

Eco-Liner™ LT Product Manual



1700 Jasper St., Unit F, Aurora, CO 80011 T 800.624.6706 F 303.364.7796 • Newstripe.com

EcoLiner™ LT Manual / 5159.0520

EcoLiner™ LT

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Thank you, for your purchase of the Newstripe **Eco-Liner™ LT** line painter.

Please read over the instructions and make sure you understand operating procedures before using the unit.

Please check the serial number on your unit. This manual is for units beginning with Serial Number 1022989 and up.



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PRECAUTIONARY WARNING!

- Please read and understand all operation instructions as detailed in this manual. Failure to follow specified instructions may result in equipment damage or serious injury to personnel up to and including death!
- **DO NOT** use oil, petroleum, primer or base coat paints in the EcoLiner™ LT.
- **ALWAYS STRAIN THE PAINT.** Field marking paint often has oversized material, lumps, skin, etc., in it. If not strained, these contaminants will be drawn into the pump, shut-off valve, lines, etc., and will cause problems.
- **THIN THE PAINT BEFORE** adding it to the pail of the EcoLiner™ LT. Almost all field marking paints **MUST BE THINNED** before using them with the EcoLiner™ LT. These paints are typically thinned at ratios of 1:1 (One gallon of water to one gallon of paint) up to 3:1.
- **NEVER** perform maintenance on the machine while the system is running.
- DO NOT run the pump dry after cleaning.
- Please note that modifying, changing or servicing any portion of the machine, system or components outside of the procedures and parts outlined in the owner's manual will **VOID** the warranty.
- Use only in a well-ventilated area.
- Always consult your Facility Safety and or Personnel Department for specified safety protocols prior to operating this equipment.

Your EcoLiner LT box should include:

- Chassis assembly with 5 gallon paint pail and lid
- Handle assembly with cable attached spray gun assembly
- Support arm for spray gun

Inside Your Pail:

- Left & right side spray shield assemblies
- Owner's manual with assembly parts bag
- Nozzles, 5002 for 2"-3" lines, and 9005 for 5"-6" lines
- Pail paint strainer



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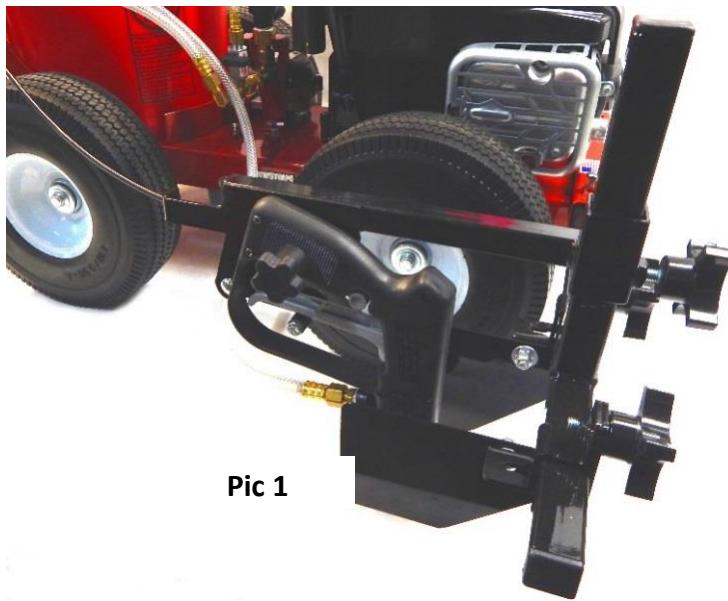
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ASSEMBLY

1. Unpack the **EcoLiner™ LT** chassis assembly, handles, pail, and parts bags.
2. Place the wheels of the machine on a flat surface. Lay the handle assembly behind the unit (pail holder end) with the grips pointing down and the bottom of the handles toward the unit.
3. Mount the bottom end of the handle assembly on the chassis (handles fit on outside of frame) with 5/16" x 1-1/2" hex head bolts from the outside through the mounting holes in the handles and chassis with locking nuts and washers on the inside. (There are no washers on the outside) **Do not tighten completely.**
4. Swing the handles up into position. Align the holes in the handle support braces (braces on the outside of handles) with the upper holes in handle and insert 5/16" x 1-1/2" long carriage bolts in holes from the outside. Secure the braces to the handles with locking nuts on the inside and then tighten the nuts on all four of the handle-mounting bolts, using two ½" wrenches.
5. Install the left and right spray shield assemblies on the support arm, centered to the upright with 4" between the spray shields. **NOTE: The shields go toward each other with their respective pivot brackets to the outside.** Secure the spray shield assemblies by tightening the star knobs.
6. Slide the support arm with side plates into the right side of the receiver tube on the front of chassis, until the end is flush with the left side of the receiver tube. Secure the support arm by tightening the two 5/16" x ¾" hex head bolts in the receiver tube.
7. Slide the spray gun assembly onto the support arm upward with spray hose connection facing rearward, and the spray nozzle at approximately 2" from the surface to be painted. Secure the spray gun assembly by tightening the star knob. **NOTE: The line width is adjusted by raising or lowering the spray gun and selecting the appropriate spray nozzle.**



Pic 1



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8. Coil the excess paint hose from the pressure valve on the right side of the handle and then route enough of it down and across the pressure valve plumbing as shown in **Pic 1**, to connect to the spray gun, while ensuring that the hose will not drag against the rear tire of the machine. Tighten lightly with a 5/8" wrench while holding the fitting in the spray gun with a 9/16" wrench, or use two adjustable wrenches.
9. **FILL THE ENGINE WITH HIGH QUALITY 10W30 DETERGENT MOTOR OIL.** Full oil level is between the cross hatched markings on the dipstick with the dipstick pushed against the fill port (not screwed in).
DO NOT OVER FILL

OPERATION

1. Adjust the spray shields to a 4" width. You may have to raise or lower the spray gun so that the machine will produce a 4" line. To stripe narrower or wider lines, select the proper spray nozzle from the selection guide and adjust the spray shields. Adjust the spray gun up or down as needed to produce the required line width.
2. Fill the fuel tank on the engine with fresh gasoline.
3. Add water or pre-mixed athletic paint to the pail.
4. Move the throttle lever to the full or fast position.
5. Pull the starter cord until the engine starts.
6. Adjust the throttle to just over the ½ position where the engine is running smoothly.
7. Turn the pump prime valve, located outside of the pressure valve, to the open position.
8. Lift the pail lid slightly and watch the water or paint flow from the hose. Once there is a continuous flow from the hose, close the pump prime valve. The unit will now spray when the handle mounted trigger is squeezed.
9. To use the spray gun by hand, unscrew the star knob and remove the spray gun from the mounting bracket, and then the coil of hose from the handle bars. Once you are finished using the spray gun by hand, coil the hose and hang it on the handle bars, re-route the hose down and across the pressure valve plumbing and then replace the gun in the gun mount. **NOTE: The gun actuator bar of the gun mount must be under the gun trigger for proper operation.**



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OPERATIONAL NOTES!



- Before using paint, fill the paint pail with water to familiarize yourself with the machine.
- Select the correct nozzle for the line width required.
- Adjust the side spray shields for the line width desired, and then adjust spray gun height up or down as needed to achieve the line width. **(Note: water will produce a wider line than paint.)**
- Fill the bucket to about 2" from the top with **PREMIXED and STRAINED** paint. **DO NOT place Non-thinned paint in unit, as this will clog the pump.** Most athletic field marking paint is mixed at a ratio of 1:1. That is one gallon of water to one gallon of paint. Some paints may be thinned more. Please see the paint manufacturer's directions.
- You will need to use the pump prime valve each time you run the pail dry, and also when you switch to water for cleaning to remove air in the system. The spray pressure valve is initially set at the factory for maximum spray pressure. If you feel you are getting too much paint flow from the nozzles, unscrew the pressure valve cap until the flow is where you would like it to be and then run the Locking ring up against the cap to maintain the setting.



CLEAN UP PROCEDURE

CLEAN AFTER EACH USE

1. When your striping job is complete, pull the paint return hose & prime valve hose out of the lid and point them toward the ground behind the machine or into a separate pail.
2. Remove the paint pail lid and set it aside. Pull out the suction hose and place it to side of machine or into a separate pail.
3. Empty the pail of unused paint, or remove the pail completely and then cover it for the next time you stripe.
4. Place another empty pail on the machine.
5. Wipe off or rinse off the suction hose, screen, return hose, pump prime hose, and pail lid.
6. Remove the nozzle cap, nozzle, and valve seat and place them in a container of water to soak.
7. Place 2-3 gallons of clean water in the pail. Place the suction hose back in pail. Leave the return and pump prime hoses out of the pail. This allows you to flush all of the hoses of paint.



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8. Clean the spray gun parts that have been soaking and then reassemble them onto the spray gun. **NOTE: The cone shaped depression in the gun seat goes toward the spray nozzle.**
9. Start the engine and then use the pump prime valve to prime the pump. **CAUTION: The hose will “jump” from the paint pressure.** Activate the spray gun until the spray runs clear with water.
10. Clean and rinse the exterior of the machine. Use soapy water (dish washing detergent or Simple Green) at least once each week to thoroughly clean the pump. Add soap to 2-3 gallons of water, and then run the machine and let it circulate back to the pail as long as desired. Once you have completed this, empty the pail.

CLEANING PROCEDURE FOR WINTER (FREEZING) STORAGE

1. Clean as instructed in the normal cleaning procedure.
2. Remove as much fuel from the engine gas tank as you can. Run the engine until it runs out of gas.
3. Disconnect the paint hoses from the pump and gun and then drain the hoses.
4. The unit may now be stored in freezing temperatures.
5. Drain and change the engine oil in the spring before adding fuel to the tank for the first time.

MAINTENANCE

ITEM	CHECK	MAINTENANCE ACTION
Engine Oil Level	Prior to every use	Change engine oil after the first 20 hours of operation and then every 100 hours thereafter.
Paint System	After every use	Clean the paint pail, hoses, and gun.
Hoses and Pump	After every use	Run soapy water through the pump and hoses for additional cleaning.
Wheels and Tires	Check the air pressure before each use	Fill the tires with air as needed. Grease the wheels monthly.
Handles	Monthly	Check the handle bolts for tightness to the chassis and handle braces.
Engine Air Filter	Monthly	Clean the filter monthly. Replace every 4 months of use.

****For additional instructions please contact Newstripe, Inc. at 800-624-6706**



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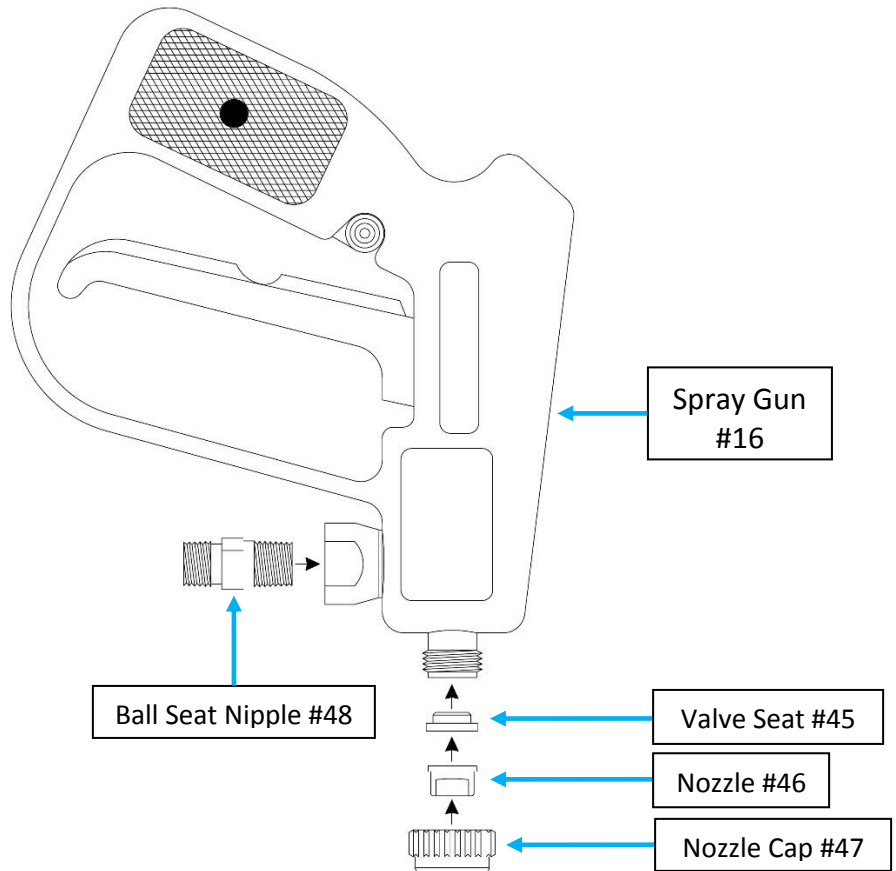
SPRAY GUN ASSEMBLY

(Item 10000809)

<u>Item</u>	<u>Description</u>	<u>Part Number</u>
45	Valve Seat	10000136
46	Nozzle (4 Pack)	Select nozzle below
47	Nozzle Cap (4 pack)	10001890
48	Ball Seat Nipple	10000731

SELECT NOZZLE FOR APPLICATION

<u>Item</u>	<u>Description</u>	<u>Part Number</u>
5002	2" Line	10001891
8005	4" -5" Line (Heavy Turf)	10003493
8004	4" -5" Line (Turf/Asphalt)	10001893
9505	5" -6" Line	10001894



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PARTS LIST

Item	Description	Part Number
1	Chassis (Bare)	10004610
2	Engine, Briggs & Stratton 550EX	10004608
3	Engine Air Filter Element (Not Shown)	10004969
4	Wheel Assembly (4 Total)	10004705
5	Handle Bars (Bare)	10003949
6	Handle Support Braces (2 Total)	10004578
7	Control Cable	10000820
8	Control Lever	10002951
9	Paint Pail	10002838
10	Paint Pail Lid Assembly	10002827
11	Hose, Paint	10000695
12	Hose, Suction	10004470
13	Suction Hose Filter (Not Shown)	10002842
14	Hose, Recirculating	10003692
15	Hose, Pump Prime Return	10003692
16	Belt Guard	10005158
17	Spray Gun Assembly * See the Spray Gun Assembly on Page 6 for Breakdown of Part Numbers	10000809
18	Spray Gun Support Arm	10003550
19	Pivot Assembly with Shield, Left	10004824
20	Pivot assembly with Shield, Right	10004825
21	Spray Shields (Included with P/Ns 10004824 & 10004825 Above)	*See Note 10003562

Item	Description	Part Number
22	Spray Gun Mount	10000808
23	Cable Adjuster	10000018
24	Cable Stop	10001577
25	Gun Mount Star Knob	10004480
26	Star Knobs, 5/16-18 (3 Total)	N/A
27	Pressure Valve Adjusting Cap (Part of Pressure Valve Assembly)	N/A
28	Pressure Valve Locking Ring (Part of Pressure Valve Assembly)	N/A
29	Pressure Limiter Collar (Part of Pressure Valve Assembly)	N/A
30	Pressure Valve Assembly	10003478
31	¼" Brass Branch Tee	10002490
32	½" FPT – 3/8" MPT Adapter	10000778
33	3/8" Brass Street Tee	10000777
34	Pump Prime Valve	10000233
35	¼" Male Brass Elbow	10000159
36	Pressure Valve Support	10005157
37	3/8" – ¼" Brass Reducer	10000896
38	Pump Inlet Fitting	10004459
39	Pump Assembly	10003367
40	Drive Belt, 3L320 (not shown)	10000775
41	Pump Shaft (not Shown)	10003365
42	Pump Shaft Bearing (2 not shown)	10003131

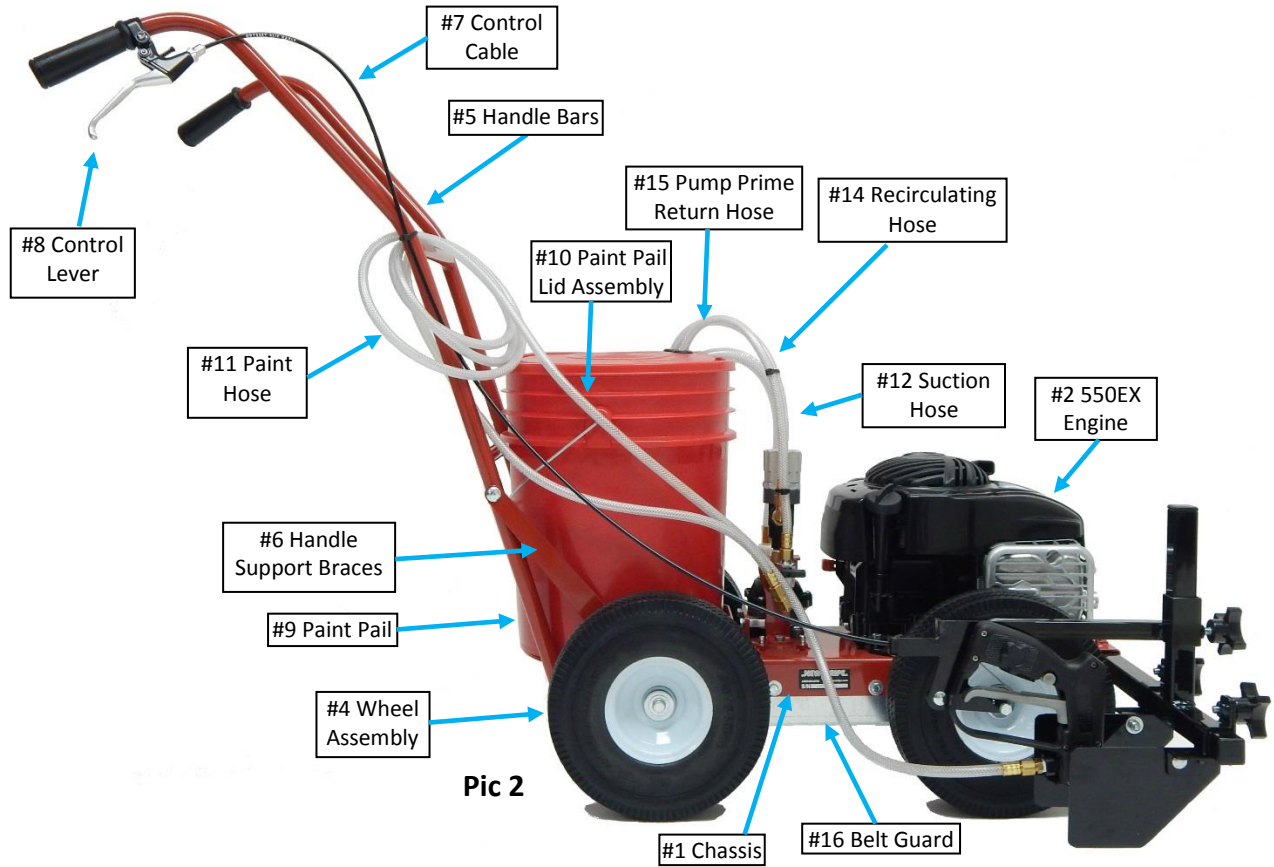


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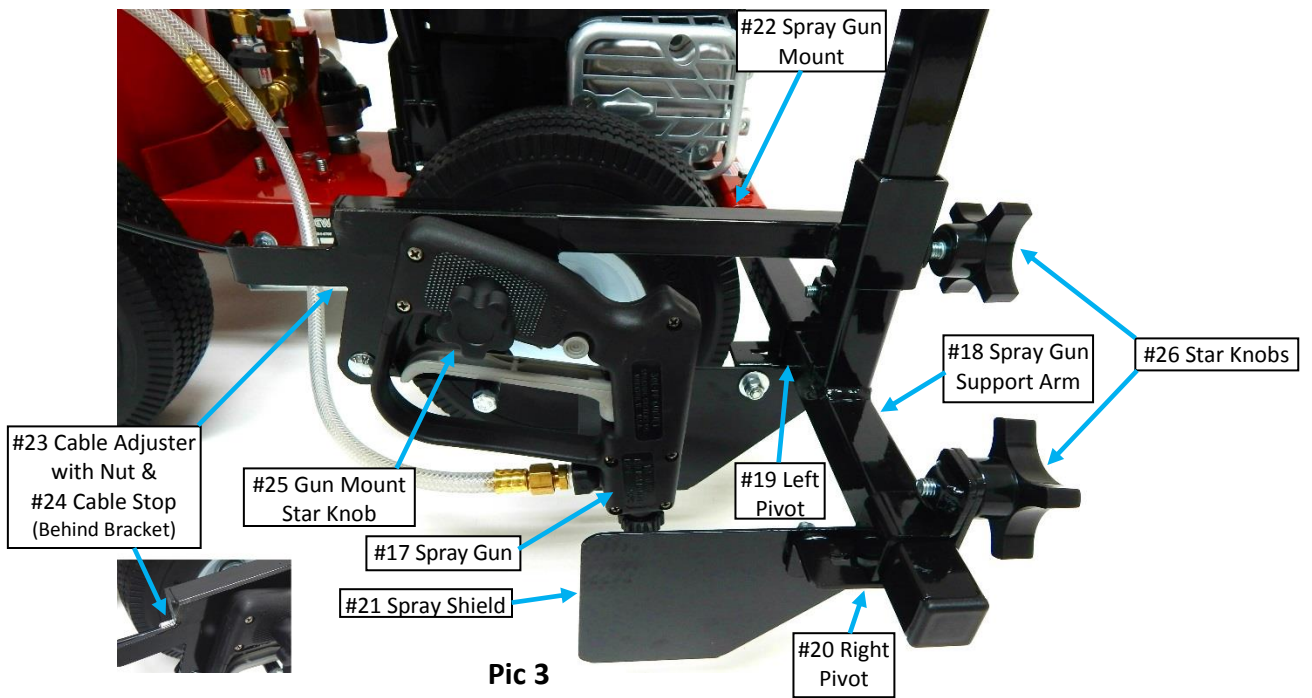
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Pic 2



Pic 3

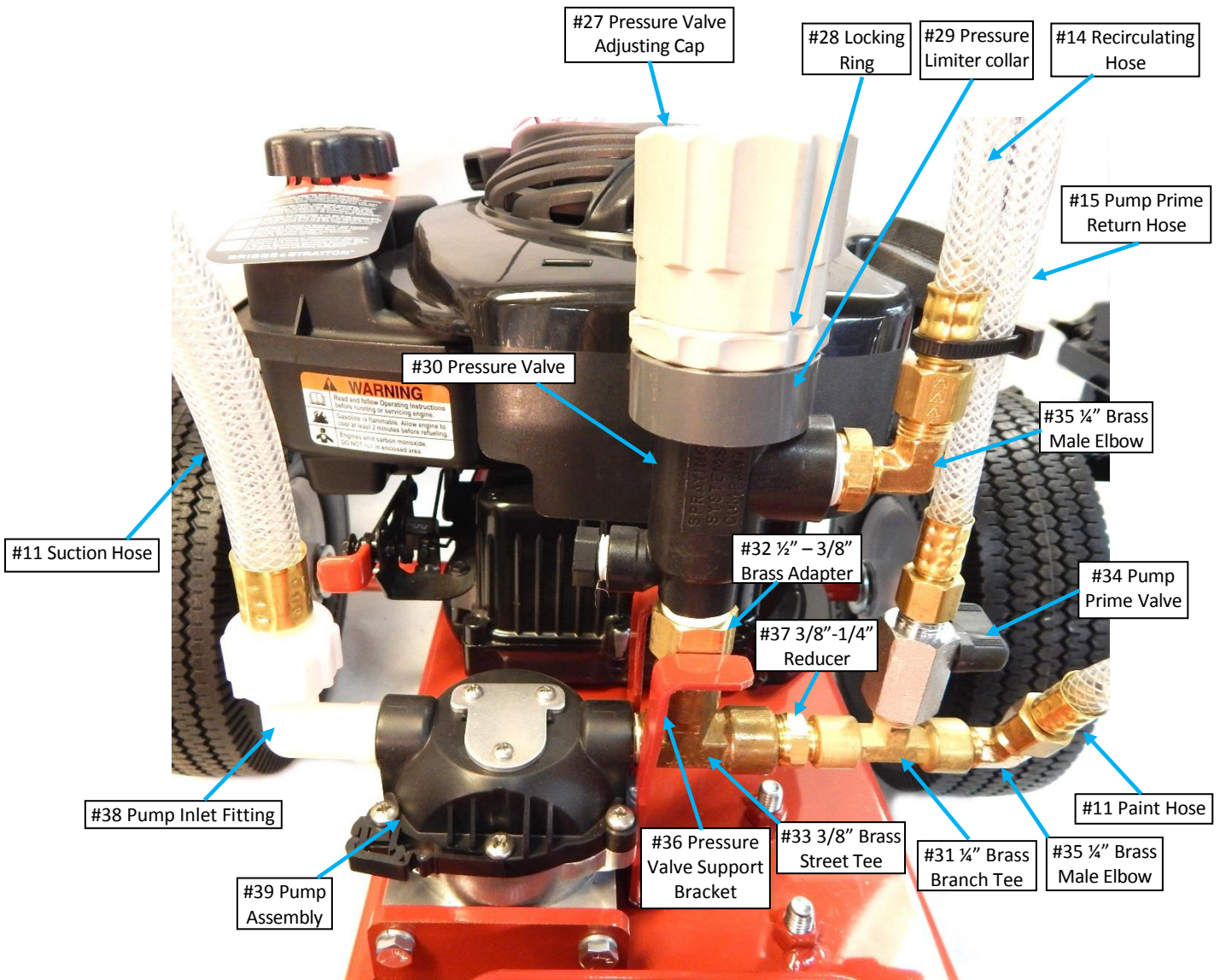


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Pic 4



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TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	REMEDY
Pump will not prime	Air in pump system	Open the pump valve and check flow from the hose into pail. When the flow is continuous, close the valve.
Pump will not prime after relieving the air in the system	Pump is probably clogged with paint	Disconnect the supply and discharge hoses. Clean out the hoses. Pour hot water into the opening of the pump and let soak. Reconnect the hoses and start the pump again.
Pump won't prime due to clog in the system	Spray system not properly cleared after previous use.	If hot water alone does not remove the clog, pour liquid dish soap and water, or "Simple Green" into the pump inlet. Jog the pump by pulling the starter cord several times with the engine off to get the solution into the pump. Let the pump soak 15-30 minutes, then try pumping water. The pump does not need to be rinsed of all of the soap as the soap will mix easily with the paint. If it is still not working call the factory. Disassembly of the pump will VOID the pump warranty.
Pump will not run	Loose or broken drive belt	Inspect, adjust or replace. The belt should deflect approximately ½" between pulleys.
Paint leaving nozzle in stream, not spraying	Paint too thick	Thin the paint
Pressure too low		See step #4 in operating instructions
Spray Inconsistent	Obstruction in nozzle Obstruction or clog in suction hose or suction hose filter.	Remove the nozzle screen and clean or replace it. Remove the suction hose and filter screen. Filter the paint before putting it in the pail. Clean the screen to remove any clogs.
Spray pattern too narrow or uneven	Wrong nozzle or spray head height is incorrect Paint is too thick	Adjust the spray head height up or down. The nozzle slot must be oriented crosswise to the gun body. Thin the paint properly.
Paint drips after being shut off	Control cable out of adjustment Clogged or worn spray gun	Check the cable at the gun. Adjust the cable at the gun or lever or replace the cable. Disassemble and clean, or replace the gun.
Paint drips after being shut off	Stuck or faulty control lever	Lubricate or replace the control lever.



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WARRANTY – 18 MONTH

NEWSTRIPE, INC., WARRANTS TO THE ORIGINAL PURCHASER, FOR 18 (EIGHTEEN) MONTHS AFTER DATE OF PURCHASE, THAT THE EQUIPMENT* HEREBY SOLD SHALL BE FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP. THIS WARRANTY DOES NOT EXTEND TO ANY DAMAGE OR MALFUNCTION RESULTING FROM MISUSE, NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, OR NORMAL WEAR AND TEAR.

Damage incurred in shipment from Newstripe, Inc. to the customer is the total responsibility of the carrier. The CUSTOMER MUST NOTE DAMAGES on the Bill of Lading of Trucking Company or Railroad; and Newstripe, Inc. will furnish to the customer the cost or parts and labor. The customer can then bill the common carrier for the damages by placing his signature on the documents.

The Newstripe, Inc. obligation under this warranty and any implied warranties is limited to replacement or repair of defective parts of its manufacture without charge for 18 (Eighteen) months from date of purchase. For service under this warranty, buyer shall ship the defective part or parts of the equipment, transportation prepaid, to Newstripe, Inc. together with a written description of any claimed defect and proof of purchase date of the materials being returned. **Prior to retuning any part or machine, the CUSTOMER must obtain a Return Materials Authorization number. Call 1-800-624-6706.**

***Components not manufactured by Newstripe, Inc. such as engines, compressors, pumps, and transaxles are furnished with their respective manufacturer's warranties only. Where Newstripe elects to extend manufacturers' warranties, the warranty shall cover up to 100% of the cost to repair or replace materials and parts for the first 12 months of ownership, excluding labor. Extension of any manufacturers' warranty for these components is at the sole discretion of Newstripe, Inc. and does not include wearable parts and consumable components from normal wear and tear.**

The responsibilities described above are the only responsibilities of Newstripe, Inc. under this written warranty or any implied warranty, and may be exercised only within 18 (Eighteen) months from the date of purchase. In no event shall Newstripe, Inc. be liable for incidental or consequential damages and no person had any authority to bind it to any representation or warranty, not be responsible for work done, materials furnished or repairs made by others without its' specific written authorization.

THIS WARRANTY SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THERE IS NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND WITH RESPECT TO THE GOODS SOLD HEREBY EXCEPT AS SET FORTH HEREIN. IT IS EXPRESSLY AGREED THAT THIS WARRANTY SHALL BE LIMITED TO THE ADJUSTMENT, REPAIR OR REPLACEMENT OF PARTS AND THE LABOR AND SERVICES REQUIRED THEREBY. IN NO EVENT, INCLUDING ANY CLAIM FOR NEGLIGENCE, SHALL NEWSTRIPE, INC. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Sincerely,

Newstripe, Inc



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