

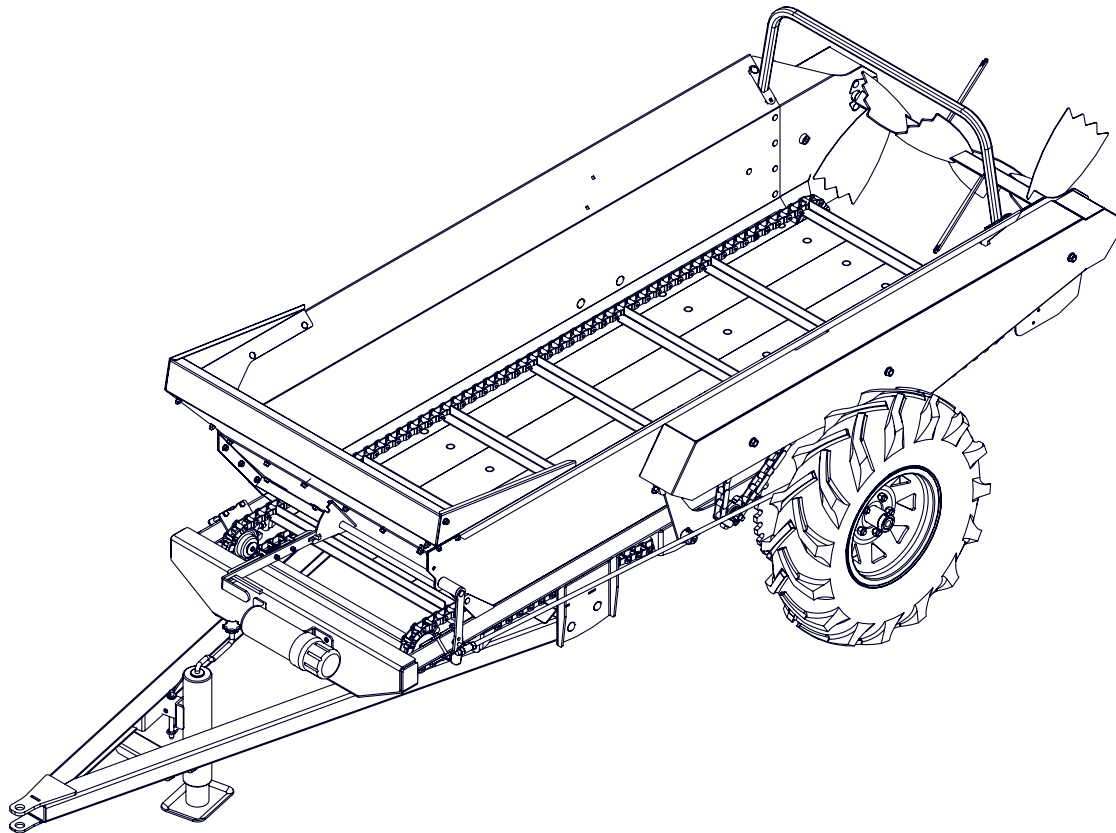


EMB Manufacturing Inc.  
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# MX50G Manure Spreader

## Parts Manual

Starting with S/N's  
**750G121 & After**



Refer to the operators  
manual for safe  
operation and  
maintenance

## 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

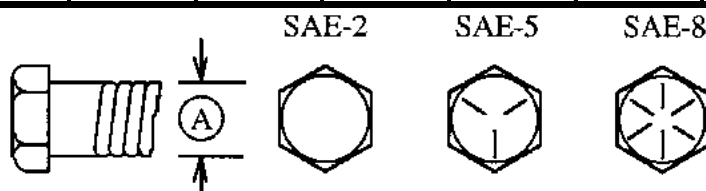
**Bolt Torque**

**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.

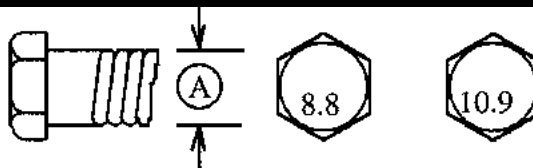
**ENGLISH TORQUE SPECIFICATIONS**

Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (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



**METRIC TORQUE SPECIFICATIONS**

Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (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



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.

### 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*		Recommended Turns To Tighten (After Finger Tightening)	
		(N.m)	(lb-ft)	(Flats)	(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
<b>3/8</b>	<b>11/16</b>	<b>24</b>	<b>18</b>	<b>1</b>	<b>1/6</b>
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.

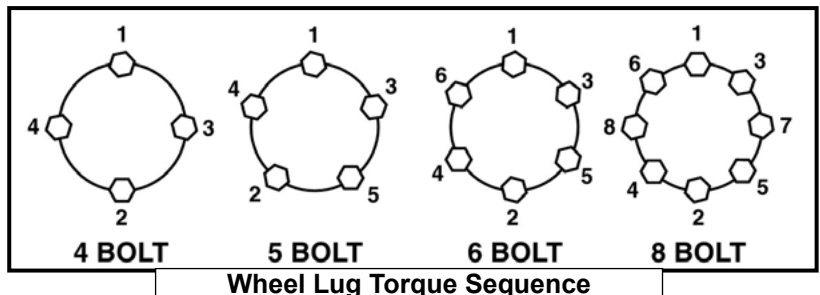
Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

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.

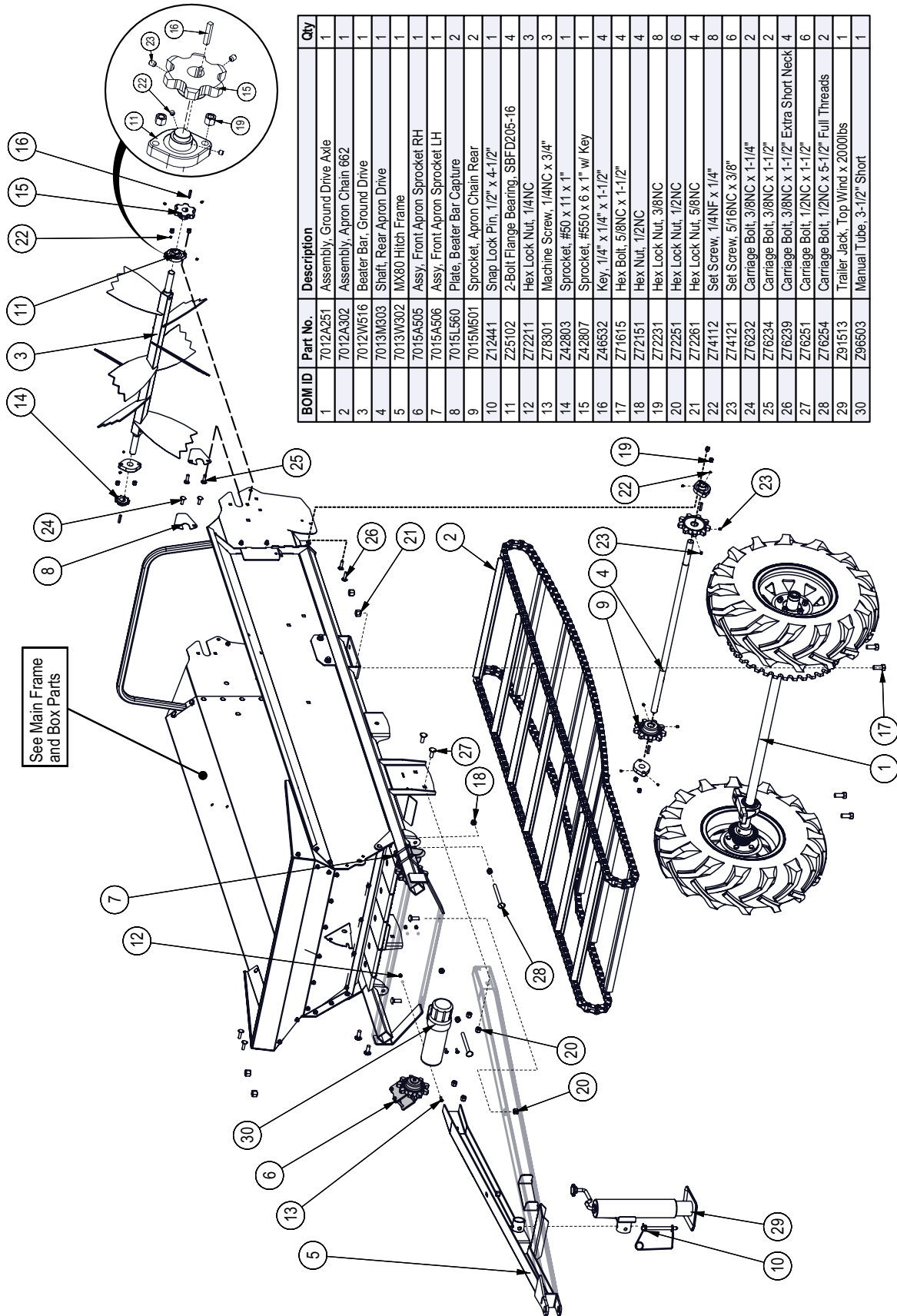
- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

#### 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

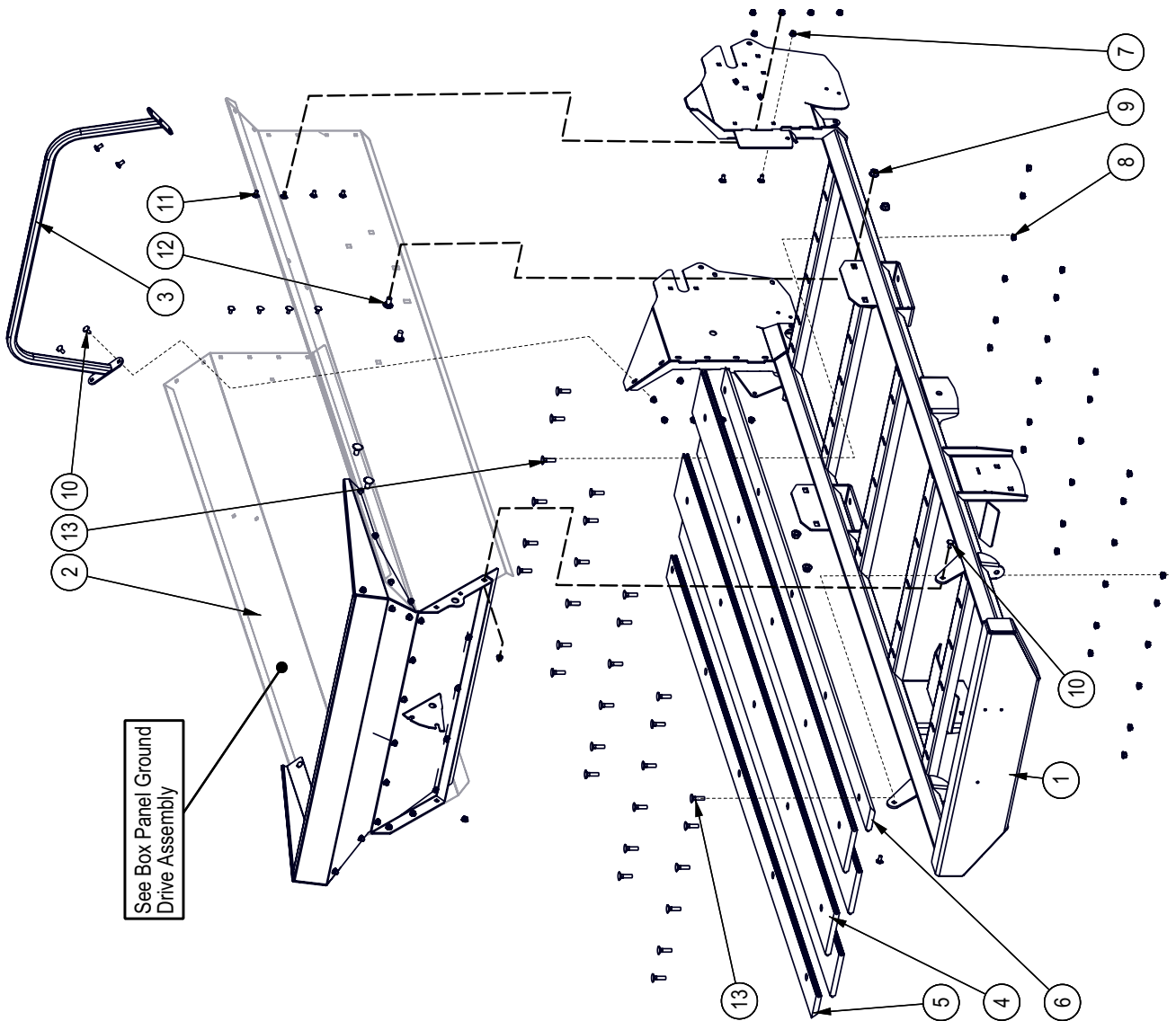


**Main Parts**



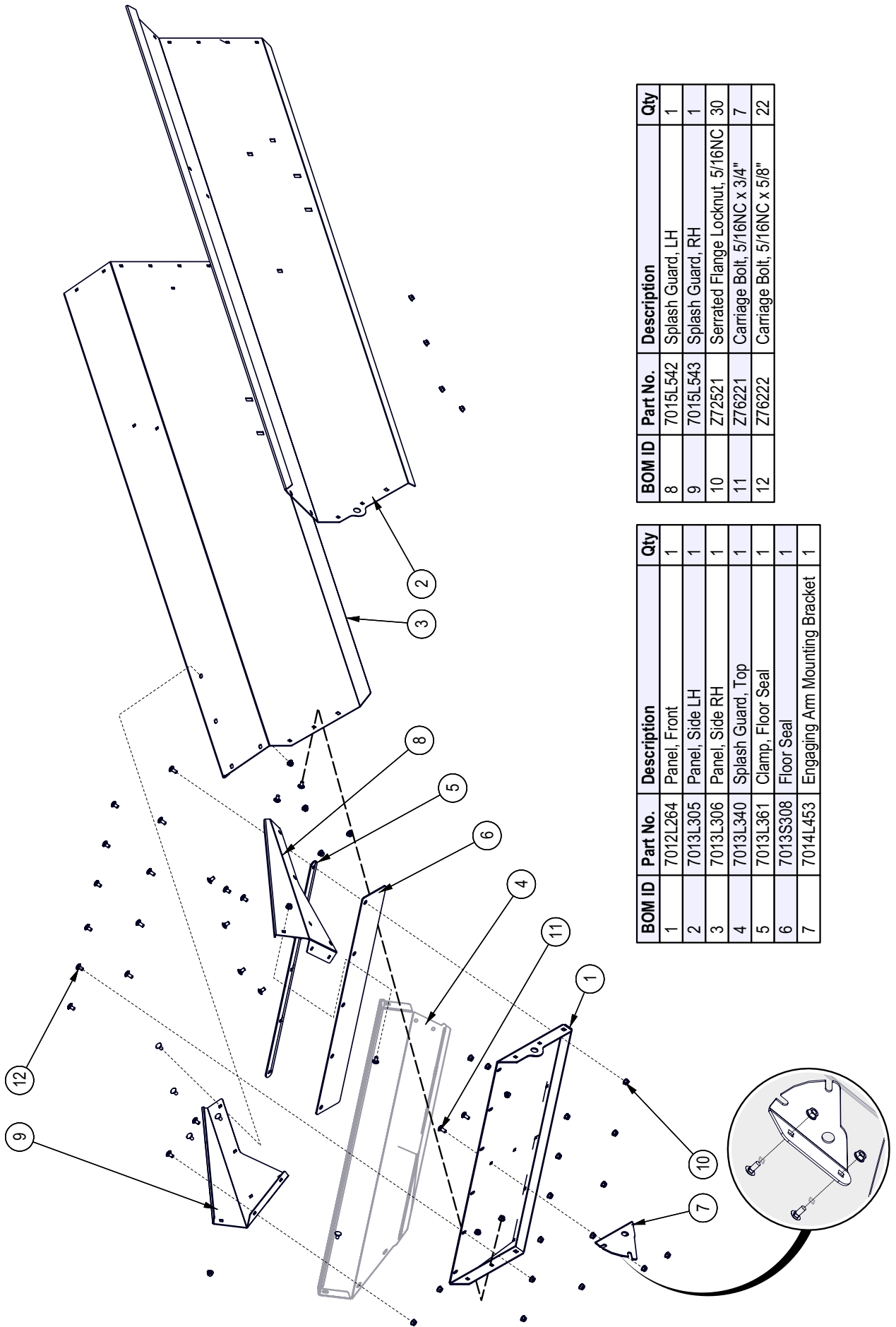
BOM ID	Part No.	Description	Qty
1	7012A251	Assembly, Ground Drive Axle	1
2	7012A302	Assembly, Apron Chain 662	1
3	7012W616	Beater Bar, Ground Drive	1
4	7013M303	Shaft, Rear Apron Drive	1
5	7013W302	MX80 Hitch Frame	1
6	7015A505	Assy, Front Apron Sprocket RH	1
7	7015A506	Assy, Front Apron Sprocket LH	1
8	7015L560	Plate, Beater Bar Capture	2
9	7015M501	Sprocket, Apron Chain Rear	2
10	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	1
11	Z25102	2-Bolt Flange Bearing, SBFD205-16	4
12	Z72211	Hex Lock Nut, 1/4NC	3
13	Z78301	Machine Screw, 1/4NC x 3/4"	3
14	Z42803	Sprocket, #50 x 11 x 1"	1
15	Z42807	Sprocket, #550 x 6 x 1" w/ Key	1
16	Z46532	Key, 1/4" x 1/4" x 1-1/2"	4
17	Z71615	Hex Bolt, 5/8NC x 1-1/2"	4
18	Z72151	Hex Nut, 1/2NC	4
19	Z72231	Hex Lock Nut, 3/8NC	8
20	Z72251	Hex Lock Nut, 1/2NC	6
21	Z72261	Hex Lock Nut, 5/8NC	4
22	Z74112	Set Screw, 1/4NF x 1/4"	8
23	Z74121	Set Screw, 5/16NC x 3/8"	6
24	Z76232	Carriage Bolt, 3/8NC x 1-1/4"	2
25	Z76234	Carriage Bolt, 3/8NC x 1-1/2"	2
26	Z76239	Carriage Bolt, 3/8NC x 1-1/2" Extra Short Neck	4
27	Z76251	Carriage Bolt, 1/2NC x 1-1/2"	6
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

**Main Frame and Box Parts**



BOM ID	Part No.	Description	Qty
1	7013W301	MX50 Main Frame	1
2	7012A301	Assy, Box Panel Ground Drive	1
3	7013W317	Crossbar	1
4	7013S305	Floor Board, Center	4
5	7013S306	Floor Board, Right End	1
6	7013S307	Floor Board, Left End	1
7	Z72521	Serrated Flange Locknut, 5/16NC	16
8	Z72531	Serrated Flange Locknut, 3/8NC	30
9	Z72551	Serrated Flange Locknut, 1/2NC	4
10	Z76221	Carriage Bolt, 5/16NC x 3/4"	8
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"	30

**Box Panel Ground Drive Ass'y**



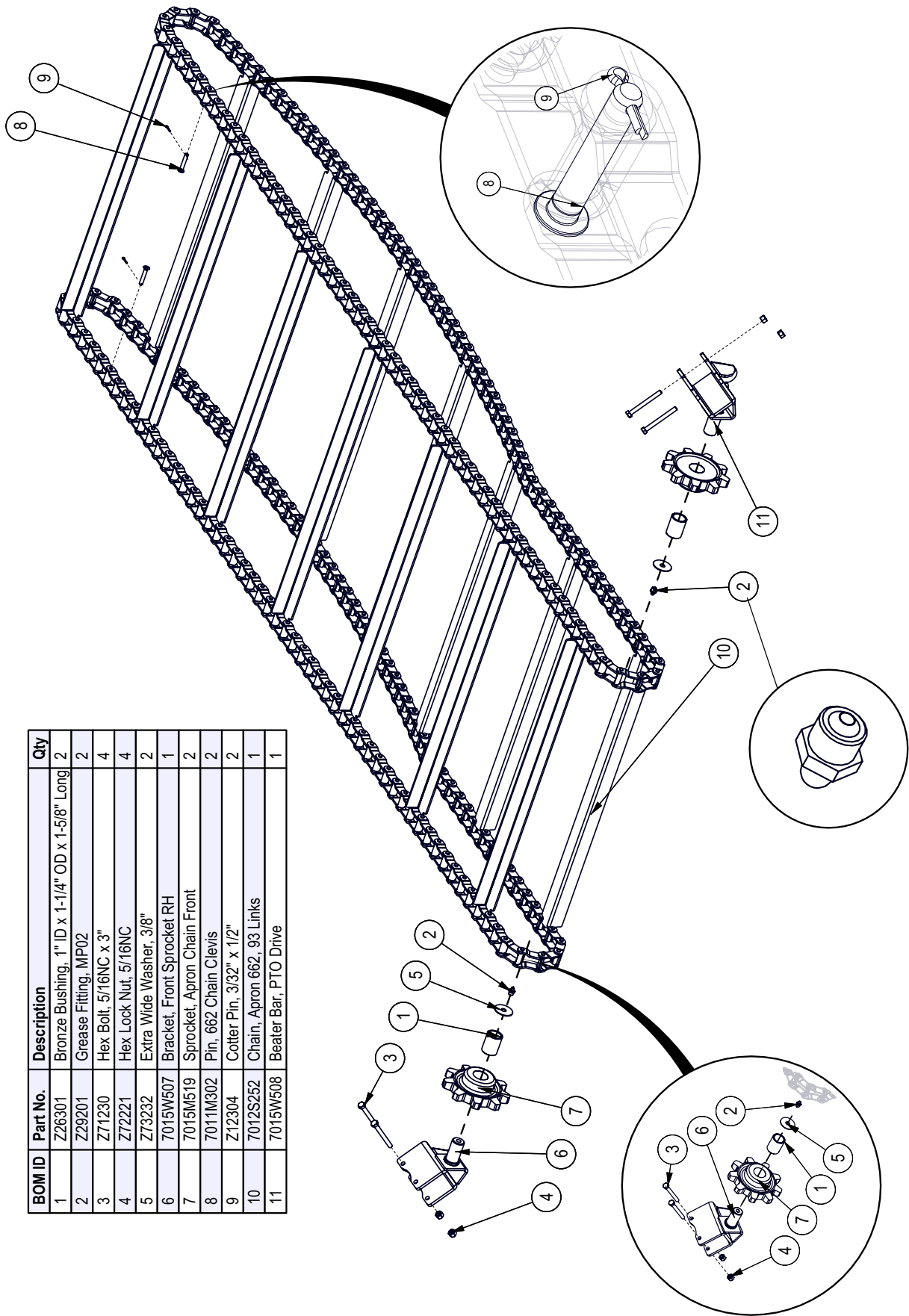
BOM ID	Part No.	Description	Qty
1	7012L264	Panel, Front	1
2	7013L305	Panel, Side LH	1
3	7013L306	Panel, Side RH	1
4	7013L340	Splash Guard, Top	1
5	7013L361	Clamp, Floor Seal	1
6	7013S308	Floor Seal	1
7	7014L453	Engaging Arm Mounting Bracket	1

BOM ID	Part No.	Description	Qty
8	7015L542	Splash Guard, LH	1
9	7015L543	Splash Guard, RH	1
10	Z72521	Serrated Flange Locknut, 5/16NC 30	7
11	Z76221	Carriage Bolt, 5/16NC x 3/4"	7
12	Z76222	Carriage Bolt, 5/16NC x 5/8"	22

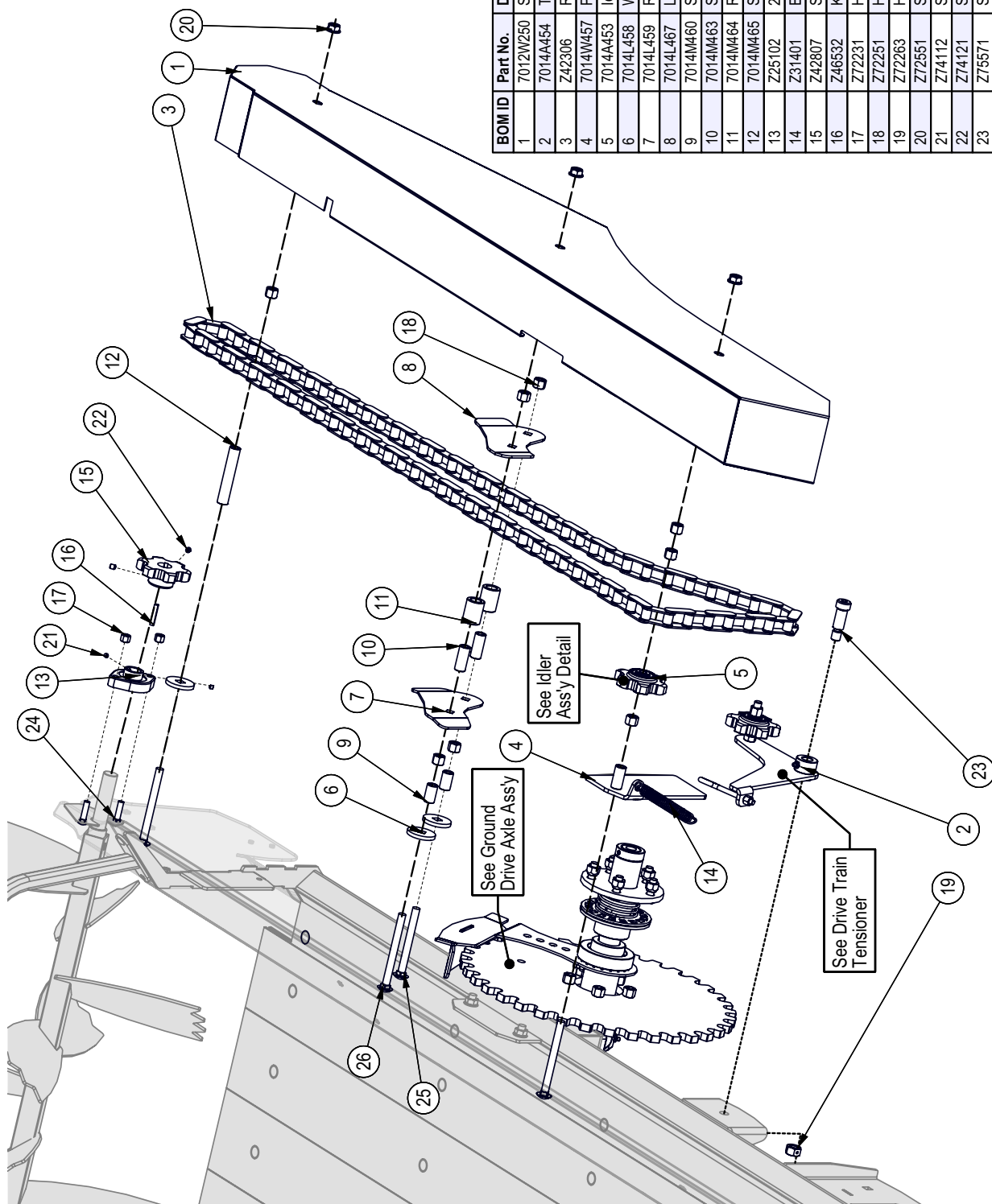


**Apron Chain And Front Sprockets**

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	7012S252	Chain, Apron 662, 93 Links	1
11	7015W508	Beater Bar, PTO Drive	1

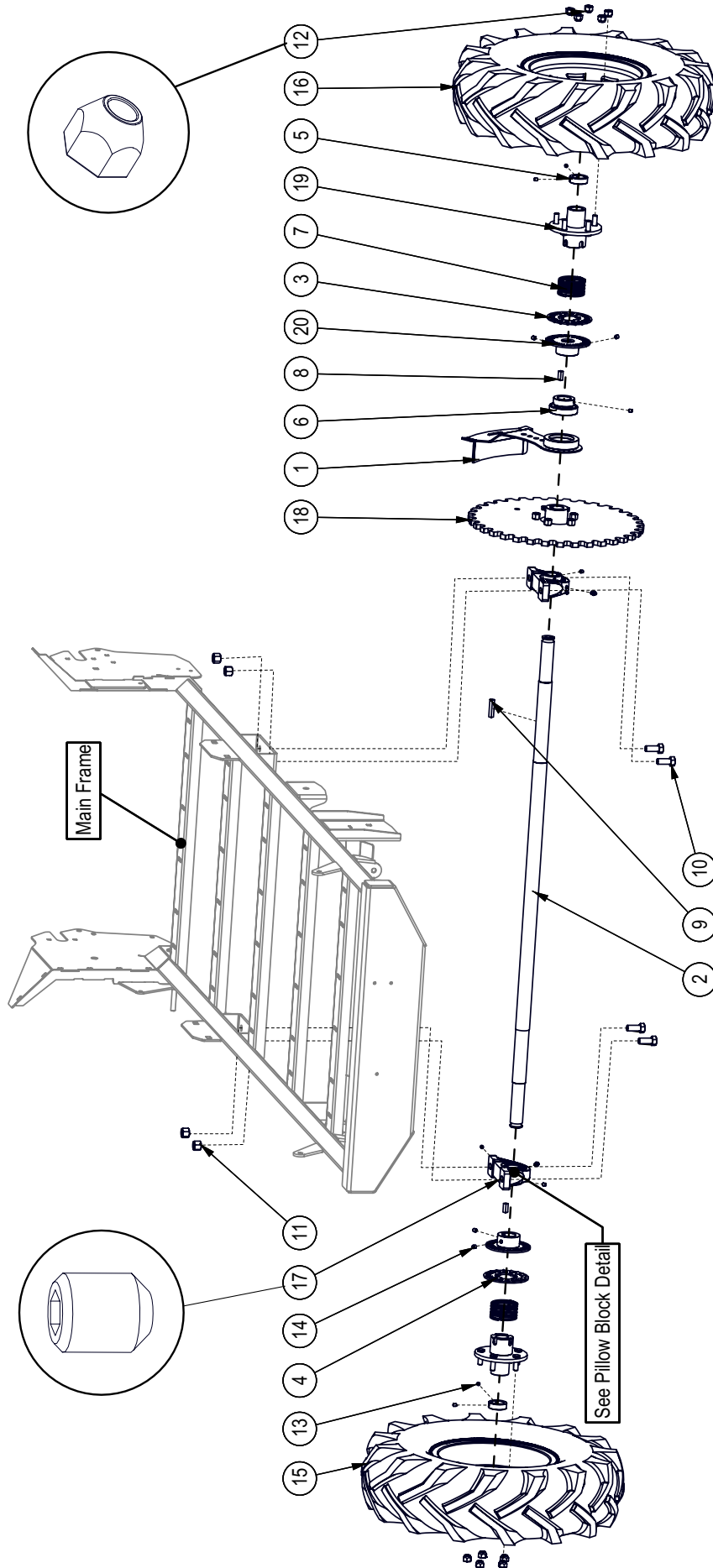


**Ground Drive Parts**



BOM ID	Part No.	Description	Qty
1	7012W250	Shield, Drive Chain	1
2	7014A454	Tensioner, Drive Chain	1
3	Z42306	Roller Chain, #550 x 40	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	7014W460	Spacer, 1-1/4	2
10	7014W463	Spacer, 1-3/4	2
11	7014W464	Roller, Chain Guide	2
12	7014W465	Spacer, Rear Shield	1
13	Z25102	2-Bolt Flange Bearing, SBF205-16	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	8
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	Z76253	Carriage Bolt, 1/2NC x 5" Full Threads	1
26	Z76254	Carriage Bolt, 1/2NC x 5-1/2" Full Threads	3

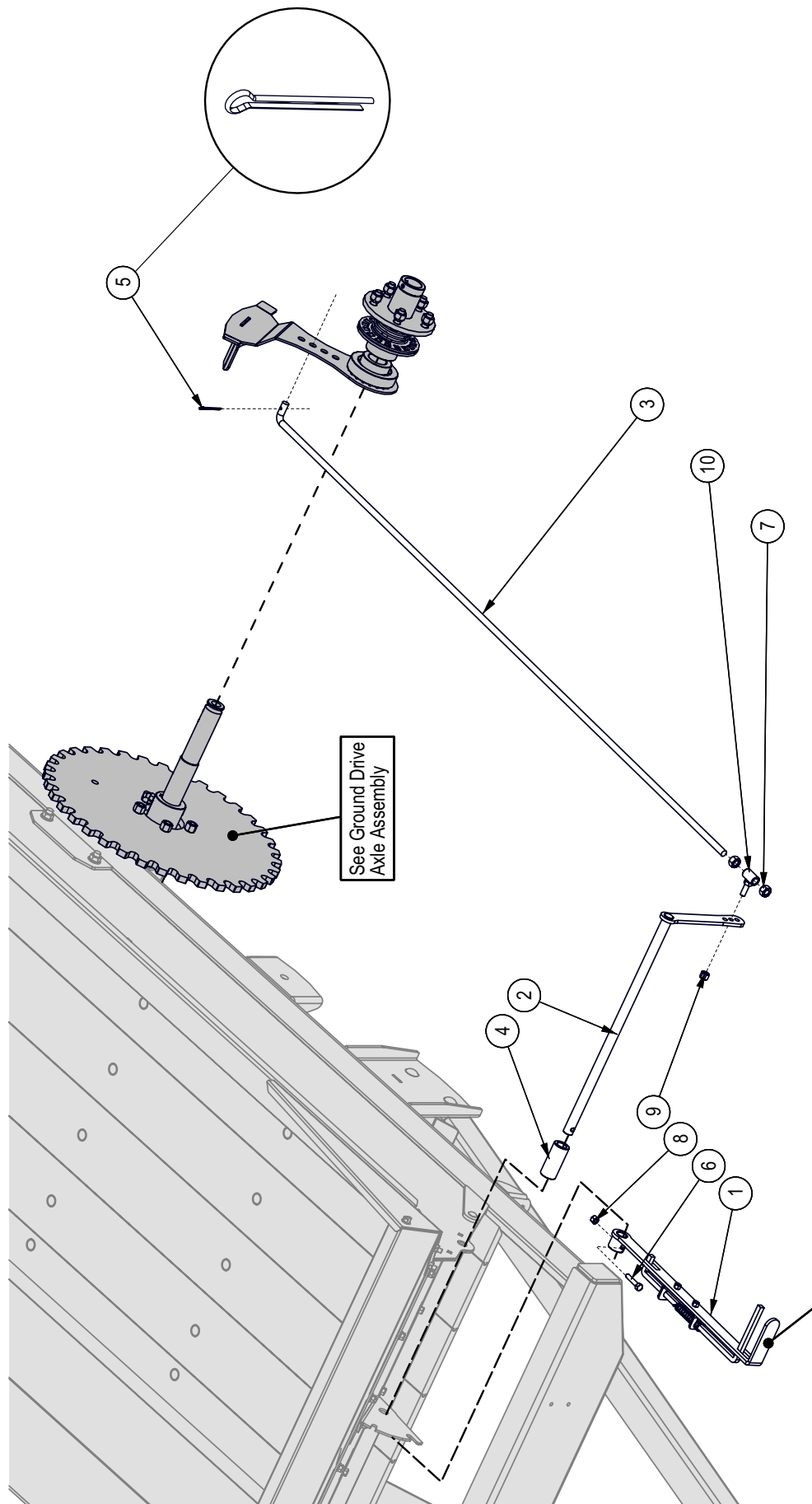
**Ground Drive Axle Assembly**



BOM ID	Part No.	Description	Qty
12	Z72931	Lug Nut, 1/2NF	10
13	Z74121	Set Screw, 5/16NC x 3/8"	5
14	Z74131	Set Screw, 3/8NC x 3/8"	4
15	Z91305	7.60-15SL 6PR American Farmer RH	1
16	Z91306	7.60-15SL 6PR American Farmer LH	1
17	Z24101	Pillow Block, UCP208-24	2
18	7014W455	Assy, Main Ground Drive Sprocket	1
19	7014W460	Hub, 5-Bolt Ground Drive	2
20	7014W454	Receiver, GD Ratchet	2

BOM ID	Part No.	Description	Qty
1	7014W451	Arm, Drive Chain Deflector	1
2	7012M252	Axle, Ground Drive	1
3	7014L452	Driver, GD Ratchet LH	1
4	7014L468	Driver, GD Ratchet RH	1
5	7014M456	Collar, Wheel Stop	2
6	Z21901	Ball Bearing, CSA208-24 x Taper Lock	1
7	Z32402	Comp Spring, 3" OD x 4-1/2" x 0.145"	2
8	Z46553	Key, 3/8" x 3/8" x 1"	2
9	Z46555	Key, 3/8" x 3/8" x 2"	1
10	Z71615	Hex Bolt, 5/8NC x 1-1/2"	4
11	Z72261	Hex Lock Nut, 5/8NC	4

**Ground Drive Engagement**



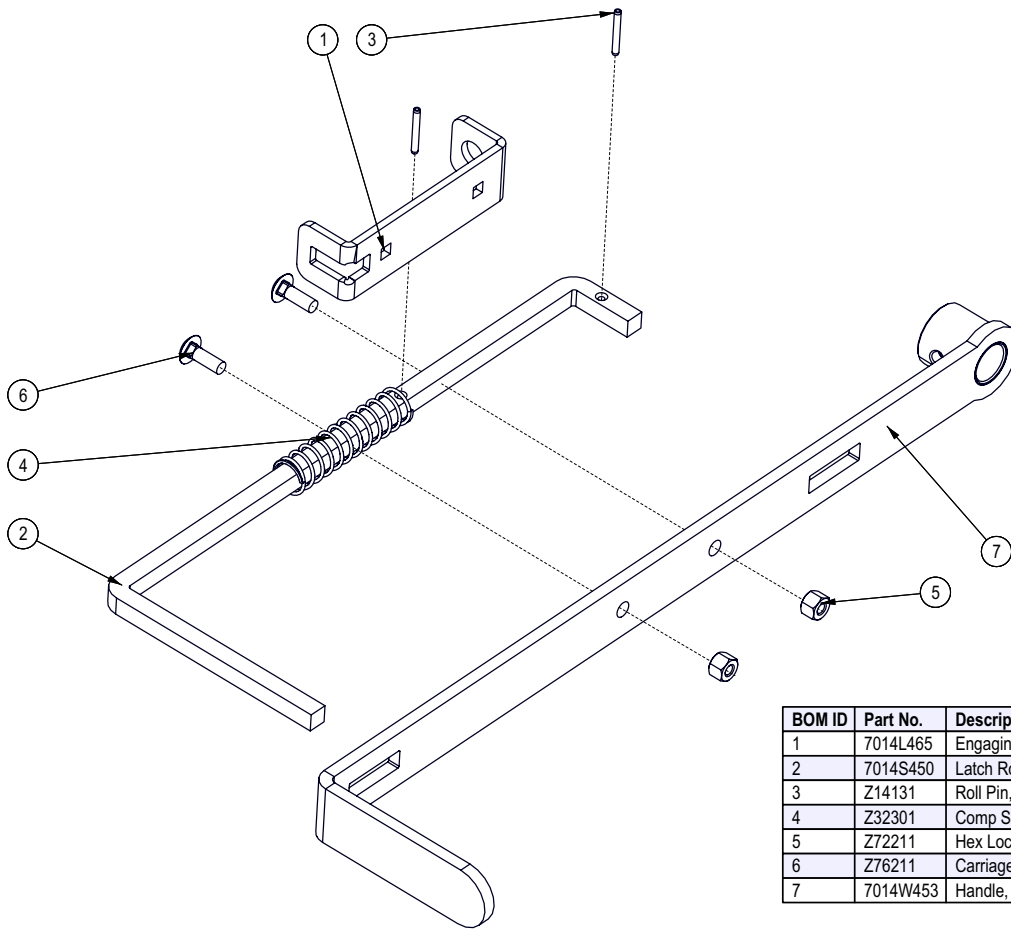
See Drive Engagement Handle

See Ground Drive Axle Assembly

BOM ID	Part No.	Description	Qty
1	7014A450	Handle, Drive Engagement	1
2	7012W252	Rod, Drive Engagement Connection	1
3	7012S251	Engaging Rod	1
4	7014M459	Engaging Shaft Spacer	1
5	Z12300	Cotter Pin 3/16 X 2-1/2	1
6	Z71215	Hex Bolt, 5/16NC x 1-1/2"	1

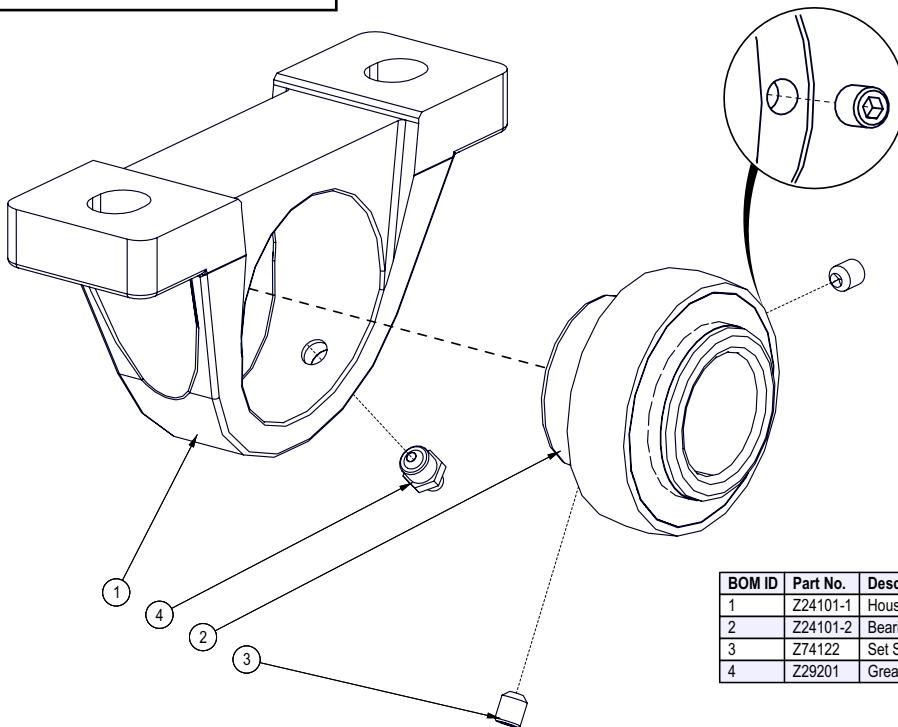
BOM ID	Part No.	Description	Qty
7	Z72151	Hex Nut, 1/2NC	2
8	Z72221	Hex Lock Nut, 5/16NC	1
9	Z72231	Hex Lock Nut, 3/8NC	1
10	7014W458	Joint, Engagement Linkage	1

**Drive Engagement Handle**



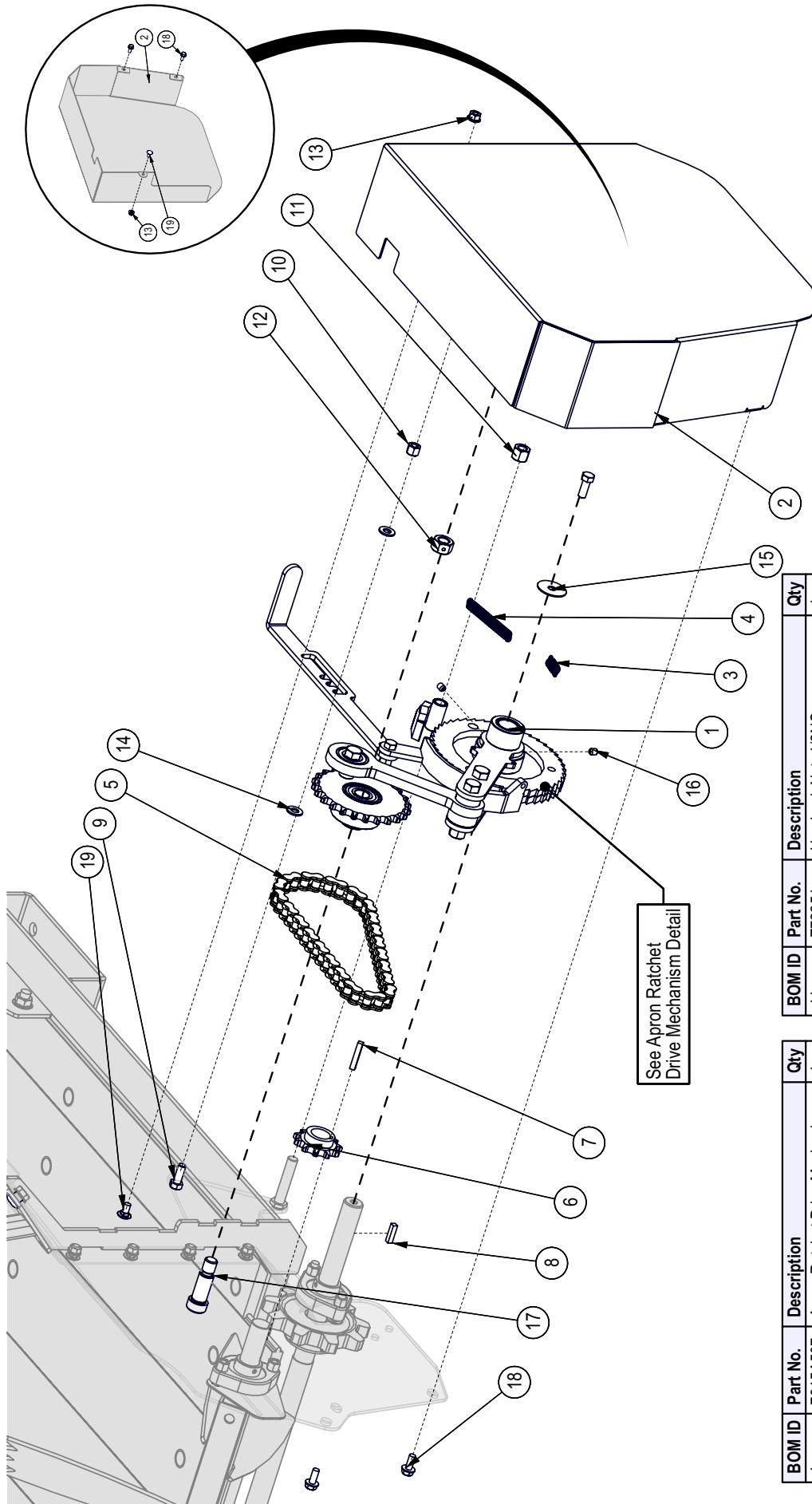
BOM ID	Part No.	Description	Qty
1	7014L465	Engaging Arm Guide	1
2	7014S450	Latch Rod	1
3	Z14131	Roll Pin, 1/8" x 1"	2
4	Z32301	Comp Spring, 0.720" OD x 3" x 0.063"	1
5	Z72211	Hex Lock Nut, 1/4NC	2
6	Z76211	Carriage Bolt, 1/4NC x 3/4"	2
7	7014W453	Handle, Engagement	1

**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

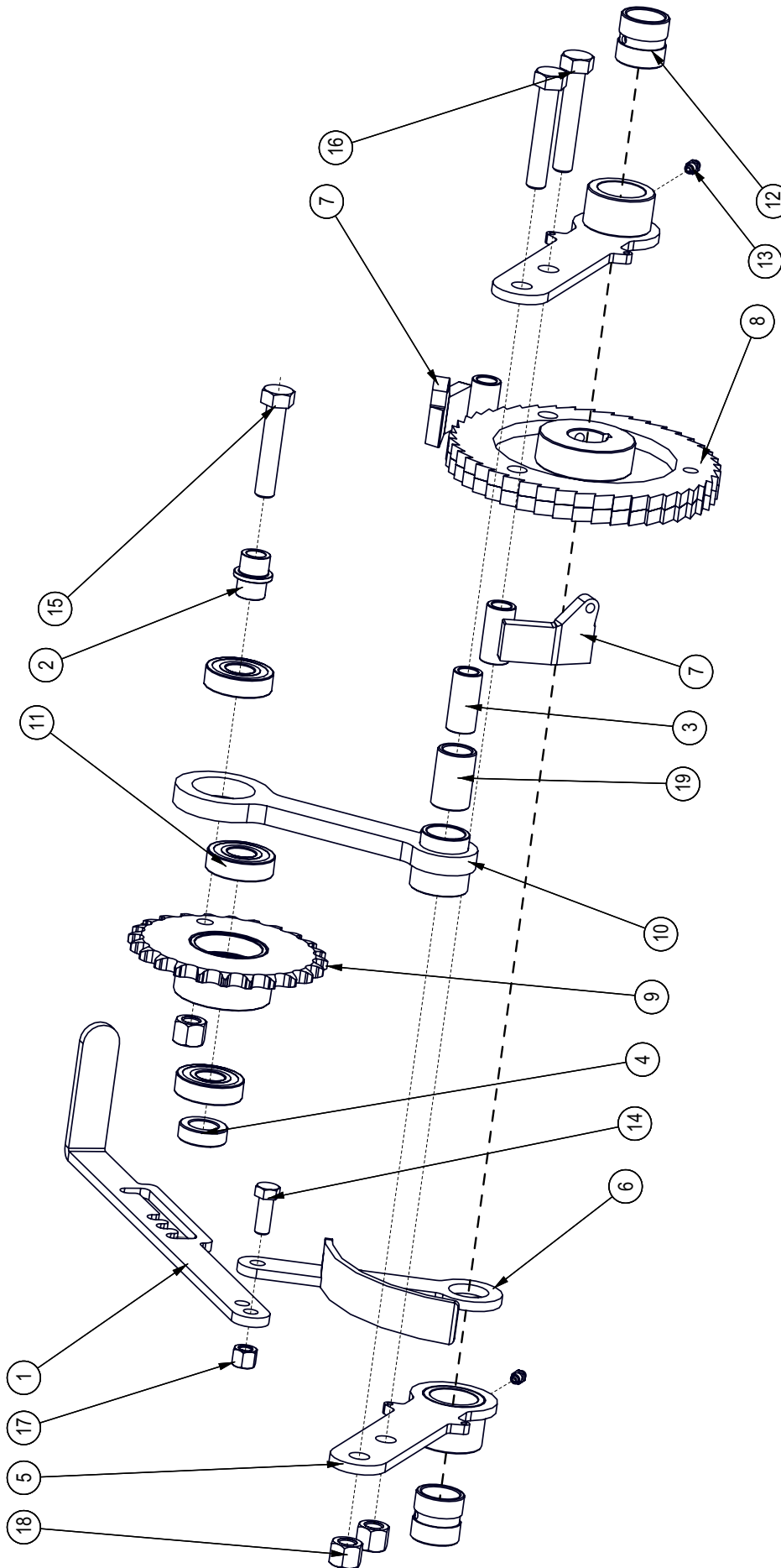
**Apron Chain Ratchet Parts**



BOM ID	Part No.	Description	Qty
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

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

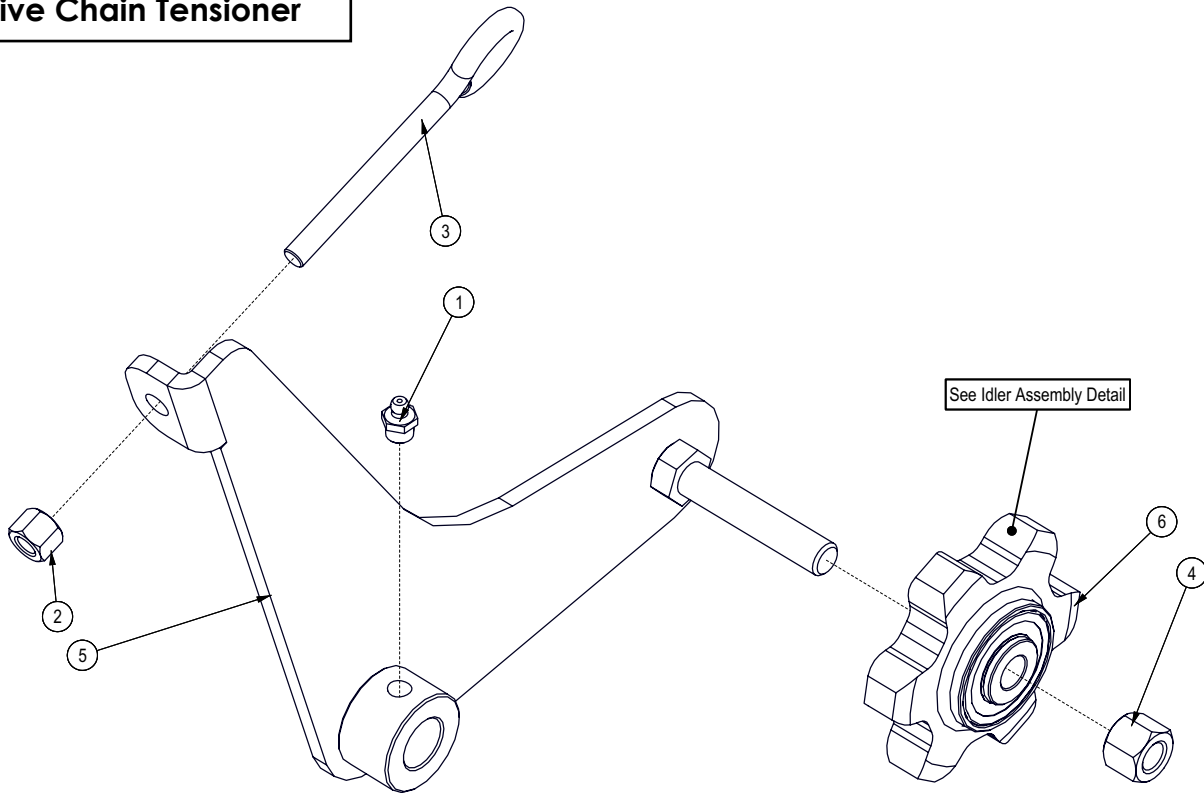
**Apron Ratchet Drive Mechanism Detail**



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	ZT1310	Hex Bolt, 3/8NC x 1"	1
15	ZT1525	Hex Bolt, 1/2NC x 2-1/2"	1
16	ZT1527	Hex Bolt, 1/2NC x 2-3/4"	2
17	ZT2231	Hex Lock Nut, 3/8NC	1
18	ZT2251	Hex Lock Nut, 1/2NC	3
19	Z26201	Bronze Bushing, 3/4" ID x 1" OD x 1-1/2" Long	1

BOM ID	Part No.	Description	Qty
1	70151524	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

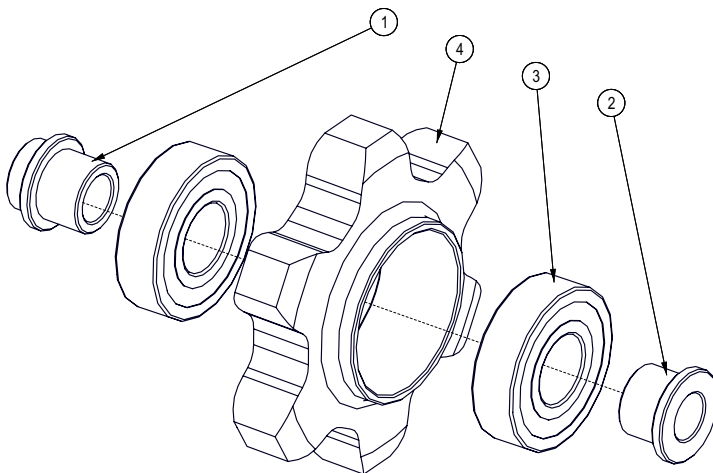
**Drive Chain Tensioner**



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**

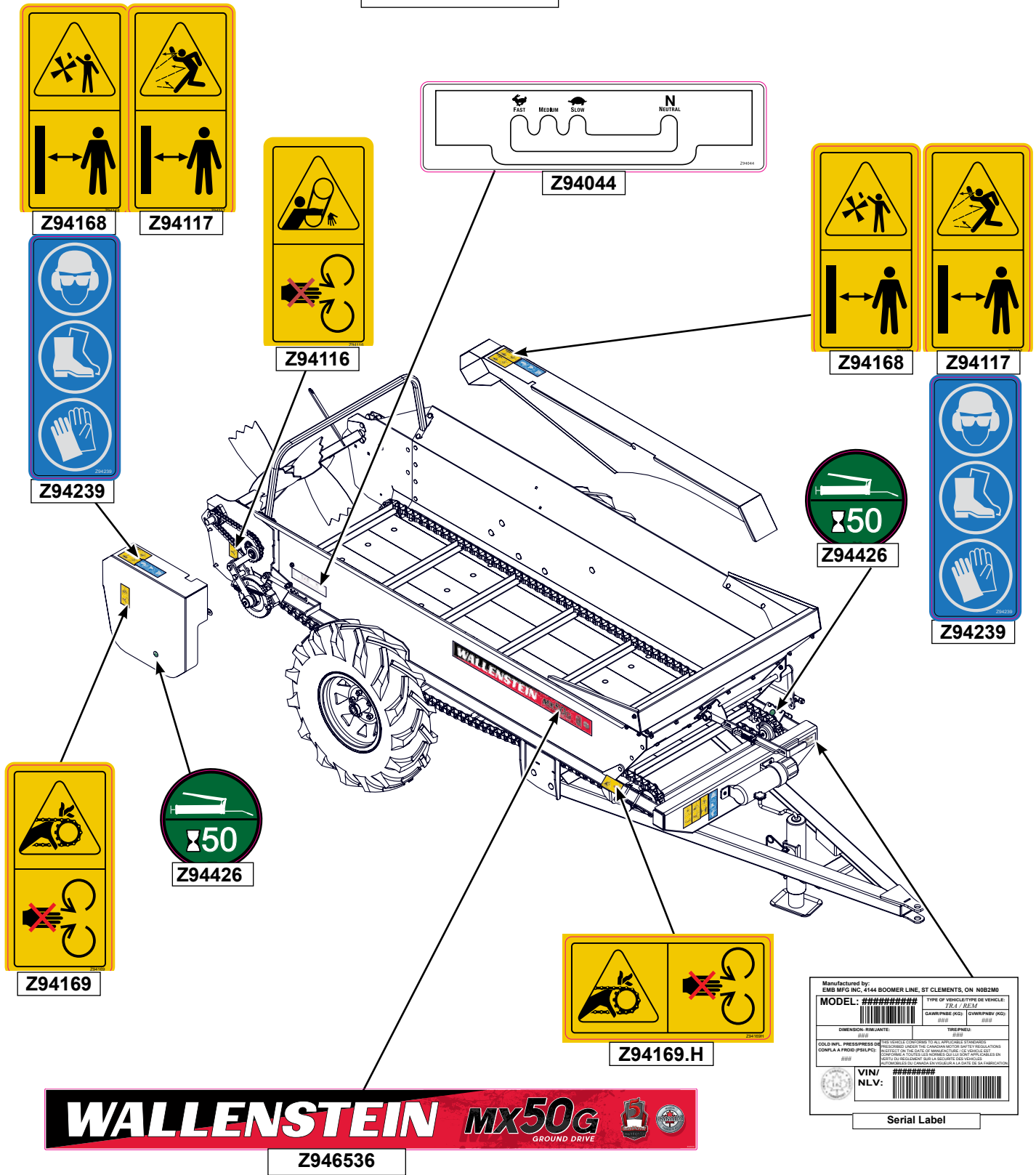


BOM ID	Part No.	Description	Qty
1	7014M450	Bushing, 1/2x3/4 Flanged	1
2	7014M468	Bushing, 1/2x3/4x5/8Lg Flanged	1
3	Z21204	Ball Bearing, 1635-2RS x Self Aligning	2
4	Z42806	Sprocket, #550 x 6 x 1-3/4"	1



**Label Layout**

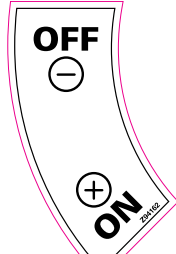
Right Side



Left Side



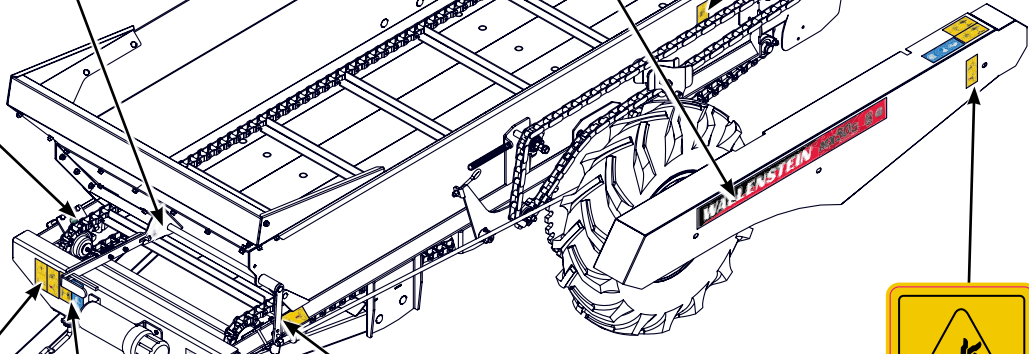
Z946536



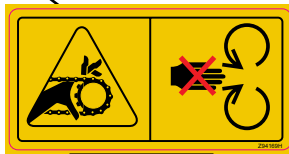
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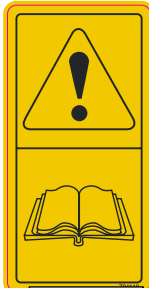
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Z94169



Z94169.H



Z94119



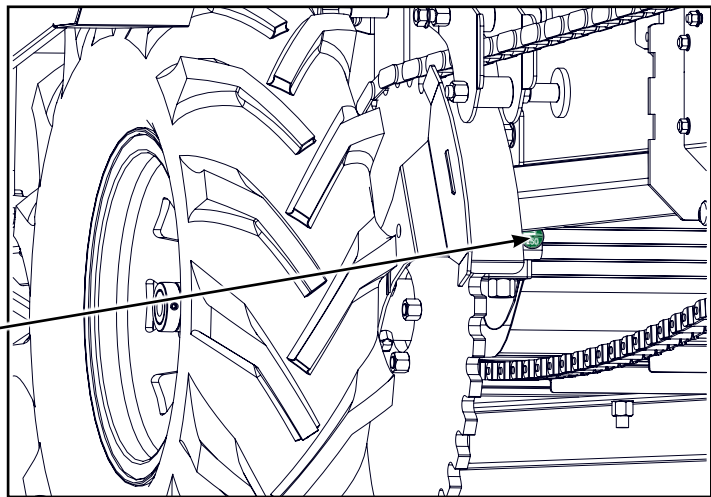
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Z94117



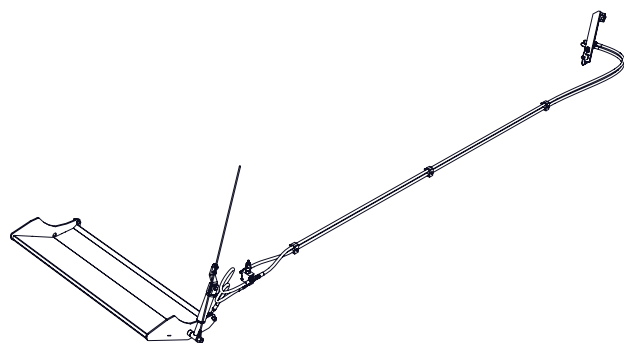
Z94239



Z94426 x 2

## 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](http://www.wallensteinequipment.com)