



## PARTS, INSTRUCTIONS & HOW-TO MANUAL

Portable and quiet | Sprays almost all paints and liquids  
Compatible with most workshop compressors

**WARNING:** Spray materials may be harmful if inhaled or allowed to come into contact with the skin or eyes. Consult the product label and Material Safety Data Sheet supplied for the spray material. Follow all safety precautions.





**CAUTION:** Well-ventilated area required to remove fumes, dust or overspray. Secure airhose to airbrush with wrench for safety and to prevent air leaks. Maximum air pressure 75 PSI.

# **vFAN GRAVITY**

www.preval.com



## 4-STEP QUICK START

-  1 Test the vFan Gravity by filling it half way with water or solvent.
-  2 The vFan Gravity is ready to test spray. Push down the airbrush trigger and air pressure will be forced out from the aircap.
-  3 While holding the trigger down, pull back. The further you pull back, the greater the volume of the product will flow.
-  4 Now that you have tested your unit for optimal results, it is time to strain and thin your paints accordingly to thinning guidelines. Clean after each use.

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# SPECIFICATIONS

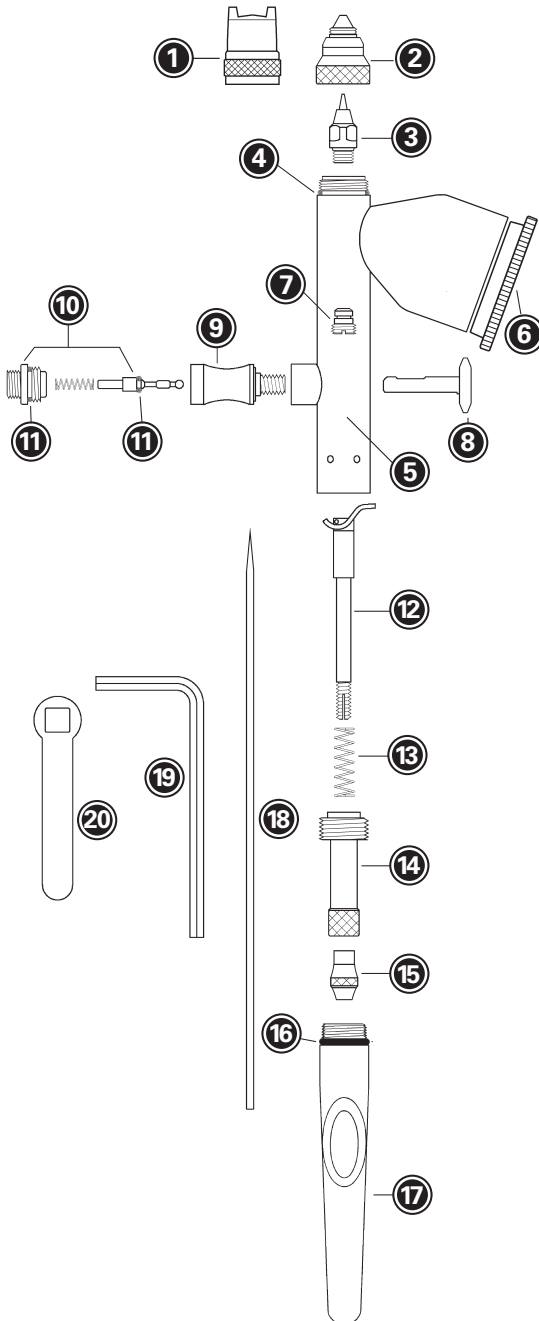
The world's first hybrid, high performance touch-up system.

- 20 PSI @ .5 CFM
- Dual action
- Head size: .9 mm (comes with the aircaps) .66 mm and .38 mm available.
- Hairline detail to 3-inch fan pattern
- Hybrid system—allows for multiple power sources, including compressor.
- No electric compressor needed, but compatible with 1/4 inch threaded intake.

# GRAVITY OPERATION

1. Press down on the trigger to control air and pull back on the trigger to control quantity of paint flow.
2. The airbrush comes with a fan aircap. Test spray on a piece of scrap. Hold the airbrush 6" away from the surface to achieve a 3" fan pattern.
3. Switching aircap is as easy as screwing the fan aircap off and replacing it with the standard aircap. Make sure there is a snug fit and there are no air leaks.
4. Speed of movement controls density of color and fading effects at beginning and end of strokes.
5. For fine detail, hold the airbrush very close to the surface, push down for air and pull back very slowly on the trigger to release a small amount of paint.
6. For background work and broad effects, hold the airbrush away from the work surface and pull back on trigger to release required amount of color.
8. For more information visit [www.preval.com](http://www.preval.com) and visit the FAQ section. See more videos at [YouTube.com/prevalspraygun](http://YouTube.com/prevalspraygun)

## DIAGRAM OF THE vFAN GRAVITY (ILLUSTRATION A)



### NO. PART

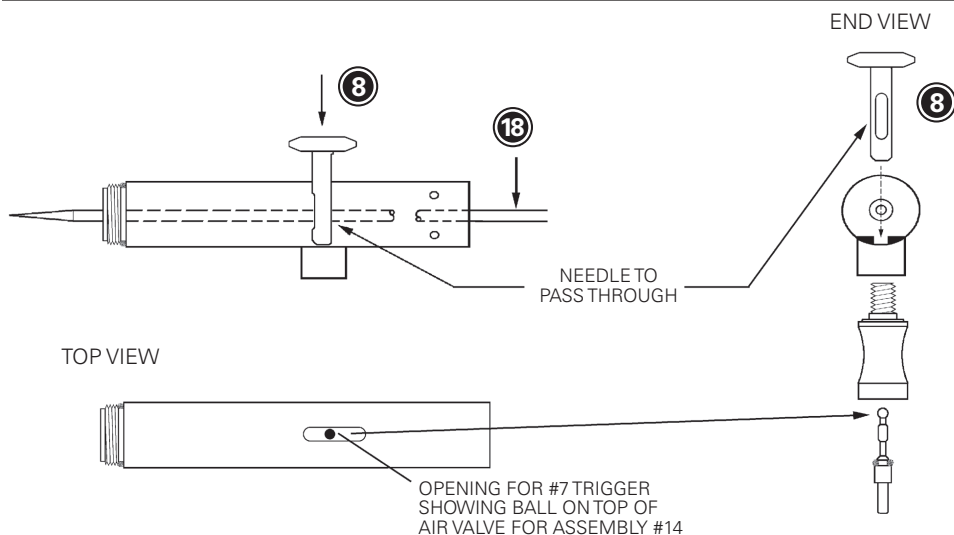
- ①** Fan Aircap  
.9mm
- ②** Standard Aircap  
.38mm, .66mm, .9mm
- ③** Fluid Tip  
.38mm, .66mm, .9mm
- ④** "O" Ring for  
vFan Gravity Shell/Body
- ⑤** Shell/Body
- ⑥** Threaded  
Cup Cover
- ⑦** Packaging Assembly
- ⑧** Trigger
- ⑨** Valve Casting
- ⑩** Air Valve  
Assembly
- ⑪** "O" Ring
- ⑫** Rocker  
Assembly
- ⑬** Needle Spring
- ⑭** Spring Housing
- ⑮** Needle Lock Nut
- ⑯** "O" Ring for  
vFan Gravity Airbrush
- ⑰** vFan Gravity Handle
- ⑱** Needle  
.38mm, .66 mm, .9mm
- ⑲** Allen Wrench
- ⑳** Fluid Tip Wrench

# MAINTENANCE GUIDE

## REMOVING/REPLACING THE NEEDLE AND HANDLE (Illustration A):

1. Unscrew the handle and loosen the locknut **(15)** by turning counterclockwise. Depress the trigger **(8)** and hold in DOWN position while removing or inserting the needle. This assures the needle will move freely through the trigger. Gently remove the needle **(18)**, rotating if necessary. Do NOT force out. Do NOT bend.
2. Inspect the condition of the needle. If it is bent or misshapen in any way, replace it with a new needle. A bent needle can damage or split the tip, causing bubbles or a rough spray pattern. The sharp end of the needle bends easily.
3. Hold trigger in DOWN position, insert the new needle into the rocker assembly **(12)**. Gently push needle through, rotating if necessary, push gently forward until the needle stops in the front of the tip.
4. Release trigger and tighten locknut by turning clockwise.

## DIAGRAM OF THE vFAN GRAVITY (ILLUSTRATION B)



## REPLACING THE TIP:

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1. Remove handle, loosen locknut ⑮ and withdraw needle about one inch.
2. Unscrew the aircap ② and remove. The tip ③ can now be unscrewed with wrench ⑳.
3. Place a new tip into position and tighten with wrench. The tip must be wrenched tight. Finally, push the needle forward until it is seated fully forward into tip.

## REPLACING PACKING ASSEMBLY:

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1. If packing assembly ⑦ becomes worn or loose, it must be tightened or replaced.
2. Tighten packing nut with small screwdriver. To reach packing nut, all internal parts must be removed.
3. Replace needle and ensure packing nut is not too tight. A slight resistance to movement is needed when needle is passed through.
4. Completely reassemble airbrush's internal parts.

## CLEANING THE AIRBRUSH:

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1. Always clean your airbrush thoroughly.
2. If airbrush is dirty, the spray will be affected or cease.
3. After use, take the product container off from the bottom of the airbrush.
  - If using water based paints, place the front of the airbrush (including the metal tip where product container attaches into) into a bowl of water and spray thoroughly. If using a solvent based or oil based paints, do the same as above. Wear protective gloves and a respiratory mask.

## USING OUR ULTRA-LIGHT COMPRESSOR:

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- Operating pressures: 0-75 PSI. Fan aircap needs 20 PSI at .5 CFM.
- 40 PSI is best for detail spraying with properly thinned paint, and 20 PSI for light touch-ups.
- Use the higher pressures for thicker material where fine detail is not critical or thin the paint to allow lower pressures.
- Excellent for spraying water-based paints as there is no oil residue buildup, as found in most compressors.
- Comes with regulator, moisture trap and automatic shut-off.

## USING EDU AND YOUR **150 FEET OF ENERGY**



For longer lasting, continuous spray, each compressor unit of 150 Feet of ENERGY allows for the unit to be submerged into water using our EDU.

- Hold compressor unit upright and remove the dusting tip from the top of the unit. Fill EDU 3/4 full with room temperature water.
- Screw the regulator valve into the top of the unit.
- Make sure the pressure control head is OFF to prevent energy from escaping.
- Attach one end of the vFan Gravity air hose to the regulator valve and feed the other end of the air hose into the bottom of the EDU top, placing the 150 Feet of ENERGY fully under water.
- Screw the other end of the airhose into the bottom of the vFan Gravity.
- Adjust the regulator valve and turn clockwise to control energy output. Energy pressure increases as the pressure control head is turned clockwise. Secure top of EDU and you are ready to spray.
- Recommended usage is for 3-5 continuous minutes, until unit is depleted. At that point, switch to the other unit of 150 Feet of ENERGY.
- When you are finished, always release the pressure by turning the pressure regulator counter clockwise and removing 150 Feet of ENERGY from the water.



# THINNING GUIDE

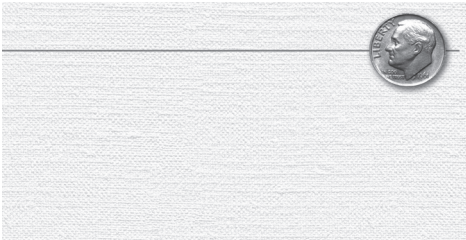
The following are estimated values from evacuation testing of one 7-oz. 152a power unit per type of paint.

Type of Paint Used	Dilution	Thinner Used	Coverage (Sq. Ft.)	Volume Used (oz.)
Duster w/out Extension Wand	N/A	N/A	150	7.0
Black Acrylic Air-Brush Paint°	16 to 1	Water	13.7	1.25
White Latex Flat°	2 to 1	Latex X-Tender® or Water	17.8	0.5
Clear Lacquer**	3 to 1	Lacquer Thinner	47.0	0.5
Clear Varnish Semi Gloss**	3 to 1	Mineral Spirits	40.2	0.5
Clear (Porch) Gloss Polyurethane**	3 to 1	Mineral Spirits	41.3	0.5
Black Lettering Enamel^	2 to 1	Mineral Spirits	29.2	1.0

\*\*Oil-Based    °Water-Based    ^One Shot Brand

# SPRAY DETAIL

1/16 INCH TO 3 INCH FAN DETAIL:



1/16" HAIRLINE



3" FAN

# TIPS AND TRICKS

The vFan Gravity is the world's first high-performance hybrid airbrush system. The double-action, internal-mix feature permits flexibility in regulation of paint and airflow without work stoppage.



1. For long lasting, continuous spray with our Preval 150 Feet of ENERGY unit, use our EDU.
2. Always test spray and clean out your airbrush. Test spray on a piece of scrap or use a plastic milk carton with one of the sides cutout and put paper towels inside (keep reusing the milk carton to absorb leftover paint).
3. You can buy metal blanks online to practice on. Scrap wood, metal and plastic panels are great, depending on the surface you wish to spray.
4. Using on food gives unique results but always use an electric and properly filtered compressor.
5. Automotive touch-ups are a breeze with the vFan Gravity.
6. Go anywhere, anytime and enjoy the portability of the 150 Feet of ENERGY.
7. Residential touch-ups for professional and general contractors are quick and easy.
8. A Do-It-Yourselfer's dream.

Visit the Preval youtube page for more tips and tricks. [www.youtube.com/prevalspraygun](https://www.youtube.com/prevalspraygun)

# TROUBLE SHOOTING

PROBLEM	HOW TO SOLVE
Paint is not coming out of the vFan Gravity consistently or not at all.	<ol style="list-style-type: none"><li>1) Tip may be clogged. Take the head assembly apart and spray it with 150 Feet of ENERGY to clean it. If that doesn't work, clean with Q-tips® and thinner.</li><li>2) The diptube is clogged. Take strainer off of diptube and clean; spray 150 Feet of ENERGY through the diptube or replace the diptube.</li><li>3) Clean the airbrush as it may be clogged.</li><li>4) Check to see if the needle or tip is damaged.</li></ol>
There is no pressure coming out of the vFan Gravity.	<ol style="list-style-type: none"><li>1) Check to make sure the regulator valve is sealed correctly and control knob turned clockwise.</li><li>2) Check to make sure the trigger is seated correctly.</li><li>3) Make sure hose has no kinks in it.</li><li>4) Disassemble the airbrush, clean it and reassemble, making sure all parts are in the proper place.</li><li>5) Make sure 150 Feet of ENERGY is not empty.</li></ol>
When I spray paint, the paint is coming out splattered or crooked.	<ol style="list-style-type: none"><li>1) Check the tip of the needle with a cotton ball to make sure the tip is not bent. The tip is fragile and can bend easily.</li><li>2) Check tip with cotton ball to make sure the tip is not cracked.</li><li>3) Clean entire airbrush thoroughly with thinner and dry with 150 Feet of ENERGY. If there is paint that can't be removed, you must soak the parts separately in solvents.</li></ol>

If you have questions, please email [info@preval.com](mailto:info@preval.com)

## THE vFAN GRAVITY FREQUENTLY ASKED QUESTIONS

### *1. HOW DO I USE THE FAN GRAVITY AIRCAP?*

The fan aircap is designed like a paint gun used for painting cars. The tip is designed to give the user a better, more even result over large areas. It can be turned in any angle to give you the most control (up to 3 inches).

### *2. HOW DO I USE THE STANDARD AIRCAP?*

The standard aircap is used for more precise control and to achieve very fine lines up to an inch. Simply screw off fan cap and screw on standard cap. As you get closer to the surface, the greater the detail.

### *3. WHAT PSI DOES AN AIRBRUSH NEED TO WORK?*

It depends on how thin the paint is: Thinner paints use 20 or higher PSI and thicker paints use up to 75 PSI.

### *4. WHAT ARE THE BEST CONDITIONS TO WORK IN?*

Dry, calm areas are best. The more wind there is, the more overspray there will be and the harder it will be to control the paint's path. Humidity, heat and cold will affect paint curing.

### *5. CAN I USE THE vFAN GRAVITY WITH A COMPRESSOR?*

Yes, the vFan Gravity works with our Ultra-Light Compressor and most compressors. Our airhose attaches to a standard 1/4 inch threaded intake.

### *6. IS THE vFAN GRAVITY SAFE TO USE INDOORS?*

Yes, as long as it is a well-ventilated area. Using a mask is always recommended with spray paints or chemicals.

### *7. WHAT IS THE BEST METHOD FOR USING THE vFAN GRAVITY WITH 150 FEET OF ENERGY?*

The best method is with our EDU Unit.

### *8. WHAT CAN I SPRAY WITH THE vFAN GRAVITY?*

Almost anything (oils, liquids or paints) thinned to the manufacturers' recommended thinning guidelines. With regards to viscosity, keep the liquid a bit thicker than milk.

### *9. IS THE vFAN SAFE FOR FOOD?*

Yes, when using the vFan gravity with a properly filtered air compressor, it is safe for spraying food as long as the product you are spraying is also safe. We don't recommend using 150 Feet of ENERGY units when spraying foods.

**10. HOW THICK OR THIN OF A LINE CAN I EXPECT TO GET WITH THE vFAN GRAVITY?**

With the vFan Gravity, you can expect up to a 3-inch fan spray pattern. With the standard tips you can expect 1/16-inch thin lines and up to 1-inch round thick lines.

**11. HOW LOUD IS THE vFAN GRAVITY AND ULTRA LIGHT COMPRESSOR?**

The 150 Feet of Energy power source is practically silent. The only sound that can be heard is the air coming out of the tip of the airbrush, which is a soft hiss or comparable to a kitchen mixer.

**12. CAN I USE ANOTHER COMPANY'S TIPS/NEEDLES IN THE vFAN GRAVITY?**

No. Each company uses very specific lengths and diameters on their tips and needles. They are not compatible with other airbrushes.

**13. WHY IS THE UNIT OF 150 FEET OF ENERGY GETTING SO COLD?**

The power from the can is a liquid propellant called 152a. When the propellant is released, the liquid state turns into a gas. As this process occurs, the propellant drops in temperature and cools the can. Use our patent-pending EDU. When the unit is submerged in room temperature water, the increase in liquid mass insulates the 150 Feet of ENERGY.

**14. HOW DOES THE vFAN GRAVITY WORK?**

The airbrush must be attached to an air source or 150 Feet of ENERGY. In this system, we offer two cans of 150 Feet of ENERGY for portability and ease. We also recommend properly filtered air compressors for larger projects. To use the vFan Gravity, push down on the trigger to start the airflow. With the trigger pushed down, begin pulling back to spray the paint. The farther back you pull the trigger, the more paint will be released.

**15. WHAT TYPES OF SURFACES CAN BE AIRBRUSHED?**

Any surface that can hold paint can be airbrushed. You must ensure what you are spraying is compatible with the surface you are spraying. Sanding surfaces first and using primers is always a good idea.

**16. WHY USE A vFAN GRAVITY INSTEAD OF A LARGE AIRGUN, PAINTBRUSH OR ROLLER?**

The vFan Gravity is used to achieve a softer, more even look with no visible touch-up marks, paintbrush strokes or roller marks, on small areas and when little to no overspray is desired. Plus, you will consume much less paint.

### ***17. SHOULD I SOAK MY AIRBRUSH WITH GUN CLEANER?***

Soaking the parts of the airbrush that have paint on them is ok. But soaking the whole airbrush for too long might remove the lubrication that helps all the parts move smoothly. Also, soaking dissolves paint and may allow it to settle in to harder-to-reach areas. It is preferable to clean the airbrush in pieces with the appropriate solution before storing.

### ***18. WHAT MAKES THE vFAN GRAVITY CLOG?***

Clogs in your vFan Gravity are caused by old, dried bits of paint or by paint that has bigger particles in it than the airbrush can spray. Always use a strainer. To avoid clogging, you should strain all paints prior to putting into the product container with a strainer, a paint sleeve, a stocking or whatever will extract large particles or contaminants...and make sure that what you are spraying is thinned correctly.

### ***19. HOW DO I SPRAY FINE LINES?***

Use the standard aircap. Get close to what you're going to spray and use less paint. You can move faster as you spray.

### ***20. HOW DO I ACHIEVE AN EVEN COAT?***

Use the fan aircap. Overlap your passes by 40% to 75%.

### ***21. DO I NEED TO LUBRICATE MY vFAN GRAVITY?***

It's a good idea to lubricate your airbrush regularly. Lubrication keeps the airbrush parts working smoothly. Only use proper lubrication.

### ***22. WHY ISN'T PAINT STICKING TO METAL OR PLASTIC?***

Usually when paint isn't sticking to a surface, it is because the paint has nothing to "grab" onto. Scuffing up the glossy finish with suggested sandpaper or lightly with an SOS pad will help. Adhesion promoter or primers will also help. After scuffing, wipe the surface with a tack cloth and a degreaser.

### ***23. IF I HAVE ANY QUESTIONS OR I NEED REPLACEMENT PARTS, WHO DO I CONTACT?***

We take pride in our customer service. Call us toll-free at 877-753-0021 or email us at [info@preval.com](mailto:info@preval.com). We have everything you need or will direct you to a local retail store or distributor to assist you.

# PRECAUTIONS

## 150 FEET OF ENERGY

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Contains 1,1,-difluoroethane. Contents under pressure. Vapor may flash, burn or explode if ignited. Product vapor that is burned or comes into contact with very hot surfaces may decompose, producing corrosive and toxic gases. Compressor unit exposed to direct sunlight or otherwise heated may burst.

**Safe Handling Procedures:** KEEP CAN OUT OF THE REACH OF CHILDREN. Use outdoors or in a well-ventilated area with a constant, abundant supply of fresh air. Do not allow product vapor to accumulate. Do not use, store or dispose of near sources of heat, flames, sparks or other hot surfaces. Do not puncture, incinerate (burn) or store can above 120°F (49°C). Dispose of in accordance with all applicable federal, state and local regulations.

**Health Hazards:** Excessive inhalation of vapor or intentional misuse by concentrating and inhaling vapor may be harmful or fatal. Overexposure may cause central nervous system damage. Contact with liquid may cause frostbite.

**First Aid:** Always get prompt medical attention for ANY ill effects that persist or appear later. If contact occurs with eyes or skin, IMMEDIATELY treat for frostbite. If inhaled and overcome, IMMEDIATELY get victim fresh air and medical attention. If breathing is difficult, give oxygen; if breathing stopped, apply artificial respiration.