Model: FS-ATV-25 (5301170)  
(25 Gallon Lawn & Garden/ATV Sprayer)

Technical Specifications

- 25 Gal. Corrosion-Resistant Polyethylene Tank
- 12 Volt Diaphragm Pump, 2.2 GPM, 100 PSI
- Spot Sprayer Handgun
- 15 Ft. Handgun Hose (3/8” I.D.)
- Boom Ready

Caution: When fully filled with water, this sprayer will weigh 240 lbs. Consult the owner’s manual for your vehicle to verify that you are within its load carrying capacity

Assembly Instructions

- Make sure the contents of the sprayer’s carton match the items shown on page 2 of the manual.
- Follow the steps on page 3 to properly assemble the sprayer.
- After assembly is complete and before testing your sprayer, make sure you connect the electrical hook-up to the end of your pump and clip the clips to a fully charged battery. The red wire must be connected to the positive (+) and the black wire should be connected to the negative (-).
- The drain plug assembly should already be attached to the tank

General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your lawn & garden ATV sprayer.

WARNING: To reduce the risk of injury, the user must read and understand the operator’s manual before using this product.

WARNING: Cancer and Reproductive Harm
www.P65Warnings.ca.gov

Retain a copy of your receipt for your unit, as it will be required to validate any warranty service.

Products are warranted against manufacturer or workmanship defects for one year from date of purchase for home owner usage and 90 days for commercial usage.

For technical assistance, visit our website @ www.agspray.com or call: Toll Free to one of the above phone numbers

Our Technical Support Representatives will be happy to help you. To obtain prompt, efficient service, always remember to give the following information…

- Correct Part Description and/or part number
- Model #/Serial # of your sprayer

Part descriptions and numbers can be obtained from the illustrated parts list section(s) of this manual.
Contents of your sprayer’s carton (FS-ATV-25 - 5301170):

- Owner’s Manual
- Tank/Plumbing Pre-Assembly
- Spot Sprayer Handgun & 15’ x 3/8” Hose
- Lid w/Lanyard

Contents of Parts Bag #5281110

<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Part #</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5277040</td>
<td>Lead Wire Assembly (14 ga, w/Switch), 120”</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>5117334</td>
<td>#10-24 x 1/2” Machine Screw, Phillips Round Head</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5053096</td>
<td>Spray Wand Clip</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>5167004</td>
<td>Pressure Gauge, 0-200 p.s.i.</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>5051114</td>
<td>Hose Clamp, 1/2”</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>5034149</td>
<td>5/16-18nc x 3/4” Ig Flat Head Screw W/Locking Patch</td>
<td>4</td>
</tr>
</tbody>
</table>

Contents of Bracket Kit #5278289

<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Part #</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5278222</td>
<td>ATV Quick Release Bracket Assembly</td>
<td>2</td>
</tr>
<tr>
<td>1.1</td>
<td>5078223</td>
<td>Cam Handle Assembly</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>5038872</td>
<td>QR Bracket - Bent Adjustable Height</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5020570</td>
<td>Hose, 1/2&quot;-1 Brd. x 48”</td>
<td>1</td>
</tr>
</tbody>
</table>
**Assembly Procedure (FS-ATV-25)**

Normally, the sprayer will be mounted on an ATV with the pump assembly at the operator’s back and the spray wand will be at the rear of the unit. Right Hand (RH) and Left Hand (LH) sides of the sprayer are determined as if you are standing behind the sprayer, looking at it (facing forward).

After removing the tank from the box, start the assembly procedure by turning the tank upside down on a stable, flat surface.

**A phillips head screwdriver is required for this step.**

(\*) Mount tank brackets to the underside of the tank as shown in Step 1. Use (4) flat head screws to secure it to the tank. The tank will rest on the surface of the brackets. Make sure the brackets are parallel with each other before tightening down the bolts. Do not over-tighten.

---

After your tank brackets are securely attached, turn the tank assembly over and position it so that the cam handles which extend beyond the back of the tank are facing you and just hanging over the edge of the table or flat surface you are assembling this on.

Secure the boom mounting brackets to the tank mounting brackets with Cam handles as shown in Detail A. You can position them as needed within the slot on the bracket. Just be sure that the surfaces of both brackets are even with each other.

You are now ready to mount this unit to an ATV, using ratchet straps (NOT INCLUDED)

---

**Detail A:** Install the pressure gauge. Hand tighten securely.  
**DO NOT OVER-TIGHTEN**

**Detail B:**  Screw the lid onto the tank. Place the end of the lanyard through the tab in the tank. This is so the lid can ‘hang’ off the tank when filling/rinsing the tank out.

**Detail C:** Locate the (2) clips and (2) phillips head screws from the parts bag.  
**A phillips head screwdriver is required for this step**  
Place a screw through the hole in the clip and bring it up to the tank, where the embossments for the clips are (located on the rear side of the tank)  
Secure the clip/screw to the tank. Tighten so that the clip is secure. Do this for each clip.  
**DO NOT OVER-TIGHTEN**  
The spray wand will snap into the clips once installed. Do not use excessive force when placing the spray wand into the clips, as this could cause the clips to break.

**Detail D:** Locate the 48” feeder hose and attach to the manifold with a hose clamp.  
Loosely slip a hose clamp over the end of the hose. Attach the hose to the hose barb on the manifold. Use a twisting motion, if necessary, to get the hose fully onto the barb. Bring the hose clamp to the connection point and tighten securely.

**NOTE:**  
Make sure this boom feeder hose does not end up on the ‘outside’ of the spray wand hose, otherwise unwrapping the spray wand hose from around the tank may be difficult.

---

***The Sprayer should now be ready for use***
IMPORTANT: Remove tank lid and be sure the tank is clean and free of any foreign material. Rinse tank out of any tank residue before filling with water to test.

Testing the Sprayer

NOTE: It is VERY important for you to test your sprayer with plain water before actual spraying is attempted. This will enable you to check the sprayer for leaks without the possibility of losing any expensive chemicals.

Fill the tank about 1/2 full with plain water and drive to the starting place for spraying.

When you are ready to spray, turn the boom valve to the “on” position (Detail A). This will start solution spraying from the tips of the boom. The pressure will decrease slightly when the boom is spraying.

Adjust the pressure by turning the “ON/OFF” valve lever on the bypass line valve (Detail B). Make sure your pattern is sufficient. You may down-pressure the system by ‘bypassing’ solution back into the tank. This is achieved by opening the bypass valve. Regulating pressure is done in this manner.

Read the operating instructions and initially begin spraying by closing the ‘Pressure Adjust’ valve and opening the boom line valve (Detail A). This will enable the air in the line to be eliminated (purged) through all the tips, while building pressure. When everything tests all right (no leaks and good pressure), add the desired chemicals to the mixture and water combination and start your spraying operation. Adjust the pressure and spray as you did in the testing procedure.

Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases.

Be sure to read the chemical label(s) before application!

Operation

The pumping system draws solution from the tank, through the strainer and to the pump. The pump forces the solution under pressure to the handgun or boom nozzles.

Connect the lead wire to a fully charged 12 volt battery. You may use either a stand-alone battery or the battery on your towing vehicle. Connect to the positive (red) terminal first, then connect to the negative (black) terminal. Then connect the end of the lead wire to the end of the pump. When disconnecting, disconnect the end of the pump wire from the lead wire, then disconnect the negative (black) connection and finally the positive (red) connection. The lead wire has an On/Off switch to activate the pump. “O” is off.

Fill the tank part way with water and then add the desired amount of chemical to be sprayed. Finish filling tank to proper level. Turn the pump on and by depressing the “O” side of the rocker switch. The pump is equipped with a pressure switch that is pre-set at the factory to shut the pump off when all discharges are closed.

The pump will turn back on when one of the following actions occurs:

♦ Handgun lever is squeezed to spray the handgun.
♦ Boom valve is opened to broadcast spray with the boom.
♦ Bypass valve is opened to re-circulate solution back into the tank.

When spraying with either the boom or the handgun, pressure may be reduced by slowly opening the bypass valve until desired pressure is achieved. Opening the valve decreases pressure, closing the valve increases pressure. When spraying with the boom, the proper method to set the pressure is to open the boom valve completely and if a lower pressure is desired, then slowly open the bypass valve until that pressure is obtained.

For the safest and most efficient chemical application, you will need to calibrate your sprayer using the tip and speed charts. Once you have determined the proper speed and pressure settings, you will need to consult your chemical label for the amount of chemical to be added to the tank. Read the entire label. Use only according to label directions.
**DO**

- Clean and rinse your pump after each use with Fimco Tank Neutralizer
- Winterize your pump or sprayer by rinsing, draining and running RV Antifreeze through it before storing for the winter.
- Use clean water for your spray mixture
- Store inside a building when not in use.

**DON'T**

- Use to pump bleach.
- Use to pump petroleum products, such as diesel fuel, gasoline or kerosene
- Leave your pump sit with spray mixture in it for extended periods
- Use dirty or unfiltered water for spraying

---

Troubleshooting the Pump:

**Motor does not run:**
- Check for loose wiring connection(s).
- Make sure the 'ON/OFF' switch in the lead wire assembly is in the 'ON' position. "I" is the 'ON' position and 'O' is the 'OFF' position.
- Check for defective switch assembly. Make sure you are connected to a good 12 volt power source. Make sure any on/off switches are in the 'on' position. Disconnect the wires off of switch assembly and short them out. If your pump runs when you do this, your switch assembly will need to be replaced.
- Check the fuse, if applicable.
- Check for low voltage at the power supply.

**Pump does not prime:**
- Check for air leaks in supply line.
- Check for debris in the valve assembly.
- Check for defective valve assembly.
- Check for clogged strainer/filter.
- Check for cracks in the pump housing.
- Check for empty product supply.

---

**Exploded View/Parts List:**

---

STOP WARNING STOP

**CAUTION**

**PRESSURE SWITCH OPERATION**

Pressure switch is pre-set at the factory. Improper adjustment of the pressure switch, may cause severe overload or premature failure. If the pump is subjected to rapid cycling during normal operation, or infrequent periods, damage may occur.

---

Pulsating flow (surging):
- Check for defective switch assembly.
- Check for leaks in the discharge line.
- Check for restriction in the discharge line.
- Check for debris in nozzle orifice.
- Discharge hose may be too long.
- Check for clogged strainer.

Motor continues to run after discharge is shut off:
- Check for empty product supply.
- Check for open bypass valve. (if equipped)
- Check for low voltage.
- Check for leak in discharge line.
- Check for defective or dirty valve assembly.
- Check for defective switch assembly.
Maintenance During/After Spraying

Periodically check the strainer and clean the screen on your intake line.

Proper care and maintenance will prolong the life of your sprayer.

After use, drain the tank and store or dispose of chemical properly. Fill the sprayer half way with clean water. Start the pump and allow the water to pump through the entire plumbing system and nozzles. Drain and then refill half full, add the recommended amount of a good quality tank cleaner, such as FIMCO Tank Neutralizer and Cleaner. (If no tank cleaner is available, you may substitute dish soap for this step, about 1-2 oz. per gallon). Turn pump on and circulate through system for 15 minutes and then spray out through boom and handgun nozzles. Refill sprayer half way with clean water and repeat. Follow the chemical manufacturer’s disposal instructions of all wash or rinsing water.

If boom or handgun nozzles need cleaning, remove them from the sprayer and soak in warm soapy water. Clean with a soft bristled brush or toothpick if necessary. Never use a metal object. Even the slightest damage can change the flow rate and spray distribution. Water rinse and dry the tips before storing.

**WARNING:** Some chemicals will damage the pump valves if allowed to soak untreated for a length of time! ALWAYS flush the pump as instructed after each use. DO NOT allow chemicals to sit in the pump for extended times of idleness. Follow the chemical manufacturer’s instructions on disposal of all waste water from the sprayer.

Storing Sprayer

When sprayer is not in use, release Cam Lock Handles. This is to prevent deforming of Cam Lock Mechanism. Do not use QR bracket Cams to hold and store boom in vertical position.

Winter Storage

Prepare the sprayer for end-of-season storage by running RV antifreeze through the system. This will keep internal parts lubricated, protect against corrosion and keep the unit from freezing. *Note: RV antifreeze is non-toxic and biodegradable and generally safer for the environment than automotive antifreeze.*

Before storing your sprayer for winter or long term storage, thoroughly clean and drain it as much as possible. Then pour enough pink RV antifreeze into the tank so that when the pump is turned on you can pump the antifreeze throughout the entire plumbing system, including the bypass. Make sure to operate the boom and handgun until you see pink fluid spraying from the nozzles. Leave any remaining antifreeze in the tank. Before your next usage, rinse the antifreeze from the sprayer with clean water.

Pumping the antifreeze through the system will displace the water and help prevent this damage.

Removing from storage: drain the antifreeze. Fill the tank with fresh water and run through the system. Dispose of antifreeze and flush water properly.

---

**Plumbing Detail**

![Diagram of Sprayer Plumbing System]

- **Boom Feeder Hose**
- **ByPass Hose**
Exploded View/Parts List: FS-ATV-25 (5301170)

<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Part #</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TA25Y</td>
<td>25 Gallon Tank (Yellow)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>5058188</td>
<td>Tank Lid w/Lanyard</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>5116251</td>
<td>Strainer, Suction Line, 1/2&quot;</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>5100532</td>
<td>Intake Tube 1/2&quot; O.D. x 18 1/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>5075018</td>
<td>Grommet, 1/2&quot; I.D.</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>5020494</td>
<td>Hose, 1/2&quot;-1 Brd. x 2&quot;</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>5051114</td>
<td>Hose Clamp, 1/2&quot;</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>5281361</td>
<td>SHURflo 2.2 Pump Assembly</td>
<td>1</td>
</tr>
<tr>
<td>8.1</td>
<td>3AF12</td>
<td>Poly Hose Barb, 1/2&quot; FNPT x 1/2&quot;</td>
<td>1</td>
</tr>
<tr>
<td>8.2</td>
<td>5151074</td>
<td>SHURflo Pump, 12V, 2.2 GPM, 100 PSI</td>
<td>1</td>
</tr>
<tr>
<td>8.3</td>
<td>5117168</td>
<td>#10-24 x 1&quot; Phillips Truss Head Machine Screw</td>
<td>3</td>
</tr>
<tr>
<td>8.4</td>
<td>5005456</td>
<td>3/4&quot; Port to 1/2&quot; Female NPT Adapter</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>5005457</td>
<td>Port Adapter Clip</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>5117166</td>
<td>#10-24 x 1 1/4&quot; Phillips Truss Head Machine Screw</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>5302350</td>
<td>Quick Connect Manifold Assembly</td>
<td>1</td>
</tr>
<tr>
<td>11.1</td>
<td>5302347</td>
<td>Quick Connect Manifold (Body)</td>
<td>1</td>
</tr>
<tr>
<td>11.2</td>
<td>5143430</td>
<td>Flat Washer - Hose Barb Seal</td>
<td>3</td>
</tr>
<tr>
<td>11.3</td>
<td>5143431</td>
<td>QC Manifold - 3/8&quot; Hose Straight Barb</td>
<td>2</td>
</tr>
<tr>
<td>11.4</td>
<td>5143432</td>
<td>QC Manifold - 1/2&quot; Hose Straight Barb</td>
<td>1</td>
</tr>
<tr>
<td>11.5</td>
<td>5143429</td>
<td>Quick Connect Quarter Turn Cap</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>5037945</td>
<td>Manifold Support Brace</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>5167004</td>
<td>Pressure Gauge, 0-200 p.s.i., Dry</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>5020570</td>
<td>Hose, 1/2&quot;-1 Brd. x 48&quot;</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>5020532</td>
<td>Hose, 3/8&quot;-1 Brd. x 7 1/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>5075022</td>
<td>Grommet, 5/8&quot; I.D.</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>5051144</td>
<td>Hose Clamp, 3/8&quot;</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>5020524</td>
<td>Hose, 3/8&quot;-1 Brd. x 15 Ft.</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>5163100</td>
<td>Low-Flow Spray Wand w/X-26 Tip</td>
<td>1</td>
</tr>
<tr>
<td>19.1</td>
<td>5018330</td>
<td>Handgun Tip (X-26)</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>5278348</td>
<td>Deluxe Wand Clips &amp; Screws (Pkg/2) (#10-24 Thread)</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>5274373</td>
<td>Drain Plug Assembly</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>5278222</td>
<td>ATV Quick Release Bracket Assembly</td>
<td>2</td>
</tr>
<tr>
<td>22.1</td>
<td>5078223</td>
<td>Cam Handle Assembly</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>5034149</td>
<td>5/16-18x x 3/4&quot; Flat Head Screw w/Locking Patch</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>5038872</td>
<td>Quick Release Bracket - Bent Adjustable Height</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>5277040</td>
<td>Lead Wire Assembly (14 ga, w/Switch), 120&quot;</td>
<td>1</td>
</tr>
<tr>
<td>25.1</td>
<td>5157238</td>
<td>15 Amp Regular Blade Fuse</td>
<td>1</td>
</tr>
</tbody>
</table>

See Plumbing Detail Page 6
Warranty

LIMITED WARRANTY FOR NEW AG SPRAY EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the “Limited Warranty”) is provided by Ag Spray Equipment to the original purchaser (“you”) of the Equipment (as defined below) from Ag Spray Equipment or one of Ag Spray Equipment’s authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG. Ag Spray Equipment warrants that any new Equipment will be free from defects in material and workmanship for a period of one (1) year (homeowner), 90 days (commercial user), after delivery of the Equipment to you (the “Warranty Period”). The Warranty Period is not extended if Ag Spray Equipment repairs or replaces the Equipment.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY. This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Ag Spray Equipment or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Ag Spray Equipment’s operator’s manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, “acts of God” or other events beyond Ag Spray Equipment’s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Ag Spray Equipment, whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

HOW TO OBTAIN WARRANTY SERVICE. To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Ag Spray Equipment of the defect during the Warranty Period and within thirty (30) days after the defect becomes apparent or the repair becomes necessary, at the following address: Ag Spray Equipment, 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Ag Spray Equipment or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: 800-274-1025 or your local Ag Spray location.

WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY. If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Ag Spray Equipment shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Ag Spray Equipment will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES. THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES, AND AG SPRAY EQUIPMENT’S SOLE LIABILITY, FOR ANY BREACH OF THIS LIMITED WARRANTY. TO THE EXTENT APPLICABLE, ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND THE REMEDIES AVAILABLE FOR BREACH THEREOF SHALL BE LIMITED TO THE REMEDIES AVAILABLE UNDER THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL AG SPRAY EQUIPMENT’S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL AG SPRAY EQUIPMENT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.