



The CPR-Gravity gun comes equipped with both a pressure reduced air cap 23-2101 and a HVLP air cap 23-1301 for areas requiring HVLP compliance.

23-2101 - consumes 11 cfm at 29 psi gun inlet.

23-1301 - consumes 13.5 cfm at 29 psi gun inlet.

23-2101 compliant air caps can be used with the 0.8 mm - 1.7 mm fluid orifices listed below.

23-1301 HVLP air caps can be used with the full range of fluid orifices listed below.

**COMPLIANT/HVLP AIR CAP AND FLUID NOZZLE CHART**

MODEL NO.	AIR CAPS	FLUID TIP RANGE	*MAX GUN INLET PRESS. FOR HVLP	FAN CONTROL	SCFM @ MAX GUN INLET	STANDARD IN CAT PACK	AVAILABLE FLUID NOZZLES TIPS	NEEDLES / marking on needle
CPR-G	23-2101 CPR (Compliant)	0.8 - 1.7	29*	60-1504 (S)	11		33-0208 0.8mm (.022")	40-1308 (308)
						W, W-PPS	33-0210 1.0mm (.040")	40-1310 (310)
							33-0212 1.2mm (.046")	40-1312 (312)
						W, A, PPS	33-0213 1.3mm (.052")	40-1313 (313)
	23-1301 (HVLP)	0.8 - 2.2	29*		13.5		33-0214 1.4mm (.055")	40-1314 (314)
						W, A, PPS	33-0215 1.5mm (.059")	40-1315 (315)
						W, A, PPS	33-0217 1.7mm (.070")	40-1317 (317)
							33-0219 1.9mm (.075")	40-1319 (319)
						33-0222 2.2mm (.086")	40-1322 (322)	

Actual fluid nozzle and air cap combinations are determined by application (see application chart page 4)

\*Note: Air cap test gages are available to confirm HVLP compliance.

\*Gun inlet pressures may vary as required by application

W = Wood

A = Automotive

PPS = 3M™ PPS™

# Operation and Maintenance Instructions for *CPR-G* Spray Guns

## Operation

1. Connect air supply hose at handle of gun.
2. Screw the paint cup onto the gun's gravity feed fluid inlet.
3. 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".
4. Fan width can be adjusted using the fan control knob. Turning the knob clockwise narrows the fan.

## Maintenance

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

Several states prohibit spraying solvent into the atmosphere and require the use of covered gun cleaner.

1. If a gun cleaner is being used, connect and clean the gun in the gun cleaner according to the manufactures instructions.
2. If a gun cleaner is not being used:  
Remove air cap and clean separately using clean solvent.  
Clean the gravity feed cup thoroughly, then spray clean solvent through the gun until clean.

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

## Gun head disassembly and reassembly instructions:

Have repair kit # 10-105 available before gun disassembly.

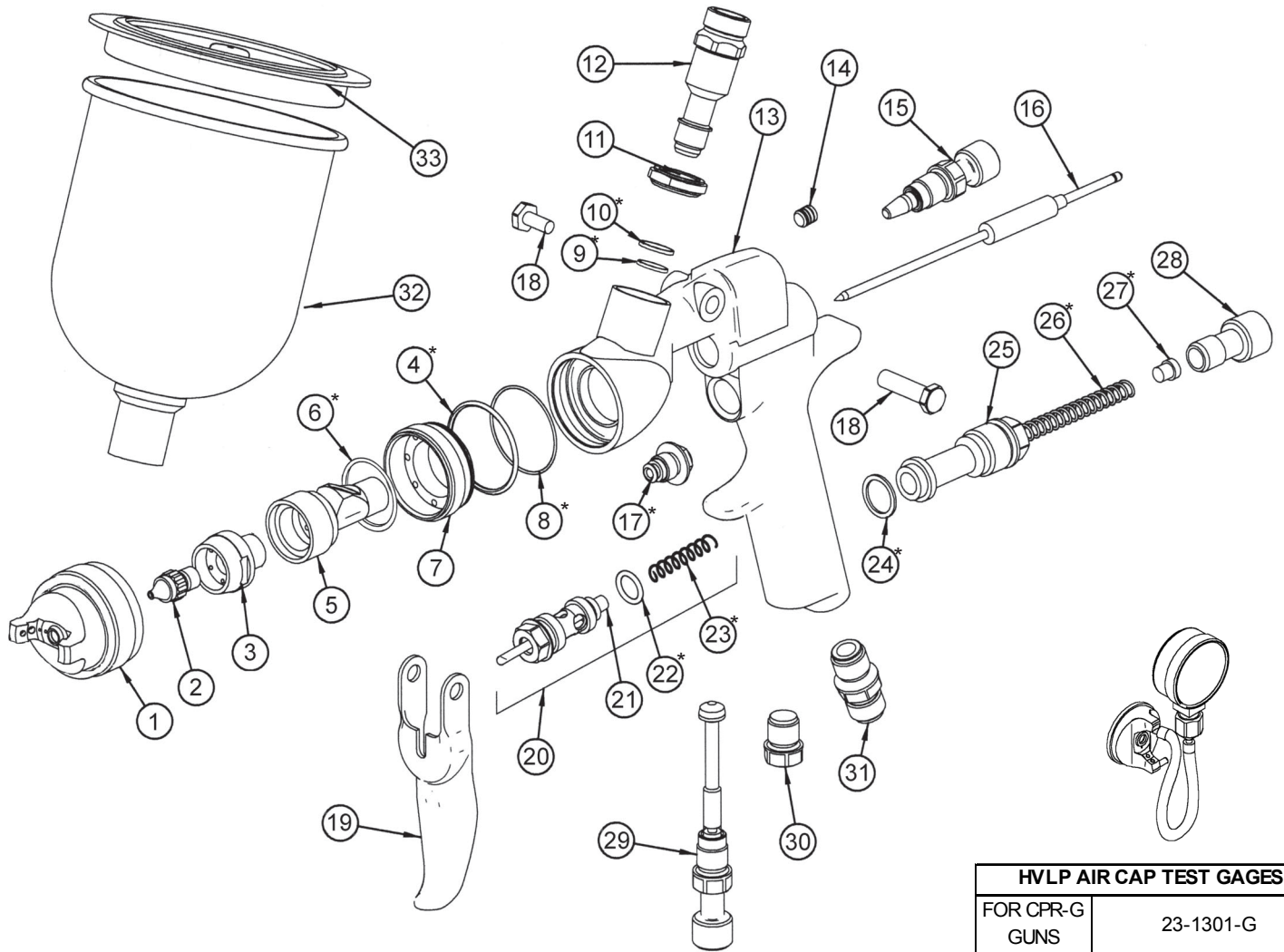
### Gun head disassembly

To remove the nozzle carrier (5) and air cap adapter (7):

1. Remove the air cap (1), fluid nozzle tip (2), fluid nozzle body (3), and needle (16).
2. Remove the needle seal cartridge (17).
3. Loosen the locknut (11) and remove fluid inlet (12) using a 11/16" open-end wrench.
4. The nozzle carrier (5) and air cap adapter (7) will now slide forward from the gun body (13).

### Gun head reassembly

1. Install a new o-ring (4 & 8) on the air cap adapter (7).
2. Install the thread locknut (11) and seal (10) onto the fluid inlet (12) as far as possible.
3. Install a new fluid inlet seal (9) into the recess area on the nozzle carrier (5) inlet port.
4. Install carrier seal (6) onto the back of the nozzle carrier (5).
5. Slide the nozzle carrier (5) into air cap adapter (7) and insert into the gun body (13) as far as possible. Be sure the nozzle carrier (5) extends into the hole at the back of the gun head. Install the needle seal (17) but do not tighten.
6. Rotate the nozzle carrier (5) until the fluid inlet port in the nozzle carrier (5) is aligned with the threaded hole in the body. While in this position, insert the fluid inlet (12) and tighten firmly.
7. Tighten the needle seal (17) to approx. 12 ft.-lb. torque.
8. Tighten the fluid inlet (12) to approx. 25 ft.-lb. torque.
9. Tighten the locknut (11) to approx. 33 ft.-lb. torque.



HVLP AIR CAP TEST GAGES	
FOR CPR-G GUNS	23-1301-G

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	See Air Cap Chart	Air Cap**	19	60-2101	Trigger
2	See Air Cap Chart	Fluid Tip**	20	60-1520	Air Valve Assembly
3	33-1202	Fluid Nozzle Body	21	60-302	Air Valve Poppet
4	98-8026	O-Ring*	22	60-125	Seal*
5	60-J31H	Nozzle Body Carrier	23	61-1003	Air Valve Spring*
6	60-123	Seal*	24	60-119	Seal*
7	60-34H	Air Cap Adapter	25	60-201	Rear Bushing
8	60-131	O-Ring*	26	60-204	Needle Return Spring*
9	60-124	Seal*	27	60-205	Spring Seat*
10	60-130	Seal*	28	60-202	Fluid Control Knob*
11	60-118	Locknut	29	60-1510	Inlet Air Control (Optional)
12	60-127	Fluid Inlet	30	60-122	Plug
13	60-1119-CPR	CPR-Gravity Gun Body	31	60-104	Air Inlet Fitting
14	98-0109	Allen Plug	32	51-401 Standard 700 mL	Gravity Feed Cup (Aluminum)
15	See Air Cap Chart	Fan Control Assembly**		51-400 Optional 700 mL	Gravity Feed Cup (Plastic)
16	See Air Cap Chart	Fluid Needle**		51-403 Optional 1000 mL	Gravity Feed Cup (Aluminum)
17	60-1400	Needle Seal*	33	51-418	Gravity Cup Lid (401 & 403)
18	60-1033	Trigger Pivot Set		51-413	Gravity Cup Lid (400)

\*\*See air cap selection chart on page 1

\*Indicates part included in repair kit # 10-105

# FLUID NOZZLE / AIR CAP SELECTION CHARTS

## CPR-G Series - Gravity Feed Guns

### CPR-G HVLP/COMPLIANT SPRAY GUN

MATERIAL TYPE	FLUID ORIFICE x AIR CAP	MAXIMUM PATTERN WIDTH	CFM
<b>Very Thin</b> less than 16 sec. Zahn #2 inks , dyes, solvents, stains	0.8 mm x 2101 or 1301 1.0 mm x 2101 or 1301	23-2101 13" 23-1301 12"	23-2101 11 CFM 23-1301 13.5 CFM
<b>Thin</b> 16 to 20 sec. Zahn #2 lacquers, enamels, primers, sealers	1.2 mm x 2101 or 1301 1.3 mm x 2101 or 1301	23-2101 13" 23-1301 12"	23-2101 11 CFM 23-1301 13.5 CFM
<b>Medium</b> 21 to 30 sec. Zahn #2 automotive base coat enamels, primers epoxies, urethanes automotive clear coat	1.3 mm x 2101 or 1301 1.4 mm x 2101 or 1301 1.5 mm x 2101 or 1301 1.7 mm x 2101 or 1301	23-2101 13" 23-1301 12"	23-2101 11 CFM 23-1301 13.5 CFM
<b>Heavy</b> over 30 sec. Zahn #2 heavy body primers high solid enamels high solid automotive coatings adhesives	1.7 mm x 2101 or 1301 1.9 mm x 1301 2.2 mm x 1301	23-2101 13" 23-1301 12"	23-2101 11 CFM 23-1301 13.5 CFM



**CPR-G-(W or A) Includes:**

- 51-401 700 mL Aluminum Gravity Cup
- 52-300 Mini Regulator
- 98-0104 3/8" Socket
- 98-0112 Ratchet Wrench
- 60-8001 Gun Wrench
- 98-0113 Gun Cleaning Brush
- 51-430 Gravity Gun Hook

***Air Caps and Needles Shown on Page 1***

**CPR-G-(W or A)-PPS Includes:**

- 91-465 1 QT PPS Cup and Collar
- 91-466 Lids and Liners (Available in 50 Pack)
- 91-474 #2 PPS Adapter
- 52-300 Mini Regulator
- 98-0104 3/8" Socket
- 98-0112 Ratchet Wrench
- 60-8001 Gun Wrench
- 98-0113 Gun Cleaning Brush

***Air Caps and Needles Shown on Page 1***