

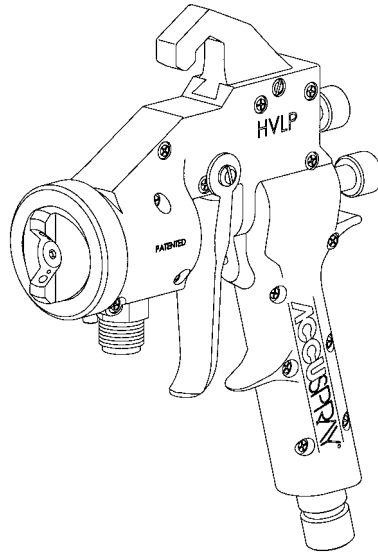


V Gun

T Gun

E Gun

Owners Manual



**Very Transfer Efficient HVLP spray guns for  
excellent results with the widest variety of  
applications.**

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## Gun Overview

Accuspray's VTE Guns were designed from the inside out for low-pressure performance. The gun is molded in two precision shaped halves with large sweeping air passages. These passages enable unrestricted low-pressure air to flow through the gun without turbulence or pressure loss. When using a turbine, this means maximum pressure with the greatest amount of control right where its needed – at the point of atomization. When using compressed air sources, it means complete atomization with the widest range of coatings.

With proper use and maintenance, your Accuspray Gun will deliver long trouble-free life and first class results.

### Unpacking

Remove the components from the box. Inspect for concealed damage and missing items. If you discover any damage or missing pieces, contact your distributor immediately.

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## General Safety

Accuspray's HVLP equipment is for professional use only. Hazards can occur from equipment misuse. Any misuse of the equipment or accessories, such as over pressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts can cause serious bodily injury, fire, explosion or property damage. **Please read and follow all General Safety, Safety Precautions and User Instructions.**

**Never** point a spray gun at anyone or any part of the body. Never place your hand or fingers in front of a spray nozzle.

**Never** try to stop or deflect leaks with your hand or body.

**Never** alter or modify any part of this equipment. A malfunction could result.

**Check** your spray equipment regularly. Repair or replace worn or damaged parts immediately.

**Always** use Accuspray HVLP replacement parts. Only these parts were designed to work with your equipment.

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## Safety Precautions

Solvents and coatings can be highly flammable to combustible, especially when sprayed. Adequate exhaust must be provided to keep the air free of accumulations of flammable vapors. Smoking must never be allowed in spray areas. Fire extinguishing equipment must be present in the spray area.

Certain materials may be harmful if inhaled or if there is contact with the skin. Follow the requirements of the Material Safety Data Sheet supplied by the coating material manufacturer. Use a respirator whenever there is a chance of inhaling sprayed material. The mask must be compatible with the material being sprayed and its concentration. Safety equipment must be NIOSH approved.

Certain solvents containing Methylene Chloride and Trichloromethane are not chemically compatible with aluminum or zinc. The solvents reaction can become violent and explosive. If you are in doubt whether a coating or cleaning material is compatible, contact your material supplier.

Improper operation or maintenance may create a hazard. Personnel must be given training. Instructions and safety precautions must be read and understood. Comply with your local, state, and national codes governing ventilation, fire protection, operation, maintenance, and housekeeping.

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## T Gun

### Series 14 and Series 15

The T gun is an HVLP spray gun for use with turbine systems.

Gun features are compatible with water-based materials. These features are:

- **Corrosion Resistant fluid passage**
- **Delrin-tipped needle**
- **Stainless steel fluid nozzle**
- **Delrin Air Cap**

The standard atomizing set, consisting of a .051 needle tip/nozzle and #10 air cap, delivers desired production and finish quality for frequently used coatings with turbine air. These coatings include architectural and maintenance coatings of medium to heavy viscosity, such as full-bodied stains, waterborne and acrylic lacquers, latex paints.

Excellent results with lighter coating, such as stains and wood sealers, can be obtained simply by changing to a smaller delrin tip and matching fluid nozzle. If the turbine generates at least 5psi at the air cap, heavier coatings such as multi-colors, can be sprayed by changing to a larger delrin tip and matching fluid nozzle.

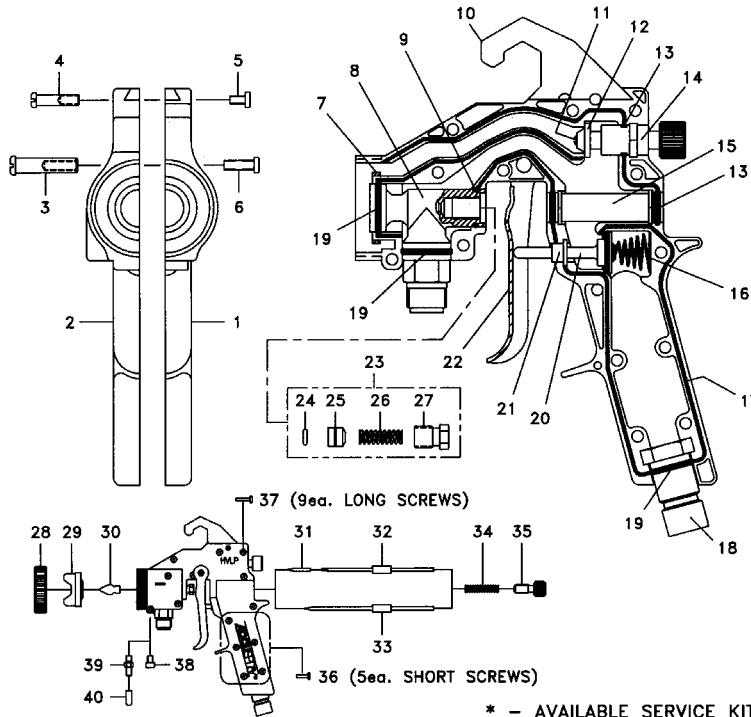
This gun has been set up for use with a pressurized ½ pint or 1 quart cup. Set up and maintenance instructions begin on page 10.

If using this gun with a remote pressure cup or tank, refer to Set-Up Instructions – Production Applications on page 11.

**T Gun Series 14:** This gun is a non-bleed HVLP spray gun. It can be used with any turbine that has a pressure relief valve or mechanism to release air. This mechanism is important because it prevents the turbine motor from overheating when the gun is not being triggered.

**T Gun Series 15:** This is a bleeder HVLP spray gun. In order to prevent the turbine from overheating, it will bleed or release air when it is not being triggered.

# T Gun Series 14 and Series 15 Parts Identification



\* - AVAILABLE SERVICE KITS

ITEM	PART No.	DESCRIPTION
1	91-123-A	LEFT-HALF SPRAYGUN HANDLE
2	91-122	RIGHT-HALF SPRAYGUN HANDLE
3	91-014	TRIGGER PIVOT POST
4	91-141	HOOK POST
5	UH-869/4	HOOK POST SCREW
6	UH-769/4	TRIGGER PIVOT POST SCREW
7	91-276	CLOSURE RING
8	91-203	FLUID PASSAGE ASSEMBLY
9	UH-790/10	O-RING (PACK OF 10)
10	91-124	SPRAYGUN HOOK
11	UH-765/4	FAN VALVE ASSEMBLY SCREW
12	91-015	VALVE SEAL
13	UH-647/10	O-RING (PACK OF 10)
14	91-072	FAN VALVE ASSEMBLY
15	91-041	THREADED SLEEVE ASSEMBLY
16	91-019/5	TELESCOPIC SPRING
17	UH-753/2	SEAL
18	91-020	AIR INLET ASSEMBLY
19	UH-789/10	O-RING (PACK OF 10)
20	91-142	POPPET VALVE ASSEMBLY
21	91-021	FLANGED BUSHING
22	HP-405	TRIGGER

ITEM	PART No.	DESCRIPTION
23	91-200	SELF-ADJUSTING PACKING KIT
24	UH-1405/10	O-RING (PACK OF 10)
25	91-202/2	NEEDLE GUIDE (PACK OF 2)
26	91-199/3	COMPRESSION SPRING (PACK OF 3)
27	91-201	PACKING NUT
28	91-043	RETAINING RING
29	91-009-xxx	AIR CAP (DELRIN)
29	91-071-xxx	AIR CAP (ALUMINUM)
30	91-008-xxx	FLUID NOZZLE
31	91-107-xxx/4	NEEDLE TIP (PACK OF 4)
32	91-078	NEEDLE SHAFT
33	91-006-xxx	FULL S.S. NEEDLE
34	LG-27/5	SPRING (PACK OF 5)
35	91-068	NEEDLE ADJUSTMENT SCREW
36	UH-800/10	1/2" (SHORT) SCREW (PACK OF 10)
37	UH-801/10	5/8" (LONG) SCREW (PACK OF 10)
38	UH-694/4	AIR PRESSURE PORT PLUG
39	LFG-465	AIR PRESSURE STEM
40	91-109/10	AIR PRESSURE STEM CAP
*	91-028	SPRAYGUN REBUILD KIT
*	91-049	O-RING REPLACEMENT KIT
*	91-152-A	HANDLE REPLACEMENT KIT

\*Note: For Series 15 T Gun, replace items #16, #20, and #21 with part# 91-027.

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## V Gun Series 16

The V Gun series is a versatile HVLP production gun. It operates with high-pressure compressed air – up to 60 psi – delivered to the gun inlet. The air is decompressed inside the gun handle at a 6:1 reduction. As an example, an inlet pressure of 30 psi will deliver 5 psi to the air cap.

Gun features are compatible with water-based materials. These features are:

- **Corrosion Resistant fluid passage**
- **Delrin-tipped needle**
- **Stainless steel fluid nozzle**
- **Delrin Air Cap**

The standard atomizing set, consisting of a .043 needle tip/nozzle and #9 air cap, delivers the desired and finish quality for production applications with medium viscosity coatings. These coatings include: full-bodied stains, waterborne clears, epoxies, polyurethanes, acrylic urethanes, and enamels. Excellent results with all sprayable materials – from light to heavy viscosity – can easily be obtained by changing needle tip/nozzle and air cap sizes.

This gun has been set up for use with a pressurized 1/2 pint or 1 quart cup. Set up and maintenance instructions begin on page 10.

If using this gun with a remote pressure cup or tank, refer to Set-Up Instructions – Production Applications on page 11.

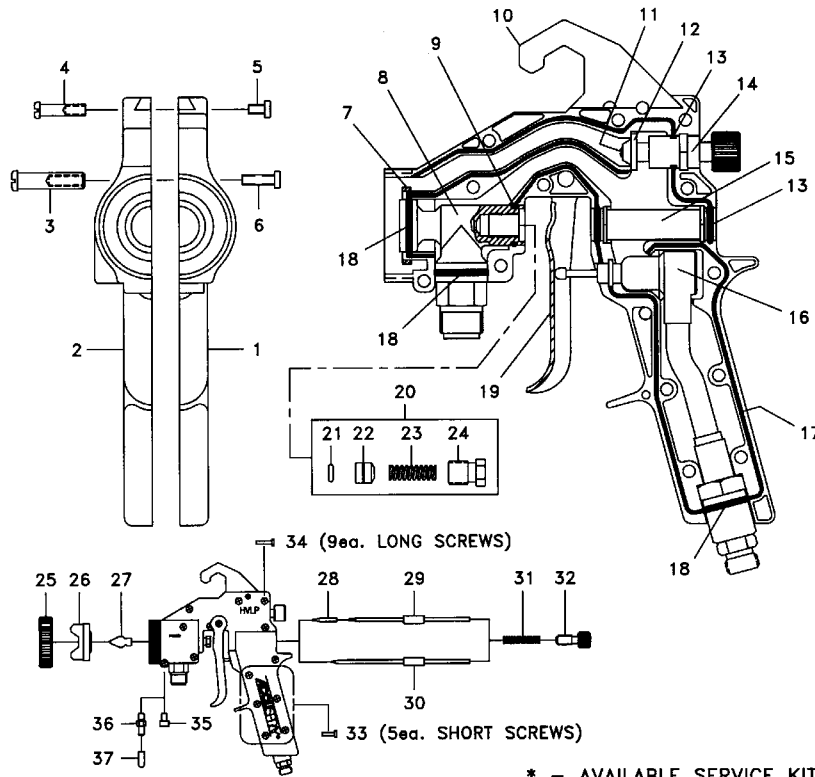
Requirements:

- Any 0-125 psi 1/4" ported (or larger) full-sized regulator.
- 5/16" or larger atomizing air hose feeding the gun.

Recommendations:

- A pre-filter for each air line to ensure clean atomizing air.

## V Gun Series 16 Parts Identification



\* - AVAILABLE SERVICE KITS

ITEM	PART No.	DESCRIPTION
1	91-123-B	LEFT-HALF SPRAYGUN HANDLE
2	91-122	RIGHT-HALF SPRAYGUN HANDLE
3	91-014	TRIGGER PIVOT POST
4	91-141	HOOK POST
5	UH-869/4	HOOK POST SCREW
6	UH-769/4	TRIGGER PIVOT POST SCREW
7	91-276	CLOSURE RING
8	91-203	FLUID PASSAGE ASSEMBLY
9	UH-790/10	O-RING (PACK OF 10)
10	91-124	SPRAYGUN HOOK
11	UH-765/4	FAN VALVE ASSEMBLY SCREW
12	91-015	VALVE SEAL
13	UH-647/10	O-RING (PACK OF 10)
14	91-072	FAN VALVE ASSEMBLY
15	91-041	THREADED SLEEVE ASSEMBLY
16	91-168	50 PSI AIR VALVE ASSEMBLY
17	UH-753/2	SEAL
18	UH-789/10	O-RING (PACK OF 10)
19	HP-405	TRIGGER
20	91-200	SELF-ADJUSTING PACKING KIT
21	UH-1405/10	O-RING (PACK OF 10)

ITEM	PART No.	DESCRIPTION
22	91-202/2	NEEDLE GUIDE (PACK OF 2)
23	91-199/3	COMPRESSION SPRING (PACK OF 3)
24	91-201	PACKING NUT
25	91-043	RETAINING RING
26	91-009-xxx	AIR CAP (DELRIN)
	91-071-xxx	AIR CAP (ALUMINUM)
27	91-008-xxx	FLUID NOZZLE
28	91-107-xxx/4	NEEDLE TIP (PACK OF 4)
29	91-078	NEEDLE SHAFT
30	91-006-xxx	FULL S.S. NEEDLE
31	LG-27/5	SPRING (PACK OF 5)
32	91-068	NEEDLE ADJUSTMENT SCREW
33	UH-800/10	1/2" (SHORT) SCREW (PACK OF 10)
34	UH-801/10	5/8" (LONG) SCREW (PACK OF 10)
35	UH-694/4	AIR PRESSURE PORT PLUG
36	LFG-465	AIR PRESSURE STEM
37	91-109/10	AIR PRESSURE STEM CAP
*	91-119	SPRAYGUN REBUILD KIT
*	91-223	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-B	HANDLE REPLACEMENT KIT

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## E Gun Series 18

The E gun Series 18 is an excellent all-purpose HVLP gun for automotive finishing applications. The standard atomizing set consists of a .036 needle tip/nozzle and a #8 aluminum air cap.

The E gun operates with high-pressure compressed air – up to 60 psi – delivered to the gun inlet. The air is decompressed inside the gun handle at a 6:1 reduction. As an example, an inlet pressure of 30 psi will deliver 5 psi to the air cap.

Gun features are compatible with water-based materials. These features are:

- **Corrosion Resistant fluid passage**
- **Delrin-tipped needle**
- **Stainless steel fluid nozzle**

This gun has been set up for use with a pressurized 1/2 pint or 1 quart cup. Set up and maintenance instructions begin on page 10.

If using this gun with a remote pressure cup or tank, refer to Set-Up Instructions – Production Applications on page 11.

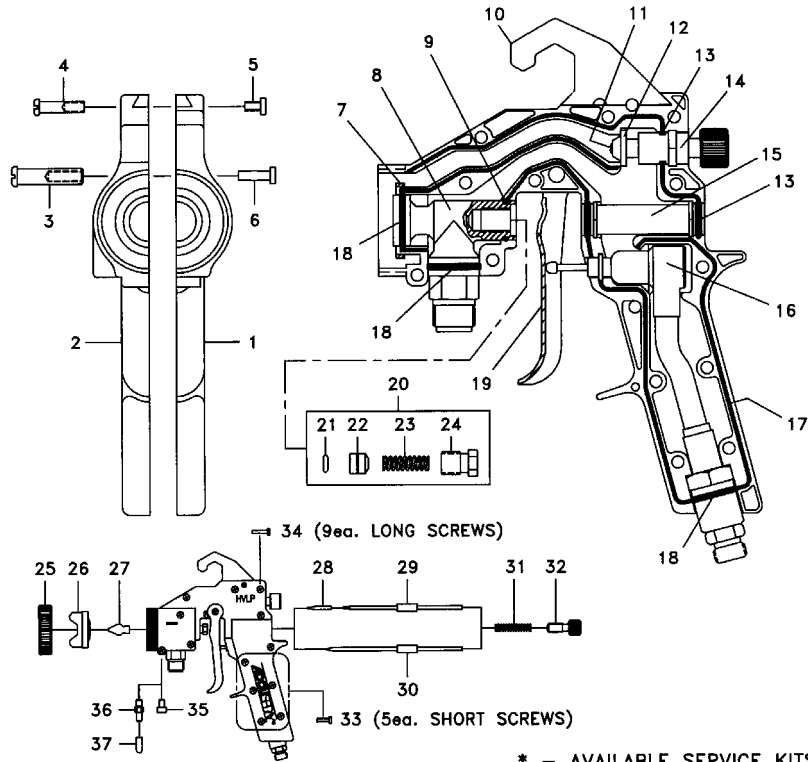
### **Requirements:**

- Any 0-125 psi 1/4" ported (or larger) full-sized regulator.
- 5/16" or larger atomizing air hose feeding the gun.

### **Recommendations:**

- A pre-filter for each air line to ensure clean atomizing air.

## E Gun Series 18 Parts Identification



\* - AVAILABLE SERVICE KITS

ITEM	PART No.	DESCRIPTION
1	91-123-B	LEFT-HALF SPRAYGUN HANDLE
2	91-122	RIGHT-HALF SPRAYGUN HANDLE
3	91-014	TRIGGER PIVOT POST
4	91-141	HOOK POST
5	UH-869/4	HOOK POST SCREW
6	UH-769/4	TRIGGER PIVOT POST SCREW
7	91-276	CLOSURE RING
8	91-203	FLUID PASSAGE ASSEMBLY
9	UH-790/10	O-RING (PACK OF 10)
10	91-124	SPRAYGUN HOOK
11	UH-765/4	FAN VALVE ASSEMBLY SCREW
12	91-015	VALVE SEAL
13	UH-647/10	O-RING (PACK OF 10)
14	91-072	FAN VALVE ASSEMBLY
15	91-041	THREADED SLEEVE ASSEMBLY
16	91-168	50 PSI AIR VALVE ASSEMBLY
17	UH-753/2	SEAL
18	UH-789/10	O-RING (PACK OF 10)
19	HP-405	TRIGGER
20	91-200	SELF-ADJUSTING PACKING KIT
21	UH-1405/10	O-RING (PACK OF 10)

ITEM	PART No.	DESCRIPTION
22	91-202/2	NEEDLE GUIDE (PACK OF 2)
23	91-199/3	COMPRESSION SPRING (PACK OF 3)
24	91-201	PACKING NUT
25	91-043	RETAINING RING
26	91-009-xxx	AIR CAP (DELFIN)
	91-071-xxx	AIR CAP (ALUMINUM)
27	91-008-xxx	FLUID NOZZLE
28	91-107-xxx/4	NEEDLE TIP (PACK OF 4)
29	91-078	NEEDLE SHAFT
30	91-006-xxx	FULL S.S. NEEDLE
31	LG-27/5	SPRING (PACK OF 5)
32	91-068	NEEDLE ADJUSTMENT SCREW
33	UH-800/10	1/2" (SHORT) SCREW (PACK OF 10)
34	UH-801/10	5/8" (LONG) SCREW (PACK OF 10)
35	UH-694/4	AIR PRESSURE PORT PLUG
36	LFC-465	AIR PRESSURE STEM
37	91-109/10	AIR PRESSURE STEM CAP
*	91-119	SPRAYGUN REBUILD KIT
*	91-223	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-B	HANDLE REPLACEMENT KIT

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## Set-up Instructions - General

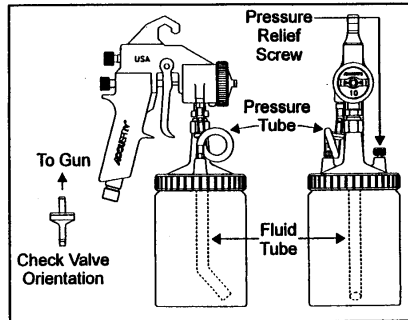
If you have a pressurized 1/2 pint or 1 quart cup, the sections on "Gun/Cup Installation" and "External Check Valve Assembly" below are very important for ensuring your gun operates efficiently.

### Gun/Cup Installation

Thread the swivel nut of the cup lid onto the fluid inlet fitting of the spray gun. Tighten with an Accuspray Gun Wrench while applying counterforce with an 11/16" wrench on the fluid inlet fitting of the spray gun.

Before fully tightening, make certain that the fluid tube is pointed forward. Attach the pressure tube from the pressure stem on the gun head to the cup lid.

**Note: Spray solvent through the gun before using it for the first time**



### External Check Valve Assembly

To install the assembly, attach the short pressure tube hose from the check valve assembly to the gun. Loop the tube and attach it to the pressure stem of the cup. The loop plays an important role; it allows you to see any material that may be working its way back up the tube.

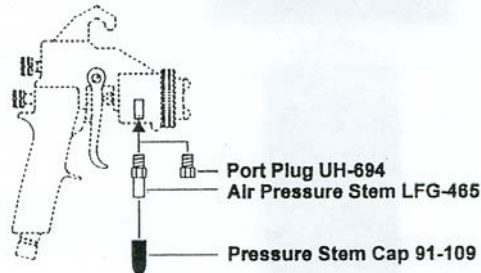
A properly working check valve is required for uninterrupted spraying. The advantage of the external check valve is that in its remote location (away from the paint) it is not prone to becoming jammed. The external check valve is a wear part and it will require replacement after it becomes contaminated. The normal life expectancy is from one week to three months, depending on its care.

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## Set-up Instructions – Production Applications

When using your gun with a remote 2 quart cup or pressure tank, rather than with an attached 1/2 pint or 1 quart cup, use the pressure stem cap, (part#91-109). This will prevent loss of atomizing pressure. To install the cap, simply push over the air stem.

For permanent use of your gun with a pressure tank, remove the pressure stem, (LFG-465) and replace it with a port plug, (UH-694)



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## Maintenance

### Gun Cleaning

It is very important to clean your gun after every use. Do not clean the gun body with paint strippers containing formic acid or acetic acid. Please refer to the coating manufacturers MSDS for the proper solvents to be used.

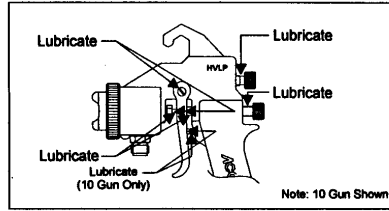
Accuspray does not recommend using a gun washer. After cleaning, blow out the gun with air and wipe off the exterior with the appropriate solvent. You can place a small amount of solvent in the cup, pressurize the cup, close your fan air down slightly, and trigger the gun until the stream of solvent runs clear. Do not place the mini-regulator in a gun washer.

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## Maintenance - Continued

### Lubrication

After every cleaning of the gun, you must lubricate the working components. Cleaning washes away the lubricants that protect these friction points. Lubricate with Accuspray gun lube part #91-170. The lubrication points are shown below.



### Fluid Nozzle

If the fluid nozzle should become clogged, spraying solvent through the gun should clear the passage.

If it is necessary to remove and replace the fluid nozzle, care should be taken not to over-torque during replacement. The nozzle seals easily together with the fluid passage, and no more than a 1/8 turn past finger-tight is required to prevent fluid leaks.

#### Note:

Over-tightening the stainless steel nozzle may damage the fluid passage.

### Cup Cleaning

It is also very important to clean your cup after every use. Before removing your cup lid from the cup, be sure to relieve the cup pressure through the relief valve. Unscrew the cup lid and remove the remaining material from the cup. Rinse the cup with a suitable solvent.

#### Cup Warnings

1/2 Pint and 1 Quart Pressure Cup do not exceed 10 psi (.7 Bar)  
Disconnect Atomizing Air Before Opening Cup  
Open Pressure Relief Screw Before Opening Cup

### Gasket Replacement

Remember that the cup is a pressure cup. The gasket must be in good condition. The lid must be firmly seated to the cup to prevent air and fluid leakage. Inspect the gasket, lube the gasket channel, and pay attention to the fit with each use. Replace the gasket when necessary.

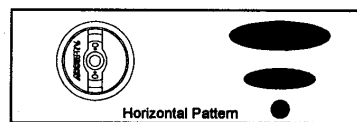
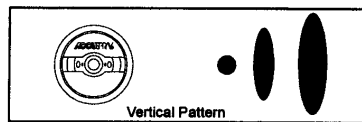
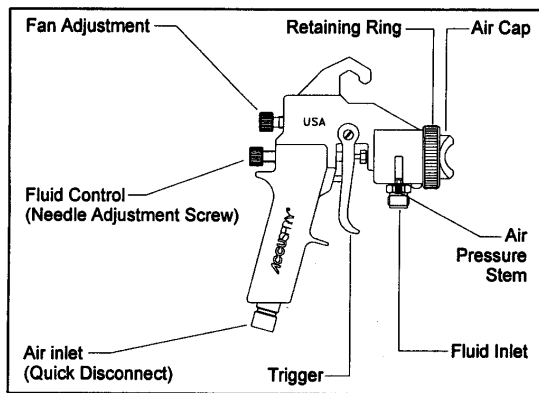
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# Hand Gun Use

## Gun Adjustments

The fan size is regulated by the fan adjustment located at the top, rear of the gun. As a starting point, gently turn the knob clockwise until you feel no further adjustment. Next, turn the knob counter-clockwise one full rotation. The fan adjustment will allow you to spray from a small round to a full wet pattern. The pattern can also be changed from vertical to horizontal by rotating the air cap  $\frac{1}{4}$  turn.

The fluid flow can be adjusted by the needle adjustment screw. The needle adjustment screw is located directly below the fan adjustment knob. As a starting point, gently turn the knob clockwise until you have very little needle travel. (Pull trigger to verify). Do not over-tighten. After the needle travel has stopped, further tightening will only serve to compress the spring and will not aid in adjustment. Next turn the knob counterclockwise two full turns. These adjustment procedures will serve only as a starting point. Fine tuning of these adjustments will be based on your material and technique.



Note: The small round pattern can be achieved by closing down the fan adjustment, triggering the gun lightly, and maintaining a distance from your target of 2 to 4 inches.

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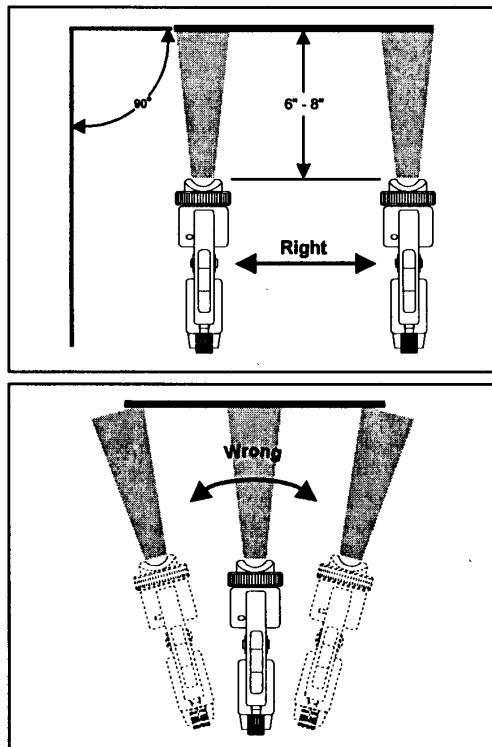
## Hand Gun Use-Continued

### Spray Technique

Proper spray technique is very important to achieve a good finish. Always spray at a distance of 6 to 8 inches from your target. Keep the gun parallel to your target throughout the entire pass. More detailed spraying can be done with the gun as close as 2 inches from the target. Make sure that your wrist remains firm during each pass.

Trigger the gun only after your pass begins, and release the trigger before stopping your motion. Do not angle your gun upward or downward while spraying. Angled spraying will develop an uneven paint buildup. Overlap your passes approximately 50% for an even finish.

Always be certain to thin your material with the proper solvent, and to follow the recommendations of the materials manufacturer.



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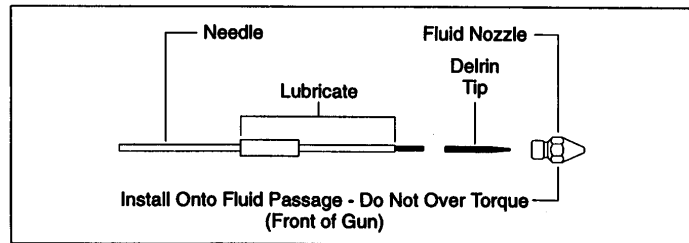
## Hand Gun Use-Continued

### Why change needle tips/nozzles and air caps?

The atomizing set in your gun was selected for its performance with many frequently used coatings. At the same time, different sizes of needle tips/nozzles or air caps can improve the results with coatings of different viscosities. To extend the versatility of your Accuspray gun, please see general guidelines for needle tips/nozzles and air caps.

### To Change Needle Tips and Nozzles:

- 1) Remove the retaining ring and air cap.
- 2) Squeeze the trigger and keep the needle retracted for the next procedure.
- 3) Remove the fluid nozzle from front of the gun with the gun wrench.
- 4) Release the gun trigger.
- 5) Unscrew the Delrin needle tip and replace.
- 6) Squeeze trigger again and hold.
- 7) Replace the fluid nozzle. Tighten the nozzle . No not over-tighten.
- 8) Check the needle packing to ensure a proper seal.
- 9) Replace the air cap and retaining ring.



**Note: To prevent damage to the needle tip, be sure to follow steps 2 and 6 above when removing or replacing the fluid nozzle.**

**Note: If removing a full stainless steel needle please do the following.**

Remove retaining ring, air cap, and fluid nozzle/ Loosen packing nut. Remove needle adjustment screw and needle adjustment spring. Gently pull out the stainless steel needle from the back of the gun. Please refer to literature #SI-MK-0295 Maintenance Kit Service Instructions for detailed adjustment and component replacement instructions.

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## Needle Tips/Nozzles and Air Caps

### General Guidelines

- Light viscosity coatings will usually require a smaller nozzle.
- To adjust speed of application, the nozzle size can be changed

Smaller Nozzles----Slower

Larger Nozzles----Faster

- To adjust the degree of fine finish, the air cap size can be changed

Smaller Air Caps----Finer Finishes

### Prokits:

These atomizing sets combine popular tip/nozzle and air cap sizes.

#### Prokit-10:

Includes: .036(0.9mm) Delrin tip and Nozzle; #8 Delrin Air Cap

Lighter viscosity materials such as acrylic lacquers, waterborne laquers, shellacs, stains, wood sealers. Also most automotive finishes.

#### Prokit-11:

Includes: .043(1.1mm) Delrin Tip and Nozzle; #9 Delrin Air Cap

Medium viscosity materials, such as waterborne clears, epoxies, polyurethanes, acrylic urethanes, and enamels. Also most automotive finishes.

#### Prokit-12:

Includes: .051(1.3mm) Delrin Tip and Nozzle; #10 Delrin Air Cap

Heavier viscosity architectural and maintenance materials, such as full-bodied stains, waterborne and acrylic enamels, latexes, and adhesives.

#### Prokit-30:

Includes: .036, .043, .061(1.3mm) Delrin Tip and Nozzle; #8 & #9 Delrin Air Caps

Various coatings with low medium and heavier viscosities.

**Prokits can also be ordered with an aluminum air cap. To order, add an "A" to the Prokit part number.**

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## Needle Tips/Nozzles and Air Caps

### Recommendations and ordering information for architectural, maintenance, and production applications:

#### 91-143-xxxDT.....Delrin tip and nozzle set.

Replace the xxx to specify size:

- .021(.5mm) or .028(.7mm) for very light viscosity coatings; low fluid flow
- .036(.9mm) for light /medium viscosity coatings; low fluid flow
- .043(1.1mm) for medium viscosity coatings; medium fluid flow
- .051(1.3mm) for heavier viscosity coatings; medium fluid flow
- .061(1.5mm) -.110(3.0mm) also available for the heaviest materials; high fluid flow

### Recommendations and ordering information for automotive applications:

#### 91-143-xxxDT.....Delrin tip and nozzle set.

Replace the xxx to specify size:

- .021(.5mm) or .028(.7mm) for spot repairs; exceptional material control; slow speed.
- .036(.9mm) for spot, panel and completes; excellent for bases; medium speed.
- .043(1.1mm) for panels and completes; excellent for single stage colors and clears; fast speed.
- .051(1.3mm) for high viscosity materials; great for primers; very fast speed.

#### 91-009-yy.....Delrin Air Cap

A delrin air cap provides a smooth non-stick surface for easy cleaning and quality finishes. The smaller the air cap, the finer the finish.

Replace the yy to specify size: 8,9,10,11,11.5,12,13

#### 91-071-yy.....Aluminum Air Cap

Aluminum air caps are machined at slightly higher tolerances and are usually used in automotive refinishing where a very fine finish is needed. The smaller the number air cap, the finer the finish. Replace the yy to specify size.

#5 air cap. No orange peel. For a mirror like finish with high solids and clears.

#6 air cap. No orange peel. For completes on single-stage solid colors, candies and clears.

#7 air cap. Almost no orange peel. For panels and completes on single-stage solids, candies and clears.

#8 air cap Little orange peel. For spot, panel and completes on single stage finishes, candies and clears.

#9 air cap. Some orange peel. Will duplicate most O.E.M. finishes. For spot, panel, and completes on single stage finishes, basecoats and clears.

#10 air cap. Will leave some orange peel. For primers, sealers, and some undercoatings.

## Maintenance Kits and Accessories

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### **Complete Gun and Cup Care Kit #91-270 (14 and 15 Series)**

Maintenance Kit	#91-028
Cup Gasket	#94-034(8)
Cup Lid Diaphragm	#94-021(6)
Gun Handle Screw Kit	#91-106
Check Valve Assembly	#94-049(6)
Spring Clip for Diaphragm	#94-064(3)
Gun Wrench	#91-145
Gun Lube	#91-170
Brush	#SH-480

### **Complete Gun and Cup Care Kit #91-270-1 (16 and 18 Series)**

Maintenance Kit	#91-119
Cup Gasket	#94-034(8)
Cup Lid Diaphragm	#94-021(6)
Gun Handle Screw Kit	#91-106
Check Valve Assembly	#94-049(6)
Spring Clip for Diaphragm	#94-064(3)
Gun Wrench	#91-145
Gun Lube	#91-170
Brush	#SH-480

**14 Series Maintenance Kit #91-028**  
**15 series Maintenance Kit #91-029**  
**16 series Maintenance Kit #91-119**  
**18 series Maintenance Kit #91-119**  
**14/15 Series O-Ring Kit #91-049**  
**16/18 Series O-Ring Kit #91-249**  
**Mini-Regulator #36-00 (14 series)**  
**Mini-Regulator #93-103(16/18 Series)**  
**Replacement Gun Handle Kit #91-152**  
**½ Pint Cup Assembly #41-11**  
**Standard 1 Quart Cup #41-22**  
**Waterborne 1 Quart Cup #41-32**  
**Premium 1 Quart Cup #41-42**  
**Complete Brush Cleaning Kit #91-470**

### **Gun Conversions for Fluid Handling Options**

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### **Attached Cup to Pressure Feed**

When using your gun with a 2 quart cup or paint tank, rather than with an attached ½ pint or 1 quart cup. Install the pressure stem cap (#91-109) by pushing it over the air pressure stem (#LFG-465) to prevent loss of atomizing pressure.

For permanent use of your gun with 2 quart cup or paint tank, remove the pressure stem (#LFG-465) and replace it with a port plug (#UH-694).

*\*You will be able to convert back to a cup set-up by removing the plug and re-installing the pressure stem.*

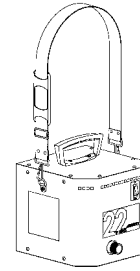
### **Pressure Feed to Attached Cup**

When the gun is purchased as a pressure feed gun and you want to convert it to a pressure gun, the pressure stem (#LFG-465) must replace the plug (#UH-694). After the pressure stem is installed in the gun, the easiest way to change to pressure feed is through installing the air stem cap (#91-109). To install, simply push over the stem.

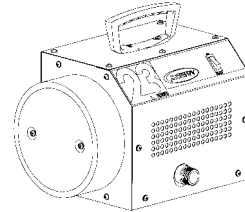
## **Turbine Overview**

**T Guns come standard on all Accuspray turbine systems. These turbine systems are the most advanced portable HVLP units available. The key to their performance is the combination of an Accuspray gun with an Accuspray turbine. All packages also include pressure cup and hose.**

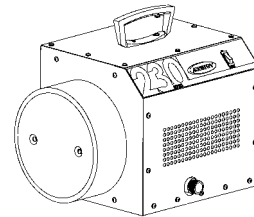
**22 Series:** 2 Stage Turbine.  
3 psi at 50 cfm. Lightweight turbine which has a shoulder strap for portability. Great for touch-up and smaller jobs. Used for spraying light viscosity coatings. Ideal for small jobs and hobbyists.



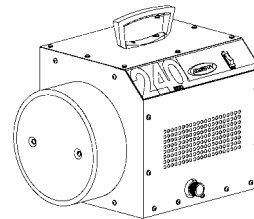
**23 Series:** 3 Stage Turbine.  
5 psi at 85 cfm. Compact workhorse with all the power required for mid-sized jobs. Used for spraying medium viscosity coatings.



**230 Series:** Heavy-duty 3 Stage Turbine.  
6 psi at 115 cfm. Heavy-duty turbine ideal for extended hours of use on larger jobs. Featuring cooling fan, overload protection, and heavy-duty bearings for the toughest working conditions. Used for spraying heavier viscosity coatings. Up to 6 hours continuous operation.



**240 Series:** 4 Stage Turbine.  
7 psi at 85 cfm. The 240 can do everything from touch-up to extended production applications. Even difficult to atomize materials can be applied quickly and easily. Used for spraying heavier viscosity coatings. Higher psi gives increased speed.

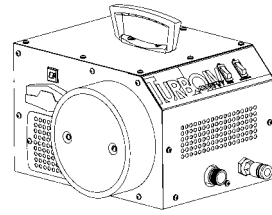


## Turbine Overview - Continued

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**240c Series:**

4 Stage Turbine.  
8 psi at 85 cfm. Combination turbine and  
compressor unit. Additional 1/16<sup>th</sup> Hp  
compressor used to pressurize remote 2  
quart cup. Ideal for cabinet shops.



\*All non-bleed turbine guns can be used with compressed air with the  
addition of the 36-00 mini-regulator and gauge assembly.

## Troubleshooting

<b>Problem</b>	<b>Cause</b>	<b>Remedy</b>
<b>Bad Spray Pattern</b>	Air Cap Clogged	Soak in Thinner
	Nozzle Clogged	Appropriate Solvent
	Bent Fluid Needle	Replace Fluid Needle
<b>Blistering</b>	Moisture on Surface	Clean Surface
	Wrong Solvent	Check Solvent
	Coats Not Compatible	Check Compatability
	Insufficient Dry Time	Longer Dry Time
<b>Fish Eyes</b>	Surface Too Cold	Warm Surface
	Air Contamination	Add Air Filtration
<b>Heavy Middle Pattern</b>	Silicone Contamination	Clean Surface W/ Solvent
	Too Much Pot Pressure	Reduce Fluid Pressure
<b>Intermittent, Pulsating Spray</b>	Not Enough Atomizing Pressure	Increase Atomizing Pressure
	Worn or Loose Packing	Tighten or Replace
<b>Insufficient Fluid Flow, Pressure Feed</b>	Low Fluid in Cup or Pot	Add Fluid
	Restriction in Fluid Line	Use 3/8" Fluid Hose
	Blocked Hose	Flush or Replace Hose
	Fluid Nozzle Too Small	Use Larger Needle/Nozzle
<b>Coarse or Lumpy Surface</b>	Low Fluid Pressure	Increase Fluid Pressure
	Dirt or Dust on Surface	Tack Wipe Before Spray
<b>Mottled Looking Surface</b>	Material is Contaminated	Change or Strain
	Coating Too Thin	Use Less Thinner
<b>No Paint Flow</b>	Coats Too Wet	Reduce Fluid Flow
	Improper Spray Technique	Hold Gun Parallel to Work
	Clogged Fluid Nozzle	Clean Fluid Nozzle
<b>Orange Peel</b>	Loss of Air Pressure	Check Hose, Cup Gasket
	Loss of Fluid Pressure	Out of Paint
	Clogged Air Passage	Clean With Solvent
	Restriction in Mat'l Hose	Flush With Solvent
	Clogged Check Valve	Replace Check Valve
<b>Overspray is Excessive</b>	Paint Drying Too Fast	Use Proper Solvent
	Gun Too Far From Target	6 - 8 Inches is Ideal
	Too Much Atomizing Air for Coating Being Sprayed	Reduce Atomizing Air
<b>Pin-holing, Solvent Pops</b>	Viscosity Too Heavy	Reduce with Solvent
	Trapped Solvent	Apply Lighter Coats
	Improper Solvent	Check Coating Mfg.
<b>Paint Leak</b>	System Contaminated	Clean all Parts
	Wrong Needle Size	Replace
	Damaged/Worn Needle	Replace
	Loose Fluid Nozzle	Tighten or Replace
	Worn/loose Packing Nut	Tighten or Replace
	Needle Not Closing	Packing Too Tight. Broken or Missing Needle Spring. Dried Paint on Needle.
	Tilted Gun	Do Not Tilt While Spraying

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## Troubleshooting-Continued

<b>Problem</b>	<b>Cause</b>	<b>Remedy</b>
<b>Runs and Sags</b>	Material Too Thin	Add Product
	Moving Gun Too Slow	Speed up, Smaller Nozzle
	Surface Too Cold	Warm Up Surface
	Too Much Product	Reduce Fluid flow
	Gun Too Close To Target	6 - 8 Inches is Ideal

**Some Reminders:**

**If correcting a problem involves changing the fluid nozzle:**

- Be sure to squeeze the trigger to retract the needle. This will prevent damaging the needle tip.

**If it necessary to remove cup lid from the cup:**

- Be sure to relive cup pressure through the relief valve.

**When using a cup gun and spraying a horizontal surface, the fluid may work itself into the tube. In order to reverse this flow, follow these instructions:**

- Hold the gun upright
- Open the pressure relief valve screw (94-035A)
- Pull the trigger back just enough for air. This will push paint back into cup.
- When the tube is clear of fluid, re-close the pressure relief screw.
- If the tube has been coated, replace it before your next use.

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To order additional copies of this manual, call Accuspray Customer Service at 1-800-618-6860 or fax your request to (440) 498-9815. You may also request the manual on the web at [www.accuspray.net](http://www.accuspray.net). Request Literature Number: SM-VTE-1104

#### LIMITED WARRANTY

Accuspray, (Accuspray Application Technologies, Inc.), warrants all equipment manufactured by and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Accuspray distributor to the original purchaser for use. As purchaser's sole remedy for breach of this warranty, Accuspray will, for a period of twelve months from the date of sale, repair or replace any part of the equipment proven defective.

This warranty does not cover, and Accuspray shall not be liable for any malfunction, damage, or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Accuspray component parts. This warranty is conditioned upon the prepaid return of the equipment claimed to be defective for examination to verify the claimed defect.

A complete description of this warranty can be obtained by calling or writing Accuspray.

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