



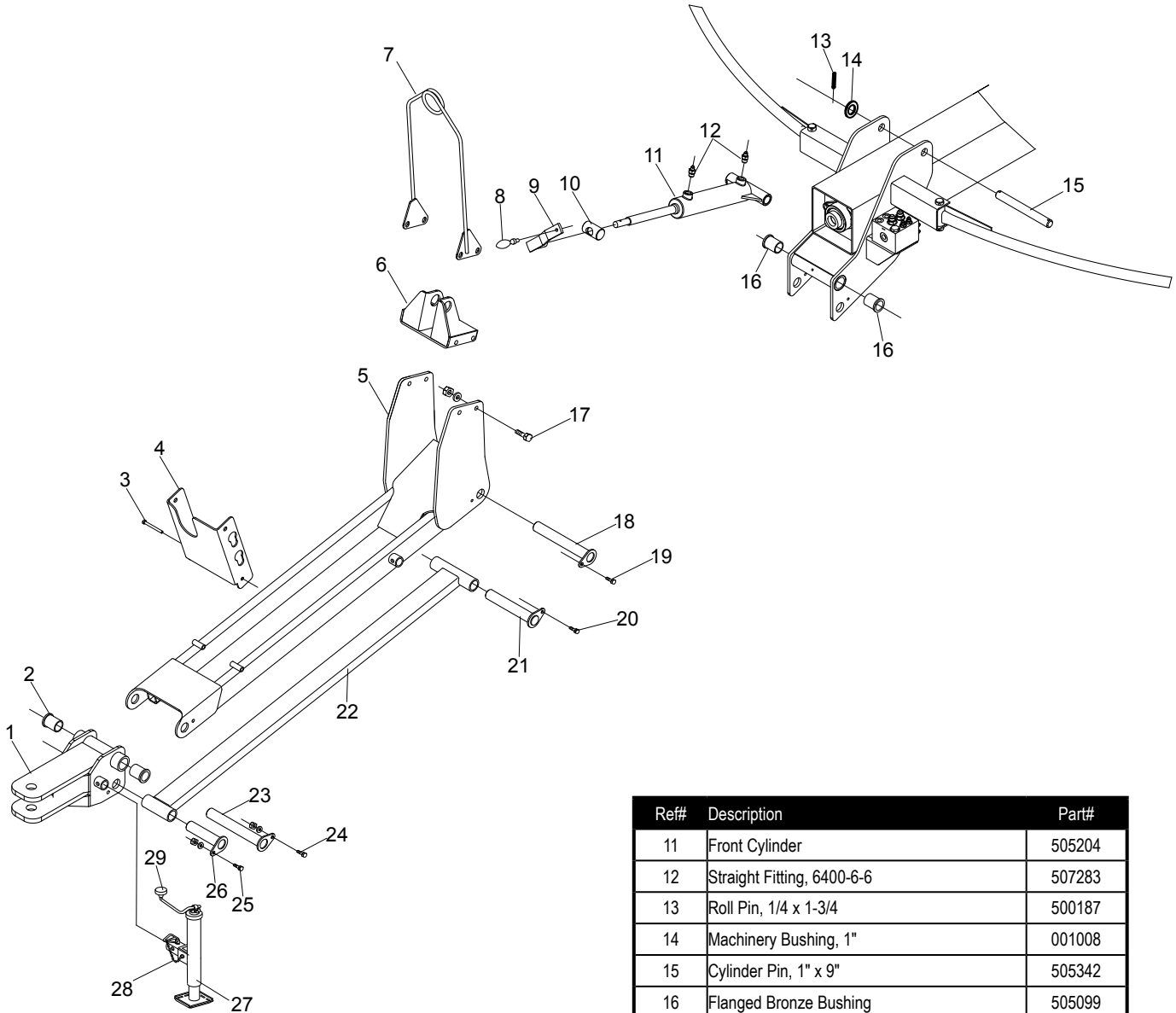
# HR24TS Rotary Rake

**Serial Numbers less than 87500**

## Illustrated Parts Breakdown

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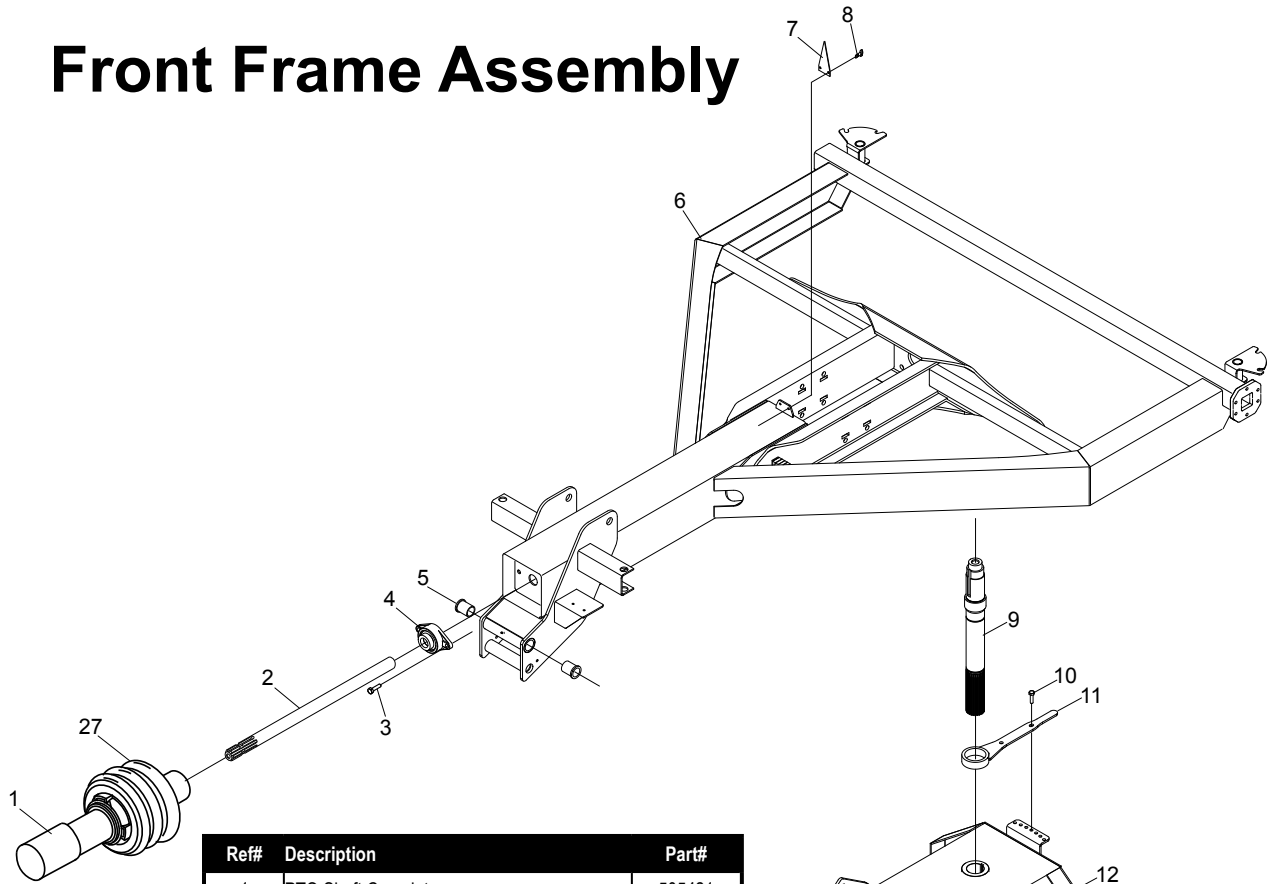
# Tongue Assembly



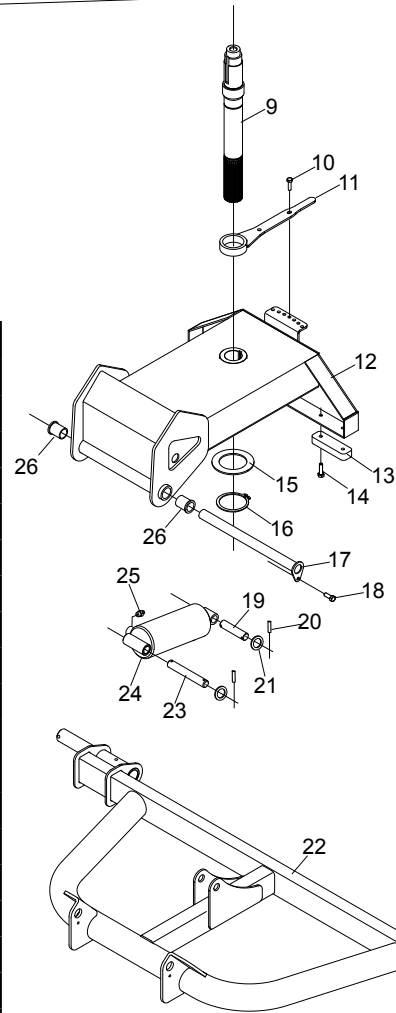
Ref#	Description	Part#
1	Hitch	505108
2	Flanged Bronze Bushing	505099
3	Hex Bolt, 3/8 x 2-3/4	000305
4	PTO Stand	505241
5	Tongue	505098
6	Trunnion Pivot	505212
7	Hose Guide	505033
8	Handle Knob	502149
9	Cylinder Handle	503037
10	Threaded Cylinder Mount	502218

Ref#	Description	Part#
11	Front Cylinder	505204
12	Straight Fitting, 6400-6-6	507283
13	Roll Pin, 1/4 x 1-3/4	500187
14	Machinery Bushing, 1"	001008
15	Cylinder Pin, 1" x 9"	505342
16	Flanged Bronze Bushing	505099
17	Hex Bolt, 1/2 x 1-1/2	000435
18	Pivot Shaft, 9.25"	505283
19	Hex Bolt, 3/8 x 3/4	000245
20	Hex Bolt, 3/8 x 3/4	000245
21	Pivot Shaft, 8"	505288
22	Hitch Linkage	505102
23	Pivot Shaft, 9.25"	505283
24	Hex Bolt, 3/8 x 1	000270
25	Hex Bolt, 3/8 x 1	000270
26	Pivot Shaft, 5.5"	505285
27	Complete Jack	500009
28	Pin & Chain	500012
29	Jack Handle	500010

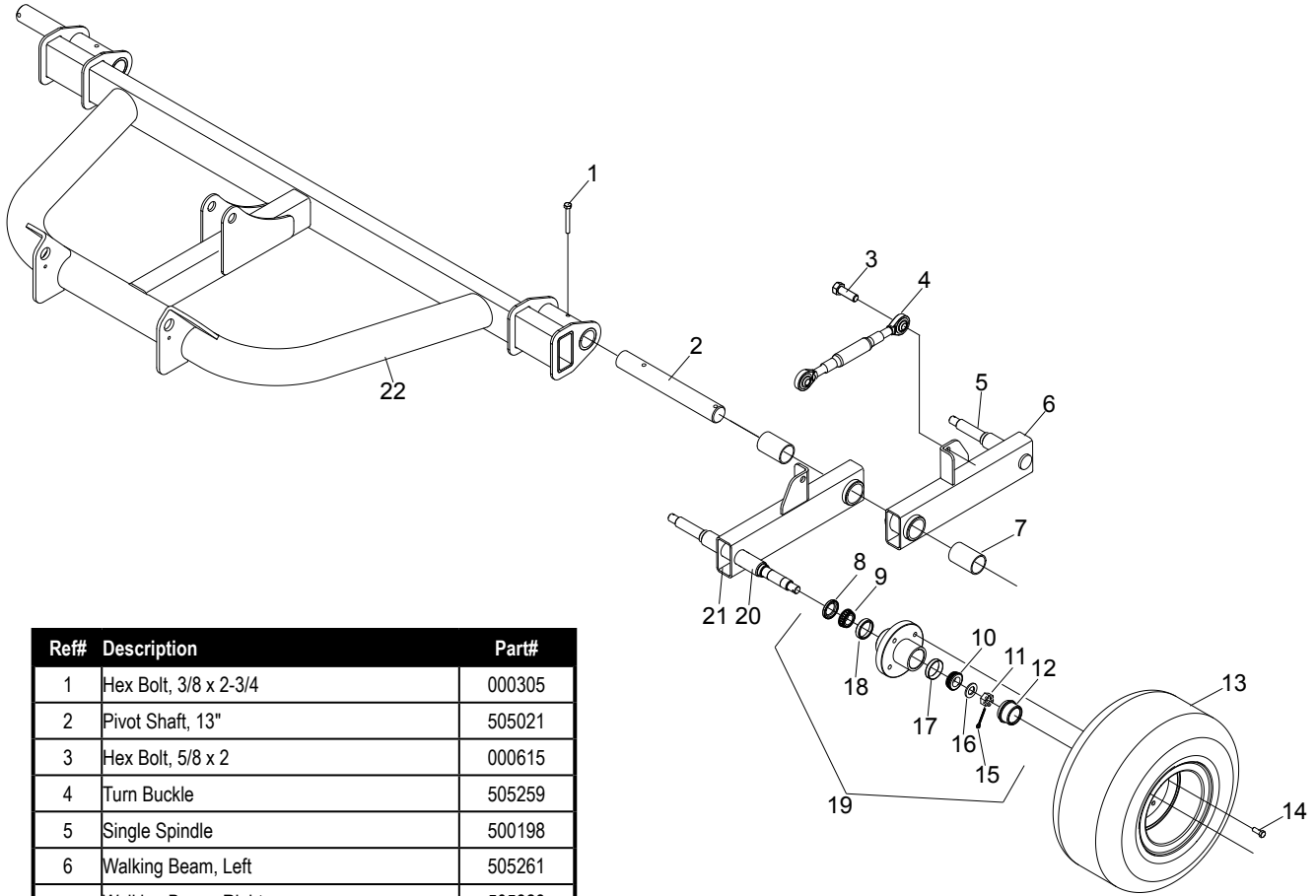
# Front Frame Assembly



Ref#	Description	Part#
1	PTO Shaft Complete	505421
2	Front Drive Shaft	505413
3	Hex Bolt, 1/2 x 1-1/2	000435
4	Flange Bearing	500067
5	Flanged Bronze Bushing	505099
6	Front Tunnel Weldment	505036
7	Indicator Arrow	505217
8	Hex Bolt, 1/4 x 3/4	000175
9	Gearbox Center Shaft	502054
10	Hex Bolt, 3/8 x 1-1/4	000275
11	Cam Pitch Handle	505258
12	Front Head	505128
13	Rubber Bumper	505269
14	Carriage Bolt, 3/8 x 1-3/4	000130
15	60mm Machinery Washer	505244
16	60mm Ext. Retaining Ring	502073
17	Pivot Shaft, 17.25"	505113
18	Hex Bolt, 3/8 x 7/8	000250
19	Cylinder Pin	508186
20	Roll Pin, 1/4 x 1-3/4	500187
21	Machinery Bushing, 1"	001008
22	Front Axle	505014
23	Cylinder Pin	505184
24	Hydraulic Cylinder	505167
25	Straight Fitting, 6400-4-6	700908
26	Flanged Bronze Bushing	505099
27	PTO Shield Kit, Bondioli Shafts Only	505800

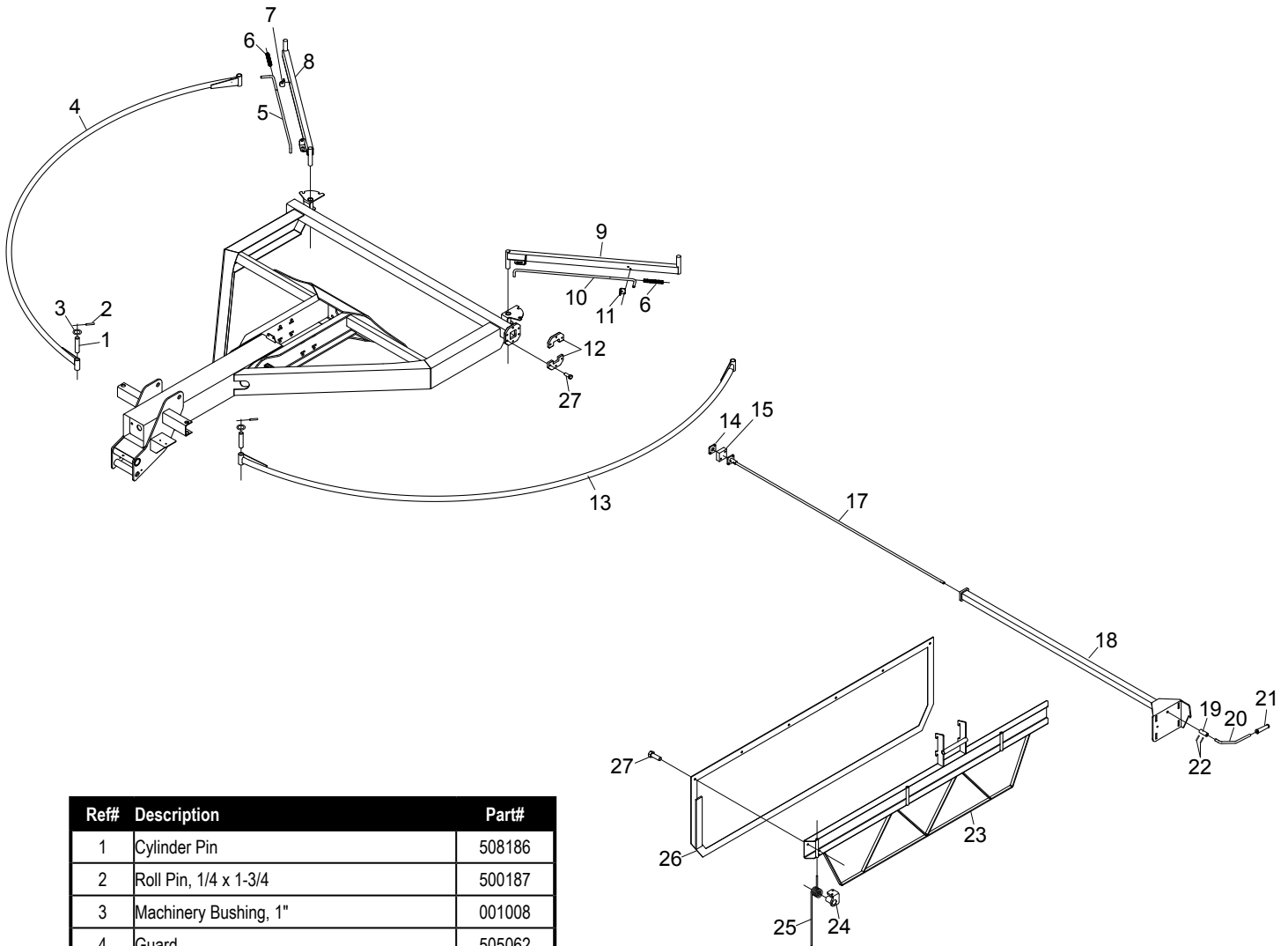


# Front Axle



Ref#	Description	Part#
1	Hex Bolt, 3/8 x 2-3/4	000305
2	Pivot Shaft, 13"	505021
3	Hex Bolt, 5/8 x 2	000615
4	Turn Buckle	505259
5	Single Spindle	500198
6	Walking Beam, Left	505261
	Walking Beam, Right	505328
7	Bronze Bushing	505093
8	Grease Seal	500201
9	Bearing, L44642	500202
10	Bearing, L44643	500202
11	Spindle Nut	500207
12	Dust Cap	500209
13	Tire & Wheel Assembly	500220
14	Lug Bolt, 1/2-20	500210
15	Cotter Pin	500208
16	Spindle Washer	500206
17	Race, L44610	500204
18	Race, L44610	500204
19	Complete Hub	500199
20	Single Spindle	500198
	Double Spindle	505114
21	Walking Beam w/ Single Spindle, Left	505261
	Walking Beam w/ Single Spindle, Right	505328
	Walking Beam w/ Double Spindle, Left	505329
	Walking Beam w/ Double Spindle, Right	505019
22	Axle Weld Assembly	505014

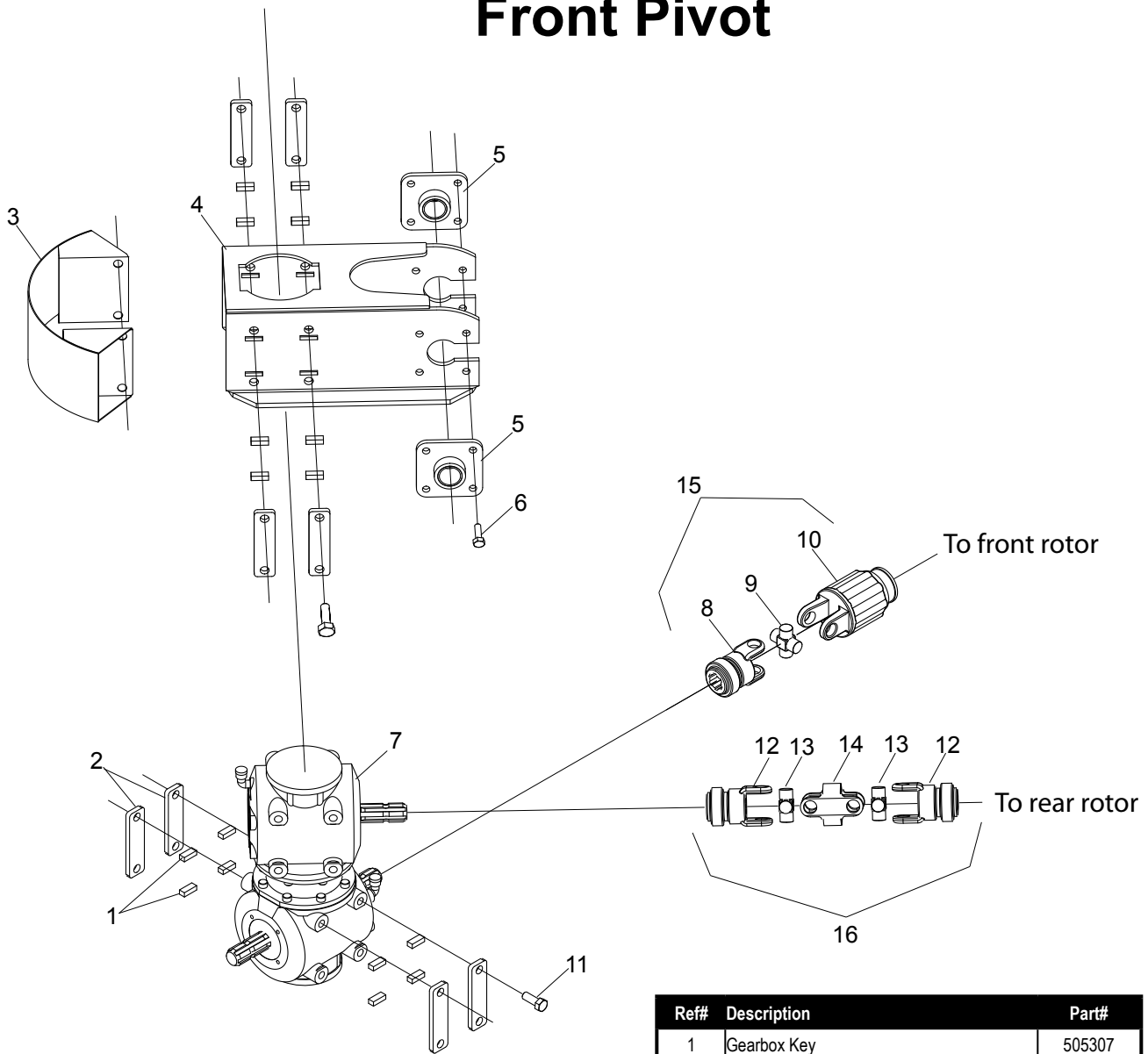
# Curtain & Guards, Front Rotor



Ref#	Description	Part#
1	Cylinder Pin	508186
2	Roll Pin, 1/4 x 1-3/4	500187
3	Machinery Bushing, 1"	001008
4	Guard	505062
5	Guard Lock Pin, Right	505323
6	Compression Spring	505316
7	Guide Bracket, Right	505318
8	Guard Linkage, Right	505304
9	Guard Linkage, Left	505325
10	Guard Lock Pin, Left	505315
11	Guide Bracket, Left	505317
12	Plastic Guide	505194
13	Guard	505062
14	Rubber Holder Plate	505330
15	Rubber Torsion Block	505334
17	Torsion Bar	505344
18	Curtain Slide	505045
19	Curtain Handle Coupler	505053

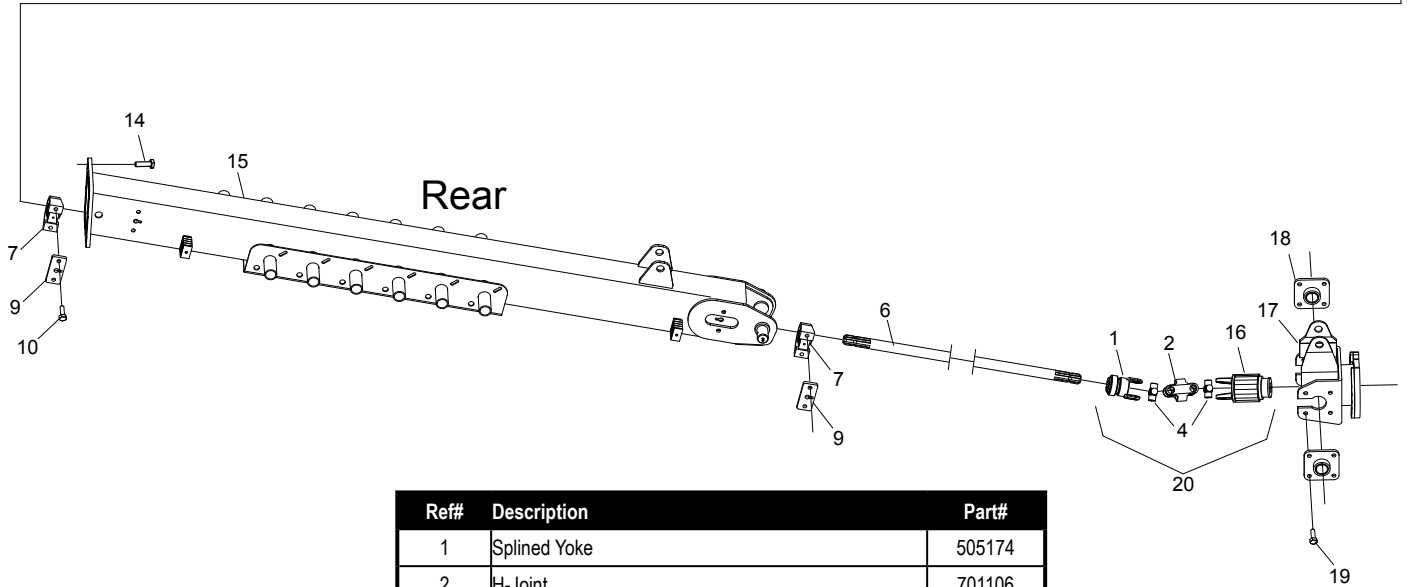
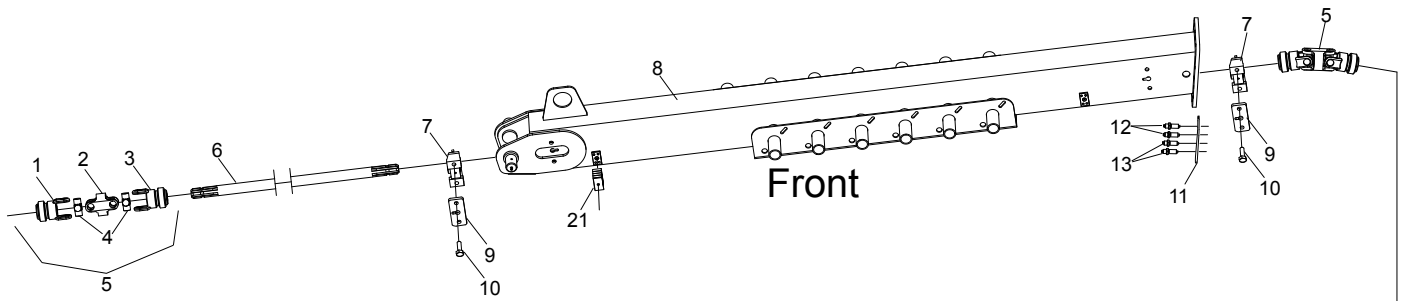
Ref#	Description	Part#
20	Torsion Bar Handle	505050
21	Handle Grip	505052
22	Roll Pin, 3/16 x 1-1/4	000563
23	Front Curtain Frame	505271
24	Spring Shaft	505299
25	Curtain Support Spring	505294
26	Hay Curtain	505044
27	Carraige Bolt, 3/8 x 1-1/4	000150

# Front Pivot



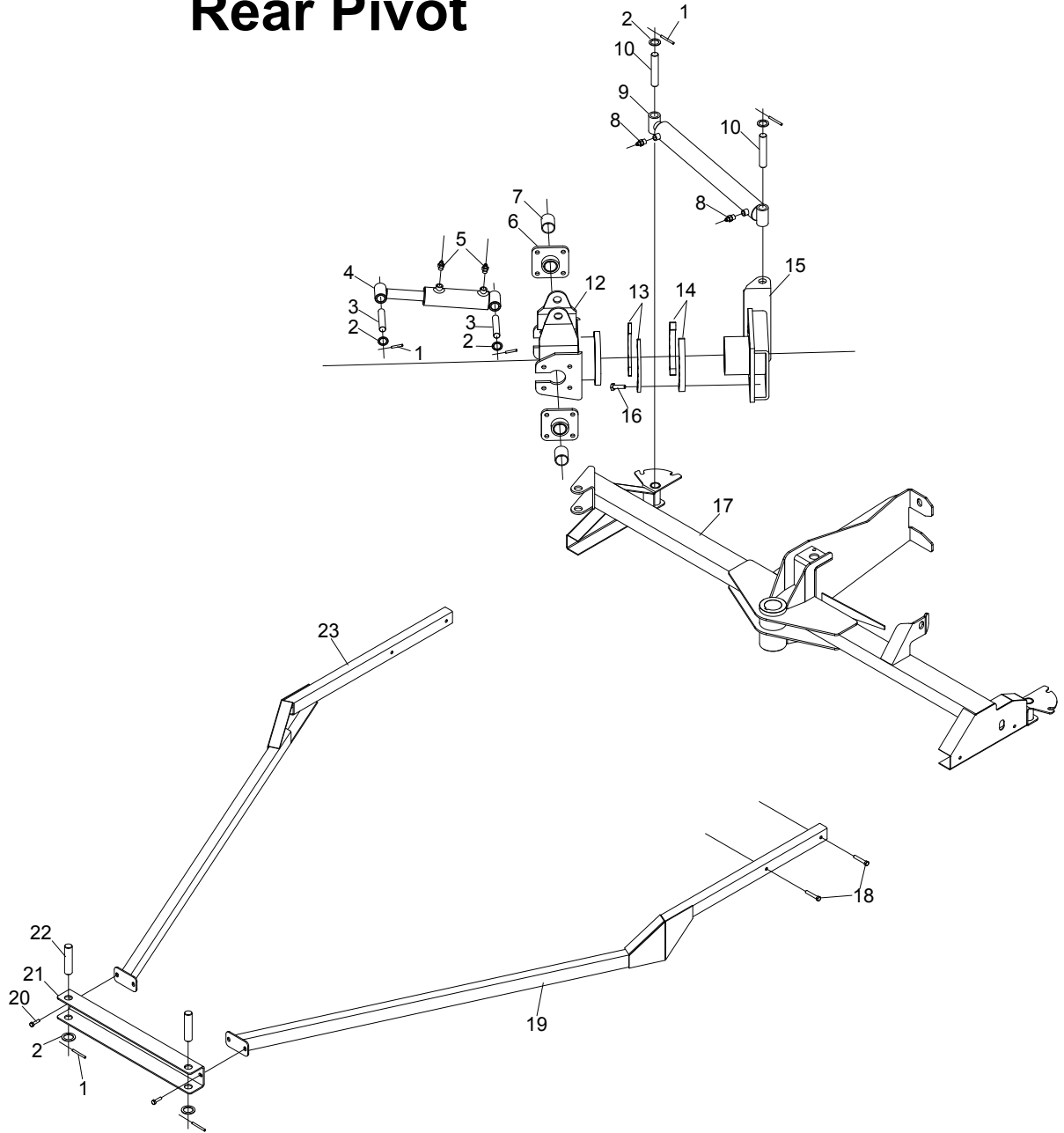
Ref#	Description	Part#
1	Gearbox Key	505307
2	Key Retainer	505191
3	Indicator Panel	505215
4	Swivel Mount	505069
5	Pivot Bearing	505075
6	Hex Bolt, 1/2 x 1-1/2	000435
7	Swivel Gearbox	505000
8	Splined Yoke	505174
9	Cross & Bearing Kit	701172
10	Splined Clutch	505173
11	Hex Bolt, M16 x 40	002690
12	Splined Yoke	505174
13	Cross & Bearing Kit	701172
14	H-Joint	701106
15	U-Joint Assembly w/ Clutch	505339
16	H-Joint Assembly	505176

# Bridge Frame Assembly



Ref#	Description	Part#
1	Splined Yoke	505174
2	H-Joint	701106
3	Splined Yoke	505174
4	Cross & Bearing Kit	701172
5	H-Joint Assembly	505176
6	Drive Shaft	505171
7	Bearing	505291
8	Front Swivel Beam	505071
9	Bearing Spacer	505292
10	Hex Bolt, 1/2 x 1-1/2	000435
11	Bulkhead Bracket	505196
12	Bulkhead Fitting 2700-4-4	505240
13	Bulkhead Fitting 2700-6-6	505218
14	Hex Bolt, 7/16 x 1-3/4	000362
15	Rear Swivel Beam	505177
16	Splined Clutch	505173
17	Rear Swivel Weldment	505087
18	Pivot Bearing	505075
19	Hex Bolt, 1/2 x 1-1/2	000435
20	Clutch H-Joint Assembly	505175
21	Hose Block Kit, 1/4 Hose	507294
	Hose Block Kit, 3/8 Hose	507300

# Rear Pivot

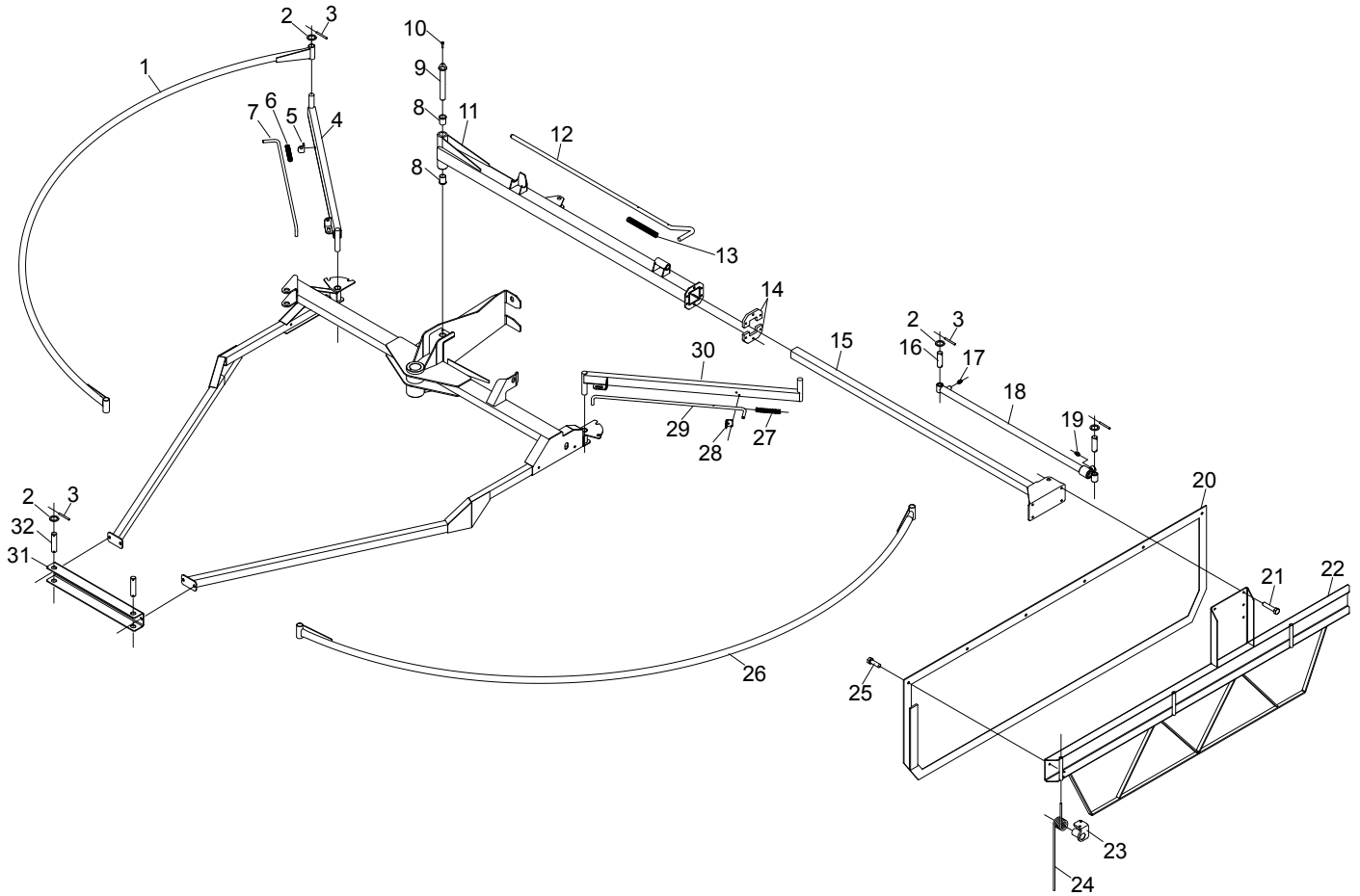


Ref#	Description	Part#
1	Roll Pin, 1/4 x 1-3/4	500187
2	Machinery Bushing, 1"	001008
3	Cylinder Pin	701016
4	Rear Upper Cylinder	505205
5	Straight Fitting, 6400-4-6	700908
6	Pivot Bearing	505075
7	Flanged Bronze Bushing	700054
8	Hyd Fitting, 6400-4-6	700908
9	Swing Cylinder	505219
10	Cylinder Pin	701021
12	Rear Swivel Weldment	505087

Ref#	Description	Part#
13	Swivel Clamp	505089
14	Swivel Spacer	505088
15	Rear Gearbox Mount	505081
16	Socket Head Bolt, M16 x 55	002697
17	Rake Angle Weldment	505138
18	Hex Bolt, 3/8 x 2-1/4	000315
19	Guard Frame, Left	505237
20	Hex Bolt, 3/8 x 1	000270
21	Guard Mounting Bracket	505197
22	Guard Pivot Pin, 4.25"	508186
23	Guard Frame, Right	505238



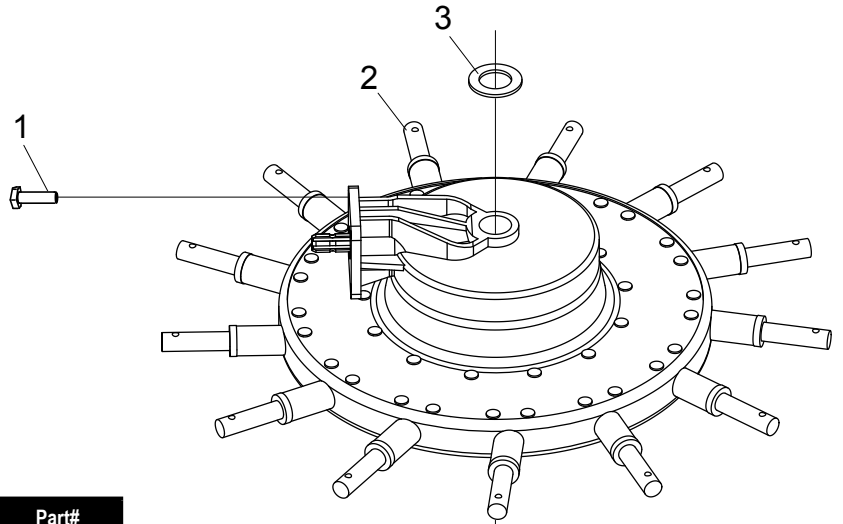
# Guards & Curtain, Rear Rotor



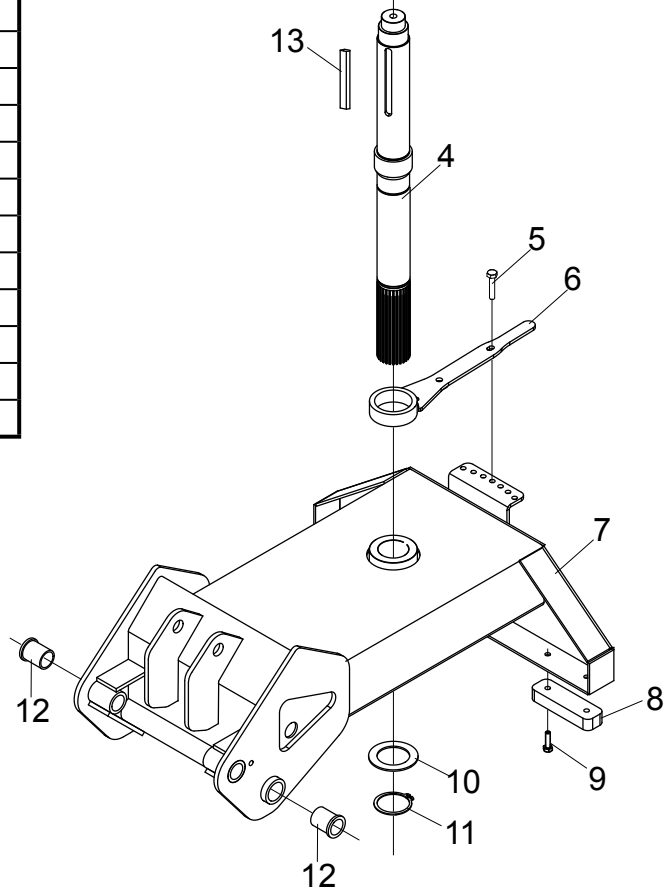
Ref#	Description	Part#
1	Guard	505062
2	Machinery Bushing, 1"	001008
3	Roll Pin, 1/4 x 1-3/4	500187
4	Guard Linkage, Right	
5	Guide Bracket, Right	505318
6	Compression Spring	505316
7	Guard Lock Pin, Right	505323
8	Flanged Bronze Bushing	505099
9	Teardrop Pivot Shaft	505283
10	Hex Bolt, 3/8 x 3/4	000245
11	Rear Curtain Mount	505151
12	Curtain Lock Shaft	505247
13	Compression Spring	505263
14	Plastic Guide	505194
15	Curtain Pivot Tube	505054
16	Cylinder Pin	502213

Ref#	Description	Part#
17	Hyd Fitting, 6400-4-4	290195
18	Curtain Cylinder	505154
19	Hyd Fitting, 6400-4-4	290195
20	Hay Curtain	505044
21	Hex Bolt, 3/8 x 1	000270
22	Pivot Bearing	505057
23	Spring Mount	505299
24	Cusrtain Support Spring	505294
25	Carraige Bolt, 3/8 x 1-1/4	000150
26	Guard	505062
27	Compression Spring	505316
28	Guide Bracket, Left	505317
29	Guard Lock Pin, Left	505315
30	Guard Linkage, Left	
31	Guard Mounting Bracket	505197
32	Pivot Pin	508186

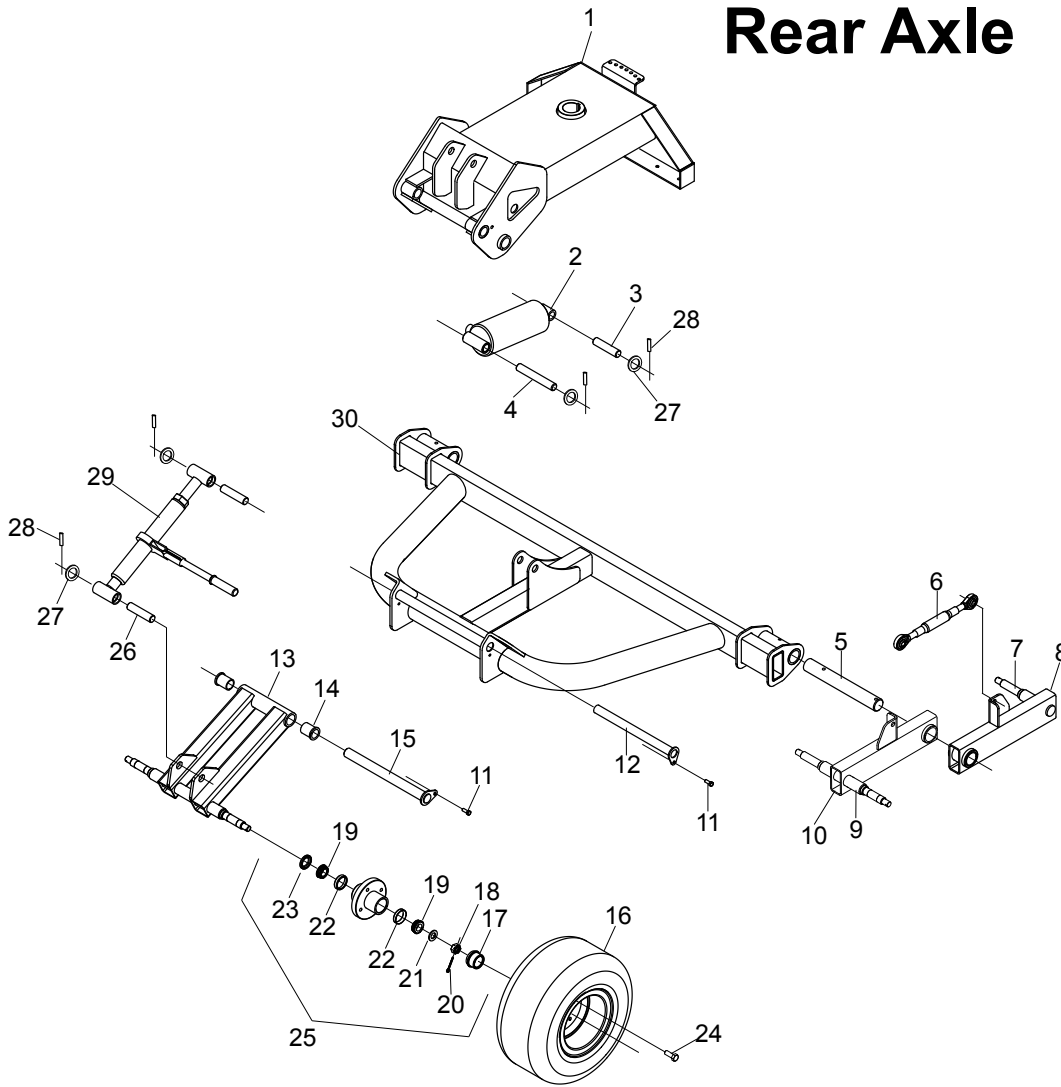
# Gearbox & Stand, Rear Rotor



Ref#	Description	Part#
1	Hex Bolt, M16 x 55	002699
2	Complete Gearbox	505034
3	Shim	505139
4	Gearbox Center Shaft	502135
5	Hex Bolt, 3/8 x 1-1/4	000275
6	Cam Pitch Handle	505258
7	Rear Head Assembly	505008
8	Rubber Bumper	505269
9	Carriage Bolt, 3/8 x 1-3/4	000130
10	60mm Machinery Washer	505244
11	60mm Ext Retaining Ring	502073
12	Flanged Bronze Bushing	505099
13	Gearbox Shaft Key	502136



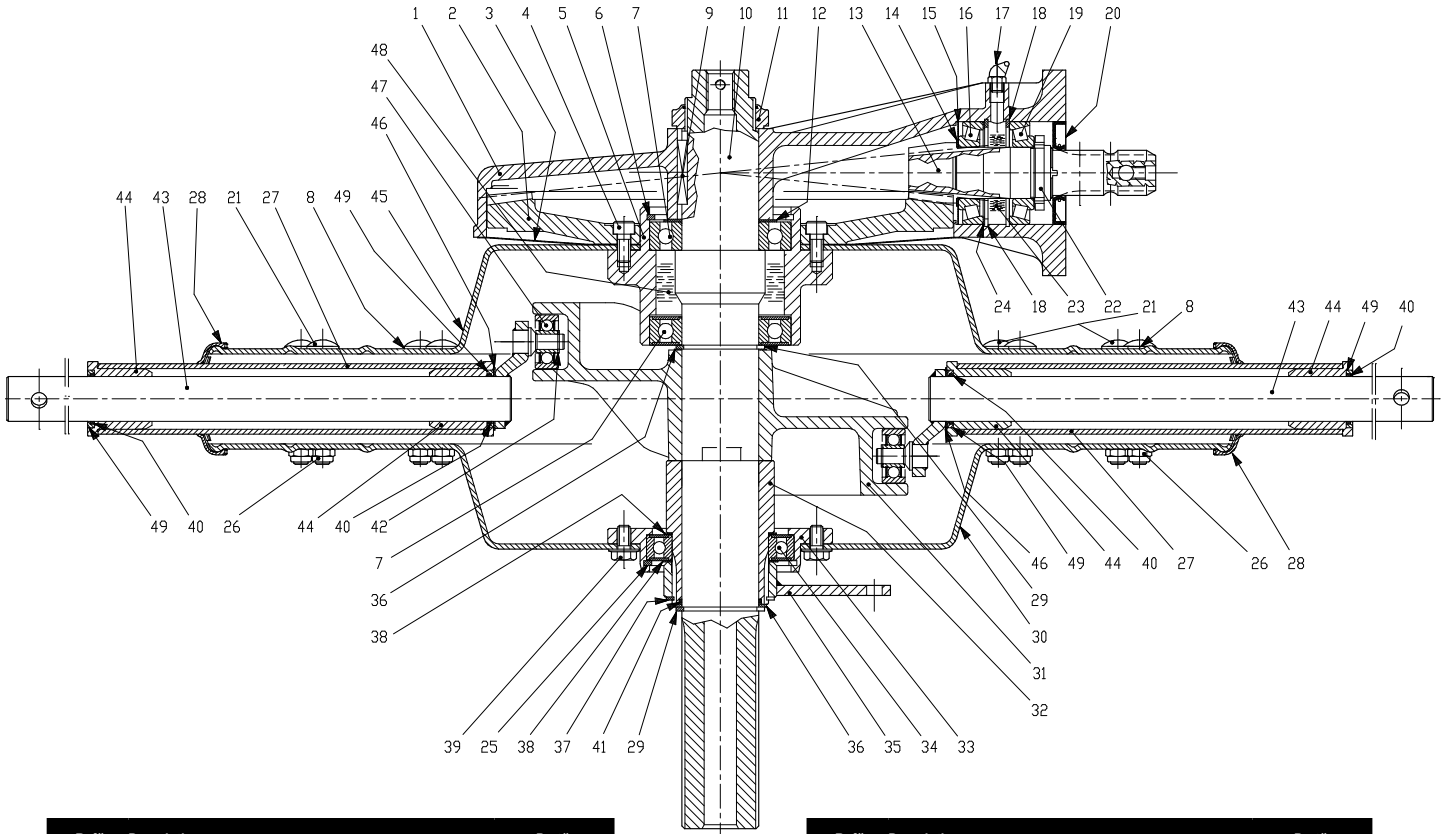
# Rear Axle



Ref#	Description	Part#
1	Rear Head Weld Assembly	505008
2	Hydraulic Cylinder	505167
3	Cylinder Pin, 4.25"	508186
4	Cylinder Pin, 6.625"	505184
5	Pivot Shaft, 13"	505021
6	Turn Buckle	505259
7	Single Spindle	500198
8	Left Rear Axle	505261
9	Double Spindle	505114
	Single Spindle	500198
10	Walking Beam w/ Single Spindle, Left	505261
	Walking Beam w/ Single Spindle, Right	505328
	Walking Beam w/ Double Spindle, Left	505329
	Walking Beam w/ Double Spindle, Right	505019
11	Hex Bolt, 3/8 x 1	000270
12	Pivot Shaft, 17.25"	505113
13	Pitch Arm Weld Assembly	505118
14	Flanged Bronze Bushing	505099
15	Pivot Shaft	505281

Ref#	Description	Part#
12	Pivot Shaft, 17.25"	505113
13	Pitch Arm Weld Assembly	505118
14	Flanged Bronze Bushing	505099
15	Pivot Shaft	505281
16	Tire & Wheel Assembly	500220
17	Dust Cap	500209
18	Spindle Nut	500207
19	Bearing, L44643	500202
20	Cotter Pin	500208
21	Spindle Washer	500206
22	Race, L44610	500204
23	Grease Seal	500201
24	Lug Bolt	500210
25	Complete Hub	500199
26	Pivot Pin	507129
27	Machinery Bushing, 1"	001008
28	Roll Pin, 1/4 x 1-3/4	500187
29	Ratchet Assembly	507230
30	Axle Weld Assembly	505014

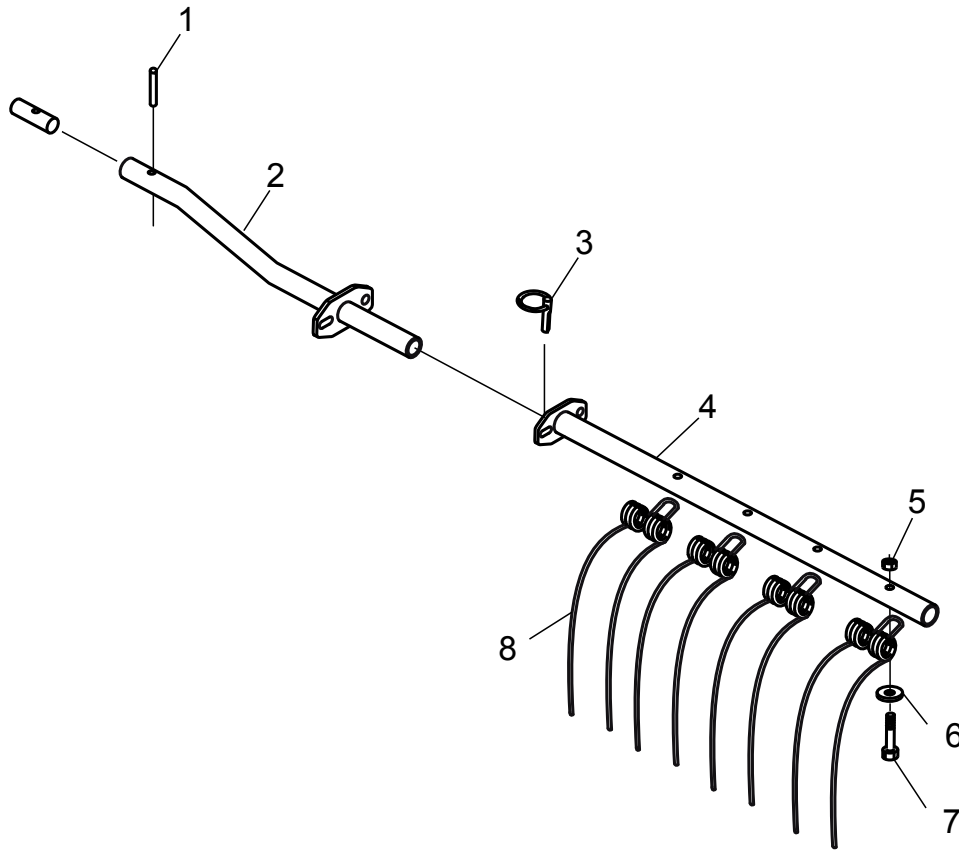
# Rotary Gearbox



Ref#	Description	Part#
1	COVER	502045
2	CROWN WHEEL	502046
3	COVER	502047
4	BOLT	502048
5	FLANGE	502049
6	SNAP RING	502050
7	BEARING	502051
8	BLANK WASHER	502052
9	PARRALLEL KEY	502053
10	DRIVE SHAFT	502054
11	LOCKNUT	502055
12	SHIM	502056
13	PINION SHAFT	502057
14	SHIM	502058
15	SHIM	502059
16	BEARING	502060
17	GREASE NIPPLE	502061
18	SNAP RING	502062
19	BEARING	502063
20	OIL SEAL	502064
21	BOLT	502065
22	NUT	502066
23	GREASE	502067
24	SHIM	502068
25	SNAP RING	502069

Ref#	Description	Part#
26	LOCKNUT	502070
27	CONNECTING ROD SUPPORT	502071
28	CAP	502072
29	SNAP RING	502073
30	COVER	502074
31	CAM CENTER	502075
32	SPACER	502076
33	COVER	502077
34	BEARING	502078
35	LEVER	502079
36	SHIM	502080
37	SNAP RING	502081
38	SHIM	502082
39	BOLT	502083
40	O-RING	502084
41	O-RING	502085
42	SNAP RING	502086
43	CONNECTING ROD	502087
44	HUB	502088
45	COVER	502089
46	SHIM	502090
47	BEARING	502091
48	GREASE	502092
49	O-RING BUSHING	502093

# Tine Arm & Tine



Ref#	Description	Part#
1	Roll Pin, 12 x 60	702019
2	Stub Arm Weld Assembly	502094
3	Lynch Pin	500219
4	Tine Arm	505407
5	Hex Locknut, 1/2"	000950
6	1/2" HD Flat Washer	000520
7	Hex Bolt, 1/2 x 3-1/2 GR8	000482
8	Tine	500218