



DRAPER[®]

12V ATV

SPOT SPRAYER

34674 / 34676 / 34677



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION

USER MANUAL FOR: 12V ATV Spot Sprayer

Stock Nos: 34674 / 34676 / 34677

Part Nos: SS37L / SS60L / SS98L

1.2 REVISION HISTORY

Date first published: November 2010.

First revision date: August 2021.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://drapertools.com/manuals>

Draper Tools Limited
Hursley Road
Chandler's Ford
Eastleigh
Hampshire
SO53 1YF
UK

Draper Tools Limited
Oude Graaf 8
6002 NL
WEERT
Netherlands

Website: drapertools.com

Product help line: +44 (0) 23 8049 4344

General Fax: +44 (0) 23 8026 0784

1.3 UNDERSTANDING THIS MANUAL'S SAFETY CONTENT

Warning! – Information that draws attention to the risk of injury or death.

Important – Information that draws attention to the risk of damage to the product or surroundings.

1.4 COPYRIGHT © NOTICE

Copyright © Draper Tools Limited.

Permission is granted to reproduce this publication for personal and educational use only. Commercial copying, redistribution, hiring or lending is prohibited.

No part of this publication may be stored in a retrieval system or transmitted in any other form or means without written permission from Draper Tools Limited.

In all cases this copyright notice must remain intact.

2. CONTENTS

2.1 CONTENTS

1. TITLE PAGE	
1.1 INTRODUCTION	2
1.2 REVISION HISTORY	2
1.3 UNDERSTANDING THIS MANUAL'S SAFETY CONTENT	2
1.4 COPYRIGHT © NOTICE	2
2. CONTENTS	
2.1 CONTENTS	3
3. WARRANTY	
3.1 WARRANTY	4
4. INTRODUCTION	
4.1 SCOPE	5
4.2 SPECIFICATION	5
4.3 HANDLING AND STORAGE	6
5. POWER SUPPLY	7
6. HEALTH AND SAFETY INFORMATION	
6.1 GENERAL SAFETY INSTRUCTIONS FOR SPRAYERS	8
6.2 ADDITIONAL SAFETY INSTRUCTIONS FOR SPRAYERS.....	9
7. TECHNICAL DESCRIPTION	
7.1 IDENTIFICATION FOR 34674.....	10
7.2 IDENTIFICATION FOR 34676 & 34677	11
7.3 MANUAL BAG CONTENTS.....	12
8. UNPACKING AND CHECKING	
8.1 PACKAGING.....	13
8.2 WHAT'S IN THE BOX.....	13
9. ASSEMBLY	
9.1 ATTACH LANCE CLIPS TO TANK.....	14
9.2 ATTACH DRAIN CAP TO TANK	14
9.3 ATTACH GUN HOSE TO PUMP.....	14
9.4 ATTACH HOSE GUIDE TO TANK	15
9.5 ATTACH GUN HOSE TO SPRAY GUN	15
9.6 BROADCAST ASSEMBLY (34676 & 34677).....	16
9.7 ATTACH BROADCAST BRACKET TO TANK.....	16
9.8 FINISH BROADCAST KIT ASSEMBLY	17
9.9 ATTACH SPRAYER TO VEHICLE	18
9.10 CONNECT THE REMOTE SWITCH TO THE PUMP POWER CORD.....	18
10. OPERATION (PREPARING FOR USE)	
10.1 CLEAN THE SUCTION STRAINER OF ANY CHEMICAL RESIDUE.....	21
11. OPERATION AND USE	22
11.1 OPERATION AND USE (STOCK NO. 34674)	24
11.2 OPERATION AND USE (STOCK NOS. 34676 & 34677)	25
12. TROUBLESHOOTING	29
13. DISPOSAL	
13.1 DISPOSAL.....	30

3. WARRANTY

3.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or Product Help Line (023) 8049 4344.

A proof of purchase **must** be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covering parts and labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. This warranty does not apply to any consumable parts, any type of battery or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

Your Draper warranty is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the warranty period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

These 12V DC ATV Spot/Crop Broadcast Sprayers mounts to any all-terrain vehicle (ATV) by fixing straps and securing to ATV. The 60L and 98L (Stock number: 34676 and 34677) are supplied with two lances: one attached to tank bracket for broadcast spraying and the second with a trigger for hand operation. The broadcast lance is not included for the 37L (Stock number 34674). All the products in this range are ideal for spraying fertiliser, weed killer, de-icer and ethylene glycol products. Powered by 12V battery or connected via electric 12V ATV supply.

- Pressure activated diaphragm pump powered from electrics in ATV engine produces smooth flow of solution from tank.
- Trigger operated lance with heavy droplet pattern for minimal spray drift in windy conditions.
- Remote switch for easy operation.
- Tank manufactured from special chemical resistant polymers for extra-long life.

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

4.2 SPECIFICATION

STOCK NO.....	34674 / 34676 / 34677
PART NO.....	SS37L / SS60L / SS98L
RATED VOLTAGE.....	12V DC
MAXIMUM L/MIN.....	3.8L/MIN (1.0GPM) / 8.3L/MIN (2.2GPM) / 8.3L/MIN (2.2GPM)
MAXIMUM PRESSURE.....	40PSI (4.8BAR) / 70PSI (4.8BAR) / 70PSI (4.8BAR)
TANK CAPACITY MAXIMUM.....	37L / 60L / 98L
EMPTY WEIGHT.....	4KG / 8.3KG / 9.9KG
FULL WEIGHT.....	41KG / 68.3KG / 108KG
BROADCAST NOZZLE	
SPRAY WIDTH.....	N/A / 4.8M / 4.88M
SPRAY OVERLAP.....	N/A / 300MM / 300MM

Component Materials*

Tank.....	Polyethylene, EPDM.
Suction Tube.....	Polypropylene, PVC, Stainless Steel.
Hose.....	PVC.
Pump.....	Polypropylene, Viton®, Santoprene®, Stainless Steel.
Valves.....	PVC, Buna-N.
Gun and Nozzle.....	Nylon, Polyacetal, Aluminum.

***Before using any chemical, check to ensure the chemical is compatible with all materials in the system**

4. INTRODUCTION

4.3 HANDLING AND STORAGE

- Care must be taken when handling this product.
 - Dropping this product could have an effect on its accuracy and could also result in personal injury. This product is not a toy and must be respected.
- Environmental conditions can have a detrimental effect on this product if neglected.
 - Exposure to damp air can gradually corrode components.
 - If the product is unprotected from dust and debris, components will become clogged.
 - If not cleaned and maintained correctly or regularly, the machine will not perform at its best.

Prepare the sprayer for end-of-season storage by running antifreeze through the system. This will keep internal parts lubricated, protect against corrosion, and keep the unit from freezing.

Caution!

The sprayer will be damaged if it freezes.

Protect the sprayer from freezing during storage by following the instructions below.

Preparing for storage.

Pour 4 litres of antifreeze into the tank.

Turn on the pump motor and squeeze the gun trigger briefly until fluid sprays. Store gun in lance clips. If equipped, store broadcast lance in stored position to prevent damage.

Removing from storage.

Drain the antifreeze left in the tank through the tank drain hole into a suitable container

Fill the tank with fresh water and run through the system. Operate the spray gun until the system is completely flushed. Be sure to set up containers to capture the antifreeze flush water.

Dispose of the antifreeze and flush water properly.

Always wear appropriate personal protective equipment whilst using, cleaning and servicing the spot/crop broadcast sprayer. Store the sprayer in a well ventilated area out of reach of children and away from livestock.

5. POWER SUPPLY

The sealed lead-acid battery in this appliance has a normal working life of many years. When the battery expires, it should be removed from the appliance for recycling.

Please contact your local solid waste authority for recycling information.

Warning!

Battery must be charged for 24 hours prior to first use.

Caution!

This appliance has a sealed lead acid battery that should be kept at full charge. Recharge when first received, immediately after each use, and every three months if not used. Immediately charge when the unit has been incorrectly overdischarged. Do not operate the unit while charging. Failure to do this may cause the battery life to be reduced greatly.

6. HEALTH AND SAFETY INFORMATION

6.1 GENERAL SAFETY INSTRUCTIONS FOR SPRAYERS

Chemical application safety

Warning!

Caution must be used when spraying chemicals to avoid unsafe exposure to humans and the environment.

Heed the warnings below and follow all instructions carefully.

Before spraying

Sprayer prep. ALWAYS inspect and prepare the sprayer before use according to the directions provided in this manual.

Keep sprayer off. Do not turn on power to the sprayer until ready to spray in order to avoid unintentional spray release.

Broadcast nozzle down. Make sure broadcast nozzle is oriented to spray straight down before starting the sprayer. An incorrectly positioned broadcast nozzle may spray chemicals on you or others

Wind speed. NEVER spray when wind speed exceeds 8 KPH in order to minimize spray drift.

Clear area/post. ALWAYS keep the work area clear of people and pets. POST warning notices to restrict access by the public for the period recommended on chemical label.

Operator age. You must be 16 years of age or older to operate this sprayer. Pesticides are especially toxic to children.

During spraying

Over application. DO NOT over apply pesticide. Apply at a rate recommended by chemical manufacturer. Excess pesticide can be dangerous to humans, damage desirable plants, and contaminate soil and water sources.

Never point gun. NEVER point the spray gun at people or animals.

Children/pets. ALWAYS exercise extra caution when spraying near areas accessible to children and pets.

Eating/smoking. DO NOT eat, drink, smoke, rub your eyes, or touch any part of your bare skin while handling chemicals and spraying.

Heat/flames. DO NOT spray near open flames or sources of heat.

Spills. ALWAYS clean up spills immediately per instructions on the chemical label.

Unattended. ALWAYS turn off vehicle and set brake or block wheels, turn off power to sprayer, and relieve system pressure before leaving sprayer unattended.

Troubleshooting. ALWAYS refer to the safety instructions in the Troubleshooting Section before attempting any repairs.

After spraying

Clean sprayer. ALWAYS clean the sprayer immediately after use according to the directions provided in this manual.

Decontaminate. ALWAYS decontaminate yourself immediately after you are finished spraying and handling chemicals. Wash all exposed areas of the body with soap and water and remove and launder clothing.

Chemical disposal/storage. ALWAYS dispose of or store remaining chemicals properly as recommended on the chemical label.

6.2 ADDITIONAL SAFETY INSTRUCTIONS FOR SPRAYERS

ATV vehicle handling safety

Warning!

Serious injury can occur if the ATV on which the sprayer is mounted is driven unsafely.

1. Less stable. Be aware that all vehicle handling will be affected with the filled sprayer attached. See your ATV's warning label for the hazards associated with driving:
 - a) Too fast
 - b) On paved surfaces
 - c) On inclines or rough terrain.
2. These hazards will be increased drastically as a result of the additional weight and location of the filled sprayer. The centre of gravity will be higher and weight distribution different, causing the ATV to be less stable when braking, turning, and driving. Exercise extra caution in vehicle handling. Use particular caution on sloped or rough surfaces in order to prevent rollover. A vehicle equipped with Roll Over Protection System (ROPS) is recommended if you will be operating on non-level terrain.
3. Speed limit. DO NOT exceed 8 kph with sprayer mounted on ATV.
4. Ride/transport. NEVER ride or transport cargo on the sprayer.

Chemical accident procedures

Warning!

Before you fill the sprayer, review the following information with regard to handling accidents.

Chemical spills, sprayer leaks, personal contamination, and poisoning are accident situations which you may encounter. All require an immediate response – See instructions below.

Sprayer leak In the event that the sprayer develops a leak while spraying chemicals, you must immediately stop spraying.

Turn off power to the sprayer and follow the directions below, as applicable.

Bodily chemical contact

Personal contamination can occur when chemicals splash, spill, or spray directly onto a person.

Follow the emergency first aid instructions on the chemical label listed in the “First Aid” or “Statements of Practical Treatment” section.

General procedures include:

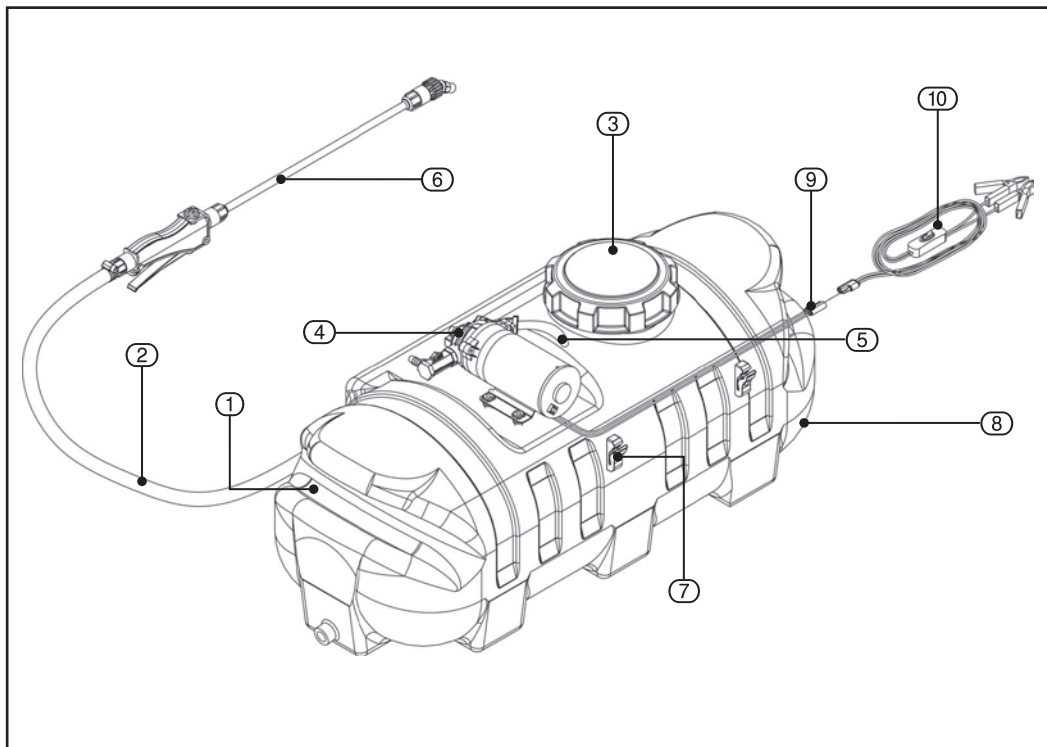
Eyes – immediately flush with water or follow other directions as specified on the chemical label.

Skin – immediately wash all contaminated skin surfaces with soap and water, or follow directions as specified on the chemical label.

Clothing – remove contaminated clothing immediately. Dispose of heavily contaminated clothing per the instructions on the chemical label for safe chemical/container disposal.

7. TECHNICAL DESCRIPTION

7.1 IDENTIFICATION FOR 34674



① Hose wrap

② Gun hose

③ Fill cap

④ Sprayer pump

⑤ Suction tube

⑥ Spray gun

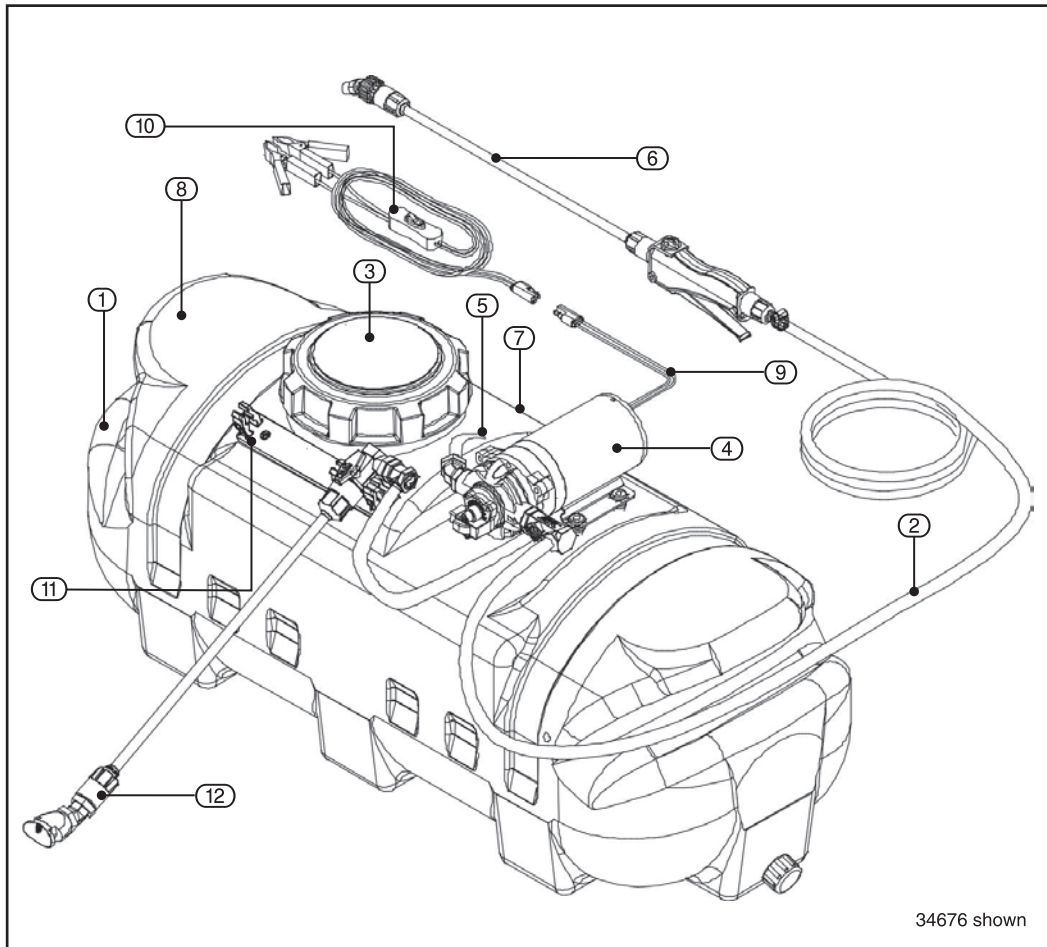
⑦ Lance clips

⑧ Sprayer tank

⑨ Pump power cord

⑩ Remote switch

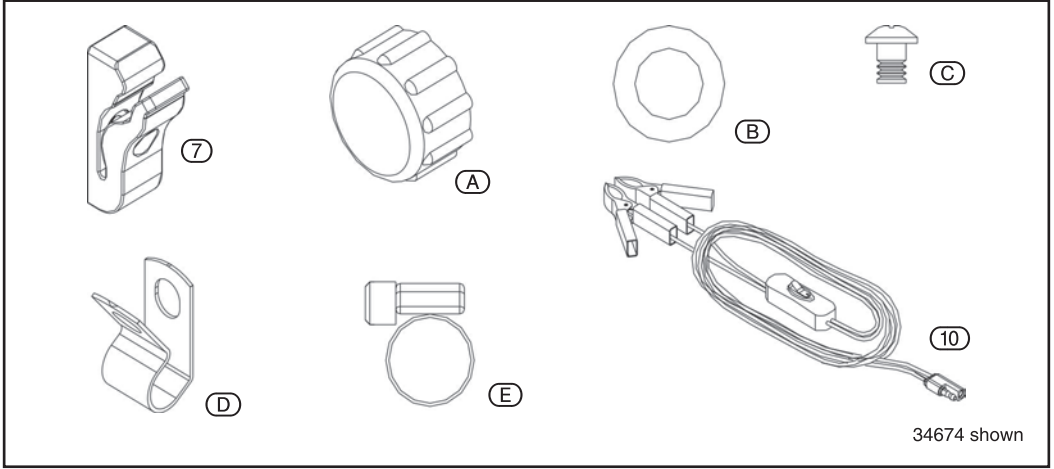
7.2 IDENTIFICATION FOR 34676 & 34677



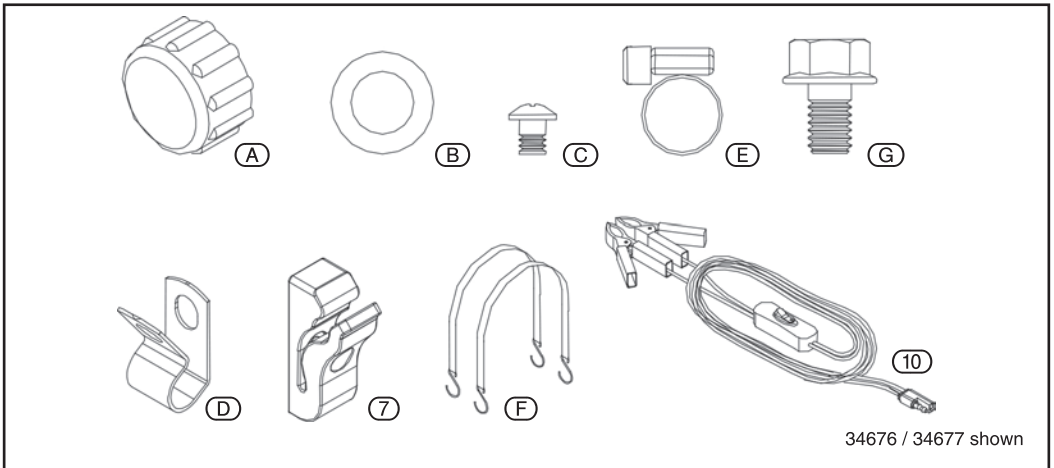
- | | |
|----------------|---------------------|
| ① Hose wrap | ⑦ Lance clips |
| ② Gun hose | ⑧ Sprayer tank |
| ③ Fill cap | ⑨ Pump power cord |
| ④ Sprayer pump | ⑩ Remote switch |
| ⑤ Suction tube | ⑪ Broadcast bracket |
| ⑥ Spray gun | ⑫ Broadcast lance |

7. TECHNICAL DESCRIPTION

7.3 MANUAL BAG CONTENTS



- (A) Drain cap
- (B) Rubber washer
- (C) Screw x 3
- (D) Hose guide
- (E) Hose clamp x 2
- (7) Lance clip x 2
- (10) Remote switch



- (A) Drain cap
- (B) Rubber washer
- (C) Screw x 3
- (D) Hose guide
- (E) Hose clamp x 2
- (F) Tie down strap x 2
- (G) Flange bolt
- (7) Lance clip x 2
- (10) Remote switch

8. UNPACKING AND CHECKING

8.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing, please contact the Draper Help Line (the telephone number appears on the Title page) and do not attempt to use the product.

The packaging material should be retained at least during the warranty period, in case the machine needs to be returned for repair.

Warning!

- Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly, according to local regulations.

8.2 WHAT'S IN THE BOX

Note: For details of our full range of accessories and consumables, please visit drapertools.com

9. ASSEMBLY

9.1 ATTACH LANCE CLIPS TO TANK – FIG. 1

Fasten the two lance clips (7) to the sprayer tank with screws (C).

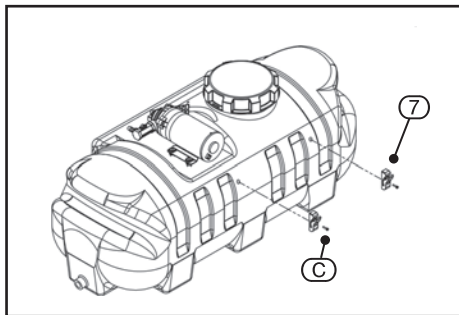


FIG. 1

9.2 ATTACH DRAIN CAP TO TANK – FIG. 2

Press the rubber washer (B) into the drain cap (A) with your finger.

Thread the drain cap onto the tank.

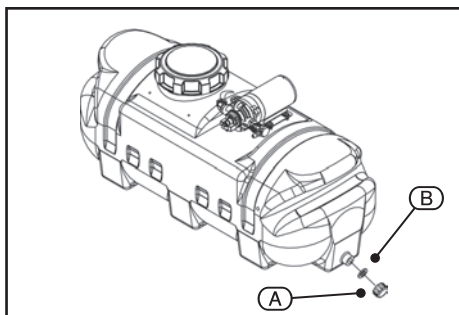


FIG. 2

9.3 ATTACH GUN HOSE TO PUMP – FIGS. 3 & 4

Install hose clamp on hose by sliding hose clamp over the end of the hose.

Push the hose onto the hose barb.

Slide the hose clamp over the hose barb.

Tighten the hose clamp.

Attach one end of the gun hose to the pump hose barb.

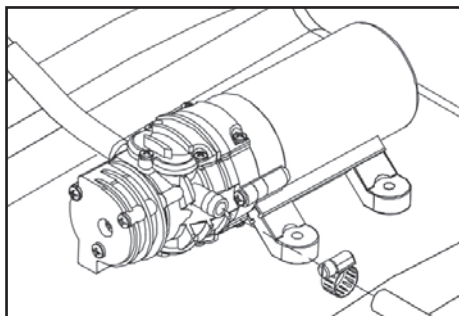


FIG. 3

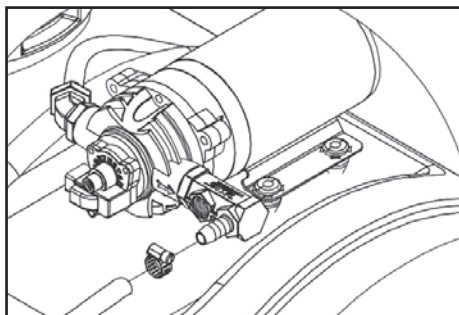


FIG. 4

9.4 ATTACH HOSE GUIDE TO TANK – FIGS. 5 & 6

Route gun hose through hose guide.
Attach hose guide to tank with bolt.

9.5 ATTACH GUN HOSE TO SPRAY GUN – FIG. 7

Install hose clamp on hose by sliding hose clamp over the end of the hose.

Push the hose onto the hose barb.

Slide the hose clamp over the hose barb.

Tighten the hose clamp.

Attach the end of the gun hose to the gun hose barb.

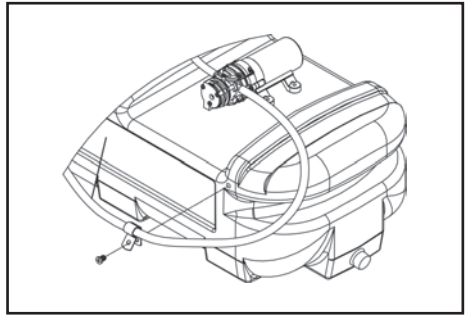


FIG. 5

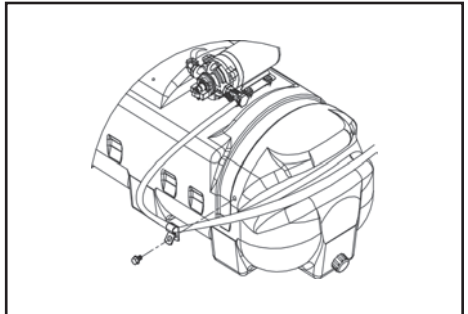


FIG. 6

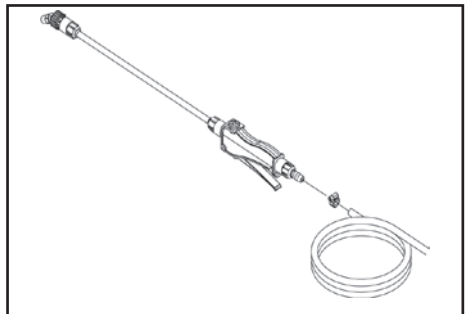


FIG. 7

9. ASSEMBLY

9.6 BROADCAST ASSEMBLY (34676 & 34677) – FIG. 8

Unpack and inspect parts from kit bag.

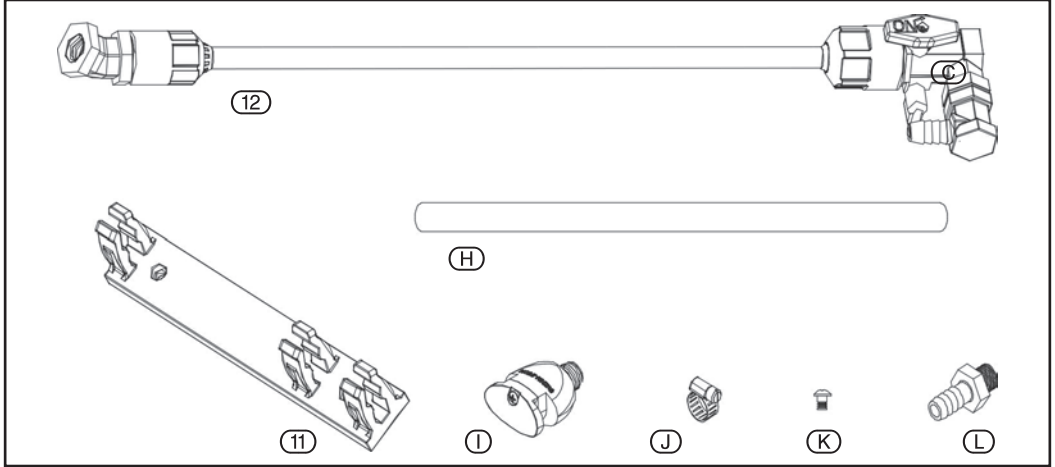


FIG. 8

- (12) Broadcast lance
- (H) 24" hose
- (11) Broadcast bracket
- (I) Broadcast nozzle

- (J) Hose clamp x 2
- (K) Screw x 2
- (L) Broadcast fitting

9.7 ATTACH BROADCAST BRACKET TO TANK – FIG. 9

Attach broadcast bracket (11) to tank using two screws (K).

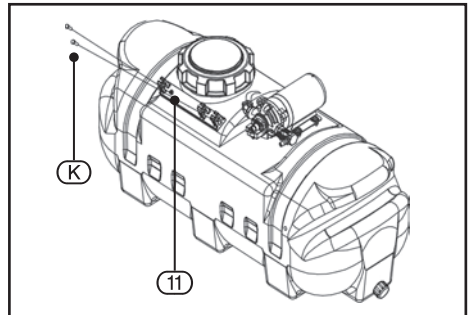


FIG. 9

9.8 FINISH BROADCAST KIT ASSEMBLY – FIG.10

Push broadcast lance (12) into broadcast bracket. Note orientation.

Install hose barb (M) into open port on pump. Hand tighten, then one turn with a wrench.

Connect 24" hose (H) from pump to broadcast lance using two hose clamps (J). Follow hose clamp instructions below.

Thread broadcast nozzle (I) hand tight onto the end of the lance. Note orientation.

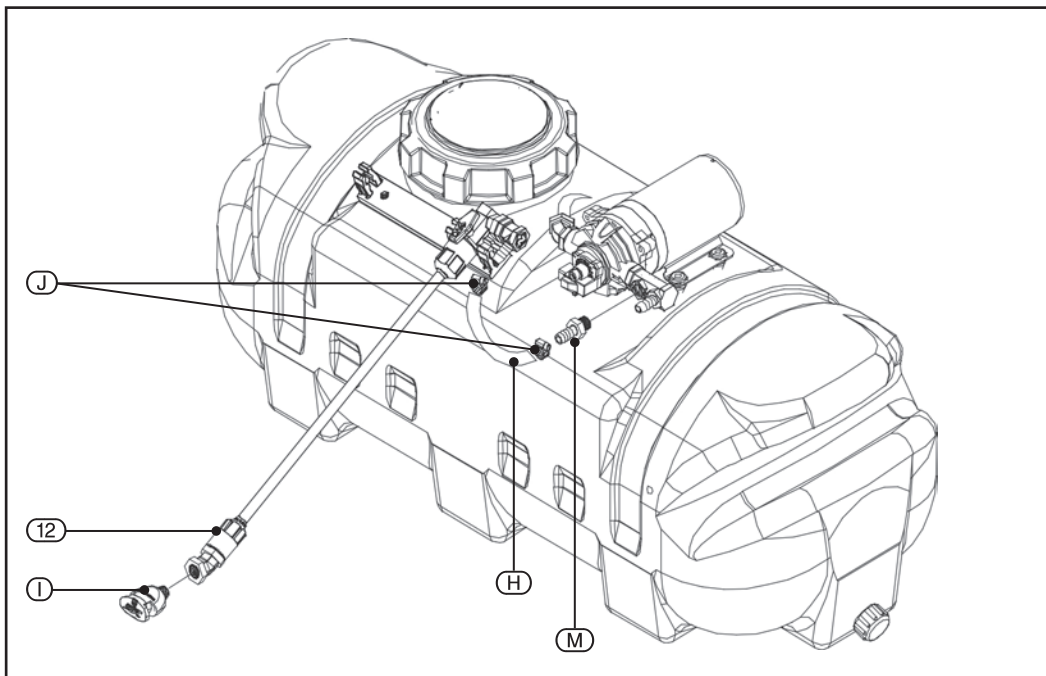


FIG. 10

(12) Broadcast lance

(H) 24" hose

(I) Broadcast nozzle

(J) Hose clamp x 2

(M) Hose barb

Hose clamp installation instructions

Slide hose clamp over the end of the hose.

Push the hose onto the hose barb.

Slide the hose clamp over the barb.

Tighten the hose clamp.

9. ASSEMBLY

9.9 ATTACH SPRAYER TO VEHICLE – FIG. 11

Note: If your vehicle battery will be inaccessible after the sprayer is attached, proceed to “connect remote switch (10) to vehicle battery” prior to performing this step.

Secure the sprayer tank to your ATV rack with two tank straps (straps not supplied with 34674).

Connect remote switch to vehicle battery.

Warning!

Batteries are hazardous because they contain caustic acid, can emit explosive gases, and can cause electric shock.

Caution must be exercised when making connections to a battery to avoid shock and contact with the acid, and to prevent any sparking that could lead to an explosion.

ALWAYS follow the safety instructions and steps listed below in exact sequence when connecting the sprayer’s remote switch to the battery terminals.

Preparatory safety steps.

ALWAYS use eye protection.

NEVER smoke or work near sparks or other sources of ignition.

NEVER touch both battery terminals at the same time or with any non-insulated tools.

If battery acid contacts skin or clothing, flush immediately with water and neutralize with baking soda.

Connect the sprayer’s remote switch to the vehicle battery using the following procedure.

Disconnect the vehicle battery ground wire.

Connect the remote switch’s red battery clamp to the positive (+) terminal of the battery.

Connect the remote switch’s black battery clamp to the negative (-) terminal of the battery.

Reconnect the vehicle battery ground wire.

Warning!

Always connect in this sequence to avoid possible shock.

9.10 CONNECT THE REMOTE SWITCH TO THE PUMP POWER CORD – FIG. 12

Note: Make sure the power switch is in the OFF position on the remote switch (10).

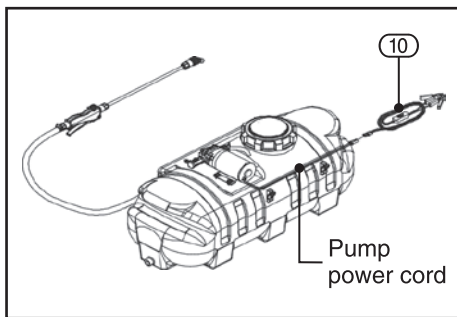


FIG. 11

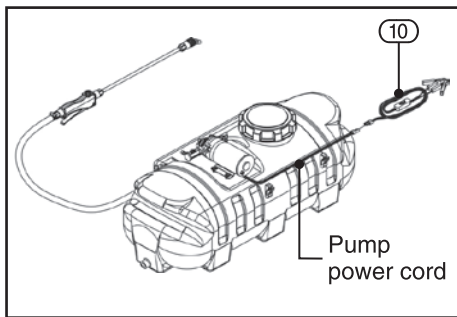


FIG. 12

Verifying a complete connection.

Check with a DC voltmeter, or by briefly turning the remote switch to the ON position and listening for pump activation.

After each use.

Disconnect power to the sprayer by disconnecting the sprayer's pump cord from the remote switch – the remote switch may remain connected to the battery.

Note: It is important to disconnect power to the sprayer when not in use for safety reasons. ALWAYS verify that the power has been disconnected or the remote switch is in the OFF position before adding chemicals or servicing.

To disconnect permanently.

When it is necessary to disconnect the sprayer's remote switch from the battery, use the following procedure:

Disconnect sprayer's pump cord from the remote switch.

Disconnect the remote switch from the vehicle battery as follows:

- a) Disconnect vehicle battery ground wire.
- b) Disconnect the remote switch's black battery clamp from the negative(-) terminal of the vehicle battery.
- c) Disconnect the remote switch's red battery clamp from the positive(+) terminal of the vehicle battery.
- d) Reconnect the vehicle battery ground wire.

Warning!

Always disconnect in this sequence to avoid possible shock. (Remember that on some vehicle models, you may need to remove the sprayer to access the battery).

Check and test completed assembly.

Warning!

Check and test completed assembly.

Serious injury could result from chemical leaks if sprayer is improperly assembled or the design of the sprayer is modified.

Follow the steps below to ensure the sprayer is properly assembled. Never modify the sprayer design.

9. ASSEMBLY

Check assembly.

Check assembly to assure the sprayer is properly assembled and in safe working condition:

- a) Check that the gun clip screws are tight, hose clamps are secure, and tank straps are properly fastened.
- b) While it is unlikely that factory-assembled components become loose, they should also be checked to make sure they are tight.

Test with water.

Test the system for leaks with water:

- a) Fill the tank with water.
- b) Connect the remote switch to the pump power cord and turn the remote switch ON. The pump is an “on demand” pump. When turned on, the pump will prime itself, then turn off. When the gun trigger is squeezed, the pump will automatically start.
- c) Operate the spray gun by squeezing the gun trigger.
- d) Check for leaks throughout the system. If a leak is detected, fix the leak and re-test the system with water until no leaks are detected.

10. OPERATION (PREPARING FOR USE)

If the sprayer has been used previously, it must be prepared BEFORE EACH SUBSEQUENT USE.

Warning!

Read instructions below carefully for inspecting and preparing the sprayer.

Damaged or clogged equipment could result in leaks or uncontrolled spray.

Leaks could result in injury to the operator or bystanders from chemical exposure, or cause damage to the environment.

Important safety rules.

Power off. Make sure all power is OFF before cleaning, inspecting, or servicing the sprayer.

Guards/shields. Make sure all guards and shields are replaced after servicing the sprayer.

Replacement parts. If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the sprayer.

Ensure the sprayer is securely attached to the vehicle.

Ensure the sprayer has been thoroughly flushed and drained of all residual chemical from prior uses.

10.1 CLEAN THE SUCTION STRAINER OF ANY CHEMICAL RESIDUE – FIG. 13

It is important to clean the suction strainer before each use to ensure it is not clogged and to prevent residual chemical from contaminating sprayer contents.

Important: The strainer must be accessed by reaching into the tank, so the tank must be empty to avoid immersing your hand in chemicals.

- a) Open fill cap on top of tank.
- b) **USING RUBBER GLOVES**, reach into the tank and pull the suction strainer off the end of the suction tube.
- c) Run the suction strainer under fresh water to remove debris.
- d) Replace the suction strainer onto the end of the suction tube specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the sprayer.

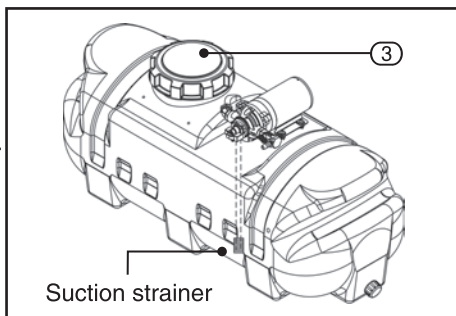


FIG. 13

Inspect and test the sprayer thoroughly:

- a) Inspect hoses for exposed mesh and holes. Replace all worn or damaged hoses.
- b) Inspect tank and fittings for cracks and leaks. Replace all damaged fittings with original Kincome parts.
- c) Check to be sure retaining nut on gun nozzle is tight.
- d) Check to be sure all other nuts, bolts, and screws are tight.
- e) Check wheels and tires, if equipped. Make sure wheel lugs are tight and tires are inflated.
- f) Partially fill tank with plain water and spray to test for leaks. Repair as needed.

Important: After any repair work has been done, ALWAYS test for leaks with water one final time before using.

11. OPERATION AND USE

Assess wind conditions and clear work area.

Before you decide to spray, you must determine whether wind conditions are suitable. You must also restrict access to the work area to ensure the safety of bystanders.

Warning!

Do not spray if wind speeds are greater than 8 KPH or if there are bystanders in the intended spray area.

Assess weather conditions to ensure that it is not too windy to spray.

DO NOT SPRAY if wind speeds are greater than 8 KPH. Visible indication of wind speed:

If leaves are in constant motion or there is any branch movement, DO NOT spray because the wind is too strong.

Clear work area.

Clear the work area of all bystanders and pets.

Restrict access by the public for the period recommended on chemical label.

Fill the sprayer.

Warning!

ALWAYS wear personal protective equipment as directed on the chemical label when handling pesticides.

Long trousers and sleeves, chemical resistant gloves, and eye protection are strongly recommended.

Additional protective gear may be required depending on the particular pesticide.

Fill the sprayer using the following steps.

Review the “Operation – Important Safety Information” related to General Chemical Safety and Chemical Accident Procedures provided in this manual.

Choose a safe pesticide mixing and loading area.

Choose an outdoor, well-ventilated area away from unprotected people, animals, food, and other items that might become contaminated.

Wear personal protective equipment as directed on the chemical label.

Note: Additional equipment may be specified for mixing and loading activities.

Turn OFF power to the sprayer before filling.

The vehicle should also be off, with brake set or wheels blocked to prevent unintended movement.

Remove the fill cap (3) located on top of the sprayer (Fig. 14)

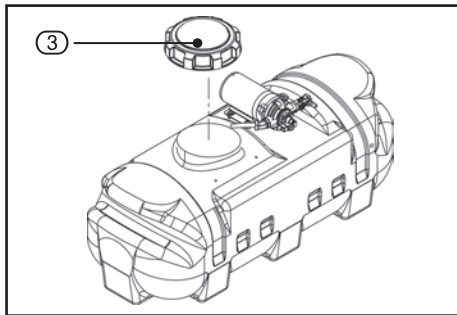


FIG. 14

Ensure tank is flushed of all chemicals from prior uses.

Chemicals can interact dangerously when mixed, and residue chemicals are also a health hazard.

Before filling tank, ensure drain cap is securely tightened (Fig. 15).

Add pesticide to tank through fill (Fig.16).

Confirm the chemical/water dilution ratios specified on the chemical label.

Determine chemical and water volumes needed for the planned application, taking into consideration that maximum tank capacity is:

37 litres for Stock No.34674

60 litres for Stock No.34676

98 litres for Stock No.34677.

Note: Only purchase and mix as much chemical as you need for the planned application in order to minimize chemical over application and the need for storing unused chemicals.

Add chemical to the tank through the fill cap.

If the chemical is not pre-mixed, add water and pesticide concentrate in the order prescribed on the label.

Ensure chemical is thoroughly mixed in tank.

Stirring device should be made of metal or plastic, non-chemical absorbing material, and then properly cleaned and stored after use.

Replace fill cap and tighten securely.

Operate the sprayer.

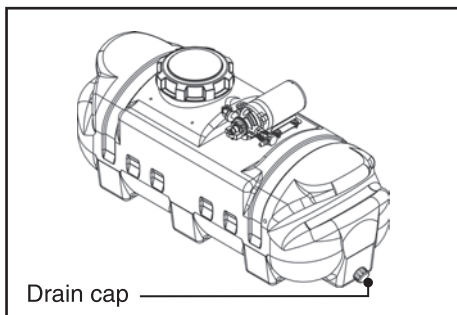


FIG. 15

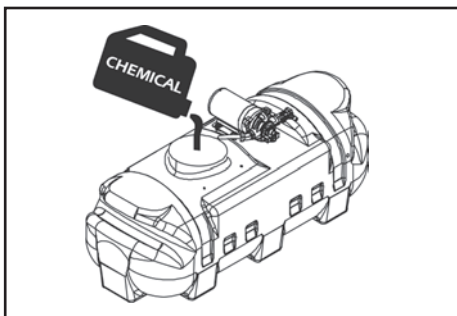


FIG. 16

11. OPERATION AND USE

11.1 OPERATION AND USE (STOCK NO. 34674)

Warning!

ALWAYS wear personal protective equipment as directed on the chemical label when spraying. Long pants and sleeves, chemical-resistant gloves, and eye protection are strongly recommended. Additional protective gear may be required depending on the particular pesticide.

Review the "Operation – Important Safety Information" related to Chemical Application Safety and ATV Vehicle Handling Safety provided in this manual.

Wear personal protective equipment as directed on the chemical label.

Turn on the power to the sprayer.

Verify the remote switch is connected to the pump power cord.

Turn the remote switch to the "ON" position.

Note: The pump will start automatically when power is turned on. The pump will cycle on and off as needed to retain pressure in the hose.

To spray, squeeze the gun trigger.

Twist the spray nozzle to adjust (Fig. 17).

From a straight stream to hollow cone spray pattern, as recommended on the chemical label for proper delivery rate.

Note: It is not unusual for the operator to be exposed to chemical drips while adjusting the nozzle – gloves should be chemical resistant.

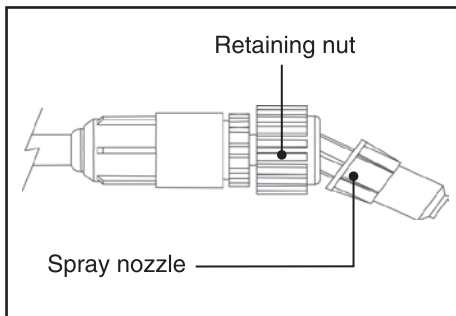


FIG. 17

If the sprayer becomes clogged or inoperative during use, discontinue use immediately.

DO NOT attempt to service while chemicals are in the sprayer and power is connected.

Return to service area to review instructions for troubleshooting before attempting to service.

Note: A reserve, clean container capable of holding at least 37 Litres should be kept for use when the sprayer tank needs to be emptied temporarily for repairs. The container should be properly labelled as to its contents if it is used.

11.2 OPERATION AND USE (STOCK NOS. 34676 & 34677)

Warning!

ALWAYS wear personal protective equipment as directed on the chemical label when spraying. Long trousers and sleeves, chemical-resistant gloves, and eye protection are strongly recommended.

Additional protective gear may be required depending on the particular pesticide.

Review safety information

Review the Operation - "Important Safety Information" related to Chemical Application Safety and ATV Vehicle Handling Safety provided in this manual.

Wear personal protective equipment as directed on the chemical label.

Close broadcast valve (Fig. 18).

Turn the broadcast nozzle to the off position.

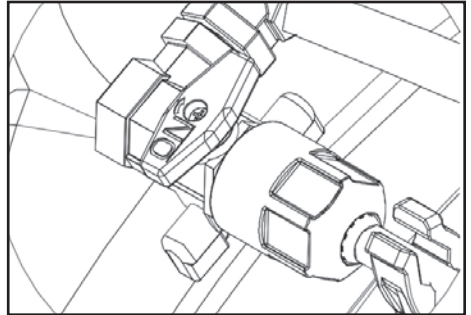


FIG. 18

Turn on the power to the sprayer.

Verify the remote switch is connected to the pump power cord.

Turn the remote switch to the "ON" position.

Note: The pump will start automatically when power is turned on. The pump will cycle on and off as needed to retain pressure in the hose.

To spray, squeeze the gun trigger (Fig. 19).

Twist the spray nozzle to adjust from a straight stream to hollow cone spray pattern, as recommended on the chemical label for proper delivery rate.

Note: It is not usual for the operator to be exposed to chemical drips while adjusting the nozzle – wear chemical resistant gloves.

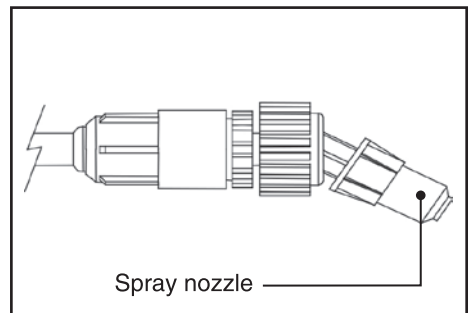


FIG. 19

11. OPERATION AND USE

Move broadcast lance into the broadcast position.

Ensure power to the pump is off, then lift the broadcast lance out of its stored position and click the lance into its broadcast position.

Stored position (Fig. 20).

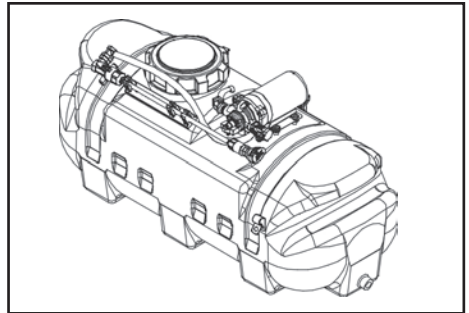


FIG. 20

Broadcast position (Fig. 21).

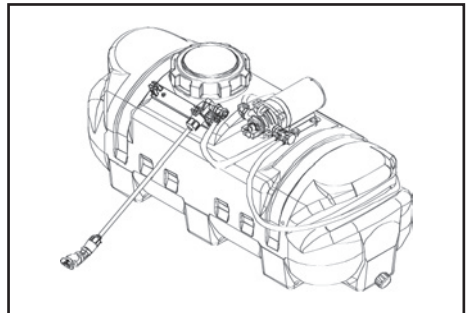


FIG. 21

Locate broadcast lance valve (Fig. 22).

Ensure the valve is in the off position.

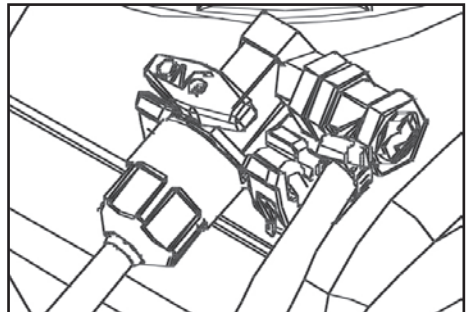


FIG. 22

Ensure correct spray pattern (Fig. 23).

Rotate the broadcast nozzle, if needed, so that the spray pattern is pointed down and evenly distributed.

Note: It is not unusual for the operator to be exposed to chemical drips while adjusting the broadcast nozzle.

Wear chemical resistant gloves.

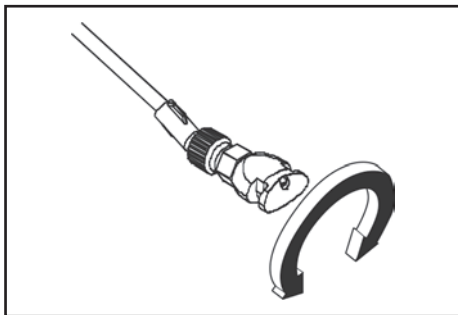


FIG. 23

Begin to spray (Fig. 24).

Turn the power ON, turn broadcast lance valve to the on position.

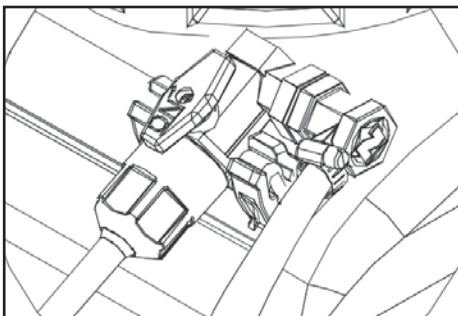


FIG. 24

Note: Broadcast lance and spot spray gun can be used simultaneously. Use the spot spray gun if you desire to apply pesticide only on selected plants. Use the broadcast nozzle if you wish to spray large ground areas.

Leaving unattended.

If the sprayer must be left unattended at any time:

Disconnect power to the sprayer.

Relieve system pressure by depressing the gun trigger.

Turn off the vehicle. Set brake or block the wheels.

Discontinue use if clogged or inoperative.

If the sprayer becomes clogged or inoperative during use, discontinue use immediately.

DO NOT attempt to service while chemicals are in the sprayer and power is connected.

Return to service area to review instructions for troubleshooting before attempting to service.

11. OPERATION AND USE

Clean sprayer and decontaminate after use.

When done using the sprayer, it is important to clean the sprayer and decontaminate yourself.

Do not store the sprayer with chemicals in the tank, as it is unsafe and could also result in damage to the equipment.

Warning!

Clean up and decontamination procedures must be followed after each use.

Improper equipment clean up and disposal of chemicals can result in dangerous chemical exposure to humans and the environment, as well as equipment damage.

Personal decontamination is required after spraying to minimize unsafe exposure to chemicals and potential illness.

If there is excess pesticide left in the tank, drain the tank.

Disconnect power to the sprayer and relieve system pressure by depressing the gun trigger.

Find a suitable container in which to drain the unused pesticide. Place it under the tank drain hole.

While wearing rubber gloves, eye protection, and all other required personal protective equipment, remove the drain cap and allow pesticide to drain into container.

When tank stops draining, replace drain cap. Tighten securely.

Properly store or dispose of unused chemical.

If the unused pesticide is to be stored for future use:

Store all unused pesticide in its original, or a suitably marked, container in a secure location out of the reach of children & animals.

If remaining pesticide is to be disposed:

Properly dispose of the remaining chemical and its container per the chemical manufacturer's recommendation and according to local hazardous waste disposal regulations.

Flush the sprayer per the chemical manufacturer's recommendations.

A general procedure is as follows:

Add fresh water to the tank.

Reconnect power to the sprayer.

Operate the spray gun and discharge all rinse water onto an area that can accept dilute pesticide application.

Add 18 litres of the chemical manufacturer's recommended cleaning solution. Operate the spray gun, collecting the discharged solution if recommended by the manufacturer.

After flushing, disconnect power to the sprayer and be sure all system pressure is relieved by squeezing the gun trigger.

Dispose of cleaning solution discharge as recommended by the manufacturer of the solution.

Decontaminate yourself after you are finished handling chemicals.

Remove all clothing worn during spraying and chemical handling.

Wash all exposed parts of the body with soap and water.

Launder clothing separately from other wash.

12. TROUBLESHOOTING

Problem	Cause	Solution
Pump will not turn on	Bad electrical connection	Check battery connections
	Short in wires	Check condition of wires
	Low voltage	Check voltage
Low pressure	Worn spray gun nozzle	Replace spray gun
	Worn boom nozzle	Replace boom nozzle
Low flow	Clogged intake tube	Remove obstruction
	Clogged suction strainer	Clean suction strainer
	Low voltage	Check voltage
Poor spray distribution	Clogged intake tube	Remove obstruction
	Suction strainer clogged	Clean suction strainer
	Worn spray gun nozzle	Replace spray gun
Pump cycles while not spraying	Leak in the system	Tighten leaking hose clamps or fittings, replace spray gun

13. DISPOSAL

13.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not dispose of WEEE* as unsorted municipal waste.



* *Waste Electrical & Electronic Equipment.*

CONTACTS

Draper Tools Limited

UK: Hursley Road, Chandler's Ford, Eastleigh,
Hampshire. SO53 1YF. U.K.

EU: Oude Graaf 8
6002 NL Weert (NL)

Help line: (023) 8049 4344

Sales desk: (023) 8049 4333

Internet: drapertools.com

E-mail: sales@drapertools.com

General enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools help line for details of an agent in your local area.

YOUR DRAPER STOCKIST

RDTL0821

©Published by Draper Tools Limited.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise without prior permission in writing from Draper Tools Ltd.