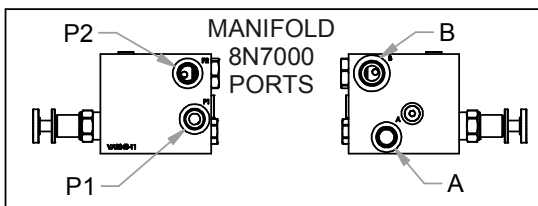
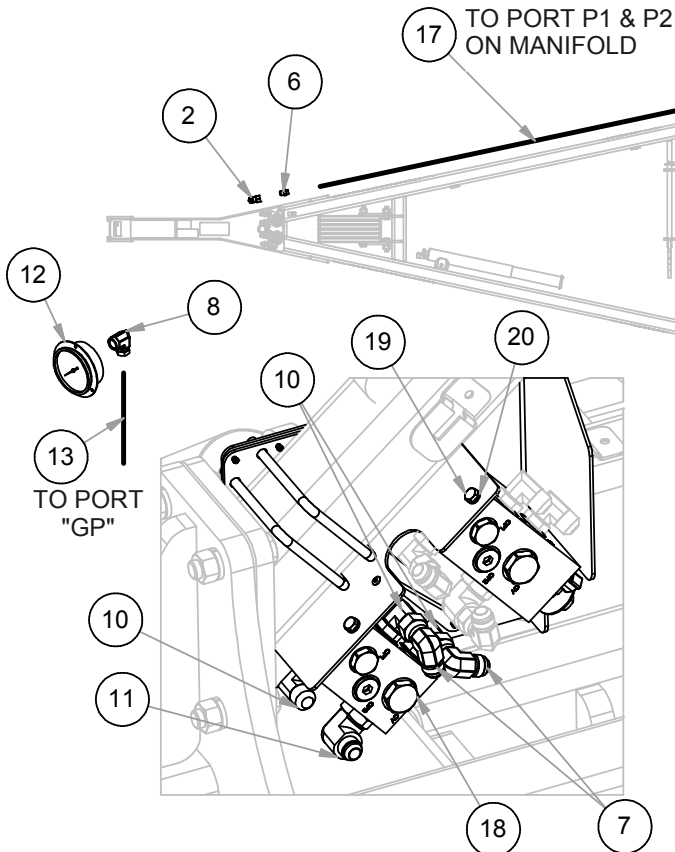
35'-40'

35' VRT DOES NOT CONTAIN HOSES A & C.

ROD END HYD HOSES
GO TO PORT A ON
MANIFOLD.



BASE END HYD HOSES
GO TO PORT B ON
MANIFOLD.



NOTE: HOSE/FITTING LAYOUT IS SAME FOR ROD AND
BASE ENDS OF HYDRAULIC CYLINDERS.

8/9/2017

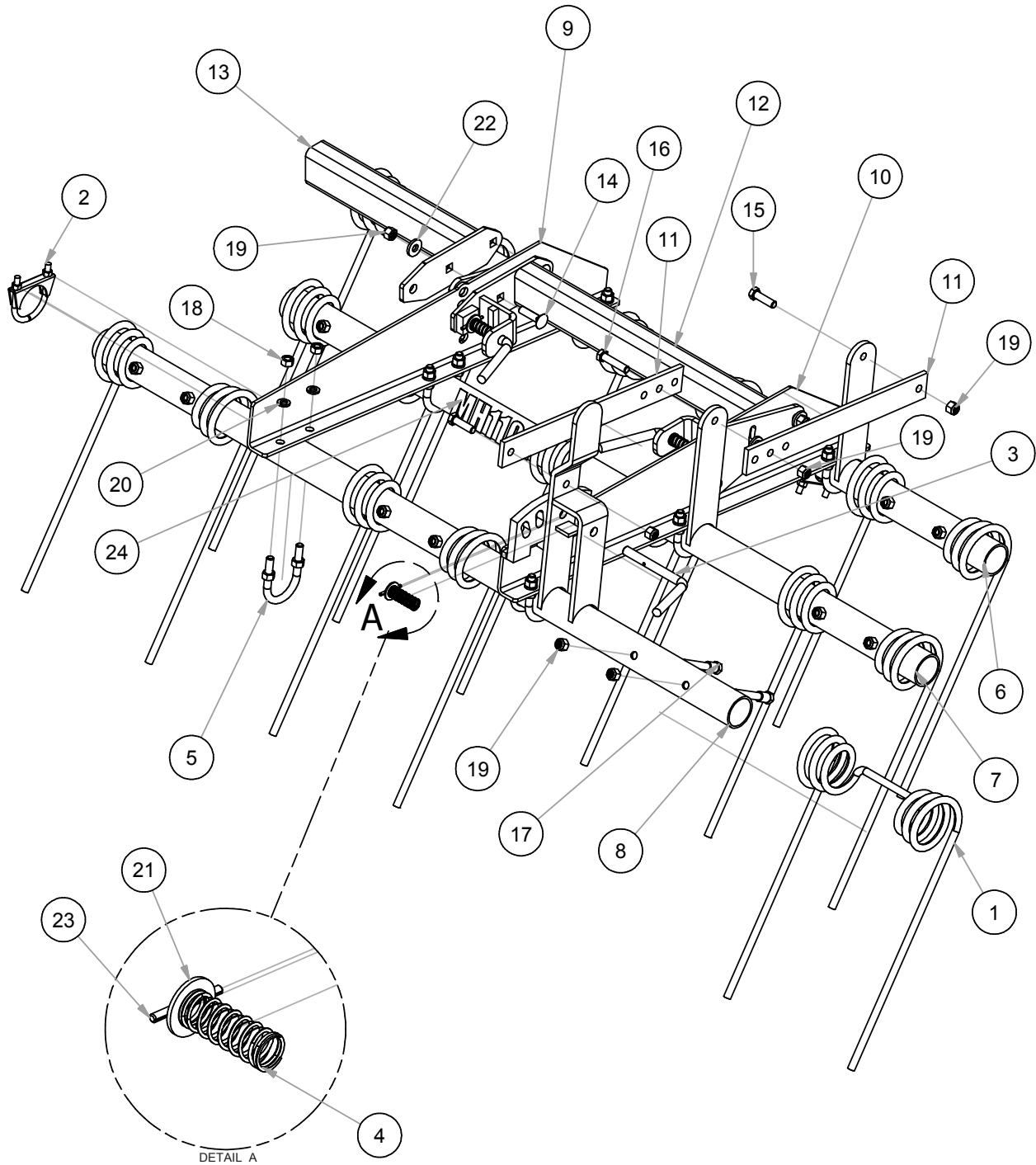
40' VRT.iam/HYD_MNTD_ARMS

PARTS

35'-40' VRT HYDRAULIC MOUNTING ARM HYDRAULICS

ITEM	PART NUMBER	DESCRIPTION
1	8CA1756	HYD CYL 1.75 X 6" HYD BSKT 10-
2	8D3212	MALE TIP 3/4"-16 ORB ISO
3	8J5112	#10 JIC(M) X #10 JIC(M) 90°
4	8J5200	#10 JIC(F) X #6 JIC(M) HEX BUSH
5	8J5310	TEE #10 JIC (MALE) 3X
6	8J5520	3/4"-16 ORB X #10 JIC(M) STR
7	8J5710	#10 JIC(F-SW) X #10 JIC(M) 90° ADP
8	8J5812	1/2" FPT X 1/2" MPT(F-SW) 90° ADP
9	8J5995	9/16"-18 ORB X #6 JIC(M) 45° ADP
10	8J6030	7/8"-14 ORB X #10 JIC(M) 90°ADP
11	8J6050	1-1/16" - 12ORB X #10 JIC(M) 90° ADP
12	8N0400	HYD PRESSURE GAGE 4" PANL MNT
13	8N1036	1/4X 36" HYD GAUGE LINE 3000PSI
14	8N3028	3/8X 28" HYD HOSE #6 FJX3000PSI
15	8N3035	3/8X 35" HYD HOSE #6 FJX3000PSI
16	8N6124	3/4" X 124" HYD HOSE #10FJX3000PSI
17	8N6370	3/4" X 370" HYD HOSE #10FJX3000PSI
18	8N7000	ADJ DOWN PRESSURE MANIFLD 12-
19	8X0021	BOLT 5/16-18NC X 3/4" GR5 YZ
20	8X0300	LOCKWASHER 5/16" YLW ZNC
A		1/2" X 24" HYD HOSE #10FJX3000PSI
B		1/2" X 26" HYD HOSE #10FJX3000PSI
C		1/2" X 30" HYD HOSE #10FJX3000PSI
D		1/2" X 42" HYD HOSE #10FJX3000PSI
E		1/2" X 60" HYD HOSE #10FJX3000PSI
F		1/2" X 84" HYD HOSE #10FJX3000PSI

PARTS



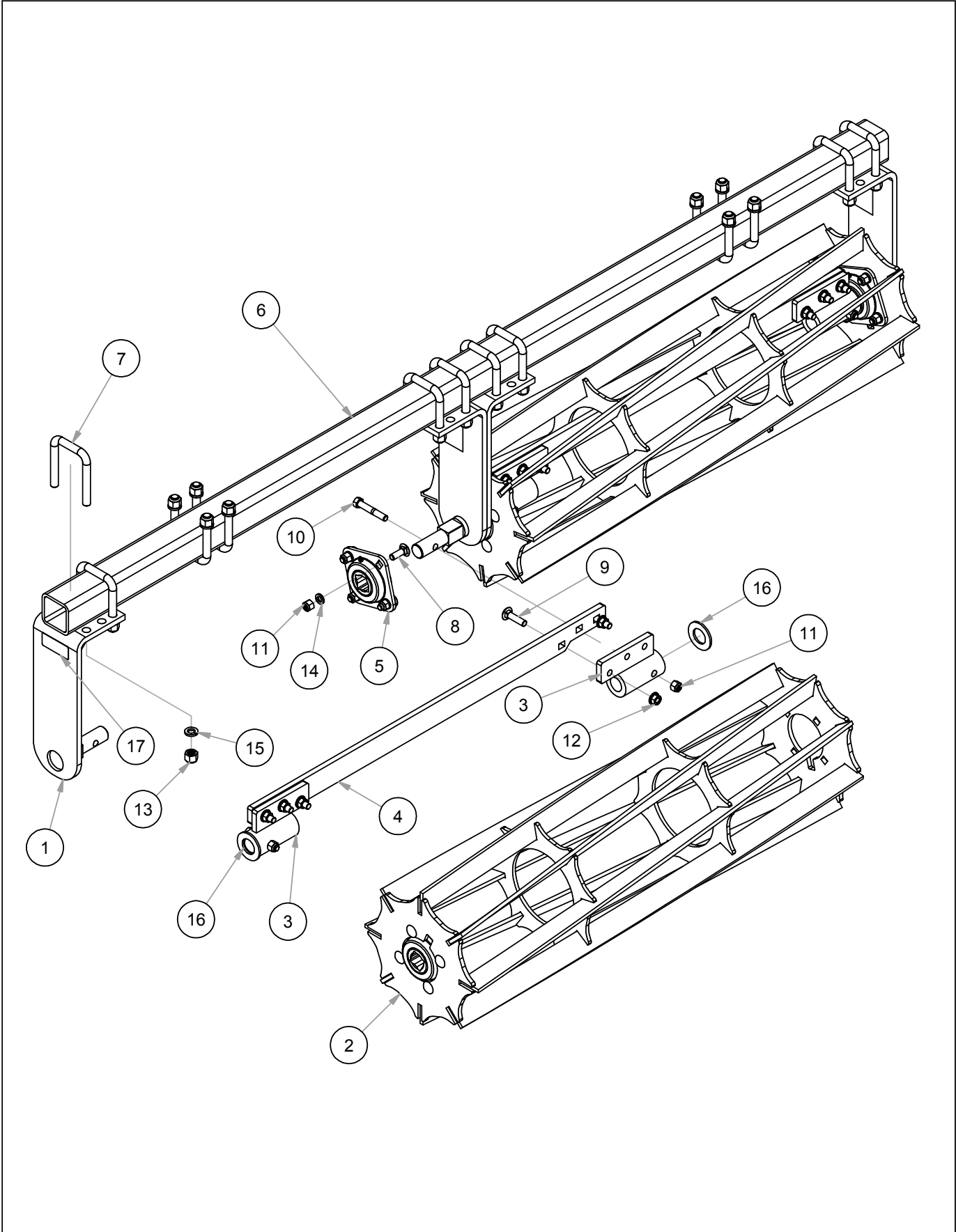
6/5/2015

8HD5361Q.iam/6' 3BR M104

PARTS**VRT MOUNTED HARROWS**

ITEM	PART NUMBER	DESCRIPTION
1	8H1180S	HARROW TOOTH 1/2 X 20" M104/SH
2	8HD0080	PIPE CLAMP 2-1/2"ID PLATED ZDI
3	8HD0150	PIN
4	8HD0160	COMPRESSION SPRING
5	8HD0200	U-BOLT 1/2" X 2-3/8" X 3-9/16" RND
6	8HD5052 8HD5072	1ST PIPE W/LVR 6' 3OR4BR 1ST PIPE W/LVR 8' 104/6 3OR4BR
7	8HD5054 8HD5074	2ND PIPE W/LVR 6' 3OR4BR 2ND PIPE W/LVR 8' 104/6 3OR4BR
8	8HD5056Q 8HD5076Q	3RD PIPE/LVR6' 3BR104/6QADJ 3RD PIPE/LVR8' 3BR104/6QADJ
9	8HD5111	SIDE PLT 1/4"3BR QADJ LEFT
10	8HD5112	SIDE PLT 1/4"3BR QADJ RGHT
11	8HD5115	ADJUSTABLE CONNECTING BAR
12	8HD5141 8HD5151	CROSS TUBE W/FLATS 6' QADJ CROSS TUBE W/FLATS 8' QADJ
13	8HD5181	EXT BRKT QADJ 2ND ARM 15"
14	8X0065	CRG 1/2-13NC X 2" GR5 YZ
15	8X0066	BOLT 1/2-13NC X 1-3/4" GR5 YZ
16	8X0067	BOLT 1/2-13NC X 2-1/4" GR5 YZ
17	8X0079	BOLT 1/2-13X4.12"SHOULDR GR2 YZ
18	8X0240	NUT 1/2"-13NC HEX GR2 YZ
19	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
20	8X0303	LOCKWASHER 1/2" YLW ZNC
21	8X0323	WASHER 5/8" SAE FLAT YZ
22	8X0330	WASHER 17/32"ID X 1.25"OD YZ
23	8X0520	ROLL PIN 3/16 X 2" ZINC CLEAR
24	8Z0114	MH1104 DECAL

PARTS

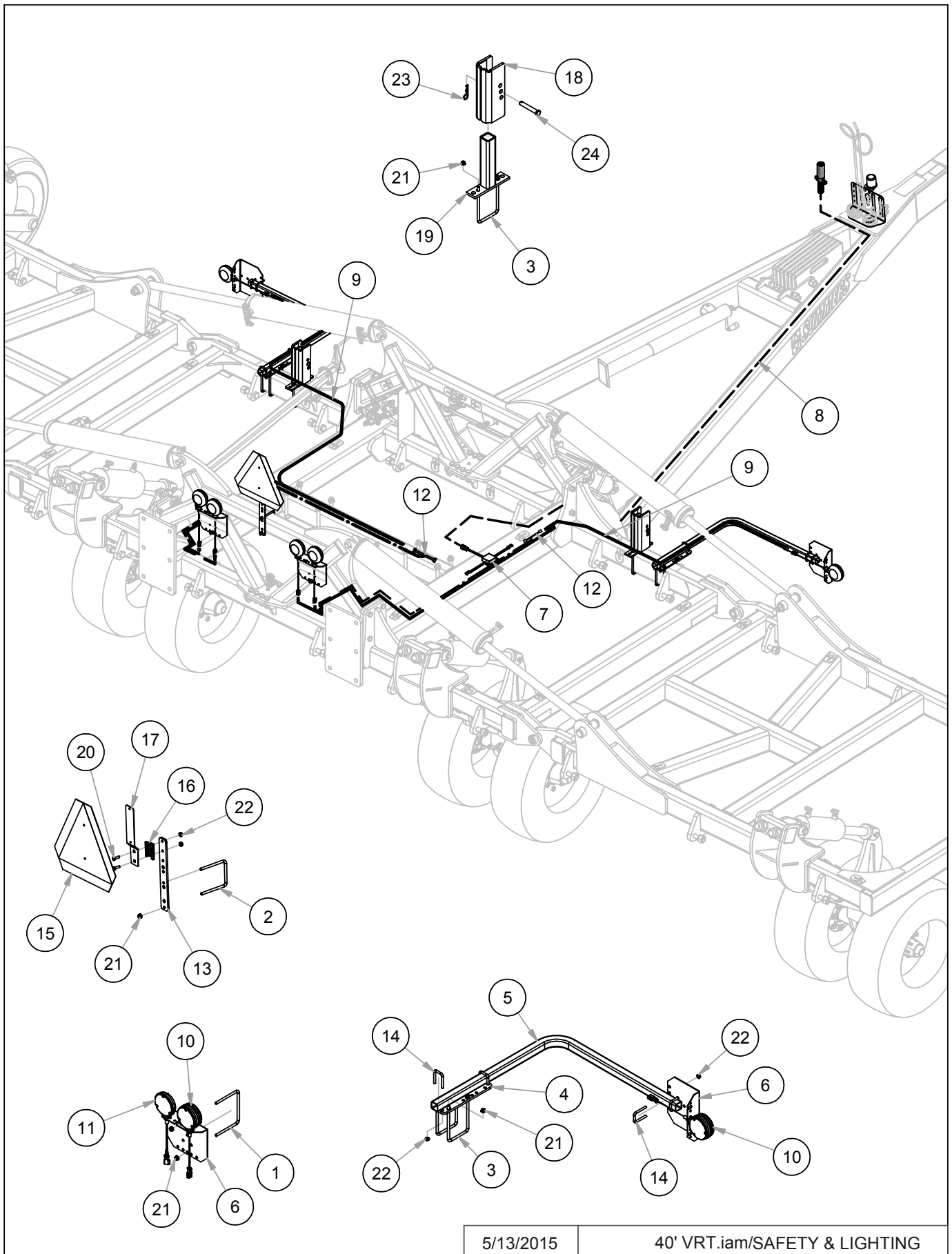


PARTS

VRT ROLLING BASKETS

ITEM	PART NUMBER	DESCRIPTION
1	8H2601 8H2601B	RLLNG BSKT ENDPLATE 4SCRPR -2017 RLLNG BSKT ENDPLATE 4SCRPR 2018-
2	8H2634 8H2636	RLLNG BSKT 4' REEL ONLY RLLNG BSKT 6' REEL ONLY
3	8H2660 8H2660B	RLLING BSKT SCRPR MNT -2017 RLLING BSKT SCRPR MNT 2018-
4	8H2664 8H2666	4' BSKT SCRAPER (40.5") 6' BSKT SCRAPER (63.5")
5	8H2702	BEARING 1-1/4" SQ FLNG4BLT
6	8H2708 8H2710	TUBE SQ 3 X 4T- 94" BSKT MNT TUBE SQ 3 X 4T - 118" BSKT MNT
7	8S0358	U-BOLT 5/8 X 3-1/16 X 4-1/2" SQ.
8	8X0064	CRG 1/2-13NC X 1-1/2" GR5 YZ
9	8X0065	CRG 1/2-13NC X 2" GR5 YZ
10	8X0069	BOLT 1/2-13NC X 3" GR5 YZ
11	8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ
12	8X0244	NUT 1/2"-13NC FLANG TOP LOCK Z
13	8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ
14	8X0303	LOCKWASHER 1/2" YLW ZNC
15	8X0304	LOCKWASHER 5/8" YLW ZNC
16	8X0327	WASHER 1-1/4" SAE FLAT YZ
17	8Z0046	PATENT PENDING DECAL

PARTS



5/13/2015

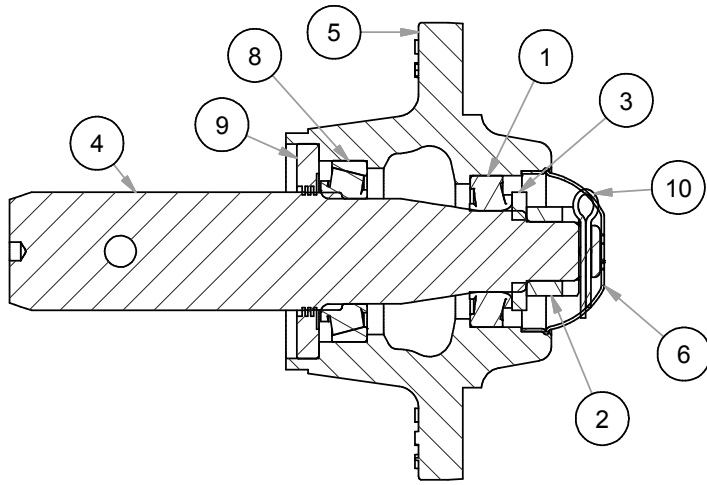
40' VRT.iam/SAFETY & LIGHTING

PARTS

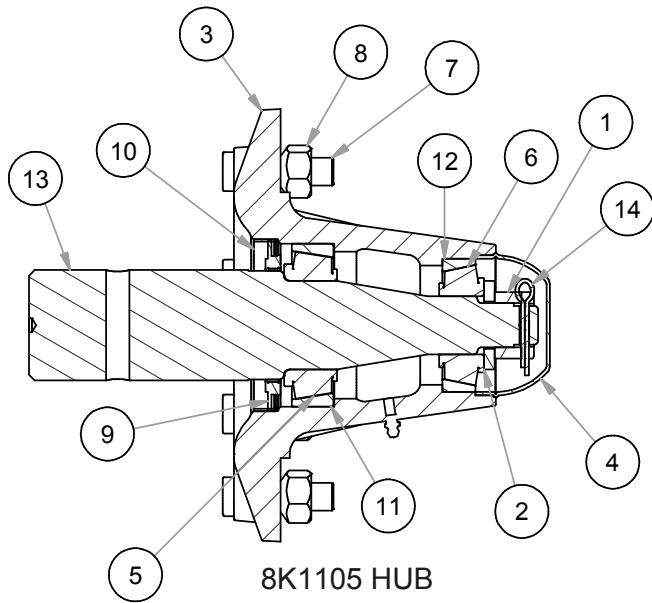
VRT SAFETY & LIGHTING

ITEM	PART NUMBER	DESCRIPTION
1	8A1155	U-BOLT 3/8 X 6-1/16 X 5" SQ
2	8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ
3	8A1157	U-BOLT 3/8 X 4-1/16 X 7" SQ
4	8K8000	STL 7K2045 3/8X3.5 PNTDLGHT
5	8K8010	TUBE LGHT BRCKT1.5SQ55.5"00-
6	8K8020	MOUNTNG BRCKT LIGHT 00-
7	8K8030A	MODULE AG ENHNCD W/BRAKE 6PIN 08-
8	8K8070B	MAIN HRNSS 7PNLNG W/BRAKE 09-
9	8K8075A	EXT HRNSS NONDRAWBAR DTSCH 07-
10	8K8090B	LIGHT LED AMBER 2WR DTSCH 12-
11	8K8095B	LIGHT LED RED 3WIRE DTSCH 12-
12	8K8105A	EXT HARNESS 26' 2WIRE DTSCH 07-
13	8K8200	BRCKT SMV ATTCH 4-8"FRAME98-
14	8L0258	U-BOLT 5/16 X 1-1/2 X 2-1/2"SQ
15	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
16	8S1124	MOUNTING SOCKET SMV SIGN YZ
17	8S1126	MNT SPADE W/HRDWR SMV SIGN
18	8T4350	TRNS LCK W/UHMW10.6"(2.4RD)
19	8T4380	HOLDER CYL LOCK 4"&6" MNT 96-
20	8X0021A	BOLT 5/16-18NC X 1" GR5 YZ
21	8X0203	NUT 3/8"-16NC SERFLANG GR2 YZ
22	8X0211	NUT 5/16"-18NC SERFLANG GR2 YZ
23	8X0402	HAIR PIN CLIP 1/8 X 2-9/16"
24	8X0440	CLEVIS PIN 5/8 X 3-7/8" YZ

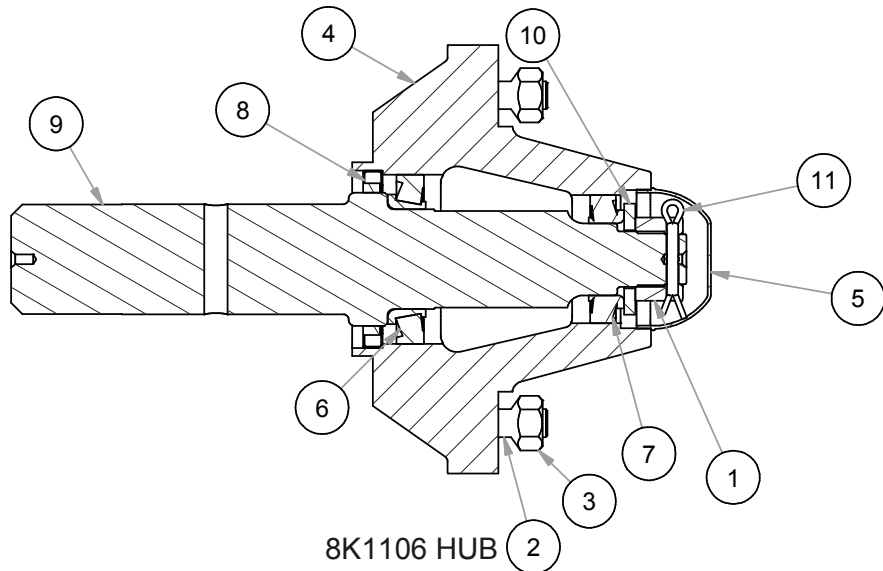
PARTS



8K1100 HUB



8K1105 HUB



8K1106 HUB

PARTS

VRT HUBS & AXLES

ITEM	PART NUMBER	DESCRIPTION
1	8D5217 8D5332	BEARING IN 517 OUT 614 & 618 RACE H517 & H614 LM48510
2	8D5312	NUT 1"-14NF HEX SLOT GR2 PLN
3	8D5319	WASHER 1" AXLE
4	8R6901	AXLE H614 STR 2"CR X 10"
5	8R6911	HUB H614 W/CUPS&ZRK 6 BLT GBGI
6	8R6913	HUB CAP H614 & H618
7	8R6914	BOLT WHEEL 9/16"-18 UNF - 1.25"
8	8R6917 8R6925	BEARING INNER 614 RACE INNER H614 LM603011
9	8R6922	SEAL ASSY GBGI H614 HUB 00-
10	8X0415	COTTER PIN 3/16 X 1-1/2"

ITEM	PART NUMBER	DESCRIPTION
1	8D5312	NUT 1"-14NF HEX SLOT GR2 PLN
2	8D5319	WASHER 1" AXLE
3	8K7111	812 HUB ASSEMBLY
4	8K7113	HUB CAP HD812 DC17
5	8K7117	BEARING INNER HD812 LM3780
6	8K7118	BEARING OUTER HD812 LM2790
7	8K7122	STUD WHEEL 5/8-18UNFX2.5" 97-
8	8K7123	NUT WHEEL BOLT 5/8-18UNF 97-
9	8K7127	SEAL TRPL LIP EXTRNL HD812 06-
10	8K7128	SEAL SLEEVE HD812 06-
11	8K7130	RACE INNER FOR HD812 LM3720
12	8K7132	RACE OUTER FOR HD812 LM2720
13	8K7150	AXLE HD812 X 11.5" (2.5"DIA.)
14	8X0415	COTTER PIN 3/16 X 1-1/2"

ITEM	PART NUMBER	DESCRIPTION
1	8D5314	NUT 1-1/4"-12 HEX SLOT GR2 PLN
2	8K7122	STUD WHEEL 5/8-18UNFX2.5" 97-
3	8K7123	NUT WHEEL BOLT 5/8-18UNF 97-
4	8K7340	HUB HD817 W/CUPS&SRK 8BLT3LIP
5	8K7341	HUB CAP HD817 DC26
6	8K7342 8K7346	BEARING INNER HD817 LM387AS RACE INNER HD817 382A
7	8K7343 8K7347	BEARING OUTER HD817 LM501349 RACE GBGI & OTR 817 LM501310
8	8K7344	SEAL 3"ID HD817 SE42
9	8K7349	AXLE HD817X 15.25" (2.5"DIA.RCVR)
10	8X0328	WASHER 1.312"IDX2.5 OD-1/4" BL
11	8X0414	COTTER PIN 1/4 X 2" YZ

SUMMERS MFG. CO., INC.

3/23/16

INSTALLATION AND OPERATION INSTRUCTIONS FOR 8K1850

HUBODOMETER W/ HOUSING FOR SUMMERS VRT

Attach HUB ODOMETER to gang nut as shown in photos with 3/8" x 4-1/2" bolt, flat washers and lock nut. To prevent loosening, rotate gang to insure that bracket is on center and spot weld at locations shown.

Position Hubodometer on inside of rear center gang. DO NOT LOCATE HUBODOMETER BENEATH IMPLEMENT WING HINGE OR AT WIDEST POINT OF MACHINE. Hub Odometer will be damaged if installed in these locations.

The Hub Odometer is calibrated at 359 revolutions per acre. Refer to chart below for conversion for your implement.

MACHINE	CONVERSION FACTOR
VRT Width	Multiply by ___ for Acres Covered
26'	1.19
30'	1.37
35'	1.60
40'	1.90



PART NUMBERS AND DESCRIPTIONS

Stock Code	Description	Stock Code	Description
8A1004	CLAMP HOSES 5" #72	8B1384	2 GAUGE PANEL VRT NRRW 15-
8A1155	U-BOLT 3/8 X 6-1/16 X 5" SQ	8B1385	2 GAUGE PANEL VRT 15-
8A1156	U-BOLT 3/8 X 4-1/16 X 5" SQ	8B2080C	GANG 8BLADE CLTR RR RIGHT
8A1157	U-BOLT 3/8 X 4-1/16 X 7" SQ	8B2080D	GANG 8BLADE DSK FR LFT
8B0010	2VLV PANL FACE	8B2081D	GANG 8BLADE DSK FR RIGHT
8B0012	2VLV MNT PLATE	8B2090C	GANG 9BLADE CLTR RR LFT
8B0013	VALVE PANL MNT GSST	8B2160C	GANG 16BLADE CLTR RR LFT
8B0020	HITCH WGHT PLATE 15-	8B2160D	GANG 16BLADE DSK FR LFT
8B1000	HITCH HYD VRT 15-	8B2161C	GANG 16BLADE CLTR RR RIGHT
8B1000P	HITCH HYD VRT PNTD	8B2161D	GANG 16BLADE DSK FR RIGHT
8B1005	HITCH HYD NRRW VRT	8B4040	HYD CYL 4 X 4" REPHASE 15-
8B1005P	HITCH HYD NRRW VRT PNTD	8B4540	HYD CYL 4.5 X 4" REPHASE 15-
8B1100	FRAME CNTR VRT 35'-40'	8B7840	HYD HOSE MANIFOLD 40' VRT
8B1100P	FRAME CNTR VRT 35'-40' PNTD	8C0270	SPLITSTEELBUSH 1.375X 1"ID-
8B1102	FRAME CNTR VRT 20'-30'	8CA1756	HYD CYL 1.75 X 6" HYD BSKT10-
8B1102P	FRAME CNTR VRT 20'-30' PNTD	8CC0740	SPIRALRING .068X1.625 INTR 1
8B1110	FRAME WING VRT 35'-40' LEFT	8CC0800	DEPTH INDICATOR CYL CLAMP11-
8B1110P	FRAME WING VRT 35'-40' L PNT	8CC0805	DEPTH INDICATOR FLAT 11-
8B1112	FRAME WING VRT 35'-40' RIGHT	8CC0810	DEPTH INDICATOR POINTER 12-
8B1112P	FRAME WING VRT 35'-40' R PNT	8CC0815	DEPTH INDICATOR POINTRCLAMP
8B1115	FRAME WING VRT 26'-30' L	8CC1619	SNGL TILLAGE HUB ASSY 15-
8B1115P	FRAME WING VRT 26'-30' L PNT	8CC1620	DBL TILLAGE HUB ASSY 14-
8P1117	FRAME WING VRT 26'-30' R	8D0330	U-BOLT 5/8 X 6-1/16 X 5-5/8"
8P1117P	FRAME WING VRT 26'-30' R PNT	8D0340	U-BOLT 3/4 X 4-1/16 X 7-3/4"
8B1120	GANG TUBE TIE BAR VRT	8D0719	HITCH PIECE CAST CAT.3 CTD R
8B1121	GANG TUBE CNTR REAR 62" 15-	8D2470	SAFETY CHAIN 30400# 7/16" X
8B1122	GANG TUBE CNTR FRNT 62" 15-	8D3035	WHEEL 15 X 8" 6 BOLT-VLV GRD
8B1125	GANG TUBE CNTR FRNT 82" 15-	8D3212	MALE TIP 3/4"-16 ORB ISO
8B1126	GANG TUBE CNTR FRNT 82" 15-	8D3260	GREASE DELVAC XTREME 120# DR
8B1128	GANG TUBE WING 93.5" 15-	8D3330	HYD HOSE 3/8" 3000 PSI
8B1129	GANG TUBE WING 113" 15-	8D3340	HYD HOSE 1/2" 3000 PSI
8B1130	GANG TUBE WING 154.5" 15-	8D3436	HYD HOSE END 3/8" X #6JIC FX
8B1132	GANG TUBE WING 124.5" 15-	8D5217	BEARING IN517 OUT517HD 614&6
8B1198	CYL ATTACH VRT 26'-30'	8D5312	NUT 1"-14TPI HEX SLOT GR2 PL
8B1200	CYL ATTACH VRT 35'-40'	8D5314	NUT 1-1/4"-12 HEX SLOT GR2 P
8B1208	TRANS REST VRT 26'-30'	8D5319	WASHER 1" AXLE X .2" THICKNE
8B1210	TRANS REST VRT 35-40'	8D5332	RACE H517 & H614 LM48510
8B1215	WING LOCK TAB VRT 15-	8D8491	STL 11GA ISO TIP HLDR LRG RA
8B1217	WING LOCK TAB SPCR 15-	8D8493	PIONEER/ISO TIP HLDR LARGE
8B1250	LIFT CYL ATTACH MODULE VRT	8D8502	HYD HOSE HOLDER H-DUTY BLK 1
8B1255	HYD GAGEWHL CYL ATTCH VRT 15	8D8521	JACK SPOOL 3 X 2.56- 1-29/32
8B1270	OSC AXLE SPNDLE HLDR 2.5" 15	8D8521L	JACK SPOOL 3 X 2.56- 4-1/4"99-
8B1280	LIFTARM OSC AXLE VRT 15-	8D8523	JACK 8000# DROPLEG 5/8X4.25P
8B1281	LIFT ARM OSC AXLE VRT	8D9108	ROLL PIN 1/4 X 2" ZINC
8B1285	LIFTARM SOLID AXLE (2.5") VR	8D9110	HAIRPIN CLIP LARGE (1" CYL PI)
8B1290	LIFTARM GAGEWHL VRT LEFT	8H1180S	HARROW TOOTH 1/2 X 20" M104/SH
8B1292	LIFTARM GAGEWHL VRT RIGHT	8H1307	SPRING PRESS 1.63OD- 15" 91#/"
8B1350	SNGL PNT DPTH SLIDE TUBE	8H1316	ROD 7/8-9NCX 31.25" GR5 YZ 10-
8B1352	SNGL PNT DPTH SLIDE ROD	8H1327	CAST SWIVEL 3/4X7/8 MNTD ATTCH
8B1355	SNGL PNT DPTH NUT PLATE	8H1328	CAST SWVL 8H1327 PNTD 10-
8B1360	SNGL PNT DPTH POPPET MNT	8H1396	ROD ASSY 7/8" DBL SWVL 10-
8B1365	SNGL PNT DPTH CRANK HNDLE	8H2015	PIPE SPACER 1/2 X 3-7/8" 10-
8B1370	SNGL PNT DPTH SLIDE MNT	8H2131A	SPRING W/7/8-9NC NUT 12-
8B1371	SNGL PNT DPTH SLIDE MNT-L	8H2135	CARRIER ARM 34" DUALSPRING 12-
8B1372	SNGL PNT DPTH STOP PLATE	8H2251	MTD ATTCH BRKT BOLTON NRRW11-
8B1374	SNGL PNT DPTH GAGE FLAT	8H2328	MNTG ARM ASSY HRRW HYD BSKT12-
8B1380	2 VALVE PANEL ASSY VRT 15-	8H2601	ENDPLATE RLNGBSKT 4SCRPR 12-

PART NUMBERS AND DESCRIPTIONS

Stock Code	Description	Stock Code	Description
8H2601B	ENDPLATE RLNGBSKT 4SCRPR 18-	8J6030	7/8"-14 ORB X #10 JIC(M)90*A
8H2612	MNTG BRKT HRW/HYD BSKT 12-	8J6050	1-1/16" - 12ORB#10JIC(M)90*
8H2619	MNTG ARM HYD RLLNG BSKT 12-	8J7040	THERMAL RELIEF MANIFLD 4000P
8H2634	RLLNG BSKT 4' REEL ONLY 10-	8J7116	3/4"-16 ORB(2X)1WAY 1/16"RES
8H2636	RLLNG BSKT 6' REEL ONLY 10-	8J7216	#6JIC(M) X #6JIC(F) 1/16" RSTR BL
8H2660	RLLING BSKT SCRAPR MNT 12-17	8K1100	HUB&AXLE ASSY 614(GBGI-2"RCV
8H2660B	RLLING BSKT SCRAPR MNT 18-	8K1105	HUB&AXLE ASSY HD812(2.5"RCVR
8H2664	4' BSKT SCRAPR (40.5") YLW 12-	8K1106	HUB&AXLE ASSY HD817(2.5"RCVR
8H2666	6' BSKT SCRAPR (63.5") YLW 12-	8K1610	PIN 3/4 X 6.25" TRNSPRTLCK 8
8H2702	BEARING 1-1/4" SQ FLNG4BLT	8K1755	EYEBOLT 1.5"DIAX1.26EYE YZ 1
8H2706	TUBE SQ 3 X 4T- 70" BSKT MNT	8K2000	BEARING 211 X 2.02" ID 01-
8H2708	TUBE SQ 3 X 4T- 94" BSKT MNT	8K2020	RETAINING RING GANG BRNG 84-
8H2716	RLLNG BSKT ASSY 6FT	8K2050	GANG BRNG W/HOUSNG 211 X 2"+ID
8H2718	RLLNG BSKT ASSY 8FT	8K2080	CAST BEARNG MNT BASE DRILLD
8H2719	RLLNG BSKT ASSY 10FT	8K2090	CAST BEARNG PIVOT TUBE DRILLD
8HD0080	PIPE CLAMP 2-1/2" ID PLATED YZ	8K2102	GANG BRNG ASSYW/211BRNG&CSTNGS
8HD0150	PIN ADJSTMNT 5/8X9.75" YZ 95-	8K2120	GANG ROD 2" DIA X 47"
8HD0160	SPRING TINE ADJ.COMP.ZINC95-	8K2130	GANG ROD 2" DIA X 57"
8HD0200	U-BOLT 1/2 X 2-3/8X 3-9/16"RND	8K2140	GANG ROD 2" DIA X 67"
8HD0202	U-BOLT 8HD0200 W/2:8X0240 NUTS	8K2150	GANG ROD 2" DIA X 77"
8HD5050Q	SET 3 PIPE W/LVR 6' QADJ 00-	8K2160	GANG ROD 2" DIA X 87"
8HD5070Q	SET 3 PIPE W/LVR 8' QADJ 00-	8K3002	WRENCH GANG 3-1/8" HEX BLCK0
8HD5111	SIDE PLT 1/4"3BR QADJ LEFT13-	8K4009	SPOOL HALF 2.63" FLAT CLTR 00
8HD5112	SIDE PLT 1/4"3BR QADJ RGHT13-	8K4019	SPOOL HALF 4.8" FLAT CLTR 00-
8HD5115	CONNCTNG BAR (3/8X2-17.5) 00-	8K4130	HOUSING BRG TOGGLE MNT CAST
8HD5141	CROSS TUBE W/FLATS 6' QADJ13-	8K4199	CAST CLAMP GANG MNT W/PEG RAW
8HD5151	CROSS TUBE W/FLATS 8' QADJ13-	8K4209	CAST CLAMP GANG MOUNT RAW
8HD5181	EXT BRKT QADJ 2ND ARM 15"13-	8K4219	CAST CLAMP GNG MNT TOP RAW13-
8HD5361Q	6' 3BR M104SECT ASSY QADJ15-	8K4400	SPRING SHANK GNG MNT 2.5"X1.25
8HD5381Q	8' 3BR M104SECT ASSY QADJ15-	8K4922S	BLADE DISK 1/4X22"5BLT4"ID LC
8HD5401	10' 3BR M104SECT ASSY QADJ15-	8K5200	WASHER GANG BOLT 2.03" ID
8J0200	MNT FLAT SCRAPR SPRCLTR 00-	8K5350	SPLITSTEELBUSH 2" X 1.5"ID-
8J1000	SPRING SHNK W/BRG&MNTFLT 00-	8K5505	U-BOLT 3/4 X 2-1/8 X 4-1/4" SQ
8J1021N	CLTR BLADE 8X1.75W NOTCH.26X22	8K7026	TIRE 11L X 15" LRF TBLS HWYS
8J3008	CAST SPOOL FULL CLTR DCTL RAW	8K7033	11L X 15 LRF ON 15X8X6 WHEEL
8J3009	MACHINING COST FOR 8J3010 14-	8K7034	TIRE MNTNG CO ST 8K7033 8K70
8J3010	CAST SPOOL 10" FULL CLTR 00-	8K7111	HUB HD812 W/CUPS&ZRK 8BLT3LI
8J3236R	SCRAPER MNT TUBE-36" RAW	8K7113	HUB CAP HD812 DC17
8J3256R	SCRAPER MNT TUBE-56" RAW	8K7117	BEARING INNER HD812 LM3780
8J3266R	SCRAPER MNT TUBE-66" RAW	8K7118	BEARING OUTER HD812 LM2790
8J3276R	SCRAPER MNT TUBE-76" RAW	8K7122	STUD WHEEL 5/8-18UNF 97-
8J4290	REAR JACK ATCHBRCKT N-CNT 07-	8K7123	NUT 5/8"-18UNF WHEEL BOLT 97
8J5100	#6 JIC(M) X #6 JIC(M) UNION	8K7127	SEAL TRPL LIP EXTRNL HD812 0
8J5110	#10 JIC(M) X #10 JIC(M) UNIO	8K7128	SEAL SLEEVE HD812 06-
8J5300	TEE #6 JIC (MALE) 3X	8K7130	RACE INNER FOR HD812 LM3720
8J5310	TEE #10 JIC (MALE) 3X	8K7132	RACE OUTER FOR HD812 LM2720
8J5312	TEE #10JIC(M2X)X3/4-16ORBBRN	8K7150	AXLE HD812 X 11.5 (2.5 DIA.)
8J5510	3/4"-16 ORB X #6 JIC(M) STR	8K7340	HUB HD817 W/CUPS&ZRK 8BLT3LI
8J5520	3/4"-16 ORB X #10 JIC(M) STR	8K7341	HUB CAP HD817 DC26
8J5680	3/4"-16 ORB X 3/4"-16ORB UNI	8K7342	BEARING INNER HD817 LM387AS
8J5690	3/4-16X3/4-16 ORB M-SW90*UNI	8K7343	BEARING OUTER HD817 LM501349
8J5700	#6 JIC(F-SW) X #6 JIC(M)90*A	8K7344	SEAL 3" ID HD817 SE42
8J5710	#10 JIC(F-SW)X#10 JIC(M)90*A	8K7346	RACE INNER HD817 382A
8J5812	1/2"FPPT X 1/2"MPPT(F-SW)90*AD	8K7347	RACE GBGI & HOUTR 817 LM501310
8J5995	9/16"-18 ORB X #6 JIC(M)45*ADP	8K7349	AXLE HD817X15.25 (2.5DIA.RCV
8J6010	3/4"-16 ORB X #6 JIC(M)90*AD	8K7430	340/65R18 ON 18X11X8 WHL-1.5
8J6020	3/4"-16 ORB X #10 JIC(M)90*A	8K7450	340/60R16.5 ON 16.5X11X8 WHL

PART NUMBERS AND DESCRIPTIONS

Stock Code	Description	Stock Code	Description
8K8000	STL 7K2045 3/8X3.5 PNTDLGHT0	8P3912	PIN 2 X 13.5" HARDENED GREAS
8K8005	LTUBE LGHT BRKT SHRT 1.5SQ PN	8R6805	SPLITSTEELBUSH 1" X .75"ID-
8K8010	TUBE LGHT BRCKT 1.5SQ PNTD 0	8R6810	SPLITSTEELBUSH 1.62X1.25"ID-
8K8020	STL 12GA MNTNG BRCKT LIGHT 0	8R6820	SPLITSTEELBUSH 2.5X2.00"ID-2
8K8030A	MODULE AG ENHNCDW/BRAKE6PIN0	8R6901	AXLE H614 STR 2"CR X 10"
8K8067	DUST CAP FOR 7PIN CONNECT00-	8R6911	HUB H614 W/CUPS&ZRK 6 BLT GB
8K8070B	MAIN HRNSS 7PNLNG W/BRAKE 09	8R6913	HUB CAP 517HD H614 & H618
8K8075A	EXT HRNSS NONDRAWBR DTSCH 07	8R6914	BOLT WHEEL 9/16"-18 UNF- 1.2
8K8090B	LIGHT LED AMBER 2WR DTSCH 12	8R6917	BEARING INNER 614
8K8095B	LIGHT LED RED 3WIRE DTSCH 12	8R6922	SEAL ASSY GBGI H614 HUB 00-
8K8105A	EXT HARNESS 26'2WIRE DTSCH 0	8R6925	RACE INNER H614 LM603011
8K8200	BRCKT SMV ATTCH 4-8"FRAME98-	8S0358	U-BOLT 5/8X3.06X 4.5" SQ1.25" T
8K9106	PIN 1-1/4 X 4-3/8" HRDND 1/4	8S1120	SIGN SLOW MOVING VEHICLE(SMV)
8K9110	PIN 1-1/4 X 6-13/16" HRDND	8S1124	MOUNTING SOCKET SMV SIGN
8K9230	SUITCASE WGHT PNTD 1.25"- 67	8S1126	MNT SPADE W/HRDWR SMV SIGN
8K9650	HYD CYL 5 X 36" W/3" STOP TU	8S3095	CAPLUG FITS ISO HYD COUPLR 0
8L0258	U-BOLT 5/16 X 1-1/2 X 2-1/2"	8T1010	POPPET ASSY HD BLT-ON RAM02-
8N0400	HYD PRESSURE GAGE 4" PANL MN	8T1045	HYD CYL 4.5 X 10" REPHASE 96
8N1036	1/4X 36"HYD GAUGE LINE3000PS	8T1050	HYD CYL 5 X 10" REPHASE 96-
8N3028	3/8X 28"HYD HOSE #6FJX3000PSI	8T1055	HYD CYL 5.5 X 10" REPHASE 96
8N3035	3/8X 35"HYD HOSE #6FJX3000PSI	8T1060A	HYD CYL 6 X10" REPHASE 13-
8N3060	3/8X 60"HYD HOSE #6FJX3000P	8T2040	HYD CYL 4 X 4" 3500PSI 09-
8N3216	3/8X 16"HYD HOSE #6FJX3000P	8T3300	BOLT PIVOT CHSLTRP&WNGFLT YZ
8N3288	3/8X 288"HYD HOSE #6FJX3000P	8T3606	PIN 1-1/2 X 5-3/8" PRT2HNG 99
8N3348	3/8X 348"HYD HOSE #6FJX3000P	8T3620	PIN 1-1/2 X 12-1/2" HRDND&ZI
8N3390	3/8X 390"HYD HOSE #6FJX3000P	8T3640	PIN 1-1/2 X 19" HARDEND 98-
8N3432	3/8X 432"HYD HOSE #6FJX3000P	8T4350	TRNS LCK W/UHMW10.5"(2.4RD)9
8N3462	3/8X 462"HYD HOSE #6FJX3000P	8T4355	TRNS LCK 10.5"(2.4"RD)RAW11-
8N3570	3/8X 570"HYD HOSE #6FJX3000P	8T4360	TAPE UHMW .03X 1.75" BLCK 09
8N4024	1/2X 24"HYD HOSE#10FJX3000P	8T4380	HOLDER CYL LOCK 4"&6" MNT 96
8N4026	1/2X 26"HYD HOSE#10FJX3000P	8T4385	HOLDER MANUAL-PAK 3/4/6MNT09
8N4030	1/2X 30"HYD HOSE#10FJX3000P	8T5345	SPLITSTEELBUSH 2 X1.5"ID- 1.
8N4035	1/2X 35"HYD HOSE#10FJX3000PS	8T6810	PLST BUSH 1-5/8X1.25ID-1" 96
8N4042	1/2X 42"HYD HOSE#10FJX3000PS	8W1205	U-BOLT 5/8 X 3.06 X 3.25" SQ
8N4048	1/2X 48"HYD HOSE#10FJX3000PS	8W1897	NYLATRON 1"ODX .76"ID- 1-3/4"
8N4060	1/2X 60"HYD HOSE#10FJX3000PS	8X0000	BOLT 1/4-20X3/4" FLLTHD GR5
8N4070	1/2X 70"HYD HOSE#10FJX3000PS	8X0000B	BOLT 1/4-20NC X 1" GR5 YZ
8N4084	1/2X 84"HYD HOSE#10FJX3000PS	8X0001	BOLT 3/8-16NC X 3/4" GR5 YZ
8N4114	1/2X 114" HYD HOSE#10FJX3000P	8X0015	BOLT 3/8-16NC X 3-3/4" GR5 Y
8N4120	1/2X 120"HYD HOSE#10FJX3000P	8X0021	BOLT 5/16-18NC X 3/4" GR5 YZ
8N4138	1/2X 138"HYD HOSE#10FJX3000P	8X0021A	BOLT 5/16-18NC X 1" GR5 YZ
8N4160	1/2X 160"HYD HOSE#10FJX3000P	8X0044	BOLT 7/16-14NC X 3-1/2"GR5 Y
8N4300	1/2X 300"HYD HOSE#10FJX3000P	8X0063	BOLT 1/2-13NC X 1-1/2" GR5 Y
8N4370	1/2X 370"HYD HOSE#10FJX3000P	8X0064	CRG 1/2-13NC X 1-1/2" GR5 YZ
8N4420	1/2X 420"HYD HOSE#10FJX3000P	8X0065	CRG 1/2-13NC X 2" GR5 YZ
8N6060	3/4X 60"HYD HOSE#10FJX3000P	8X0066	BOLT 1/2-13NC X 1-3/4" GR5 YZ
8N6124	3/4X 124"HYD HOSE#10FJX3000P	8X0067	BOLT 1/2-13NC X 2-1/4" GR5 YZ
8N6354	3/4X 354"HYD HOSE#10FJX3000P	8X0069	BOLT 1/2-13NC X 3" GR5 YZ
8N6370	3/4X 370"HYD HOSE#10FJX3000P	8X0072	BOLT 1/2-13NC X 3-3/4" GR5 Y
8N7000	ADJ DOWN PRESSURE MANIFLD 12	8X0074	BOLT 1/2-13NC X 4-1/2" GR5 Y
8N7010	ADJ DN PRSSR MNFLD W/OVERRIDE	8X0076	BOLT 1/2-13NC X 5-1/2" GR5 YZ
8N7012	PRSSR OVRIDE SWITCHBOX	8X0079	BOLT 1/2-13X4.12" SHLDR GR2 YZ
8N7013	PRSSR OVRIDE CABLE 240"	8X0082	BOLT 1/2-13NC X 6-1/2" GR5 Y
8N7014	PRSSR OVRIDE CABLE 180"	8X0091	BOLT 5/8-11NC X 1-3/4" GR5 YZ
8N7015	SWITCHBOX KIT FOR 8N7010	8X0093	BOLT 5/8-11NC X 2" GR5 YZ
8N9020	Hyd Hose Kit VRT	8X0095	BOLT 5/8-11NC X 5" GR5 YZ
8P3910	PIN 2 X 13-1/2" HARDENED	8X0110	BOLT 3/4-10NC X 1-1/4" GR5 Y

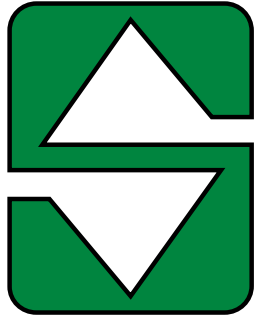
PART NUMBERS AND DESCRIPTIONS

Stock Code	Description	Stock Code	Description
8X0111	BOLT 3/4-10NC X 2-1/2" GR5 Y	8X0317	WASHER 3/4" SAE FLAT YZ
8X0112	BOLT 3/4-10NC X 2-1/4" GR5 YZ	8X0318	WASHER 3/4"(13/16"ID)FLAT YZ
8X0113	BOLT 3/4-10NC X 5" GR5 YZ	8X0320	WASHER 3/8"(7/16" ID)FLAT YZ
8X0114	BOLT 3/4-10NC X 3" GR5 YZ	8X0323	WASHER 5/8" SAE FLAT YZ
8X0115	BOLT 3/4-10NC X 3-1/2" GR5 YZ	8X0325	WASHER 3/4"(13/16"ID)FLAT PL
8X0117	BOLT 3/4-10NC X 7" GR5 YZ	8X0327	WASHER 1-1/4" SAE FLAT YZ
8X0118	BOLT 3/4-10NC X 4" GR5 YZ	8X0328	WASHER 1.312"IDX2.5 OD-1/4"
8X0119	BOLT 3/4-10NC X 7-1/2" GR5 YZ	8X0330	WASHER 17/32"ID X 1.25"OD YZ
8X0120	BOLT 3/4-10NC X 9" GR5 YZ	8X0366	WASHER 2.03IDX2-7/8ODX 1/4"PLN
8X0121	BOLT 3/4-10NC X 6-1/2" GR5 Y	8X0370	WASHER 3.016"IDX 3.93"ODX 14GA
8X0122	BOLT 3/4-10NC X 4-1/2" GR5 YZ	8X0400	HAIRPIN CLIP 1/8 X 1-15/16"
8X0123	BOLT 3/4-10NC X 5-1/2" GR5 Y	8X0402	HAIRPIN CLIP 1/8 X 2-9/16"
8X0125	BOLT 3/4-10NC X 10" GR5 YZ	8X0405	SNAPPER PIN 1/4 X 1.75"
8X0133	BOLT 7/8-9NC X 3" GR5 YZ	8X0414	COTTER PIN 1/4 X 2" YZ
8X0137	BOLT 1-8NC X 4" GR5 YZ	8X0415	COTTER PIN 3/16 X 1-1/2"
8X0139	BOLT 1-8NC X 3" GR5 YZ	8X0440	CLEVIS PIN 5/8 X 3-7/8" YZ
8X0145	BOLT 1-8NC X 10-1/2" GR5 YZ	8X0520	ROLL PIN 3/16 X 2" ZINC CLEAR
8X0146	BOLT 1-8NC X 8-1/2" GR5 YZ	8X0520	ROLL PIN 3/16 X 2" ZINC CLEAR
8X0152	BOLT 1-1/4-7NC X 3.75 FULLTH	8X0523	ROLL PIN 5/16 X 2-1/2" PLN
8X0160	SCREW NO. 10 X 24- 5/8"	8X0558	RIVET 3/16 SML FLNG .375
8X0202	NUT 3/8"-16NC NY-LOCK GR2 YZ	8X0708	ZERK 1/4"-28 NF STR YZ
8X0203	NUT 3/8"-16NC SERFLANG GR2 Y	8X0710	ZERK 1/4"-28 NF 90 DEG YZ
8X0205	NUT 10-24 HEX YZ	8X0721	ZERK 5/16"-24 NF STR YZ
8X0211	NUT 5/16"-18NC SERFLANG GR2	8X0800	STL 12GA CRG BOLT TAB-3/8" 1
8X0223	NUT 1/4"-20NC SERFLANG GR2 Y	8X0960	CAN SPRAY PAINT SUMMERS GREE
8X0234	NUT 7/16"-14NC NY-LOCK GR2 Y	8X0962	CAN SPRAY PAINT SUMMERS BLAC
8X0240	NUT 1/2"-13NC HEX GR2 YZ	8X1115	CRG 3/8-16NC X 1-1/2" GR2 ZN
8X0242	NUT 1/2"-13NC NY-LOCK GR2 YZ	8Y2200	KIT DECAL VRT2530/VRT3530
8X0244	NUT 1/2"-13NC FLANG TOP LOCK	8Z0046	DECAL PATENT PENDING 1.25X3"
8X0246	NUT 1/2"-13NC SERFLANG GR2 Y	8Z0055	PLATE SERIAL NUMBER UNIVRSL
8X0250	NUT 5/8"-11NC HEX GR2 YZ	8Z0075	DECAL TRNSPRT LCK WARNING TI
8X0253	NUT 5/8"-11NC NY-LOCK GR2 YZ	8Z0087	DECAL"WARNING"PINCH POINT03-
8X0256	NUT 5/8"-11NC SERFLANG GR2 YZ	8Z0099	DECAL"WARNING" DISCONNECT IM
8X0257	NUT 3/4"-10NC HEX GR2 PLN	8Z0100	DECAL MADE IN USA
8X0259	NUT 3/4"-10NC JAM GR2 YZ	8Z0101	2" SUMMERS DECAL
8X0260	NUT 3/4"-10NC HEX GR2 YZ	8Z0114	DECAL MH1104 ID (M104)
8X0261	NUT 3/4"-10NC NY-LOCK GR2 YZ	8Z0202	DECAL 3.5" SUMMERS 14-
8X0265	NUT 3/4"-10NC CNTRLOCK GR2 YZ	8Z0204	DECAL 5.5" SUMMERS 14-
8X0266	NUT 3/4"-10NC SERFLANG GR2 Y	8Z0276	DECAL GENERAL CAUTION 91-
8X0268	NUT 7/8"-9NC HEX GR2 YZ	8Z0340	DECAL REPHASING CYLINDERS
8X0269	NUT 7/8"-9NC JAM GR2 YZ	8Z0342	DECAL INSTALL CYLINDER LOCKS
8X0274	NUT 7/8"-9NC FLNG GRF YZ	8Z0344	DECAL WING DANGER
8X0280	NUT 1"-8NC HEX GR2 YZ	8Z0346	DECAL ELECTROCUTION-TILLAGE
8X0281	NUT 1"-8NC NY-LOCK GR2 YZ	8Z0348	DECAL GAUGE WHEEL DEPTH
8X0282	NUT 1"-14TPI TOPLOCK GR B Z	8Z0350	DECAL GREASE GANG BEARNG 04-
8X0283	NUT 1-1/4"-7NC JAM GR2 YZ	8Z0365	DECAL DEPTH INDICATOR 11-
8X0285	NUT 1-1/2"-6NC HEX GR2 YZ	8Z0480	DECAL VALVE PANEL 15-
8X0286	NUT 1-1/2"-6NC JAM GR2 YZ	8Z0481	DECAL BSKT PRESS VRT 15-
8X0289	NUT 1-1/4"-7NC HEX GR2 PLN	8Z0482	DECAL WING PRESS VRT 15-
8X0292	NUT 2"-4.5 HVY HEXSLOT GR2 PLN	8Z0490	DECAL DEPTH CRANK 15-
8X0300	LOCKWASHER 5/16" YLW ZNC	8Z0800	REFLECTOR AMBER ADHSVBCK98-
8X0303	LOCKWASHER 1/2" YLW ZNC	8Z0805	REFLCTR REDORANGE ADHSVBK99-
8X0304	LOCKWASHER 5/8" YLW ZNC	8Z0810	REFLECTOR RED ADHSV-BACK 98-
8X0306	LOCKWASHER 3/4" YLW ZNC	8Z1000	MANUAL-PAK 3DIA X 11.75" 09-
8X0307	LOCKWASHER 7/8" YLW ZNC	8Z1060	VRT2530/VRT3530 OPERATOR'S MANUAL
8X0309	LOCKWASHER 1" YLW ZNC	8Z2500	DECAL VRT2530 15-
8X0314	WASHER 49/64"IDX2"ODX1/4" BL	8Z2505	DECAL VRT3530 16-
8X0316	WASHER 1" SAE FLAT YZ		

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



Sprayers



Cultivators/Harrows



Mounted Attachments

