



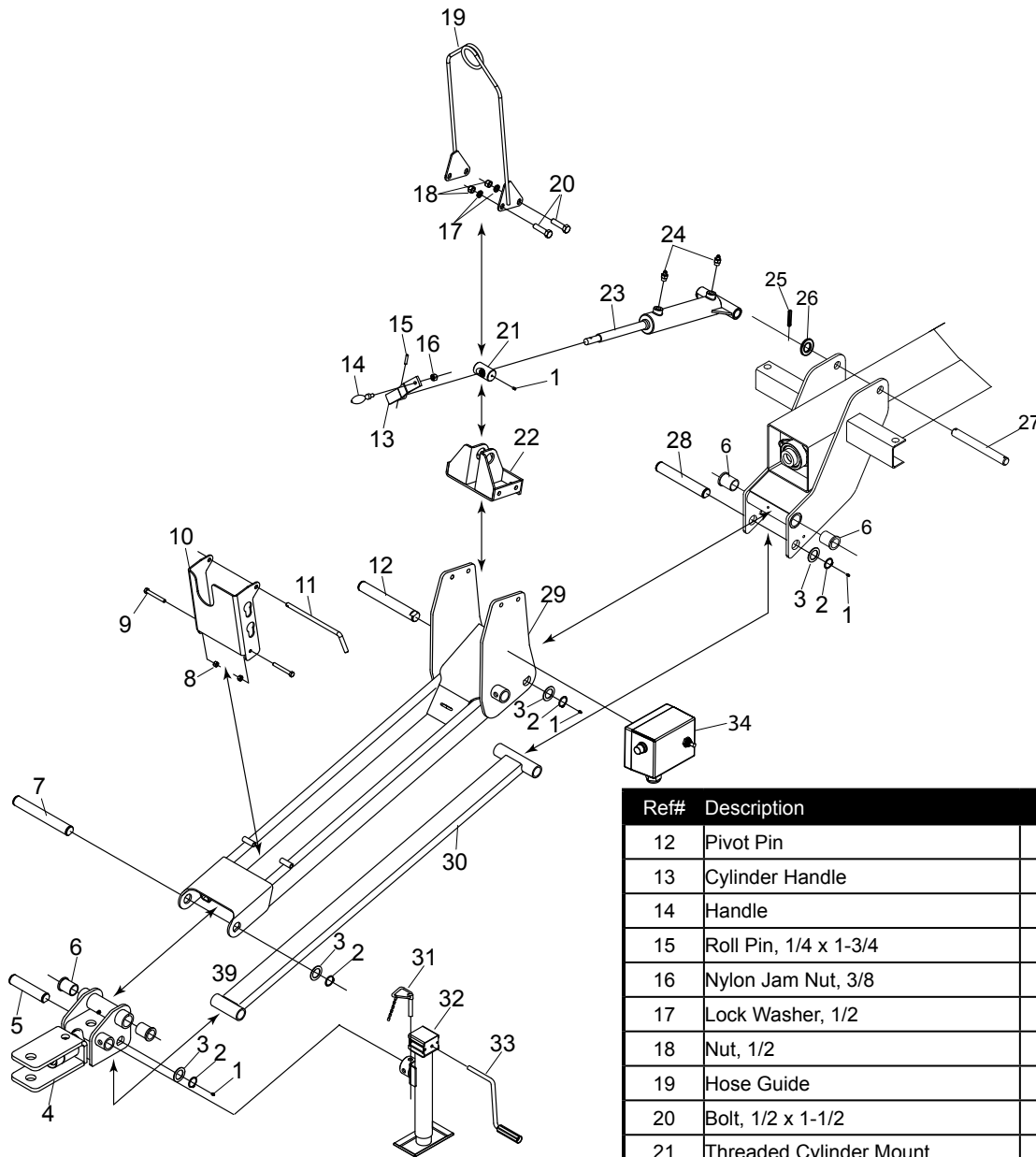
HR24TS Rotary Rake

Serial Numbers 87500-99049

Illustrated Parts Breakdown

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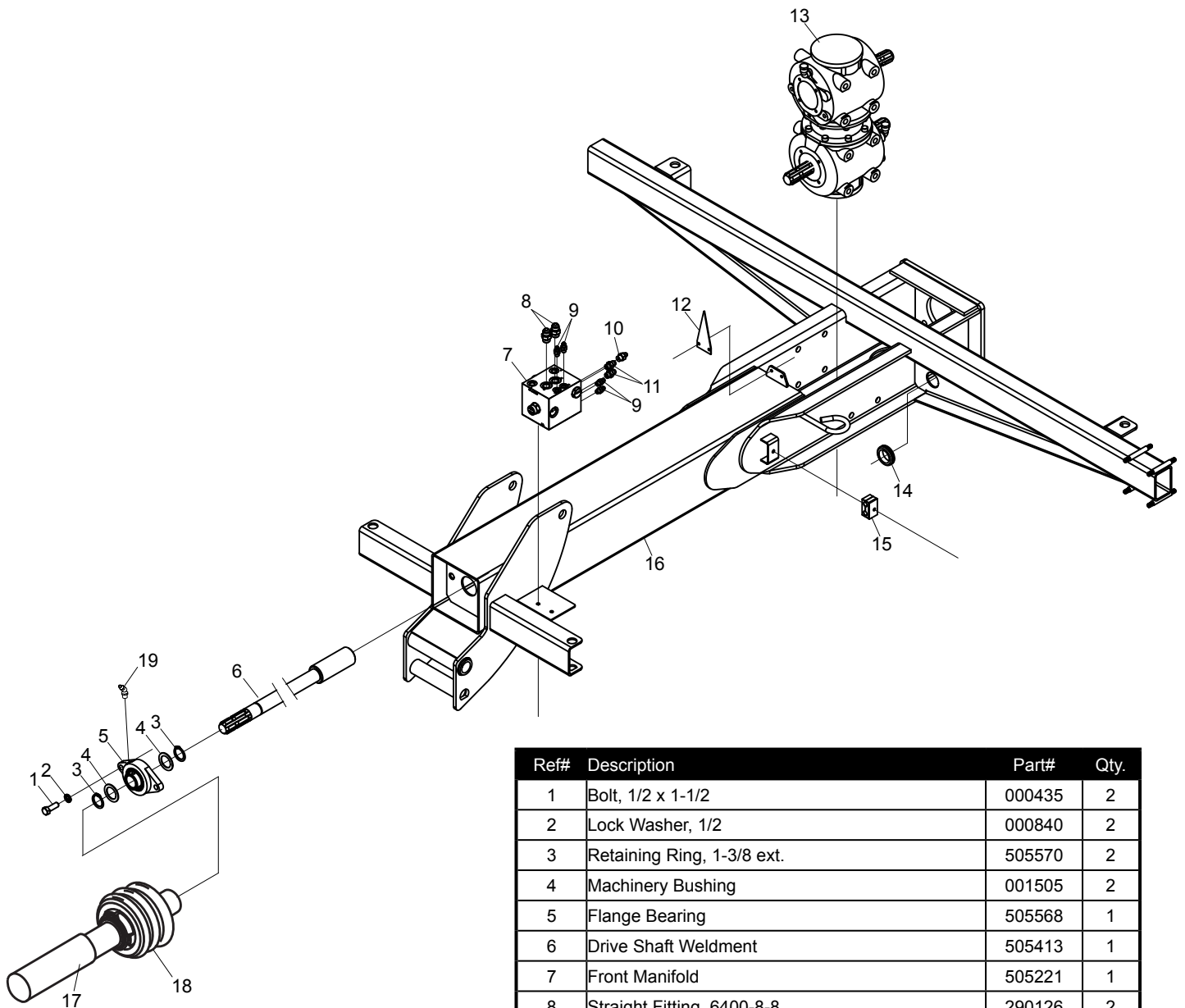
Tongue Assembly



Ref#	Description	Part#	Qty.
1	Grease Fitting	400117	4
2	Retaining Ring, 1-1/4	701173	3
3	Machinery Bushing, 1-1/4	500185	3
4	Swivel Hitch	505468	1
5	Pivot Pin	505684	1
6	Flange Bronze Bushing	505099	4
7	Pivot Pin	505683	1
8	Nylon Locknut, 3/8	003000	2
9	Bolt, 3/8 x 2-1/2	000300	2
10	PTO Stand	505241	1
11	Hitch Pin	505707	1

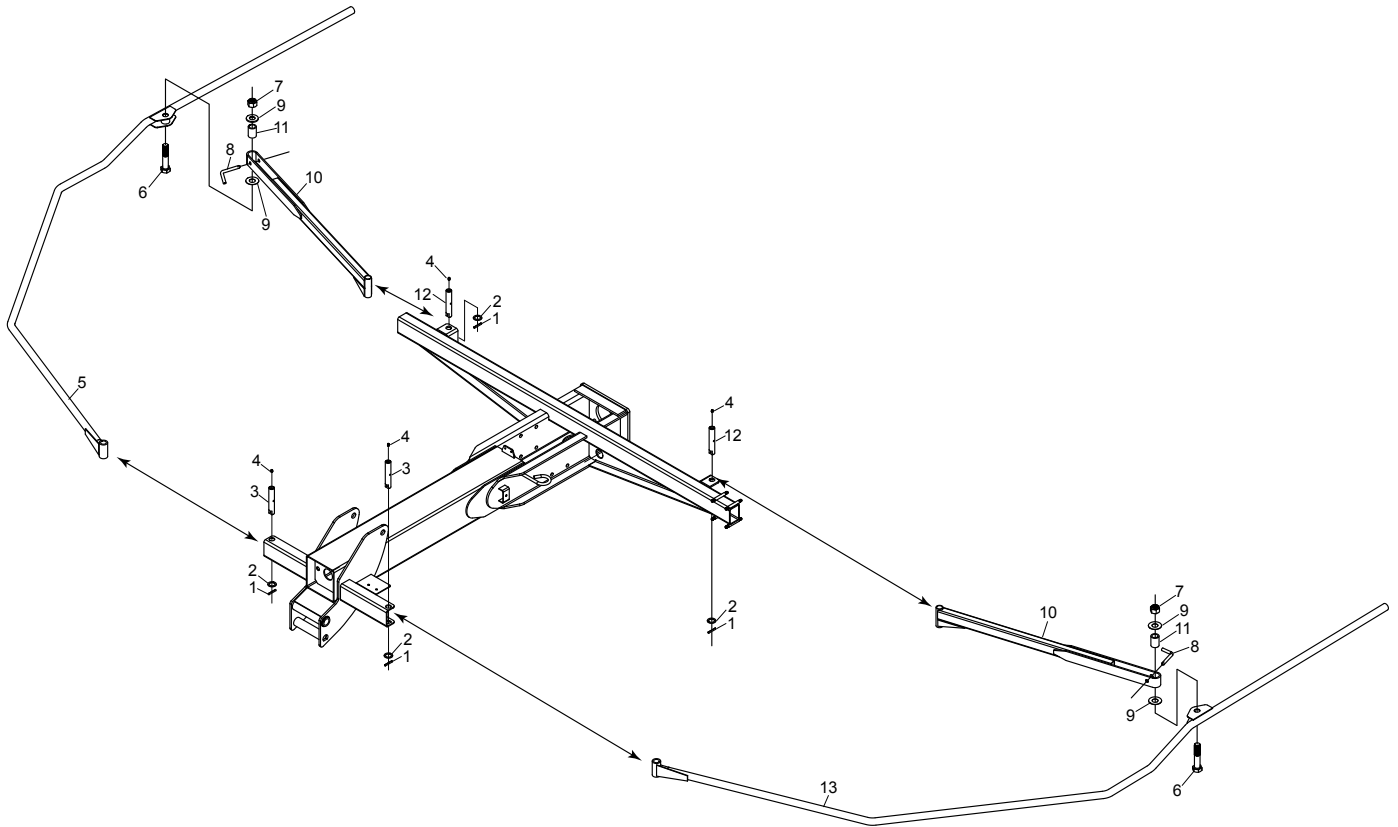
Ref#	Description	Part#	Qty.
12	Pivot Pin	505687	1
13	Cylinder Handle	503037	1
14	Handle	502149	1
15	Roll Pin, 1/4 x 1-3/4	500187	1
16	Nylon Jam Nut, 3/8	000920	1
17	Lock Washer, 1/2	000840	4
18	Nut, 1/2	000940	4
19	Hose Guide	505033	1
20	Bolt, 1/2 x 1-1/2	000435	4
21	Threaded Cylinder Mount	502218	1
22	Trunnion Pivot	505212	1
23	Cylinder	505204	1
24	Straight Fitting, 6400-4-6	700908	2
25	Roll Pin, 1/4 x 1-3/4	500187	2
26	Machinery Bushing, 1"	001008	2
27	Pivot Pin	505342	1
28	Pivot Pin	505686	1
29	Tongue Weldment	505098	1
30	Hitch Linkage	505102	1
31	Pin & Chain	500012	1
32	Complete Jack	903317	1
33	Jack Handle	903318	1
34	Switchbox	505104	1

Front Frame Assembly



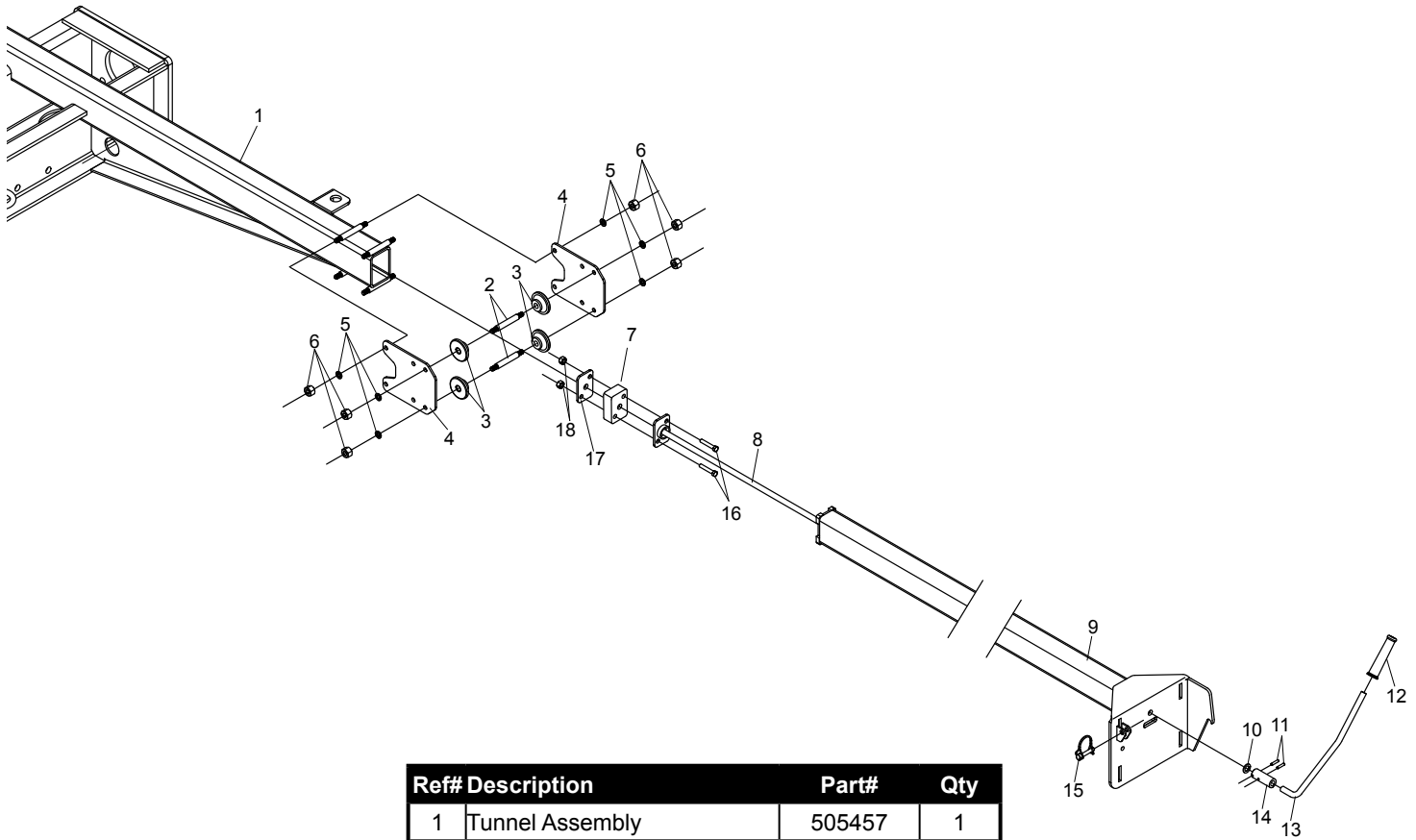
Ref#	Description	Part#	Qty.
1	Bolt, 1/2 x 1-1/2	000435	2
2	Lock Washer, 1/2	000840	2
3	Retaining Ring, 1-3/8 ext.	505570	2
4	Machinery Bushing	001505	2
5	Flange Bearing	505568	1
6	Drive Shaft Weldment	505413	1
7	Front Manifold	505221	1
8	Straight Fitting, 6400-8-8	290126	2
9	Straight Fitting, 6400-4-4	290195	4
10	Straight Fitting, 6400-4-6	700908	1
11	Straight Fitting, 6400-6-6	507283	2
12	Indicator Arrow	505217	1
13	Swivel Gearbox	505000	1
14	Rubber hose Grommet	502291	1
15	Hose Holding Kit	507294	2
16	Front Tunnel Weldment	505543	1
17	PTO Shaft, Complete	505421	1
18	PTO Shield Kit (Bondioli Shafts Only)	505800	1
19	45° Grease Fitting	701171	1

Guards & Guard Arms (Front Rotor)



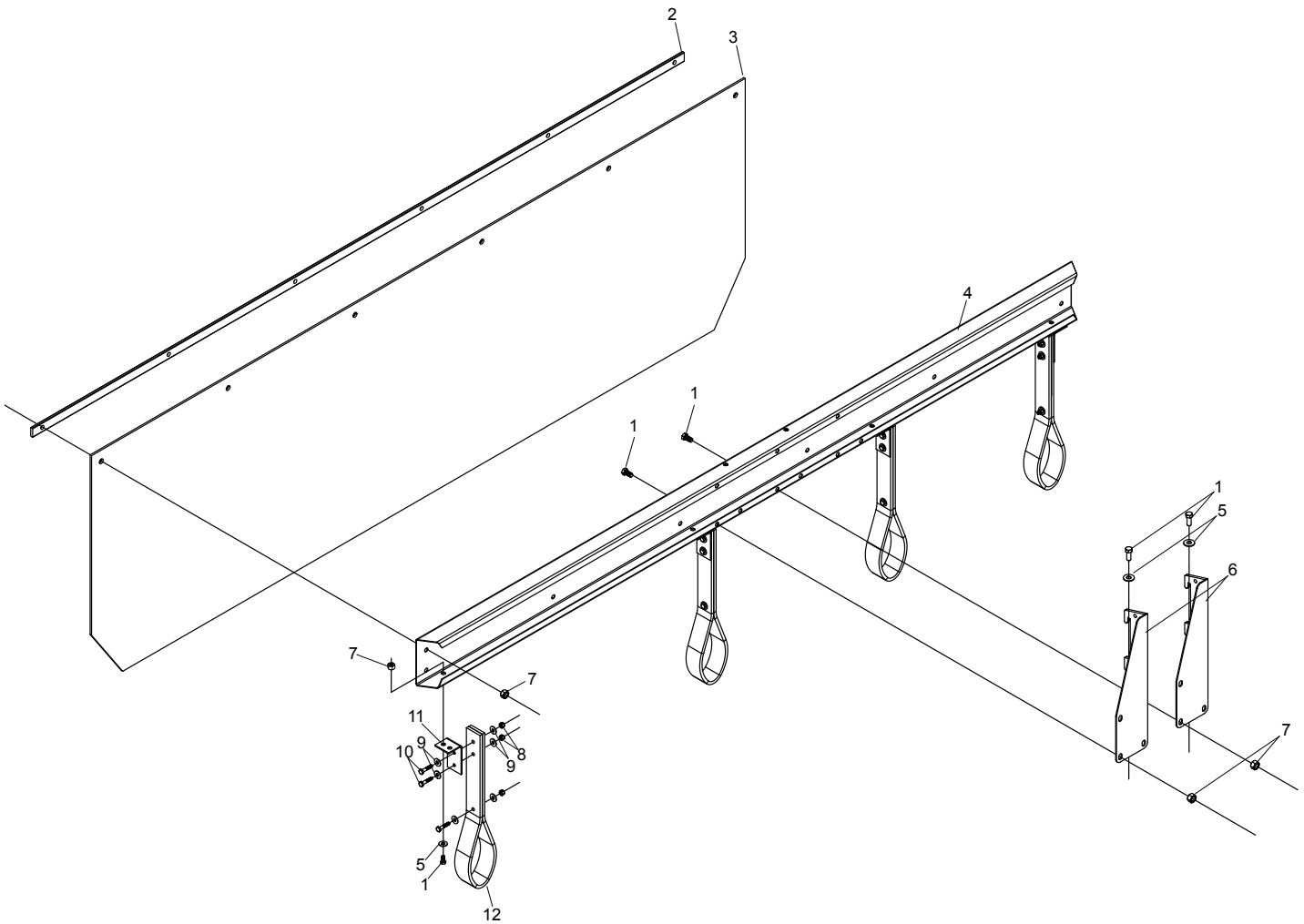
Ref#	Description	Part#	Qty
1	Roll Pin, 1/4 x 1-3/4	500187	4
2	Machinery Bushing, 1"	001008	4
3	Guard Pin	505651	2
4	Grease Fitting	400117	4
5	Guard, Right	505639	1
6	Bolt, 1" x 5"	000785	2
7	Nylon Locknut, 1"	001013	2
8	Pin	100330	2
9	Washer	001094	4
10	Guard Arm	505678	2
11	Pivot Bushing	505638	2
12	Guard Pin	505647	2
13	Guard, Left	505626	1

Hay Curtain Mount, (Front Rotor)



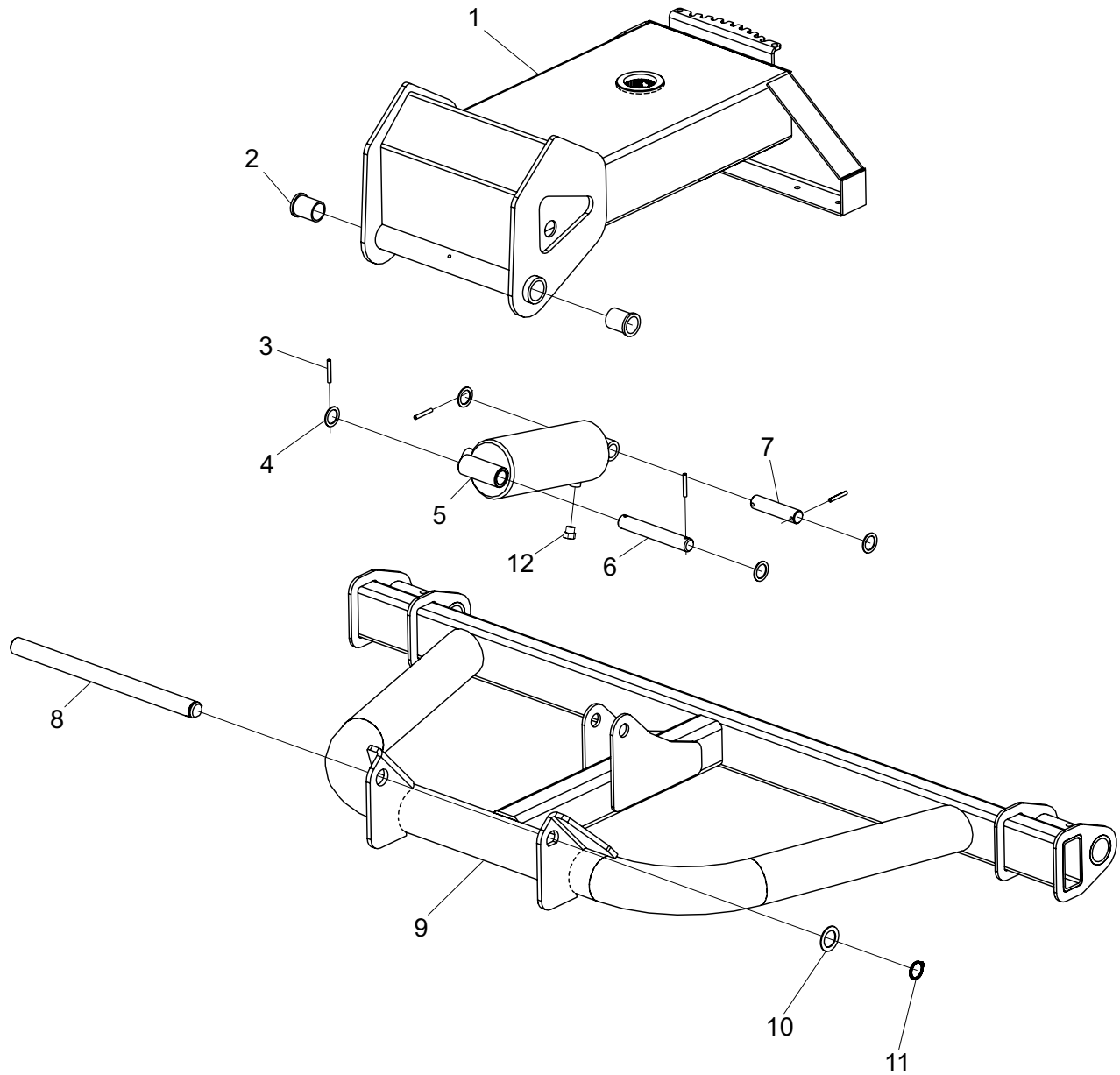
Ref#	Description	Part#	Qty
1	Tunnel Assembly	505457	1
2	Roller Stud	505681	2
3	Plastic Bearing	505827	4
4	Guide Plate	505607	2
5	Lock Washer, 3/8"	000820	12
6	Nut, 3/8"	000915	12
7	Rubber Block	505441	1
8	Torsion Bar	505437	1
9	Curtain Bar	505439	1
10	Machinery Bushing, 1/2"	000530	1
11	Roll Pin, Stainless Steel	505691	2
12	Handle Grip	505052	1
13	Handle	505050	1
14	Curtain Handle Coupler	505053	1
15	Quick Pin	903144	1
16	Bolt, 3/8 x 2	000286	2
17	Rubber Hold Plate	505442	1
18	Nylon Locknut, 3/8	003000	2

Hay Curtain



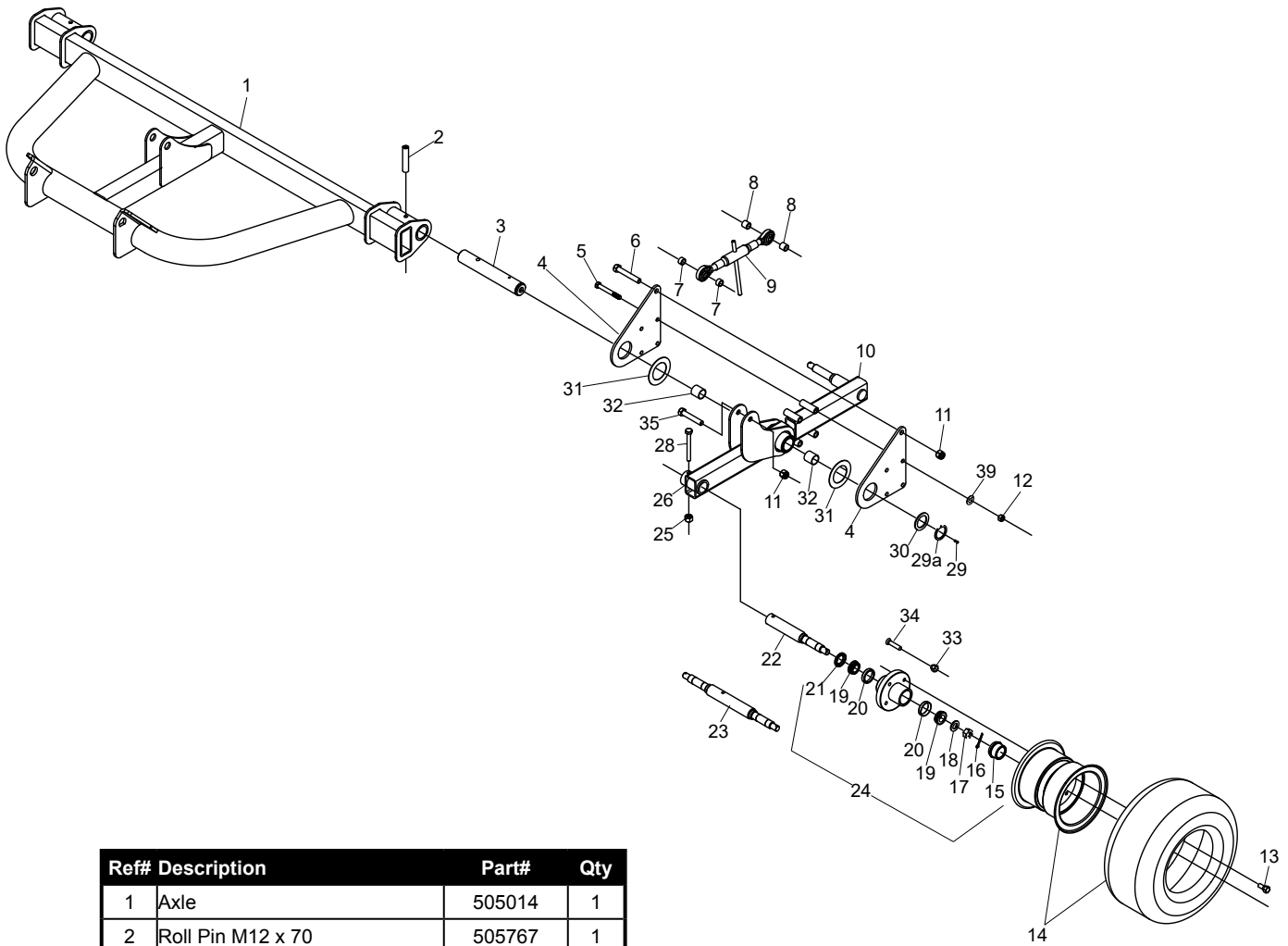
Ref#	Description	Part#	Qty.
1	Bolt, 3/8 x 1	000270	20
2	Curtain Clamp	505713	1
3	Hay Curtain	505044	1
4	Curtain Bracket	505520	1
5	Flat Washer, 3/8	001035	8
6	Curtain Mount	505529	2
7	Nylon Locknut, 3/8	003000	20
8	Nylon Locknut, 1/4	003001	12
9	Flat Washer, 1/4	001020	16
10	Bolt, 1/4 x 1	100148	12
11	Mounting Plate	505738	4
12	Curtain Support	505737	4

Front Chassis



Ref#	Description	Part#	Qty
1	Gearbox Base Weldment	505560	1
2	Bronze Bushing	505099	2
3	Roll Pin	500187	4
4	1" x 1-1/2 Machinery Bushing	001008	4
5	Cylinder	505167	1
6	Pivot Pin	505184	1
7	Pivot Pin	701021	1
8	Axle Pivot Shaft	505654	1
9	Pivot Pin	505014	1
10	Axle Weldment	500185	1
11	Retaining Ring, 1-1/4	701173	2
12	Breather Plug	290266	1

Front Axle

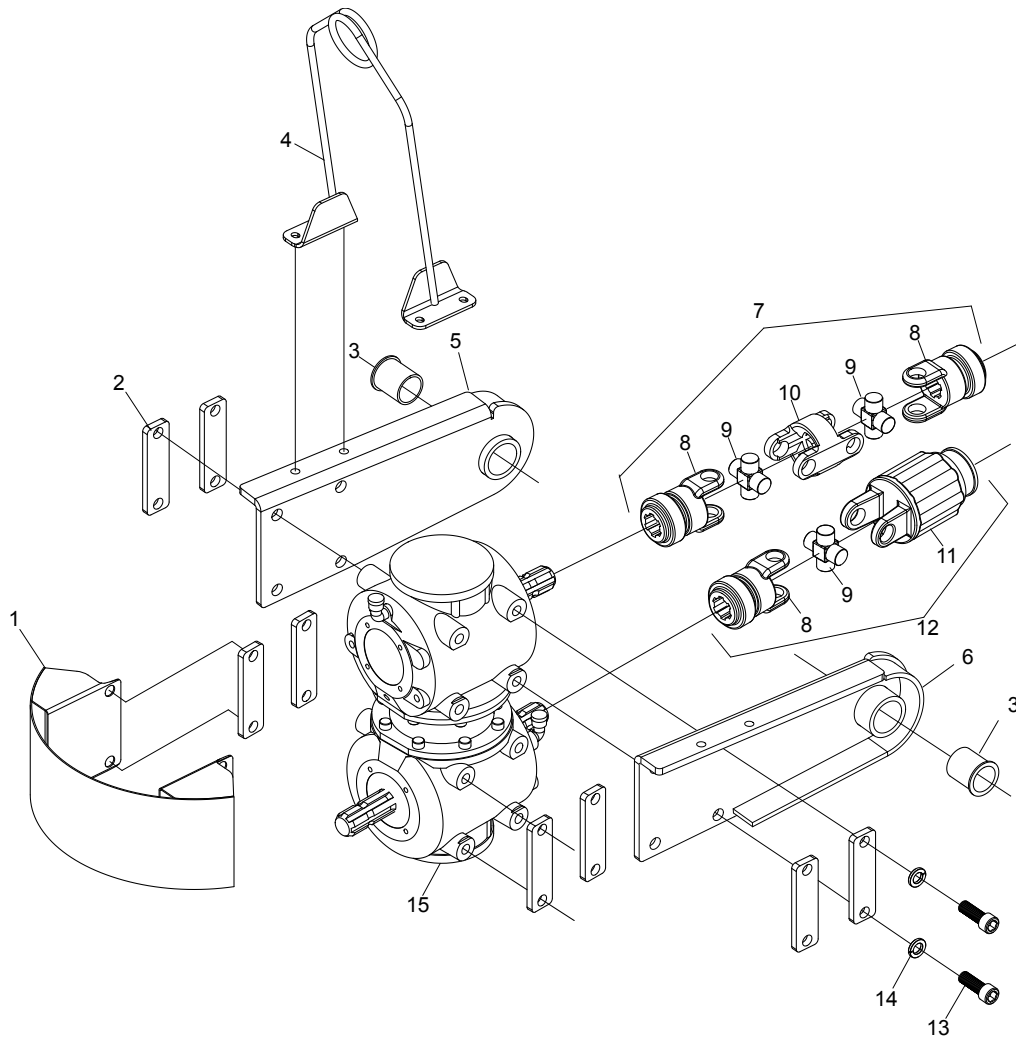


Ref#	Description	Part#	Qty
1	Axle	505014	1
2	Roll Pin M12 x 70	505767	1
3	Pivot Shaft	505491	1
4	Pivot Plate	505487	2
5	Bolt, 1/2 x 4	000490	4
6	Bolt, 5/8 x 4-1/2	000645	1
7	Spacer	505671	2
8	Spacer	505495	2
9	Turn Buckle	505259	1
10	Walking Beam, Rear	505494	1
11	Nylon Locknut, 5/8	000972	2
12	1/2" Hex Nut	000940	4
13	Lug Bolt	500210	8
14	Tire & Wheel Assembly	500220	2
15	Cap	500209	2
16	Cotter Pin	001215	2
17	Spindle Nut	705070	2
18	Spindle Washer	400146	2
19	Bearing	500202	4
20	Race	500204	4

Ref#	Description	Part#	Qty
21	Seal	500201	2
22	Spindle	500198	1
23	Double Spindle	505114	1
24	Hub Complete	501199	2
25	Nylon Locknut, 3/8	003000	2
26	Front Walking Beam, Left	505532	1
27	Front Walking Beam, Right	505480	
28	Bolt, 3/8 x 2-1/2	000300	2
29	Grease Fitting	400117	1
29a	Retaining Ring	505492	1
30	Machinery Bushing	500191	1
31	Pivot Washer	505489	2
32	Bronze Bushing	300012	2
33	Lug Nut	508506	8
34	Wheel Stud	508505	8
35	Bolt, 5/8 x 3-1/2	000627	1
39	1/2" Lock Washer	000840	4

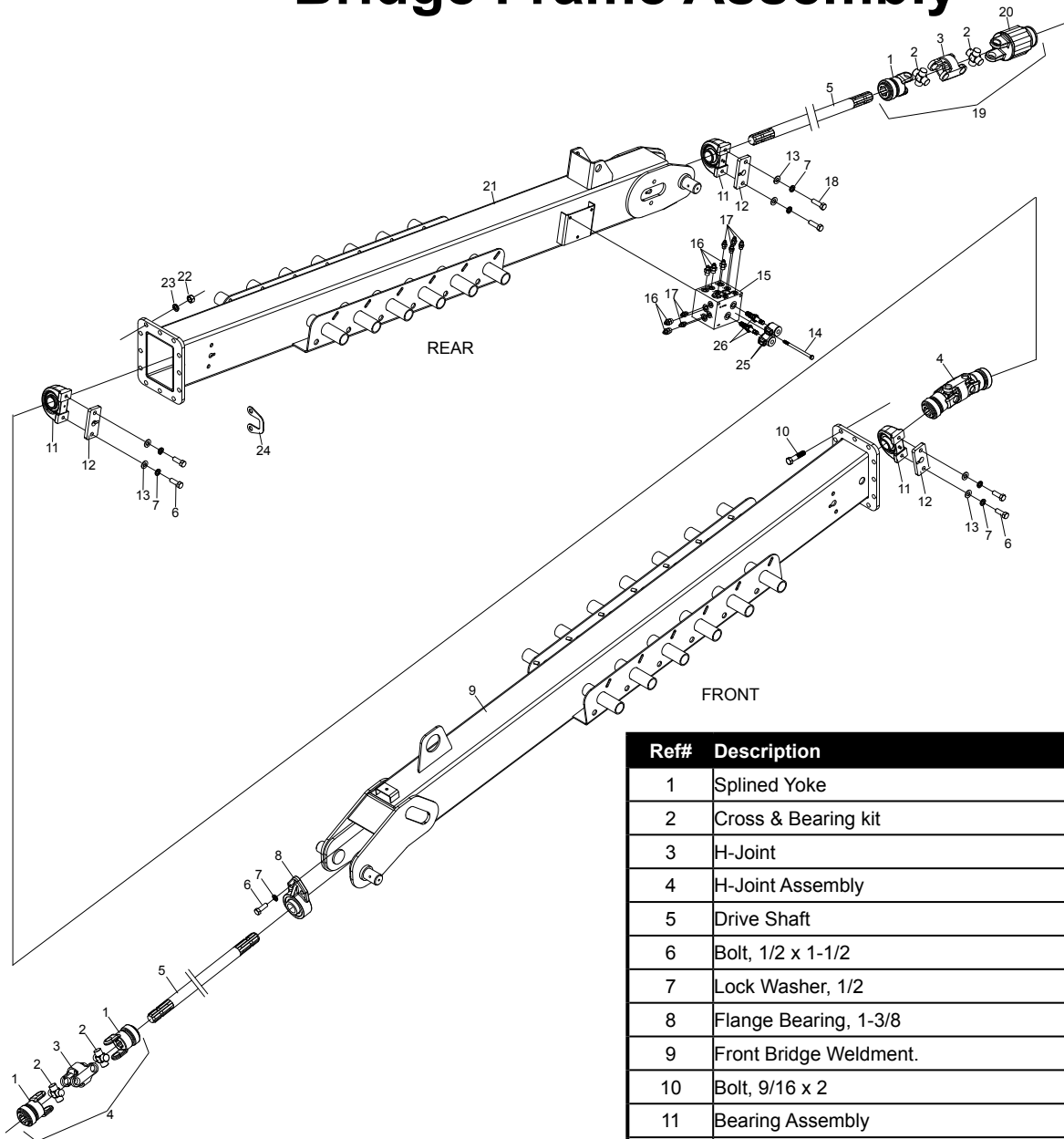
NOTE: Quantities listed are for left side only.
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Front Pivot



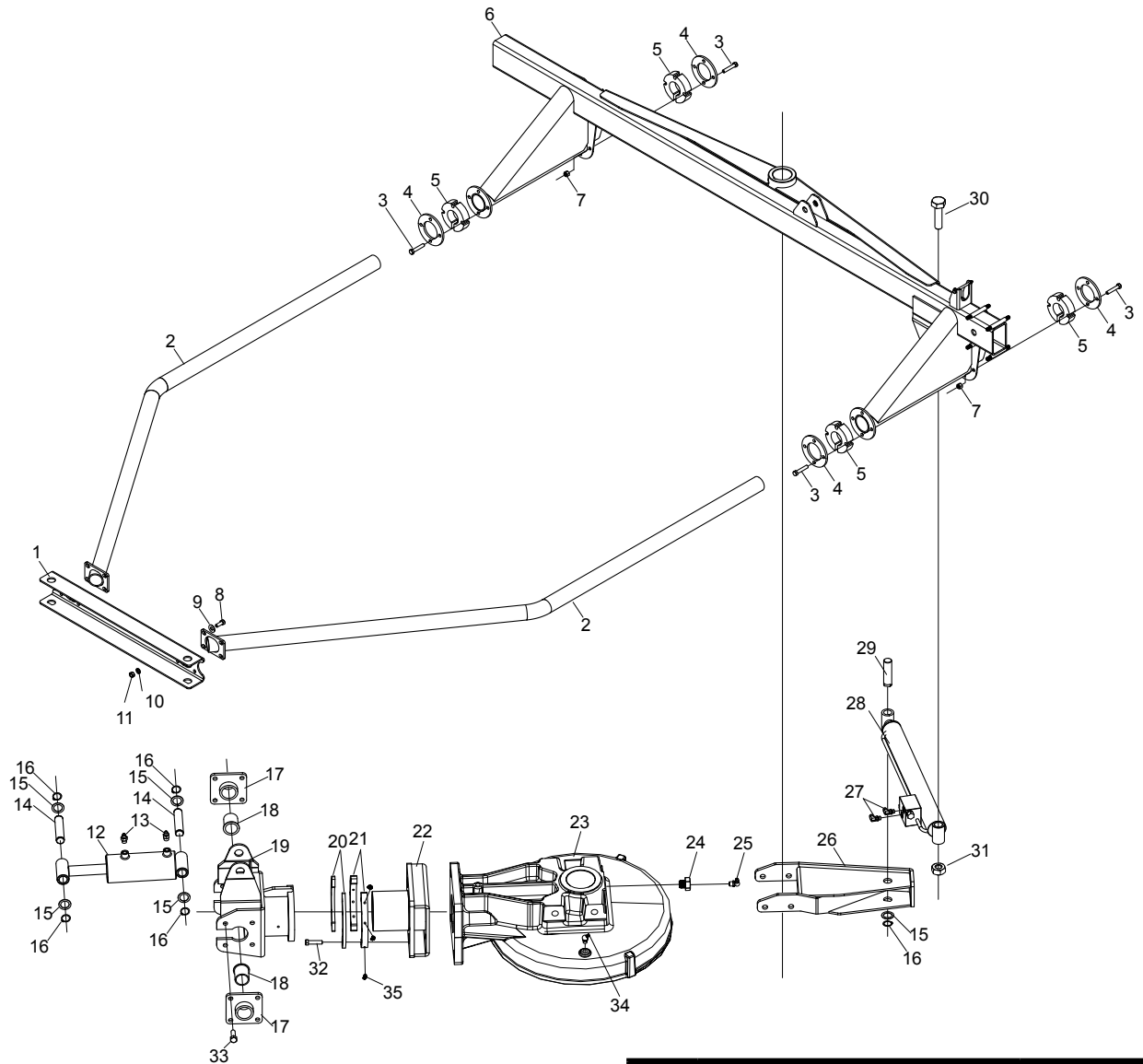
Ref#	Description	Part#	Qty.
1	Indicator Panel	505215	1
2	Retainer Plate	505191	8
3	Bronze Bushing	700054	2
4	Hose Guide	505748	1
5	Swivel Clamp Plate (R)	505781	1
6	Swivel Clamp Plate (L)	505780	1
7	H-Joint Assembly	505176	1
8	Splined Yoke	505174	3
9	Cross & Bearing Kit	701172	3
10	H-Joint	701106	1
11	Radial Pin Clutch	505173	1
12	Joint Assembly	505339	1
13	Socket Head Bolt, M16 x 55	002695	16
14	Lock Washer, M16	002868	16
15	Swivel Divider Gearbox	505000	1

Bridge Frame Assembly



Ref#	Description	Part#	Qty.
1	Splined Yoke	505174	5
2	Cross & Bearing kit	701172	6
3	H-Joint	701106	3
4	H-Joint Assembly	505176	2
5	Drive Shaft	505171	2
6	Bolt, 1/2 x 1-1/2	000435	7
7	Lock Washer, 1/2	000840	9
8	Flange Bearing, 1-3/8	505578	1
9	Front Bridge Weldment.	505673	1
10	Bolt, 9/16 x 2	000578	12
11	Bearing Assembly	505291	3
12	Bearing Block	505292	3
13	Flat Washer, 1/2"	001061	6
14	Bolt, 3/8 x 5	000153	3
15	Manifold Assembly	505220	1
16	Straight Fitting, 6400-4-6	700908	5
17	Straight Fitting, 6400-4-4	290195	6
18	Bolt, 1/2 x 1-3/4	000445	2
19	Clutch H-Joint Assembly	505175	1
20	Splined Clutch	505173	1
21	Rear Bridge Weldment	505553	1
22	Nut, 9/16	000965	12
23	Lock Washer, 9/16	000850	12
24	Hose Bracket	505733	1
25	Solenoid Coil	505725	1
26	Solenoid Valve	505724	1

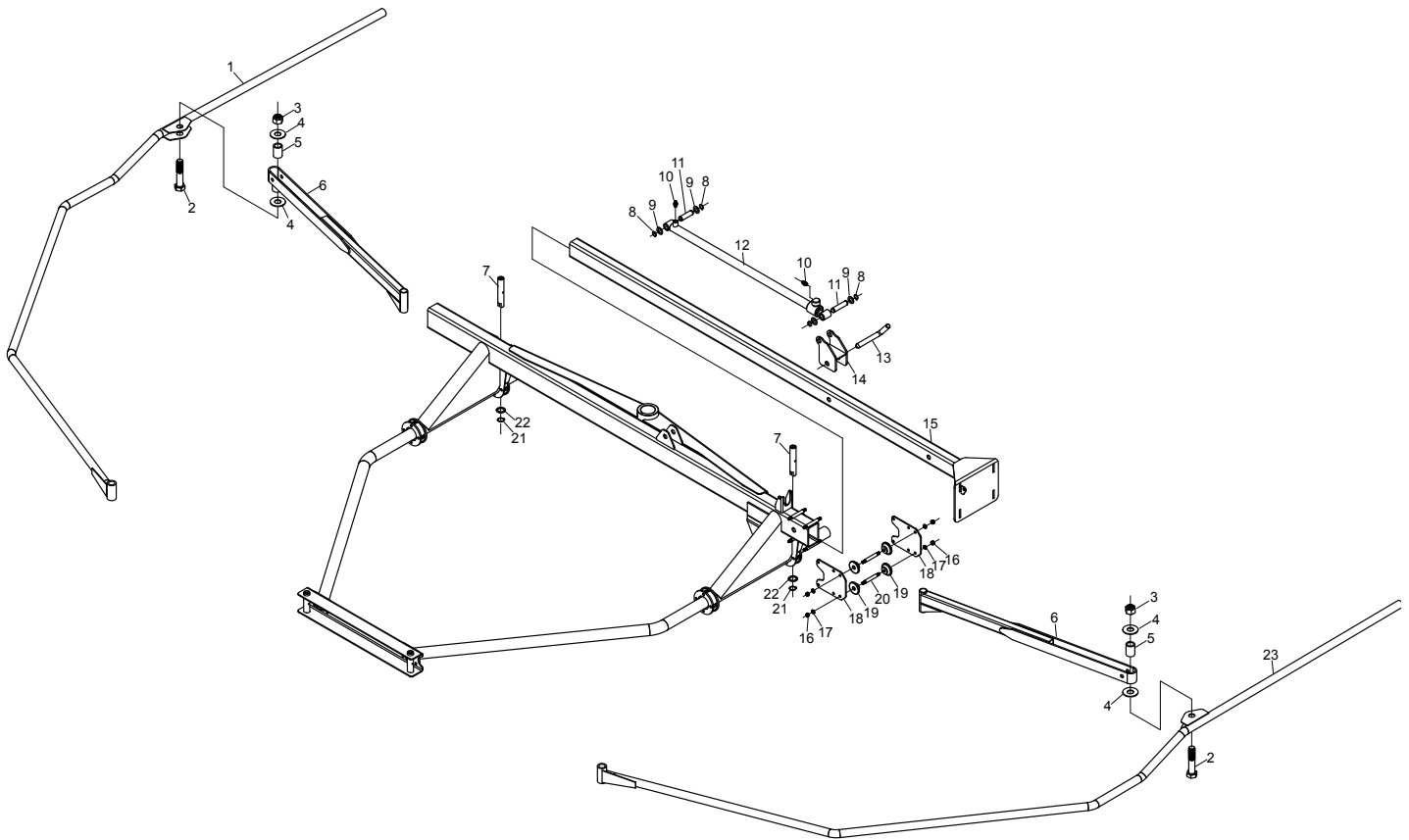
Rear Pivot



Ref#	Description	Part#	Qty.
1	Guard Mounting Bracket	505586	1
2	Guard Frame Weldment	505622	2
3	Bolt, 3/8 x 2	000286	16
4	Grommet Plate	505620	4
5	Rubber Grommet	505621	4
6	Rear Tunnel Weldment	505601	1
7	Nylon Locknut, 3/8	003000	16
8	Bolt, 3/8 x 1	000270	8
9	Flat Washer, 3/8	001035	8
10	Lock Washer, 3/8	000820	8
11	Nut, 3/8	000915	8
12	Rear Upper Cylinder	505205	1
13	Straight Fitting, 6400-4-6	700908	2
14	Pivot Pin	505672	2
15	Machinery Bushing	001008	3
16	Retaining Ring, 1"	505648	3
17	Pivot Bearing w/ Bushing	505075	2

Ref#	Description	Part#	Qty.
18	Bronze Bushing	700054	2
19	Rear Swivel Weldment	505087	1
20	Swivel Clamp	505089	2
21	Swivel Spacer	505088	2
22	Rear Gearbox Mount	505594	1
23	Gearbox Cover	502143	1
24	5/8-11 x 3/4 Hex Bolt	505782	1
25	90° grease fitting, 1/8 NPT	900044	1
26	Swing Bracket Weldment	505645	1
27	Elbow Fitting, 6801-4-4	700948	2
28	Swing Cylinder	505219	1
29	Pivot Pin	505650	1
30	Bolt, 1" x 4"	000783	1
31	Nylon Jam Nut, 1"	001013	1
32	Bolt, 7/16 x 1-3/4	000362	10
33	Bolt, 1/2 x 1-1/2	000435	8
34	45° grease fitting	502061	1
35	45° grease fitting 1/4" Thread	701171	6

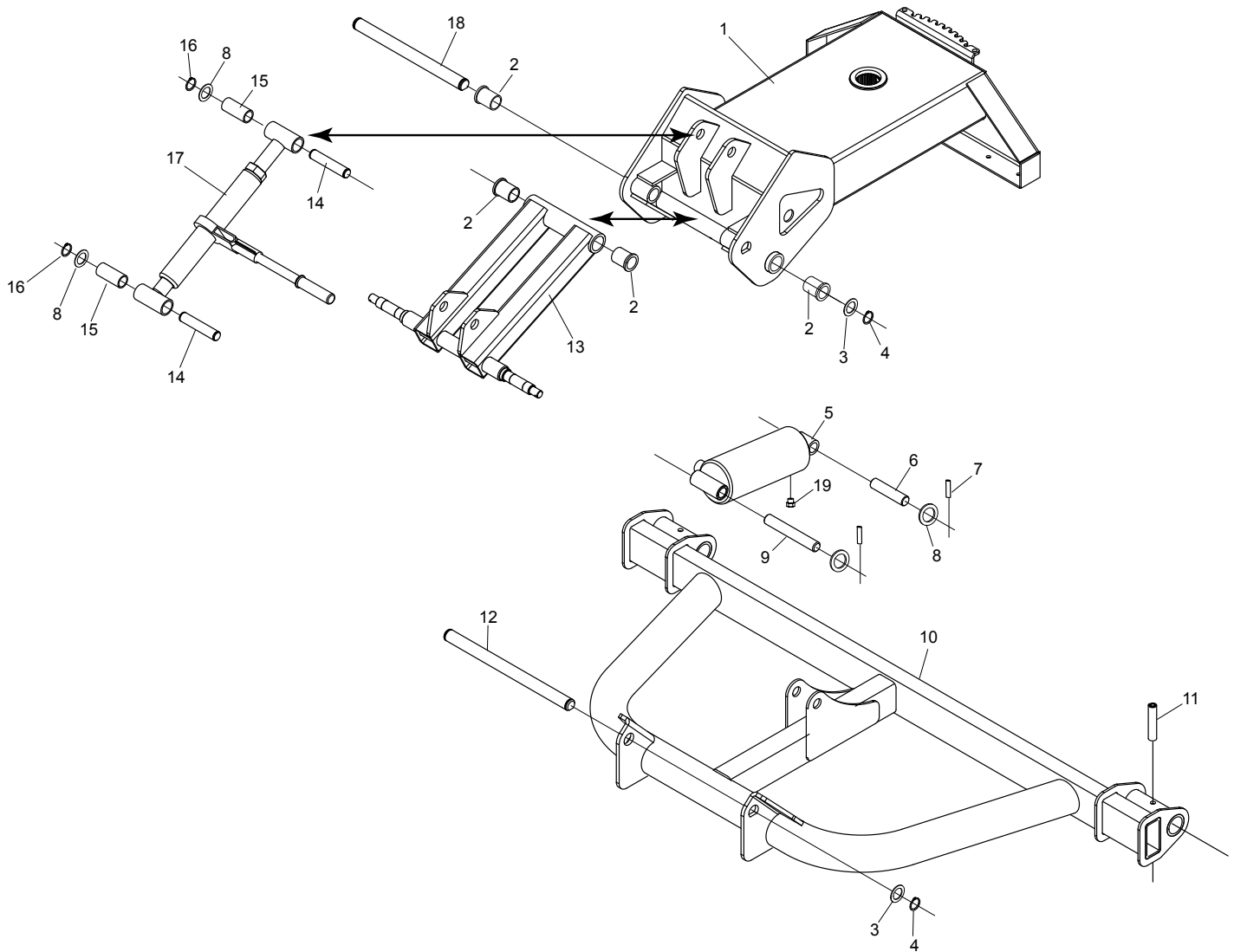
Guards, Rear Rotor



Ref#	Description	Part#	Qty.
1	Guard, Right	505639	1
2	Bolt, 1 x 5	000785	2
3	Nylon Locknut, 1"	001012	2
4	Flat Washer, 1"	001094	4
5	Pivot Bushing	505638	2
6	Guard Arm	505636	2
7	Guard Arm Pin	505647	2
8	Retaining Ring, 3/4	902022	4
9	Machinery Bushing, 3/4	400148	4
10	Straight Fitting, 6400-4-4	290195	2
11	Pivot Pin	505663	2
12	Cylinder	505773	1

Ref#	Description	Part#	Qty.
13	Bent Pin	505659	1
14	Cylinder Bracket	505609	1
15	Rear Curtain Bar Weldment	505596	1
16	Nut, 3/8	000915	6
17	Lock Washer, 3/8	000820	6
18	Guide Plate	505607	2
19	Curtain Arm Bearing	505605	4
20	Roller Stud	505681	2
21	Retaining Ring, 1"	505648	2
22	Machinery Bushing, 1"	001008	2
23	Guard, Left	505626	1

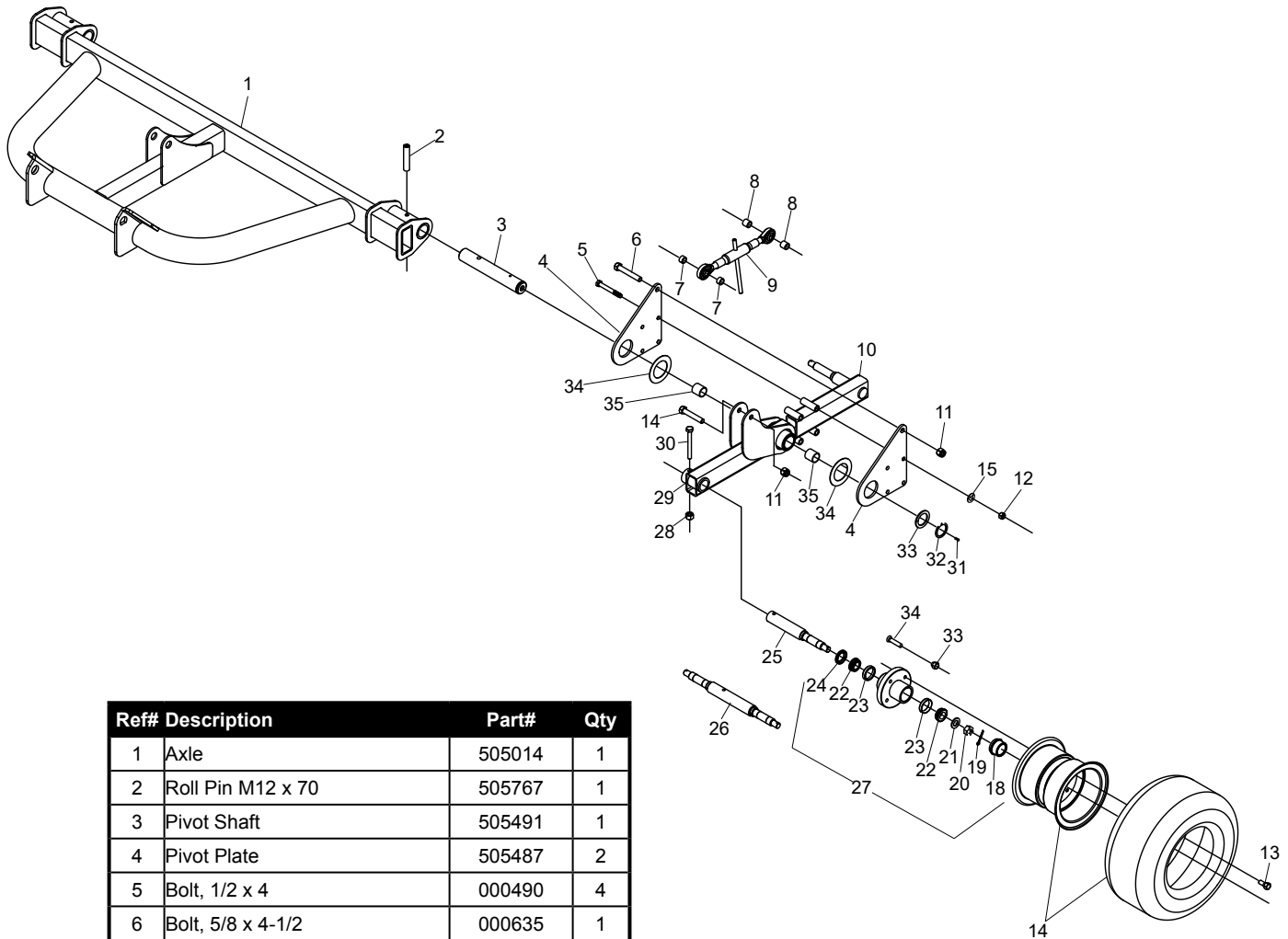
Rear Chassis



Ref#	Description	Part#	Qty
1	Gearbox Base Weldment	505602	1
2	Bronze Bushing	505099	4
3	Machinery Bushing, 1-1/4	500185	2
4	Retaining Ring, 1-1/4	701173	2
5	Cylinder	505167	1
6	Pivot Pin	701021	1
7	Roll Pin, 1/4 x 1-3/4	500187	4
8	Machinery Bushing, 1"	001008	8
9	Pivot Pin	505184	1

Ref#	Description	Part#	Qty
10	Axle Weldment	505014	1
11	Roll Pin, 12mm x 70mm	505767	2
12	Pivot Shaft, 17.5"	505654	1
13	Pitch Arm Weldment	505118	1
14	Pivot Pin, 5"	505660	2
15	Bronze Bushing	500278	2
16	Retaining Ring, 1"	505648	4
17	Ratchet Assembly	507230	1
18	Pivot Shaft, 15.25"	505658	1
19	Breather Plug	290266	1

Rear Axle & Walking Beam



Ref#	Description	Part#	Qty
1	Axle	505014	1
2	Roll Pin M12 x 70	505767	1
3	Pivot Shaft	505491	1
4	Pivot Plate	505487	2
5	Bolt, 1/2 x 4	000490	4
6	Bolt, 5/8 x 4-1/2	000635	1
7	Spacer	505671	2
8	Spacer	505495	2
9	Turn Buckle	505259	1
10	Walking Beam, Rear	505494	1
11	Nylon Locknut, 5/8	000972	2
12	1/2" Hex Nut	000940	4
14	Bolt, 5/8 x 3-1/2	000627	1
15	1/2" Lock Washer	000840	4
16	Lug Bolt	500210	8
17	Tire & Wheel	500220	2
18	Cap	500209	2
19	Cotter Pin	500208	2
20	Spindle Nut	500207	2
21	Spindle Washer	500206	2
22	Bearing	500202	4
23	Race	500204	4
24	Seal	500201	2

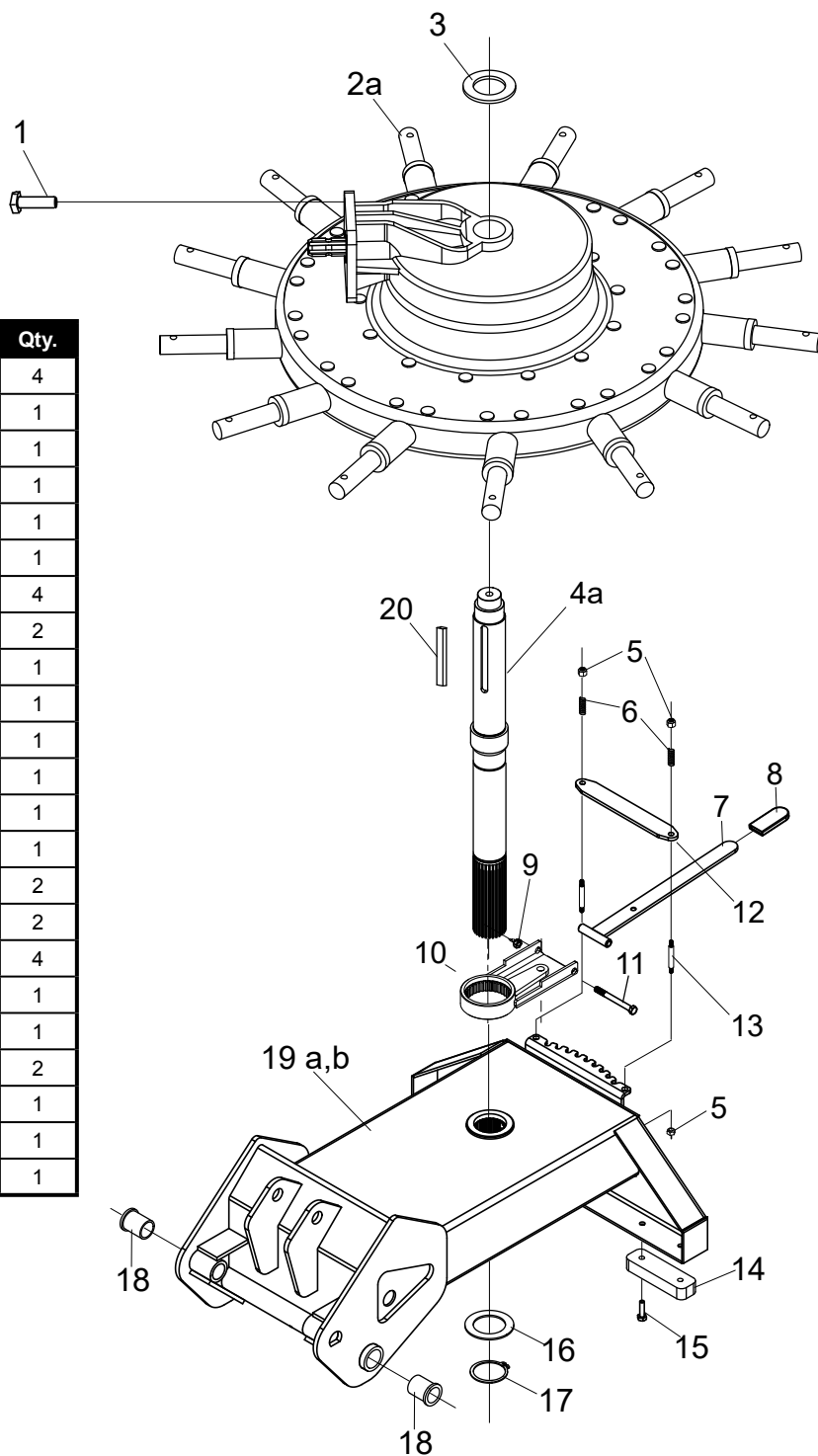
Ref#	Description	Part#	Qty
25	Spindle	505534	1
26	Double Spindle	505114	1
27	Hub Complete	500199	2
28	Nylon Locknut, 3/8	003000	2
29	Front Walking Beam, Left	505532	1
29a	Front Walking Beam, Right	505480	
30	Bolt, 3/8 x 2-1/2	000300	2
31	Grease Fitting	400117	1
32	Retaining Ring	505492	1
33	Machinery Bushing	500191	1
34	Pivot Washer	505489	2
35	Bronze Bushing	300012	2
36	Lug Nut	###	8
37	Wheel Stud	508505	8

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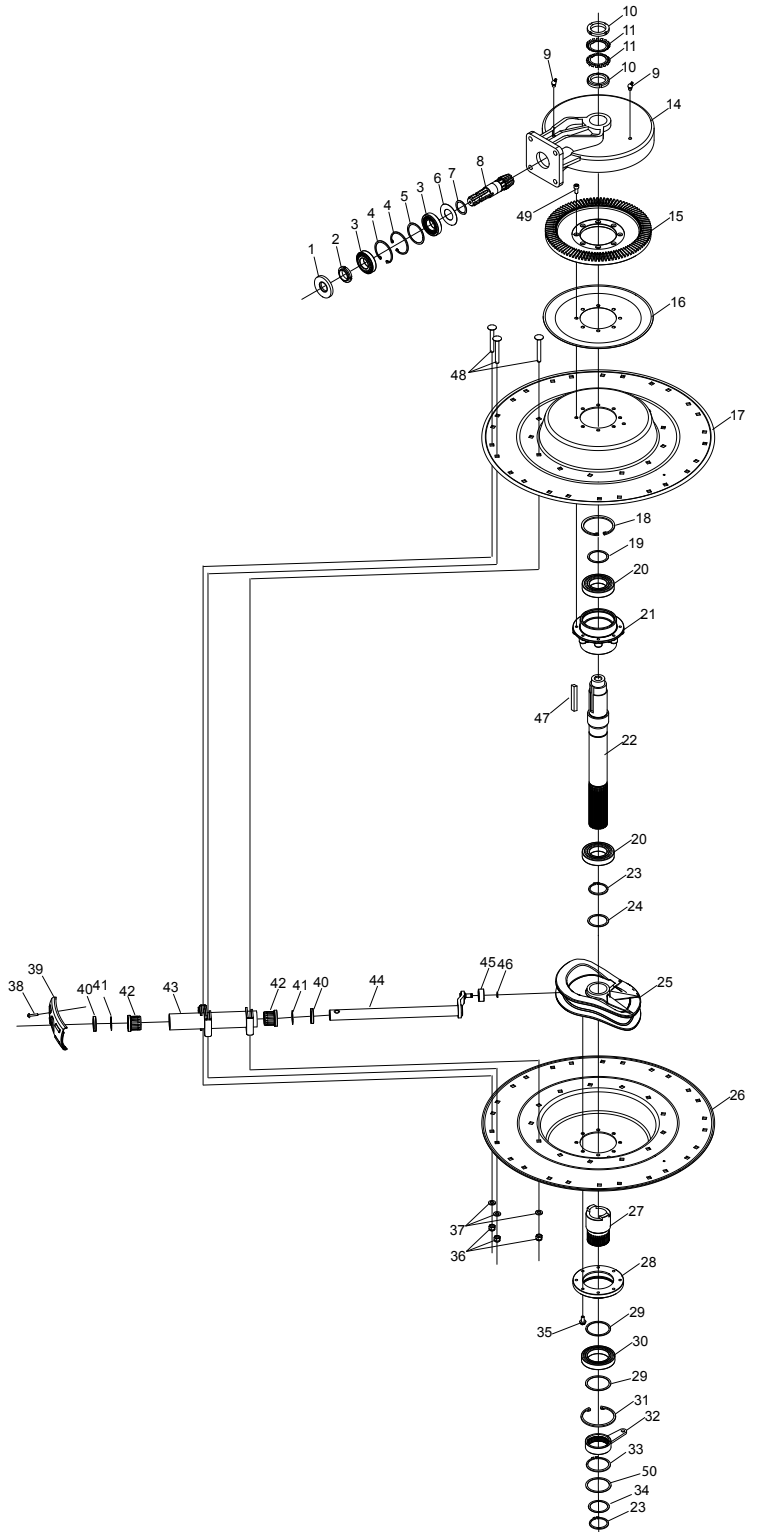
Gearbox & Stand

Ref#	Description	Part#	Qty.
1	Hex Bolt, M16 x 55	002699	4
2a	Complete Gearbox, Front Rotor	505426	1
2b	Complete Gearbox, Rear Rotor	505542	1
3	Shim	505139	1
4a	Gearbox Center Shaft, Front Rotor	502142	1
4b	Gearbox Center Shaft, Rear Rotor	502141	1
5	Nylon Locknut, 3/8	003000	4
6	Compression Spring	505734	2
7	Pitch Handle	505566	1
8	Handle Grip	401289	1
9	Steel Locknut, 3/8	900134	1
10	Pitch Adjustment Handle	505641	1
11	Bolt, 3/8 x 3-3/4	000310	1
12	Pitch Spring Plate	505562	1
13	Threaded Stud	505681	2
14	Rubber Bumper	505269	2
15	Carriage Bolt, 3/8 x 1-3/4	000130	4
16	60mm Machinery Washer	505244	1
17	60mm Ext Retaining Ring	502073	1
18	Flanged Bronze Bushing	505099	2
19a	Gearbox Base Weldment, Front Rotor	505813	1
19b	Gearbox Base Weldment, Rear Rotor	505815	1
20	Gearbox Shaft Key	502136	1



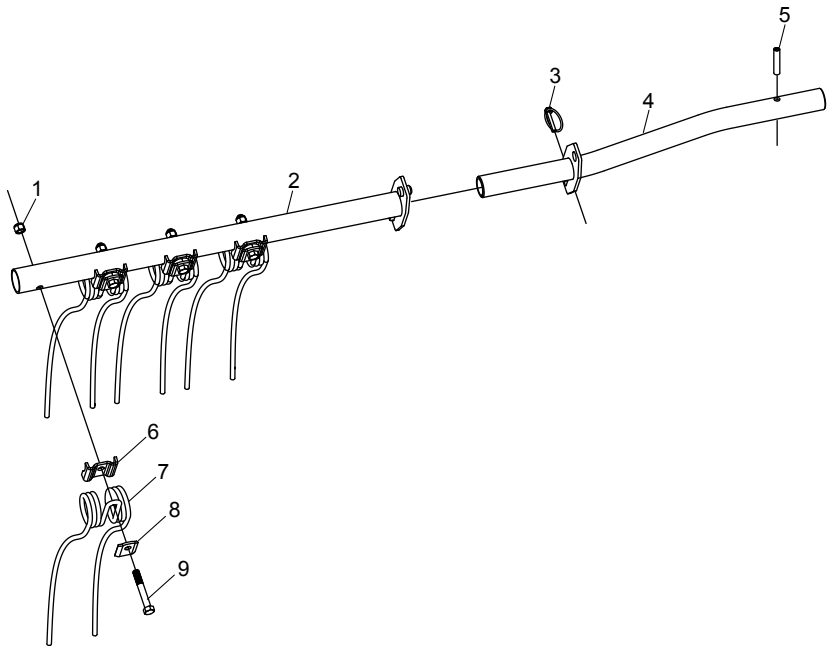
Rotary Gearboxes

Ref#	Description	Part#	Qty
1	Oil Seal	502064	1
2	Nut	502066	1
3	Bearing	502063	2
4	Snap Ring	502062	2
5	Shim	502068	A/R
6	Shim	502059	A/R
7	Shim	502058	A/R
8	Pinion Shaft	502057	1
9	Grease Fitting	502061	2
10	Locking nut	502137	2
11	Nut Retainer	502138	2
14	Gearbox Cover (for front rotor)	502144	1
	Gearbox Cover (for rear rotor)	502143	1
15	Crown Wheel	502046	1
16	Cover	502047	1
17	Top Cover	502089	1
18	Snap Ring	502050	1
19	Shim	502056	A/R
20	Bearing	502051	2
21	Flange	502049	1
22	Center Shaft (for front rotor)	502142	1
	Center Shaft (for rear rotor)	502141	1
23	Snap Ring	502073	2
24	Shim	502080	A/R
25	Cam Center	502075	1
26	Bottom Cover	502074	1
27	Spacer	502076	1
28	Cover	502077	1
29	Shim	502082	A/R
30	Bearing	502078	1
31	Snap Ring	502069	1
32	Lever	502079	1
33	Snap Ring	502081	1
34	Shim	502080	A/R
35	Bolt	502083	4
36	Locknut, M12	002876	39
37	Washer	502052	39
38	Screw	000117	13
39	Plastic Cap	502072	13
40	O-Ring Bushing	502093	26
41	O-Ring	502084	26
42	Plastic Hub	502088	26
43	Connecting Rod Support	502071	13
44	Connecting Rod	502087	13
45	Bearing	502091	13
46	Snap Ring	202086	13
47	Paralell Key	502053	1
48	Bolt	502065	39



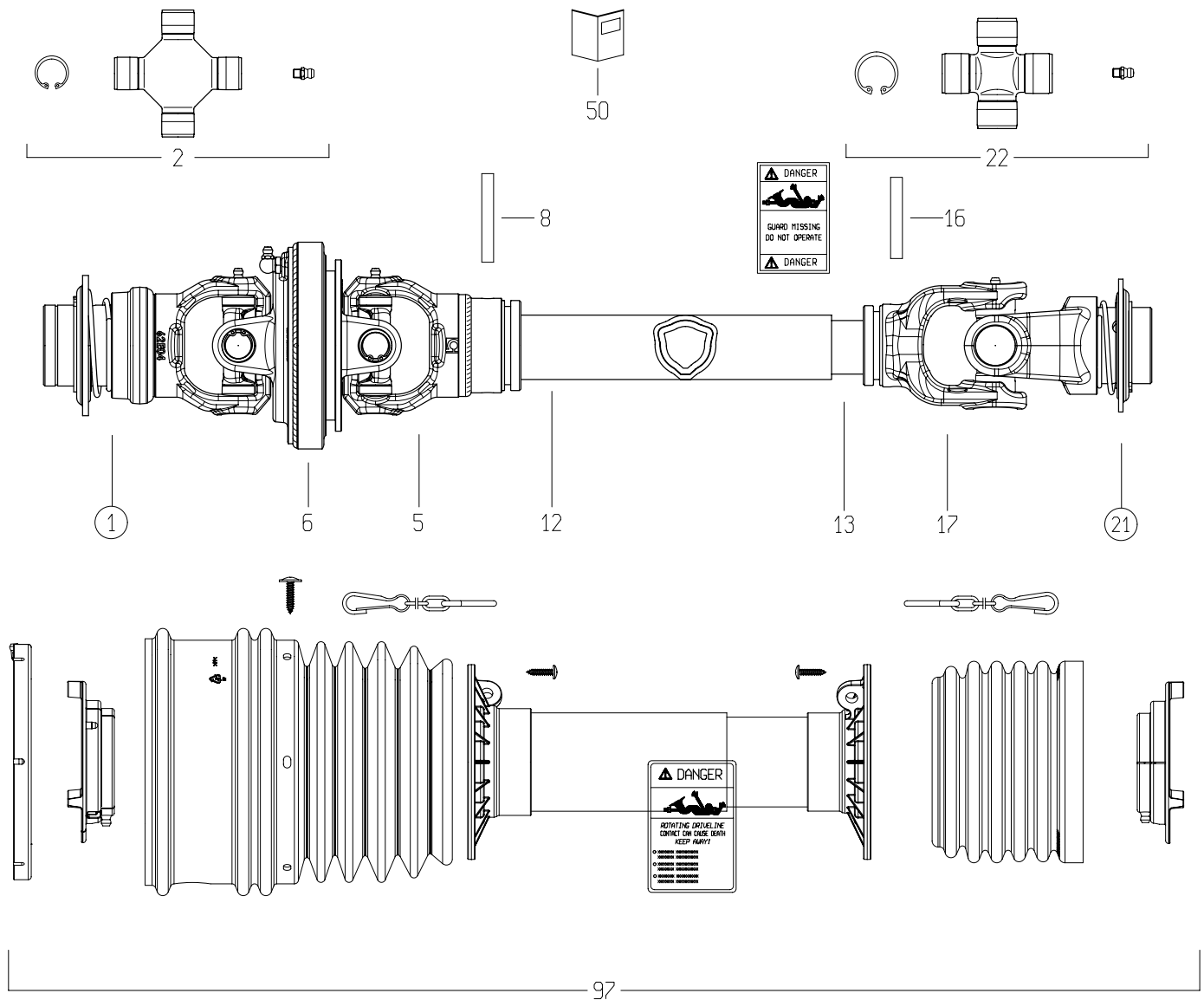
49	Bolt	502048	8
50	Rotary Rake Comer O - Ring	502446	1
	Complete Gearbox (Front)	505425	1
	Complete Gearbox (Rear)	505541	1

Tine Arm & Tine



Ref#	Description	Part#	Qty
1	Locknut, 1/2	000950	104
2	Tine Arm	505407	26
3	Lynch Pin	500219	26
4	Stub Arm	505462	26
5	Roll Pin	702019	26
6	Tine Clip	500318	104
7	Tine	500218	104
8	Tine Clip	500319	104
9	Bolt, 1/2 x 3-1/2 GR8	000482	104

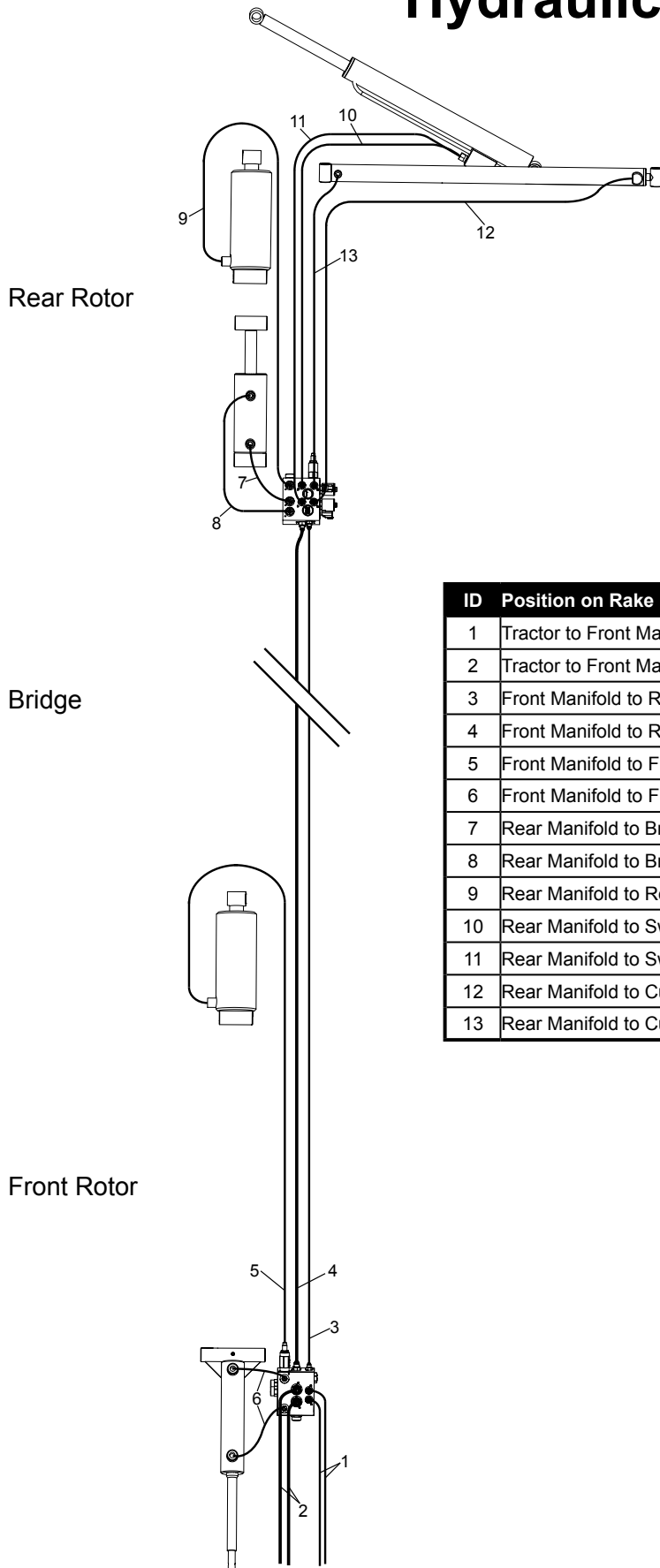
PTO Shaft Assembly



Ref#	Description	Part#
1	Yoke S4/1R4 Rt El 80° Cv 1-3/8" Z6 (Wr7)	505352
2	Cross Kit S4-1R4-G4 El 80°/50° Cv 22X86	505353
5	Yoke #4 Outer Tube (43.5) 80° Cv 1R4	505354
6	Central Body 1R4-S4-G4 80° Cv Sft El	505355
8	Flexible Roll Pin 8X60 Din1481	500430
12	Drive Tube #4 Outer Rilsan 43.5X3.1x1060	505356
13	Drive Tube #4 Inner Rilsan 36.6X4.8x1050	505357
16	Flexible Roll Pin 8X55 Din1481	500433
17	Tube Yoke #4-G4 Inner (36.0)	500434
21	Yoke #4-S4-G4 Rt Ball 1-3/8" Z6 (R07)	505358
22	Cross Kit S4-G4 27X74.6 Cap Zerk	500428
26	Shield Support Outer G3-G4	500436

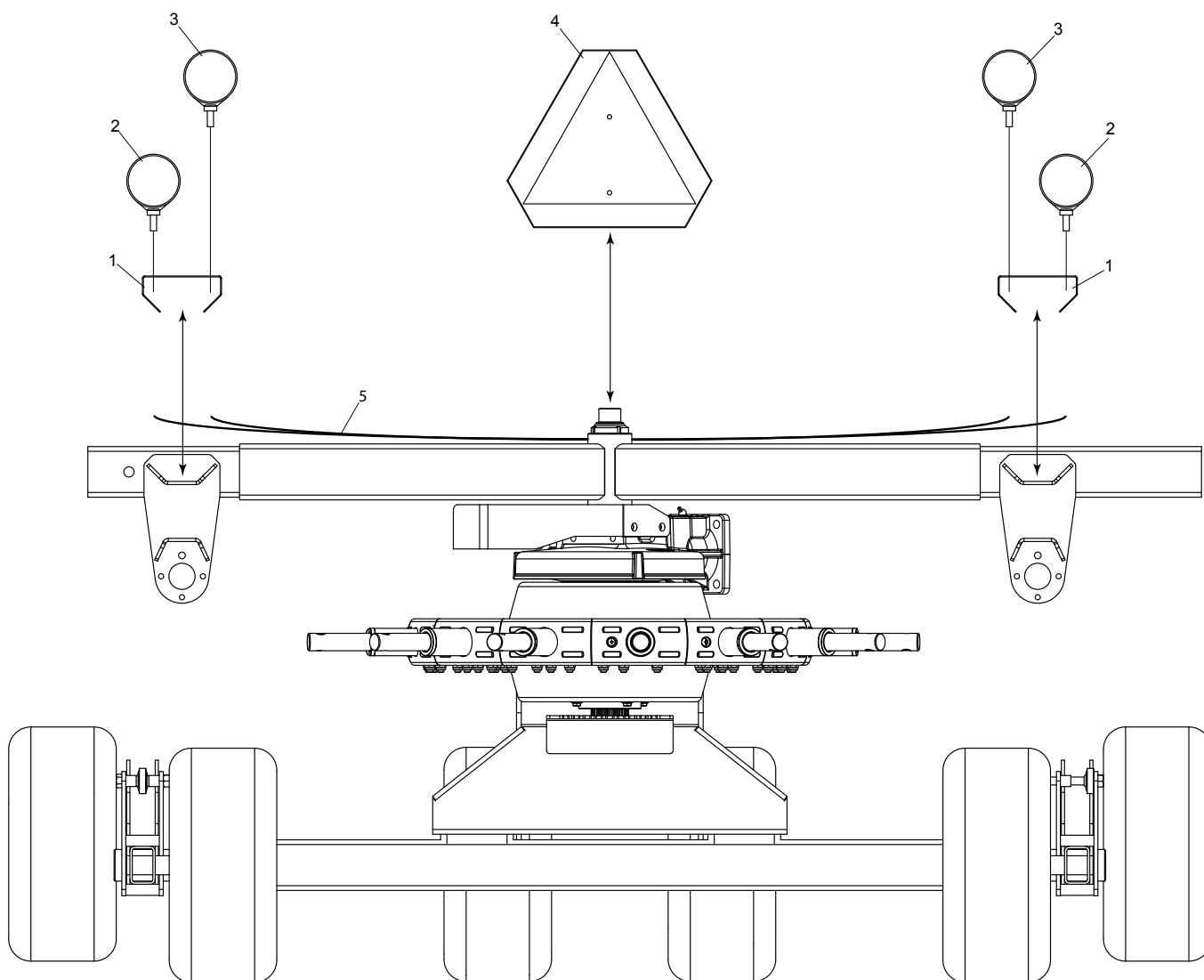
Ref#	Description	Part#
27	Shield Support S2-S4 El Cv 80° & 50°	503110
28	Screw 4.8X22 Self Tap Zinc	500417
32	Shield Support Inner G3-G4	500437
34	Screw 4.8X22 Self Tap Zinc Flange Head	503112
40	Shield Chain W/S-Hook L=500Mm	500420
48	Label - Danger - Outer Drive Tube	500421
49	Label - Danger - Outer Shield Tube	500422
50	Instruction Booklet - N.america Global	500423
93	Half Shaft Cleared	505359
94	Half Shaft Cleared	505360
97	Complete Shield Kit	505361

Hydraulic Hoses



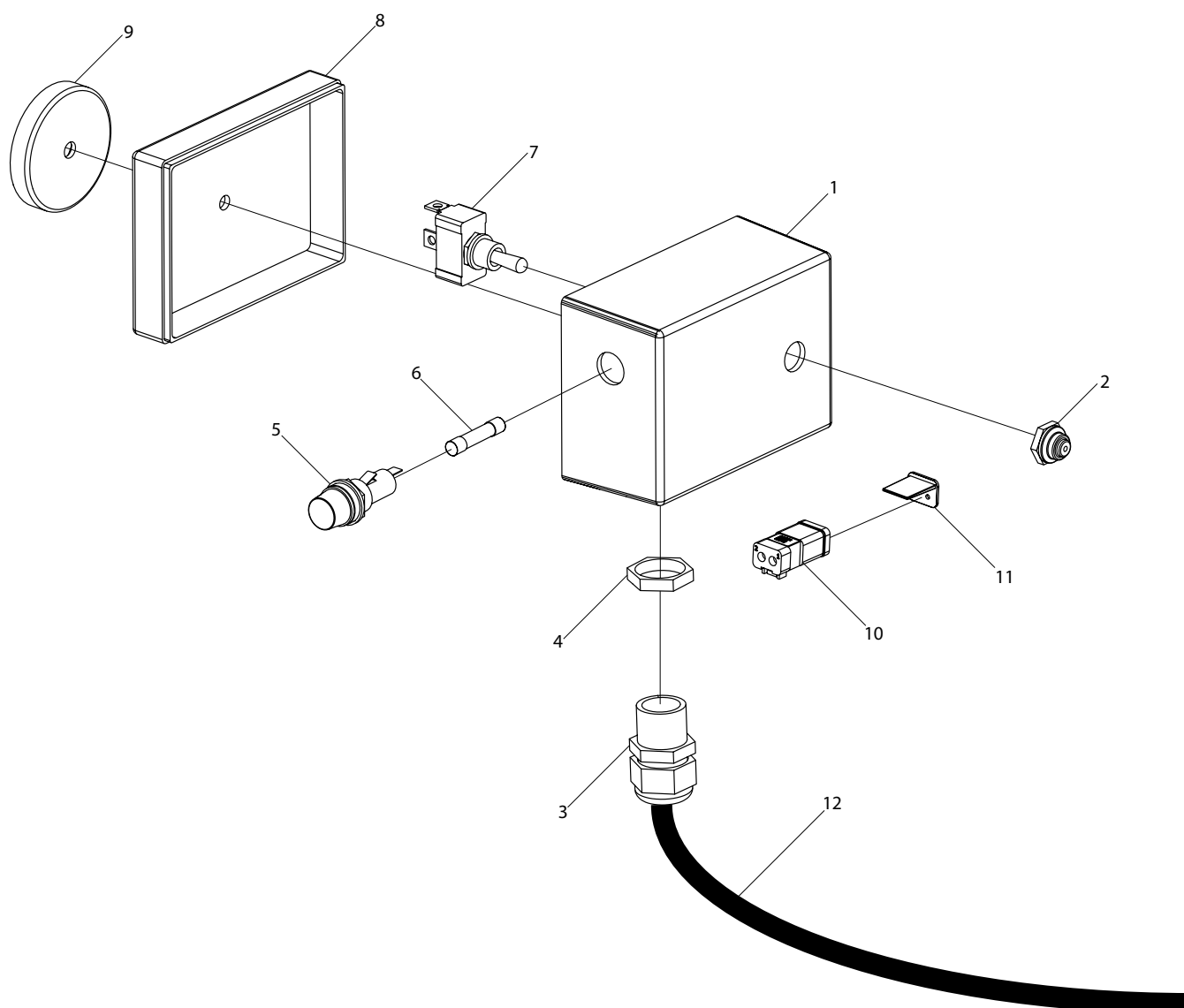
ID	Position on Rake	Description	Part#	Qty.
1	Tractor to Front Manifold	1/4" Hose x 135"	505761	2
2	Tractor to Front Manifold	1/2" Hose x 135"	505760	2
3	Front Manifold to Rear Manifold	1/4" Hose x 263"	505763	2
4	Front Manifold to Rear Manifold	3/8" Hose x 263"	505762	2
5	Front Manifold to Front Rotor Lift Cylinder	1/4" Hose x 130"	505753	1
6	Front Manifold to Front Leveling Cylinder	1/4" Hose x 27"	505754	2
7	Rear Manifold to Bridge Cylinder	1/4" Hose x 20"	505755	1
8	Rear Manifold to Bridge Cylinder	1/4" Hose x 26"	505756	1
9	Rear Manifold to Rear Rotor Lift Cylinder	1/4" Hose x 104"	505757	1
10	Rear Manifold to Swing Cylinder	1/4" Hose x 73"	505758	1
11	Rear Manifold to Swing Cylinder	1/4" Hose x 75"	505759	1
12	Rear Manifold to Curtain Cylinder	1/4" Hose x 89"	505764	1
13	Rear Manifold to Curtain Cylinder	1/4" Hose x 61"	505765	1

Lighting



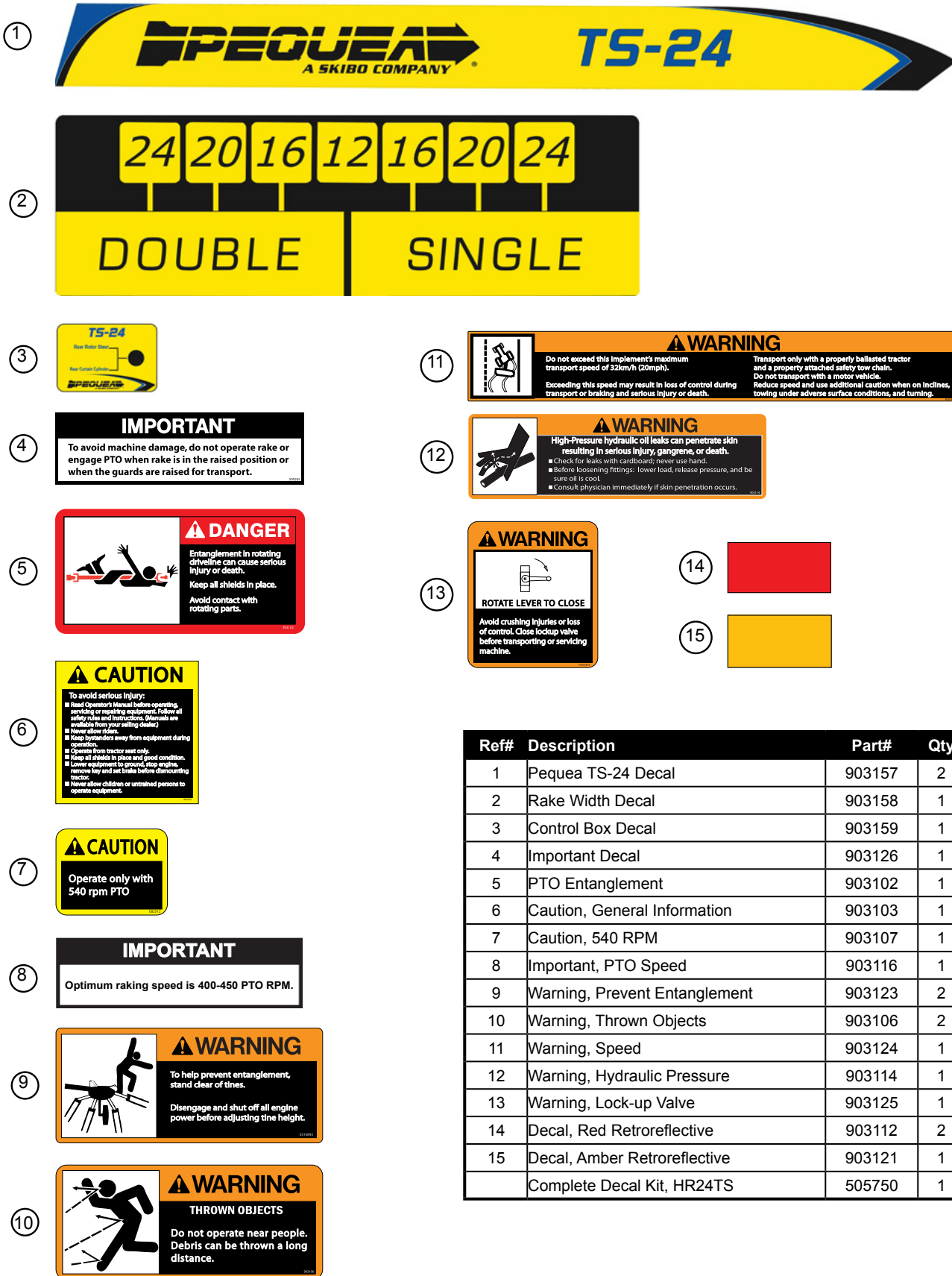
Ref#	Description	Part#	Qty.
1	Light Bracket	505667	2
2	Light, Amber/Amber	507164	2
3	Light, Red/Blank	830160	2
4	SMV Triangle	507166	1
5	Wiring Harness	505104	1

Switch Box



Ref#	Description	Part#	Qty.
1	Switchbox Cover	830399	1
2	Toggle Boot	507413	1
3	Strain Relief Cord Connector	507415	1
4	1/2" NPT Locking Nut	507414	1
5	Fuse Retainer	507402	1
6	10 Amp AGC™ Fuse	507403	1
7	SPST On-Off Toggle Switch	830353	1
8	Switchbox Base	830398	1
9	Cup Magnet	800450	1
10	Housing	290052	2
11	Wedgelock	290028	2
12	Complete Wiring Harness Kit	505104	1

Decals



Ref#	Description	Part#	Qty
1	Pequeea TS-24 Decal	903157	2
2	Rake Width Decal	903158	1
3	Control Box Decal	903159	1
4	Important Decal	903126	1
5	PTO Entanglement	903102	1
6	Caution, General Information	903103	1
7	Caution, 540 RPM	903107	1
8	Important, PTO Speed	903116	1
9	Warning, Prevent Entanglement	903123	2
10	Warning, Thrown Objects	903106	2
11	Warning, Speed	903124	1
12	Warning, Hydraulic Pressure	903114	1
13	Warning, Lock-up Valve	903125	1
14	Decal, Red Retroreflective	903112	2
15	Decal, Amber Retroreflective	903121	1
	Complete Decal Kit, HR24TS	505750	1

