



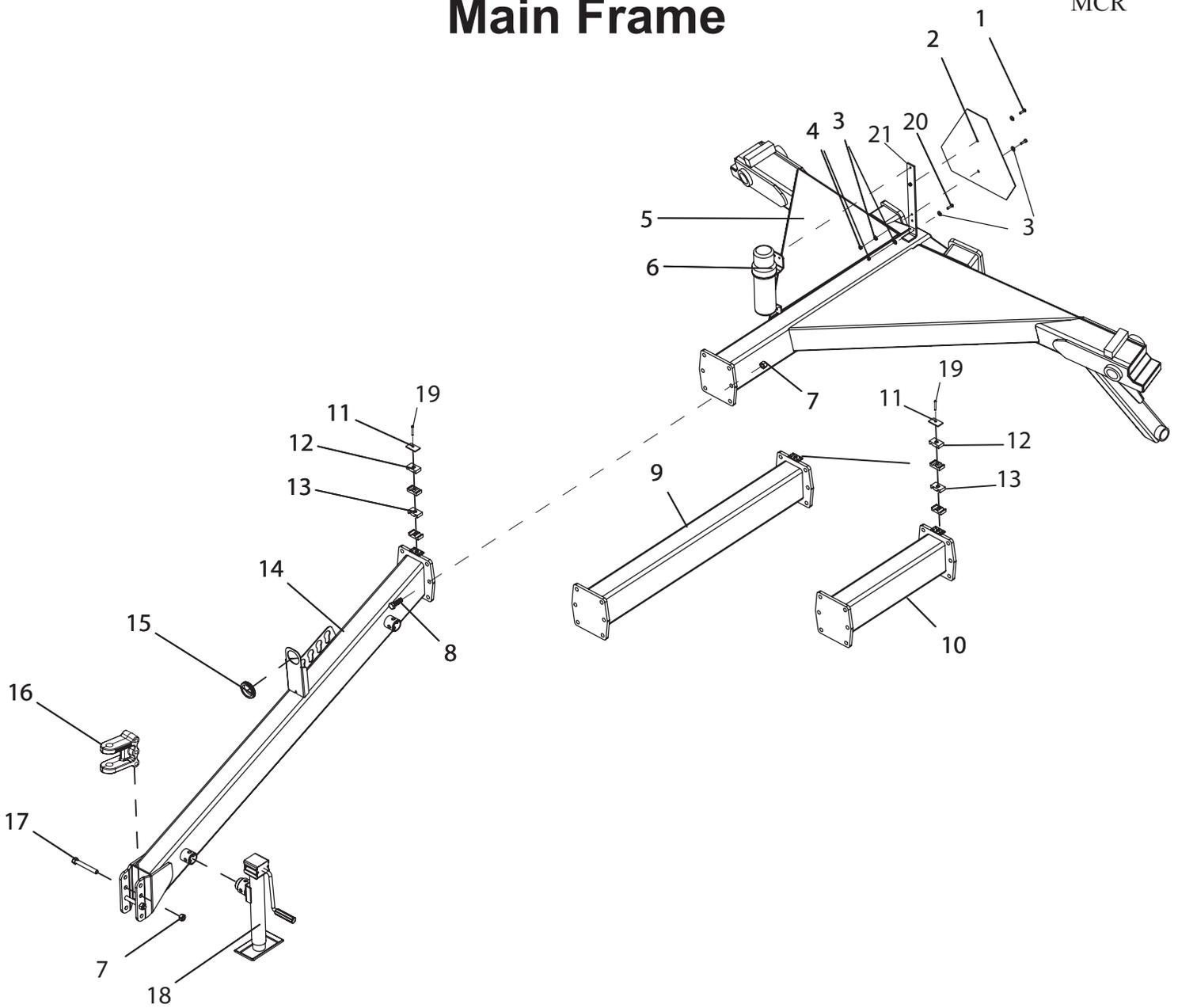
MidCap Rake

Illustrated Parts Breakdown

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Main Frame

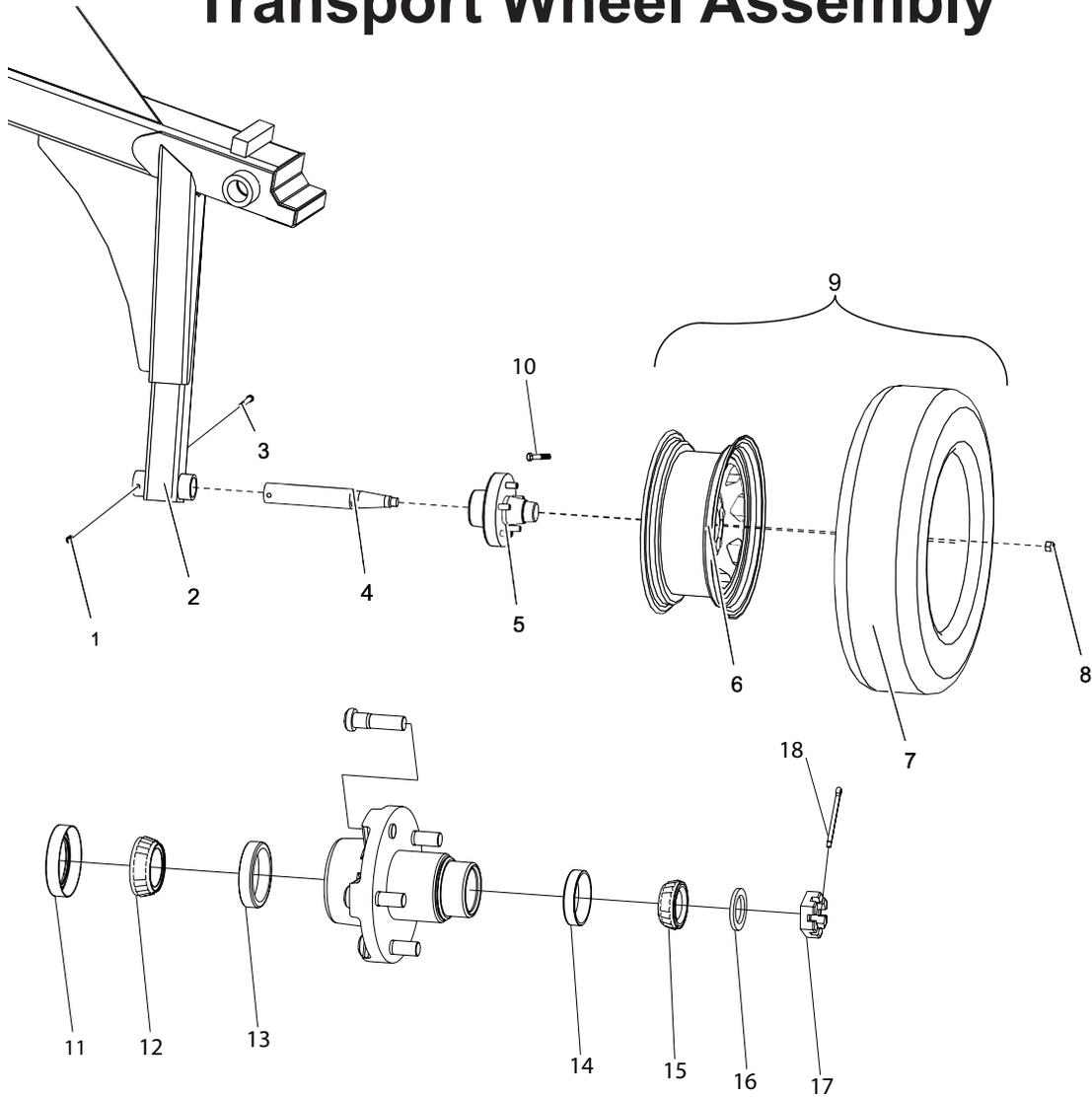
MCR



ID	Description	Part #
1	1/4-20 x 1-1/4 HH Bolt Gr5	000184
2	Fanny Flag	507166
3	1/4 USS Flat Washer	001020
4	1/4 Lock Nut, Zinc	003001
5	TR Main Frame	510505
6	Ops Manual Cylinder	503050
7	5/8-11 Top Lock Nut, Zinc	900145
8	5/8-11 x 2 Hex Head Bolt	000615
9	12 Wheel Ext. Tongue	510572

ID	Description	Part #
11	Hose Clamp Top Plate	510630
12	1/4" Clamp Block	510632
13	3/8 Clamp Block	507300
14	Front Tongue Section	510530
15	Grommet	510621
16	2 Hole Clevis	507018
17	5/8-11 x 4.5 HH Bolt, Zinc	000645
18	2K Side Wind Jack	903317
19	5/16-18 X 1-1/2 HH Bolt, Zinc	000225
20	1/4-20 x 1" HH Bolt Gr5	100148
21	MCR SMV Mounting Bracket	510674

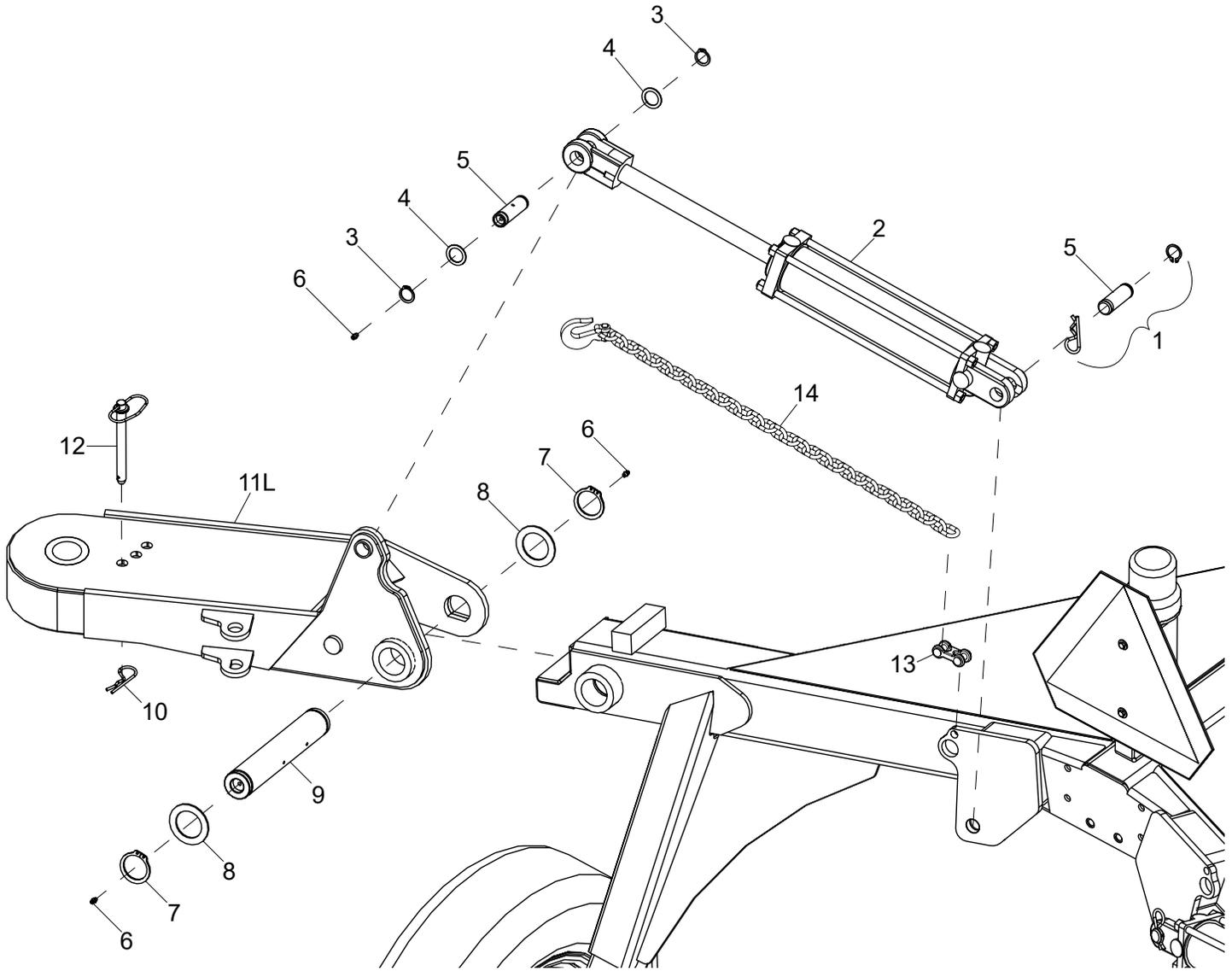
Transport Wheel Assembly



ID	Description	Part #	Qty
1	3/8"-16 Nylon Lock Nut	003000	1
2	TR Main Frame	510505	1
3	3/8"-16 x 3" Hex Head Bolt	000307	1
4	1-3/4" x 12" Spindle	508027	1
5	545 Hub Assembly	508026	1
6	Rim, 15 x 6-6 White Spoke	102186	1
7	Tire, 205/75 D15	100723	1
8	1/2" Cone Wheel Nut	101458	1
9	Tire and Rim, Mounted	100284	1
10	Hub Stud	508505	6

ID	Description	Part #	Qty
11	Grease Seal, 545 Hub	508500	1
12	Bearing, L68149	508501	1
13	Race, L68111	508502	1
14	Race, L44610	508504	1
15	Bearing, L44649	508503	1
16	1" x 1-1/2 Machinery Bushing	001006	1
17	Slotted Spindle Nut	101440	1
18	5/32 X 1-3/4 Cotter Pin	300282	1

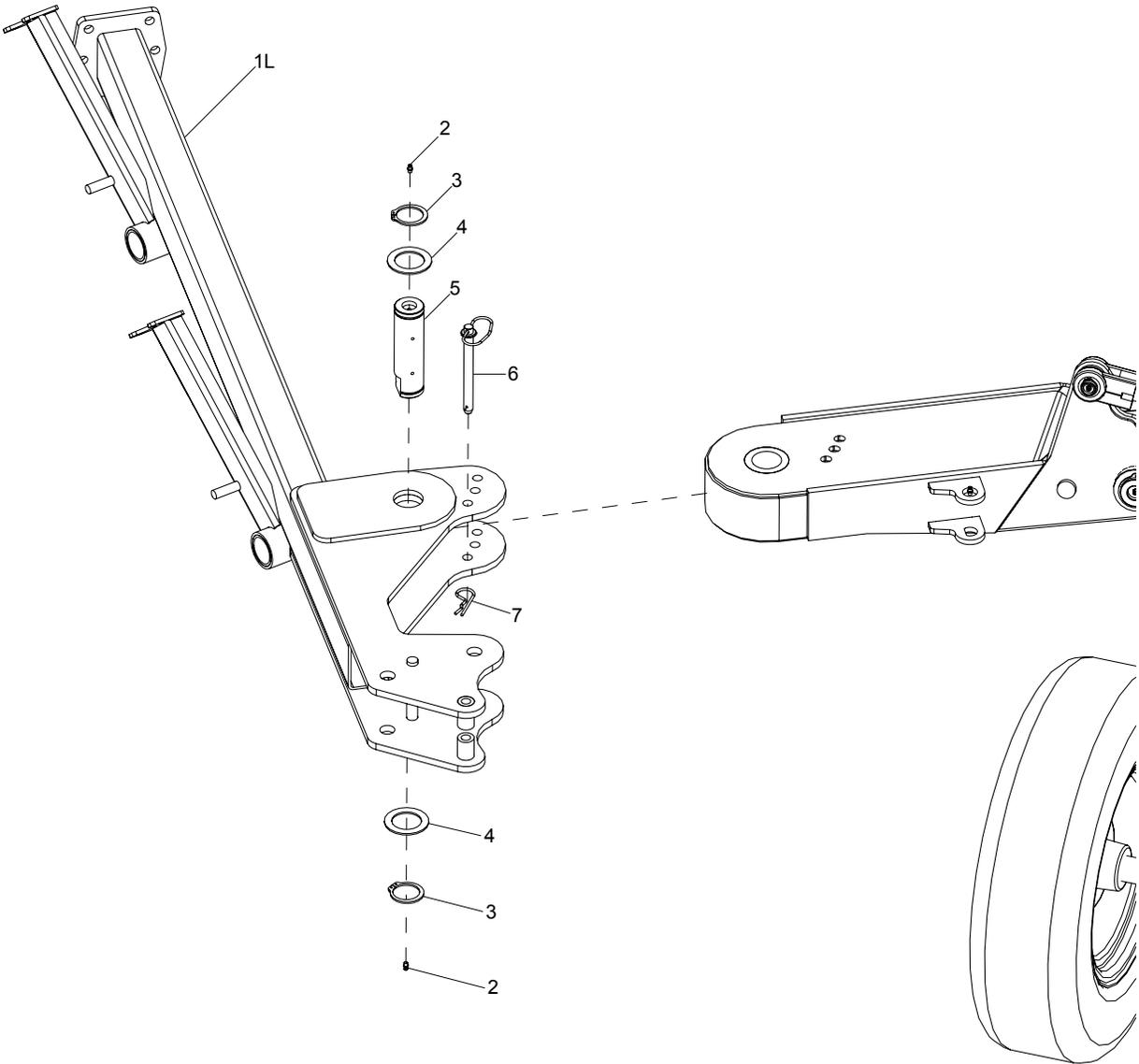
Lift Arm Assembly



ID	Description	Part #
1	Clevis Pin with Hairpin and Snap Ring	507273
2	3 x 12 Tie Rod Cylinder	510586
3	1" Heavy Duty Ext. Retaining Ring Zinc Plated	702883Z
4	1" X 1-1/2 Machinery Bushing 14GA	001008
5	Outer Cylinder Pin	510574
6	1/4-28 Spin-Drive Grease Zert	400117
7	2" (.63 thick)EXT. RETAINING RING YZ	510548
8	Pivot Washer	510553

ID	Description	Part #
9	Wing Pivot Shaft	510552
10	0.148" x 3-5/16" OAL Zinc Plated Hairpin Cotter	100216
11L	Lift Arm Assembly, Left	510515
11R	Lift Arm Assembly, Right (not shown)	510510
12	5/8" x 6-1/2" Pin	510641
13	Safety Chain Clevis	510656
14	MCR Chain (30" Overall Length)	510675

Main Beam Assembly

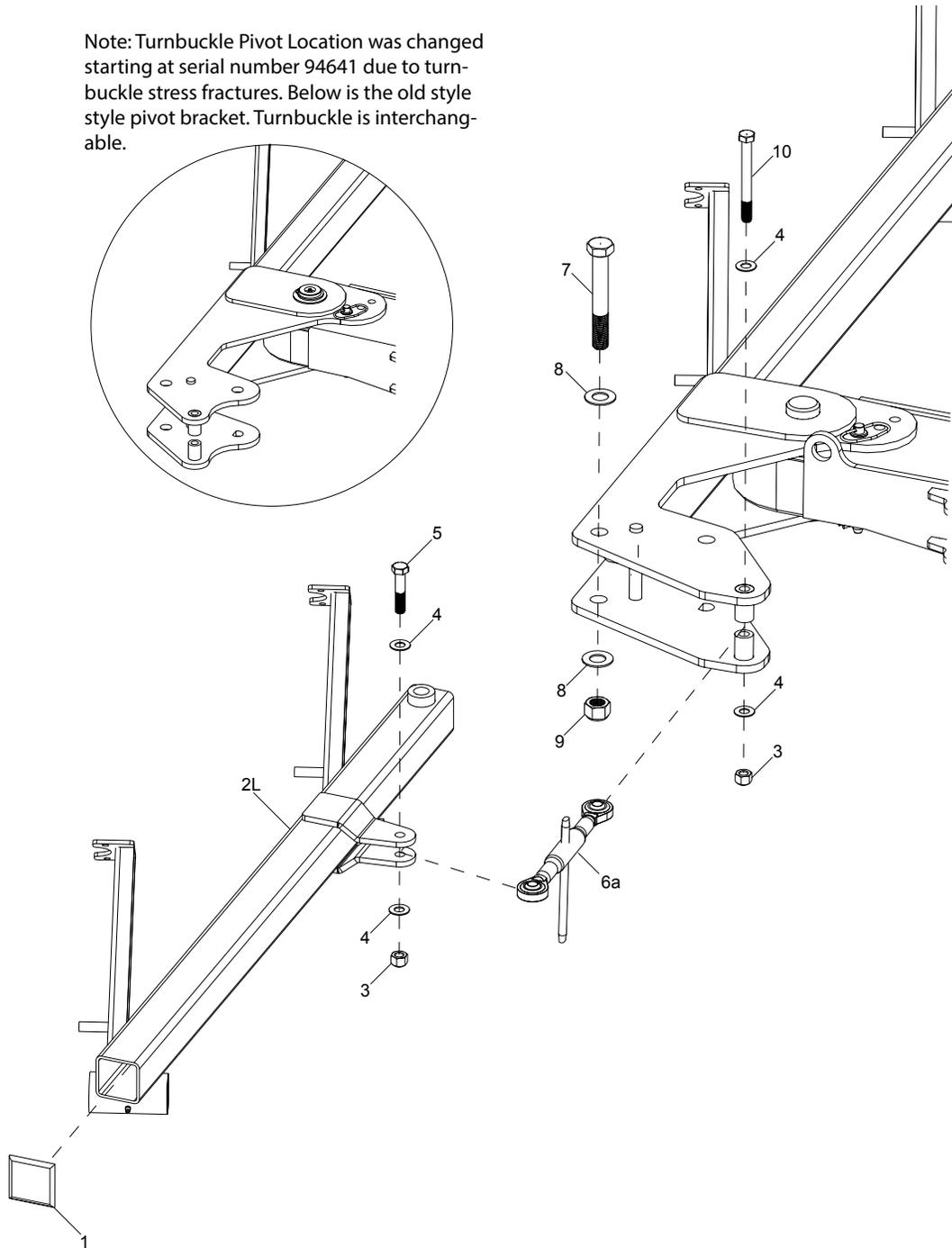


ID	Description	Part #
1L	Left Main Beam	510532
1R	Right Main Beam (not shown)	510512
2	1/4-28 Spin-Drive Grease Zert	400117
3	2" External Snap Ring (Zinc Plated)	510548
4	Pivot Washer, Plated	510553
5	Arm Pivot Shaft	510557
6	5/8" 6-1/2" Pin	510641
7	Hairpin Cotter	100216

Rear Beam Assembly

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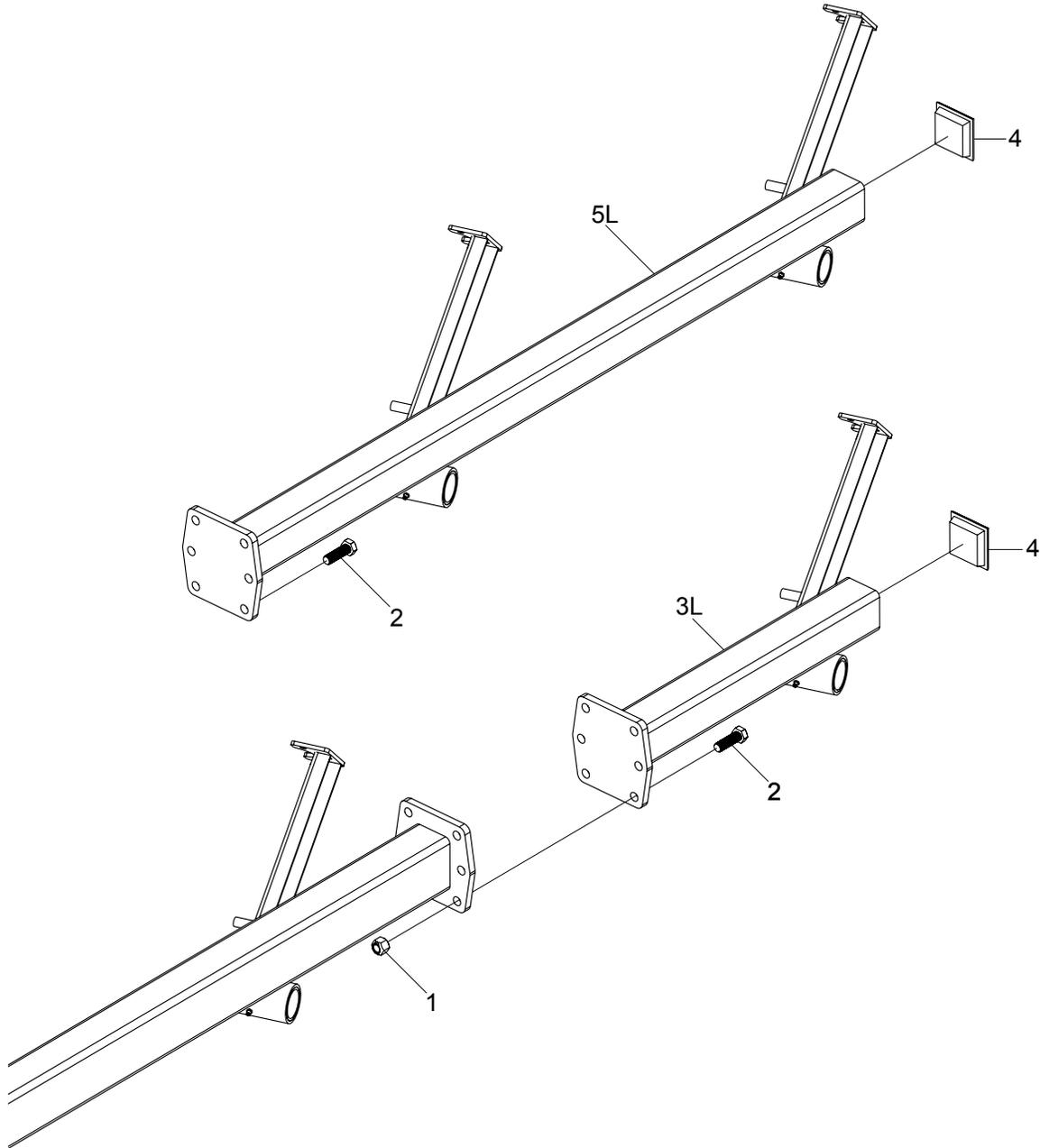
Note: Turnbuckle Pivot Location was changed starting at serial number 94641 due to turnbuckle stress fractures. Below is the old style pivot bracket. Turnbuckle is interchangeable.



ID	Description	Part #
1	Plastic Caps	508090
2L	Left Rear Wheel Beam	510535
2R	Right Rear Wheel Beam (not shown)	510534
3	5/8" Nylon Lock Nut, Zinc	000972
4	5/8" SAE Flat Washer	001076
5	5/8" x 3" Hex Head Bolt	010019

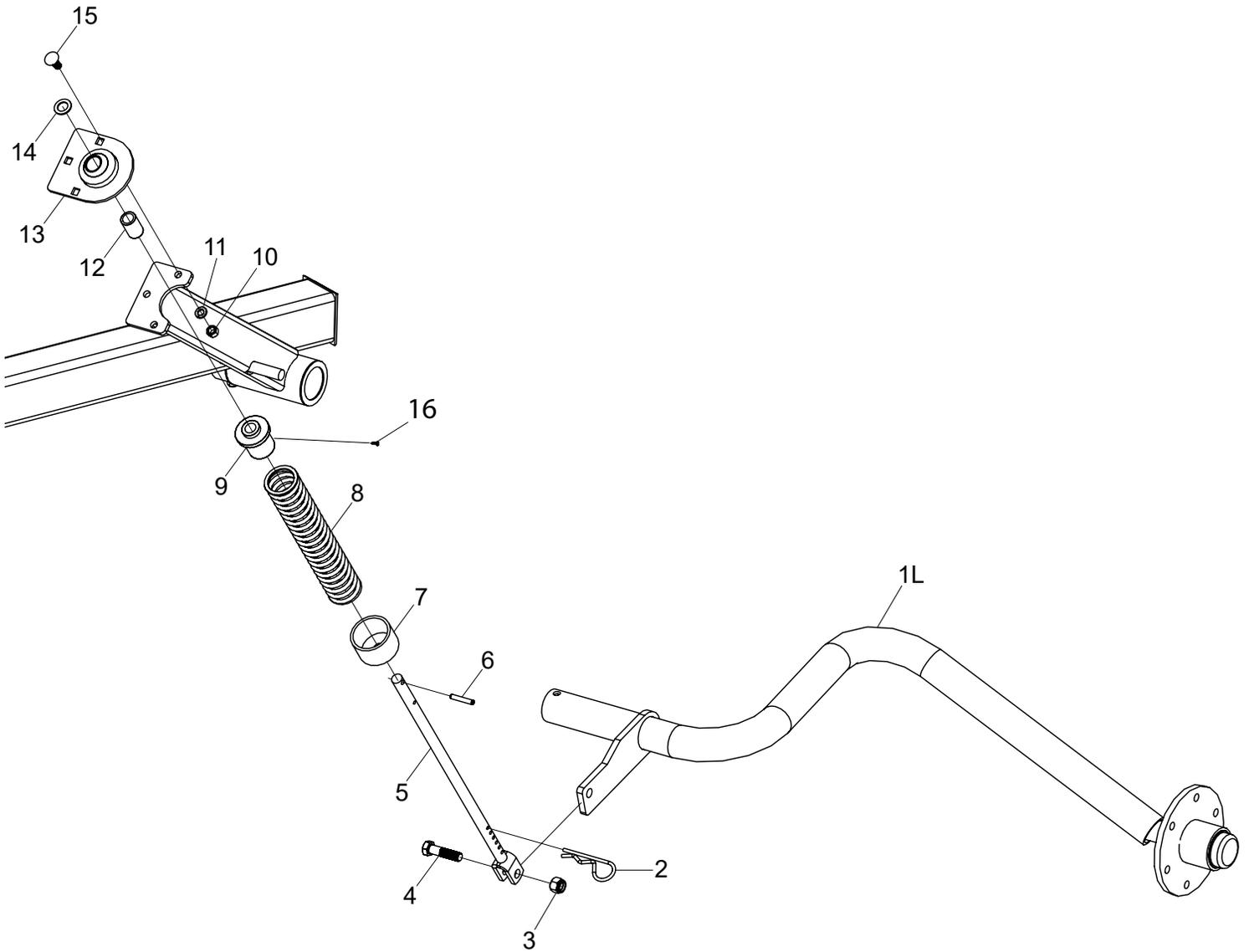
ID	Description	Part #
6a	10" Turnbuckle S/N under 94641	510677
6b	10" Turnbuckle S/N over 94641	505259
7	1" x 7" Hex Head Bolt	000789
8	1" SAE Flat Washer Zinc	000879
9	1" Nylon Locknut	001012
10	5/8" x 6" Hex Head Bolt	000665

Front Beam Extensions for 10 & 12 Wheel Rakes



ID	Description	Part #
1	5/8-11 Top Lock Nut, Zinc	900145
2	5/8" x 2" Hex Head Bolt	000615
3L	10 Wheel Beam Extension, Left	510605
3R	10 Wheel Beam Extension, Right (not shown)	510603
4	Plastic Cap	508090
5L	12 Wheel Beam Extension, Left	510545
5R	12 Wheel Beam Extension, Right (not shown)	510546

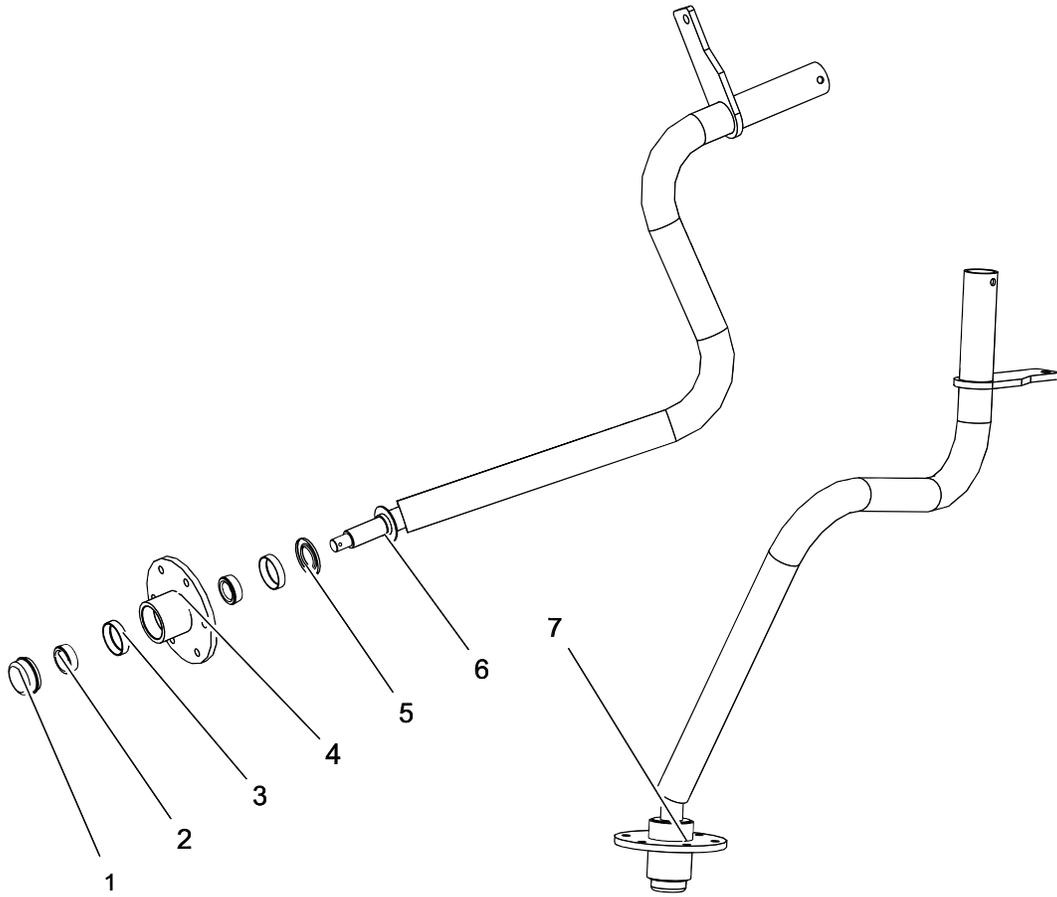
Wheel Arm Spring Assembly



ID	Description	Part #
1L	Left Wheel Arm Weldment	508965
1R	Right Wheel Arm Weldment	508967
2	Hairpin Cotter,- .178 Wire X 3"	507340
3	1/2" Nylon Locknut	000950
4	1/2-13 X 2 Hex Head Bolt, Gr.5	000452
5	Spring Assist Rod Weldment	510575
6	1/4 X 1-1/2 Roll Pin Galvanize	000564
7	Spring Cap Weldment, Plated	508918

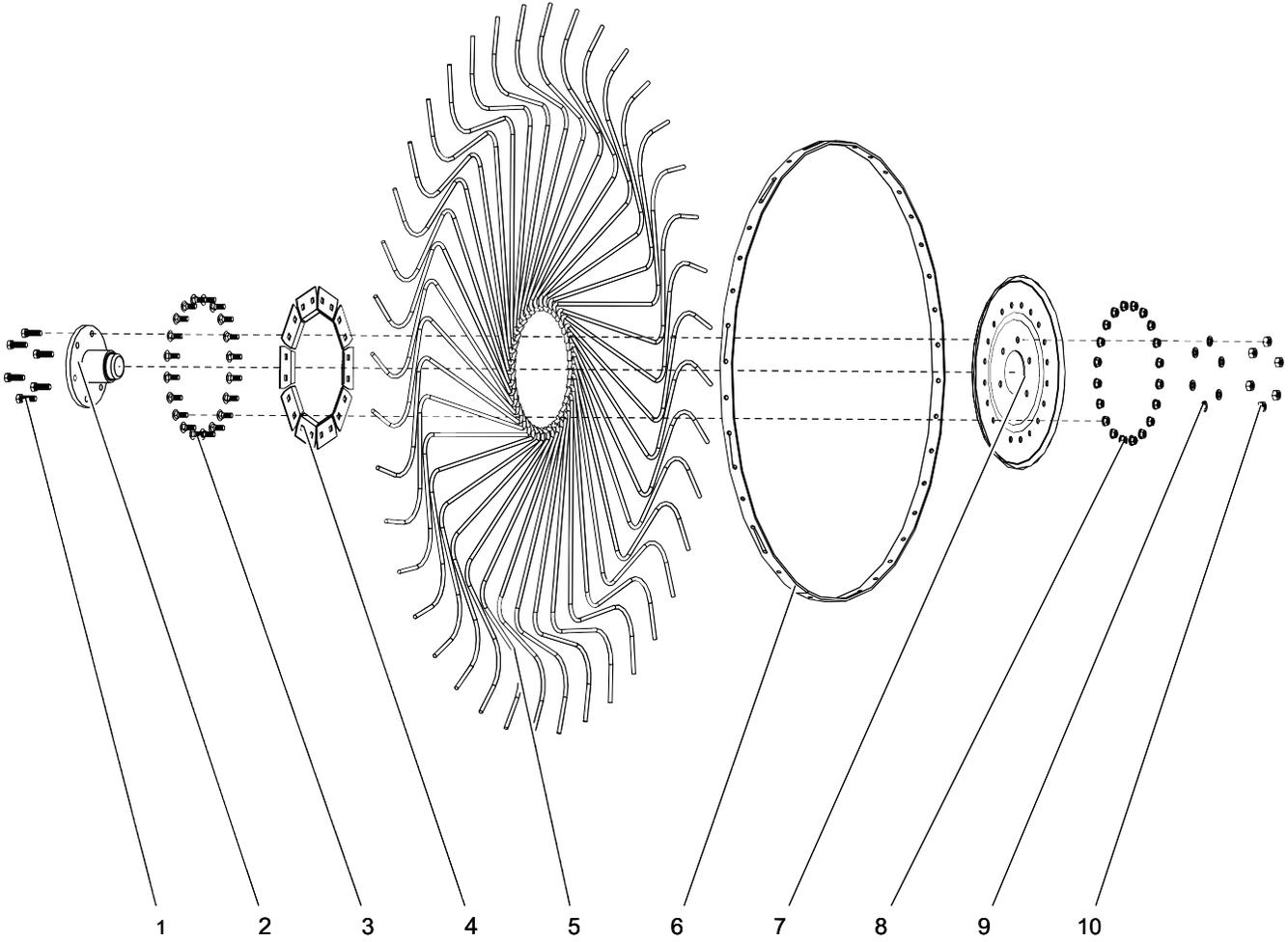
ID	Description	Part #
8	Wheel Lift Spring	508900
9	Plastic Spring Insert	510516
10	3/8" Hex Nut	000915
11	3/8" Lock Washer	000820
12	Ball Bushing	510517
13	Spring Assist Weldment	508964
14	5/8" SAE Flat Washer	001076
15	3/8" x 1" Carriage Bolt	000125
16	#12 X 3/4 Sheet Metal Screw	000106

Wheel Arm Hub Assembly



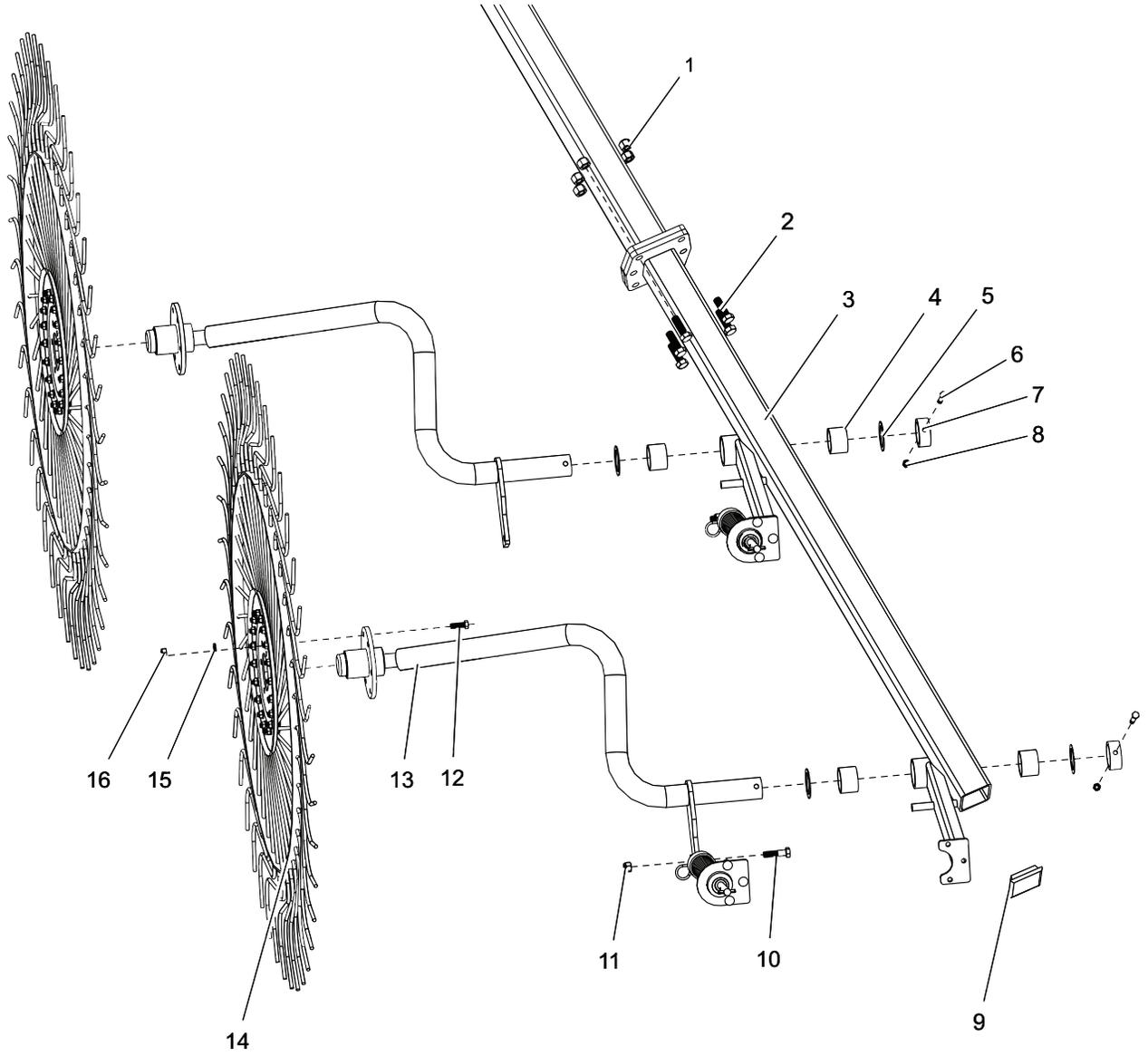
ID	Description	Part #	Qty
1	1.98" OD Dust Cap	508144	1
2	L44649 Tapered Bearing	101469	2
3	L44610 Race	101471	2
4	Rake Wheel Hub	508423	1
5	1.25 ID x 2.25 OD x .25 Seal	508137	1
6	Left Wheel Arm Weldment	508965	1
7	Right Wheel Arm Weldment	508967	1

Rake Wheel Assembly



ID	Description	Part #	Qty
1	7/16-14 x 1-1/4 Hex Head Bolt	000355	6
2	Rake Wheel Hub Assembly	508141	1
3	3/8-16 x 1 Carriage Bolt	000125	20
4	Tine Mounting Bracket	508191	10
5	Turbo Rake Tine	508086	40
6	Tine Ring	508158	1
7	Rake Wheel Hub	508087	1
8	3/8-16 Serrated Flange Nut, Zinc	000916	20
9	7/16 Split Lock Washer	000830	6
10	7/16-14 Hex Nut	000935	6

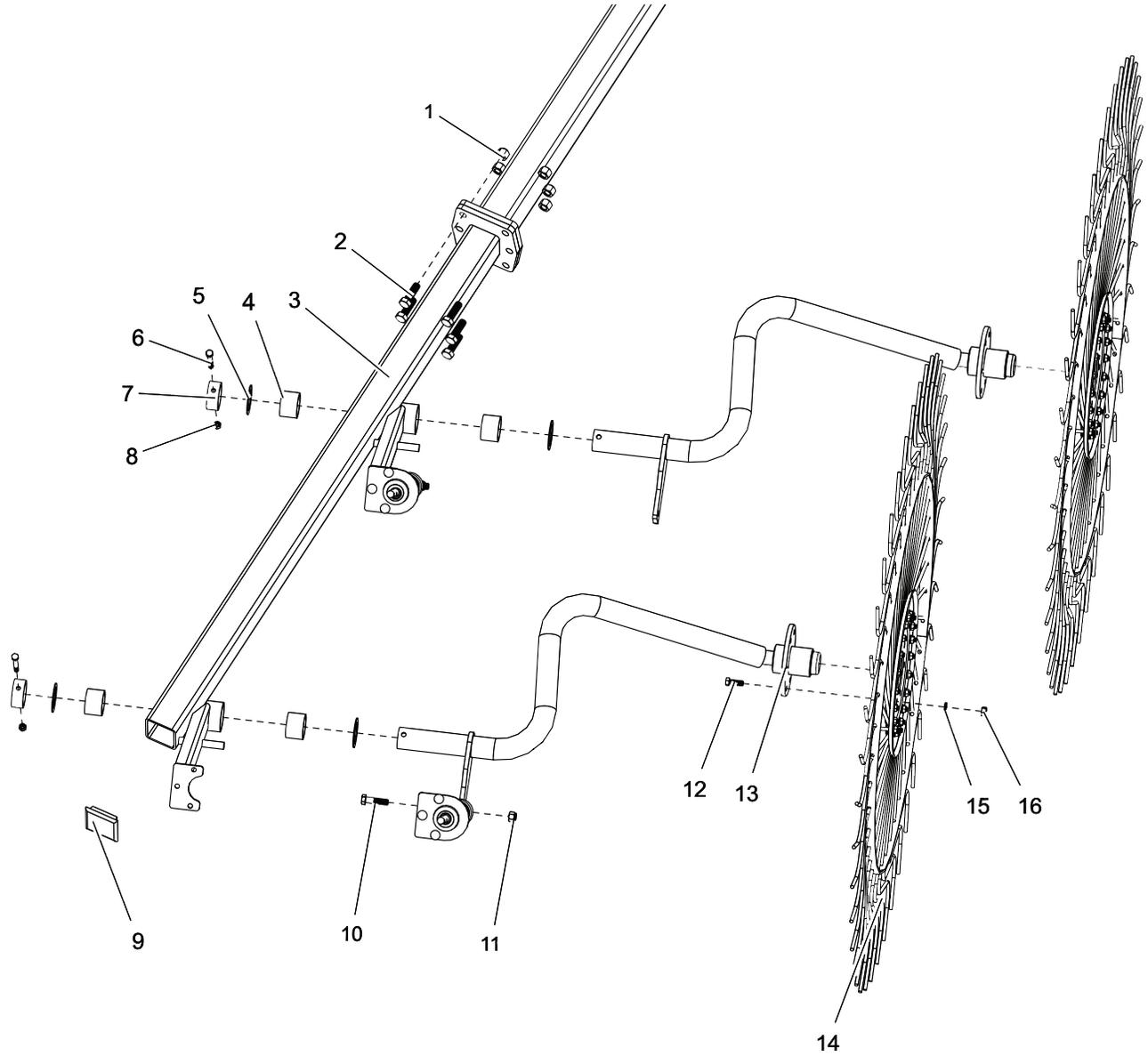
12 Wheel Beam Extension,-Right



ID	Description	Part #	Qty
1	5/8-11 Top Lock Nut, Zinc	900145	6
2	5/8-11 x 2 Hex Head Bolt	000615	6
3	TR-12 Right Extension	510546	1
4	Wheel Arm Bushing	508076	4
5	Wheel Arm Washer	508417	4
6	3/8-16 x 3 Hex Head Bolt	000307	2
7	Wheel Arm Retainer	508070	2
8	3/8-16 Nylon Lock Nut	003000	2

ID	Description	Part #	Qty
9	Plastic Caps	508090	1
10	1/2-13 x 3 Hex Head Bolt	000452	2
11	1/2-13 Nylon Lock Nut	000950	2
12	7/16-14 x 1-1/4 Hex Head Bolt	000355	12
13	Right Wheel Arm Weldment	508967	2
14	55" Finger Wheel Assembly, Right	508085	2
15	7/16 Split Lock Washer	000830	12
16	7/16-14 Hex Nut	000935	12

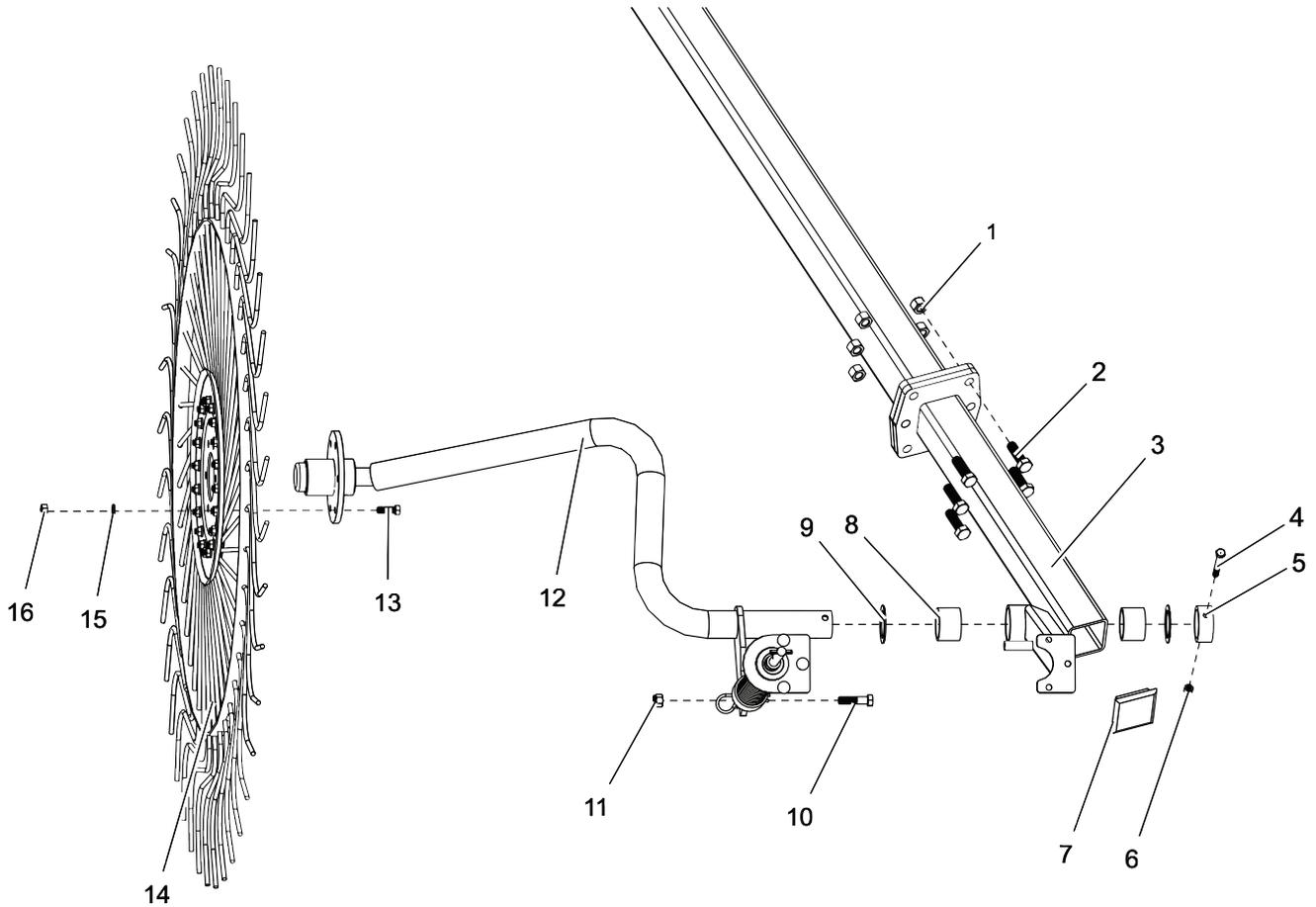
12 Wheel Beam Extension,-Left



ID	Description	Part #	Qty
1	5/8-11 Top Lock Nut, Zinc	900145	6
2	5/8-11 x 2 Hex Head Bolt	000615	6
3	Left 12 Wheel Ext.	510545	1
4	Wheel Arm Bushing	508076	4
5	Wheel Arm Washer	508417	4
6	3/8-16 x 3 Hex Head Bolt	000307	2
7	Wheel Arm Retainer	508070	2
8	3/8-16 Nylon Lock Nut	003000	2

ID	Description	Part #	Qty
9	Plastic Caps	508090	1
10	1/2-13 x 3 Hex Head Bolt	000452	2
11	1/2-13 Nylon Lock Nut	000950	2
12	7/16-14 x 1-1/4 Hex Head Bolt	000355	12
13	Left Wheel Arm Weldment	508965	2
14	55" Finger Wheel Assembly, Left	508194	2
15	7/16 Split Lock Washer	000830	12
16	7/16-14 Hex Nut	000935	12

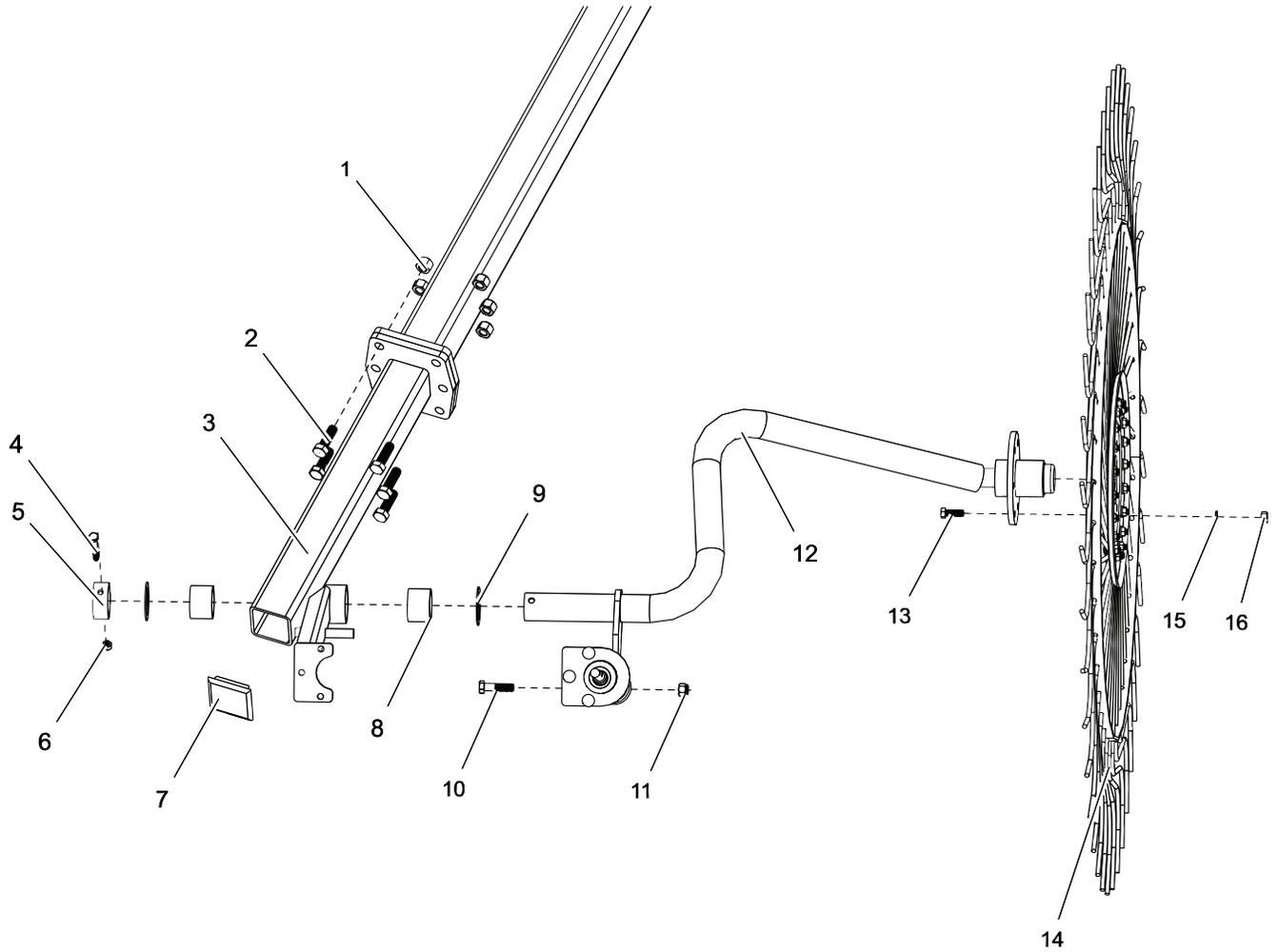
10 Wheel Beam Extension,-Right



ID	Description	Part #	Qty
1	5/8-11 Top Lock Nut, Zinc	900145	6
2	5/8-11 x 2 Hex Head Bolt	000615	6
3	TR-10 Right Extension	510603	1
4	3/8-16 x 3 Hex Head Bolt	000307	1
5	Wheel Arm Retainer	508070	1
6	3/8-16 Nylon Lock Nut	003000	1
7	Plastic Caps	508090	1
8	Wheel Arm Bushing	508076	2

ID	Description	Part #	Qty
9	Wheel Arm Washer	508417	2
10	1/2-13 x 3 Hex Head Bolt	000452	1
11	1/2-13 Nylon Lock Nut	000950	1
12	Right Wheel Arm Weldment	508967	1
13	7/16-14 x 1-1/4 Hex Head Bolt	000355	6
14	55" Finger Wheel Assembly, Right	508085	1
15	7/16 Split Lock Washer	000830	6
16	7/16-14 Hex Nut	000935	6

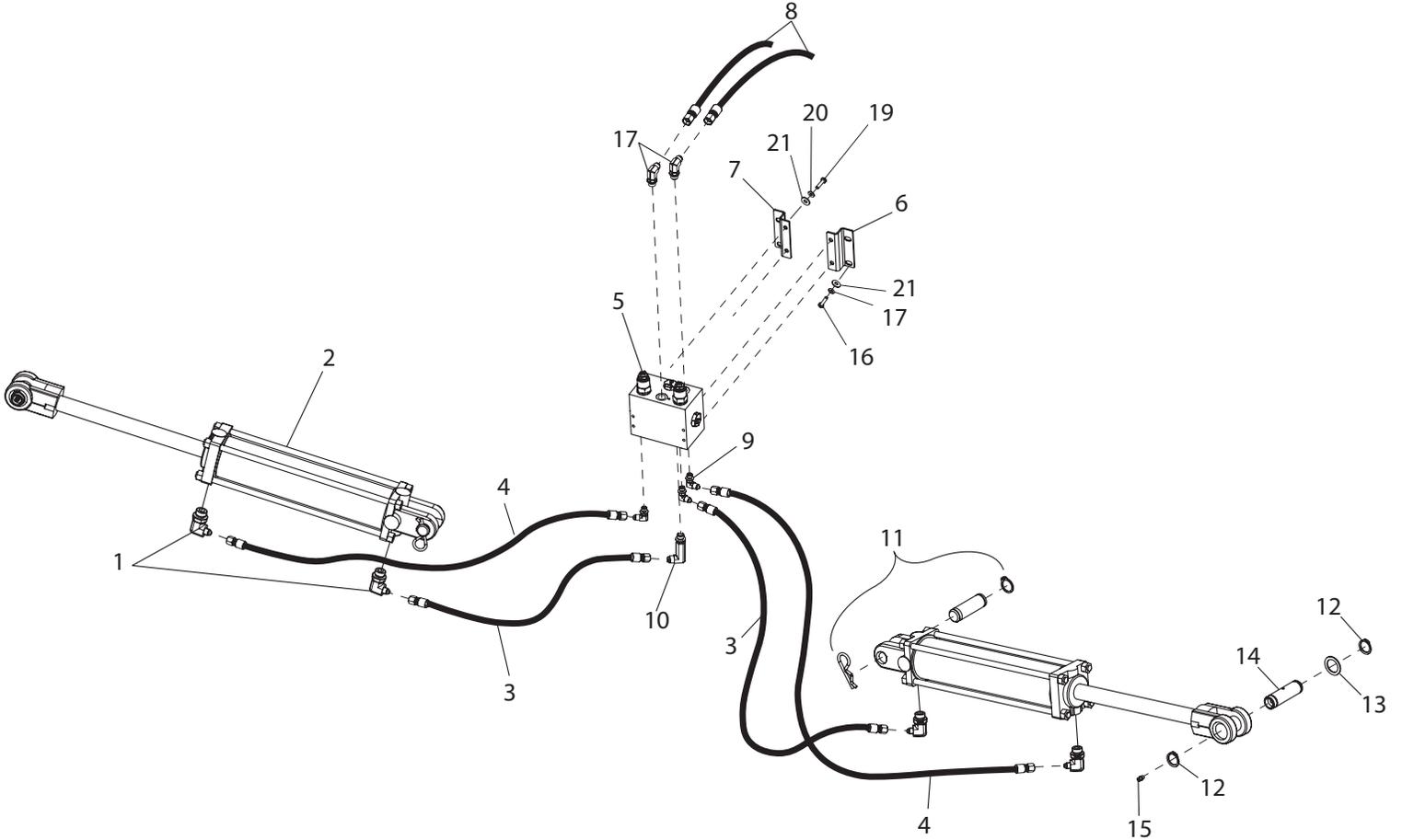
10 Wheel Beam Extension,-Left



ID	Description	Part #	Qty
1	5/8-11 Top Lock Nut, Zinc	900145	6
2	5/8-11 x 2 Hex Head Bolt	000615	6
3	TR-10 Left Extension	510605	1
4	3/8-16 x 3 Hex Head Bolt	000307	1
5	Wheel Arm Retainer	508070	1
6	3/8-16 Nylon Lock Nut	003000	1
7	Plastic Caps	508090	1
8	Wheel Arm Bushing	508076	2

ID	Description	Part #	Qty
9	Wheel Arm Washer	508417	2
10	1/2-13 x 3 Hex Head Bolt	000452	1
11	1/2-13 Nylon Lock Nut	000950	1
12	Left Wheel Arm Weldment	508965	1
13	7/16-14 x 1-1/4 Hex Head Bolt	000355	6
14	55" Finger Wheel Assembly, Left	508194	1
15	7/16 Split Lock Washer	000830	6
16	7/16-14 Hex Nut	000935	6

Beam Lift Hydraulics

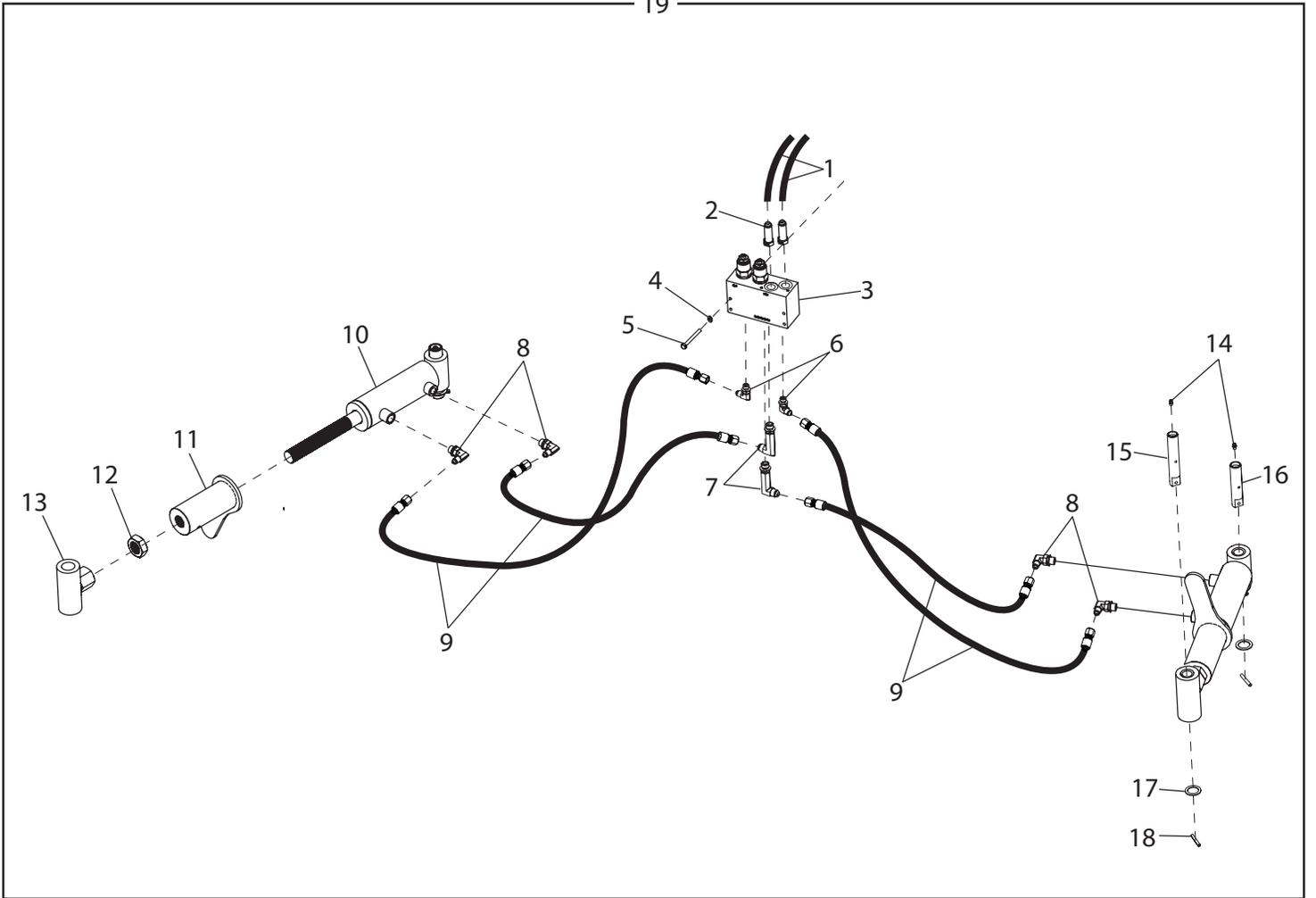


ID	Description	Part #	Qty
1	90° Elbow, #4 MJ x #8 MB	290255	4
2	3 x 12 Tie Rod Cylinder	510586	2
3	Lift Cylinder Hose, Base	510615	2
4	Lift Cylinder Hose, Rod End	510614	2
5	Turbo Rake Manifold	510589	1
6	Right Manifold Foot	510640	1
7	Left Manifold Foot	510639	1
8a	8 Wheel Tractor Hose	510651	2
8b	10 Wheel Tractor Hose	510650	2
8c	12 Wheel Tractor Hose	510612	2
9	90° Elbow, #4 MJ x #4 MB	700948	2
10	90° Long Elbow Fitting, #6 MJ x #6 MB	507284	1
11	1" Clevis Pin with Pin and Ring	507273	2

ID	Description	Part #	Qty
12	1" Heavy Duty Ext. Retaining Ring Zinc Plated	702883	2
13	1" X 1-1/2 Machinery Bushing 14GA	001008	2
14	Outer Cylinder Pin	510574	2
15	1/4-28 Spin-Drive Grease Zert	400117	2
16	3/8-16 X 1-1/4 Hex Head Bolt, Zinc Gr. 5	000275	4
17	3/8 Lock Washer, Zinc	000820	4
18	3/8 USS Flat Washer, Zinc	001035	4
19	5/16-18 X 1 Hex Head Bolt, Zinc Gr. 5	000221	4
20	5/16 Lock Washer, Zinc	000810	4
21	5/16 USS Flat Washer Zinc	001030	4

Hydraulic Wheel Beam Assembly

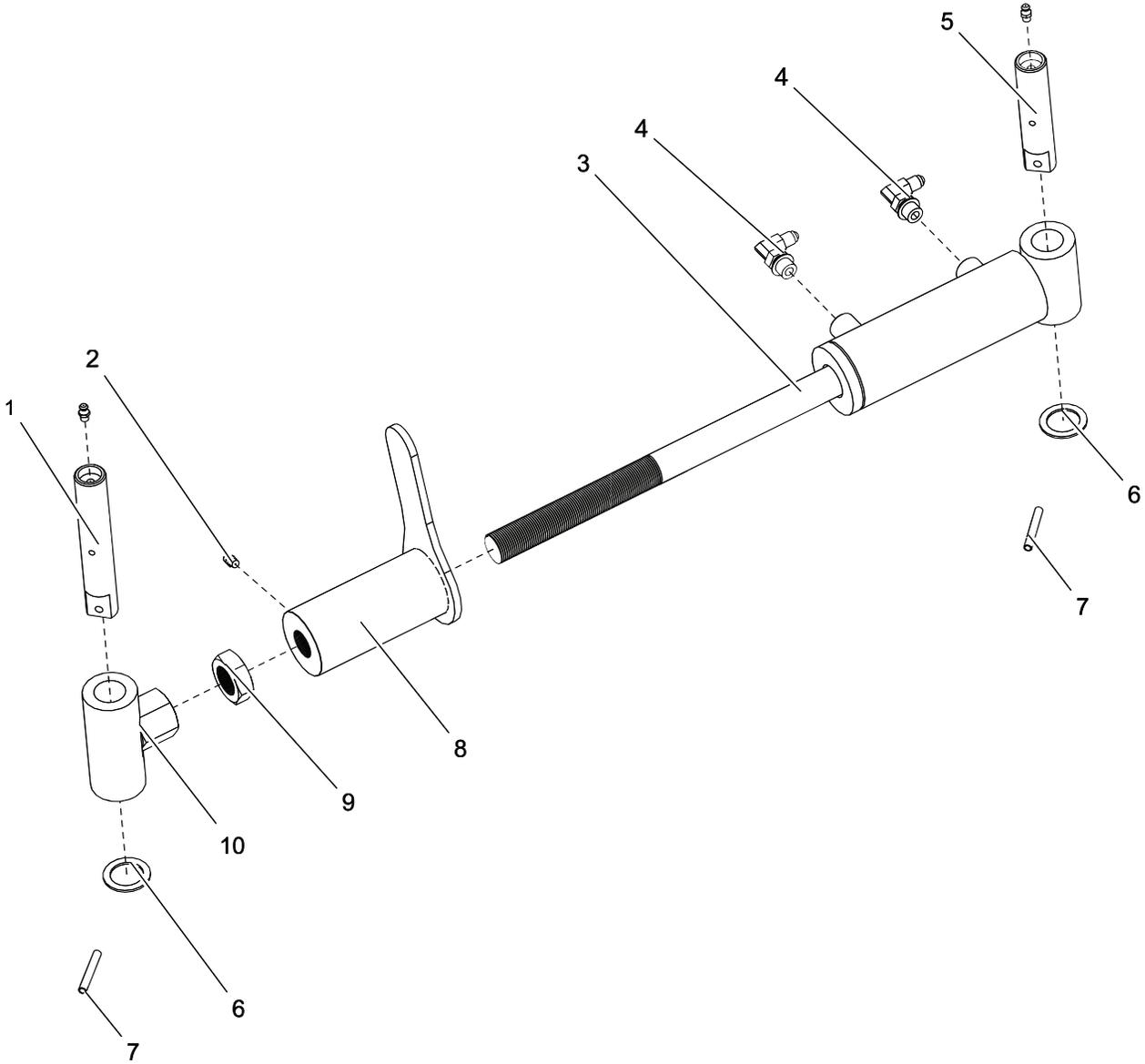
19



ID	Description	Part #	Qty
1a	Tractor Hoses for 8 Wheel Rake	510653	2
1b	Tractor Hoses for 10 Wheel Rake	510654	2
1c	Tractor Hoses for 12 Wheel Rake	510655	2
2	Fitting, 6 - 6L	510638	2
3	Wing Cylinder Manifold	510609	1
4	1/4" Lock Washer	000805	4
5	1/4" x 2-1/2" Hex Head Bolts	000195	4
6	90° Elbow Fitting, #4 MJ x #4 MB	700948	2
7	90° Long Elbow Fitting, #6 MJ x #6 MB	507284	2
8	90 Degree Elbow, #4 MJ x #6 MB	700907	4

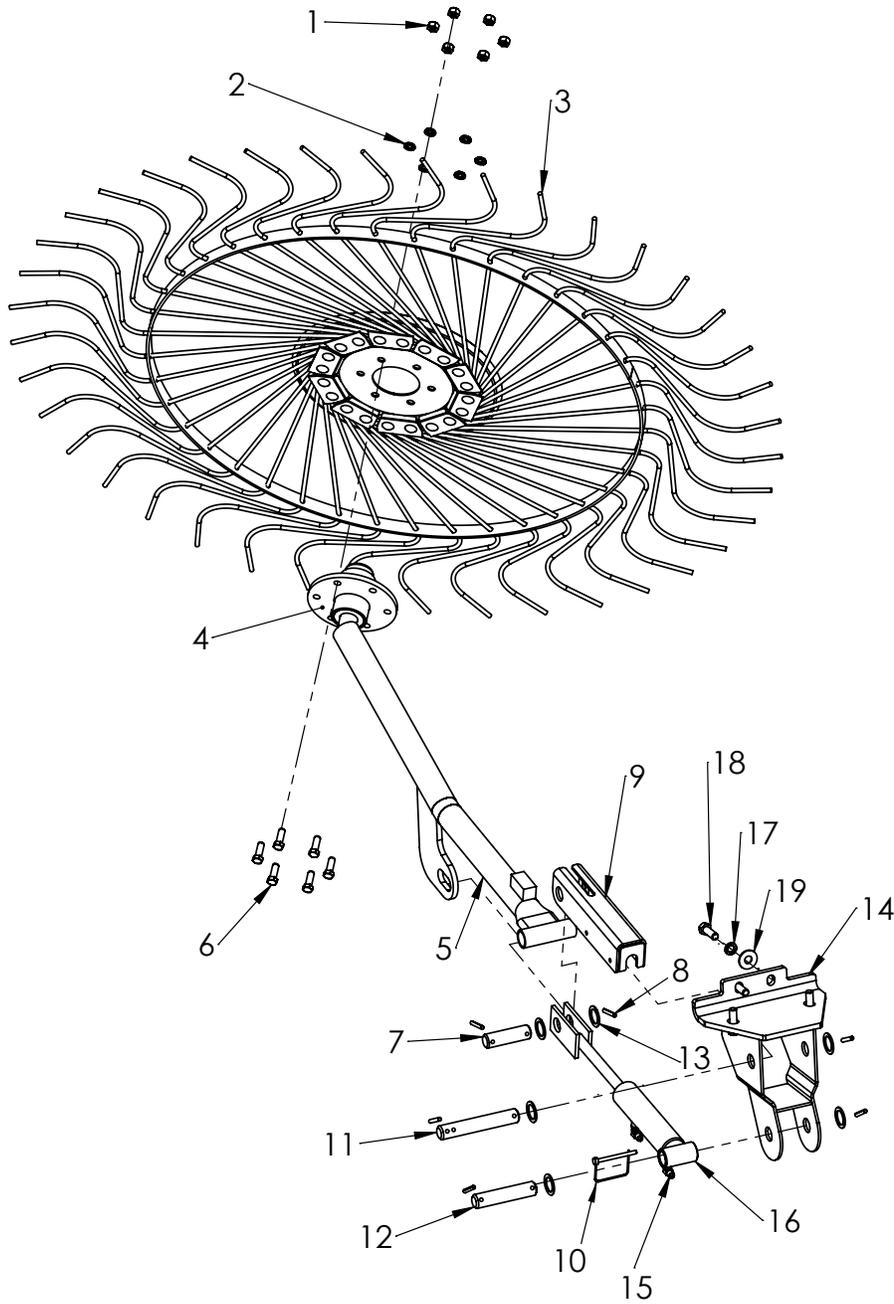
ID	Description	Part #	Qty
9	Hydraulic Beam Hose 53"	510616	4
10	Rear Wheel Beam Cylinder	510558	2
11	Cylinder Adjustment	510568	2
12	1" Jam Nut	510600	2
13	Beam Cylinder Rod End	510047	2
14	1/4" Spin Drive Fitting	400117	4
15	1" x 5- 7/8" Cylinder Pin	510571	2
16	1" x 4-1/2" Cylinder Pin	700907	4
17	1" X 1-1/2 Machinery Bushing 14GA	001008	4
18	1/4" x 1-3/4" Roll Pin	500187	4
19	Hydraulic Wheel Beam Option	510628	1

Hydraulic Wheel Beam Cylinder



ID	Description	Part #	Qty
1	Cylinder Pin	510653	1
2	1/4-28 Spin Drive Fitting	400117	3
3	Rear Wing Cylinder	510558	1
4	#4 JIC x #6 Male Boss Elbow Fitting	700907	2
5	Cylinder Pin	510570	1
6	1" X 1-1/2 Machinery Bushing 14GA	001008	2
7	1/4 x 1 3/4 Roll Pin	500187	2
8	Cylinder Adjustment	510568	1
9	1-14 Jam Nut	510600	1
10	Beam Cylinder Rod End	510047	1

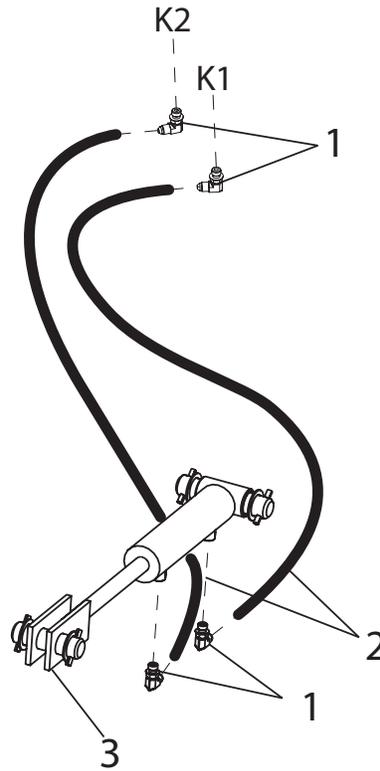
Kicker Wheel Kit



ID	Description	Part #	Qty
1	7/16-14 Hex Nut	000935	6
2	7/16 Split Lock Washer	000830	6
3	55" Finger Wheel Assembly, Left	508194	1
4	Rake Wheel Hub Assembly	508423	1
5	Kicker Arm Weldment	510591	1
6	7/16-14 x 1-1/4 Hex Head Bolt	000355	6
7	Working Stop Pin	508311	1
8	1/4 x 1 3/4 Roll Pin	500187	6
9	Kicker Cylinder Stop	510561	1
10	1/4 x 2-1/2 Snapper Pin	507186	1

ID	Description	Part #	Qty
11	Tongue Pin	507129	1
12	Center Hydraulic Pin	701021	1
13	1" X 1-1/2 Machinery Bushing 14GA	001008	6
14	Kicker Wheel Mounting Weldment	510597	1
15	90 Degree Hydraulic Connection	700948	2
16	Kicker Wheel Cylinder	508404	1
17	1/2 Split Lock Washer	000840	4
18	1/2-13 x 1" HH Bolt	000405	4
19	1/2 USS Flat Washer, Zinc	001055	2

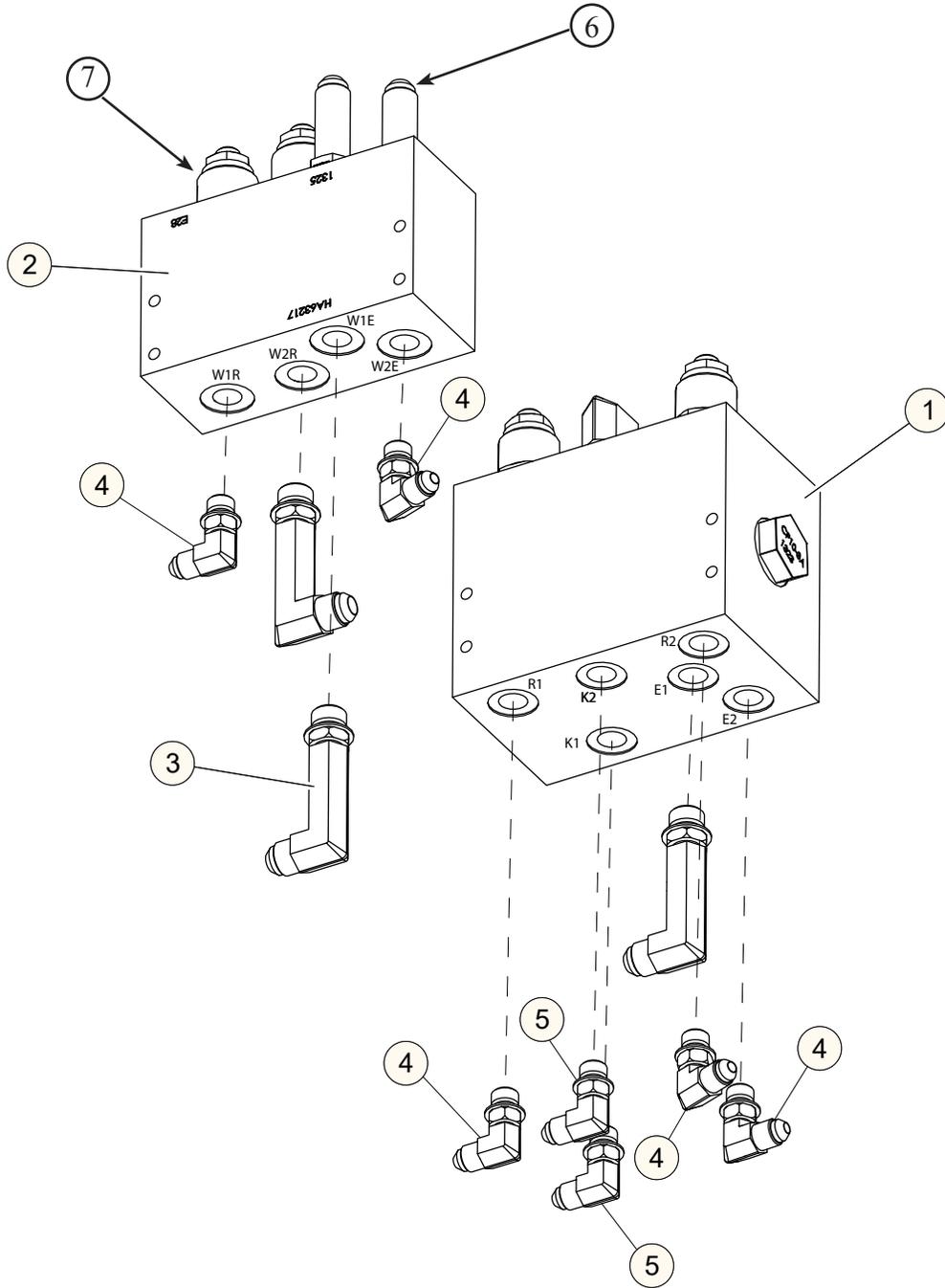
Kicker Wheel Hydraulics



Ref #	Description	Part #	Qty
1	90 Degree Elbow, #4 MJ x #4 MB	700948	4
2	Kicker Wheel Hose	510614	2
3	Kicker Wheel Cylinder	508404	1
4	Complete Seal Kit	510682	1

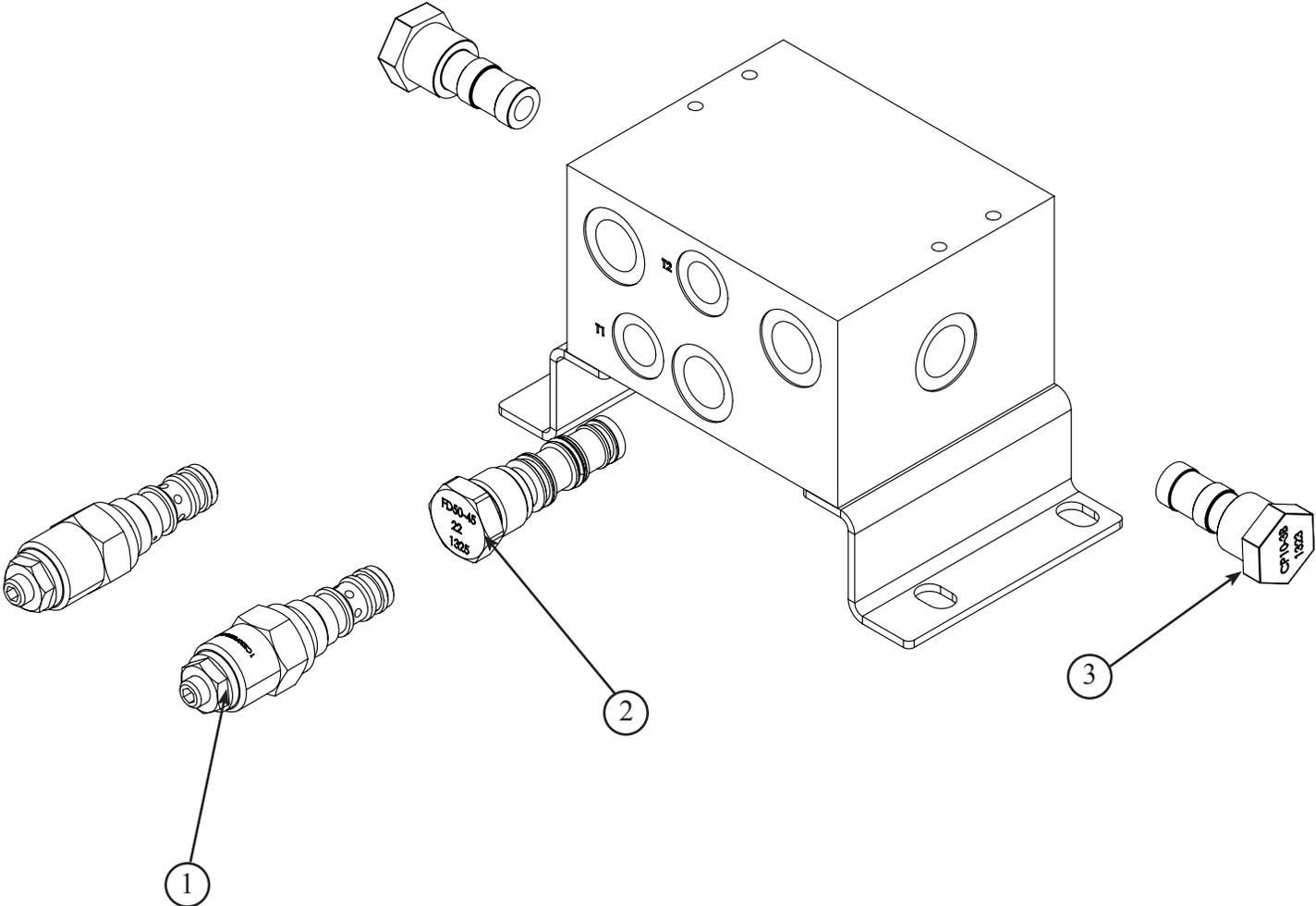
Note: See page 1 for additional kicker wheel parts.

Manifold Fittings



ID	Description	Part #
1	Mid Cap Rake Manifold	510589
2	Wing Cylinder Manifold	510609
3	Adapter - 4MB-4MJ90 Long	510619
4	90 Degree Elbow	700948
5a	90 Degree Elbow, for rakes S/N	700948
5b	90 Degree Elbow with orifice, for Rake S/N	403771
6	6400-6-6L	510638
7	Counter Balance Valve	510645

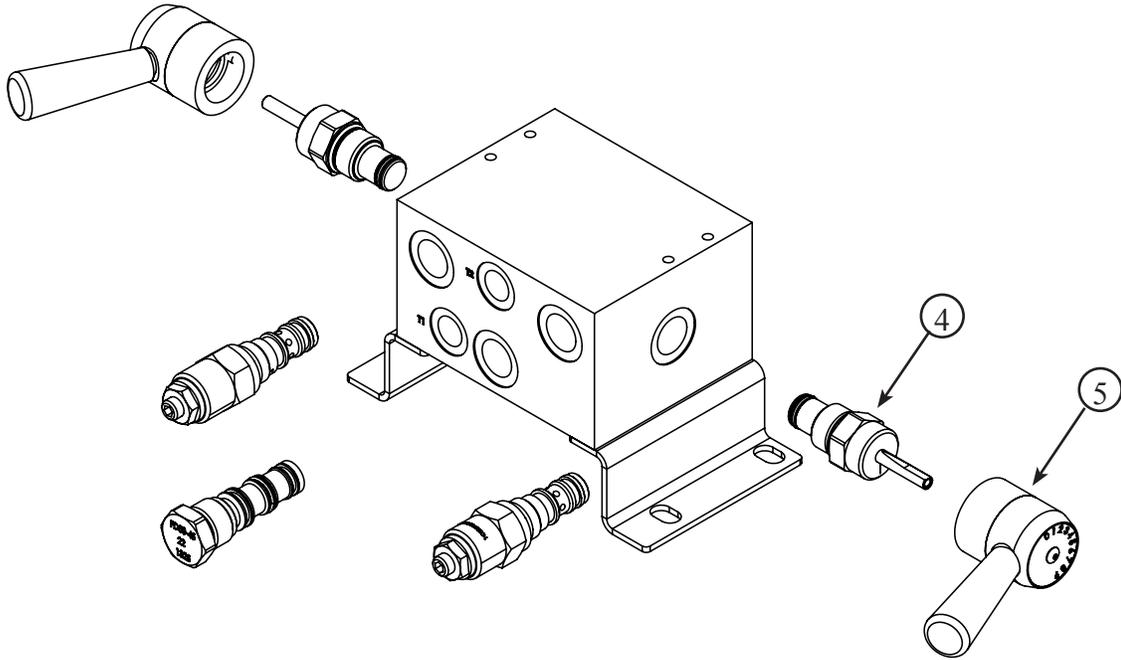
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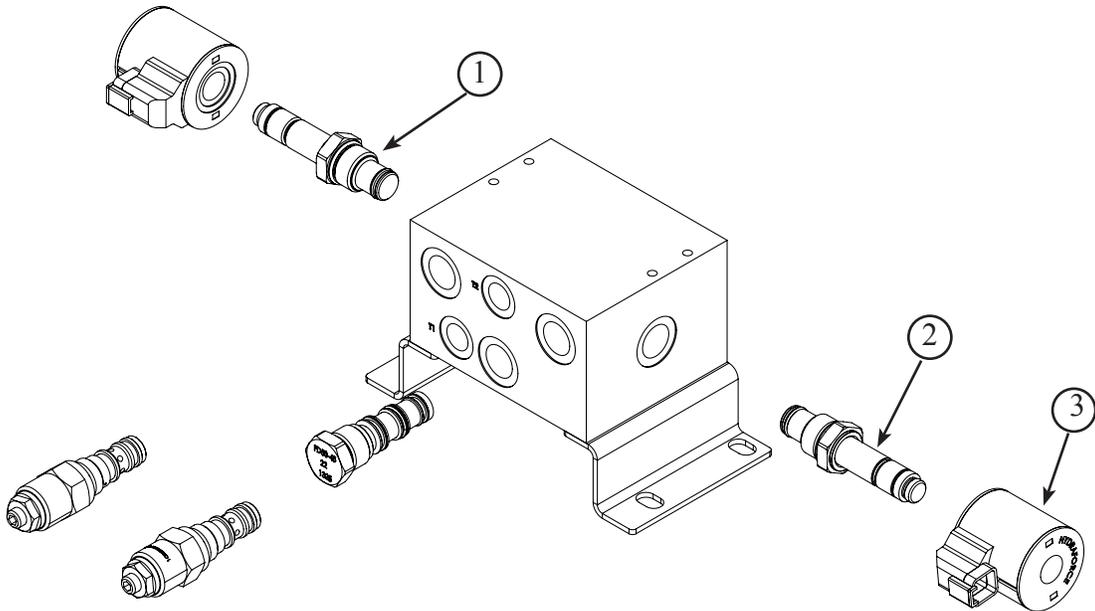
ID	Description	Part #
1	Counter Balance Valve	510645
2	Flow Divider Combiner	510646
3	PLUG	PLUG

Manual Control

MCR



Electric Option



ID	Description	Part #
1	SV10-31-0-N-00 (Right Side)	510622
2	SV10-33-0-N-00 (Left Side)	510623
3	Solenoid Valve Coil	830325
4	Manual Shutoff Valve	290270
5	Handle Kit	290271

Switch Box

