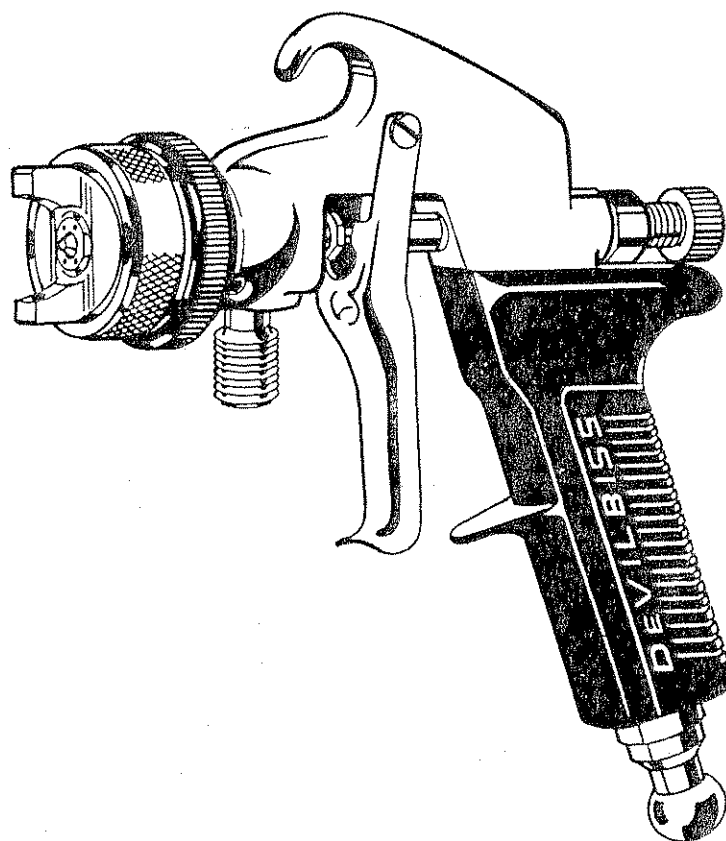


## Model JGHV Spray Guns

#501 — #503



**IMPORTANT:** Read and follow all instructions and **SAFETY PRECAUTIONS** before using this equipment. Retain for future reference.

## SAFETY PRECAUTIONS

This manual contains important information that *all* users should know and understand before using the equipment.

This information relates to **USER SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**.

To help you recognize this information, we use the following terms to draw your attention to certain equipment labels and portions of this Service Bulletin.

Please pay special attention to any label or information that is highlighted by one of these terms:



**IMPORTANT INFORMATION TO ALERT YOU TO A SITUATION THAT MIGHT CAUSE SERIOUS INJURY IF INSTRUCTIONS ARE NOT FOLLOWED.**




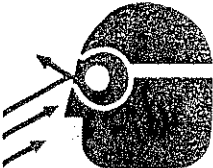
**Important information that tells how to prevent damage to equipment, or how to avoid a situation that might cause minor injury.**

### Note

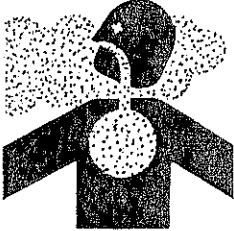

Information that you should pay special attention to.



**THE FOLLOWING HAZARDS MAY OCCUR DURING THE NORMAL USE OF THIS EQUIPMENT. PLEASE READ THE FOLLOWING CHART.**

AREA	HAZARD	SAFEGUARDS
Tells where hazards may occur.	Tells what the hazard is.	Tells how to avoid the hazard.
Spray Area – Fire Hazard  	Solvents and coatings can be highly flammable or combustible, especially when sprayed.	<ol style="list-style-type: none"> <li>1. Adequate exhaust must be provided to keep the air free of accumulations of flammable vapors.</li> <li>2. Smoking must never be allowed in the spray area.</li> <li>3. Fire extinguishing equipment must be present in the spray area.</li> </ol>
Solvent Spray  	During cleaning and flushing, solvents can be forcefully expelled from fluid and air passages. Some solvents can cause eye injury or irritation.	Wear eye protection.

## SAFETY PRECAUTIONS (Continued)

<b>AREA</b> Tells where hazards may occur.	<b>HAZARD</b> Tells what the hazard is.	<b>SAFEGUARDS</b> Tells how to avoid the hazard.
Toxic Substances  	Certain materials may be harmful if inhaled, or if there is contact with the skin.	<ol style="list-style-type: none"> <li>1. Follow the requirements of the Material Safety Data Sheet supplied by your coating material manufacturer.</li> <li>2. Adequate exhaust must be provided to keep the air free of accumulations of toxic materials.</li> <li>3. 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. Equipment must be as prescribed by an industrial hygienist or safety expert, and be NIOSH approved.</li> </ol>
Explosion Hazard – Incompatible Materials  	Halogenated hydrocarbon solvents – for example: methylene chloride and 1,1,1 – Trichlorethane are not chemically compatible with the aluminium that might be used in many system components. The chemical reaction caused by these solvents reacting with aluminium can become violent and lead to an equipment explosion.	The JGHV spray gun itself can be used with these solvents. However, aluminium 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 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. Any other type of solvent may be used with aluminium equipment.
General Use Maintenance	Improper operation or maintenance may create a hazard.	<ol style="list-style-type: none"> <li>1. All spray guns project particles at high velocity and should never be aimed at any part of the body.</li> <li>2. Operators must be given training in accordance with the requirements of NFPA-33, Chapter 15 (1985).</li> <li>3. Read all instructions and safety precautions prior to operating.</li> <li>4. Comply with appropriate local, state and national codes governing ventilation, fire prevention, operation, maintenance and housekeeping. OSHA references are Sections 1910.94 and 1910.107. Also refer to NFPA-33 and your insurance company requirements.</li> </ol>

## DESCRIPTION

A production spray gun utilizing heated low pressure, high volume air. This system reduces overspray and improves coating efficiency. This gun is to be used as pressure feed only.

### CAUTION

These guns are not designed for use with highly corrosive or abrasive materials. If such materials are used, the need for cleaning, maintenance and parts replacement will be greatly increased.

## MODELS AND SPECIFICATIONS

**JGHV-501 Spray Gun** with black handle, fitted with air adaptor for use with TLC-565 pressure feed cup.

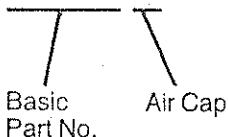
**JGHV-503 Spray Gun** with gray handle, for use with remote material feed system.

Both of the above models feature high grade stainless steel material passages. The fluid needles have acetel tips for improved sealing and longer service life.

Connections: Air — Ball connector, for HC-4234 quick detachable hose connection.  
 Material — 3/8" NPS(M) thread.

Example

JGHV-501-16FF — Fluid Tip Size



## INSTALLATION

### Note

Coatings and rust inhibitors have been applied for protection during shipping. Flush the spray gun with a suitable solvent before use.

1. Connect air hose from supply to HC-4234 connection and attach to the ball connector at the bottom of the handle.

### Note

The maximum recommended air pressure is 10 psi (0.7 bar).

2. a) For JGHV-503, attach material supply hose to fluid inlet connector (14).  
 b) For JGHV-501, attach TLC-565 cup to fluid inlet connector (14). Connect air tube from cup lid to air adaptor (15).  
 c) JGHV guns can be altered to use TLC cup or remote pressure feed by interchanging the air adaptor and screw (15).

### WARNING

RISK OF INJURY OR DAMAGE, NEVER USE MORE THAN 10psi (0.7 bar), PRESSURE IN THE TLC-565 CUP.

## OPERATION

### Note

All JGHV gun models are designed to operate from air sources which produce 10 psi (0.7 bar) or less. DeVilbiss assumes no warranty in operation or finish appearance if 10 psi (0.7 bar) is exceeded.

Mix, prepare and strain the material to be sprayed according to the paint manufacturer's instructions. Use a lint free mesh to strain the material.

1. Adjust needle travel by turning screw (12) counter-clockwise. Pull trigger (16) and turn screw (12) clockwise until resistance is felt. This ensures maximum needle travel to minimize wear on the fluid tip (3) and needle (10).
2. Turn fan pattern adjustment ring (6) to fully open position, by turning clockwise as viewed from back of gun.
3. Fill cup, tank and/or turn on material supply.
4. Turn on air source (turbine or other) and allow a few minutes for the temperature and pressure to stabilize.

### Note

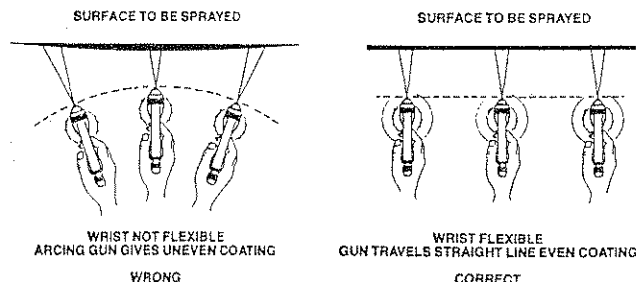
The JGHV is a bleeder type gun which allows air to pass through the gun at all times.

5. Adjust spray pattern as follows:
  - a) Remote pressure feed with regulation: Start with the lowest regulated pressure and spray test, increasing the pressure until a full wet pattern is achieved.
  - b) Pressure feed with attached cup: Close screw (12) fully by turning clockwise. Then open gradually while spray testing until a desired pattern is achieved.

The pattern can be altered by rotating ring (6), fully counter-clockwise for round spray or fully clockwise for fan spray.

It is recommended for the best results that the fluid tip selected avoids excessively high flow rates at low fluid pressures.

The gun should be held perpendicular to the spray surface at all times. Arcing the gun will cause an uneven coat of paint. The recommended spraying distance is between 6"-8" (150-200mm).



## PREVENTIVE MAINTENANCE

### CLEANING

**CAUTION**

Never soak the spray gun in solvents. The lubricants and packings will be damaged, and the performance and life expectancy of the gun reduced. Wipe off the gun with a solvent dampened rag.

### TLC-565 CUP

Disconnect air supply. Remove cup from lid. Raise tube out of material and pull trigger to allow remaining material to drain back to the cup. Then empty the cup of material. Clean the cup, lid, and tube. Add some solvent to cup. Reassemble – connect air supply and spray with solvent. Repeat with clean solvent if necessary. Disconnect gun, remove air cap and clean as noted below. Wipe gun and cup with solvent dampened rag.

### PRESSURE FEED

Turn off air supply to pump, pressure cup or tank and gun. Relieve pressure by pulling trigger on gun – most tanks have a cock and pressure cups have a control valve to relieve pressure. On a pressure cup or tank, material in hoses may be drained back. Lid must be loose and all air pressure off. Keep gun higher than tank and pull the trigger. Pour off remaining material.

A hose cleaner may be used to clean inside of hose and gun.

If a hose cleaner is not available or if using a pump, remove extra material and set up tank or pump with solvent. Leave air to gun off and trigger gun into waste container, flush until clean.

Wipe the exterior of the gun with a solvent dampened cloth.

Clean the air cap by immersing in solvent and if the orifice is clogged, use a broom straw or toothpick to remove the obstruction. Never use a steel wire or hard instrument which will damage the air cap and result in a distorted spray pattern.

### LUBRICATION

Lubricate each day with oil the trigger bearing stud (17) and the shank of the fluid needle (10) where it enters the packing nut.

The fluid needle spring (11) should be coated with a light grease.

## REPLACEMENT OF PARTS

Fluid tip (3), baffle (5) and/or fan ring (6)

1. Remove screw (12) and spring (11) to ensure that valve seats are not damaged.
2. Unscrew retaining ring (1) remove air cap (2).
3. Use a 10mm socket wrench (preferably a 6pt. socket wrench) to unscrew fluid tip (3), remove gasket (4), baffle (5) and fan ring complete with spring rings (6,7), replace any worn or damaged parts.
4. Re-assemble reversing steps 1 to 3.

**CAUTION**

Ensure that the tangs of both spring rings (7) are located properly in the gun body slot, and baffle (5) pin is engaged in the hole provided in the gun body, before re-tightening fluid tip (3).

Spring rings (7).

Repeat steps 1 to 3.

5. Remove springs (7) from ring (6) with pliers.
6. Coat spring rings with grease before replacing. Fit springs (7) with coils in opposite directions one clockwise and the other counter-clockwise. Align the tangs, ensure that the rings are not crossed in the groove.
7. Place fan ring (6) on to gun body with spring ring tangs (7) engaged in the location slot. Hold in place and rotate ring (6) until the baffle pin hole is visible through the longest slot in ring (6).

Re-assemble, reversing steps 1 to 4.

Fluid needle (10) and packing (8).

8. Remove the adjusting screw (12).
9. Withdraw the spring (11) and the needle (10).
10. Remove the trigger (16) by unscrewing the trigger bearing stud (17) from the screw (18).
11. Unscrew the packing nut (9) and remove the packing (8). The packing (8) should be replaced when a new needle is fitted. Lubricate the packing before re-assembly.

Re-assemble, reversing steps 8 to 11.

Ensure that the needle seats correctly in the fluid tip, and that the movement of the needle is not restricted.

Trigger Bushing (19).

12. Remove the trigger (16), repeat step 10 above. Support gun body with the spray head facing to the right and drive bushing (19) out using a 7/16" (11mm) diameter drift.

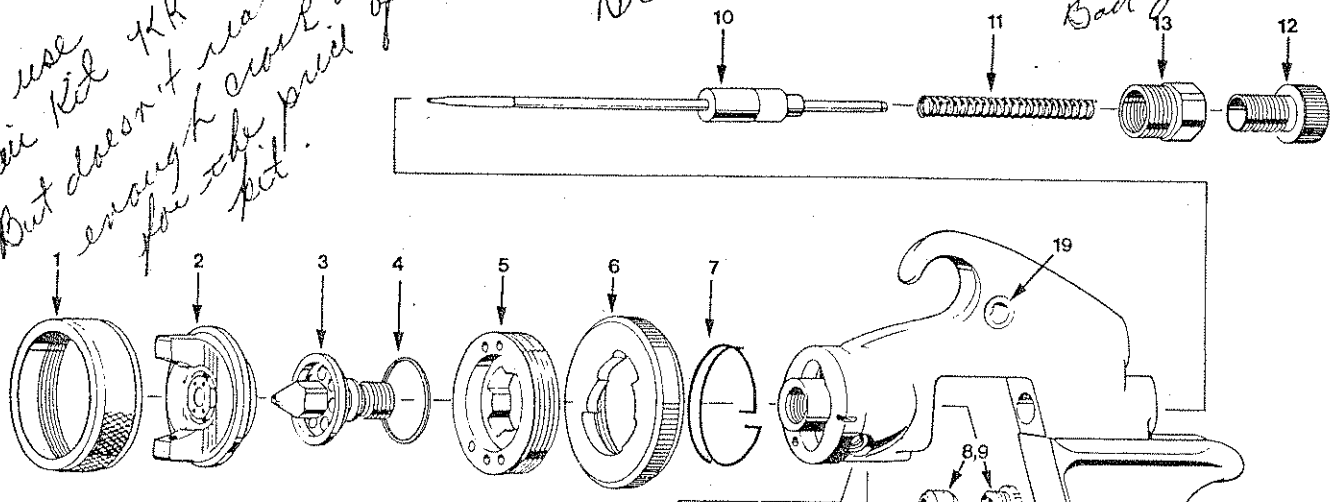
Replace bushing with the flange into counterbore with the gun body facing in the opposite direction.

Re-assemble the trigger (16), trigger bearing stud (17) and the screw (18).

*Can use repair kit KK-4930  
But doesn't really have  
enough cross over for  
pit.*

*Bleeder style gun*

*1/1 Ratio  
Bad finish*



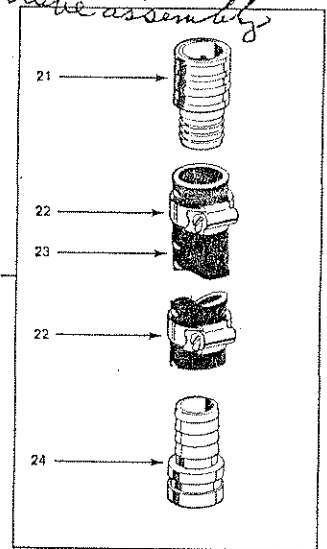
**Note**  
SS-3800-K5 set screw, use with remote pressurized material pump, tank or cup. Set screw supplied loose with model JGHV-501. Set screw fitted to model JGHV-503.

Ref	Part No.	Qty	Description
1	JGHV-3	1	Retaining Ring
2	See Chart	1	Air Cap
3	See Chart	1	Fluid Tip
X 4	AV-1-K5	1	Gasket
5	JGHV-407	1	Baffle
6	JGHV-5	1	Fan Adjustment Ring
7	JGHV-19-K4	2	Spring Ring
8	JGA-7-K5	1	Packing
9	34411-122	1	Packing Nut
10	See Chart	1	Fluid Needle
11	JGHV-14	1	Spring
12	JGHV-21	1	Adjusting Screw
13	JGHV-11	1	Bushing
14	JGHV-8	1	Fluid Connector
15	KR-103-K4	1	Air adaptor (JGHV-501 only)
15	SS-3800-K5	1	Set screw (see note)
16	JGS-108	1	Trigger
17	JGS-35-K5	1	Stud
X 18	A-42-K5	1	Screw
19	JGHV-20-K5	1	Trigger Bushing
† 20	HA-5851	1	Hose Assembly
† 21	HC-4234	1	Q.D. Connector
† 22	SSP-8614	2	Hose Clamp
† 23	H-3635	1	Hose 20'
† 24	SSP-8235	1	Swivel Connector

*JGHV-501  
has no  
air valve  
Bleeder style*

*JGHV-407  
Ball stem  
& tube assembly*

† ACCESSORY  
Order Separately 20



*KK-4987-2  
REPAIR KIT*

**AIR CAP (2), FLUID TIP (3) AND NEEDLE (10) COMBINATIONS**

No. on Cap	Fluid Tip Size		Ordering Number		
	in	mm	Ref (2)	Tip* Ref (3)	Ref (10)
12	G	.028	JGHV-16-12	JGHV-601-G	JGHV-404-G
	GX	.034		JGHV-601-GX	JGHV-404-GX
14	FY	.039	JGHV-16-14	JGHV-601-FY	JGHV-404-GX
16	FF	.055	JGHV-16-16	JGHV-601-FF	JGHV-404-FF
	DE	.079		JGHV-601-DE	JGHV-404-DE

\*Includes AV-1 gasket (4)

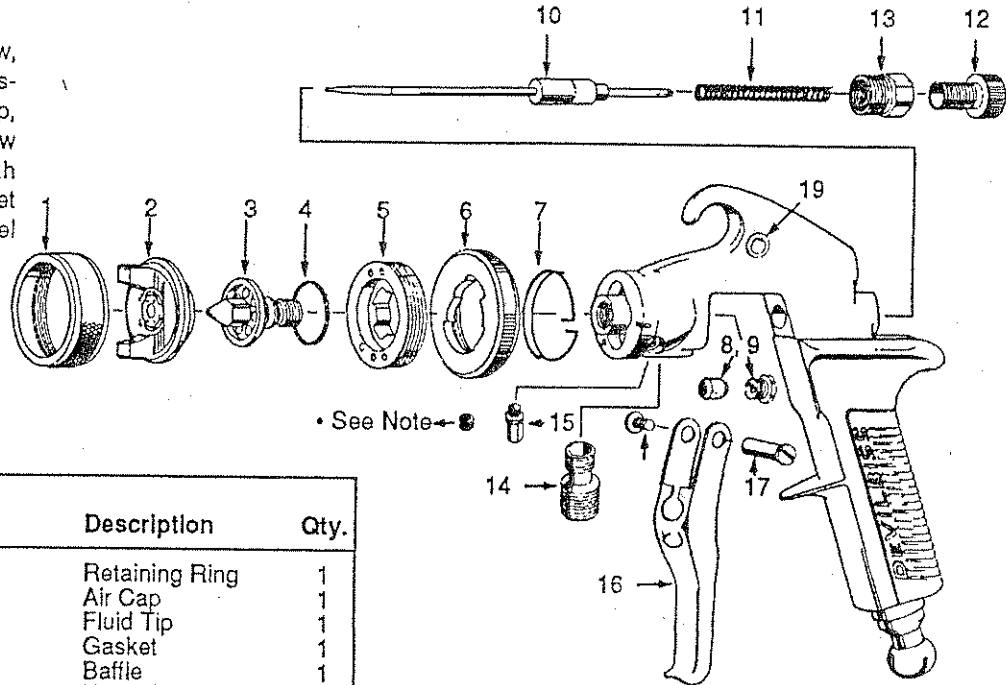


# ADDENDUM to SB-2-320-A

## IMPORTANT NOTICE

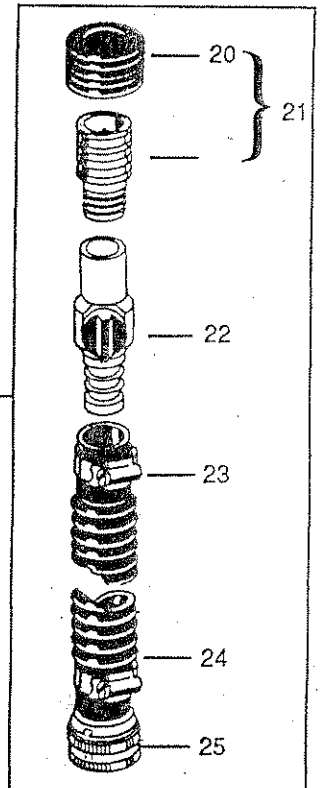
Keep this addendum with SB-2-320-A page 6 for future reference purposes.

• Note  
 SS-3800-K5 set screw, use with remote pressurized material pump, tank or cup. Set screw supplied loose with model JGHV-501. Set screw fitted to model JGHV-503.



Ref. No.	Part No.	Description	Qty.
1	JGHV-3	Retaining Ring	1
2	See Chart	Air Cap	1
3	See Chart	Fluid Tip	1
X 4	AV-1-K5	Gasket	1
5	JGHV-407	Baffle	1
6	JGHV-5	Fan Adjustment Ring	1
7	JGHV-19-K4	Spring Ring	2
8	JGA-7-K5	Paacking	1
9	34411-122	Packing Nut	1
10	See cahrt	Fluid Needle	1
11	JGHV-14	Spring	1
12	JGHV-21	Adjusting Screw	1
13	JGHV-11	Bushing	1
14	JGHV-8	Fluid Connector	1
15	KR-103-K4	Air Adapter (JGHV-501 only)	1
	SS-3800-K5	Set Screw (see note)	1
16	JGS-108	Trigger	1
17	JGS-35-K5	Stud	1
X 18	A-42-K5	Screw	1
19	JGHV-20-K5	Trigger Bushing	1
†20	HC-1080-K3	Sleeve	1
†21	HC-4234	Q.D.Connector	1
†22	ACU-423(heated)	On/Off Valve (not on ATU's)	1
†23	SSP-8614	Hose Clamp	1
†24	H-3662	40" Flex Hose	1
†25	SSP-8239	Female Connector	1

†ACCESSORY  
 Order Separately



### AIR CAP (2), FLUID TIP (3) AND NEEDLE (10) COMBINATIONS

Cap #	Fluid Tip Size		Ordering Number		
	.In	mm	Ref (2)	*Ref (3)	Ref (10)
12	G	.028	JGHV-16-12	JGHV-601-G	JGHV-404-G
	GX	.034		JGHV-601-GX	JGHV-404-GX
14	FY	.039	JGHV-16-14	JGHV-601-FY	JGHV-404-GX
16	FF	.055	JGHV-16-16	JGHV-601-FF	JGHV-404-FF
	DE-	.079		JGHV-601-DE	JGHV-404-DE

\*Includes AV-1 gasket.

# SERVICE CHECKS



**A NORMAL SPRAY PATTERN**  
 Proper gun adjustment will result in a normal spray pattern of this shape.

CONDITION	CAUSE	CORRECTION
1. Will not spray.	1. No pressure at gun. 2. Fluid adjusting screw (12) not properly adjusted.	1. Check air and material lines. 2. Correct. See "Operation".
2. A. Improper spray pattern. 	A. Gun incorrectly adjusted. B,C. Material build-up on air cap. D,E. Incorrect material flow or viscosity	A. Re-adjust gun. See "Operation". B,C. Clean cap/tip. See "Preventive Maintenance". D,E. Adjust fluid flow or viscosity
3. Jerky or fluttering spray. 	1. Insufficient material in pressure cup or tank or an obstruction in hose. 2. Gun material passage obstructed. 3. Worn packing (8) or loose packing nut (9). 4. Damaged or loose fluid tip (3).	1. Fill or clear obstruction. 2. Clean. 3. Replace or tighten – See "Lubrication". 4. Replace or tighten – See "Replacement of Parts".
4. Fluid leakage from packing nut (12).	1. Packing nut (9) loose. 2. Packing (8) dry or worn.	1. Tighten, check needle for free movement. 2. Replace or lubricate – See "Replacement of Parts" or "Lubrication".
5. Dripping from fluid tip (3).	1. Dry packing (8). 2. Sluggish needle (10). 3. Tight packing nut (9). 4. Fluid tip (3) worn.	1. See "Lubrication". 2. See "Lubrication". 3. Adjust. See "Replacement of Parts". 4. Replace. See "Replacement of Parts".

# ACCESSORIES

**WARNING**

**RISK OF INJURY OR DAMAGE. DO NOT USE WITH HALOGENATED HYDROCARBON SOLVENTS.**

TLC-565 Pressure Feed Cup

Capacity – 1 Qt  
 Maximum Air Pressure – 10 psi  
 Thread Size – 3/8" NPS(F)

VS-531  
LOW PRESSURE  
FLUID STRAINER

The VS-531 Low Pressure Fluid Strainer provides a final filter for trapping foreign particles in the paint supply.

**WARNING**

**RISK OF INJURY OR DAMAGE. DO NOT USE WITH HALOGENATED HYDROCARBON SOLVENTS.**

**HD-501  
HOSE CLEANER**

Hose cleaner used to clean the inside of hose and material passages of gun.

42884-214-K5 3/8"  
42884-215-K10 5/8"  
CLEANING  
BRUSHES

These brushes are helpful in cleaning threads and recesses of gun body.



## WARRANTY

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

## WORLDWIDE SALES AND SERVICE

DeVilbiss has authorized distributors throughout the world. For equipment, parts and service check the yellow pages under "Spray Equipment" or "Compressors." If further assistance is required, write or call one of the following DeVilbiss Distribution Centers or Sales Offices nearest you.

**FOR LOCAL ORDER ENTRY AND CUSTOMER SERVICE, CALL TOLL FREE: 1-800-338-4448.  
FOR LOCAL CALLS, SEE LISTING BELOW.**

U.S. Sales and Distribution Centers	Address	Telephone No.
ATLANTA, GA 30336	520 Wharton Circle, P.O. Box 43226 Industrial Branch	(404) 696-4988
SANTA FE SPRINGS, CA 90670	12878 E. Florence Avenue	(213) 944-1111
TOLEDO, OH 43692-0913	300 Phillips Avenue, P.O. Box 913	(419) 470-2169
<b>Sales Office Only:</b>		
*DARIEN (Chicago), IL 60559	8205 South Cass Ave. Suite 102	(312) 696-0440
*VERNON, CT 06066	30 Lafayette Square, Suite 106	(203) 872-1372

## INTERNATIONAL MARKETING AND MANUFACTURING

- The DeVilbiss Co., Ltd., Bournemouth, England
- DeVilbiss (Canada) Ltd., Barrie, Ont., Canada
- DeVilbiss S.A., Sao Paulo, Brasil
- \*DeVilbiss G.m.b.H. Dietzenbach, West Germany
- \*DeVilbiss (Japan) Co., Ltd., Tokyo, Japan
- \*DeVilbiss Europa G.m.b.H. Dietzenbach, West Germany
- \*DeVilbiss (Australasia) Pty. Ltd., Melbourne, Vic., Australia
- DeVilbiss Mexico, S.A. de C.V., Tlalnepantla, Mexico
- \*Toussaint-DeVilbiss & Cie., Valence (Drome) France
- \*DeVilbiss Latinoamerica, Miami, Florida, U.S.A.

\* Sales Office Only

**THE DEVILBISS COMPANY**  
Toledo, Ohio 43692-0913

