



## MSV-2K-1 (PRO BOND 2K™) WATERBORNE ADHESIVE HVLP SPRAY GUN

**IMPORTANT:** Before using this equipment, read all safety precautions and instructions in this manual. Keep for future use.

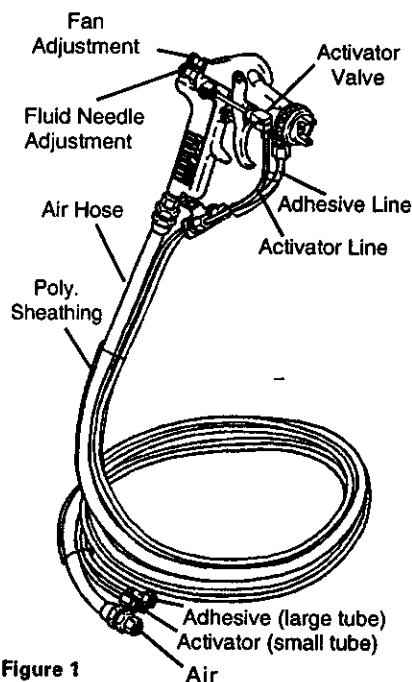


Figure 1

Product shown covered by U.S. Patent No. 5,639,027.

### SPECIFICATIONS

P1 - Maximum Air Pressure	100 PSI (7 Bar)
P2 - Maximum Adhesive Pressure	100 PSI (7 Bar)
P4 - Maximum Activator Pressure	60 PSI (4 Bar)

### DESCRIPTION

The MSV-2K-1 spray gun is designed to apply waterborne 2 component contact adhesives. The unique activator valve injects activator material through the special air baffle, where it is then distributed from the air cap horn holes. Activator is then blended with atomized adhesive material within the spray pattern.

The MSV-2K-1 is a high volume, low pressure (HVLP) spray gun. Included with the spray gun is a "hose management system" comprised of adhesive (larger) and activator (smaller) fluid tubes and a 3/8" I.D. (9.5 mm) air hose. The hose and tubing are protected within a polyethylene sheath. Two standard hose lengths are available. See Models Chart.

### Models Chart:

MSV-2K-1-15	Includes 15 ft. fluid tubes, and 20 ft. air hose.
MSV-2K-1-30	Includes 30 ft. fluid tubes, and 35 ft. air hose.



The MSV-2K-1 is intended for use with waterborne adhesive only. Do not use with other two component materials.

### Connections:

Adhesive	- 3/8" NPS(F) swivel
Activator	- 1/8" NPT(M) push-in
Air	- 1/4" NPS(F) swivel

**Wetted Parts:** 303, 304, 316 passivated stainless steel, nylon and Delrin®.

### INSTALLATION

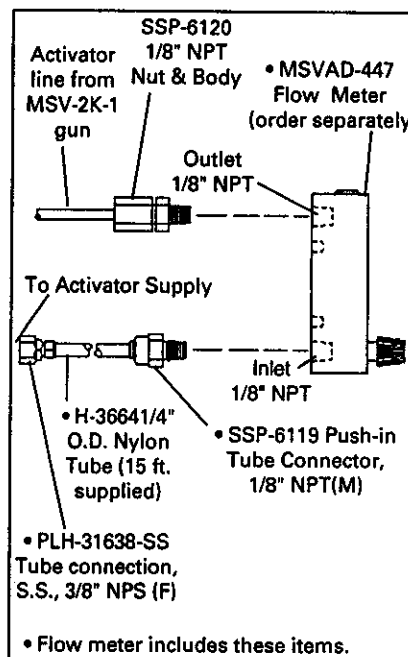
1. Remove MSV-2K-1 spray gun and hoses from carton.
2. Note a sealed bag, containing the following items, is included (one each). These items are spares provided for back-up.

Part No.	Description	Ref.#	Pg.9
MSVAD-14	Air Tube	34D	
SSG-8182	O-Ring	6	
JGD-14	Seal	5	
SSL-13	Gun Lube, 1.5 ML	-	

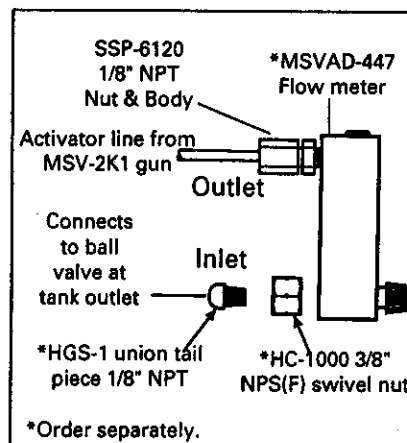
3. A warranty registration postcard is also included. Be sure to fill it out and return to DeVilbiss.
4. Attach adhesive line (larger tube) to adhesive pressure tank. Tighten with wrench.
5. Attach activator line (smaller tube) to flow meter (see ACCESSORIES), or activator pressure tank.
6. Attach air hose to regulated, filtered air supply. Tighten with wrench.

### Installation Options

#### Option 1 - Using Flow Meter



#### Option 2 - Flow Meter Installed at Activator Pressure Tank Outlet



## SAFETY PRECAUTIONS

This manual contains information that is important for you to know and understand. This information relates to **USER SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**. To help you recognize this information, we use the following symbols. Please pay particular attention to these sections.

**WARNING**

Important safety information—A hazard that may cause serious injury or loss of life.

**CAUTION**





Important information that tells how to prevent damage to equipment, or how to avoid a situation that may cause minor injury.

## Note


Information that you should pay special attention to.

**WARNING**

The following hazards may occur during the normal use of this equipment. Please read the following chart before using this equipment.

HAZARD	CAUSE	SAFEGUARD
<b>Fire</b> 	Solvent and coatings can be highly flammable or combustible especially when sprayed.	<p>Adequate exhaust must be provided to keep air free of accumulations of flammable vapors.</p> <p>Smoking must never be allowed in the spray area.</p> <p>Fire extinguishing equipment must be present in the spray area.</p> <p>Static discharges must be prevented. Ground (earth) all conductive objects in the spray area, such as a cleaning solvent bucket, fire extinguisher, etc.</p> <p>When using solvents for cleaning:</p> <ul style="list-style-type: none"> <li>• Those used for equipment flushing must have a flash point equal to or higher than that of the coating.</li> <li>• Those used for general cleaning must have flash points above 100°F (37.8° C).</li> </ul>
<b>Solvent Spray</b> 	During cleaning and flushing, solvents can be forcefully expelled from fluid and air passages. Some solvents can cause eye injury.	Wear eye protection.
<b>Explosion Hazard</b> 	Halogenated hydrocarbon solvents – for example; methylene chloride and 1, 1, 1 - Trichloroethane can chemically react with aluminum. The chemical reaction caused by these solvents reacting with aluminum can become violent and lead to an equipment explosion.	The MSV-2K-1 gun is not intended for use with solvent based incompatible materials. However, aluminum is widely used in other spray application equipment – such as, material pumps, cups, regulators, valves, etc. Check all other equipment items before use and make sure they can also be used safely with these solvents. Read the label or material data sheet for the material you intend to spray. If in doubt as to whether or not a coating or cleaning material is compatible, contact your material supplier.
<b>Inhaling Toxic Substances</b> 	Certain materials may be harmful if inhaled, or if there is contact with the skin.	<p>Follow the requirements of the Material Safety Data Sheet supplied by your coating material manufacturer.</p> <p>Adequate exhaust must be provided to keep the air free of accumulation of toxic materials.</p> <p>Use a mask or respirator whenever there is a chance of inhaling sprayed materials. The mask must be compatible with the material being sprayed and its concentration.</p>
<b>General Safety</b>	Improper operation or maintenance of equipment.	Operators should be given adequate training in the safe use and maintenance of the equipment (in accordance with the requirements of NFPA-33, Chapter 15 in the U.S.). Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation, maintenance and housekeeping (in the U.S., these are OSHA Sections 1910.94 and 1910-107 and NFPA-33).

## SAFETY PRECAUTIONS (continued)

HAZARD	CAUSE	SAFEGUARD
<b>Noise Levels – Ear Injury</b> 	A continuous A-weighted sound pressure level of this spray gun (spray pistol) may exceed 85 dB(A) depending on the air cap/ nozzle set-up being used. Sound levels are measured using an impulse sound level meter and analyser, when the gun is being used in a normal spraying application.	Always wear ear protection when using the gun.  Details of actual noise levels produced by the various air cap/ fluid head set-ups are available upon request.
<b>Misuse:</b> <ul style="list-style-type: none"> <li>• All spray guns (spray pistol) project particles at high velocity and must never be aimed at any part of the body.</li> <li>• Never exceed the recommended safe working pressures for any of the equipment used.</li> <li>• The fitting of non-recommended or non-original accessories or spare parts may create hazardous conditions.</li> <li>• Before dismantling the equipment for cleaning or maintenance all pressures, air and materials, must be isolated and released.</li> </ul> <p>The disposal of waste materials must be carried out in an approved manner. Burning may generate toxic fumes. The removal of waste solvents and coating materials should be carried out by an authorized local waste disposal service.</p>		

## INITIAL SET-UP-CALIBRATION

Follow material supplier instructions for handling and filling supply tanks or pumps. It is recommended to pre-filter the activator. Do not pressurize the adhesive or activator tanks or turn on atomization air at this time.

## ADHESIVE

1. Adjust adhesive pressure to approximately 20 PSI (1.4 Bar). Open ball valve on tank. Pull trigger on gun, allowing adhesive to fill the line, until all air pockets are removed (Figure 2).

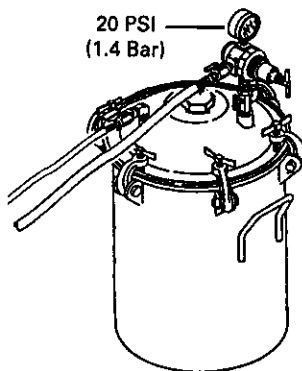


Figure 2 Adhesive Tank

2. Turn atomizing air pressure on at air source.
3. Using cardboard or scrap work pieces, test spray with adhesive only. Increase or decrease adhesive tank pressure to meet work requirements.
4. Increase or decrease atomizing air pressure to obtain the desired particle size and atomization quality. Normal gun inlet air pressure range is 30-50 PSI (2-3.5 Bar).
5. Adjust fan pattern size as required by turning the "fan adjustment knob" (Figure 1). Turn clockwise to reduce fan size or counterclockwise to increase.

## Note

Adjusting the fan pattern affects the amount of back pressure on the activator fluid column. Once the desired fan pattern is achieved, try to maintain the same setting. Changes to the pattern size will affect activator flow, and may necessitate an adjustment to the activator tank pressure to maintain the proper ratio.

## AIR CAP PRESSURE

The air cap pressure can be measured using the optional air cap test kit (see pg.11, ACCESSORIES). Before measuring the air cap pressure, turn the needle adjustment knob in fully clockwise, to shut off adhesive flow (Figure 3).

Turn needle adjustment knob in fully (clockwise)

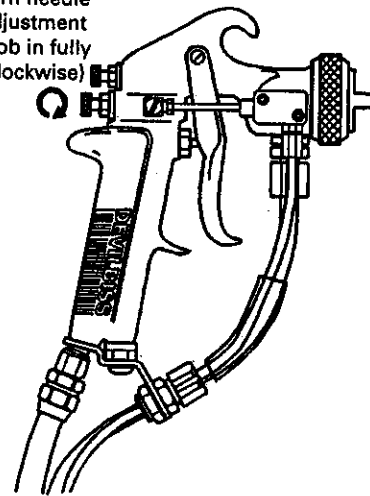


Figure 3

1. Attach air cap test kit to gun (Figure 4).
2. Turn air supply on and pull gun trigger. Observe reading on gauge and note pressure. Also, make a note of the pressure gauge settings at the air source, both under static and flowing conditions.

## Air Cap Test Kit

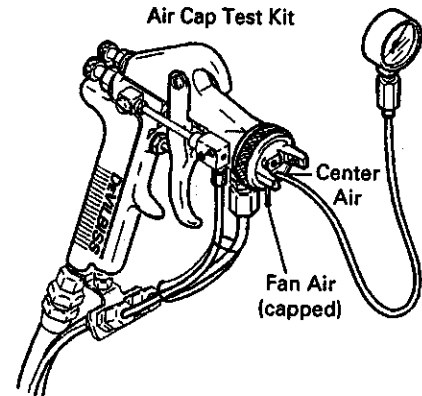


Figure 4

## Note

A minimum of 30 PSI (2 Bar) gun inlet pressure is required for the activator valve to actuate.

## ACTIVATOR

1. Open ball valve on activator tank. Insure needle adjustment knob is turned fully clockwise, shutting off adhesive flow (Figure 3).
2. Adjust the activator tank pressure to approximately 18 PSI (1.2 Bar) (Figure 5). If the optional flow meter is used, open the adjustment valve fully counterclockwise.

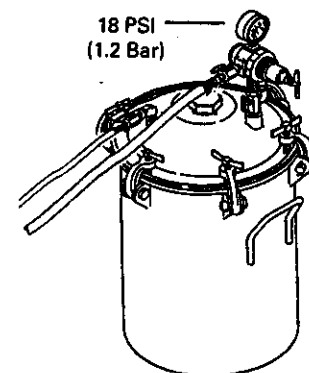


Figure 5 Activator Tank

3. Pull gun trigger until activator begins spraying out of the air cap horns.
4. After activator flow has stabilized, lower the activator flow by closing the flow meter adjustment knob clockwise. Adjust until a fine mist comes out of the air cap horn holes.

**Notes**

Activator flow must overcome back pressure created by air cap pressure. You may have to increase activator tank pressure slightly to overcome this back pressure. The amount of back pressure is dependent upon the air cap pressure.

On new guns, it may require higher air pressure to the gun to initially actuate the activator valve. Refer to Page 7, "Break-In" procedure (new guns).

**APPLICATION**

Normal application of contact adhesive is equal to approximately 7 grams per square foot. This will not result in a continuous film. Rather, a coarse, random spot atomization pattern will result which is desirable. Apply this "pebbled" film to both surfaces. Follow the manufacturer's instructions for tack time before bonding. Some adjustments to activator concentration may be required.

Adjustments to the adhesive pressure will require re-calibration of both components.

**CLEAN UP**

Refer to the manufacturer's instructions. DeVilbiss recommends each component be slowly pushed out of both hoses using a lukewarm water and soap solution recommended by the supplier. Do not attempt to blow components back. Clean out from supply source forward only.

If adhesive and activator are flushed out daily, DeVilbiss recommends all liquid lines be kept filled with the clean out water solution, until system is used again.

If system is not flushed daily, DeVilbiss recommends the following:

1. Turn off supply ball valve at activator source.
2. Turn off supply ball valve at adhesive source.
3. Remove any adhesive accumulation from the air cap surfaces (see **PREVENTIVE MAINTENANCE** for cleaning instructions).
4. Remove adhesive accumulation from face of fluid tip.
5. Wipe exterior of baffle with a wet rag to remove activator. Clean baffle and retaining ring threads.
6. Store gun with nozzle pointed downward, preferably in a shallow container of clean water.

The activator flow can be affected by fluctuating supply pressures, increasing or decreasing atomizing air, adjustment to the fan pattern, a plugged activator filter screen, or a plugged .020" (.5 mm) orifice fitting (36).

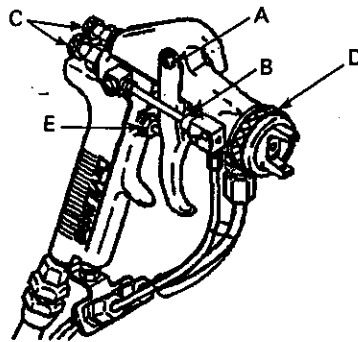
If there appears to be no reason for a reduced activator flow, remove pressure from supply. Check for blockage in the .020" (.5 mm) orifice fitting (36) located at the activator valve. Inspect filter screen. If accumulation is present, clean or replace screen (46), or orifice fitting (36).

**PREVENTIVE MAINTENANCE**

A gun lube sample (1.5 ml) is included in each gun package. SSL-10 gun lube is also available in 2 oz. (66 ml) bottles (see **ACCESSORIES** section on Page 11) and can be ordered from your DeVilbiss distributor.

Additional lubrication points on the gun are shown.

- A. Trigger points
- B. Needle Packing
- C. Adjusting screw threads
- D. Baffle and retaining ring threads
- E. Air valve cartridge



The needle spring (12) and air valve spring (17) should be coated with a light grease. Make sure that any excess grease does not clog the air passages. For best results, lubricate the points indicated daily using SSL-10 gun lube.

**Air Cap** - Remove air cap from gun and brush exterior with bristle brush and appropriate cleaning agent. Blow dry with compressed air.

If small holes in the air cap become plugged, soak cap in cleaning agent. If reaming holes is necessary, use a toothpick, broomstraw or some other soft implement (Figure 6). Cleaning holes with a wire, nail or similar hard object may damage cap by enlarging jets, resulting in a defective spray pattern.

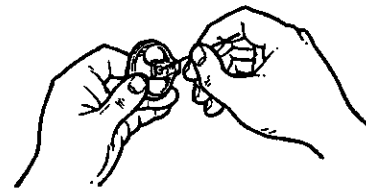


Figure 6 Cleaning Air Cap

**PARTS REPLACEMENT**



To prevent damage to the fluid tip (3A) or needle (3B), be sure to either 1) pull the trigger and hold while loosening or tightening the fluid tip; or 2) remove needle adjusting screw (13) to relieve spring pressure.






When replacing the fluid tip or fluid needle, both should be replaced as a lapped set to prevent leakage.

When installing the new fluid tip, tighten to a torque of 20-25 ft. lbs. (27.2 - 34 N\*m).

**Fluid Inlet Gasket (27) Replacement Instructions**

1. Remove fluid inlet adapter with appropriate wrench.
2. Clean Loctite from gun body inlet threads, threads of inlet fitting (29), and seal area.
3. Place gasket (27) squarely onto the fluid inlet adapter and push it down until it is flat against the boss.
4. Place a couple of drops of thread sealant (i.e. Loctite Med. Strength 242, Blue) on threads before installing fluid inlet adapter.
5. Torque fluid inlet adapter 25-30 ft. lbs. (34 - 41 N\*m) and tighten locknut until snug.

## TROUBLESHOOTING

CONDITION	CAUSE	CORRECTION
<b>Heavy top or bottom pattern</b> 	Horn holes plugged.  Obstruction on top or bottom of fluid tip 3A.  Cap and/or tip seat dirty.	Clean. Ream with non-metallic point object such as a toothpick.  Clean.  Clean.
<b>Heavy right or left side pattern</b> 	Left or right side horn holes plugged.  Dirt on left or right side of fluid tip.  Remedies for top-heavy, bottom-heavy, right-heavy and left-heavy patterns: 1) Determine if obstruction is on the cap or fluid tip. Do this by making a test pattern. Then, rotate cap one-half turn and spray another pattern. If defect is inverted, obstruction is on air cap. Clean air cap as previously instructed. 2) If defect is not inverted, it is on fluid tip. Check for a fine burr on edge of fluid tip. Remove with #600 wet or dry sand paper. 3) Check for dried material just inside opening. Remove by cleaning.	Clean. Ream with non-metallic point object such as a toothpick.  Clean.
<b>Heavy center pattern</b> 	Material flow exceeds air cap's capacity.  Atomizing pressure too low.	Lower fluid flow.  Increase pressure.
<b>Split spray pattern</b> 	Needle adjusting screw (13) turned in too far.  Atomization air pressure too high.	Back out counterclockwise to achieve proper flow.  Reduce air pressure.
<b>Jerky or fluttering spray</b> 	*Loose or damaged fluid tip (3A) seat.  Material level too low.  Container tipped too far.  Obstruction in fluid passage.  Loose or broken fluid tube or fluid inlet adapter (29).  Dry packing (16) or loose packing nut (15).	Tighten or replace.  Refill.  Hold more upright.  Clean according to material supplier's recommendations.  Tighten or replace.  Lubricate or tighten.
<b>Will not spray</b>	No air pressure at gun. Needle adjusting screw (13) not open enough.	Check air supply and air lines. Open needle adjusting screw.
<b>Excessive overspray</b>	Too much atomization air pressure.  Gun too far from work surface.  Improper stroking (arcing, gun motion too fast).	Reduce pressure.  Adjust to proper distance.  Move at moderate pace, parallel to work surface.
<b>Dry Spray</b>	Air pressure too high.  Gun tip too far from work surface.  Gun motion too fast.  Gun out of adjustment.	Decrease air pressure.  Adjust to proper distance.  Slow down.  Adjust.
<b>Fluid leaking from packing nut</b>	Packing nut (15) loose.  Packing (16) worn or dry.	Tighten, do not bind needle.  Replace or lubricate.

## TROUBLESHOOTING (continued)

CONDITION	CAUSE	CORRECTION
Fluid leaking or dripping from front of gun	<p>*Foreign matter in fluid tip (3A).</p> <p>Packing nut (15) too tight.</p> <p>Dry packing(16).</p> <p>Fluid tip (3A) or needle (3B) worn or damaged.</p> <p>Needle spring (12) deformed or broken.</p>	<p>Clean.</p> <p>Adjust.</p> <p>Lubricate.</p> <p>Replace tip &amp; needle with lapped set.</p> <p>Replace.</p>
No activator flow.	<p>Activator tank pressure too low (must be higher than back pressure from the air cap).</p> <p>Material level in tank low.</p> <p>Optional 100 mesh filter screen (46) plugged.</p> <p>.020" (.5 mm) orifice (36) plugged.</p> <p>Inadequate air pressure to gun. Activator valve (34B) requires approx. 30 PSI (2 Bar) gun inlet pressure to activate.</p> <p>Activator valve malfunction.</p> <p>Plugged baffle (7) or air cap (2).</p>	<p>Increase tank pressure to approximately 18 PSI (1.2 Bar), and make fine adjustments at the flow meter.</p> <p>Refill.</p> <p>Clean or replace.</p> <p>Clean or replace.</p> <p>Increase gun inlet pressure to above 30 PSI (2 Bar).</p> <p>See "ACTIVATOR VALVE TROUBLESHOOTING" section, Page 7.</p> <p>Clean or replace.</p>
Activator flow won't shut off when gun not triggered.	Activator valve malfunction.	See "ACTIVATOR VALVE TROUBLESHOOTING" section, Page 7.
No adhesive flow.	<p>Material level in tank low.</p> <p>Tank pressure too low.</p> <p>Plugging in tank, fluid line or gun.</p> <p>Needle adjusting screw (13) turned in too far.</p>	<p>Refill.</p> <p>Increase pressure.</p> <p>Locate plug and clean.</p> <p>Back knob out (counterclockwise).</p>
Poor adhesion of material.	<p>Improper activator to adhesive ratio.</p> <p>Improper application method.</p> <p>No activator or adhesive flow.</p> <p>Optional 100 mesh filter screen (46) plugged.</p> <p>.020" (.5 mm) orifice fitting (36) plugged.</p> <p>Inadequate air pressure to gun. Activator valve (34B) requires approx. 30 PSI (2 Bar) gun inlet pressure to activate.</p> <p>Activator valve malfunction.</p> <p>Plugged baffle (7) or air cap (2).</p>	<p>Refer to material supplier recommendations and recalibrate. See "INITIAL SET-UP-CALIBRATION" section, Page 3.</p> <p>Refer to material supplier recommendations.</p> <p>See previous sections on "no flow".</p> <p>Clean or replace.</p> <p>Clean or replace.</p> <p>Increase gun inlet pressure to above 30 PSI (2 Bar).</p> <p>See "ACTIVATOR VALVE TROUBLESHOOTING" section, Page 7.</p> <p>Clean or replace.</p>

\* Most common problem.

## KK-5040 ACTIVATOR VALVE REPAIR KIT

Ref. No.	Description	Qty.
1	Spring	1
2	Spool with O-rings	1
3	Piston with O-ring	1
4	"C" Clip	2
5	Air Fitting with O-ring	1
*6	Hex Flathead Screw (not shown)	1
7	Air Tube (not shown)	1

\* Used for valve disassembly

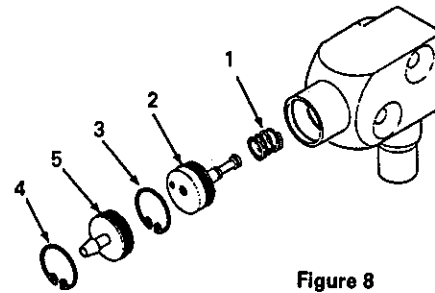


Figure 8

### ACTIVATOR VALVE (34B) INITIAL "BREAK-IN", TROUBLESHOOTING

#### Break-In Procedures (New Guns)

O-rings in the activator valve may take a "set" after factory assembly and require more than 30 PSI (2 Bar) gun inlet pressure to activate. If the valve does not operate during initial start-up, try increasing air pressure to the gun to overcome initial friction of the O-rings. Continue increasing air pressure as required until the valve actuates.

If the valve will not actuate, even with higher pressures, it may be necessary to manually open the valve, as shown in Figure 11.

#### TROUBLESHOOTING

##### Note

A minimum of 30 PSI gun inlet air pressure (flowing) is required to actuate the activator valve. Confirm adequate air pressure is available before troubleshooting the activator valve.

1. First verify flow of activator to valve by removing the activator tube from the bottom of the activator valve. If no flow, check the filter (optional) (46) and .020" (.5 mm) orifice fitting (36) for an obstruction.
2. Remove two set screws. Carefully pull valve away from gun body, being careful not to lose the small O-ring (Figure 9).

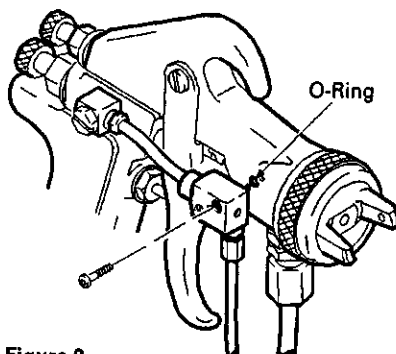


Figure 9

3. Pull gun trigger to actuate valve. Check for activator flow from the back side of the valve through the small orifice (Figure 10). If activator flow is present, the problem is in either the body, baffle or air cap. If there is no flow, proceed to Step 4.
4. Look for an obstruction in the outgoing orifice of the activator valve. Clean opening. Check again for flow.

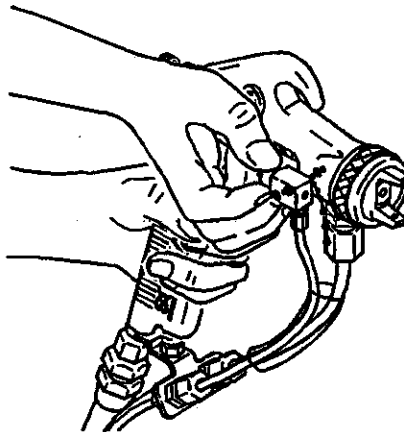


Figure 10

5. Remove the air tube from the valve.
6. Using a paper clip, install one end into the "air side", pressing on the internal piston (Figure 11). This may free up the piston if it is stuck. The piston will move approximately 1/16" (1.5 mm). If you can't move the piston, it will be necessary to soak the valve in warm soapy water to remove the internal contamination causing the valve to stick.

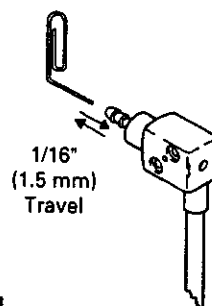


Figure 11

7. After soaking the valve and blowing out with air, probe again with the paper clip to check for piston movement. Once the piston is free, reconnect air to the "air side" and test for proper activation. If a problem continues, valve disassembly will be required. See above.

#### Activator Valve Won't Shut Off

Internal contamination may also cause the activator valve to remain open when the gun is not triggered. To correct, try increasing air pressure and activator flow. The higher air pressure may open the internal valve spool more, allowing any debris to dislodge. The additional activator flow may help "wash" out the debris. If this doesn't work, remove the valve, soaking in water/soap. Then try activating with paperclip as shown in Figure 11. If a problem continues, valve disassembly will be required. See above.

## PARTS LIST

Ref. No.	Replacement Part No.	Description	Individual No. Parts Required
1	MSA-1	Retaining ring	1
2	GTI-1-100L	Air Cap	1
3 A,B	MSVAD-4055-FF	Fluid Tip & Needle, 303 S/S Lapped Set	1
*4	SSG-8201-K5	O-ring Kit (Kit of 5)	1
*5	JGD-14-K10	Seal Kit (Kit of 10)	1
*6	SSG-8182-K5	O-ring Kit (Kit of 5) (Buna-N)	1
7	MSVAD-459	Baffle Kit #100L	1
*8	----	Retaining ring	1
*9	----	O-ring (Viton)	1
10	JGA-497-1	Air Valve Assy. - Horn	1
*11	JGS-72-K10	Seal (Kit of 10) (Teflon)	2
*12	MBD-19-K10	Spring (Kit of 10)	1
13	JGS-16	Needle Adjusting Screw	1
14	JGA-4041	Bushing, Spring & Knob Kit	1
15	34411-122-K10	Packing Nut (Kit of 10)	1
*16	JGV-463-K3	Needle Packing (Kit of 3)	1
*17	----	Spring	1
*18	----	Air Valve	1
*19	----	"U" Cup Seal	1
*20	----	Washer	1
*21	----	Snap Ring	1
22	JGS-449-1	Air Valve Assy.	1
23	----	Trigger Bearing Stud	1
*24	----	Screw	1
25	JGS-478	Stud and Screw Kit (Kit Includes 5 screws & 3 studs)	1
26	JGS-477-1	Trigger, Stud & Screw Kit (Kit includes 1 of each)	1
27	MSV-3-K10	Seal, Teflon, Blue (Kit of 10)	1
28	----	Locknut	1
29	----	Fluid Inlet	1
30	SSP-7826-K5	Nylon Nut 1/4" (Kit of 5)	1
31	MSVAD-456	Fluid Inlet & Nut Kit	1
32	MSVAD-430	Bracket Assy. Kit (Includes Items 32A, 32B, 32C, 32D & 32E)	1
32 A	----	Bracket Plug	1
32 B	----	Tube Bracket	1
32 C	----	Hex Socket Cap Screw, 1/4-20 x 3/8 Lg.	1
+ 32 D	----	Nylon ring	1
32 E	MSVAD-41-K2	Tubing Connector (Kit of 2)	2
33	MSA-3	Air Inlet Adapter 1/4" NPS	1
34	MSVAD-431	Activator Valve Kit (Includes Items 34A, 34B, 34C & 34D)	1
*34 A	SSG-8200-K5	O-ring Kit (Kit of 5)	1
**34 B	----	Activator Valve	1
*34 C	SSP-3163-K10	#5-40 Flat Head Hex Socket Cap Screw Kit (Kit of 10)	2
*34 D	MSVAD-14-K10	Air Tube Kit (Kit of 10)	1
35	MSVAD-415	"L" Type Adjusting Fitting (Includes Item 34D)	1
36	MSVAD-68	020" Orifice fitting, 316 S.S.	1
37	SSP-7825-K5	Nylon Nut 1/8" (Kit of 5)	1
38	H-3671	Nylon II 1/8" O.D. Tubing	15 or 30 ft.
39	H-3664	Nylon II 1/4" O.D. Tubing	15 or 30 ft.
40	SSP-6120	Male Connector, Nylon, 1/8" NPT	1
41	PLH-31638-SS	Tube Connection, SS, 3/8" NPS(F) Swivel	1
42	P-HC-4854	Push-Lock Hose Connection, 1/4" NPS(F) Swivel	2
43	MSVAD-416	Hose Sleeve, Poly, (Sold in 100 ft. Lengths)	12 ft.
*44	----	Tube Protector	1
45	PLH-MF-100	Final Filter Assy., 100 Mesh (Optional Accessory)	1
46	PLH-MFC-100	Replacement Filter Screen, 100 Mesh (Optional Accessory)	1
47	H-3670	ErgoFlex Air Hose, 3/8" I.D.	20 or 35 ft.
48	MSVAD-405-1	Gun Body, Machined	1

- \* These parts are included in KK-5037-1 Gun Repair Kit. This kit should be kept on hand for service convenience.
- \*\* The activator valve can be repaired, order KK-5040 Activator Valve Repair Kit. See page 7 for details.
- + Ref. 32D nylon ring used with 1/8" O.D. poly. tube only.

Chart 1

Air Cap No.	Air Cap Part No. Ref. #2	Baffle Ref. #7 Part No.
100L	GTI-1-100L	MSVAD-459
33L	*JGHV-101-33L	*MSVAD-455
98L	*JGHV-101-98L	*MSVAD-454

- \* Obsolete. Available during obsolescence period or until stock depleted.



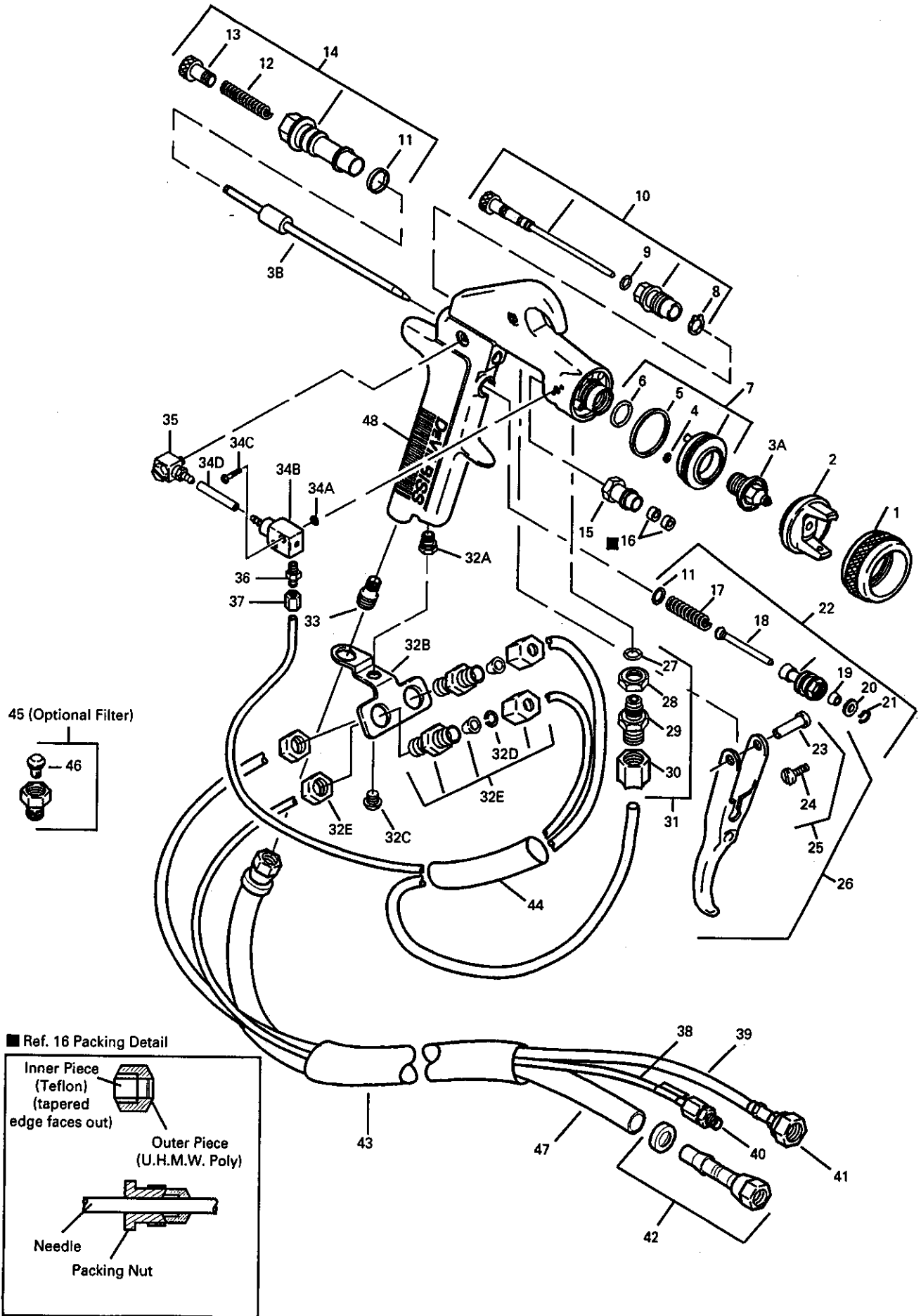
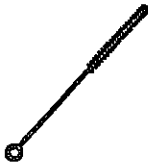


Figure 12

NOTES

ACCESSORIES

**42884-214-K5 3/8"**  
**42884-215-K10 5/8"**  
**Cleaning Brushes**




These brushes are helpful in cleaning threads and recesses of gun body. Available in U.S. only.

**Gun Lube SSL-10**  
**(2 oz. 60 ml bottle)**



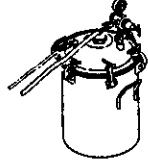
Compatible with all paint materials: contains no silicone or petroleum distillates to contaminate paint.

**HAV-501**  
**Air Adjusting Valve**




Use to control air pressure at gun.

**QMST Stainless Steel**  
**2, 5, 10, 15 Gal.**  
**(8.5, 21.2, 42.4 & 63.6 liters)**  
**Pressure Tanks**




Supply material at a constant preset pressure up to max. of 110 psi.

**WR-103 Wrench**



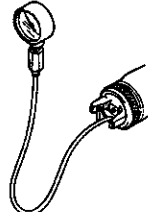
Contains all necessary tip, hose and nut sizes used on or with gun. Available in U.S. only.

**MSVAD-447**  
**Flow Meter**



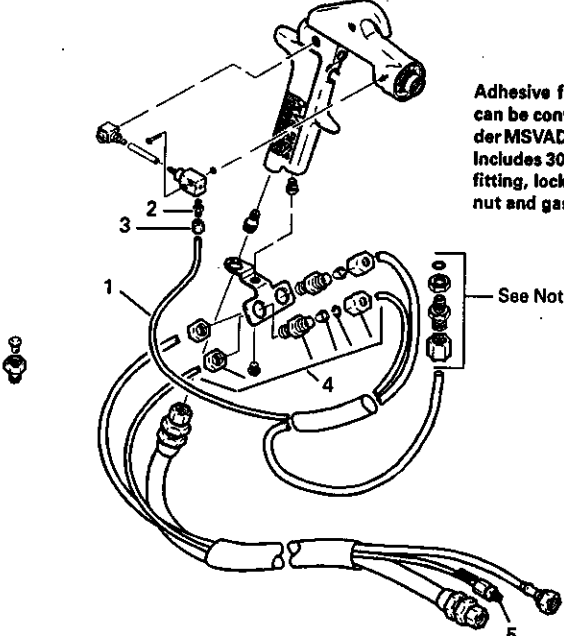
Used to regulate and monitor activator flow. Refer to SI-2-55-9 for details.

**GTI-5033-100**  
**Air Cap Test Kit**



Measures atomizing pressure at the air cap. Used to confirm pressure in states where legislation prohibits pressures over 10 PSI (0.7 Bar).

**MSVAD-457 Retrofit Kit**  
**(Converts activator line from 4 mm nylon with blue .020" orifice restrictor, to 1/8" O.D. Poly tube).**



**Note**  
 Adhesive fluid inlet fitting can be converted also. Order MSVAD-456 separately. Includes 303 S.S. fluid inlet fitting, locknut, 1/4" nylon nut and gasket.

See Note

**MSVAD-457 Kit Contents:**

Ref. No.	Part No.	Description	Qty.
1	H-3671	1/8" O.D. Nylon Tube	30 ft.
2	MSVAD-68	.020" Orifice Fitting, 316 S.S.	1
3	SSP-7825	Nylon Nut 1/8"	1
4	MSVAD-41	Tube connector	1
5	SSP-6120	Male Connector, Nylon, 1/8" NPT	1
-	QH-130	Loctite 242 (blue) (not shown)	1

**SERVICE LITERATURE REVISIONS**

Refer to the following chart for Part No./Literature changes.

Part Number Changes			Literature Changes
Old Part Number	New Part Number	Interchangeability	
JGHV-101-33L Air Cap	GTI-1-100L	Directly Obsolete.	Revised Instal. Options 1 & 2 drawings. Revised KK-5040 Repair Kit. Revised Chart 1.
JGHV-101-98L AirCap		Directly	
MSVAD-445 Baffle Kit	MSVAD-459 Baffle Kit	Obsolete	
MSVAD-454 Baffle Kit		Directly	
KK-5033-33A Air Cap Test Kit	GTI-5033-100 Air Cap Test Kit	Obsolete	
KK-5033-98 Air Cap Test Kit			

**WARRANTY**

This product is covered by DeVilbiss' 1 Year Limited Warranty. See SB-1-000 which is available upon request.

**NOTE**

For Europe, this will not affect the purchasers statutory rights, for example, under the U.K. Consumer Protection Act.

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