

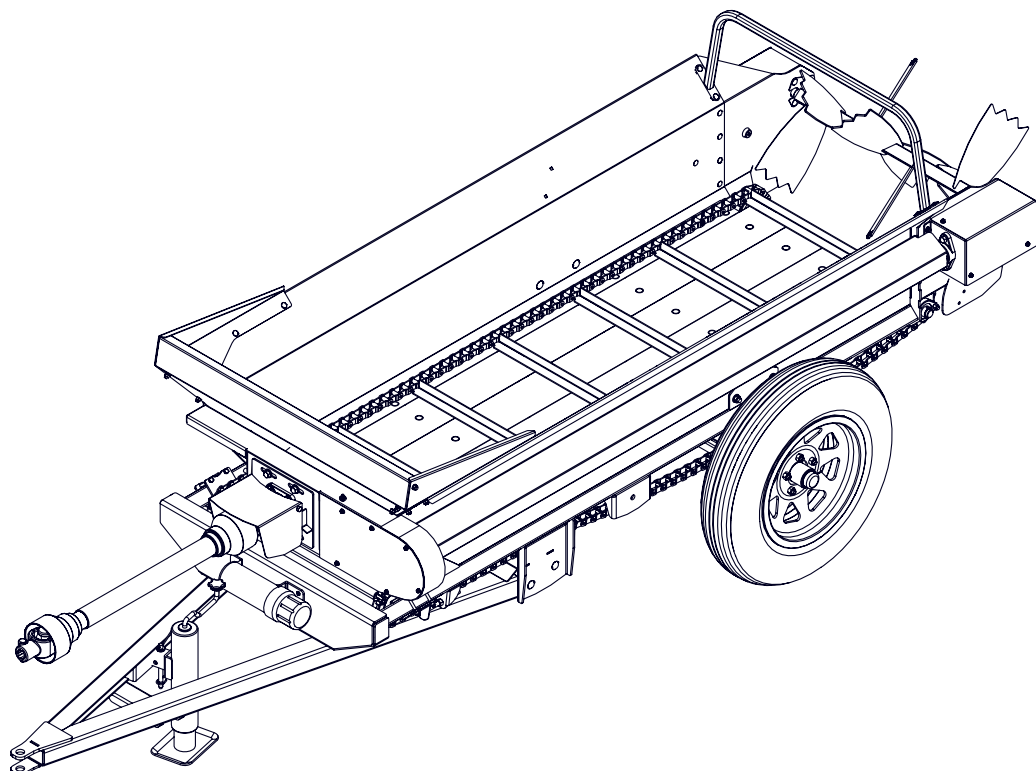


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# MX50P Manure Spreader

## Parts Manual

Starting with S/N's  
**7050P106 & 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.



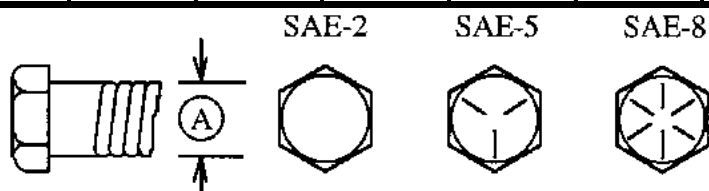
Refer to the operators  
manual for safe  
operation and  
maintenance

**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.

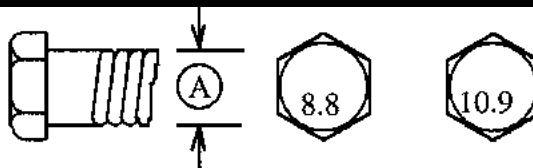
ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	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



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 (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



### 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.

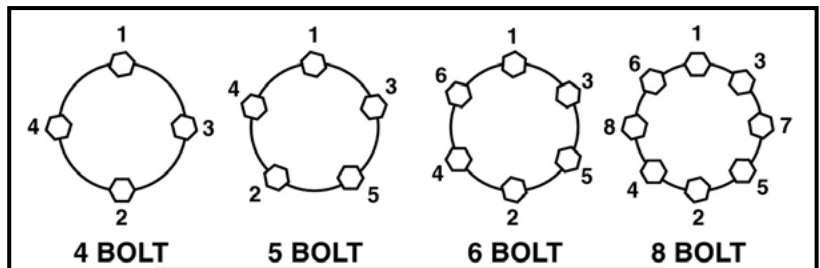
Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

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.

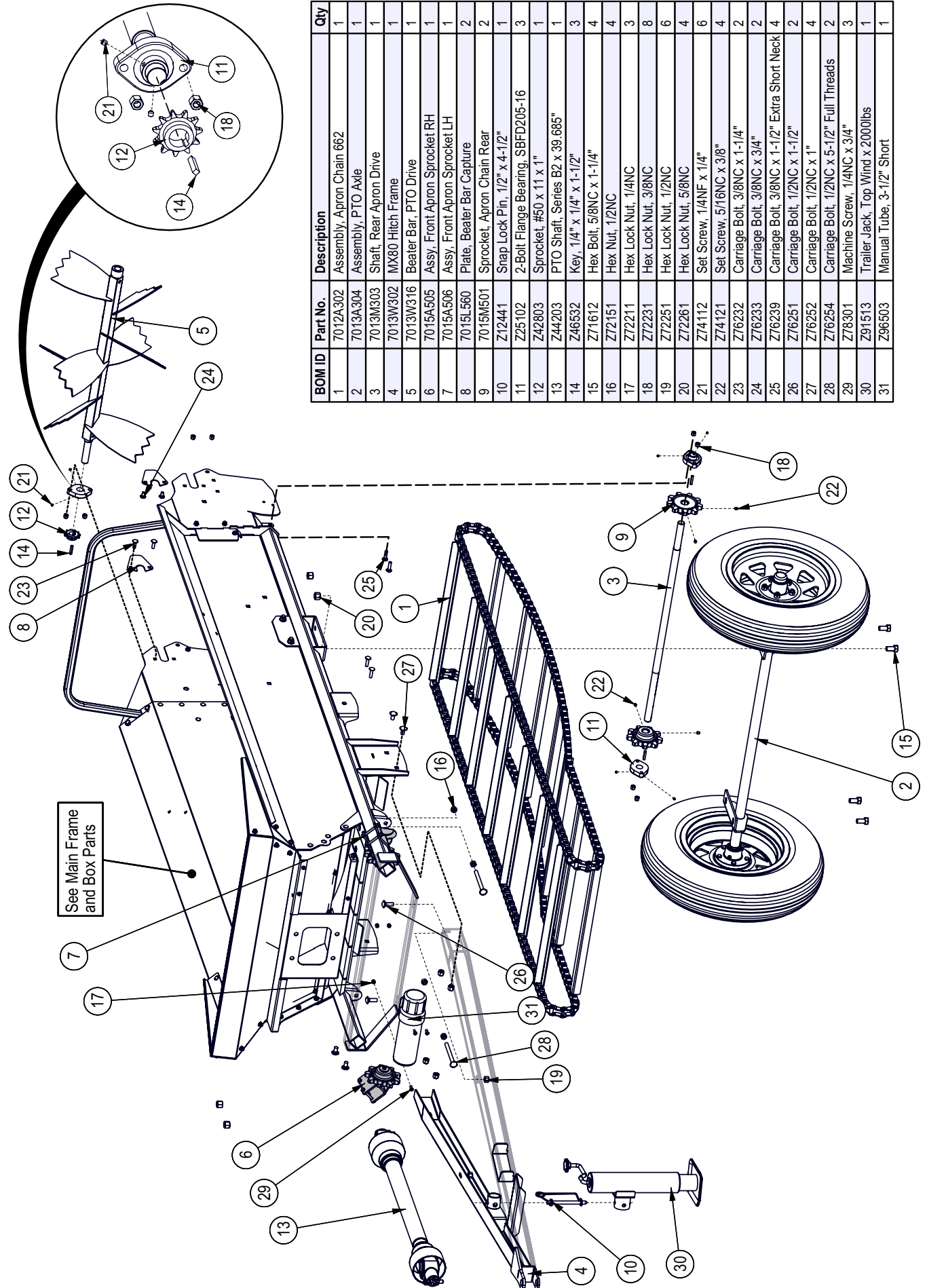
#### Wheel Torque Requirements

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



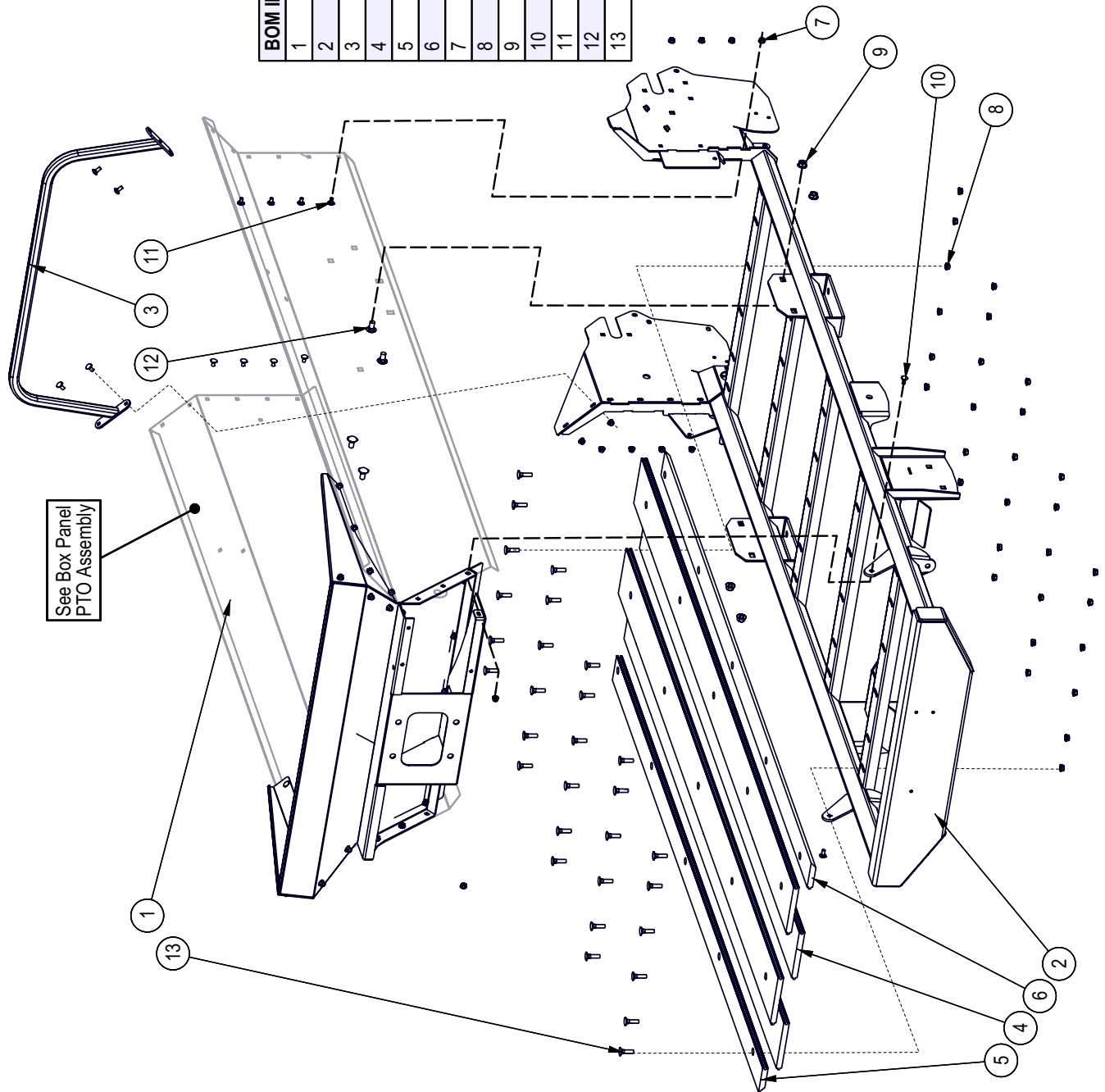
Wheel Lug Torque Sequence

**Main Parts**



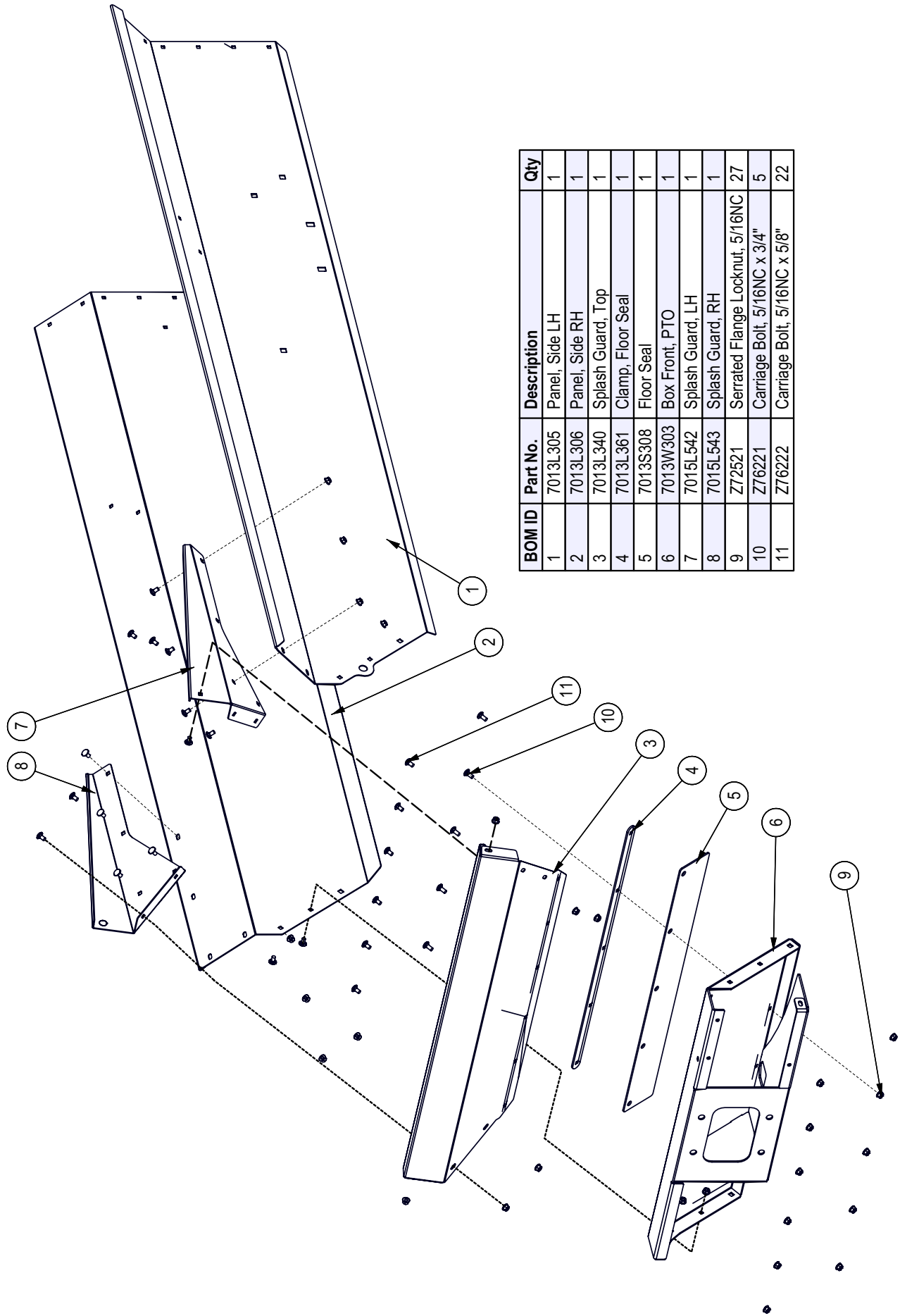
BOM ID	Part No.	Description	Qty
1	7012A302	Assembly, Apron Chain 662	1
2	7013A304	Assembly, PTO Axle	1
3	7013M303	Shaft, Rear Apron Drive	1
4	7013W302	MX80 Hitch Frame	1
5	7013W316	Beater Bar, PTO Drive	1
6	7015A505	Assy, Front Apron Sprocket RH	1
7	7015A506	Assy, Front Apron Sprocket LH	1
8	7015L560	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	3
12	Z42803	Sprocket, #50 x 11 x 1"	1
13	Z44203	PTO Shaft, Series B2 x 39.685"	1
14	Z46532	Key, 1/4" x 1/4" x 1-1/2"	3
15	Z71612	Hex Bolt, 5/8NC x 1-1/4"	4
16	Z72151	Hex Nut, 1/2NC	4
17	Z72211	Hex Lock Nut, 1/4NC	3
18	Z72231	Hex Lock Nut, 3/8NC	8
19	Z72251	Hex Lock Nut, 1/2NC	6
20	Z72261	Hex Lock Nut, 5/8NC	4
21	Z74112	Set Screw, 1/4NF x 1/4"	6
22	Z74121	Set Screw, 5/16NC x 3/8"	4
23	Z76232	Carriage Bolt, 3/8NC x 1-1/4"	2
24	Z76233	Carriage Bolt, 3/8NC x 3/4"	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	Z76301	Machine Screw, 1/4NC x 3/4"	3
30	Z91513	Trailer Jack, Top Wind x 2000lbs	1
31	Z96503	Manual Tube, 3-1/2" Short	1

**Main Frame and Box Parts**



BOM ID	Part No.	Description	Qty
1	7013A301	Assy, Box Panel PTO	1
2	7013W301	MX50 Main Frame	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	14
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"	6
11	Z76222	Carriage Bolt, 5/16NC x 5/8"	8
12	Z76252	Carriage Bolt, 1/2NC x 1"	4
13	Z76631	Flaw Bolt, 3/8NC x 1-1/2"	30

**Box Panel PTO Assembly**

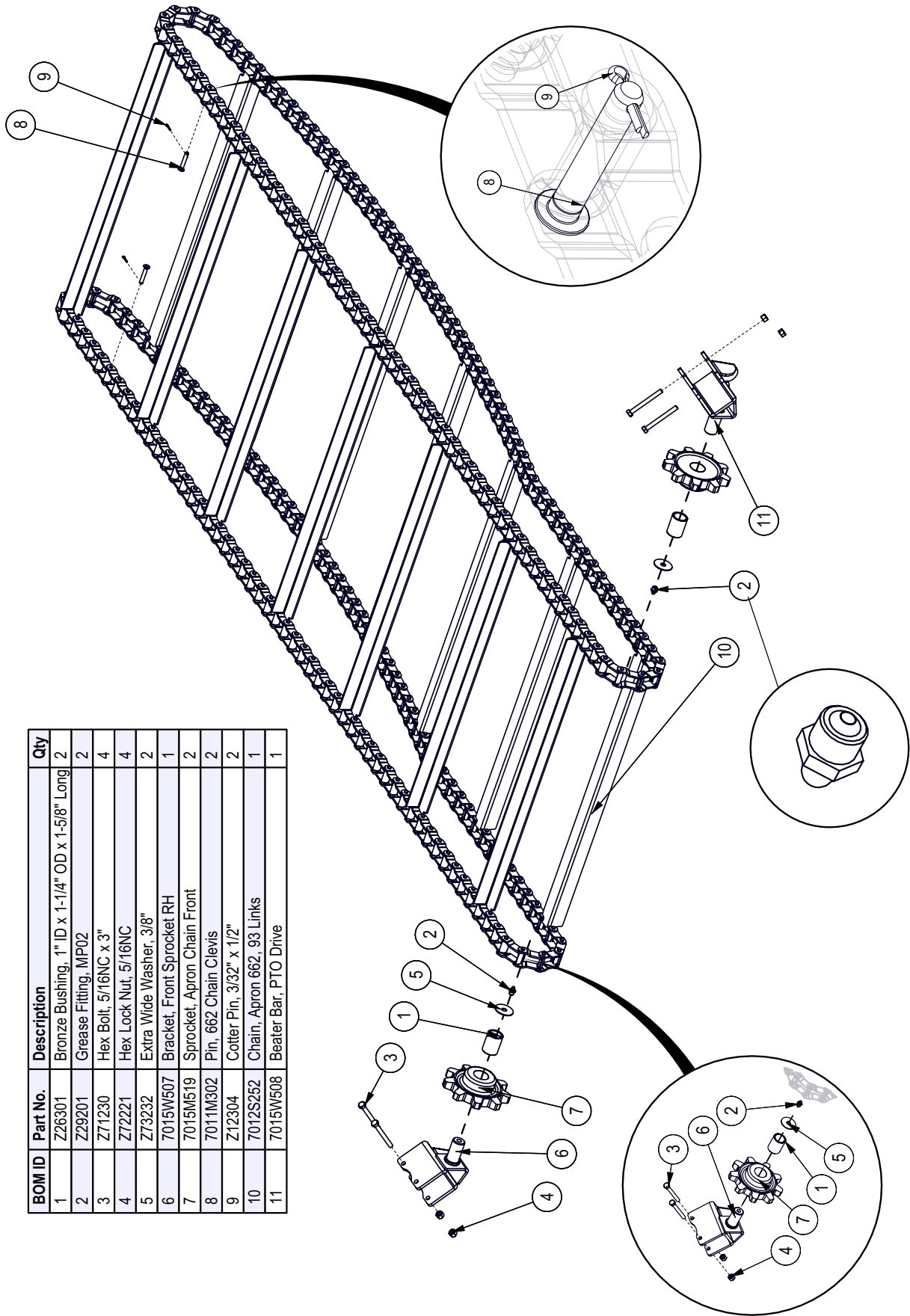


BOM ID	Part No.	Description	Qty
1	7013L305	Panel, Side LH	1
2	7013L306	Panel, Side RH	1
3	7013L340	Splash Guard, Top	1
4	7013L361	Clamp, Floor Seal	1
5	7013S308	Floor Seal	1
6	7013W303	Box Front, PTO	1
7	7015L542	Splash Guard, LH	1
8	7015L543	Splash Guard, RH	1
9	Z72521	Serrated Flange Locknut, 5/16NC	27
10	Z76221	Carriage Bolt, 5/16NC x 3/4"	5
11	Z76222	Carriage Bolt, 5/16NC x 5/8"	22

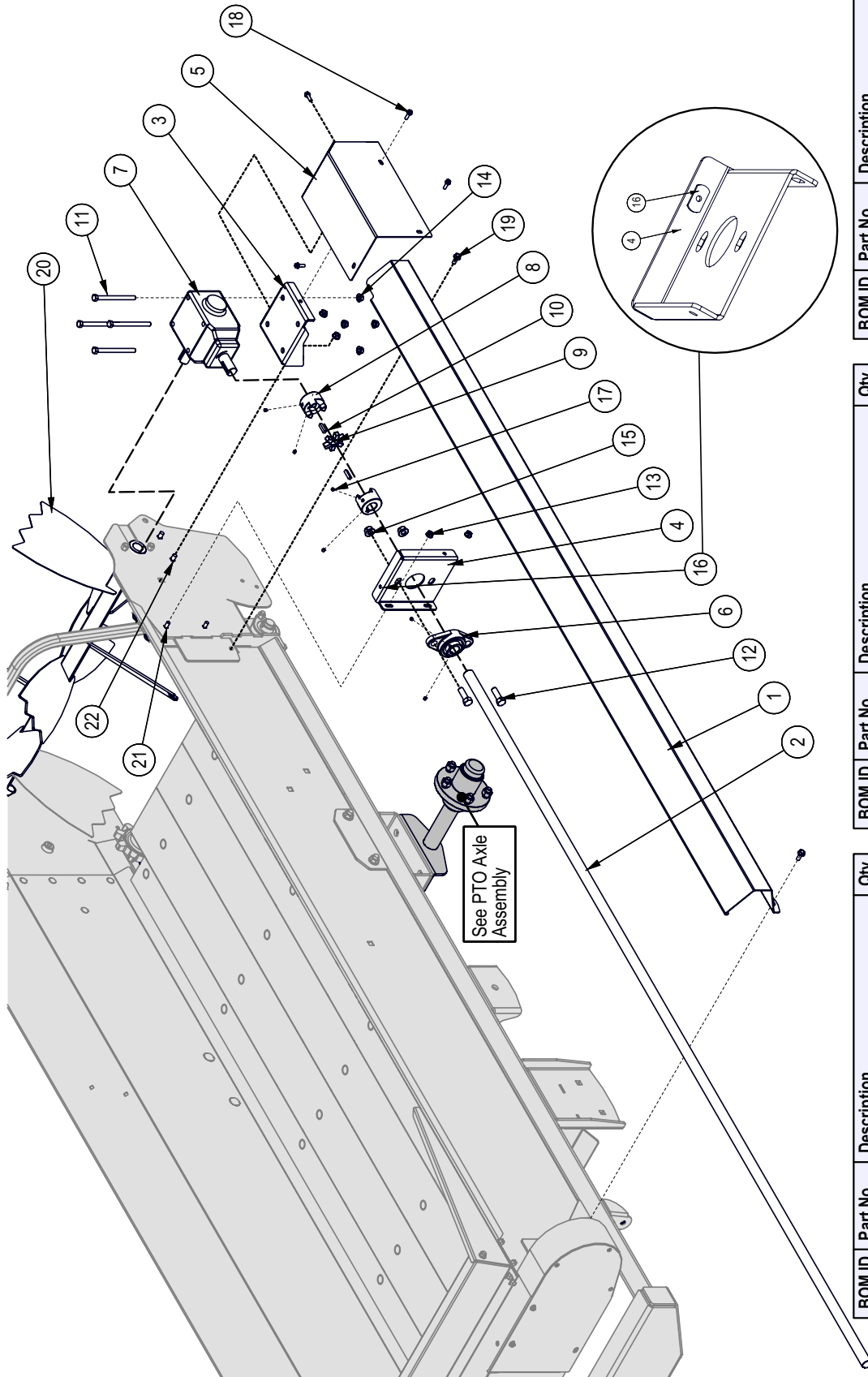


**Apron Chain And Front Sprockets**

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



**PTO Driveline Parts**

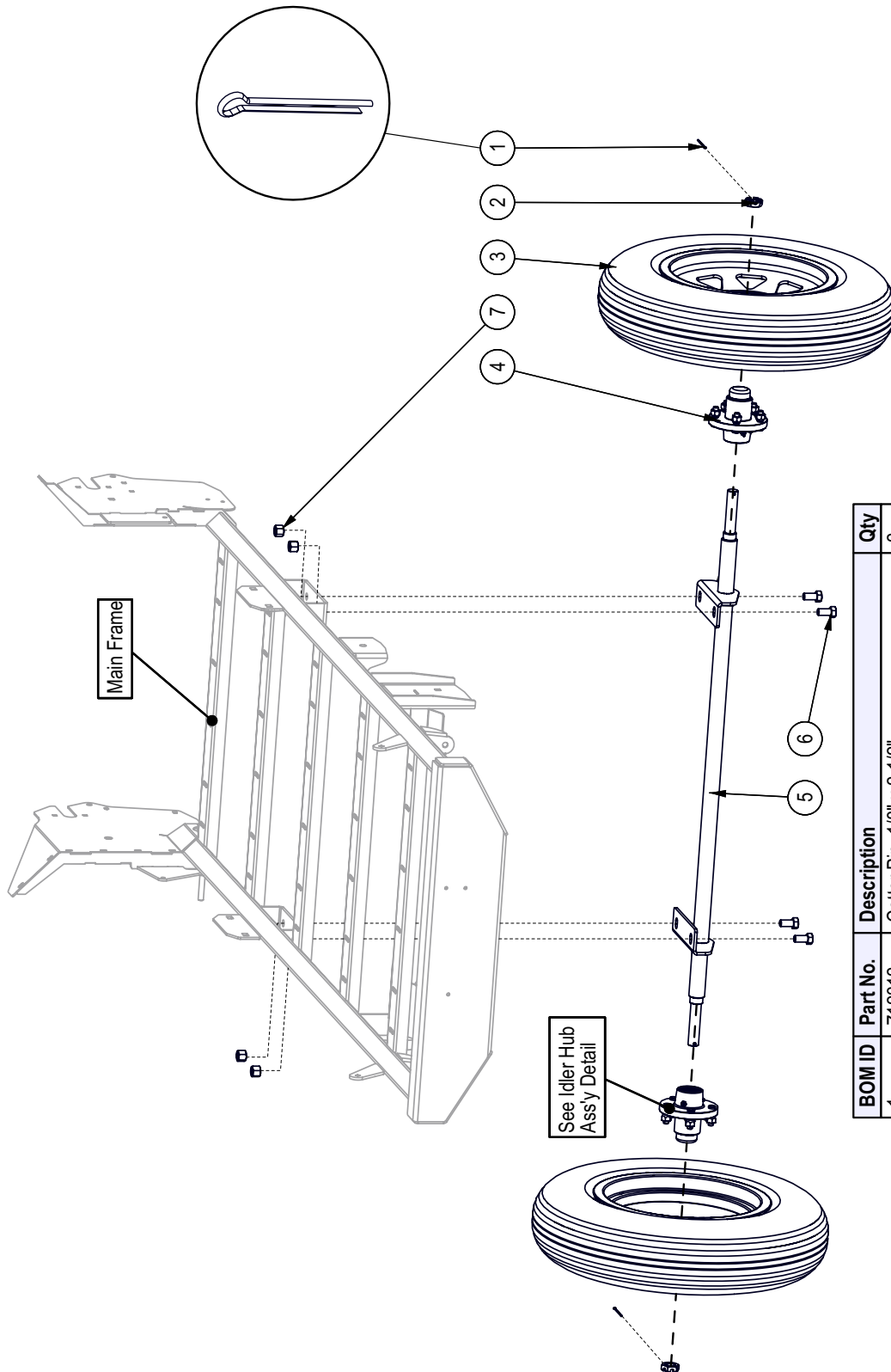


BOM ID	Part No.	Description	Qty
1	7013L333	Shield, PTO Drive Shaft	1
2	7013M315	Shaft, PTO Drive	1
3	7015L525	Bracket, Gear Box	1
4	7015L536	Bracket, PTO Drive Shaft	1
5	7015W506	Guard, Gearbox	1
6	Z25101	2-Bolt Flange Bearing, UCF1205-16	1
7	Z43101	Right Angle Gearbox, 15HP x 540RPM	1
8	Z46404	Shaft Coupling, L095 x 1"	2

BOM ID	Part No.	Description	Qty
9	Z46405	Spider, L095	1
10	Z46533	Key, 1/4" x 1/4" x 1"	2
11	Z71345	Hex Bolt, 3/8NC x 4-1/2"	4
12	Z71515	Hex Bolt, 1/2NC x 1-1/2"	2
13	Z72521	Serrated Flange Locknut, 5/16NC	2
14	Z72531	Serrated Flange Locknut, 3/8NC	6
15	Z72551	Serrated Flange Locknut, 1/2NC	2
16	Z72811	Weld Nut, 1/4NC Flanged	4

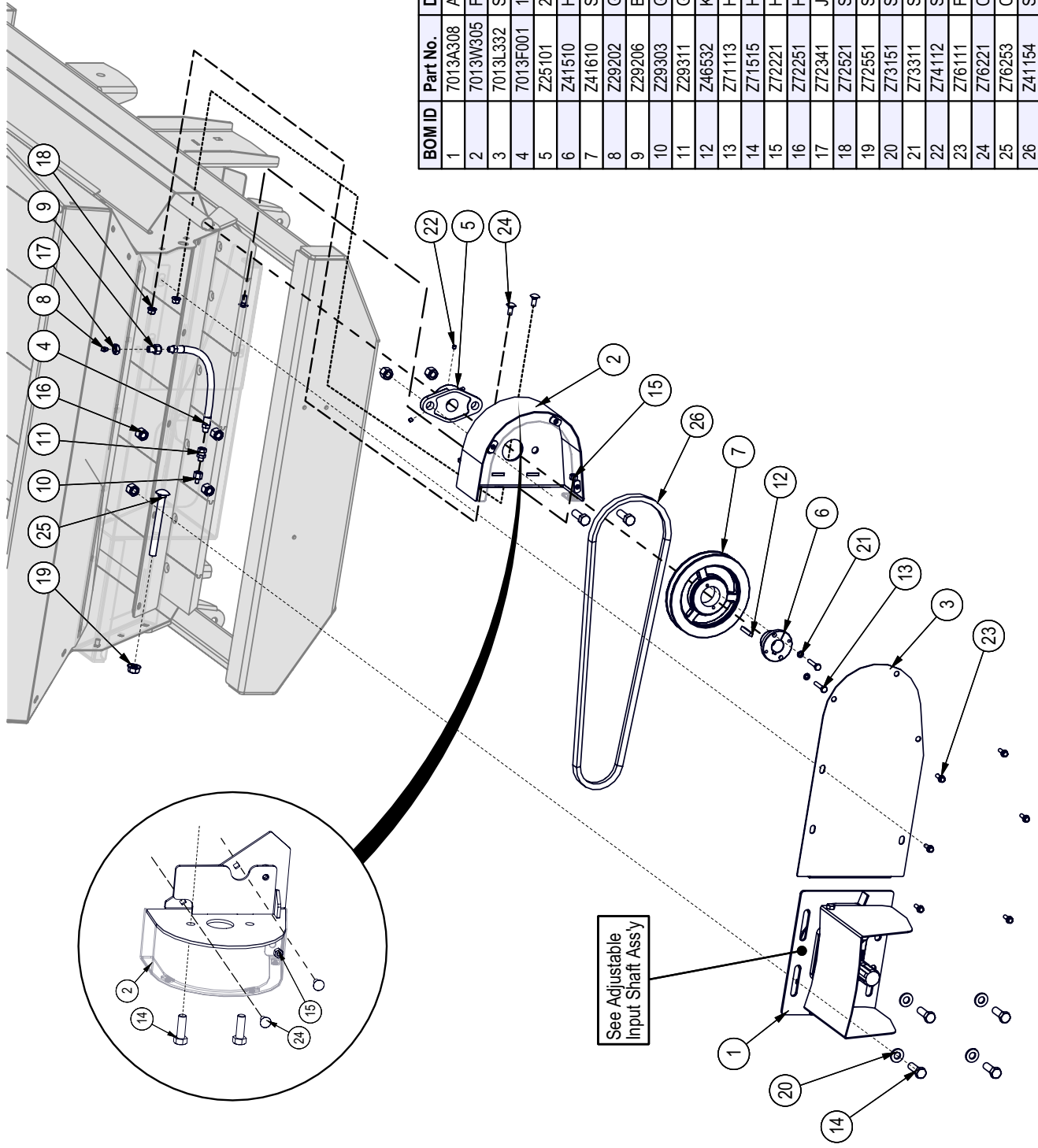
BOM ID	Part No.	Description	Qty
17	Z74112	Set Screw, 1/4NF x 1/4"	6
18	Z76111	Flange Bolt, 1/4NC x 3/4"	4
19	Z76121	Flange Bolt, 5/16NC x 3/4"	2
20	7013W316	Beater Bar, PTO Drive	1
21	Z76221	Carriage Bolt, 5/16NC x 3/4"	2
22	Z76233	Carriage Bolt, 3/8NC x 3/4"	2

**PTO Axle Assembly**



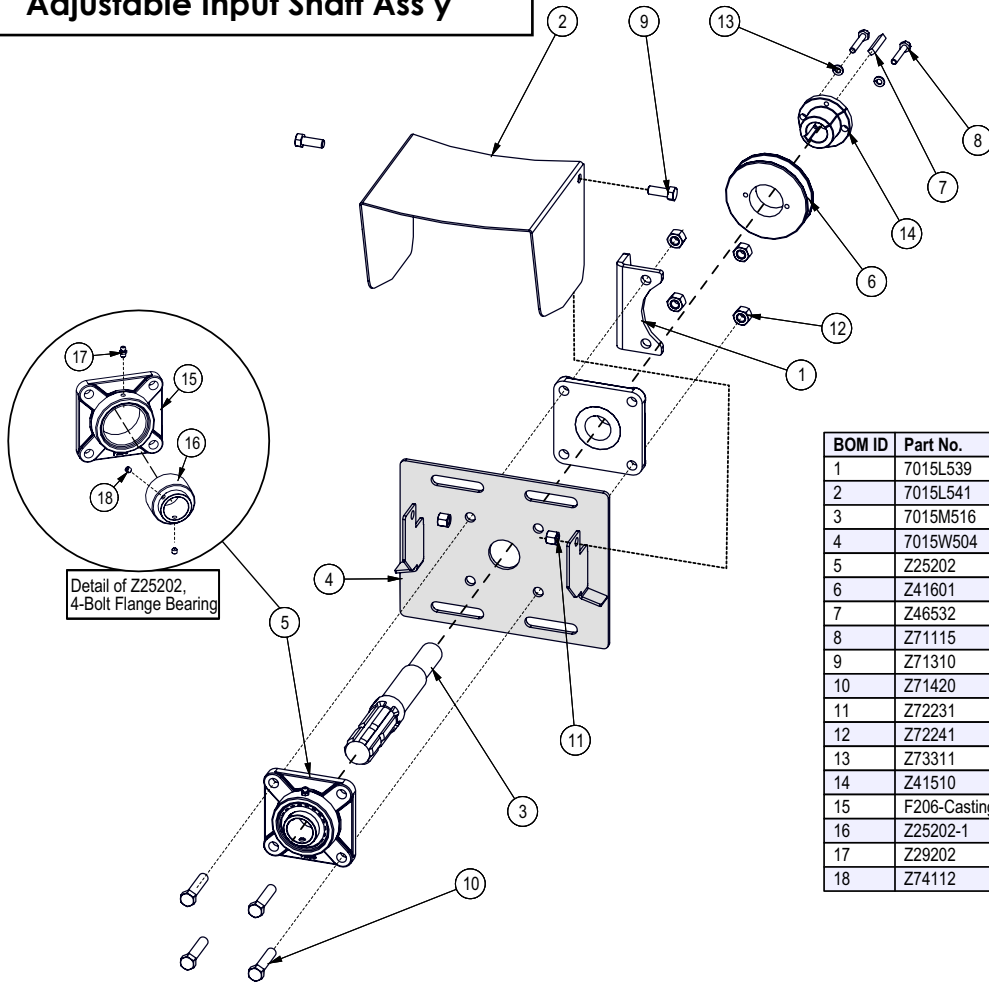
BOM ID	Part No.	Description	Qty
1	Z12312	Cotter Pin, 1/8" x 2-1/2"	2
2	Z72691	Castle Nut, 1NF x 9/16" Thick	2
3	Z91304	6.70-15SL I-1(TL) 6PR Farm Specialist 5on4.5"	2
4	Z91204	Idler Hub Assy, 1100lbs x 5on4-1/2"	2
5	7013W309	Solid Axle, 1" Spindle	1
6	Z71612	Hex Bolt, 5/8NC x 1-1/4"	4
7	Z72261	Hex Lock Nut, 5/8NC	4

**PTO Drive Parts**



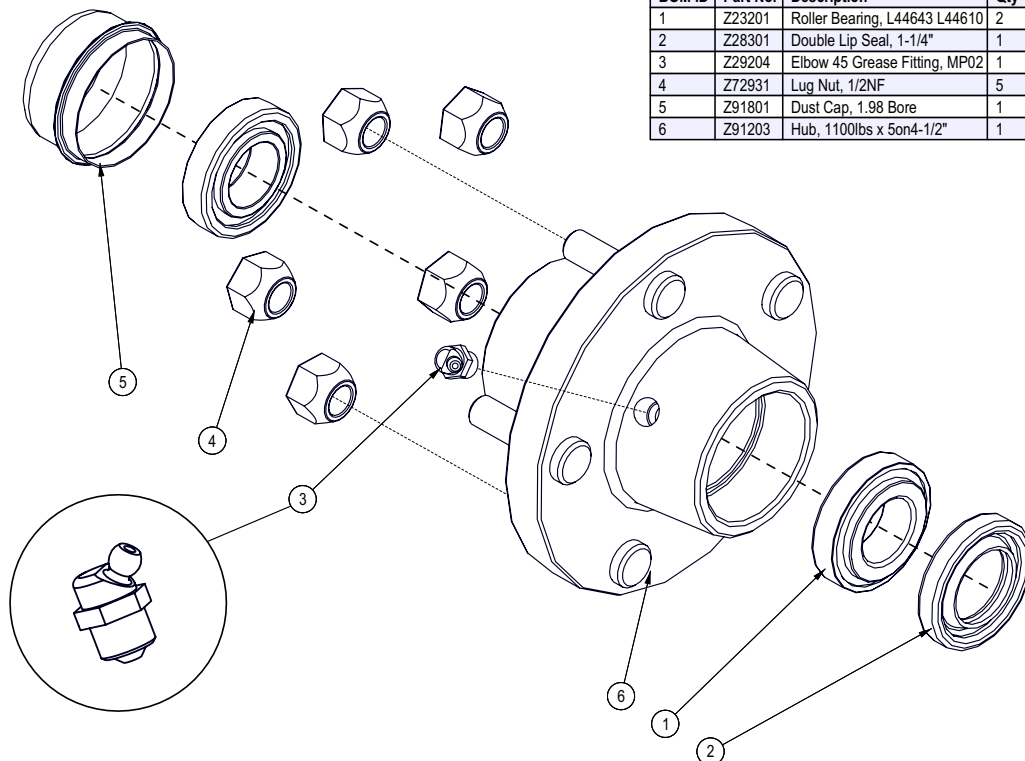
BOM ID	Part No.	Description	Qty
1	7013A308	Assy, Adjustable Input Shaft	1
2	7013W305	Front Pulley Shield	1
3	7013L332	Shield, PTO Belt	1
4	7013F001	1/4" Grease Whip, MP02 x MP02 x 10"	1
5	Z25101	2-Bolt Flange Bearing, UCFL205-16	1
6	Z41510	Hub, L x 1"	1
7	Z41610	Sheave, MBL67 x L	1
8	Z29202	Grease Fitting, 1/4NF	1
9	Z29206	Bulkhead, FP x FP 0402 x 7/16NC	1
10	Z29303	Grease Fitting, FP02 x 1/4NF	1
11	Z29311	Grease Fitting, MP x FPX 0202	1
12	Z46532	Key, 1/4" x 1/4" x 1-1/2"	1
13	Z71113	Hex Bolt, 1/4NC x 1-3/8"	2
14	Z71515	Hex Bolt, 1/2NC x 1-1/2"	6
15	Z72221	Hex Lock Nut, 5/16NC	1
16	Z72251	Hex Lock Nut, 1/2NC	6
17	Z72341	Jam Nut, 7/16NC	1
18	Z72521	Serrated Flange Locknut, 5/16NC	2
19	Z72551	Serrated Flange Locknut, 1/2NC	1
20	Z73151	SAE Washer, 1/2"	4
21	Z73311	Split Lock Washer, 1/4"	2
22	Z74112	Set Screw, 1/4NF x 1/4"	2
23	Z76111	Flange Bolt, 1/4NC x 3/4"	6
24	Z76221	Carriage Bolt, 5/16NC x 3/4"	3
25	Z76253	Carriage Bolt, 1/2NC x 5" Full Threads	1
26	Z41154	Single "B" Belt x 51"	1

### Adjustable Input Shaft Ass'y



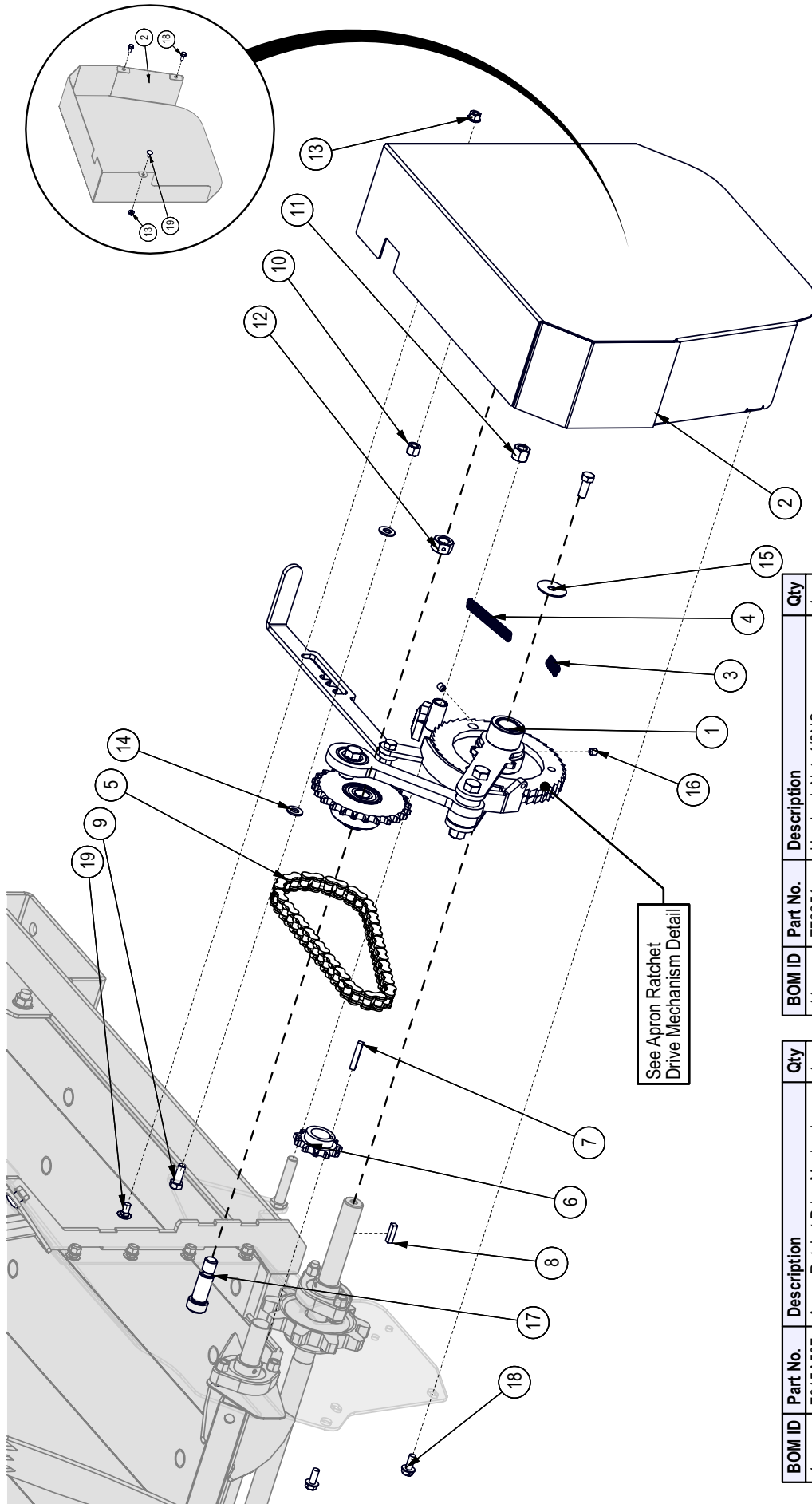
BOM ID	Part No.	Description	Qty
1	7015L539	Bracket, Belt Tightener	1
2	7015L541	PTO Cover	1
3	7015M516	PTO Spline	1
4	7015W504	PTO Spline Plate	1
5	Z25202	4-Bolt Flange Bearing, UCF206-20	2
6	Z41601	Sheave, MBL39 x L	1
7	Z46532	Key, 1/4" x 1/4" x 1-1/2"	1
8	Z71115	Hex Bolt, 1/4NC x 1-1/2"	2
9	Z71310	Hex Bolt, 3/8NC x 1"	2
10	Z71420	Hex Bolt, 7/16NC x 2"	4
11	Z72231	Hex Lock Nut, 3/8NC	2
12	Z72241	Hex Lock Nut, 7/16NC	4
13	Z73311	Split Lock Washer, 1/4"	2
14	Z41510	Hub, L x 1"	1
15	F206-Casting	F206-Casting	2
16	Z25202-1	Bearing Insert, UC206-20 for Z25202	2
17	Z29202	Grease Fitting, 1/4NF	2
18	Z74112	Set Screw, 1/4NF x 1/4"	4

### Idler Hub Ass'y Detail



BOM ID	Part No.	Description	Qty
1	Z23201	Roller Bearing, L44643 L44610	2
2	Z28301	Double Lip Seal, 1-1/4"	1
3	Z29204	Elbow 45 Grease Fitting, MP02	1
4	Z72931	Lug Nut, 1/2NF	5
5	Z91801	Dust Cap, 1.98 Bore	1
6	Z91203	Hub, 1100lbs x 5on4-1/2"	1

**Apron Chain Ratchet Parts**

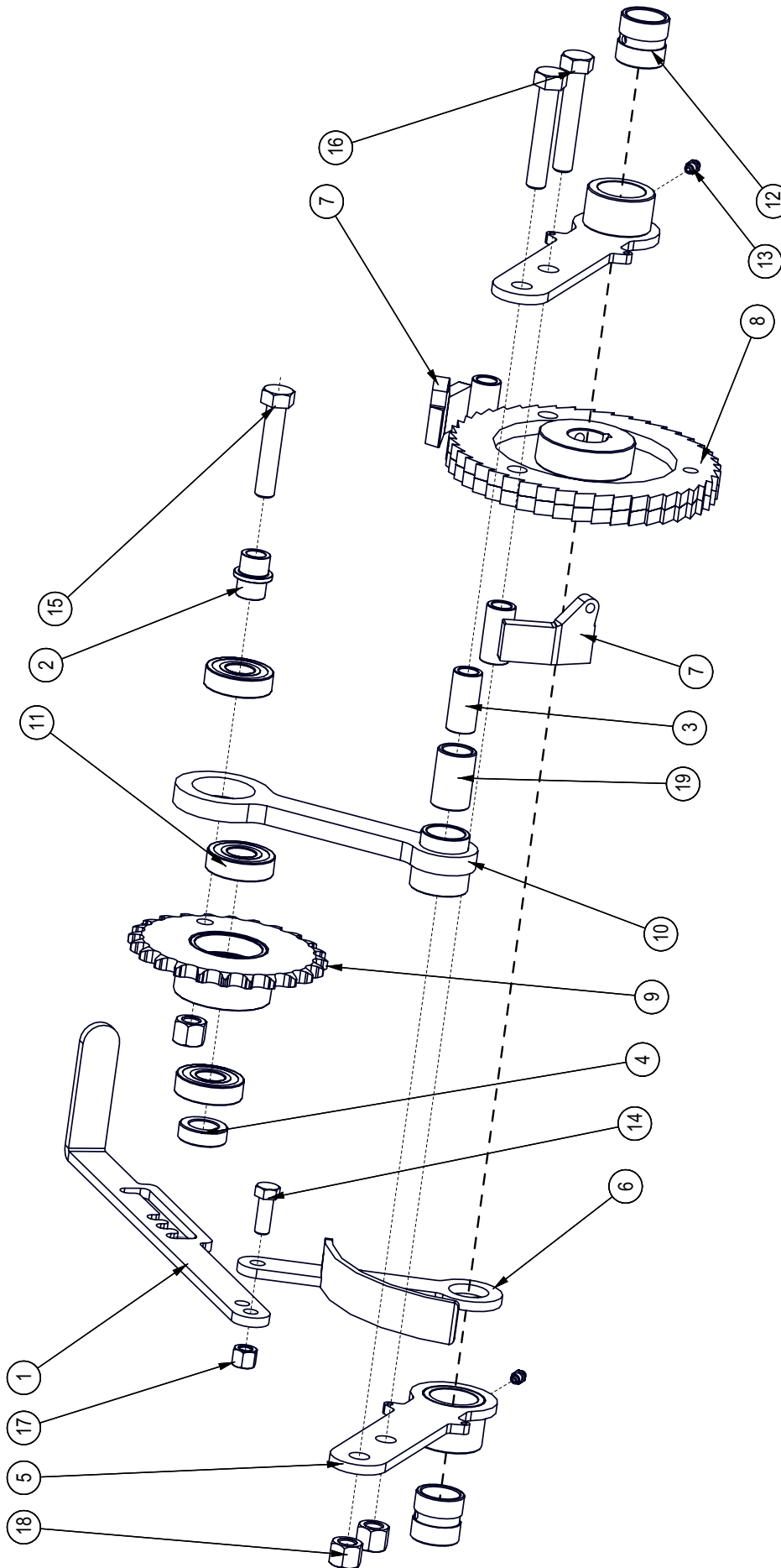


BOM ID	Part No.	Description	Qty
11	Z72251	Hex Lock Nut, 1/2NC	1
12	Z72263	Hex CTR-lock Nut, 5/8NC	1
13	Z72521	Serrated Flange Locknut, 5/16NC	1
14	Z73131	SAE Washer, 3/8"	2
15	Z73232	Extra Wide Washer, 3/8"	1
16	Z74121	Set Screw, 5/16NC x 3/8"	2
17	Z75571	Shoulder Bolt, 3/4" x 1-1/2"	1
18	Z76121	Flange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



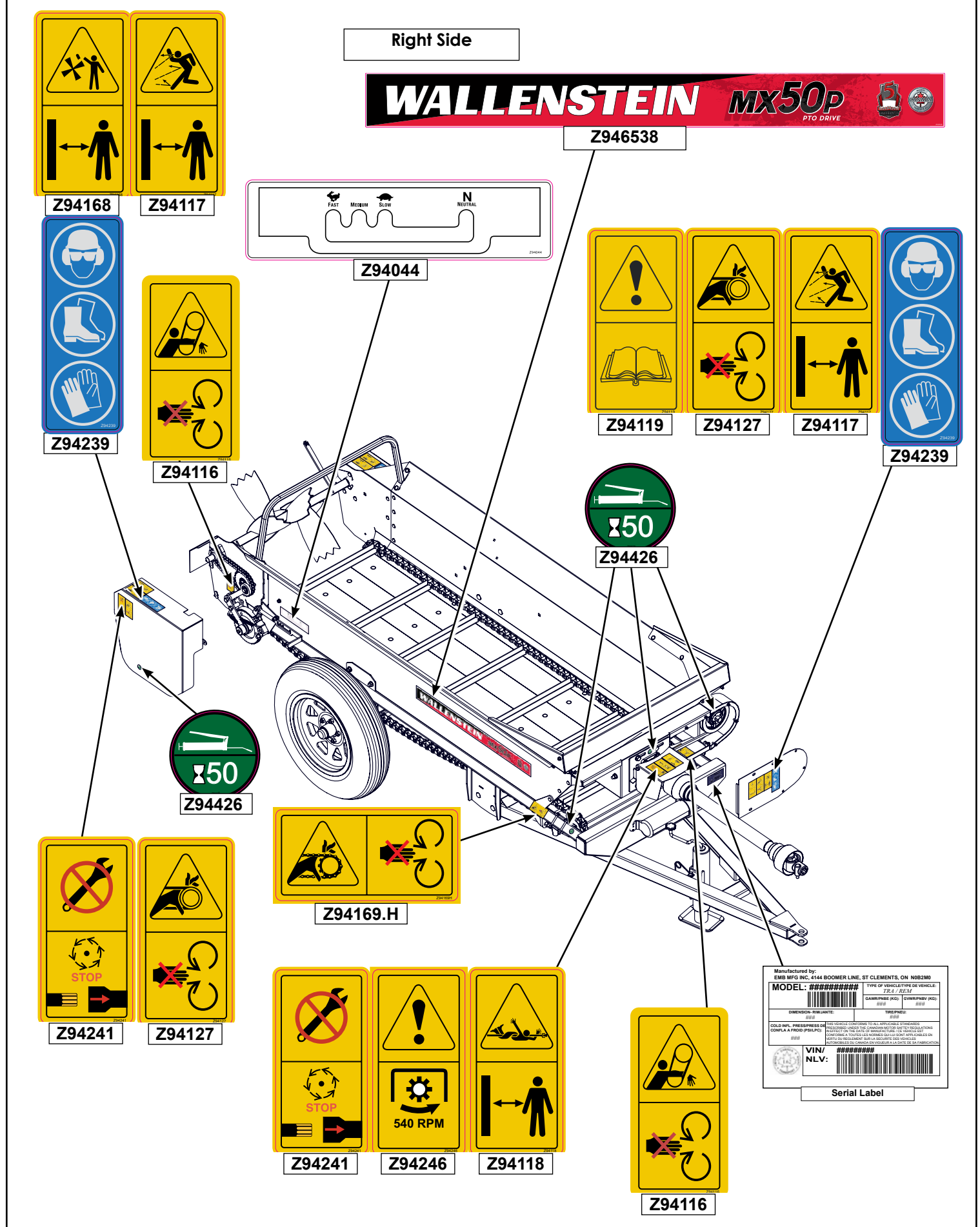
**Apron Ratchet Drive Mechanism Detail**



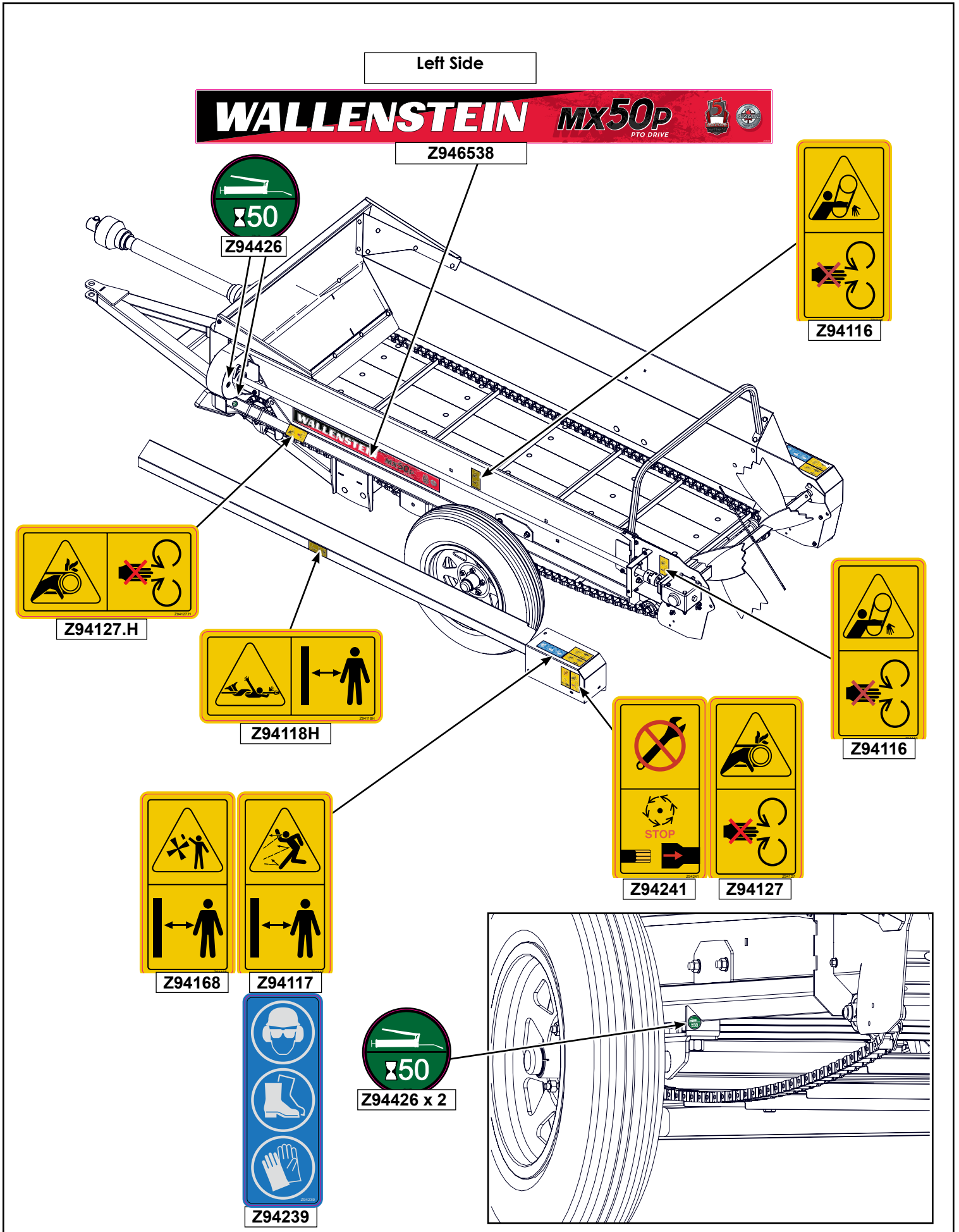
BOM ID	Part No.	Description	Qty
11	Z21204	Ball Bearing, 1635-2RS x Self Aligning	3
12	Z26303	Bronze Bushing, 1" ID x 1-1/4" OD x 1-1/4" Long Grooved OD	2
13	Z29202	Grease Fitting, 1/4NF	2
14	Z11310	Hex Bolt, 3/8NC x 1"	1
15	Z71525	Hex Bolt, 1/2NC x 2-1/2"	1
16	Z71527	Hex Bolt, 1/2NC x 2-3/4"	2
17	Z72231	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

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

**Label Layout**

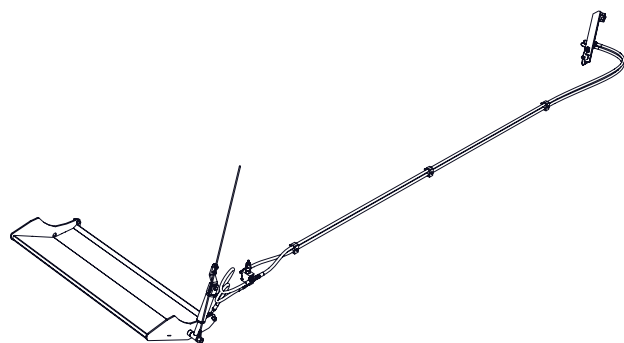






## Accessories

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)