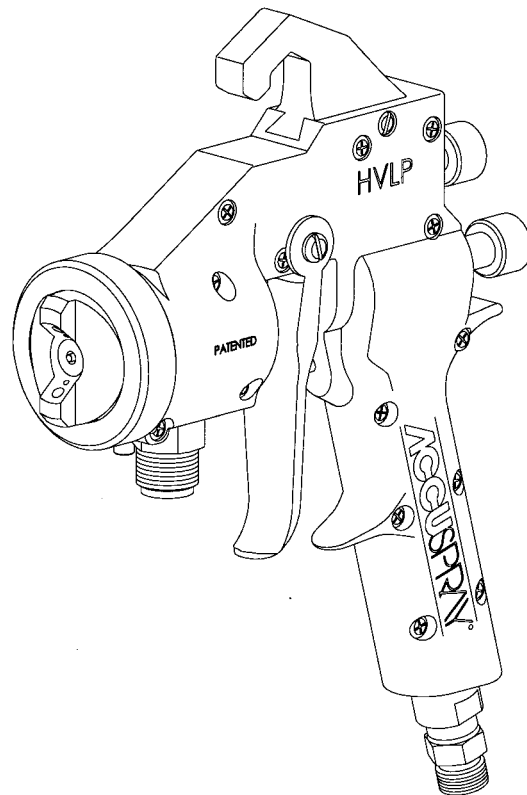




12 Series HVLP Spray Gun Owners Manual



Literature #SM-12-0803

This Manual Covers 12, 12S, 12ZZ, and 12SZ Model Spray Guns

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Gun Overview

Accuspray's Series 12/12S Gun was designed from the inside out for HVLP use to deliver performance without compromise. This means achieving compliance with environmental regulations and delivering the fastest production speeds; generating substantial paint savings and producing a first class finish.

The series 12 can connect directly to your high-pressure air hoses so set-up is fast and easy. With a reducer built right into the gun, high-pressure air is decompressed inside the gun. The series 12 has a 10:1 reduction ratio. This means that an inlet pressure of 50psi will deliver 5psi at the air cap. The series 12 can be used with up to 100 psi. The series 12s has a 6:1 reduction ratio, so an inlet pressure of 30psi delivers 5psi at the air cap. The series 12S can be used with up to 60psi.

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

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Contents

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.

Your Accuspray **12/12S Series** spray gun package should include:

- 12 Series Spraygun
- Gun Wrench
- Tube of Gun Lube
- Port Plug
- Cleaning Brush
- ½ Pint or 1 Quart Cup (Optional)

12/12S Series Spraygun

The 12 series spraygun is a non-bleed gun for use with compressed air systems only. This superior performing spraygun offer the ultimate in the ease of use. Simply connect the gun to your existing high-pressure regulator air hose, and cup or fluid hose. The series 12 has a 10:1 reduction ratio. The series 12s has a 6:1 reduction ratio.

12ZZ/12SZ Series Spraygun (Zinc Compatible)

The 12 (Z), zinc series sprayguns offers all the features and benefits of the 12/12S series with the ability to spray organic and inorganic zinc materials. All wetted parts are non-stick and are made of either graphite or delrin.

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.

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.

Set-up

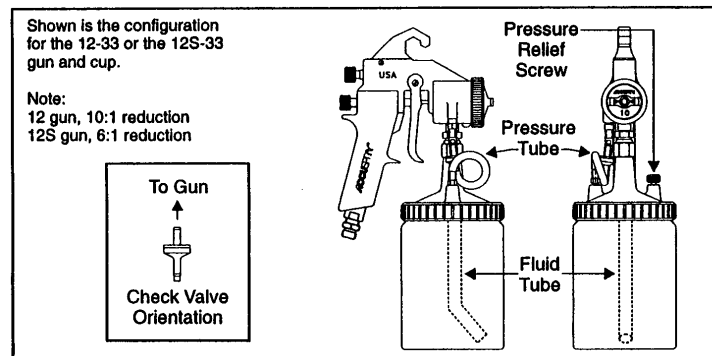
If you have a pressurized 1/2 pint or 1 quart cup, the sections on "Gun/Cup Installation" and "External Check Valve Assembly" below are very important for ensuring your gun operates efficiently.

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, which 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.

Maintenance

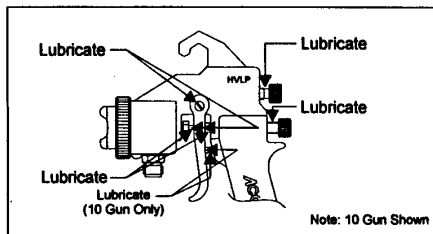
Gun Cleaning

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.

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.



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 relieving 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
- 2 Quart Pressure Cup Do Not Exceed 50 psi
- 2.5 Gallon Paint Tank Do Not Exceed 80psi
- 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.

Overview 12-Series Propack

The 12/12S propack system was designed for maximum operator flexibility in adjusting pressure where coatings are frequently changed and slight variations in atomizing pressures are used.

Series 12s Propack Package Includes:

- 93-103 Mini-regulator and gauge assembly
- Series 12S Gun
- 1 quart pressure cup
- Extra Atomizing Set

The mini-regulator and gauge assembly provides precision control of low pressure atomizing air.

Set-up

The 93-103 mini-regulator and gauge assembly is shipped assembled and attached to your gun. Attach the high-pressure inlet fitting to the inlet of the 93-103 (wrap threads in Teflon tape).

Attach your high-pressure air hose (5/16" I.D. or larger) from your existing high-pressure regulator and filtered air source to the high-pressure inlet fitting now installed on the 93-103.

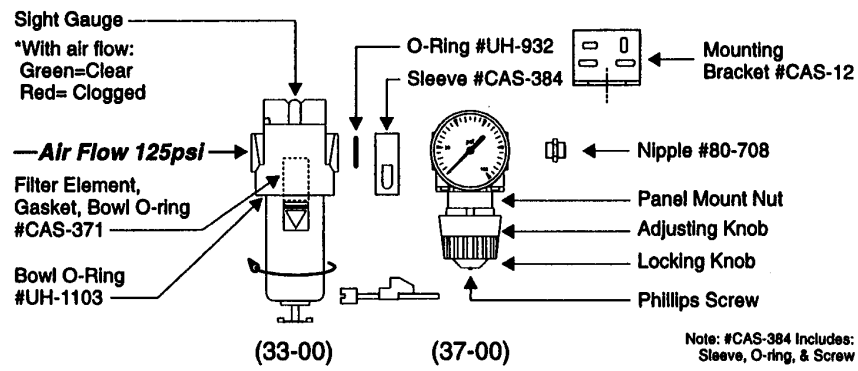
The inlet pressure to the 93-103 should be at least 90 psi in order to have maximum working pressure. Adjust the 93-103 for the desired atomizing pressure 0 to 100 psi with the gun triggered on the 12 series spraygun and between 0 and 60 psi on the 12s series spraygun.

Requirements: A high-pressure wall mount regulator. This regulator should be set between 100 and 125 psi.

Caution: Use of wall mount and coalescing filters are highly recommended so that only clean air is delivered to the 93-103 and the gun.

Please refer to Maintenance on page 6 of this manual for gun and cup cleaning, and other maintenance issues.

37-00 and 38-00 Wall Mount Regulators



37-00 High-pressure wall mount regulator and gauge assembly.

38-00 High-pressure wall mount regulator (part #37-00) and coalescing filter assembly (part #33-00).

37-00 Set-Up

The 37-00 can be mounted with the adjusting knob in the up or down position. Select the position that is best for your application. Please note the airflow arrow located on your regulator body. High pressure can only enter from one direction. The mounting bracket may also be positioned up or down. The 37-00 may also be mounted in line with your air line pipe.

To install the 37-00 regulator, first remove the Phillips head screw that holds the locking knob in place. Next remove, remove the adjusting knob, and unscrew and remove the panel mount nut. Install the regulator fitting to the regulator outlet. Select the port that will install the gauge to. Install the plug to the unused port and affix the regulator to the mounting bracket.

38-00 Set-Up

The 33-00 coalescing filter attaches to the 37-00 regulator and gauge assembly (making the 38-00) with the sleeve CAS-184. First be sure that the O-ring UH-932 is seated in the 33-00 body port. The sleeve slides over the 33-00 outlet and the 37-00 inlet. Lock the sleeve in place with the supplied screw. Note that the wedge shaped piece is attached to the screw will only fit in the sleeve one way.

The 33-00 must precede the 37-00 when assembled. An Accuspray pre-filter 31-00 is recommended for this application. Drain the bowl at least once per work shift.

Note* "When clogged" the sight gauge on the 33-00 will change from green to red once air begins to flow. Replace the filter when necessary, and only handle the filter by the end plates.

Overview Series 12-Contiued

Atomizing Pressure

Set the **atomizing pressure** on the mini-regulator **before** spraying. Always set atomizing pressure with the gun trigger pulled so air is flowing out the air cap.

Note: Increasing the air pressure will give finer atomization. Decreasing the air pressure will give less atomization. However, before increasing the atomizing pressure, work with the fan and fluid controls. This will insure maximum paint savings and highest quality finishes.

Fan and Fluid Controls (see also Hand Gun Use on page 10)

Fan and fluid adjustments are used differently than on a high-pressure gun. To start, screw the fan adjusting screw in all the way. Screw the needle adjusting screw until there is very little needle travel. Then back out these knobs, as a starting point, 2 full turns.

Note: When adjusting fan and fluid controls, adjust only 1/2 turn at a time. **Do not open the fan or fluid knobs all the way.**

After all adjustments (air pressure, fan width and fluid flow) have been made, adjustments should only be made in small steps.

Air Pressure Control: Adjust only 1/2 to 1 psi at a time.

Fan and Fluid Controls: Adjust only 1/4 to 1/3 turn at a time.

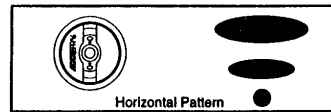
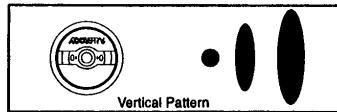
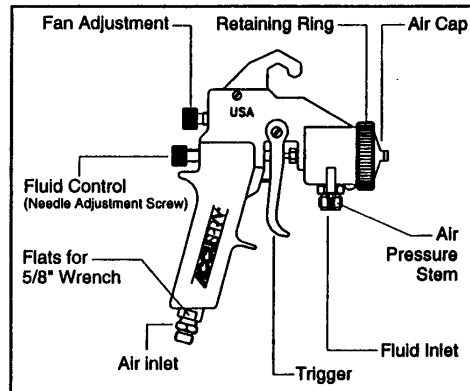
If you feel the gun is spraying too much material, try closing down the fluid adjustments a little at a time to achieve the desired finish. Do this before increasing air pressure. *Increasing the air pressure increases the airflow.*

*When using a remote 2 quart cup or paint tank, set fluid flow to 0-20psi. Fluid atomizes best within this range. Some special applications may require over 20psi. Using fluid pressures over 20psi may create "heavy center" effects in the spray patterns. Changing the fluid nozzle to the next larger size, then reducing the fluid pressure will reduce "heavy center" effects in the spray patterns. Please refer to Needle Tips/Nozzles and Air Caps beginning on page 14 of this manual for further information.

Hand Gun Use

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.

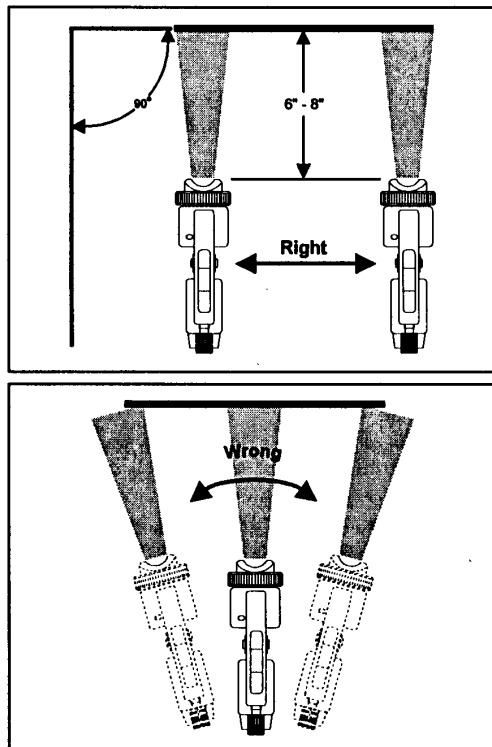
Hand Gun Use-Continued

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 and 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.



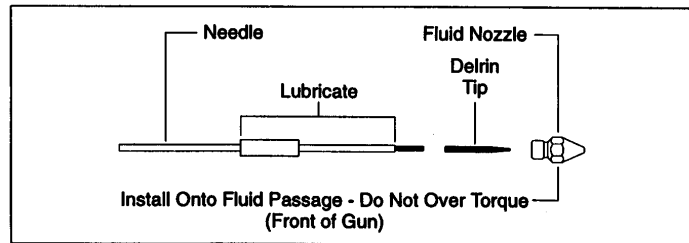
Hand Gun Use-Continued

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-MKH-995 Series 10/11 Maintenance Kit Service Instructions for detailed adjustment and component replacement instructions.

Maintenance Kits and Accessories

Complete Gun and Cup Care Kit #91-271

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

12/12S series Maintenance Kit #91-119

12/12S Series O-Ring Kit #91-249

Mini-Regulator #93-103

Replacement Gun Handle Kit (12)#91-152-C

Replacement Gun Handle Kit (12s)#91-152-B

½ Pint Cup Assembly #41-11

Standard 1 Quart Cup #41-22

Premium 1 Quart Cup #41-42

Complete Brush Cleaning Kit #91-470

Gun Conversions for Fluid Handling Options

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.

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.

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; exception 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.

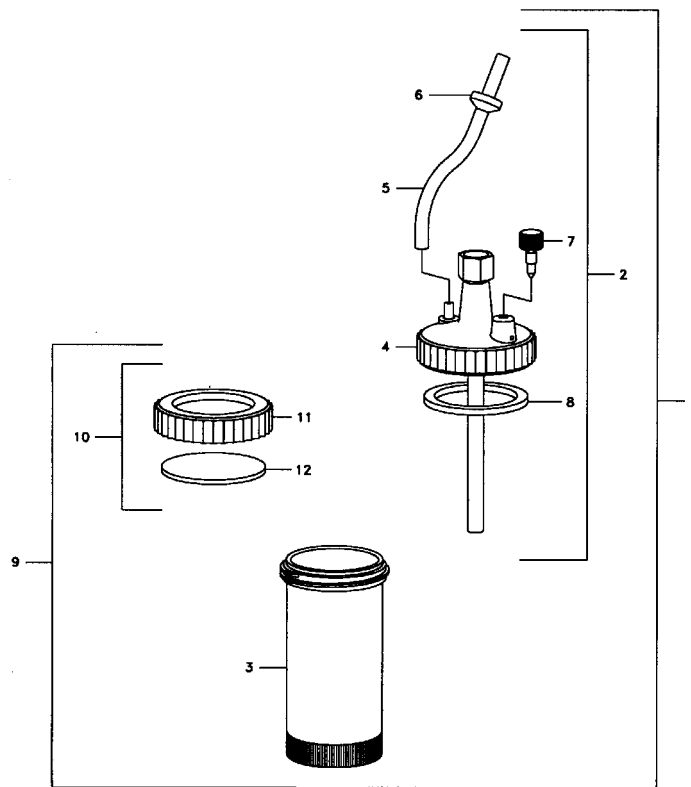
#7 air cap. Almost no orange peel. For panels and completes on single-stage solids, candies and clears.

#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.

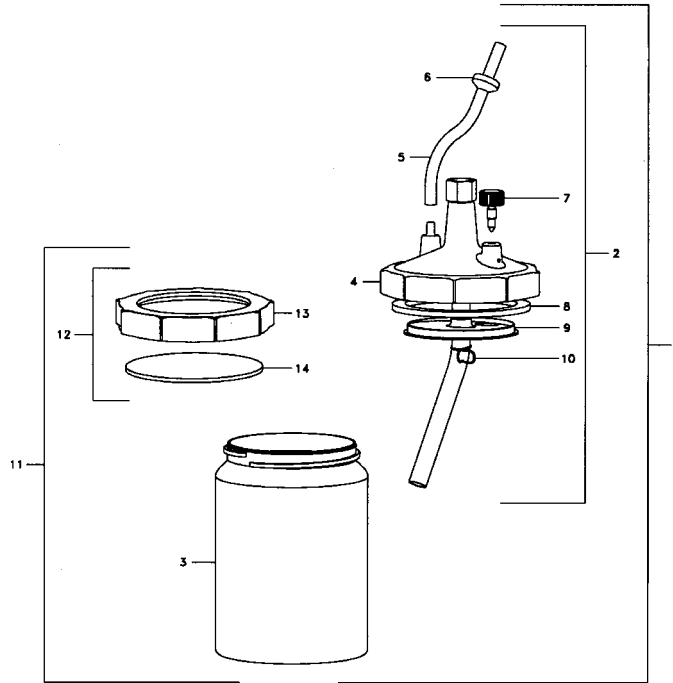
#10 air cap. Will leave some orange peel. For primers, sealers, and some undercoatings.

Parts Identification ½ Pint Cup Assembly (41-11)



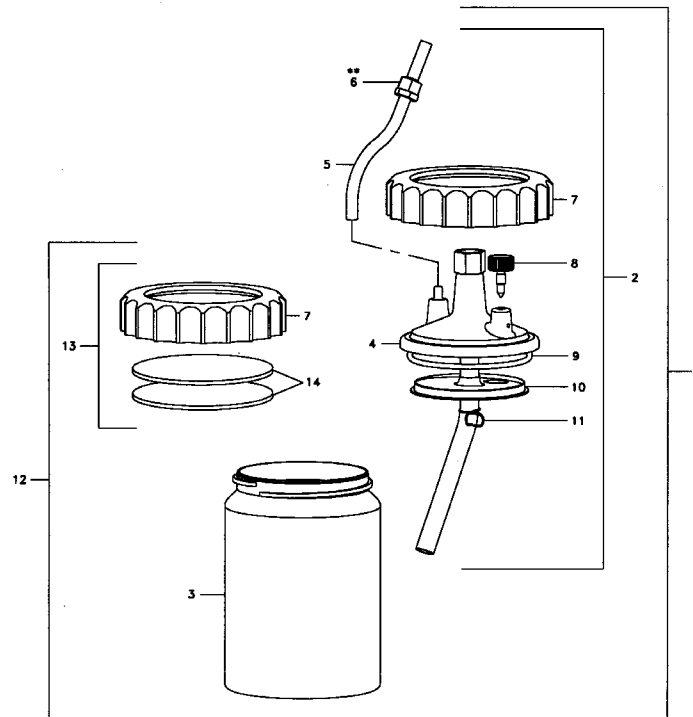
Item	P/N	Description
1	41-11	½ Pint Cup Assembly
2	94-101	½ Pint Cup Lid Assembly w/ Ck. Valve
3	94-082	½ Pint Cup (Cup Only)
4	94-087	Cup Lid Sub-Assembly
5	94-049/3	Check Valve Assembly (Pack of 3)
6	91-129/4	Check Valve (Pack of 4)
7	94-035A	Pressure Relief Screw
8	94-084/4	Gasket (Pack of 4)
9	94-232	Storage Cap/Cup Assembly
10	94-231	Storage Cap Assembly
11	94-226	Storage Cap
12	94-227/4	Storage Cap Gasket

Parts Identification 1 Quart Pressure Cup (41-22)



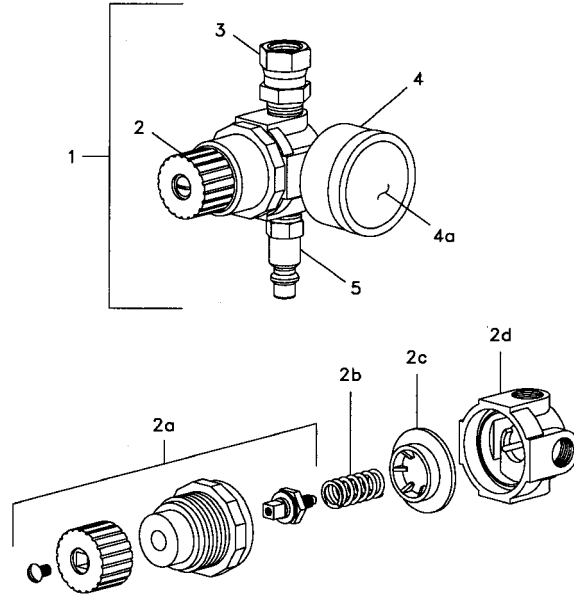
Item	P/N	Description
1	41-22	1 Quart Cup Assembly
2	94-057	1 Quart Cup Lid Assembly w/ Check Valve
3	94-056	1 Quart Cup (Cup Only)
4	94-061	Cup Lid Sub-Assembly
5	94-049/3	Check Valve Assembly (Pack of 3)
6	91-129/4	Check Valve (Pack of 4)
7	94-035A	Pressure Relief Screw
8	94-034/4	Gasket (Pack of 4)
9	94-021/3	Diaphragm (Pack of 3)
10	94-064/3	Spring Clip (Pack of 3)
11	94-234	Storage Cup/Cap Assembly
12	94-233	Storage Cap Assembly
13	94-228	Storage Cap
14	94-230/4	Storage Cap Gasket

Parts Identification 1 Quart Premium Cup (41-42)



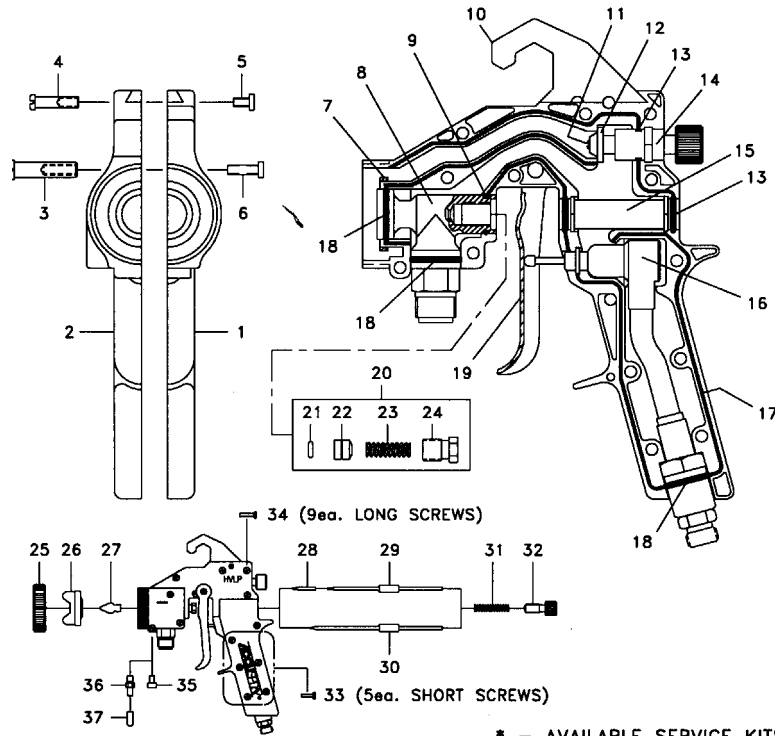
Item	P/N	Description
1	41-42	Premium 1 Quart Cup Assembly
2	94-596	1 Quart Cup Lid Assembly w/ Check Valve
3	94-594	1 Quart Cup (Cup Only)
4	94-593	Cup Lid Sub-Assembly
5	94-601	Check Valve Assembly (Pack of 3)
6	91-225	Serviceable Check Valve
7	94-597	Retaining Ring
8	94-035A	Pressure Relief Screw
9	UH-13773	O-Ring Seal (Pack of 3)
10	94-021/3	Diaphragm (Pack of 3)
11	94-064/3	Spring Clip (Pack of 3)
12	94-634	Storage Cup/Cap Assembly
13	94-433	Storage Cap Assembly
14	94-230/4	Storage Cap Gasket
**	91-228/10	Check Valve Diaphragm (Pack of 10)

Parts Identification Mini-Regulator/Gauge (93-103)



ITEM	PART No.	DESCRIPTION
1	93-103	AIR REGULATOR ASSEMBLY
2	93-101	0-125 PSI AIR REGULATOR
2a	93-026	BONNET ASSEMBLY
2b	93-073	ADJUSTMENT SPRING
2c	93-028	DIAPHRAGM
2d	93-104	AIR REGULATOR BASE
3	UH-1032	SWIVEL FITTING
4	93-102	0-160 PSI AIR GAUGE
4a	93-036	REPLACEMENT GAUGE LEN
5	80-936	AIR INLET QUICK-DISCONNECT

12 Series Hand Gun Parts Identification

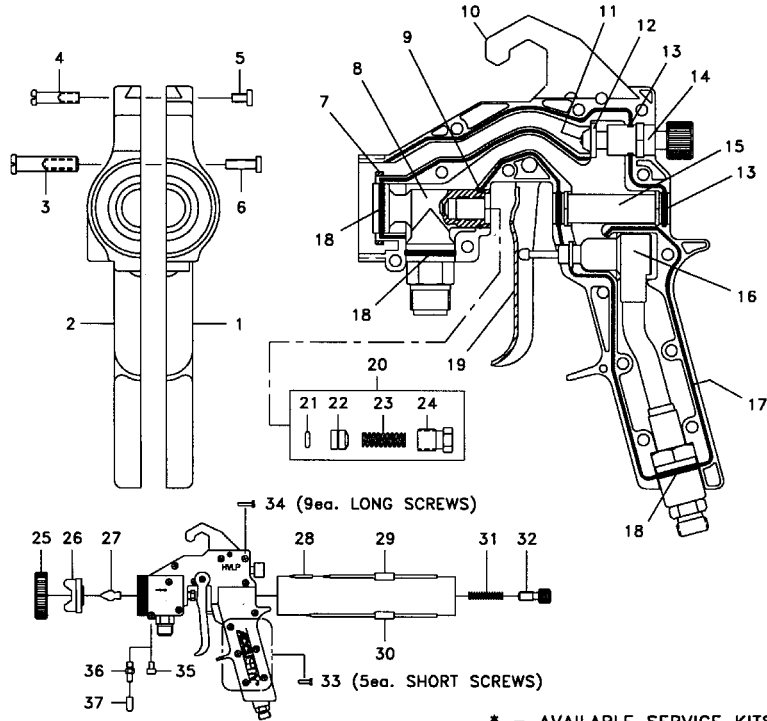


* - AVAILABLE SERVICE KITS

ITEM	PART No.	DESCRIPTION
1	91-123-C	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 (PACK OF 4)
6	UH-769/4	TRIGGER POST SCREW (PACK OF 4)
7	91-276	CLOSURE RING
8	91-064	FLUID PASSAGE ASSEMBLY
9	UH-790/10	O-RING (PACK OF 10)
10	91-124	SPRAYGUN HOOK
11	UH-765/4	SCREW (PACK OF 4)
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	91-096	80 PSI AIR VALVE ASSEMBLY
17	UH-753/2	SEAL (PACK OF 2)
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	91-271	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 (PACK OF 4)
36	LFG-465	AIR PRESSURE STEM
37	91-109/10	AIR PRESSURE STEM CAP (PACK OF 10)
*	91-119	SPRAYGUN REBUILD KIT
*	91-224	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-C	HANDLE REPLACEMENT KIT

12S Series Hand Gun Parts Identification

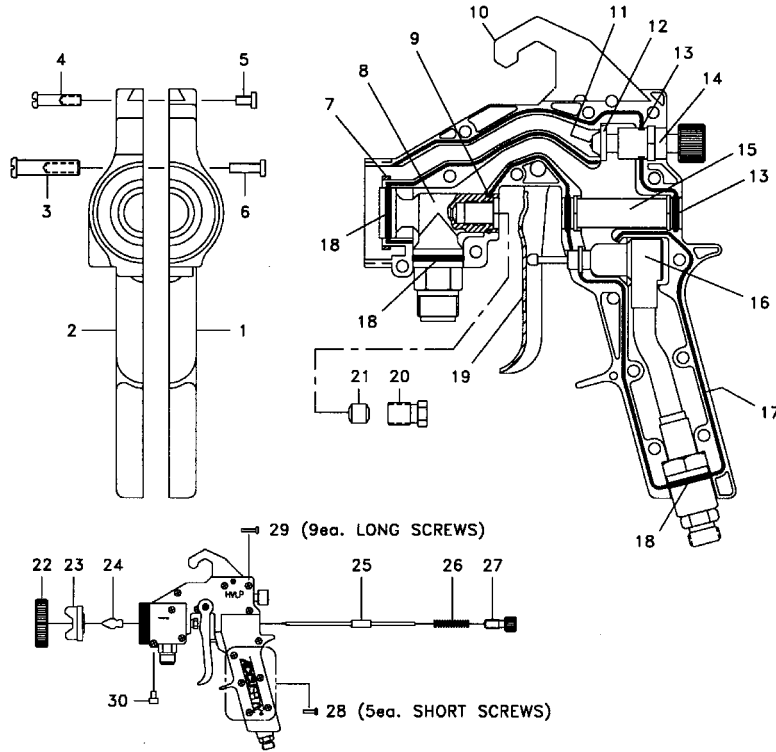


* - AVAILABLE SERVICE KITS

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 (PACK OF 4)
6	UH-769/4	TRIGGER POST SCREW (PACK OF 4)
7	91-276	CLOSURE RING
8	91-064	FLUID PASSAGE ASSEMBLY
9	UH-790/10	O-RING (PACK OF 10)
10	91-124	SPRAYGUN HOOK
11	UH-765/4	SCREW (PACK OF 4)
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 (PACK OF 2)
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	91-271	RETAINING RING
26	91-009-xxx	AIR CAP (DELTRIN)
26	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 (PACK OF 4)
36	LFG-465	AIR PRESSURE STEM
37	91-109/10	AIR PRESSURE STEM CAP (PACK OF 10)
*	91-119	SPRAYGUN REBUILD KIT
*	91-223	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-B	HANDLE REPLACEMENT KIT

12ZZ Parts Identification (Zinc Compatible)

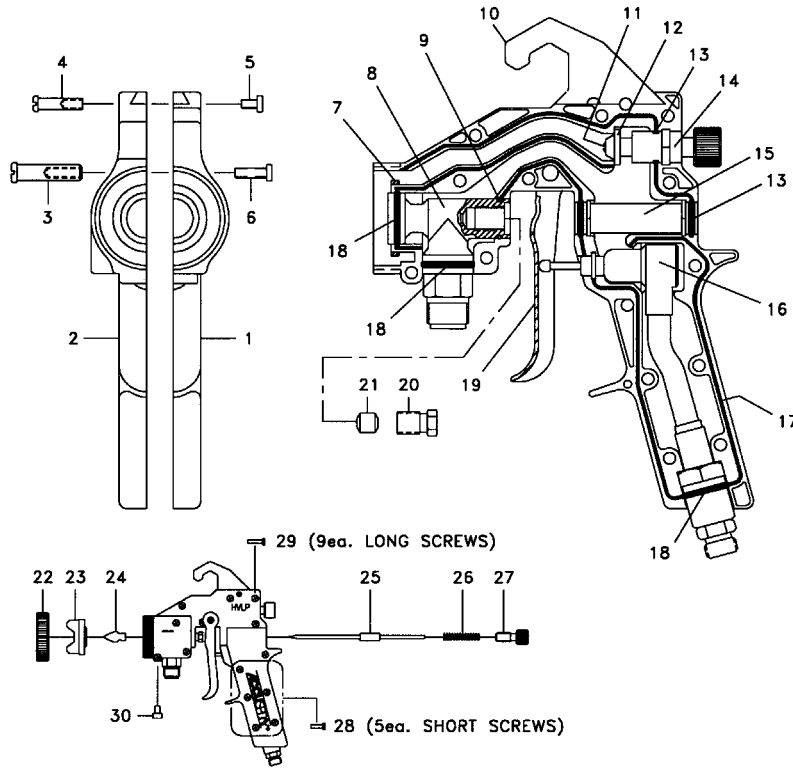


* - AVAILABLE SERVICE KITS

ITEM	PART No.	DESCRIPTION
1	91-123-C	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	91-064-ZZ	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	91-096	80 PSI AIR VALVE ASSEMBLY
17	UH-753/2	SEAL

ITEM	PART No.	DESCRIPTION
18	UH-789/10	O-RING (PACK OF 10)
19	HP-405	TRIGGER
20	91-023-D	PACKING NUT
21	91-139	PACKING (GRAPHITE)
22	91-271	RETAINING RING
23	91-009-xxx	AIR CAP (DELTRIN)
24	91-148-xxx	FLUID NOZZLE (DELTRIN)
25	91-006-xxx-D	NEEDLE (DELTRIN)
26	LG-27/5	SPRING (PACK OF 5)
27	91-068	NEEDLE ADJUSTMENT SCREW
28	UH-800/10	1/2" (SHORT) SCREW (PACK OF 10)
29	UH-801/10	5/8" (LONG) SCREW (PACK OF 10)
30	UH-694/4	AIR PRESSURE PORT PLUG
*	91-224	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-C	HANDLE REPLACEMENT KIT

12SZ Parts Identification (Zinc Compatible)



* - 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	91-064-ZZ	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

ITEM	PART No.	DESCRIPTION
18	UH-789/10	O-RING (PACK OF 10)
19	HP-405	TRIGGER
20	91-023-D	PACKING NUT
21	91-139	PACKING (GRAPHITE)
22	91-271	RETAINING RING
23	91-009-xxx	AIR CAP (DELRIN)
24	91-148-xxx	FLUID NOZZLE (DELRIN)
25	91-006-xxx-D	NEEDLE (DELRIN)
26	LG-27/5	SPRING (PACK OF 5)
27	91-068	NEEDLE ADJUSTMENT SCREW
28	UH-800/10	1/2" (SHORT) SCREW (PACK OF 10)
29	UH-801/10	5/8" (LONG) SCREW (PACK OF 10)
30	UH-694/4	AIR PRESSURE PORT PLUG
*	91-224	AIR VALVE UPGRADE KIT
*	91-249	O-RING REPLACEMENT KIT
*	91-152-B	HANDLE REPLACEMENT KIT

Zinc Compatible Parts and Accessories

(12ZZ and 12SZ Series)

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

91-148-xxx.....Delrin Nozzle

Replace the xxx to specify size:
.051(1.3mm) lighter viscosity coatings; low fluid flow
.061(1.5mm) medium viscosity coatings; low fluid flow
.072(1.8mm) heavier viscosity coatings; medium fluid flow
.084(2.0mm) for heavy viscosity coatings; high fluid flow
.110(3.0mm) available for the heaviest materials; very high fluid flow

91-006-xxx-D.....Full Delrin Needle

Replace the xxx to specify size:
.051(1.3mm) lighter viscosity coatings; low fluid flow
.061(1.5mm) medium viscosity coatings; low fluid flow
.072(1.8mm) heavier viscosity coatings; medium fluid flow
.084(2.0mm) for heavy viscosity coatings; high fluid flow
.110(3.0mm) available for the heaviest materials; very high fluid flow

Graphite Packing	#91-139
Fluid Passage Assembly	#91-064ZZ
Delrin Packing Nut	#91-023D
Retaining Ring	#91-043

Troubleshooting

Problem	Cause	Remedy
Bad Spray Pattern	Air Cap Clogged	Soak in Thinner
	Nozzle Clogged	Appropriate Solvent
	Bent Fluid Needle	Replace Fluid Needle
Blistering	Moisture on Surface	Clean Surface
	Wrong Solvent	Check Solvent
	Coats Not Compatible	Check Compatability
	Insufficient Dry Time	Longer Dry Time
Fish Eyes	Surface Too Cold	Warm Surface
	Air Contamination	Add Air Filtration
Heavy Middle Pattern	Silicone Contamination	Clean Surface W/ Solvent
	Too Much Pot Pressure	Reduce Fluid Pressure
Intermittent, Pulsating Spray	Not Enough Atomizing Pressure	Increase Atomizing Pressure
	Worn or Loose Packing	Tighten or Replace
Insufficient Fluid Flow, Pressure Feed	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
Coarse or Lumpy Surface	Low Fluid Pressure	Increase Fluid Pressure
	Dirt or Dust on Surface	Tack Wipe Before Spray
Mottled Looking Surface	Material is Contaminated	Change or Strain
	Coating Too Thin	Use Less Thinner
No Paint Flow	Coats Too Wet	Reduce Fluid Flow
	Improper Spray Technique	Hold Gun Parallel to Work
	Clogged Fluid Nozzle	Clean Fluid Nozzle
Orange Peel	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
Overspray is Excessive	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
Pin-holing, Solvent Pops	Viscosity Too Heavy	Reduce with Solvent
	Trapped Solvent	Apply Lighter Coats
	Improper Solvent	Check Coating Mfg.
Paint Leak	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	

Troubleshooting-Continued

Problem	Cause	Remedy
Runs and Sags	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

Troubleshooting for the 93-103 Mini-Regulator

Problem	Cause	Remedy
Air Pressure Too High	Regulator sticking caused by dirt on valve body or seat or piston seat or improperly lubricated parts	Clean, replace and lubricate parts Install good air filter before main regulator and maintain it
Not Enough Pressure	Dirty filter	Replace filter element
	Air hose too small from high pressure wall mount regulator to gun mount HVLP regulator	Install larger air hose (5/16") to eliminate the restriction. 85-125 psi should be kept at the regulator inlet for full efficiency
	Insufficient line pressure	Increase pressure delivered to gun or shorten hose length
Regulator Doesn't Hold Pressure	Dirt from contaminated air is making diaphragm stick or solvents have attacked the seals	Use only clean filtered air to the mini-regulator. Do not place mini-regulator in a gun washer

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.

Notes

To order additional copies of this manual, call Accuspray
Customer Service at 1-800-618-6860
Fax your request to (440) 498-9815.
Visit us online at www.accuspray.net.
Request Literature Number: SM-12-0803

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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.

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