

Operation and Assembly Manual
for the
EarthWay® M20 12-volt
ATV Broadcast Spreader



EarthWay®

Electric Spreaders

Model M20

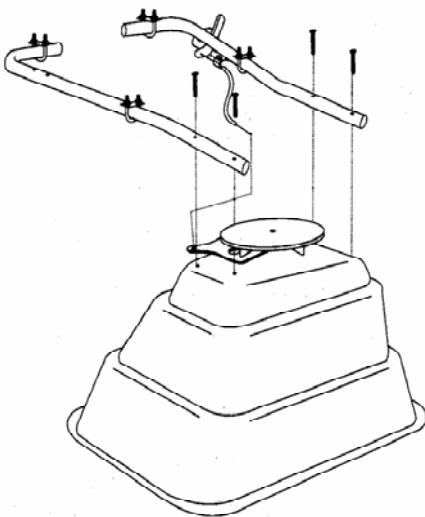


1. Always wear protective clothing, eyewear, and dust mask to prevent contact with chemicals and other materials being applied with this machine.
2. Remove any material in the hopper before lifting or detaching this machine from the vehicle.
3. Care must be taken when lifting this machine so as not to cause personal injury or equipment damage. Never attempt to install this machine to the vehicle alone. Recruit the help of someone to assist when attaching and detaching this machine from the vehicle.
4. Refer to the material packaging or the Material Safety Data Sheet for precautionary measures required when handling materials to be applied.
5. Before attaching this machine, consideration must be given to the load capacity of the vehicle. Refer to the owner's manual of the vehicle for rated load capacity. Be sure to take into account the weight of this machine 20 lbs. and the weight of the material to be placed in the hopper when calculating the total load.
6. Keep hands away from any spinning object.

How to operate safely:

- A. Read, understand, and follow all product label information provided on the material being applied.
- B. An adjustable solid stop is provided that allows the operator to adjust to the desired opening position on the rate setting control prior to operation of the vehicle. This allows repeatability to the stop without the need to look at the control while operating the vehicle.
- C. Establish the correct rate and then lock the stop in that position using the thumb wing nut on the setting control.

ASSEMBLY INSTRUCTIONS



1. Attach frames to hopper as shown using (4) # 10 x 1-1/4" screws.
2. Position the rate control assembly to either frame rail based on if the spreader is mounted to the front or the rear rack. If on front mount the control to the left rail, if on the rear mount on the right rail.

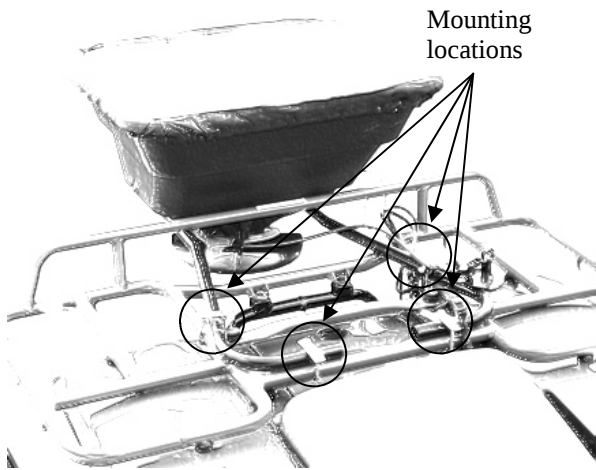
WARRANTY

EARTHWAY guarantees this product to be free of defects in original workmanship and materials for a period of **90 days** from sale to the original user. If any defect develops during this period EARTHWAY will repair or replace this product at no charge provided the defect is not the result of mishandling or tampering and that this product is received at the factory with shipping charges prepaid. For quicker service you may call EARTHWAY at (574) 848-7491 or write and describe the nature of the defect and we will send repair parts to you.

Due to the corrosive nature of most fertilizers and ice melters, EARTHWAY PRODUCTS, INC. makes no warranty or guarantee against corrosion failure on models with plated steel or painted steel frames.

Clean and dry your spreader well after each use.

Warranty covers parts only, not labor charges to repair.



How to attach to your ATV:

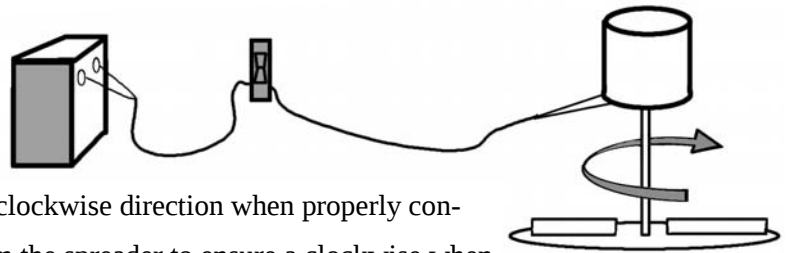
Position the M20 centered on either the front or rear luggage rack on your ATV. Next using the included “Double J-Bolts” connect the rear cross bars to the luggage rack cross bar closest to the seat or handle-bars. Using two “Double J-Bolts” attach the M20 to the luggage rack securing it to the outer most rail on the luggage rack. Tighten all fasteners and cut any excessive bolt lengths that extend beyond the nuts on the “J-Bolts” and smooth if necessary.



Prior to each use and occasionally during times of extended use, inspect the mounting and spreader hardware for loosening to ensure the rigidity of the mount. This is done by tightening any loose hardware either on the Spreader or Luggage Rack mounts.

Connecting the Power

After your spreader is securely attached to your ATV, connect the wiring harness to the spreader motor, then to the battery. The motor is to rotate in a clockwise direction when properly connected, if not reverse the battery connection wires from the spreader to ensure a clockwise when looking in the hopper.



Secure all wires so that they will not become entangled with operator or machinery with proper wire fastening straps.

If rate settings are not available use the following procedure to calculate the setting:

1. Determine how much material is to be applied per 1,000 sq/ft.
2. Measure off a distance of 50 feet, preferably on a paved surface such as a parking lot.
3. Weigh out enough of the material to be applied to fill the hopper at least half full. Record the weight for future use.
4. With the unit mounted on the vehicle and the hopper at least half full of the material to be spread, position the vehicle far enough before the beginning of the 50 foot test area so that the vehicle will achieve the desired speed before you reach the starting line.
5. Set the rate setting stop at a position that you feel would be an appropriate setting.
6. Start the vehicle in motion and as you cross the starting line (of the 50 feet) move the rate lever to the open position against the stop. Take care to be aware of what is going on around you maintaining control of the vehicle.
7. Continue from the starting line with the unit spreading the material. As you cross the finish line move the rate lever to the closed position.
8. Stop the vehicle and note the width of the spread path that was just completed.
9. Return to the start point and empty the remaining material from the hopper into your weighing container and re-weigh.

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Rate Setting Worksheet

Desired Application Rate (lbs/1,000 sq ft) _____

To determine the desired application rate divide the area (sq ft) the bag should cover by the weight of the bag, then multiply by 1,000. (example: 5000 sq ft / 25 lbs = .005 x 1,000 = 5)

_____ Weight of Material Placed in Hopper

- _____ Weight of Material Left in Hopper

= _____ Weight of Material Used

50 Length of Test Area

x _____ Width of Spread Area

= _____ Total Spread Area

Divide the Weight of Material Used by the Total Spread Area = _____ lbs/sq ft

Multiply the lbs/sq ft times 1,000 = _____ lbs/1,000 sq ft

Compare the results of your test to the desired application rate.

Adjust the rate setting stop accordingly and run through the test again.

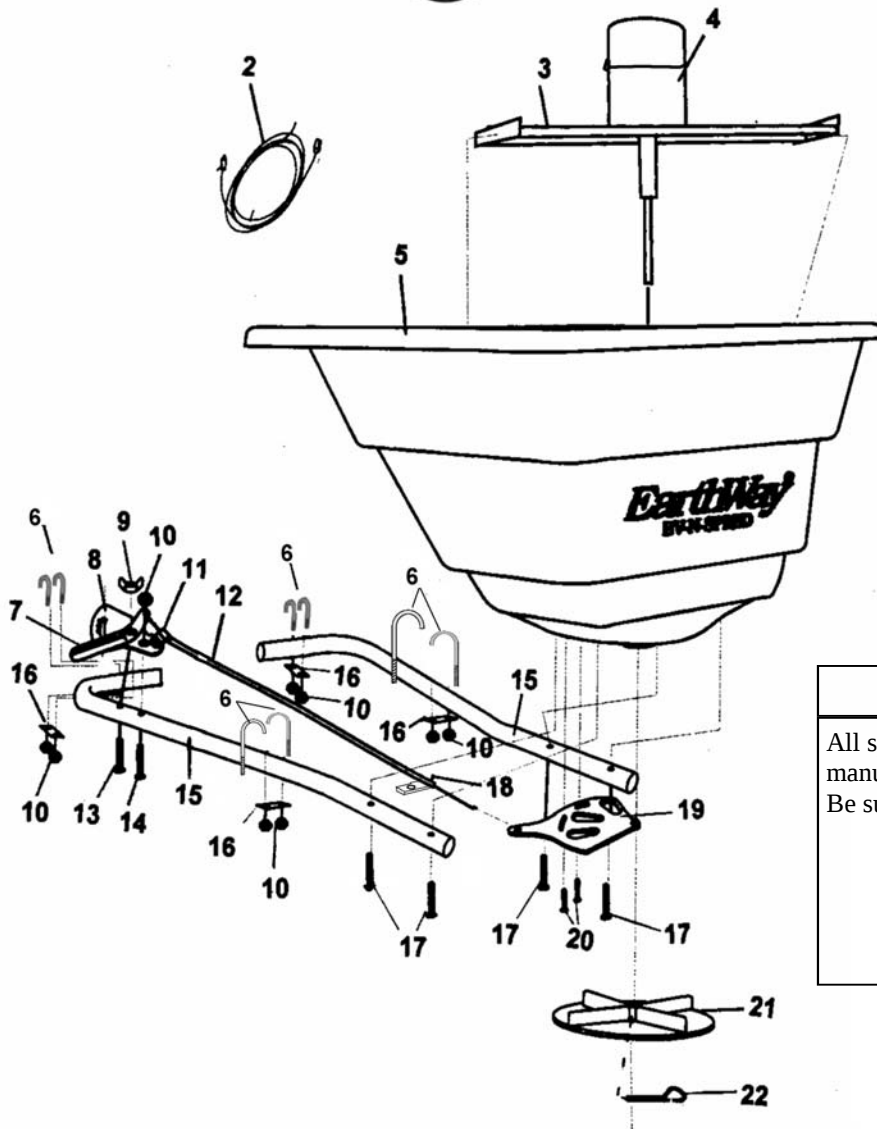
Repeat this process until you have achieved the desired application rate.

The settings furnished on the Rate Setting Chart are intended as a guide only. Variations in physical characteristics of material applied, brisk walking speed (3 mph.), and roughness of ground surface may require slightly different spreader settings. Due to the above conditions, EARTHWAY PRODUCTS INC. makes no warranty as to the uniformity of coverage actually obtained from the setting listed.

EarthWay®

Products, Inc.

P.O. Box 547
Bristol, Indiana 46507
(574) 848-7491 or 800-294-0671
www.earthway.com



HOW TO ORDER SPARE PARTS

All spare parts listed herein may be ordered direct from the manufacturer, **EARTHWAY PRODUCTS, INC.**

Be sure to give the following information when ordering.

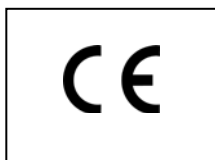
1. Model Number
2. Part Number
3. Part Description

Call (574)848-7491 or write for current prices.

M20 12~Volt ATV Spreader *Rev.9-05*

Key #	Part #	Description	Key #	Part #	Description
1	77003	Rain Cover	12	60431	Wire & Housing Assembly
2	60511	Wire Harness Assembly	13	N/A	1/4-20 X 1-3/4" FHPMS
3	60323	Motor Support Assembly	14	N/A	1/4-20 X 1-1/4" FHPMS
4	77101	Electric Motor	15	25116	Frame
5	60322	Hopper Assembly Includes key #20 & #19	16	43050	J-Bolt Bracket
6	44287	J-Bolt	17	N/A	#10 X 1-1/4" Screw
7	12125	Lever	18	12318	Lower Housing Clip
8	60432	Gauge & Housing Assembly	19	12221	Shut Off Plate
9	60027	1/4-20 Wing Nut	20	N/A	#8 X 3/8" Screw
10	N/A	1/4-20 Hex Nut	21	12109	Impeller
11	12319	Upper Housing Clip	22	N/A	1/8" X 1-1/4" Cotter Pin
				38156	Hardware Package

N/A fasteners are available at any local hardware store.



EarthWay Products, Inc.

P.O. Box 547

Bristol, Indiana 46507

USA

EC DECLARATION OF CONFORMITY

(Machinery Directive & Electromagnetic Compatibility Directives)

Herewith we declare that the machinery described below is in accordance with the relevant health and safety requirements of the EC Council Directives concerned with Machinery and Electromagnetic Compatibility. No alterations are to be made to the machine without prior consultation and approval of EarthWay Products, Inc. otherwise the Declaration may become invalid. This equipment must be commissioned, used and maintained strictly in accordance with the operating and maintenance instructions issued with the machine. Operators must be trained in accordance with the recommendations given in the operating and maintenance instructions issued with the machine.

Description of Machine: EarthWay M20 ATV 12-volt Broadcast Spreader

Serial Number: AS STAMPED ON MACHINE

Date of Supply: AS INVOICED DATE

Relevant EC Council Directives:

Machine Directives 89/392/EEC and subsequent amendments.

Electromagnetic compatibility Directive 89/336/EEC and subsequent amendments.

Issued by: Jeffrey Kendall on behalf of EarthWay Products, Inc.

Signed by: 

Date: 29 September 2005

Position of Signatory: Vice President

DO NOT RETURN TO DEALER FOR REPAIR

EARTHWAY PRODUCTS, INC.

1009 Maple Street

P.O. Box 547

Bristol, IN 46507

FOR YOUR RECORDS

Date Purchased: _____

Store Name: _____