

# CAT-33000 GRAVITY FEED LVLP SPRAY GUN

# **OWNER'S MANUAL**

#### LVLP GUN FEATURES:

Reduced air consumption - less strain on compressor.

Increased transfer efficiency: >68% reduction in paint use.

Stainless steel fluid nozzle and needle allow for use of waterborne coatings.

Less paint waste as compared to HVLP guns

#### LVLP GUN SPECIFICATIONS:

Fluid orifice: 1.3mm

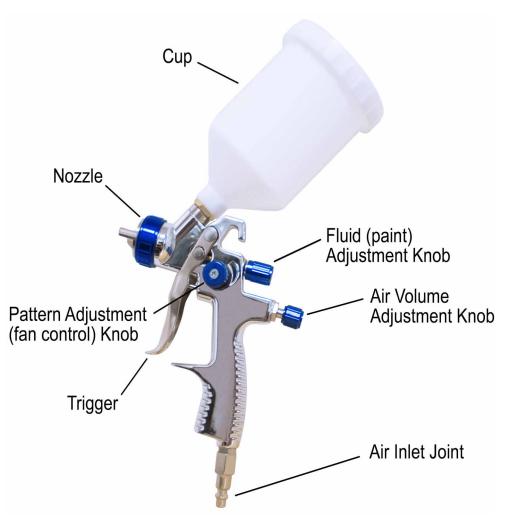
Max working air pressure (at the

gun): 22psi

Working air pressure (at the air cap):

9.6 psi

Air consumption: 4.3 cfm
Air connection: 1/4" NPS



# CALIFORNIA AIR TOOLS CUSTOMER SERVICE:

Phone: 1-866-409-4581 Ext. 1

Online: WWW.CALIFORNIAAIRTOOLS.COM

Do not return your item for service or parts to the store/dealer where the item was purchased.

#### IMPORTANT INSTRUCTIONS

# WARNING!

## SAFETY RULES

!IMPORTANT! Before you begin to use this equipment it's necessary to read this manual completely to be able to operate under the best conditions and thus for being able to obtain the maximum of yield. In this manual, instructions are included to operate and to give maintenance as well includes instructions of security.



Is prohibited the use of this equipment to minors and people nonenabled for its use. Don't try to use this equipment in applications for which it was not designed. Operating it under these conditions can damage the equipment permanently or cause damages or injuries.



Use always accessories in good state and with the characteristics the equipment has, if some accessory presents or displays malfunctions in its operation immediately replace it. Teflon or sealant are always recommended in connections between two elements to avoid air leaks. Do not connect too long of a hose, no longer than 15 ft. is recommended.



Gas accumulation can cause some type of explosion, work in open and ventilated areas. The use of a mask is recommended to avoid the excessive inhalation of pulverized products.



To perform any maintenance work it is necessary to disconnect the pneumatic line. If for any reason it is required to replace any pieces of gun we suggest you replace it with an original, never use similar parts or other manufacture.



Never operate equipment if you are under the influence of alcohol or any drug. If you show exhaustion suspend the use, it can cause an accident.

#### **ASSEMBLY**

Hose connection is 1/4"; a hose of the same size will need to be attached to the Air Inlet Joint.

Attached Cup by gently screwing on clockwise hand tight.

- 1) Initially perform the following actions:
- a. Use the spanner wrench to tighten the fluid nozzle.
- b. Install and tighten the paint cup.
- c. Check air lines and fittings to ensure that they are clean and damage free before connecting to gun.
- d. Flush gun thoroughly with cleaning fluid
- 2) Pattern Adjustment

Use the pattern (fan) adjustment knob on the left side of the gun to obtain the desired fan pattern.

3) Air Volume Adjustment

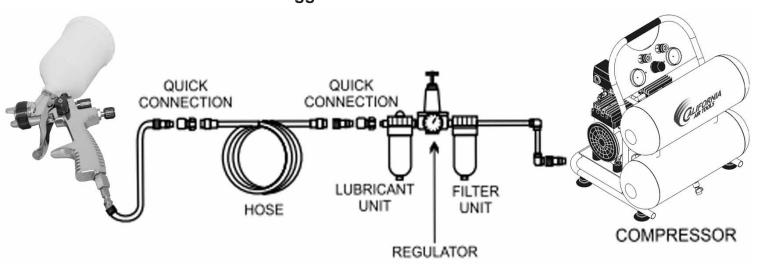
Use the air volume adjustment knob to obtain the desired fluid flow volume.

4) Fluid (paint) adjustment

Use the fluid control knob to obtain the desired fluid flow volume.

Before you start work with a spray gun, be sure to have clean air and no moisture particles of water/oil in order to achieve satisfactory results. Addition of a water filter or inline dessicant filter is suggested.





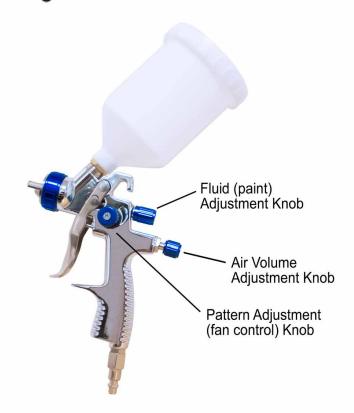
#### **ADJUSTMENT**

The desired pattern, volume of fluid output and fine atomization can easily be obtained by regulating the Pattern Adjusting Knob, Fluid (Paint) Adjusting Knob and Air Adjusting Knob.

AIR Volume ADJUSTMENT: Turning the Air Adjusting valve clockwise will decrease the air volume. And counterclockwise will increase the air volume.

PATTERN ADJUSTMENT: Turning Pattern Adjusting Knob to the right until tight will make spray pattern round, or turning left make spray pattern ellipse.

Fluid (Paint) ADJUSTMENT: Turn the Paint Adjusting Knob clockwise will decrease the volume of fluid output and conter-clockwise will increase fluid output.



## Operation

- Begin spraying. Always keep the gun at right angles to the work.
- 2. Keep the nozzle about 6 to 12 inches from the work surface. Grip the gun keeping perpendicular with spraying area then move it parallel for several times, Stopping gun movement in mid-stroke will cause a build up of paint and result in runs. Do not fan the gun from side to side while painting. This will cauze a build-up of paint in the center of the stroke and an insufficient coating at each end.
- 3. Trigger gun properly. Start the gun moving at the beginning of the stroke BEFORE SQUEEZING THE TRIGGER and release the trigger BEFORE STOPPING GUN MOVEMENT at the end of the stroke. This procedure will blend each stroke with the next without showing overlap or unevenness.
- 4. The amount of paint being applied can be varied by the speed of the stroke, distance from the surface and adjustment of the fluid control knob.
- Overlap strokes just enough to obtain an even coat.

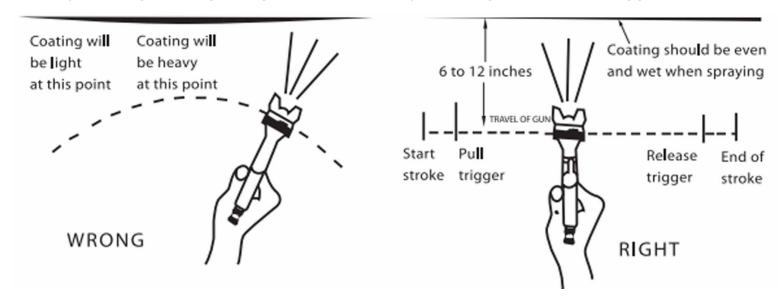
# NOTE: Two thin coats of paint will yield better results and have less chance of runs than one heavy layer.

Use a piece of cardboard as a shield to catch overspray at the edges of the work to protect other surfaces.

#### **OPERATION**

#### **TIP#1:**

Always keep gun at right angles of work; always move gun first, then trigger.



#### **TIP #2**

Accurately adjusting your spray gun inlet pressure using a pressure regulator at the spray gun

- 1)"open" the air adjustment valve on the gun.
- 2) With your gun trigger depressed half way (air only) adjust your air inlet pressure regulator to the desired inlet pressure to obtain the desired air cap pressure based on the table to the right.
- 3) Spray a test pass on a piece of masking paper, cardboard, etc. to check for proper atomization and desired spray ability.
- 4) Fine tune using the air adjustment valve on on the gun.

#### **MAINTENANCE**

Changing of air cap: To ensure proper function and operation always change the fluid nozzle and needle as a matched set.

Changing of needle packing: The needle is sealed using a Teflon packing. To change the packing remove the fluid needle, fluid nozzle and the packing nut.

Cleaning and gun care

- a) After using immediately flush with solvent to remove all coatings.
- b) Clean the air cap with the brush provided.

#### MAINTENANCE

c) Lightly lube all moving parts with a non-petroleum based lubricant.

Note: never use improper cleaning instruments as they may damage the part and adversely affect gun performance. Never immerse the gun in solvent.

#### **TROUBLESHOOTING**

Problem: Gun is leaking from fluid nozzle.

Causes: Fluid nozzle is loose, foreign particles or dried paint is keeping needle from

seating properly.

Remedy: Tighten nozzle of remove and clean nozzle.

Problem: Gun is leaking from needle sealing area.

Causes: Teflon packing is damaged of missing.

Remedy: Replace Teflon packing

Problem: Gun sprays 'sickle shaped' patterns to the left or right )(

Causes: Air holes clogged on air cap of air cap is damaged.

Remedy: Clean air holes of replace air cap.

Problem: Tear drop or oval shaped pattern appears

Causes: Air cap clogged at fluid needle orifice.

Remedy: Remove and clean air cap and fluid nozzle.

Problem: Paint sputters from gun.

Causes: Insufficient material in cup, material not filtered, fluid nozzle loose, needle Teflon damaged, needle and/or nozzle is dirty.

Remedy: Refill cup. filer material, tighten loose parts, replace Teflon packing, clean needle and nozzle.

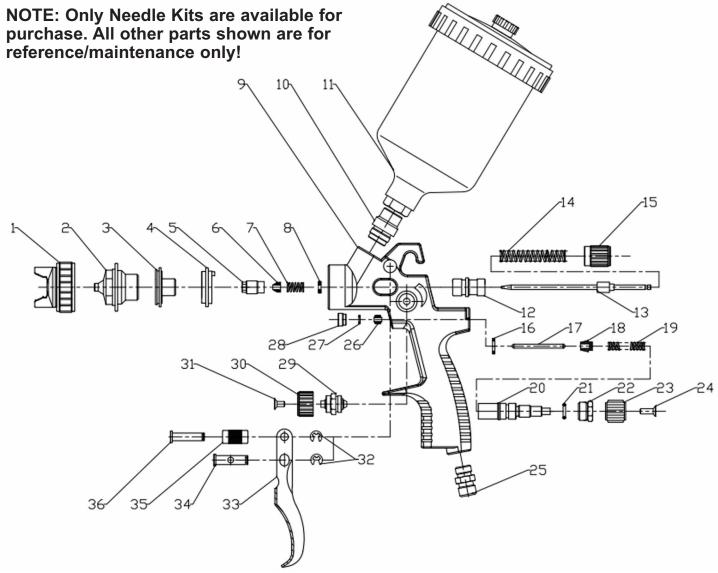
Problem: Incorrect atomization of spray pattern.

Causes: Inlet air pressure to low or material too thick; pressure too high or material too

thin.

Remedy: Adjust air pressure and/or product viscosity.

#### **PARTS LIST**



#### Description

Description		
AIR CAP	20	AIR VALVE ASSEMBLY
FLUID NOZZLE	21	O RING
BRASS RING	22	HOLD NUT
AIR DISTRIBUTION RING	23	ADJUST KNOB
NEEDLE PACKING HOLDER	24	SCREW
NEEDLE PACKING	25	AIR INLET FITTING
GUN BODY	26	GASKET
FLUID JOINT	27	PE GASKET
CUP	28	SEALING SCREW
FLUID CONTROL	29	FAN CONTROL
NEEDLE	30	FAN CONTROL KNOB
SPRING	31	SCREW
FLUID CONTROL KNOB	32	CIRCLIP
VALVE GASKET	33	TRIGGER
VALVE NEEDLE	34	TRIGGER PIN
GASKET	35	TRIGGER PIN SLEEVE
VALVE SPRING	36	TRIGGER PIN
	AIR CAP FLUID NOZZLE BRASS RING AIR DISTRIBUTION RING NEEDLE PACKING HOLDER NEEDLE PACKING GUN BODY FLUID JOINT CUP FLUID CONTROL NEEDLE SPRING FLUID CONTROL KNOB VALVE GASKET VALVE NEEDLE GASKET	AIR CAP       20         FLUID NOZZLE       21         BRASS RING       22         AIR DISTRIBUTION RING       23         NEEDLE PACKING HOLDER       24         NEEDLE PACKING       25         GUN BODY       26         FLUID JOINT       27         CUP       28         FLUID CONTROL       29         NEEDLE       30         SPRING       31         FLUID CONTROL KNOB       32         VALVE GASKET       33         VALVE NEEDLE       34         GASKET       35

# CALIFORNIA AIR TOOLS INC. LIMITED WARRANTY

This warranty is limited to products distributed by:

California Air Tools, Inc. 8560 Siempre Viva Road San Diego, CA 92154 1-866-409-4581 Ext. 1

# **Limited Warranty**

California Air Tools Inc. will repair or replace, free of charge, to the original retail customer who purchased a California Air Tools, Inc. product from an authorized dealer, distributor or distributor's dealer in North America.

This warranty does not transfer to subsequent owners.

California Air Tools Inc. will repair or replace, at its option, any parts that are proven by an authorized service center to be defective in material or workmanship under normal use during the applicable warranty time period as stated below. This limited warranty covers the cost of the replacement parts and labor for all defects when installed by an authorized service center.

Transportation charges are the responsibility of the customer. Any part replaced under warranty becomes the property of California Air Tools Inc.

All parts replaced under warranty will be considered as part of original product, and any warranty on those parts will expire coincident with the original product warranty.

# **Limited Warranty Periods**

Non-commercial / Non-rental (personal use by a retail customer): 1 year parts and labor

The limited warranty period begins on the date of retail purchase by the original purchaser.

The orignal receipt or invoice is required for warranty claims.

## Disclaimers, Limitations of Remedies & Exclusions

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

#### **Disclaimer of Other Warranties**

To the fullest extent permitted by applicable law, this limited warranty is exclusive and expressly in lieu of any and all other warranties, including, without limitation, any implied warranties of merchantability or fitness for a particular purpose or any other implied warranties that may arise from the course of dealing or usage of the trade. California Air Tools Inc. hereby declaims and excludes all other warranties. To the extent that California Air Tools Inc. products are consumer products under applicable federal and state law with respect to any customer, the duration of any implied warranties (including but not limited to implied warranties of merchantability or fitness for a particular purpose) are limited to the shortest duration permitted by applicable law or the Limited Warranty period provided herein, whichever is longer.

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