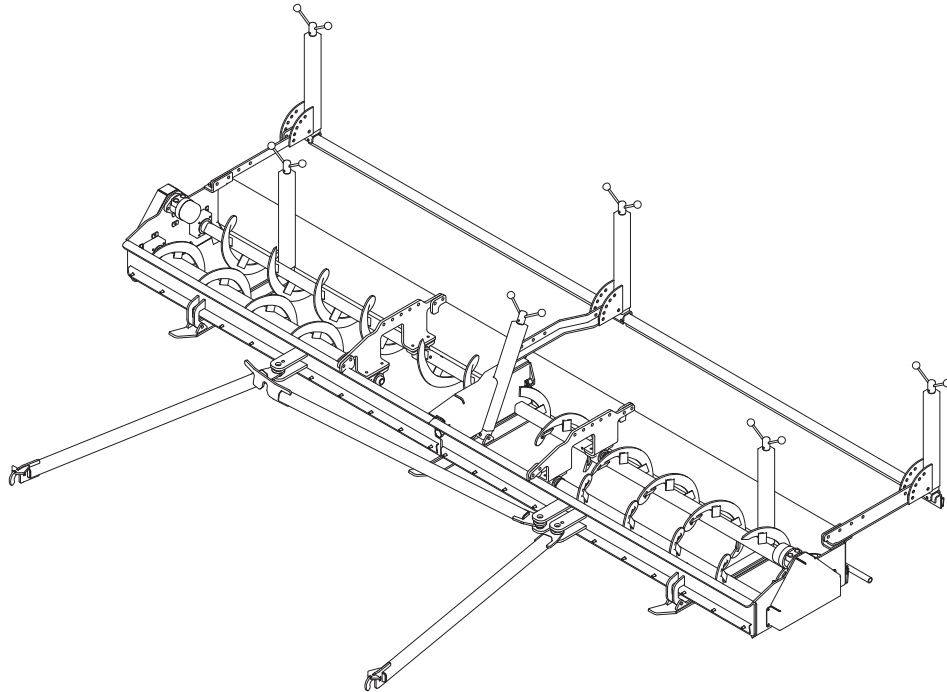


Macropaver 12-E[®]

Small Microsurfacing Box



Instruction Manual



a division of Reed International

Pavement Preservation Solutions From One Source

P.O. Box 178, Hickman, CA 95323

Phone:(209) 874-2719

Fax:(209) 874-1174

www.slurry.com

Table of Contents

Safety Information2
General Description3
Box Rubber Installation3
Texture Flap Installation4
Box Height Adjustment5
Texture Flap Adjustment.....5
Spreader Box Maintenance6
Parts - Spreader Box Components7
Parts - Auger Components8
Parts Order Form9

Safety Information

Be alert when seeing this symbol in this manual.

There is the potential for personal injury

Follow recommended precautions and safe operating practices.

Personnel must be fully qualified to perform procedures in this manual.



Follow Safety Instructions

Learn how to operate the machine properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the machine's function and/or safety features and may also affect machine life.

Prevent Auger Injuries

Avoid possible injury or death from entanglement with spreader box augers.

Do not wear loose clothing.

ALWAYS stop auger rotation when making depth adjustments to spreader box. Shut off engine and remove and pocket the ignition key.

ALWAYS disconnect auger hydraulic quick disconnects from paver when working on spreader box.

Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher and emergency numbers handy.

General Description

The Macropaver Small Microsurfacing Box is used when applying microsurfacing mixes. Microsurfacing is a specialized form of slurry surfacing. The asphalt emulsion used in microsurfacing is polymer modified and the additives are specialized for fast setting and break control. The spreader box is also specialized in that it always uses augers for material distribution and it provides more control over depth, flatness and texture of the material.

In operation, the spreader box is connected to and is pulled along the pavement by the Macropaver. It can be shifted side-to-side to follow the pavement edge by the side shift mechanism on the Macropaver. The box is lifted from the pavement at the end of the paving operation by the box lift mechanism on the Macropaver. Slurry is deposited into the box from the Macropaver pugmill. It can be placed in the center, or either side, by the diverter rubber located on the outlet of the pugmill.

As the box is pulled along the pavement the front rubber helps keep the slurry in the auger chamber of the box. The rear rubber, or strike-off, brings it down to the actual final thickness. The thickness is adjusted by adjusting the height of the box skids. The texture flap, which trails out behind the box, applies the final finish and texture to the slurry. The box can also pull a drag mop, which trails out behind the box, to apply the final finish and texture to the slurry. Side plates with box rubbers keep the slurry from exiting the sides of the box. The augers are used to help distribute the slurry evenly throughout the box.

The box width paving capacity is 12' 6" (3.8m). The outside box width is 167" (424cm).

Assembly Instructions

Box Rubber Installation

The spreader box is shipped with the box rubber shipped loose to prevent shipping damage. The box rubber will have to be cut to length and installed. It is easiest to install the box rubber if the box is lifted up and the rubber is installed from the bottom. All box rubbers are held in place by the clamping strips. It is not necessary to drill holes in the rubber to install it in place. See illustration on following page for installation locations.

The rubber should be cut as follows:

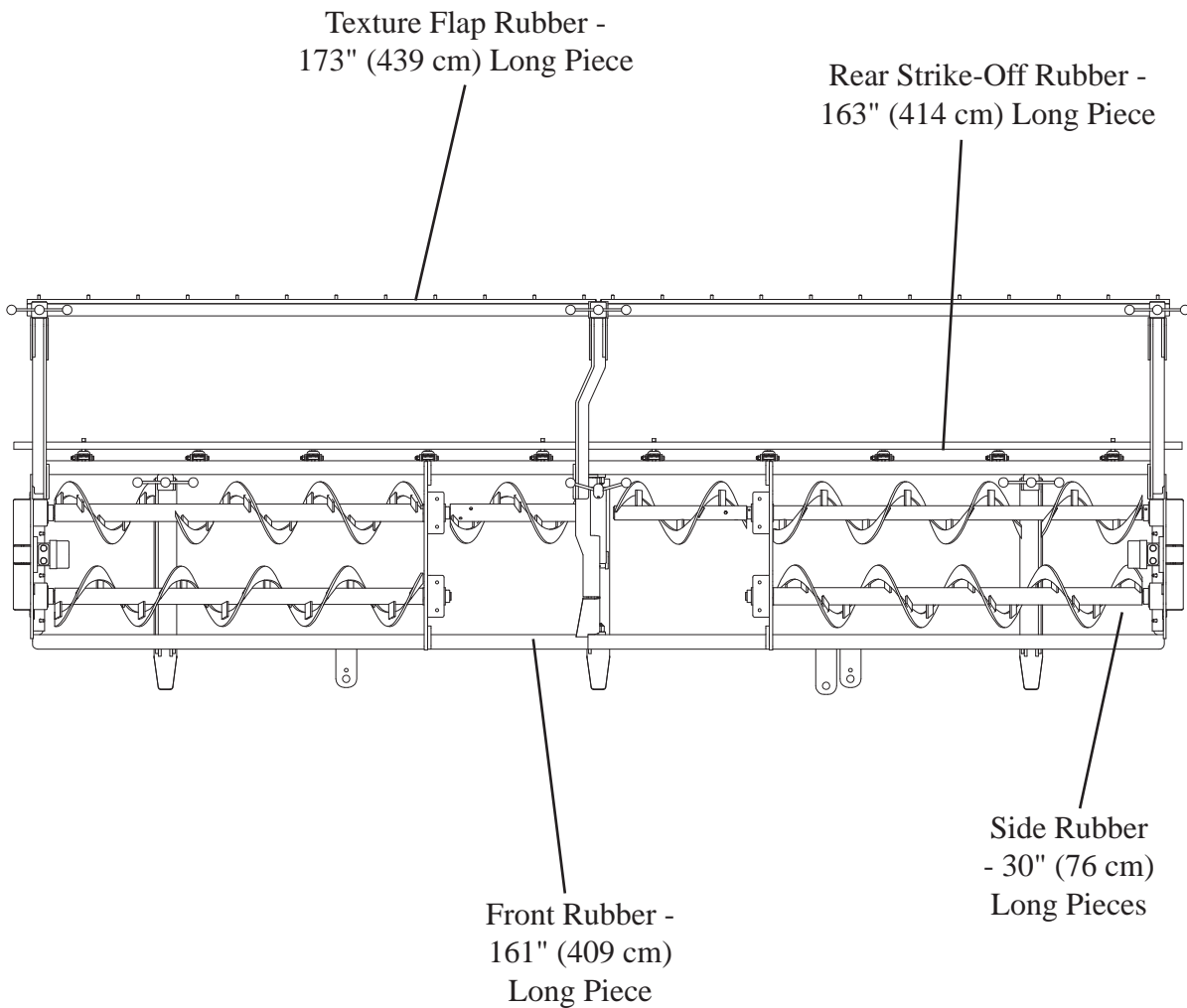
1. One 6" (15cm) wide piece cut 161" (409cm) long for front screed position.
2. One 6" (15cm) wide piece cut 163" (414cm) long for rear strike-off position. Tension the rubber while installing by pulling on each end and then tighten the bolts, starting from the center and proceeding toward the outside.
3. Two 6" (15cm) wide pieces cut 30" (76cm) long for side plates. Tighten the front clamp bolt, then tension rubber toward the back and tighten remaining clamp bolts. The back edge of the side rubber should extend back about 6" (15cm) underneath the rear rubber.
4. One 7" (18cm) wide pieces cut 173" (439cm) long for the texture flap. The outer edges of the texture flap rubber should extend about 3-5" (8-13cm) wider than the rear of the spreader box. Tension the rubber while installing as in step 2 above.

Assembly Instructions (cont'd)

Box Rubber Installation (cont'd)



WARNING: PROPER AND SAFE LIFTING AND SUPPORT PROCEDURES MUST BE USED TO LIFT AND SUPPORT THE SPREADER BOX. FAILURE TO DO SO COULD CAUSE POSSIBLE INJURY OR DEATH.



Texture Flap Installation

See illustration for texture flap location. The texture flap assembly is inserted into the support brackets. It is then held in place with the bolts supplied with the box. Adjustment of the texture flap is described in the next section.

Spreader Box Adjustment

Box Height

Microsurfacing application thickness is controlled by adjusting the height of the spreader box's rear strike-off. For thinner application, lower the height of the strike-off by rotating the two outer depth control handles counter-clockwise. This will lower the strike-off, thereby reducing the thickness of the application. For thicker applications, raise the height of the rear strike-off by rotating the depth control handles clockwise. Be sure to rotate the handles equally to make sure the microsurfacing thickness is consistent from one side of the box to the other. The center adjustment handle can be adjusted differently from the outer handles to adjust for crown in the road. Rotating the handle clockwise will raise the center of the strike-off by pushing down on the center skid, to allow for the increased height of the crown in the road..



WARNING: ALWAYS STOP AUGER ROTATION BEFORE ATTEMPTING ANY ADJUSTMENTS ON SPREADER BOX. FAILURE TO DO SO COULD CAUSE ENTANGLEMENT WITH THE AUGERS AND POSSIBLE INJURY OR DEATH.

Texture Flap

The height and angle of the texture flap, as well as the distance that the texture flap trails the box, can be adjusted to modify the finish of the microsurfacing. The height is adjusted by turning the depth control handles clockwise to lower and counter-clockwise to raise the texture flap. The angle is adjusted by removing the hitch pin from the angle adjustment plates, rotating the flap to the desired angle and then reinserting the pins. The trailing distance is adjusted by removing the six bolts from the texture flap support brackets, moving the flap in or out and then reinserting the bolts. The actual adjustments required will depend upon the application and finish desired.

Maintenance

Box Rubber

Box rubber maintenance consists of daily cleaning of the spreader box and box rubbers. Use a solvent to soften the hardened slurry and high-pressure washer to remove it. After cleaning, inspect the rubber for excessive wear, loose mounting conditions or damage. Repair or replace as required.

Height Adjusters

Height adjuster maintenance consists of cleaning and inspection. Inspect the adjusters for wear or damage and repair or replace as required.

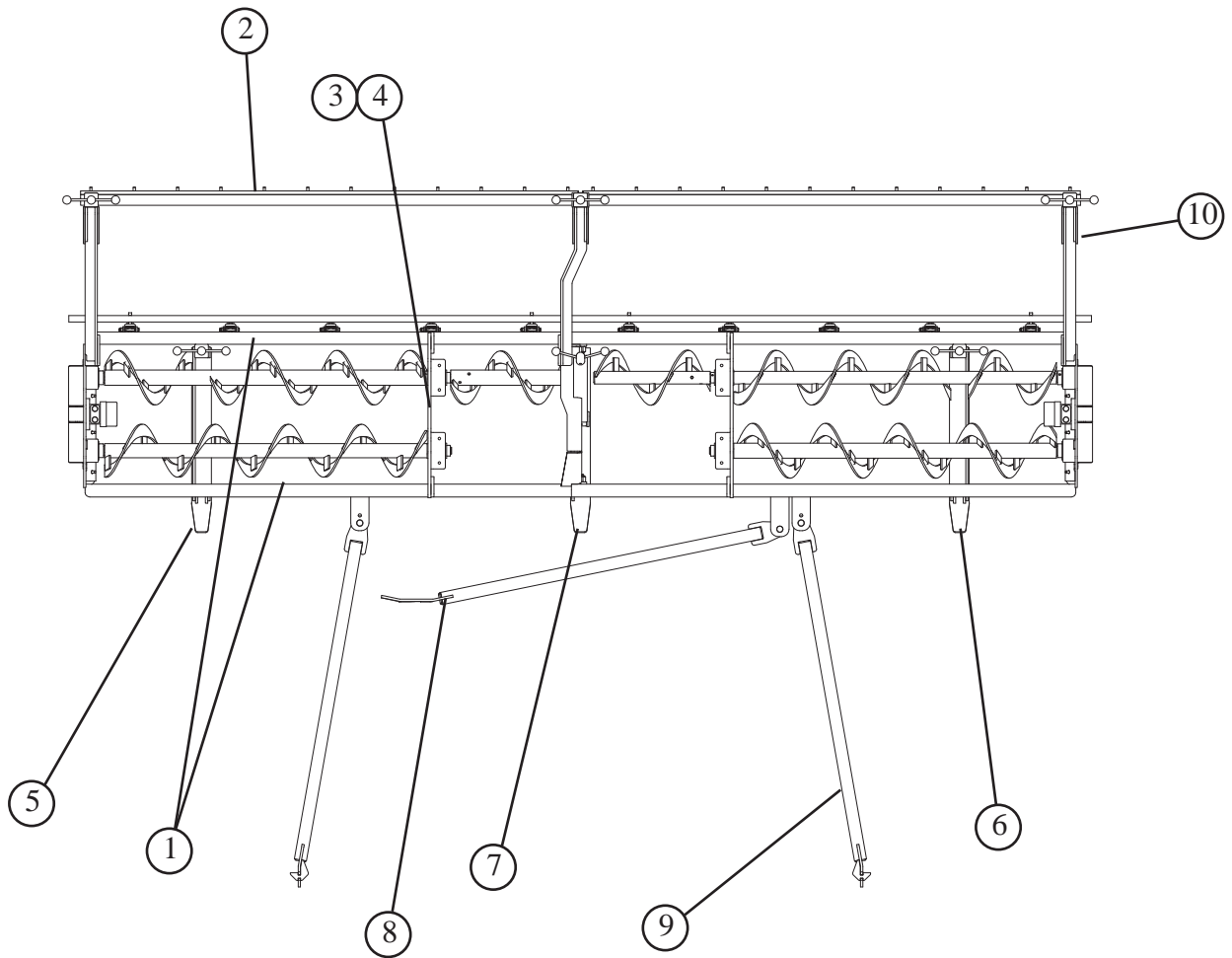
Augers

Auger bearings are made of UHMW material and do not require greasing. The bearings should be cleaned regularly along with the cleaning of the spreader box. Inspect augers and bearings for wear or damage after daily cleaning. Repair or replace components as required. Worn auger flighting can be built back up to required diameter by application of hard-facing material providing wear is not excessive. The auger diameter is 9" (229mm) when new.

Skids

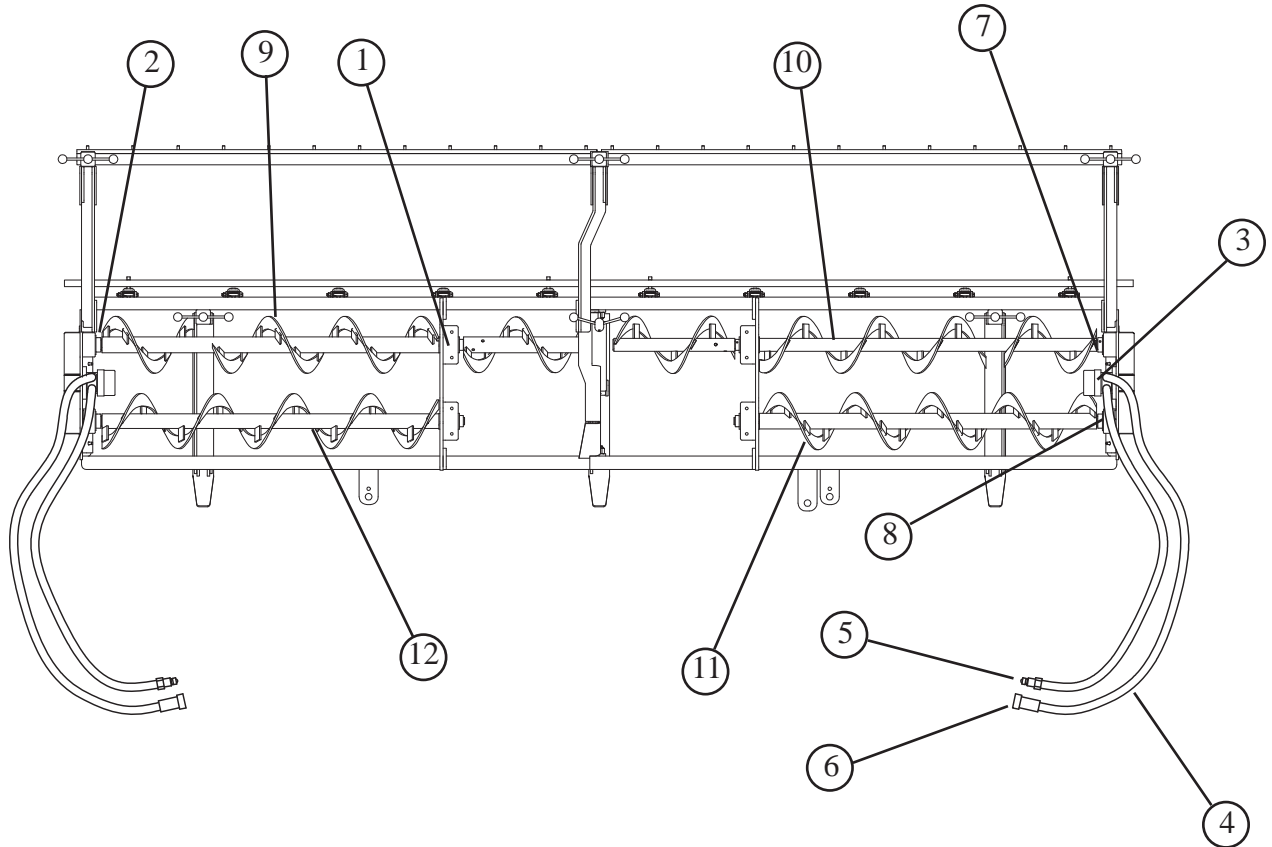
The center and outer skids are made of a hardened steel. Inspect regularly for wear. Minor wear can be corrected with hard-facing the affected area. Excessive wear will require replacement of the worn components.

Spreader Box Components



ITEM	PART NO.	DESCRIPTION	QTY
1	270-0014-18	Spreader Box Rubber - 1/4" x 6" x 18 Ft. Long	2
2	270-0015-15	Spreader Box Rubber - 1/4" x 7" x 15 Ft. Long	1
3	225-0035	Chain, 3/8" Proofcoil	8'
4	715-0008	Chain Shackle, 3/8"	2
5	SMB1501-LH	Left Side Skid (Skid Only)	1
6	SMB1501-RH	Right Side Skid (Skid Only)	1
7	SMB1502	Center Skid (Skid Only)	1
8	EMB1022	Side Shift Arm - Quick-Attach Style (w/ Pin)	1
	EMB1025	Side Shift Arm Pin (Included w/ Side Shift Arm)	1
9	EMB1021	Drag Link - Quick-Attach Style (Set of 2)	1
10	715-0075	Hitch Pin, Texture Flap Adjusters	3

Auger Components



ITEM	PART NO.	DESCRIPTION	QTY
1	210-0115	Pillow Block Bearing - 1-1/8"Ø x 2" Thick	4
2	210-0113	Four Bolt Flange Bearing - 1-1/2"Ø x 2" Thick	4
3	255-0102	Hydraulic Motor - Auger Drive	2
4	250-0200	Hydraulic Hose - Auger Drive Motor	4
5	255-0968P	Hydraulic Quick Disconnect - Male	2
6	255-0970P	Hydraulic Quick Disconnect - Female	2
7	285-0130	Auger Drive Sprocket	2
	285-0131	Auger Driven Sprocket	4
8	225-0037	Auger Drive Chain - 5' Long	2
	225-0029	Master Link - Auger Drive Chain	2
9	SMB1400-RH-L	Auger Assembly, Right Hand Pitch - Long	1
10	SMB1400-LH-L	Auger Assembly, Left Hand Pitch - Long	1
11	SMB1400-RH	Auger Assembly, Right Hand Pitch	1
12	SMB1400-LH	Auger Assembly, Left Hand Pitch	1

PARTS ORDER FORM



To order parts in this manual, please copy this form and FAX or mail to:

VSS Macropaver
P.O. Box 178
Hickman, CA 95323 USA
FAX (209) 874-1174

MY MAILING ADDRESS

MY SHIPPING ADDRESS

SHIP VIA: _____

ATTN: _____

DATE: _____

EQUIP. S/N: _____

Part Number	Part Name	Quantity

ORDERED BY: _____

PAYMENT: CHECK P.O.# _____ COD