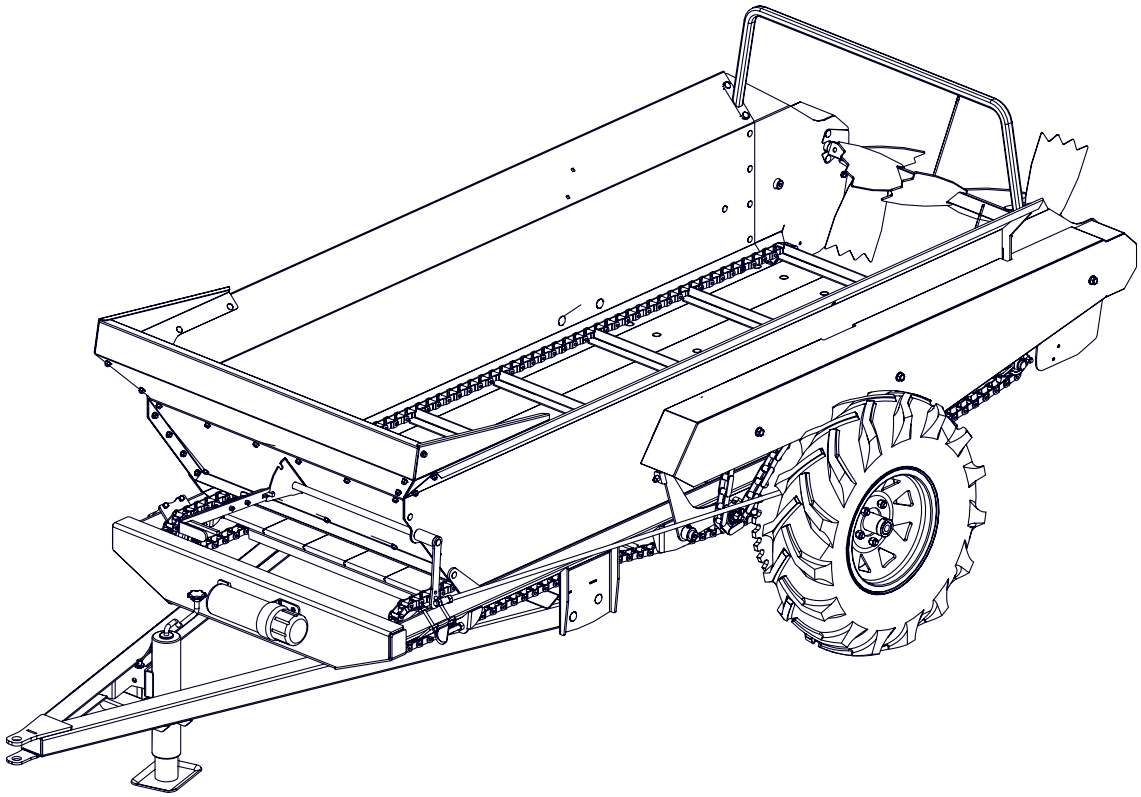
WALLENSTEIN
BY EMB MFG INC.

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MX80G Manure Spreader Parts Manual

Starting with S/N's

780G80 & After



Refer to the operators manual for safe operation and maintenance

7014 MX80 RevC Parts Manual.140716
Rev # 220217

Foreword

EMB Mfg. has prepared this parts manual to assist customers in ordering quality OEM replacement parts.

Proper and regular service and replacing old, worn or broken parts with the correct OEM parts are essential to prolonging the life of your EMB product. Please refer to this manual before ordering any replacement parts.

All information contained in this parts manual is based on the latest product specification available at the time of printing this manual. If your product differs from the specifications contained within this manual contact EMB Mfg. for information.

EMB reserves the right to alter specifications on their products at any time.

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For parts and information please contact your dealer. If your dealer is no longer available please go to our website: http://www.**wallensteinequipment.com** and click on ”FIND A DEALER NEAR YOU” for information on a local dealer.

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Maintenance should be performed by trained personnel only.



Refer to the operators manual for safe operation and maintenance

 For threaded parts installation, refer to the torque charts in this manual.

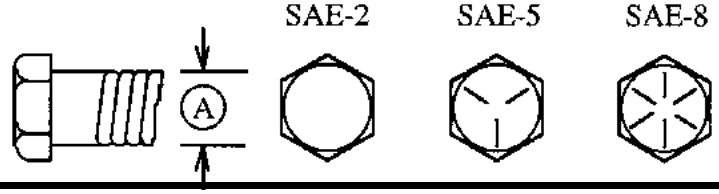
Bolt Torque

CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

ENGLISH TORQUE SPECIFICATIONS

Bolt Diamter "A"	Bolt Torque*					
	SAE 2		SAE 5		SAE 8	
	(N.m)	(lb-ft)	(N.m)	(lb-ft)	(N.m)	(lb-ft)
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970

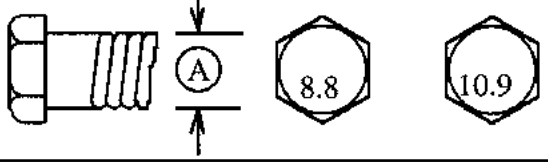


Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

METRIC TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*			
	8.8		10.9	
	(N.m)	(lb-ft)	(N.m)	(lb-ft)
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



Hydraulic Fitting Torque

Tightening Flare Type Tube Fittings *

1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the swivel nut to the torque shown.

Tube Size OD (in.)	Nut Size Across Flats (in.)	Torque Value• (N.m)	Torque Value• (lb-ft)	Recommended Turns To Tighten (After Finger Tightening) (Flats)	Recommended Turns To Tighten (After Finger Tightening) (Turn)
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
3/8	**11/16**	**24**	**18**	**1**	**1/6**
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1-1/4	102	75	3/4	1/8
7/8	1-3/8	122	90	3/4	1/8

The torque values shown are based on lubricated connections as in reassembly.

Wheel Lug Torque

It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

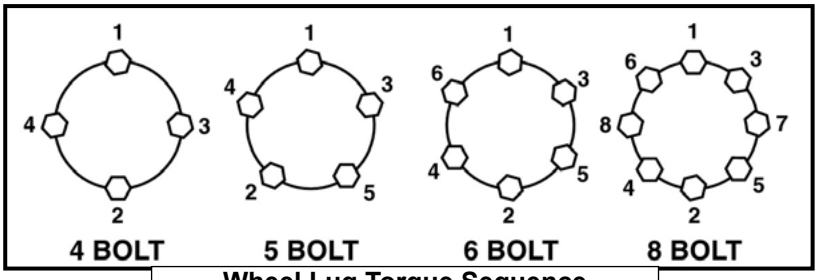
Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

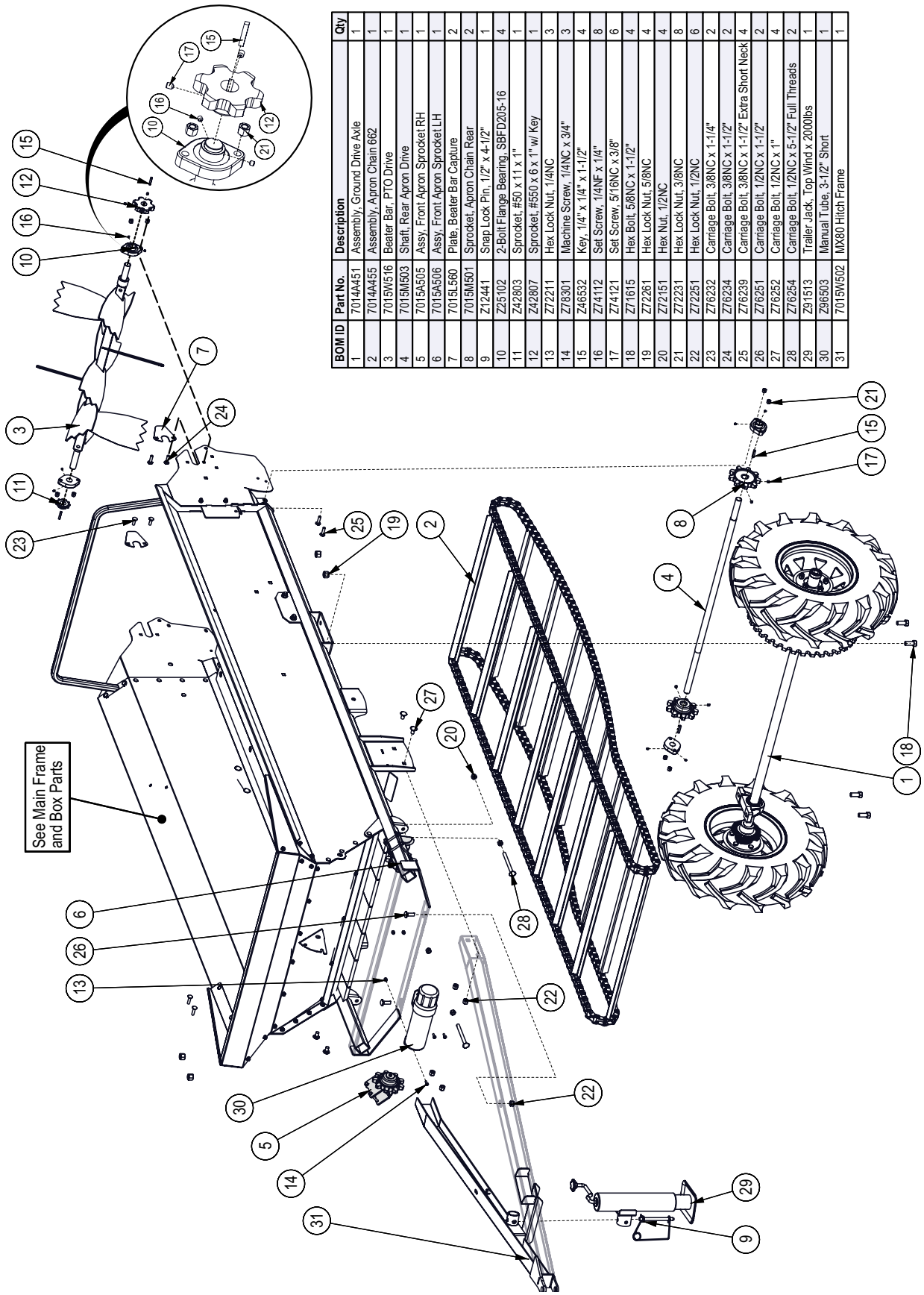
- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

Wheel Torque Requirements

Wheel Size	Torque Unit	1st Stage	2nd Stage	3rd Stage
8"	ft-lbs	12 - 20	30 - 35	45 - 55
	Nm	16 - 26	39 - 45.5	58.5 - 71.5
12"	ft-lbs	20 - 25	35 - 40	50 - 60
	Nm	26 - 32.5	45.5 - 52	65 - 78
13"	ft-lbs	20 - 25	35 - 40	50 - 60
	Nm	26 - 32.5	45.5 - 52	65 - 78
14"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156
15"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156
16"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156



Wheel Lug Torque Sequence

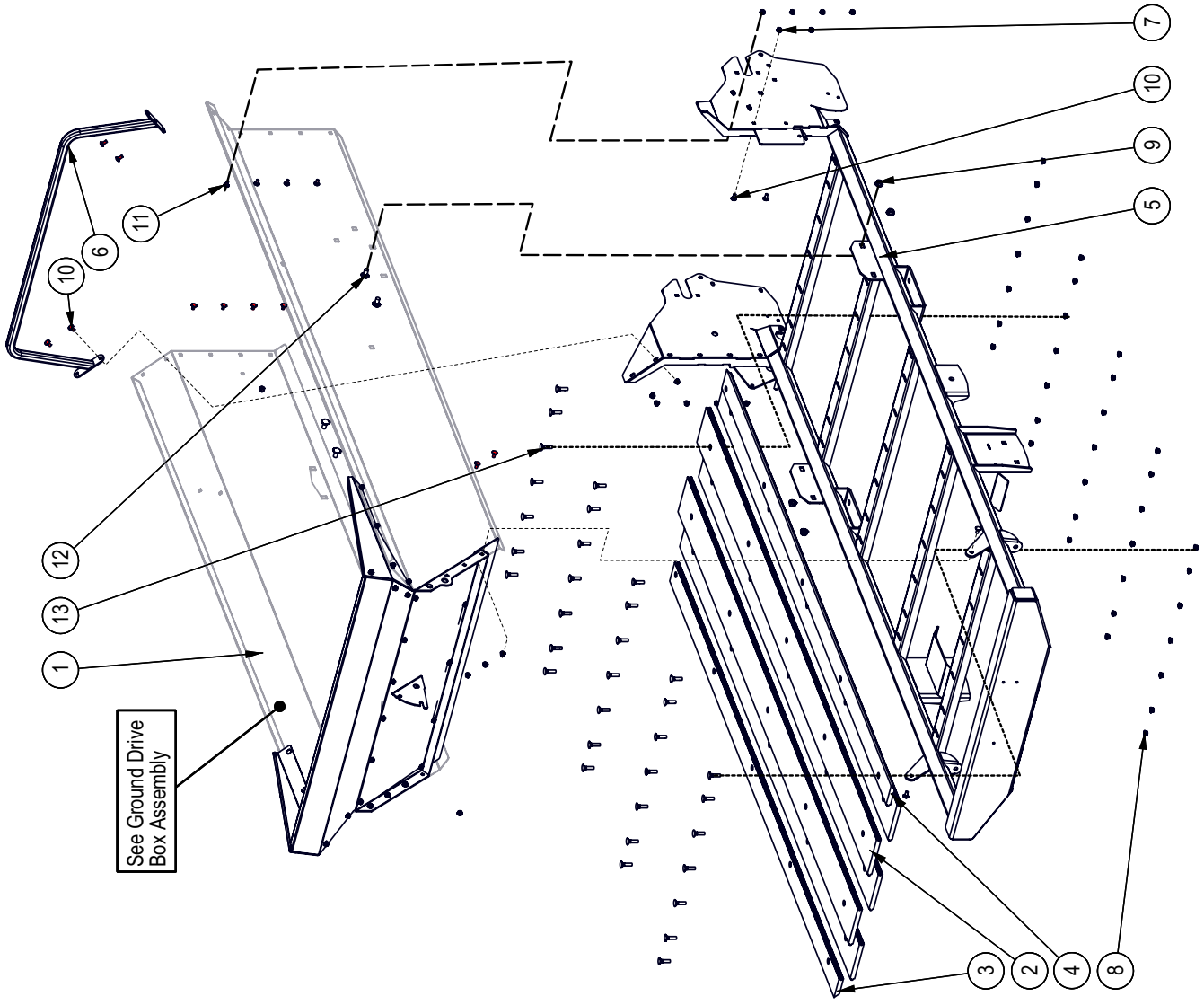


BOM ID	Part No.	Description	Qty
1	7014A451	Assembly, Ground Drive Axle	1
2	7014A455	Assembly, Apron Chain 662	1
3	7015W516	Beater Bar, PTO Drive	1
4	7015M503	Shaft, Rear Apron Drive	1
5	7015A505	Assy, Front Apron Sprocket RH	1
6	7015A506	Assy, Front Apron Sprocket LH	1
7	7015L560	Plate, Beater Bar Capture	2
8	7015M501	Sprocket, Apron Chain Rear	2
9	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	1
10	Z25102	2-Bolt Flange Bearing, SBFD205-16	4
11	Z42803	Sprocket, #50 x 11 x 1"	1
12	Z42807	Sprocket, #550 x 6 x 1" w/ Key	1
13	Z72211	Hex Lock Nut, 1/4NC	3
14	Z78301	Machine Screw, 1/4NC x 3/4"	3
15	Z46532	Key, 1/4" x 1/4" x 1-1/2"	4
16	Z74112	Set Screw, 1/4NF x 1/4"	8
17	Z74121	Set Screw, 5/16NC x 3/8"	6
18	Z71615	Hex Bolt, 5/8NC x 1-1/2"	4
19	Z72261	Hex Lock Nut, 5/8NC	4
20	Z72151	Hex Nut, 1/2NC	4
21	Z72231	Hex Lock Nut, 3/8NC	8
22	Z72251	Hex Lock Nut, 1/2NC	6
23	Z76232	Carriage Bolt, 3/8NC x 1-1/4"	2
24	Z76234	Carriage Bolt, 3/8NC x 1-1/2"	2
25	Z76239	Carriage Bolt, 3/8NC x 1-1/2" Extra Short Neck	4
26	Z76251	Carriage Bolt, 1/2NC x 1-1/2"	2
27	Z76252	Carriage Bolt, 1/2NC x 1"	4
28	Z76254	Carriage Bolt, 1/2NC x 5-1/2" Full Threads	2
29	Z91513	Trailer Jack, Top Wind x 2000lbs	1
30	Z96503	Manual Tube, 3-1/2" Short	1
31	7015W502	MX80 Hitch Frame	1

Main Parts

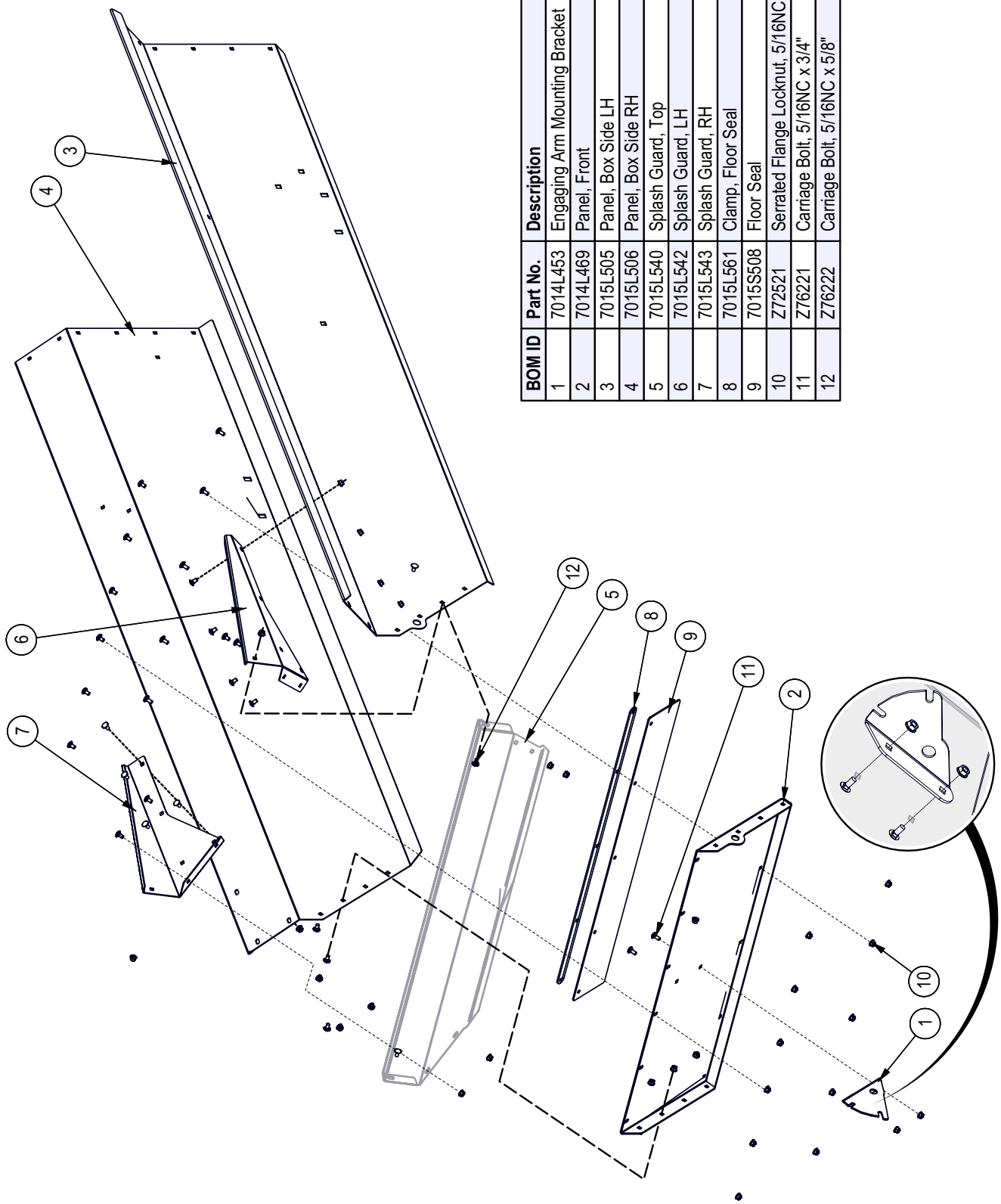
Main Frame and Box Parts

BOM ID	Part No.	Description	Qty
1	7014A401	Assembly, Ground Drive Box	1
2	7015S505	Floor Board, Center	5
3	7015S506	Floor Board, Right End	1
4	7015S507	Floor Board, Left End	1
5	7015W501	MX80 Main Frame	1
6	7015W517	Crossbar	1
7	Z72521	Serrated Flange Locknut, 5/16NC	18
8	Z72531	Serrated Flange Locknut, 3/8NC	35
9	Z72551	Serrated Flange Locknut, 1/2NC	4
10	Z76221	Carriage Bolt, 5/16NC x 3/4"	10
11	Z76222	Carriage Bolt, 5/16NC x 5/8"	8
12	Z76252	Carriage Bolt, 1/2NC x 1"	4
13	Z76631	Plow Bolt, 3/8NC x 1-1/2"	35



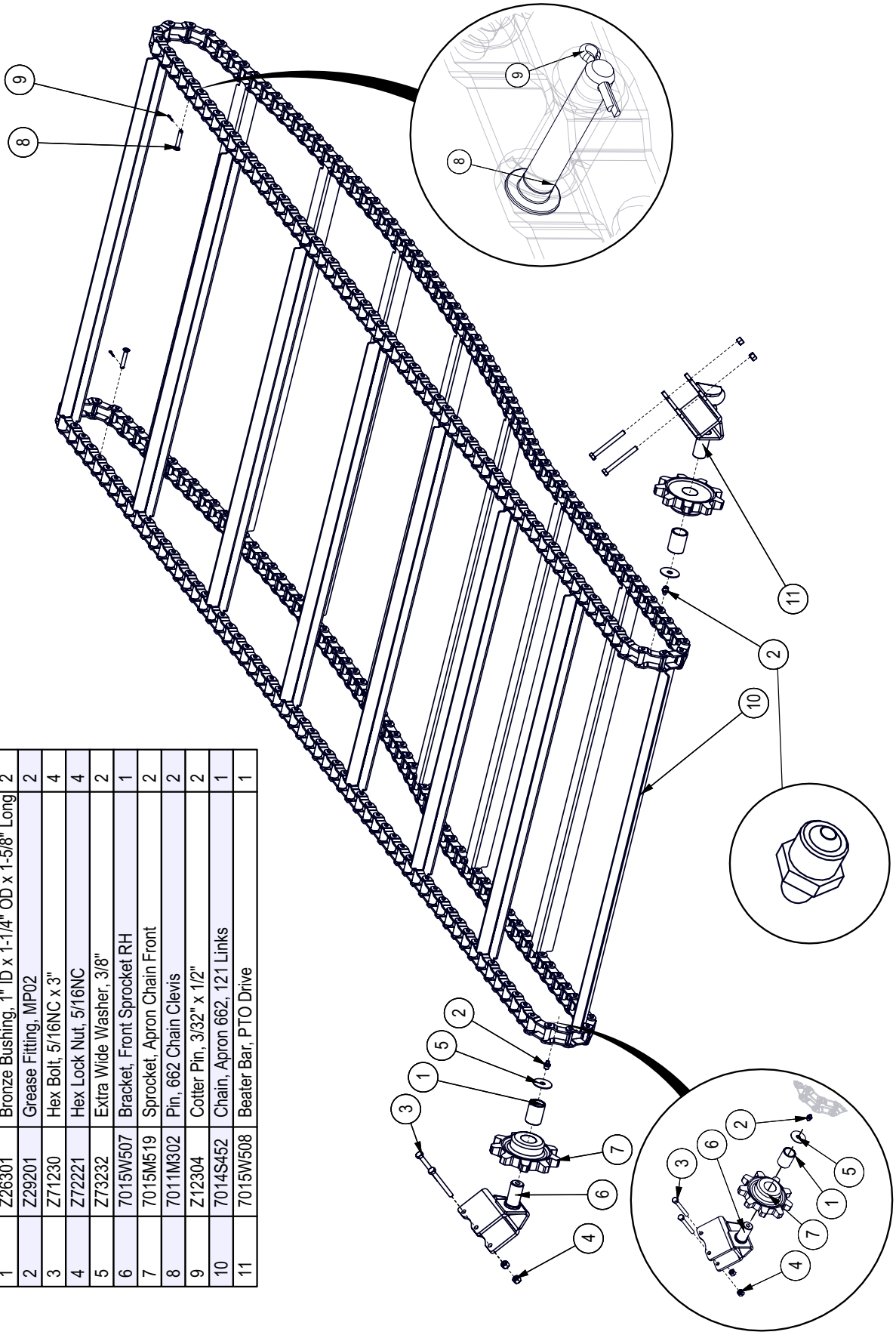
 For threaded parts installation, refer to the torque charts in this manual.

Ground Drive Box Assembly



BOM ID	Part No.	Description	Qty
1	7014L453	Engaging Arm Mounting Bracket	1
2	7014L469	Panel, Front	1
3	7015L505	Panel, Box Side LH	1
4	7015L506	Panel, Box Side RH	1
5	7015L540	Splash Guard, Top	1
6	7015L542	Splash Guard, LH	1
7	7015L543	Splash Guard, RH	1
8	7015L561	Clamp, Floor Seal	1
9	7015S508	Floor Seal	1
10	Z72521	Serrated Flange Locknut, 5/16NC	31
11	Z76221	Carriage Bolt, 5/16NC x 3/4"	7
12	Z76222	Carriage Bolt, 5/16NC x 5/8"	24

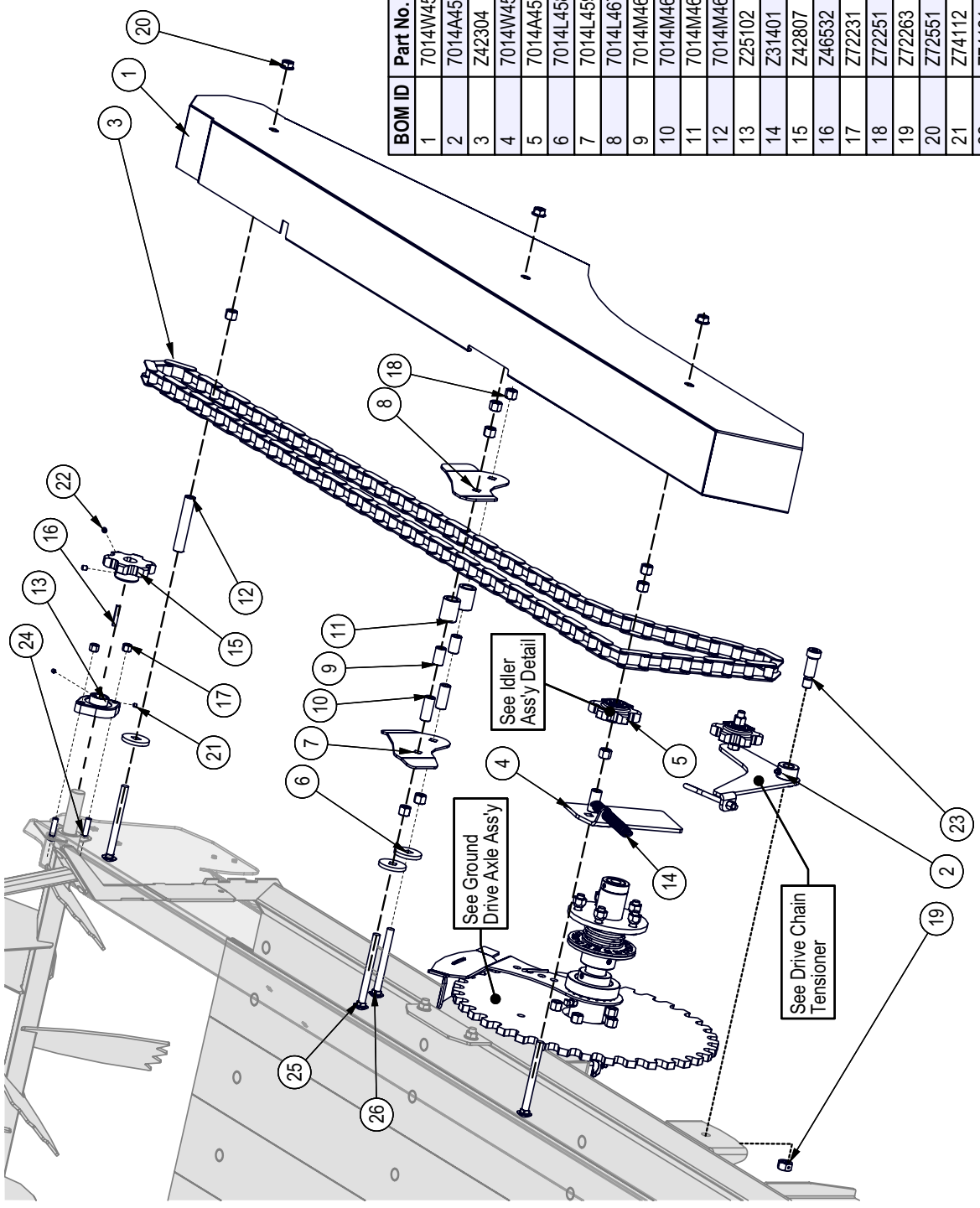
Apron Chain And Front Sprockets



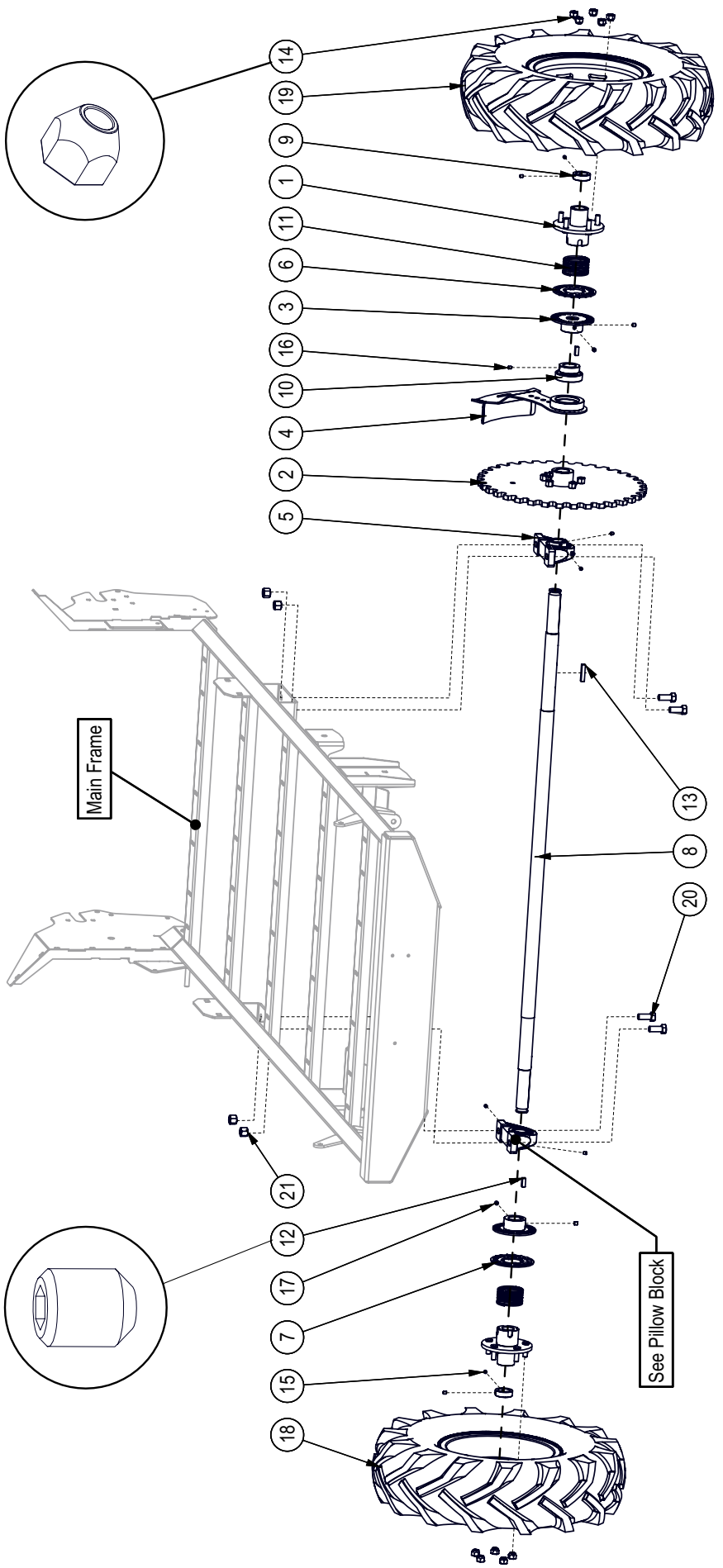
BOM ID	Part No.	Description	Qty
1	Z26301	Bronze Bushing, 1" ID x 1-1/4" OD x 1-5/8" Long	2
2	Z29201	Grease Fitting, MP02	2
3	Z71230	Hex Bolt, 5/16NC x 3"	4
4	Z72221	Hex Lock Nut, 5/16NC	4
5	Z73232	Extra Wide Washer, 3/8"	2
6	7015W507	Bracket, Front Sprocket RH	1
7	7015M519	Sprocket, Apron Chain Front	2
8	7011M302	Pin, 662 Chain Clevis	2
9	Z12304	Cotter Pin, 3/32" x 1/2"	2
10	7014S452	Chain, Apron 662, 121 Links	1
11	7015W508	Beater Bar, PTO Drive	1

Ground Drive Parts

BOM ID	Part No.	Description	Qty
1	7014W450	Shield, Drive Chain	1
2	7014A454	Tensioner, Drive Chain	1
3	Z42304	Roller Chain, #550 x 42 Links	1
4	7014W457	Plate, Idler/Tensioner Mount	1
5	7014A453	Idler Assembly, #550 Chain	1
6	7014L458	Washer, Square Head	3
7	7014L459	RH Guide, Chain	1
8	7014L467	LH Guide, Chain	1
9	7014M460	Spacer, 1-1/4	2
10	7014M463	Spacer, 1-3/4	2
11	7014M464	Roller, Chain Guide	2
12	7014M465	Spacer, Rear Shield	1
13	Z25102	2-Bolt Flange Bearing, SBFD205-16	1
14	Z31401	Ext Spring, 3/4" OD x 4" x 0.105"	1
15	Z42807	Sprocket, #550 x 6 x 1" w/ Key	1
16	Z46532	Key, 1/4" x 1/4" x 1-1/2"	1
17	Z72231	Hex Lock Nut, 3/8NC	2
18	Z72251	Hex Lock Nut, 1/2NC	9
19	Z72263	Hex CTR-lock Nut, 5/8NC	1
20	Z72551	Serrated Flange Locknut, 1/2NC	3
21	Z74112	Set Screw, 1/4NF x 1/4"	2
22	Z74121	Set Screw, 5/16NC x 3/8"	2
23	Z75571	Shoulder Bolt, 3/4" x 1-1/2"	1
24	Z76234	Carriage Bolt, 3/8NC x 1-1/2"	2
25	Z762515	Carriage Bolt, 1/2NC x 5-1/2"	3
26	Z76257	Carriage Bolt, 1/2NC x 5"	1



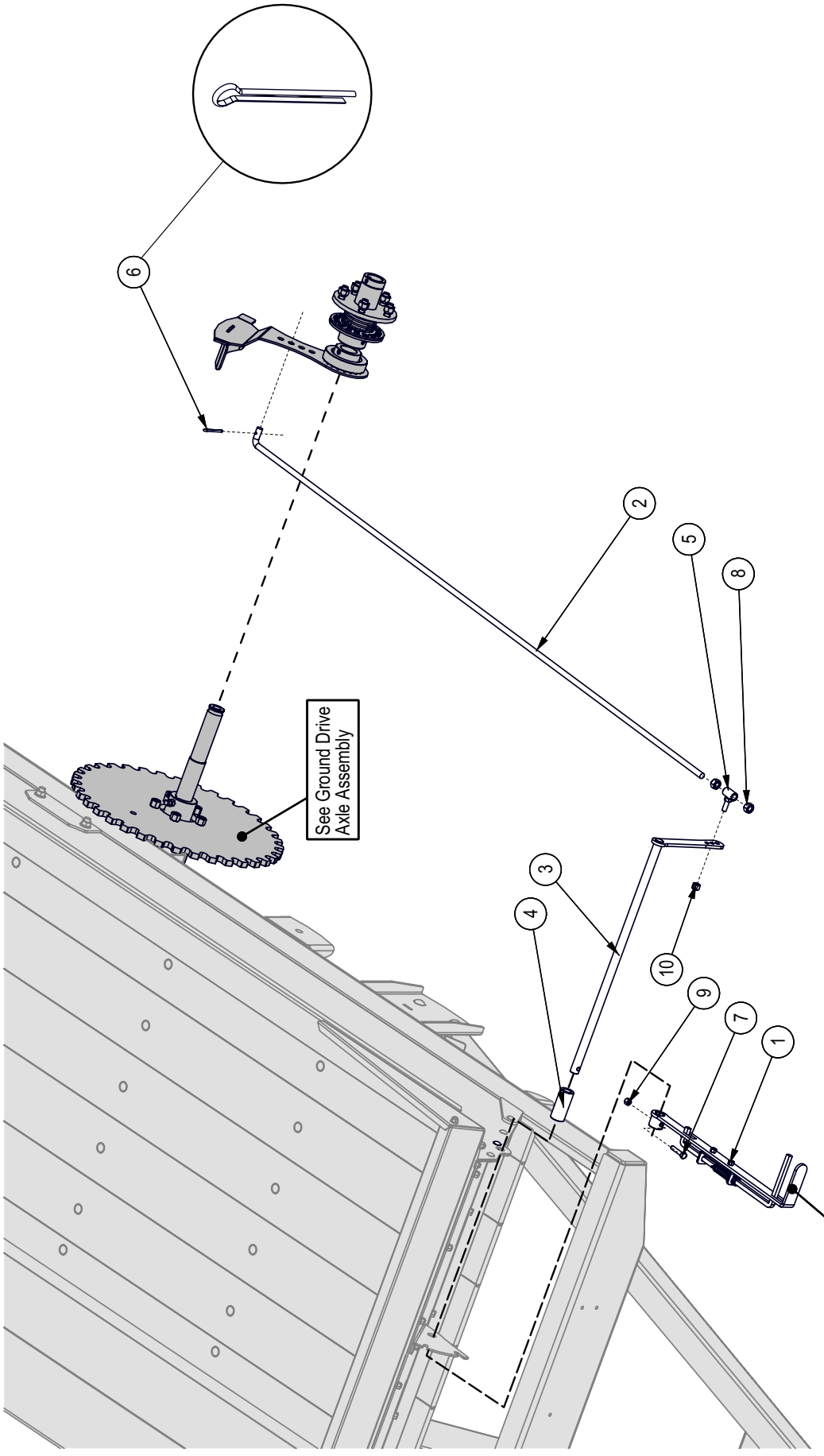
Ground Drive Axle Assembly



BOM ID	Part No.	Description	Qty
1	7014W460	Hub, 5-Bolt Ground Drive	2
2	7014W455	Assy, Main Ground Drive Sprocket	1
3	7014W454	Reciever, GD Ratchet	2
4	7014W451	Arm, Drive Chain Deflector	1
5	Z24101	Pillow Block, UCP208-24	2
6	7014L452	Driver, GD Ratchet LH	1
7	7014L468	Driver, GD Ratchet RH	1
8	7014M452	Axle, Ground Drive	1
9	7014M456	Collar, Wheel Stop	2
10	Z21901	Ball Bearing, CSA208-24 x Taper Lock	1
11	Z32402	Comp Spring, 3" OD x 4-1/2" x 0.145"	2

BOM ID	Part No.	Description	Qty
12	Z46553	Key, 3/8" x 3/8" x 1"	2
13	Z46555	Key, 3/8" x 3/8" x 2"	1
14	Z72931	Lug Nut, 1/2NF	10
15	Z74121	Set Screw, 5/16NC x 3/8"	4
16	Z74122	Set Screw, 5/16NF x 3/8"	5
17	Z74131	Set Screw, 3/8NC x 3/8"	4
18	Z91305	7.60-15SL 6PR American Farmer RH	1
19	Z91306	7.60-15SL 6PR American Farmer LH	1
20	Z71615	Hex Bolt, 5/8NC x 1-1/2"	4
21	Z72261	Hex Lock Nut, 5/8NC	4

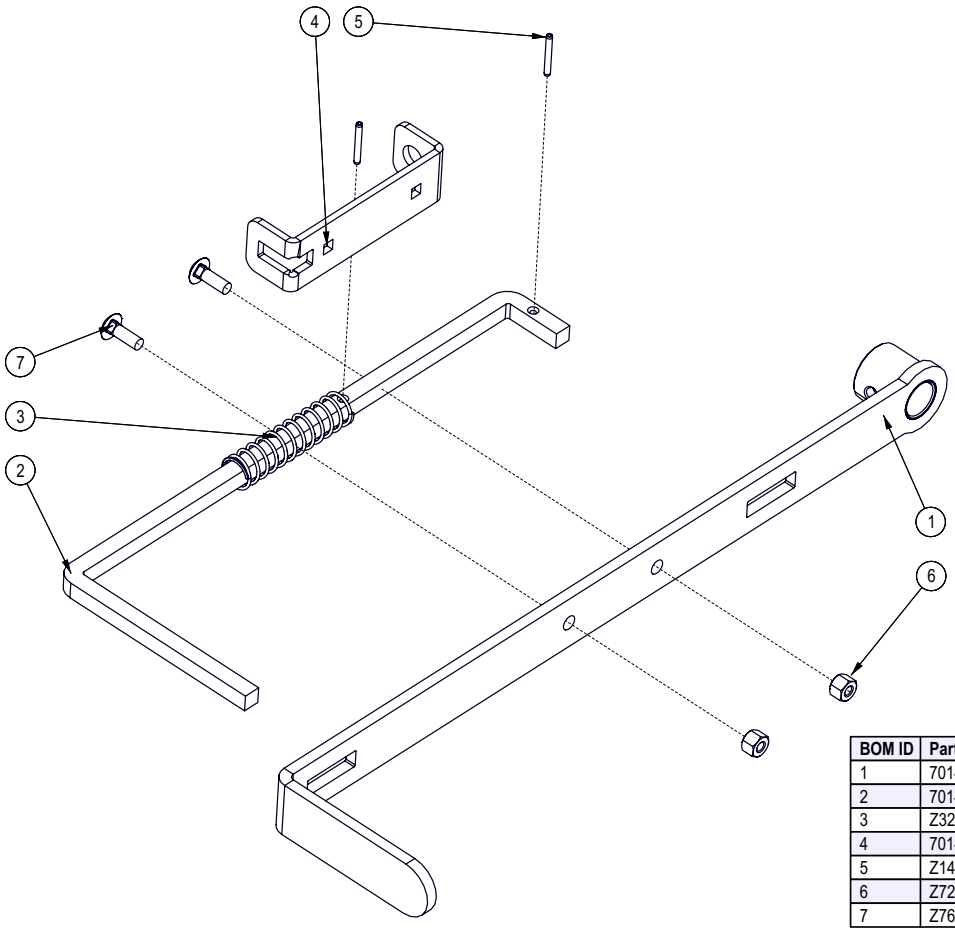
Ground Drive Engagement



BOM ID	Part No.	Description	Qty
1	7014A450	Handle, Drive Engagement	1
2	7014S451	Engaging Rod	1
3	7014W452	Rod, Drive Engagement Connection	1
4	7014M459	Engaging Shaft Spacer	1
5	7014W458	Joint, Engagement Linkage	1
6	Z12321	Cotter Pin, 3/16" x 1-3/4"	1

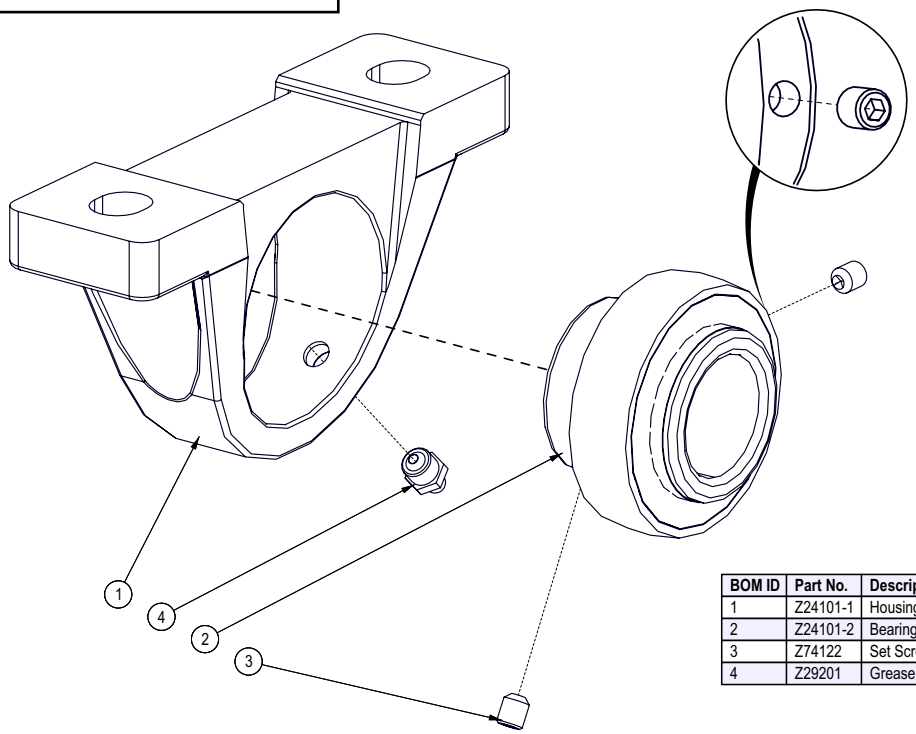
BOM ID	Part No.	Description	Qty
7	Z71215	Hex Bolt, 5/16NC x 1-1/2"	1
8	Z72151	Hex Nut, 1/2NC	2
9	Z72221	Hex Lock Nut, 5/16NC	1
10	Z72231	Hex Lock Nut, 3/8NC	1

Drive Engagement Handle



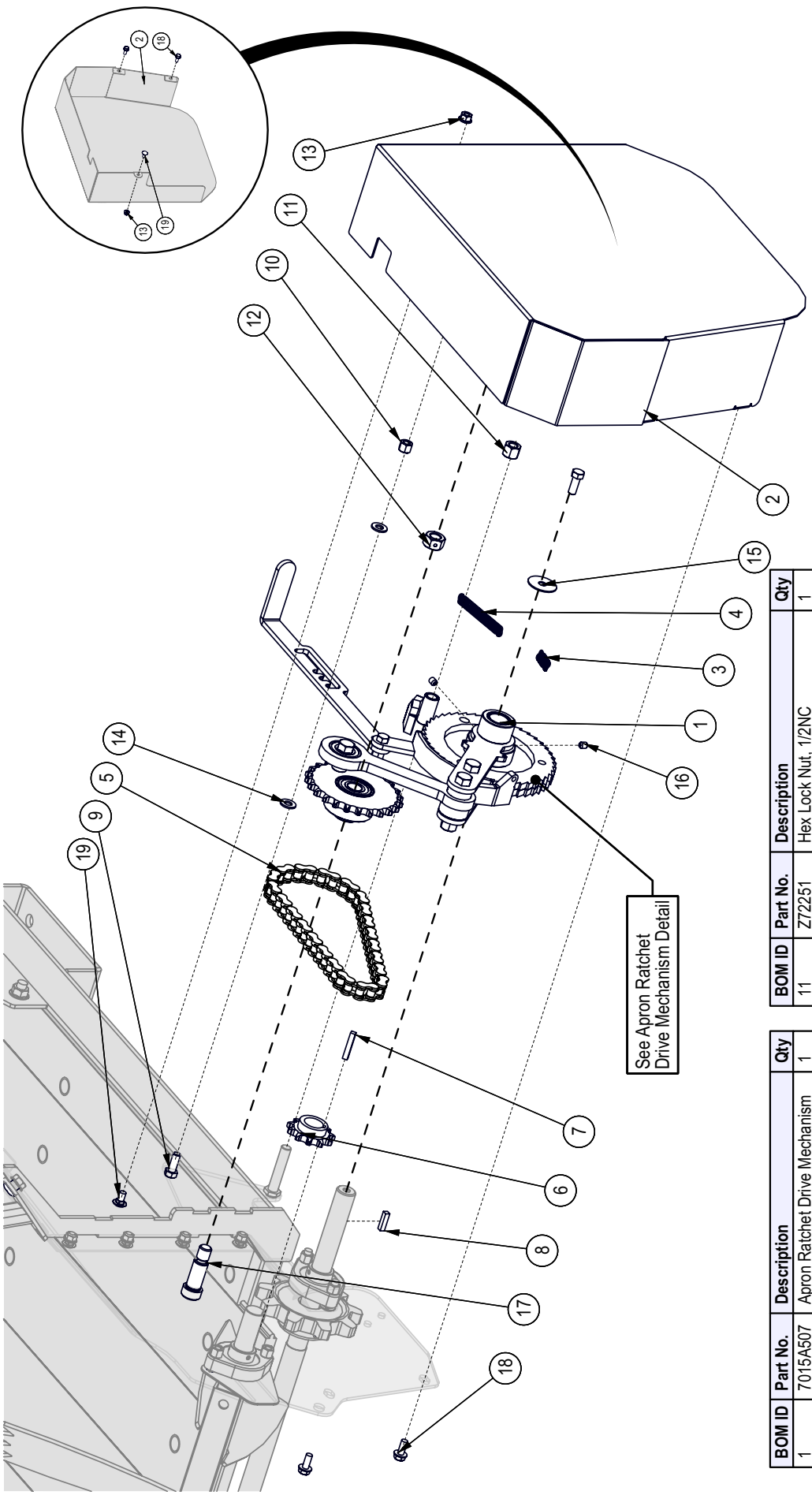
BOM ID	Part No.	Description	Qty
1	7014W453	Handle, Engagement	1
2	7014S450	Latch Rod	1
3	Z32301	Comp Spring, 0.720" OD x 3" x 0.063"	1
4	7014L465	Engaging Arm Guide	1
5	Z14131	Roll Pin, 1/8" x 1"	2
6	Z72211	Hex Lock Nut, 1/4NC	2
7	Z76211	Carriage Bolt, 1/4NC x 3/4"	2

Pillow Block Detail



BOM ID	Part No.	Description	Qty
1	Z24101-1	Housing, P208 for Z24101	1
2	Z24101-2	Bearing Insert, UC208-24 for Z24101	1
3	Z74122	Set Screw, 5/16NF x 3/8"	2
4	Z29201	Grease Fitting, MP02	1

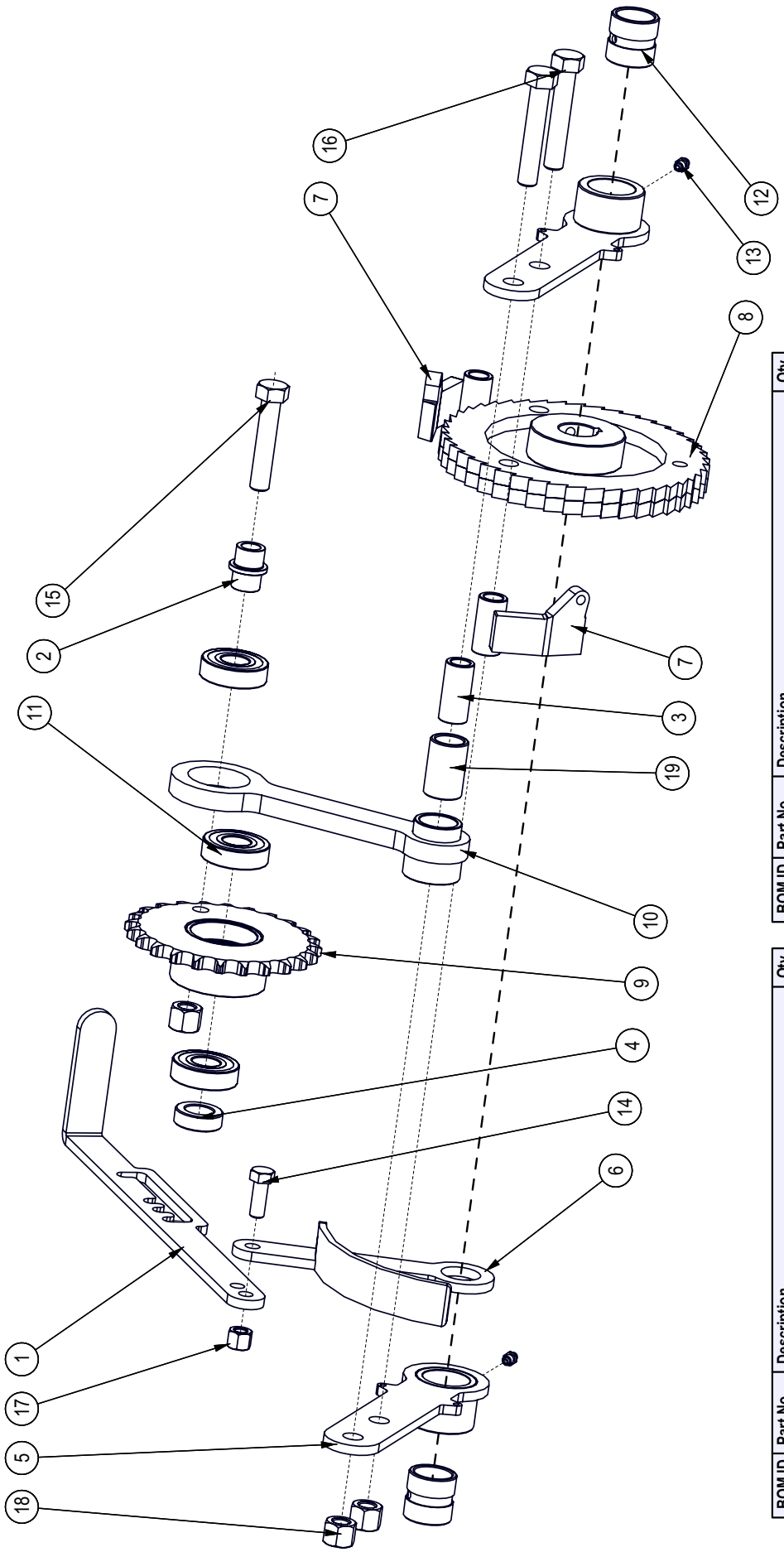
Apron Chain Ratchet Parts



BOM ID	Part No.	Description	Qty
1	7015A507	Apron Ratchet Drive Mechanism	1
2	7015W518	Shield, Apron Drive	1
3	Z31201	Ext Spring, 1/2" OD x 1-1/2" x .048"	1
4	Z31304	Ext Spring, 1/2" OD x 2-1/2" x .063"	1
5	Z42141	Roller Chain, #50 x 22	1
6	Z42803	Sprocket, #50 x 11 x 1"	1
7	Z46532	Key, 1/4" x 1/4" x 1-1/2"	1
8	Z46533	Key, 1/4" x 1/4" x 1"	1
9	Z71310	Hex Bolt, 3/8NC x 1"	2
10	Z72231	Hex Lock Nut, 3/8NC	1

BOM ID	Part No.	Description	Qty
11	Z72251	Hex Lock Nut, 1/2NC	1
12	Z72263	Hex CTR-lock Nut, 5/8NC	1
13	Z72521	Serrated Flange Locknut, 5/16NC	1
14	Z73131	SAE Washer, 3/8"	2
15	Z73232	Extra Wide Washer, 3/8"	1
16	Z74121	Set Screw, 5/16NC x 3/8"	2
17	Z75571	Shoulder Bolt, 3/4" x 1-1/2"	1
18	Z76121	Flange Bolt, 5/16NC x 3/4"	2
19	Z76222	Carriage Bolt, 5/16NC x 5/8"	1

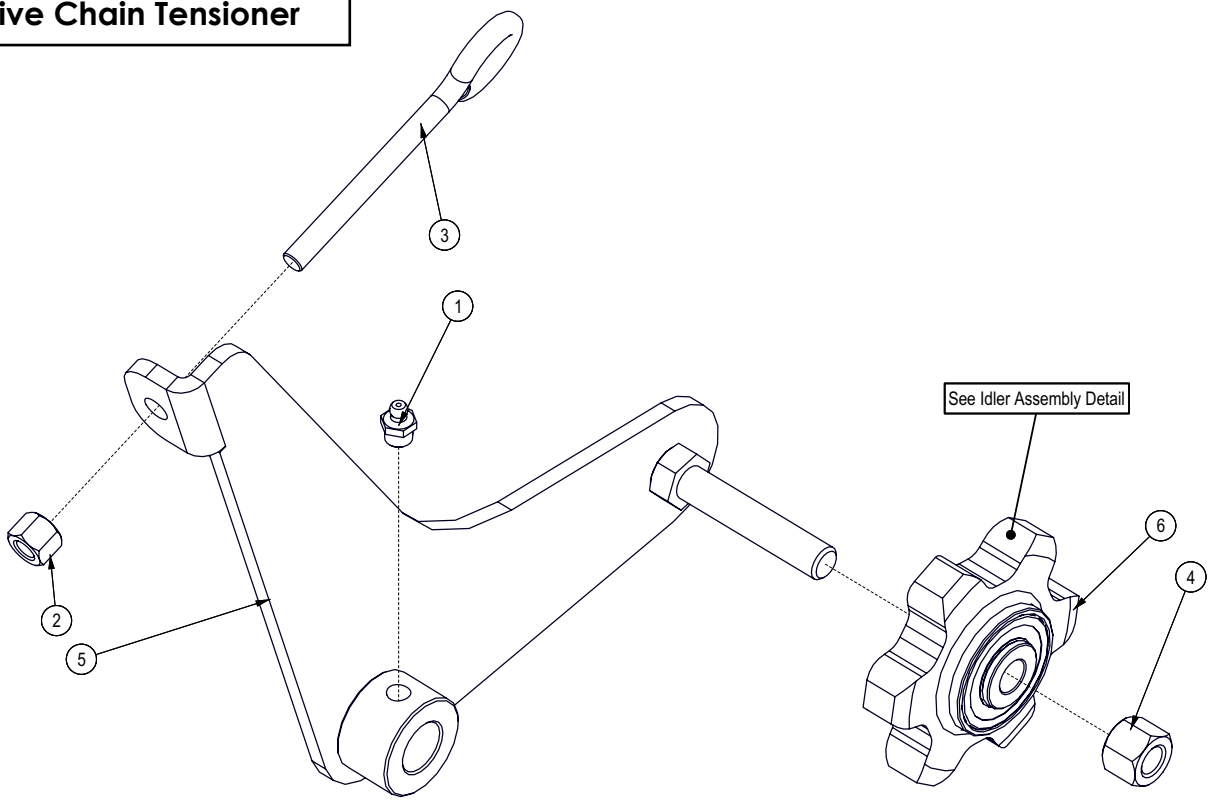
Apron Ratchet Drive Mechanism Detail



BOM ID	Part No.	Description	Qty
1	7015L524	Handle, Ratchet Speed Set	1
2	7015M512	Flange Bushing	1
3	7015M514	Bushing, Link Arm Bolt	1
4	7015M517	Bolt Spacer	1
5	7015W510	Arm, Apron Ratchet Drive	2
6	7015W511	Slide, Speed Adjuster	1
7	7015W512	Dog, Ratchet	2
8	7015W513	Ratchet, Apron Drive	1
9	7015W514	#50 24Tooth Sprocket Hub	1
10	7015W515	Arm, Ratchet Drive Link	1

BOM ID	Part No.	Description	Qty
11	Z21204	Ball Bearing, 1635-2RS x Self Aligning	3
12	Z26303	Bronze Bushing, 1" ID x 1-1/4" OD x 1-1/4" Long Grooved OD	2
13	Z29202	Grease Fitting, 1/4NF	2
14	Z71310	Hex Bolt, 3/8NC x 1"	1
15	Z71525	Hex Bolt, 1/2NC x 2-1/2	1
16	Z71527	Hex Bolt, 1/2NC x 2-3/4"	2
17	Z72231	Hex Lock Nut, 3/8NC	1
18	Z72251	Hex Lock Nut, 1/2NC	3
19	Z26201	Bronze Bushing, 3/4" ID x 1" OD x 1-1/2" Long	1

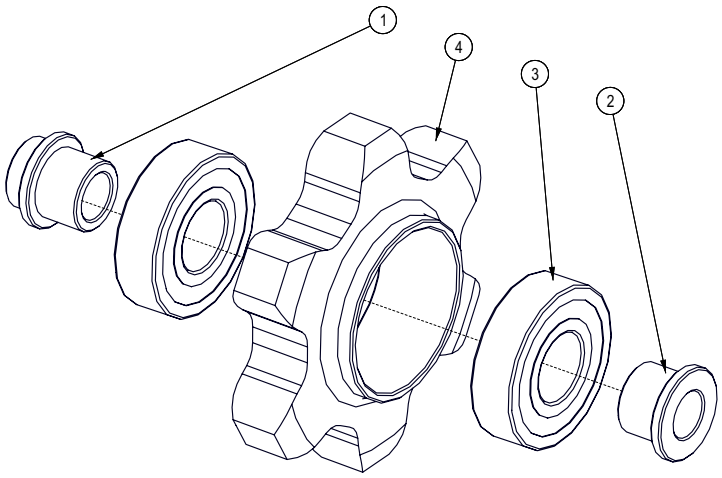
Drive Chain Tensioner



BOM ID	Part No.	Description	Qty
1	Z29201	Grease Fitting, MP02	1
2	Z72231	Hex Lock Nut, 3/8NC	1
3	Z76531	Eye Bolt, 3/8NC x 3-1/2"	1
4	Z72251	Hex Lock Nut, 1/2NC	1

BOM ID	Part No.	Description	Qty
5	7014W459	Arm, Tensioner	1
6	7014A453	Idler Assembly, #550 Chain	1

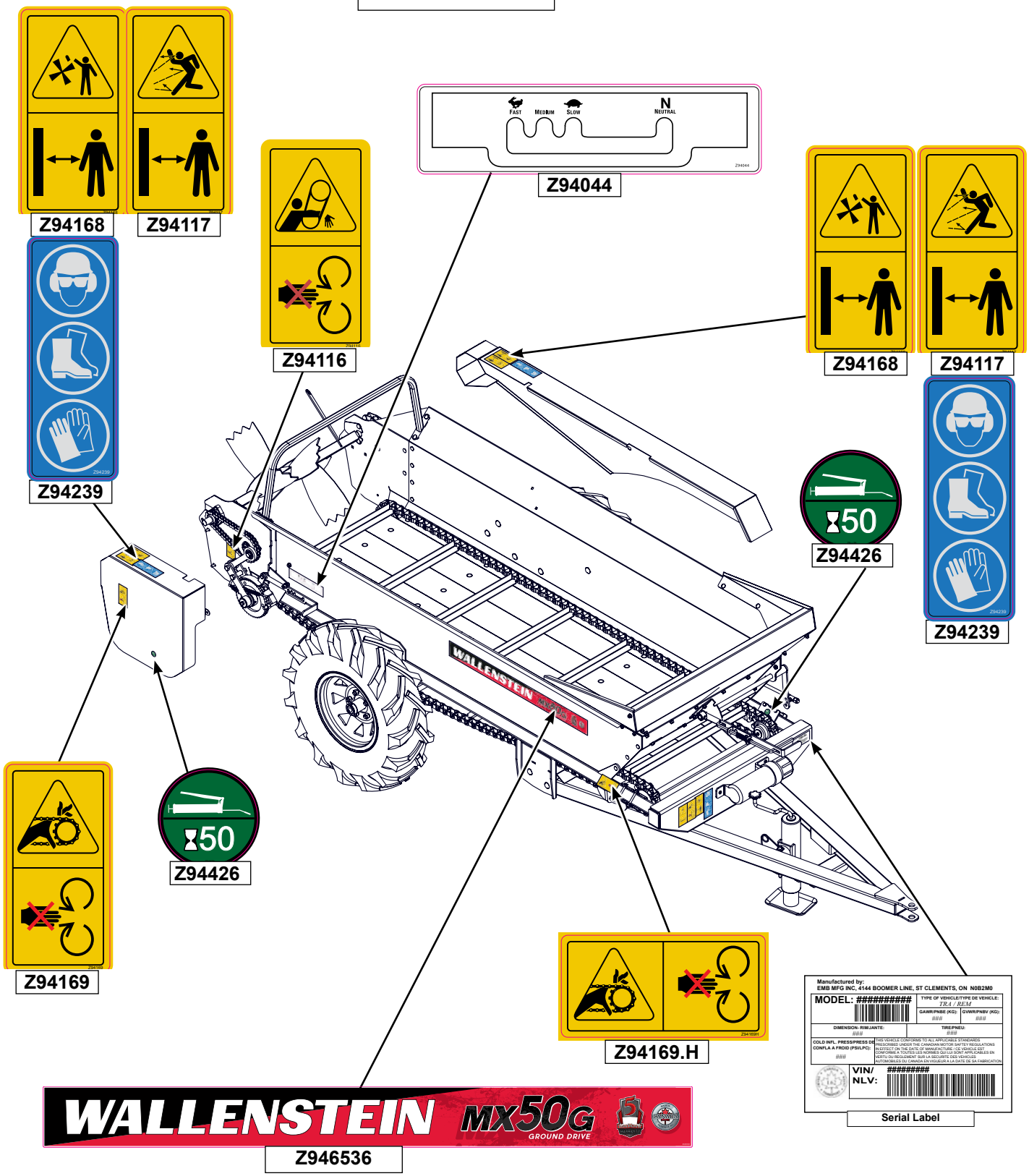
Idler Ass'y Detail



BOM ID	Part No.	Description	Qty
1	7014M450	Bushing, 1/2x3/4 Flanged	1
2	7014M468	Bushing, 1/2x3/4x5/8Lg Flanged	1
3	Z21204	Ball Bearing, 1635-2RS x Self Aligning	2
4	Z42806	Sprocket, #550 x 6 x 1-3/4"	1

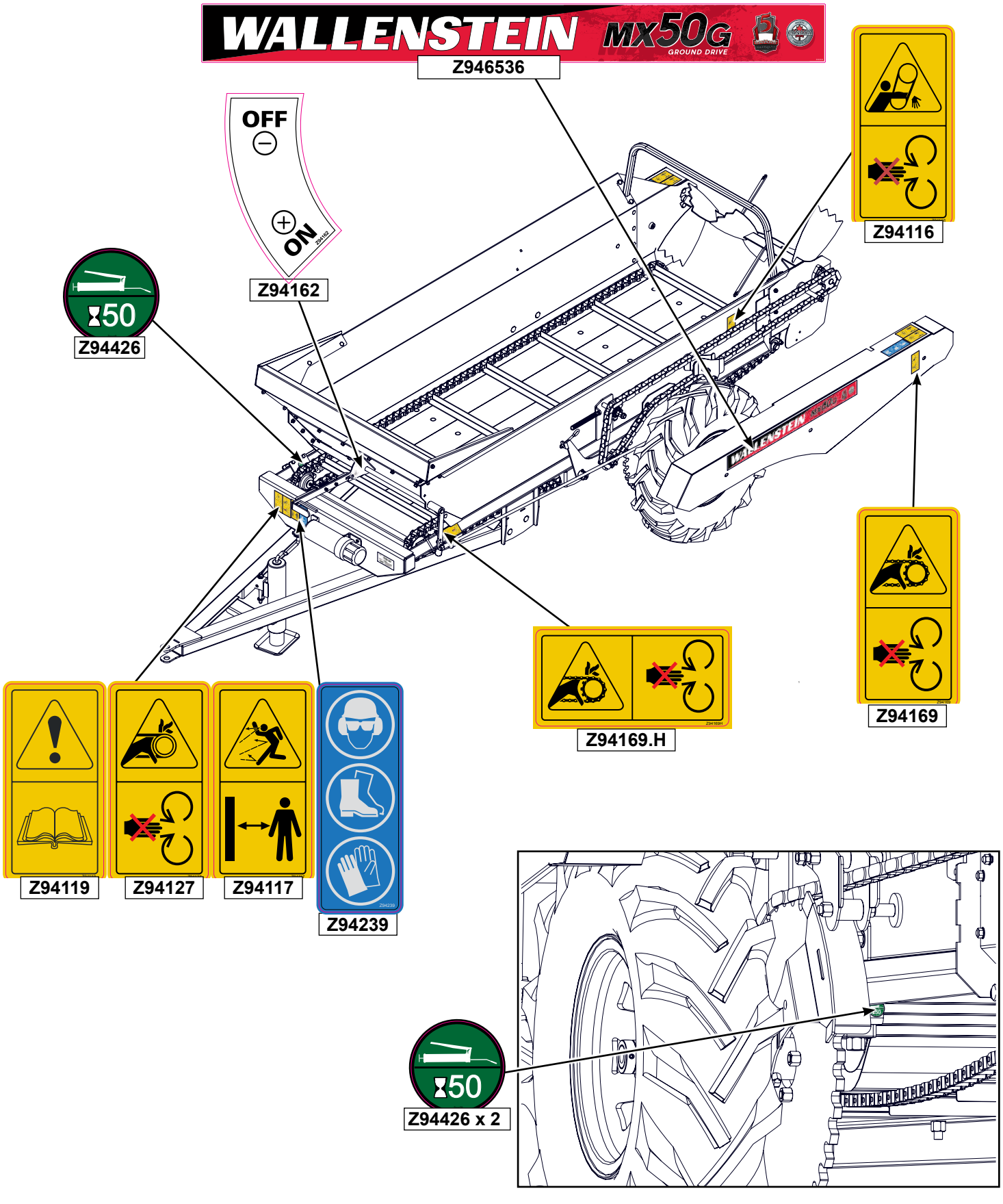
Label Layout

Right Side



 For threaded parts installation, refer to the torque charts in this manual.

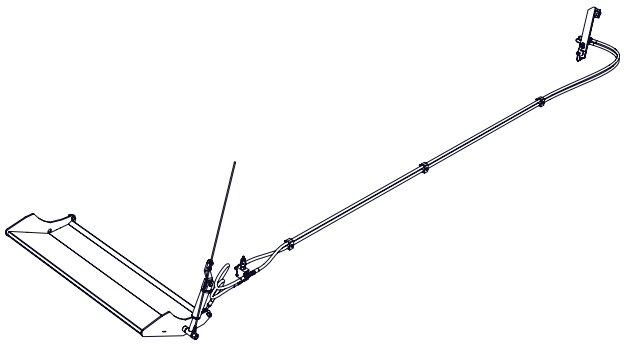
Left Side



 For threaded parts installation, refer to the torque charts in this manual.

Accessories

Call your dealer for pricing and availability



#M7750

M7750 Fines Pan

A must have add on kit, Fines Pan provides a more consistent spread of
manure by causing all manure to be discharged by the beater paddles.
Kit consists of fines pan, hardware, hydraulic cylinder, hoses and components.
Must be dealer installed.



#Z97045
COMPACT MANURE SPREADERS
OPERATOR'S MANUAL

Available as a download at
www.wallensteinequipment.com

 For threaded parts installation, refer to the torque charts in this manual.