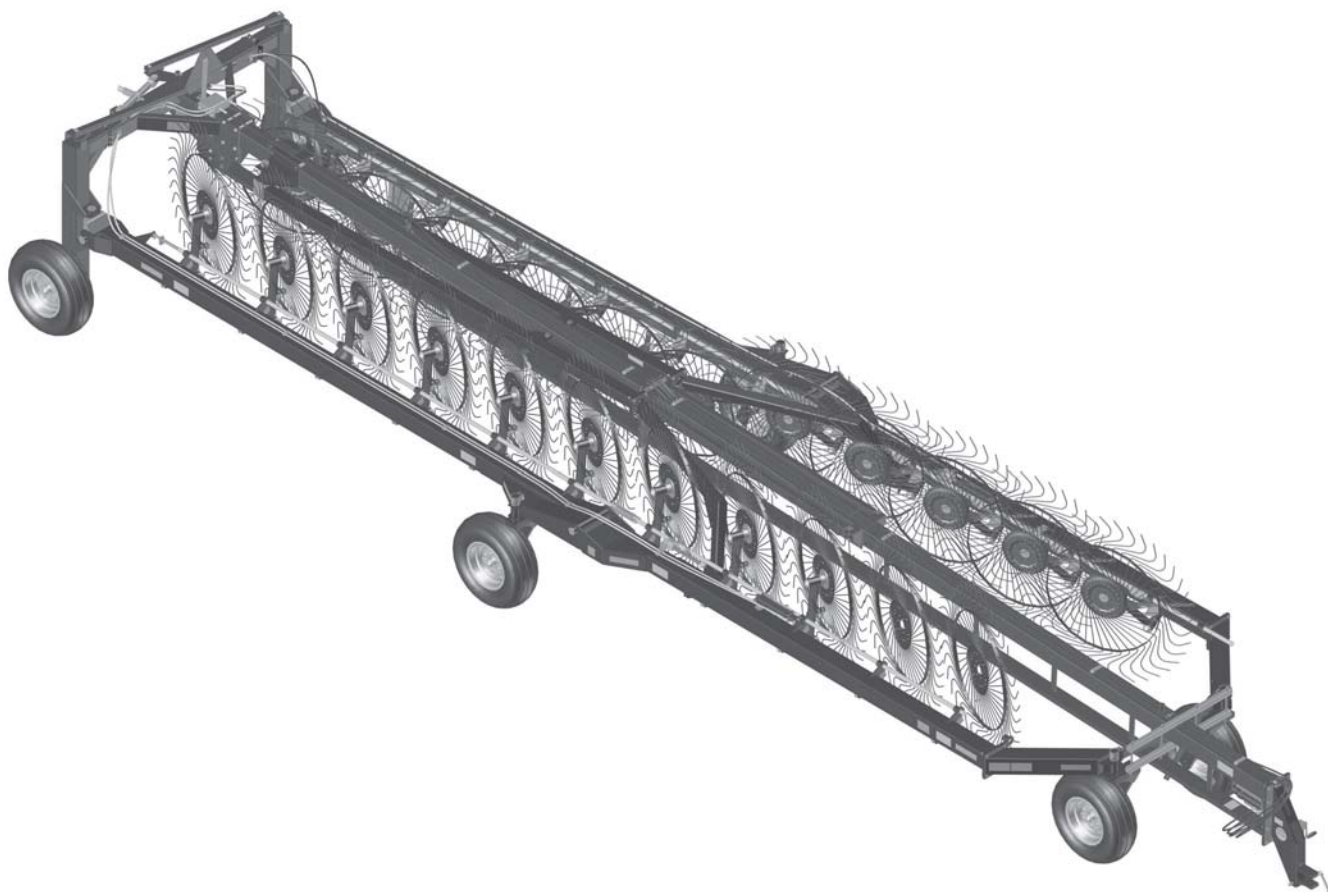


H&S PARTS BOOK

6122 FLEX-FRAME RAKE



Revision #02
Starting Ser. #512008

Part #60552
HSMFG0115

P.O. BOX 768, MARSHFIELD, WI 54449
(715) 387-3414 FAX (715) 384-5463
www.hsmfgco.com

CONTENTS

Instructions for Ordering Parts - About Improvements	1
Figure 1 - Main Frame Front	2-3
Figure 2 - Main Frame Middle	4-5
Figure 3 - Main Frame Rear	6-7
Figure 4 - Rear Frame & Axle Assembly	8-9
Figure 5 - Right Caster	10-11
Figure 6 - Left Caster	12-13
Figure 7 - Right & Left Front Rake Beams	14-15
Figure 8 - Right & Left Back Rake Beams	16-17
Figure 9 - U-Joint Assembly	18-19
Figure 10 - Rake Wheel Assembly	20-21
Figure 11 - Hydraulics	22-23
Figure 12 - Lift Cylinder	24-25
Figure 13 - Open Cylinder	26-27
Figure 14 - Optional Hydraulic Rear Opening Cylinder	28-29
Figure 15 - Optional Tandem Axle	30-31
Figure 16 - Wind Guard	32
Figure 17 - Optional Lighting	33
Figure 18 - Optional Kicker Wheel	34-41
Parts Notes	42

INSTRUCTIONS FOR ORDERING PARTS

All service parts should be ordered through your authorized H&S dealer. They will be able to give you faster service if you will provide them with the following

1. Model & Serial number is located on the left, rear main frame of your unit.
2. All reference to left or right apply to the machine as viewed from the rear.
3. Parts should not be ordered from illustration only. Please order by complete part number.
4. If your dealer has to order parts - give shipping instructions:

VIA truck - large pieces (please specify local truck lines)

VIA United Parcel Service (include full address)

H&S MFG. CO. INC.	
MARSHFIELD, WIS.	
MOD. NO.	
SER. NO.	
DESCR.	

PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

ABOUT IMPROVEMENTS

H&S IS CONTINUALLY STRIVING TO IMPROVE IT'S PRODUCTS

We must therefore, reserve the right to make improvements or changes whenever it becomes practical to do so without incurring any obligation to make changes or additions to the equipment previously sold.

FIGURE 1
MAIN FRAME FRONT

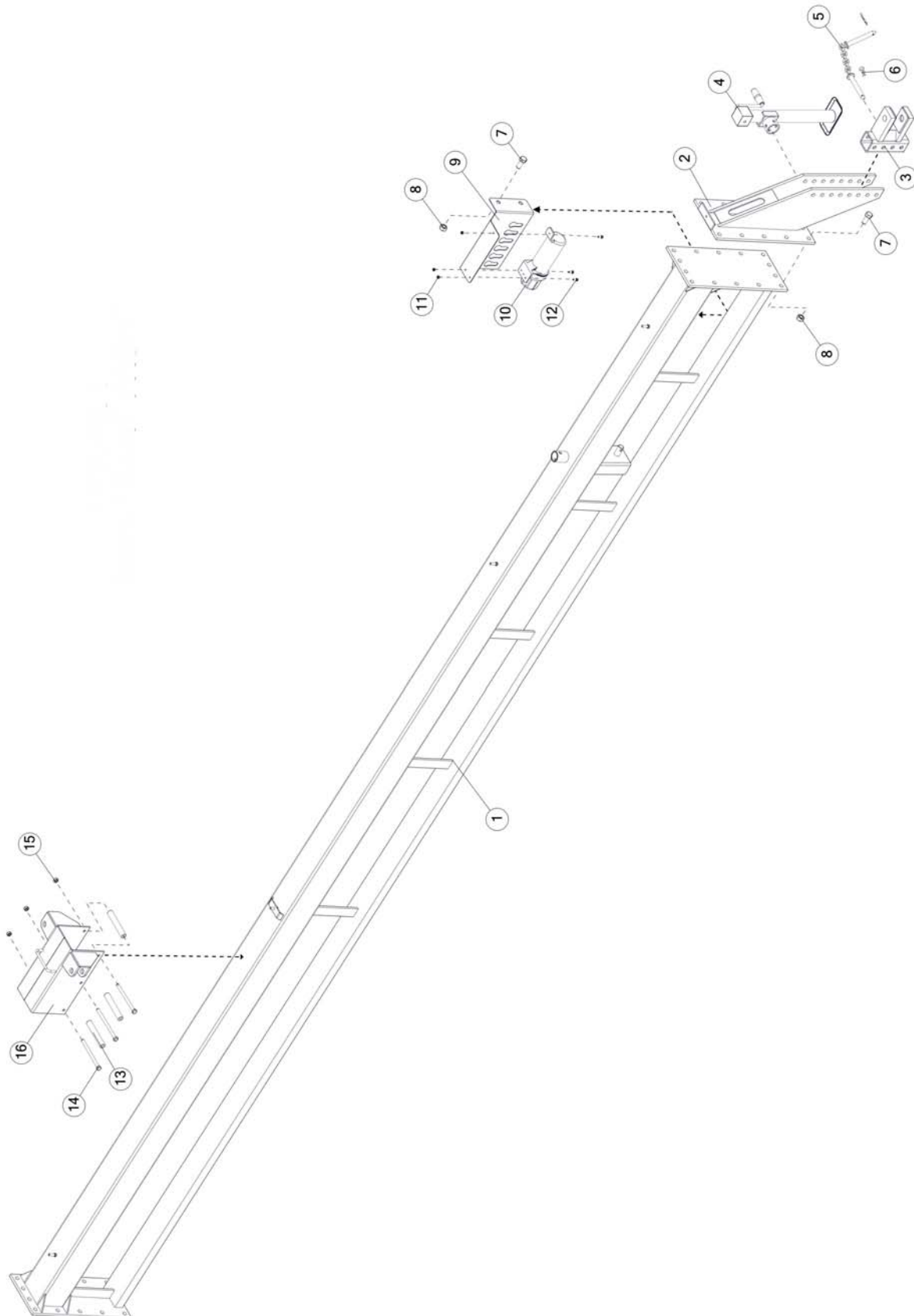


FIGURE 1

MAIN FRAME FRONT

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	60066	POLE FRONT
2	1	FR25	HITCH RECEIVER
*	1	SC10100	SAFETY CHAIN 10,100 LB. RATING
3	1	HD83	ASSY, HITCH CLEVIS
4	1	BFR753A	JACK, SIDE WIND, 2000#
5	1	BFR450	ASSY, HITCH PIN
6	2	YPHR02010	HAIR PIN, #21-07
7	14	YBHH24014	BOLT, 3/4" - 10 X 1-3/4" GR. 5
8	14	YNTL24005	HEX NUT, TOP LOCK, 3/4" - 10
9	1	60269	HOSE HOLDER
10	1	S522	MANUAL HOLDER
11	3	YNNY08005	HEX NUT, NYLON LOCKNUT, 1/4" - 20
12	3	YBHH08100	BOLT, 1/4" X 3/4" GR. 5
13	3	58298	SLIDER SPACER
14	3	YBHH16180	BOLT, 1/2" X 7" GR. 5
15	3	YNTL16005	HEX NUT, TOP LOCK, 1/2" - 13
16	1	58303	FRONT LINKAGE SLIDER

NOTE: * MEANS NOT SHOWN

FIGURE 2
MAIN FRAME MIDDLE

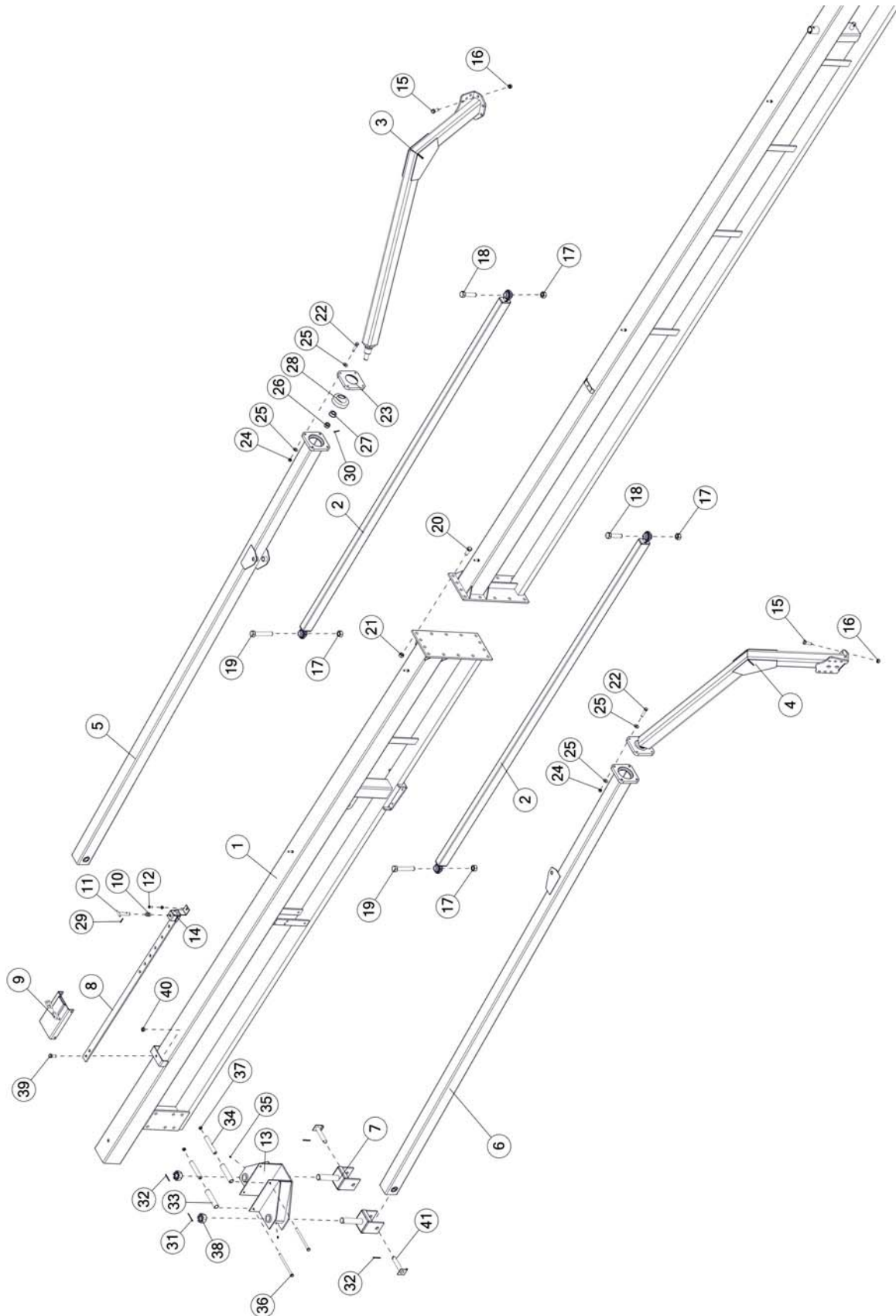


FIGURE 2

MAIN FRAME MIDDLE

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	58293	BACK POLE
2	2	BFR458	ASSY, FRONT LINKAGE
3	1	58352	ARM ASSEMBLY, LH
4	1	58353	ARM ASSEMBLY, RH
5	1	63371	LH LINKAGE ARM ASSEMBLY
6	1	63372	RH LINKAGE ARM ASSEMBLY
7	2	BFR476	ASSY, BACK LINKAGE YOKE
8	1	BFR611	ASSY, WIDTH ADJUSTMENT BAR
9	1	58380	WIDTH ADJUSTMENT STOP
10	1	BFR240	SPRING #SP41
11	1	BFR241	ADJUSTMENT HANDLE
12	1	YSST10005	.312 X 1 SELF THREADING FLANGE
13	1	58251	BACK LINKAGE SLIDER
14	1	BFR239	ASSY, SLEEVE LOCK ADJUSTMENT
15	20	YBHH20020	BOLT, 5/8" X 1-3/4" GR. 5
16	20	YNL20005	HEX NUT, TOP LOCK, 5/8" - 11
17	4	YNL32005	HEX NUT, TOP LOCK, 1" - 8 GR. C, ZINC
18	2	YBHH32015	BOLT, 1" - 8 X 4" GR. 5
19	2	YBHH32025	BOLT, 1" - 8 X 6" GR. 5
20	14	YBHH24014	BOLT, 3/4" - 10 X 1-3/4" GR. 5
21	14	YNL24005	HEX NUT, TOP LOCK, 3/4" - 10
22	8	YBHH16080	BOLT, 1/2" X 2-1/2" GR. 5
23	4	58287	BEARING SUPPORT
24	8	YNL16006	HEX NUT, TOP LOCK, 1/2"-13 GR. 9
25	16	YWFL16005	WASHER, FLAT, 1/2" USS
26	2	YNL28005	HEX NUT, SLOTTED, 7/8" - 14
27	2	58301	SPACER, BALL
28	2	58409	PITCH ROD BALL 1.75 DIA. PIN
29	1	YPCT05005	COTTER PIN, 5/32" X 1"
30	2	YPCT05020	COTTER PIN, 5/32" X 1-3/4"
31	1	YPCT05035	COTTER PIN, 5/32" X 2-1/2"
32	3	YPCT06020	COTTER PIN, 3/16" X 2"
33	2	58297	BACK SLIDER ROLLER
34	2	58298	SLIDER SPACER
35	2	G89	ZERK, 1/4"-28 STRAIGHT-STD #1641
36	2	YBHH16182	BOLT, 1/2"-13 X 8" GR. 5
37	2	YNL16005	HEX NUT, TOP LOCK, 1/2" - 13
38	2	YNL40005	HEX NUT, SLOTTED, 1-1/2" - 12
39	1	YBHH20010	BOLT, 5/8" X 1-1/2" GR. 5
40	1	YNL20005	HEX NUT, TOP LOCK, 5/8" - 11
41	2	BFR279	RH PIVOT YOKE SHAFT PIN

FIGURE 3
MAIN FRAME REAR

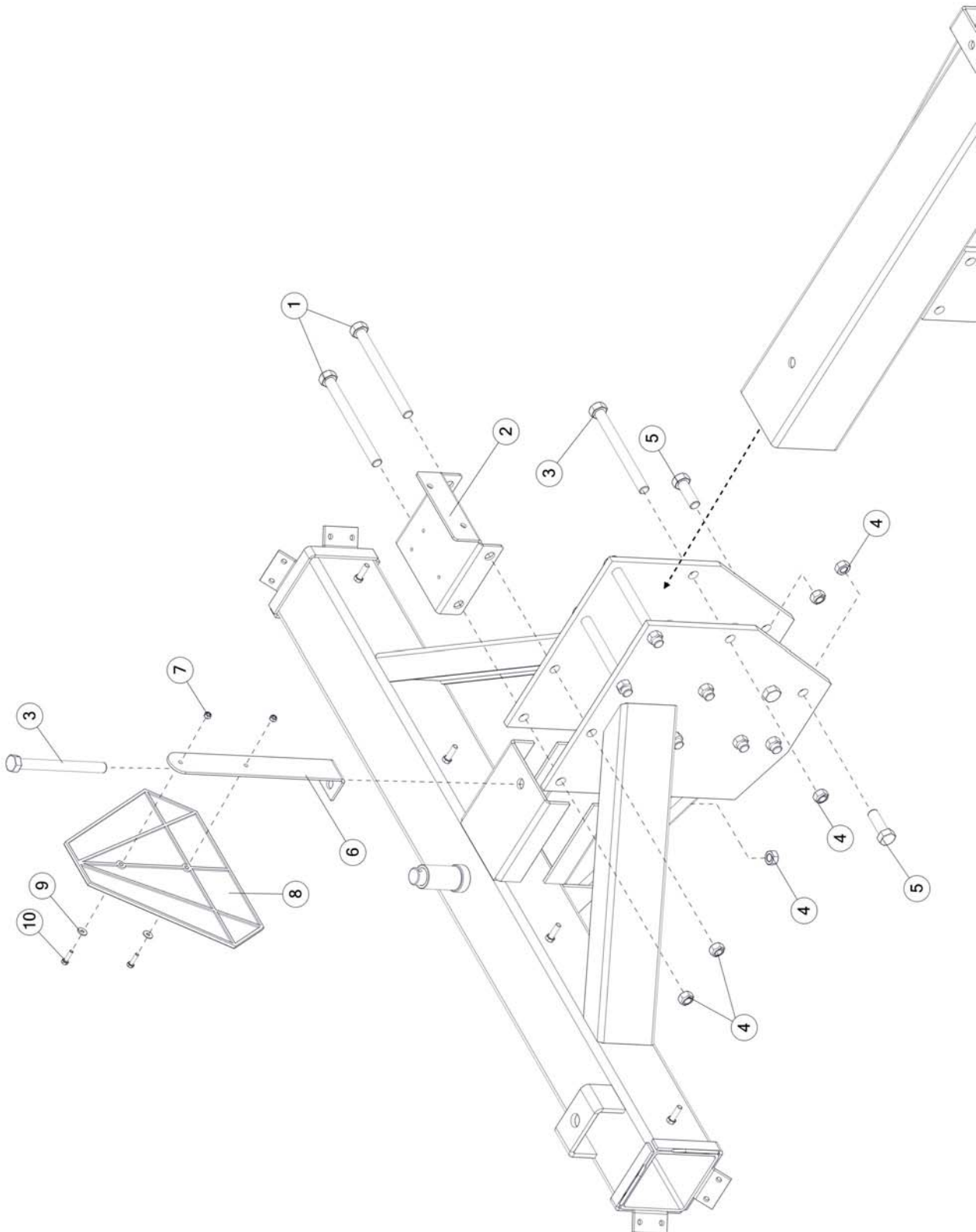


FIGURE 3

MAIN FRAME REAR

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	YBHH24115	BOLT, 3/4" X 8-1/2" GR. 5
2	1	58411	HYDRAULIC MOUNT
3	9	YBHH24110	BOLT, 3/4" X 8" GR. 5
4	15	YNTL20005	HEX NUT, TOP LOCK, 5/8" - 11
5	4	YBHH24035	BOLT, 3/4" X 2-1/4" GR. 5
6	1	63408	SMV BRACKET
7	2	YNNY08005	HEX NUT, NYLON LOCKNUT, 1/4" - 20
8	1	BFR723	SMV SIGN
9	2	YWFL08005	WASHER, FLAT, 1/4" USS
10	2	YBHH08010	BOLT, 1/4" X 1" GR. 5

FIGURE 4
REAR FRAME & AXLE ASSEMBLY

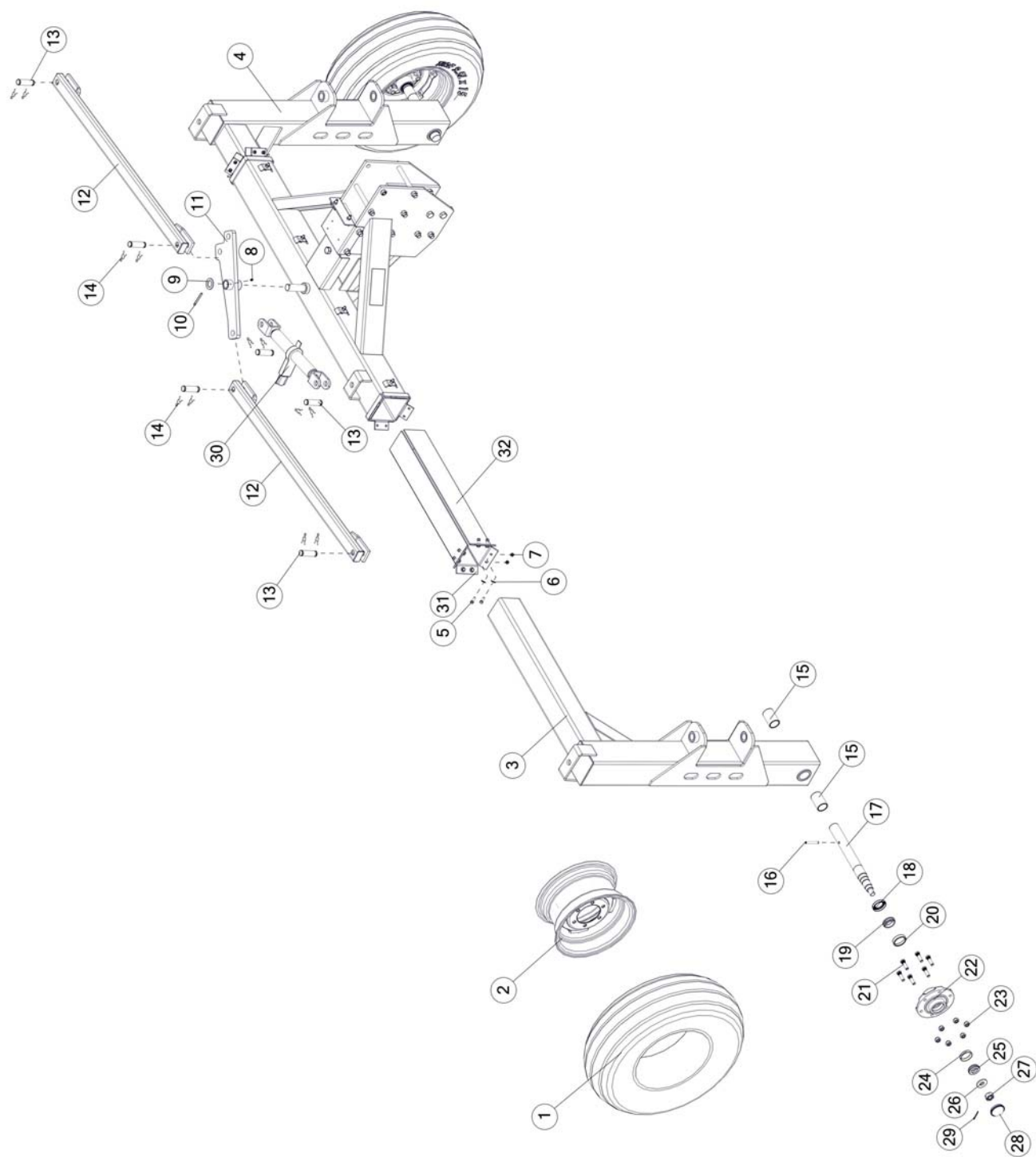


FIGURE 4

REAR FRAME & AXLE ASSEMBLY

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	UR2	TIRE AND TUBE 11L X 15
2	2	12N24	WHEEL 15 X 8, 6 BOLT
*	2	33417	COMPLETE WHEEL & TIRE ASSEMBLY
3	1	60200	UPRIGHT, RIGHT
4	1	60199	UPRIGHT, LEFT
5	16	YBHH10010	BOLT, 5/16" X 1" GR. 5
6	16	YWFL10005	WASHER, FLAT, 5/16" USS
7	16	YNTL10005	HEX NUT, TOP LOCK, 5/16" - 18
8	1	G89	ZERK, 1/4"-28 STRAIGHT-STD #1641
9	1	BFR229	WASHER
10	1	YPCT08010	COTTER PIN, 1/4" X 2-1/2"
11	1	HD8	CAMARM
12	2	FR9	CYLINDER LINK
13	6	T143	HYDRAULIC CYLINDER PIN
14	8	53371	HYDRAULIC CYLINDER PIN
15	4	58275	BUSHING, 2.00" OD X 1.75" ID X 3.00" LONG
16	2	YPEX12025	EXPANSION PIN, 3/8" X 2-3/4"
17	2	FR55	BACK SPINDLE
18	2	12N17	SEAL
19	2	12N18	INNER BEARING
20	2	12N19	INNER RACE
21	12	YBSD16005	STUD BOLT, 1/2" - 20 UNF X 1-7/8"
22	2	RG101	HUB W/RACES & STUDS
23	12	YNWL16005	WHEEL NUT, 1/2" - 20 UNF
24	2	12N21	OUTER RACE
25	2	12N25	OUTER BEARING
26	2	HD200	ROAD WHEEL SPINDLE WASHER
27	2	YNSL28005	HEX NUT, SLOTTED, 7/8" - 14
28	2	17G144	HUB CAP
29	2	YPCT05010	COTTER PIN, 5/32" X 1-1/2"
30	1	T138	RATCHET JACK W/ HANDLE
31	4	FR52	THICK POLY SLIDES
32	4	FR53	THIN POLY SLIDES

NOTE: * MEANS NOT SHOWN

FIGURE 5
RIGHT CASTER

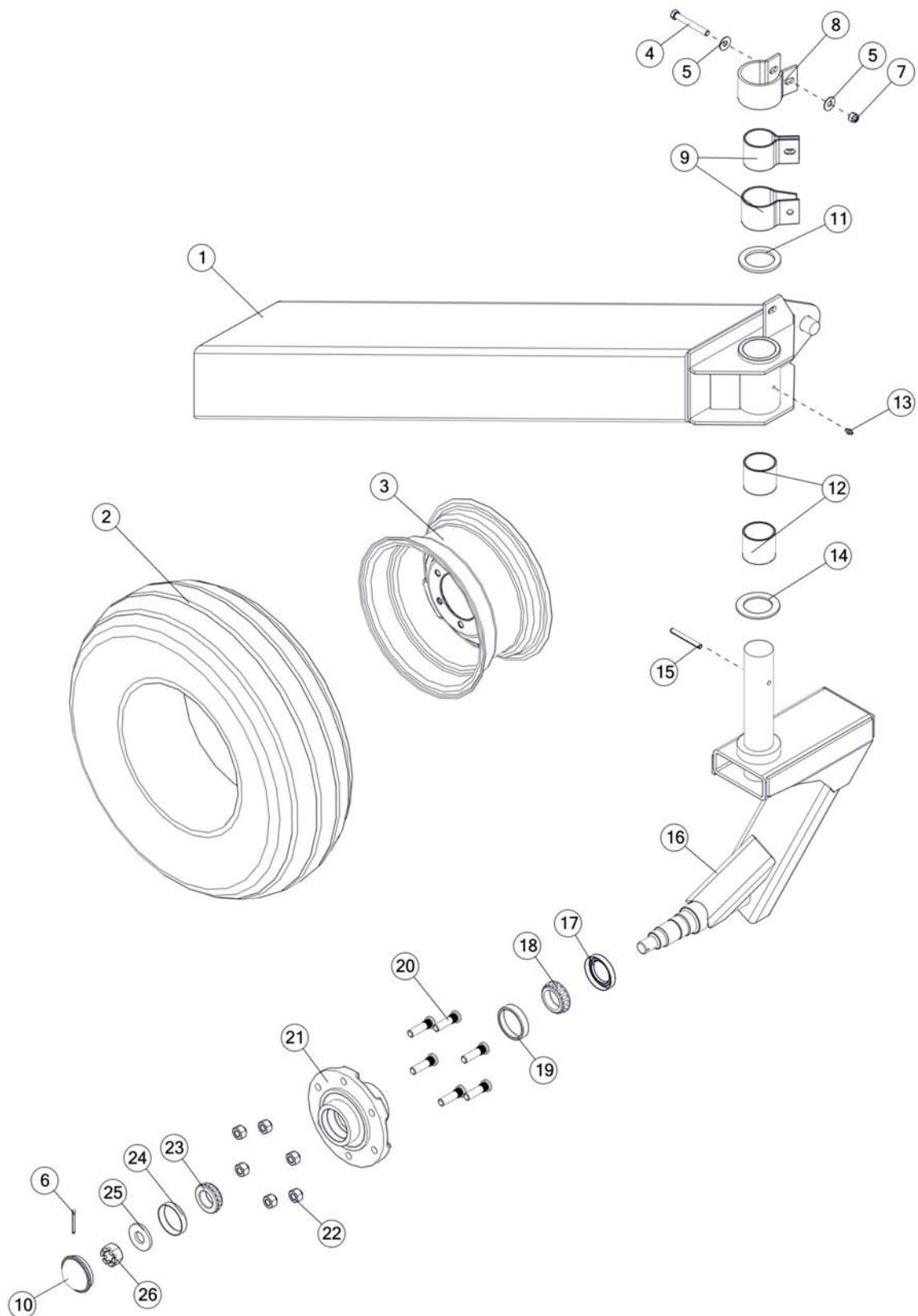


FIGURE 5

RIGHT CASTER

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	60236	STANDOFF, RH
2	2	UR2	TIRE AND TUBE 11L X 15
3	2	12N24	WHEEL 15 X 8, 6 BOLT
*	2	33417	COMPLETE WHEEL & TIRE ASSEMBLY
4	2	YBHH12125	BOLT, 3/8" X 3" GR. 5 FULL THREAD
5	4	YWFL12005	WASHER, FLAT, 3/8 USS
6	2	YPCT05010	COTTER PIN, 5/32" X 1-1/2"
7	2	YNNY12005	HEX NUT, NYLON LOCKNUT, 3/8"
8	2	BFR311	BRAKE COLLAR
9	4	BFR310	BRAKE PAD
10	2	17G144	HUB CAP
11	2	BFR309	GAUGE WHEEL WASHER
12	4	RG26	BUSHING, 2.015" ID X 2.25" OD X 2.00" LONG
13	2	G89	ZERK, 1/4"-28 STRAIGHT-STD #1641
14	2	RG24	WASHER, THRUST, BRONZE, 2.00" ID X 3.00 OD X .125" LONG
15	2	YPEX10025	EXPANSION PIN, 5/16" X 2-3/4"
16	2	FR23	ASSY, RH CASTER
17	2	12N17	SEAL
18	2	12N18	INNER BEARING
19	2	12N19	INNER RACE
20	12	YBSD16005	STUD BOLT, 1/2" - 20 UNF X 1-7/8"
21	2	RG101	HUB W/RACES & STUDS
22	12	YNWL16005	WHEEL NUT, 1/2" - 20 UNF
23	2	12N25	OUTER BEARING
24	2	12N21	OUTER RACE
25	2	HD200	ROAD WHEEL SPINDLE WASHER
26	2	YNSL28005	HEX NUT, SLOTTED, 7/8" - 14

NOTE: * MEANS NOT SHOWN

FIGURE 6
LEFT CASTER

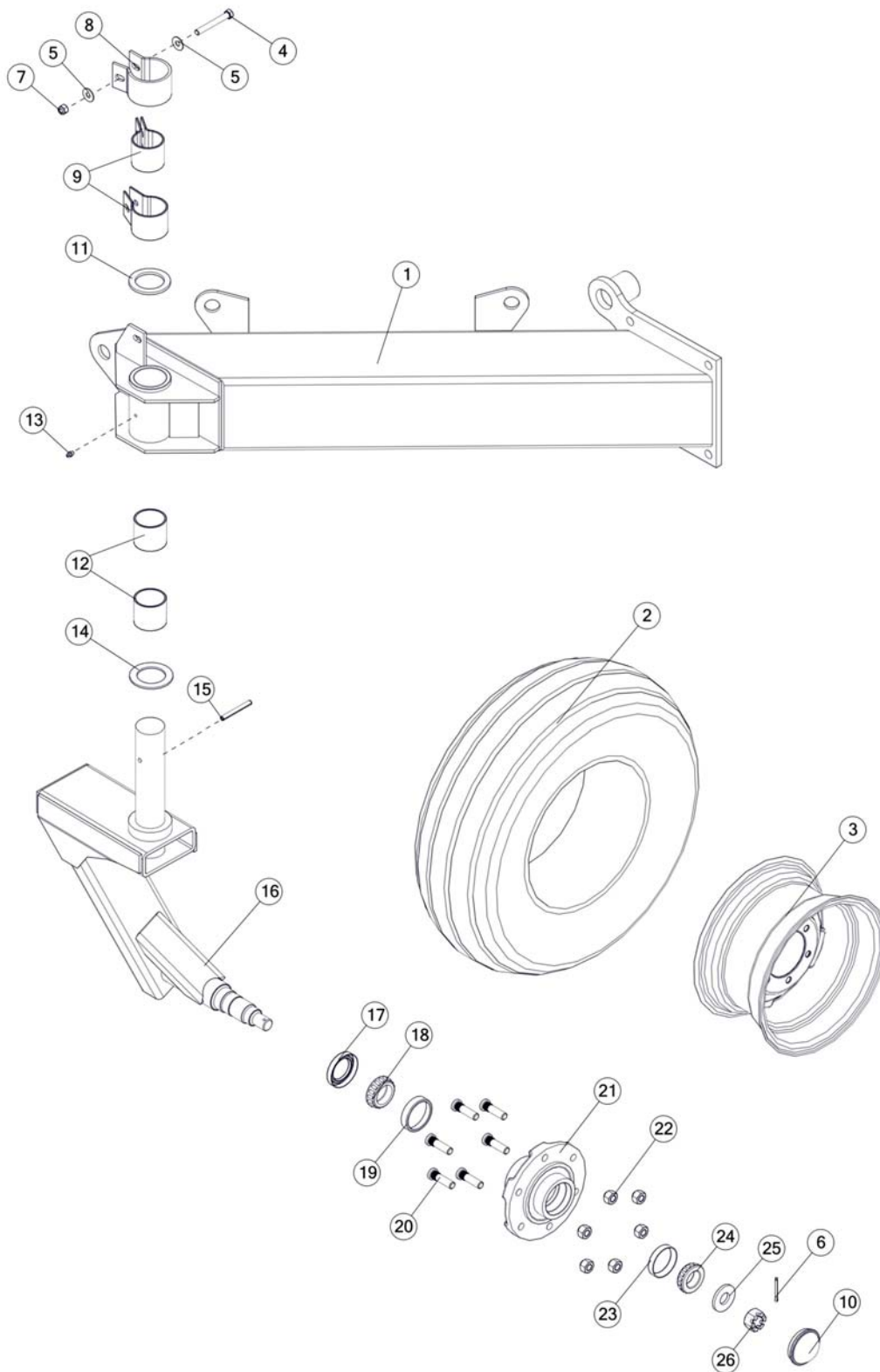


FIGURE 6

LEFT CASTER

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	60235	STANDOFF, LH
2	2	UR2	TIRE AND TUBE 11L X 15
3	2	12N24	WHEEL 15 X 8, 6 BOLT
*	2	33417	COMPLETE WHEEL & TIRE ASSEMBLY
4	2	YBHH12125	BOLT, 3/8 X 3 GR 5 FULL THREAD
5	4	YWFL12005	WASHER, FLAT, 3/8 USS
6	2	YPCT05010	COTTER PIN, 5/32 X 1-1/2
7	2	YNNY12005	HEX NUT, NYLON LOCKNUT, 3/8
8	2	BFR311	BRAKE COLLAR
9	4	BFR310	BRAKE PAD
10	2	17G144	HUB CAP
11	2	BFR309	GAUGE WHEEL WASHER
12	4	RG26	BUSHING, 2.015" ID X 2.25" OD X 2.00" LONG
13	2	G89	ZERK, 1/4"-28 STRAIGHT-STD #1641
14	2	RG24	WASHER, THRUST, BRONZE, 2.00" ID X 3.00 OD X .125" LONG
15	2	YPEX10025	EXPANSION PIN, 5/16" X 2-3/4"
16	2	FR22	ASSY, LH CASTER
17	2	12N17	SEAL
18	2	12N18	INNER BEARING
19	2	12N19	INNER RACE
20	12	YBSD16005	STUD BOLT, 1/2-20 UNF X 1-7/8
21	2	RG101	HUB W/RACES & STUDS
22	12	YNWL16005	WHEEL NUT, 1/2-20 UNF
23	2	12N25	OUTER BEARING
24	2	12N21	OUTER RACE
25	2	HD200	ROAD WHEEL SPINDLE WASHER
26	2	YNSL28005	HEX NUT, SLOTTED, 7/8-14

NOTE: * MEANS NOT SHOWN

FIGURE 7
RIGHT & LEFT FRONT RAKE BEAMS

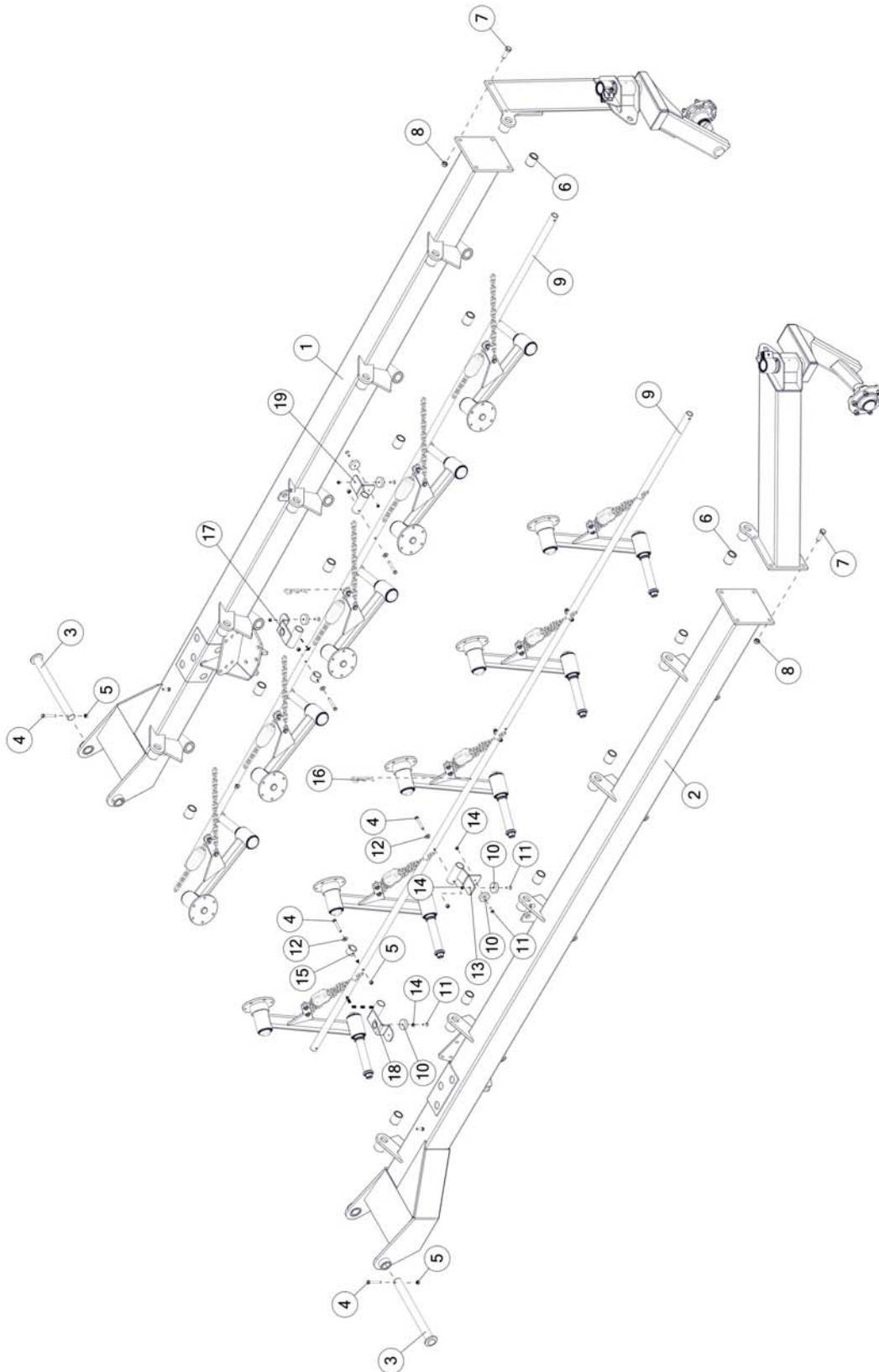


FIGURE 7

RIGHT & LEFT FRONT RAKE BEAMS

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	60001	FRONT RAKE BEAM, LEFT
2	1	60351	FRONT RAKE BEAM, RIGHT
3	2	FR8	PIVOT PIN
4	6	YBHH12110	BOLT, 3/8" X 2-3/4" GR. 5
5	6	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
6	12	HD128	BUSHING
7	8	YBHH20025	BOLT, 5/8" X 2" GR. 5
8	8	YNHX20005	HEX NUT, 5/8" - 11 PLATED
9	2	60214	FRONT LIFT PIPE
10	6	FR51	SLIDER PAD
11	6	YSFS10005	FLAT HEAD SOCKET CAP SCREW, 5/16" X 1"
12	4	YWFL12005	WASHER, FLAT, 3/8" USS
13	1	FR40	RIGHT PIPE STABILIZER
14	8	YNTL10005	HEX NUT, TOP LOCK, 5/16" - 18
15	2	FR50	SLIDE STOP
16	2	YPHR08040	HAIR PIN, 1/4" X 5" 2109
17	1	FR31	LH PIPE LIFTER
18	1	FR32	RH PIPE LIFTER
19	1	FR39	LEFT PIPE STABILIZER

FIGURE 8
RIGHT & LEFT BACK RAKE BEAMS

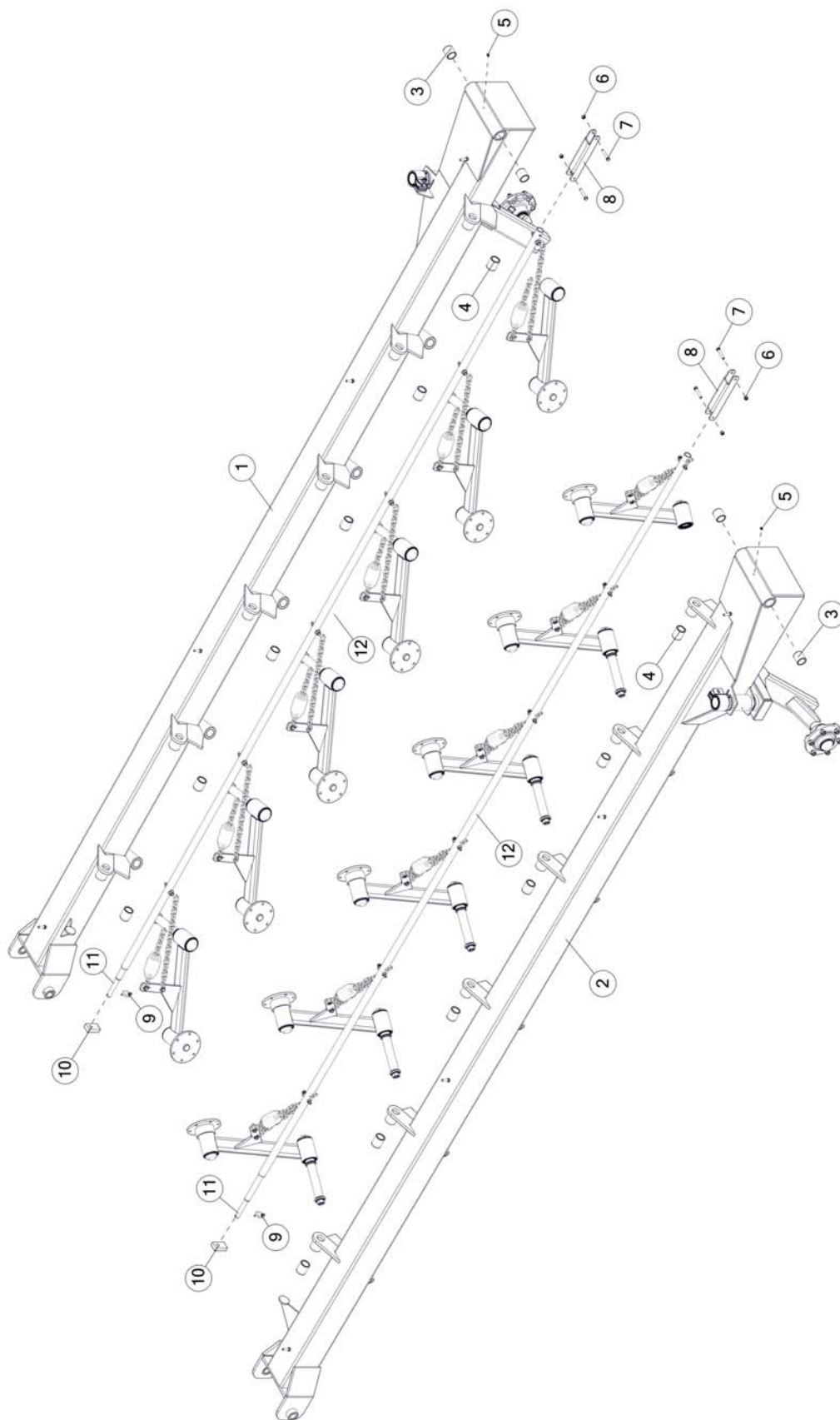


FIGURE 8

RIGHT & LEFT BACK RAKE BEAMS

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	FR13	ASSY, BACK LH RAKE BEAM
2	1	FR14	ASSY, BACK RH RAKE BEAM
3	4	FR83	IRON BUSHING, 1.511"ID X 1-3/4"OD X 1-3/4"
4	12	HD128	BUSHING
5	2	G89	ZERK, 1/4"-28 STRAIGHT-STD #1641
6	4	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
7	4	YBHH12105	BOLT, 3/8 X 2-1/4 GR 5 FULL THREAD
8	2	58392	PIPE LINKAGE
9	2	YPLY08011	LYNCH PIN, 1/4" X 1-9/16"
10	2	64103	RAKE PRESSURE HANDLE
11	2	BFR486	ASSY, RAKE ARM LOCK-UP SHAFT
12	2	FR57	REAR LIFT PIPE

FIGURE 9

U-JOINT ASSEMBLY

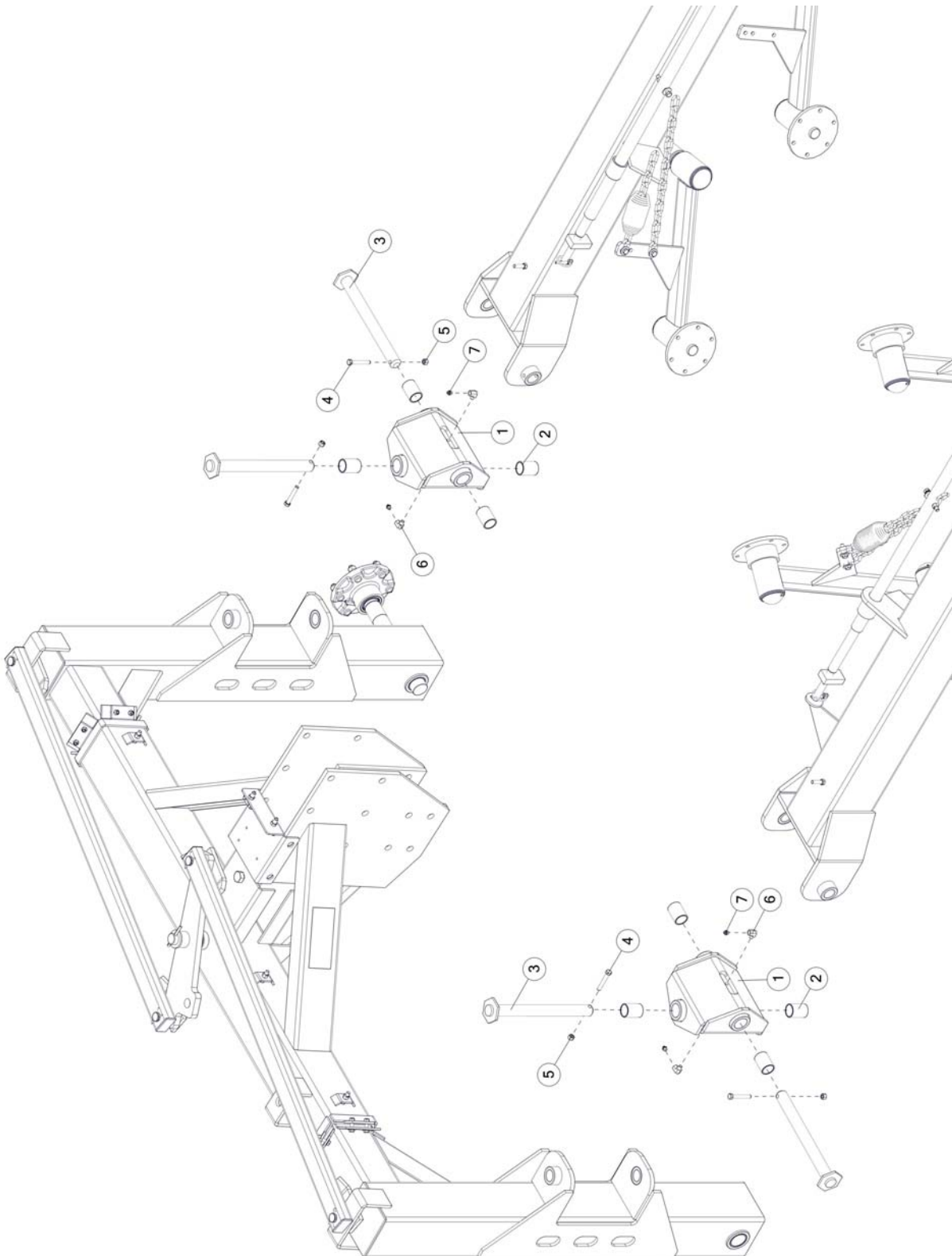


FIGURE 9

U-JOINT ASSEMBLY

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	FR5	U-JOINT
2	8	RG132	BUSHING, 1.260" ID X 1.50" OD X 2.00" LONG
3	4	FR10	U-JOINT PIN
4	4	YBHH12090	BOLT, 3/8" X 2-1/2" GR. 5
5	4	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
6	4	58453	ELBOW 1/8" - 27 THREADS
7	4	BFR28	1/8" NPT GREASE ZERK

FIGURE 10
RAKE WHEEL ASSEMBLY

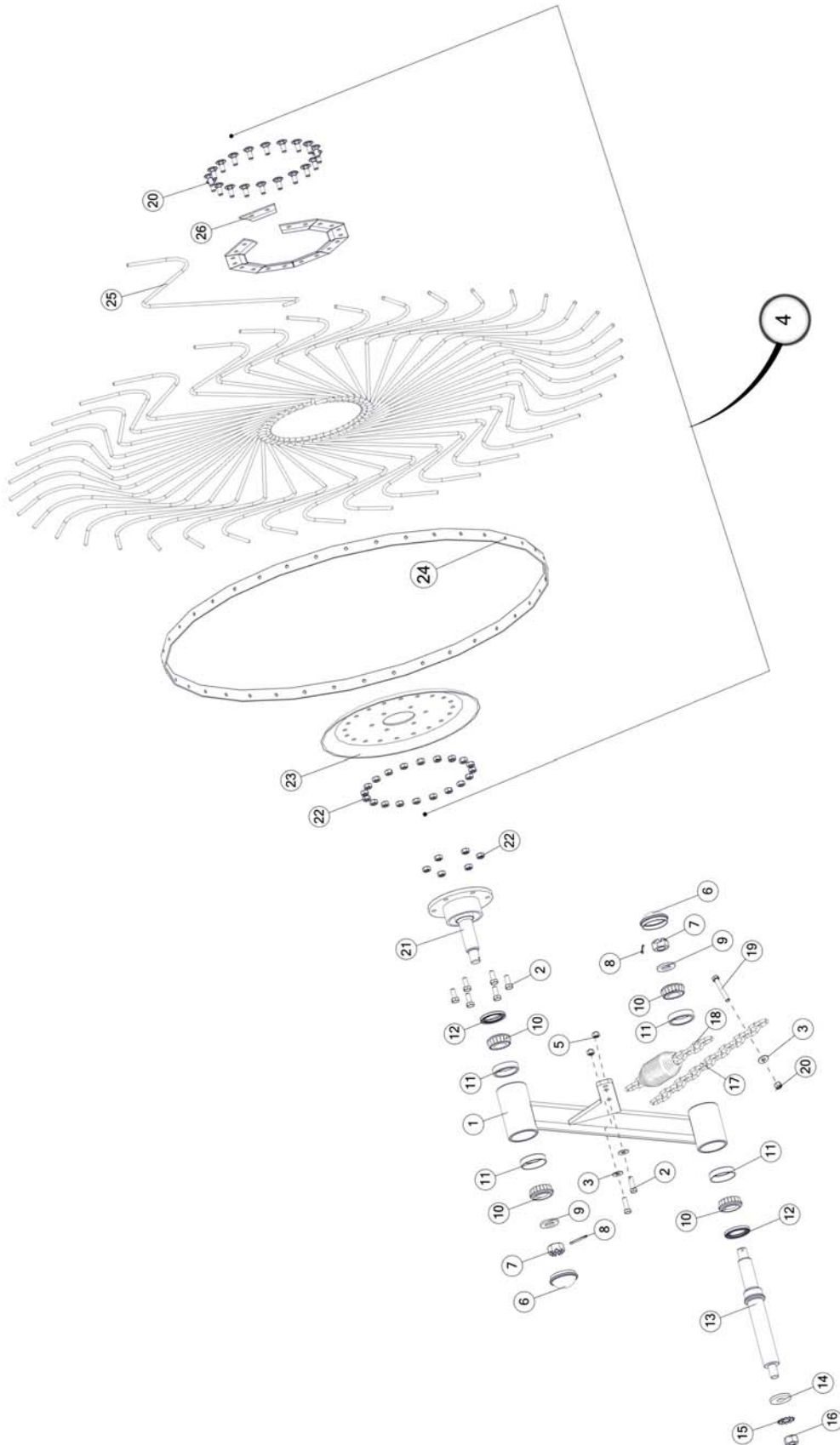


FIGURE 10

RAKE WHEEL ASSEMBLY

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	11	FR6	ASSY, RH RAKE ARM
*	11	FR7	ASSY, LH RAKE ARM
2	176	YBHH12035	BOLT, 3/8"-16 X 1-1/4" GR. 5
3	66	YWFL12005	WASHER, FLAT, 3/8 USS
4	11	FR70	60" RIGHT HAND RAKE WHEEL
*	11	FR69	60" LEFT HAND RAKE WHEEL
5	44	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
6	44	17G144	HUB CAP
7	44	YNSL28005	HEX NUT, SLOTTED, 7/8" - 16
8	44	YPCT05010	COTTER PIN, 5/32" X 1-1/2"
9	44	HD121	7/8"ID X 1-3/4"OD WASHER
10	88	HD122	15125 CONE PEER BEARING
11	88	58714	RACE
12	44	HD124	SEAL
13	22	FR54	FRONT PIVOT SPINDLE
14	22	HD157	PIVOT WASHER
15	22	YWSI24005	WASHER, LOCK, STAR, INTERNAL/EXTERNAL, 3/4"
16	22	YNHX24004	HEX NUT, 3/4" - 10 GR. 5
17	22	FR58	CHAIN - 15 LINKS
18	22	8771	RAKE WHEEL SPRING
19	22	YBHH12110	BOLT, 3/8" X 2-3/4" GR. 5
20	440	YBCR76005	CARR. BOLT, 10MM X 25MM
21	22	FR24	RAKE WHEEL HUB
22	594	YNHX76015	HEX NUT, M10-1.5
23	22	FR71	RAKE WHEEL CENTER
24	22	FR72	RAKE WHEEL OUTER RING
25	880	FR73	RAKE WHEEL TOOTH
26	440	FR74	RAKE TOOTH CLIP

NOTE: * MEANS NOT SHOWN

FIGURE 11

HYDRAULICS

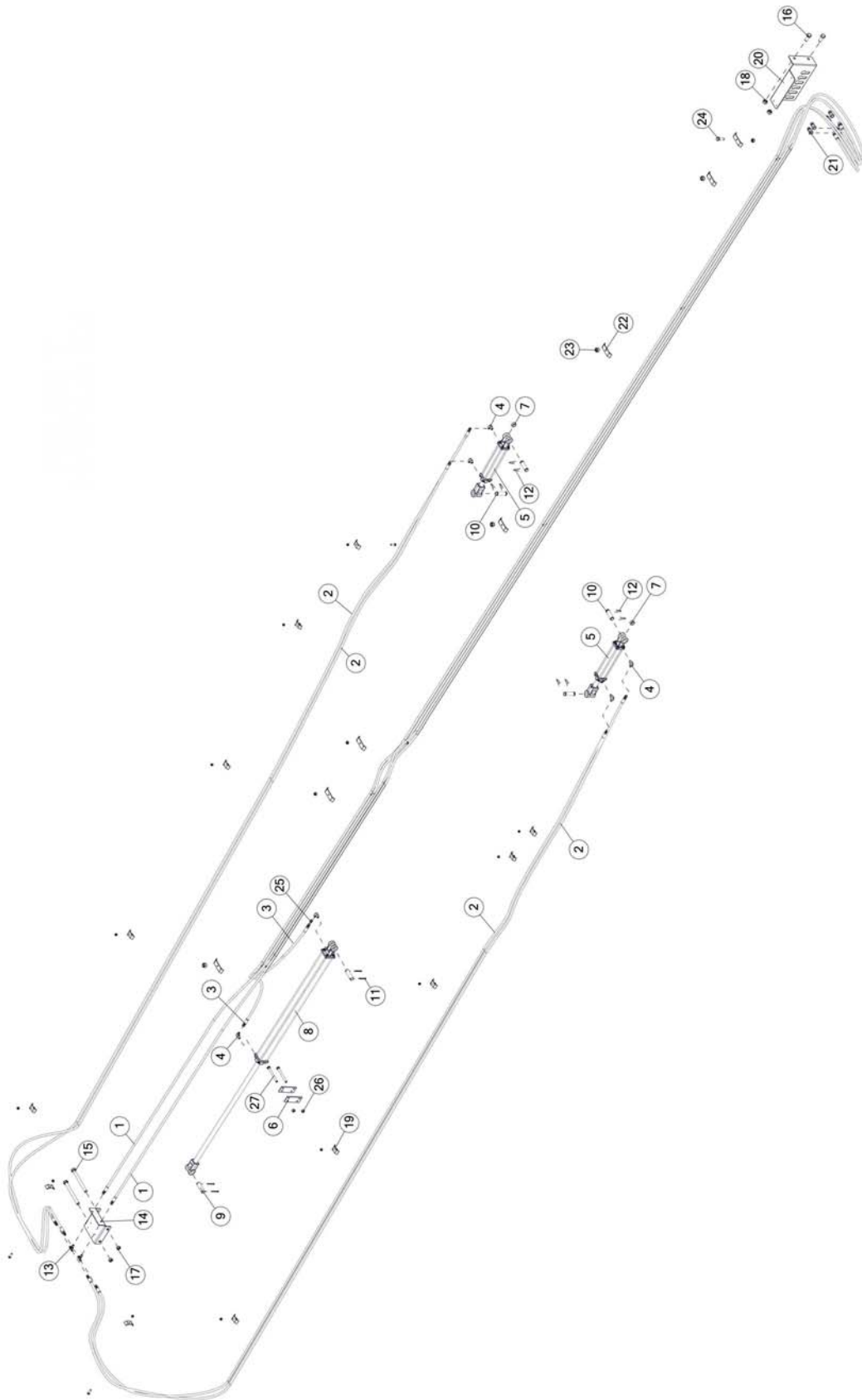


FIGURE 11

HYDRAULICS

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	60305	HOSE, MAIN
2	4	58403	HOSE, LIFT CYL
3	2	58445	HOSE, MAIN
4	6	58444	MALE ELBOW 37 DEG, 3/8" - 4
5	2	56000	2" X 10" HYDRAULIC CYLINDER
6	2	58692	SPACER, CYL.
7	2	58374	SPACER
8	1	60374	2.5 X 40" CYLINDER (3000PSI)
9	2	BFR634	CYLINDER PIN
10	4	T143	HYDRAULIC CYLINDER PIN
11	4	YPCT06020	COTTER PIN, 3/16" X 2"
12	8	53371	CYLINDER PIN
13	2	58414	BULKHEAD TEE, #4
14	1	58411	HYDRAULIC MOUNT
15	2	YBHH24115	BOLT, 3/4" X 8-1/2" GR. 5
16	2	YBHH24014	BOLT, 3/4" - 10 X 1-3/4" GR. 5
17	2	YNHX24004	HEX NUT, 3/4" - 10 GR. 5
18	2	YNTL24005	HEX NUT, TOP LOCK, 3/4" - 10
19	12	23N67	WASHER, LOCK, 3/4"
20	1	60269	HOSE HOLDER
21	4	DWM205	MALE QUICK COUPLER
22	6	58448	HOSE BRACKET
23	15	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
24	1	YBHH20020	BOLT, 3/8" - 16 X 1-1/2" GR. 5
25	1	58109	4 XHX7-S .047 ORIFICE
26	2	YNRL16005	HEX NUT, REVERSIBLE-SIDE LOCK, 1/2" - 13
27	2	YBHH16160	BOLT, 1/2" X 5-1/2" GR.5

FIGURE 12
LIFT CYLINDER

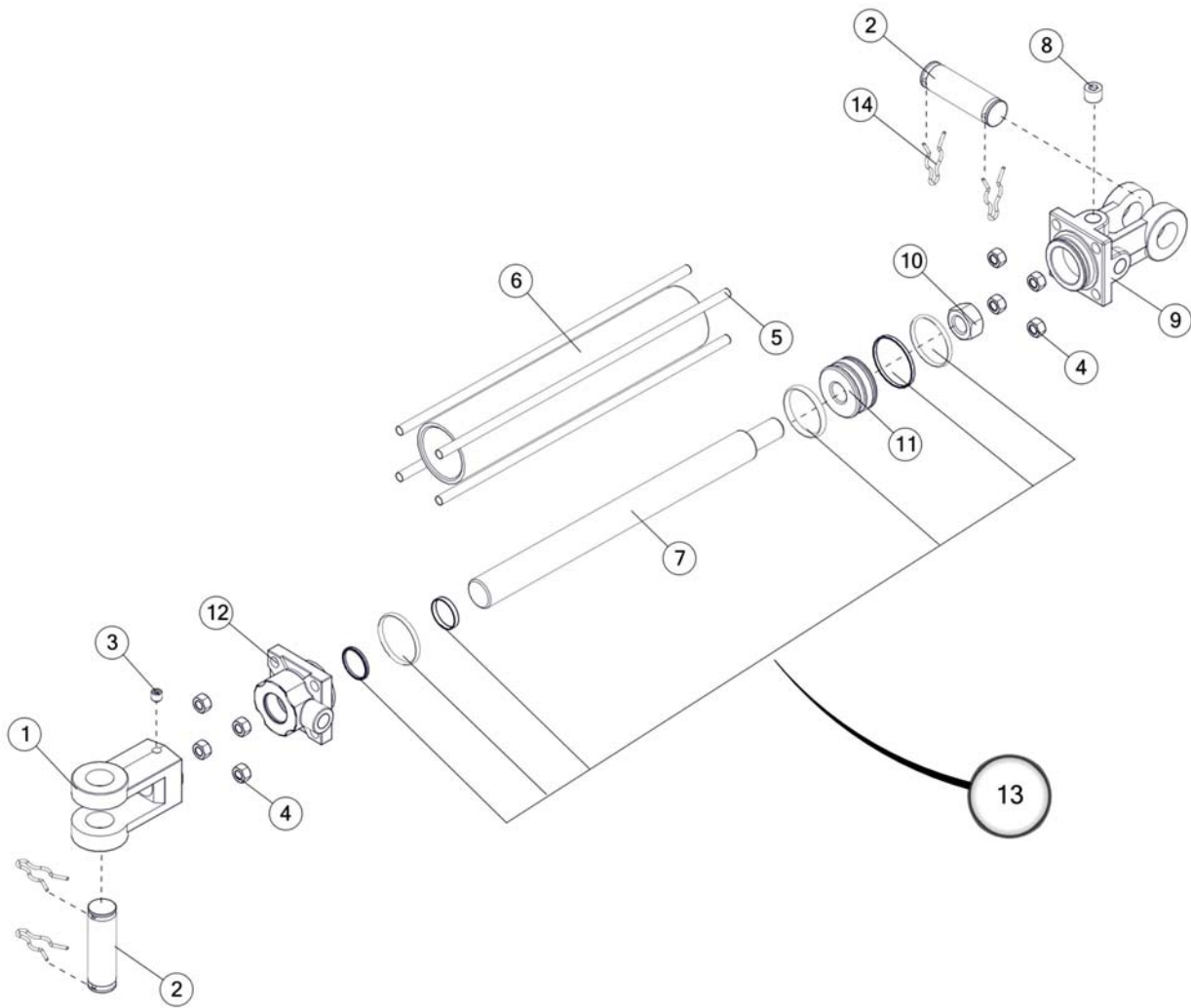


FIGURE 12

LIFT CYLINDER

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	23N150A	ROD CLEVIS
2	2	T143	HYDRAULIC CYLINDER PIN
3	1	YSSO12015	SET SCREW, SOCKET, 3/8-24 X 3/8
4	8	YNHX12006	HEX NUT, 3/8-24
5	4	16SV170	TIE ROD
6	1	16SV169	CYLINDER TUBE
7	1	16SV168A	CYLINDER ROD FOR 2" X 10" CYLINDER
8	1	23N149	PLUG
9	1	23N142A	CLEVIS CAP FOR 2" CYLINDER
10	1	23N148	PISTON NUT
11	1	56180	PISTON FOR 2" CYLINDER
12	1	56174	ROD CAP FOR 2" CYLINDERS
13	1	56187	SEAL KIT FOR 2" CYLINDER
14	1	53371	CYLINDER PIN
*	1	56000	2" X 10" HYDRAULIC CYLINDER

NOTE: * MEANS NOT SHOWN

FIGURE 13
HYDRAULIC OPEN CYLINDER

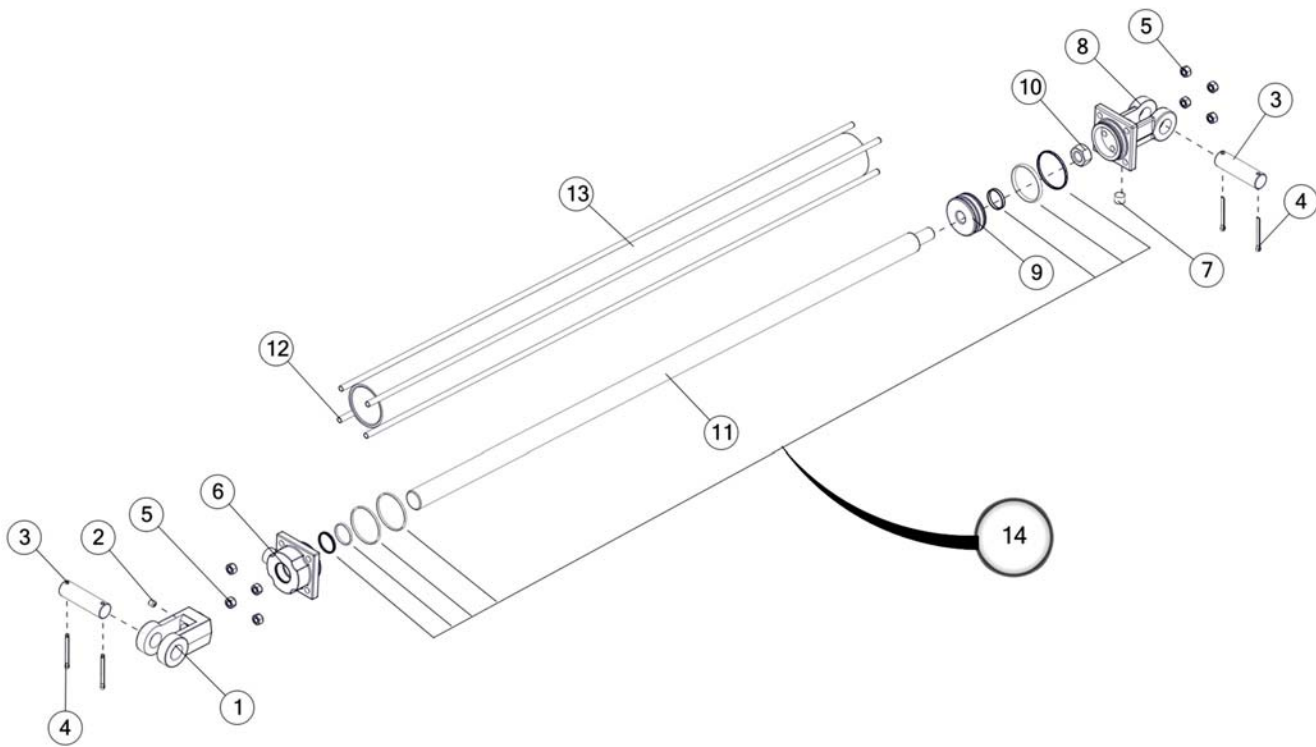


FIGURE 13

HYDRAULIC OPEN CYLINDER

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	23N150A	ROD CLEVIS
2	1	YSSO12015	SET SCREW, SOCKET, 3/8" - 24 X 3/8"
3	2	BFR634	CYLINDER PIN
4	4	YPCT06020	COTTER PIN, 3/16" X 2"
5	8	YNHX12006	HEX NUT, 3/8" - 24
6	1	60374	2.5" ROD CAP
7	1	23N149	PLUG
8	1	56173	CLEVIS CAP FOR 2.5" CYLINDER
9	1	56181	PISTON FOR 2.5" CYLINDER
10	1	23N148	PISTON NUT
11	1	71386	CYLINDER ROD
12	4	BFR65	COTTER PIN, 5/32" X 1-1/2"
13	1	60627	2.5" X 40" CYLINDER TUBE
14	1	58687	2.5" SEAL KIT, WITH 1.25" ROD
*	1	60374	2.5" X 40" HYDRAULIC CYLINDER

FIGURE 14
OPTIONAL HYDRAULIC REAR OPENING CYLINDER

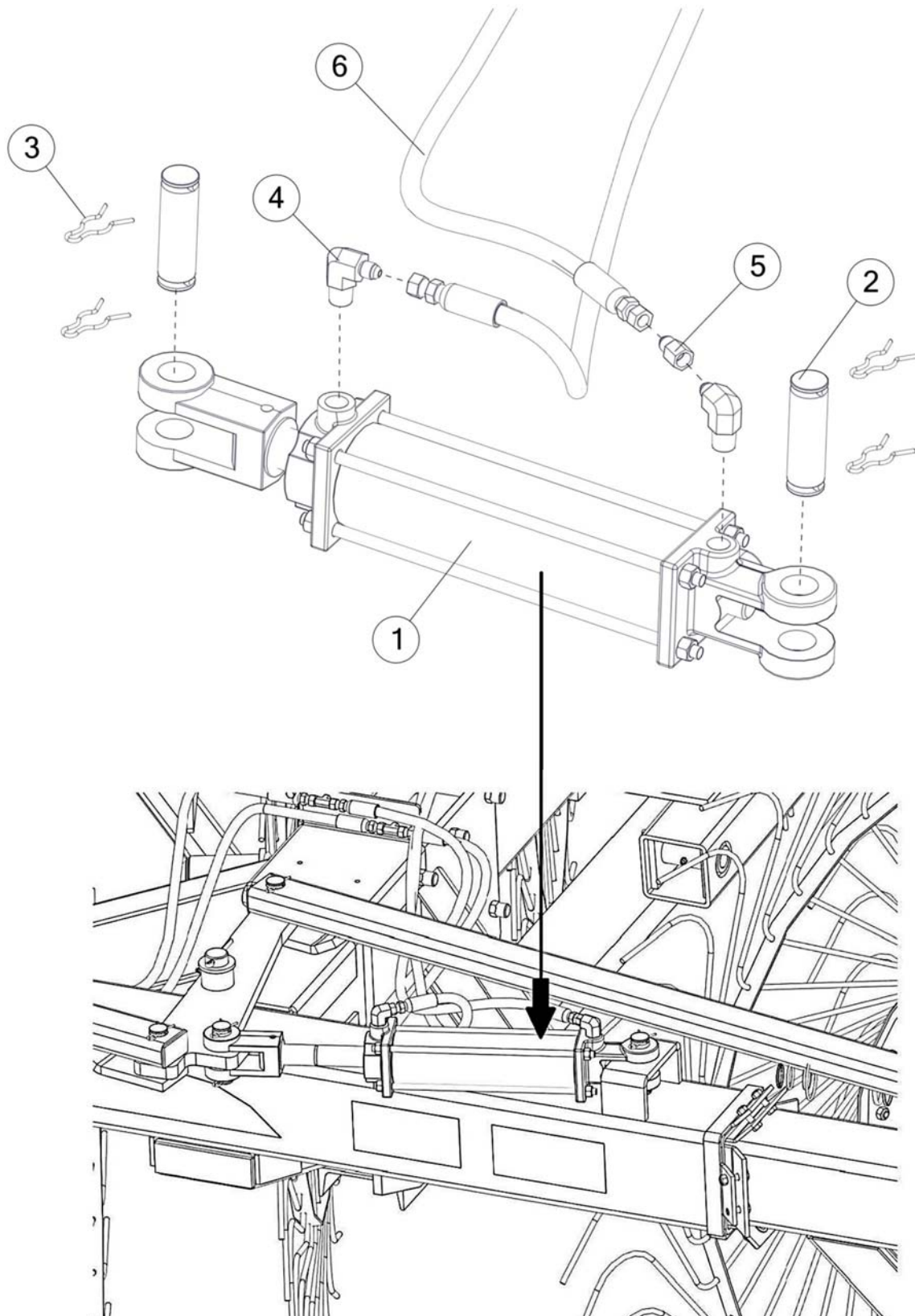


FIGURE 14

OPTIONAL HYDRAULIC REAR OPENING CYLINDER

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	56006	2.5" X 8" HYDRAULIC CYLINDER
2	2	T143	HYDRAULIC CYLINDER PIN
3	4	53371	CYLINDER PIN
4	2	58444	MALE ELBOW 37 DEG, 3/8" - 4
5	1	58108	4 XHX7-S .031 ORIFICE
6	2	60290	HOSE, HYD OPEN
*	1	23N67	FRONT HOSE BRACKET
*	1	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
*	1	56188	SEAL KIT FOR 2.5" CYLINDER

NOTE: * MEANS NOT SHOWN

FIGURE 15
OPTIONAL TANDEM AXLE

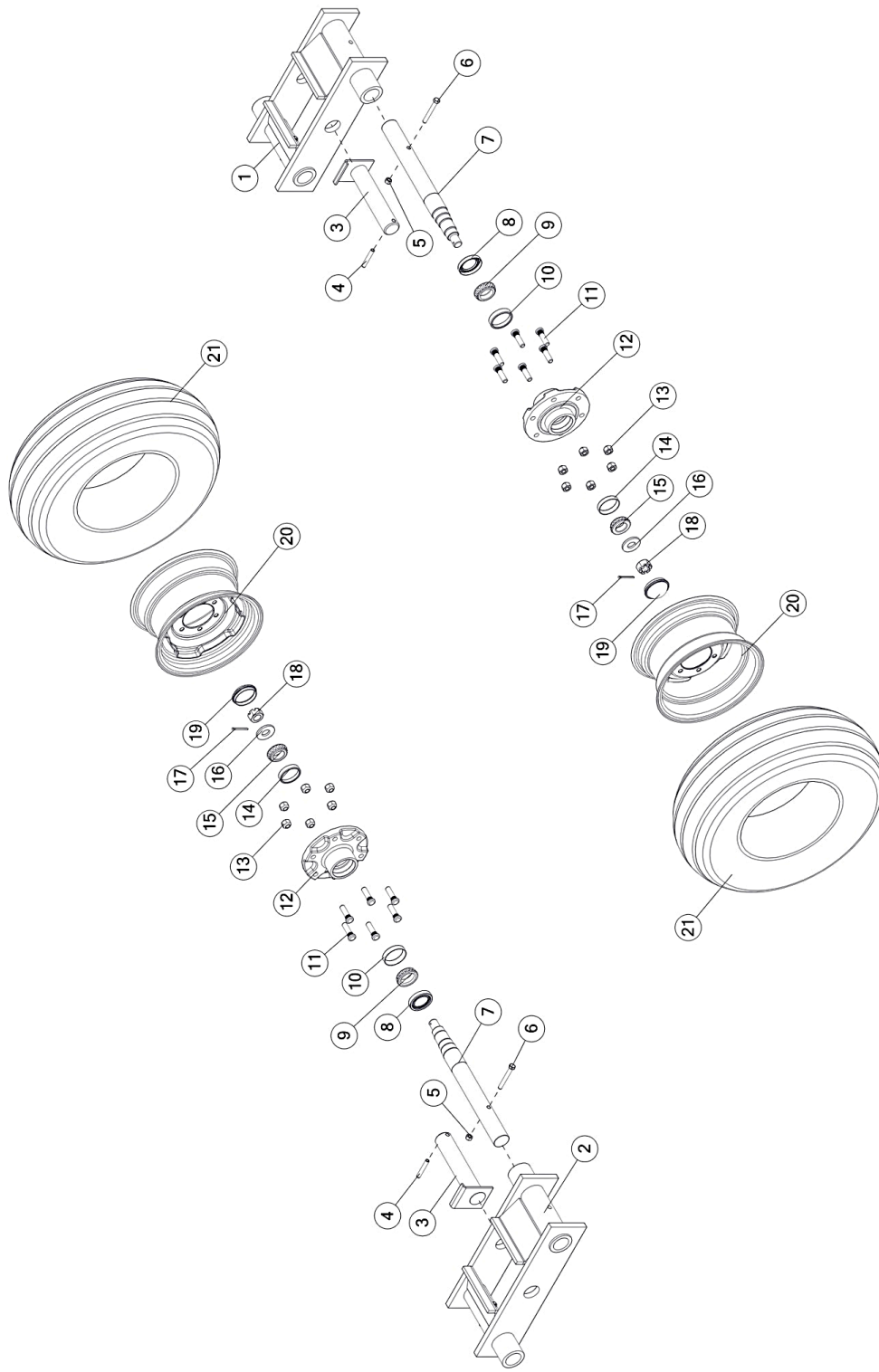


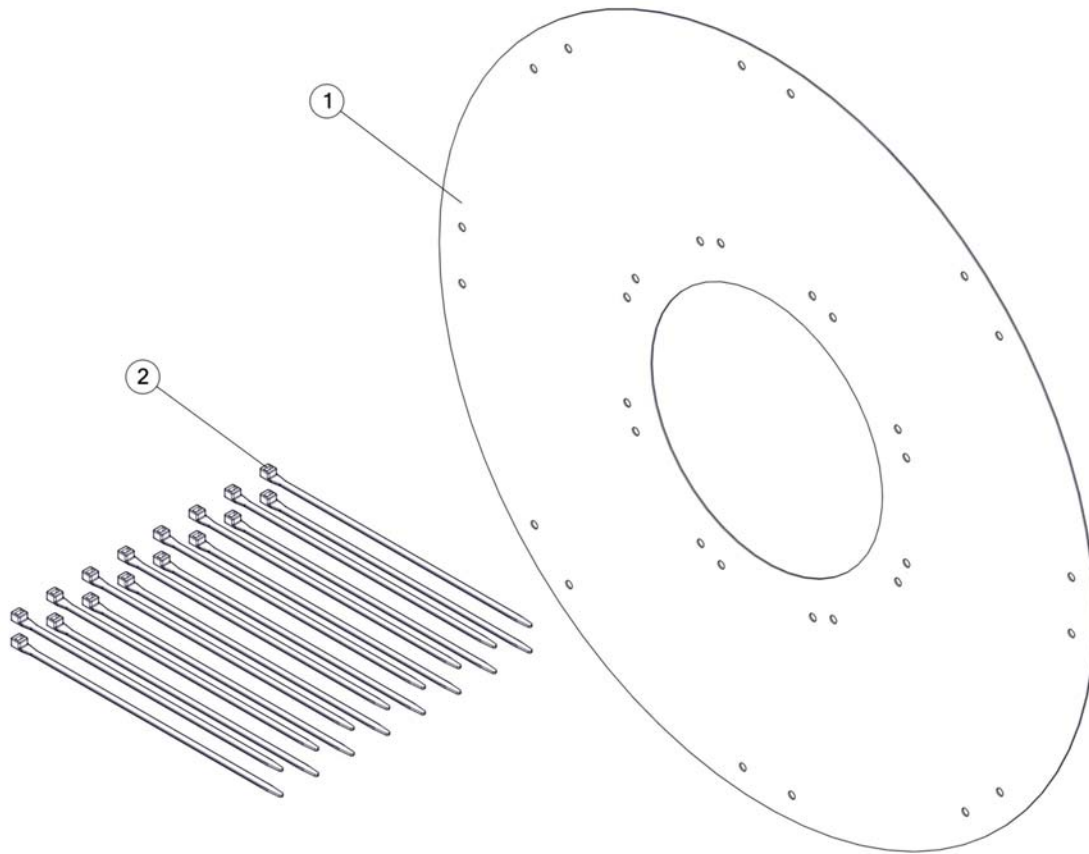
FIGURE 15

OPTIONAL TANDEM AXLE

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	58299	RIGHT TANDEM
2	1	58300	LEFT TANDEM
3	2	58277	AXLE PIVOT PIN
4	2	YPEX12022	EXPANSION PIN, 3/8" X 2-3/8"
5	4	YNTL12005	HEX NUT, TOP LOCK, 3/8" - 16
6	4	YBHH12120	BOLT, 3/8" X 3" GR. 5
7	2	FR55	BACK SPINDLE
8	2	12N17	SEAL
9	2	12N18	INNER BEARING
10	2	12N19	INNER RACE
11	12	YBSD16005	STUD BOLT, 1/2" - 20 UNF X 1-7/8"
12	2	RG101	888 HUB CASTING
13	12	YNWL16005	WHEEL NUT, 1/2" - 20 UNF
14	2	12N21	OUTER RACE
15	2	12N25	OUTER BEARING
16	2	HD200	ROAD WHEEL SPINDLE WASHER
17	2	YPCT05010	COTTER PIN, 5/32" X 1-1/2"
18	2	YNSL28005	HEX NUT, SLOTTED, 7/8" - 14
19	2	17G144	HUB CAP
20	2	12N24	WHEEL 15 X 8, 6 BOLT
21	2	UR2	TIRE AND TUBE 11L X 15
*	2	33417	COMPLETE WHEEL & TIRE ASSEMBLY

NOTE: * MEANS NOT SHOWN

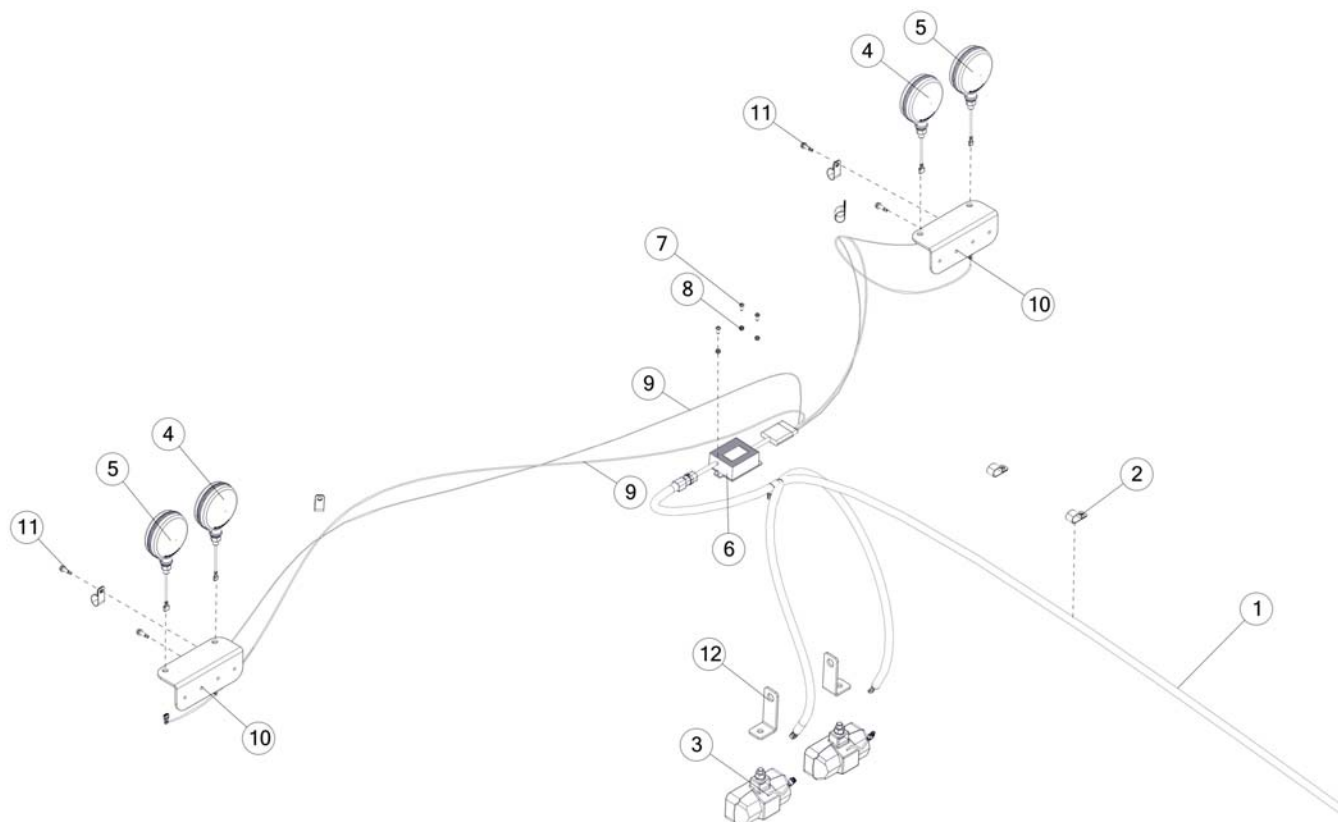
FIGURE 16
WIND GUARD



<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	59039	POLY WIND GAURD, FOR 60" RAKE WHEEL
2	16	57626	15 INCH 120# BLACK CABLE TIE

FIGURE 17

OPTIONAL LIGHTING



<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	60537	HARNESS, MAIN
2	8	HGV72	CUSHION WIRE CLAMP
3	2	DWM130	FLOODLIGHT - WORKING LIGHT
4	2	BFR675	RED LIGHT
5	2	DWM129	YELLOW HAZARD THIN LIGHT 2-WAY
6	1	S441	LIGHT MODULE
7	3	YSPP64005	MISC, PHILLIPS PAN HEAD TYPE, 10-32 X 1/2"
8	3	YNNY62005	8-32, HEX NYLON INSERT LOCKNUT
9	1	FR2	REAR RAKE HARNESS
10	2	67811	REAR LIGHT BRACKET
11	4	YSDR08005	SELF DRILLING SCREW, HEX WASHER HEAD, 1/4" - 14 X 1" (ZINC)
12	2	BFR675	BRACKETS, LIGHTS

FIGURE 18 **OPTIONAL KICKER WHEEL**

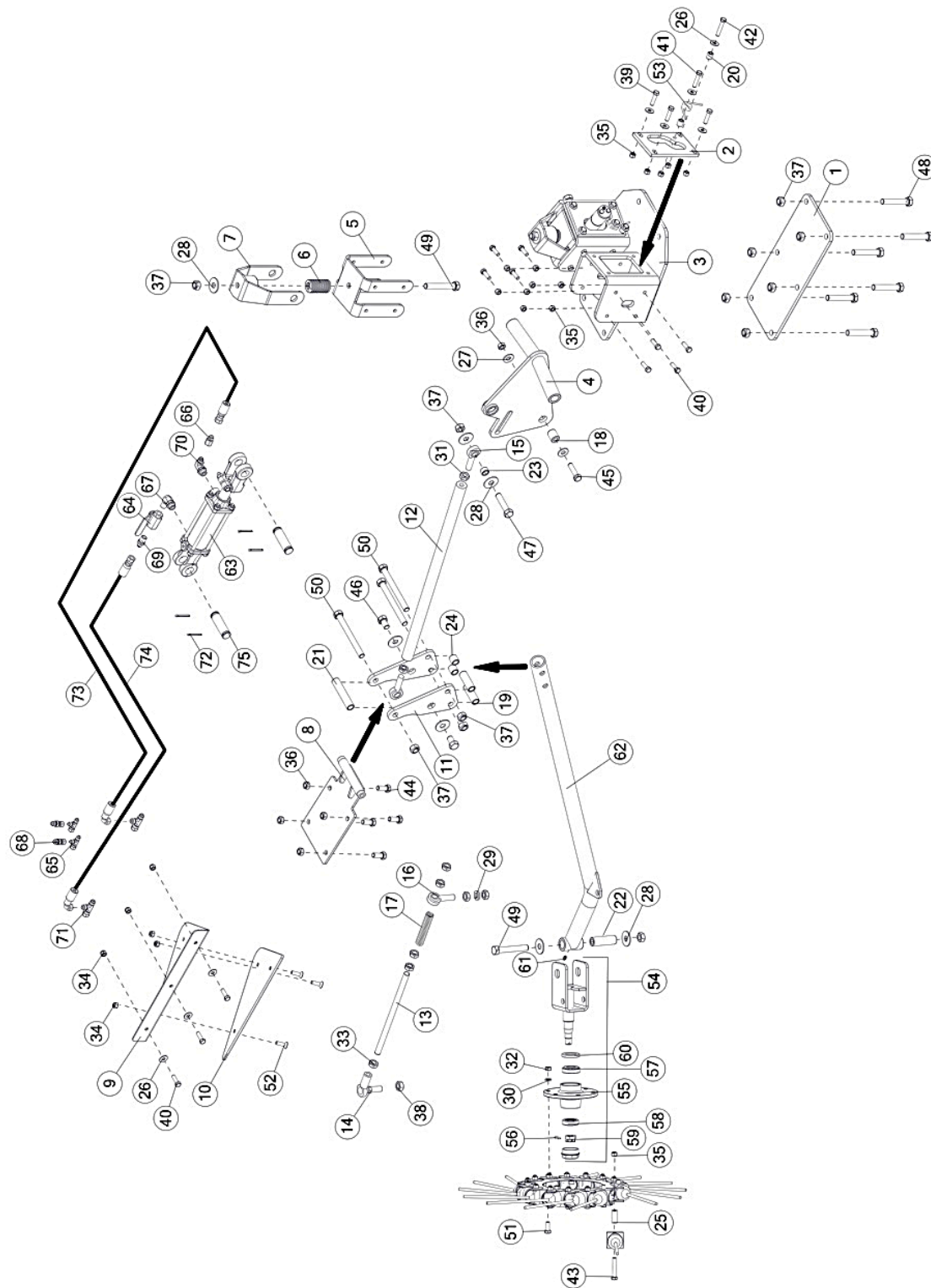


FIGURE 18

OPTIONAL KICKER WHEEL

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	71496	PLT, 17.3 X 7.35 X 0.38
2	2	71526	PLT, 6.60 X 4.50 X 0.38
3	1	71486	WLDMT, KICKER MAIN
4	1	71495	WLDMT, KICKER BELL
5	2	71500	BRKT, SPRING BASE
6	2	71574	SPRG, 3.00 X 1.80 X 1930, DIE
7	2	71534	WLDMT, SPRING YOKE
8	1	71521	WLDMT, PIVOT
9	1	71185	BRKT, KICKER DEFLECTOR
10	1	71192	PANEL, POLY 1/4, DEFLECTOR
11	2	71522	PLT, 8.38 X 4.25 X 0.38
12	1	71601	TUBE, 1.25 X 0.75 X 26.7
13	1	71618	ALLTHREAD, 5/8-18 X 12.5
14	1	71599	BRG, BALL JOINT, 5/8-18 F
15	1	71593	BRG, 5/8 ROD END LH
16	2	71594	BRG, ROD END RH
17	1	71296	SPRG, 6.00 X 2.80 X 16.0
18	1	71487	BSH, 1.00 X 0.52 X 1.15, ZC
19	2	71548	BSH, 0.88 X 0.66 X 2.53, STL
20	2	71568	TUBE, 0.63 X 0.12 X 0.70
21	1	71577	BSH, 0.88 X 0.66 X 4.38, STL
22	1	71584	BSH, 1.00 X 0.63 X 3.00
23	1	71605	BSH, 0.88 X 0.66 X 0.50, STL
24	2	71536	BSH, 0.88 X 0.66 X 0.88, STL
25	1	70807	TUBE, RND, STR, 0.63 X .12 X 1.39, DOM
26	8	YWFL12005	WASHER, FLAT, 3/8 USS
27	2	YWFL16005	WASHER, FLAT, 1/2 USS
28	4	YWFL20005	WASHER, FLAT, 5/8 USS
29	1	YWLO20005	WASHER, LOCK, 5/8
30	6	YWLO76015	WASHER, LOCK, M10
31	2	YNJM20011	NUT, HEX, 5/8-18, NA, G5, ZY, LH JAM
32	6	YNHX76015	HEX NUT, M10-1.5
33	8	YNJM20010	HEX NUT, JAM, 5/8-18
34	6	YNNY12005	HEX NUT, NYLON LOCKNUT, 3/8
35	24	YNTL12005	HEX NUT, TOP LOCK, 3/8-16
36	5	YNTL16005	HEX NUT, TOP LOCK, 1/2-13
37	12	YNTL20005	HEX NUT, TOP LOCK, 5/8-11
38	1	YNTL20006	HEX NUT, TOP LOCK, 5/8-18
39	6	YBHH12025	BOLT, 3/8-16 X 1-1/2 GR 5
40	11	YBHH12035	BOLT, 3/8"-16 X 1-1/4" GR. 5

FIGURE 18
OPTIONAL KICKER WHEEL

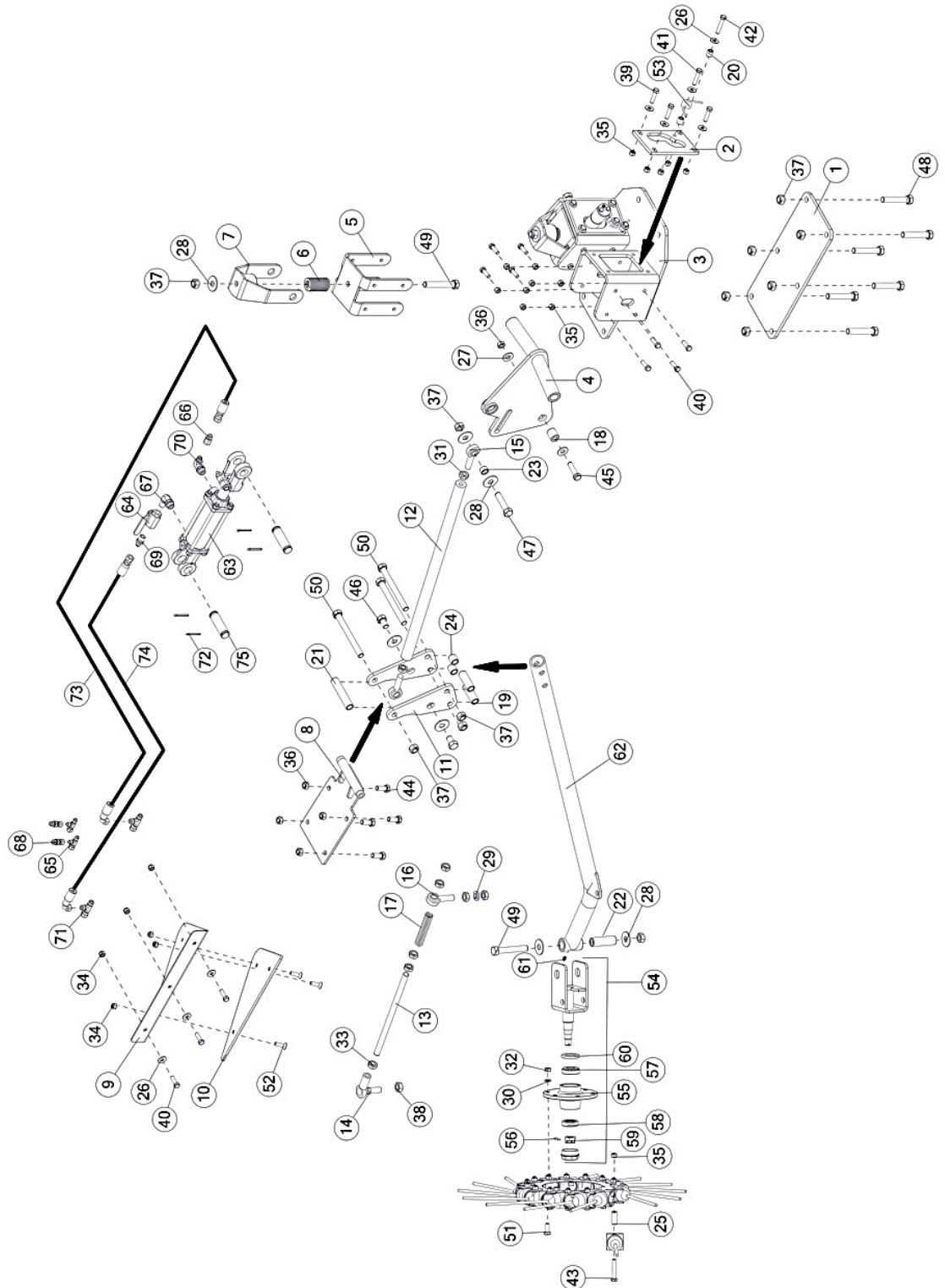


FIGURE 18

OPTIONAL KICKER WHEEL

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
41	2	YBHH12060	BOLT, 3/8 X 1-3/4 GR 5
42	2	YBHH12075	BOLT, 3/8 X 2 GR 5
43	15	YBHH12100	BOLT, 3/8 X 2-1/4 GR 5
44	4	YBHH16045	BOLT, 1/2-13 X 1-1/4 GR 5
45	1	YBHH16065	BOLT, 1/2"-13 X 2" GR 5
46	2	YBHH20005	BOLT, 5/8-11 X 1 GR 5
47	1	YBHH20045	BOLT, 5/8-11 X 2-3/4 GR 5, ZINC
48	6	YBHH20055	BOLT, 5/8-11 X 3-1/2, GR 5, ZINC
49	2	YBHH20065	BOLT, 5/8-11 X 4 GR 5, ZINC
50	3	YBHH20103	BOLT, 5/8-11 X 6-1/2 GR 5
51	6	YBHH76015	SCR, HHC, M10, 1.5, 25MM, 10.9, ZC
52	3	YSFS12005	FLAT HEAD SOCKET CAP SCREW, 3/8 X 1-1/4
53	2	71570	SPRG, TORS, 90° X 180° X 40
54	1	71581	WLDMT, SPINDLE B
55	1	1086	HUB, RAKE WHEEL
56	1	1088	CLIP, RETAINING
57	1	600012	BRG, 2.05 X 0.75, TAPER, COMPLETE
58	1	600014	BRG, 1.85 X 0.75, TAPER, COMPLETE
59	1	T172	NUT, HEX, 18MM - 1.5, CASTLE, G2, NF
60	1	T163	SEAL, 2.05 X 1.25 X .25
61	1	MS26	1/4" - 28, STRAIGHT STANDARD SHORT GREASE FITTING
62	1	71529	WLDMT, CENTER POLE
63	1	70797	CYL, HYD, 10.2 X 14.2
*	1	72160	ASSEM, 2" CYL TIE ROD
*	1	72161	ASSEM, SEAL KIT
64	1	16SV338	VALVE, BALL, 3/8"
65	2	58101	FITTING 4 R6X-S
66	1	58142	FITTING 6 XHX7-S .031 ORIFICE
67	1	70158	FTG, 90, 3/4 ORB, 3/8 NPT, STL
68	2	71802	FTG, ST, 6 MALE JIC, 4 FEMALE JIC, STL, EXPANDER
69	1	CHM202	3/8 MALE NPT TO -6 MALE JIC
70	1	CHM206	06 90 DEG TO 3/4-16 ORB FITTING
71	2	CHM242	SWIVEL RUN TEE 6-R6X-S FITTING
72	4	YPCT05010	COTTER PIN 5/32" X 1-1/2"
73	1	71780	HOSE ASSY, HYD, 6, 201, 6 JIC, 6 JIC
74	1	71778	HOSE ASSY, HYD, 6, 193, 6 JIC, 6 JIC
75	2	T143	HYDRAULIC CYLINDER PIN

NOTE: * MEANS NOT SHOWN

FIGURE 18
OPTIONAL KICKER WHEEL

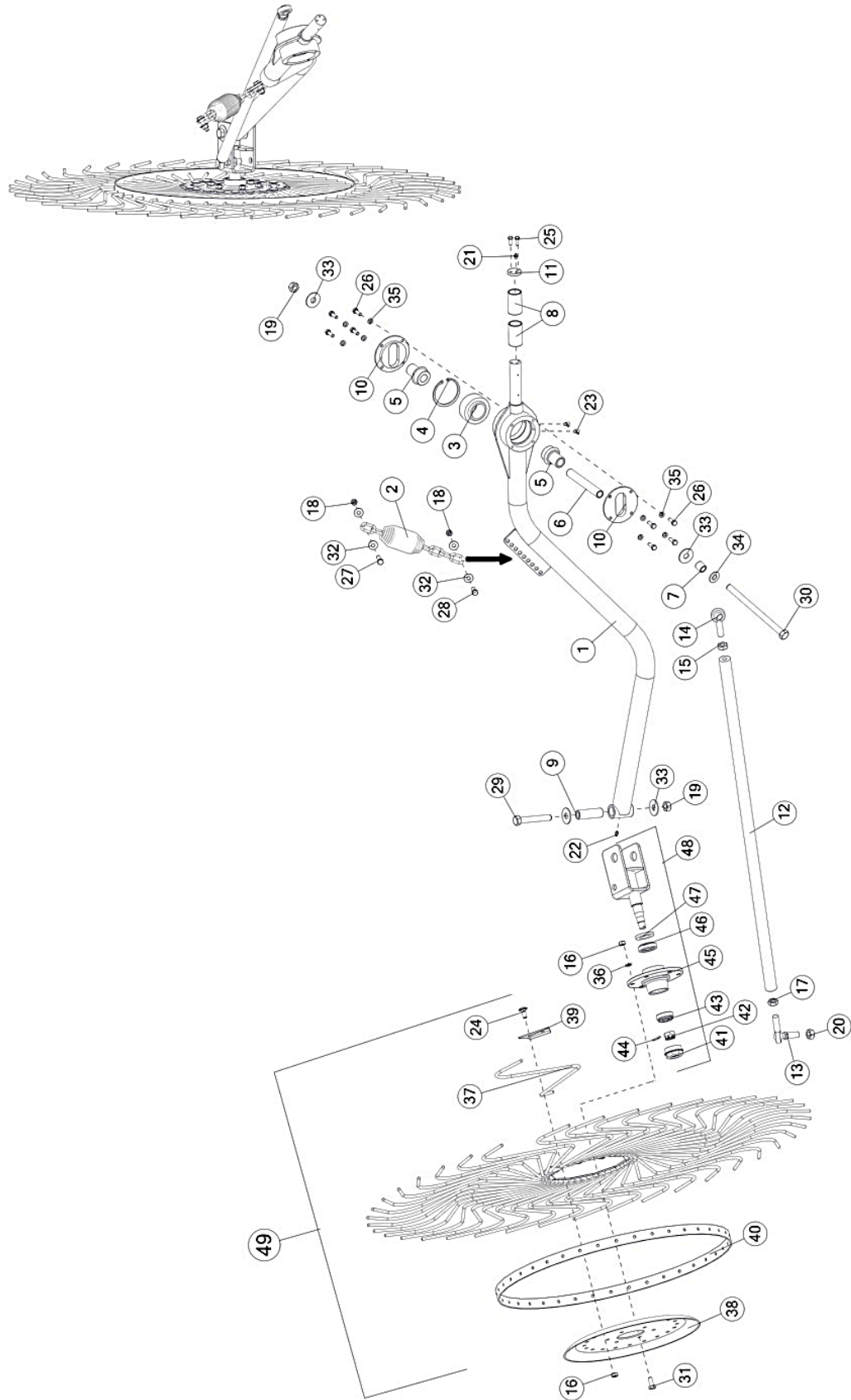


FIGURE 18

OPTIONAL KICKER WHEEL

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	71558	WLDMT, RIGHT POLE.
*	1	71560	WLDMT, LEFT POLE
2	2	8771	RAKE WHEEL SPRING
3	2	71553	BRG, 3.125 X 1.75 X 1.56
4	2	71608	SNAP RING
5	2	71550	BSH, 2.08 X 0.89 X 2.44,
6	2	71535	STL BSH, .875 X .635 X 6.30
7	2	71536	BSH, 0.88 X 0.66 X 0.88,
8	4	71563	STL BSH, 1.50 X 1.25 X 2.47
9	2	71584	BSH, 1.00 X 0.63 X 3.00
10	4	71562	PLT 4.25 X 0.50
11	2	71993	PLT, 1.50 X 1.50 X 0.25, KEEPER
12	2	71600	SHAFT, 1.25 X 43.0, TIE ROD
13	2	71598	BRG, BALL JOINT 5/8 -18 M
14	2	71593	BRG, 5/8 ROD END LH
15	2	YNJM20011	NUT, HEX, 5/8-18, NA, G5, ZY, LH JAM
16	52	YNHX76015	HEX NUT, M10-1.5
17	2	YNJM20010	HEX NUT, JAM, 5/8-18
18	4	YNTL12005	HEX NUT, TOP LOCK, 3/8-16 HEX NUT,
19	4	YNTL20005	TOP LOCK, 5/8-11 HEX NUT, TOP
20	2	YNTL20006	LOCK, 5/8-18

NOTE: * MEANS NOT SHOWN

FIGURE 18
OPTIONAL KICKER WHEEL

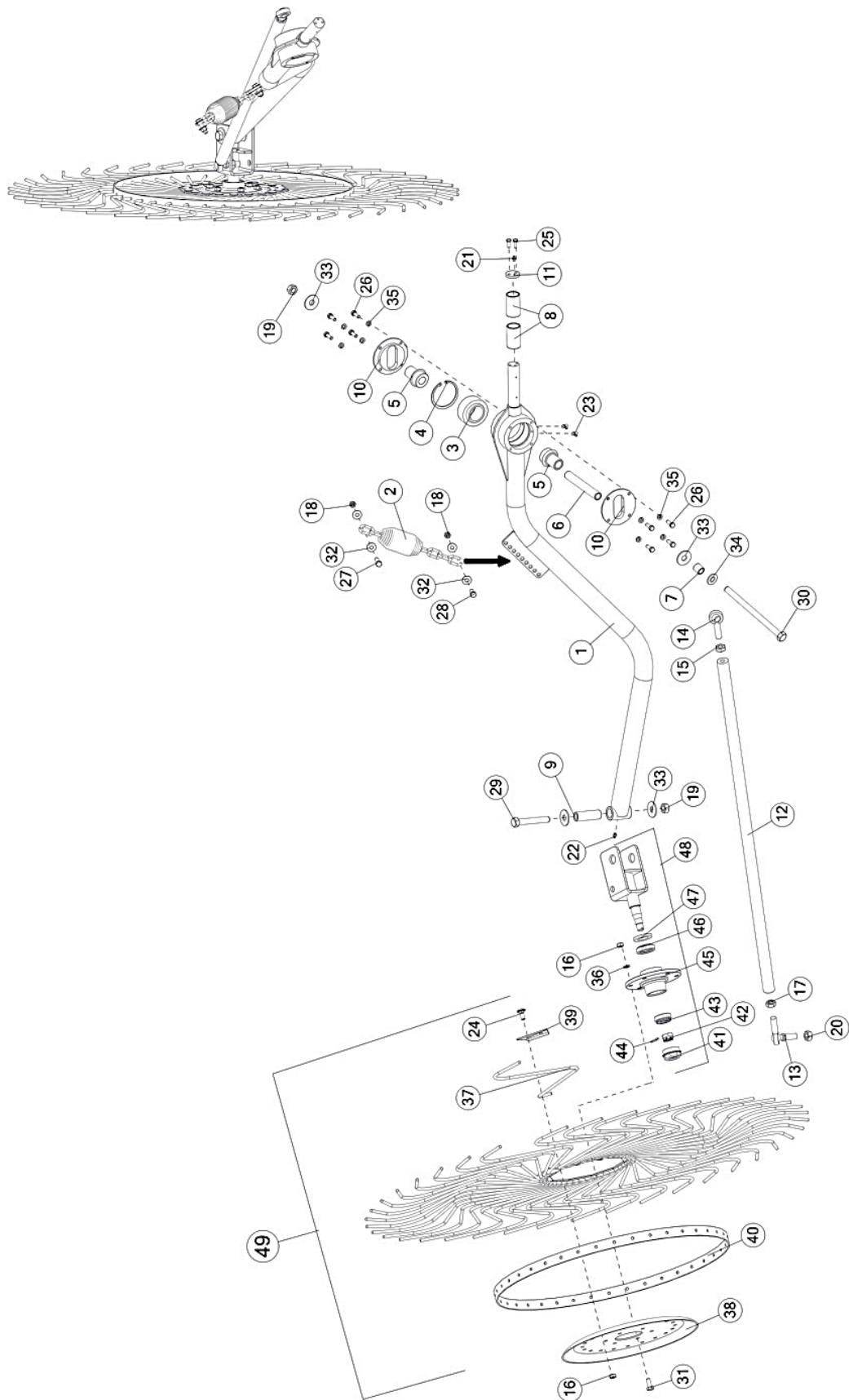


FIGURE 18

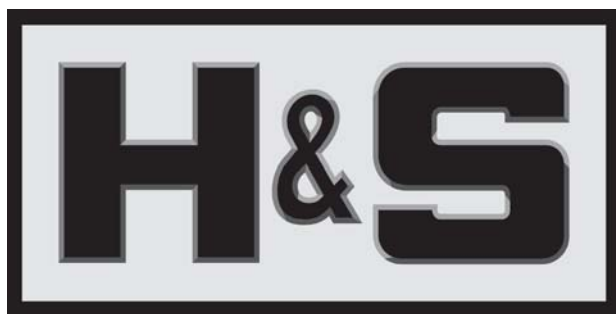
OPTIONAL KICKER WHEEL

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
21	2	G89	ZERK, 1/4"-28 STRAIGHT
22	2	MS26	1/4" - 28, STRAIGHT STANDARD SHORT GREASE FITTING
23	4	RG51	ZERK, 90 DEGREE 1/4"-28 # B1911
24	20	YBCR76005	CARR. BOLT, 10MM X 25MM
25	4	YBHH08102	HBOLT 0.2500-28X0.750 GR8
26	16	YBHH10010	BOLT, 5/16-18 X 1 GR 5
27	2	YBHH12025	BOLT, 3/8-16 X 1-1/2 GR 5
28	2	YBHH12035	BOLT, 3/8"-16 X 1-1/4" GR. 5
29	2	YBHH20065	BOLT, 5/8-11 X 4 GR 5, ZINC
30	2	YBHH20120	BOLT, 5/8-11 X 9" GR 5
31	12	YBHH76015	BOLT, M10-1.5 (25MM)
32	4	YWFL12005	WASHER, FLAT, 3/8 USS
33	8	YWFL20005	WASHER, FLAT, 5/8 USS
34	2	YWFL20010	WASHER, FLAT, 5/8" SAE GR. 8 (YELLOW ZINC)
35	16	YWLO10005	WASHER, LOCK, 5/16
36	12	YWLO76015	WASHER, LOCK, M10
37	80	10WR42	RAKE WHEEL TOOTH, 49" , BLACK
38	2	FR71	RAKE WHEEL CENTER
39	10	FR74	RAKE TOOTH CLIP
40	2	T177A	RAKE WHEEL OUTER RING
41	2	T173	CAP, HUB, RAKE WHEEL
42	2	T172	NUT, HEX, 18MM - 1.5, CASTLE, G2, NF
43	2	600014	BRG, 1.85 X 0.75, TAPER, COMPLETE
44	2	1088	CLIP, RETAINING
45	2	1086	HUB, RAKE WHEEL
46	2	600012	BRG, 2.05 X 0.75, TAPER, COMPLETE
47	2	T163	SEAL, 2.05 X 1.25 X .25
48	2	71580	WLDMT, SPINDLE A
49	1	10WR17	LH RAKE WHEEL, 49" DIAMETER, BLACK
*	1	71622	49" RAKE WHEEL RH

NOTE: * MEANS NOT SHOWN

PARTS NOTES

[illegible]



**H&S Manufacturing products are approved for the
FEMA SEAL OF QUALITY**

**P.O. BOX 768, MARSHFIELD, WI 54449
(715) 387-3414 FAX (715) 384-5463
www.hsmfgco.com**