



# **HVLP PAINT SPRAY SYSTEM**

# User's Manual

# SharpShooter SS-100

### Smith Eastern Corporation

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# **Compliance • Quality • Performance • Reliability**

DO NOT OPERATE SPRAY GUNS WITHOUT PERSONAL SAFETY EQUIPMENT

## Please Read This Owner's Manual *BEFORE* Using Your SharpShooter Spray Gun

DO NOT OPERATE THIS EQUIPMENT WITHOUT USING PROPER PERSONAL SAFETY EQUIPMENT INCLUDING RESPIRATOR, GOGGLES AND SAFETY CLOTHING. OBSERVE ALL PRECAUTIONS RELATED TO SPRAYING.

## WARNING

THIS EQUIPMENT IS OPERATED USING PRESSURIZED AIR. ALWAYS DISCONNECT SPRAY GUN FROM AIR AND FLUID HOSES AND DEPRESSURIZE SYSTEM PRIOR TO ANY MAINTENANCE OR DISASSEMBLY PROCEDURE.

#### WARRANTY

Smith Eastern Corporation warrants to the Purchaser that the SharpShooter (SS-100) Spray Gun is free from defects in material or workmanship under normal use and service for a period of twelve (12) months from the date of purchase. Should any failure appear during this period, Smith Eastern shall, if given prompt written notice by the Purchaser, correct such nonconformity by repair or replacement of the nonconforming part, F.O.B. Smith Eastern's repair facility. Repair parts are warranted for ninety (90) days from the date of shipment, but repairs or replacements to original equipment shall not renew or extend the warranty period of such equipment. Equipment and parts furnished by Smith Eastern but manufactured by others shall be limited to the warranty offered by the manufacturer thereof.

Smith Eastern reserves the right to limit this warranty in cases of misuse or abuse. Any modifications to spray guns or recommended procedures will void the warranty.

The foregoing warranty is exclusive and in lieu of other warranties of quality or performance, expressed, implied or statutory, including any warranties of merchantability or of fitness for a particular purpose.

## EQUIPMENT REQUIREMENTS

#### Air Compressor

Air compressors used with AirVerter<sup>®</sup> Spray Guns must be able to HOLD a minimum of 40 PSI while spraying. **Note**: Position a pressure gauge in the air hose nearest the spray gun to be assured of the PSI required to satisfactorily spray your coating.

## **OPERATING INSTRUCTIONS**

#### **OPERATION:**

#### Starting:

A. The SharpShooter (SS-100) Spray Gun operates with the trigger controlling both the fluid flow and airflow.

#### **Before Spraying**

- A. Follow the *Air and Paint Management Guidelines* listed on the following page.
- B. Before paint is poured into the cup, **make certain paint is properly mixed**. This is particularly true when mixing multi-component paints. Use a paint shaker, rotary mixer, or paint paddle to achieve a homogeneous mixture. (*Hint:* Split your paint into two parts; the top will be lighter and the bottom will be heavier. Completely stir the bottom half of the paint and slowly add small amounts of the top half into the heavier bottom.)
- C. Strain your paint to remove impurities. Use a cone strainer or a 100-mesh nylon bag or equivalent strainer.
- D. **Thin your paint** according to the manufacturer's specifications.
- E. Ensure needle packings are properly adjusted. Needle packings are preset at the factory to proper tension. However, use and cleaning may alter this setting. To adjust needle packings to proper tension:

#### High Pressure Air Hose

- A. Air hose lengths up to 50 feet **MUST** have an I.D. of 3/8" including fittings.
- B. Air hose lengths greater than 50 feet **MUST** have an I.D. of 1/2" including fittings.
  - 1. With gun disconnected from air and fluid sources, pull trigger to move the needle out of the nozzle.
  - 2. Adjust packing nut until needle is held in the open position by tension from the needle packings.
  - 3. Loosen packing nut approximately <sup>1</sup>/<sub>4</sub> turn or until needle returns to closed position.

#### Spraying

- A. A siphon action draws paint from the paint container into the fluid chamber of the gun and out through the nozzle where the flow of atomizing air breaks the paint stream into tiny particles, creating the spray.
  - 1. Needle position controls the amount of paint flowing through the fluid nozzle.
  - 2. Trigger action controls needle position.
  - 3. The Fluid Control Knob (CT-05-1) at the rear of the spray gun controls trigger action. Turning the knob to the right reduces the fluid flow, turning it to the left increases the flow.
- B. If you are having problems with the operation of your paint gun, check the Trouble Shooting Guide at the end of the manual for possible causes and solutions.

## Air and Paint Management Guidelines

Approximate PSI	Application
Thin Coatings	Machines and implements, small parts, plant maintenance,
ZAHN #2 Test: 16 to 22 seconds Minimum 40 PSI compressor pressure	controlled production work, work in enclosed areas with poor ventilation, priming.

# WARNING

Gun must be de-pressurized prior to any maintenance or disassembly procedure. Disconnect air hose prior to performing any maintenance operation.

#### Cleaning the SharpShooter Spray Gun

#### **Cleaning and Gun Care**

- A. Remove the Air Cap and Ring and clean with solvent.
- B. Flush gun thoroughly with solvent.

- C. Clean nozzle with brush. Never place the whole gun in solvent.
- D. Clogged holes should never be cleaned with hard objects as the smallest amount of damage may badly influence the spray pattern.
- E. Packing must be slightly lubricated after cleaning of gun.

#### Spray Gun Performance Is Directly Related To How Well The Gun Is Cleaned After Use

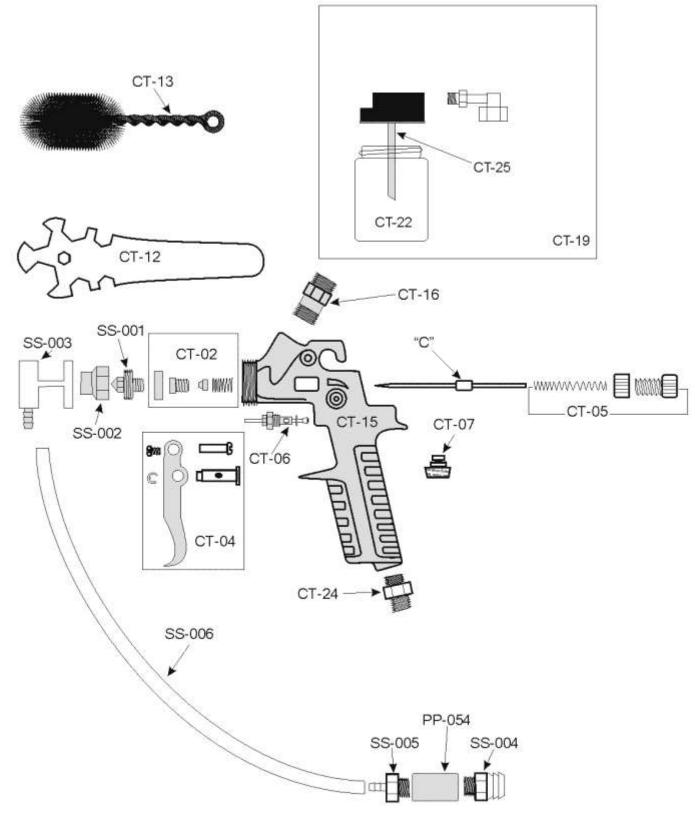
#### Lubricate

- A. Use Vaseline or a non-silicone grease to lubricate the gun.
- B. Lubricate all threaded connections for ease of maintenance.
- C. Lubricate the Needle only where it passes through the needle packings.
- D. **DO NOT** allow lubricant to get into the Fluid Tube, Nozzle, Air Cap, or interior of the paint chamber (areas where paint may come in contact with lubricant).

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## AirVerter<sup>®</sup> SharpShooter HVLP Paint Spray System

SharpShooter Illustrated Parts Breakdown



# SharpShooter (SS-100) Parts List

Part #	NSN	Description
CT-02	4940-01-439-7965	Packing Set
CT-04	4940-01-439-8993	Trigger Assembly
CT-05	4820-01-439-8979	Fluid Control Assembly
CT-06	4940-01-439-9934	Air Control Assembly
CT-07	4940-01-439-9935	Pattern Control Assembly
CT-12	4940-01-439-9002	Wrench
CT-13	4940-01-439-8999	Brush
CT-14	4940-01-439-8998	O-Ring
CT-15	4940-01-439-8327	Body
CT-16	4730-01-439-8995	Adapter Connector
CT-17-05	4940-01-439-8321	Needle 0.5mm
CT-20	4940-01-439-7968	Stencil Brush Attachment Kit
CT-21	4940-01-439-9008	Stencil Brush Jar Cover Assembly
CT-22	4940-01-439-7037	22cc Jar
CT-23	4940-01-439-7045	60cc Jar
CT-24	4730-01-439-9007	Air Connector
CT-25	4710-01-439-9006	Suction Tube
PP-054	4460-01-467-6827	Coupling
SS-001		Fluid Nozzle
SS-002		Air Cap
SS-003		Containment cage
SS-004		Barb Fitting 1 ¼" Hose – ¾ " NPT
SS-005		Barb Fitting 3/8" Tube – ¾" NPT
SS-006		Vacuum Hose

Trouble	Probable Cause	Remedy		
	1. Blockage in fluid nozzle	1. Clean or replace; strain paint		
Paint Will Not Flow	2. Loose fluid nozzle	2. Tighten		
	3. Coating is too thick	3. Thin the coating		
	4. Loose needle packing	4. Adjust packing		
Inconsistent	1. Running out of paint	1. Fill cup or pot, but never the top $\frac{1}{4}$		
Spray Pattern	2. Loose needle packing	2. Adjust packing		
(Spits and Sputters)				
Leakage at Front of Gun	1. Damaged fluid needle	1. Replace		
	2. Wrong size fluid needle	2. Replace		
	3. Dirty fluid nozzle	3. Clean		
	4. Impurities in paint	4. Strain paint		
	5. Loose fluid nozzle	5. Tighten		
	<ol><li>Fluid adjustment screwed all the way out</li></ol>	6. Rotate Fluid Control Knob (CT-05-1) on rear of gun clockwise		
	<ol> <li>Needle not firmly seated in the nozzle</li> </ol>	7. Check for nozzle obstruction		
	8. Packing too tight	8. Loosen and adjust to correct tension		
Distorted Spray Pattern	1. Dirty or damaged air cap	1. Clean or replace		
	<ol> <li>Dirty or damaged fluid nozzle or needle</li> </ol>	2. Clean or replace		
	3. Fluid nozzle partially clogged	3. Clean		
	4. Fluid nozzle not centered with air cap	4. Replace air cap		
	5. Air cap not seated correctly	5. Re-seat air cap		

# SharpShooter Troubleshooting Guide

## CT-11 High Wear Kit For Stencil Pro and SharpShooter Spray Guns NSN 4940-01-439-7966

Part #	NSN	Description	QTY
CT-02-3	4940-01-439-9946	Teflon Seal	1
CT-02-4	4940-01-439-9942	Spring	1
CT-04-5	4940-01-439-8983	E Ring	1
CT-05-3	4940-01-439-9930	Spring for Paint Needle	1
CT-06-1		Spring (Air Control)	1
CT-06-4		P. C. Seal	1
CT-06-5		Foamed Rubber	1
CT-07-5		Washer	1
CT-14	4940-01-439-8998	O-Ring	1
CT-26-3		E Ring	1

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