

WALLENSTEIN

EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada
Ph: (519) 699-9283 · Fax: (519) 699-4146
www.embmfg.com

MX80P Manure Spreader Parts Manual



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 Wallenstein parts are essential to prolonging the life of your Wallenstein 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.

Reproduction of this parts manual of any kind is prohibited without prior written permission from EMB Mfg.

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

Table of Contents

Bolt Torque.....	4
Hydraulic Fitting Torque	5
Wheel Lug Torque	5
Main Parts	6
Box	7
Apron Chain And Sprocket	8
Apron Ratchet.....	9
PTO Driveline	10
PTO Drive	11
PTO Drive Axle	12
PTO Shaft.....	13
Decal Locations.....	14
Decals.....	15
Two-Panel Decal Locations	16
Two-Panel Decals.....	17

Bolt Torque

CHECKING BOLT TORQUE

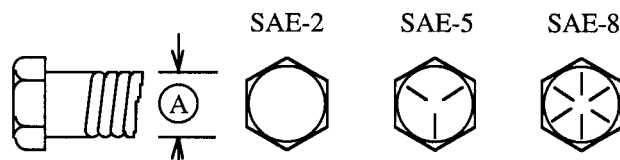
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

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.

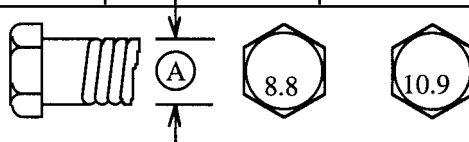
ENGLISH TORQUE SPECIFICATIONS

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	.5	.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
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.

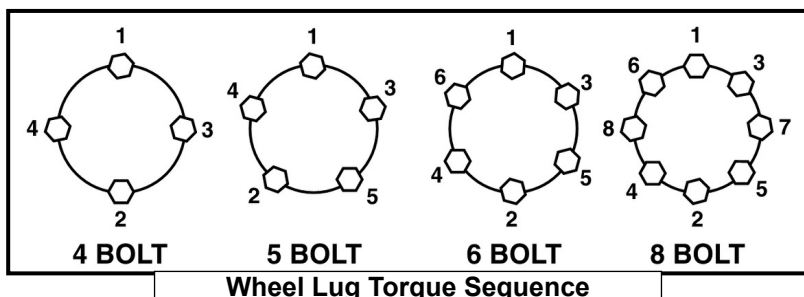
Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

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.

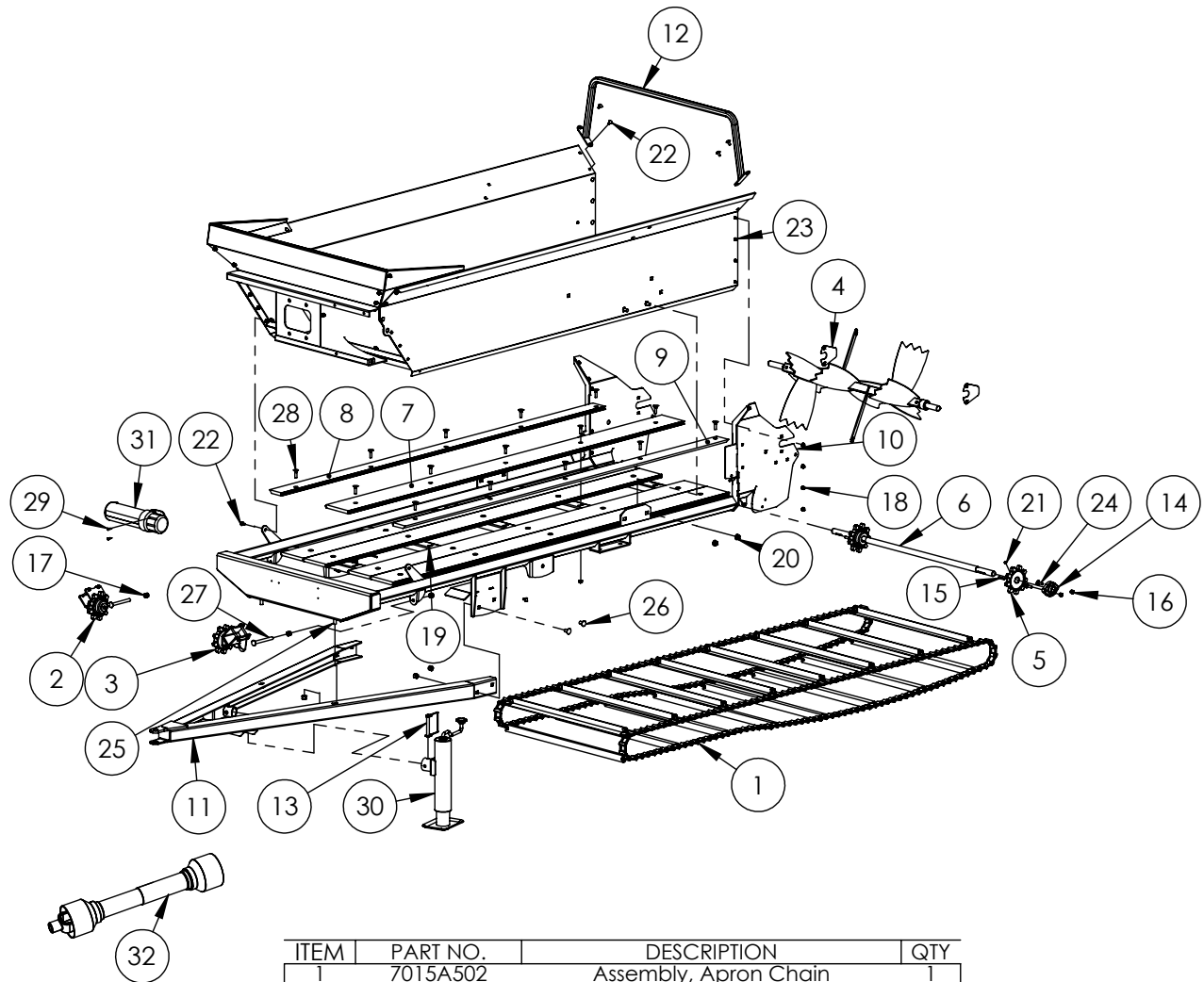
- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

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

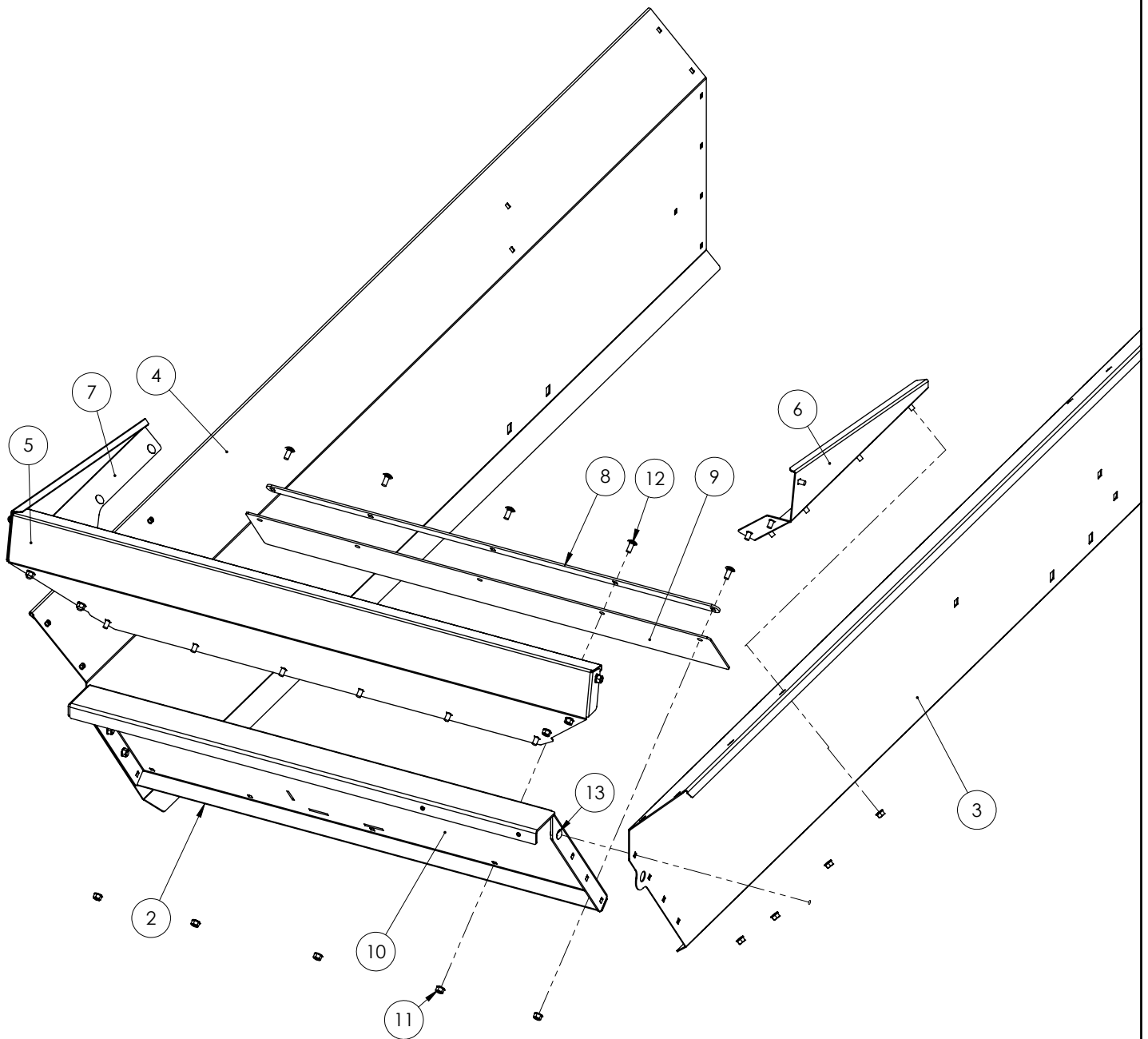


Main Parts



ITEM	PART NO.	DESCRIPTION	QTY
1	7015A502	Assembly, Apron Chain	1
2	7015A505	Assy, Front Apron Sprocket RH	1
3	7015A506	Assy, Front Apron Sprocket LH	1
4	7015L560	Plate, Beater Bar Capture	2
5	7015M501	Sprocket, Apron Chain Rear	2
6	7015M503	Shaft, Rear Apron Drive	1
7	7015S505	Floor Board, Full	5
8	7015S506	Floor Board, Right End	1
9	7015S507	Floor Board, Left End	1
10	7015W501	MX80 Main Frame	1
11	7015W502	MX80 Hitch Frame	1
12	7015W517	Crossbar	1
13	Z12441	Snapper Pin 1/2 x 4-1/2	1
14	Z25102	FD 2-Bolt Flange Bearing 1"	2
15	Z46532	Key 1/4 x 1/4 x 1-1/2	2
16	Z72231	Hex Lock Nut 3/8NC	4
17	Z72251	Hex Lock Nut 1/2NC	10
18	Z72521	Flange Nut 5/16NC	14
19	Z72531	Flange Nut 3/8NC	35
20	Z72551	Flange Nut 1/2NC	4
21	Z74121	Set Screw 5/16NC	4
22	Z76221	Carriage Bolt 5/16NC x 3/4	6
23	Z76222	Carriage Bolt 5/16NC x 5/8	8
24	Z76237	Carriage Bolt 3/8NC x 1-1/4 Extra Short Neck	4
25	Z76251	Carriage Bolt 1/2NC x 1-1/2	2
26	Z76252	Carriage Bolt 1/2NC x 1	8
27	Z76253	Carriage Bolt 1/2NC x 5	2
28	Z76631	Plow Bolt 3/8NC x 1-1/2	35
29	Z76712	Self-tapping Screw #10	4
30	Z91513	Top-Wind 10" Swivel Jack	1
31	Z96502	Manual Tube 3-1/2	1
32	Z44203	PTO Shaft	1

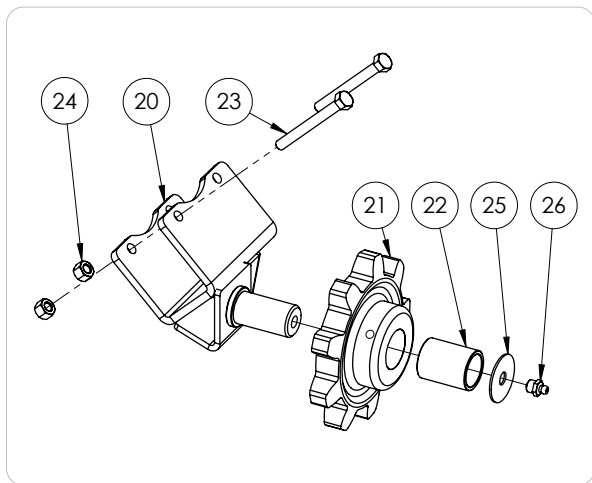
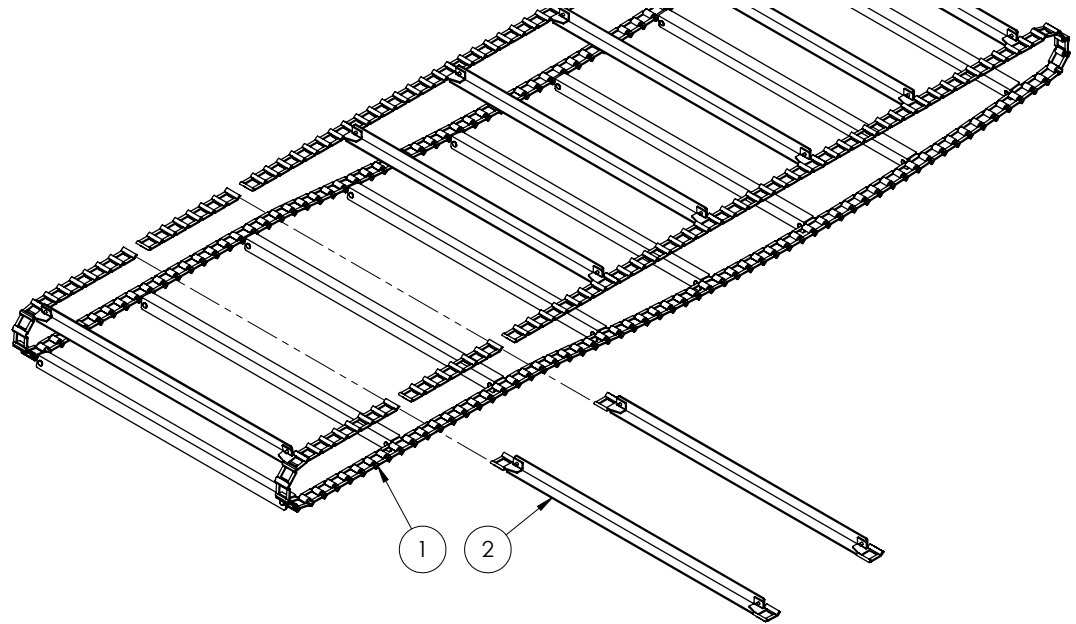
Box



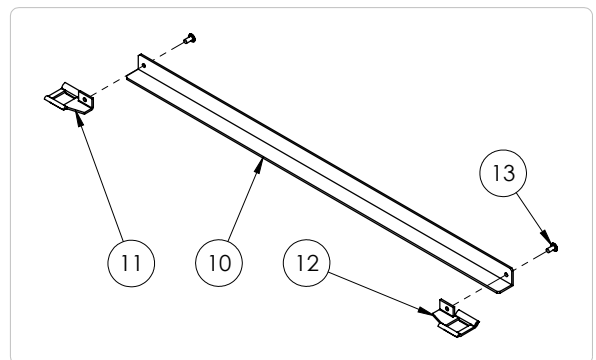
MX80 BOX PARTS BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY
1	7014L453	Engaging Arm Mounting Bracket	1
2	7014L469	Front Panel, Ground Drive	1
3	7015L505	Side Panel LH	1
4	7015L506	Side Panel 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	7015W503	Box Front, PTO	1
11	772521	Flange Nut 5/16NC	31
12	776221	Carriage Bolt 5/16NC x 3/4	7
13	776222	Carriage Bolt 5/16NC x 5/8	24

Apron Chain And Sprocket



APRON SPROCKET ASSEMBLY (RH SHOWN)

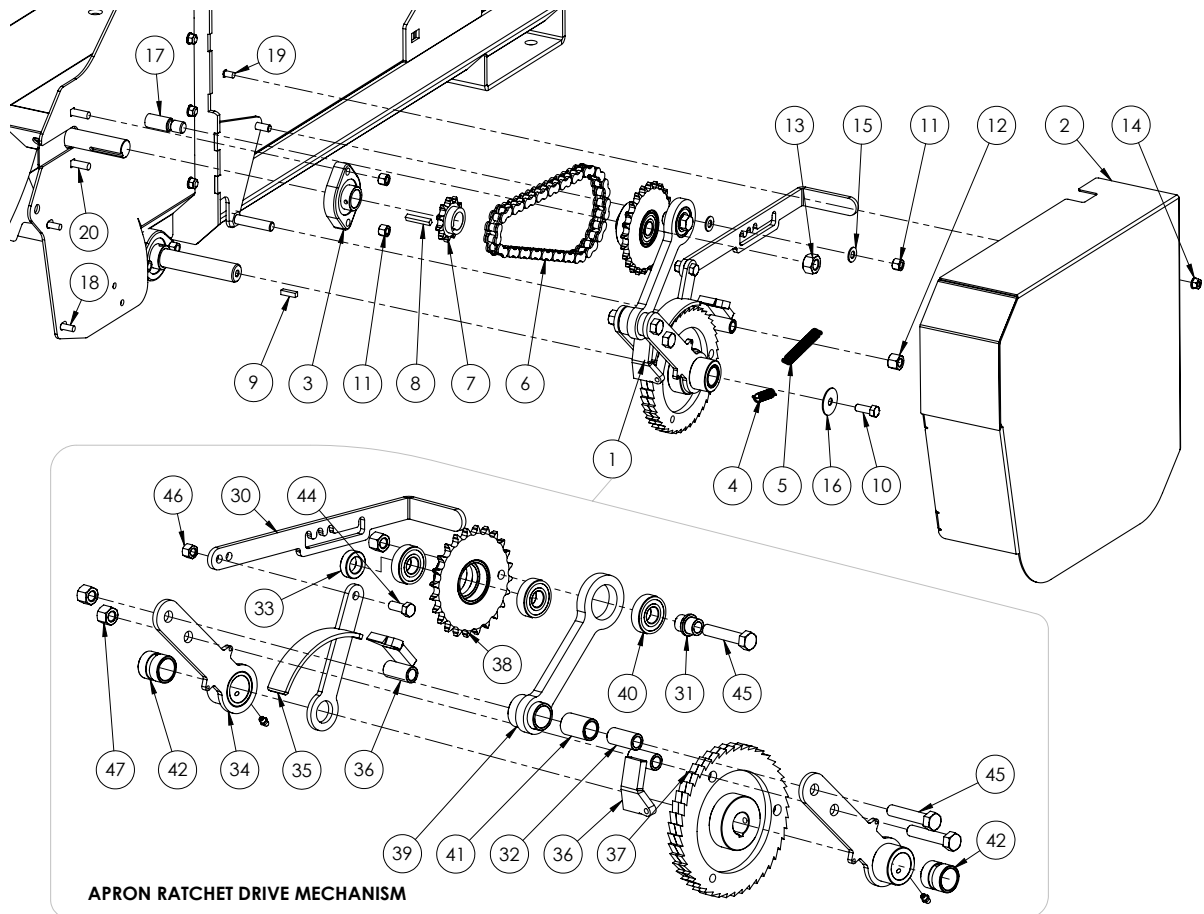


APRON FLIGHT ASSEMBLY

MX80 APRON CHAIN AND SPROCKET ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	Z42301	Apron Chain #62 x 123 links	2
2	7015A503	Apron Flight Assembly	16
ITEM	PART NO.	DESCRIPTION	QTY
10	7015S502	Apron Flight	1
11	Z42302	Apron Chain #62 End RH	1
12	Z42303	Apron Chain #62 End LH	1
13	Z79301	Rivet 1/4 x 1/2 Flat Head	2
ITEM	PART NO.	DESCRIPTION	QTY
20	7015W507	Bracket, Front Sprocket RH	1
21	7015M519	Sprocket, Apron Chain Front	1
22	Z26301	Bushing, 1 ID x 1-1/4 OD x 1-5/8	1
23	Z71230	Hex Bolt 5/16NC x 3	2
24	Z72221	Hex Lock Nut 5/16NC	2
25	Z73232	Wide Washer 3/8 Thin	1
26	Z29201	Grease Fitting, 1/8NPT	1

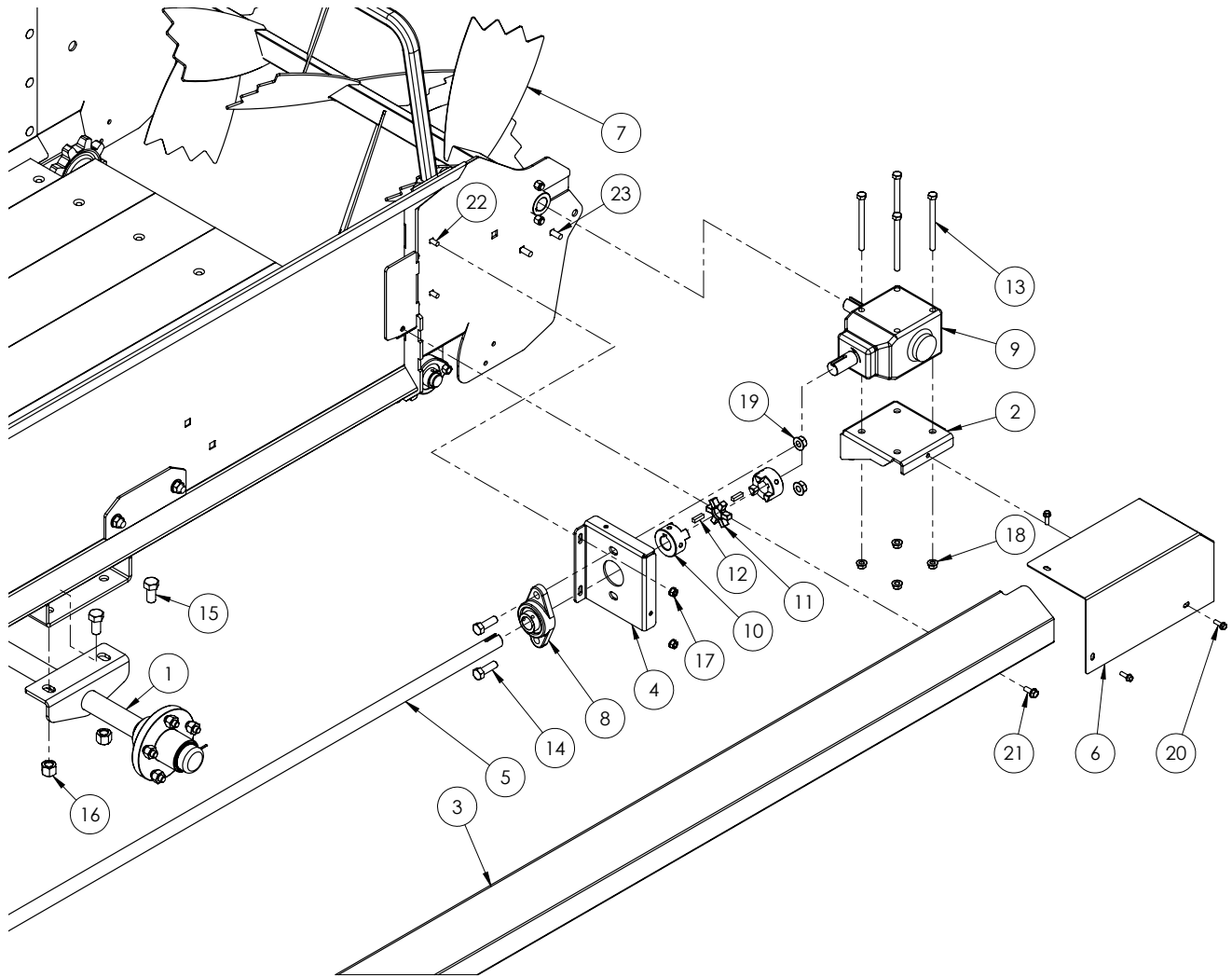
Apron Ratchet



MX50 / MX80 APRON RATCHET PARTS BREAKDOWN

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	7015A507	Apron Ratchet Drive Mechanism	1
2	7015W518	Shield, Apron Drive	1
3	Z25102	FD 2-Bolt Flange Bearing 1"	1
4	Z31201	Spring 1/2 x 1-1/2 x .048	1
5	Z31304	Spring 1/2 x 2-1/2 x .063	1
6	Z42141	#50 Roller Chain 44P (22 Links)	1
7	Z42803	Sprocket, #50 11Tooth 1" Bore	1
8	Z46532	Key 1/4 x 1/4 x 1-1/2	1
9	Z46536	Key, 1/4 x 1/4 x .913	1
10	Z71310	Hex Bolt 3/8NC x 1	2
11	Z72231	Hex Lock Nut 3/8NC	3
12	Z72251	Hex Lock Nut 1/2NC	1
13	Z72461	Low Profile Lock Nut 5/8NC	1
14	Z72521	Flange Nut 5/16NC	1
15	Z73130	Flat Washer 3/8	2
16	Z73232	Wide Washer 3/8 Thin	1
17	Z75571	Shoulder Bolt 3/4 x 1-1/2	1
18	Z76121	Flange Bolt 5/16NC x 3/4	4
19	Z76222	Carriage Bolt 5/16NC x 5/8	1
20	Z76232	Carriage Bolt 3/8NC x 1-1/4	2
ITEM	PART NUMBER	DESCRIPTION	QTY.
30	7015L524	Handle, Ratchet Speed Set	1
31	7015M512	Flange Bushing	1
32	7015M514	Bushing, Link Arm Bolt	1
33	7015M517	Bolt Spacer	1
34	7015W510	Arm, Apron Ratchet Drive	2
35	7015W511	Slide, Speed Adjuster	1
36	7015W512	Dog, Ratchet	2
37	7015W513	Ratchet, Apron Drive	1
38	7015W514	#50 24Tooth Sprocket Hub	1
39	7015W515	Arm, Ratchet Drive Link	1
40	Z21204	Ball Bearing 1635 RS	3
41	Z26201	Bushing, 3/4 ID x 1-1/2	1
42	Z26303	Bushing, 1 ID x 1-1/4 Long Grooved	2
43	Z29202	Grease Zerk 1/4NF	2
44	Z71310	Hex Bolt 3/8NC x 1	1
45	Z71525	Hex Bolt 1/2NC x 2-1/2	3
46	Z72231	Hex Lock Nut 3/8NC	1
47	Z72251	Hex Lock Nut 1/2NC	3

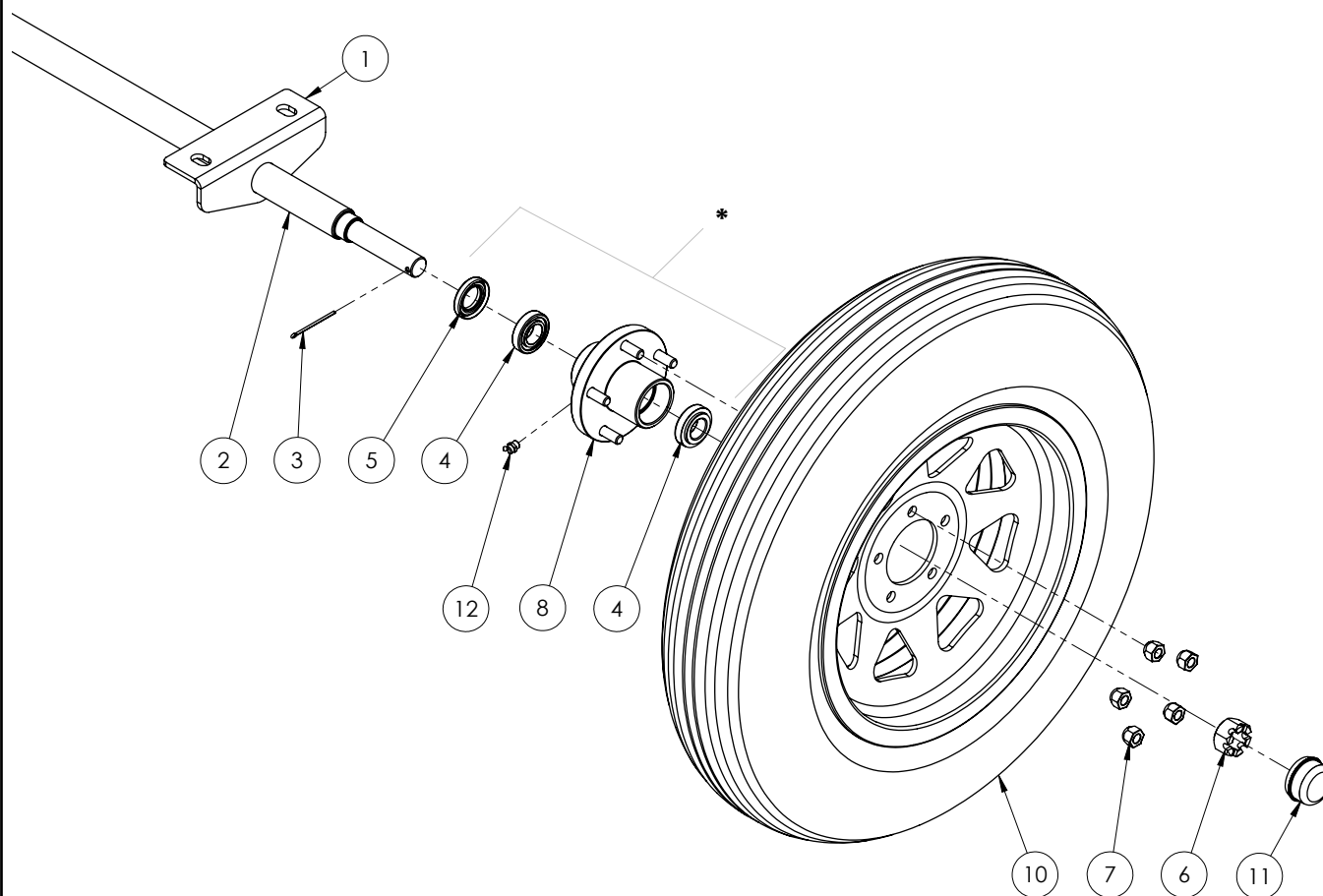
PTO Driveline



MX PTO DRIVELINE PARTS BREAKDOWN

ITEM	PART #	DESCRIPTION	QTY.
1	7015A504	Assembly, PTO Axle	1
2	7015L525	Bracket, Gear Box	1
3	7015L533	Shield, PTO Drive Shaft	1
4	7015L536	Bracket, PTO Drive Shaft	1
5	7015M515	Shaft, PTO Drive	1
6	7015W506	Guard, Gearbox	1
7	7015W519	Beater Bar, PTO Drive	1
8	Z25101	FL 2-Bolt Flange Bearing 1"	1
9	Z43101	Gearbox 540RPM 15HP	1
10	Z46404	Shaft Coupler L095 x 1	2
11	Z46405	Coupler Spider L095	1
12	Z46536	Key, 1/4 x 1/4 x .913	2
13	Z71345	Hex Bolt 3/8NC x 4-1/2	4
14	Z71515	Hex Bolt 1/2NC x 1-1/2	2
15	Z71612	Hex Bolt 5/8NC x 1-1/4	4
16	Z72261	Hex Lock Nut 5/8NC	4
17	Z72521	Flange Nut 5/16NC	2
18	Z72531	Flange Nut 3/8NC	6
19	Z72551	Flange Nut 1/2NC	2
20	Z76111	Flange Bolt 1/4NC x 3/4	4
21	Z76121	Flange Bolt 5/16NC x 3/4	2
22	Z76221	Carriage Bolt 5/16NC x 3/4	2
23	Z76231	Carriage Bolt 3/8NC x 1	2

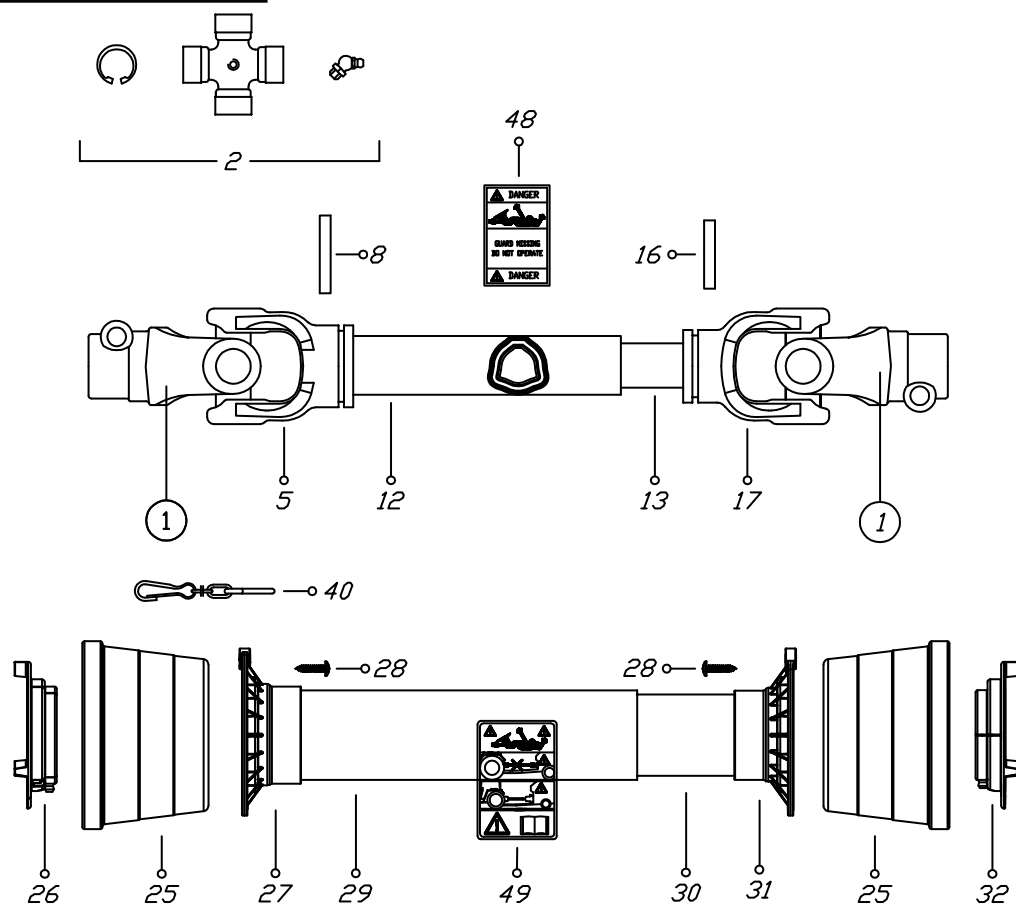
PTO Drive Axle



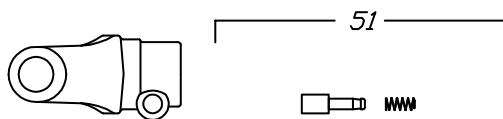
PTO DRIVE MANURE SPREADER AXLE PARTS BREAKDOWN

ITEM	PART #	DESCRIPTION	QTY.
1	7015L509	Bracket, PTO Axle Mount	2
2	7015W509	Axle Shaft	1
3	Z12312	Cotter Pin 1/8 X 2-1/2	2
4	Z23201	L44643 Cone, L44610 Cup	4
5	Z28301	Double Lip Seal 1-1/4 Shaft	2
6	Z72691	Slotted Hex Nut 1NF	2
7	Z72931	Lug Nut 1/2NF	10
8	Z91203	1100# 5 on 4-1/2 Hub	2
*	Z91204	Complete 1100 Hub w/ Parts	2
10	Z91304	6.70-15 SL Farm Spec Spoked	2
11	Z91801	Dust Cap 1.98 Bore	2
12	Z29204	Grease Fitting, 1/8NPT x 45	2

PTO Shaft



①



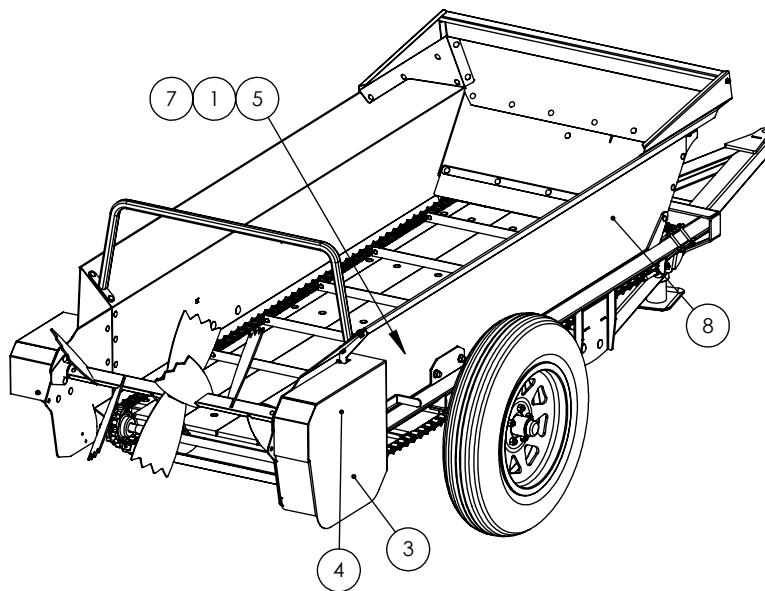
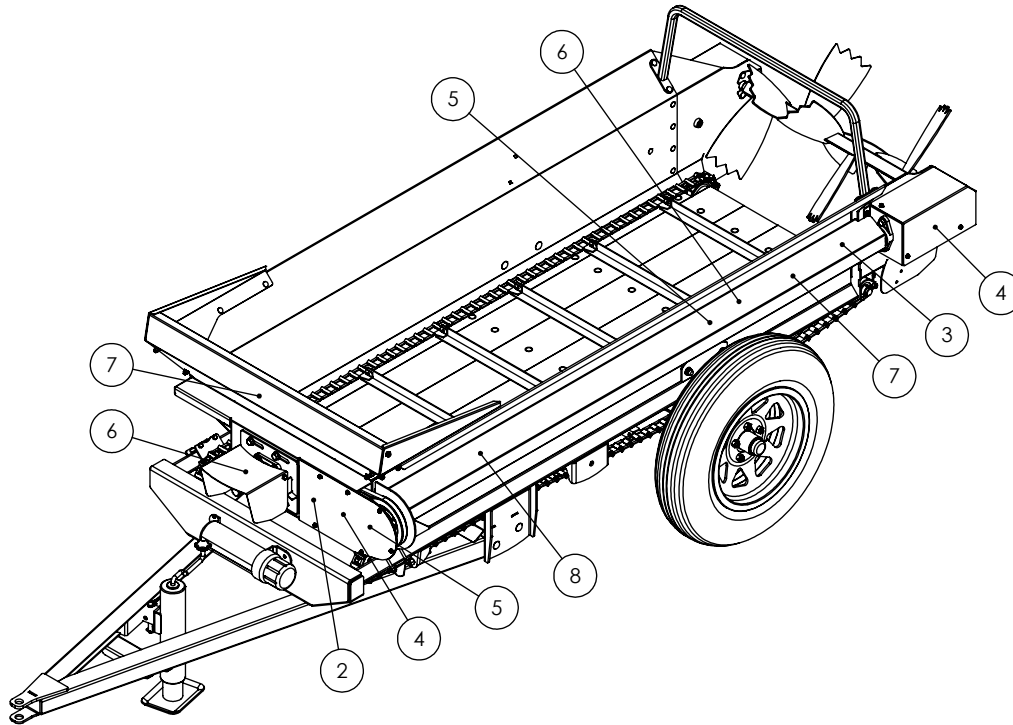
Binacchi SPARE PARTS LIST :B2N081USA60A60			
POS.	DESCRIPTION	Q.	Part No.
01	YOKE	2	0800203
02	CROSS JOURNAL ASS.	2	08202
05	OUTER TUBE YOKE	1	08002021
08	FLEXIBLE PIN	1	098700855
12	CM. 100 CARDAN TUBE(*)	1	09881363100
13	CM. 100 CARDAN TUBE(*)	1	09881294100
16	FLEXIBLE PIN	1	098700850
17	INNER TUBE YOKE	1	08002011
25	CONE SHIELD BELL 01-02	2	021902C001
26	OUTER BEARING 02	1	025502C001
27	OUTER BASE CONE 01-02	1	025402C001
28	SCREW	6	0998052242
29	OUTER SAFETY TUBE	1	0988961NB2081
30	INNER SAFETY TUBE	1	0988955NB2081
31	INNER BASE CONE 01-02	1	025402C002
32	INNER BEARING 02	1	025502C002
40	CHAIN	1	0252000001
48	LABEL DANGER OUTER DRIVE TUBE	1	09872006
49	EXTERNAL SHIELD LABEL	1	09872003
51	COMPLETE PUSH BUTTTON	2	0986014047

Decal Locations

MX80P DECAL BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY
1	Z94044	Apron Speed	1
2	Z94046	Read Manual	1
3	Z94047	Rotating Blade	2
4	Z94012	Rotating Part	3
5	Z94049	Shield Hazard	2
6	Z94009	Rotating Driveline	1
7	Z94019	Made in Canada	3
8	Z94070	MX80	2

NOTE: Item 5 is placed under the shield



Decals

MX80P Decals

Z94019

Z94049

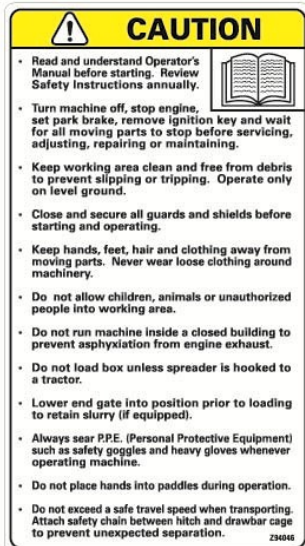
Z94047



Z94070

Wallenstein MX80

Z94046



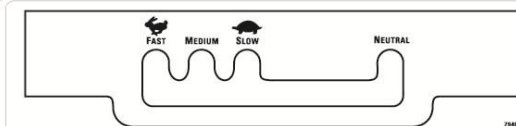
Z94012



Z94009



Z94044

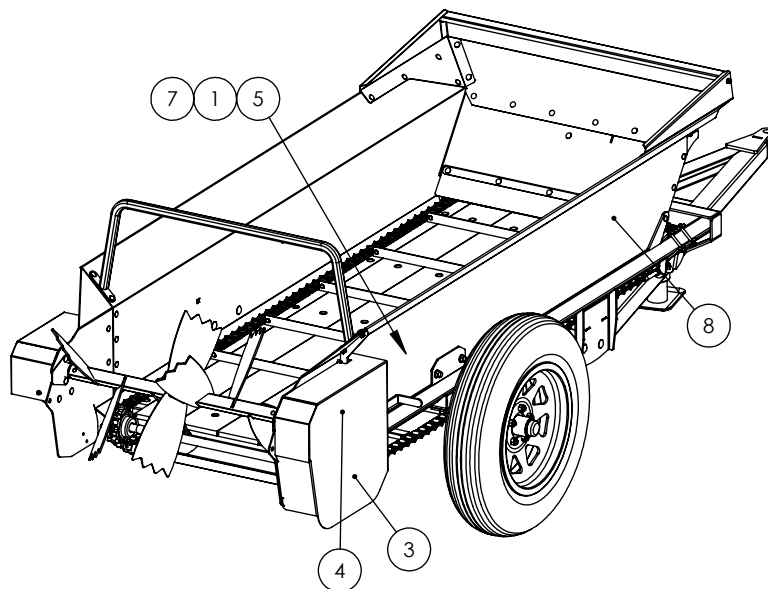
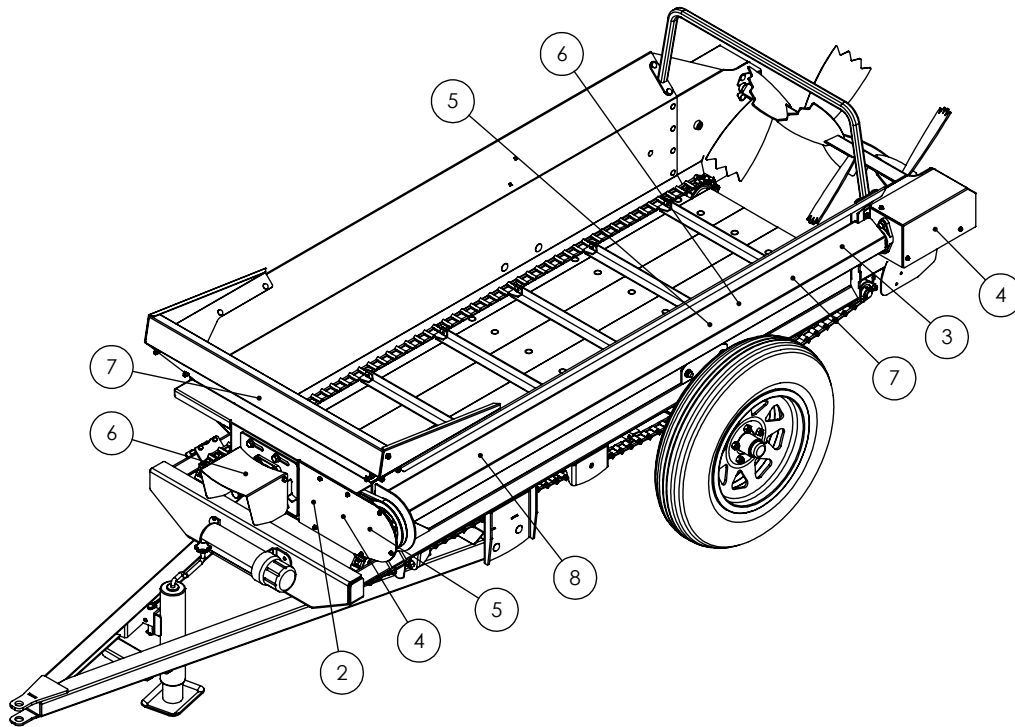


Two-Panel Decal Locations

MX80P DECAL BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY
1	Z94044	Apron Speed	1
2	Z94119	Read Manual	1
3	Z94168	Rotating Blade	2
4	Z94116	Rotating Part	3
5	Z94169	Shield Hazard	2
6	Z94118	Rotating Driveline	1
7	Z94019	Made in Canada	3
8	Z94070	MX80	2

NOTE: Item 5 is placed under the shield



Two-Panel Decals

Two-Panel MX80P Decals

Z94116



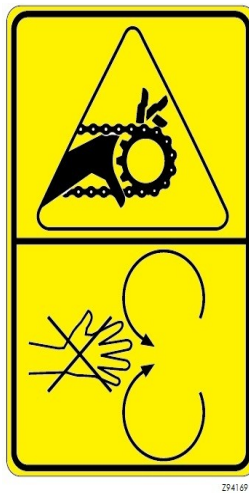
Z94019



Z94168



Z94169



Z94118



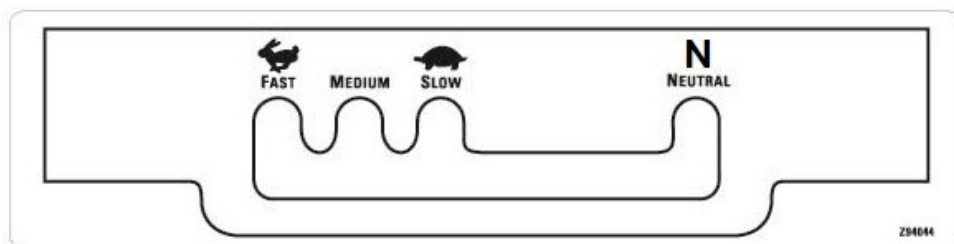
Z94119



Z94070

Wallenstein MX80

Z94044





WALLENSTEIN Products Manufactured by:

EMB MFG Inc.

4144 Boomer Line
St. Clements, Ontario
Canada N0B 2M0
Phone: 1-877-695-9283
Fax: 519-699-4146
www.embmfg.com