

Actual fluid nozzle and air cap combinations are determined by application Fluid nozzles ending in "V" are carbide fluid tips

Coating Atomization Technologies 337 South Arthur Avenue, Louisville CO 80027 Phone: 888.820.4498, Fax: 303.438.5708 www.spraycat.com

Operation and Maintenance Instructions for A100CVT Spray Guns

Gun Mounting

A 1/2" dia. x 5" lg. rod is provided for mounting. The gun can be mounted from the left or right side or from the bottom. Thread the mounting rod (9) into one of the three holes that best suit the mounting location for the application. Tighten the locknut (10) to secure the gun in the position desired. Do not plug the remaining holes as they are used as drain holes in the event of a needle seal leak.

Operation: Connections and Adjustments

The automatic gun requires two separate regulated air supply lines.

- 1. Connect one air line to the fitting marked "CYL", this actuates the gun on and off and is usually connected through an air solenoid.
- 2. Connect the second air line to the fitting marked "ATM", this provides atomizing and fan air.
- 3. Connect a pressurized fluid supply to the gun fluid inlet.
- 4. Fluid flow can be controlled using the fluid control knob, this restricts flow by limiting needle travel. It is best to control fluid flow by proper selection of fluid orifice size and use the fluid control knob to "fine tune flow rate".
- 5. Fan width can be adjusted using the fan control knob. Turning the knob clockwise narrows the fan.

Maintenance: Needle Seal Replacement

IMPORTANT! Routine cleaning and maintenance is essential to insure proper gun operation.

Before beginning needle seal replacement, it is recommended kit no. 10-107 be on hand.

- Several states prohibit spraying solvent into the atmosphere and require the use of covered gun cleaner.
- 1. Remove fluid control knob (36), needle return spring (34), and needle assembly (33).
- 2. Remove end cap (32) and piston return spring (31).
- 3. Piston (29) can be removed with pliers by carefully gripping the hub on the rear of the piston.
- 4. Remove the air control spool (22) using an 11/16" socket to unscrew it from the body.
- 5. The needle seal can be removed using a 7/16" socket with a short extension. Install a new needle seal and torque to approx. 2 ft.-lbs.
- 6. It is recommended that the o-rings on the air control spool (22) and piston (29) be replaced and lubricated before reassembling the gun.

NOTE: Gun head disassembly is not recommended for normal cleaning and maintenance.

Gun head disassembly and reassembly instructions:

Have repair kit # 10-107 available before gun disassembly.

Gun head disassembly

To remove the nozzle carrier (6) and air cap adapter (7):

- 1. Remove the air cap (1), fluid nozzle tip (3), fluid nozzle body (4), and needle (33).
- 2. Remove the needle seal cartridge (18) as described above.
- 3. Loosen the locknut (26) using 11/16" wrench and remove fluid inlet (27) using a 5/8" open-end wrench.
- 4. The nozzle carrier (6) and air cap adapter (7) will now slide forward from the gun body (11).

Gun head reassembly

- 1. Install a new o-ring (8) on the air cap adapter (7).
- 2. Install gasket (5) into the air cap adapter (7).
- 3. Install the thread locknut (26) onto the fluid inlet (27) as far as possible.
- 4. Install a new fluid inlet seal (25) into the recess area on the nozzle carrier (6) inlet port.
- 5. Slide the nozzle carrier (6) into air cap adapter (7) and insert into the gun body (11) as far as possible. Be sure the nozzle carrier (6) extends into the hole at the back of the gun head. Install the needle seal (18) but do not tighten.
- 6. Rotate the nozzle carrier (6) until the fluid inlet port in the nozzle carrier (6) is aligned with the threaded hole in the body. While in this position, insert the fluid inlet (27) and tighten firmly.
- 7. Tighten the needle seal (18) to approx. 12 ft.-lb. torque.
- 8. Tighten the fluid inlet (27) to approx. 25 ft.-lb. torque.
- 9. Tighten the locknut (26) to approx. 33 ft.-lb. torque.

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		29			
ITEM NO.	PART NO.	-	ITEM NO.	PART NO.	DESCRIPTION
ITEM NO. 1	PART NO. See Air Cap Chart	29	ITEM NO. 21	PART NO. 98-7006	DESCRIPTION O-Ring (Viton) 2 Required*
		DESCRIPTION			
1	See Air Cap Chart See Air Cap Chart 31-2201	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body	21	98-7006	O-Ring (Viton) 2 Required* Air Control Spool O-Ring (Viton) 2 Required*
1 3	See Air Cap Chart See Air Cap Chart 31-2201 61-1005	29 DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal*	21 22 23 24	98-7006 60-603 98-7014 98-7027	O-Ring (Viton) 2 Required* Air Control Spool
1 3 4 5 6	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier	21 22 23 24 25	98-7006 60-603 98-7014 98-7027 60-124	O-Ring (Viton) 2 Required* Air Control Spool O-Ring (Viton) 2 Required* O-Ring (Viton) 2 Required* Seal*
1 3 4 5 6 7	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter	21 22 23 24 25 26	98-7006 60-603 98-7014 98-7027 60-124 60-128	O-Ring (Viton) 2 Required* Air Control Spool O-Ring (Viton) 2 Required* O-Ring (Viton) 2 Required* Seal* Locknut
1 3 4 5 6 7 8	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)*	21 22 23 24 25 26 27	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126	 O-Ring (Viton) 2 Required* Air Control Spool O-Ring (Viton) 2 Required* O-Ring (Viton) 2 Required* Seal* Locknut Fluid Inlet
1 3 4 5 6 7 8 9	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614	29 DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod	21 22 23 24 25 26 27 28	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*
1 3 4 5 6 7 8 9 10	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16)	21 22 23 24 25 26 27 28 29	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602	 O-Ring (Viton) 2 Required* Air Control Spool O-Ring (Viton) 2 Required* O-Ring (Viton) 2 Required* Seal* Locknut Fluid Inlet O-Ring (Teflon)* Piston
1 3 4 5 6 7 8 9 10 11	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-622	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional	21 22 23 24 25 26 27 28 29 30	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*
1 3 4 5 6 7 8 9 10 11 11 12	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-622 60-136	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug	21 22 23 24 25 26 27 28 29 30 31	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return Spring
1 3 4 5 6 7 8 9 10 11 11 12 13	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-136 98-8108	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)*	21 22 23 24 25 26 27 28 29 30 31 32	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd Cap
1 3 4 5 6 7 8 9 10 11 11 12 13 14	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-136 98-8108 98-0108	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)* Circlip	21 22 23 24 25 26 27 28 29 30 31 31 32 33	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601 See Air Cap Chart	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle Assembly
1 3 4 5 6 7 8 9 10 11 12 13 14 15	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-136 98-8108 98-0108 60-605	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)* Girclip Fan Control Housing	21 22 23 24 25 26 27 28 29 30 31 32 33 33 34	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601 See Air Cap Chart 60-613	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return Spring
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-131 60-614 98-0115 60-136 98-8108 98-0108 60-605 60-606	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)* Girclip Fan Control Housing Fan Control Stem	21 22 23 24 25 26 27 28 29 30 31 31 32 33 33 34 35	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601 See Air Cap Chart 60-613 60-612	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return SpringLocknut - Fluid Control Knob
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-12C 60-131 60-614 98-0115 60-136 98-8108 98-0108 60-605 60-606	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)* Circlip Fan Control Housing Fan Control Stem Needle Seal Assembly*	21 22 23 24 25 26 27 28 29 30 31 32 33 33 34 35 36	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601 See Air Cap Chart 60-613 60-612 60-608	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return SpringLocknut - Fluid Control KnobFluid Control Knob
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16	See Air Cap Chart See Air Cap Chart 31-2201 61-1005 60-L11C 60-131 60-614 98-0115 60-136 98-8108 98-0108 60-605 60-606	DESCRIPTION Air Cap** Fluid Tip** Fluid Nozzle Body Seal* Nozzle Body Carrier Air Cap Adapter O-Ring (Teflon)* Mounting Rod Locknut (3/8-16) AutoCAT Gun Body Conventional Plug O-Ring (Teflon)* Girclip Fan Control Housing Fan Control Stem	21 22 23 24 25 26 27 28 29 30 31 31 32 33 33 34 35	98-7006 60-603 98-7014 98-7027 60-124 60-128 60-126 98-8010 60-602 98-7217 66-246 60-601 See Air Cap Chart 60-613 60-612	O-Ring (Viton) 2 Required*Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return SpringLocknut - Fluid Control Knob

**See air cap selection chart on page 1

***Air inlet fittings are available in 90 degree elbow . 90 degree elbow tubing "push on" style fittings

P/N 53-521 1/8 NPT x 1/4" OD Tube

P/N 53-520 1/4 NPT x 3/8" OD Tube

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