

See Warranty on page 8 for important information about commercial use of this product.

Operating Instructions and Parts Manual

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Detail Spray Gun

Description

A conventional siphon feed detail spray gun designed to spray all light to medium viscosity materials. It has fluid and pattern controls and is supplied with an 8 oz. material cup. The compact design makes this spray gun handy for detail, touch-up and small painting projects.

Specifications

Feed Type	Siphon
Mix Type	External
Bleed Type	Non-bleeder
Fluid Nozzle I.D.	0.071" (1.8 cm)
Max. Inlet Air Pressure	70 psig
Fluid Delivery at 40 psig	10.0 fl. oz. per minute
Air Req'd. (SCFM @ 40 psi)	2.8 ave. (50% Duty) 5.6 continuous
Pattern Size	9.0" @ 40 psi 8" Distance from workpiece
Air Inlet	1/4 NPS (M)
Fluid Inlet	1/4 NPS (M)
Fluid Nozzle Material	Stainless Steel
Fluid Needle Material	Stainless Steel
Cup Volume	8 fl. oz.

Safety Guidelines

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

▲ DANGER *Danger indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.*

▲ WARNING *Warning indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.*

▲ CAUTION *Caution indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.*

NOTICE *Notice indicates important information, that if not followed, may cause damage to equipment.*

Unpacking

After unpacking the product, inspect carefully for any damage that may have occurred during transit. Make sure to tighten fittings, bolts, etc., before putting unit into service.

▲ WARNING *Do not operate tool if damaged during shipping, handling or use. Damage could result in bursting and cause injury or property damage.*

Spray Gun Terms

FEED – Method used to bring paint into the gun for spraying.

PRESSURE FEED – Method of paint feed where a canister or paint tank is pressurized to force paint to the gun. Either internal or external mix air caps are used with this method. Pressure feed is generally used for spraying heavy bodied paints or for large size projects.

SIPHON FEED – Method of paint feed where atmospheric pressure creates a partial vacuum to siphon paint to the gun. Only external mix air caps are used with this method. Siphon feed is used with light bodied paints.

GRAVITY FEED – Method of paint feed similar to the siphon feed method. However, the cup is inverted to create a positive fluid pressure at the nozzle.

MIX – The mixing of paint and air when spraying.

INTERNAL MIX – Process where the air and paint are mixed inside the air cap just before being sprayed. This method is best for heavy bodied, slow drying paints and can only be used with the pressure feed method. Do not use fast drying paints with internal mix. The paint will dry inside and quickly clog the air cap.

EXTERNAL MIX – Process where the air and paint are mixed just after leaving the nozzle. This type of mix should be used for fast drying paints and when a high quality finish is needed.

BLEEDER/NON-BLEEDER – Indicates whether air flows through the gun continuously or as the trigger is pulled.

BLEEDER – In this mode, air passes continuously through the gun whether spraying or not. This mode is generally used when the air is supplied by a continuously running compressor that does not have a tank.

NON-BLEEDER – In this mode, air flows only when the trigger is pulled. This type of operation is used with a compressor equipped with a tank or with a large factory air system.

VISCOSITY – A measurement of the resistance of the flow of a liquid.

ATOMIZATION – Conversion of liquid to spray droplets (mist).

PATTERN CONTROL KNOB – Used to form the proper pattern (size and shape) of paint as it is sprayed from the gun to the work piece.

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach it to this manual or file it for safekeeping.

Detail Spray Gun

Spray Gun Terms (Cont.)

FLUID CONTROL KNOB – Used to control the amount of paint being mixed with air.

PAINT TANK – An auxiliary pressurized paint reservoir that allows continuous spraying of large amounts of paint without stopping for refills as with a canister. It also allows using the spray gun at any angle or orientation.

General Safety Information

CALIFORNIA PROPOSITION 65

⚠ WARNING

You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.



⚠ WARNING This product or its power cord may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

GENERAL SAFETY INFORMATION

1. Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Follow all local electrical and safety codes as well as in the United States, the National Electrical Codes (NEC) and Occupational Safety and Health Act (OSHA).



⚠ WARNING

Use a face mask/respirator and protective clothing when spraying. Always spray in a well ventilated area to prevent health and fire hazards.



Refer to Material Safety Data Sheets (MSDS) of spray material for details.

⚠ DANGER

Never spray closer than 25 feet to the compressor! If possible, locate compressor in separate room. Never spray into the compressor, compressor controls or the motor.



3. Do not smoke or eat when spraying paint, insecticides, or other flammable substances.

⚠ WARNING

Do not spray flammable materials in vicinity of open flame or near ignition sources. Motors, electrical equipment and controls can cause electrical arcs that will ignite a flammable gas or vapor. Never store flammable liquids or gases in the vicinity of the compressor.



4. When spraying and cleaning, always follow the instructions and safety precautions provided by the material manufacturer (Refer to MSDS).

⚠ WARNING

Do not spray acids, corrosive materials, toxic chemicals, fertilizers or pesticides. Using these materials could result in death or serious injury.

5. Keep visitors away and NEVER allow children or pets in the work area.

⚠ WARNING

Never aim or spray at yourself or anyone else or serious injury could occur.

6. Always work in a clean environment. To avoid injury and damage to the workpiece, do not aim the spray gun at any dust or debris.

⚠ WARNING

Do not use pressure that exceeds the operating pressure of any of the parts (hoses, fittings, etc.) in the painting system.



⚠ CAUTION

Keep hose away from sharp objects. Bursting air hoses may cause injury. Examine air hoses regularly and replace if damaged.

7. Always use a pressure regulator on the air supply to the spray gun.

NOTICE

Failure to install appropriate water/oil removal equipment may result in damage to machinery or workpiece.

Preparation

1. Thoroughly mix the paint in accordance with the manufacturer's instructions, adding thinner where necessary. Most materials will spray readily if thinned properly. Strain material through cheese cloth or a paint strainer. Test the consistency of the material by making a few strokes on a cardboard target. If material still appears too thick, add a small amount of thinner. THIN WITH CARE!!
2. Fill the canister about 3/4 full and start the air compressor.
3. Set up a piece of cardboard as a target and adjust for best spray pattern.

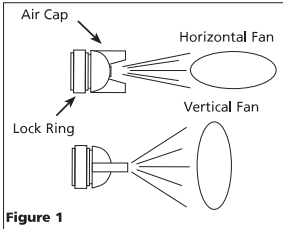


Figure 1

FAN DIRECTION

The direction of the fan (horizontal or vertical) can be changed by loosening the lock ring and turning the air cap 90 degrees (See Figure 1). Hand tighten lock ring after adjustment.

Preparation (Cont.)

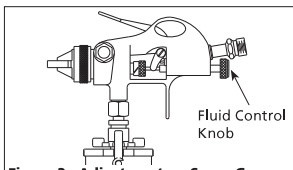


Figure 2 - Adjustment on Spray Gun

PATTERN ADJUSTMENT

1. Adjust air pressure to the spray gun according to the recommendations supplied with the spray material. This air pressure usually falls between 40 - 60 PSI. Adjust air pressure with the trigger pulled.
2. Turn fluid control knob fully clockwise until closed.
3. Trigger a short burst while turning fluid control knob counterclockwise. Observe the spray pattern on the target and adjust the fluid control knob until the desired pattern (atomization) is obtained.

If the spray is too fine (excessive overspray), caused by too much air for the amount of paint being sprayed, reduce the air pressure or open the fluid control to spray more material.

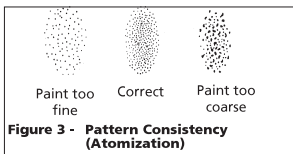


Figure 3 - Pattern Consistency (Atomization)

If the spray is too coarse (spitting globs), reduce the amount of material with the fluid control knob or thin the paint.

Before spraying the workpiece, practice a few minutes on a cardboard target to ensure the pattern size and consistency are set correctly.

WATER/OIL IN COMPRESSED AIR

All compressor pumps discharge some condensed water, oil or contaminants with the compressed air.

IMPORTANT: This condensation will cause "fish eyes" to appear in the paint job. Install appropriate water/oil removal equipment and controls as necessary for the intended application.

NOTICE Failure to install appropriate water/oil removal equipment may result in damage to machinery or workpiece.

Operation

1. Begin spraying. Always keep the gun at right angles to the work. (See Figure 4.)

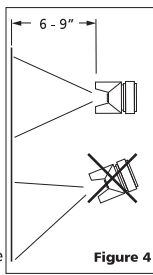


Figure 4

Keep the nozzle about 6 to 9 inches from the work surface throughout the stroke and always keep the gun in motion while spraying. 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 cause a build-up of paint in the center of the stroke and an insufficient coating at each end (See Figure 5).

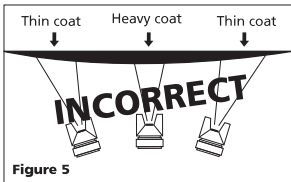


Figure 5

2. "Trigger" the 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 "feather" (blend) each stroke with the next without showing overlap or unevenness.

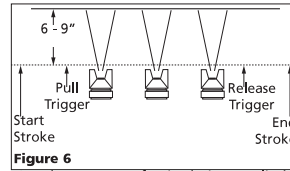


Figure 6

3. 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.
4. 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.
5. Use a piece of cardboard as a shield to catch overspray at the edges of the work to protect other surfaces. Use masking tape to cover other areas if needed.

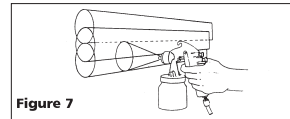


Figure 7

Detail Spray Gun

Maintenance

DAILY CLEAN-UP

Local codes may require specific cleaning methods and equipment. Follow local codes and manufacturer's recommendations for the use and disposal of spray materials and solvent.

NOTICE

Clean spray gun

immediately after use. Paint and other material dry quickly in the small passages rendering gun useless due to the difficulty of removing hardened paint from the passages inside the gun.

NOTE: In the instructions below, the use of the word "solvent" refers to the specific solvent for the material used (eg: lacquer thinner for lacquer, etc).

1. Remove and empty the canister; then rinse with a solvent recommended for the paint or other material used.
2. Refill canister with clean solvent and attach to the gun. Spray solvent through the gun while shaking the gun vigorously. Wipe the gun exterior with a solvent soaked rag. Repeat until the gun is clean.
3. Remove the air cap and soak in solvent until clean. Use a small brush for stubborn stains if necessary. Toothpicks or small brushes may be used to clean air passages; however, **NEVER USE METAL OBJECTS TO CLEAN PRECISELY DRILLED PASSAGES. DAMAGED PASSAGES WILL CAUSE IMPROPER SPRAYING.**
4. Clean gaskets with a solvent soaked rag. To prevent equipment damage, **Do not immerse gaskets or spray gun body in solvents.**
5. After using water to clean out water based paints or materials, spray mineral spirits through the gun to prevent corrosion.

6. Use a non-silicone oil on all moving parts when reassembling. Use Vaseline® or light grease on all threaded connections prior to storage.
7. Clean and flush gun thoroughly to neutralize any contaminants corrosive to the spray gun.

PERIODIC CLEAN-UP

Due to improper cleaning and paint it may be necessary to inspect and clean the internal parts and the gun body.

1. Examine openings in air cap and fluid tip. If clogged, remove any o-rings and soak the air cap or fluid tip in solvent.
2. A brush or toothpick or something similar may be used to dislodge the dried paint from holes and passages.

NEVER USE METAL OBJECTS TO CLEAN PRECISELY DRILLED PASSAGES. DAMAGED PASSAGES WILL CAUSE IMPROPER SPRAYING.

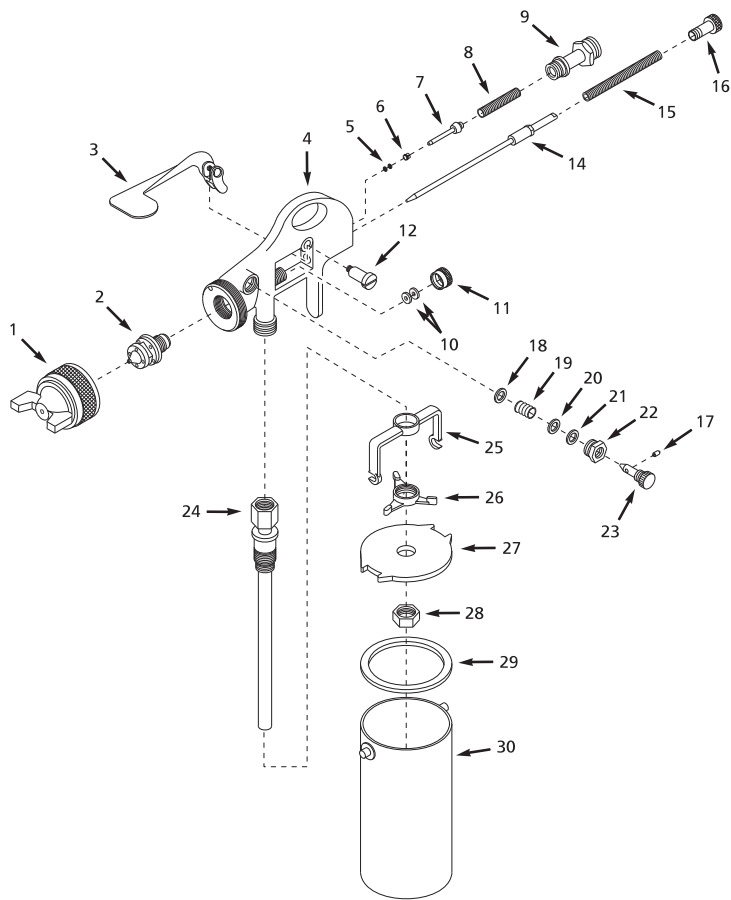
3. Remove and check the adjusting needle for excessive wear at the tip and straightness.

IMPORTANT: If the needle tip is worn more on one side than the other, either the needle is bent or the gun body has been dropped or knocked out-of-line. There are no adjustments that can be made to a bent gun body. Test the needle by rolling on a flat surface. Replace if necessary.

4. Check and replace any damaged o-rings and seals. O-rings and seals can be wiped clean but not soaked in solvent.
5. Unscrew packing nuts and replace the packing **ONLY** if a leak will not stop when the nut is tightened. Do not over-tighten a packing nut because this will restrict movement of the needle.
6. Re-assemble in reverse order of above and use a non-silicone oil on moving parts. Apply Vaseline® or light grease on threaded joints and hose connections.

STORING

1. When not using spray gun, turn the fluid adjustment knob counterclockwise to open which will reduce spring tension on needle fluid tip.
2. Spray gun **MUST BE** well cleaned and lightly lubricated.








Please provide following information:

- Model number
- Stamped-in code
- Part description and number as shown in parts list

Replacement Parts List

Ref. No.	Description	Part Number	Qty.	Ref. No.	Description	Part Number	Qty.
1	Air cap assembly	DH067300AV	1	22	Pattern control nut	○	1
2	Fluid nozzle	▲ DH067400AV	1	23	Pattern control knob	○	1
3	Trigger	●	1	24	Material tube assembly	□	1
4	Gun body	n/a	1	25	Yoke	□	1
5	Air valve packing	■ ◆	2	26	Adjustment lever	□	1
6	Air valve packing nut	■ ◆	1	27	Cup lid	□	1
7	Air valve stem assembly	■	1	28	Nut	□	1
8	Air valve spring	■	1	29	Gasket (Pack of 3)	DH067500AV	1
9	Air inlet	■	1	30	Cup	DH067600AV	1
10	Fluid needle packing	▲ ◆	2	SERVICE KITS (contains qty. 1 for each component unless noted)			
11	Packing nut	▲	1	■	Air valve kit (qty. 2 - #5)	DH550100AV	
12	Trigger screw	●	1	▲	Fluid control kit (qty. 2 - #10)	DH550200AV	
14	Fluid needle assembly	▲	1	○	Pattern control assembly	DH550300AV	
15	Fluid control spring	▲	1	◆	Gasket kit (qty. 2 - #5 & 10)	DH550400AV	
16	Fluid control knob	▲	1	●	Trigger kit	DH550500AV	
17	Pattern control pin	○	1	□	Yoke assembly	DH550600AV	
18	Pattern control washer	○	1				
19	Pattern control spring	○	1				
20	Pattern control packing ring	○ ◆	1				
21	Pattern control packing	○ ◆	1				

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
 Right or left heavy spray pattern	<ol style="list-style-type: none"> Holes in left or right side of the air cap are plugged Dirt on left or right side of fluid tip 	<ol style="list-style-type: none"> Clean. Use only non-metallic paint Clean
 Top or bottom heavy spray pattern	<ol style="list-style-type: none"> Dried material at top or bottom of fluid tip Loose air cap or dirty seat Air cap plugged 	<ol style="list-style-type: none"> Clean Clean and tighten Clean. Use only non-metallic paint
 Split spray pattern	<ol style="list-style-type: none"> Fluid turned in too far Atomization air too high 	<ol style="list-style-type: none"> Increase fluid Reduce atomization air pressure
 Center heavy spray pattern	<ol style="list-style-type: none"> Material too thick Atomization pressure too low 	<ol style="list-style-type: none"> Thin to proper viscosity Increase atomization pressure
 Sputtering spray	<ol style="list-style-type: none"> Material level too low Container tipped too far Loose fluid inlet connection Loose or damaged fluid tip/seat Dry or loose fluid needle packing nut Air vent clogged 	<ol style="list-style-type: none"> Refill Hold more upright Tighten Adjust or replace Lubricate and or tighten Clear vent hole
Fluid leaking from packing nut	<ol style="list-style-type: none"> Packing nut loose Packing worn or dry 	<ol style="list-style-type: none"> Tighten, but do not restrict needle Replace or lubricate (non-silicone oil)
Air leaking from air cap without pulling trigger	<ol style="list-style-type: none"> Sticking air valve stem Contaminate on air valve or seat Worn or damaged air valve or seat Broken air valve spring Bent valve stem 	<ol style="list-style-type: none"> Lubricate Clean Replace Replace Replace
Fluid leaking from fluid tip of pressure feed spray gun	<ol style="list-style-type: none"> Packing nut too tight Fluid tip worn or damaged Foreign matter on tip Fluid needle spring broken 	<ol style="list-style-type: none"> Adjust Replace tip and/or needle Clean Replace
Excessive overspray	<ol style="list-style-type: none"> Too high atomization pressure Too far from work surface Improper stroking (arcing, gun motion too fast.) 	<ol style="list-style-type: none"> Reduce pressure Adjust to proper distance Move at moderate pace, parallel to surface
Will not spray	<ol style="list-style-type: none"> No pressure at gun Fluid control not open enough Fluid too heavy 	<ol style="list-style-type: none"> Check air lines Open fluid control Thin fluid or change to pressure feed system