

# Herd

# SEEDER CO.

## M3B ELECTRIC MODEL POWER SPREADER/SEEDER



## MOUNTING, SERVICE, AND SAFETY INFORMATION

### IMPORTANT NOTICE!

The Model M3B seeder is designed to be mounted to farm tractors, pickup trucks, the Herd T12-300 flotation trailer or turf trucks.

We do not recommend that this seeder be mounted to a lawn tractor, garden tractor or all terrain vehicle (ATV) due to the size of this seeder. If you purchased this seeder to mount to a lawn tractor, garden tractor or ATV, please contact your dealer or the Herd Seeder Company.

The Model M3B seeder is powered by a 12 volt D.C. motor which is negative (-) ground. Any attempt to run the motor with any device or battery other than a 12 volt D.C. battery could result in injury to the operator or cause damage to the motor.

Any questions about the mounting of or the safe operation of this seeder should be directed to the Herd Seeder Company by phone at 574-753-6366.

### **HERD SEEDER COMPANY, INC.**

P.O. Box 448 • 2383 South U.S. 35 • Logansport, IN 46947

Phone: 574-753-6366 • Fax: 574-722-4106

Email: [info@herdseeder.com](mailto:info@herdseeder.com) • Website: [www.herdseeder.com](http://www.herdseeder.com)

# MOUNTING INSTRUCTIONS

## Mounting M3B Seeder To Farm Tractors

Place the main frame (#T303) of the seeder on the drawbar (hitch) of the tractor and attach it with the 5/8" x 2-1/2" hex head bolt provided. This bolt will screw into the bottom of the main frame. (A 5/8" hex head nut is welded inside the main frame.) Attach one brace rod (#T203) to each side of the hopper by bolting the small hole end of the brace rod to the hole in the corner brace (#T205). Then attach the large loop end of the brace rods to a solid bolt on the tractor frame or axle housing. Push the top of the hopper toward the tractor and tighten the brace rod clamps to put slight tension on the brace rods. Now follow the wiring diagram on the next page to complete the installation.

If the tractor has a category 1 three point hitch, we have available as an option the lower cross bar (#T505) and the upper three point hitch bracket (#T393).

## Mounting M3B Seeder To Pickup Trucks

This seeder can be mounted to a pickup truck by three different methods. The first method is by using the brace rods (#T203) that are provided with the seeder as standard equipment. Place the main frame (#T303) of the seeder on the rear bumper of the pickup making sure that the bottom of the frame is over the hole provided in the bumper. Using the 5/8" x 2-1/2" hex head bolt provided, insert it from the bottom of the bumper up through the hole in the bumper. Then screw it into the 5/8" hex head nut that is welded inside the seeder main frame. Now attach the small hole ends of the two brace rods (#T203) to the top of the hopper using the holes provided in the corner braces (#T205). Attach one brace rod to each side of the hopper. Then attach the large loop end of the brace rods to a solid spot on the pickup bed or side rails. If there are not any existing holes, you will have to drill them to complete this installation. Now follow the wiring diagram on the next page to complete the mounting.

The second method is to use the optional pickup mounting rails (#T502). These mounting rails allow the seeder to be mounted to a pickup without drilling holes for the brace rods. The pickup must have stake pockets at the rear of the pickup bed for the optional mounting rails to be used. Complete instructions are furnished when this option is ordered.

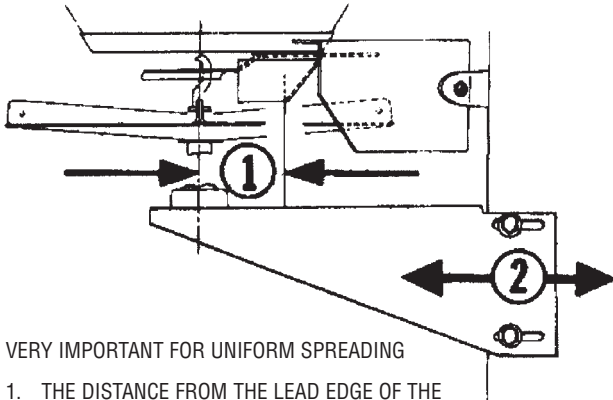
The third method is the optional 2" receiver mount hitch (#T700). This mounting requires that the pickup already has a 2" receiver attached. Complete instructions are furnished when this option is ordered.

## Mounting M3B Seeder To T12-300 Flotation Trailer

The optional T12-300 Flotation Trailer is available from Herd Seeder Company to mount the M3B Seeder using the brace rods (#T203) which are furnished standard with the seeder. Complete instructions are furnished when this option is ordered.

# HERD ELECTRIC SPREADERS - VERY IMPORTANT SERVICE INFORMATION

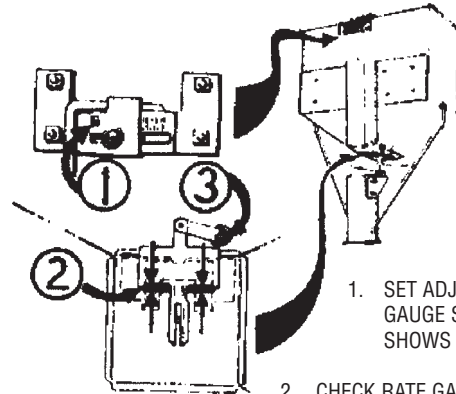
## CORRECT SPREADING SPINNER LOCATION IN RELATION TO HOPPER BOTTOM LOCATION



VERY IMPORTANT FOR UNIFORM SPREADING

1. THE DISTANCE FROM THE LEAD EDGE OF THE FLOW SPOUT TO THE CENTER OF THE SPREADING SPINNER SHAFT SHOULD BE EXACTLY 2-15/64 INCH.
2. IF DIMENSION IS OTHER THAN 2-15/64 INCH, LOOSEN THE TWO BRACKET MOUNTING BOLTS, REPOSITION, AND TIGHTEN, IN REPOSITIONING, MAKE CERTAIN RATE GATE OPENING IS EQUAL ON BOTH SIDES.

## CALIBRATION CHECK

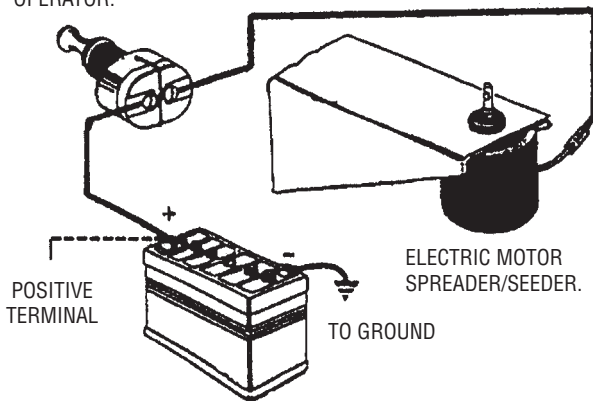


1. SET ADJUSTABLE RATE GAUGE SO NUMBER "2-1/2" SHOWS IN THE WINDOW.
2. CHECK RATE GAUGE OPENING. RATE GAUGE OPENING SHOULD BE EXACTLY 1/8 INCH WIDE - EQUAL ON BOTH SIDES.
3. IF ADJUSTMENT IS REQUIRED, LOOSEN RATE GATE ARM, REPOSITION, AND TIGHTEN.

# IMPORTANT

WIRING FOR STANDARD ON-OFF SWITCH

OFF-ON SWITCH MOUNTS AT A LOCATION CONVENIENT TO OPERATOR.



TERMINAL CONNECTOR

ELECTRIC MOTOR SPREADER/SEEDER.

TO GROUND

THE ABOVE DIAGRAM ILLUSTRATES HOW TO WIRE THE HERD M3B SEEDER WITHOUT THE TR-75 VARIABLE RESISTOR WHICH IS OPTIONAL. IT IS VERY IMPORTANT TO REMEMBER THAT THE SEEDER MOTOR MUST BE GROUNDED BACK TO THE (-) NEGATIVE SIDE OF THE BATTERY. THIS CAN BE ACHIEVED BY CONTACT OF THE SEEDER MOUNTING BRACKETS TO THE FRAME OF THE VEHICLE THE SEEDER IS MOUNTED ON. SOMETIMES WHEN THE MOUNTING BRACKETS DO NOT CONTACT THE FRAME OF THE VEHICLE SOLIDLY A SEPARATE GROUND WIRE MUST BE RUN FROM THE SEEDER FRAME TO THE FRAME OF THE VEHICLE. IF THE MOTOR WILL NOT RUN, FIRST CHECK TO SEE THAT IT IS GROUNDED PROPERLY.

## WIRING DIAGRAMS

# IMPORTANT

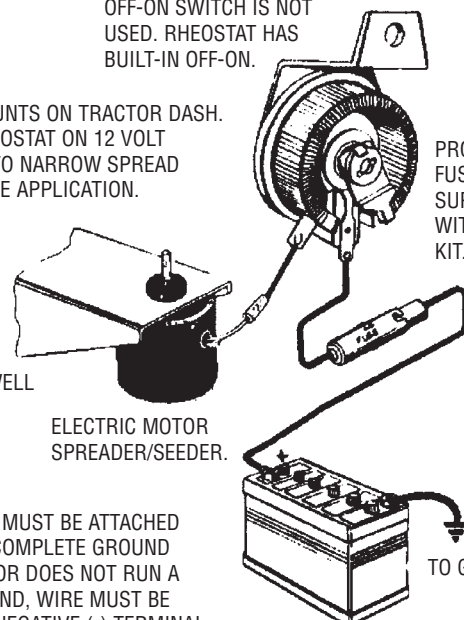
WIRING WHEN USING OPTIONAL PHEOSTAT

OFF-ON SWITCH IS NOT USED. RHEOSTAT HAS BUILT-IN OFF-ON.

RHEOSTAT MOUNTS ON TRACTOR DASH. USE TR-75 RHEOSTAT ON 12 VOLT SYSTEM. USE TO NARROW SPREAD WIDTH TO MAKE APPLICATION.

PROTECTIVE FUSE IS NOT SUPPLIED WITH WIRING KIT.

IT IS NECESSARY THAT MOTOR IS WELL GROUNDED.

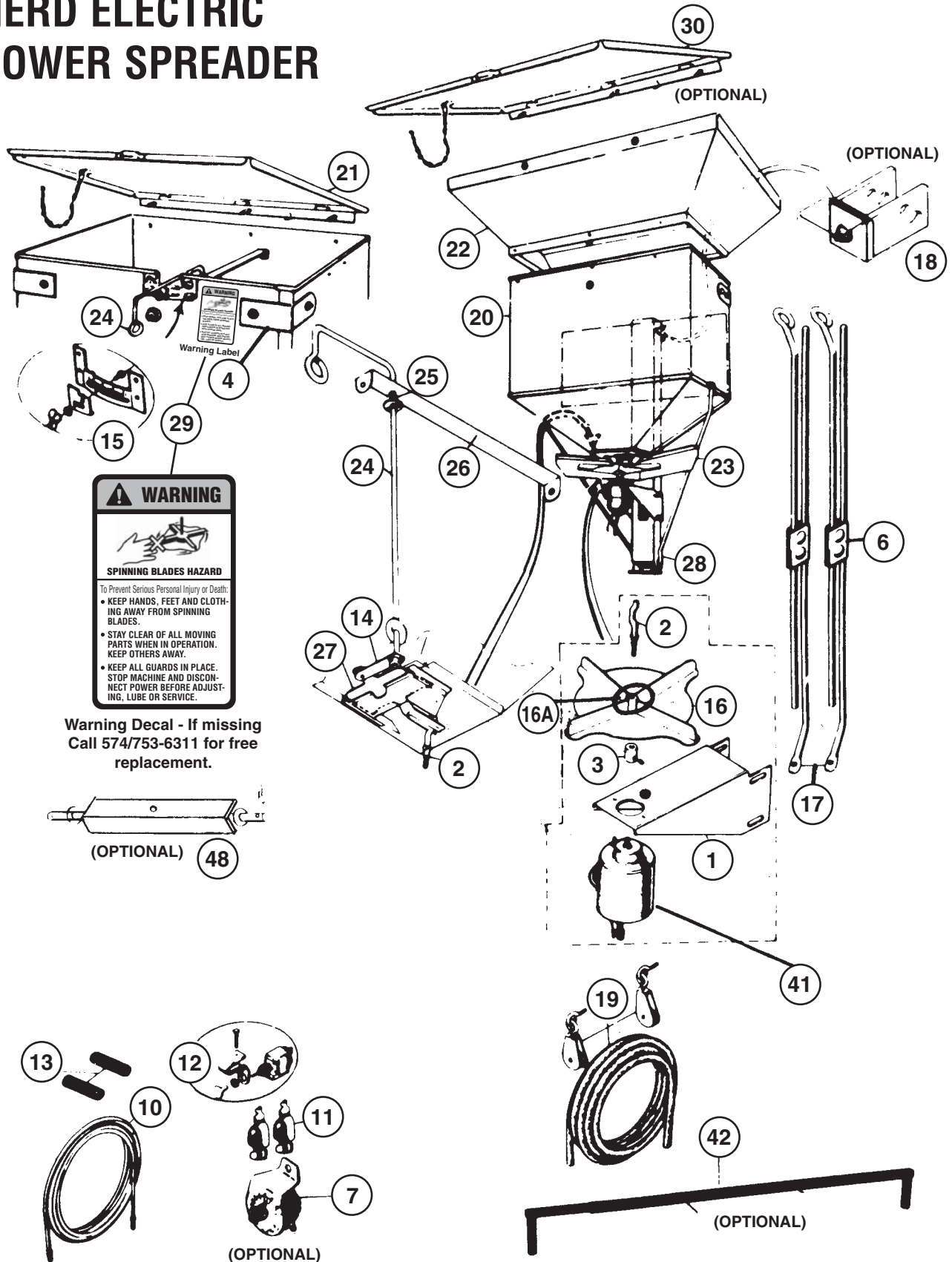


ELECTRIC MOTOR SPREADER/SEEDER.

TO GROUND

\* **NOTE:** SEEDER MUST BE ATTACHED TO VEHICLE TO COMPLETE GROUND CIRCUIT. IF MOTOR DOES NOT RUN A SEPARATE GROUND, WIRE MUST BE RUN FROM THE NEGATIVE (-) TERMINAL OF THE BATTERY TO THE MOTOR MOUNTING BRACKET - PART #T108.

# HERD ELECTRIC POWER SPREADER



**“CAUTION”** KEEP HANDS, FINGERS AND LOOSE CLOTHING WELL AWAY FROM SPINNING FAN OR INJURY MAY RESULT. **Disconnect power supply to motor before making any adjustments or repairs to seeder.**








<b>DRAWING NO.</b>	<b>PART NO.</b>	<b>QTY. STD. W/M3B SEEDER</b>	<b>DESCRIPTION</b>
1	T108	1	Motor mounting bracket
2	T213	1	Eccentric shaft - left hand thread
3	T211	1	Coupling only - motor to shaft w/set screw
4	T205	2	Corner brace for hopper
6	T529	2	Clamp only for brace rod
7	TR75	0	Rheostat for 12 volt D.C. only (Optional)
9	T141	1	Wiring kit complete (Includes numbers 10 thru 13)
10	T142	1	20ft. #14 electric wire w/terminals
11	T143	1	Battery clip
12	T144A	1	On-Off switch with mounting bracket
13	T145	2	Terminal connector
14	T117	1	Gauge linkage arm
15	T119	1	Rate gauge, complete
16	T221	1	Stainless steel spinner (fan) w/center ferrule
16A	T612	1	Ferrule only (Included with spinner #T221)
17	T203	2	Adjustable brace rod (2 brace rods & 1 clamp = 1 side. 2 sides required per seeder)
18	T393	0	Three point hitch upper link bracket (Optional)
19	T214	1	Remote rope control (Includes 18' of 3/16" rope, 2 pulleys, washer and nuts)
20	T300	1	Hopper only, less lid
21	T301	1	Hopper lid only
22	T305	0	Extension hopper w/mounting hardware (Optional)
23	T302	1	Shield
24	T120	1	Rate control lever
25	T316	1	Spring for rate control lever
26	T307	1	Hopper brace
27	T314	1	Rate gate
28	T303	1	Frame only
29	1091	1	"Warning" decal - Spinning Blades Hazard
30	T308	0	Lid for extension hopper (Optional)
41	T400A	1	Heavy duty motor, 12 volt D.C. only
42	T502	0	Complete mounting rail for pickup truck (Optional)
48	T505	0	Lower link cross bar for three point hitch (Optional)
	T222	0	Conversion kit - converts electric model M3B to PTO model S3B. Includes all parts necessary. (Optional)

# SPREADING CHART

Material	Spreader Mounting Angle to Tractor	Ground Speed MPH	Spread Width (feet)	Lbs. Per Acre	Gauge Setting	Lbs. Per Acre	Gauge Setting
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## Herd Spreader/Seeder Electric Model M3B

### FERTILIZERS

Large Heavy Pellets		4	16	80	6.5	100	7.25	
		6	16	80	7.25	100	8	
		8	16	80	8.25	100	8.75	
		4	28	80	8	100	8.75	
		6	28	80	9	100	10.5	
		8	28	80	10.5	100	12	
	Small Pellets and Granules		4	10	80	4.75	100	5.5
			6	10	80	5.75	100	6.25
			8	10	80	6.5	100	7
			4	16	80	5.75	100	6.75
			6	16	80	6.75	100	7.5
			8	16	80	7.75	100	8.75
Medium Pellets Such as Nitrogen			4	10	80	5.25	100	5.75
			6	10	80	5.75	100	6.25
			8	10	80	6.25	100	7.5
			4	16	80	5.75	100	6.25
			6	16	80	6	100	7.75
			8	16	80	8	100	9
	Medium Mixed Size Granules		4	34	80	8	100	9
			6	34	80	10.25	100	11
			8	34	80	11.25	100	Max
			4	10	80	5	100	5.5
			6	10	80	5.75	100	6.25
			8	10	80	6.5	100	7.25
Small Light Weight Granules			4	16	80	6	100	7.25
			6	16	80	7.25	100	8
			8	16	80	8	100	8.75
			4	35	80	9.25	100	10.5
			6	35	80	Max		
					4	10	100	6.75
	6	10			100	8.25	150	9.5
	8	10			100	9.25	150	10.5
	4	14			100	7.5	150	9
	6	14			100	9		
	8	14			100	Max		
				4	16	100	7.5	150
6				16	100	9.5		
8				16	100	Max		

**A.** With limitations, spread widths are determined by:

1. Volume Density/Particle size of fertilizer, seed, granular material.
2. Speed of whirling spreading disk.
3. Mounting height (some materials only).

**B.** NOT ALL MATERIALS HAVE THE SAME SPREADING CHARACTERISTICS as shown in "SPREADER MOUNTING ANGLE TO TRACTOR" column of chart.

Arrow indicates proper mounting angle (if required) for individual materials.

For equal spread on both sides of Spreader/Seeder, point Spreader/Seeder in the direction of the arrow. OR, if "off-center" spread is indicated, Spreader/Seeder may be mounted "off-center" on vehicle, OR allowance may be made in the operation of the vehicle.




**C.** Electric Spreader/Seeder mounting angles are for clockwise rotation of spreading disk. If an electric motor with counter-clockwise rotation is used, use reverse arrow directions.

**D.** CHECK CALIBRATION OF SPREADER/SEEDER before using. Lever setting #2-1/2 should show exactly 1/8" opening - with opening equal.

If required, adjustment may be made by loosening allen screw on "arm" connecting feed plate to control lever, adjusting and tightening.

**E.** The distance from the CENTER of the spreading disk to the EDGE of the feed flow spout should be exactly 2-15/64". Adjustment may be made by loosening the two bracket bolts, adjusting bracket and tightening bolts.

### GRANULAR CHEMICALS

Sevin (Granular Sand Carrier)		2.3	18	87	3.75 +	174	5.25 +			
		4	18	87	5 +	174	6.27 +			
		6	18	87	6	174	8.75			
		8	18	87	6.75 +	174	10.5			
		2.3	16	87	3.75	174	5 +			
		4	16	87	5	174	6.75			
		6	16	87	5.75 +	174	8.5			
		8	16	87	6.75	174	10			
		2.3	14	87	3.5 +	174	5			
		4	14	87	4.75 +	174	6			
		6	14	87	5.25 +	174	8.5			
		8	14	87	6	174	8.75			
			2.3	12	87	3.5	174	4.75 +		
			4	12	87	4.75	174	5.75 +		
			6	12	87	5 +	174	6.75 +		
			8	12	87	5.75 +	174	8.5 +		
			2.3	10	87	3.25 +	174	4.75		
			4	10	87	3.75 +	174	5.25 +		
			6	10	87	5	174	6.75		
			8	10	87	5.25 +	174	8.5		
			Sevin (Granular Attaclay Carrier)		2.3	9	87	3.5 +	174	4.75
					4	9	87	4.5	174	6.25
					6	9	87	5.25 +	174	7.5
					8	9	87	6.25	174	8.75
2.3	8	87			3.5	174	4.5			
4	8	87			4.25 +	174	5.75			
6	8	87			5	174	7.25			
8	8	87			5.75	175	8.5			



# SPREADING CHART

Material	Spreader Mounting Angle to Tractor	Ground Speed MPH	Spread Width (feet)	Lbs. Per Acre	Gauge Setting	Lbs. Per Acre	Gauge Setting	Lbs. Per Acre	Gauge Setting
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## SEEDS

Alfalfa	↗	2.3	28	10	2.25	12	2.5	15	2.75	
		4	28	10	3	12	3.25	15	3.5	
		6	28	10	3.5	12	3.75	15	4	
		8	28	10	3.75	12	4	15	4.75	
	↕	2.3	30	10	2.25 +	12	2.5 +	15	2.75 +	
		4	30	10	3 +	12	3.25 +	15	3.5 +	
		6	30	10	3.5 +	12	3.75 +	15	4 +	
		8	30	10	3.75 +	12	4 +	15	4.75 +	
	Birdfoot Trefoil	↗	2.3	28	4	1.5	6	1.75		
			4	28	4	2 -	6	2 +		
			6	28	4	2 +	6	2.5 +		
			8	28	4	2.5	6	3		
↕		2.3	30	4	1.5 +	6	1.75 +			
		4	30	4	2	6	2.25			
		6	30	4	2.25	6	2.75			
		8	30	4	2.5 +	6	3 +			
Bluegrass, Kentucky	↕	4	10	20	4	30	4.75			
		6	10	20	4.75	30	5.5			
		8	10	20	5.5	30	6.5			
Clover	↕	4	30	4	2 +	8	2.75	12	3.25	
		6	30	4	2.5	8	3.25	12	4 +	
		8	30	4	2.75	8	3.75 +	12	4.25 +	
Fescue, Kentucky 31	↕	4	13	10	5	15	5.75	20	6.5	
		6	13	10	5.75	15	6.5	20	7.5	
		8	13	10	6.5	15	7.5	20	8.25	
Ladino	↕	4	15	10	5.25	15	6	20	6.75	
		6	15	10	6	15	6.75	20	8	
		8	15	10	6.75	15	8	20	9	
		4	24	2	1 +	3	1.5	4	1.5 +	
	↕	6	24	2	1.5	3	1.75	4	1.75 +	
		8	24	2	1.5 +	3	1.75 +	4	2 +	
		4	26	2	1.25	3	1.5	4	1.75 +	
		6	26	2	1.5	3	1.75 +	4	2	
	↕	8	26	2	1.75	3	2	4	2.25	
		4	32	20	3.75	30	4.75			
		6	32	20	4.75	30	5.5			
		8	32	20	5.5	30	6.5			
↕	4	34	20	3.75 +	30	4.75 +				
	6	34	20	4.75 +	30	5.75				
	8	34	20	5.75	30	6.75				
	Lespedeza, Korean, Unhulled	↕	4	26	20	4.5	30	5.25	50	7
6			26	20	5.25	30	6.25	50	8.25	
8			26	20	6	30	7.25	50	9.25	
↕		4	28	20	4.5 +	30	6.25	50	7 +	
		6	28	20	5.5 +	30	7	50	8.25	
		8	28	20	6.25	30	7.5	50	9.75	
Millet	↕	4	32	10	3	15	3.5	30	5	
		6	32	10	3.5	15	4.5	30	6	
		8	32	10	4	15	5	30	6.5	
Rape	↕	4	40	5	3.25	8	3.75			
		6	40	5	3.75	8	4.5			
		8	40	5	4.25	8	5			
Ryegrass	↗	4	15	25	5.75	30	6.25			
		6	15	25	6.75	30	7.25			
		8	15	25	7.75	30	8			
Sudan Grass, Sorghum, Lindsey - 77F	↕	4	40	10	4.5	25	6.5	35	7.75	
		6	40	10	5.5	25	7.75	35	9.25	
		8	40	10	6	25	9.25	35	10.5	
Timothy	↕	4	18	5	1.75	7	2	10	2.25 +	
		6	18	5	2 +	7	2.5	10	2.75	
		8	18	5	2.25 +	7	2.75	10	3.25	
Vetch, Hairy Vetch	↕	4	40	20	6.5					
		6	40	20	7.5					
		8	40	20	8.25					

Measure an acre or a fraction of an acre and put the amount of seed or fertilizer you wish to spread in the hopper.

Make a temporary setting. After a temporary run, a permanent setting may be determined.

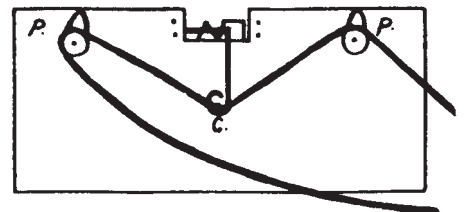
1 acre contains 43,560 square feet.

### IMPORTANT!

After spreading salt, ice melter or fertilizer the spreader hopper should be washed thoroughly with water to remove any corrosive residue. Special care should be taken to prevent water from entering the motor around the motor shaft. If you use a high pressure washer to clean the hopper do not spray the pressurized water stream directly at the motor shaft or you might displace the grease from under the rubber boot covering the motor bearing.

The electric motor is sealed and no maintenance can be performed except to wipe off any residue on the exterior of the motor housing.

### REMOTE ROPE CONTROL



### POSITIVE AND INSTANT CONTROL FOR REMOTE MOUNTING LOCATIONS:

Pass rope through eye of control lever (C) to center and knot.

Then pass rope through pulleys (P) to the operator.

## SERVICE INFORMATION

The M3B Seeder uses a 12 volt D.C. electric motor that is a negative (-) ground. Therefore, the orange wire from the motor must be connected to the positive (+) terminal of the 12 volt battery being used for power. The frame of the seeder must be mounted securely to the vehicle to act as the ground. If the frame of the seeder does not contact the frame of the vehicle and make the ground complete, a separate ground wire must be added. This can be done by using a 14 Ga. automotive wire (not furnished with the seeder) and connecting it to the bolt on the seeder and a secure place on the frame of the vehicle or directly to the negative (-) terminal of the battery. Every M3B Seeder is tested before it is shipped; so if the motor does not operate, the problem is most likely the ground is not complete.

When fertilizer or salt is used in the seeder, the hopper should be washed with water to remove the corrosive residue. Special care should be taken to prevent water from entering the motor around the motor shaft and the terminal wires. NOTE: A plastic sack makes a good motor covering to keep water out while washing the seeder.

To remove the spreading spinner (#T221) and eccentric shaft (#T213) from the electric motor, loosen the allen head set screw in the motor coupling (#T211). This coupling may be removed from the eccentric shaft by turning the coupling in a clockwise direction or to the right. Both the coupling and eccentric shaft are left hand thread and turning to the right or clockwise will loosen them.

## OPTIONAL ACCESSORIES

<b>Part Number</b>	<b>Description</b>
TR75	Rheostat - 12 volt D.C. used to control the motor speed of the M3B Seeder which also controls the spread width.
T393	3-Point Hitch Upper Arm Bracket - Used to attach the tractor's upper link to the seeder. (Used with #T505)
T505	3-Point Hitch Lower Cross Mounting Bar - Used to attach the tractor's lower links to the seeder. (Used with #T393)
T305	Extension Hopper - Used to increase the capacity of the standard hopper by approximately 2 bushels of 200 lbs. of material.
T308	Lid for extension hopper.
T502	Pickup Mounting Rails - Used to attach M3B Seeder to a pickup truck without drilling holes for brace rods.
T700	2" Receiver Hitch Mount - The pickup truck must already have a 2" receiver in order to use this option.
T222	Conversion Kit - Converts M3B Electric Seeder to a PTO driven model S3B Seeder.
T12-300	Flotation Trailer - The M3B Seeder can be mounted to this trailer allowing it to be pulled by a vehicle instead of being mounted to a vehicle.
T12-301	Dump Bed for T12-300 Trailer - 10 cubic feet or 1,000 lbs. capacity.
T12-304	Battery Box - This can be bolted to the T12-300 trailer frame and used to carry a 12 volt D.C. battery to run the seeder if the vehicle pulling the trailer does not have a battery.