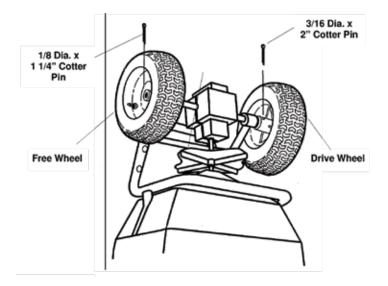




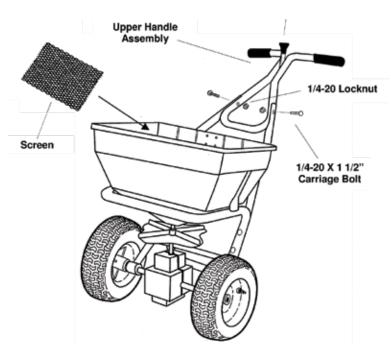
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**OWNER'S MANUAL** 

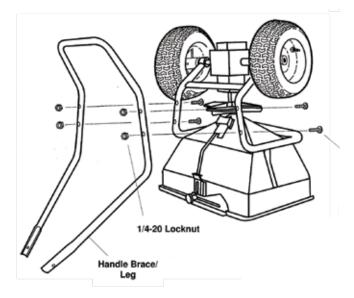
# ASSEMBLY INSTRUCTIONS



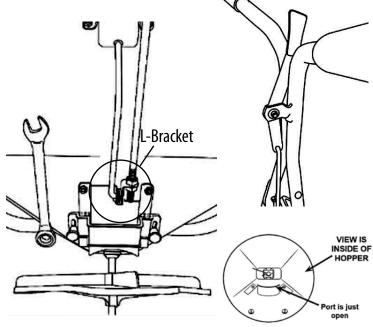
**1.** Remove the spreader and components from box and place hopper up-side down on a padded surface as shown. Slide drive and free wheel onto axle as shown with the longer portion of wheel hub facing the frame. Secure free wheel with (1) 1/8'' dia. x 1-1/4'' cotter pin. Attach drive wheel to axle with (1) 3/16" dia. x 2" cotter pin.



3. Turn spreader upright on wheels. Insert screen into hopper sliding it under the screen clips. Attach the upper handle assembly to handle brace with the handle lever facing as shown. Secure with (2) 1/4-20 x 1-1/2" carriage bolts, and lock-nuts.



2. Attach leg/brace to frame as shown using (4) 1/4-20 x 2-1/4" carriage bolts and lock-nuts.



**4.** Install control rod to handle lever with a 1/4" dia. clevis pin. Thread (1) 5/16" hex nut onto the control rod until it is roughly in the middle of the threaded area. Next, Install all three friction washers on the spring housing rod. Place the L-Bracket on the end of the spring housing rod and secure with the 3/32" cotter pin. Slide the end of the control rod through the L-Bracket making sure there no tension between the hex nut and the L-Bracket. Set the rate control plate to the "B Position". Flip control lever to the "On Position". Check port gap. Adjust the threaded nut on the threads until the port opening is "just" open when lever is in the "On Position". With the lever in the closed position install the second 5/16 Hex Nut on the control rod. Tighten both nuts against the L-Bracket. 2

# OPERATION

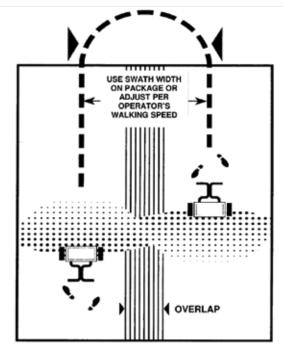
1. Check the product package for the rate setting, and recommended swath width. Loosen rate control knob and slide rate plate to the proper setting. The pattern is controlled by loosening the two knobs on the discharge chute and moving the chute closer or further away from the impeller (setting A, B or C). <u>See</u> <u>"Pattern Adjustment" for details.</u>

2. Always fill the spreader on the driveway or sidewalk, NOT on the lawn. Make sure screen is in the hopper and spreader is in the "Off" position.

3. Start spreader moving before opening port. Close before stopping. Always push spreader, <u>never pull.</u>

4. Hold handle so top of spreader is level. Tipping the spreader too far can cause uneven spreading.

5. The settings and swath widths on the product label are recommended starting points. Always check the delivery rate and pattern on a small area before treating a large area. Actual delivery rate can vary due to weather conditions, operating variables and condition of the product being applied. See <u>"How to determine spreader settings and spread width" for details.</u>



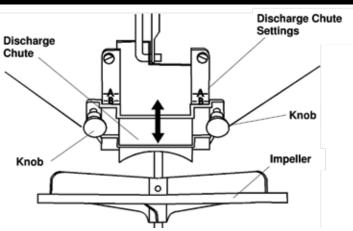
6. Push spreader at a normal walking speed, roughly 2.5 mph. Apply header strips around area to be treated. Space strips across the area as shown. Keep material off flower beds, sidewalks, etc.

7. When transporting spreader, make sure that it is in the "off" position.

8. Empty spreader after each use. Return leftover materials to its original container.

# **PATTERN ADJUSTMENT**

Normal spreading of materials requires no adjustment (Factory setting "A") unless stated on the package. In those cases where the spread pattern has shifted, the pattern can be adjusted left and right by loosening the two knobs on the discharge chute and moving the chute closer or further away from the impeller. Settings of A, B and C are provided as reference.



#### HOW TO DETERMINE SPREADER SETTINGS AND SPREAD WIDTH

Two major factors should be considered when determining correct spreader settings of any project:

1. The product application rate, or the amount of material applied per 1,000 square feet.

2. The effective pattern width, or the actual width in which material is applied. Label settings are a guide and can be affected by numerous factors.

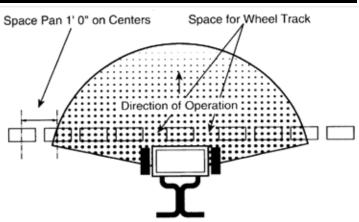
### **APPLICATION RATE**

Knowing the effective pattern width, for example: 10 feet. Measure a distance equal to 100 square feet ( $10' \times 10'$  swath). Determine the product coverage in pounds / 100 sq. ft. by taking the weight of the product and dividing it by the recommended square foot coverage (add two zeros to the weight of the bag).

Example: Product weight: 25 lb. Coverage: 5,000 sq. ft. 2500 lbs ÷ 5000 sq. ft. = .5 lbs / 100 sq. ft.

Weigh out 15 to 20 lbs of material and spread over 100 sq. ft area. Weigh remaining material left in hopper and adjust rate setting as required. Repeat test until application rate is correct.

#### EFFECTIVE PATTERN WIDTH



A simple visual pattern test can be made by operating the spreader over a non-turf area and evaluating the pattern. A more accurate method is to place a row of common disposable aluminum cake pans approximately 1 foot on center. Set the rate plate at a middle setting and make 3 or 4 passes in the same direction as shown. Pour the material collected from each pan into individual bottles of the same size. Set them side by side in order and visually inspect their volume. If the pattern is not centered (example: volume in bottle #2 left not equal to bottle #2 right), adjust the discharge chute up or down as described in "Pattern Adjustment" section.

Once the pattern is uniform, the effective pattern width can be determined. The effective pattern width is the distance out from the spreader to a point where the amount of material is 1/2 the average amount in the center pans. This distance is multiplied by 2 to achieve the total effective pattern width.

# RATE SETTING CONVERSION

The following provides approximate A.M. Leonard AM70P and AM70S setting for the spreaders listed below.

Leonard AM70P / 70S	В	C	D	E	F	G	Н	Ι	J	K	L	М	N	0	Р	Q	R	S	T	U	V	W	Х	Y	Z
Prizelawn BF1 / CBR-IV	В	C	D	E	F	G	Н	I	J	K	L	М	N	0	Р	Q	R	S	T	U	V	W	Х	Y	Z
Prizelawn CBR II	-	2	-	2.5	-	3	3.5	4	-	4.5	-	5	5.5	6	6.5	7	8	9.5	10	11	12	13	14	15	-
Lesco 029600	-	В	C	D	-	Ε	F	-	G	Η	I	-	J	K	L	-	М	N	0	-	Р	Q	R	-	S
Scotts R8A/SR-1	D	Ε	F	G	Η	I	J	К	L	М	N	0	Р	Q	R	S	Т	U	-	۷	W	-	Х	Y	Z
Earthway 2200/2400	5	-	-	-	10	-	-	-	-	15	-	-	-	-	20	-	-	-	-	25	-	-	-	-	30
Spyker 76/78-2	-	3	-	-	-	4	-	-	5	-	-	6	-	-	7	-	-	8	-	-	-	9	-	-	10
Scotts Speedy Green	-	-	-	2	-	-	3	3.5	-	4.5	5	5.5	6	-	6.5	-	7	-	7.5	-	8	-	8.5	-	9

# RATE SETTING CONVERSION CONTINUED

The following provides approximate A.M. Leonard AM70P and AM70S setting when only the product weight, square-foot coverage and visual inspection of material is available.

FERTILIZER PARTICLE SIZE	<b>BAG RATE</b> Pounds of fertilizer used per 1,000 sq. ft. of coverage	APPROX SETTING	SPREAD WIDTH
Large Heavy Particles	5, 10, 15	M, O, Q	8, 8, 8
Medium - Mixed Particles	5, 10, 15	L, N, O	8, 8, 8
Small Particles (Nitrogen)	1, 2, 3	G, J, L	8, 8, 8
Mixed Size Particles Some Fines	5, 10, 15	M, O, P	6, 6, 6
Light Weight Particles	5, 10, 15	J, L, O	4 to 6

The conversions should be used as guidelines for establishing proper rate settings for the particular product being applied. Steps for obtaining the most accurate settings are outlined in the "How to Determine Spreader Settings and Spread Width" section of this manual. These settings are approximate and may vary due to physical characteristics of the product. Walking speed, wear, condition of the turf and humidity may cause actual rate settings to deviate. <u>No expressed nor implied warranty or guarantee is provided as to the coverage or uniformity indicated by these rate settings.</u>

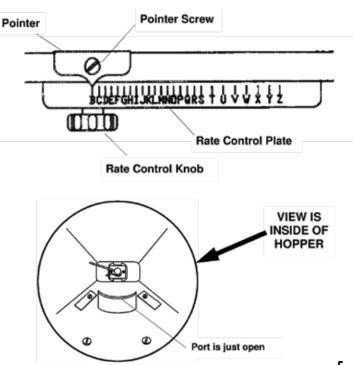
# **CALIBRATION INSTRUCTIONS**

The AM70P / AM70S was calibrated during assembly of the threaded control rod in step 4 of the assembly instructions section. However, it is good practice to occasionally check the calibration to ensure optimum performance.

1. Pull the On/Off lever to the "OFF" position. Set the rate control plate to setting "B".

2. Flip On/Off control lever to the "ON" position. Check the port opening. It should be "just" open. If adjustment is necessary, continue to step 3.

3. Loosen the rate control knob and slide the rate plate until the port is just opening. Loosen pointer screw and move pointer until it aligns with "B" on the rate plate. Re-tighten pointer screw.



#### **GENERAL MAINTENANCE**

1. Never store unused material in spreader, return product to its original container.

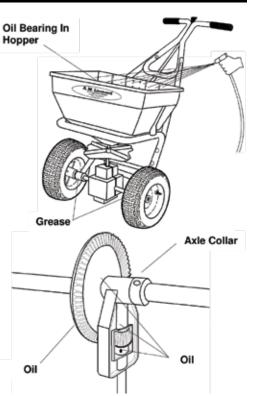
2. Wash spreader thoroughly after each use and dry completely in sun or heated area.

3. Grease axle bearings in frame. Oil the impeller shaft bearing in hopper, pivot points on the shut-off plate and the spring in the housing behind the rate plate.

4. Remove gear cover and wash gears thoroughly. Oil all bearing areas and face of gear teeth. Lubricate gear teeth with dry graphite. Re-install gear cover.

5. Gear mesh should be checked on a regular basis during high use periods. Clearance between the axle gear and pinion gear should be minimal but not tight. if adjustment is necessary, loosen axle collar set screw and hold gears together. Slide axle collar against the gear support and tighten axle collar set screw. Spin drive wheel. Gears should run freely and smoothly.

6. Impeller surface should be cleaned periodically to remove build-up of product. Build-up can cause the spread pattern to change.



7. Tire pressure should be 20-25 PSI.

### WARRANTY INFO

#### A.M. Leonard warrants to Purchaser the following:

1. Product will be free of defects in materials and workmanship.

- 2. A.M. Leonard will decide in its reasonable discretion if the part(s)/unit is defective.
- 3. The spreader or part(s) will be shipped to A.M. Leonard at the customer expense with a written description of defect.
- 4. All Unit and part replacement will be performed at the reasonable discretion of A.M. Leonard.

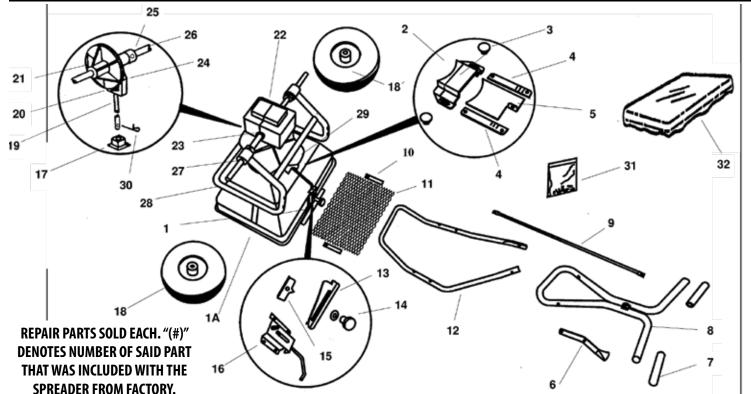
A.M. Leonard's sole obligation under this warranty is limited to repairing or replacing the defective part. Upon replacement of any Product or Product part, the replacement item shall become the property of A.M. Leonard. If A.M. Leonard determines that the Product covered by this warranty requires service, A.M. Leonard shall prepay return shipping charges from A.M. Leonard. In all other instances, such charges shall be paid by Purchaser. Except for loss or damage caused by A.M. Leonard negligence, Purchaser relieves A.M. Leonard of responsibility for all risks of loss or damage to the Product and its parts during the period the products are in transit to and from A.M. Leonard.

This warranty does not extend to any Product or parts thereof that have been allowed to corrode, subjected to misuse, neglect, accident, or modification by anyone other than A.M. Leonard or that have been affixed to any nonstandard accessory attachment or that have been used, stored, installed, maintained or operated in violation of A.M. Leonard's instructions or standard industry practice. No agent, employee or representatives of A.M. Leonard has any authority to bind A.M. Leonard to any affirmation, representation or warranty concerning the Product and any affirmation, representation or warranty made by any agent, employee or representative shall not be enforceable by Purchaser.

# THIS WARRANTY EXTENDS ONLY TO THE ORIGINAL PURCHASER AND ITS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS OR INTENDED USE FOR A PARTICULAR PURPOSE AND OF ANY OTHER OBLIGATION ON THE PART OF A.M. LEONARD.

A.M. LEONARD SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL LOSS, DAMAGE OR EXPENSE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF ANY OF THE PRODUCT INCLUDING, BUT NOT LIMITED TO, DAMAGE OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF PROFITS OR REVENUE, COST OF CAPITAL, COST OF PURCHASED OR REPLACEMENT GOODS, OR CLAIMS OF CUSTOMERS OF PURCHASER.

### PARTS LIST FOR AM70P AND AM70S



No.	Description	AM70P	AM70S
1	Hopper	16032	16032
2, 4	Discharge Chute & Shut-off Plate Guides	15144	15144
3	Discharge Chute Knob (2)	14001	14001
5	Shutoff Plate	13353	13353
6	Handle Lever Assembly	15513	15513
7	Handle Grip (2)	14870	14870
8	Upper Handle	15497	15498
9	Threaded Control Rod	14871	14871
10	Screen Clips (2)	14022	14022
11	Hopper Screen	14603	14603
12	Handle Brace / Leg	15507	15508
13	Rate Plate	15521	15521
14	Rate Control Knob	12704	12704
15	Pointer	12708	12708
16	Spring Housing Assembly	12702-2	12702-2

No.	Description	AM70P	AM70S
17	Impeller Shaft Bearing	14312-1	14312-1
18	Wheel	14856	14856
19	Impeller Shaft	15641	15641
20	Pinion Gear	14833	14833
21	Axle Gear	14832	14832
22	Gear Cover (2)	14837	14837
23	Gear Cover Clamps (3)	14868	14868
24	Gear Support	14834	14834
25	Axle Collar w/ Set Screw	14971	14971
26	Axle	15518	15518
27	Axle Bearing (4)	14855	14855
28	Frame Assembly	15501	15501
29	Impeller	14625	14625
30	Agitator	14510	14510
31	Fastener Package	15579	15579
32	Hopper Cover	14606-1	14606-1

#### FOR REPLACEMENT PARTS BE SURE TO GIVE:

Spreader Model Number

Part Number

Name of Part as Shown

CONTACT: 241 Fox Drive • Piqua, OH • 45356 1-800-543-8955 www.amleo.com

