

# MS800P Manure Spreader PTO Driven

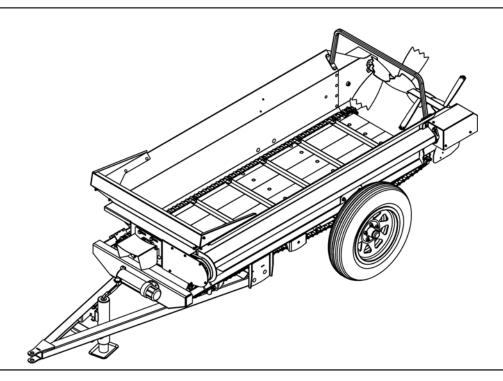
PUBLISHED 06/16

MATERIAL HANDLING PARTS MANUAL

# PARTS MANUAL SECTION 48D



An Operator's Manual was shipped with the equipment. The Operator's Manual is an integral part of the safe operation of this machine and must be maintained with the unit at all times. READ, UNDERSTAND, and FOLLOW the Safety and Operation Instructions contained in this manual before operating the equipment. If the Operator's Manual is not with the equipment, contact your dealer or Bush Hog to obtain a Free copy before operating the equipment.



### **BUSH HOG®**

2501 Griffin Ave. Selma, AL 36703 334-874-2700 www.bushhog.com



### TO THE OWNER/OPERATOR/DEALER

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached to minimize the chance of accidents.

**BEFOREYOUSTART!!** Read the safety messages on the implement and shown in your manual. Observe the rules of safety and common sense!

# **AWARNING**

#### TO AVOID SERIOUS INJURY OR DEATH:

- 1. READ AND UNDERSTAND OPERATORS MANUAL.
- 2. TRACTOR MUST BE EQUIPPED WITH ROLL-OVER PROTECTION (ROPS) AND SWAY CHAINS.
- 3. ALWAYS WEAR SAFETY GLASSES, SAFETY SHOES, AND SEAT BELT FASTENED TIGHTLY.
- 4. STOP TRACTOR, LOCK BRAKES, AND BLOCK UP OR SUPPORT IMPLEMENT SECURELY BEFORE WORKING UNDER RAISED COMPONENT.
- 5. ALLOW NO RIDERS AT ANY TIME ON TRACTOR OR IMPLEMENT: FALLING OFF CAN KILL.
- KEEP BYSTANDERS CLEAR OF MOVING PARTS AND WORKING AREA. KEEP CHILDREN AWAY!
- 7. DO NOT LIFT, LOWER, OR OPERATE UNLESS EVERYONE IS CLEAR OF IMPLEMENT.
- 8. USE INCREASED CAUTION ON SLOPES & NEAR BANKS AND DITCHES TO PREVENT OVERTURN.
- 9. LOCK LIFT LEVER UP FOR TRANSPORT. HAVE SMV SIGN VISIBLE. FOLLOW LOCAL LAWS.
- 10. USE PARKING STAND OR BLOCK UP WHEN UNHITCHING FROM TRACTOR.

#### WARRANTY INFORMATION:

It is the Dealers responsibility to fill out and record all Warranty information of this product with BUSH HOG at the time of purchase. Read and understand the complete Warranty Statement found in this Manual. Make certain the Serial Number of the Machine is recorded.

The use of "will-fit" parts will void your warranty and cause catastrophic failure with possible serious injury or death.

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

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#### PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delay and error in processing purchase orders for the equipment in this section.

- 1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. The Purchase Order must include the name and address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are ordered.
- 3. The Purchase Order must clearly list the quantity of each part, the complete and correct part number (be sure to include all periods), and the basic name of the part.
- 4. The Manufacturer reserves the right to substitute parts where applicable.
- 5. Some parts are unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a Purchase Order.
- 6. The Manufacturer reserves the right to change prices without prior notice.



For maximum safety and to guarantee optimum product reliability, always use genuine BUSH HOG Parts. The use of inferior replacement parts may causepremature or catastrophic failure which could result in serious injury or death. Direct any questions regarding parts to:

# BUSH HOG 2501 Griffin Ave. Selma, AL 36703

www.bushhog.com Contact Us 800-304-2836



#### **Bolt Torque**

#### **CHECKING BOLT TORQUE**

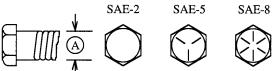
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

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	Bolt Torque*							
Diameter "A"	SAE 2 (N.m) (lb-ft)			E 5 (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	230 170		420	880	650		
1"	345	225	850	630	1320	970		



**METRIC TORQUE SPECIFICATIONS** 

Bolt	Bolt Torque*						
Diameter	8.	.8	10	).9			
"A"	(N.m)	(lb-ft)	(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.
- 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	Nut Size Across Flats	Torque Value∙		Recomi Turns To (After Tighte	Finger
(in.)	(in.)	(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**

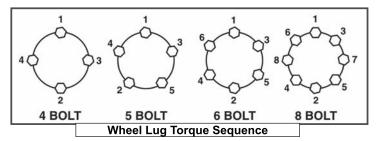
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

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.

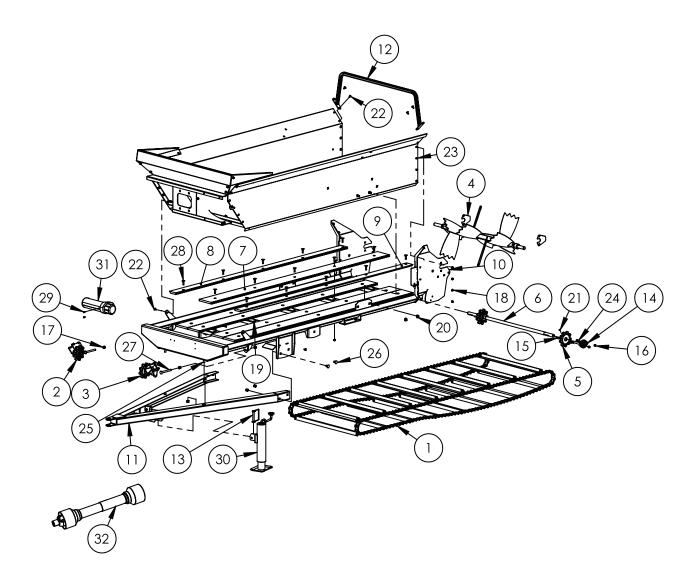
Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

- 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					

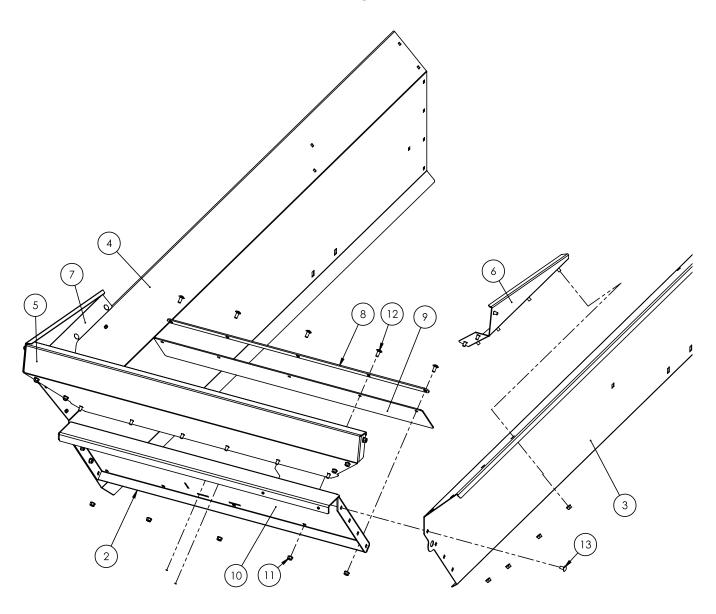


# **Main Parts**



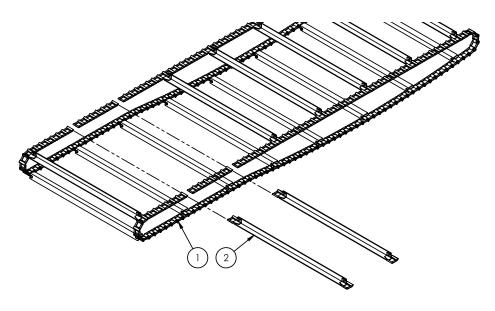
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1		Assembly, Apron Chain	1	17		Hex Lock Nut 1/2NC	10
2	7015A505	Assy, Front Apron Sprocket RH	1	18	44623BH	Flange Nut 5/16NC	14
3	7015A506	Assy, Front Apron Sprocket LH	1	19	Z72531	Flange Nut 3/8NC	35
4	7015L560	Plate, Beater Bar Capture	2	20	Z72551	Flange Nut 1/2NC	4
5	7015M501	Sprocket, Apron Chain Rear	2	21		Set Screw 5/16NC	4
6	7015M503	Shaft, Rear Apron Drive	1	22	5161006	Carriage Bolt 5/16NC x 3/4	6
7	7015S505	Floor Board, Full	5	23	Z76222	Carriage Bolt 5/16NC x 5/8	8
8	7015S506	Floor Board, Right End	1	24		Carriage Bolt 3/8NC x 1-1/4 Extra Short Neck	4
9	7015S507	Floor Board, Left End	1	25	5161614	Carriage Bolt 1/2NC x 1-1/2	2
10	7015W501	MX80 Main Frame	1	26	5161610	Carriage Bolt 1/2NC x 1	8
11	7015W502	MX80 Hitch Frame	1	27	Z76253	Carriage Bolt 1/2NC x 5	2
12	7015W517	Crossbar	1	28	44928BH	Plow Bolt 3/8NC x 1-1/2	35
13	Z12441	Snapper Pin 1/2 x 4-1/2	1	29		Self-tapping Screw #10	4
14	Z25102	FD 2-Bolt Flange Bearing 1"	2	30	Z91513	Top-Wind 10" Swivel Jack	1
15	Z46532	Key 1/4 x 1/4 x 1-1/2	2	31		Manual Tube 3-1/2	1
16		Hex Lock Nut 3/8NC	4	32	Z44203	PTO Shaft	1

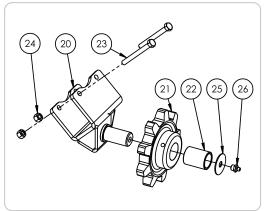
# Box



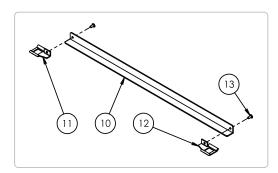
Ref. No.	Part No.	Description	Qty.
1		Engaging Arm Mounting Bracket	1
2	7014L469	Front Panel, Ground Drive	1
3	7015L505	Side Panel LH	1
4	7015L506	Side Panel RH	1
5	7015L540	Splash Guard, Top	1
6	7015L542	Splash Guard, LH	1
7	7015L543	Splash Guard, RH	1
8	7015L561	Clamp, Floor Seal	1
9	7015S508	Floor Seal	1
10	7015W503	Box Front, PTO	1
11	44623BH	Flange Nut 5/16NC	31
12	5161006	Carriage Bolt 5/16NC x 3/4	7
13	Z76222	Carriage Bolt 5/16NC x 5/8	24

# **Apron Chain & Sprocket**





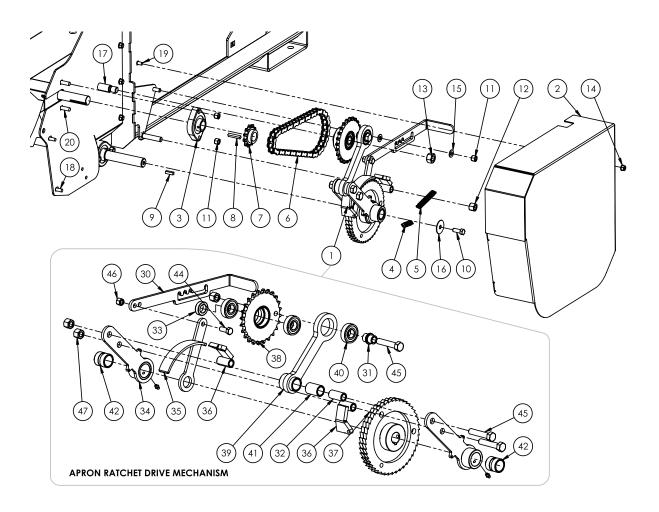
APRON SPROCKET ASSEMBLY (RH SHOWN)



APRON FLIGHT ASSEMBLY

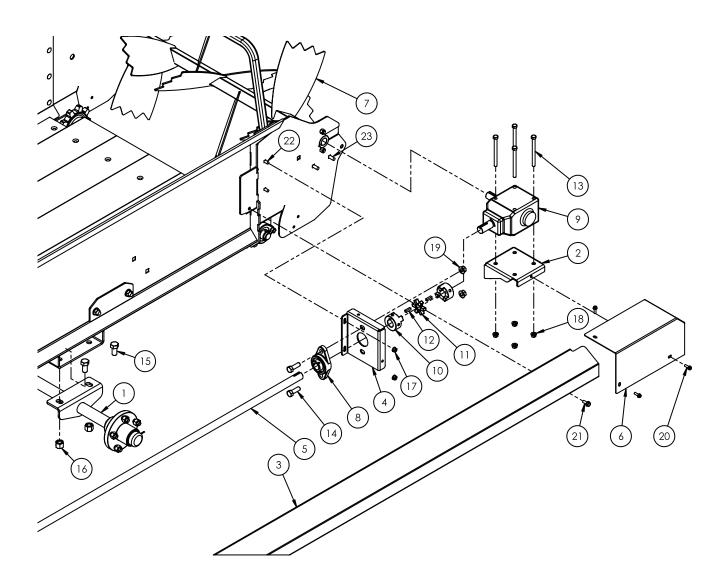
Ref. No.	Part No.	Description	Qty.
1		Apron Chain #62 x 123 links	2
2		Apron Flight Assembly	16
10		Apron Flight	1
11		Apron Chain #62 End RH	1
12		Apron Chain #62 End LH	1
13		Rivet 1/4 x 1/2 Flat Head	2
20	7015W507	Bracket, Front Sprocket RH	1
21		Sprocket, Apron Chain Front	1
22	Z26301	Bushing, 1 ID x 1-1/4 OD x 1-5/8	1
23		Hex Bolt 5/16NC x 3	2
24		Hex Lock Nut 5/16NC	2
25	Z73232	Wide Washer 3/8 Thin	1
26	Z29201	Grease Fitting, 1/8NPT	1

# **Apron Ratchet**



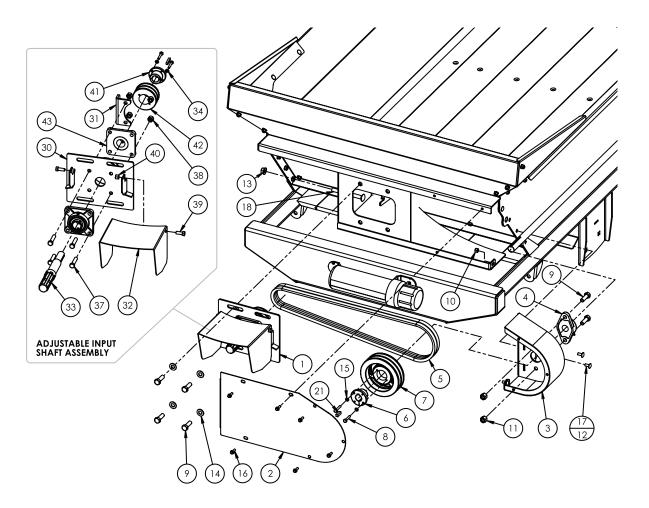
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7015A507	Apron Ratchet Drive Mechanism	1	30	7015L524	Handle, Ratchet Speed Set	1
2	7015W518	Shield, Apron Drive	1	31	7015M512	Flange Bushing	1
3	Z25102	FD 2-Bolt Flange Bearing 1"	1	32	7015M514	Bushing, Link Arm Bolt	1
4	Z31201	Spring 1/2 x 1-1/2 x .048	1	33		Bolt Spacer	1
5	Z31304	Spring 1/2 x 2-1/2 x .063	1	34	7015W510	Arm, Apron Ratchet Drive	2
6	Z42141	#50 Roller Chain 44P (22 Links)	1	35	7015W511	Slide, Speed Adjuster	1
7	Z42803	Sprocket, #50 11Tooth 1" Bore	1	36	7015W512	Dog, Ratchet	2
8	Z46532	Key 1/4 x 1/4 x 1-1/2	1	37	7015W513	Ratchet, Apron Drive	1
9		Key, 1/4 x 1/4 x .913	1	38	7015W514	#50 24Tooth Sprocket Hub	1
10		Hex Bolt 3/8NC x 1	2	39	7015W515	Arm, Ratchet Drive Link	1
11		Hex Lock Nut 3/8NC	3	40	Z21204	Ball Bearing 1635 RS	3
12		Hex Lock Nut 1/2NC	1	41	Z26201	Bushing, 3/4 ID x 1-1/2	1
13	Z72461	Low Profile Lock Nut 5/8NC	1	42	Z26303	Bushing, 1 ID x 1-1/4 Long Grooved	2
14	44623BH	Flange Nut 5/16NC	1	43	449BH	Grease Zerk 1/4NF	2
15	15915BH	Flat Washer 3/8	2	44		Hex Bolt 3/8NC x 1	1
16	Z73232	Wide Washer 3/8 Thin	1	45		Hex Bolt 1/2NC x 2-1/2	3
17	Z75571	Shoulder Bolt 3/4 x 1-1/2	1	46		Hex Lock Nut 3/8NC	1
18	Z76121	Flange Bolt 5/16NC x 3/4	4	47		Hex Lock Nut 1/2NC	3
19	Z76222	Carriage Bolt 5/16NC x 5/8	1				
20	5161212	Carriage Bolt 3/8NC x 1-1/4	2				

# **PTO Driveline**



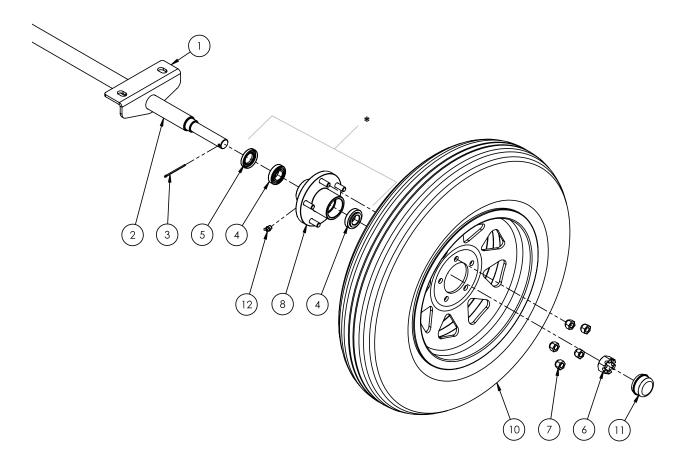
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7015A504	Assembly, PTO Axle	1	13		Hex Bolt 3/8NC x 4-1/2	4
2	7015L525	Bracket, Gear Box	1	14		Hex Bolt 1/2NC x 1-1/2	2
3	7015L533	Shield, PTO Drive Shaft	1	15		Hex Bolt 5/8NC x 1-1/4	4
4	7015L536	Bracket, PTO Drive Shaft	1	16		Hex Lock Nut 5/8NC	4
5	7015M515	Shaft, PTO Drive	1	17	44623BH	Flange Nut 5/16NC	2
6	7015W506	Guard, Gearbox	1	18	Z72531	Flange Nut 3/8NC	6
7	7015W516	Beater Bar, PTO Drive	1	19	Z72551	Flange Nut 1/2NC	2
8	Z25101	FL 2-Bolt Flange Bearing 1"	1	20	Z76111	Flange Bolt 1/4NC x 3/4	4
9	Z43101	Gearbox 540RPM 15HP	1	21	Z76121	Flange Bolt 5/16NC x 3/4	2
10	Z46404	Shaft Coupler L095 x 1	2	22	5161006	Carriage Bolt 5/16NC x 3/4	2
11	Z46405	Coupler Spider L095	1	23	44109BH	Carriage Bolt 3/8NC x 1	2
12		Key, 1/4 x 1/4 x .913	2			-	

## **PTO Drive**



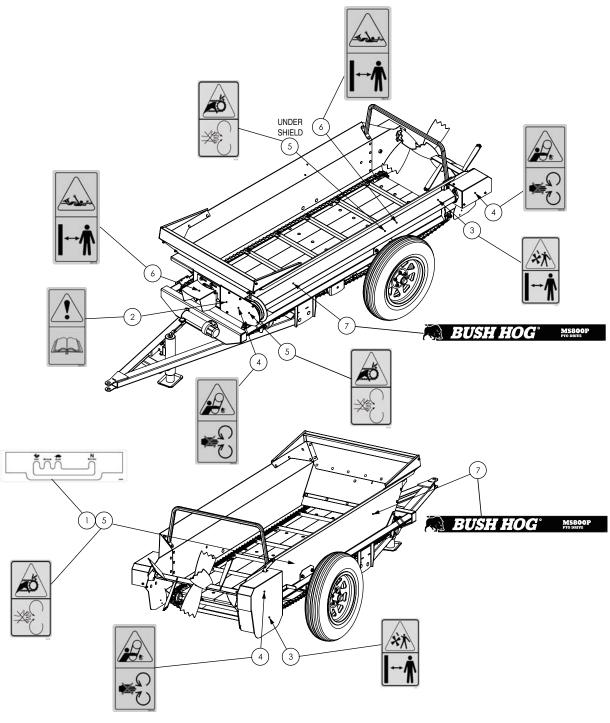
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7015A508	Assy, Adjustable Input Shaft	1	30	7015W504	PTO Spline Plate	1
2	7013L332	Shield, PTO Belt	1	31	7015L539	Bracket, Belt Tightener	1
3		Front Pulley Shield	1	32	7015L541	PTO Cover	1
4	Z25101	FL 2-Bolt Flange Bearing 1"	1	33	7015M516	PTO Spline	1
5	Z41154	Single Belt, B57 / B51	2	34		Lock Washer 1/4	2
6	Z41510	"L" Bushing 1" Bore	1	35		Hex Bolt 1/4NC x 1-3/8	2
7	Z41610	Dbl "B" Shv, 6.25" Pitch / "B" Shv, 6.75" Pitch	1	36	Z46535	Key, 1/4 x 1/4 x 1-3/4	1
8		Hex Bolt 1/4NC x 1-3/4	2	37		Hex Bolt 7/16NC x 2	4
9		Hex Bolt 1/2NC x 1-1/2	6	38		Hex Lock Nut, 7/16NC	4
10		Hex Lock Nut 5/16NC	1	39		Hex Bolt 3/8NC x 1	2
11		Hex Lock Nut 1/2NC	6	40		Hex Lock Nut 3/8NC	2
12	44623BH	Flange Nut 5/16NC	1	41	Z41510	"L" Bushing 1" Bore	1
13	Z72551	Flange Nut 1/2NC	1	42	Z41704	Double "B" Sheave, 3.55" Pitch	1
14		Flat Washer 1/2	4	43	Z25202	4-Bolt Flange Bearing, 1-1/4	2
15		Lock Washer 1/4	2				
16	Z76111	Flange Bolt 1/4NC x 3/4	6				
17	5161006	Carriage Bolt 5/16NC x 3/4	3				
18	Z76253	Carriage Bolt 1/2NC x 5	1				
19		Self-tapping Screw #10	4				
20		Manual Tube 3-1/2	1				
21	Z46535	Key 5/16 x 5/16 x 1	1				
				_			

# **PTO Drive Axle**



Ref. No.	Part No.	Description	Qty.
1	7015L509	Bracket, PTO Axle Mount	2
2	7015W509	Solid Axle, 1" Spindle	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

# **Decal Locations**



Ref. No.	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	3
6	Z94118	Rotating Driveline	2
7	Z946619	Model Decal, MS800P	2



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