

WALLENSTEIN

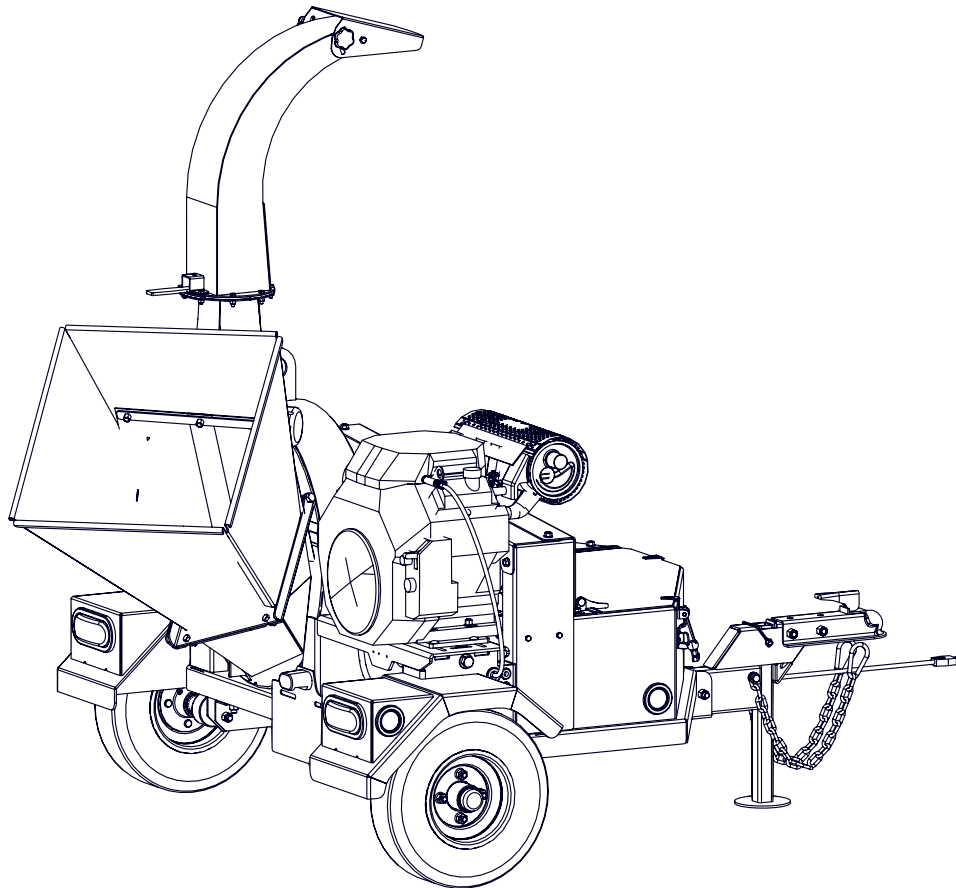
BY EMB MFG INC.

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BXT4224 Chipper S/N 2E9US1115FS040137 & After

BXT4228su Chipper S/N 2E9US1116FS040518 & After

Parts Manual



Refer to the operators
manual for safe
operation and
maintenance

1052 BXT4224 BXT4228su RevK1 Parts Manual
Rev K1 190416

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.



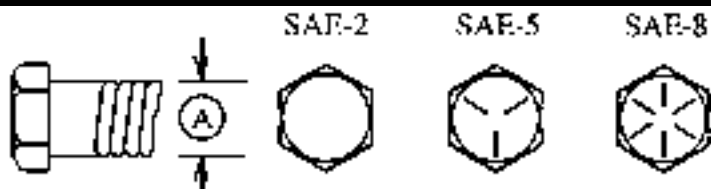
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Bolt Torque

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.

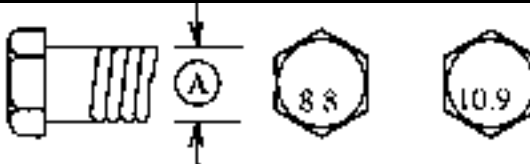
ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160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

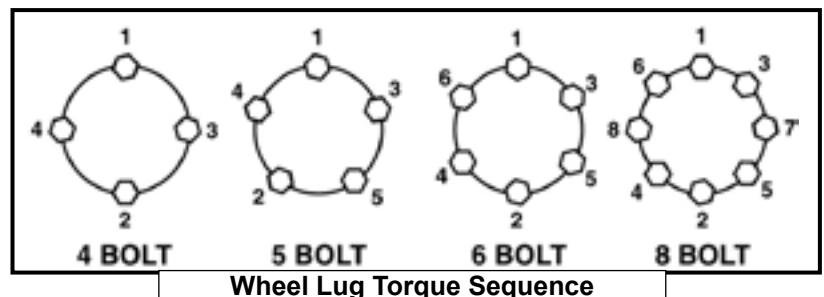
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

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.

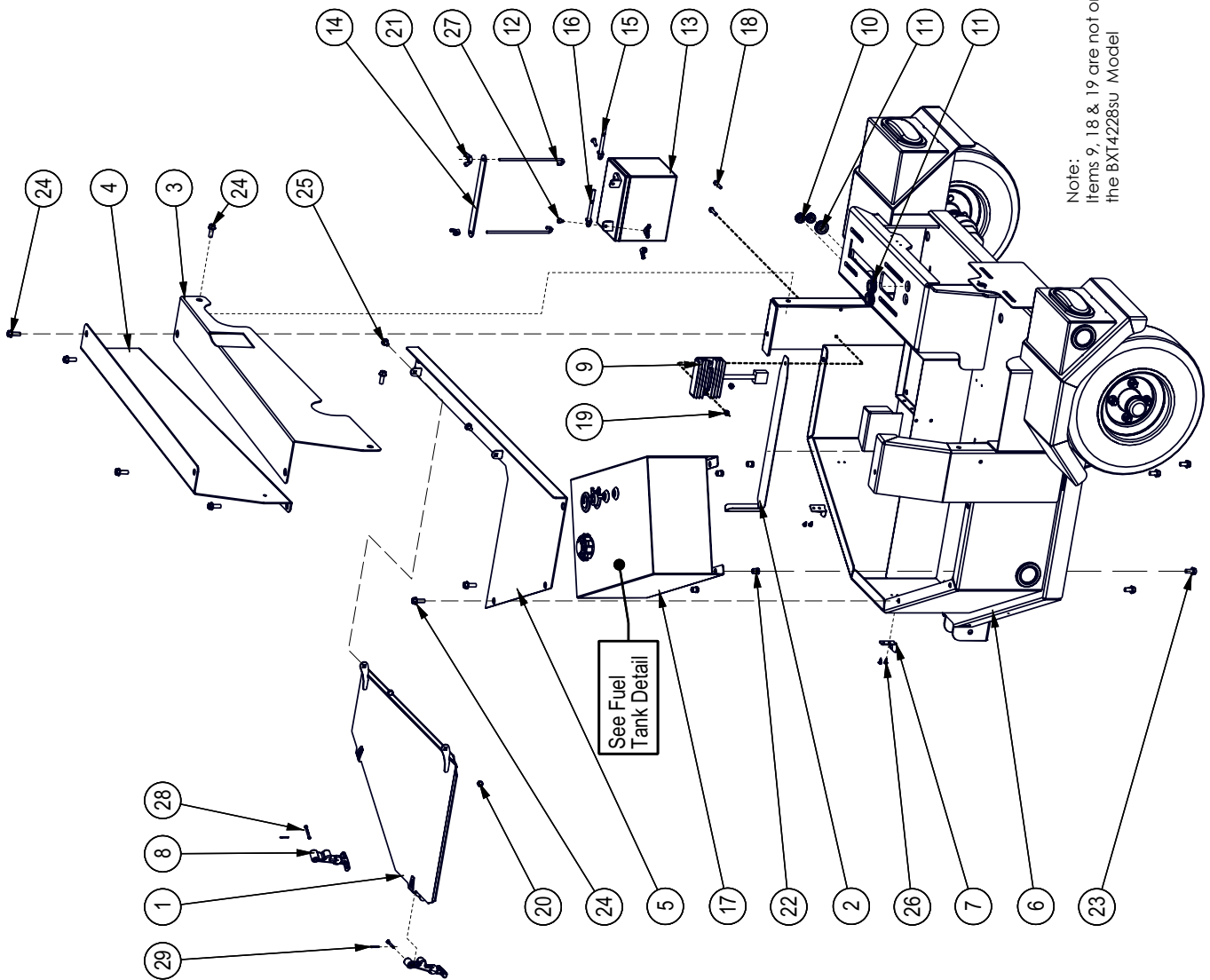
Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

- 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



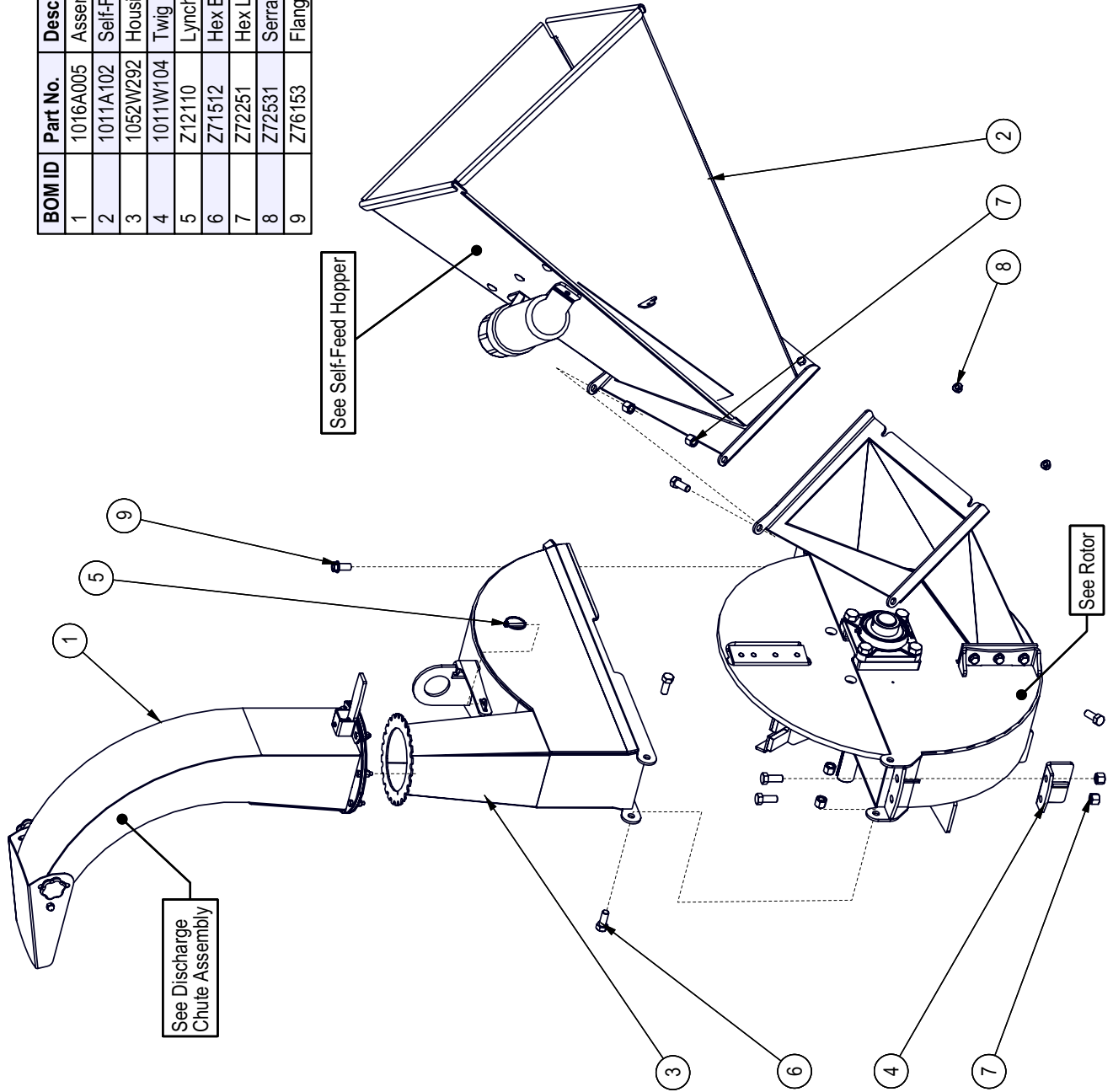
Main Frame, Guards, & Battery



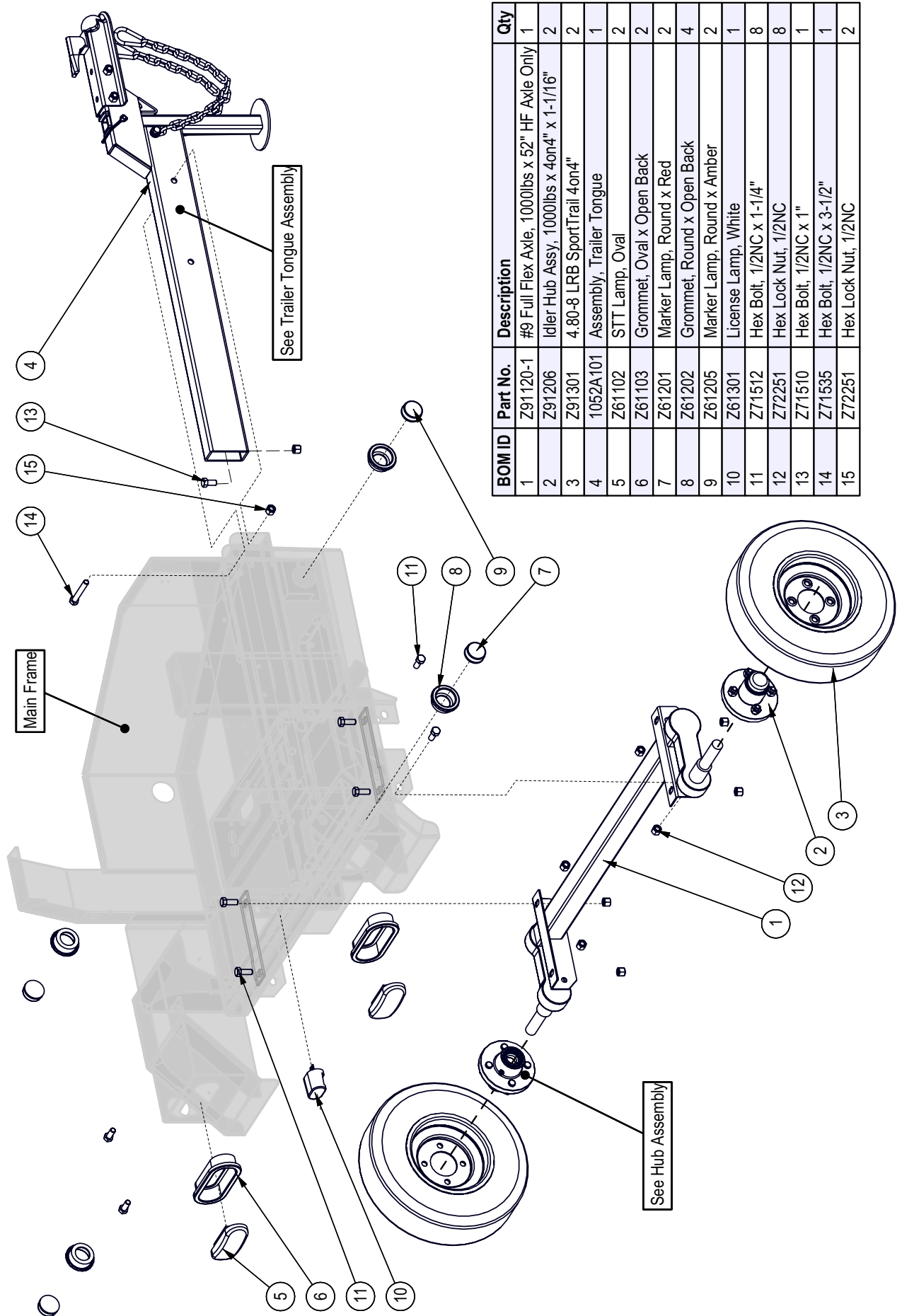
BOM ID	Part No.	Description	Qty
1	1052A104	Toolbox Lid	1
2	1012L269	Gauge, Ledger Setting	1
3	1052L122	Rear Belt Guard	1
4	1052L125	Front Belt Guard	1
5	1052W106	Weldment, Bay Cover	1
6	1052W502	Main Frame	1
7	Z18201-2	Hood Fastener, Top Bracket	2
8	Z18201-3	Hood Fastener, Latch Strap	2
9	Z47901	Regulator Rectifier	1
10	Z62808	Rubber Grommet, 7/16" x 1/4"	2
11	Z62822	Rubber Grommet, 3/4" x 1/4"	3
12	Z93202	J-Hook, 1/4" x 7"	2
13	Z93204	Battery, 325CCA	1
14	Z93207	Hold-Down Strap, 1" x 8-1/2"	1
15	Z93210	Battery Cable, Negative x 25"	1
16	Z93212	Battery Cable, Positive x 28"	1
17	1052A501	Fuel Tank, Trailer Chippers EPA	1
18	Z71112	Hex Bolt, 1/4NC x 1-1/4"	2
19	Z72211	Hex Lock Nut, 1/4NC	2
20	Z72914	Acorn Nut, 5/16NC	2
21	Z72921	Wing Nut, 1/4NC	4
22	Z72959	Rivet Nut, 3/8NC x 150	4
23	Z76133	Flange Bolt, 3/8NC x 3/4"	4
24	Z76134	Flange Bolt, 3/8NC x 1"	8
25	Z76221	Carriage Bolt, 5/16NC x 3/4"	2
26	Z76711	Self-tapping Screw, #10 x 1/2"	4
27	Z76301	Machine Screw, 1/4NC x 3/4"	2
28	Z11300	Clevis Pin 3/16 x 1-3/8	2
29	Z12300	Cotter Pin 3/32 X 3/4	2

Blower Parts

BOM ID	Part No.	Description	Qty
1	1016A005	Assembly, Discharge Chute	1
2	1011A102	Self-Feed Hopper	1
3	1052W292	Housing, Upper Rotor	1
4	1011W104	Twig Breaker	1
5	Z12110	Lynch Pin, 3/16"	1
6	Z71512	Hex Bolt, 1/2NC x 1-1/4"	6
7	Z72251	Hex Lock Nut, 1/2NC	6
8	Z72531	Serrated Flange Locknut, 3/8NC	2
9	Z76153	Flange Bolt, 1/2NC x 1"	1

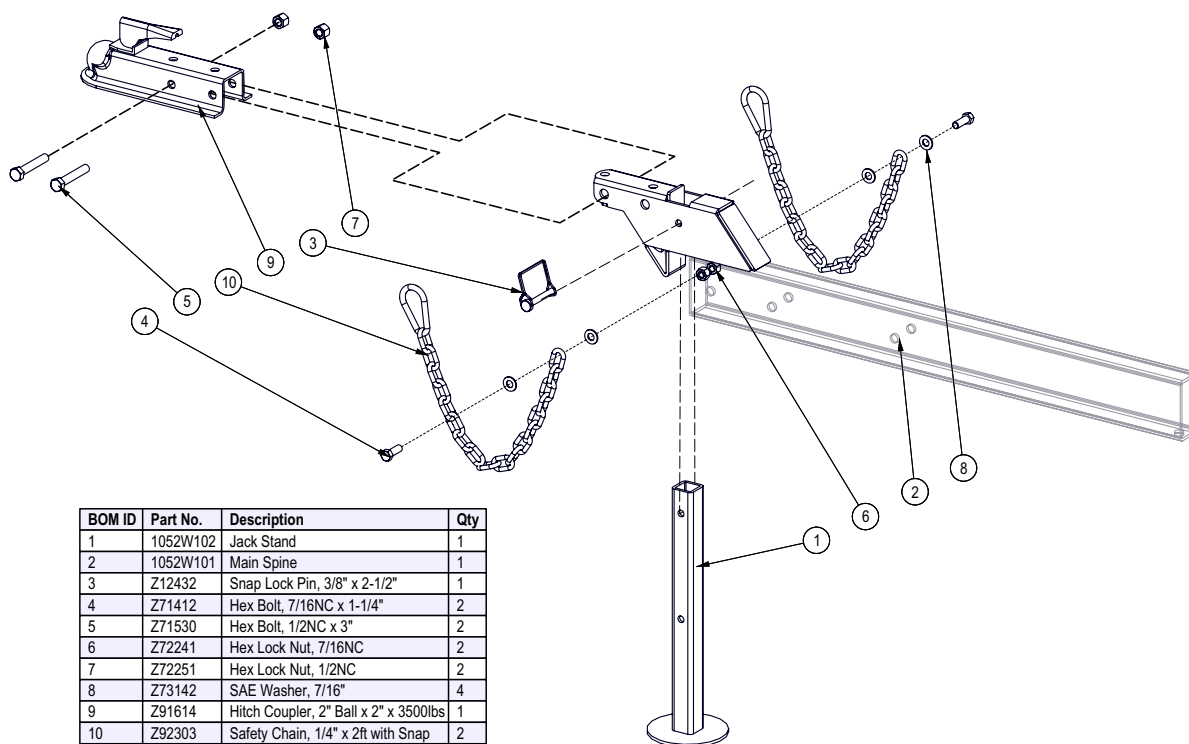


Running Gear



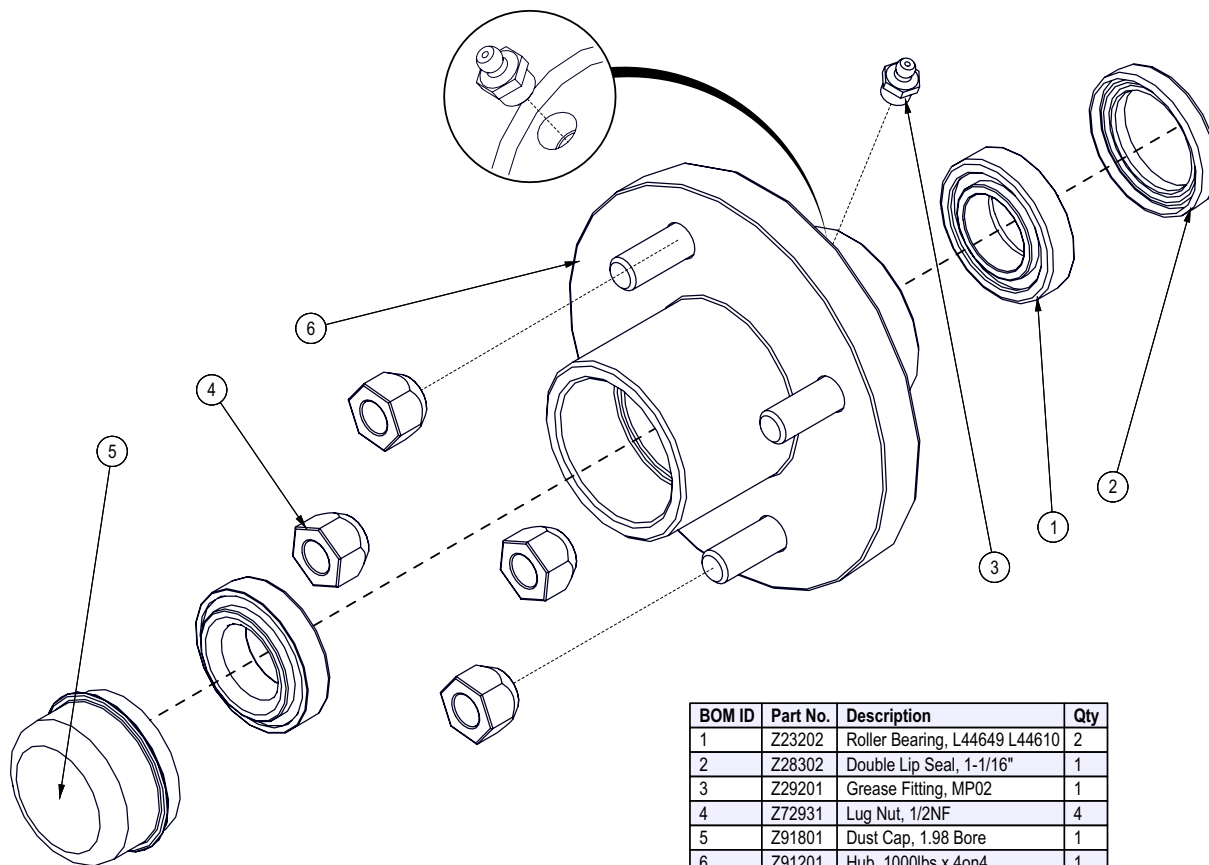
BOM ID	Part No.	Description	Qty
1	Z91120-1	#9 Full Flex Axle, 1000lbs x 52" HF Axle Only	1
2	Z91206	Idler Hub Assy, 1000lbs x 4on4" x 1-1/16"	2
3	Z91301	4.80-8 LRB SportTrail 4on4"	2
4	1052A101	Assembly, Trailer Tongue	1
5	Z61102	STT Lamp, Oval	2
6	Z61103	Grommet, Oval x Open Back	2
7	Z61201	Marker Lamp, Round x Red	2
8	Z61202	Grommet, Round x Open Back	4
9	Z61205	Marker Lamp, Round x Amber	2
10	Z61301	License Lamp, White	1
11	Z71512	Hex Bolt, 1/2NC x 1-1/4"	8
12	Z72251	Hex Lock Nut, 1/2NC	8
13	Z71510	Hex Bolt, 1/2NC x 1"	1
14	Z71535	Hex Bolt, 1/2NC x 3-1/2"	1
15	Z72251	Hex Lock Nut, 1/2NC	2

Trailer Tongue Assembly



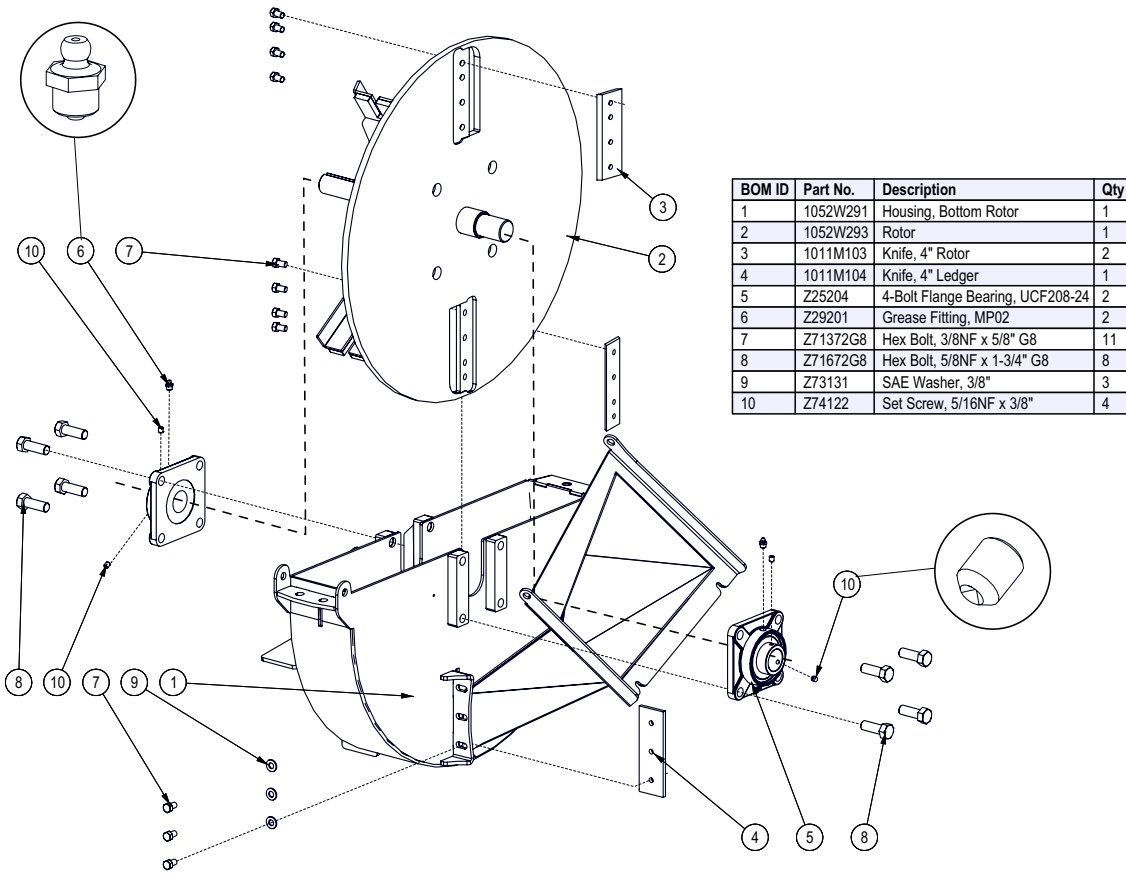
BOM ID	Part No.	Description	Qty
1	1052W102	Jack Stand	1
2	1052W101	Main Spine	1
3	Z12432	Snap Lock Pin, 3/8" x 2-1/2"	1
4	Z71412	Hex Bolt, 7/16NC x 1-1/4"	2
5	Z71530	Hex Bolt, 1/2NC x 3"	2
6	Z72241	Hex Lock Nut, 7/16NC	2
7	Z72251	Hex Lock Nut, 1/2NC	2
8	Z73142	SAE Washer, 7/16"	4
9	Z91614	Hitch Coupler, 2" Ball x 2" x 3500lbs	1
10	Z92303	Safety Chain, 1/4" x 2ft with Snap	2

Idler Hub Assembly



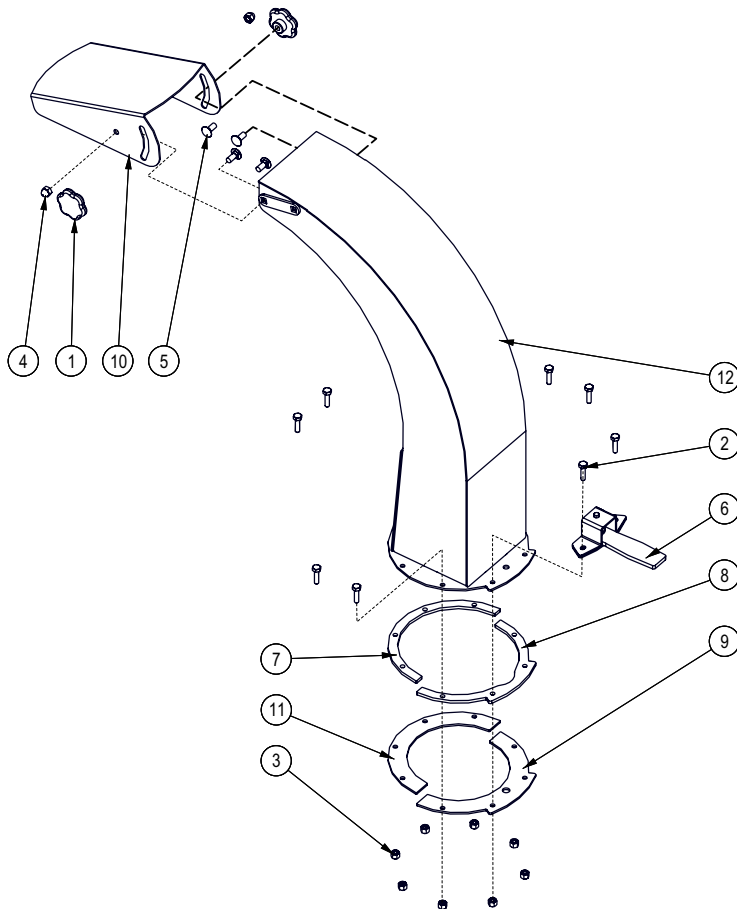
BOM ID	Part No.	Description	Qty
1	Z23202	Roller Bearing, L44649 L44610	2
2	Z28302	Double Lip Seal, 1-1/16"	1
3	Z29201	Grease Fitting, MP02	1
4	Z72931	Lug Nut, 1/2NF	4
5	Z91801	Dust Cap, 1.98 Bore	1
6	Z91201	Hub, 1000lbs x 4on4	1

Rotor



BOM ID	Part No.	Description	Qty
1	1052W291	Housing, Bottom Rotor	1
2	1052W293	Rotor	1
3	1011M103	Knife, 4" Rotor	2
4	1011M104	Knife, 4" Ledger	1
5	Z25204	4-Bolt Flange Bearing, UCF208-24	2
6	Z29201	Grease Fitting, MP02	2
7	Z71372G8	Hex Bolt, 3/8NF x 5/8" G8	11
8	Z71672G8	Hex Bolt, 5/8NF x 1-3/4" G8	8
9	Z73131	SAE Washer, 3/8"	3
10	Z74122	Set Screw, 5/16NF x 3/8"	4

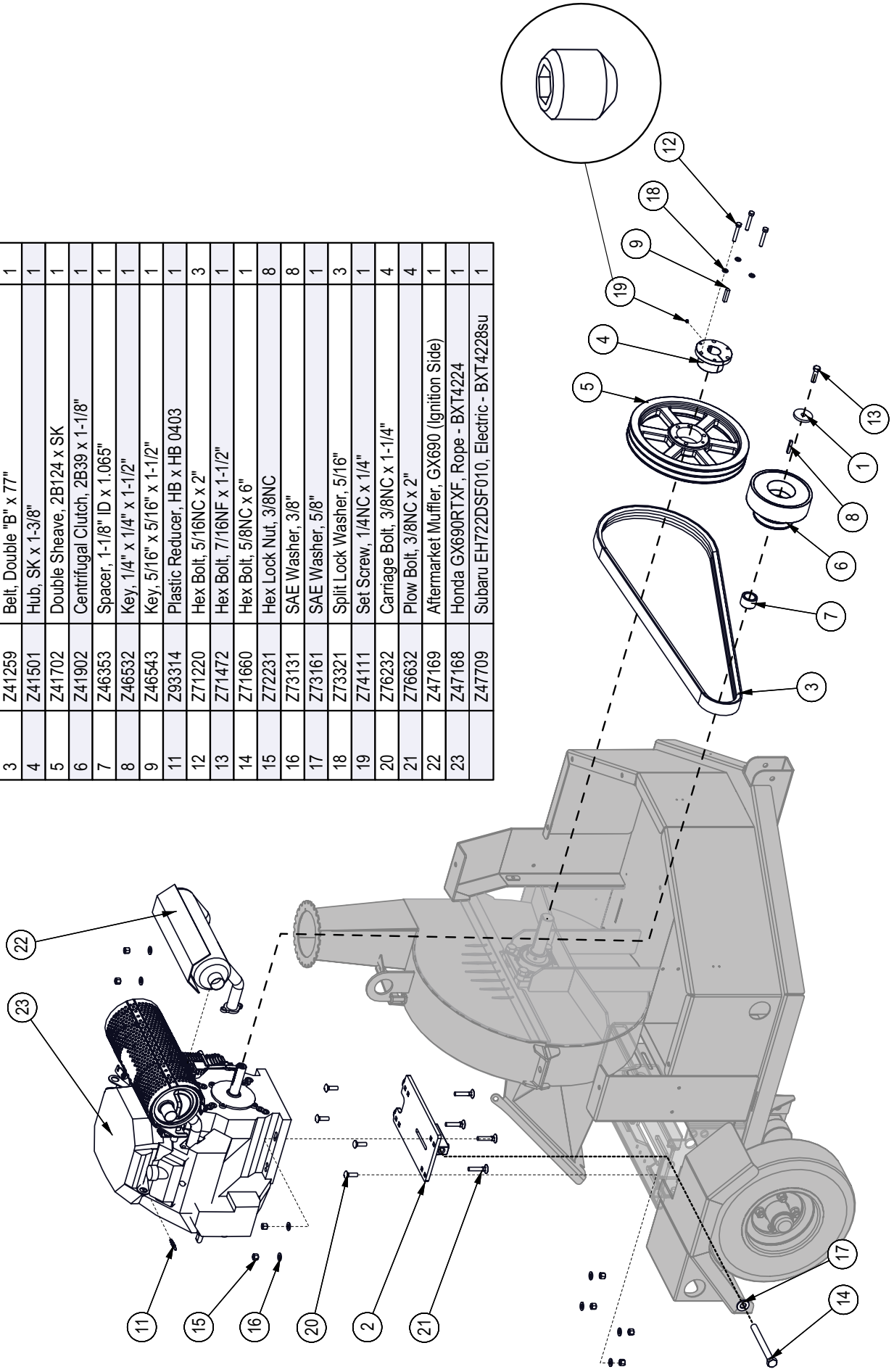
Discharge Chute Assembly



BOM ID	Part No.	Description	Qty
1	Z19313	Hand Knob, 5/16NC Female Stud	2
2	Z71110	Hex Bolt, 1/4NC x 1"	8
3	Z72211	Hex Lock Nut, 1/4NC	8
4	Z72914	Acorn Nut, 5/16NC	2
5	Z76221	Carriage Bolt, 5/16NC x 3/4"	4
6	1012W208	Assembly, Hood Latch	1
7	1016L027	Plate, Spacer Ring	1
8	1016L029	Plate, Spacer Ring	1
9	1016L030	Plate, Hood Capture	1
10	1016L033	Deflector, Discharge Chute	1
11	1016L034	Plate, Hood Capture	1
12	1016W008	Discharge Chute	1

Engine & Driveline

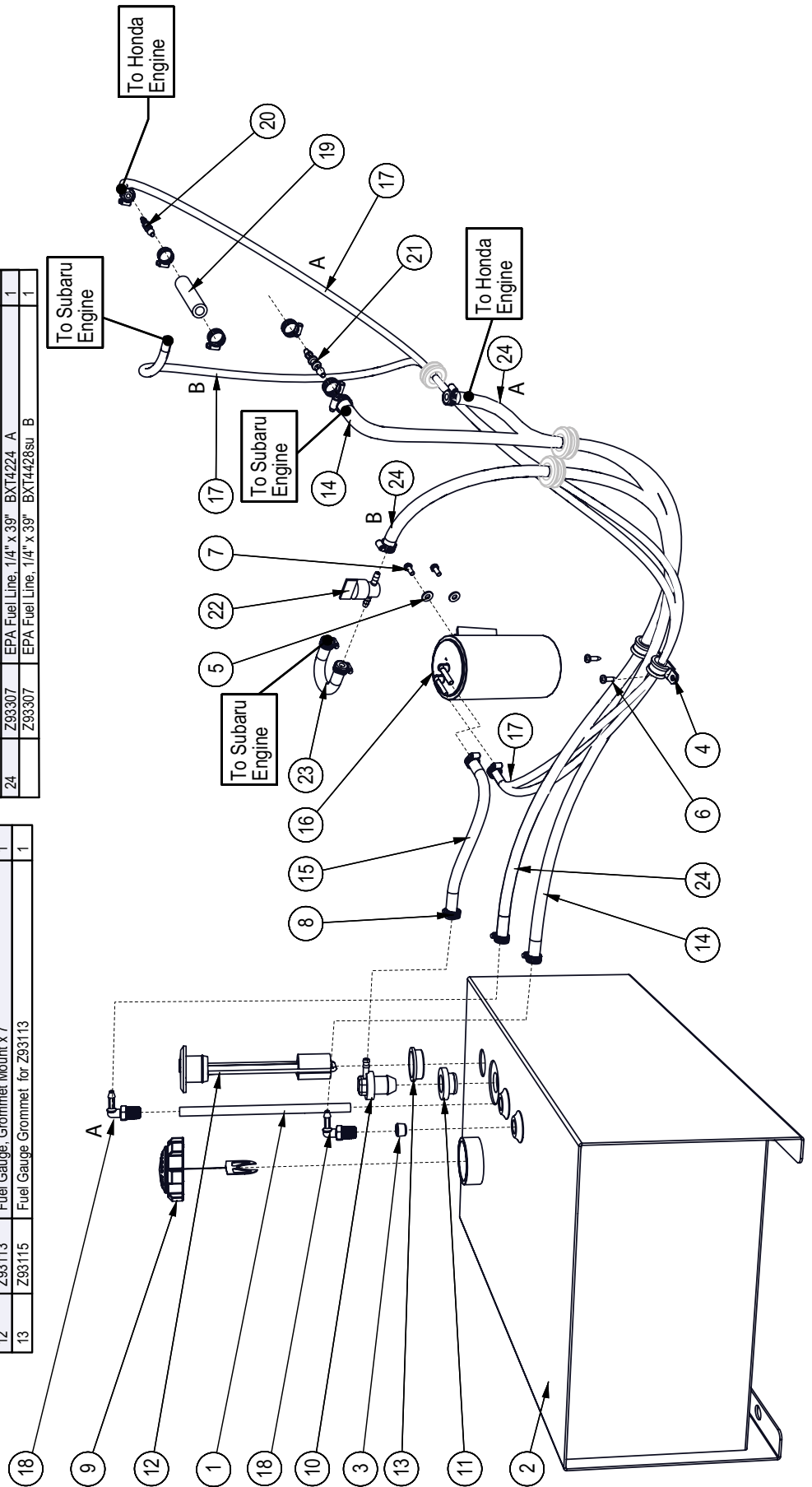
BOM ID	Part No.	Description	Qty
1	1052L503	Washer, Clutch Trap x 7/16"	1
2	1052W104	Engine Adjustment Plate	1
3	Z41259	Belt, Double "B" x 77"	1
4	Z41501	Hub, SK x 1-3/8"	1
5	Z41702	Double Sheave, 2B124 x SK	1
6	Z41902	Centrifugal Clutch, 2B39 x 1-1/8"	1
7	Z46353	Spacer, 1-1/8" ID x 1.065"	1
8	Z46532	Key, 1/4" x 1/4" x 1-1/2"	1
9	Z46543	Key, 5/16" x 5/16" x 1-1/2"	1
11	Z93314	Plastic Reducer, HB x HB 0403	1
12	Z71220	Hex Bolt, 5/16NC x 2"	3
13	Z71472	Hex Bolt, 7/16NF x 1-1/2"	1
14	Z71660	Hex Bolt, 5/8NC x 6"	1
15	Z72231	Hex Lock Nut, 3/8NC	8
16	Z73131	SAE Washer, 3/8"	8
17	Z73161	SAE Washer, 5/8"	1
18	Z73321	Split Lock Washer, 5/16"	3
19	Z74111	Set Screw, 1/4NC x 1/4"	1
20	Z76232	Carriage Bolt, 3/8NC x 1-1/4"	4
21	Z76632	Plow Bolt, 3/8NC x 2"	4
22	Z47169	Aftermarket Muffler, GX690 (Ignition Side)	1
23	Z47168	Honda GX690RTXF, Rope - BXT4224	1
	Z47709	Subaru EH722DSF010, Electric - BXT4228su	1



Fuel Tank Assembly & Fuel Lines

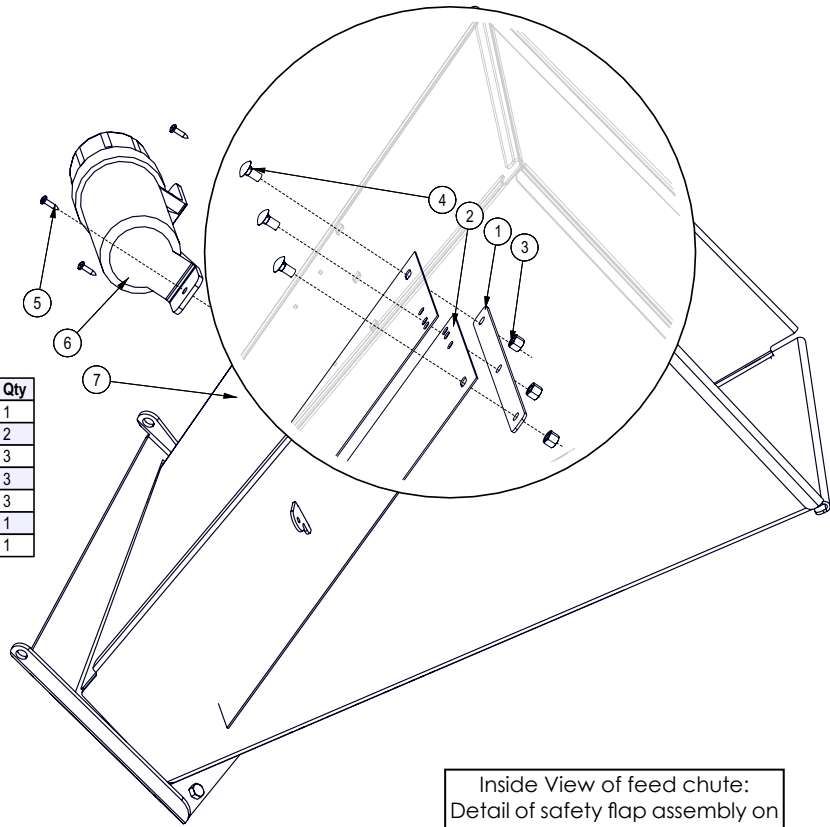
BOM ID	Part No.	Description	Qty
1	1052S501	Fuel Pickup Tube	1
2	1052W501	Fuel Tank, Trailer Chipper	1
3	Z51194	Socket Plug, MP 04	1
4	Z62821	Rubberized Wire Clamp, 5/8"	2
5	Z73111	SAE Washer, 1/4"	2
6	Z76712	Self-tapping Screw, #10 x 3/4"	2
7	Z77130	Hex Bolt, M6x1.0 x 14mm	2
8	Z79405	Hose Clamp, SAE #4 (5/8") BXT4224	8
11	Z79405	Hose Clamp, SAE #4 (5/8") BXT4228su	11
9	Z93108	EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether	1
10	Z93110	EPA Remote Vent, HB04	1
11	Z93111	Vent Grommet For Z93110	1
12	Z93113	Fuel Gauge, Grommet Mount x 7"	1
13	Z93115	Fuel Gauge Grommet for Z93113	1

BOM ID	Part No.	Description	Qty
14	Z93307	EPA Fuel Line, 1/4" x 47" BXT4228su	1
15	Z93307	EPA Fuel Line, 1/4" x 9"	1
16	Z93309	EPA Carbon Canister, 652cc	1
17	Z93310	EPA Fuel Line, 3/16" x 58" BXT4224 A	1
	Z93310	EPA Fuel Line, 3/16" x 62" BXT4228su B	1
18	Z93312	Plastic Elbow 90, MP x HB 0404 BXT4224 A	1
	Z93312	Plastic Elbow 90, MP x HB 0404 BXT4228su	2
19	Z93313	Fuel Line, 3/8" ID x 3" BXT4224 Only	1
20	Z93314	Plastic Reducer, HB x HB 0403	1
21	Z93317	Plastic Coupling, HB x HB 0404 BXT4228su Only	1
22	Z93301	Fuel Shut-Off Valve, 1/4" BXT4228su Only	1
23	Z93307	EPA Fuel Line, 1/4" ID x 4" BXT4228su Only	1
24	Z93307	EPA Fuel Line, 1/4" x 39" BXT4224 A	1
	Z93307	EPA Fuel Line, 1/4" x 39" BXT4228su B	1

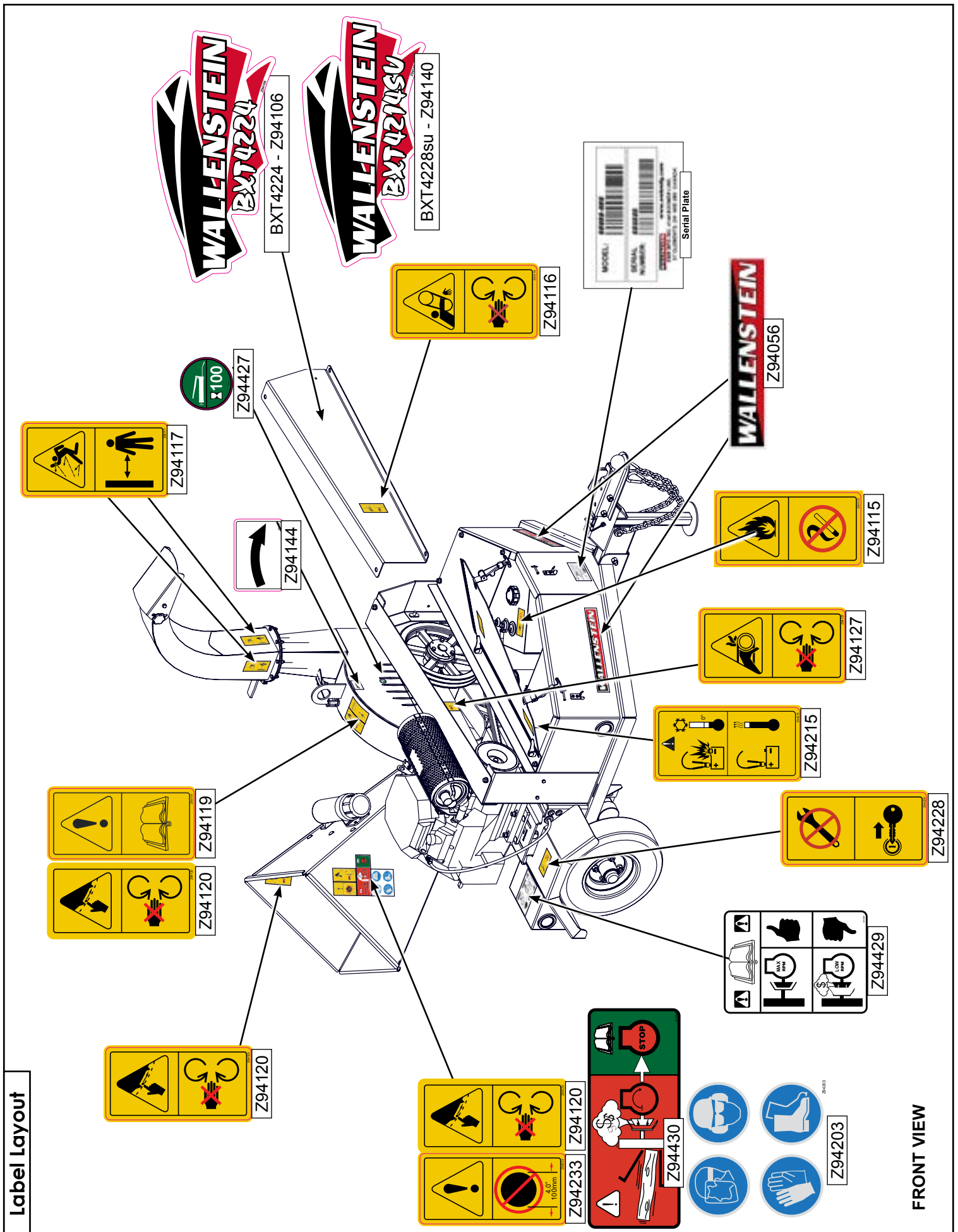


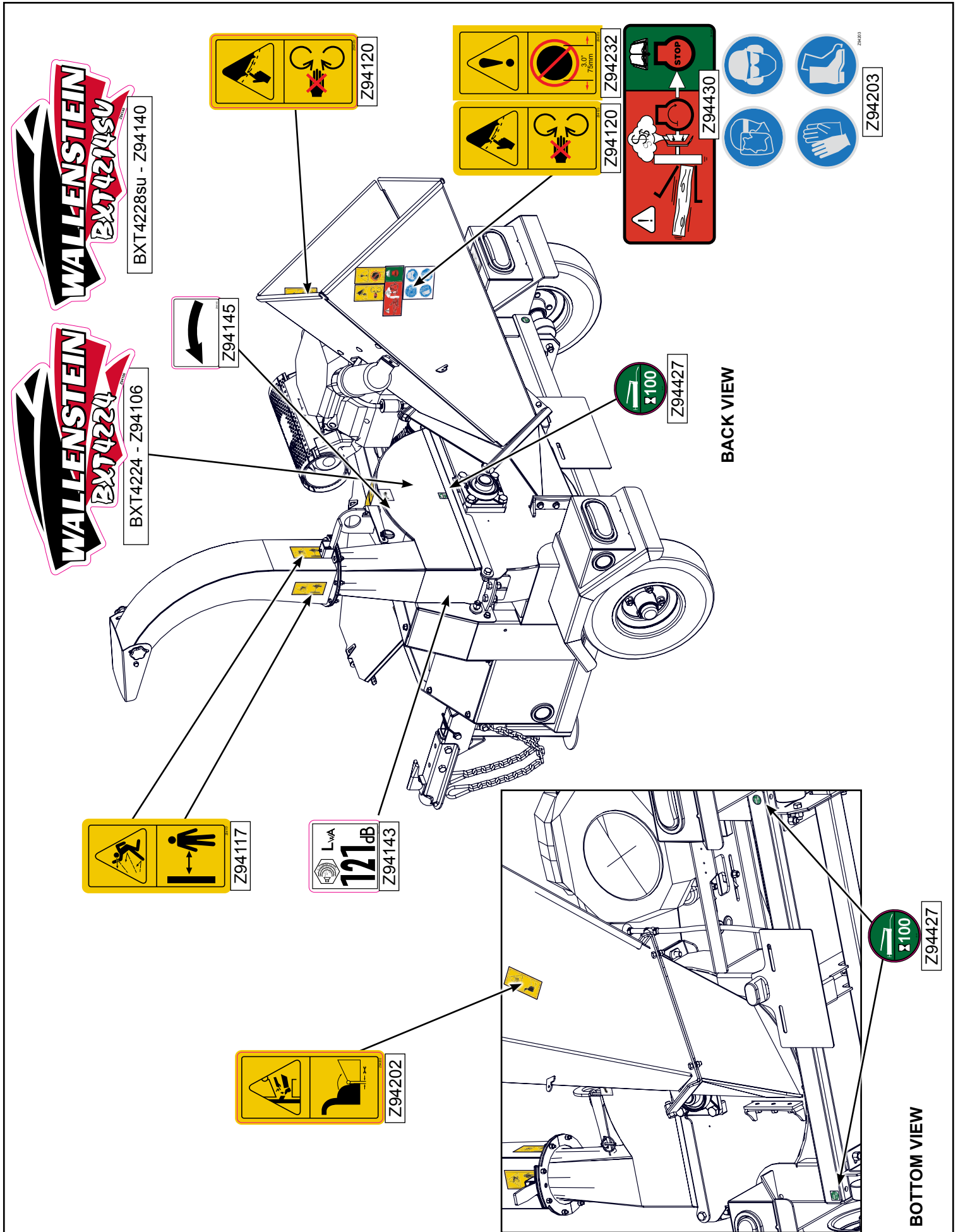
Self-feed Hopper Flap Detail

BOM ID	Part No.	Description	Qty
1	1011L151	Strap, Hopper Flap	1
2	1011S103	Flap, Hopper	2
3	Z72231	Hex Lock Nut, 3/8NC	3
4	Z76233	Carriage Bolt, 3/8NC x 3/4"	3
5	Z76712	Self-tapping Screw, #10 x 3/4"	3
6	Z96503	Manual Tube, 3-1/2" Short	1
7	1011W108	Weldment, Infeed Hopper	1



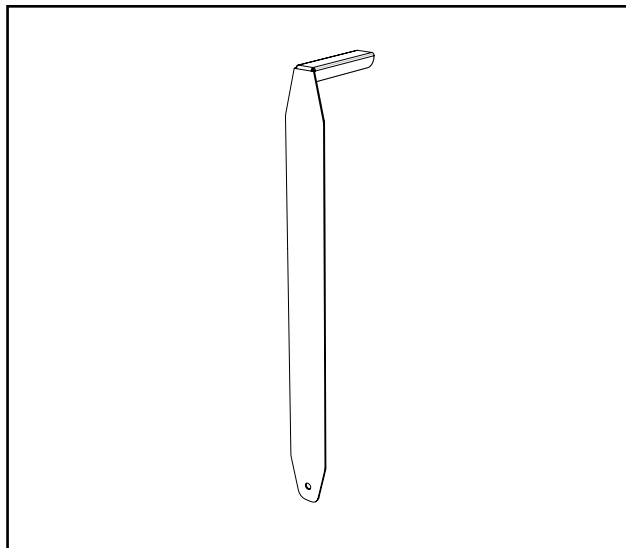
Inside View of feed chute:
Detail of safety flap assembly on
inside of feed chute.





Accessories

Call your dealer for pricing and availability



#1012L269 LEDGER CLEARANCE SETTING GAUGE



**#Z97033
TRAILER WOOD CHIPPER
OPERATOR'S MANUAL**

Available as a download at
www.wallensteinequipment.com