



Parts Manual



483 Chisel Pro

VADERSTAD INC. PARTS WARRANTY – UNITED STATES AND CANADA

EFFECTIVE FOR EQUIPMENT RETAILED AND DELIVERED AFTER MAY 21ST, 2021

Vaderstad Inc. has issued these Terms and Conditions for its Retail Dealers of Parts and Machinery ("Dealers"). These Terms and Conditions supersede all previously issued Terms and Discounts, or Terms and Conditions, and are applicable to the products defined in the Dealer Sales and Service Agreement. These Terms and Conditions will remain in effect until cancelled or modified by the Company. The Company reserves the right to change these Terms and Conditions at any time without prior notice.

PARTS WARRANTY:

The Company provides a ninety (90) day parts warranty from the date purchased by end-user or the balance of the warranty period of the whole good unit (whichever shall be longer) and does not include an allowance for dealer installed labor. This warranty covers most parts shipped from the Company. The exchange of a new part for the defective part shall constitute compliance with this warranty. Maintenance and wear items are excluded from Parts Warranty. Company warranty is set forth in the operator's manual for the unit and can be found on our websites under the manuals tab.

"VADERSTAD INC." AS REFERRED TO HEREIN WITH RESPECT TO SALES IN: UNITED STATES and CANADA: Vaderstad Inc.
PO Box 1030
Wahpeton, ND 58074

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FOREWORD

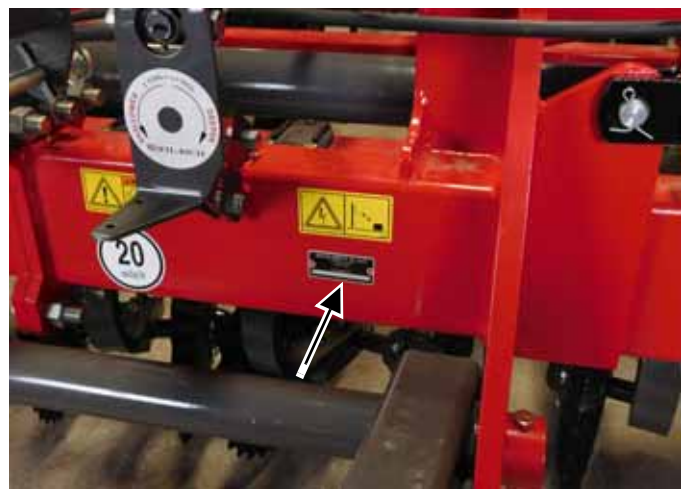
Abbreviations

- FN** - Footnote (FN) is a column in the parts list used to communicate information that directly effects the part it's lined up with. The number used will correspond with information located below the parts list.
- REF** - Reference (REF) is used in the part number column and indicates the part has special service information. The location of this information is often referenced in the description column.
- UAR** - Use As Required (UAR) is used in the quantity column indicating the number of parts used is determined by service needs.
- NSS** - Not Serviced Separately (NSS) in a part number column indicates the part is not available for service.

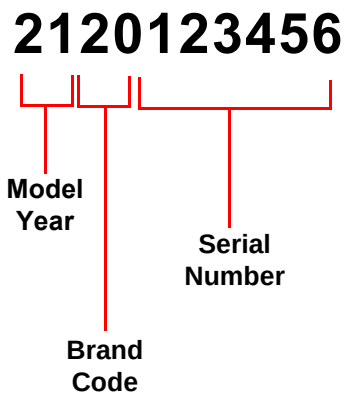
Parts Ordering Procedure

When ordering parts for your implement, please contact an authorized dealer in your area. If the parts are associated with a possible warranty claim, make sure that you contact the original dealer from which you purchased the implement. Make sure to provide the Model, Serial number, Part number, Part description and quantity.

Location of Product Model and Serial Number (Identification plate)



Serial Number Format



Consumables:

- P351481 - RED PAINT SPRAY CAN**
- P357194 - CHASIS GREY PAINT SPRAY CAN**
- P240799 - 460EP GREASE**

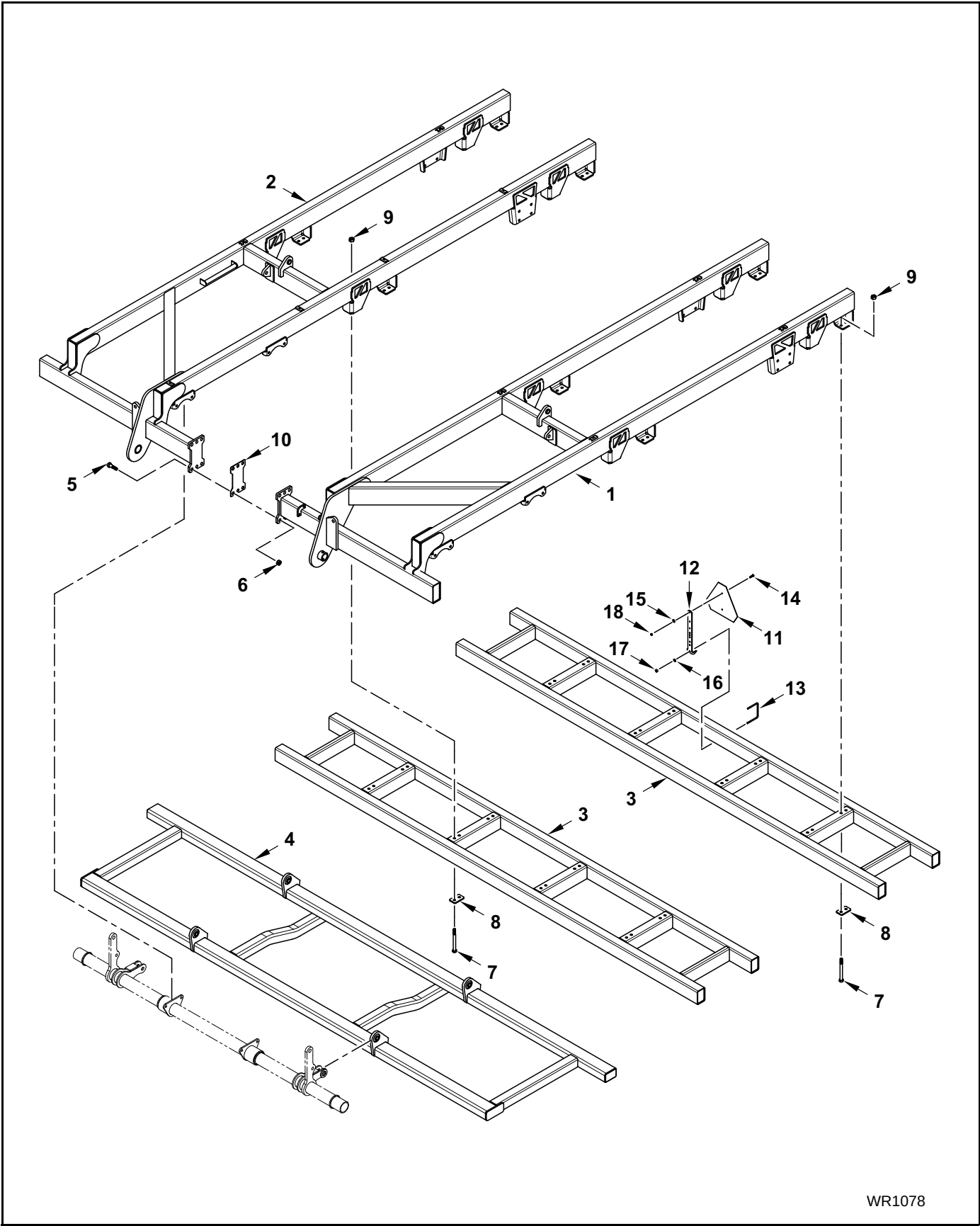
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This technical diagram illustrates the exploded view of a vehicle chassis assembly. The main components are labeled with numbers 1 through 22. The assembly includes a central longitudinal beam (1), side rails (2), and various mounting brackets (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22). The diagram shows the relative positions and assembly sequence of these parts, with dashed lines indicating the alignment and fit of the components. The assembly is designed for mounting onto a vehicle frame, with various brackets and bolts (17) used for secure attachment. The side rails (2) are connected to the main beam (1) via brackets (3, 4) and bolts (17). The diagram also shows the installation of a chain (15) and a hook (16) for towing or securing the vehicle. The overall structure is robust and designed for heavy-duty use.

Front Hitch Assembly

Ref.	FN	Part Number	Series	Qty.	Description
1		P357103		1	HITCH, Frame
2		P357134		1	PIN, Headless, 2-1/2" x 55"
3		P88945		2	BOLT, Hex, 5/8" -1NC x 4", Gr.8 YZ
4		P88369		2	NUT, Lock, 5/8" -11NC, Gr.5 Z
5		P236142		1	BRACKET, Hydraulic Hose
6		P241777		1	PLATE, Backing
7		P89406		1	U-BOLT, 3/8" -NC x 6", Gr.5 Z
8		P88362		6	WASHER, Lock, 3/8" ID Z
9		P88103		6	NUT, Hex, 3/8" -16NC, Gr.5 Z
10		P223329		1	HOLDER, Plug, Electrical
11		P88203		2	BOLT, Hex, 1/4" -20NC x 3/4", Gr. 5 Z
12		P88282		2	WASHER, Lock, 1/4" ID (5/16" Act) Z
13		PA64635		1	CASE, Storage, Manual
14		P88172		2	NUT, Hex, 1/4" -20NC, Gr.5 Z
15		P238225		1	CHAIN, Safety, 40K, 1/2" x 70"
16		P246795		1	HITCH, Category 5
17		P246372		2	BOLT, Hex, 1-1/4" -7NC x 8", Gr. 5
18		P88350		2	NUT, Slotted, 1-1/4" -7NC, Gr. 5 Z
19		P88133		2	PIN, Cotter, 3/16" x 2" Z
20		P24415		1	JACKSTAND, Pole
21		P322801		1	BRACKET, Mounting, Storage, Manual
22		P89056		4	NUT, Nylok, 1/4"-20NC, Gr 5Z

Main Frame Mounting



WR1078

Main Frame Mounting

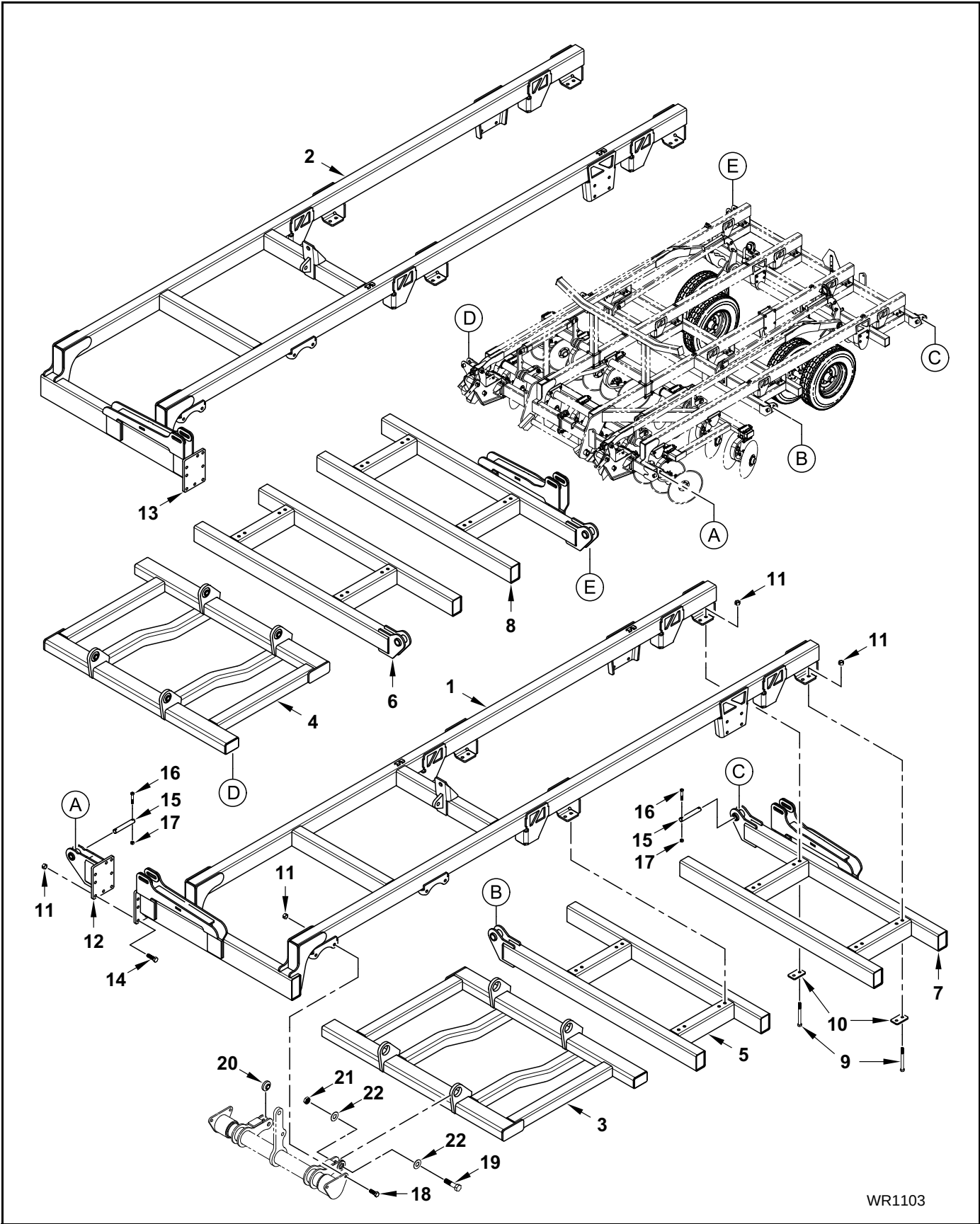
Ref.	FN	Part Number	Series	Qty.	Description
1	1	P333322		1	FRAME, LH
	2	P357251		1	FRAME, LH
2	1	P333321		1	FRAME, RH, 16' and 19"
	2	P357241		1	FRAME, RH
3		P358072		2	FRAME, Shank, Rigid 16'
		P358140		2	FRAME, Shank, Rigid 19'
	2	P357252		2	FRAME, Shank, Rigid
	1	REF		1	FRAME, ASSY., Disk Mounting, See page 2-2
	2	REF		1	FRAME, ASSY., Disk Mounting, See page 2-2
4		P358069		1	FRAME, Disk Mounting 19'
		P357274		1	FRAME, Disk Mounting 16', 24', 29' , 34'
5		P89371		6	BOLT, Hex, 1" 8NC x 3 1/2", Gr. 8 Z
6		P88348		6	NUT, Lock, 1" -8NC Gr. 5 Z
7		P89408		32	BOLT, Hex, 3/4" -10NC x 8", Gr. 8 YZ
8		P35960		16	PLATE, Mounting
9		P88356		48	NUT, Lock, 3/4" -10NC, Gr. 5 Z
10		P359586		1	SPACER
		P359700		1	SLOW MOVING VEHICLE ASSY., (SMV) Sign, Inc 11 - 18
11		P30651		1	EMBLEM, Slow Moving Vehicle
12		P350933		1	BRACKET, Slow Moving Vehicle
13		P89406		1	U-BOLT, 3'8" -16NC x 6" x 5" Z
14		P88203		2	BOLT, Hex, 1/4" -20NC x 1", Gr. 5 Z
15		P88261		2	WASHER, Flat, 1/4" (5/16" x 3/4" Act) Z
16		P88362		3	WASHER, Lock, 3/8" ID Z
17		P88172		2	NUT, Hex, 1/4" -20NC, Gr. 5 Z
18		P88103		2	NUT, Hex, 3/8" -16NC, Gr. 5 Z

1 - Used on 16' and 19' Models

2 - Used on 24', 29' and 34' Models

3 - Used on 29' and 34' Models

Wing Frame Mounting 24', 29', and 34'

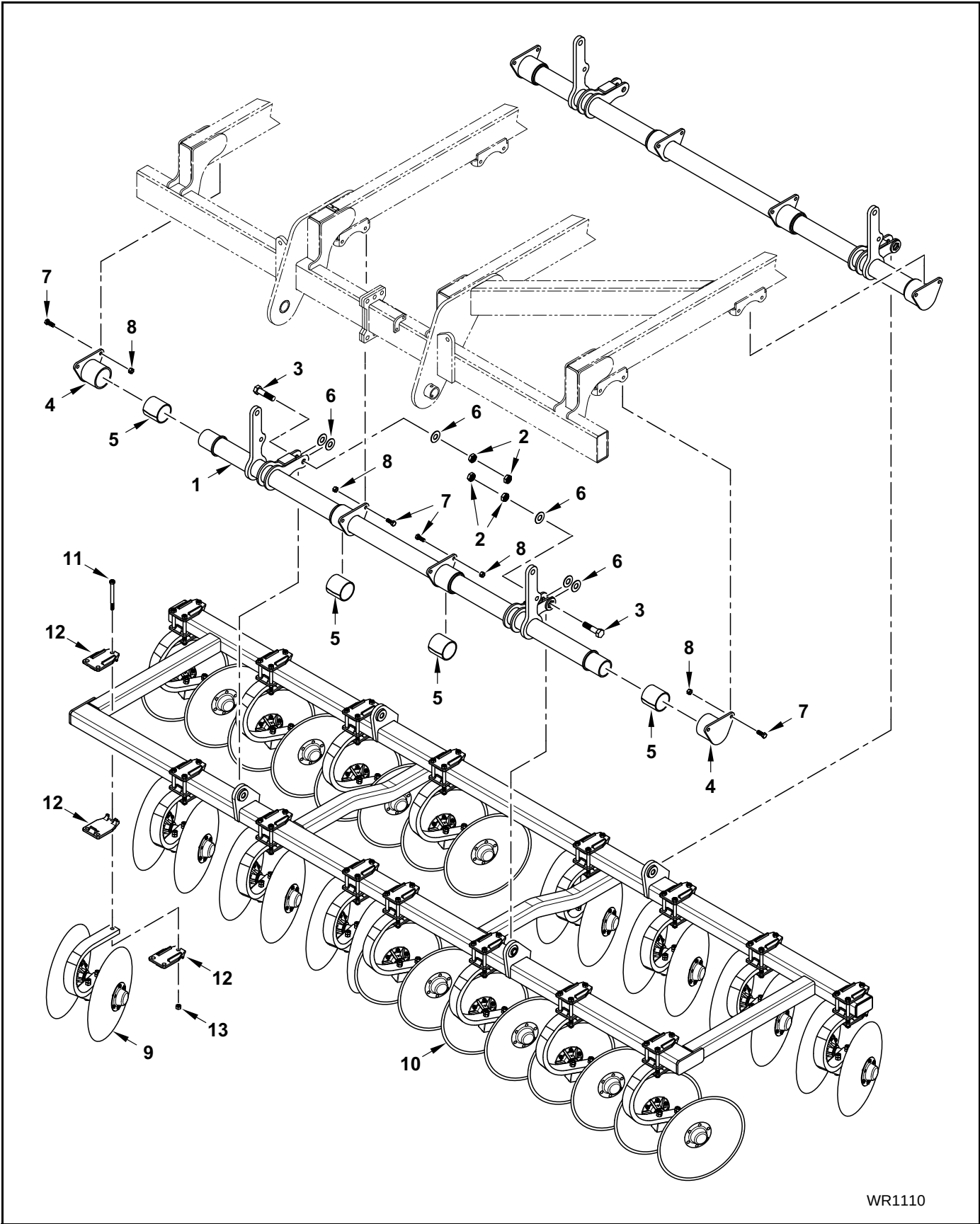


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Wing Frame Mounting 24', 29', and 34'

Ref.	FN	Part Number	Series	Qty.	Description
1		P358119		1	FRAME, Wing, LH, 24'
		P358030		1	FRAME, Wing, LH, 29'
		P357255		1	FRAME, Wing, LH, 34'
2		P358132		1	FRAME, Wing, RH, 24'
		P358040		1	FRAME, Wing, RH, 29'
		P357254		1	FRAME, Wing, RH, 34'
3		P358125		1	FRAME, Disk, Wing, LH, 24'
		P358036		1	FRAME, Disk, Wing, LH, 29'
		P357279		1	FRAME, Disk, Wing, LH, 34'
4		P358134		1	FRAME, Disk, Wing, RH, 24'
		P358044		1	FRAME, Disk, Wing, RH, 29'
		P357281		1	FRAME, Disk, Wing, RH, 34'
5		P358129		1	FRAME, Shank, Wing, Front, LH, 24'
		P358032		1	FRAME, Shank, Wing, Front, LH, 29'
		P357267		1	FRAME, Shank, Wing, Front, LH, 34'
6		P358137		1	FRAME, Shank, Wing, Front, RH, 24'
		P358041		1	FRAME, Shank, Wing, Front, RH, 29'
		P357268		1	FRAME, Shank, Wing, Front, RH, 34'
7		P358131		1	FRAME, Shank, Wing, Rear, LH, 24'
		P358034		1	FRAME, Shank, Wing, Rear, LH, 29'
		P357270		1	FRAME, Shank, Wing, Rear, LH, 34'
8		P358138		1	FRAME, Shank, Wing Rear, RH, 24'
		P358042		1	FRAME, Shank, Wing Rear, RH, 29'
		P357269		1	FRAME, Shank, Wing Rear, RH, 34'
9		P89408		48	BOLT, Hex, 3/4" -10NC x 8", Gr. 8YZ
10		P359560		24	PLATE, Support, 2 hole
11		P88356		80	NUT, Lock, 3/4" -10NC, Gr. 5 Z
12		P357164		1	HINGE, LH
13		P357163		1	HINGE, RH
14		P89389		16	BOLT, Hex, 5/8" -11NC x 6-1/2", Gr. 8 Z
15		P357132		6	PIN, Hinge
16		P88585		12	BOLT, Hex, 1/2" -NC x 2-3/4", Gr. 5 Z
17		P88363		12	NUT, Lock, 1/2" -13NC, Gr. 5 Z
18		P88290		16	BOLT, Hex, 3/4" -10NC x 2", Gr. 8 YZ
19		P89027		8	BOLT, Hex, 1-1/4" -NC x 5, Gr. 5 Z
20		NS		8	BALL JOINT, 1-1/4"
21		P88622		16	NUT, Jam, 1-1/4" -7NC, Gr. 5 Z
22		P88602		16	WASHER, Flat, 1-1/4" (1-3/8" x 3" Act) Z
23		P357560		6	BUSHING, Composite Bearing 1.2 ID x 1.7 OD x 4.06 (NOT SHOWN)

Rockshaft Mounting

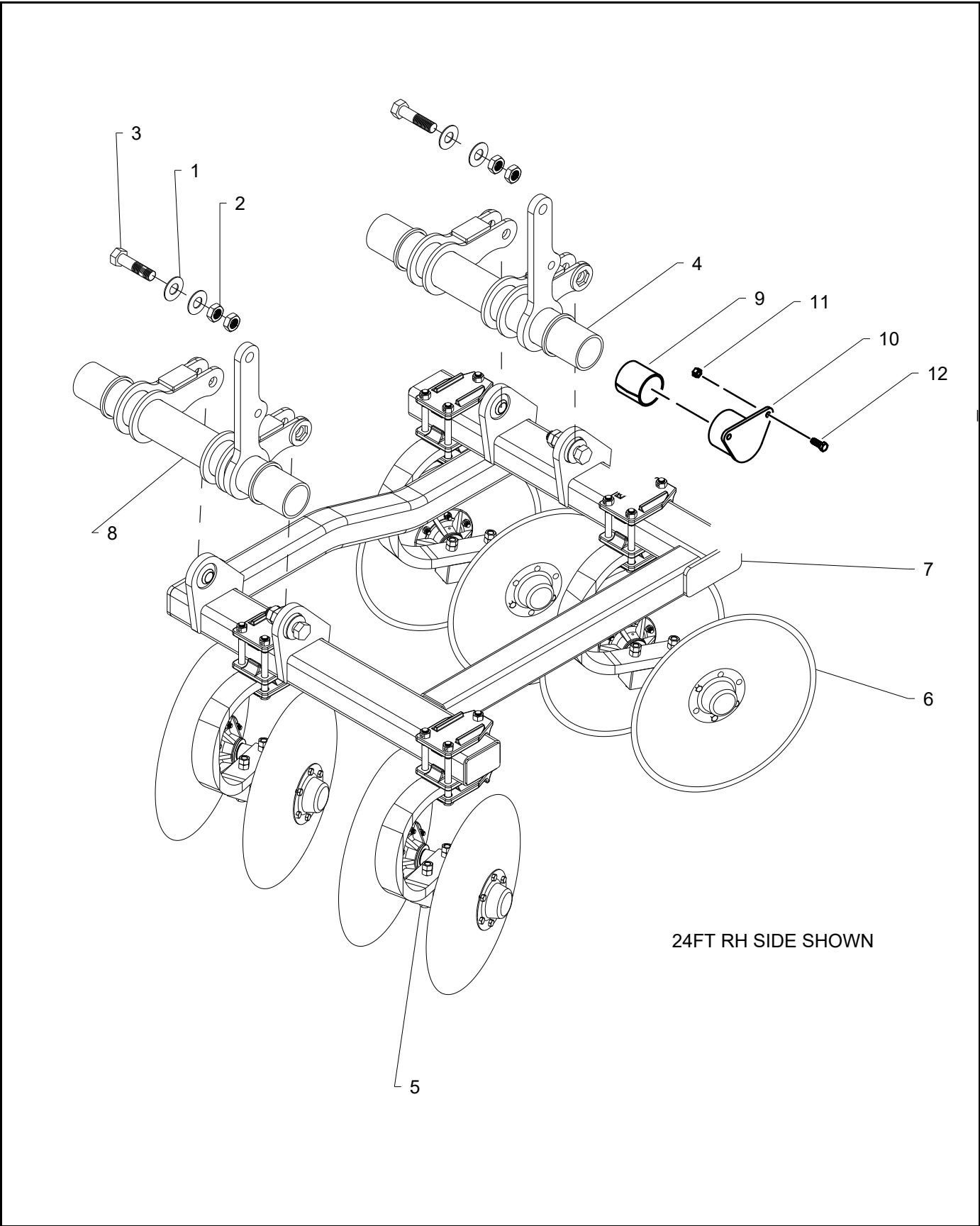


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Rockshaft Mounting

Ref.	FN	Part Number	Series	Qty.	Description
1		P355977		2	MAIN FRAME ASSY., Rockshaft
2		P88622		4	NUT, Jam, 1-1/4" -7NC Gr. 5 Z
3		P89027		4	BOLT, Hex, 1-1/4" -7NC x 5", Gr. 5 Z
4		P355972		4	BEARING, Axle, End
5		P351762		8	BEARING, Bushing, Composite, 4.50" ID x 5.00" ID x 4.75"
6		P88602		4	WASHER, Flat, 1-1/4" (1-3/8" x 3" Act) Z
7		P88290		16	BOLT, Hex, 3/4" -10NC x 2", Gr. 8 Z
8		P88356		16	NUT, Lock, 3/4" -10NC, Gr. 5 Z
9		P355945		16	DISK ASSY., Left Pitch, See page 2-2
10		P355947		16	DISK ASSY., Right Pitch, See page 2-2
11		P89624		3	BOLT, Hex, 3/4" - 16NF x 8", Gr. 8 Y Z
12		P351111		3	PLATE, Coulter, Cast
13		P89626		3	NUT, Lock, 3/4" - 16NF, Gr. 8 Y Z

Wing Frame Rock Shaft Mounting



Wing Frame Rock Shaft Mounting

Ref.	FN	Part Number	Series	Qty.	Description
1		P88602		8	WASHER-FLAT: 1-1/4(1-3/8 X 3ACT) 2ZP
2		P88622		8	NUT-JAM: 1-1/4-7NC 2ZP
3		P89027		4	BOLT-HEX: 1-1/4-7NC X 5 5ZP
4	1	P358127		1	WING ROCKSHAFT WELD LH 24FT
	1	P358136		1	WING ROCKSHAFT WELD RH 24FT
	2	P334035		1	WING ROCK SHAFT WELDMENT - LEFT NARROW REAR 24 FT 483
	2	P334036		1	WING ROCK SHAFT WELDMENT - RIGHT NARROW REAR 24FT 483
		P358038		1	WING ROCK SHAFT WELD 29FT (LH)
		P358038		1	WING ROCK SHAFT WELD 29FT (RH)
		P355991		1	WING ROCK SHAFT WELD 34FT (LH)
		P355991		1	WING ROCK SHAFT WELD 34FT (RH)
5		P355945		1	RIGHT COULTER ASSY
6		P355947		1	LEFT COUTLER ASSY
7		P358134		1	DISK FRAME RH WING 24FT
		P358125		1	DISK FRAME LH WING 24FT
		P358044		1	DISK FRAME RH WING 29FT
		P358036		1	DISK FRAME LH WING 29FT
		P357281		1	DISK FRAME RH WING 34FT
		P357279		1	DISK FRAME RH WING 34FT
8		P358136		1	WING ROCKSHAFT WELD RH 24FT
		P358127		1	WING ROCKSHAFT WELD LH 24FT
		P358038		1	WING ROCK SHAFT WELD LH 29FT
		P358038		1	WING ROCK SHAFT WELD RH 29 FT
		P355991		1	WING ROCK SHAFT WELD LH 34FT
		P355991		1	WING ROCK SHAFT WELD RH 34FT
9		P351762		1	COMPOSITE BEARING BUSHING 4.50 ID X 5.00 OD X 4.75
10		P355972		1	END AXLE BEARING
11		P89624		1	BOLT-HEX: 3/4-16NF X 8 8YZP
12		P88356		1	NUT-LOCK: 2 POS 3/4-10NC 5YZP

1 - Used on serial numbers prior to SN: AGCW48300KX464841

2 - Used on serial numbers AGCW48300KX464841 to current

This diagram illustrates the assembly of a vehicle chassis, specifically the rear axle and suspension system. The central component is the axle (1), which is shown in an exploded view with various mounting brackets (2, 3, 4, 5), bushings (3), pins (7), and nuts (8). The wheels (6) are shown at the bottom. Dashed lines indicate the assembly path for each component.

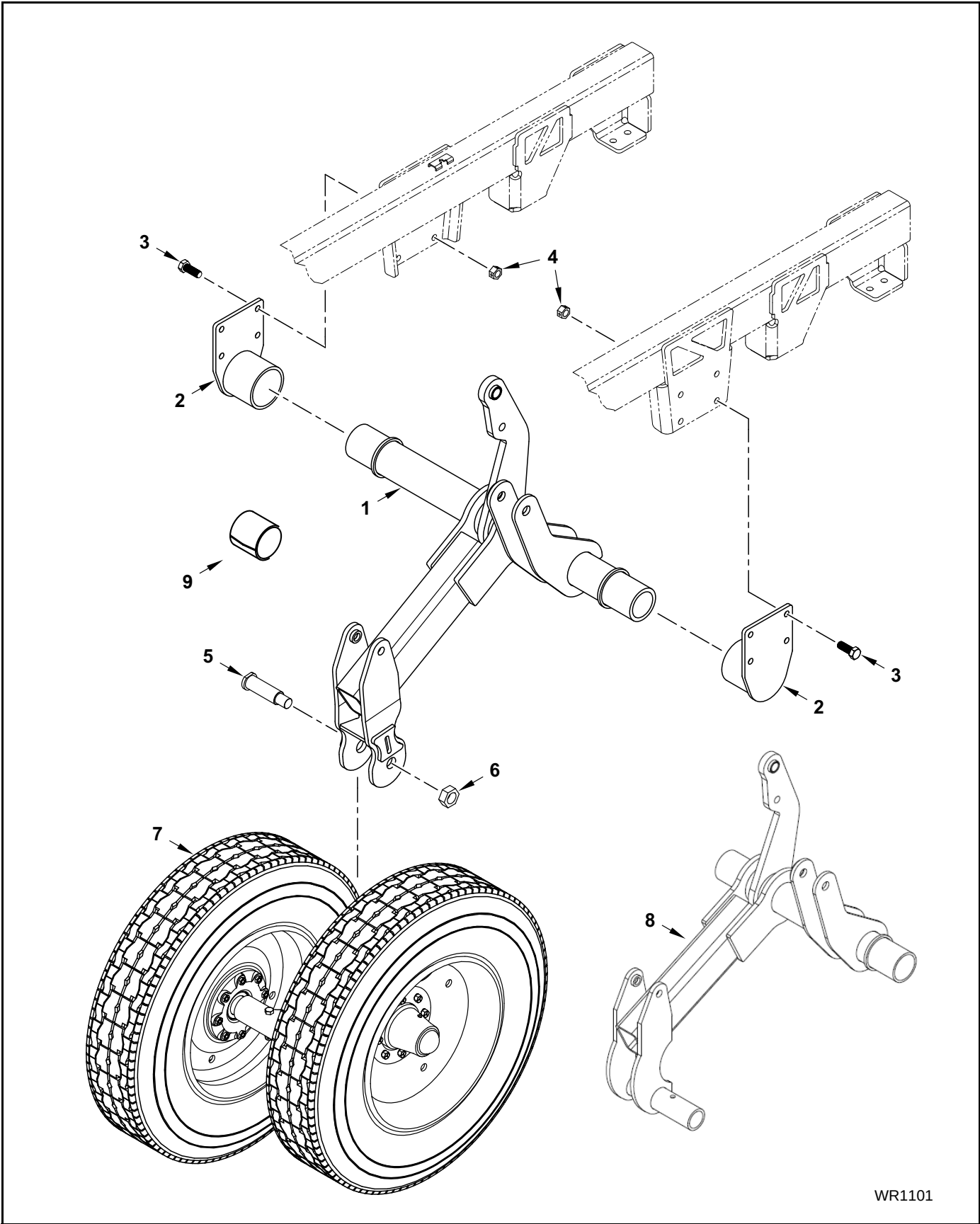
Key components and their assembly sequence are as follows:

- 1**: Axle
- 2**: Mounting bracket
- 3**: Bushing
- 4**: Mounting bracket
- 5**: Mounting bracket
- 6**: Wheel
- 7**: Pin
- 8**: Nut

Axle Mounting - Main Frame, Rear

Ref.	FN	Part Number	Series	Qty.	Description
1		P355940		2	AXLE ASSY., Main Frame, Rear
2		P248409		2	BEARING, Axle Mounting
3		P351762		2	BUSHING, Bearing Composite, 4.5" ID x 5" OD x 4.75"
4		P88290		16	BOLT, Hex 3/4" -10NC x 2", Gr. 8 YZ
5		P88356		16	NUT, Lock, 3/4" -10NC, Gr. 5 Z
6		REF		2	WHEEL & WALKING AXLE ASSY., Rear, See page 3-4
7		P16277		2	SHAFT, Tandom
8		P42082		2	NUT, Nylok, Jam, 1-1/2" NF

Axle Mounting - Wing Frame, Rear



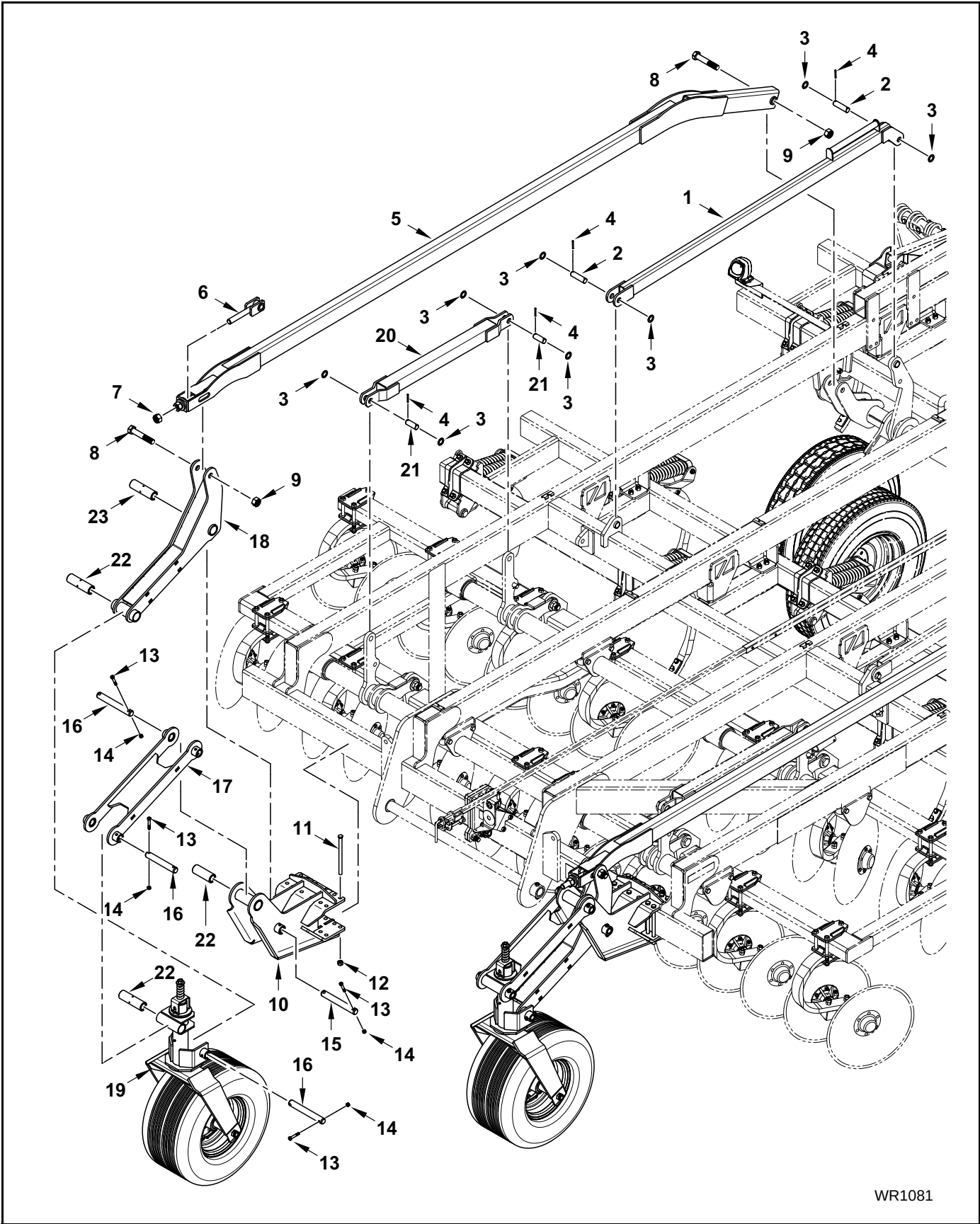
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Axle Mounting - Wing Frame, Rear

Ref.	FN	Part Number	Series	Qty.	Description
1	2	P357120			TUBE, Mast (LH)
	2	P355993			TUBE, Mast (RH)
2		P248409			WELD, Bearing
3		P88290			BUSHING, Machined, 1-1/4" x 1-7/8" x 14GA Z
4		P88356			PIN, Roll, 1/4" x 2-1/4" Z
5		P16277			BAR, Level
6		P42082			PLATE, Level, Adjuster
7		REF			NUT, Hex, 1-1/4" -7NC, Gr. 5 Z
8	1	P358122			TUBE, Mast (LH)
	1	P358133			TUBE, Mast (RH)
9		P351762			BUSHING, Composite Bearing, 4.5" ID x 5" OD x 4.75"

1 - Used on 24' Models

2 - Used on 29' and 34' Models



WR1081

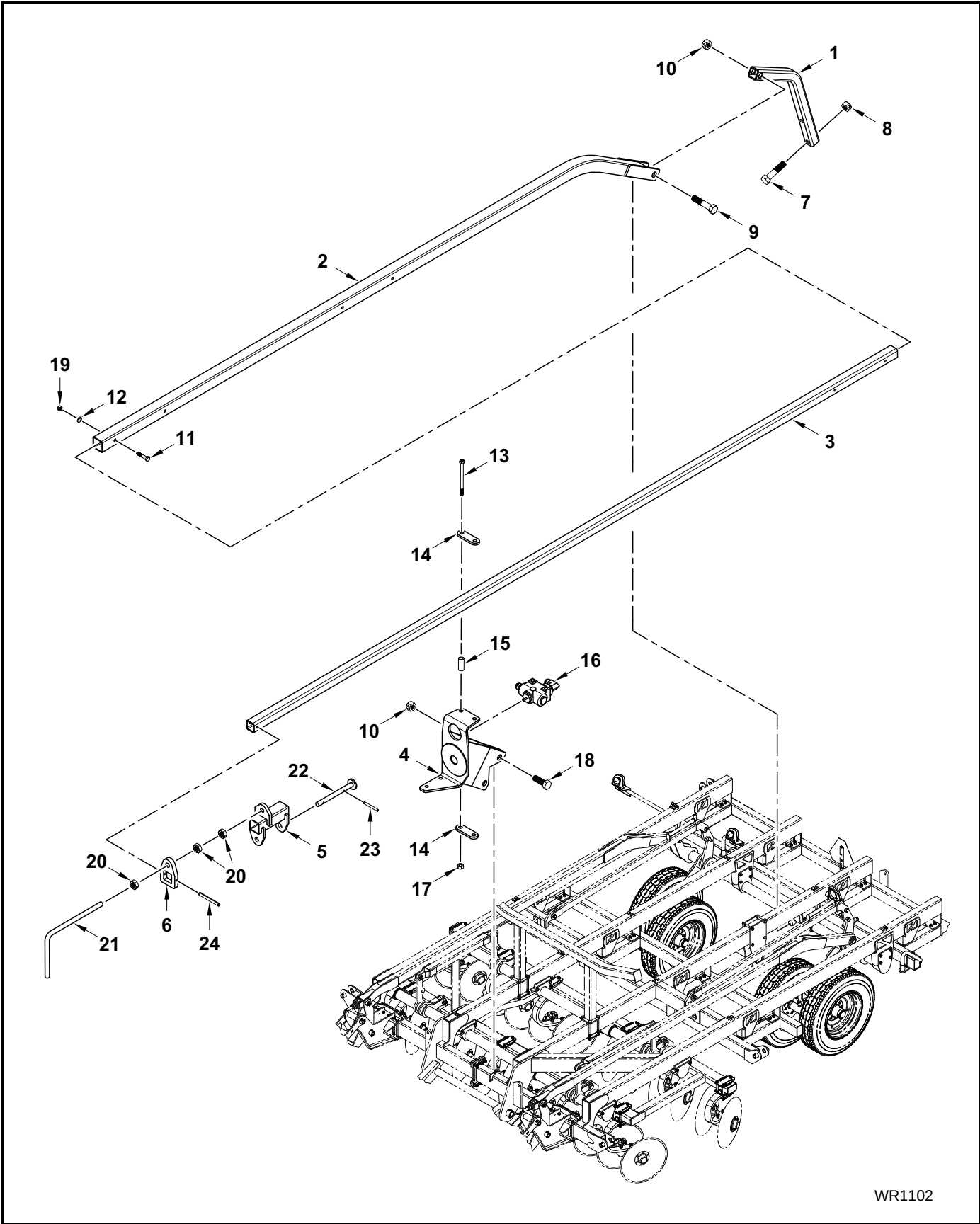
Depth Control

Ref.	FN	Part Number	Series	Qty.	Description
1		P357264		2	TUBE, Mast
2		P67854		4	PIN, 1-1/4" x 4-1/2"
3		P88440		12	BUSHING, Machined, 1-1/4" x 1-7/8" x 14GA Z
4		P42484		12	PIN, Roll, 1/4" x 2-1/4" Z
5		P359506		2	BAR, Level
6		P359515		2	LINK, Leveling, Adjustment
7		P88613		2	NUT, Hex, 1-1/4" -7NC, Gr. 5 Z
8		P88349		4	BOLT, Hex, 1-1/4" -7NC x 6-1/2", Gr. 5 Z
9		P88430		4	NUT, Lock, 1-1/4" -7NC, Gr. 5 Z
10		P359554		2	BRACKET, Mounting, Gauge Wheel
11	1	P89285		24	BOLT, Hex, 3/4" -10NC x 11", Gr. 8 Z
	2	P89462		24	BOLT, Hex, 3/4" -10NC x 10-1/2", Gr. 8 Y Z
12		P88665		24	NUT, Lock, 3/4" -10NC x 3", Gr. 5 Z
13		P88541		14	BOLT, Hex, 3/4" -13NC x 3", Gr. 5 Z
14		P88363		14	NUT, Lock, 1/2" -13NC, Gr. 5 Z
15		P359517		4	PIN, 1-1/2" x 10"
16		P359518		4	PIN, 1-1/2" x 11-1/2"
17		P359502		2	LINK, Parallel, Upper
18		P355379		2	LINK, Parallel, Lower
19		REF		2	WHEEL ASSY., Gauge, See page 3-8
20		P357283		1	ARM, Adjuster
21		P68034		2	PIN, 1-1/4" x 3-3/8"
22		P355388			BUSHING, Composite Bearing, 1.5 " ID x 2.2" OD x 7.44"
23		P355389			BUSHING, Composite Bearing, 1.5 " ID x 2.5" OD x 6"

1 - Used on 16' and 19' Models

2 - Used on 24', 29' and 34' Models

Depth Control, Single Point

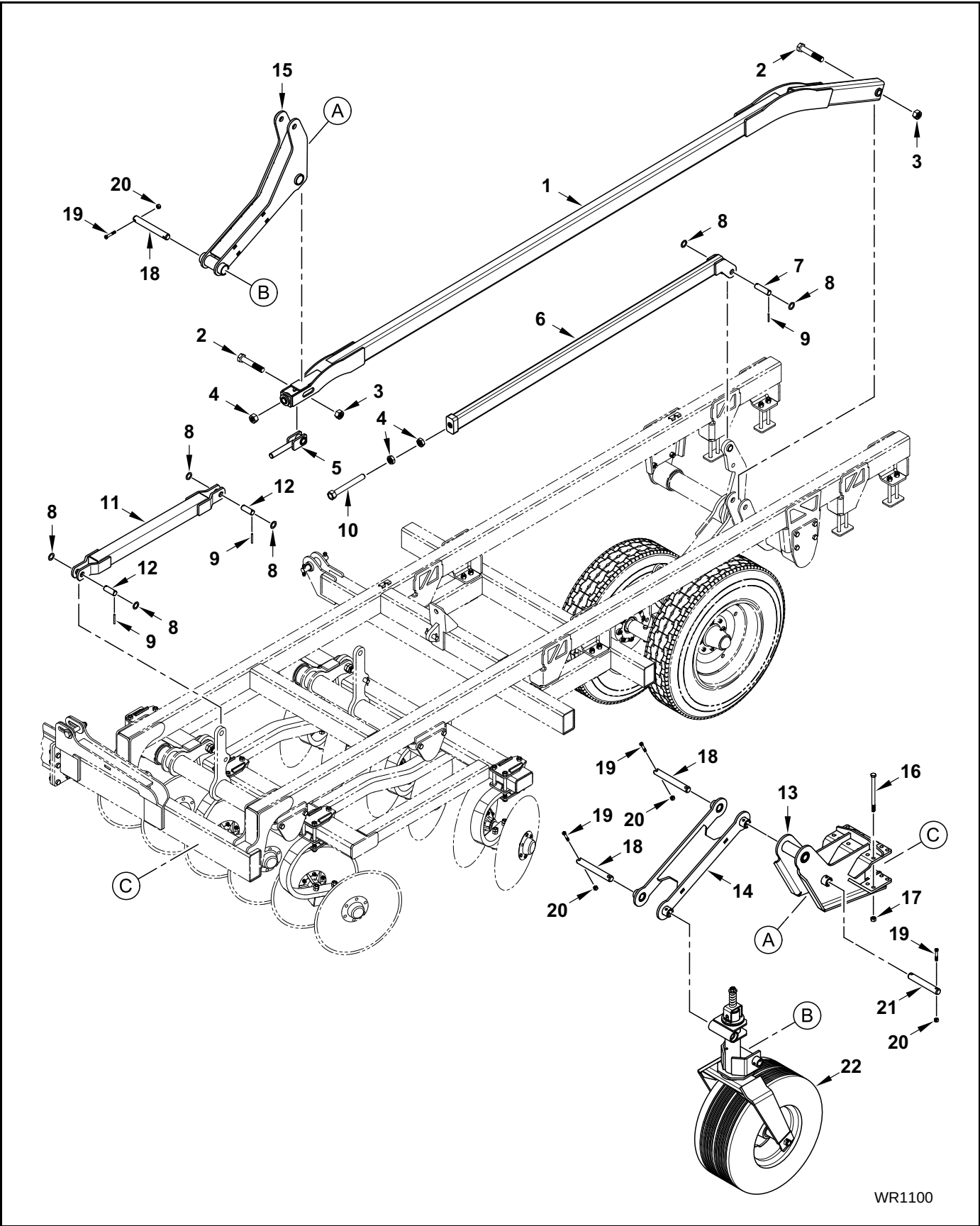


WR1102

Depth Control, Single Point

Ref.	FN	Part Number	Series	Qty.	Description
1		P238652		1	TUBE, Single Point Adjustment, Short
2		P241487		1	TUBE, Single Point Adjustment, Bent
3		P358139		1	TUBE, Single Point Adjustment, Long
4		P238638		1	BRACKET, Mounting, Single Point
5		P222111		1	SLIDE, Adjustment
6		P222107		1	ADJUSTER, Ear
7		P88825		2	BOLT, Hex, 1/2" -13NC x 2-1/4", Gr. 5 Z
8		P88363		2	NUT, Lock, 1/2" -13NC, Gr. 5 Z
9		P88408		1	BOLT, Hex 5/8" -11NC x 3", Gr. 5 Z
10		P88369		3	NUT, Lock, 5/8" -11NC, Gr. 5 Z
11		P89058		2	BOLT, Hex 1/4" -20NC x 2", Gr. 5 Z
12		P88262		2	WASHER, Lock 1/4" ID (5/16" Act) Z
13		P88812		2	BOLT, Hex, 5/16" -18NC x 4-1/2", Gr.2 Z
14		P238636		2	PLATE, Valve, Spacer
15		P238637		2	SPACER, Tube
16		P247429		1	VALVE, Depth Control
17		P88540		2	NUT, Lock, 5/16" -18NC, Gr. 5
18		P88838		2	BOLT, Hex, 5/8" -11NC x 1-3/4", Gr. 5 Z
19		P88172		2	NUT, Hex, 1/4" -20NC, Gr. 5 Z
20		P88561		3	NUT, Jam, 1/2" -12NC, Gr. 5 Z
21		P222182		1	CRANK, Adjustment
22		P222180		1	SPRING PIN
23		P89078		2	PIN, Roll, 3/16" x 1-3/4" Z
24		P88767		1	PIN, Roll, 1/4" x 2-1/2" Z

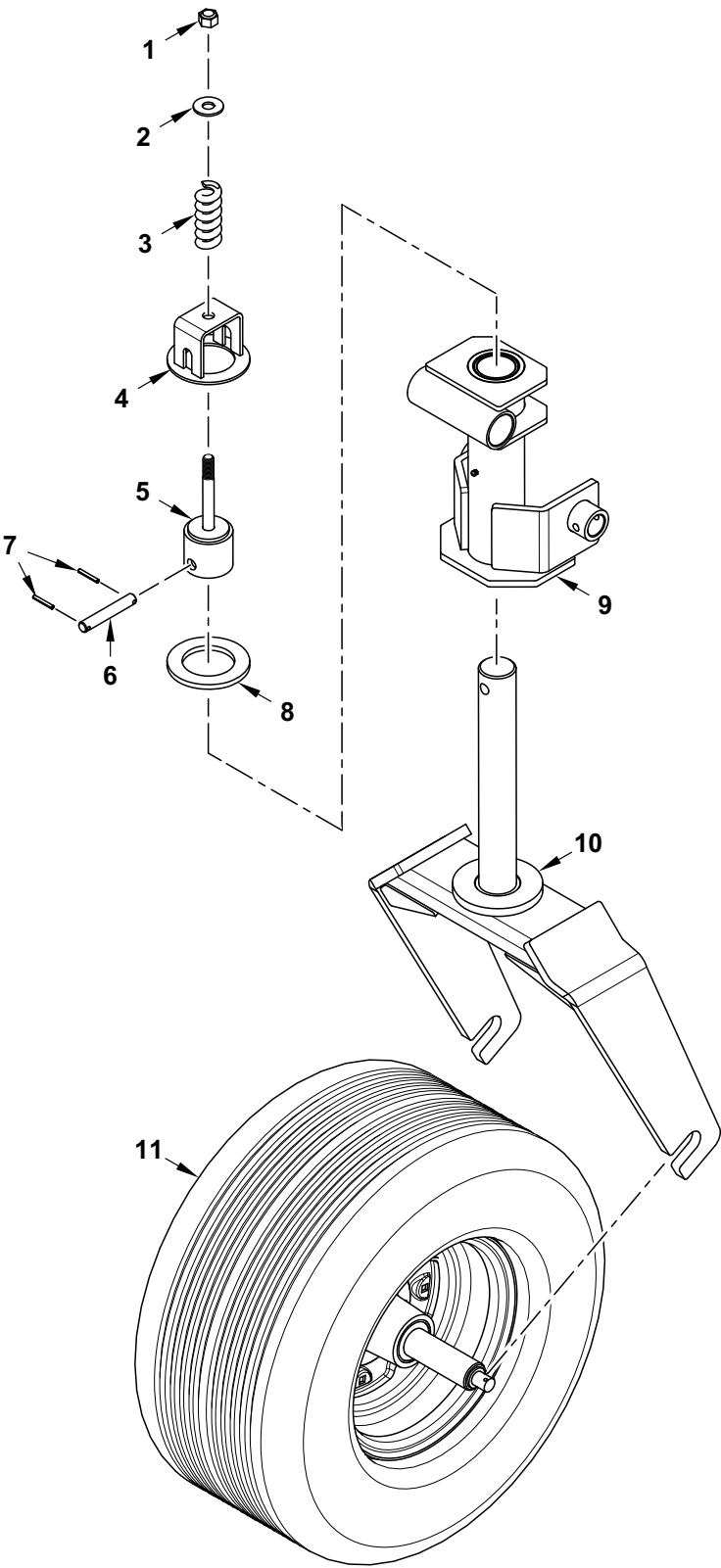
Depth Control, Wing



Depth Control, Wing

Ref.	FN	Part Number	Series	Qty.	Description
1		P359506		1	BAR, Leveling
2		P88349		2	BOLT, Hex, 1-1/4" -7NC x 6-1/2", Gr. 5 Z
3		P88430		2	NUT, Lock, 1-1/4" -7NC, Gr. 5 Z
4		P88622		3	NUT, Jam, 1-1/4" -7NC, Gr. 5 Z
5		P359515		1	LINK, Leveling, Adjustment
6		P357266		1	TUBE, Mast, Wing Frame
7		P67854		1	PIN, 1-1/4" x 4-1/2"
8		P88440		6	BUSHING, 1-1/4" x 1-7/8" x 14" GA Z
9		P42484		6	PIN, Roll, 1/4" x 2-1/4" Z
10		P357719		1	ROD, Threaded
11		P357283		1	ARM, Adjustment
12		P68034		2	PIN, 1-1/4" x 3-3/8"
13		P359554		1	BRACKET, Mounting, Gauge Wheel
		P359598		1	BRACKET, Mounting, Gauge Wheel 24'
14		P359502		1	LINK, Parallel, Upper
15		P355379		1	LINK, Parallel, Lower
16		P89462		12	BOLT, Hex, 3/4" -10NC x 10-1/2", Gr. 8 Z
17		P88665		12	NUT, Hex, 3/4" -10NC, Gr. 8 Z
18		P359518		3	PIN, 1-1/2" x 11-1/2"
19		P88541		8	BOLT, Hex, 1/2" -13NC x 3", Gr. 5 Z
20		P88363		8	NUT, Nylok, 1/2" -NC, Gr. 5 Z
21		P359517		1	PIN, 1-1/2" x 10"
22		REF			GAUGE WHEEL ASSY., See page 1-20

Gauge Wheel Assembly

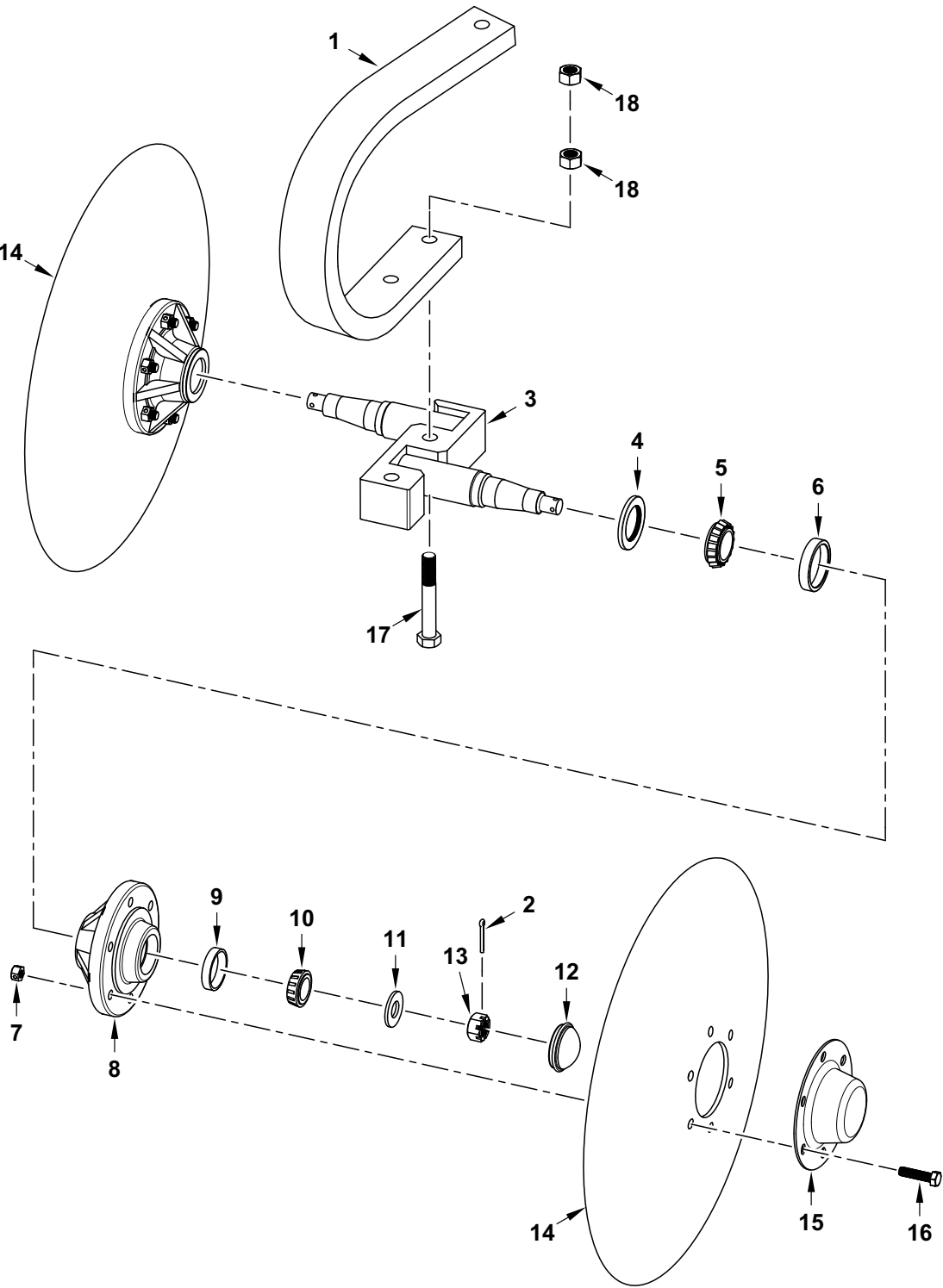


WR1086

Gauge Wheel Assembly

Ref.	FN	Part Number	Series	Qty.	Description
1		P88611		2	NUT, Lock, Nylon, 3/4" -10NC, Gr. 5 Z
2		P88131		2	WASHER, Flat, 3/4" (13/16" x 2" Act) Z
3		P54832		2	SPRING, Compression, 4-1/2"
4		P233747		2	COVER, Damper
5		P233746		2	COVER, Cap
6		P233749		2	PIN, Mounting
7		P88628		4	PIN, Roll, 1/4" x 1-3/4" Z
8		P233742		2	PAD, Brake, Damper
9		P359519		2	WHEEL, Gauge, Bracket
10		P356325		2	YOKE, Gauge Wheel
11		P351484		2	WHEEL ASSY., Gauge, Depth Control, See page 3-8

Disk Assembly

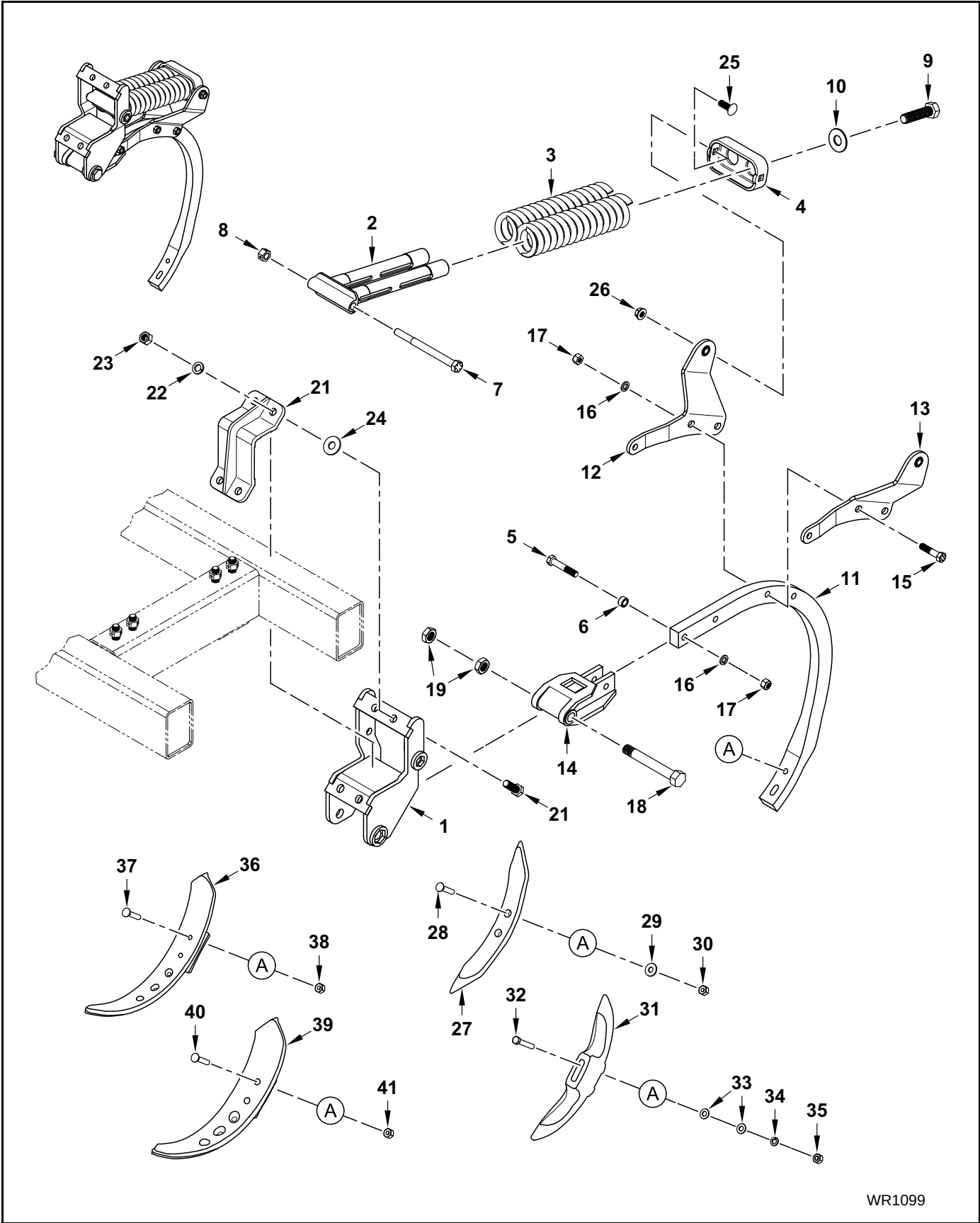


WR1082

Disk Assembly

Ref.	FN	Part Number	Series	Qty.	Description
1		P247981		1	C-SPRING, LH, Pitch, not shown
		P247988		1	C-SPRING, RH Pitch
2		P88301		2	PIN, Cotter, 3/16 Dia. X 1-1/2" Z
		P359580		2	HUB ASSY., Disk, Inc. 3 - 13
3		P359553		2	SPINDLE, Coulter
4		P58546		2	SEAL, Triple Lip, 2"
5		P14248		2	CONE, Bore, 1.625"
6		P14249		2	BEARING, Cup
7		P88363		12	NUT, Lock, 1/2" -13NC Gr.5 Z
8		P58953		2	HUB, 6 Bolt, Cutter, with Caps
9		P10344		2	BEARING, Cup, 2.328" OD
10		P10345		2	BEARING, Cone, 1-1/4" ID
11		P16094		2	WASHER, Spindle, 7/8" ID
12		P11381		2	CAP, Dust
13		P88340		2	NUT, Slotted, 7/8" 4NF Z
14		P355919		2	DISK, 24"
15		P56951		2	COVER, Dust
16		P88679		12	BOLT, Hex, 1/2" -13NC x 2", Gr. 5 Z
17		P89627		2	BOLT, Hex, 3/4" -16NF x 5", Gr. 8 Z
18		P89582		2	NUT, Hex, 3/4" -16NF, Gr. 8 Z

Shank Assembly



WR1099

Shank Assembly

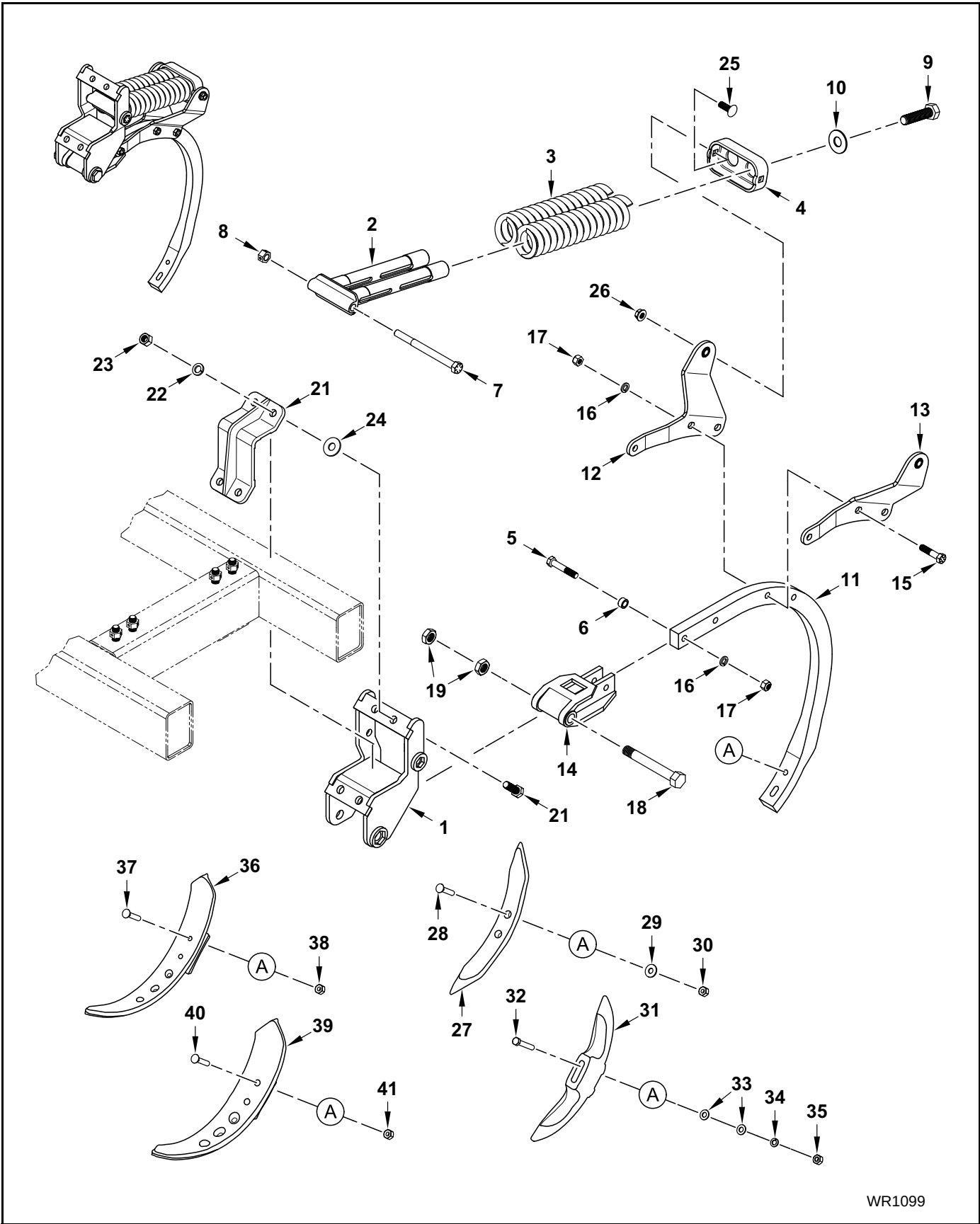
Ref.	FN	Part Number	Series	Qty.	Description
		240698			SHANK ASSY., Inc. 1 - 20
1		239756		1	MOUNT, Shank
2		240696		1	BRACKET, Spring
3		240601		2	SPRING
4		240695		1	RETAINER, Spring
5		88292		1	BOLT, Hex 5/8" -11NC x 3-1/2", Gr. 5 Z
6		56932		1	PLATE, Pivot, Main
7		351191		1	BOLT, Hex 3/4" -10NC x 8-3/4", Gr. 8
8		88356		1	NUT, Lock, 3/4" -10NC, Gr. 5 Z
9		66226		2	MODULE, Clutch
10		88196		2	WASHER, Flat 1" (1-1/6" x 2-1/2" Act) Z
11	1	64977		1	SHANK, Grey
	2	334609		1	50° SHANK (GRAY)
12		239758		1	PLATE, Mounting Spring, Right
13		239757		1	PLATE, Mounting Spring, Left
14		67196		1	HOLDER, Shank
15		88949		3	BOLT, Hex, 5/8" -11NC x 2-3/4", Gr. 8 Y Z
16		88129		4	WASHER, Lock, 5/8" (11/16 Act) Z
17		88845		4	NUT, Lock, 5/8" -1NC, Gr. 5 Z
18		350988		1	BOLT, Hex, 1" -8NC x 7.35" (1.5 in), Gr. 5
19		88141		2	NUT, Jam, 1" -8NC, Gr. 5 Z
20		89433		4	BOLT, Hex, 3/4" -10NC x 2-1/4", Gr. 8 Y Z
21		240694		1	CAP, Corner
22		88130		4	WASHER, Lock, 3/4" (13/16 Act) Z
23		89080		4	NUT, Hex, 3/4" -10NC, Gr. 8 Y Z
24		88131		4	WASHER, Flat, 3/4" (13/16" x 2" Act) Z
25		89463		2	BOLT, Carriage, 5/8" -11NC x 1-3/4", Gr. 5 Z
26		89505		2	NUT, Lock, Flange, 5/8", Gr. 8 ZP
		222696			CHISEL POINT ASSY., Straight, Inc. 27 - 30
27		223817		1	CHISEL POINT, Straight
28		89468		2	BOLT, Plow, 1/2" -13NC x 2-1/2", #3, Gr. 8
29		88347		2	WASHER, Flat, 1/2" Z
30		88346		2	NUT, Hex, 1/2" -13NC, Gr. 5

1 - Used on serial numbers prior to SN: 2120465342

2 - Used on serial numbers 2120465342 to current

Continued on Next Page

Shank Assembly

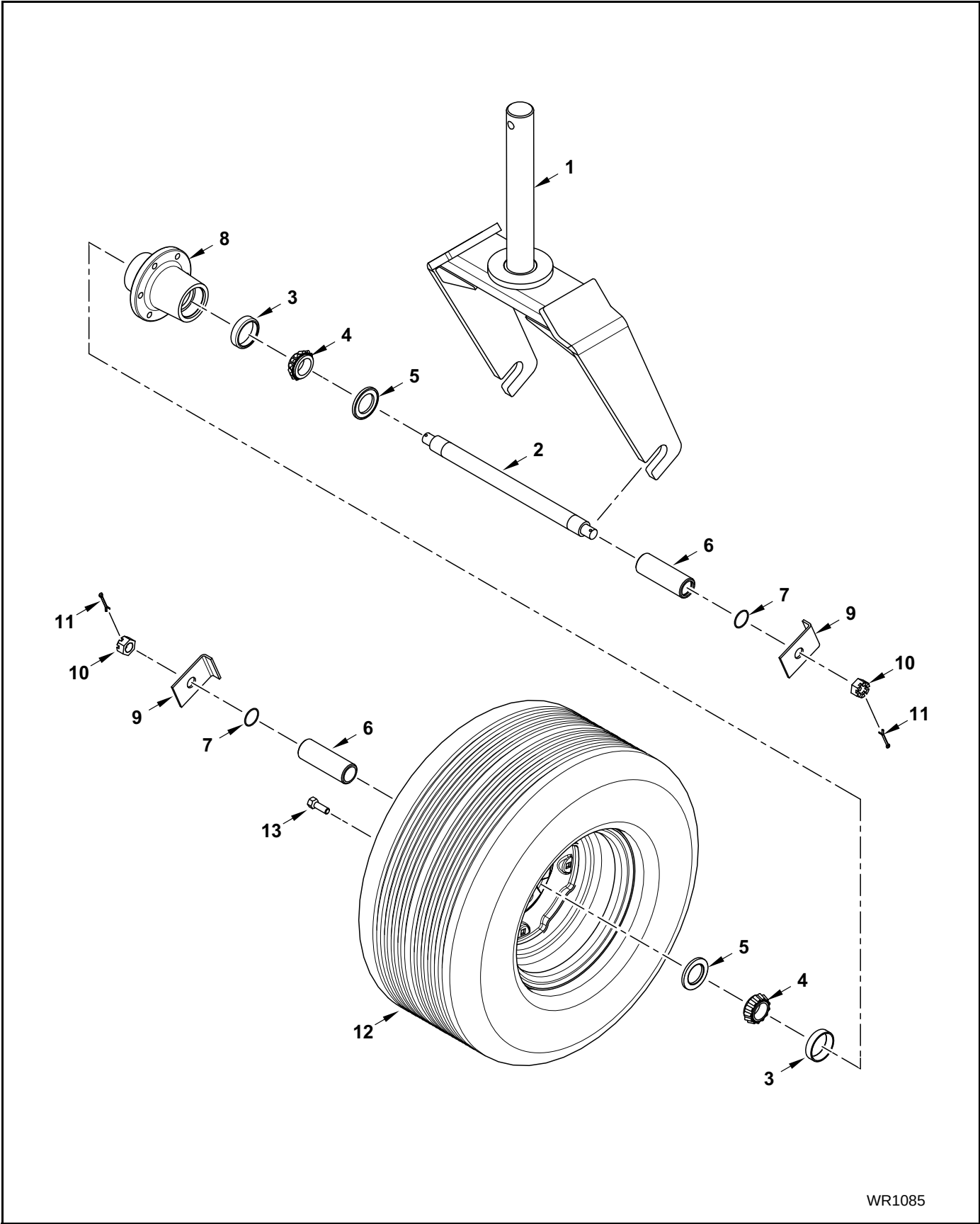


WR1099

Shank Assembly

Ref.	FN	Part Number	Series	Qty.	Description
		359010			CHISEL POINT ASSY., Straight, Chrome, Inc. 31 - 35
31		359009		1	CHISEL POINT, Straight, Chrome
32		88940		2	BOLT, Hex, 1/2" -13NC x 3-3/4", Gr. 5 Z
33		333332		4	WASHER
34		88303		2	WASHER, Lock, 1/2" ID Z
35		333331		2	NUT
		240690			CHISEL POINT ASSY., Concave, Twist, LH, 3", nc. 36 - 38
		240691			CHISEL POINT ASSY., Concave, Twist, RH, 3", Inc. 36 - 38, Not Shown
36		240686		1	SPIKE, Concave, Twist, LH, 3"
		240687		1	SPIKE, Concave, Twist, RH, 3", Not Shown
37		89468		2	BOLT, Plow, 1/2" -13NC x 2-1/2", #3, Gr. 8
38		88346		2	NUT, Hex, 1/2" -13NC, Gr. 5
		240692			CHISEL POINT ASSY., Concave, Twist, LH, 4", Inc. 39 - 41
		240693			CHISEL POINT ASSY., Concave, Twist, RH, 4", Inc. 39 - 41, Not Shown
39		240688		1	SPIKE, Concave, Twist, LH, 4"
		240689		1	SPIKE, Concave, Twist, RH, 4", Not Shown
40		89468		2	BOLT, Plow, 1/2" -13NC x 2-1/2", #3, Gr. 8
41		88346		2	NUT, Hex, 1/2" -13NC, Gr. 5

Spindle Assembly, Gauge Wheel

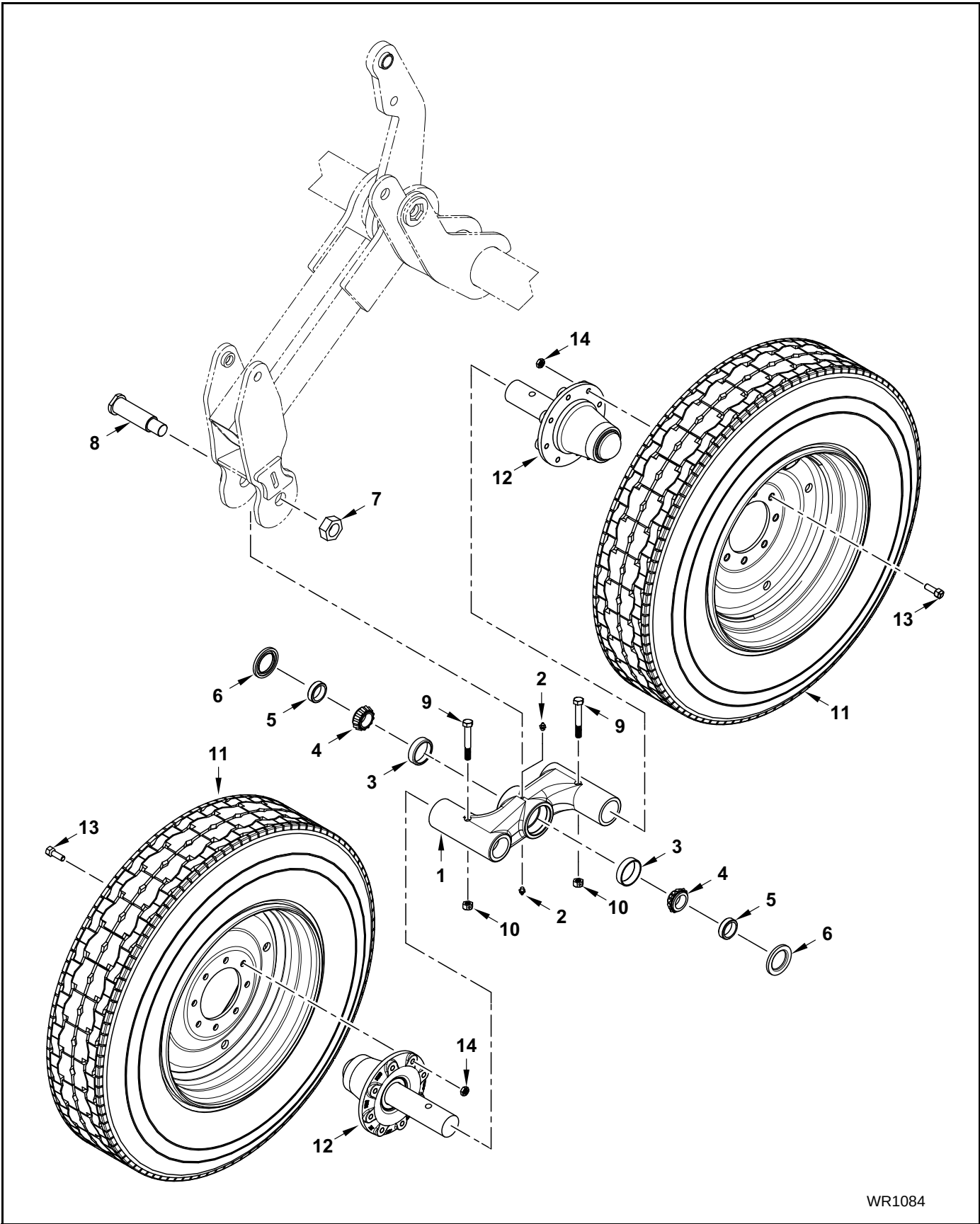


WHEELS AND SPINDLES

Spindle Assembly, Gauge Wheel

Ref.	FN	Part Number	Series	Qty.	Description
1		P356325		2	YOKE, Gauge Wheel, Tall
		P58294		1	SPINDLE ASSY., Inc. 2 - 11
2		P58204		2	SPINDLE, 22"
3		P16082		4	BEARING, Cup, 3" OD
4		P54731		2	BEARING, Cone, 1-1/2" ID
5		P208981		2	SEAL, Internal, Triple Lip, 2"
6		P62400		2	INSERT, Gauge Wheel
7		P12456		2	SEAL, O-Ring, 3/32" x 1-11/16"
8		P54729		2	HUB, 6 Bolt
9		P55150		2	LOCK, Spindle
10		P88299		2	NUT, Slotted, 1-1/4" NF, Gr. 5 Z
11		P88133		2	PIN, Cotter, 3/15" x 2" Z
12		P351484		2	WHEEL ASSY., Gauge, See page 3-8
13		P63831		6	BOLT, Wheel, 9/15" NF x 1-1/2"

Walking Axle Assembly, Rear



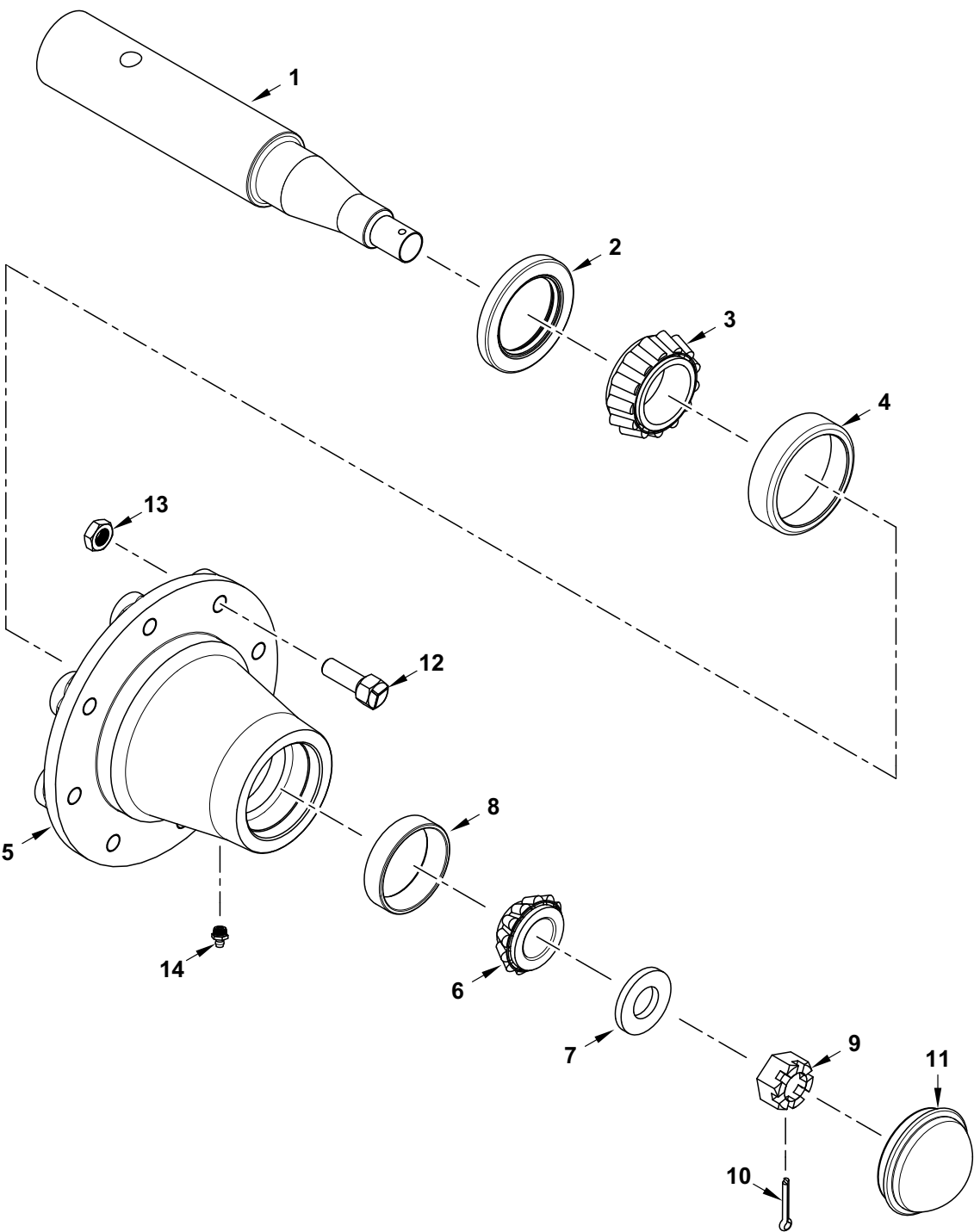
WR1084

WHEELS AND SPINDLES

Walking Axle Assembly, Rear

Ref.	FN	Part Number	Series	Qty.	Description
		P357135		2	WALKING AXLE ASSY., Rear, Inc. 1 - 10
		P356835		1	AXLE, Walking, Main Frame, Short, Dia. Cast, 2-1/2"
		P356838		1	AXLE, Walking, Wing Frame, Short, Dia. Cast, 2-1/2"
1		NSS		1	AXLE, Walking, Main Frame, Short, Dia. Cast, 2-1/2"
		NSS		1	AXLE, Walking, Wing Frame, Short, Dia. Cast, 2-1/2"
2		P88263		2	FITTING, Grease, Tapered, 1/8" NPT
3		P12103		2	BEARING, Cone, 1-3/4" ID
4		P12104		2	BEARING, Cup, 3.265" OD
5		P16278		2	BEARING, Bushing
6		P23733		2	SEAL, Triple Lip, 2.25" ID x 3.40" OD
7		P42082		1	NUT, Lock, Jam, 1-1/2" NF
8		P16277		1	SHAFT, Tandom
9		P88298		2	BOLT, Hex, 5/8" -11NC x 4", Gr. 5 Z
10		P88369		2	NUT, Lock, 5/8" -11NC, Gr. 5 Z
11		P353366		2	WHEEL ASSY., Rear, See page 3-8
12		P16154		2	HUB ASSY., Rear, See page 3-6
13		P63831		8	BOLT, Wheel, 9/16" -18NF x 1-1/2"
14		P89458		8	NUT, Jam, 9/16" -18NF Z

Hub & Spindle Assembly, Rear



WR1083

WHEELS AND SPINDLES

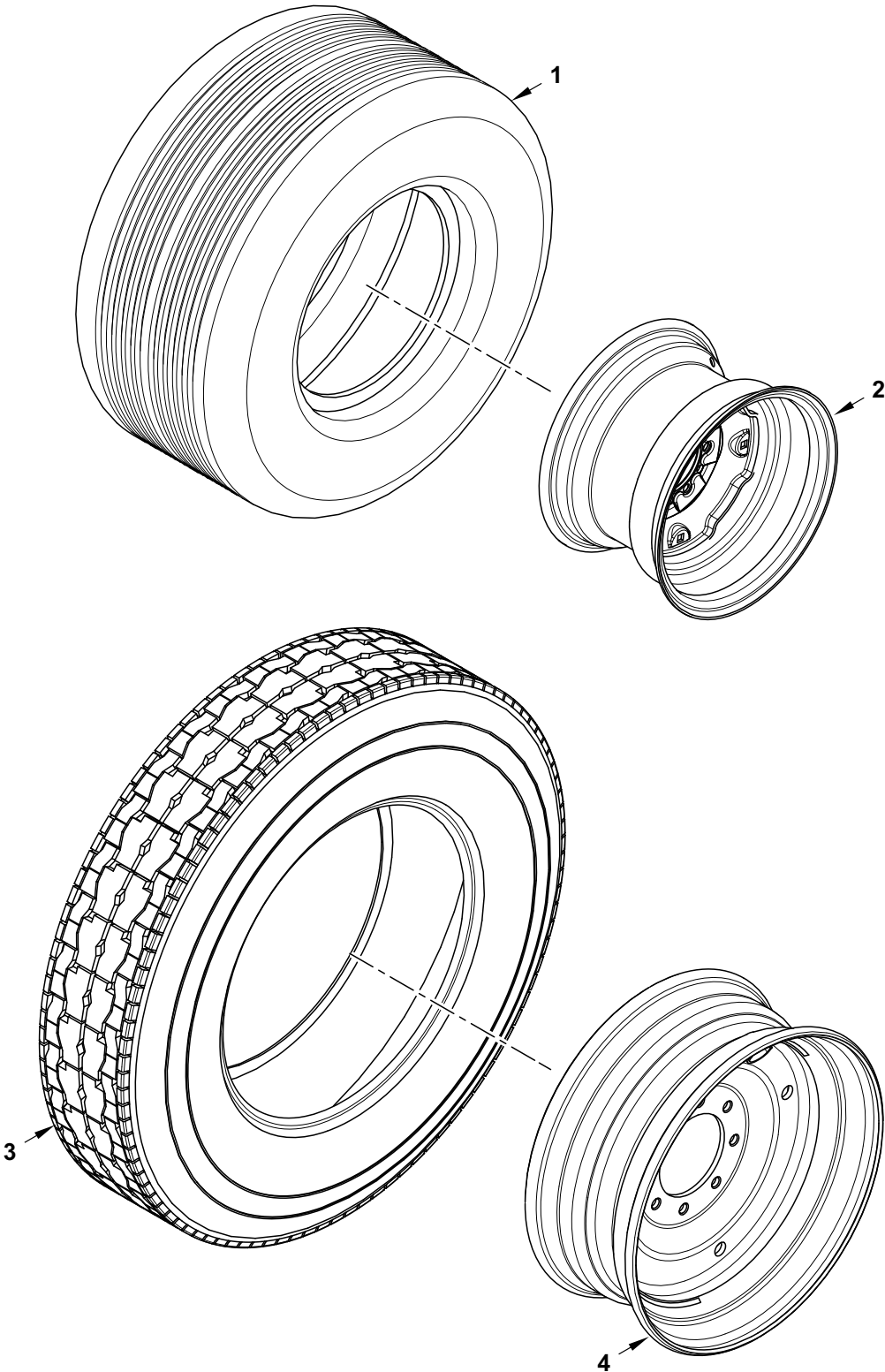
Hub & Spindle Assembly, Rear

Ref.	FN	Part Number	Series	Qty.	Description
	1	P16154		1	HUB & SPINDLE ASSY., Maine Frame, Rear, Inc. 1 -13
	2	P247897		1	HUB & SPINDLE ASSY., Maine Frame, Rear, Inc. 1 -13
1		P16156		1	SPINDLE, 2-1/2"
2		P235298		2	SEAL, Hub, Single Lip, 2-1/2"
3		P16083		2	BEARING, Cone, 2" ID
4		P16084		2	BEARING, Cup, 3.672" OD
5		P41054		2	HUB, 2-1/2"
6		P16081		2	BEARING, Cone, 1-5/16" ID
7		P64050		2	WASHER, Hard, 2-1/2" OD x 1-1/16" ID
8		P16082		2	BEARING, Cup, 3" OD
9		P88299		2	NUT, Slotted, 1" -14NF, Gr. 5 Z
10		P88301		2	PIN, Cotter, 3/16" x 1-1/2" Z
11		P16077		2	CAP, Dust, DC -17
12	1	P63831		8	BOLT, Wheel, 9/16" NF x 1-1/2"
	2	PW104213		8	STUD BOLT, 9/16" NF x 2-1/8" (NOT SHOWN)
13	1	P89458		8	NUT, JAM, 9/16" NF
13	2	PW103636		8	NUT, STUD, 9/16" UNF (NOT SHOWN)

1 - Pre Model Year 21'

2 - Model Year 21' and Newer

Wheel Assembly



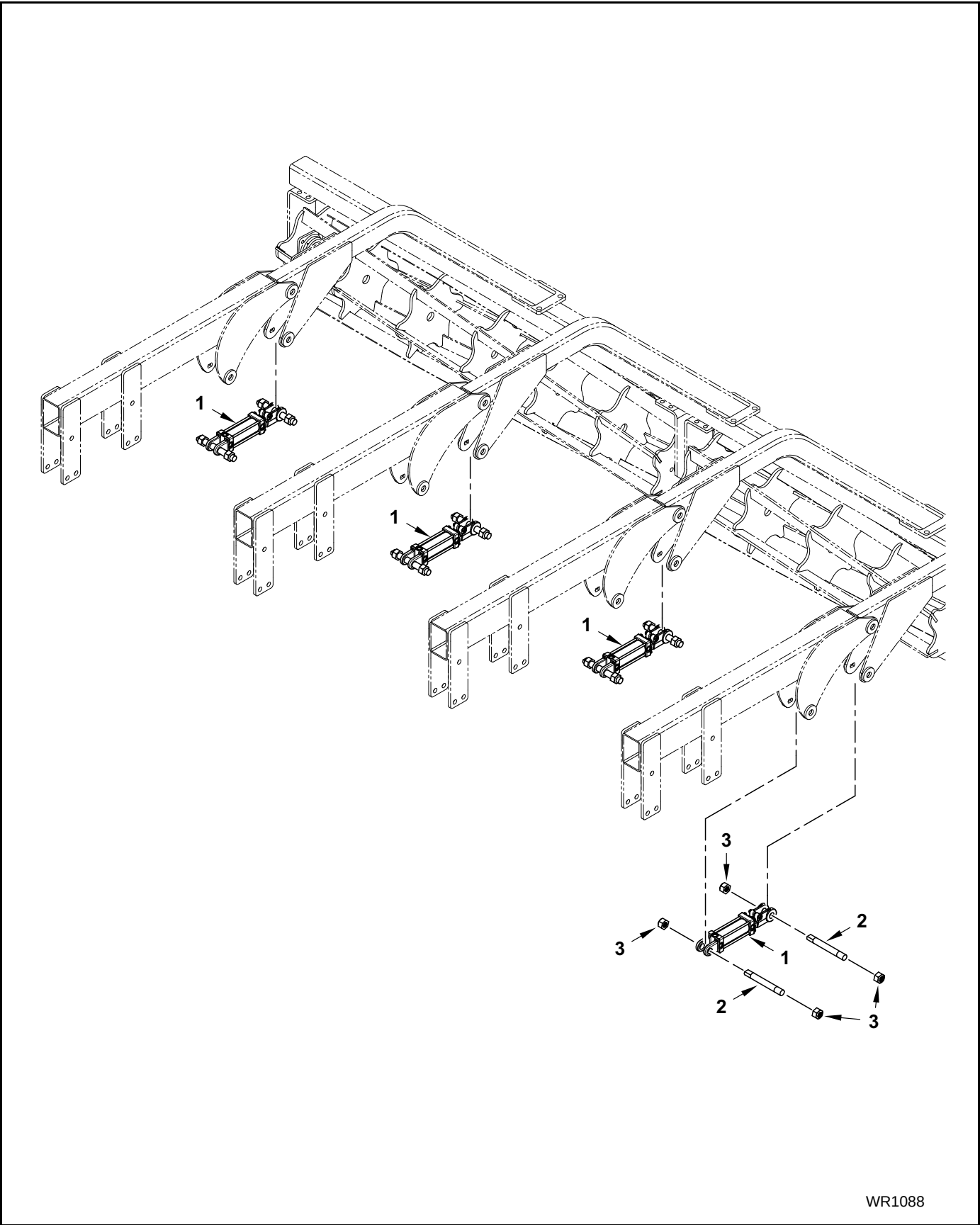
WR1095

WHEELS AND SPINDLES

Wheel Assembly

Ref.	FN	Part Number	Series	Qty.	Description
		P351484			WHEEL ASSY., Gauge Wheel, Inc. 1 - 2
1		NSS			TIRE, 13.50 x 15 FI F HWY IMP
2		P46714			RIM, 15 x 10, 6 Bolt
		P353366			WHEEL ASSY., Rear, Inc. 1 - 2
3		NSS			TIRE, 12R22.5
4		P350268			RIM, 12R22.5 x 8.25, 8 Bolt, Silver Mist

Cylinder Mounting, Rolling Basket (Option)

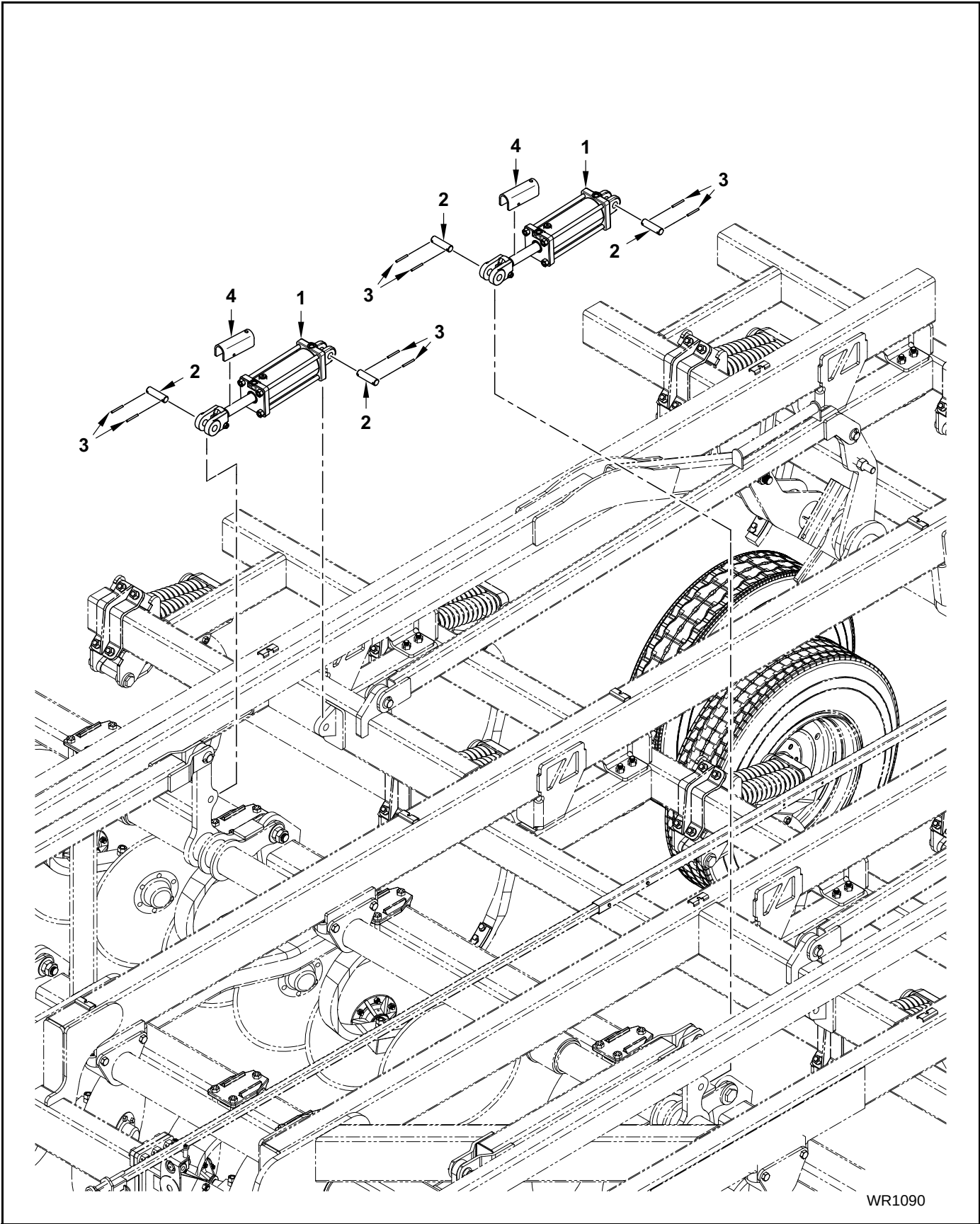


WR1088

Cylinder Mounting, Rolling Basket (Option)

Ref.	FN	Part Number	Series	Qty.	Description
1		PB112426		4	CYLINDER, Rolling Basket, 2-1/2" x 4"
2		P355339		8	PIN, Threaded Pivot
3		P88658		16	NUT, Lock, 1" -NC, Gr. 5 Z

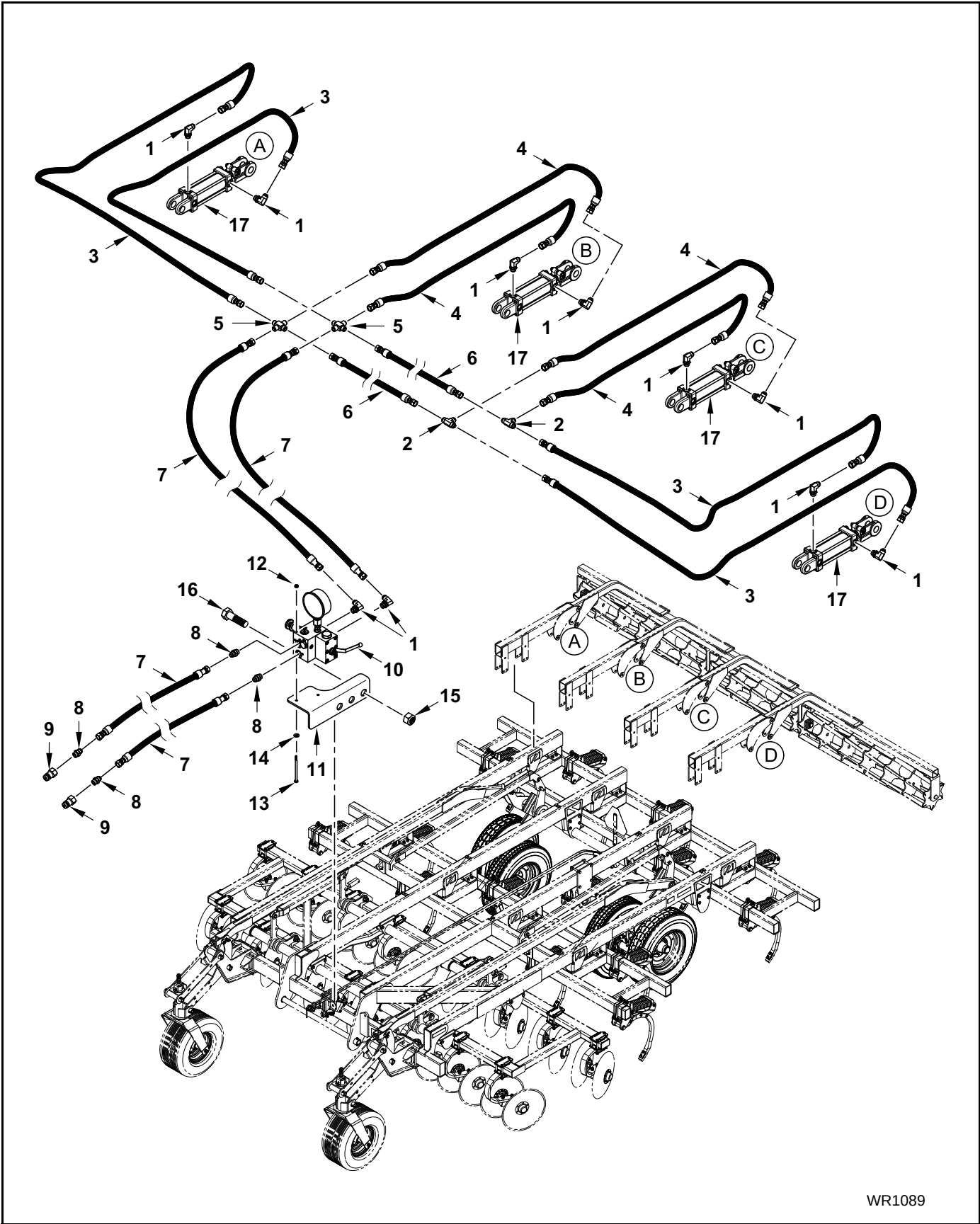
Cylinder Mounting, Disk Depth Control



Cylinder Mounting, Disk Depth Control

Ref.	FN	Part Number	Series	Qty.	Description
1		P246056		2	CYLINDER, Depth Control 4" x 8"
		P40064			SEAL KIT, 4" x 8"
2		P68796		4	PIN, Linkage
3		P42484		8	PIN, Roll, 1/4" x 2-1/4" Z
4		P13681		2	LOCK, Cylinder

Rolling Basket Circuitry, 16' and 19' (Option)

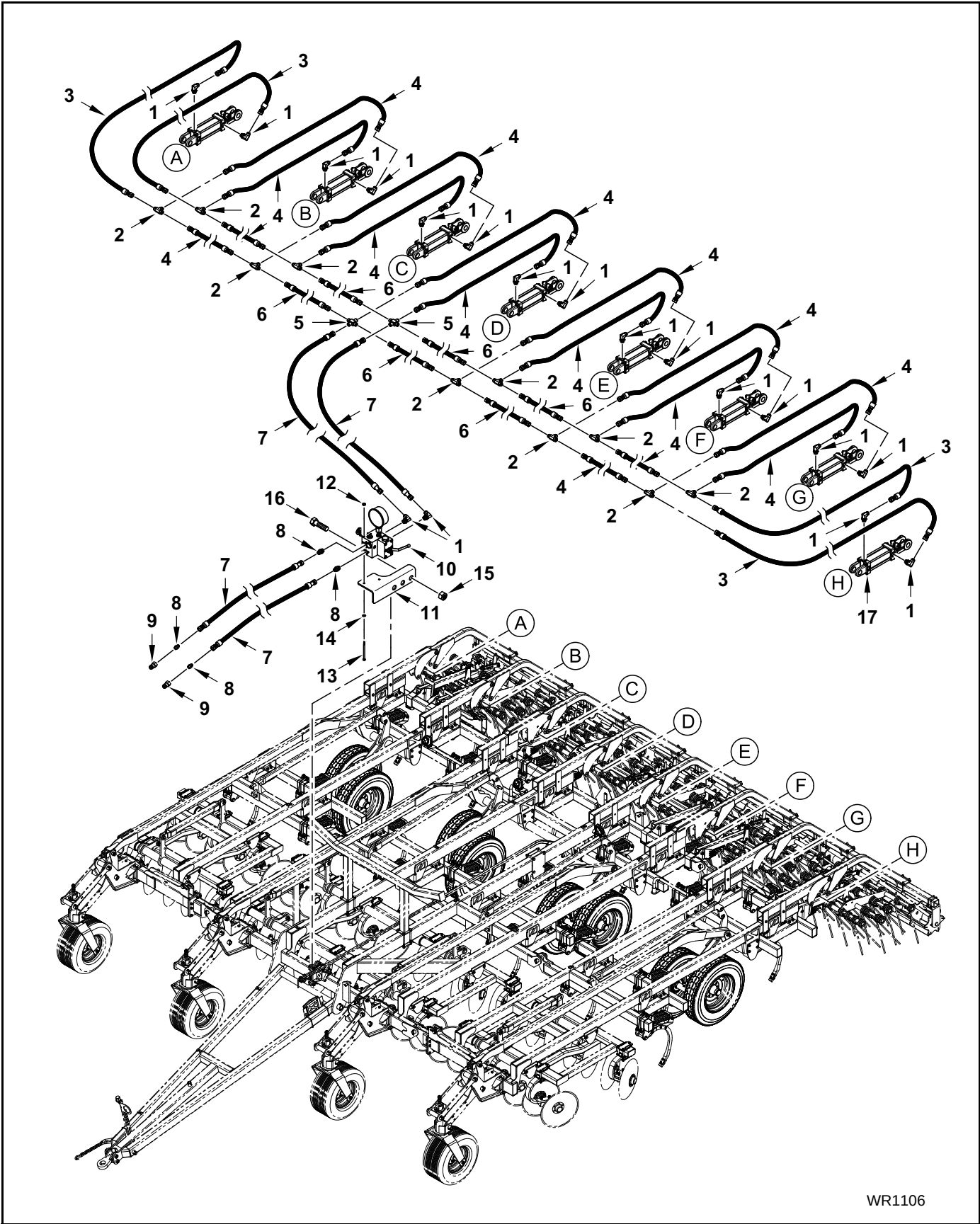


WR1089

Rolling Basket Circuitry, 16' and 19' (Option)

Ref.	FN	Part Number	Series	Qty.	Description
1		P25580		10	ELBOW, 90°, 8M ORB x 8MJ
2		P13238		2	TEE, 8MJ x 8MJ x 8MJ
3		P13483		4	HOSE, 3KPSI, 3/8" x 120", 8 FJX x 8FJX
4		P67636		4	HOSE, 3KPSI, 3/8" x 72", 8FJX x 8FJX
5		P15910		2	FITTING, CROSS, 8MJ x 8MJ x 8MJ x 8MJ
6		PA63005		2	HOSE, 3KPSI, 3/8" x 48", 8FJX x 8FJX
7		P234939		4	HOSE, 3KPSI, 3/8" x 220" 8FJX x 8FJX
8		P24024		4	FITTING, Adapter, 8 MORB x 8MJ
9		P247425		2	FITTING, Coupler, Quick, 8 ORB
10		P355299		1	VALVE ASSY., Pressure Reducing / Relieving Pilot, See page 4-16
11		P358158		1	PLATE, Valve Mount
12		P88237		2	NUT, Lock, 1/4" -20NC x 4-1/2", Gr. 5 Z
13		P89410		2	BOLT, Hex, 1/4" -20NC x 4-1/2", Gr. 5 Z
14		P88261		2	WASHER
15		P88658		3	NUT, Lock, 1" -NC x 3-1/2", Gr. 8 Z
16		P89371		3	BOLT, Hex, 1" -8NC x 3-1/2", Gr. 8 Z
17		PB112426		4	CYLINDER, Rolling Basket, 2-1/2" x 4"

Rolling Basket Circuitry, 24', 29' and 34' (Option)



WR1106

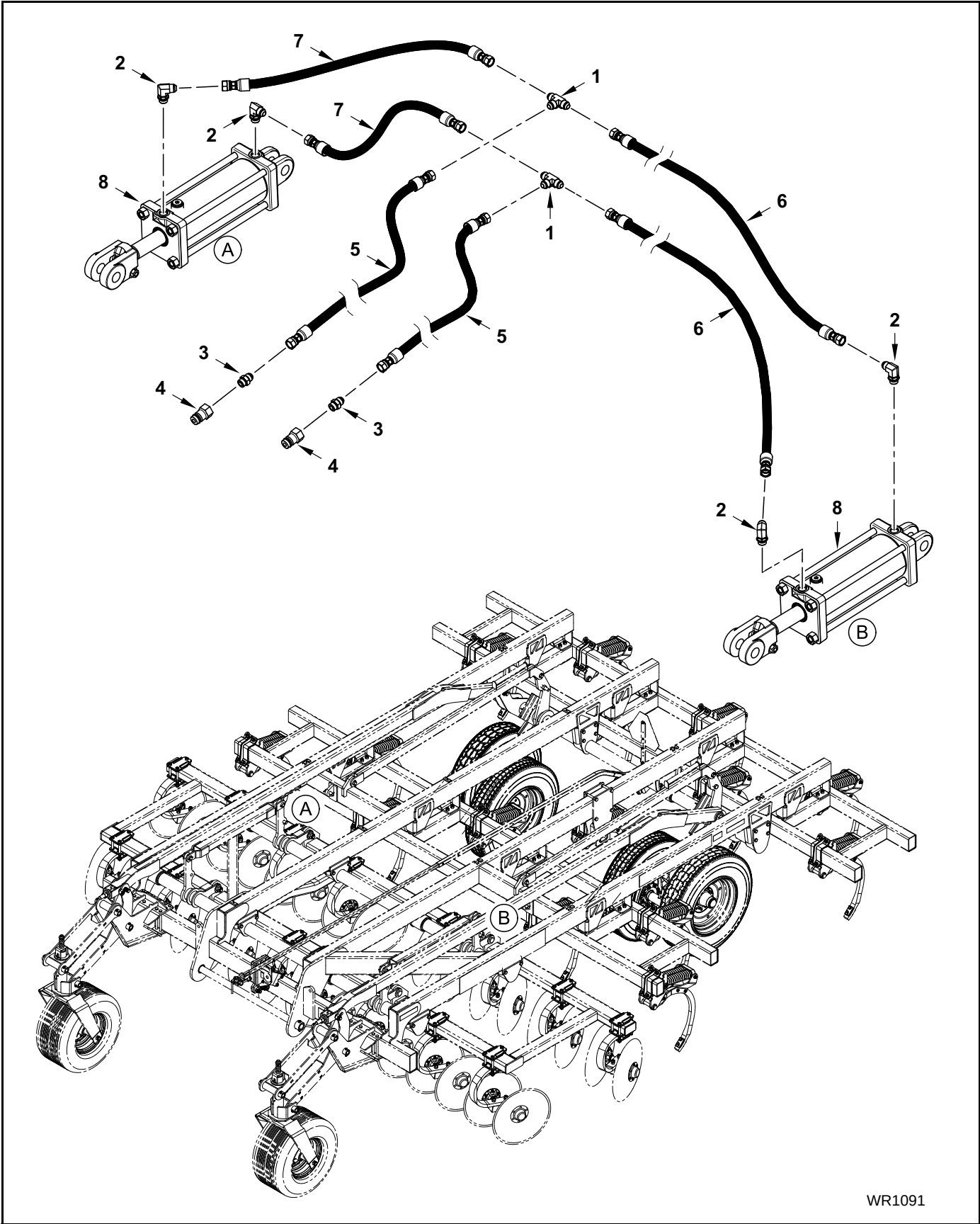
Rolling Basket Circuitry, 24', 29' and 34' (Option)

Ref.	FN	Part Number	Series	Qty.	Description
1		P25580		18	ELBOW, 90°, 8M ORB x 8MJ
2		P13238		10	TEE, 8MJ x 8MJ x 8MJ
3		P13483		4	HOSE, 3KPSI, 3/8" x 120", 8FJX x 8FJX
4	1	P67636		12	HOSE-HYD: 0.38 X 072 8FJX-8FJX 3KPSI
	2	P56540		4	HOSE, 3KPSI 3/8" x 89", 8FJX x 8FJX
5		P15910		2	FITTING, Cross, 8MJ x 8MJ x 8MJ x 8MJ
6		PA63005		10	HOSE, 3KPSI, 3/8" x 48", 8FJX x 8FJX
7		P234939		4	HOSE, 3KPSI, 3/8" x 220" 8FJX x 8FJX
8		P24024		4	FITTING, Adapter, 8MORB x 8MJ
9		P247425		2	FITTING, Coupler, Quick, 8ORB
10		P355299		1	VALVE ASSY., Pressure Reducing / Relieving Pilot, See page 4-16
11		P358158		1	PLATE, Valve Mount
12		P88237		2	NUT, Lock, 1/4" -20NC, Gr. 5 Z
13		P89410		2	BOLT, Hex, 1/4" -20NC x 4-1/2", Gr. 5 Z
14		P88261		2	WASHER
15		P88658		3	NUT, Lock, 1" -8NC x 3-1/2", Gr. 8 Z
16		P89371		3	BOLT, Hex, 1" -8NC x 3-1/2", Gr. 8 Z
17		PB112426		8	CYLINDER, Rolling Basket, 2-1/2" x 4"

1 - Used on 24' and 29' Models

2 - Used on 34' Models

Disk Depth Control Circuitry, 16' and 19'



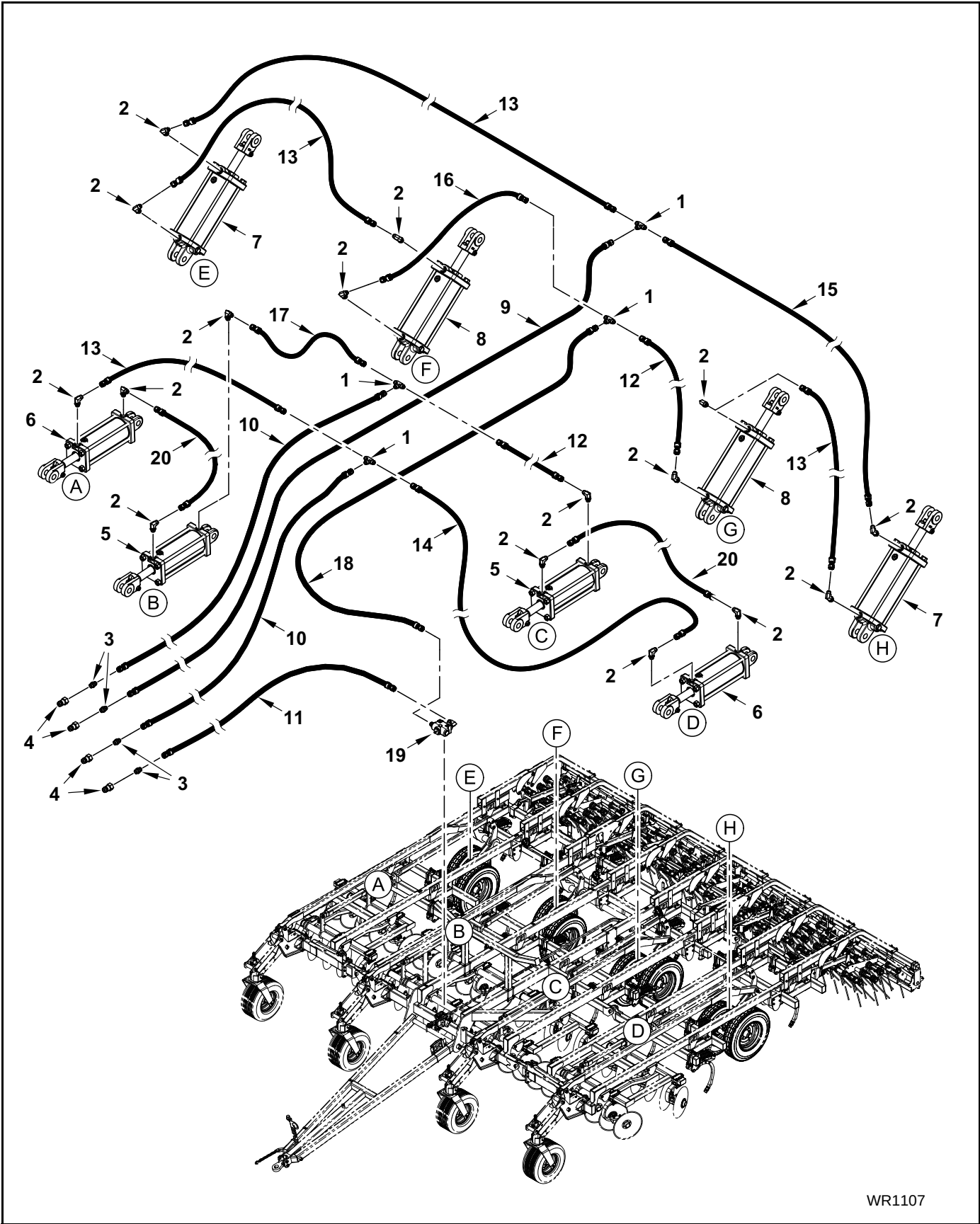
WR1091

Disk Depth Control Circuitry, 16' and 19'

Ref.	FN	Part Number	Series	Qty.	Description
1		P13238		2	FITTING, Tee, 8MJ x 8MJ x 8MJ
2		P25580		4	FITTING, 90°, 8M ORB x 8MJ
3		P24024		2	FITTING, Adapter, 8M ORB x 8MJ
4		P247425		2	COUPLER, Quick, 8 ORB
5		P240609		2	HOSE, 3KPSI, 3/8" x 324", 8FJX x 8FJX
6		P56540		2	HOSE, 3KPSI, 3/8" x 89", 8FJX x 8FJX
7		P25597		2	HOSE, 3KPSI, 3/8" x 40" 8FJX x 8FJX
8	1	P246056		2	CYLINDER, Depth Control 4" x 8"

1 - Seal Kit P40064

Disk Depth Control Circuitry, 24', 29' and 34'



WR1107

Disk Depth Control Circuitry, 24', 29' and 34'

Ref.	FN	Part Number	Series	Qty.	Description
1		P13238		4	FITTING, Tee, 8MJ x 8MJ x 8MJ
2		P25580		16	FITTING, 90°, 8M ORB x 8MJ
3		P24024		4	FITTING, Adapter, 8M ORB x 8MJ
4		P247425		4	COUPLER, Quick, 8 ORB
5	3	P246056		2	CYLINDER, Depth Control 4" x 8"
6	4	P246057		2	CYLINDER, Depth Control 3-3/4" x 8"
7	5	P351768		2	CYLINDER, Depth Control, 4-3/4" x 10"
8	6	P351767		2	CYLINDER, Depth Control, 5" x 10"
9		P248422		1	HOSE, 3KPSI, 1/2" x 432", 8FJX x 8FJX
10		P240609		2	HOSE, 3KPSI, 3/8" x 324", 8FJX x 8FJX
11		PA35684		1	HOSE, 3KPSI, 1/2" x 258", 8FJX x 8FJX
12		P56540		2	HOSE, 3KPSI, 3/8" x 89", 8FJX x 8FJX
13	1	P13483		2	HOSE, 3KPSI, 3/8" x 120", 8FJX x 8FJX
	2	P13484		2	HOSE, 3KPSI, 3/8" x 156", 8FJX x 8FJX
14		P234947		1	HOSE, 3KPSI, 3/8" x 194", 8FJX x 8FJX
15	1	P59909		1	HOSE, 3KPSI, 3/8" x 168", 8FJX x 8FJX
	2	P234947		1	HOSE, 3KPSI, 3/8" x 194", 8FJX x 8FJX
16		P56539		1	HOSE, 3KPSI, 3/8" x 50", 8FJX x 8FJX
17		P25597		1	HOSE, 3KPSI, 3/8" x 40', 8FJX x 8FJX
18		P237264		1	HOSE, 3KPSI, 1/2" x 234", 8FJX x 8FJX
19		P355299		1	VALVE ASSY., Pressure Reducing / Relieving Pilot
20		P13483		1	HOSE, 3KPSI, 3/8" x 120", 8FJX x 8FJX

1 - Used on 24' and 29' Models

2 - Used on 34' Models

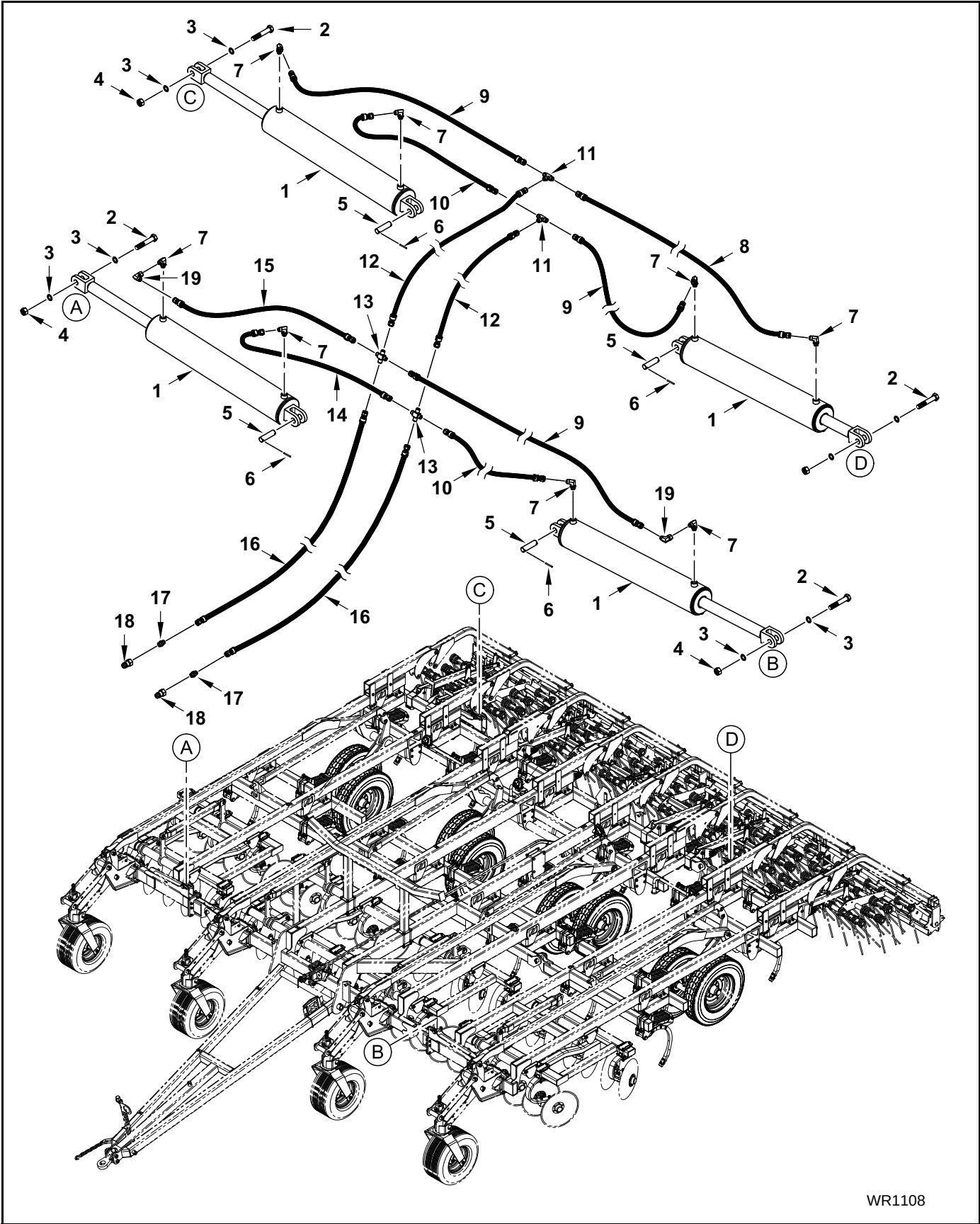
3 - Seal Kit P40064

4 - Seal Kit P40817

5 - Seal Kit P354584

6 - Seal Kit P354583

Wing Lift Circuitry, 24' and 29'



WR1108

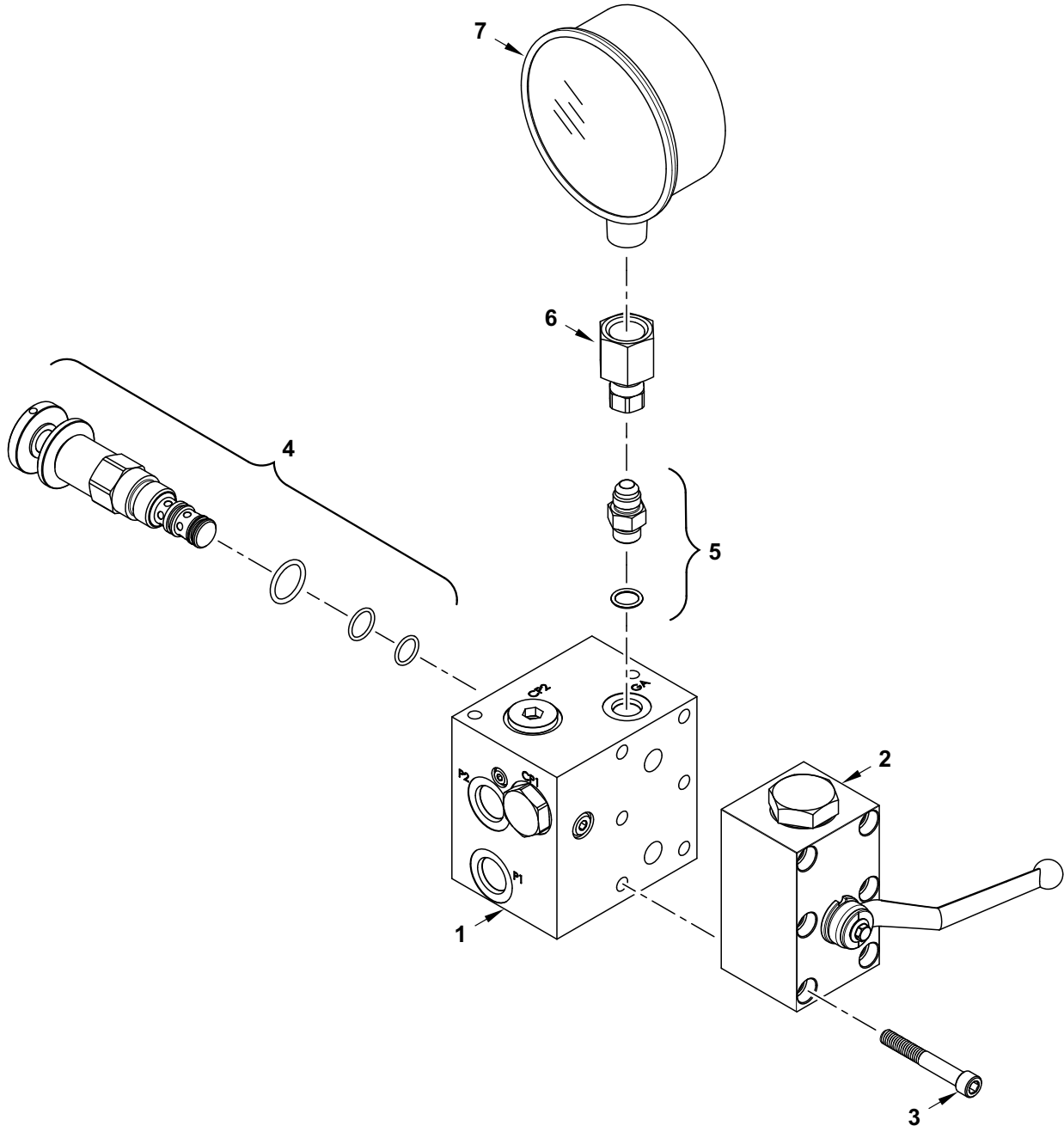
HYDRAULIC SYSTEM

Wing Lift Circuitry, 24' and 29'

Ref.	FN	Part Number	Series	Qty.	Description
1	1	P20966F1		4	CYLINDER, Wing Lift 5 x 30
2		P355975		4	BOLT, Wing Fold, 1" -8NC x 6"
3		P88196		8	WASHER, Flat, 1" (1-1/16" x 2-1/2" Act) Z
4		P88348		4	NUT, Lock, 1" -NC, Gr. 5 Z
5		P221714		4	PIN, 1" x 4"
6		P42484		8	PIN, Roll, 1/4" x 1-1/4" Z
7		P25580		10	FITTING, 90°, 8M ORB x 8MJ
8		P235386		1	HOSE, 3KPSI, 3/8" x 137", 8FJX x 8FJX
9		P56540		3	HOSE, 3KPSI, 3/8" x 89", 8FJX x 8FJX
10		P25602		2	HOSE, 3KPSI, 3/8" x 65", 8FJX x 8FJX
11		P13238		2	FITTING, Tee, 8MJ x 8MJ x 8MJ
12		P234947		2	HOSE, 3KPSI, 3/8" x 194", 8FJX x 8FJX
13		P15910		2	FITTING, 4-Way, 8MJ x 8MJ x 8MJ x 8MJ
14		P14850		1	HOSE, 3KPSI, 3/8" x 18", 8FJX x 8FJX
15		P56539		1	HOSE, 3KPSI, 3/8" x 50", 8FJX x 8FJX
16		P237264		2	HOSE, 3KPSI, 3/8" x 234", 8FJX x 8FJX
17		P24024		2	FITTING, Adapter, 8M ORB x 8MJ
18		P247425		2	FITTING, Coupler, Quick 8 ORB
19		P25591		2	ELBOW, 90, 8MJ x 8FJX

1 - Seal Kit P233731

Pressure Reducing Valve Assembly, Rolling Basket (Option)

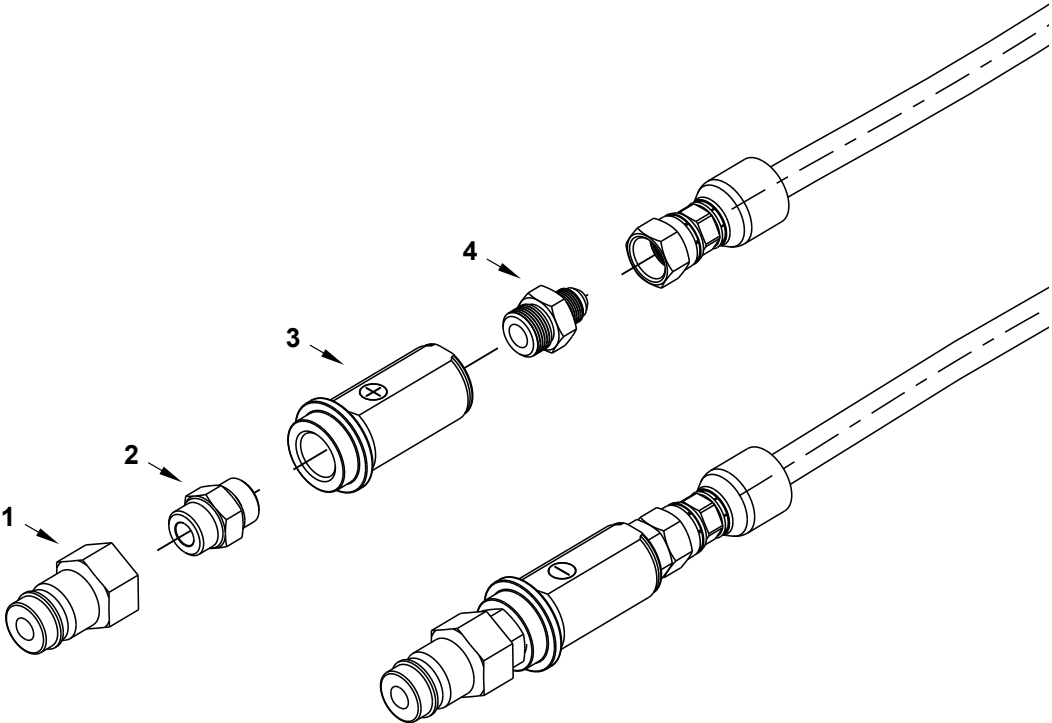


WR1096

Pressure Reducing Valve Assembly, Rolling Basket (Option)

Ref.	FN	Part Number	Series	Qty.	Description
		P355299		1	VALVE ASSY., Pressure Reducing / Relieving Pilot, Inc. 1 - 7
1		P357231		1	BLOCK
2		P357227		1	VALVE, Ball
3		P357230		1	BOLT, SHCS, 5/16" -18NC x 2-1/4"
4		P357226		1	CARTRIDGE
5		P357229		1	FITTING, Adapter SAE #6 Male x JIC #6 Male
6		P357228		1	FITTING, 08 Female Pipe x 06 Female JIC
7		P355309		1	GUAGE, Pressure, 3000 PSI, 4"

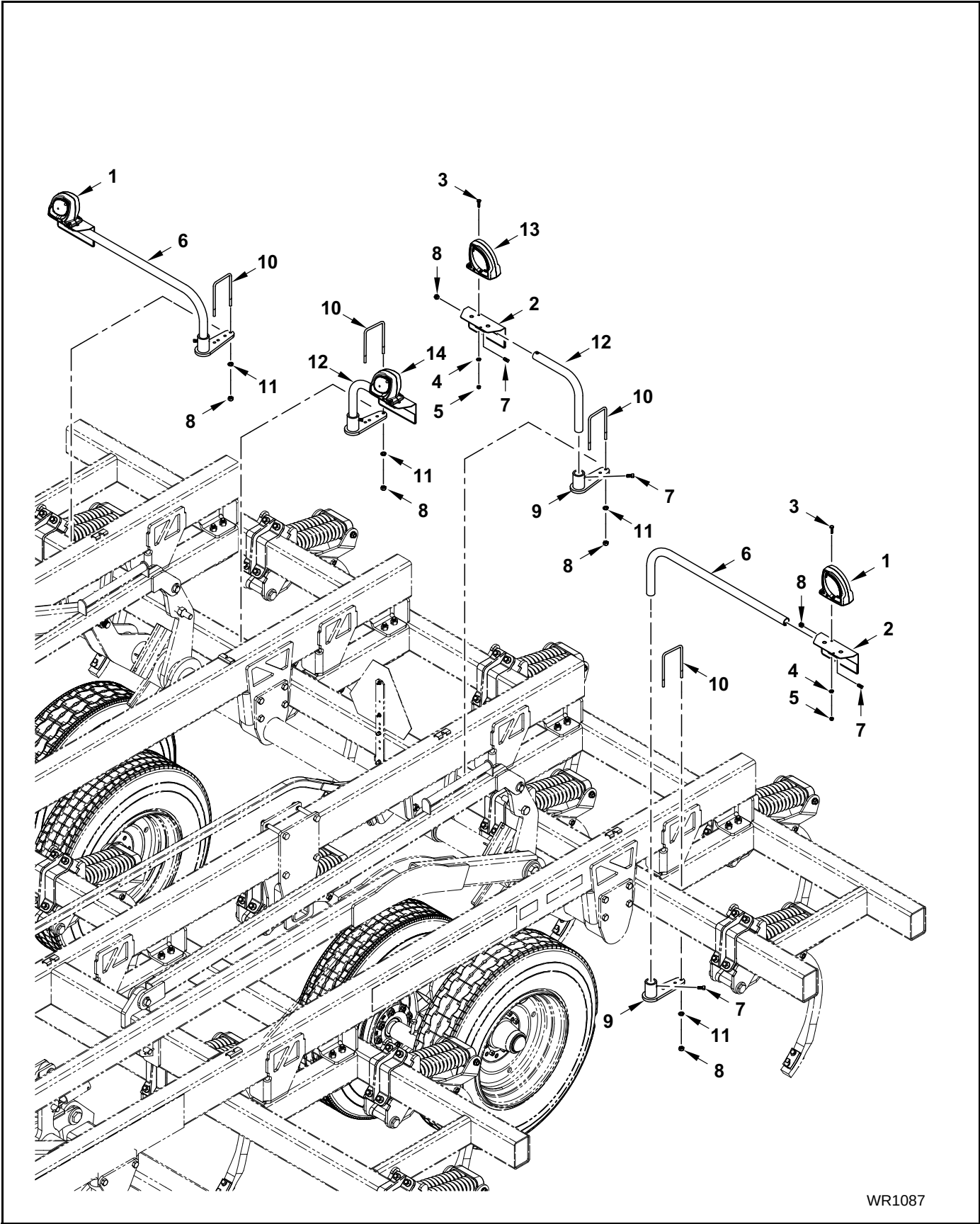
Hydraulic Colored Connectors



Hydraulic Colored Connectors

Ref.	FN	Part Number	Series	Qty.	Description
1		P247425		1	QUICK COUPLER 8 ORB
2		P334210		1	-8MORB X -8MORB UNION
3		P334204		1	GOLD QD GRIP -8FORB PACK OF 2
		P334205		1	BLUE QD GRIP -8FORB PACK OF 2
		P334206		1	RED QD GRIP -8FORB PACK OF 2
		P334207		1	GREEN QD GRIP -8FORB PACK OF 2
		P334208		1	BROWN QD GRIP -8FORB PACK OF 2
		P334209		1	PURPLE QD GRIP -8FORB PACK OF 2
4		P58543		1	ADP 6 MJ X 8 MORB

Lamp Mounting

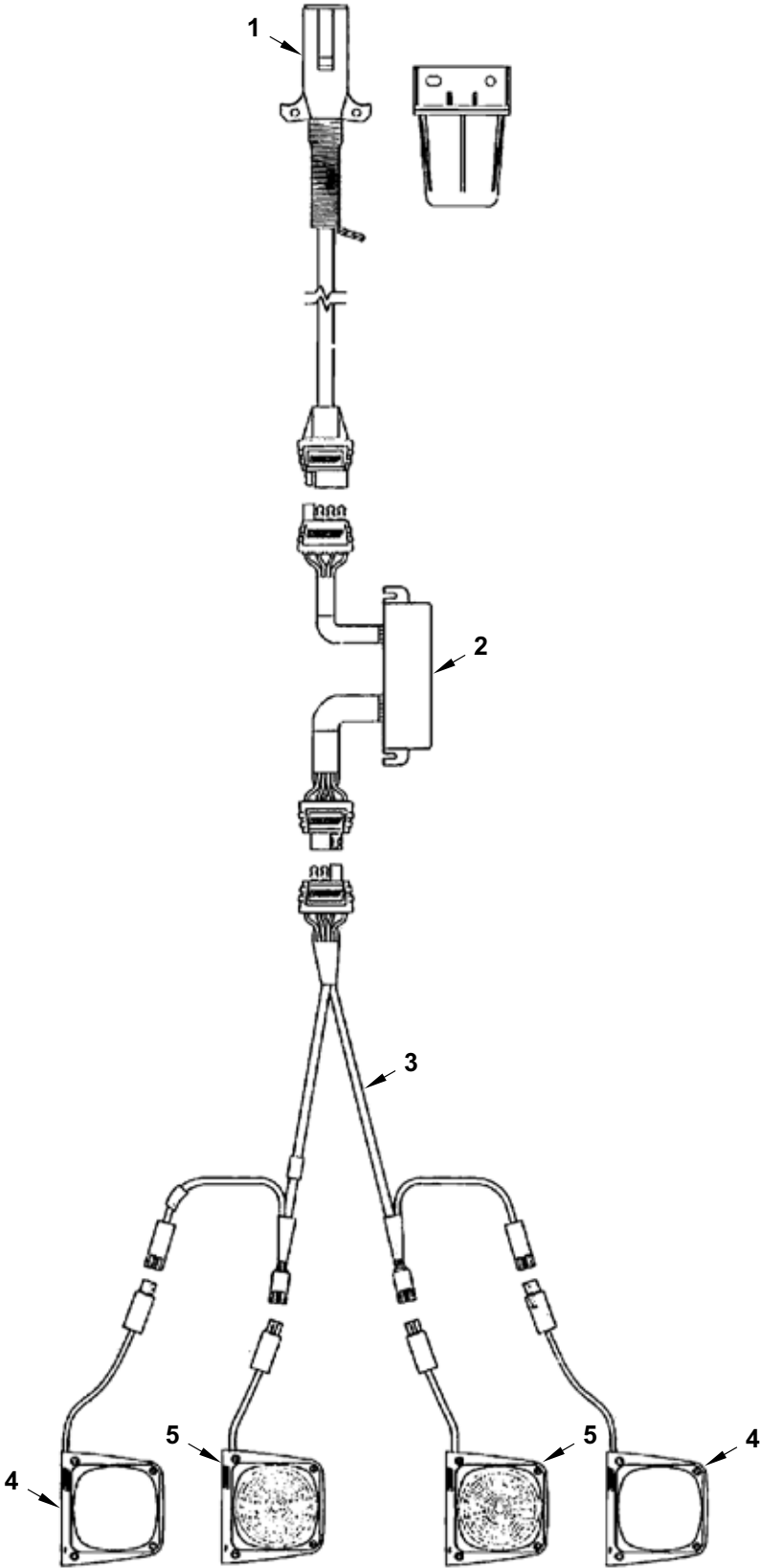


WR1087

Lamp Mounting

Ref.	FN	Part Number	Series	Qty.	Description
		P350911		2	LIGHT ASSY., Inc. 1 - 14
1		P359712		2	LIGHT ASSY., Amber
2		P223126		4	BRACKET, Mounting, Reflector / Light
3		P88203		8	BOLT, Hex, 1/4" -20NC x 1", Gr. 5 Z
4		P88262		8	WASHER, Lock, 1/4" ID, (5/16" Act) Z
5		P88172		8	NUT, Hex, 1/4" -20NC, Gr. 5 Z
6		P235460		8	ARM, Light Mounting, 12" x 36"
7		P88702		8	SCREW, Set, 3/8"NC x 3/4", Sq Head Z
8		P88103		12	NUT, Hex, 3/8" -16NC, Gr. 5 Z
9		P223130		4	PIVOT, Base, Short
10		P89040		4	U-BOLT, 3/8" -16NC x 4" x 7" Z
11		P88362		8	WASHER, Lock, 3/8" ID Z
12		P223140		2	ARM, Light, 12" x 12"
13		P359710		1	LIGHT, LH, Red w/ Black Cover
14		P359711		1	LIGHT, RH, Red w/ Black Cover

Lamp Wiring Circuitry



WR1112

Lamp Wiring Circuitry

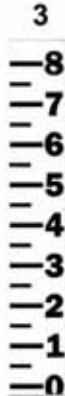
Ref.	FN	Part Number	Series	Qty.	Description
1		P64597		1	WIRE HARNESS, Flat 35'
2		P223145		1	MODULE ASSY.
3		P359709		1	WIRE HARNESS, Rear, 21"
4		P359712		1	LIGHT, Single, Amber
5		P359711		1	LIGHT, Single, Red w/ Black Cover



WR1097

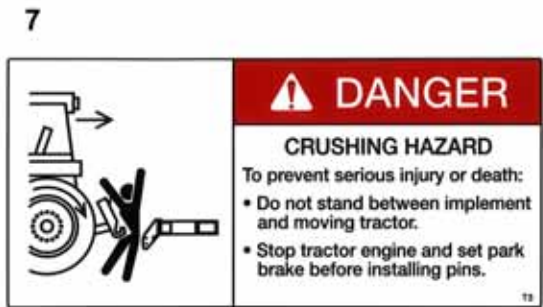
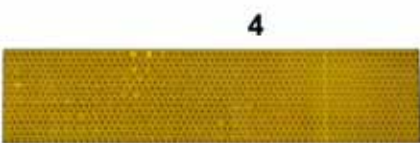
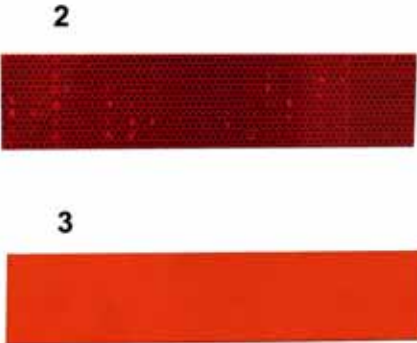
Decals - Model

Ref.	FN	Part Number	Series	Qty.	Description
1		P64404		4	DECAL, WR Wil-Rich 3" x 19-7/8"
2		P243479		4	DECAL, Wil-Rich
3		P358157			DECAL, 483 Chisel Pro
4		P359510			DECAL, Frame Dimension (16' 3")
5		P359511			DECAL, Frame Dimension (18' 9")
6		P359512			DECAL, Frame Dimension (23' 9")
7		P359513			DECAL, Frame Dimension (28' 9")
8		P359514			DECAL, Frame Dimension (33' 9")



Decals - Safety

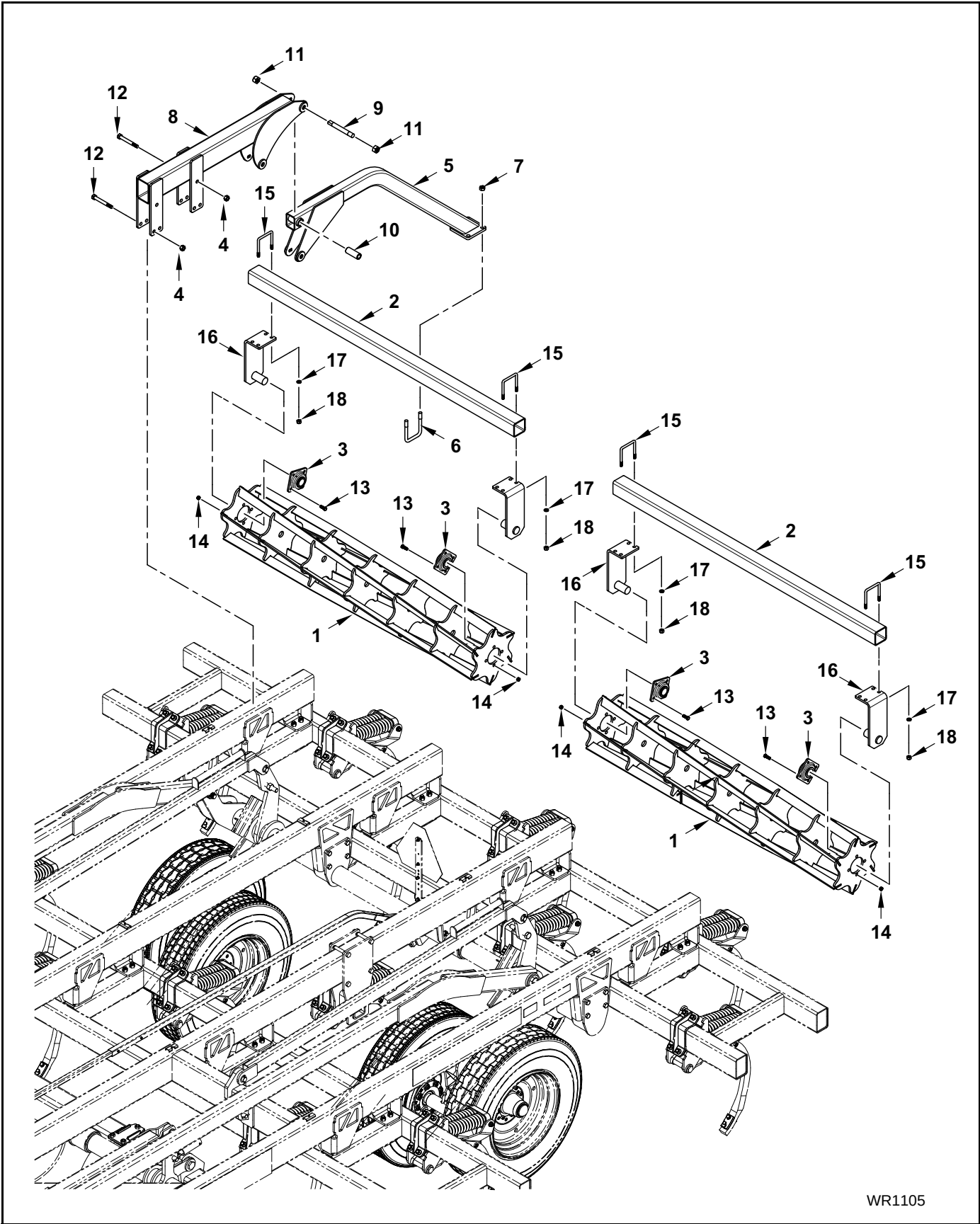
Ref.	FN	Part Number	Series	Qty.	Description
1		P997263			DECAL, Tillage Promotes A Safer Environment For Tomorrow
2		P69077			DECAL, Depth Adjustment
3		P69304			DECAL, Gauge Depth
4		P9971018			DECAL, Speed Sign, 20 Mile/Hr
5		P997852			DECAL, WARNING, Unhitching Hazard
6		P997854			DECAL, DANGER, Folding Wing Stand Clear
7		P997864			DECAL, WARNING, Lockout
8		P997860			DECAL, WARNING, Read Manual
9		P997862			DECAL, DANGER, High Voltage
10		P997865			DECAL, Cylinder Lockout
11		P997856			DECAL, Caution, Fasten Safety Chain
12		P41345			SIGN, SMV (Slow Moving Vehicle), for mounting See page 1-4



Decals - Safety

Ref.	FN	Part Number	Series	Qty.	Description
1		P22128		1	DECAL, DANGER, Hitch Plate
2		P223118		2	DECAL, Reflector, Red-Orange
3		P22371		2	DECAL, Reflector, Red
4		P22372		2	DECAL, Reflector, Amber
5		P24227		1	DECAL, WARNING, OPERATING
6		P31944		2	DECAL, CAUTION
7		P222802		2	DECAL, DANGER, Crushing Hazard
8		P700738712		4	DECAL, WARNING, Stay Clear Foot
9		P9971163		1	DECAL, Safety Set

Rolling Basket Mounting, Main Frame, 16', 24', 29' and 34'



WR1105

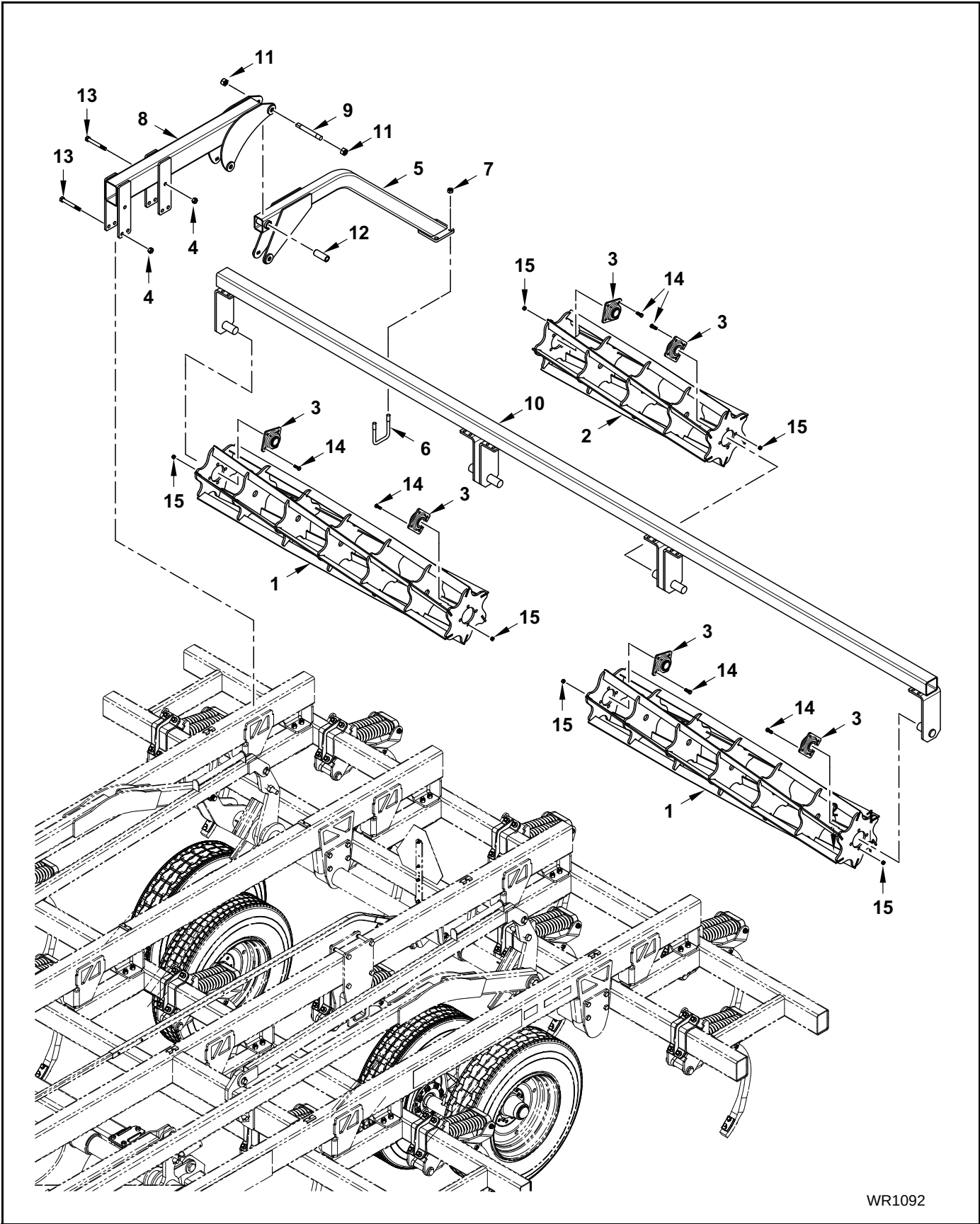
Rolling Basket Mounting, Main Frame, 16', 24', 29' and 34'

Ref.	FN	Part Number	Series	Qty.	Description
1	1	P247241		2	BASKET ASSY., 101"
	2	P240887		2	BASKET ASSY., 87"
2	1	P355226		2	TUBE, 4 x 4, 104"
	2	P355297		2	TUBE, 4 x 4, 90"
3	1	P357168		4	BEARING, Flange with Collar
	2	P30185		4	BEARING, Flange with Collar
4		P88356		2	NUT, Lock, 3/4" -10NC, Gr. 5Z
5		P357204		4	ARM, Packer, Rear
6		P333329		8	U-BOLT
7		P88665		16	NUT, Lock, 3/4" -NC, Gr. 8 Z
8		P357272		4	ARM, Mounting, Packer, Rear
9		P355338		4	PIN, Threaded Pivot (Long)
10		P355222		4	BUSHING, Composite, 1.02" ID x 1.50" OD x 4.00"
11		P88658		8	NUT, Lock, 1" -NC, Gr. 5 Z
12		P88293		4	BOLT, Hex, 3/4" -10NC x 6", Gr. 5 Z
13		P88475		8	BOLT, Hex, 1/2" -13NC x 1-1/2", Gr. 5 Z
14		P88363		8	NUT, Lock, 1/2" -13NC, Gr. 5 Z
15		P88145		4	U-BOLT, Hex, 5/8" -11NC x 4" x 5-1/4" Z
16		P222997		2	MOUNT, Bracket
17		P88129		4	WASHER, Lock, 5/8" Z
18		P88126		4	NUT, Hex, 5/8" -11NC, Gr. 5 Z

1 - Used on 16' and 34' Models

2 - Used on 24' and 29' Models

Rolling Basket Mounting, Main Frame, 19'

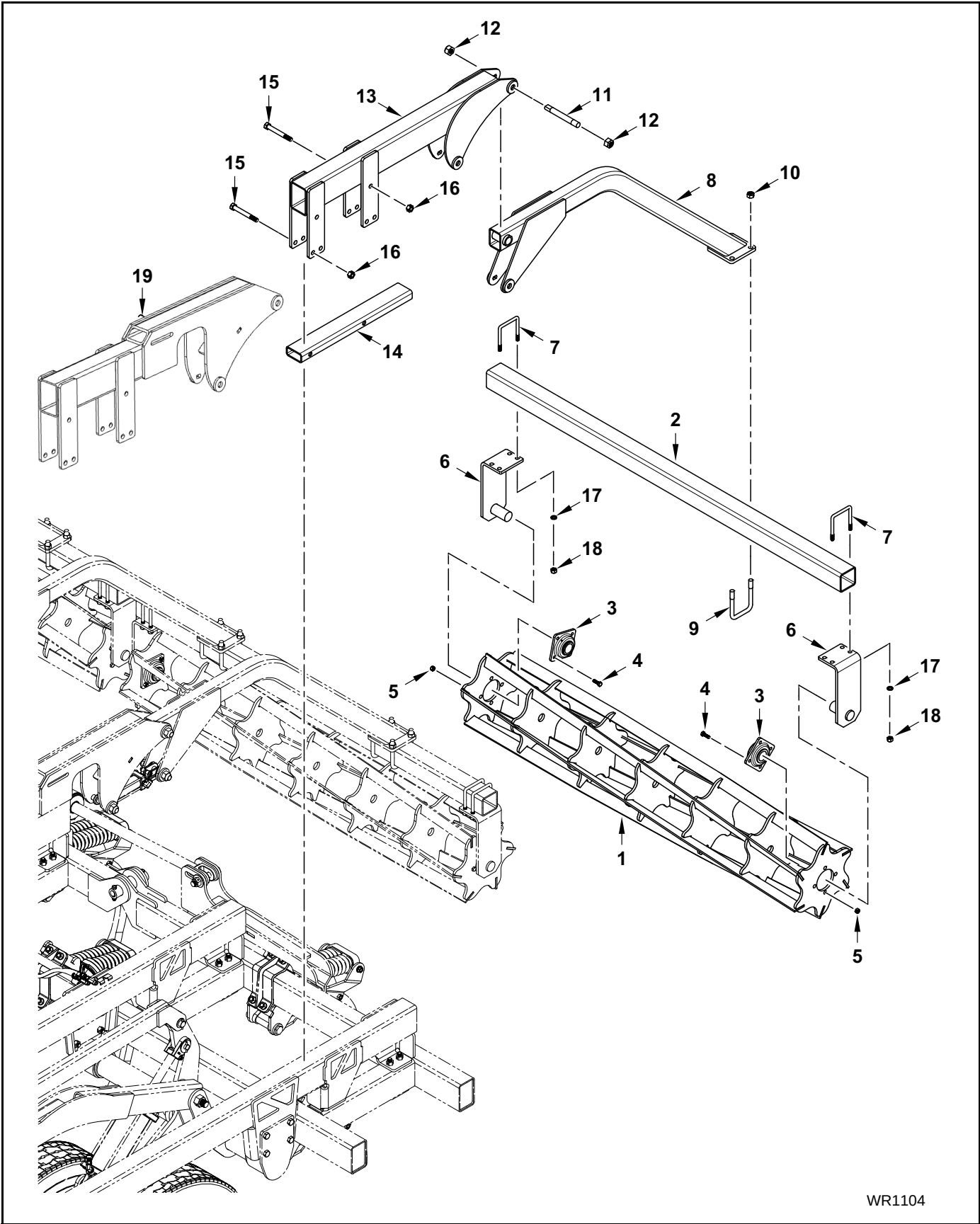


WR1092

Rolling Basket Mounting, Main Frame, 19'

Ref.	FN	Part Number	Series	Qty.	Description
1		P240887		2	BASKET ASSY., 87"
2		P240683		1	BASKET ASSY., 59"
3		P357168		4	BEARING, with Collar, 1-15/16"
4		P88356		16	NUT, Lock, 3/4" -10NC, Gr. 5 Z
5		P357204		4	ARM, Packer, Rear
6		P333329		8	U-BOLT, 3/4" -10NC x 4" x 6-3/8"
7		P88665		16	NUT, Lock, 3/4" -10NC, Gr. 8 Z
8		P357272		4	ARM, Mounting, Packer, Rear
9		P355338		4	PIN, Threaded Pivot (Long)
10		P358181		1	TUBE, Rolling Basket, 20'
11		P88658		8	NUT, Lock, 1" -8NC, Gr. 5 Z
12		P355222		4	BUSHING, Composite, 1.02" ID x 1.50" OD x 4.00"
13		P88293		16	BOLT, Hex, 3/4" -10NC x 6", Gr. 5 Z
14		P88475		8	BOLT, Hex, 1/2" -13NC x 1-1/2", Gr. 5 Z
15		P88363		8	NUT, Hex, 1/2" -13NC, Gr. 5 Z

Rolling Basket Mounting, Wings



WR1104

Rolling Basket Mounting, Wings

Ref.	FN	Part Number	Series	Qty.	Description
1		P240683		2	BASKET ASSY., Wing Frame, 24'
		P240887		2	BASKET ASSY., Wing Frame, 29'
		P247241		2	BASKET ASSY., Wing Frame, 34'
2	1	P355269		2	TUBE, 4 x 4, 62"
	2	P355297		2	TUBE, 4 x 4, 90"
	3	P355226		2	TUBE, 4 x 4, 104"
3	1, 2	P30185		4	BEARING, Flange, with Collar
	3	P357168		4	BEARING, Flange, with Collar
4		P88475		16	BOLT, Hex, 1/2" -13NC x 1-1/2", Gr. 5 Z
5		P88363		16	NUT, Lock, 1/2" -13NC, Gr. 5 Z
6		P222997		4	MOUNT, Bracket
7		P88145		4	U-Bolt, 5/8" -11NC x 4" x 5-1/4" Z
8		P357204		4	ARM, Rear, Packer
9		P333329		8	U-BOLT
10		P88665		16	NUT, Lock, 3/4" -10NC, Gr. 8 Z
11		P355338		4	PIN, Threaded Pivot (Long)
12		P88658		8	NUT, Lock, 1" -8NC, Gr. 5 Z
13		P357272		2	MOUNT, Rear, Packer
14		P357282		4	RISER, Basket, Tube
15		P88293		4	BOLT, Hex, 3/4" -10NC x 6", Gr. 5 Z
16		P88356		4	NUT, Lock, 3/4" -10NC, Gr. 5 Z
17		P88129		16	WASHER, Lock, 5/8" Z
18		P88126		16	NUT, Hex, 5/8" -11NC, Gr. 5 Z
19	4	P333304		2	ARM, Rear, Packer (Wing Fold)

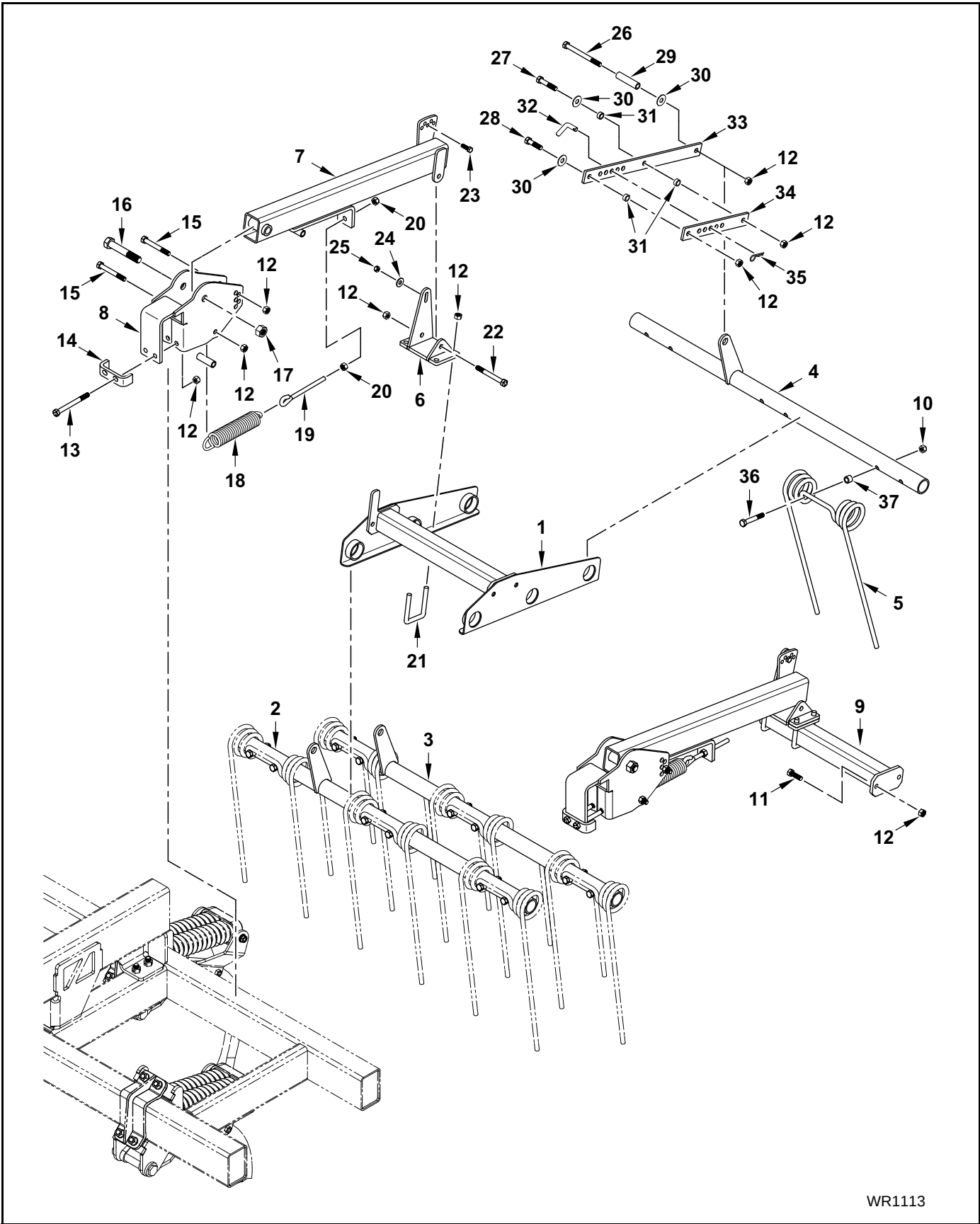
1 - Used on 24' Models

2 - Used on 29' Models

3 - Used on 34' Models

4 - Used on Frame by Wing Fold Cylinders

Harrow Assembly, 3 Bar

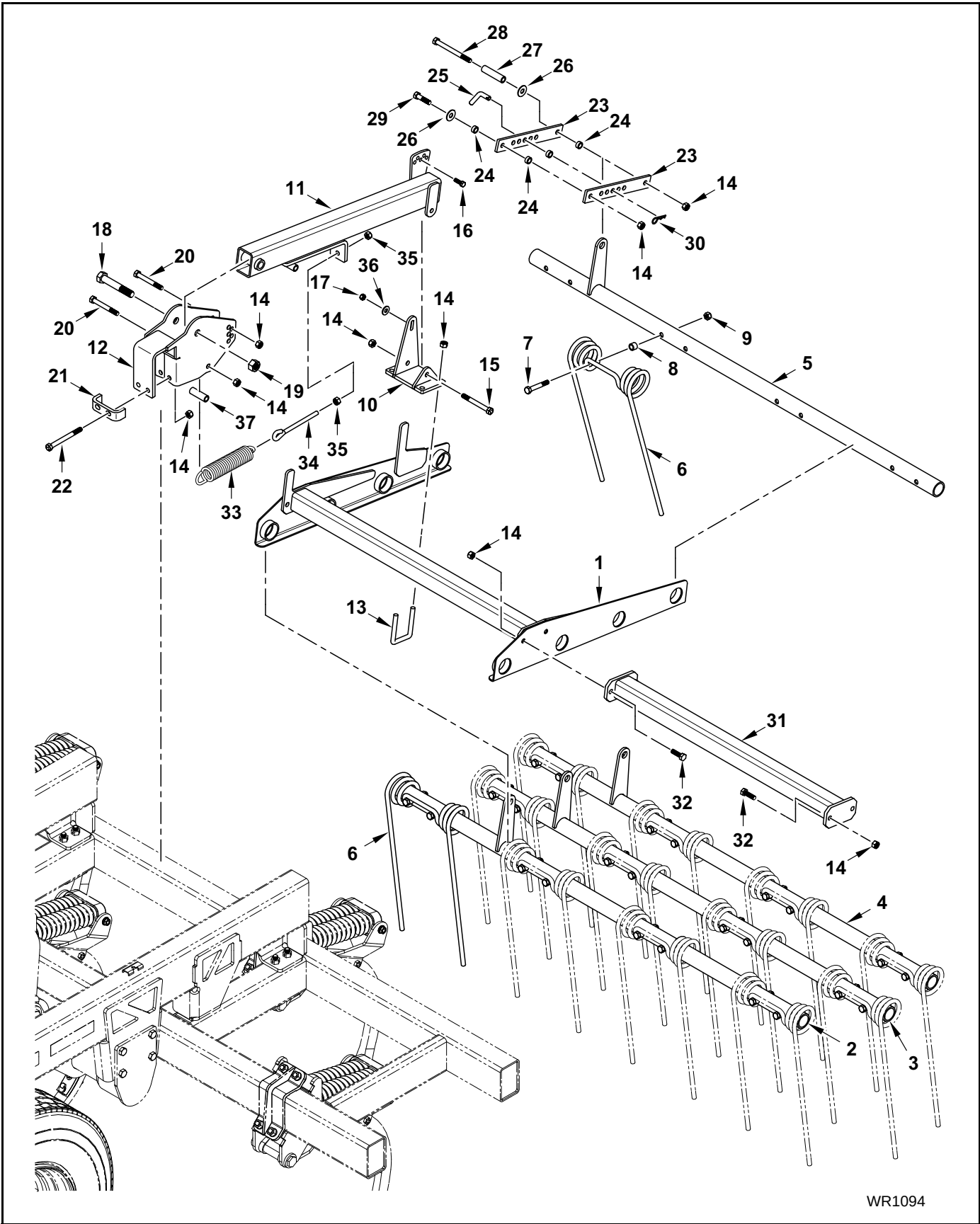


WR1113

Harrow Assembly, 3 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		UAR	HARROW ASSY., 3 Bar, 4', Inc. 1 - 37, See page 12-12
		REF		UAR	HARROW ASSY., 3 Bar, 6', Inc. 1 - 37, See page 12-12
		REF		UAR	HARROW ASSY., 3 Bar, 8', Inc. 1 - 37, See page 12-12
1		REF		1	MOUNT, Harrow, See page 12-12
2		REF		1	BAR, Harrow, #1, See page 12-12
3		REF		1	BAR, Harrow, #2, See page 12-12
4		REF		1	BAR, Harrow, #3, See page 12-12
5		P236087		9	TINE, Harrow, Short, HD
6		P350209		1	BRACKET, Mounting, Harrow, Pivot
7		P358190		1	ARM, Mounting, Harrow
8		P236839		1	BRACKET, Mounting, Harrow
9		P236189		1	SPANNER, Harrow, 46.13", 5 Shank
10		P88845		18	NUT, Lock, 5/8" -11NC, Gr. 5 Z
11		P88294		2	BOLT, Hex 5/8" -11NC x 3-1/2", Gr. 5 Z
12		P88627		14	NUT, Lock, 5/8" -11NC, Gr. 5 Z
13		P88837		2	BOLT, Hex, 5/8" -11NC, Gr. 5 Z
14		P245307		1	PLATE, Lock, Harrow
15		P88395		2	BOLT, Hex, 5/8" -11NC x 5", Gr. 5 Z
16		P88264		1	BOLT, Hex, 1" -8NC x 6", Gr. 5 Z
17		P89075		1	NUT, Lock, 1" -8NC, Gr. 5 Z
18		P23122		1	SPRING 3/8" x 2-3/8" x 12"
19		P23123		1	BOLT, Eye, 5/8"
20		P88126		2	NUT, Hex, 5/8" -11NC, Gr. 5 Z
21		P89327		2	U-BOLT, Hex, 5/8" -11NC x 3" x 4-1/2", Gr. 5 Z
22		P88633		1	BOLT, Hex, 5/8" -11NC x 5-1/2", Gr. 5 Z
23		P88475		1	BOLT, Hex, 1/2" -13NC x 1-1/2", Gr. 5 Z
24		P88347		1	WASHER, Flat, 1/2" Z
25		P88363		1	NUT, Lock, 1/2" -13ND, Gr. 5 Z
26		P88295		1	BOLT, Hex, 5/8" -11NC x 3-1/2", Gr. 5 Z
27		P88292		1	BOLT, Hex, 5/8" -11NC x 3-1/2", Gr. 5 Z
28		P88409		1	BOLT, Hex, 5/8" -11NC x 2-1/2", Gr. 5 Z
29		P22521		1	SPACER
30		P88277		3	WASHER, Flat, 5/8" (11/16" x 1-3/4" Act) Z
31		P222562		3	BUSHING, 1" OD x 0.44" LG
32		P32871		1	PIN, Hitch 5/8" x 1-3/8"
33		P222570		1	BAR, Adjustment, Outer
34		P222575		1	BAR, Adjustment, Inner
35		P23039		1	PIN, Hair, 0.14" x 2.69" Z P
36		P88298		18	BOLT, Hex, 5/8" -11NC x 4", Gr. 5 Z
37		P200479		18	BUSHING

Harrow Assembly, 4 Bar

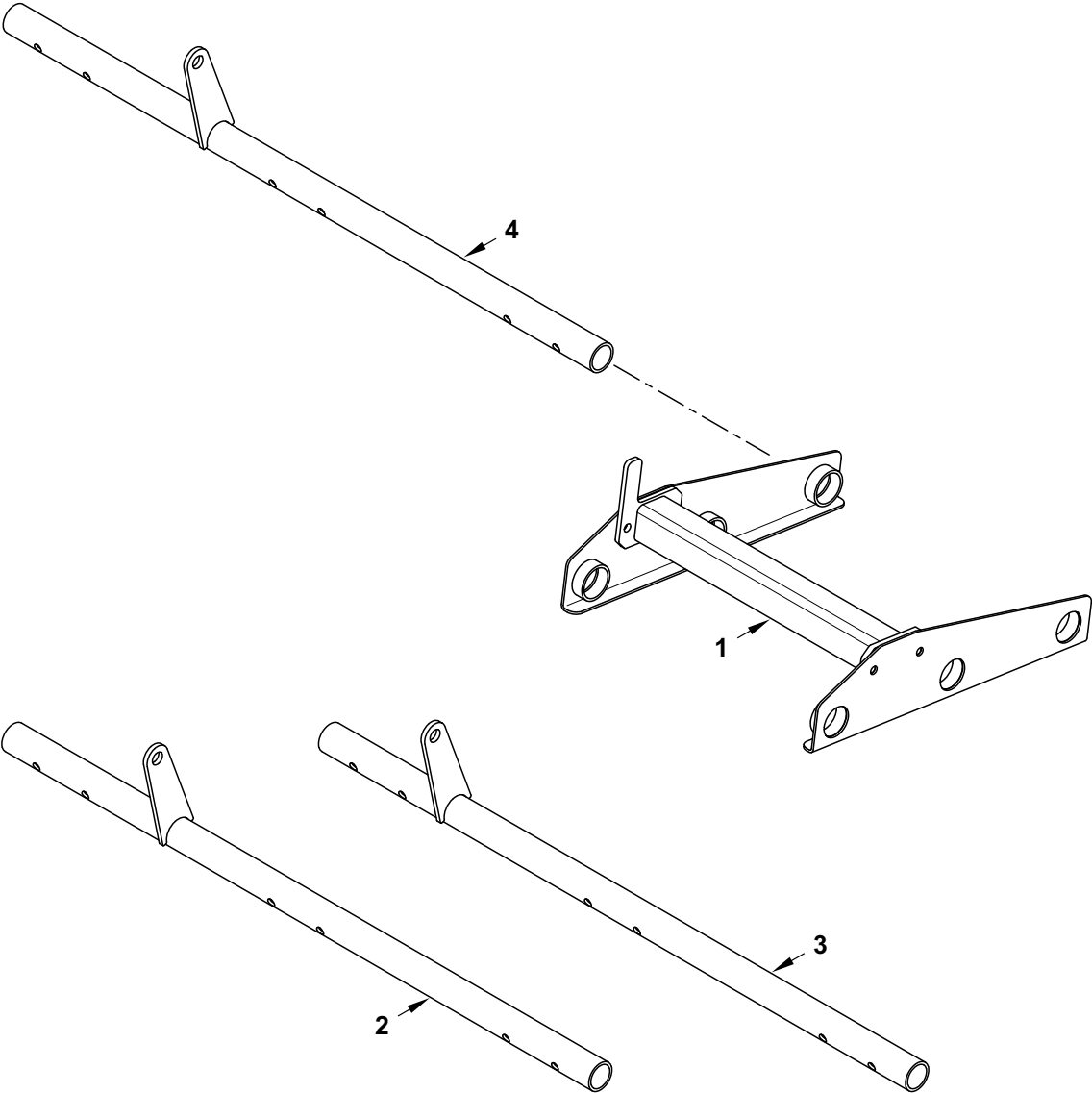


WR1094

Harrow Assembly, 4 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		UAR	HARROW ASSY., 4 Bar, 4', Inc. 1 - 37, See page 12-16
		REF		UAR	HARROW ASSY., 4 Bar, 6', Inc. 1 - 37, See page 12-16
		REF		UAR	HARROW ASSY., 4 Bar, 8', Inc. 1 - 37, See page 12-16
1		REF		1	MOUNT, Harrow, See page 12-16
2		REF		1	BAR, Harrow, #1, See page 12-16
3		REF		1	BAR, Harrow, #2, See page 12-16
4		REF		1	BAR, Harrow, #3, See page 12-16
5		REF		1	BAR, Harrow, #4, See page 12-16
6		P236087		12	TINE, Harrow, Short, HD
7		P88298		24	BOLT, Hex, 5/8" -11NC x 4", Gr. 5 Z
8		P200479		24	BUSHING
9		P88845		24	NUT, Lock, 5/8" -11NC x 4", Gr. 5 Z
10		P350209		2	BRACKET, Mounting, Harrow, Pivot
11		P236036		2	ARM, Mounting, Harrow
12		P236839		2	BRACKET, Mounting, Harrow
13		P89327		4	U-BOLT, 5/8" -11NC x 3" x 4-1/2" Z
14		P88627		22	NUT, Nylok, 5/8" -11NC, Gr. 5 Z
15		P88633		2	BOLT, Hex, 5/8" -11NC x 5-1/2", Gr. 5 Z
16		P88475		2	BOLT, Hex, 1/2" -13NC x 1-1/2", Gr. 5 Z
17		P88363		2	NUT, Lock, 1/2 -13NC, Gr. 5 Z
18		P88264		2	BOLT, Hex, 1" -8NC x 6", Gr. 5 Z
19		P89075		2	NUT, Nylok, 1" -8NC x 6", Gr. 5 Z
20		P88395		4	BOLT, Hex, 5/8" -11NC x 5", Gr. 5 Z
21		P245307		2	PLATE, Lock, Harrow
22		P88837		4	BOLT, Hex, 5/8" -11NC x 6-1/2", Gr. 5 Z
23		P222575		4	BAR, Adjustment, Inner
24		P222562		10	BUSHING, 1" OD x 0.44LG Z
25		P32871		2	PIN, Hitch 5/8" x 1-3/8"
26		P88277		6	WASHER, Flat, 5/8" (11/16" x 1-3/4" Act) Z
27		P22521		2	SPACER
28		P88383		2	BOLT, Hex, 5/8" -NC x 7", Gr. 5 Z
29		P88409		2	BOLT, Hex, 5/8" -11NC x 2 1/2", Gr. 5 Z
30		P23039		1	PIN, Hair, 0.14" x 2.69" ZP
31		P236189		1	SPANNER, Harrow, 46.13", 5 Shank
32		P88294		4	BOLT, Hex, 5/8" -11NC x 3-1/2", Gr. 5 Z
33		P23122		1	SPRING, 3/8" x 2-3/4" x 12"
34		P23123		1	BOLT, Eye, 5/8"
35		P88126		2	NUT, Hex, 5/8" -11NC, Gr. 5 Z
36		P88347		1	WASHER, Flat, 1/2" Z
37		P236185		1	SPACER

Harrow Assembly Mounting, 3 Bar



WR1114

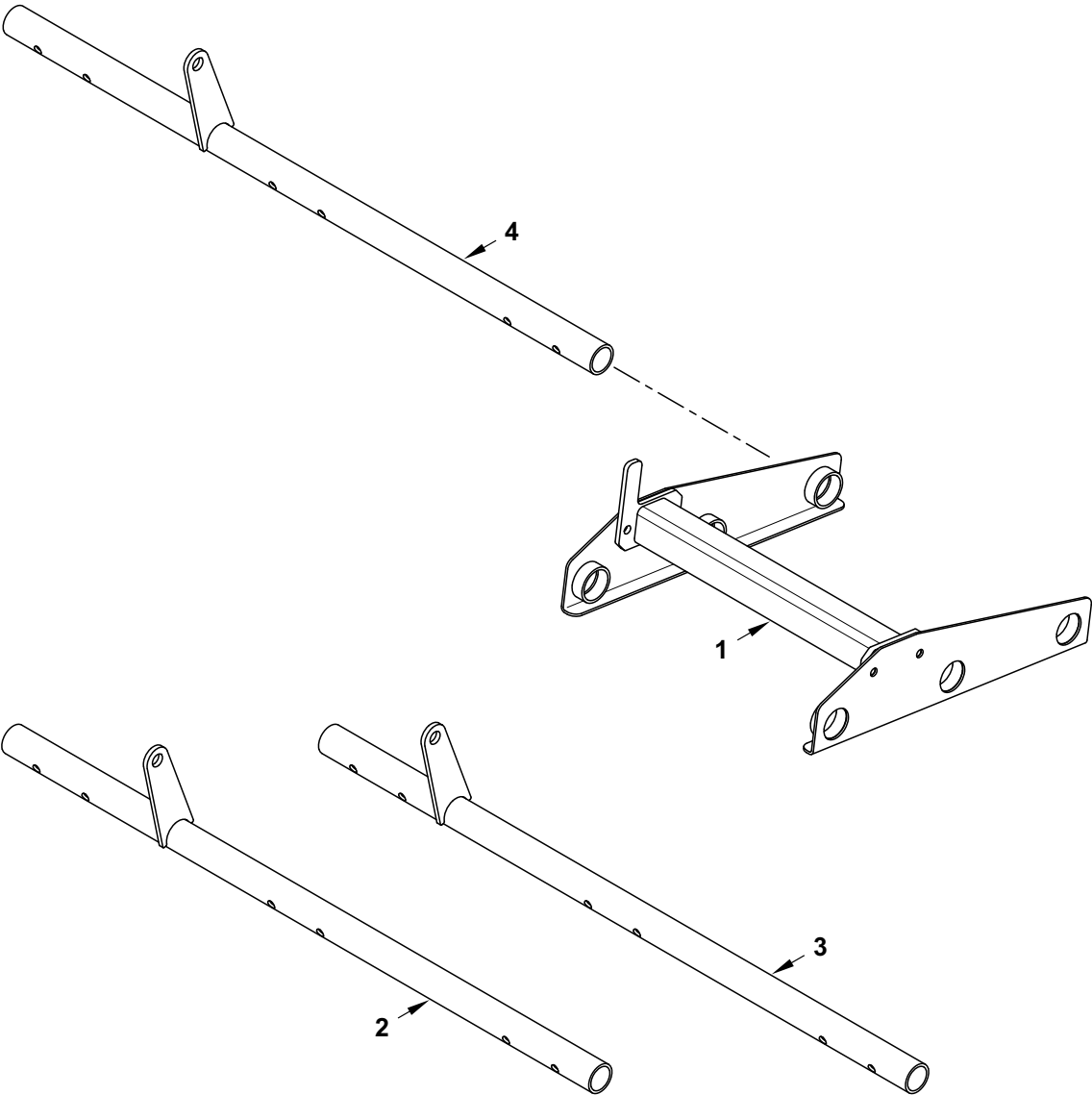
Harrow Assembly Mounting, 3 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		3	HARROW ASSY., 3 Bar, 6', Inc. 1 - 4, See page 12-8
1		P236198	16'	3	MOUNT, Harrow, Main Frame, 6'
2		P222567		3	BAR, Harrow, 6', #1
3		P222568		3	BAR, Harrow 6', #2
4		P222569		3	BAR, Harrow 6', #3
		REF		2	HARROW ASSY., 3 Bar, 6', Inc. 1 - 4, See page 12-8
		REF		1	HARROW ASSY., 3 Bar, 8', Inc. 1 - 4, See page 12-8
1		P236198	19'	2	MOUNT, Harrow, Main Frame, Outside, 6'
		P236195	19'	1	MOUNT, Harrow, Main Frame, Inside, 8'
2		P222567		2	BAR, Harrow, 6', #1
		P222572		1	BAR, Harrow, 8', #1
3		P222568		2	BAR, Harrow, 6', #2
		P222573		1	BAR, Harrow, 8', #2
4		P222569		2	BAR, Harrow, 6', #3
		P222574		1	BAR, Harrow, 8', #3
		REF		3	HARROW ASSY., 3 Bar, 6', Inc. 1 - 4, See page 12-8
		REF		2	HARROW ASSY., 3 Bar, 4', Inc. 1 - 4, See page 12-8
1		P236198	24'	3	MOUNT, Harrow, Main Frame, 6'
		P236028	24'	2	MOUNT, Harrow, Wing Frame, 4'
2		P222567		3	BAR, Harrow, 6', #1
		P236024		2	BAR, Harrow, 4', #1
3		P222568		3	BAR, Harrow, 6', #2
		P236026		2	BAR, Harrow, 4', #2
4		P222569		3	BAR, Harrow, 6', #3
		P236027		2	BAR, Harrow, 4', #3
		REF		5	HARROW ASSY., 3 Bar, 6', Inc. 1 - 4, See page 12-8
1		P236198	29'	5	MOUNT, Harrow, 6'
2		P222567		5	BAR, Harrow, 6', #1
3		P222568		5	BAR, Harrow, 6', #2
4		P222569		5	BAR, Harrow, 6', #3

NOTE: Harrow bars are numbered individually from front to rear.

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Harrow Assembly Mounting, 3 Bar



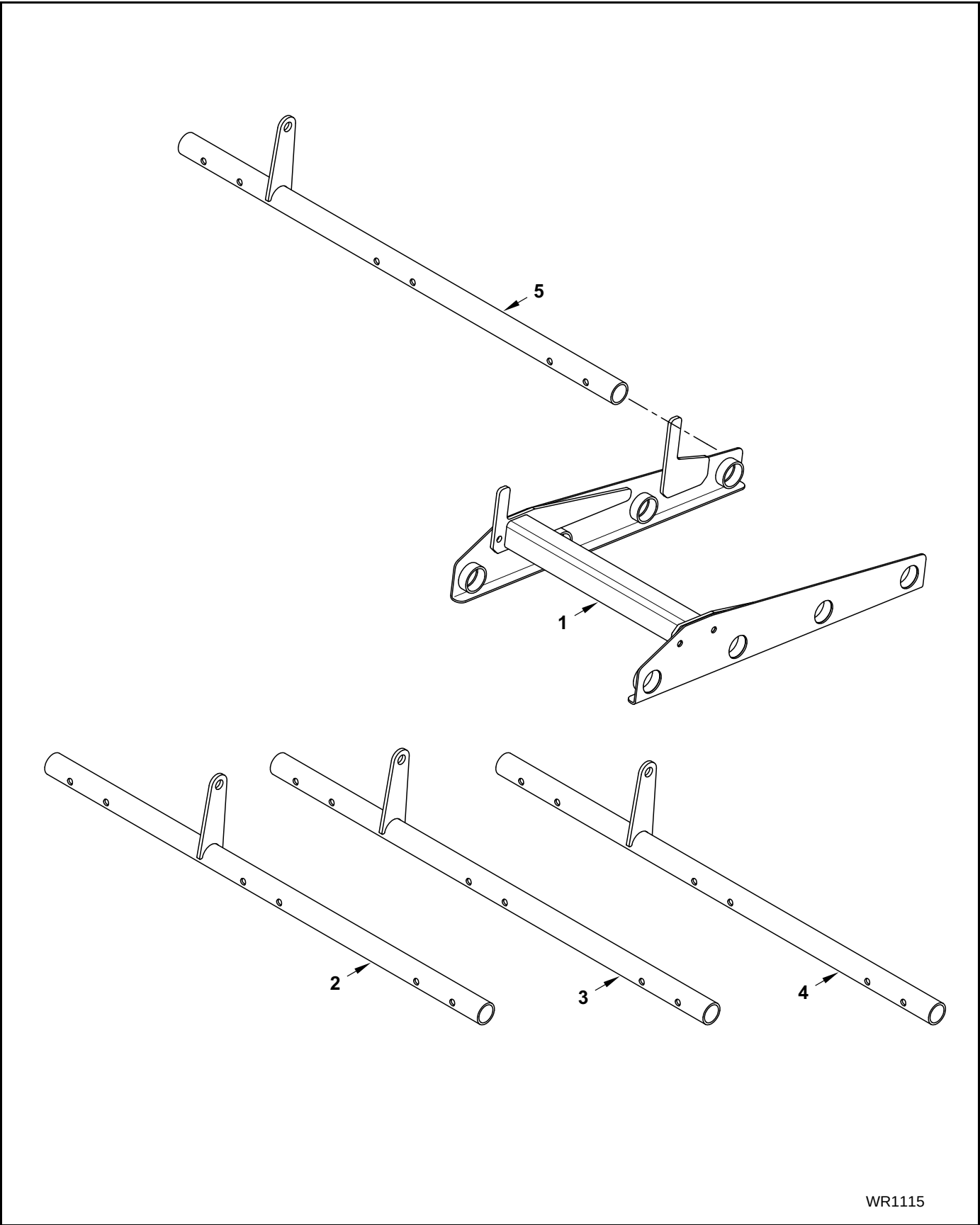
WR1114

Harrow Assembly Mounting, 3 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		3	HARROW ASSY., 3 Bar, 6', Inc. 1 - 4, See page 12-8
		REF		2	HARROW ASSY., 3 Bar, 8', Inc. 1 - 4, See page 12-8
1		P236198	34'	3	MOUNT, Harrow, Main Frame, 6'
		P236195	34'	2	MOUNT, Harrow, Wing Frame, 8'
2		P222567		3	BAR, Harrow, 6', #1
		P222572		2	BAR, Harrow, 8', #1
3		P222568		3	BAR, Harrow, 6', #2
		P222573		2	BAR, Harrow, 8', #2
4		P222569		3	BAR, Harrow, 6', #3
		P222574		2	BAR, Harrow, 8', #3

NOTE: Harrow bars are numbered individually from front to rear.

Harrow Assembly Mounting, 4 Bar



WR1115

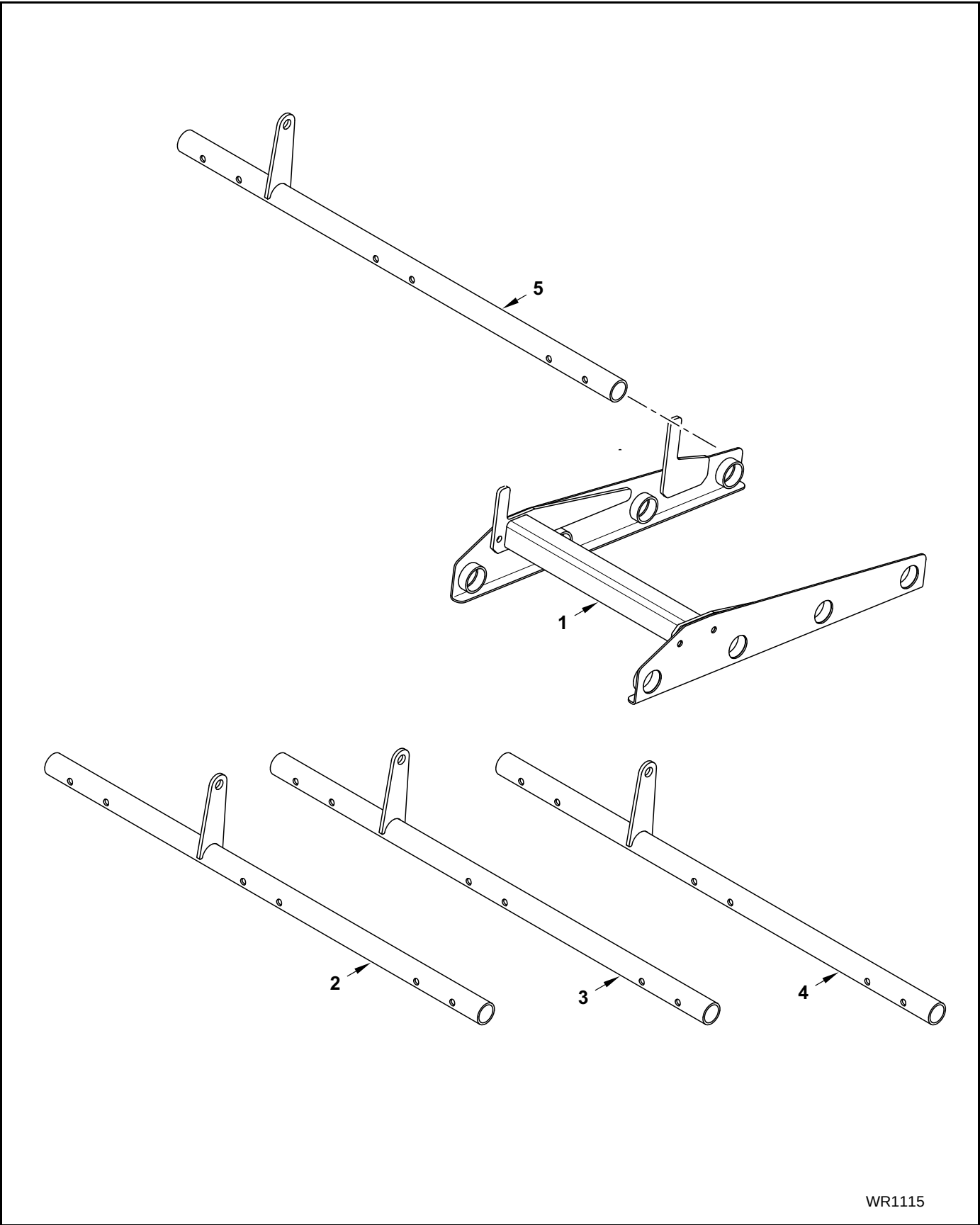
Harrow Assembly Mounting, 4 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		3	HARROW ASSY., 4 Bar, Inc. 1 - 4, See page 12-10
1		P350640	16'	3	MOUNT, Harrow, Main Frame, 6'
2		P350641		4	BAR, Harrow, 6', #1
3		P350642		4	BAR, Harrow 6', #2
4		P350643		4	BAR, Harrow 6', #3
5		P350644		4	BAR, Harrow 6', #4
		REF		1	HARROW ASSY., 4 Bar, 8', Inc. 1 - 4, See page 12-10
		REF		2	HARROW ASSY., 4 Bar, 6', Inc. 1 - 4, See page 12-10
1		P350609	19'	1	MOUNT, Harrow, Main Frame, Inside, 8'
		P350640	19'	2	MOUNT, Harrow, Main Frame, Outside, 6'
2		P350628		1	BAR, Harrow, 8', #1
		P350641		2	BAR, Harrow, 6', #1
3		P350629		1	BAR, Harrow, 8', #2
		P350642		2	BAR, Harrow, 6', #2
4		P350630		1	BAR, Harrow, 8', #3
		P350643		2	BAR, Harrow, 6', #3
5		P350631		1	BAR, Harrow, 8', #4
		P350644		2	BAR, Harrow, 6', #4
		REF		3	HARROW ASSY., 4 Bar, 6', Inc. 1 - 4, See page 12-10
		REF		2	HARROW ASSY., 4 Bar, 4', Inc. 1 - 4, See page 12-10
1		P350640	24'	3	MOUNT, Harrow, Main Frame, 6'
		P350647	24'	2	MOUNT, Harrow, Wing Frame, 4'
2		P350641		3	BAR, Harrow, 6', #1
		P350648		2	BAR, Harrow, 4', #1
3		P350642		3	BAR, Harrow, 6', #2
		P350649		2	BAR, Harrow, 4', #2
4		P350643		3	BAR, Harrow, 6', #3
		P236027		2	BAR, Harrow, 4', #3
5		P350644		3	BAR, Harrow, 6', #4
		P350650		2	BAR, Harrow, 4', #4

NOTE: Harrow bars are numbered individually from front to rear.

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Harrow Assembly Mounting, 4 Bar



WR1115

Harrow Assembly Mounting, 4 Bar

Ref.	FN	Part Number	Series	Qty.	Description
		REF		5	HARROW ASSY., 4 Bar, 6', Inc. 1 - 4, See page 12-10
1		P350640	29'	5	MOUNT, Harrow, 6'
2		P350641		5	BAR, Harrow, 6', #1
3		P350642		5	BAR, Harrow, 6', #2
4		P350643		5	BAR, Harrow, 6', #3
5		P350644		5	BAR, Harrow, 6', #4
		REF		3	HARROW ASSY., 4 Bar, 8', Inc. 1 - 4, See page 12-10
		REF		2	HARROW ASSY., 4 Bar, 6', Inc. 1 - 4, See page 12-10
1		P350640	34'	3	MOUNT, Harrow, Main Frame, 6'
		P350609	34'	2	MOUNT, Harrow, Wing Frame, 8'
2		P350628		3	BAR, Harrow, 8', #1
		P350641		2	BAR, Harrow, 6', #1
3		P350629		3	BAR, Harrow, 8', #2
		P350642		2	BAR, Harrow, 6', #2
4		P350630		3	BAR, Harrow, 8', #3
		P350643		2	BAR, Harrow, 6', #3
5		P350631		3	BAR, Harrow, 8', #4
		P350644		2	BAR, Harrow, 6', #4

NOTE: Harrow bars are numbered individually from front to rear.

