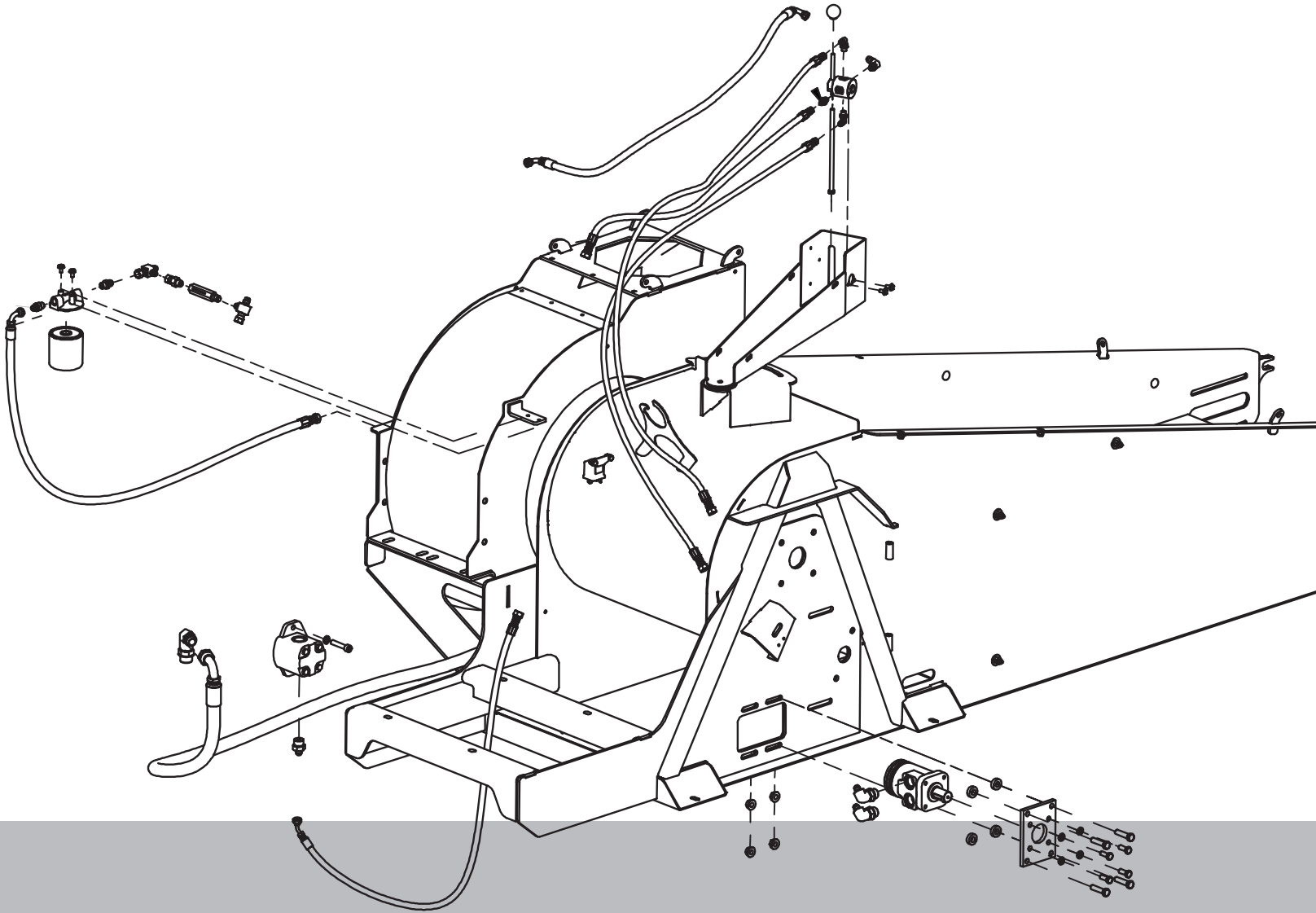


# STRAW BLOWER 4000

---



## PARTS MANUAL



# Table of Contents

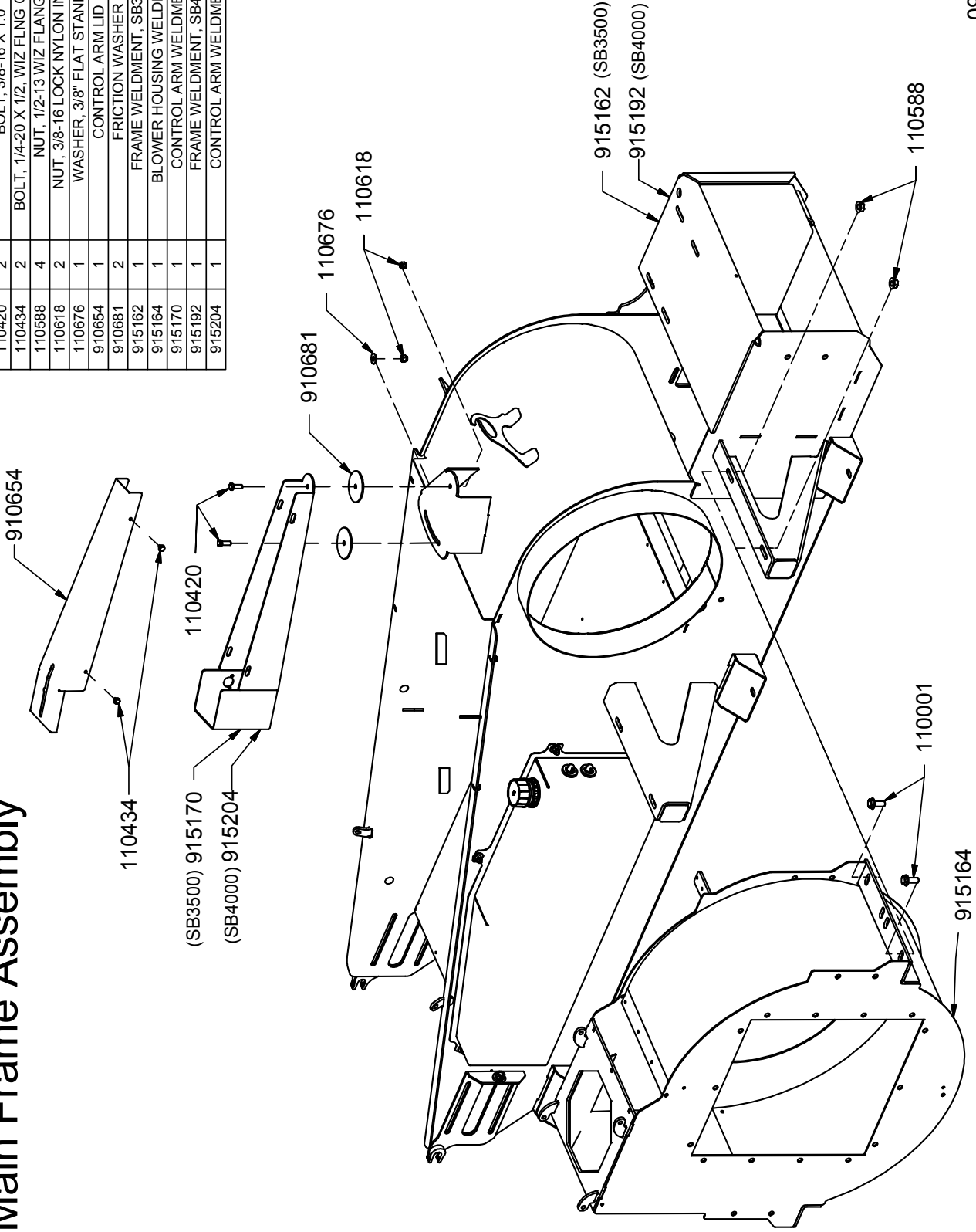
## PARTS SECTION

### Table of Contents

Main Frame Assembly.....	2
Trailer Assembly.....	3
Blower Liner.....	4
Floor Chain Assembly.....	5
Conveyor Chain Assembly.....	6
Fan & Rotor Assembly.....	7
Bale Chute Assembly.....	8
Pivthead & Spout Assembly.....	9
Fuel Tank & Battery.....	10
Diesel Engine Hood Assembly.....	12
Drive Components.....	14
Engine Assembly.....	16
Hydraulic Reservoir.....	18
Hydraulics Assembly.....	20
Wiring Diagram.....	21
Decals.....	22

# Main Frame Assembly

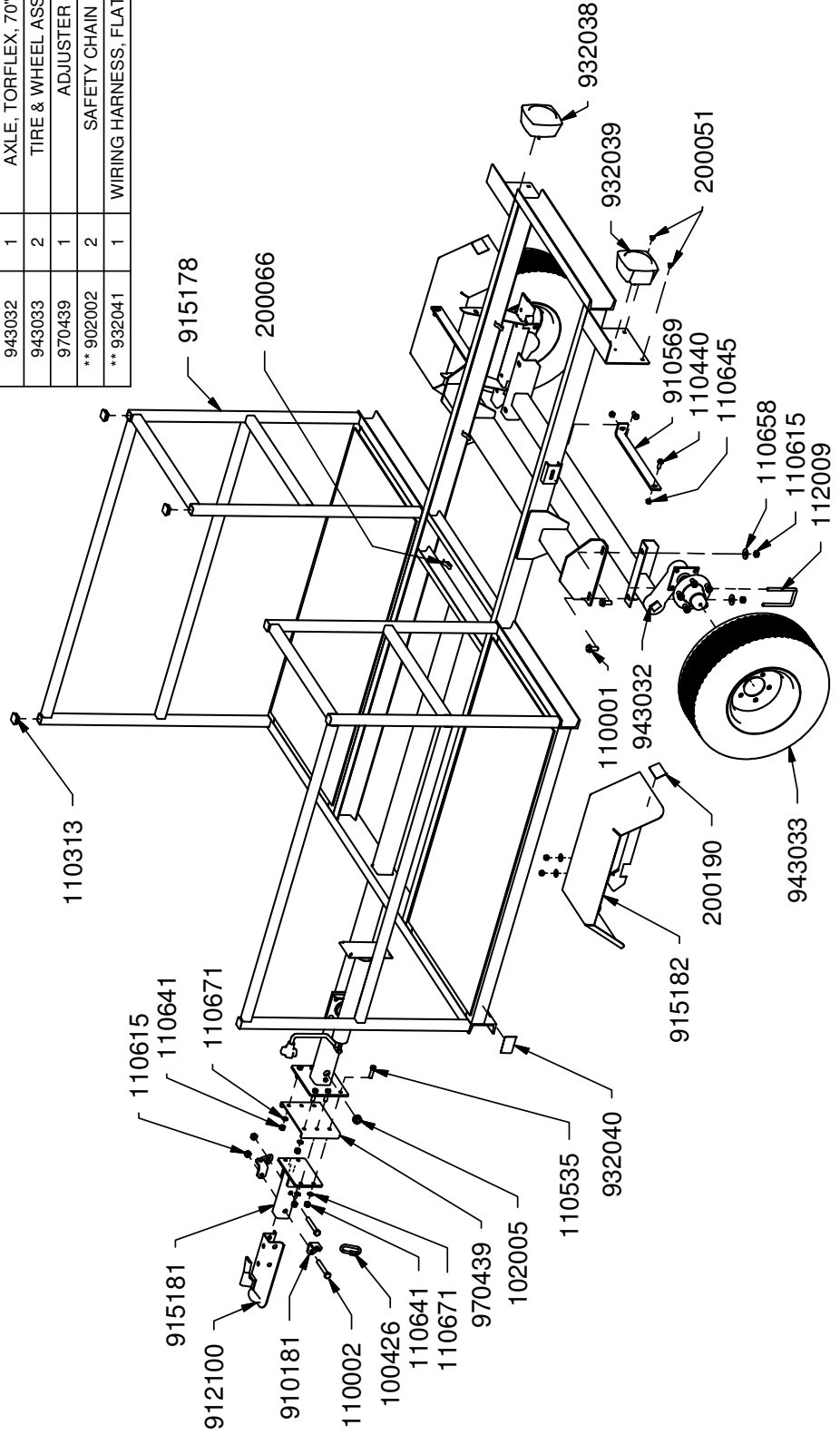
PART #	QTY	DESCRIPTION
110001	4	BOLT, 1/2-13 X 1.25, WIZ FLANGE
110420	2	BOLT, 3/8-16 X 1.0
110434	2	BOLT, 1/4-20 X 1/2, WIZ FLING GR 5 ZINC
110588	4	NUT, 1/2-13 WIZ FLANGE
110618	2	NUT, 3/8-16 LOCK NYLON INSERT
110676	1	WASHER, 3/8" FLAT STANDARD
910654	1	CONTROL ARM LID
910681	2	FRICITION WASHER
915162	1	FRAME WELDMENT, SB3500
915164	1	BLOWER HOUSING WELDMENT
915170	1	CONTROL ARM WELDMENT
915192	1	FRAME WELDMENT, SB4000
915204	1	CONTROL ARM WELDMENT



09/05/2017

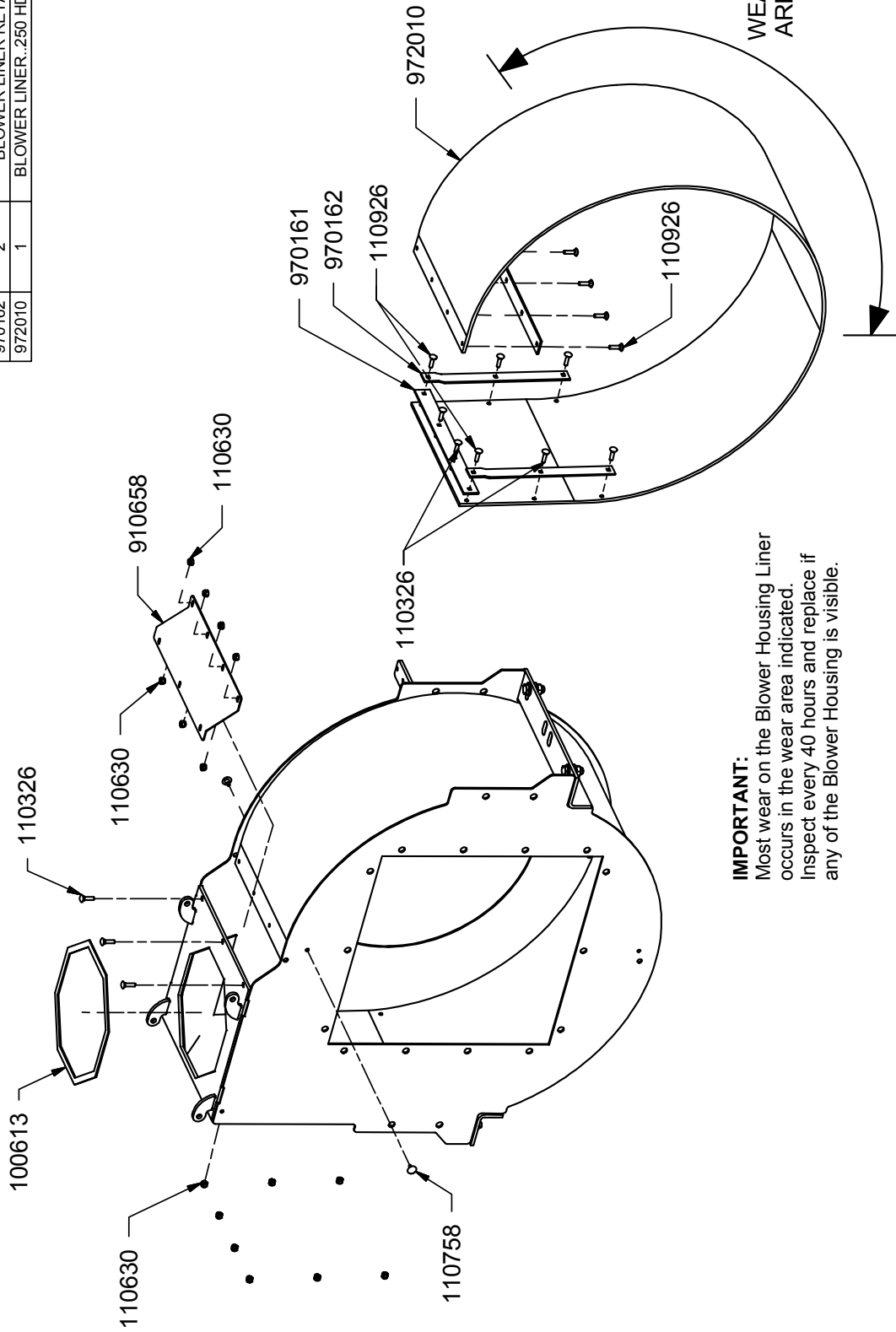
# Trailer Assembly

PART #	QTY	DESCRIPTION	PART #	QTY	DESCRIPTION
100426	2	CHAIN CONNECTOR 5/16" THREADED	112009	1	BOLT PACKAGE, U-BOLT ASSY
102005	1	GROMMET, RUBBER .875 OD X .625 ID	200051	2	NYLON LICENSE PLATE INSERT
110001	4	BOLT, 1/2-13 X 1.25, WIZ FLANGE	200066	8	CLIP, WIRE-FRAME
110002	2	BOLT, 1/2-13 X 3.5	200190	2	DECAL, REFLECTIVE
110199	1	SCREW, 1/4-20 X .75, WH SELF TAP	910181	2	MOUNT, SAFETY CHAIN
110313	6	1-1/4 SQ PLUG	910569	2	FENDER BRACKET
110440	4	BOLT, 3/8-16 X 1, WIZ FLANGE	912100	1	BALL COUPLER, 2"
110535	6	BOLT, 7/16-14 X 1.5	915178	1	TRAILER FRAME WELDMENT
110615	6	NUT, 1/2-13, UNITORQUE LOCK	915181	1	HITCH WELDMENT
110641	6	NUT, 7/16-14	915182	2	FENDER WELDMENT
110645	4	NUT, 3/8-16 WIZ FLANGE	932038	1	LIGHT, REAR STOP-TURN-TAIL, RIGHT
110658	4	WASHER, 1/2" FLAT STANDARD	932039	1	LIGHT, REAR STOP-TURN-TAIL, LEFT
110671	6	WASHER, 7/16" LOCK	932040	2	DECAL, REFLECTIVE AMBER, 2-3/4 X 1-3/4
			943032	1	AXLE, TORFLEX, 70" ON HUB FACE
			943033	2	TIRE & WHEEL ASSY, 20.5 X 8-10
			970439	1	ADJUSTER PLATE
			** 902002	2	SAFETY CHAIN (not shown)
			** 932041	1	WIRING HARNESS, FLAT 4-WAY (not shown)



# Blower Liner

PART #	QUANTITY	DESCRIPTION
100613	30 in	SEAL
110326	9	BOLT, 1/4-20 X 1 in Carriage
110630	15	NUT, 1/4-20 LOCK (NYLON INSERT)
110758	2	PLUG, 5/16 RUBBER
110926	6	BOLT, 1/4-20 X 1.25 in Carriage
910658	1	BLOWER ACCESS PANEL
970161	2	BLOWER LINER RETAINER
970162	2	BLOWER LINER RETAINER
972010	1	BLOWER LINER .250 HD UHMW

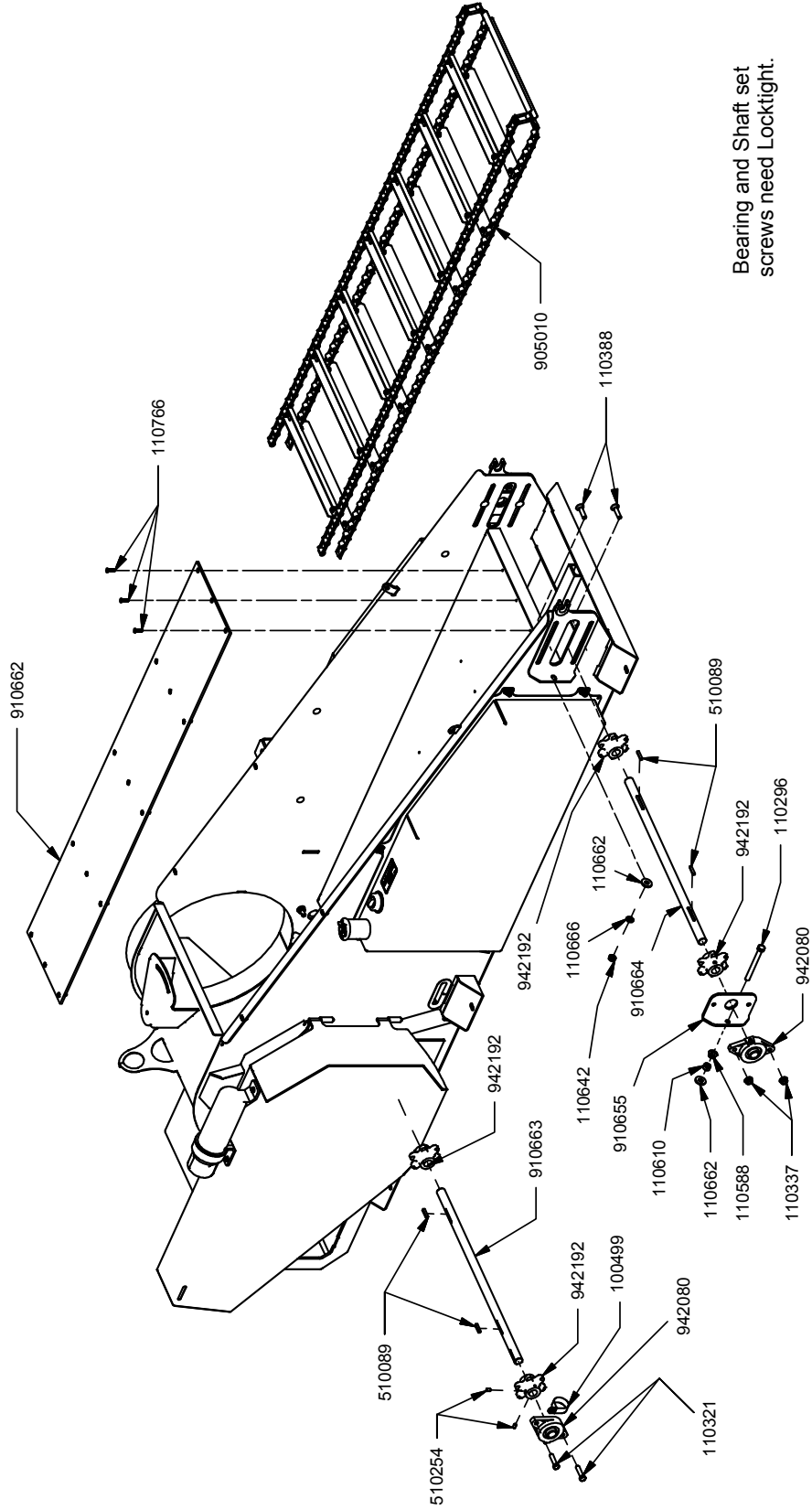


**IMPORTANT:**  
 Most wear on the Blower Housing Liner occurs in the wear area indicated. Inspect every 40 hours and replace if any of the Blower Housing is visible.

5/29/2014

# Floor Chain Assembly

PART #	QUANTITY	DESCRIPTION	PART #	QUANTITY	DESCRIPTION
100499	1	CLAMP, ADEL 1.75ID X .406HOLE	110766	15	SCREW, 1/4-20 X 1.0, FLAT HEAD TORX THREAD FORMING
110296	2	BOLT, 1/2-13 X 5 TAP	510089	4	KEY, 1/4 X 1/4 X 1.25 in
110321	4	BOLT, 7/16-14 X 1.75 GR 5 HEX HEAD	510254	8	SET SCREW, 5/16-18 X 0.5
110337	8	NUT, 7/16-14 WIZ FLANGE	905010	1	CONVEYOR CHAIN ASSY
110388	4	Bolt, 7/16-14 X 1.75 in Carriage	910655	2	BEARING PUSH PLATE
110588	2	NUT, 1/2-13 WIZ FLANGE	910662	1	TABLE GUARD
110610	2	NUT, 1/2-13	910663	1	CONVEYOR DRIVE SHAFT
110642	2	NUT, 1/2-13 HEX JAM GR 2	910664	1	CONVEYOR SHAFT
110662	4	WASHER, 1/2" FLAT SPECIAL 1.250d	942080	4	BEARING, 1" 2 BOLT FLANGE
110666	2	WASHER, 1/2" LOCK	942192	4	SPROCKET, MACHINED, 6 TOOTH #55 DETACHABLE CHAIN



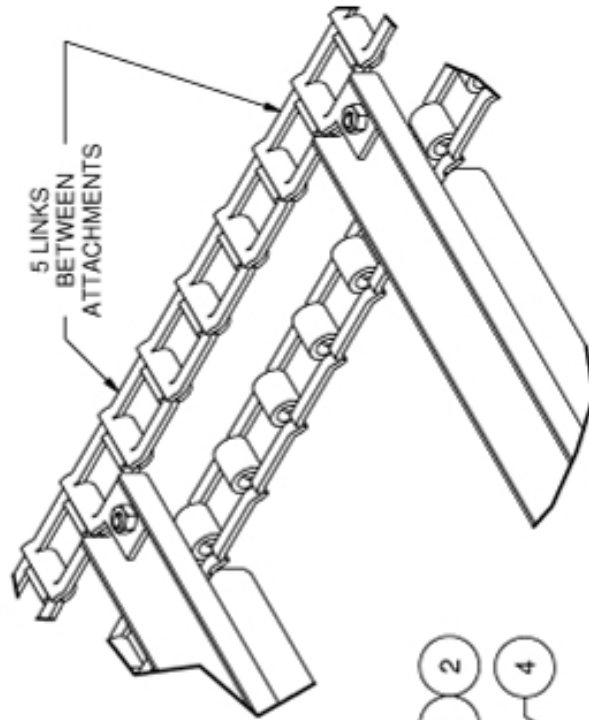
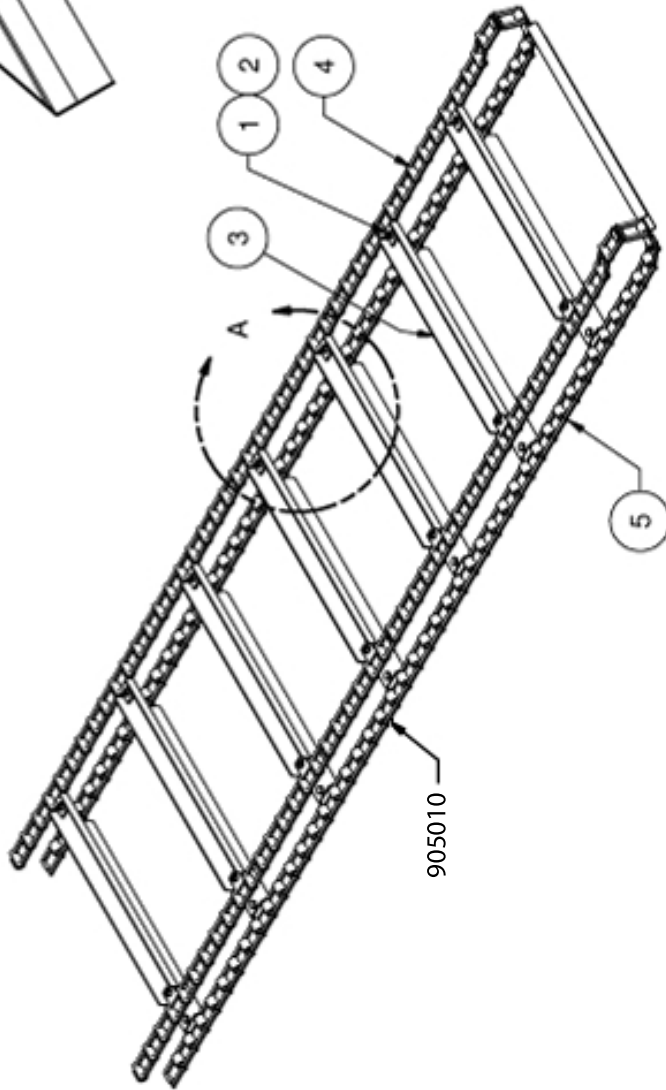
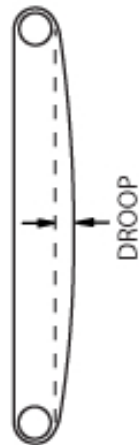
Bearing and Shaft set screws need Locktight.

6/9/2014

# Conveyor Chain Assy

**Important:**

The Conveyor Chain should have a droop of 2" to 3". Adjust droop by turning bolts on Bearing Push Plate. Adjust evenly on both sides of unit. DO NOT OVER-TIGHTEN.



DETAIL A

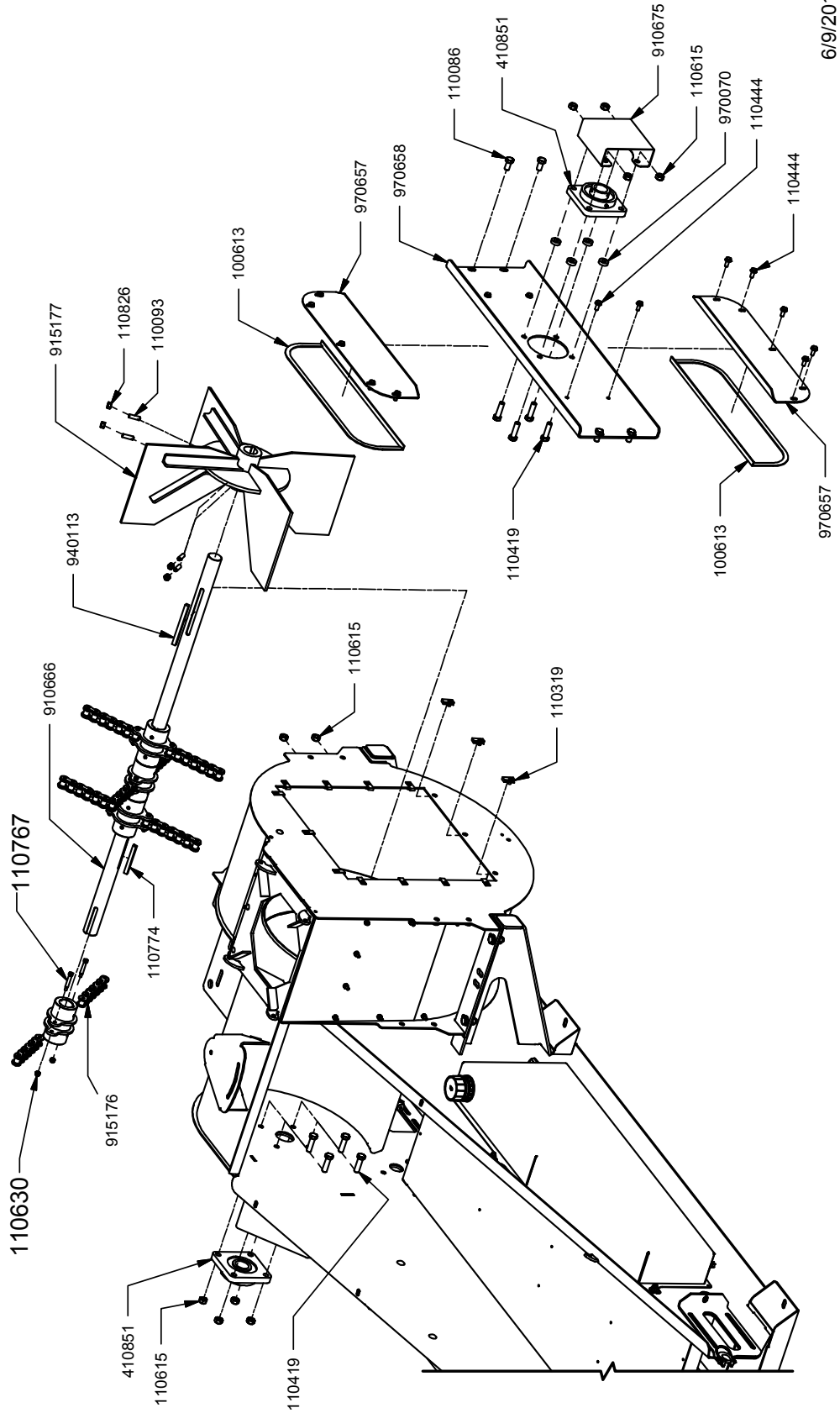
Parts List		QTY	PART #	DESCRIPTION
1	28	110515	BOLT, 1/4-20 X .50	
2	28	110530	NUT, 1/4-20 (NYLON INSERT)	
3	15	910657	CONVEYOR SLAT	
4	1	905065	CONVEYOR CHAIN, LH ATTACHMENT ASSY	
4.1	75	942193	CHAIN, #55 STEEL DETACHABLE	
4.2	15	942195	CHAIN LINK, L/HAND ATTACHMENT, #55 DETACHABLE	
5	1	905066	CONVEYOR CHAIN, RH ATTACHMENT ASSY	
5.1	75	942193	CHAIN, #55 STEEL DETACHABLE	
5.2	15	942194	CHAIN LINK, R/HAND ATTACHMENT, #55 DETACHABLE	

8/9/2005



# Fan & Rotor Assembly

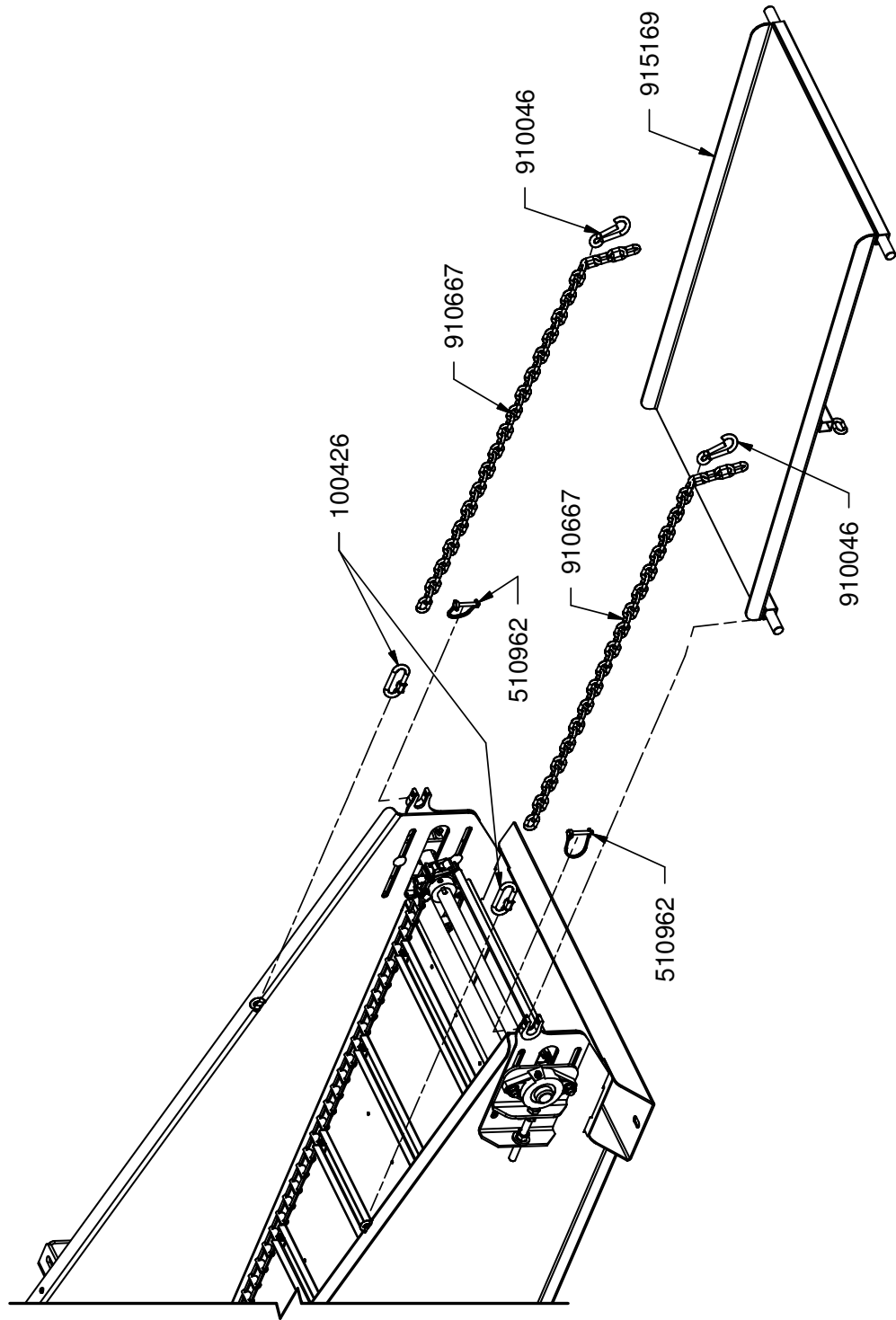
PART #	QUANTITY	DESCRIPTION	PART #	QUANTITY	DESCRIPTION
100613	96 in.	SEAL	910675	1	GUARD
110086	4	BOLT, 1/2-13 X 1.0	915171	4	FLAIL HUB
110093	4	SetScrew, 3/8-16 X 1.25	915176	4	KIT, FLAIL CHAIN ASSEMBLY
110319	14	NUT, 5/16-18 U-TYPE .75L	110630	2	NUT, 1/4-20 LOCK (NYLON INSERT)
110419	8	BOLT, 1/2-13 X 1.75	110767	2	BOLT, 5/16 X 1.5 SHOULDER SHCS
110444	4	BOLT, 5/16-18 X .75, WIZ FLANGE	910665	2	FLAIL CHAIN
110826	4	NUT, 3/8-16 GR 5	915177	1	FAN ASST WLDMNT, SB3500
110615	12	NUT 1/2-13, UNITORQUE LOCK	940113	1	KEY, 3/8 X 3/8 X 5.0 in
110774	4	KEY, 3/8 X 3/8 X 3.5 in.	970070	4	BEARING SPACER
410851	2	BEARING, 4FNG 1 1/1/2"	970657	2	PANEL, BLOWER FILLER
910666	1	BLOWER SHAFT, SB3500	970658	1	CHANNEL, BEARING



6/9/2014

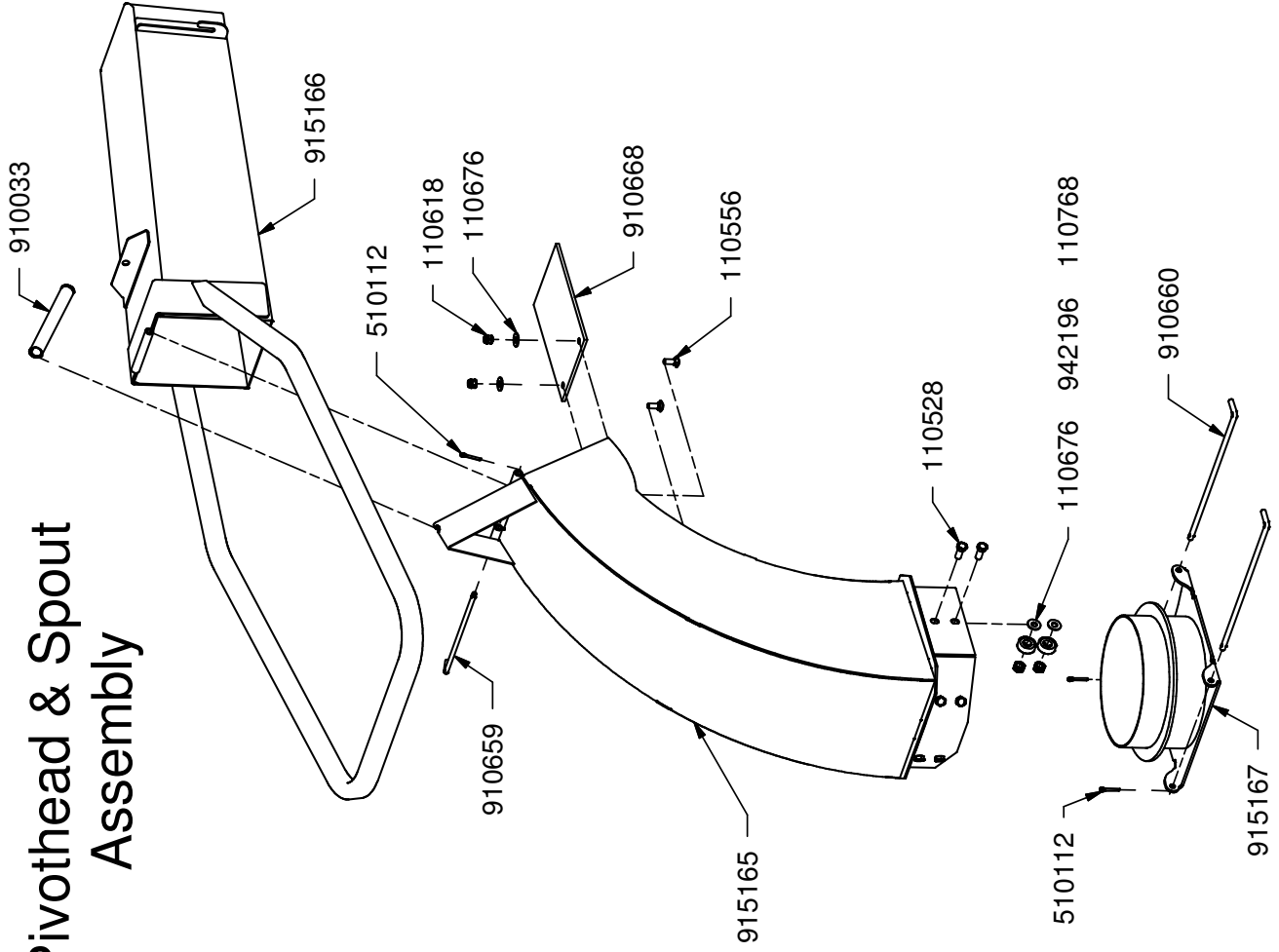
# Bale Chute Assembly

PART #	QUANTITY	DESCRIPTION
100426	2	CHAIN CONNECTOR 5/16" THREADED
510962	2	PIN, WIRE LOCK
910046	2	ENGAGING CHANNEL CLIP
910667	2	CHAIN, CHUTE SUPPORT
915169	1	BALE CHUTE WELDMENT



2/8/2005

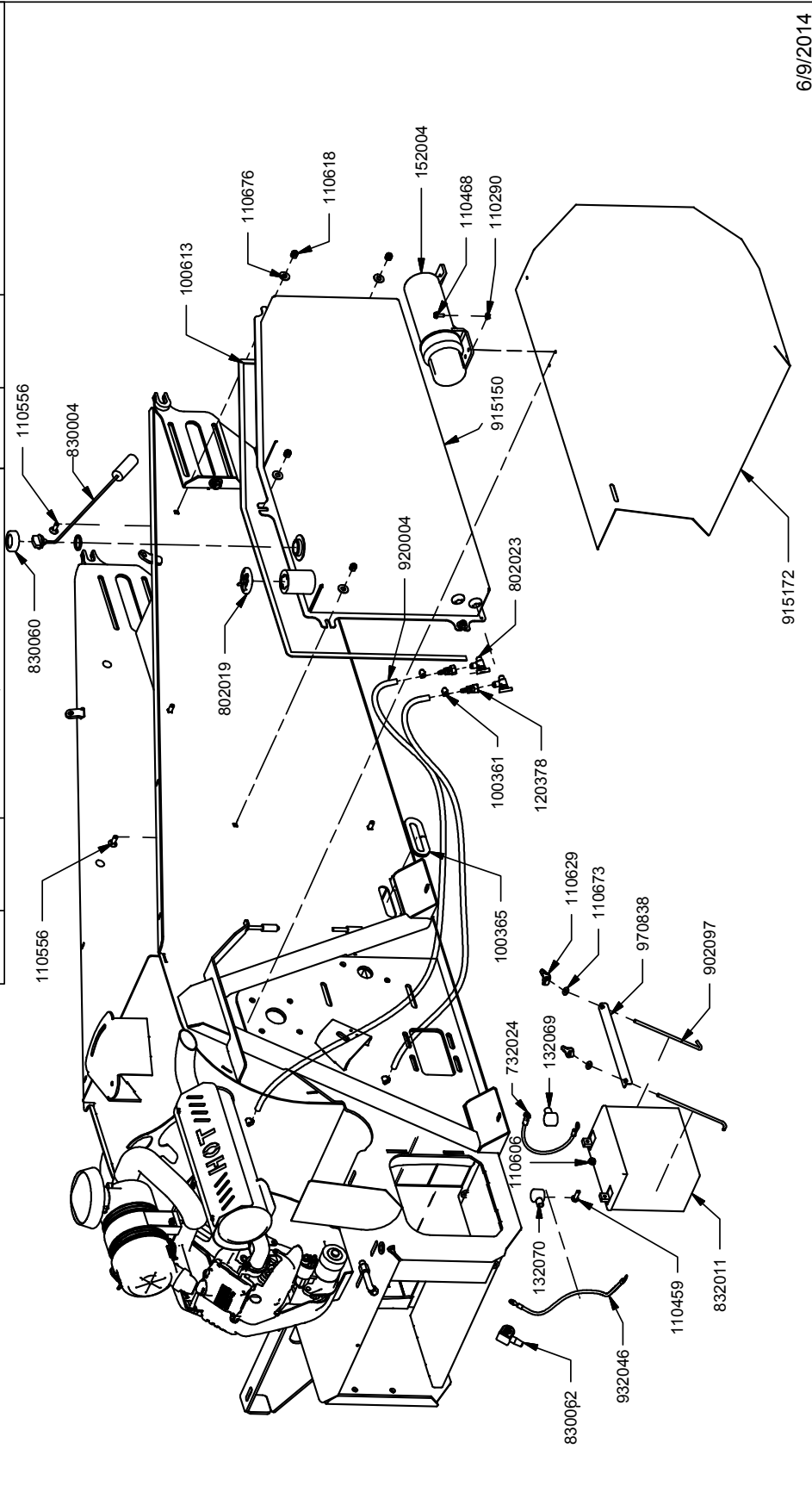
# Pivthead & Spout Assembly



PART #	QUANTITY	DESCRIPTION
110528	12	BOLT, 7/16-14 X 1.0
110556	2	Bolt, 3/8-16 X 1 in Carriage
110618	2	NUT, 3/8-16 LOCK NYLON INSERT
110676	14	WASHER, 3/8" FLAT STANDARD
110768	12	NUT, 7/16-14 LOCK 2-WAY
510112	3	COTTER PIN, 3/16 X 1
910033	1	SPRING, 1.0 OD X 8.75 L X .125
910659	1	SPOUT PIN
910660	2	GOOSENECK PIN
910668	1	SPOUT FLAP
915165	1	GOOSENECK WELDMENT
915166	1	SPOUT WELDMENT
915167	1	SPOUT SWIVEL WELDMENT
942196	12	BEARING, BALL, 1620RS

# Fuel Tank, Battery & Drive Belt Shield

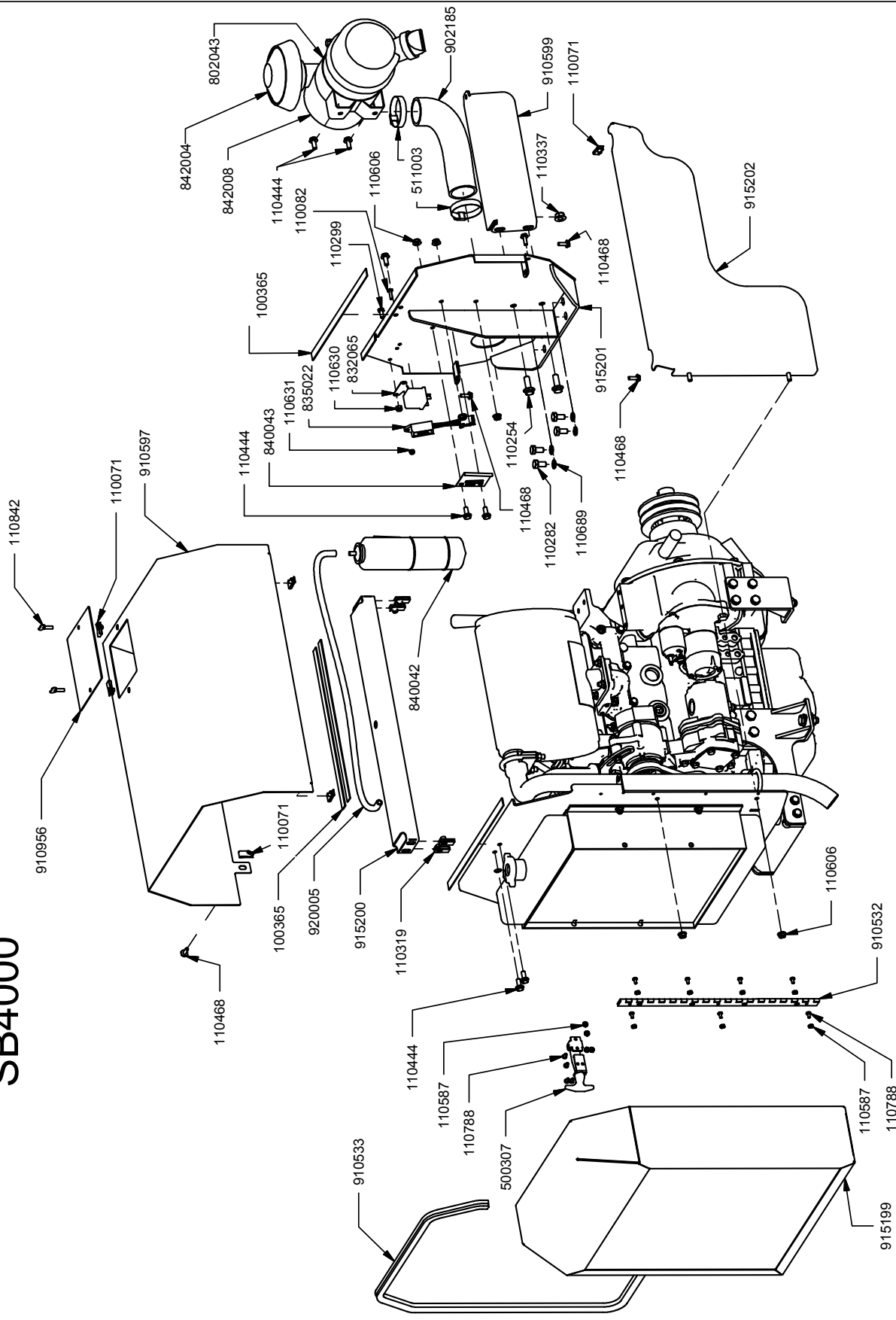
PART #	QUANTITY	DESCRIPTION	PARTS #	QUANTITY	DESCRIPTION	
100361	4	CLAMP, HOSE #4 .25 MINI	732024	1	CABLE, BATTERY TO GROUND	
100365	1	EDGE TRIM	802019	1	FUEL CAP	
100613	1	SEAL	802023	2	VALVE, FUEL SHUT OFF 6MB-4MP	
110290	3	Nut, 1/4-20 W/iz Flng	830004	1	GAUGE, FUEL	
110468	3	Bolt, 1/4-20 X .75, W/iz Flng Gr 5 Zinc		830038	1	NUT
110556	5	BOLT, 3/8-16 X 1 CARRIAGE		830061	1	GASKET
110618	5	NUT, 3/8-16 LOCK NYLON INSERT	830060	1	Nut, Fuel Gauge, NC Thread, Alum	
110629	2	NUT, 1/4-20, WING	830062	1	STARTER TERMINAL COVER	
110673	2	WASHER, 1/4" FLAT STANDARD	832011	1	BATTERY	
110676	5	WASHER, 3/8" FLAT STANDARD	902097	2	BATTERY HOLD DOWN BOLT	
120378	2	ADAPTER, 5HB-6FBX	915150	1	FUEL TANK WELDMENT	
132069	1	POSITIVE BATTERY TERMINAL COVER	915172	1	SHIELD WELDMENT	
132070	1	NEGATIVE BATTERY TERMINAL COVER	920004	2	FUEL LINE	
152004	1	HOLDER, MANUAL	932046	1	BATTERY CABLE, 36" POSITIVE	
720124	4	CLAMP, HOSE #6 .375 MINI	970838	1	BATTERY HOLD DOWN	



6/9/2014



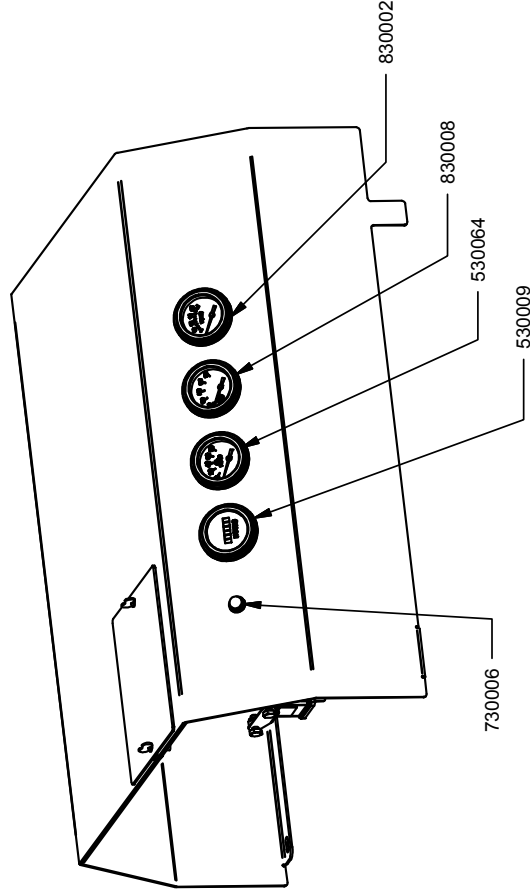
# Diesel Engine Hood Assembly SB4000



6/12/2014

# Diesel Engine Hood Assembly

## SB4000 Gauges & Harness

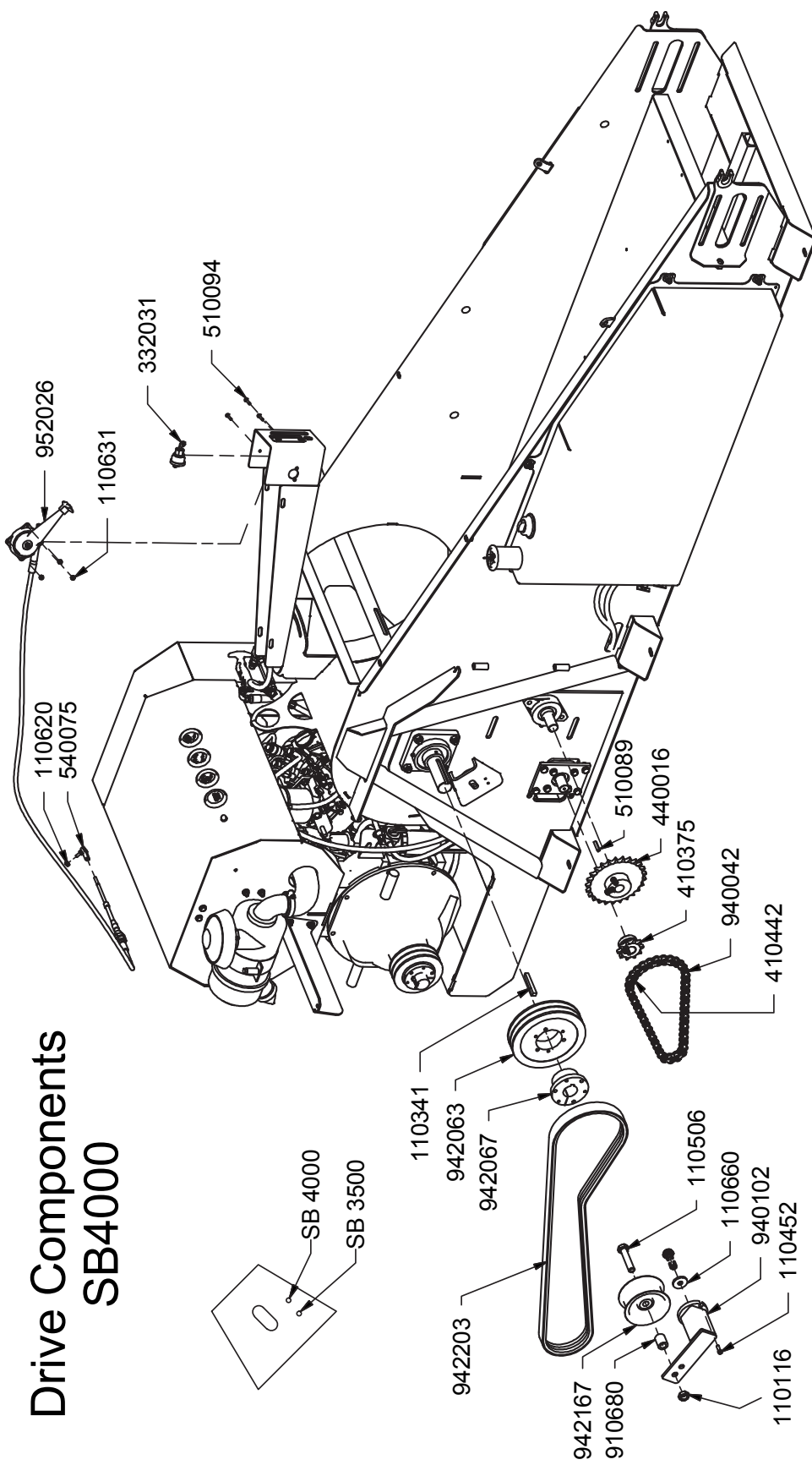


PARTS LIST	
PART #	DESCRIPTION
100365	1 ABRASIVE STRIP
110071	7 1/4-20 U-TYPE TAPPED HOLE
110082	1 SCREW, 10-24 X .75, WASHER HD. SCREW
110254	2 BOLT, 7/16-14 X 1.25, HEX WIZ ZINC
110282	4 BOLT, M10x1.5 x 20 Gr 10.9
110299	2 BOLT, 1/4-20 X .625, HHCS GR 5 ZINC
110319	4 NUT, 5/16-18 U-TYPE .75L
110337	2 LOCK COLLAR, 1.5" 2 SCREW
110444	6 BOLT, 5/16-18 X 0.75, WIZ FLANGE
110468	5 BOLT, 1/4-20 X 0.75, WIZ FLANGE
110587	11 NUT, 10-24 HEX MACHINE SCREW
110606	2 NUT, 5/16-18 WIZ FLANGE
110630	2 NUT, 1/4-20 LOCK NYLON
110631	1 NUT, 10-24 LOCK NYLON INSERT
110689	4 WASHER, 10mm LOCK
110788	11 BOLT, 10-24 X .375 STAINLESS, PHILLIPS
110842	2 SCREW, 1/4-20 X 3/4 WING HEAD
500307	1 LATCH, HOOD
511003	2 CLAMP, HOSE #36 2.25"
802043	1 BRACKET, AIR CLEANER ASSY
832065	1 GLOW RELAY
835022	1 HEATING ELEMENT TIMER UNIT, DEUTSCH ASSY
840042	1 SUBTANK, RESERVOIR
840043	1 SUBTANK BRACKET
842004	1 RAIN CAP ASSY
842008	1 AIR FILTER ASSY, DONALDSON
902185	1 ELBOW, AIR INTAKE
910532	1 HINGE, RADIATOR SHIELD, SB4000
910533	1 SEAL, RADIATOR SHIELD, SB4000
910597	1 HOOD
910599	1 SHIELD CATCH
910956	1 DOOR, ACCESS
915199	1 RADIATOR SHIELD, WELDMENT
915200	1 HOOD TOP BRACE, WELDMENT
915201	1 REAR HOOD SUPPORT, WELDMENT
915202	1 SIDE SHIELD WELDMENT
920005	1 HOSE, 5/16 LOLA X 30"

GAUGES AND HARNESS	
PART #	DESCRIPTION
530009	1 HOUR METER
530064	1 OIL PRESSURE GAUGE
530068	1 OIL PRESSURE SENDER
730006	1 INDICATOR LIGHT
830002	1 VOLT METER
830008	1 TEMPERATURE GAUGE

NOT SHOWN	
932069	1 HARNESS, IGNITION SWITCH
932048	1 HARNESS, INSTRUMENT PANEL
932049	1 HARNESS, ENGINE, SB4000

# Drive Components SB4000



PART #	QUANTITY	DESCRIPTION	PART #	QUANTITY	DESCRIPTION
110116	1	NUT, 5/8-18 JAM	510089	1	KEY, 1/4 X 1/4 X 1.25 in
110341	1	KEY, 3/8 X 3/8 X 3.0 in	510094	3	SCREW, 10-24 X 1, RHMS
110452	1	BOLT, 1/4-20 X .75 SHCS	540075	1	BEARING, ROD END 1/4-28 W/STUD
110506	1	BOLT, 5/8-18 X 3.0	910680	1	SPACER, 1.0 X .625 X 1.25
110620	1	NUT, 1/4-28	940042	1	SLAT DRIVE ROLLER CHAIN
110631	3	NUT, 10-24 LOCK NYLON INSERT	940102	1	BELT IDLER TENSIONER
110660	1	WASHER, 1/2 FLAT SPECIAL 1.5 OD	942063	1	PULLEY, 2 GROOVE OD BUSHING
332031	1	IGNITION SWITCH	942067	1	BUSHING, SK 1 1/2
410375	1	SPROCKET, 60b10 X 1.0	942167	1	IDLER PULLEY ASSY
410442	1	CONNECTING LINK, #60 CHAIN	942203	1	BELT, HI-POWER, II POWERBAND, 2(B74
440016	1	SPROCKET, 60b25 X 1.0	952026	1	THROTTLE CABLE, SB4000 (UDL-213-3-66)

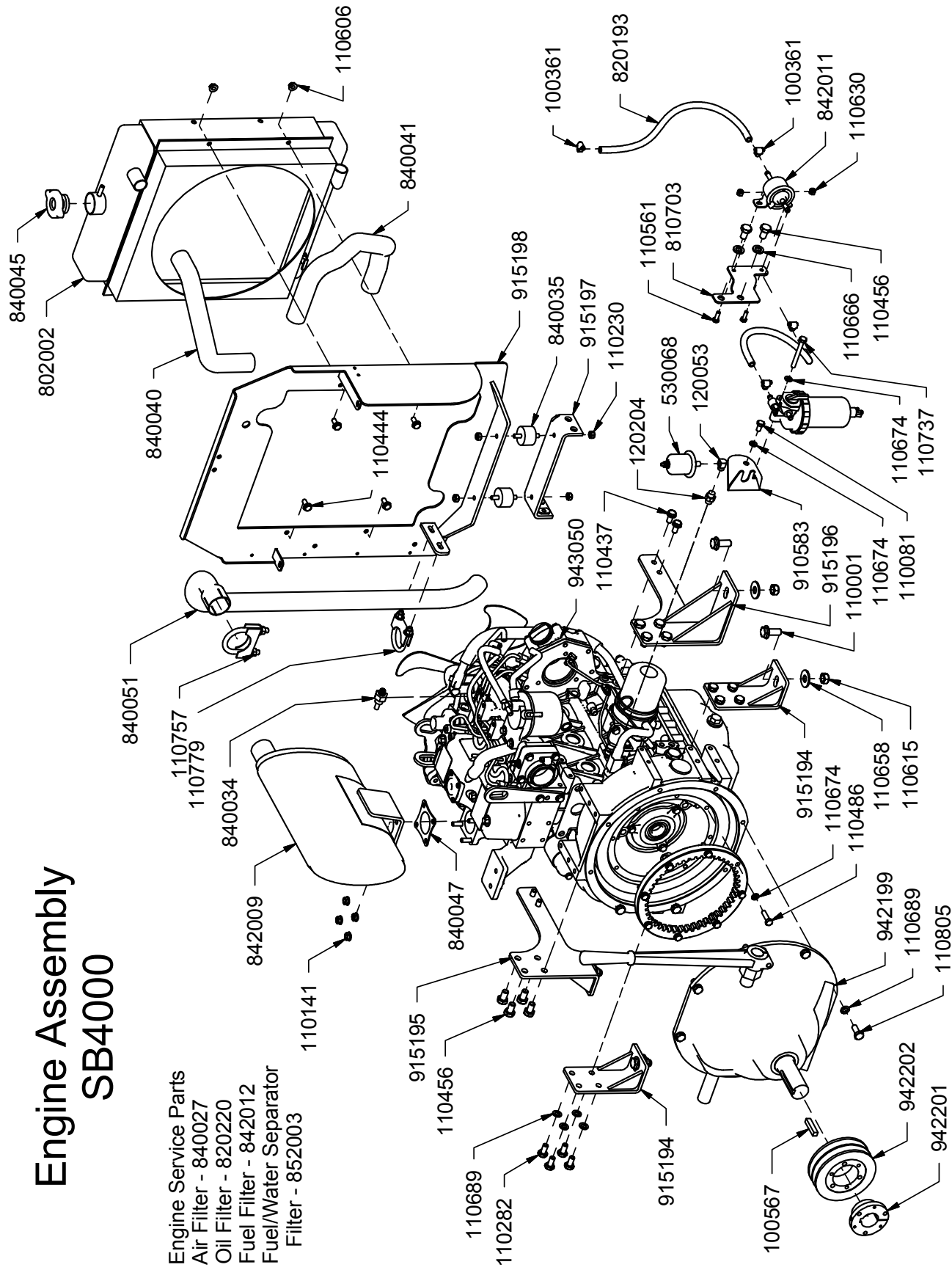
1/28/2014





# Engine Assembly SB4000

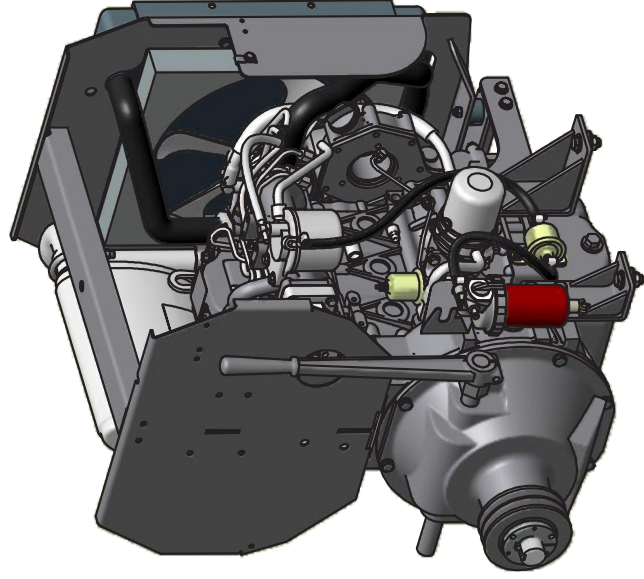
- Engine Service Parts
- Air Filter - 840027
- Oil Filter - 820220
- Fuel Filter - 842012
- Fuel/Water Separator Filter - 852003



6/9/2014

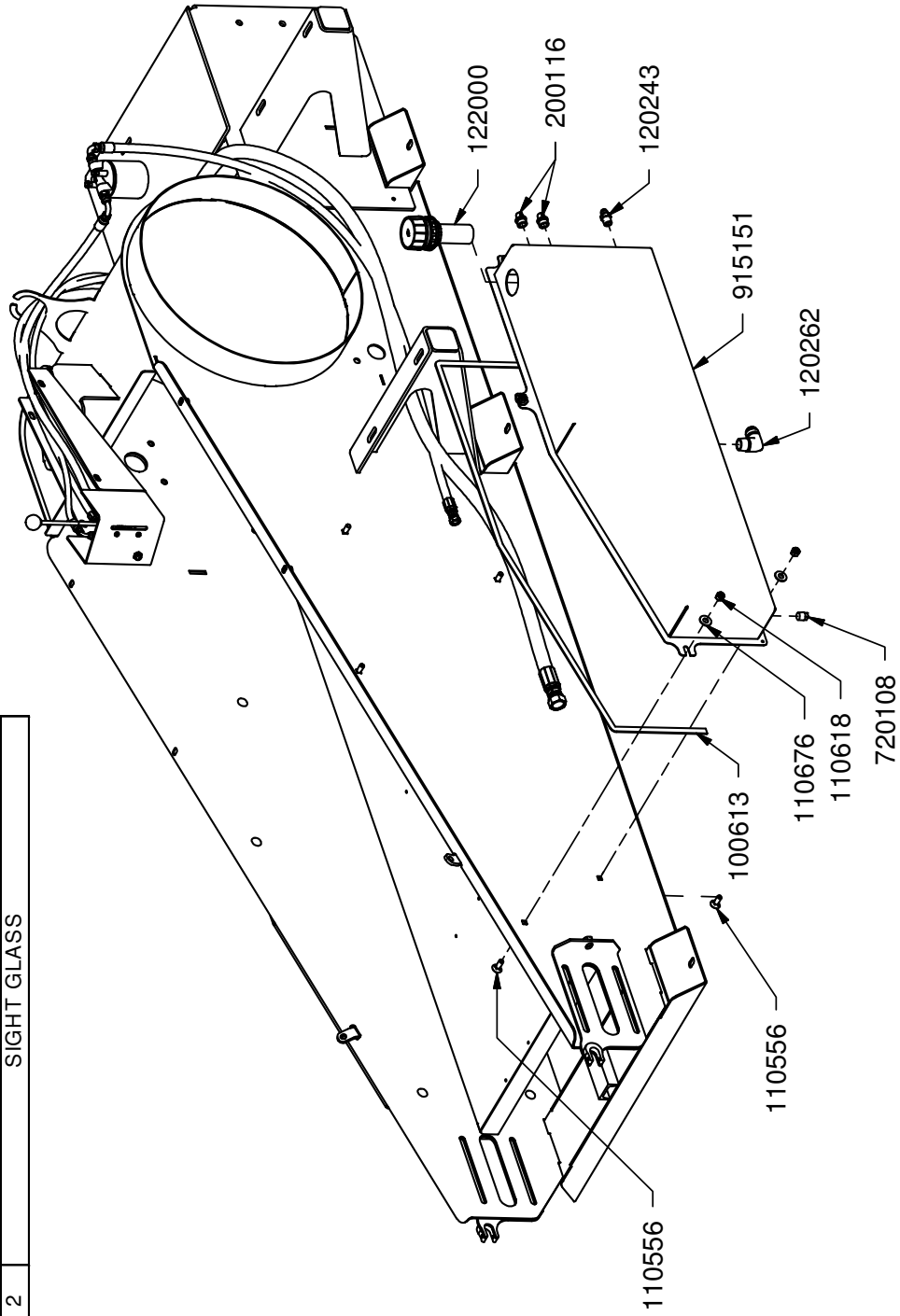
Parts List		Parts List	
PART #	QUANTITY	DESCRIPTION	DESCRIPTION
100361	4	CLAMP, HOSE #4 .25 MINI	MOTOR MOUNT WELDMENT, SB4000
100567	1	KEY, 3/8 X 3/8 X 1.75 in	MOTOR / RADIATOR MOUNT WELDMENT
110001	4	BOLT, 1/2-13 X 1.25, WIZ FLANGE	MOROT / RADIATOR MOUNT LONG, WELDMENT
110081	1	BOLT, M8x1.25 x 16 Gr 10.9	RADIATOR MOUNT WELDMENT
110141	4	NUT, M8 X 1.25 WIZFLANGE	RADIATOR MOUNTING PLATE, WELDMENT
110230	4	NUT, M8 X 1.25, LOCK NYLON	CLUTCH, MANUAL, TNV
110282	8	BOLT, M10x1.5 x 20 Gr 10.9	BUSHING, QD 1-7/16" SDS
110437	4	BOLT, 3/8-16 X 0.75, WIZ FLANGE	SHEAVE, 2A4.8/B5.2, QD SDS
110444	4	BOLT, 5/16-18 X 0.75, WIZ FLANGE	ENGINE ASSY
110456	10	BOLT, M12x1.75 x 20 Gr 10.9	
110486	8	BOLT, M8x1.25 x 30 Gr 10.9	
110561	2	BOLT, 1/4-20 X .75	
110606	4	NUT, 5/16-18 WIZ FLANGE	
110615	4	NUT, 1/2-13, UNITORQUE LOCK	
110630	2	NUT, 1/4-20 LOCK (NYLON INSERT)	
110658	4	WASHER, 1/2" FLAT STANDARD	
110666	2	WASHER, 1/2" LOCK	
110674	10	WASHER, 5/16" LOCK	
110689	16	WASHER, 10mm LOCK	
110737	1	BOLT, M8x1.25 x 70, Gr 10.9	
110757	1	CLAMP, 1 3/4" EXHAUST	
110779	1	CLAMP, 1 1/2" EXHAUST	
110805	8	BOLT, M10x1.5 x 25 Gr 10.9	
120053	1	ADAPTER, BRAKE LINE 90	
120204	1	ADAPTER, 2MP-2FP	
530068	1	OIL PRESSURE SENDER	
802002	1	RADIATOR	
810703	1	FUEL PUMP BRACKET	
820193	1	FUEL HOSE	
840034	1	COOLANT TEMP SENDER	
840035	2	ANTI-VIBRATION MOUNT	
840040	1	RADIATOR HOSE, TOP	
840041	1	RADIATOR HOSE, BOTTOM	
840045	1	RADIATOR CAP	
840047	1	EXHAUST MANIFOLD GASKET	
840051	1	EXHAUST TUBE, UNDER THE HOOD MUFFLER	
842009	1	MUFFLER, UNDER THE HOOD	
842011	1	FUEL PUMP, ELECTRIC TNV	
910583	1	THROTTLE CABLE BRACKET, SB4000	

## Engine Assembly SB4000



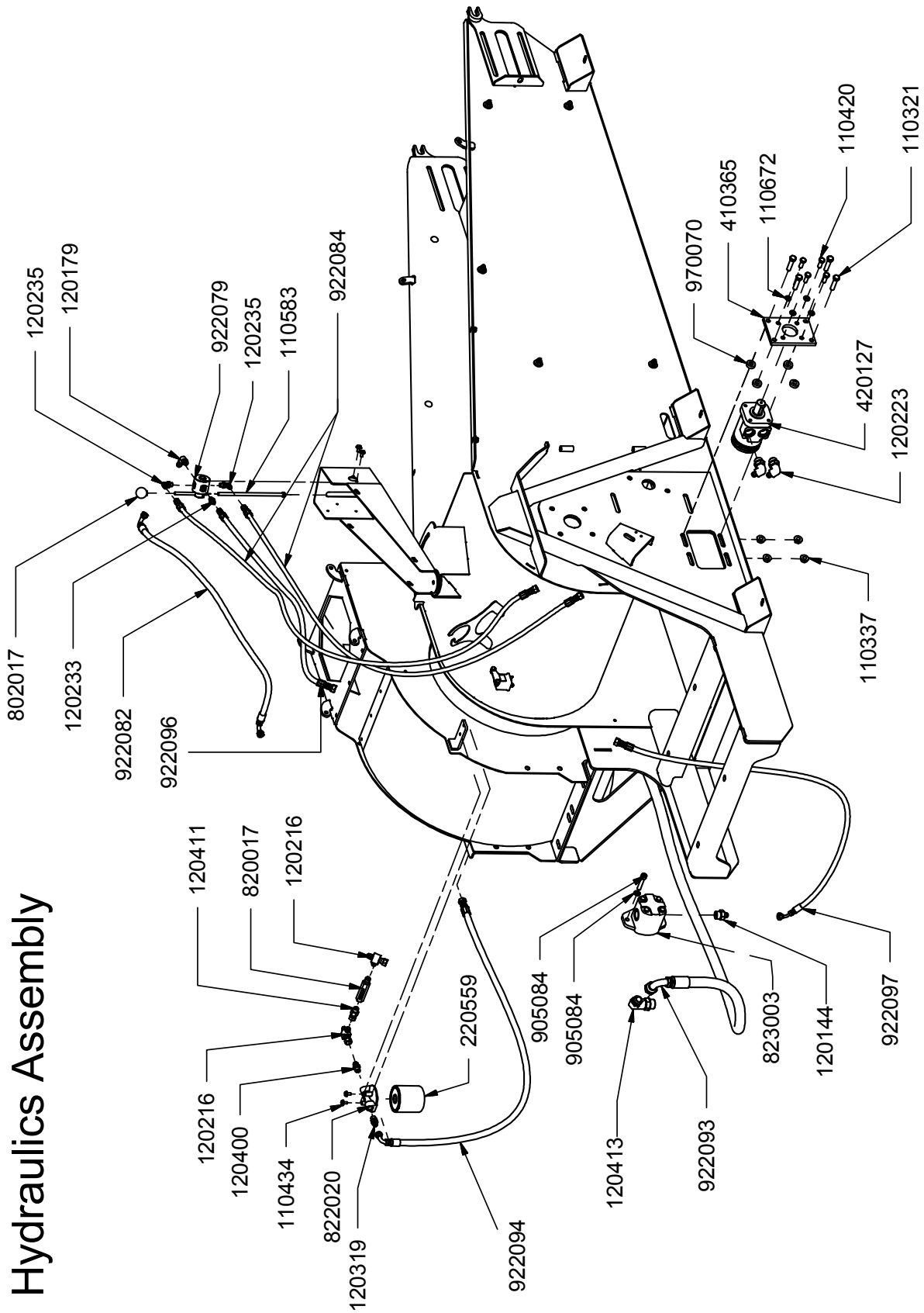
# Hydraulic Reservoir

PART #	QUANTITY	DESCRIPTION
110556	5	Bolt, 3/8-16 X 1 in Carriage
100613	1	SEAL
110618	5	NUT, 3/8-16 LOCKNYLON INSERT
110676	5	WASHER, 3/8" FLAT STANDARD
120243	1	ADAPTER, 6MJ-6MP
120262	1	ADAPTER, 12MJ-12MP90
122000	1	BREATHER FILLER CAP (ABS-30)
720108	1	FITTING, PLUG 3/8" PIPE
915151	1	HYDRAULIC RESERVOIR WELDMENT, SB3500 & 4000
	200116	2 SIGHT GLASS





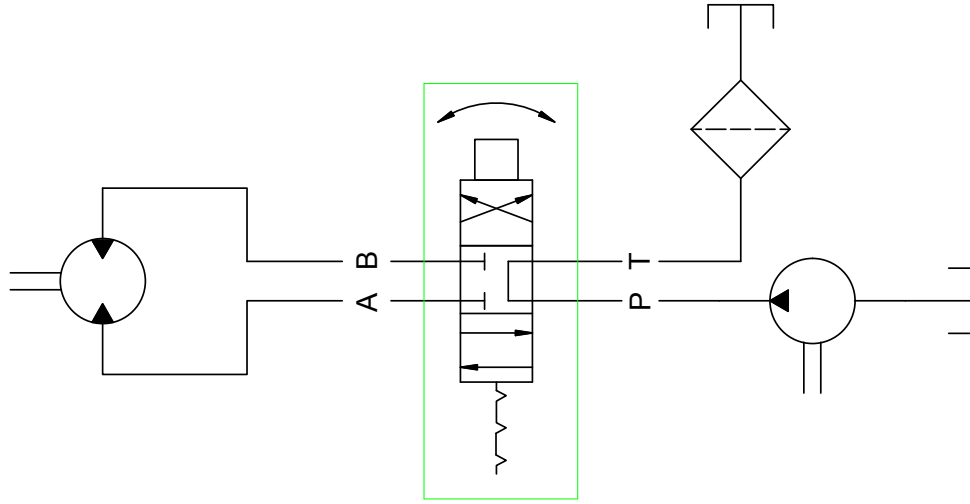
# Hydraulics Assembly



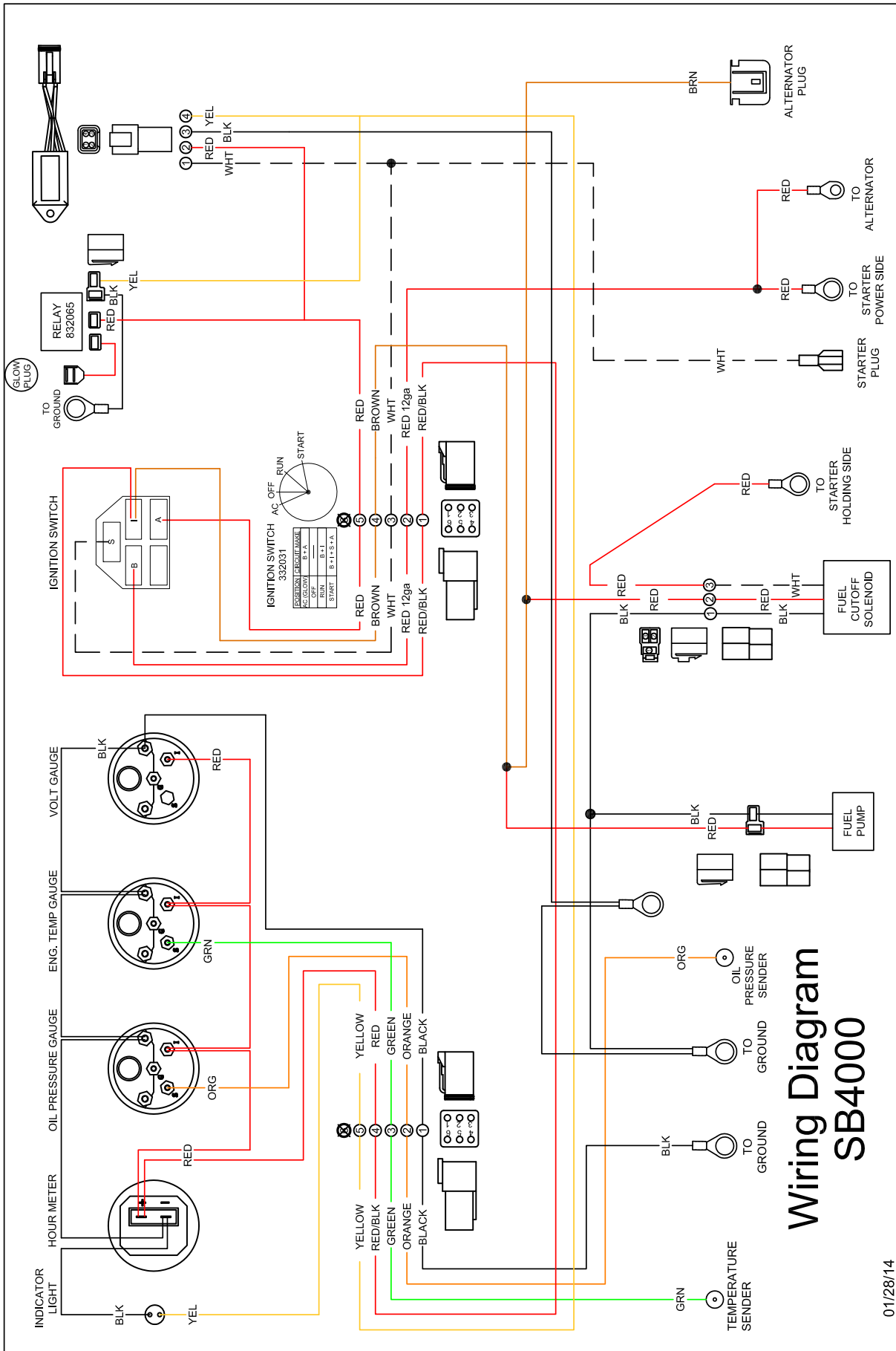
NOTE: HOSE WRAP HYDRAULIC HOSES 922093 & 922094 IN WEAR SPOTS.  
 NOTE: LEVER P/N 110583 MUST BE NOTCHED AT THE POINT OF THE SET SCREW.  
 SET SCREW MUST BE SEATED FIRMLY WITH THREAD LOCK

6/13/2014

# Hydraulics Assembly



PART #	QUANTITY	DESCRIPTION
102045	9 ft	Hose Protection, 1.00 Hd
110321	4	Bolt, 7/16-14 X 1 3/4, Hhcs Gr 5 Zinc
110337	4	Nut, 7/16-14 Wiz Flng
110356	2	Bolt, M10-1.5 X 50, Shcs 12.9 Plain
110420	4	Bolt, 3/8-16 X 1 Hhcs Gr 5 Zinc
102045	9 ft	Hose Protection, 1.00 Hd
110434	4	Bolt, 1/4-20 X 1/2, Wiz Flng Gr 5 Zinc
110583	1	Bolt, 5/16-18 X 8 Hhcs Gr 5 Zinc
110672	4	Washer, 3/8 Lock
110689	2	Washer, M10, Lock
120144	1	Adapter, 6mj-10mb
120179	1	Adapter, 6mj-4mb90
120216	2	Adapter, 6mj-6fjx-6mj
120223	2	Adapter, 6mj-10mb90
120233	1	Adapter, 4mj-4mb
120235	2	Adapter, 4mj-4mb90
120319	1	Adapter, 6mj-6mb
120400	1	Adapter, Rest 6mb-6mj, R.109"
120411	1	Adapter, 6mb - 6fjx
120413	1	Adapter, 12mj-12mb90L
220559	1	Filter, Zinga
410365	1	Adjusting Plate, Motor
420127	1	Motor, Sickle Drive 101-1009
802017	1	Knob, Threaded Insert, 5/16-18
820017	1	Valve, Charge Relief
822020	1	Filter Head, Spin On/6fb Port
823003	1	Pump, Charge, .43
922079	1	Directional Valve
922082	1	Hose .37 X 48.6 6-6fjx90m
922084	2	Hose .25 X 70, 4-6fjx
922093	1	Hose .75 X 96 12FJX/12FJX90
922094	1	Hose .375 X 65 6FJX/6FJX90M
922096	1	Hose .25 X 34 4-4fjx-4-6fjx
922097	1	Hose .25 X 48 4-6fjx-4-6fjx45
970070	4	Front Bearing Sprt Bar Spacer







## NOTES

Harper Industries, Inc.  
151 E. Highway 160  
Harper, KS 67058

Telephone: 620-896-7381  
Toll-Free: 800-835-1042  
Fax: 620-896-7129

Website: [www.harperindustries.com](http://www.harperindustries.com)

E-mail: [info@harperindustries.com](mailto:info@harperindustries.com)

---

**Straw Blower**

**HARPER**  
TURF EQUIPMENT