# QSpray

QUALITY EQUIPMENT & SPRAY

# 25 Gallon 12-Volt Skid Sprayer

Model #: QES25

## Owner's Manual

Read this manual completely before operating your sprayer.



**Questions? Our shop techs build and service these rigs. Call us.**

Sales & Support: Mon–Thu 7:30 a.m.–4:00 p.m. | Fri 7:30 a.m.–3:00 p.m. (MST)

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# Specifications

| Component | Specification |
|---|---|
| Pump | Shurflo 8000-543-138 12V DC diaphragm pump; 1/2" male pipe thread inlet and outlet; max pressure 100 psi; max flow 1.8 GPM; pressure-activated (demand) switch; corrosion-resistant body, chemical-resistant seals; rebuildable |
| Tank | 25 gallon one-piece seamless polyethylene; secured with steel bands; low-end plumbed to reduce vapor lock and suction problems; anti-siphon / backflow prevention device |
| Hose reel | Cox 1125-4-200, manual rewind; steel construction with CPC powder coat; adjustable tension brake; rebuildable brass swivel; 3/16" steel reel lift, passenger-side mount |
| Spray hose | 300 ft of 3/8" heavy-duty chemical-resistant PVC; 600 psi working pressure; ball valve at hose end; quick disconnect; stainless band clamps |
| Spray gun | Pro-Pest 505; aluminum body, stainless valve stem and tip, Viton seals; adjustable stream; rebuildable; quick disconnect |
| Strainer | Line strainer with stainless steel screen and Viton gasket; brass gate valve at tank outlet |
| Frame | 3/16" welded steel, joints welded top and bottom; painted; raised skid design for easy truck-bed cleanout |
| Power | 12V DC (vehicle battery) |

# 90-Day Money Back Guarantee & Warranty

Every QSpray-built power spray rig, including this one, is fabricated and assembled in our Phoenix shop and backed by our **90-Day Money Back Guarantee**. If you are not happy with your sprayer for any reason within 90 days of the date it ships, return it and we will refund your purchase price, less the cost of shipping it back to us. Original shipping charges are not refundable.

**To start a return:** call (602) 371-1993 for a Return Merchandise Authorization (RMA); a written RMA is required for every sprayer return. We would appreciate the chance to fix any problem first, but it is not required. Return shipping is your responsibility; we can schedule freight for you and deduct it from your refund.

**Requirements:** the sprayer must come back in good working condition (damaged, abused, or modified units are not eligible); all water and chemical must be drained from the tank, hose, and pump, as required by law for shipping; it must have been used only with water, pesticides, herbicides, or fertilizers; and the guarantee applies to the original purchaser only, one sprayer per customer, not to rigs bought for resale.

**Component warranties:** the polyethylene tank carries a 3-year and the Cox hose reel a 2-year manufacturer's limited warranty; the Shurflo pump and other components are covered per their manufacturers. QSpray will help you process any component warranty claim.

# Safety Information

**WARNING** Read and understand this manual before use. Failure to follow these instructions can cause serious injury, property damage, or chemical exposure, and will void your warranty.

### Never run these fluids through the sprayer

- Gasoline, diesel, kerosene, or any flammable or combustible liquid
- Asphalt or concrete sealers, roofing compounds, or two-part / curing products
- Abrasive slurries or any liquid with solids that can pass the strainer
- Water or any liquid intended for drinking by people or animals

### Operating safely

- Only trained operators should use the sprayer. Do not operate under the influence of drugs or alcohol.
- Wear the PPE required on the chemical label: at minimum, chemical-resistant gloves and eye protection. Add a respirator and coveralls where the label calls for it.
- Spray with the wind at your back and never let drift reach people, pets, water sources, or neighboring property.
- Never point the spray gun at yourself or anyone else, even when you think the system is depressurized.
- Do not exceed the 100 psi maximum rating of the pump. Never modify the pressure switch to raise its shutoff pressure.
- Inspect hoses, fittings, and clamps before every use. Replace any hose that is cracked, kinked, blistered, or soft.
- Release pressure (see page 8) and disconnect power before any maintenance, fitting change, or strainer cleaning.
- Secure the skid to the vehicle before driving (see page 7). An unsecured 25-gallon tank weighs over 200 lb when full.
- Do not operate outdoors during lightning. Keep power wiring away from moving parts, heat sources, and sharp edges.

# Chemical Handling & Disposal

- Always read and follow the pesticide or chemical label. The label is the law.
- Mix only the amount you will use. Never dump leftover mix or rinsate on the ground, into drains, or near water.
- Dispose of rinsate and unused product according to the label and local, state, and federal regulations.
- Never store the sprayer with chemical in the tank, pump, or hose for extended periods.
- Before returning the sprayer or pump for service: drain it, flush with clean water (and a neutralizer if required by the chemical), drain again, and attach a written note stating the unit has been decontaminated and what chemical was last used. Shipping hazardous chemicals is illegal without proper licensing.

# Sprayer Components




Figure 1: Overall view

| # | Component | What it does |
|---|---|---|
| 1 | Tank fill lid | Wide opening for adding water and chemical |
| 2 | Anti-siphon fill assembly | Backflow prevention: keeps tank contents from siphoning back into a water supply while filling |
| 3 | Tank hold-down bands | Hold the tank securely to the frame during transport |
| 4 | Brass gate valve | Shuts off flow from the tank so you can clean the strainer or service the pump without draining |
| 5 | Line strainer | Stainless screen catches debris before it reaches the pump and gun |
| 6 | Shurflo 8000 pump | 1.8 GPM at up to 100 psi; built-in pressure switch shuts it off when the gun closes |
| 7 | Cox 1125 hose reel | Manual-crank steel reel, raised on a 3/16" steel lift |
| 8 | Brass reel swivel | Lets the reel turn while the hose stays pressurized; rebuildable |
| 9 | Raised steel skid | Keeps the frame off the bed for easy cleanout; holes in each foot for bolting down |

# Close-Up Views



**Figure 2: Gate valve and strainer (4, 5).** Close the red-handled gate valve before opening the strainer bowl.




**Figure 3: Shurflo 8000-543-138 pump (6).** The pressure switch is on the pump head; the pump starts and stops on demand.



**Figure 4: Fill lid and anti-siphon assembly (1, 2).** Fill through the anti-siphon assembly, never with a hose submerged in the tank.

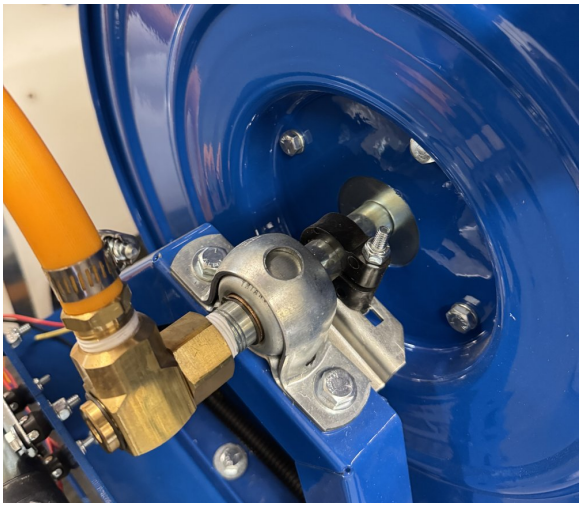


**Figure 5: Reel swivel (8).** A drip here means the swivel O-rings are worn; rebuild with a Cox swivel kit.

# Hose End & Reel Controls




**Figure 6: Hose end (10, 11, 12).** Ball valve, quick disconnect, and Pro-Pest 505 gun.



**Figure 7: Reel controls (13, 14).** Tension brake and rewind crank.

| # | Component | What it does |
|---|---|---|
| 10 | Hose-end ball valve | Shutoff right at the gun; close it before disconnecting the gun |
| 11 | Quick disconnect | Swap the gun for other tools, or remove it for storage |
| 12 | Pro-Pest 505 spray gun | Twist the tip to adjust from fine fan to straight stream |
| 13 | Tension brake | Adjustable drag that keeps the reel from overrunning when you pull hose |
| 14 | Rewind crank | Rewind hose evenly across the drum to prevent kinks |
| — | 300 ft × 3/8" spray hose | Chemical-resistant PVC rated to 600 psi working pressure |

# Installation & Power Hookup

## Mounting the skid

- Position the skid in the bed with the hose reel on the passenger side for curbside access.
- Bolt the skid to the bed through the holes in each of the four feet (Figure 8), or use rated ratchet straps on all four corners. The skid must not be able to slide or tip under hard braking.
- Make sure the strainer, gate valve, and pump remain reachable after mounting.

## Connecting power

Your sprayer ships with about 5 ft of 12-gauge red and black lead wire, taped together and coiled at the reel. The ON/OFF toggle switch is mounted on the reel stand, and a 15A blade fuse in a weatherproof holder is already installed in the wiring. The wire ends are left bare so you can cut them to length and terminate them for your vehicle.



**Figure 8: Skid foot.** Bolt through the hole in each foot.

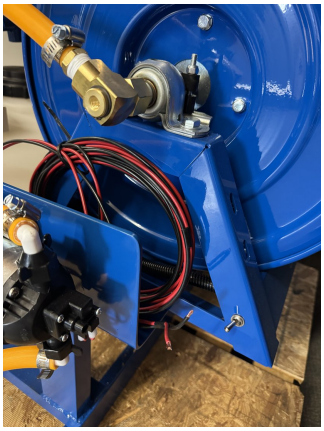


**Figure 9: Lead wires and toggle switch.** Leads ship coiled at the reel; the switch is on the reel stand.

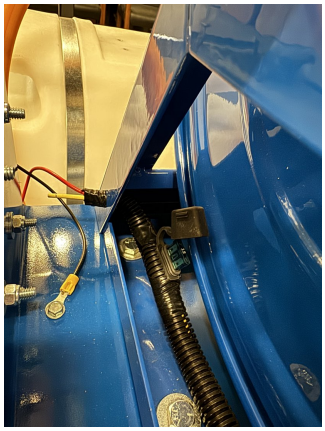


**Figure 10: 15A fuse holder.** Located in the wiring loom beneath the reel.

1. Uncoil the leads and route them to the battery, away from exhaust, sharp edges, pinch points, and moving parts. Secure them with zip ties.
2. If the leads won't reach, splice in matching red and black wire of **12 gauge or heavier** using sealed (heat-shrink) butt connectors. For long runs to a battery under the hood, 10 gauge helps the pump keep full pressure. Thinner wire causes voltage drop and weak spraying.
3. Install terminals suited to your battery or ground point (not included).
4. Connect the **black** lead to ground: the battery negative (–) terminal or a clean, bare-metal chassis ground.
5. Connect the **red** lead to the battery positive (+) terminal. Reversed polarity can damage the pump motor.
6. Keep the toggle switch OFF while connecting, and until the tank has fluid and the gate valve is open.

**Note:** replace a blown fuse only with a 15A fuse. Switch the pump OFF when not spraying so a small leak can't cycle it and drain your battery.

# Operating Your Sprayer

## First start-up (use clean water)

1. Clear the area of unnecessary people. Put on PPE.
2. Fill the tank with a few gallons of clean water only. This lets you check for leaks before adding chemical.
3. Open the brass gate valve at the tank outlet.
4. Check the line strainer for debris and confirm the bowl is hand-tight.
5. Confirm all hose clamps and fittings are tight and the hose is undamaged.
6. Pull several feet of hose off the reel. Set the reel tension brake so the reel turns smoothly without spinning free.
7. Point the gun into the tank or a safe area, open the hose-end ball valve, and squeeze the trigger.
8. Flip the toggle switch ON. Hold the trigger open until a steady, air-free stream comes out. This primes the pump and purges air from 300 ft of hose and may take a minute.
9. Release the trigger. The pump should build pressure and shut off on its own within a few seconds. If it keeps running or restarts with the gun closed, see Troubleshooting.
10. Walk the system and check every connection for drips. Fix any leaks before adding chemical.

## Spraying

1. Mix chemical in the tank according to the product label.
2. Flip the toggle switch ON and open the hose-end ball valve.
3. Twist the Pro-Pest 505 tip to set the pattern from fan to stream, then spray.
4. The pump starts when you pull the trigger and stops when you release it. This is normal demand-pump behavior.
5. Rewind hose evenly across the reel when finished to avoid kinks and uneven wraps.

## Shutting down

1. Flip the toggle switch OFF.
2. Point the gun into the tank and squeeze the trigger to release pressure in the hose.
3. Close the hose-end ball valve.
4. If the sprayer will sit for more than a few hours, flush it (page 9).

| NOTE | Avoid running the pump dry for extended periods. If the tank runs empty mid-job, switch the pump off, refill, and re-prime. |
|---|---|

# Cleaning, Maintenance & Storage

## Daily flush

1. Drain any remaining mix and dispose of it per the label.
2. Add 3–5 gallons of clean water to the tank and spray it through the gun back into a container or onto a labeled-site area until it runs clear.
3. For chemicals that leave residue, use a tank cleaner per the label, then flush again with clean water.
4. Turn the pump off and release pressure.

## Routine checks

| When | Check |
|---|---|
| Every use | Hoses and clamps for wear or leaks; strainer screen; tank bands and frame mounting |
| Weekly | Clean strainer screen and inspect gasket; check reel swivel for drips; check wiring and terminals for corrosion |
| Monthly | Inspect gun seals and tip; lubricate reel bearings and chain if equipped; tighten frame hardware |
| As needed | Rebuild pump (Shurflo 8000 kits), reel swivel, or gun with factory kits, all stocked at QSpray. The Shurflo 8000 owner's manual and parts breakdown are on the pump's page at qspray.com |

## Cleaning the strainer

1. Turn the pump off and release pressure.
2. Close the brass gate valve at the tank.
3. Unscrew the strainer bowl, rinse the stainless screen, and inspect the gasket.
4. Reassemble hand-tight, reopen the gate valve, and re-prime if needed.

## Freezing weather & storage

- Water left in the pump, strainer, or hose can freeze and crack them. Freeze damage is not covered by warranty.
- Before freezing temperatures or long storage: flush, drain the tank, then pump RV-type (propylene glycol) antifreeze through until it comes out the gun.
- Store out of direct sun when possible to extend tank and hose life.

# Troubleshooting

| Symptom | Possible cause | Fix |
|---|---|---|
| Pump won't run | Toggle switch off; blown 15A fuse; loose or corroded connection or ground; low battery | Check switch, fuse, and terminals; confirm 12V at the pump; charge or run vehicle |
| Pump runs but won't prime / no flow | Gate valve closed; tank empty; clogged strainer; air leak on suction side; air in a long hose | Open valve; add fluid; clean strainer; tighten suction fittings; hold gun open longer to purge air |
| Pump keeps running with gun closed | Leak downstream (fitting, swivel, gun); air still in system; low voltage; pressure switch worn | Check for drips; purge air; check voltage; have pressure switch tested/replaced |
| Pump cycles on and off with gun closed | Small leak at gun, swivel, or a fitting; worn pump check valve | Find and fix leak; rebuild pump valve assembly |
| Rapid on/off pulsing while spraying | Tip too small for pump flow; partially closed ball valve | Use a larger orifice or open tip pattern; fully open ball valve |
| Low pressure or weak spray | Clogged strainer or gun tip; kinked hose; worn pump valves or diaphragm; low voltage | Clean strainer and tip; straighten hose; rebuild pump; check battery |
| Leak at reel swivel | Worn swivel O-rings | Rebuild swivel with Cox repair kit |
| Gun drips when closed | Worn valve seat or seals in gun | Rebuild gun with Pro-Pest repair kit |

**NEED HELP?**

Call QSpray at **(602) 371-1993**, Mon–Thu 7:30–4, Fri 7:30–3 MST. We build these rigs in our Phoenix shop and stock the pumps, repair kits, hose, and parts to keep yours running.