

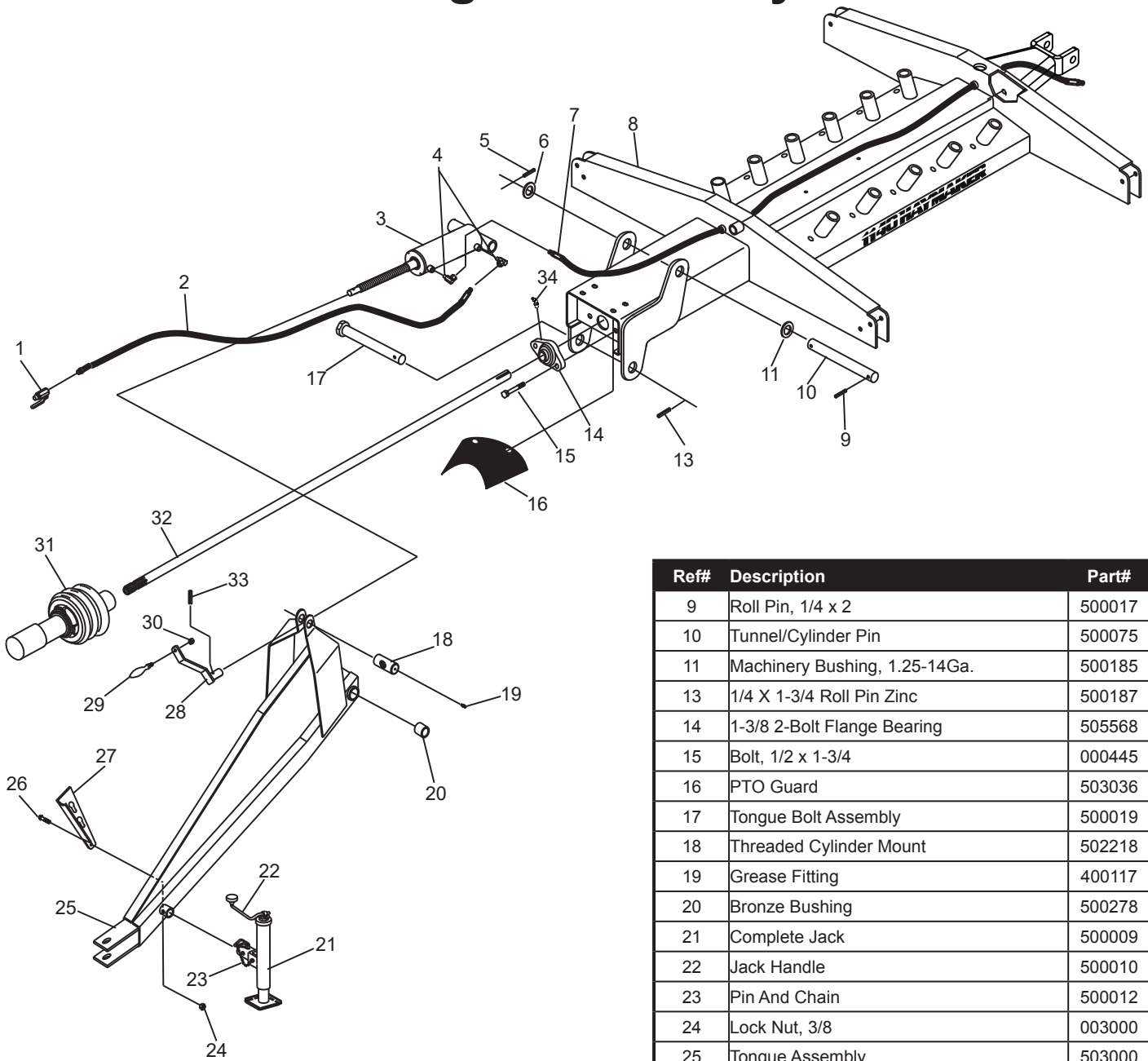


# HR1140 Rotary Rake

## Illustrated Parts Breakdown

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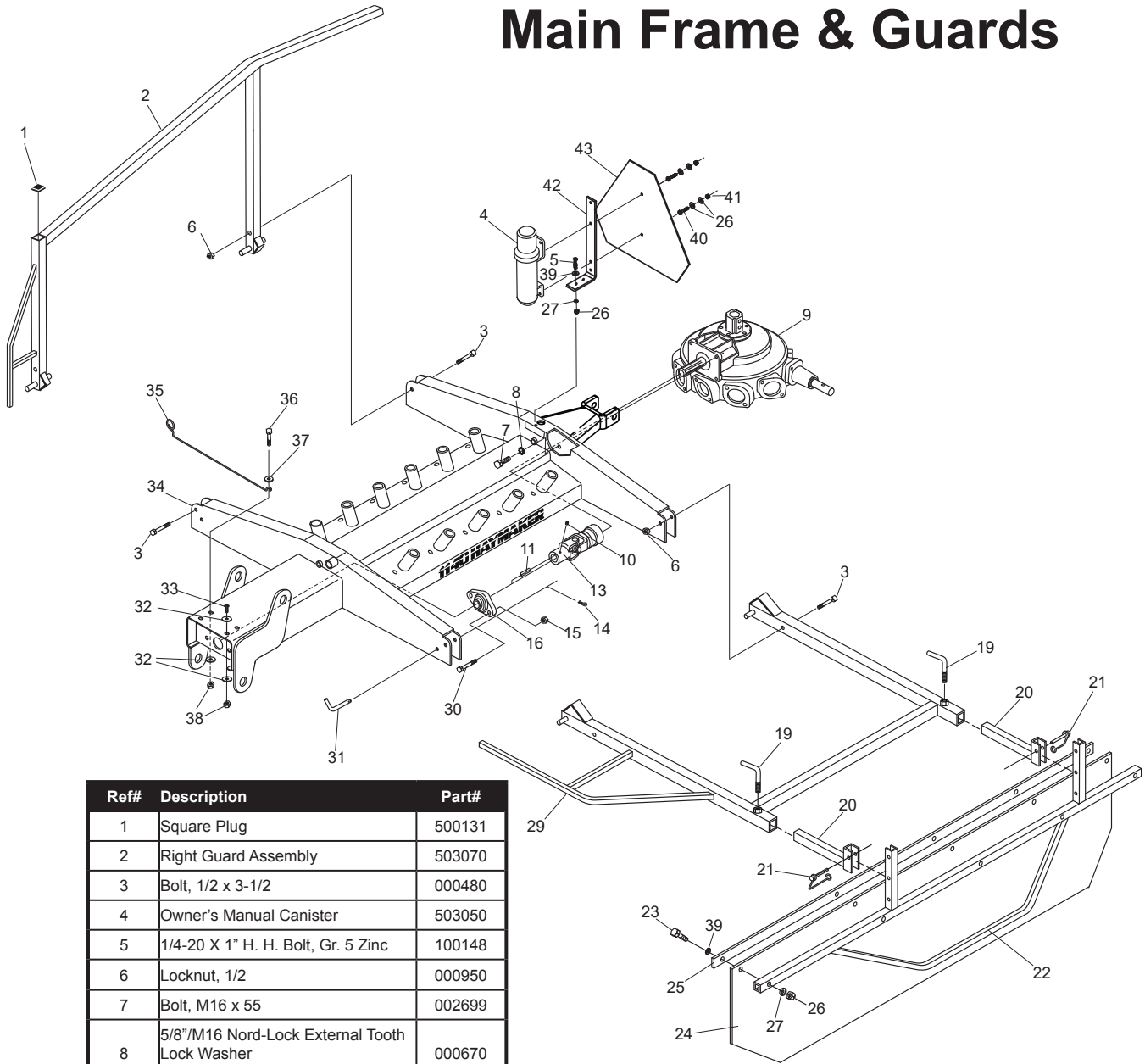
# Tongue Assembly



Ref#	Description	Part#
1	Ball Valve	502322
2	Hydraulic Hose	502294
3	Front Cylinder	500291
	Front Cyl Seal Kit (S/N -31142)	503200
	Front Cyl Seal Kit (S/N 31142+)	503230
4	Elbow Fitting, 1501-4-4	502302
5	Roll Pin, 1/4 x 2	500017
6	Machinery Bushing, 1.25-14Ga.	500185
7	Hydraulic Hose	503035
8	Tunnel Assembly	503032

Ref#	Description	Part#
9	Roll Pin, 1/4 x 2	500017
10	Tunnel/Cylinder Pin	500075
11	Machinery Bushing, 1.25-14Ga.	500185
13	1/4 X 1-3/4 Roll Pin Zinc	500187
14	1-3/8 2-Bolt Flange Bearing	505568
15	Bolt, 1/2 x 1-3/4	000445
16	PTO Guard	503036
17	Tongue Bolt Assembly	500019
18	Threaded Cylinder Mount	502218
19	Grease Fitting	400117
20	Bronze Bushing	500278
21	Complete Jack	500009
22	Jack Handle	500010
23	Pin And Chain	500012
24	Lock Nut, 3/8	003000
25	Tongue Assembly	503000
26	Bolt, 3/8 x 1-1/4	000275
27	PTO Holder	704132
28	Cylinder Handle	503037
29	Stainless Steel Handle	502149
30	Jam Nylon Nut, 3/8	000920
31	Complete PTO Shaft	503028
32	Drive Shaft	500277
33	Roll Pin, 1/4 x 1-1/4 Zinc	500102
34	45° Degree Grease Fitting, 1/4" Thread	701171

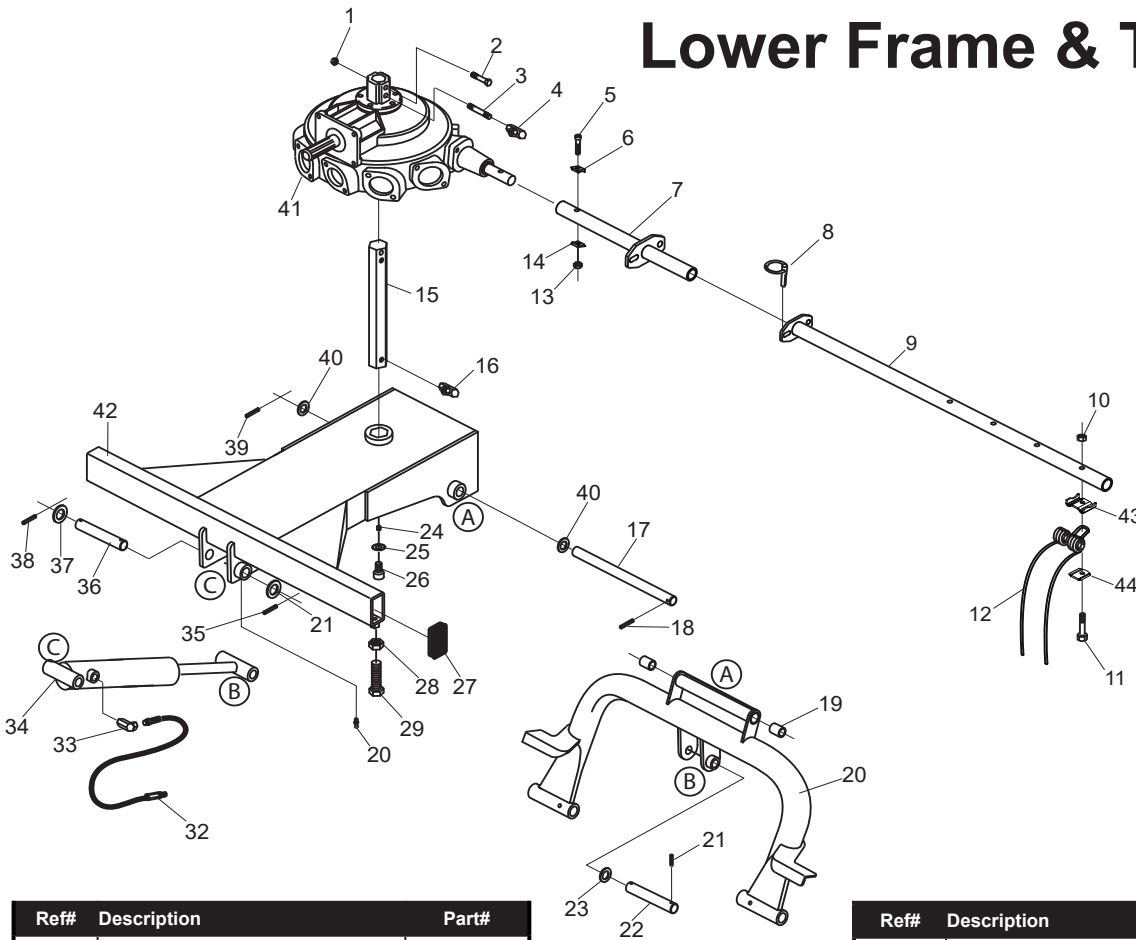
# Main Frame & Guards



Ref#	Description	Part#
1	Square Plug	500131
2	Right Guard Assembly	503070
3	Bolt, 1/2 x 3-1/2	000480
4	Owner's Manual Canister	503050
5	1/4-20 X 1" H. H. Bolt, Gr. 5 Zinc	100148
6	Locknut, 1/2	000950
7	Bolt, M16 x 55	002699
8	5/8"/M16 Nord-Lock External Tooth Lock Washer	000670
9	Complete Gearbox	500226
10	Set Screw, 3/8 x 3/8	001130
11	Key, 5/16 x 1-3/4	500217
13	12 Series U-Joint	500268
14	Safety Clip	200011
15	1/2"-13 Standard Hex Weld Nut	903066
16	1-3/8 2-Bolt Flange Bearing	505568
19	Curtain Set Bolt	500148
20	Telescoping Tube	500149
21	3/8 Snapper Pin	500158
22	Curtain Mount Assembly	500152
23	Bolt, 1/4 x 2"	000190
24	Hay Curtain	500156
25	Curtain Bar	500155
26	Hex Nut, 1/4	000900
27	Lock Washer, 1/4	000805

Ref#	Description	Part#
29	Left Guard Assembly	503075
30	Bolt, 1/2 x 1-3/4	000445
31	1/2 x 3 Bent Pull Pin	100330
32	3/8 Fender Washer	001105
33	Bolt, 5/16 x 1"	000221
34	Tunnel Assembly	503032
35	Hose Support	502288
36	Bolt, 5/16 x 1-1/2	000225
37	Hose Support Washer	502308
38	5/16 Nylon Lock Nut	002999
39	1/4 USS Flat Washer, Zinc	001020
40	1/4"-20 X 1-1/4 H.H. Bolt, Gr. 5 Zinc	000184
42	Owner's Manual Canister	503050
43	Smv Triangle	507166

# Lower Frame & Tine Arm

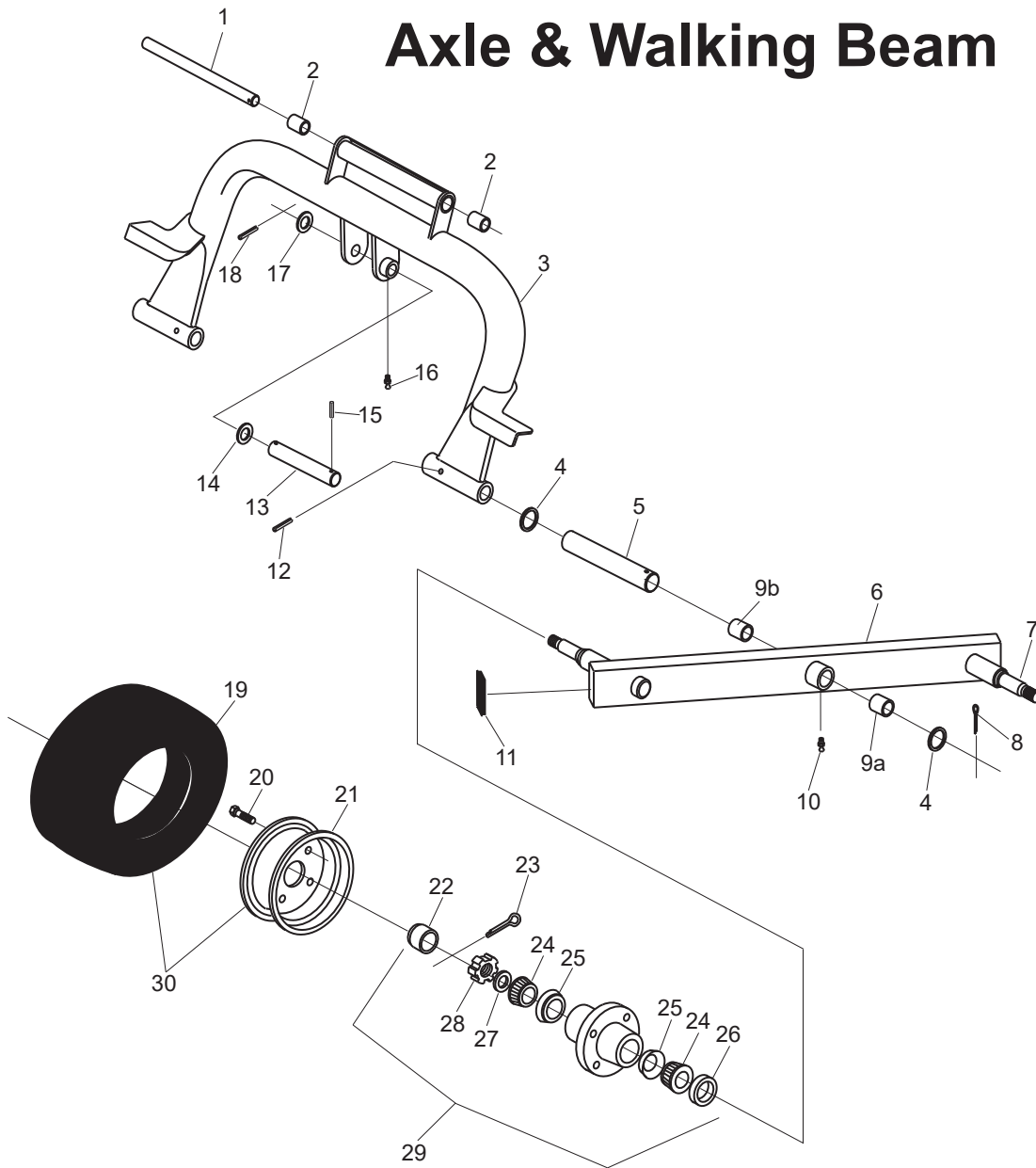


\*\*When installing tine arm 500323 on rakes with a serial number below 84857, a complete hardware kit with instructions needs to be ordered (KITR05)

Ref#	Description	Part#
1	Hex Nut, 9/16	000965
2	Bolt, 9/16 x 4	000585
3	Pipe Nipple	502299
4	Elbow Fitting, 1502-4-4	502300
5	Socket Head Bolt, M10 x 80 12.9	001080
6	Radius Washer	701008
7	Stub Arm S/N -88466	500259
	Stub Arm S/N 88466+	500303
8	Lynch Pin	500219
9	Tine Arm **	500323
10	Locknut, 1/2	000950
11	Bolt, 1/2 x 3-1/2 Gr.8	000482
12	Tine	500218
13	Locknut, M10	002822
14	Radius Washer	701008
15	Hexagon Shaft	500258
16	Elbow Fitting, 1501L-4-4	502301
17	Axle/Head Pin	503027
18	Roll Pin, 1/4 x 1-3/4	500187
19	Bronze Bushing	500278
20	Axle Assembly	503008
21	Roll Pin, 1/4 x 2	500017
22	Cylinder Pin	503026
23	Machinery Bushing, 1.25 - 14Ga.	500185

Ref#	Description	Part#
24	Pipe Plug	502298
25	3/4 Tooth Lock Washer	001087
26	Hex Head Bolt, 3/4-10 x 1" Long	000695
27	Plastic End Cap	502276
28	1" Jam Nut	000788
29	1-8 X 7 Hex Tap Bolt Wdmt	001042
30	Grease Fitting, 1/8-Npt Zert	400118
32	Hydraulic Hose	502296
33	Elbow Fitting, 1501-4-4	502302
34	Rear Cylinder	500290
	Rear Cyl Seal Kit (S/N -31142)	503201
	Rear Cyl Seal kit (S/N 31142+)	503231
35	Roll Pin, 1/4 x 2	500017
36	Cylinder Pin	503026
37	Machinery Bushing, 1.25 - 14Ga.	500185
38	Roll Pin, 1/4 x 2	500017
39	Roll Pin, 1/4 x 1-3/4	500187
40	Machinery Bushing, 1" - 10Ga.	001006
41	Complete Gearbox	500226
42	Head Assembly	503017
43	Tine Clip, Formed	500318
44	Tine Washer, Flat	500319
45	9/16 Lock Washer, Zinc	000850

# Axle & Walking Beam



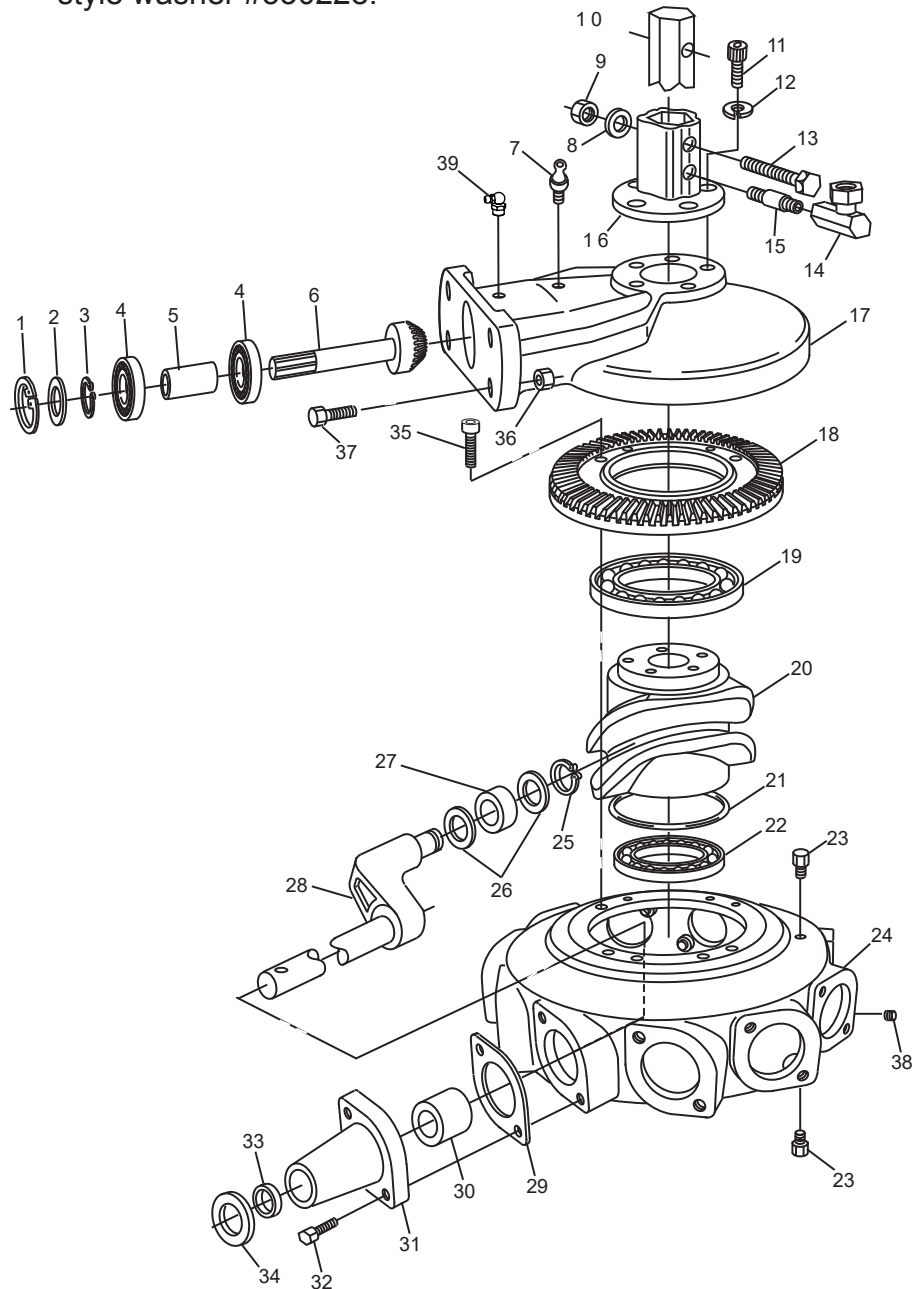
Ref#	Description	Part#
1	Axle/Head Pin	503027
2	Bronze Bushing	500278
3	Axle Assembly	503008
4	1.5-14 Machinery Bushing	500197
5	Walking Beam Mounting Pin	503015
6	Walking Beam Assembly	503004
7	Spindle	500198
8	Cotter Pin, 1/4 x 2-1/4	001231
9a	Bronze Bushing, Grease Grooved	400311G
9b	Bronze Bushing	400311
10	Grease Fitting, 1/8-Npt Zert	400118
11	Plastic End Cap	502276
12	Roll Pin, 3/8 x 2-1/2	102390
13	Cylinder Pin	503026
14	1.25-14 Machinery Bushing	500185

Ref#	Description	Part#
15	Roll, Pin, 1/4 x 2	500017
16	Grease Fitting, 1/8-Npt Zert	400118
17	1.25-14 Machinery Bushing	500185
18	Roll, Pin, 1/4 x 2	500017
19	Tire, 215/60-8 "C" ply	500221
20	Lug Bolt, 1/2-20	500210
21	4-Bolt Rim	500222
22	Hub Cap	500209
23	Cotter Pin	500208
24	Bearing, L44643	500202
25	Race, L44610	500204
26	Grease Seal	500201
27	Spindle Washer	500206
28	Spindle Nut	500207
29	Complete Hub	500199

# Rotary Gearbox (SN) -90935 (Tonutti)

Ref#	Description	Part#
1	Retaining Ring, 72MM Int.	500227
2	Washer	500228
3	Retaining Ring, - 35MM Ext.	500229
4	Bearing	500230
5	Spacer	500231
6	Pinion Gear with Shims and Washers Kit	500232
7	Grease Fitting	500233
8	Lock Washer, 9/16	500234
9	Nut, 9/16	500235
10	Hexagon Shaft	500258
11	Bolt, - M14 x 110	500236
12	Lock Washer, M14	500237
13	Bolt, 9/16 x 4	000585
14	Elbow Fitting w/ Swivel	502300
15	Nipple	502299
16	Hexagon Shaft Cover	500240
17	Gearbox Cover	500241
18	Ring Gear	500242
19	Upper Bearing	500243
20	Cam Center	500244
21	Oil Seal	500245
22	Lower Bearing	500246
23	Oil Plug	500247
24	Gearbox Main Housing	500248
25	Retaining Ring	500249
26	Washer	500250
27	Cam Roller	500251
28	Crank Arm Shaft	500252
29	Gasket	500253
30	Spacer	500254
31	Cast Arm Support	500255
32	Bolt, M12 x 30 Hex Head	500256
33	Oil Seal	500257
34	Bushing	500279
35	Socket Head Bolt, M10 x 25	002426
36	Locknut, M16	002828
37	Bolt, M16 x 55	002699
38	Oil Plug	502332
39	90 Degree Grease Fitting, M10	502331

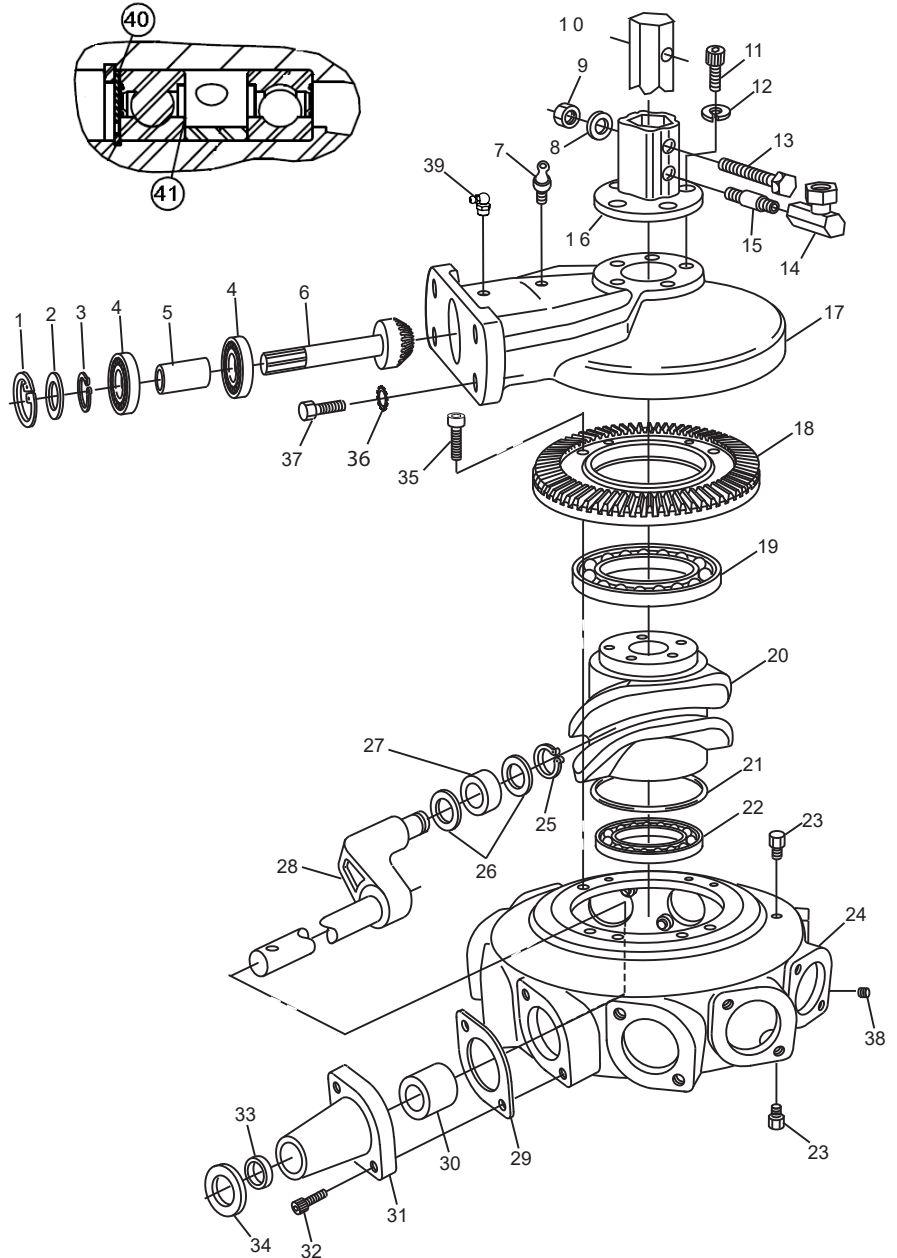
\*\*\*Callout #6 Pinion (500232) contains shim kits #19-16638 and #19-16637, and new style washer #530228.



Note: For rakes with serial numbers over 90935, use page 6 rotary gearbox breakdown.

# Rotary Gearbox (SN) 90935+ (Weasler)

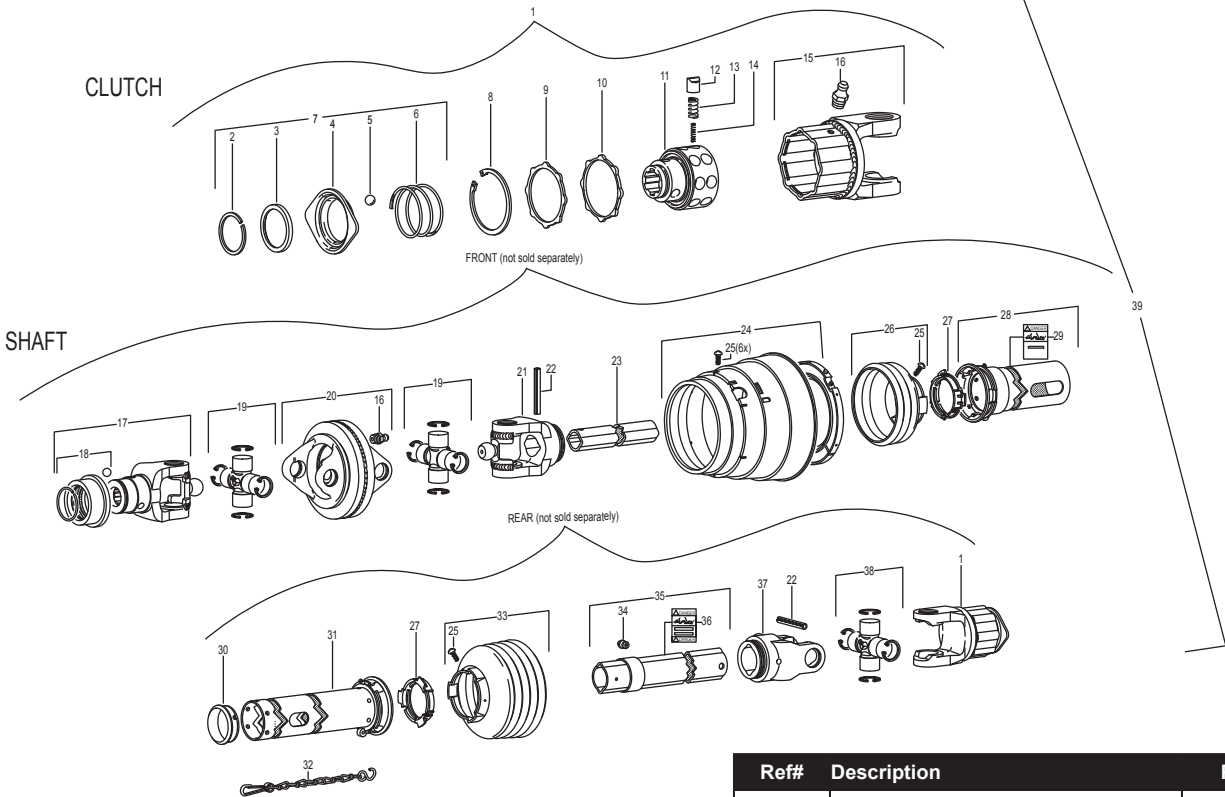
Ref#	Description	Part#
1	Retaining Ring, 72MM Int.	500227
2	Washer	530228
3	Retaining Ring, - 35MM Ext.	500229
4	Bearing	500230
5	Spacer	530231
6	Pinion Gear	503232
7	Grease Fitting	500233
8	Lock Washer, 9/16	500234
9	Nut, 9/16	500235
10	Hexagon Shaft	500258
11	Bolt, - M14 x 110	500236
12	Lock Washer, M14	500237
13	Bolt, 9/16 x 4	000585
14	Elbow Fitting w/ Swivel	502300
15	Nipple	502299
16	Hexagon Shaft Cover	500240
17	Gearbox Cover	530241
18	Ring Gear	530242
19	Upper Bearing	500243
20	Cam Center	500244
21	Oil Seal	500245
22	Lower Bearing	500246
23	Oil Plug	500247
24	Gearbox Main Housing	530248
25	Retaining Ring	500249
26	Washer	500250
27	Cam Roller	500251
28	Crank Arm Shaft	500252
29	Gasket	500253
30	Spacer	500254
31	Cast Arm Support	500255
32	M12-1.75 X 45 Hex Head Bolt Gr. 10.9 Zinc Fully Threaded	002545
33	Oil Seal	500257
34	Bushing	500279
35	Socket Head Bolt, M10 x 25	002426
36	5/8 External Tooth Lock Washer	000670
37	Bolt, M16 x 55	002699
38	Oil Plug	502332
39	90 Degree Grease Fitting, M10	502331
40	Shim Kit Large Dia.	19-16638
41	Shim Kit Small Dia.	19-16637
	Complete Gearbox	500226



Note: For rakes with serial numbers under 90935, use page 5 rotary gearbox breakdown.



# Walterscheid PTO Shaft (Yellow)

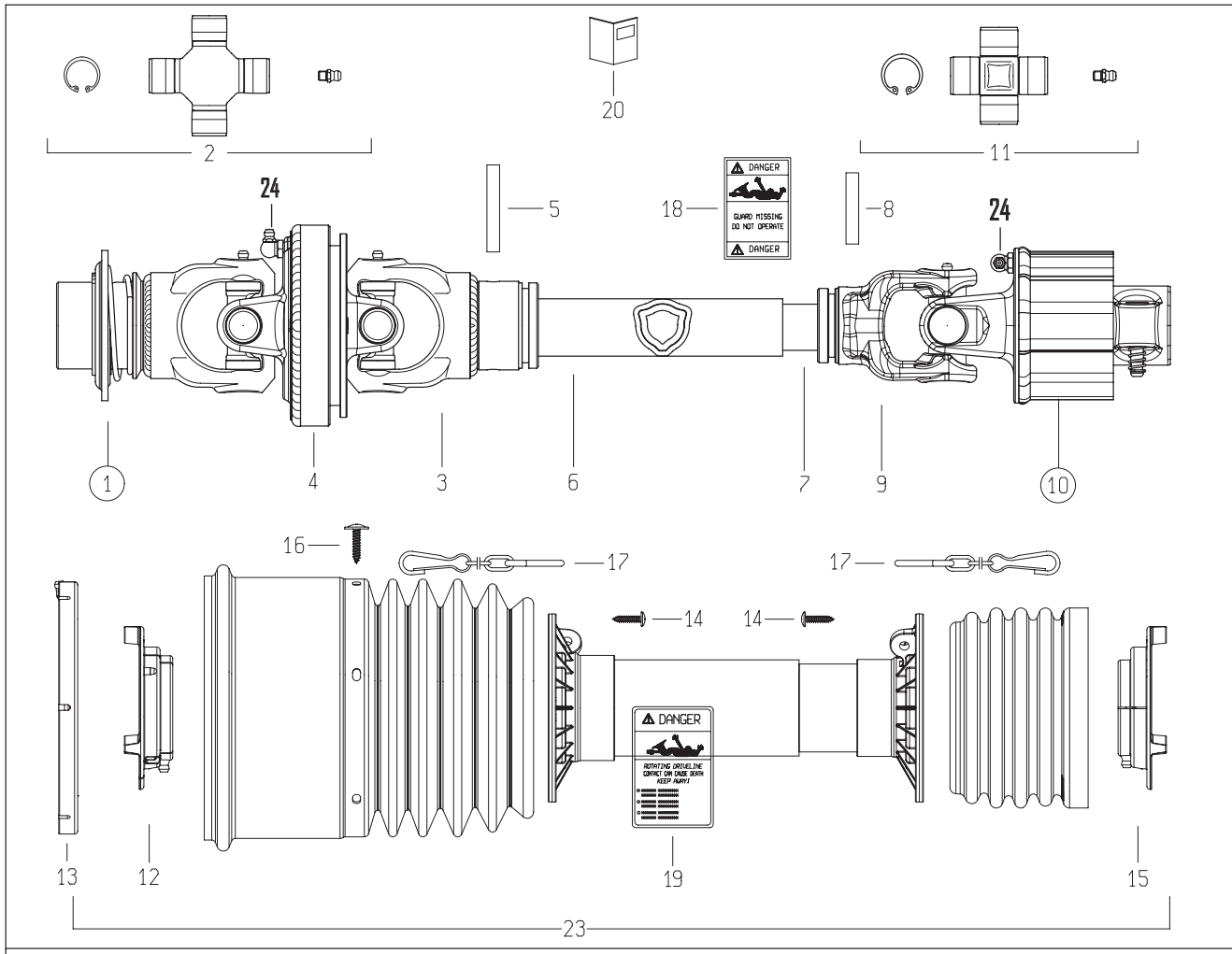


Ref#	Description	Part#
1	Radial Pin Clutch Assembly	500035
2	Retaining Ring	500048
3	Flanged Collar	500047
4	Lock Collar	500046
5	Ball 1/2	500044
6	Compression Spring	500045
7	Locking Flange Kit	500050
8	Retaining Ring	500043
9	Thrust Ring	500042
10	Plastic Seal Ring	500041
11	Hub	500037
12	Cam	500038
13	Outer Compression Spring	500039
14	Inner Compression Spring	500040
15	Clutch Housing	500036
16	Grease Fitting	500049
17	Yoke	500026
18	Collar Kit	500064
19	Cross & Bearing Kit	500030
20	Double Yoke	500027

Ref#	Description	Part#
21	Inboard Yoke	500034
22	Spring Pin	500031
23	Inner Profile	500900
24	CV Cone & Bearing	500055
25	Screw	500058
26	Shield Cone, 3 Rib	500056
27	Bearing Ring	500052
28	Outer Shield Tube	500902
29	Decal	500059
30	Support Bearing	500063
31	Inner Shield Tube	500903
32	Safety Chain	500060
33	Shield Cone, 4 Rib	500057
34	Grease Fitting	500062
35	Outer Profile & Sleeve	500901
36	Decal	500061
37	Inboard Yoke	500029
38	Cross & Bearing Kit	500051
39	Walterscheid Complete PTO Shaft ***Not available***	N/A
39	Bondioli Replacement Complete PTO Shaft (Backwards Compatible)	503028



# Bondioli PTO Shaft 503028 (Black)



Ref#	Description	Part#
1	Yoke S2 Rt 1-3/8"Z6 80° CV	500404
2	Cross Kit S2 EI 80° CV 22X76 Zerk In Cap	500405
3	Yoke G2 Outer Tube (36.0) 80°Cv EI	500406
4	Central Body 1R2-G2-S2 80°Cv EI	500407
5	Flexible Roll Pin 8X55 Din1481	500408
6	Cardan Tube 12518 L=970	500409
7	Tube Cardan Int. 12504 L=970 Rilsan.	500410
8	Flexible Roll Pin 8X45 Din1481	500411
9	Tube Yoke #2-G2 Inner (29.0)	500412
10	Torque Lim.sa2/2	500413
11	Cross Kit S2-G2 23.8X61.3 Cap Zerk	500414
12	Shield Support G2 Outer Global	500415

Ref#	Description	Part#
13	Shield Support S2-S4 EI Cv 80° & 50°	500416
14	Screw 4.8X22 Self Tap Zinc	500417
15	Shield Support G2 Inner Global	500418
16	Screw 4.8X22 Self Tap Zinc Flange Head	500419
17	Shield Chain W/S-Hook L=500Mm	500420
18	Label - Danger - Outer Drive Tube	500421
19	Label - Danger - Outer Shield Tube	500422
20	Instruction Booklet - N.america Global	500423
21	Half Shaft Cleared	500424
22	Half Shaft Cleared	500425
23	Complete Shield Kit	505797
24	90° M8-1.25 Grease Fitting	500443

