12 Volt ATV Spreader



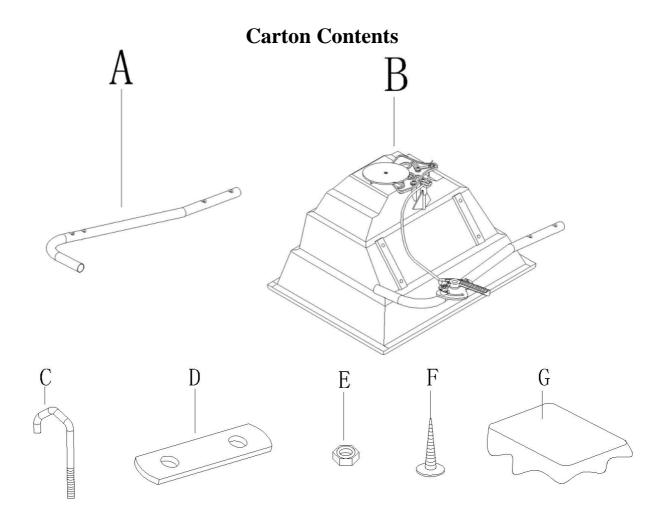
Model AS-12v



- 1. Be sure to wear safety glasses, a dust mask, and proper clothing to prevent coming in contact with any chemicals or dangerous materials that are being applied by this spreader.
- 2. Make sure to remove any contents that are in the spreader's hopper before attaching, detaching, or lifting this unit.
- 3. Avoid attaching and detaching this unit alone. To avoid damage to this unit and injury always have someone help attach and detach due to shape and weight of this unit.
- 4. Always refer to the load rating for the vehicle which located in the vehicle's owners manual. Make sure that the unit weight of 20lbs plus the weight of the contents in the hopper do not exceed that of the vehicles recommended load rating.
- 5. To avoid damage to this unit and injury NEVER overload the hopper.
- 6. Stay clear of all moving and spinning parts or objects of this unit
- 7. Always follow directions on the package of whatever you are applying with this unit.

Operation Instructions

- 1. After assembly attach to front or rear of vehicle.
- 2. Read and follow directions on the package of the material being spread by this
- 3. Fill hopper with desired material to be spread by this unit not exceeding maximum load of 80lbs.
- 4. Adjust the handle (Ref. #25) on the gauge assembly (Ref. #22) so that it is at the desired setting. Then tighten the wing nut (Ref. #24) on the gauge assembly to set the desired opening. This allows the driver to set the opening to the same place every time while driving the vehicle.
- 5. Adjust handle (Ref. #25) on the gauge assembly until desired amount of spreading material is flowing out of the hopper (Ref. #8) onto the turning plate (Ref. #16).
- 6. Flip rocker switch on wire assembly (Ref. #31) to on position and begin spreading.



NO	PART NAME	QTY	NO	PART NAME	QTY
Α	Frame Tubes	2	Е	Lock Nut M6	8
В	Hopper Ass'y (pre- assembled)	1	F	Wood Screw M5×35	4
С	J bolt	8	G	Rain Cover	1
D	Press Plate	4			



NOTE: If you have questions, problems, or missing parts please call our customer service before returning to your retailer. Contact us at 1-218-943-6296 8 a.m.-5 p.m., Monday-Friday CST.

Assembly Instructions

Step #1: Attach Frame Tubes

Attach first frame tube to one side of the hopper using 2, M5 x 35 Screws (Ref. # 14). See figure #1 Repeat for the other side.

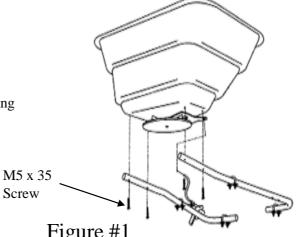


Figure #1

Step #2: Attaching the Gauge Assembly

If you are attaching the unit to the front of the vehicle attach the Gauge assembly to the LEFT Frame Tube. If attaching to the rear of the vehicle attach to the RIGHT Frame Tube. See Figure #2.

Attach here for front mount



Figure #2

Step #3: Attaching Unit to the Vehicle

Connect one side of the unit to vehicle using two Press Plates (Ref. #33), four J-bolts (Ref. #34), and four M6 Hex Nuts (Ref. #32). Connect in the two places shown in Figure #2. Repeat for other side.



Figure #3

Step #4: Connecting to Power

Once the spreader is attached and secured to the ATV connect the wire assembly (#31) to the battery and the motor (#3) of the spreader. When properly connected, the motor should rotate the Turning Plate (#16) clockwise. If the plate is turning counter clockwise, reverse wire connection at battery. See Figure 4 and Figure 5.

NOTE: View rotation from top of hopper.



Figure #4

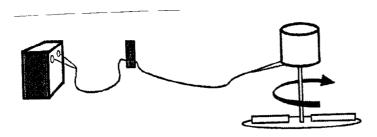
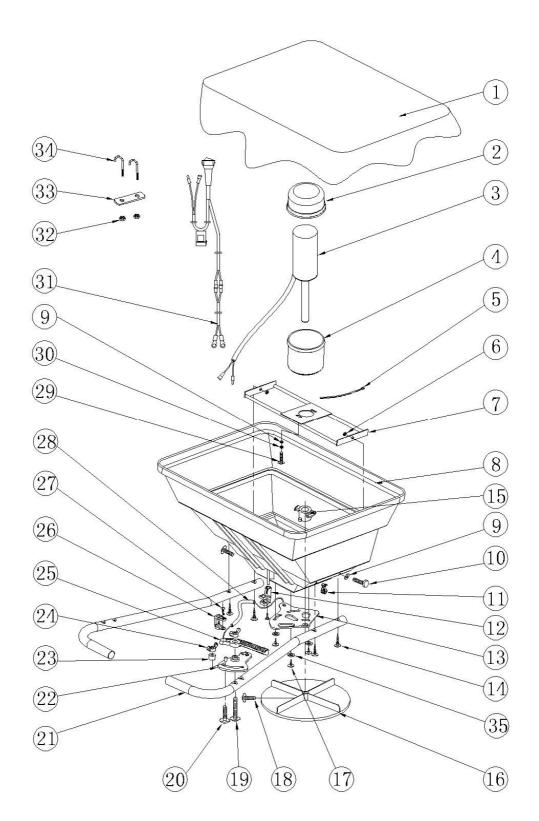


Figure #5

Caution: For safety make sure that all wires of the wire assembly are secured to the spreader or ATV. This will prevent the wires from being entangled with the operator and the ATV.



	Parts List	
Part #	DESC	Qty
1	Rain Cover	1
2	Electric Motor Cap	1
3	Electric Motor	1
4	Electric Motor Cover	1
5	Tie	1
6	Nylock Nut M6	2
7	Motor Support	1
8	Hopper	1
9	Flat Washer Ø6	4
10	Hex Bolt M6×15	2
11	Wire Clamp	1
12	Wire Adjustment Clip A	1
13	Adjustment Plate	1
14	Wood Screw M5×35	4
15	Center Sleeve	1
16	Spreader Disc	1
17	Round Head Tap Screw M4×12	3
18	Round Head Cross Slot Screw M4x20	1
19	Round Head Cross Slot Screw M6x45	1
20	Carriage Bolt M6×30	1
21	Frame Tube	2
22	Gauge Assembly	1
23	Spacer	1
24	Wing Nut M6	2
25	Handle	1
26	Wire Adjustment Clip B	1
27	Wood Screw M4.5×18	2
28	Adjustment Wire Ass'y	1
29	Round Head Cross Slot Screw M6x15	2
30	Lock Washer Ø6	2
31	Wire Assembly	1
32	Hex Nut M6	8
33	Press Plate	4
34	J- Bolt	8
35	Big Flat Washer Ø4	3

12volt Electric Spreader APPLICATION RATE WORKSHEET

Note: Settings for this product need to be determined by user since factors such as coarseness and density of "material used" affect the spread rates. See below "rate worksheet" for approximate spread rates and best results.

When Rate settings are not available, follow these guidelines to calculate spread rates:

On the bag of material to spread, you will find recommended spread rates, usually in terms to the effect of: so many pounds will cover so many sq. ft.

Read these steps, then refer to the guide (worksheet below) Determine how much material to apply per 1,000 sq. ft. Measure off a distance of 50ft, preferably on a paved area (ie: parking lot)

Weigh out enough material from bag to fill hopper ½ full (recommend at least ½ full hopper) Record weight for later. Set the stop at an position with opening of hopper at position you feel appropriate.

Now with hopper ½ full, bring vehicle to desired speed before start line of your 50 ft test area. When you arrive at start line, turn on spreader, then off at finish line

Stop the vehicle and note the width of spread path from your test run. Repeat if necessary; Then empty remaining material from hopper back to your weighing device and record new weight.

Be sure to record your results, see below guide.

12volt Electric Spreader APPLICATION RATE WORKSHEET

On the bag of material to spread, you will find recommended spread rates, usually in terms to the effect of: so many pounds will cover so many sq. ft.

Find your Desired Application (spread) Rate

Example: To find your desired rate, divide the area (sq. ft.) that bag of material covers by the weight

of the bag of material itself. Then multiply by 1,000. **Example:** 25lb bag / 2000 sq ft coverage = .0125

$.0125 \times 1,000 = 12.5 \text{ (12.5 is your desired lbs per 1,000 sq. feet)}$
Record Desired Rate = (lbs per 1,000 sq. ft.)
TEST RUN to DETERMINE SPREAD RATE: Determine lbs (weight) of Material in Hopper for Test Area
Weight of Material put into Hopper (Example: pour a 25lb bag into spreader) (-) Subtract Weight of Material in Hopper (After Test Area is spread)
(=) Weight of Material Used (will be used below)
Test Area Measurements
Length of Test Area (Recommend: 50 ft)
(x) Width of Spread Area
(=) Total Spread Area
Determine Rate of Spread Divide the Weight of Material Used in #2, by your Total Spread Area in #3. Weight of Material Used/Total Spread Area = lbs per sq. ft. Example: 2 lbs / 500 ft = .004
Multiply lbs per sq ft (x)1000 = lbs per 1000 sq ft Example: $.004 \times 1000 = 4$
Compare these results to your desired application rate in #1. Adjust the rate setting stop on the spreader accordingly and run test area again. Example: Adjust 2 times more open to achieve double the rate of test.
Now you should approx. match your desired application in #1.
Repeat the process if necessary until you achieve your desired application rate.
Settings and guidelines furnished on this Rate Worksheet are intended as a guide only. Variations in

Settings and guidelines furnished on this Rate Worksheet are intended as a guide only. Variations in materials applied, ground roughness, speed of operator, may affect rate. There is no warranty as to the rate of coverage derived from above guidelines.