



Think Sprayer
Think **ENDURASPRAY**

CONTENTS

| | |
|--|----|
| Introduction | 3 |
| Product Risk Assessment | 4 |
| Assembly and Operation | 5 |
| Mixing, Filling and Maintaining your Sprayer | 6 |
| Spraying | 7 |
| Breakdown of Parts | 8 |
| Exploded Diagram of all Models | 9 |
| Warranty Policies and Procedures | 10 |
| Warranty Exclusions | 11 |

Think Sprayer Think ENDURASPRAY

INTRODUCTION

Congratulations on the purchase of your Enduraspray 12 Volt Pro Series Spot Sprayer, which has been designed for effortless spraying of herbicides and pesticides.

The design of the tank enables the unit to be mounted on to the cargo rack of an ATV, UTV, pick up or trailer.

Warnings

1. When mounting to any vehicle ensure that you have read the vehicle Owner's Manual and that you comply with all the weight restrictions as specified by the vehicle manufacturer, as overloading can cause injury or death.
2. To ensure your own safety and that of your employees, if applicable, you must comply with all relevant environmental, work place health and safety legislation and codes of practice.
3. Select and wear appropriate Personal Protection Equipment (PPE) in accordance with the label of the product you intend using and your own safe work practices.
4. Care should be taken when spraying in windy conditions as spray drift may contaminate the air and may effect the operator or damage adjacent non-target vegetation.
5. Once the spraying operation has been completed, decontaminate the spray tank and spray accessories. Dispose of tank risings in compliance with current environmental, work place health and safety requirements.
6. PPE must still be worn while decontaminating your sprayer as per warning number 3.

Product Risk Assessment

| | Task | Hazards | Risk | Control Measures |
|---|---|---|--------|--|
| 1 | Partially fill the tank with water, connect the battery (if applicable) and test the spray unit | Manual handling; slips, trips or falls; finger jammed; electric shock or electrocution | Medium | Concentrate on tasks; follow safe manual handling techniques: - don't lift on your own if > 20kg, bend knees and keep back straight; keep fingers clear; keep unit at least 8m away from overhead power lines; ensure water is kept away from electrical sources |
| 2 | Check weather and ground conditions and select the appropriate PPE to suit the chemicals to be used | Manual handling; slips, trips or falls | Low | Put on PPE as per the chemical requirements in the Material Safety Data Sheet – coveralls, gloves, safety footwear, glasses and respirator; follow safe manual handling techniques: - don't lift on your own if > 20kg, bend knees and keep back straight |
| 3 | Mix chemicals and fill spray tank units | As above; spray drift, chemical spillage, emission of vapours or flammability; weather; untrained visitors | Medium | As above; user trained in chemical mixing and administration course. Follow the relevant Environment Protection Authority requirements, fire extinguisher present; keep visitors away from the job unless wearing full PPE |
| 4 | Use spray unit | As above; loss of load; work in heat and cold; noise; exceed load limit of vehicle; hose entanglement; terrain and slopes | High | As above; wear clothes to suit heat and cold; wear hearing protection if pump noise > 85 dBa; follow manufacturer's safe operation instructions for the vehicle and the spray unit; don't overload-water weighs 1kg per 1 litre; secure load to vehicle; hose tidy |
| 5 | Clean up, maintenance and storage | As above | Low | As above; continue to wear PPE for clean up; store tank in a dry, well-ventilated area |

Personal Protection Equipment (PPE)

Assembly and Operation

Assembly

The following steps are given as a guide to assemble your spot sprayer:

- Check inside tank for any foreign objects.
- Remove hose wraps, screws, clamps, bungee cords and gauge from parts bag.
- Install hose wraps and bungee cords using screws provided, taking care not to over tighten the screws.
- Attach hose to the discharge port of the regulator using worm drive clamp provided.
- Install drain tap.
- Fit lid on top of tank.

Operation

The following steps are given as a guide to operate your spot sprayer:

- When mounting sprayer to vehicle using ratchet tie-down straps, check that the spray tank is still secure after the first 15 minutes of operation and re-tighten as necessary.
- Partially fill the tank with clean water.
- Connect the battery clips to a 12V DC power supply (red to positive terminal, black to negative terminal) ensuring sufficient current capability (amps) to suit the pump. The pump's maximum amperage requirement is shown on its name plate.
- In order to prime the system and enable the pump to reach full pressure, depress the hand lance trigger to release trapped air. The pump may automatically switch off when the hand lance trigger is released.
- Pump cycling may occur with insufficient nozzle delivery. This continual switching on and off will reduce battery and motor life. Should this occur, adjust the setting of the nozzle tip or the regulator until the cycling stops.

Mixing Filling and Maintaining your Sprayer

Mixing and Filling

The following steps are given as a guide to mixing and filling your spot sprayer:

- Read the product label and follow the instructions carefully, taking special note with regard to the order in which the products are added to the tank.
- Calibrate the sprayer according to recognized calibration method using water only. Calibration must be done with the nozzle tip that has been selected for the spraying task.
- Measure out the correct quantity of pesticides using clean measuring jugs used only for this purpose.
- Half fill the sprayer with clean water then add the measured pesticide.
- Rinse out the measuring jug and empty container and pour all rinsings into the spray tank. Agitate by stirring with a suitable round edged paddle.
- Top up the tank with water to the required level, ensure that the tank is not over-filled and the outside is clean and dry before handling.
- Safely dispose of empty containers in compliance with current regulations.
- Mixing sites must be well away from watercourses and other environmental sensitive areas. **Children and animals must be kept away.**

Maintaining your Sprayer

The following steps are given as a guide to maintain your spot sprayer:

- After use, the sprayer must be thoroughly decontaminated including tank, pump, hoses and hand lance to avoid damage to crops from harmful spray residue and to the sprayer from corrosion or abrasion.
- After spraying, flush the tank, hose and hand lance by running it with clean water plus a recommended cleaning fluid. It is best to clean sprayers in the field or area just treated.
- The suction strainer attached to the pump suction line should be cleaned periodically. Unscrew lid, remove filter and flush with clean running water.
- Nozzle filters (if fitted), nozzle tips, nozzle caps and gaskets should be cleaned by soaking in water, brushing with a nozzle brush and allowed to dry. Never blow through nozzles with your mouth, nor use wire or pins to clear any blockages.
- When storing your spot sprayer ensure that it is clean and dry and kept in a well ventilated place.

Spraying

The following steps are given as a guide to mixing and filling your spot sprayer:

Planning to spray safely

- Before commencing spraying, plan the work effectively to reduce potential contamination.
- Wind direction and speed must be taken into account. Avoid spraying on still, hot and sunny days or when wind speed exceeds 6.5km/h.
- Do not spray if the operator, bystanders, watercourses or any non-target vegetation appears to be in danger from spray drift contamination.
- Drift can be reduced by lower nozzle height, lower pressures or by fitting larger nozzles.

Setting up your spray and adjusting the regulator

- Prior to commencing spraying, you will need to adjust the regulator knob (blue) to suit the desired pressure and spraying style.
- Winding the regulator clockwise will increase spraying pressure. Winding it counter clockwise will return liquid to the tank, increasing mixing and reducing spraying pressure.
- To begin, turn on the pump and activate the trigger or boom valve. Adjust the regulator to achieve the desired pressure on the gauge. Turn off the hand wand/boom valve and check to ensure the pump is not turning rapidly on and off or cycling. If the pump is cycling, you will need to reduce the spraying pressure slightly until this stops.
- **NOTE:** To operate the hand spray wand on-demand (where the pump activates only when the trigger is pulled), wind the regulator counter clockwise completely until it stops. No water can return to the tank and the pump pressure switch will control pump operation.

When spraying

- Spray at a constant speed (as used during calibration) and shut off the hand lance trigger at the end of each swath or before changing direction.
- Work in parallel lines at the correct spacing when spraying large area – this is better than moving the hand lance from side to side in a swinging movement which causes damage by overdosing.

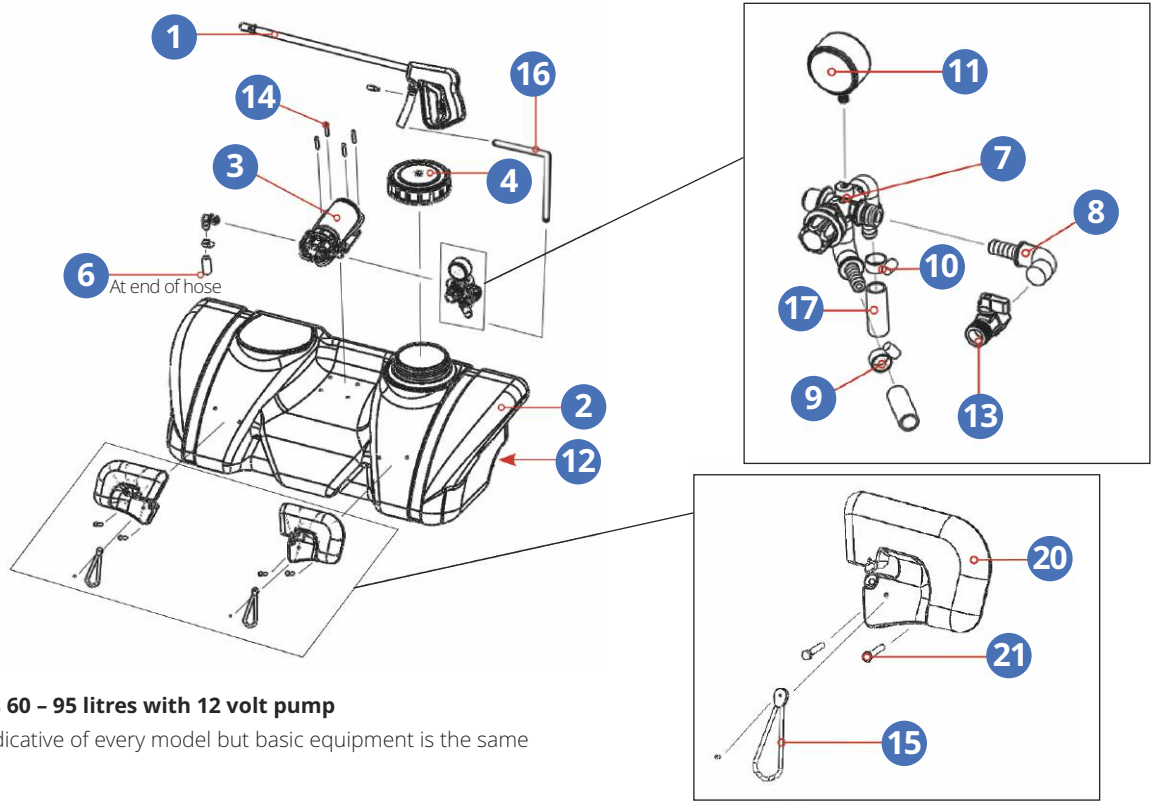
Breakdown of Parts

| | Code | Description | Quantity |
|----|--------|------------------------------------|----------|
| 1 | 135020 | Powerjet spray gun | 1 |
| | 135010 | Economy spray lance | 1 |
| 2 | 138206 | 60 L sprayer tank | 1 |
| | 138209 | 90 L sprayer tank | |
| 3 | 134010 | Delavan 3.8L/min pump | 1 |
| | 134026 | Delavan 8.3L/min pump | 1 |
| | 134035 | Delavan 11.4L/min pump | 1 |
| 4 | 135080 | 150mm screw lid | 1 |
| 5 | 135085 | 2.4 metre 12 volt electrical leads | 1 |
| 6 | 135060 | Suction foot filter (10mm) | 1 |
| | 135062 | Suction foot filter (13mm) | 1 |
| 7 | 134092 | Quick attach pressure regulator | 1 |
| 8 | 134078 | Quick attach 12mm threaded elbow | 1 |
| 9 | 135044 | 3/8" hose clamp | 2 |
| 10 | 135045 | 1/2" hose clamp | 2 |

| | Code | Description | Quantity |
|----|-----------|------------------------------------|----------|
| 11 | 134085 | Gauge 0-100Psi | 1 |
| 12 | 137022 | 3/4" drain bung | 1 |
| 13 | 137019 | 1/2" mini ball valve F/F | 1 |
| 14 | 211020 | M5 x 25 pan Phillips machine screw | 4 |
| 15 | CHYL200mm | Bungy Loop (200mm nominal length) | 2 |
| 16 | 19101001 | 10mm spray hose | 6m |
| 17 | 19101301 | 13mm spray hose | 1m |
| 18 | 136813 | 1/2" top hat grommet (Suction) | 1 |
| 19 | 136813 | 1/2" top hat grommet (Return) | 1 |
| 20 | CHKHPx2 | Hose wrap for Spot Sprayer | Set |
| 21 | 211025 | M6 x 25 pan Phillips machine screw | 4 |

Exploded Diagram of all Models

- 5 Leads not pictured
- 18 19 Around base of hose entering tank



For all Pro series models 60 – 95 litres with 12 volt pump
NB: Tank pictured is not indicative of every model but basic equipment is the same

Warranty

Warranty Policies and Procedures

The following warranty is the only warranty applicable to Enduraspray products, and to the maximum extent permitted by law, overrides any other conditions or warranties expressed or implied on Enduraspray products.

Other than legislative obligations to the contrary, Enduraspray will not be liable for incidental or consequential damages arising from the ownership or use of a product.

No person, including any dealer or representative of Enduraspray, is authorized to make any representation or warranty on behalf of Enduraspray in addition or inconsistent with these provisions. Purchasers to whom these provisions apply agree to hold Enduraspray not liable for claims by their customers in excess of the obligations of Enduraspray expressly set forth herein.

NOTE: All tank and spray systems must have their warranty activated by returning warranty card located at the end of this document within 21 days of purchase by the end user.

All products sold by Enduraspray are guaranteed to be free from defect in materials workmanship or manufacture for a period of 12 months from the initial date of purchase, excepting the following exclusions;

- Any parts/products found by Enduraspray to be defective, either in material or workmanship will be replaced or repaired within this period, at no cost to the initial purchaser if following conditions are met:
- The item has been operated in accordance with all instructions and warnings provided.
- Item is still owned and operated by original purchaser – proof of purchase is required to obtain warranty.

Warranty Exclusions

The following are expressly excluded from the warranty:

| Code | Description |
|--|--|
| Abuse | Failure as a result of neglect, such as improper operation. Lack of maintenance or continued operation after discovery of a defect that leads to further damage |
| Alterations | Any unauthorised alteration, modification, attachments or unauthorised repair to equipment |
| Clean-Up Time | Enduraspray does not pay for cleaning of products, parts or accessories or work area before or after the warranty repair |
| Damage | Damages or machine/component failure caused by carelessness/recklessness or accidental damage, improper operation, excessive speed, inappropriate storage or transportation. |
| Environmental Conditions and Application | Deteriorated or failed components such as o-rings, diaphragms, hoses, seals and connections damaged by corrosive chemicals, dirt and sand, excessive heat, moisture or other environmental impacts. Warranty determination on these type of failures will be made by Enduraspray, only after inspection of the failed component. |
| Inability Unsuitability | In no event shall Enduraspray be liable to any person for indirect or consequential damages or for injury or commercial loss resulting from any use or inability to use any Enduraspray product. |
| Maintenance | Component failure due to failure to perform maintenance services such as, oil and grease changes/ top-ups, failure to clean tanks, pumps filters, nozzles and spray lines. Failure to tighten or replace loose or missing bolts, nuts, fittings, shields and covers. |
| Non-Genuine Parts | Use of parts other than Enduraspray parts for repair of warranted items will automatically negate any warranty. Warranted components must be replaced with genuine parts |