



## SPREAD-ALL MFG. CO.

2237 MARSHALLTOWN BLVD. • MARSHALLTOWN, IOWA 50158

PHONE: (641) 753-5601 • TOLL FREE: 1-800-383-5601 • FAX: (641) 752-9748

WWW.SPREAD-ALLMFG.NET

# INSTRUCTIONS

## MODELS: E-2, E-3, & E-6 GRAIN SPREADERS

### ASSEMBLY INSTRUCTIONS

1. Remove all parts from the carton.
2. Bolt the four Hanger Straps to the hopper, two (2) bolts each, hooks out. Either lengthen or shorten them to accommodate different bin opening sizes.
3. Turn the unit upside down and gently slide the sleeved end of the Impeller Shaft Assembly onto the protruding end of the output shaft. Be sure that the sleeved shaft is way down against the bearing on the output shaft. Then tighten the 5/16 – 18 x 5/8 Set Screw.

**Important: be sure the set screw is tightened properly.**

4. Pivot the spreading impeller to a sharp angle. DO NOT loosen the pivot locking nut. A spring washer retains adequate tension to hold the impeller in a selected position. When the unit is new, extra pressure may be required to make the impeller pivot to different angles.
5. Add one (1) quart oil (included).
6. The unit is now ready to install in your bin.

### INSTALLATION AND OPERATION

1. Hang the unit into the bin. Center it and level it with a carpenter's level.
2. Make sure hanger straps are bolted securely to the fill ring or center ring.
3. Connect the power cord to 110 volts A.C. grounded supply.
4. The unit is ready to operate.
5. Changing the angle of the impeller up and down to different positions will adjust the spreading pattern. Never leave the angle in one setting for a long period of time. Tilting the long end of the impeller downward sharply usually is best for the lower fill in the bin. Gradually flattening the angle as the bin fills is the best procedure. Some changing back and forth often works well in larger diameter bins.
6. Up is reverse and forward is down.
7. Spreaders with a reversing switch should turn counterclockwise from the top looking down to start filling the bin (narrow spread). Once the bin is  $\frac{3}{4}$  full, reverse the spreader to clockwise from the top looking down to finish filling (wide spread).

**CAUTION: DO NOT STORE SPREADER UPSIDE DOWN, WITH OIL IN, OR WARRANTY WILL BE VOID. THE USE OF GROUND FAULT CIRCUIT INTERRUPTERS (GFCI) IS SUGGESTED ON ALL OUTSIDE ELECTRICAL WIRING TO REDUCE POTENTIAL FOR ELECTRICAL SHOCKS.**

### LUBRICATION (SEE ILLUSTRATION PAGE 15)

Check the oil level in the gear case once every 20 hours operating time. The gear case has an oil fill plug on the top and an oil check plug on the side. Maintain an oil level up to the check plug in the gear case. **DO NOT OVERFILL THE GEAR CASE WITH OIL!** Use #30 SAE Motor Oil in the gear case.

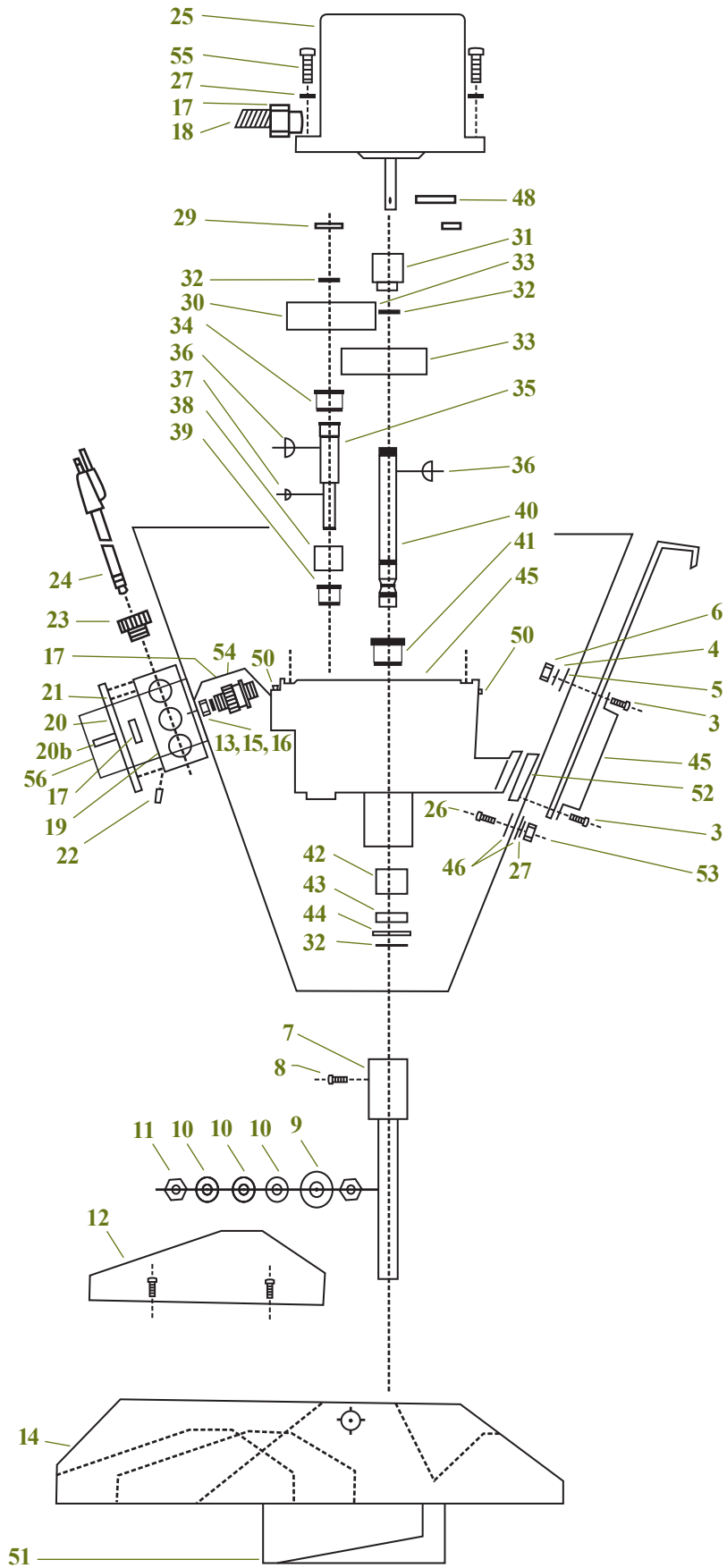
### \*\* BEFORE OPERATING SPREADER FILL PROPERLY WITH OIL

1. Use the bottle of oil that is included.
2. To put oil in gear case, remove fill plug on top of gear case and oil plug on side of gear case. Pour oil in gear case.
3. Replace fill plug and oil level plug in gear case.





# • PARTS DIAGRAM •



# • PARTS LIST •

## E-2, E-3, E-6 SPREADERS

#	Part Description	Qty.	Part #
1a	Cone – Hopper E-2	1	1D0125
2a	Strap – Hanger	2	1B0125
2b	Strap – Adjustable Hanger	2	1A0012
2c	Bracket – Adjustable Hanger	2	A10013
3	3/8" – 16" x 3/4" Hex Hd Bolt	8	
4	3/8" 1D Shakeproof Washer	8	
5	3/8" 1D x 10D Flat Washer	8	
6	3/8" – 16" Hex Nut	8	
7	Impeller Shaft Assembly E-2	1	1B0136
8	5/16" – 18 x 1 1/4" Sq Set Screw	1	
9	1/2" STD Flat Washer	2	
10	Washer Spring 1/2"	3	1P0039
11	Nut Lock 1/2" – 13	1	1P0042
12a	Vane – Spreader	3	1B0141
13	1/4-20 x 1/2 Hex Hd Cap Bolt	3	
14	Impeller Spreader	1	1D0135
15	1/4" Lock Washer	3	
16	1/4"-20" Hex Nut	3	
17	Connector Sealtight 3/8"	2	1P0038
18	Conduit Flexible Sealtight	1	1P0028
19	Handy Box	1	1P0021
20	Cover Handy Box	1	1P0022
20b	Reverse Switch Assembly	1	1P0023
21	10 x 5/8" Tek Screw	1	
22	Wirenut (L/R only)	3	
23	Connector B-x 3/8"	1	1P0024
24	Plug Cord	1	1P0018
25a	Motor Electric 1/2" HP 1PH	1	1P0069
25b	Motor Electric 1/3" HP 3PH	1	1P0070
26a	5/16"-18" x 1" Hex Hd Bolt	6	
27	5/16" Lock Washer	2	
29	Seal O-Ring	1	1P0029
30a	Gear Drive 42T Upper	1	1B0132
30b	Gear Drive 40T Hi-Speed	1	1B0138
31a	Pinion Motor – 12T	1	1B0130
31b	Pinion Motor – 14T Hi-Speed	1	1B0135
32	Retaining Ring 3/4"	3	1P0035
33	Gear Drive 41T Lower	1	1B0137
34	Bearing Flange 3/4"ID x 5/8"	1	1P0032
35	Shaft Pinion	1	1B0133
36	Key Woodruff 3/4"	2	1P0036
37	Key Woodruff 1/2"	1	1P0037
38	Pinion Drive 13T	1	1B0131
39	Bearing Flange 1/2"ID x 3/4"	1	P0033
40	Shaft Output	1	1B0134

#	Part Description	Qty.	Part #
41	Bearing Flange 3/4"ID x 1"	1	1P0012
42	Bearing Plain 3/4"ID x 1"	1	1P0034
43	Seal Oil 3/4"	1	1P0031
44	Steel Washer	1	
45	Gearbox Machined	1	1D0128
46	5/16 Flat Washer	12	
48	Pin Roll 3/16" x 3/4"	1	1P0040
49	Carrying Handle	1	1A0160
50	Pipe Plugs Sq Hd 1/4"	2	
51	Center Fill Slide	1	1B0162
53	5/16" Nylock	6	
54	Conduit Cover	1	C Cover
55	5/16" x 1 1/8" Cap Bolt	2	
56	Switchguard	1	

### E-3 Parts

1b	Cone - Hopper E-3	1	1D0126
7b	Impeller Shaft Assembly E-3	1	1B0143
12a	Straight Vane - Spreader	2	1B0141
12b	Bent Vane - Spreader	1	1B0142
52	Rubber Shims	3	1RS001
25c	Motor Electric 1HP 1PH *Hi-Speed Only	1	1P0072
26b	5/16"-18 x 2 Hex Hd Bolt	2	

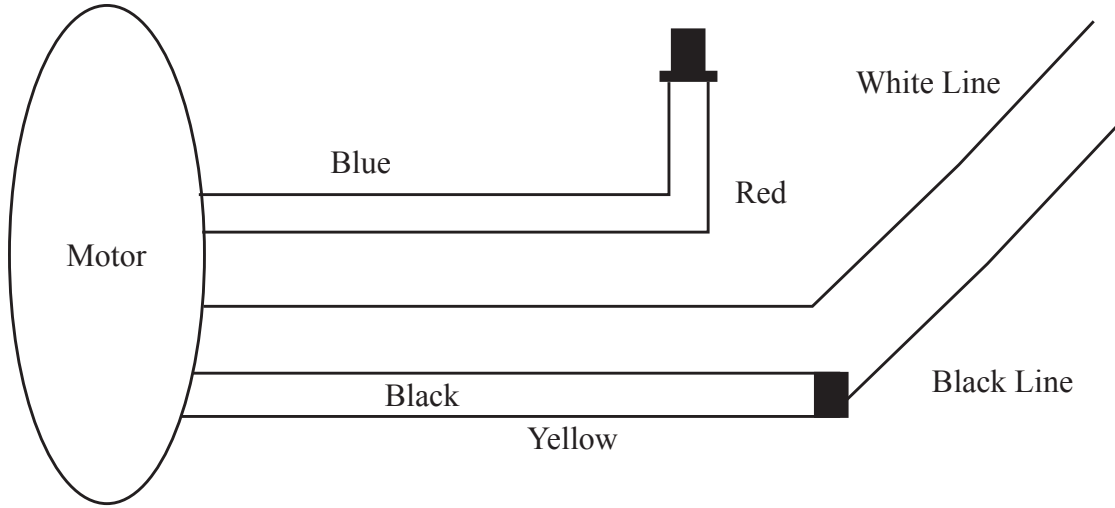
### E-6 Parts

1c	Cone - Hopper E-6	1	1D0127
7c	Impeller Shaft Assembly E-6	1	1B0144
12a	Straight Vane Spreader	2	1B0141
12b	Bent Vane Spreader	1	1B0142
52	Rubber Shims	3	1RS002
25c	Motor Electric 1HP 1PH	1	1P0072
26c	5/16"-18 x 2 1/2 Hex Hd Bolt	2	

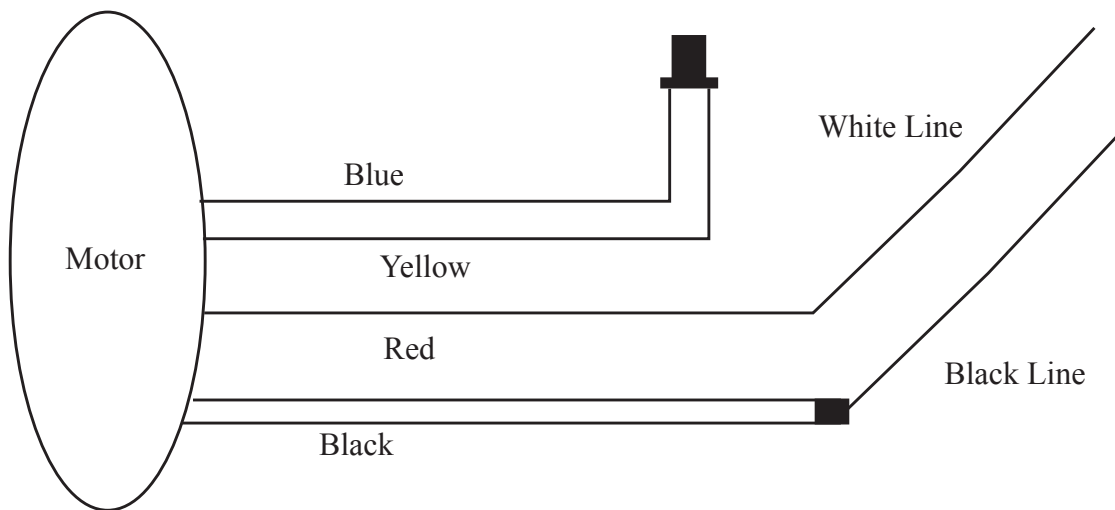
### Pans

E-2	Pan	1	1B0126
E-3	Pan	1	1B0139
E-6	Pan	1	1B0140

• **WIRING DIAGRAM** •  
**E-2, E-3, E-6 SPREADERS**

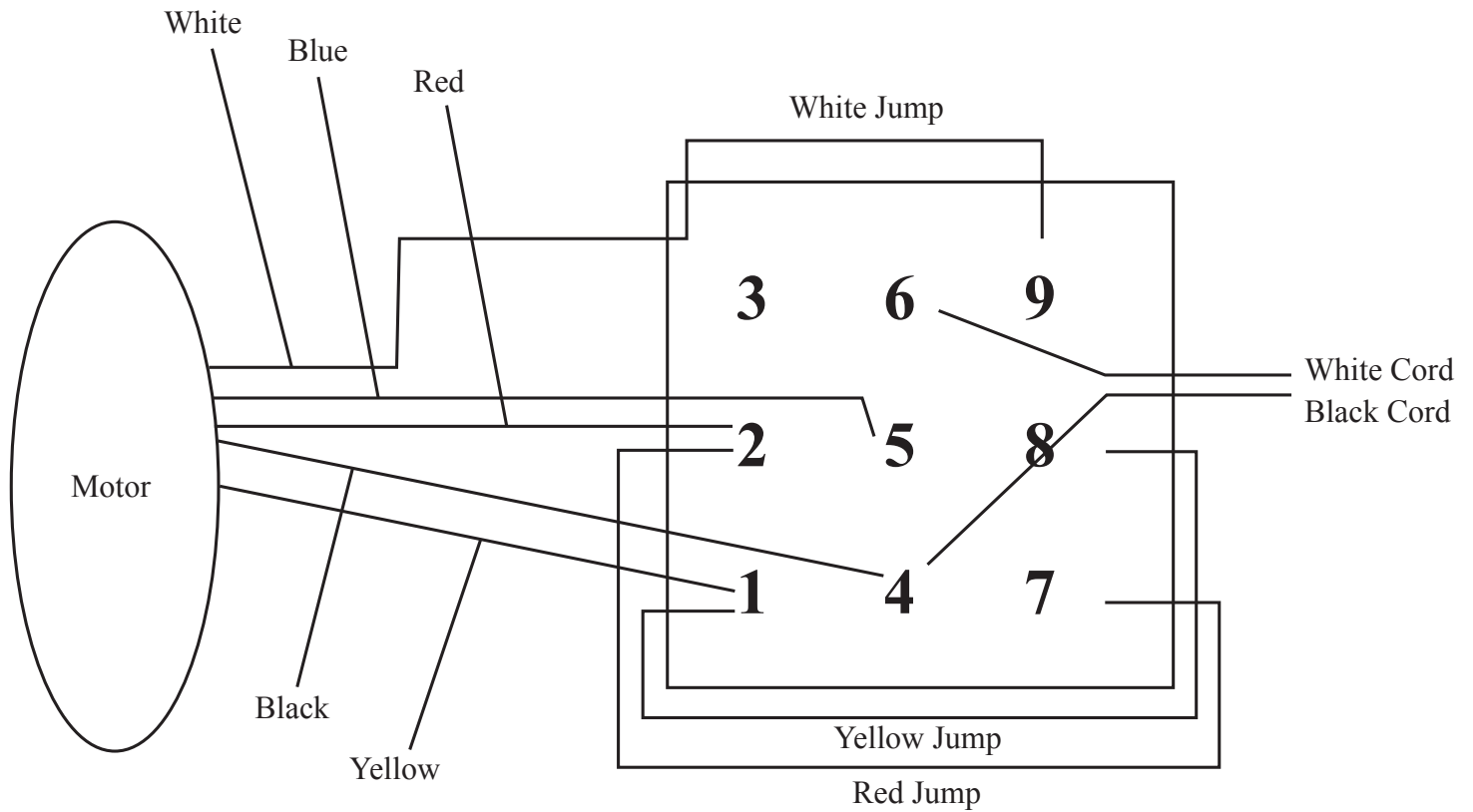


**THROWING DIRECTION**



**LIFTING DIRECTION**

• **WIRING DIAGRAM** •  
**E-2, E-3, E-6 SPREADERS**



• **Switch Jumps** •

- 3-9 White Jump
- 2-7 Red Jump
- 1-8 Yellow Jump

• **Motor Connections** •

- White - 3
- Red - 2
- Yellow - 1
- Blue - 5
- Black - 4

• **Cord** •

- Black - 4
- White - 6
- Green - Cover Screw



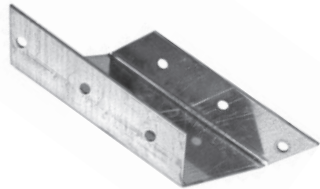
• HANGER STRAP SPACER BRACKETS •

Assembly of:  
**Hanger Strap Spacer Brackets (Optional)**



**SA-24  
 5" HANGER STRAP  
 SPACER BRACKETS**

Four of these brackets can be used to hang the Spread-All Spreader in a 36" fill opening.



**SA-25  
 8" HANGER STRAP  
 SPACER BRACKETS**

Four of these brackets can be used to hang the Spread-All Spreader in a 40", 42", or 48" fill opening.



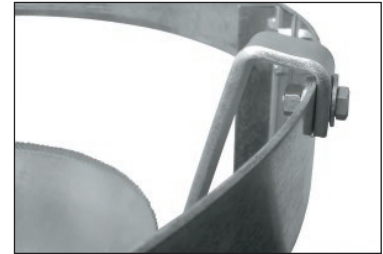
**SA-26  
 8" HANGER STRAP  
 SPACER BRACKETS**

Eight of these brackets can be used to hang the Spread-All Spreader in a 60" fill opening.

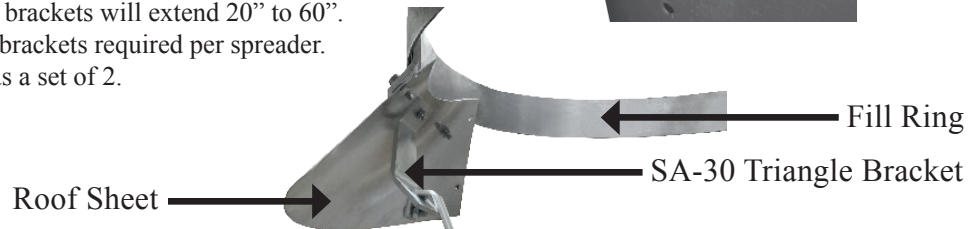
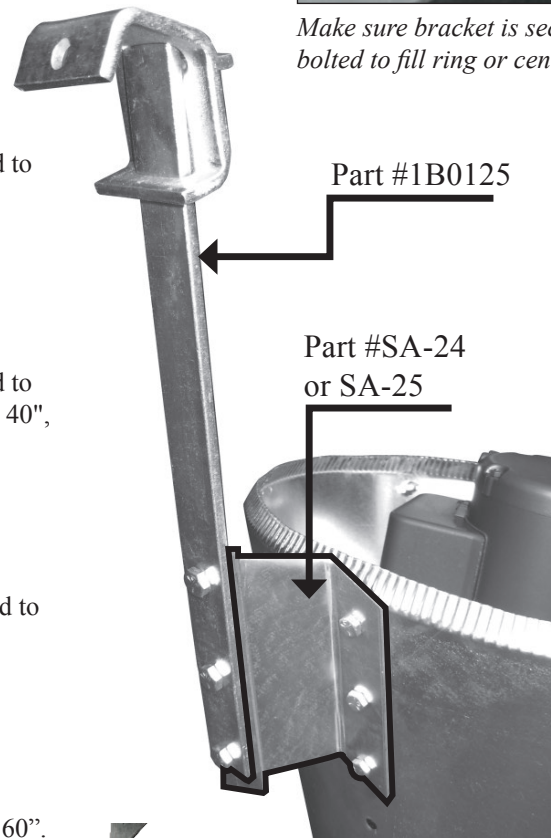


**SA-27  
 ADJUSTABLE  
 SPACER BRACKET**

These brackets will extend 20" to 60". Eight brackets required per spreader. Sold as a set of 2.



Make sure bracket is securely bolted to fill ring or center ring.



**SA-30  
 TRIANGLE BRACKET**

Four of these 1/4" steel brackets can be used to hang the Spread-All Spreader in a 30" fill opening. 4 of these brackets come with each spreader.



# • TROUBLE SHOOTING •

1. Grain is not level and grain is hitting bin high on the side walls. Large doughnut shaped ring.

TILT THE ANGLE OF THE SPREADER IMPELLER DOWNWARD MORE OR CHANGE ANGLE BACK AND FORTH.

2. Grain is high in the center of bin (small doughnut).

TILT THE ANGLE OF THE SPREADER IMPELLER UP OR MORE FLAT, OR CHANGE BACK AND FORTH.

3. Grain is high on one side and spout is entering spreader at an angle.

CORRECT SPOUT SO THAT GRAIN IS DROPPED DIRECTLY DOWN AND CENTERED SO IT FLOWS EVENLY OVER AND AROUND THE ELECTRIC DRIVE MOTOR. **NEVER LET GRAIN FLOW DOWN ONE SIDE OF THE HOPPER OR AT AN ANGLE; THIS WILL RESULT IN SEVERE SHAKING OF THE SPREADER.**

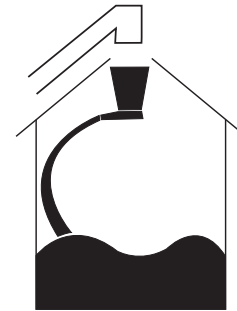
4. Grain is high on one side and spreader is not hanging level in the bin.

USE A CARPENTER'S LEVEL ACROSS THE TOP OF THE SPREADER HOPPER TO CHECK IT. BLOCK UP UNDER ONE OF THE HANGER STRAPS TO GET THE SPREADER LEVEL IF NECESSARY.

5. **THIS IS THE CORRECT SPREADING PATTERN. GRAIN IS SLIGHTLY DEPRESSED IN THE CENTER, CONVEYOR SPOUT IS CENTERED, AND THE SPREADER IS LEVEL.**

6. **Very Important** - The spreader needs to be sized for the input flow rate. Too large of a spreader, too small of a flow rate often leads to an uneven bin and severe shaking of spreader when grain is not centered and underfilled.

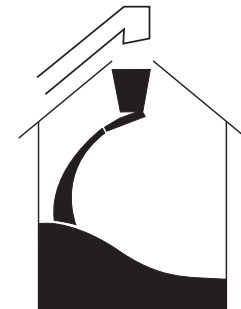
7. On reversible spreaders, begin filling the bin with the pan rotating counterclockwise (top looking down) and change direction when the spreader no longer reaches or about 3/4 full.



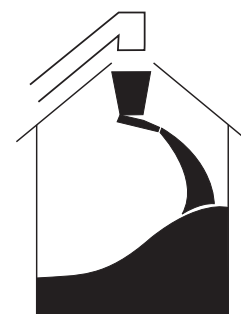
1. IMPELLER ANGLE TOO FLAT



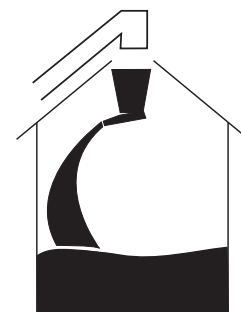
2. IMPELLER ANGLE TOO STEEP



3. AUGER SPOUT AT AN ANGLE



4. SPREADER TILTED



5. CORRECT SPREADING PATTERN



# MAIL GUARANTEE CARD TODAY

(MAIL WITHIN 10 DAYS OF PURCHASE OR GUARANTEE IS VOID)

Owner \_\_\_\_\_  
Street or Route \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP/Zone \_\_\_\_\_  
Dealer's Name \_\_\_\_\_ Model# \_\_\_\_\_  
Address \_\_\_\_\_ Serial# \_\_\_\_\_  
Date of Purchase \_\_\_\_\_

**SPREAD-ALL** equipment is guaranteed against defective material and workmanship for a period of one year from the date of sale to the original purchaser. We will repair or replace defective parts upon inspection and direction by our service department. No returns for credit allowed. We will not handle warranty on electric motors. Motor warranties will be handled by the motor manufacturers and their repair stations. Spread-All does not cover labor costs or milage charges on warranty or non-warranty work.

We assume no responsibility for any damage incurred in transit or for any other abuses, or incorrect application; nor for any attempted repairs by others without our written authorization. Sender must receive written permission from our factory before returning equipment. All shipping charges to and from the factory on defective units will be assumed by the customer.

Manufacturer shall only be liable under this guarantee if the product is used in the proper manner as specified in the enclosed instructions.

Manufacturer specifically disavows any other representation, warranty or liability related to the condition or use of this product.

The warranties contained herein are the only warranties made by the manufacturer, and no other warranties, express or implied, are given on this product.

Any warranty contained herein shall not apply to any product which shall have been repaired or altered outside the manufacturer's facilities or in any way so as, in the manufacturer's judgment, to affect its stability or reliability, or which has been subject to misuse, negligence or accident. Warranties shall not apply to any product which shall not have been operated in accordance with the printed instructions or shall have been operated beyond the rate of capacity of the product.

**Please complete and mail  
within 10 days of purchase to:**

**SPREAD-ALL MFG. CO.  
2237 MARSHALLTOWN BLVD.  
MARSHALLTOWN, IOWA 50158-9892**







# SPREAD-ALL MFG. CO.

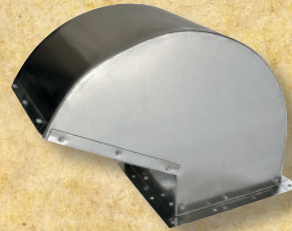
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## GRAIN STORAGE EQUIPMENT



### SA-105 & SA-106 SPINNING GRAVITY SPREADER

- Gravity Spreader designed to help keep fines out of center of smaller bins
- Has strong hanger straps (and a leveling strap)
- Capacity:  
SA-105: 3000-5000 Bu./Hr.  
SA-106: 6000-9000 Bu./Hr.  
(Depending on grain and moisture)



### ROOF VENTS

- Models Available | 70 & 90 degree
- Heavy, easily detachable angle base
  - Lock seam joints
  - Birdproof screen
  - 100% galvanized to withstand years of weather conditions
  - Symmetrically punched holes make one-person installation a breeze
  - Double edges add strength
  - Pivot Screen Available



### SA-98 GALVANIZED GRAVITY SPREADER

- To help keep fines from center of small bins
- Lightweight 18#  
(Comes unassembled in box)



### SPREAD-ALL TRANSITIONS FEATURE:

- All galvanized steel
- All welded construction
- Completely assembled
- Transitions have access doors
- SA-82 (shown)

## COMPLETE OFFERING OF AERATION FANS



### FEATURES:

- Galvanized
- Models SA-12075 and SA-14100 feature 115 volt, single phase electric motors with plug cords wired
- Standard leg stands and carrying handles
- Weather-resistant guard
- Completely factory assembled and test run before shipment
- Magnetic contactor mounted in a weatherproof enclosure on 24" & 28" fans
- Reversible application to pull air down through the grain, or to direct the air flow up through the grain by turning the fan around and reversing guard
- Either the intake or the discharge ends may be mounted to an air duct, metal transition or a flat wall bin
- These fans are designed for quiet, efficient aeration with a minimum of maintenance and operating cost
- Models available 12" to 28" ...  
So you can get just the right fan to do the job right



# COMPLETE OFFERING OF GRAIN SPREADERS

**OUR MOST  
POPULAR  
MODEL!**



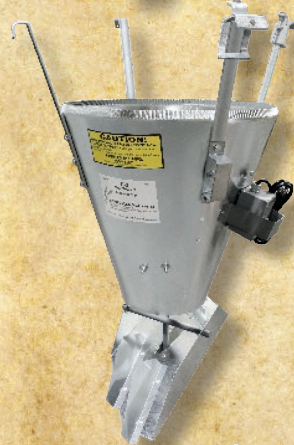
- SA-93  
SPREAD-ALL SPECIAL**  
For 6" & 8" auger
- Without reversing switch
  - Capacity: Up to 3000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1/2 HP 115V
  - Weight: 85 lbs
  - Bin diameters 18' to 30'
  - Vary the spread by tilting pan



- SA-97  
E-3 COMPACT**  
For 10" auger
- With reversing switch
  - Capacity: 3000 to 5000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1/2 HP 115V
  - Weight: 85 lbs
  - Bin diameters: 18' to 36'
  - Reversible switch to change from narrow to wide spread



- SA-94  
E-2 COMPACT**  
For 6" & 8" auger
- With reversing switch
  - Capacity: Up to 3000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1/2 HP 115V
  - Weight: 85 lbs
  - Bin diameters 18' to 36'
  - Reversible switch to change from narrow to wide spread



- SA-97HS  
E-3 HIGH SPEED**  
For 10" auger
- With reversing switch
  - Capacity: 3000 to 5000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1 HP 115V
  - Weight: 100 lbs
  - Bin diameters: 42' +
  - Reversible switch to change from narrow to wide spread



- SA-95HS  
E-2 HIGH SPEED**  
For 6" & 8" auger
- With reversing switch
  - Capacity: Up to 3000 Bu./Hr. (Depending on grain & moisture)
  - Powered: oil bath gear case
  - Motor: 1/2 HP 115V
  - Weight: 85 lbs
  - Bin diameters: 42' +
  - Reversible switch to change from narrow to wide spread



- SA-103  
E-6**  
For 13" auger
- With reversing switch
  - Capacity: 6000 to 9000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1 HP 115V
  - Weight: 100 lbs
  - Bin diameters: 18' to 36'
  - Reversible switch to change from narrow to wide spread



- SA-96  
E-3 COMPACT**  
For 10" auger
- Without reversing switch
  - Capacity: 3000 to 5000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1/2 HP 115V
  - Weight: 85 lbs
  - Bin diameters: 18' to 36'
  - Vary the spread by tilting pan



- SA-104HS  
E-6 HIGH SPEED**  
For 13" auger
- With reversing switch
  - Capacity: 6000 to 9000 Bu./Hr. (Depending on grain and moisture)
  - Powered: oil bath gear case
  - Motor: 1 HP 115V
  - Weight: 100 lbs
  - Bin diameters: 42' +
  - Reversible switch to change from narrow to wide spread