User Manual
Read this manual for complete instructions

Need help? Call Kings Sprayers if you have any questions with this product.
Technical service hours: Monday – Friday, 8:00 a.m. – 5:00 p.m. ET
1-800-228-0905  |  info@kingssprayers.com
Model #: KS100P17

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**Warranty**
5 year frame / 5 year tank / 1 year parts and labor (limited to manufacturer defects) / 1 year pump (limited to manufacturer defects) / 3 year gas engine (limited to manufacturers defects).

The warranty will not apply to products that were improperly installed, misapplied, damaged, altered or incompatible with fluids or components. Kings Sprayers obligation under this warranty is limited to the repair or replacement of the product. All returns will be tested per factory criteria. Products found not defective (under the terms of this warranty) are subject to charges paid by the returnee for testing and packing of “tested good” non-warranty returns.

No credit or labor allowances will be given for products returned as defective. Warranty replacement will be shipped at Kings Sprayers discretion. Kings Sprayers reserves the right to choose the method of transportation.

Contact Kings Sprayers at 800-228-0905 to receive a Return Merchandise Authorization (RMA#) before returning any products. The RMA number should be clearly marked on the outside of the package. Kings Sprayers shall not be liable for freight damage incurred during shipping. All products returned for warranty work should be sent shipping charges prepaid.

**General Safety Information**
The following chemicals should never be put through any pump:

- Gasoline (Petrol)
- Kerosene/Kerosine (Paraffin)
- Diesel Fuel
- Ceramic Slurries
- Sewage
- Potable Water

DO NOT pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc.
DO NOT use in explosive atmospheres
DO NOT pump asphalt sealer, roofing compounds, concrete sealers, or any two-step curing products
DO NOT pump non-approved liquids (See Above)
DO NOT operate any pump under the influence of drugs or alcohol
DO NOT perform service or maintenance to the pump or attached components until the pumping unit is below 109°F

Only authorized operators having the knowledge and skill necessary to safely use the pump, or any equipment the pump is connected to, may run the pump.

When handling pumps, wear steel-toed shoes and protective gloves in order to protect the feet in the event the pump is dropped and protect the hands from chemicals or any sharp surfaces on the pump.

When spraying manually, chemical-resistant facemasks and clothing should be worn to prevent any chemicals from coming into contact with the skin or being inhaled.

When spraying manually, always spray downwind of yourself as long as the sprayed chemical will not drift into the vicinity of other people.

Never operate a pump outside while there is a chance of getting struck by lightning.

Never leave wires or plumbing components where they can be a tripping hazard or become entangled in a moving component.
All maintenance should be done when machinery is stationary and has been isolated from its energy sources. It is dangerous to perform maintenance while machinery is still connected to its power source. Machinery should be isolated from its electrical, hydraulic, shaft driven or gas engine power source.

Be sure to release all pressure from the system before performing any sort of maintenance on a pump.

The sound level of the pump may exceed 80dBA. Observe all safety precautions when operating the pump within close proximity for extended periods of time by wearing hearing protectors. Extended exposure to elevated sound levels will result in hearing loss and other effects such as loss of balance and awareness.

Do not pump at pressure higher than the maximum recommended pressure.

Operate the pump between a temperature range of 45° to 140°F (7° to 60°C).

Secure the discharge line before starting the pump. An unsecured discharge line may whip, resulting in injury.

Check all hoses for weak or worn condition before each use.

Periodically inspect the pump and the system components. Perform routine maintenance as required.

Do not use pumps for pump water or other liquids for human or animal consumption.

Do not pressure feed pump inlet.

Failure to follow these notices can result in severe personal injury and/or property damage and will void product warranty.

**Hazardous Substance Alert**

Any hazardous liquids should be disposed of in a manner that complies with local and national regulations. Never dump fluids onto the ground.

Always drain and flush pump before servicing or disassembling for any reason.

Always drain and flush pump prior to returning unit for repair.

Never store pumps containing hazardous chemicals.

Before returning pump for service/repair, drain out all liquids and flush unit with neutralizing liquid. Then, drain the pump. Attach tag or include written notice certifying that this has been done. Please note that it is illegal to ship or transport any hazardous chemicals without United States Environmental Protection Agency Licensing.
Sprayer Components

Quick disconnect to spray gun

50’ high pressure hose

Nozzle assortment

Quick disconnect for easy nozzle replacement

Figure 1: Side View

Figure 2: Detailed View
Regulator – Screw “in” to increase pressure, screw “out” to decrease pressure
Getting Started

Starting Your Sprayer for the First Time

1. Ensure all unnecessary personnel are clear of the area.
2. For initial testing, it is recommended to start with clean water instead of chemicals to confirm the system and plumbing components are leak free.
3. Ensure there is fluid in the tank and supply line.
4. Check line strainer for debris or clogs and remove if any found.
5. Check all plumbing connections to ensure tightness.
6. Ensure all valves and regulators are set to the desired setting and working properly.
7. Ensure all hoses are positioned properly and undamaged.
8. Follow the next steps on starting the engine.
9. Before starting the sprayer, make sure the gun is plugged into the hose.
10. Before turning the pump on, press the trigger to the spray gun.
11. To start the engine, make sure the gas is ON.
12. The choke is ON.
13. The throttle is all the way down.
14. Turn the ON/OFF switch to the ON position.
15. Pull start the engine.
16. When the engine engages, set the throttle.
17. Once the engine turns ON, make sure to keep the spray gun trigger depressed. Occasionally release the trigger to allow the engine to build up pressure.
18. Continue to check the pressure by pressing the trigger to the gun.
19. This unit comes with five different spray tips: soaker, jet, large jet, 45° spread, large 45° spread. Note the larger spray tips have a higher gpm, but lower pressure.
20. To rotate the spray tip when it’s on the unit, be sure to depress the trigger first and then rotate the spray tip. If there is pressure going to the spray gun you cannot rotate or remove the spray tip.
21. To remove the spray tip, simply pull back on the nozzle release and pull the tip out.

Shutting Down Your Sprayer

1. Shut sprayer down using the outlined steps.
2. Hold down the spray gun trigger to prevent the engine from backfiring.
3. Turn the ON/OFF switch to the OFF position.
4. If pump will not be used for several hours flush your system to prolong the life of the components.

For a step-by-step video guide, visit the Sprayer Depot YouTube Channel to watch instructional videos on a variety of topics. Tune in by visiting http://YouTube.com/SprayerDepot.

Adjust Pressure

1. Screw in (clockwise) to create more pressure.
2. Screw out (counterclockwise) to decrease pressure.
# Troubleshooting Your Sprayer

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Reason</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump runs but produces no flow</td>
<td>Pump is not primed</td>
<td>Flood suction, then restart pump.</td>
</tr>
<tr>
<td>Pump fails to prime</td>
<td>Air is trapped inside pump</td>
<td>Disconnect discharge hose from pump. Flood suction hose, restart pump, and run pump until all air has been evacuated.</td>
</tr>
<tr>
<td>Pump loses prime Chattering noise, pressure fluctuates</td>
<td>Air leak in suction hose or inlet fittings</td>
<td>Remove suction hose and test for leaks by pressurizing hose with water. Make sure thread sealant has been used on all fittings. Remove suction line and inspect it for a loose liner or debris lodged in hose. Avoid all unnecessary bends. Do not kink hose. Clean strainer.</td>
</tr>
<tr>
<td></td>
<td>Suction line is blocked, collapsed or too small</td>
<td></td>
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<tr>
<td></td>
<td>Clogged suction strainer</td>
<td></td>
</tr>
<tr>
<td>Low pressure at nozzle</td>
<td>Unloader valve is bypassing</td>
<td>Make sure unloader is adjusted properly and bypass seat is not leaking. Make sure nozzle is matched to the flow and pressure of the pump. If the nozzle is worn, replace. Refer to above priming information.</td>
</tr>
<tr>
<td></td>
<td>Incorrect or worn nozzle</td>
<td></td>
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<tr>
<td></td>
<td>Restricted intake</td>
<td></td>
</tr>
<tr>
<td>Pressure loss in general</td>
<td>Screen clogged</td>
<td>Check the screen for debris and clean or replace. Make sure it is big enough. Inspect valves for rust, wear, pitting and debris and replace if necessary. Plumbed wrong. See if the flow is diverting out of the bypass line.</td>
</tr>
<tr>
<td></td>
<td>Inlet size too small</td>
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<tr>
<td></td>
<td>Worn or clogged valves are stuck due to rust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unloader bypassing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>System leaks</td>
<td>Check for leaks.</td>
</tr>
</tbody>
</table>