

Schild

Atscott Mfg, Inc

Surface Saver System

Operator's Manual

Table of Contents

	Page
I. Introduction	1
II. Installation	1
A. Receiving Information	1
B. Applicator Setup	1-3
III. Operation	4
A. How to Use	4
B. Next Lens	4
C. Reloading Tape	4
D. Application Techniques for Special Lenses	4-5
E. Additional Tips	5
IV. Maintenance and Repair	6
A. Operator Maintenance	6
B. Factory Authorized Service	6
C. Major Component Repair and Replacement Procedure	6
D. Adjustments	6
V. Troubleshooting	7
VI. Parts Ordering Information	7-10
Surface Saver Applicator	8
Applicator Right-Side Dispenser Assembly	9
Applicator Head Assembly	10
VII. Warranty	11

I. Introduction

The Atscott Surface Saver™ System consists of Surface Saver Tape applied by the Surface Saver Applicator. This system has gained acceptance as the most effective system for protecting plastic lenses during surfacing.

The Surface Saver System is a dramatic improvement over the messy, volatile work conditions associated with liquid protective coatings. No spraying, solvents, or venting are required.

The system is also an improvement over tape coverings. The Surface Saver Tape is vacuum-applied. This means no manual application and no problems trying to make a flat tape lie wrinkle-free on a curved lens.

II. Installation

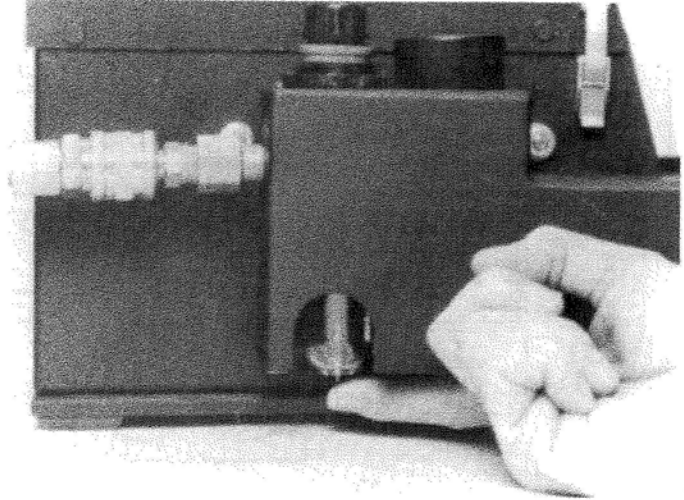
A. Receiving Information

After removal from the shipping carton, examine the applicator for damage that might have occurred during transit. If damage is evident, file a damage claim immediately with the transportation company and contact Atscott Surface Saver System Sales Representative.

(Refer to applicator diagrams on pgs. 2-3 for parts listed in the following instructions.)

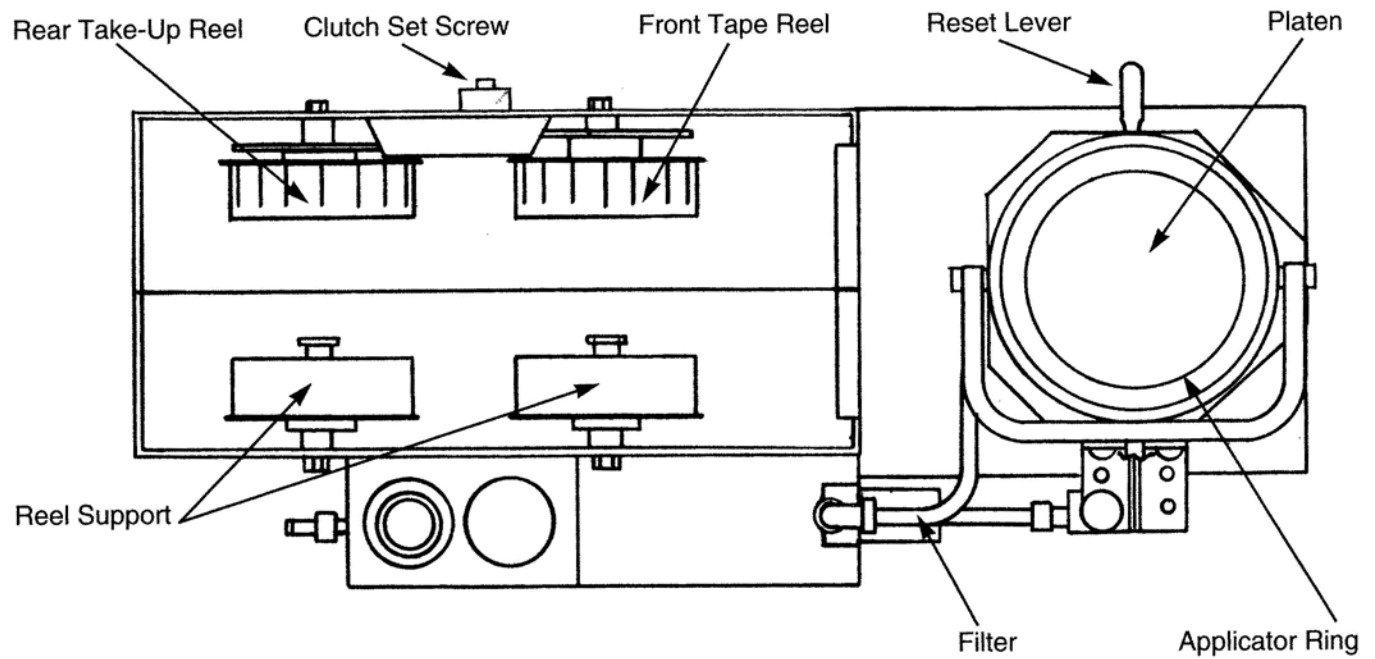
B. Applicator Setup

NOTE: 60 psi air pressure is recommended for normal operation of the Surface Saver Applicator. Air should be clean and dry. Check sediment bulb for moisture or other contaminants. (Push up release valve to clear sediment bulb.)

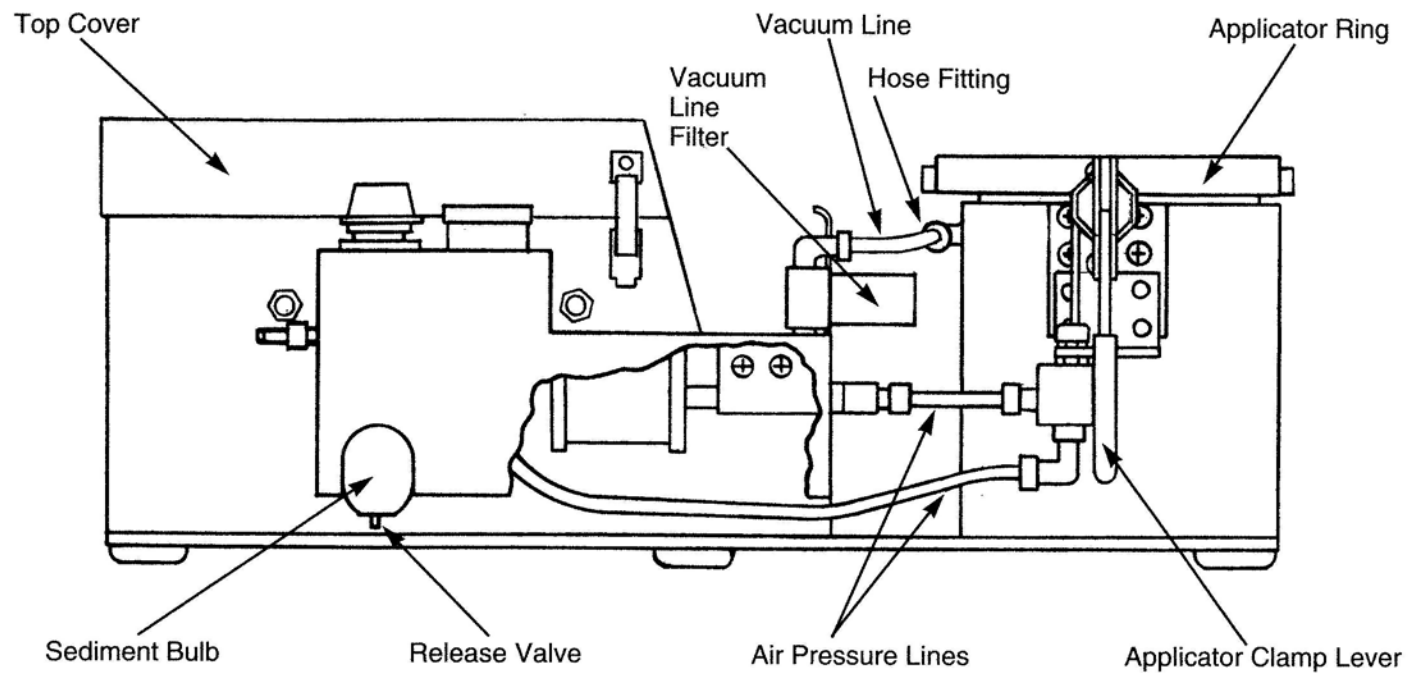


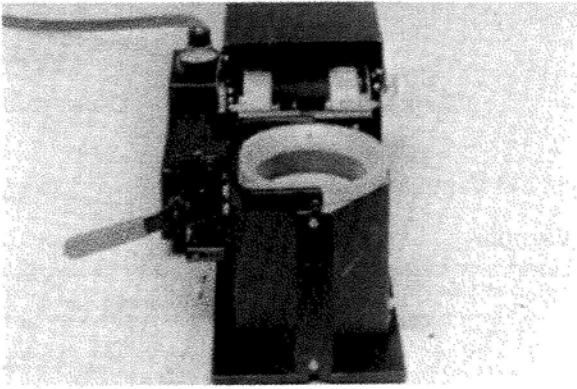
Top View

Without Cover and Applicator Ring Lever



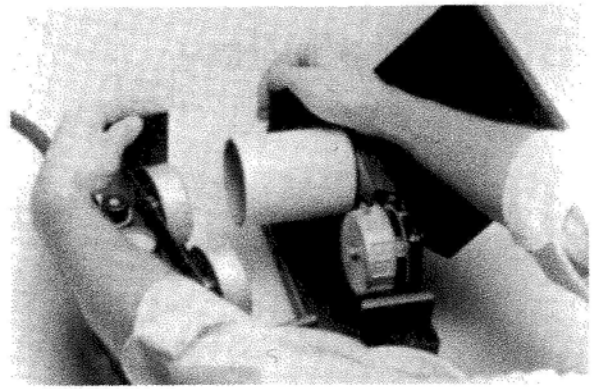
Right Side View





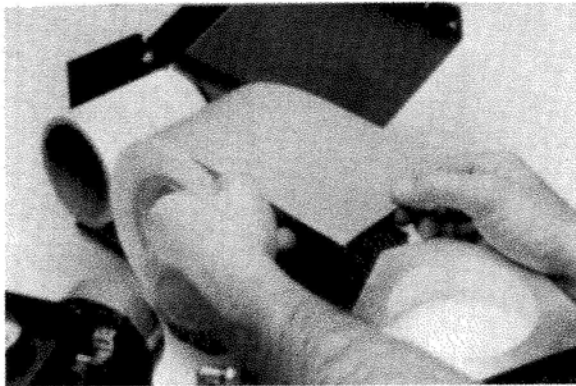
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1. Set the Atscott Surface Saver Applicator so the end with the applicator ring is toward you.



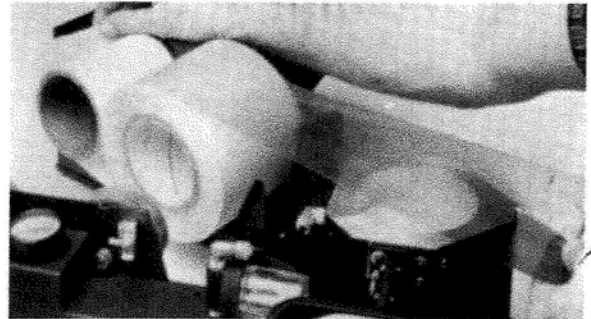
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2. Open top cover and separate sides at rear.



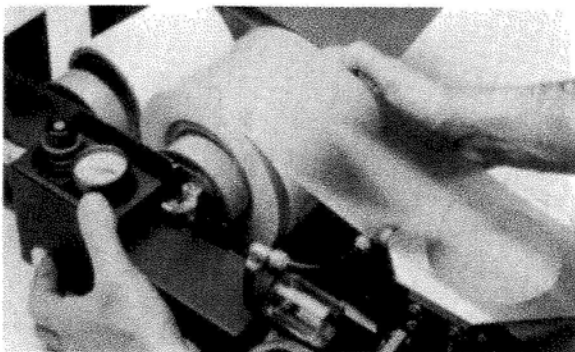
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3. Place the new roll of 3M[®] Surface Saver Tape on the tape reel closest to you with the loose tape end on top pointing toward you.



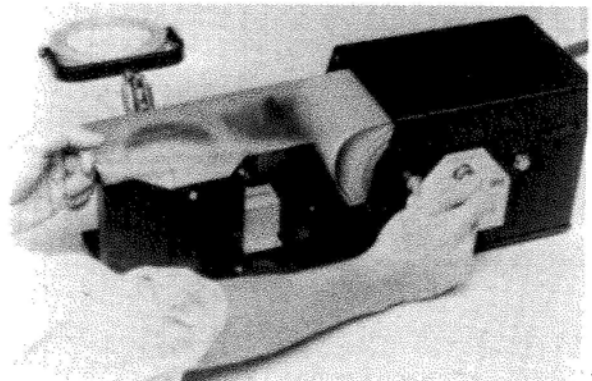
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4. Lift applicator ring. Separate liner from tape, bringing the pressure-sensitive side of the tape over the applicator platen and threading the liner under both reels and up the rear of the applicator. Fasten liner to the empty core on the rear reel using a piece of the Surface Saver Tape.



6

5. Close applicator sides guiding reels into open ends of tape cores. Close and secure cover with clamp.

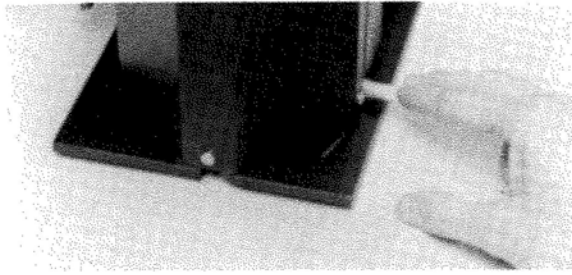


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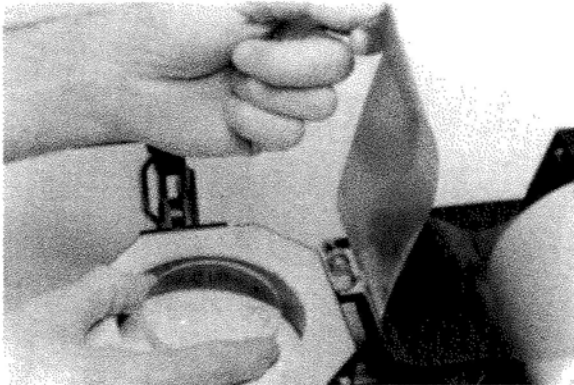
6. If liner looping occurs, adjust clutch set screw to assure sufficient tension for removal of liner from Surface Saver Tape on the rear core.

III. Operation

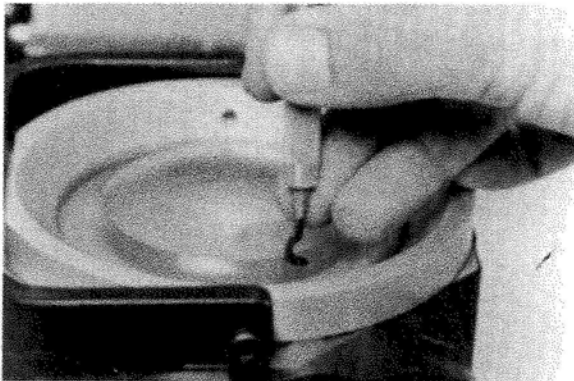
A. How to Use



1. Raise applicator cover ring. Depress reset lever on right side of applicator to lower the applicator platen and prepare unit for use.



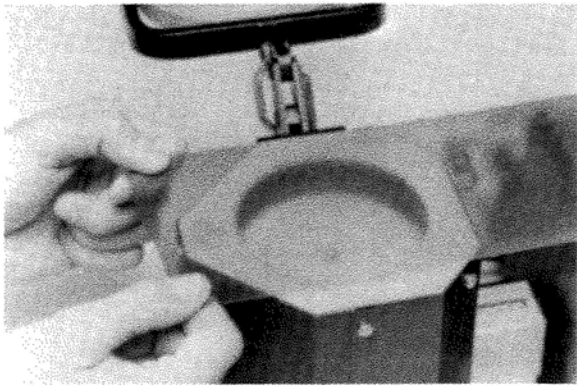
2. Center lens to be processed on recessed applicator platen.



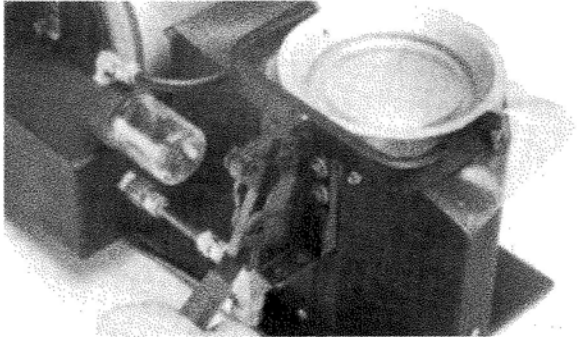
5. Hold the Surface Saver Cutter blade steady with fingertip to initially penetrate tape.



6. Holding the cutter in a vertical position, trim tape by guiding the cutter around the outside edge of the lens.



3. Grasp tape at both edges and pull until the opening over the applicator platen is evenly covered.



4. Apply tape to lens by closing the applicator cover ring and pushing the applicator clamp lever all the way down to activate the vacuum. (NOTE: See section on special lens procedures for tips on lenticulars, biconcaves, executives, et al.)

7. Raise applicator cover lid.

8. Remove lens and depress reset lever to lower platen.

9. Lens is now ready for further processing.

B. Next Lens

1. Place next lens on applicator platen through the tape opening cut for the previous lens.

2. Grasp tape at both edges and pull until the opening over the applicator platform is evenly covered.

3. Close applicator cover ring and continue from Step 4.

C. Reloading Tape

1. Discard liner and core from rear reel.

2. Relocate empty tape core from front to rear reel.

3. Follow instructions 3 through 6 under "Applicator Setup."

D. Application Techniques for Special Lenses

1. High Base Lenses.

Press down tape with fingers to avoid wrinkles around the outer edge of lens.



14

2. Executive Lenses.

Apply Surface Saver Tape. To assure maximum adhesion, apply thumb pressure along segment line.

3. Biconcave Lenses.

The applicator will apply tape to biconcave front curves up to 4.25 D.

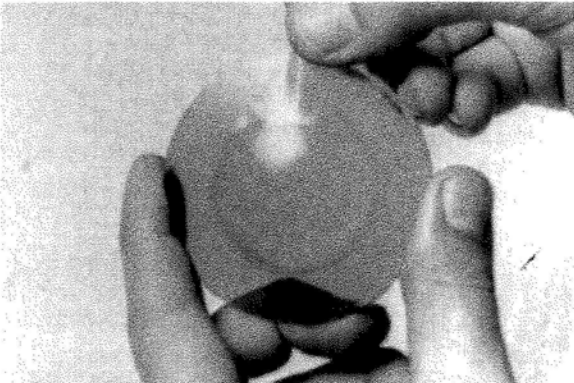


15

4. Lenticular Lenses.

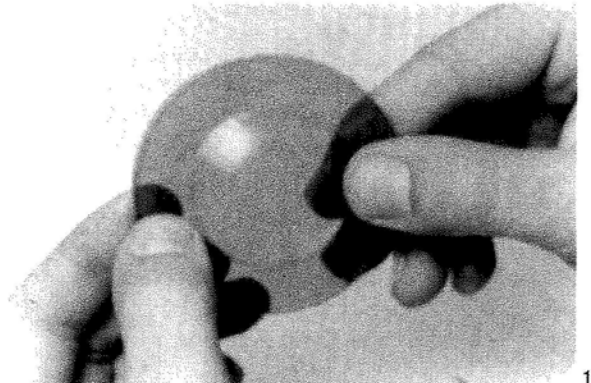
Surface Saver Tape can be applied on lenticular lenses by following these procedures:

Before cutting the tape, use thumb pressure to force the air trapped around the plus area of the lens away from you, so a bubble is formed.



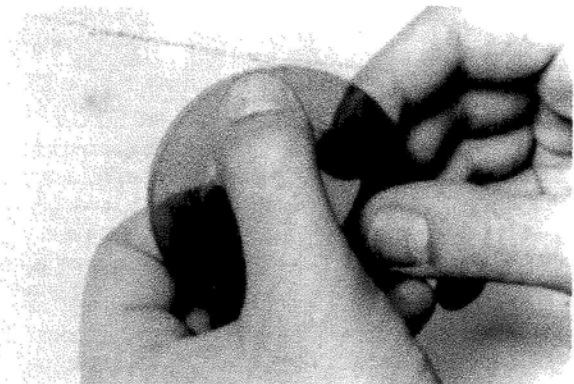
16

Cut Surface Saver Tape. Lift tape at lens edge adjacent to air bubble to allow escape of air.



18

Smooth out any remaining lines to form a wrinkle-free surface.



17

Use thumb pressure in the center of the bubbles to force air out from under the tape.

E. Additional Tips

Very high plus, thin edge, or reworked lenses may need a spacer to lift the lens off the platen to provide easier cutting of the tape. (A lens with a +6D front curve and a diameter less than that of the lens being taped can be used as a spacer.)

Lenses that come from the manufacturer with an excess plastic ridge on the front surface edge can cause the tape to wrinkle at the outer edge of the lens. This problem can be eliminated by exerting finger pressure around the inside of the ridge.

NOTE: 3M Surface Saver Tape must be kept clean and dry to assure a good bond between tape and alloy. Avoid contacting tape with oily or dirty hands.

IV. Maintenance and Repair

A. Operator Maintenance

1. Every 10,000 lenses
 - Lubricate tape reels – one drop light oil each hub.
 - Lubricate clutch assembly and nylon bearing – one drop light oil.
 - Lubricate pivot points of applicator clamp assembly – one drop light oil.
 - Wipe all areas after oiling to prevent buildup of excess oil and contamination of tape or lenses.
 - Check sediment bulb and empty by depressing release valve, unscrew filter bowl and empty foreign matter.
 - Unscrew filter jar, Item 47 on page 15; clean or replace filter element, Item 45, page 15.

B. Factory Authorized Service

To ensure proper, up-to-date maintenance of your Atscott Surface Saver Applicator, or for information about service, call 877-494-8933 or Fax 320-629-7129 or schild@atscott.com

1. Repair

Applicators that have been in use for more than six months and are out of warranty may be returned and repaired for a minimal service charge, which includes a complete overhaul and shipping back to the owner.

C. Major Component Repair and Replacement Procedure

1. To remove head assembly.
 - a. Disconnect and remove hose fitting at top of head assembly (part 1 on pg. 15).
 - b. Remove the ten shroud screws (part 15 on pg. 19).
 - c. Disconnect lever from head assembly by removing the four Phillips pan head screws (part 10 on pg. 19).
 - d. Stand applicator on back end and remove the three base plate screws (parts 3 and 4 on pg. 15).The head can now be removed from the applicator.
- e. To install the new head, follow the above instructions in reverse order.
2. To disassemble dispenser assembly.
 - a. Remove clutch retaining ring on right side of applicator (part 17 on pg. 17).
 - b. Remove the two screws (part 1 on pg. 17) that hold the bearing support on the right side.
 - c. Remove the two reel studs (part 2 on pg. 17). The tape reels can now be removed.
 - d. The reel gear assembly is now free and can be removed or replaced.
 - e. Reassemble dispenser assembly by following the above instructions in reverse order.

Current costs are available upon request. A purchase order for the repair should be included with the defective unit. Applicators for repair must be shipped postage prepaid via traceable means to address below:

Schild Service Center
Atscott Mfg, Inc
1150 Holstein Dr NE
Pine City, MN 55063

2. Loaner

Loaner Equipment

Atscott Surface Saver Applicators are available as **service loaners** upon request. There is a minimum loaner fee assessment, which covers a three-week period beginning with the initial shipment of the loaner unit. If a loaner unit will be required, the unit should be requested in advance of the defective unit being returned for repair. Upon arrival of the loaner, the same carton should be used for return of the defective unit to the Atscott Service Center. Loaner units will be shipped to the customer prepaid. The return shipment of loaner units to the Service Center is the responsibility of the customer. Return shipment must be made, **PREPAID**, via best **insured, traceable** means. Loaner transactions that exceed a three-week period will be assessed **additional** charges at the rate of \$100 per week. Loaner units will be provided at no charge (with the exception of return shipping) during the initial new unit warranty period.

3. For repairs or replacements necessitated by obvious abuse or accidental damage, charges will be made at the prevailing list prices.

D. Adjustments

A moderate amount of force is required on the applicator clamp lever to assure positive retention of the Surface Saver Tape. Lever mounting holes have been slotted to provide adjustment of clamp pressure.

V. Troubleshooting

If it is determined that the system is not functioning:

1. High air pressure required –
 - a. Perform filter maintenance outlined under maintenance schedule.
 - b. Check vacuum system for obstructions and use compressed air in the reverse direction to clear.
2. Low air pressure – adjust to 55-65 psi.
3. Tape looping occurs – adjust set screw.

If these steps do not solve your problem, call the service number listed on page 6.

VI. Parts Ordering Information

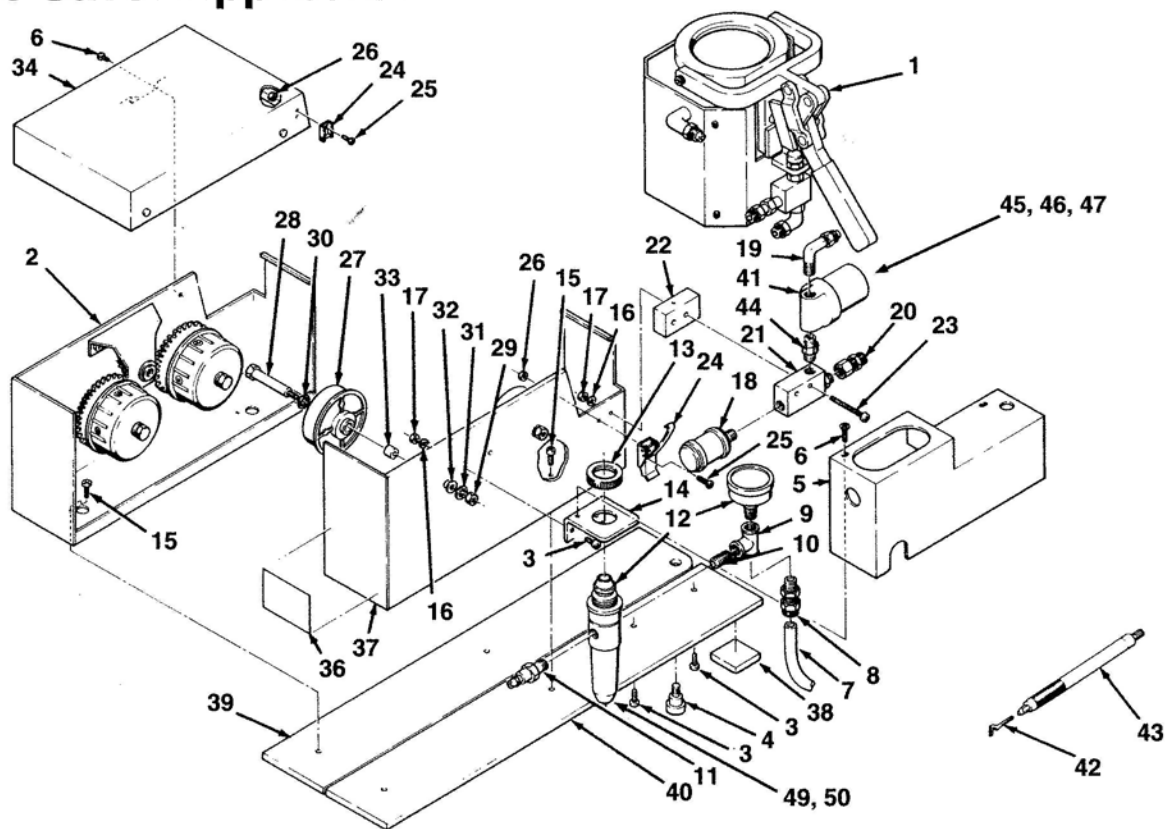
(See pages 14-19 for parts diagrams.)

3M Surface Saver System owners can obtain replacement parts shown on this list, should they choose to service their own equipment, by sending a purchase order to the address listed below.

A service charge of \$25.00 will be assessed on all orders for less than \$50.00 to cover shipping and handling. This service charge will be added to the value of the parts per purchase order when applicable. All orders are sent via Air Parcel Post or UPS, depending on weight. Special shipping charges will be the responsibility of the customer, if such shipment is requested.

Atscott Mfg, Inc
Schild Division
1150 Holstein Dr NE
Pine City, MN 55063
877-494-8933 Fax: 320-629-7129
320-629-2501 Ext 130 schild@atscott.com

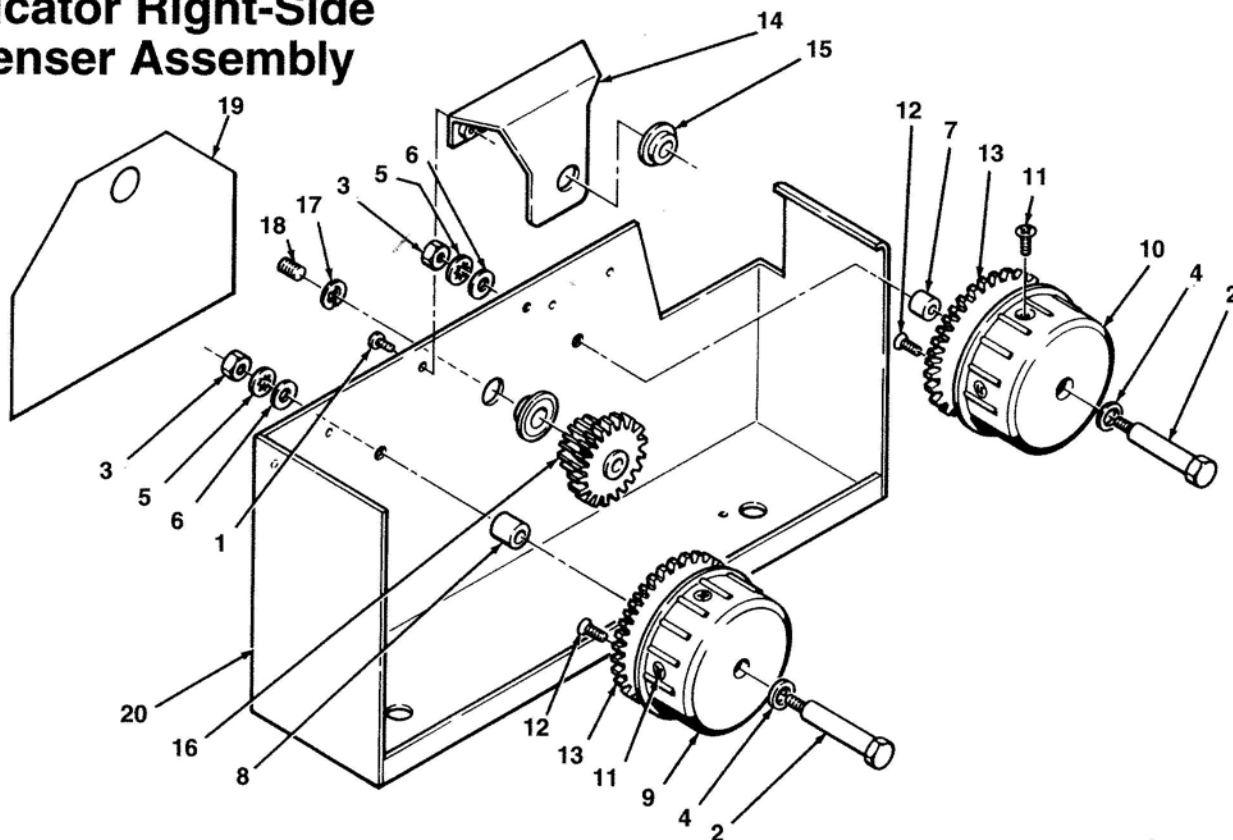
Surface Saver Applicator



SURFACE SAVER APPLICATOR

ITEM NO.	PART NO.	IDENTIFICATION	QTY. REQ.	ITEM NO.	PART NO.	IDENTIFICATION	QTY. REQ.
1	12-2376-4760-2	SURFACE SAVER APPLICATOR	1	25	18-4711-3403-3	SCREW, MACHINE, Phillips pan	
	12-2376-4763-6	APPLICATOR HEAD ASSEMBLY				hd., No. 4-40 x 5/16 in.	3
		(See pg. 18)	1	26	18-1749-1103-4	NUT, KEPS, No. 4-40	3
2	12-2376-5137-2	APPLICATOR, RT SIDE		27	12-2376-4960-8	REEL, SUPPORT	2
		DISPENSER ASSY (See pg. 16)	1	28	70-7711-0090-9	STUD, REEL	3
3	78-8003-8359-4	SCREW MACHINE, Phillips pan		29	70-7023-1870-3	NUT, HEX, No. 1/4-28	2
		hd., No. 10-24 x 1/2 in.	2	30	70-7023-1120-3	WASHER	2
4	12-2376-4842-8	SCREW, SHOULDER	1	31	70-7023-3210-0	WASHER, LOCK	2
5	12-2376-4925-1	COVER, SIDE	1	32	70-7023-1540-2	WASHER, PLAIN, 1/4 in.	2
6	18-4712-2216-8	SCREW, MACHINE, Phillips pan		33	12-2376-5686-8	SPACER, TAPE REEL	2
		hd., No. 6-32 x 1/4	6	34	12-2376-4759-4	COVER	1
7	78-8005-8196-5	TUBING, 1/4 O.D.	A/R	35	12-2376-5114-1	SWIVEL HANDLE (Optional, not shown)	
8	78-8002-2269-3	CONNECTOR, 1/8 NPT	1	36	12-2376-0449-6	PLATE, SERIAL	1
9	78-8677-8549-1	TEE, 1/8 NPT	1	37	12-2376-4580-4	SHROUD, DISPENSER, Left side	1
10	78-8675-7117-2	NIPPLE, CLOSE, 1/8 NPT	1	38	26-1002-6535-9	BUMPON	6
11	26-1002-3389-4	COUPLING, PLUG, Push-tite	1	39	12-2376-4708-1	BASE PLATE, Right side	1
12	26-1002-3462-9	FILTER REGULATOR, With gauge	1	40	12-2376-4707-3	BASE PLATE, Left side	1
13	26-1002-3355-5	NUT, MOUNTING	1	41	26-1002-6867-6	FILTER ASSY.	1
14	12-2376-4702-4	BRACKET, REGULATOR	1	42	12-2376-4864-2	BLADE, PKG ASSY	1
15	18-4712-7403-7	SCREW, MACHINE, Phillips pan		43	26-1003-5450-9	HANDLE, CUTTER, SOLID	1
		hd., No. 8-32 x 1/4 in.	4	44	78-8005-5210-7	NIPPLE, HEX 1/8 NPT	1
16	18-9813-0803-6	WASHER, PLAIN, No. 8	2	45	12-2376-5655-3	FILTER ELEMENT (3/Bag)	1
17	18-1749-1503-5	KEPS NUT, 8-32	2	46	26-1002-7012-8	FILTER SUPPORT, PLASTIC	1
18	78-8033-0783-0	MUFFLER, PUMP, Vacuum	1	47	26-1002-7013-6	FILTER JAR	1
19	12-7997-8738-2	FITTING, MALE, Elbow	1	48	18-4712-7803-8	SCREW, MACHINE, Phillips pan	
20	26-1008-0009-8	FITTING, FEMALE	1			hd., No. 8-32 UNC x 3/8 in.	2
21	26-1002-3361-3	TRANSDUCER, VACUUM FORCE	1	49	26-1003-3459-3	PLASTIC STUD FOR	
22	12-2376-4749-5	BLOCK, TRANSDUCER	1			FILTER (Item 12)	1
23	78-8002-3260-1	SCREW, MACHINE, Phillips pan		50	78-8032-5404-0	ELEMENT FOR FILTER	
		hd., No. 8-32 x 1 1/2	2			ASSEMBLY (Item 12)	1
24	26-1002-6501-1	DRAW LATCH ASSEMBLY	1				

Applicator Right-Side Dispenser Assembly



APPLICATOR RIGHT-SIDE DISPENSER ASSEMBLY

ITEM NO.	PART NO.	IDENTIFICATION	QTY. REQ.
	12-2376-5137-2	APPLICATOR RIGHT-SIDE DISPENSER ASSEMBLY	1
1	18-4712-7403-7	SCREW, MACHINE, Phillips pan hd., No. 8-32 x 1/4 in.	2
2	70-7711-0090-9	STUD, REEL	2
3	70-7023-1870-3	NUT, HEX, No. 1/4-28	2
4	70-7023-1120-3	WASHER	2
5	70-7023-3210-0	WASHER, LOCK	2
6	70-7023-1540-2	WASHER, PLAIN, 1/4 in.	2
7	12-2376-5686-8	SPACER, TAPE REEL	1
8	12-2376-5687-6	SPACER, LINER REEL	1
9	12-2376-5002-8	REEL, Take-up	1
10	12-2376-5003-6	REEL, Tape	1

ITEM NO.	PART NO.	IDENTIFICATION	QTY. REQ.
11	78-8005-1058-4	SCREW THD FORMING, Phillips pan hd., Taptite, No. 8-32 x 1/4	4
12	70-7023-1330-8	SCREW, MACHINE, Filister sltd hd., No. 10-32 x 3/8 lg	4
13	70-7012-3521-3	MAIN GEAR	2
14	12-2376-4730-5	SUPPORT, Gear	1
15	78-8005-8555-2	NYLINER, SNAP-IN	1
16	12-2376-5212-3	GEAR ASSEMBLY, Intermediate	1
17	70-7023-6510-0	RING, RETAINING	1
18	12-7997-0537-6	SCREW, SET No. 1/4-28 x 3/4 in.	1
19	12-2376-4978-0	NAMEPLATE	N/A
20	12-2376-4737-0	SHROUD, DISPENSER, Right side	1

VII. Warranty

In the event obvious defects in workmanship and material are found upon receipt of a new Atscott Surface Saver Applicator, Atscott Mfg. will repair or replace, without charge, such an instrument upon notification within a period of 14 days from date of purchase.

Furthermore, **Atscott** Surface Saver Applicator is warranted free from operational defects for a period of six months from date of purchase. Any unit found to be defective by Atscott within this period shall be replaced or repaired, provided that the unit has not been subjected to misuse, negligence, or accident.

Units must be returned **PREPAID** to the address listed in this section. All returns must include proof of purchase date to validate warranty claim. It is the responsibility of the unit owner to return said unit in a protective container sufficient to prevent damage en route and also to select a means of transportation which will guarantee against loss. All units will be returned, shipping prepaid, to owner via UPS or comparable traceable means. (Loaner units are available upon request. See Section IV, Factory Authorized Service.)

Warranties:

These warranties are made in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Atscott be liable for any injury, loss or damage, whether direct or indirect, consequential or incidental, to persons or property arising out of the use of or the inability to use the systems.

Limitation of Remedies: If this product is proved to be defective, the sole and exclusive remedy available and and/or Seller's only obligation shall be, at **Atscott's** option, to repair or replace such instrument or product which is proved to be defective or to refund the purchase price paid for this product.

Limitation of Liabilities: **Atscott** and Seller shall not be liable for any damages, including incidental and/or consequential damages, regardless of the legal theory asserted, including negligence and/or strict liability.

The foregoing limitations of remedies and liabilities may not be changed by **any representation made before, during or after the sale of product.**

Schild Service Center

Atscott Mfg, Inc

1150 Holstein Dr NE

Pine City, MN 55063

877-494-8933 Fax:320-629-7129

320-629-2501 Ext 130

schild@atscott.com