



***Owner's Manual***

# **SUPER LINER**

**44-901**

**SN: SLN361**

**Revised September, 2017**

**Product Support: 1020 Hawaii Rd; Humboldt, KS 66748  
1-888-422-5173 [wj@smithco.com](mailto:wj@smithco.com)**

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## INTRODUCTION

Thank you for purchasing a **SMITHCO** #44-901 Super Liner.

Carefully read this manual and the engine manual as they include safety, operating, assembly and maintenance instructions. Failure to do so could result in personal injury or equipment damage.

Keep manuals in a safe place after operator and maintenance personnel have read them. Right and left sides are from the operator's seat, facing forward.

All **SMITHCO** machines have a Serial Number and Model Number. Both numbers are needed when ordering parts. The serial number plate on the #44-901 Super Liner is located under the tank, on the left side wall of the tank mount.

For easy access, record your Serial and Model numbers here.

<b>SMITHCO</b>		DATE OF MFG.
WAYNE, PENNSYLVANIA 19087 USA		<input type="text"/>
610-688-4009 FAX 610-688-6069		
SERIAL NO.	kw/hp	
<input type="text"/>	<input type="text"/>	
MODEL NO.	kg/lb	
<input type="text"/>	<input type="text"/>	

Information needed when ordering replacement parts:

1. Model Number of machine.
2. Serial Number of machine.
3. Name and Part Number of part.
4. Quantity of parts.
5. Ship Via

## **SAFE PRACTICES**

1. **It is your responsibility to read this manual and all publications associated with this machine (engine and accessories).**
2. Never allow anyone to operate or service the machine or its accessories without proper training and instructions. Never allow minors to operate any equipment.
3. Learn the proper use of the machine, the locations and purpose of all the controls before you operate the equipment. Working with unfamiliar equipment can lead to accidents.
4. Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears, hands and feet. Operate the machine only in daylight or in good artificial light.
5. Inspect the area where the equipment will be used. Pick up all debris you can find before operating. Beware of overhead obstructions and underground obstacles. Stay alert for hidden hazards.
6. Never operate equipment that is not in perfect working order or without decals, guards, shields, or other protective devices in place.
7. **Never disconnect or bypass any switch.**
8. Carbon monoxide in the exhaust fumes can be fatal when inhaled, never operate a machine without proper ventilation.
9. Fuel is highly flammable, handle with care.
10. Keep engine clean. Allow the engine to cool before storing and always remove the ignition key.
11. After engine has started machine must not move. If movement is evident, the neutral mechanism is not adjusted correctly. Shut engine off and readjust so the machine does not move when in neutral position.
12. Never use your hands to search for oil leaks. Hydraulic fluid under pressure can penetrate the skin and cause serious injury.
13. This machine demands your attention. To prevent loss of control or tipping of the vehicle:  
Use extra caution in backing up the vehicle. Make sure area is clear. Do not stop or start suddenly on any slope. Avoid driving sideways on hills as much as possible. Reduce speed on slopes and in sharp turns. Use caution when changing directions on slopes.  
Stay alert for holes in the terrain and other hidden hazards.
14. Before leaving operator's position for any reason:  
Disengage all drives.  
Shut engine off and remove the ignition key.
15. Keep hands, feet and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
16. Keep the area of operation clear of all bystanders.
17. Never carry passengers.
18. Stop engine before making repairs/adjustments or to check or add oil to the crankcase.
19. **Use parts and materials supplied by SMITHCO only. Do not modify any function or part.**

These machines are intended for professional maintenance on flat grass athletic fields. Other use will void the warranty.

# **SPECIFICATIONS**

## **SUPERLINER SPECIFICATIONS**

### **MODEL #44-901**

#### **Weight and Measurements**

Length 77" overall (without boom)  
Width 48" overall (without boom)  
Ground Clearance 7"  
Weight 815 lbs; Crated - 1015 lbs

#### **Tires**

2 front wheels - 18 x 8.50 x 10; 2 ply; 2 rear wheels - 23 x 11 x 10

#### **Wheel Base**

45" (Turning Radius 10')

#### **Drive**

Hydrostatic power using 16cc displacement hydraulic pump driving (1) hydraulic drive motor on each wheel.

#### **Electrical**

12v electric start

#### **Sound Level**

At 10' (3m): 63 dbA; at 50' (15m): 53 dbA; at 100' (30m): 50 dbA

#### **Controls**

Forward / Reverse hand control

#### **Brakes**

Dynamic braking, through hydrostatic system.

#### **Seat**

High – Back, one piece for operator comfort.

#### **Main Frame**

Hydraulically formed, electrically welded heavy wall steel tubing.

#### **Ground Speed**

Infinitely variable, 0 – 12 mph (0-16kph)

#### **Engine**

16 hp (12 kW) Vanguard V twin cylinder, air cooled, gasoline, cast iron sleeves, 29.3cu in displacement, electronic ignition, full pressure lubrication with oil filter, engine mounted air cleaner.

#### **Paint Tank**

50 Gallon Poly Tank

#### **Paint Pump**

Hypro D252 Pump

#### **Steering**

Chain and sprocket system.

#### **Liquid Capacities**

Hydraulic system & Engine oil 10W30 – 2 Gallons; Gasoline (unleaded) – 3 Gallons

## **MIXING INSTRUCTIONS**

Use only top quality paint. Inferior paint voids SMITHCO warranty.

1. Completely follow mixing instructions on paint container.
2. Never use mixed paint without straining.
3. The depth of the color of the line will be determined by percentage of water added to the paint. In most cases, the mix should be at least 2 parts water to 1 part paint. **NEVER** use more than 50% paint.
4. Use spraying nozzle TeeJet 8002VS tip only. These tips have been tested and work best with the SMITHCO pumping system.
5. Fill tank with the desired amount of water.
6. Start unit and turn the paint pump on, increase engine rpm, thus starting agitation.
7. Pour the strained paint into the tank slowly to properly mix.

## **MAINTENANCE INSTRUCTIONS**

**NOTE: IF MACHINE IS TO BE LEFT MORE THAN ONE HOUR, SYSTEM SHOULD BE FLUSHED. DO NOT LEAVE PAINT IN SYSTEM OVER NIGHT.**

1. After each day's use, follow instructions below.
  - A. Open the gate valve, located at the rear of the tank. Drain remaining paint into a resealable container using the hose provided. Drain and replace the strainer.
  - B. Flush the paint tank with fresh water for 5 minutes with the drain valve open until all the paint residue is out of the tank.
  - C. Close the ball valve at the bottom of the tank. Connect the hose from the gate valve to a clean water source.
  - D. Turn the selector valve to "Flush".
  - E. Start the engine, turn on the paint pump.
  - F. Turn on the water.
  - G. Turn on the spray switch. Flush tips until the water flows clear.
  - H. Turn off the water, disconnect the hose. Open the ball valve and drain the tank again. Drain the strainer again also.
  - I. Remove spray tips from both booms. Clean thoroughly using a soft bristle brush and soapy water.
2. Lubricate the following:
  - A. Steering shaft bearings.
  - B. Hub bearings.
  - C. Both boom arms.
  - D. Front axles.
3. See engine manual for maintenance instructions on the engine.
4. When storing the unit after the painting season, the battery should be disconnected.
5. For winter storage, the unit and nozzle tips must be thoroughly cleaned and flushed.
6. System requires 10W40 Oil.

## **PUMP MAINTENANCE**

After the installation of a new pump or filter, you need to loosen the relief valve 2-3 turns. Start the engine and let it run at high RPM's for about 2 minutes. After 2 minutes, depress the right foot pedal for 30 seconds to a minute or until both rollers move freely. Do the same on the left side. After you have done this a few times you will need to tighten the relief valve, located on the right side of the pump to about 200 inch lbs.

# SERVICE CHART FOR THE ENGINE & HYDRAULIC SYSTEM



**Before servicing or making adjustments to the machine, stop engine, set park brake, block wheels and remove key from ignition.**

**NOTE:**

**Follow all procedures and ONLY use parts prescribed by the manufacturer. Read the engine manual before maintenance.**

	Daily	As Required	100 Hours	200 Hours	250 Hours	300 Hours	400 Hours	Every 500 Hours/Yearly
§ Engine Oil	C		R	R		R	R	R
Engine for Leaks and Loose Parts	C		C	C		C	C	C
Air Cleaner (Paper Element)		C	C	C		C	C	R
tt Spark Plugs		R		C			C	R
Idle Speed					C			C
Hydraulic Oil 10W30	C		C		C	R		C
Fuel Level	C	C						
Fuel Filter		R						R
Battery Electrolyte Level			C	C		C	C	C
Clean Battery Terminals					C			C
Lubricate			C	C		C	C	C

**C = Check or Clean at specified intervals**

**R = Replace at specified intervals**

**T = Torque tire nuts after the first 10 hours and every 200 hours there after (64 to 74 ft/lb (87-100 NM))**

**§ Change oil and filter after first 5 hours.**

**tt Gap .03 (.76 mm) Torque to 18-22 ft/lb (24-30 Nm)**

**Clean more often under dusty conditions or when airborne debris is present, replace air cleaner parts, if very dirty.**

The suggested maintenance checklist is not offered as a replacement for the manufacturer's engine manual but as a supplement. You must adhere to the guidelines established by the manufacturer for warranty coverage. In adverse conditions such as dirt, mud or extreme temperatures, maintenance should be more frequent.

## END USER'S SERVICE CHART FOR THE ENGINE & HYDRAULIC SYSTEM

	Daily	As Required	100 Hours	200 Hours	250 Hours	300 Hours	400 Hours	Every 500 Hours/Yearly
§ Engine Oil								
Engine for Leaks and Loose Parts								
Air Cleaner (Paper Element)								
tt Spark Plugs								
Idle Speed								
Hydraulic Oil 10W30								
Fuel Level								
Fuel Filter								
Battery Electrolyte Level								
Clean Battery Terminals								
Lubricate								

**C = Check or Clean at specified intervals**

**R = Replace at specified intervals**

**T = Torque tire nuts after the first 10 hours and every 200 hours there after (64 to 74 ft/lb (87-100 NM))**

**§ Change oil and filter after first 5 hours.**

**tt Gap .03 (.76 mm) Torque to 18-22 ft/lb (24-30 Nm)**

**Clean more often under dusty conditions or when airborne debris is present, replace air cleaner parts, if very dirty.**



# SERVICE CHART



Before servicing or making adjustments to the machine, stop engine, set park brake, block wheels and remove key from ignition.



Follow all procedures and ONLY use parts prescribed by the manufacturer. Read the engine manual before maintenance.

	Daily	50 Hours	100 Hours	200 Hours	250 Hours	300 Hours	400 Hours	Every 500 Hours/Yearly
Bearings		C						
Chains and sprockets	C							
All hydraulic fittings and hoses	C	T						
All nuts and bolts		C						
All oil filters		C	R					
All control cables		C						
Check trailer		C						

**C = Check or Clean at specified intervals**

**R = Replace at specified intervals**

**T = Torque (35 ft lb)**

**S = Change oil and filter after first 5 hours**

Clean more often under dusty conditions or when airborne debris is present, replace air cleaner parts if very dirty.

## **OPERATING INSTRUCTIONS**

1. Set the shift control lever to neutral.
2. Turn the key to start engine, choke as needed. Allow engine to warm for 3 minutes.
3. Select the front or side boom with the selector valve on the left control box.
4. Engage the pump switch to the "ON" position to begin agitation.
5. Lower desired boom. Preset the line guide to existing line or string line.
6. Do not paint until the unit is moving in the desired route of travel.
7. When ready to paint, locate the hand shifter on right of the control box, set to desired speed on the line to be painted. Depress the spray switch located on the right side of the floorboard. **Note: Line width can be adjusted by moving the flaps on the booms.**

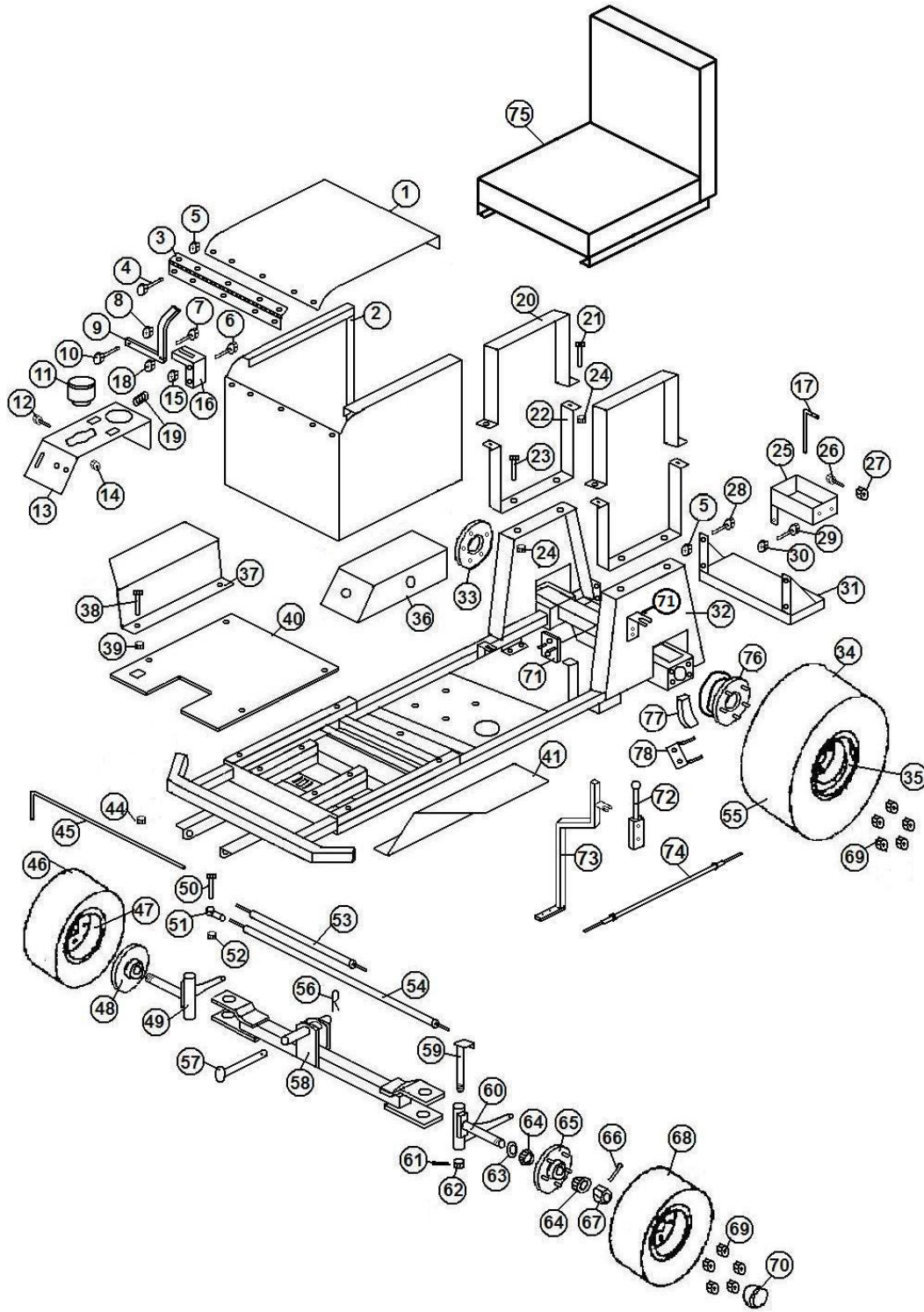
## **TROUBLESHOOTING**

There are a number of variables affecting the line density if it is not satisfactory.

- A. Paint may be inferior: Paint mixture may be too thick or too thin.
- B. Hoses or tips may be clogged: Tips must be clean. System may need to be flushed, or paint may need to be restrained.
- C. Nozzle tips may be worn out: Replace with TeeJet 8002EVS stainless steel.
- D. Reducing speed increases paint applied. Increasing speed decreases paint applied.
- E. Proper lining color should be ascertained in the field, because of variations in marking paint and the percentage of water added. Never use more than 50% paint. 1 part paint to 2 parts water.
- F. Unit will not start if the operator is not in the seat.
- G. If unit is not building pressure, then check to make sure that the pump switch is on.
- H. If switch is on and the pump is still not building pressure then speed up the engine RPM.

**NOTE:** If you have any further questions, please contact our **SMITHCO** Technical Consultant at 1-888-422-5173.

# 44-901 MAIN FRAME DRAWING



## 44-901 MAIN FRAME PARTS LIST

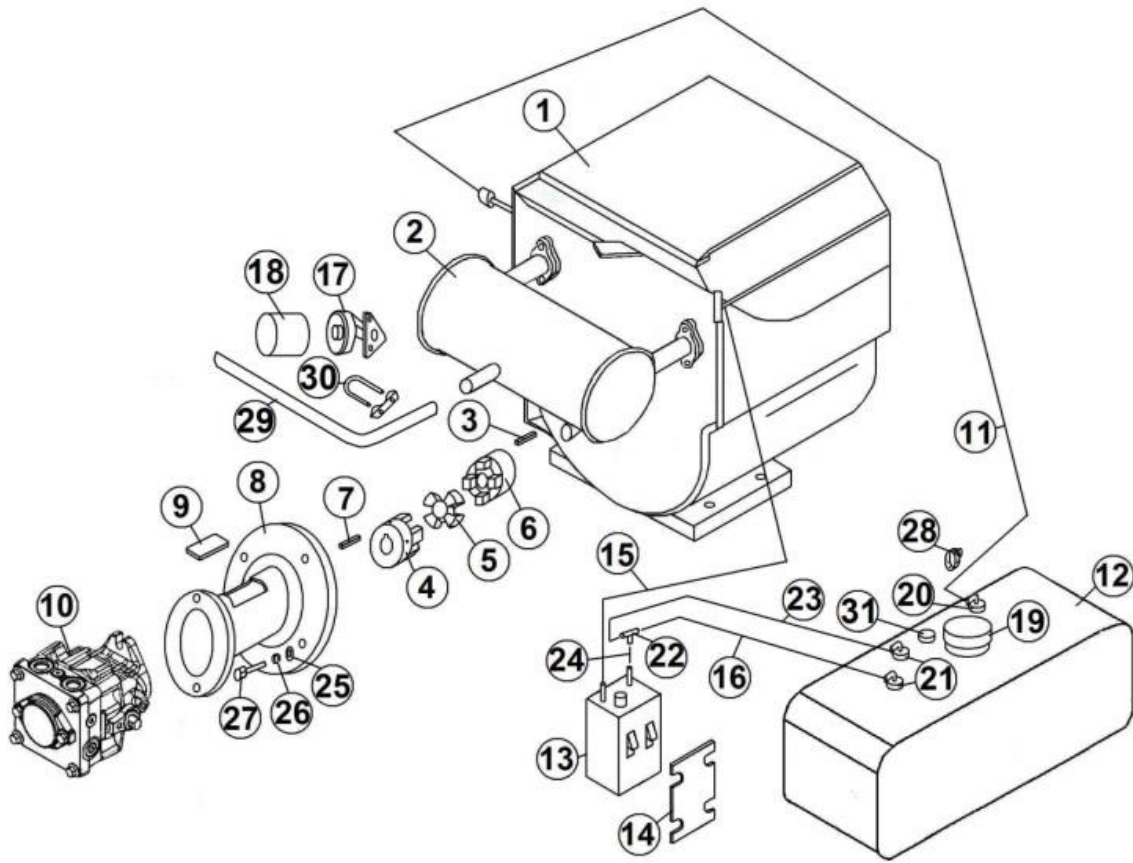
<b>REF.#</b>	<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
1	750-253-1	Seat Plate	1
2	44-926	Engine Cover	1
3	750-254	Seat Plate Hinge	1
4	400-002	5/16" x 1" Bolt	10
5	400-102	5/16" Hex Nut	14
6	400-029-1	1/2" x 3" All Thread Bolt	1
7	400-090	3/8" x 1 1/4" Bolt	2
8	400-109	5/16" Locknut	1
9	44-948	Boom Lift Handle	1
10	400-003	5/16" x 1 1/4" Bolt	1
11	943-116	Plastic Cup	1
12	400-044	1/4" x 1" Bolt	2
13	44-927	Shift Control Box	1
14	400-101	1/4" Hex Nut	2
15	400-105	1/2" Hex Nut	1
16	44-964	Side Boom Lift Lock	1
17	720-080	Battery Hold Down	1
18	400-103	3/8" Hex Nut	2
19	19-674	Spring	1
20	44-950	Upper Strap	2
21	400-005	5/16" x 1 3/4" Bolt	4
22	44-951	Lower Strap	2
23	400-255	Elevator Bolt	4
24	400-102	5/16" Hex Nut	8
25	44-963	Battery Box	1
26	400-044	1/4" x 1" Bolt	3
27	400-101	1/4" Hex Nut	2
28	400-002	5/16" x 1" Bolt	3
29	400-003	5/16" x 1 1/4" Bolt	1
30	400-102	5/16" Hex Nut	1
31	44-942	Step	1
32	44-925	Main Frame	1
33	44-919	Taper Hub 5 Bolt	2
34	44-911-1	Rear Tire Only	2
35	44-911-2	Rear Wheel Only	2
36	44-928	Valve Control Box	1
37	44-966	Fender Right	1
38	400-044	1/4" x 1" Bolt	6
39	400-201	1/4" Flat Washer	6
40	44-934	Deck Plate	1
41	44-965	Fender Left	1
44	400-060	5/16" Thumb Screw	1
45	44-151	Guide Rod	1
46	44-937-1	Front Tire Only	2

**44-901 MAIN FRAME PARTS LIST (Continued)**

<b>REF.#</b>	<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
47	44-937-2	Front Wheel Only	2
48	44-923	Front Hub	1
49	44-922	Front Axle Right	1
50	400-029-1	½" x 3" All Thread Bolt	1
51	713-806	Ball Joint	4
52	400-112	½" Locknut	3
53	44-933	Bent Tie Rod	1
54	44-932	Tie Rod	1
55	44-911	Rear Turf Tire & Wheel	2
56	2050	Hair Pin	1
57	44-982	Front Axle Pin	1
58	44-931	Main Front Axle	1
59	44-977	King Pin	2
60	44-921	Front Axle Left	1
61	720-043	Cotter Pin	2
62	44-978	Slotted Nut	2
63	709-171	Seal	2
64	2028	Bearing	4
65	44-923	Front Hub	1
66	720-043	Cotter Pin	2
67	709-126	Spindle Nut	2
68	44-937	Front Tire & Wheel	2
69	1187	Lug Nut	20
70	2024	Dust Cap	2
71	44-1000	Brake Cable Bracket	1
72	44-763	Parking Brake Lever	1
73	44-1001	Brake Bracket	1
74	44-001-1	Brake Cable	1
75	832-123	Seat	1
76	44-1003	Brake Disc	1
77	44-893	Brake Caliper	1
78	44-1004	Brake Caliper Bracket	1

Note: Part# 44-894 is the Brake Pad Kit for the 44-893.

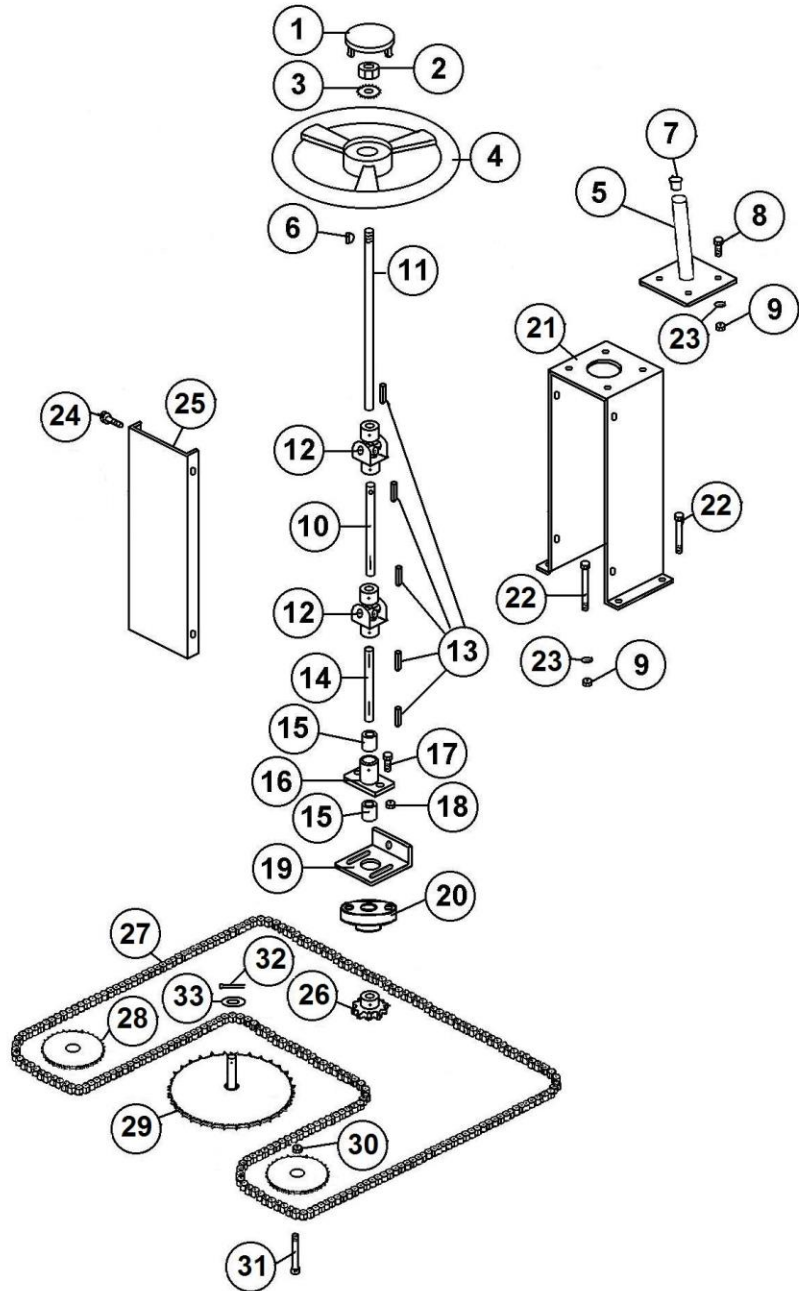
# 44-901 ENGINE & PUMP DRAWING



## ENGINE & PUMP PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	943-100	16hp Engine (Model# 303447 Type 1131-E1)	1
2	943-115	Muffler	1
3	1517	¼" x 1" Key	1
4	750-851	Pump Hub	1
5	720-027	Element	1
6	41-147	1" Coupler	1
7	750-201	#5 Key	1
8	750-255	Bell Housing	1
9	750-127-1	Bell Housing Cover	1
10	750-846	Pump with Aux Charge Pump	1
11	638	Gas Line 12 ½"	1
12	44-912	Gas Tank	1
13	943-241	Carbon Canister	1
14	943-240	Carbon Canister Mount	1
15	638	Purge Line 13"	1
16	638	Vent Line 12 ½"	1
17	943-159	Oil Filter Adapter	1
18	943-104	Oil Filter	1
19	44-912-1	Fuel Cap	1
20	44-912-2	Fuel Fitting	1
21	943-110-4	Vent Valve	2
22	44-983	¼" Barb Tee	1
23	638	Vent Line 12 ½"	1
24	638	Vent Line 1 ¼"	1
25	400-202	5/16" Flat Washer	6
26	400-209	3/8" Lock Washer	6
27	400-090	3/8" x 1 ¼" Bolt	6
28	18-003	¼" Hose Clamp	6
29	943-145	Tail Pipe	1
30	943-146	Muffler Clamp	1
31	44-912-3	Fuel Gauge f/44-912	1

# 44-901 STEERING DRAWING

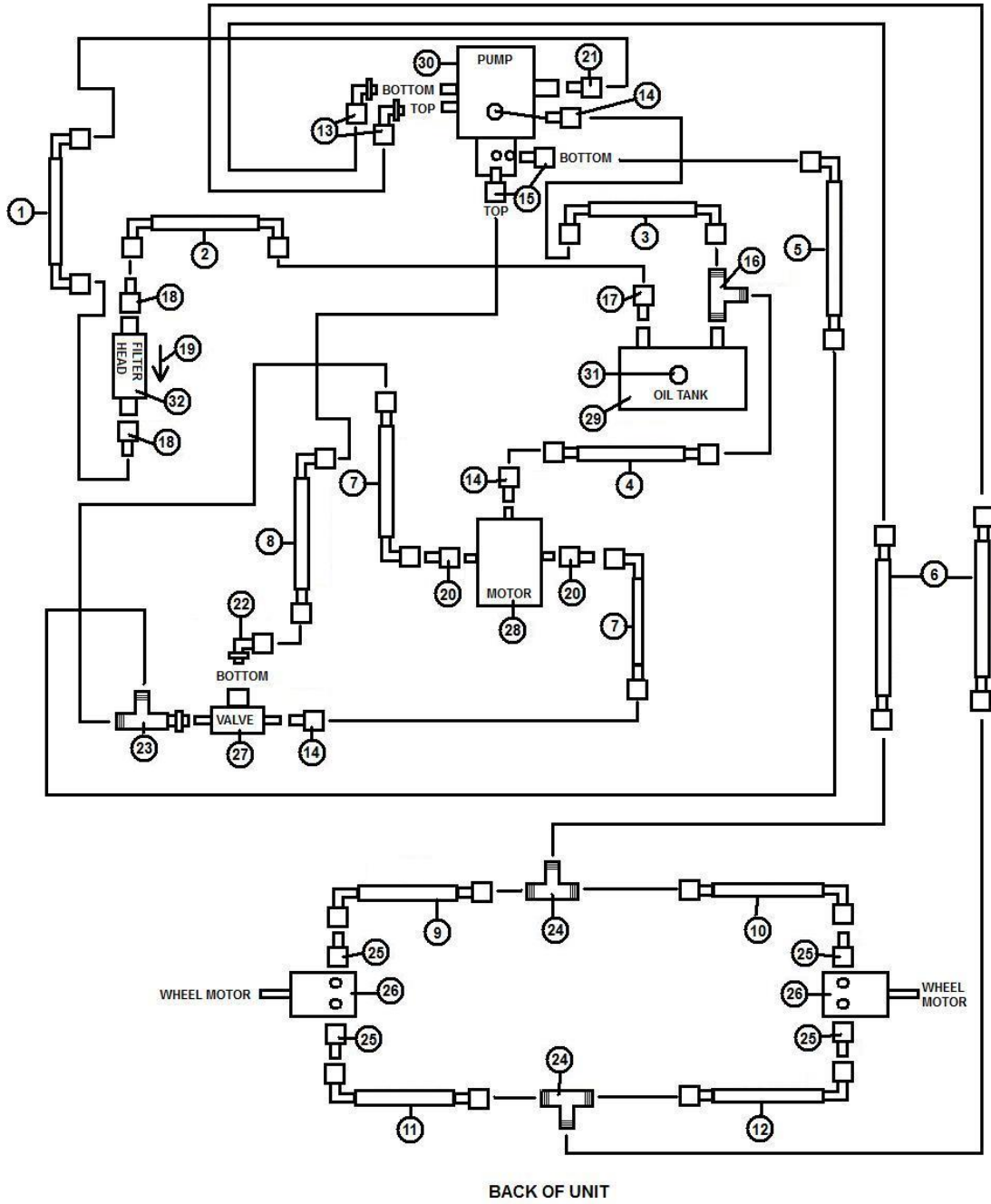




## 44-901 STEERING PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	730-046-2	Steering Wheel Cap	1
2	932-122	5/8" – 18 Hex Jam Nut	1
3	400-143	5/8" Lock Washer	1
4	730-046	Steering Wheel	1
5	750-365	Upper Steering Tube	1
6	740-023	3/16" x 3/4" Woodruff Key	1
7	2110	Bushing	2
8	400-002	5/16" x 1" Bolt	4
9	400-102	5/16" Hex Nut	8
10	44-984	Steering Shaft 4 3/16" Long	1
11	750-362	Upper Steering Shaft	1
12	41-120	U-Joint 3/4" x 3/4"	2
13	1088	3/16" x 1" Key	5
14	750-266	Steering Sprocket Shaft	1
15	520-007	Bronze Bushing	2
16	750-195	Steering Tube	1
17	400-005	5/16" x 1 3/4" Bolt	2
18	400-109	5/16" Lock Nut	2
19	41-194	Chain Adjuster	1
20	1036	Bearing	1
21	750-106	Steering Column	1
22	400-055	5/16" x 3" Bolt	4
23	400-207	5/16" Lock Washer	8
24	400-073	1/4" x 1" Drill Screw	4
25	750-107	Steering Column Cover	1
26	1075	#40 Jackshaft Sprocket 11T	1
27	44-929	Steering Chain	1
28	1066	#40 Drive Chain Idler	2
29	44-930	Steering Sprocket	1
30	400-070	5/8" – 11 x 2" HHCS	2
31	400-121	5/8" Lock Nut	2
32	720-042	Cotter Pin	1
33	713-368	Machine Bushing	1

# 44-901 HYDRAULIC HOSE DIAGRAM



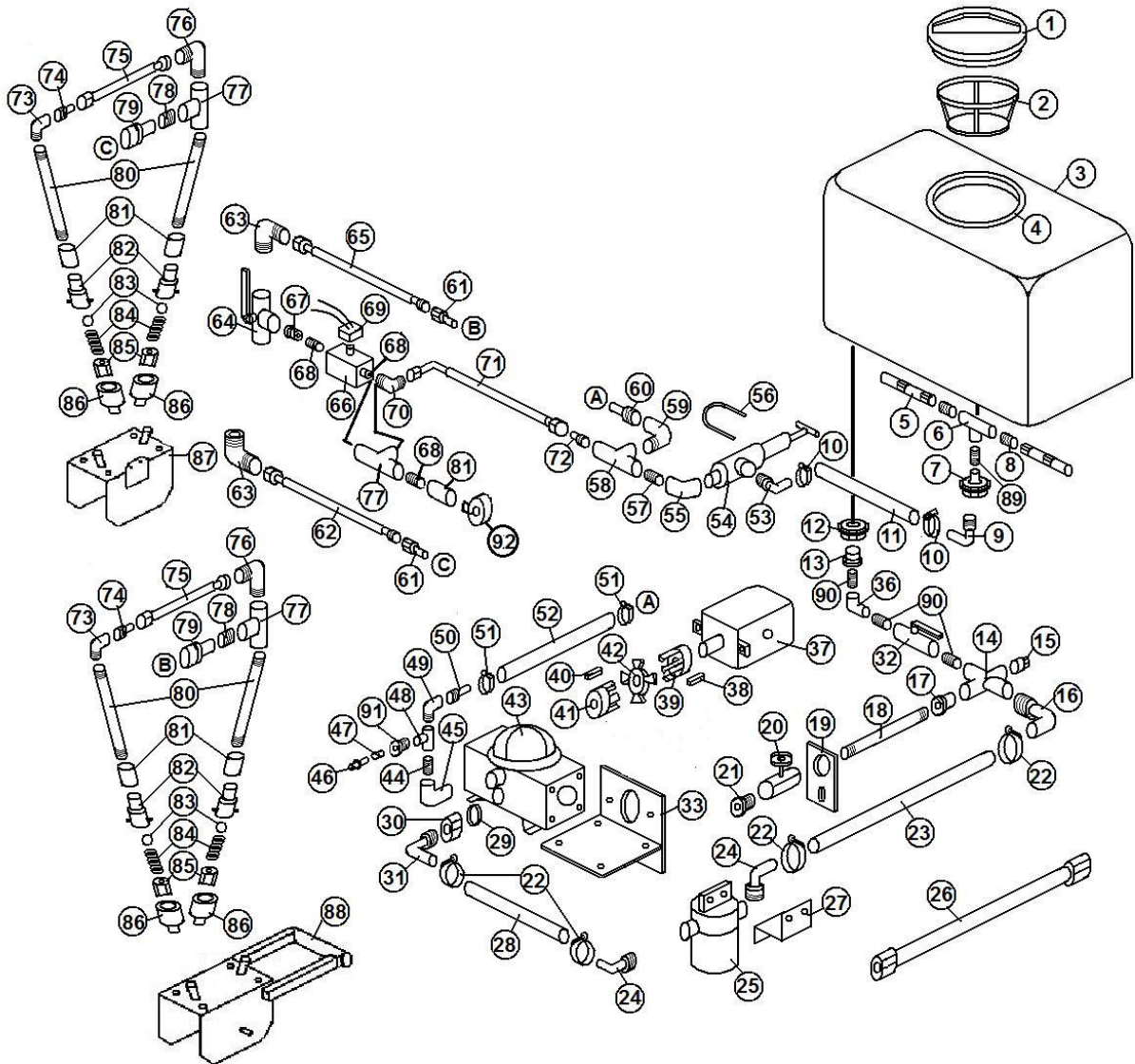
## 44-901 HYDRAULIC HOSE PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	44-985	#8 LPH 14" w/#8 90°	1
2	44-986	#8 LPH 8" w/#8 90°	1
3	44-987	#6 LPH 12" w/#6 90°	1
4	44-988	#6 HPH 11" w/#6 St.	1
5	44-989	#6 HPH 22" w/#6 90° & St.	1
6	44-990	#8 HPH 12" w/#8 St.	2
7	44-991	#6 HPH 12" w/#6 90° & St.	2
8	44-992	#6 HPH 24 ½" w/#6 90° & St.	1
9	44-993	#8 HPH 12" w/#8 90° & St.	1
10	44-994	#8 HPH 10 ½" w/#8 90° & St.	1
11	44-995	#8 HPH 14" w/#8 90° & St.	1
12	44-996	#8 HPH 8" w/#8 90° & St.	1
13	750-208	#8 90°	2
14	750-205	#6 to #6 St.	3
15	44-958	#4 to #6 St.	2
16	44-959	3/8" MNPT x #6 x #6	1
17	44-877	3/8" MNPT x #8 St.	1
18	750-325	#12 x #8 St.	2
19	750-302	Filter Head	1
20	44-997	#12 x #6 St.	2
21	750-848	#8 x #8 St.	1
22	44-961	#6 x #6 90°	1
23	44-960	#6 Tee	1
24	44-962	#8 Tee	2
25	750-326	#10 x 6 St.	4
*26	750-801	Wheel Motor	2
*27	44-918	Motor Switch	1
*28	44-917	Pump Motor	1
*29	750-118	Oil Tank	1
*30	750-846	Pump	1
*31	750-118-1	Oil Tank Cap	1
32	750-300	Oil Filter	1

Note: The complete hose kit is 44-940.

\*Parts not in the hose kit.

# 44-901 PLUMBING DRAWING



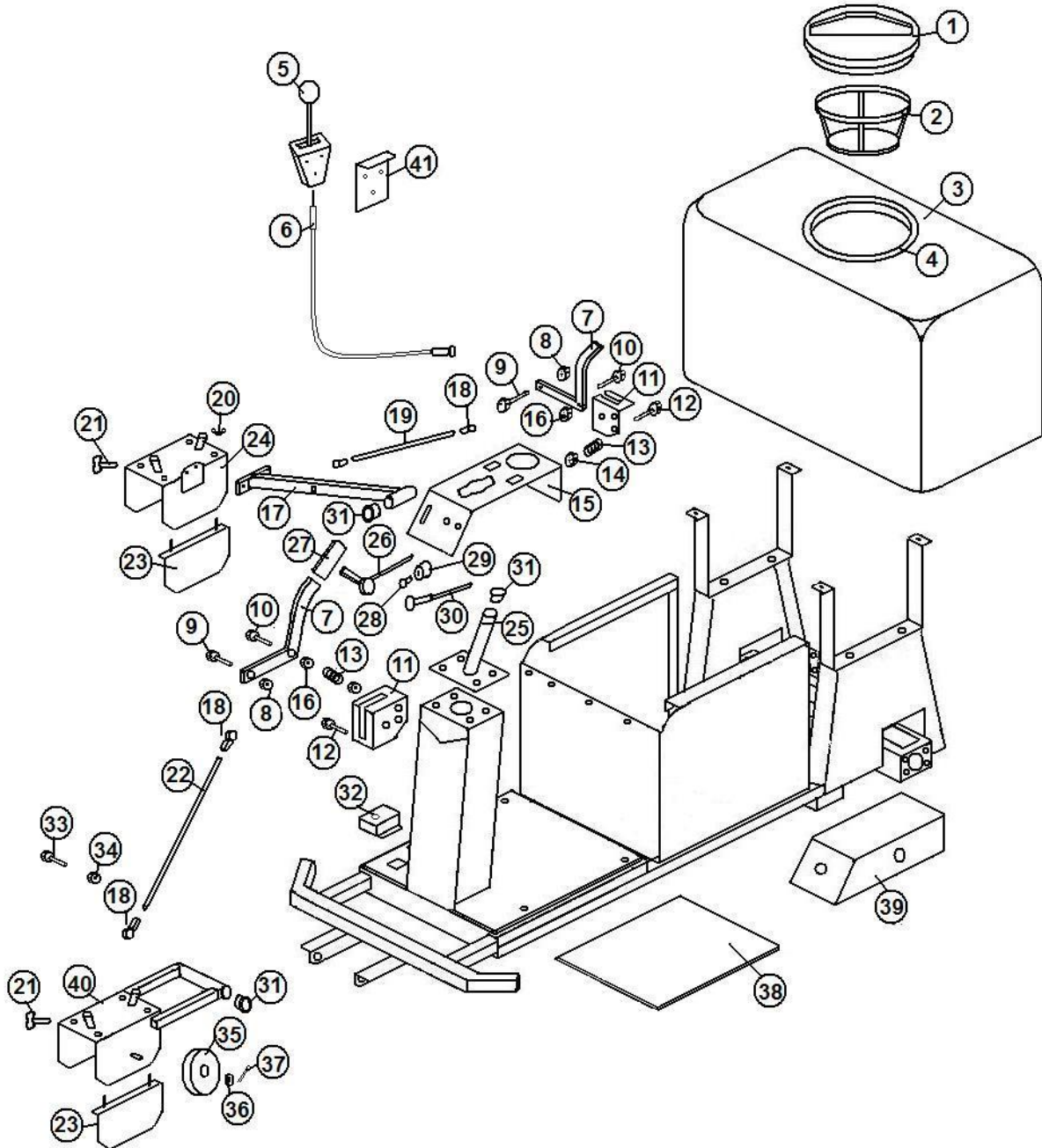
## 44-901 PLUMBING PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	44-999	Tank Lid	1
2	44-998	Paint Strainer Basket	1
3	760-159	Poly Tank 50 gal.	1
4	44-909	Fillwell	1
5	702-144	Agitator	2
6	709-331	1/2" Poly Tee	1
7	160-206	1/2" Double Thread Fitting	1
8	709-344	1/2" Poly Close Nipple	2
9	709-339	1/2" NPT x 1/2" Barb Elbow Poly	1
10	709-312	1/2" Hose Clamp	2
11	642	1/2" Hose	36"
12	160-204	1" Fitting	1
13	500-105	1" x 3/4" Bushing Gal.	1
14	500-805	3/4" Cross	1
15	500-605	3/4" Plug	1
16	709-341	3/4" x 3/4" Barb Elbow Poly	1
17	500-103	3/4" x 1/2" Bushing Gal.	1
18	500-510	1/2" x 9" Nipple Gal.	1
19	44-952	Drain Support	1
20	709-287	1/2" Gate Valve	1
21	707-050	3/4" MGHT x 1/2" MNPT Adapter	1
22	709-314	3/4" Hose Clamp	4
23	647	3/4" LP Hose	5 1/2"
24	709-341	3/4" x 3/4" Barb Elbow Poly	2
25	44-865	Strainer Aluminum & Nylon	1
	44-865-1	O-Ring	
	44-865-2	Cap	
	44-865-3	Bowl	
	44-865-4	Screen	
26	44-947	Clean out Hose	1
27	44-949	Strainer Mounting Bracket	1
28	647	3/4" LP Hose	6"
29	106-110	O-Ring	1
30	106-108	Barb Nut	1
31	106-107	Hose Barb	1
32	709-265	3/4" Ball Valve	1
33	44-939	Pump Mounting Bracket	1
36	500-405	3/4" Elbow Gal.	1
37	44-917	Pump Motor	1
38	44-917-1	5/32" Key f/44-917	1
39	44-920	5/8" Coupler	1
40	1088	3/16" x 1" Key	1
41	720-025	3/4" Coupler	1
42	720-027	Element	1
43	44-916	D252 Hypro Pump	1
44	500-505	1/2" Close Nipple Gal.	1
45	500-401	1/2" Elbow Gal.	1
46	44-008	Plug	1

**44-901 PLUMBING PARTS LIST (continued)**

<b>REF#</b>	<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
47	18-011	Nipple, 1/4" Close	1
48	500-700	1/2" Tee Gal.	1
49	500-402	1/2" Street Elbow Gal.	1
50	709-372	1/2" NPT x 3/8" Barb	1
51	709-312	1/2" Hose Clamp	2
52	750-316	3/8" LP Hose	40"
53	709-339	1/2" NPT x 1/2" Barb Elbow	1
54	705-068	Relief Valve 1/2" x 300 psi	1
55	500-425	1/2" 45° Elbow	1
56	610-229	U-Bolt	1
57	500-505	1/2" Close Nipple Gal.	1
58	500-700	1/2" Tee Gal.	1
59	500-402	1/2" Street Elbow Gal.	1
60	709-372	1/2" NPT x 3/8" Barb Brass	1
61	44-008	Plug	2
62	44-908	Boom Hose	1
63	44-953	1/2" MNPT x #6 O-Ring Face	2
64	44-811	1/2" 3-Way Ball Valve	1
65	44-908	Boom Hose	1
66	41-118	Electric Valve	1
67	500-111	1/2" x 1/2" Bushing	1
68	18-011	Nipple, 1/4" Close	3
69	41-119	Plug w/Wires	1
70	44-876	Valve Elbow	1
71	44-907	Supply Hose	1
72	44-875	Strainer Fitting	1
73	500-400	1/4" Elbow Gal.	2
74	44-879	Boom Box Fitting	2
75	44-888	1/4" x 13 Boom Box Hose	2
76	44-878	1/4" Boom Box Elbow	2
77	18-012	1/4" Brass Tee	3
78	18-011	1/4" Close Nipple	2
79	44-007	Socket	2
80	500-243	1/4" x 4" Gal Nipple	4
81	500-314	1/4" Coupler	5
82	19-697	Nozzle Body	4
83	19-698	Ball	4
84	19-699	Spring	4
85	709-081- XR8006VS	Tip	4
86	19-680	Brass Nozzle Cap	4
87	44-971	Side Boom Box	1
88	44-970	Front Boom Box	1
89	44-957	1/2" PVC Nipple	1
90	500-512	3/4" Close Nipple	3
91	500-111	1/2" x 1/4" Bushing	1
92	706-086	100 PSI Gauge	1

# 44-901 FRAME & TANK DRAWING

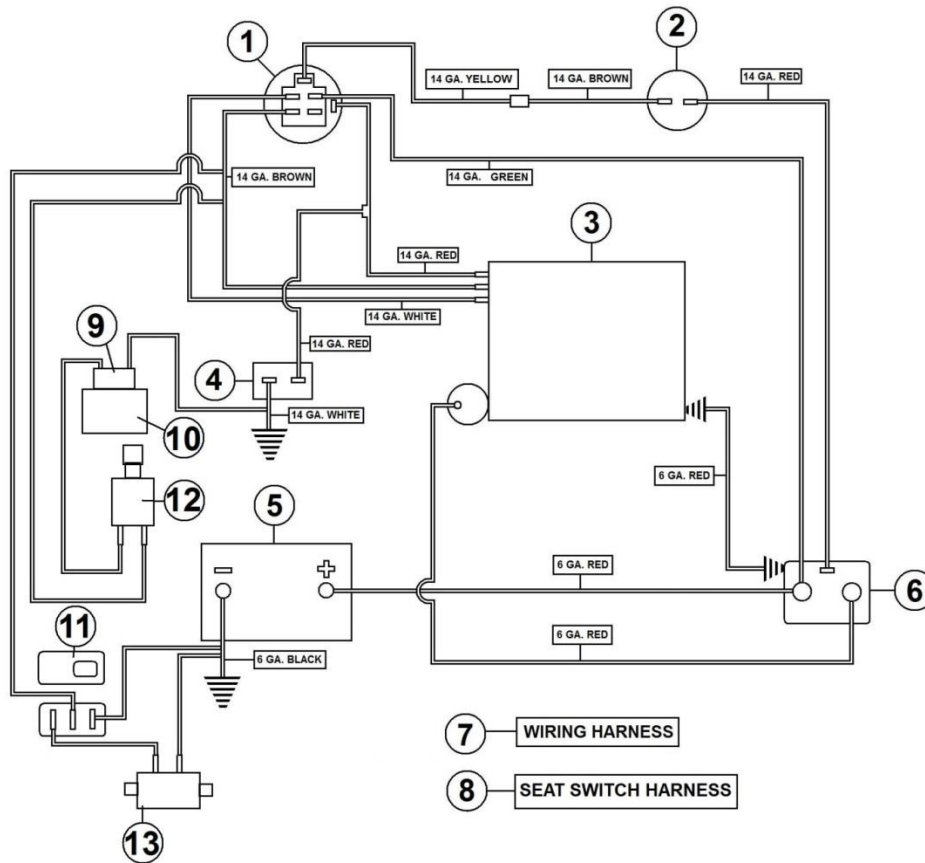


## 44-901 FRAME & TANK PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	44-999	Tank Lid	1
2	44-998	Paint Strainer Basket	1
3	760-159	Poly Tank 50 Gallon	1
4	44-909	Fillwell	1
5	940-240	Lever	1
6	44-936	Shift Cable	1
7	44-948	Boom Lift Handle	2
8	500-109	5/16" Locknut	4
9	400-003	5/16" x 1 1/4" Bolt	2
10	400-029-1	1/2" x 3" Bolt	2
11	44-964	Side Boom Lift Lock	2
12	400-090	3/8" x 1 1/4" Bolt	4
13	19-674	Spring	2
14	400-103	3/8" Nut	4
15	44-927	Shift Control Box	1
16	400-105	1/2" Nut	2
17	44-969	Side Boom Lift Arm	1
18	44-967	5/16" FT Tie Rod End	4
19	44-975	Side Boom Lift Rod	1
20	400-123	1/4" Wing Nut	8
21	400-060	5/16" x 1" Thumb Screw	4
22	44-944	Front Lift Rod	1
23	44-305-1	Boom Flapper	4
24	44-971	Side Boom Box	1
25	750-366	Steering Mechanism	1
26	750-715	Throttle Cable	1
27	2550	Handle Grip	2
28	2081-1	Key f/Ignition Switch	1
29	932-071	Key Switch	1
30	943-126	Choke Cable	1
31	2110	Bushing	2
32	44-976	Paint Switch Plate	1
33	400-006	5/16" x 2" Bolt	2
34	400-109	5/16" Locknut	4
35	49-017	8" Caster Wheel	3
36	40-128-1	1/2" x 14ga Machine Bushing	6
37	40-168	1/8" x 1" Cotter Pin	3
38	44-979	Rubber Mat	1
39	44-928	Valve Control Box	1
40	44-970	Front Boom Box	1
41	44-1002	Shift Bracket	1



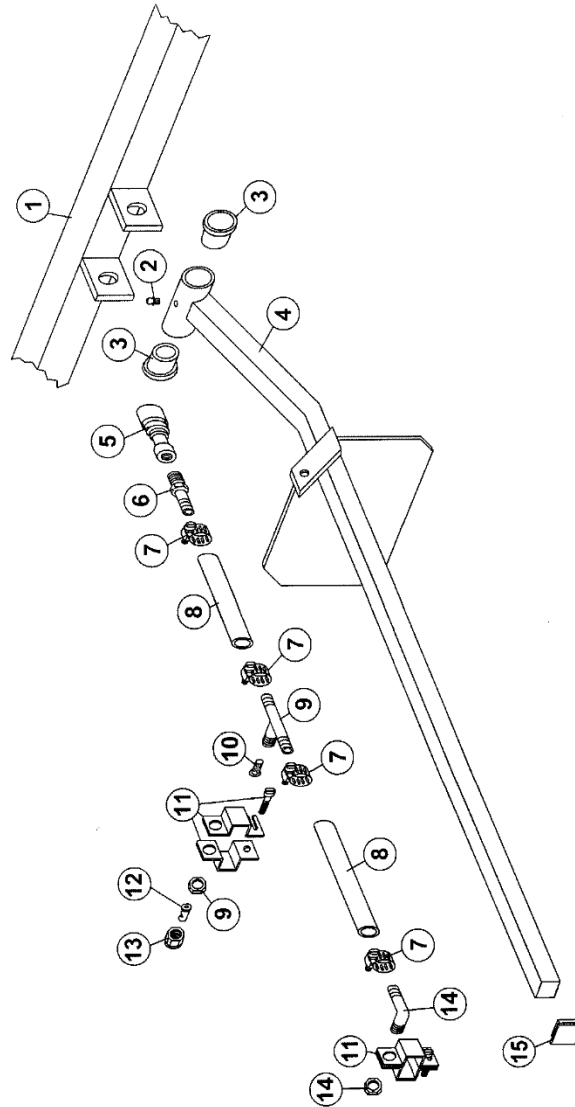
# SUPER LINER WIRING DIAGRAM



# SUPER LINER WIRING PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	932-071	Key Switch	1
2	932-119-1	Seat Switch	1
3	943-100	16hp Engine (Model# 303447 Type 1131-E1)	1
4	44-873	Hour Meter	1
5		Battery	1
6	932-072	Solenoid	1
7	44-935	Wiring Harness	1
8	942-049	Wiring Harness for Seat Switch	1
9	41-119	Plug with Wires	1
10	41-118	Electric Valve	1
11	44-943	Pump Switch	1
12	44-722	Paint Switch	1
13	44-918	Motor Switch	1

## 49-028 SIDE LINE BOOM DRAWING

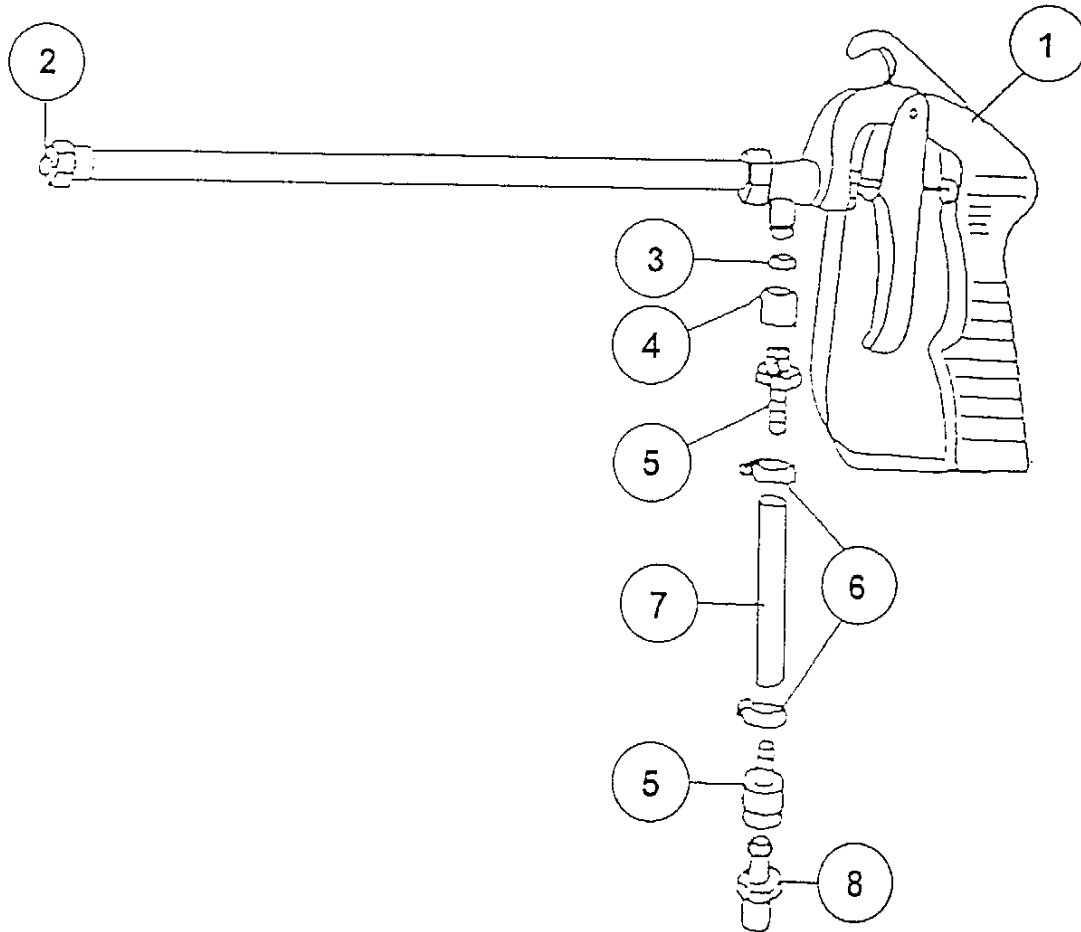


### 49-028 SIDE LINE BOOM PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1		Liner Frame	1
2	709-382	Grease Zerk	1
3	2110	Pivot Post Bearing	2
4	49-031	Boom Arm	1
5	44-007	Socket	1
6	709-303	¼" NPT x ½" Barb – Brass	1
7	709-312	½" Hose Clamp	4
8	642	½" PVC Hose Orange	40"
9	709-056	Brass Tee	1
10	709-048	Strainer	2
11	709-063	Square Clamp	2
12	709-080-TKSS3	Spray Tip SS TKSS3	2
13	19-680	Brass Nozzle Cap	2
14	709-057	Brass Elbow	1
15	610-221	Black Cap	1

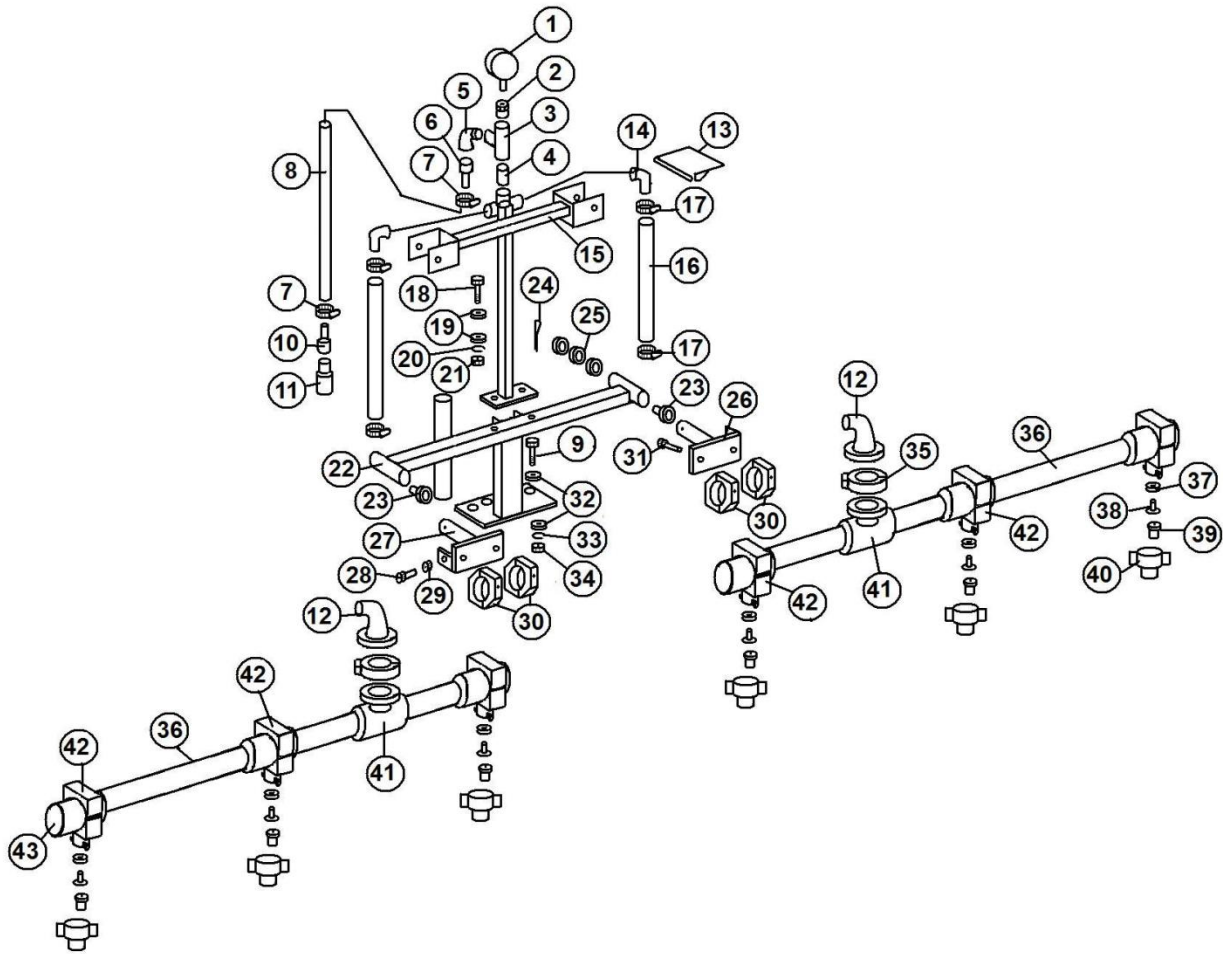
NOTE: Tip spacing is 20" apart.

## 49-027 GUN & HOSE KIT



REF#	PART#	DESCRIPTION	QTY.
1	4085	Spray Gun	1
2	709-053-6503	Nozzle Tip	1
3	19-725	Nylon Gasket	1
4	707-040	Adapter	1
5	19-658	1/4" Hose Barb	2
6	18-003	Hose Clamp	2
7	8800	1/4" Clear Hose (144")	1
8	44-007	Socket	1
	44-895	Gun & Hose Kit Bracket	1

# 49-400 BOOM DRAWING

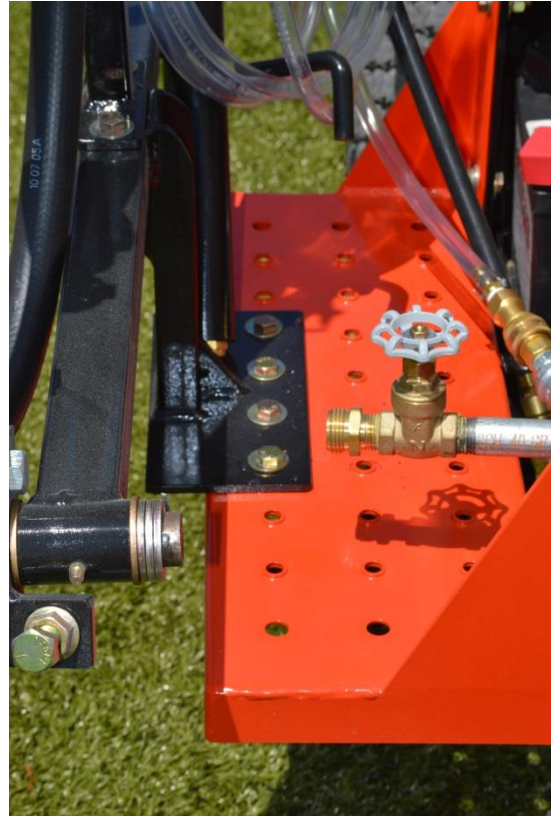


## 49-400 BOOM PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	706-086	Gauge	1
2	500-111	Bushing	1
3	500-700	1/2" Gal. Tee	1
4	500-505	1/2" Close Nipple Sch 80 Gal	1
5	500-402	1/2" Street Elbow 90° Gal.	1
6	709-372	1/2" NPT x 3/8" Barb	1
7	709-312	1/2" Hose Clamp	2
8	750-316	3/8" 250 PSI Low Pressure Hose	41"
9	400-090	3/8" – 16 x 1 1/4" HHCS	4
10	44-955	1/4" MNPT x 3/8" Male Barb Pushlock	1
11	44-007	Socket	1
12	44-896-3	Boom Elbow	2
13	943-190	Wire Lock Pin	2
14	709-340	1/2" NPT x 3/4" Elbow	2
15	49-400-3	Boom Latch Manifold Bracket	1
16	647	3/4" LP Hose	(2) 36"pcs
17	709-314	3/4" Hose Clamp	4
18	400-018	3/8" – 16 x 2 1/2" HHCS	2
19	400-203	3/8" Flat Washer	4
20	400-209	3/8" Lock Washer	2
21	400-103	3/8" – 16 Hex Nut	2
22	49-400-2	Boom Mount Crossmember	1
23	720-064	Bronze Bushing	4
24	720-043	Cotter Pin 1/8" x 1 1/2"	2
25	713-368	Machine Bushing 1" ID x 10Ga	6
26	49-400-5	Right Boom Swivel Bracket	1
27	49-400-1	Left Boom Swivel Bracket	1
28	400-027	1/2" – 13 x 1 1/2" HHCS	2
29	400-344	1/2" – 13 Serrated Hex Flange Nut	2
30	49-400-4	Boom Clamp	4
31	400-026	1/2" – 13 x 1" HHCS	4
32	400-203	3/8" Flat Washer	8
33	400-209	3/8" Lock Washer	4
34	400-103	3/8" – 16 Hex Nut	4
35	44-896-2	1" Clamp with Gasket	2
36	44-896-4	Boom Wing	2
37	709-516	Viton Gasket	6
38	709-048	Strainer	6
39	709-081-XR8006VS	Tip	6
40	709-517	Yellow Cap	6
41	44-896-6	Tee	2
42	44-896-5	Nozzle Body	6
43	44-896-7	End Cap	2

## 49-400 BOOM INSTALLATION INSTRUCTIONS

1. Using the (4) 3/8" x 1 1/4" Bolts, Washers, Lock Washers and nuts, bolt the Boom Mounting Frame on the step. Use the outside holes on the step, centering the boom on the step.
2. Using the (2) 3/8" x 2 1/2" Bolts with the Washers, Lock Washers and Nuts, bolt the Manifold Bracket to the Mounting Bracket.
3. Install the Boom arms sliding the shaft from the back of the Liner in. Be sure the tab with the bolt, slides under the tubing on the Mounting Bracket.
4. Using Machine Bushings furnished, put them on the shaft until they are snug. Then put the cotter pin in the shaft.
5. Install the Gauge.
6. Fasten the 3/4" Hose from the manifold elbow to the Boom arm elbow.
7. Connect the socket to the supply hose going to the side Boom.



# The Smithco Commercial Products Two-Year Limited Warranty

Smithco, Inc. (Smithco) warrants your 2016 or newer Smithco Commercial Product ("Product") purchased after October 1, 2016 to be free from defects in materials or workmanship for the period of time listed below. Where a warrantable condition exists, Smithco will repair the Product at no cost to you including diagnosis, labor (at the Smithco standard labor rate, subject to the Smithco flat rate schedule), and parts.

## Warranty Duration is:

(1) Two years, 1500 operational hours\* from the date of delivery to the original purchaser or Five years from the date of original manufacture of the product, whichever occurs first. (\*Products equipped with hour meter).

(2) Products used in rental situations are covered for 90 days from date of delivery to original user/renter.

## Owner Responsibilities:

As the Product owner, you are responsible for required maintenance and adjustments stated in your Owner's Manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim. **You are particularly responsible to train all present and future operators of this product on the safe operation of this product at your location.**

## Instructions for Obtaining Warranty Service:

You are responsible for notifying the Authorized Smithco Products Distributor from whom you purchased the Product as soon as you believe a warrantable condition exists and not later than 30 days from discovery of the condition.

If you need help locating an Authorized Smithco Distributor, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Smithco Product Support Department  
200 West Poplar Ave.  
Cameron, Wisconsin 54822  
Telephone: 800-891-9435 E-Mail: [ProductSupport@Smithco.com](mailto:ProductSupport@Smithco.com)

## Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

## Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items/conditions listed below are not covered by this warranty:

Product failures which result from the use of non-Smithco replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.

Product failures which result from failure to perform required maintenance and/or adjustments are not covered.

Product failures that result from operating the Product in an abusive, negligent or reckless manner are not covered. 2

This warranty does not apply to parts subject to consumption through use, unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to: blades, tines, teeth, scarifier, rakes, plates, wear plates, castor wheels, tires, batteries, filters, belts, nozzles, etc.

This warranty does not apply to failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.

This warranty does not apply to normal "wear and tear" items. Normal "Wear and Tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Smithco may require the return of failed parts or components in order to determine the validity of any warranty claim.

Smithco will not be obligated to replace components of other manufacturers if inspection by the original component manufacturer indicates that failure was due to normal wear and tear, expected consumption through use or improper care or service.

**Other Legal Disclaimers:**

The above remedy for product defects through repair or replacement by an authorized Smithco distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**THERE ARE NO OTHER EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH ABOVE. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE LIMITED WARRANTIES CONTAINED HEREIN.**

Some states may not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**THE SMITHCO COMPANY IS NOT LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT, INCLUDING ANY COST OR EXPENSE OF PROVIDING A SUBSTITUTE PRODUCT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.**

Some states may not allow the exclusion of indirect, incidental or consequential damages, so the above exclusion may not apply to you.

**Smithco neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale or use of this product.**

**SMITHCO, INC.**

**Wayne, PA 19087**



