

*Eastwood*

DO THE JOB RIGHT.

Item #15334

# 5-STAGE ELECTRIC TURBINE HVLP PAINT SYSTEM INSTRUCTIONS



# SAFETY INFORMATION



## READ INSTRUCTIONS!

Thoroughly read and understand this instruction manual before using. Save manual for future reference.



## FIRE AND EXPLOSION HAZARD!

- DO NOT allow flammable paint spray or vapors to enter the air intake of the Turbine Unit! Keep the Turbine Unit away from the painting area and in an elevated, secure position at all times.
- Never use a coating or solvent with a flash point lower than 70°F (21°C). If unsure, refer to the MSDS for the particular products in question.
- Do Not use near sparks, open flame or other potential ignition source.



## HEALTH HAZARD!

- Avoid breathing vapors produced by Spray Gun. Always wear appropriate NIOSH approved breathing apparatus and use in a well ventilated area.
- Wear appropriate eye protection.
- Wear solvent-resistant gloves.
- This device emits high sound levels, the use of appropriate hearing protection is strongly recommended. Never operate the Turbine Unit without Paint Gun attached to hose.



## ELECTRIC SHOCK HAZARD!

- Never operate or store unit in damp or wet conditions.
- If an extension cord is required, a 25' cord is recommended not to exceed 50'. All extension cords must be 14 AWG or greater.
- Always unplug Turbine Unit before refilling gun cup, cleaning or servicing the Paint Gun'

The **Eastwood 5-Stage Electric Turbine HVLP Paint System** is a powerful 5-Stage, fully self-contained, lightweight unit that provides clean, dry, warm air to the HVLP type spray gun specifically designed to withstand the demands of the avid hobbyist and semi-professional. The true HVLP type gun design is fully certified and the unique annular fan control ring allows for precise adjustment and is fully certified to use no more than 10 PSI.

## INCLUDES

- |  |                                |                                 |
|--|--------------------------------|---------------------------------|
| (1) HVLP Paint Gun with 0.8mm Needle/Nozzle set installed                      | (1) 24' x 3/4" Air Supply Hose | (1) Air Feed Tube w/Check Valve |
| (1) 1 Qt. Gravity Feed Paint Cup   | (1) Wrench                     | (1) Air Feed Fitting            |
| (1) 120 V/AC, 15 Amp, double insulated Turbine unit with 6', 14 Ga. power cord | (1) Cleaning Brush             | (1) Replacement Check Valve     |
|  | (1) Paint Gun Lube             |                                 |



## SPECIFICATIONS

### Paint Gun

- True HVLP with .8mm Needle/Nozzle set
- 1 Qt. Gravity Feed Paint Cup
- Operates on less than 10 PSI

### Turbine Unit

- 120 Volt AC, 15 Amp power requirements
- 10 PSI output
- Gun Supply air dried and warmed to 20°F above ambient intake air temperature
- 5-Stage Turbine
- Built-in air bleed system
- Gun Storage Receptacle
- 130 CFM output

# TURBINE GUN SET-UP

Remove all components from carton, identify them and become familiar with their purpose. PLEASE READ INSTRUCTIONS CAREFULLY.

## NEEDLE/NOZZLE SELECTION

It is important to remember that the highly efficient design of this turbine painting system delivers a much higher volume of air to the Turbine paint gun than a conventional compressed air paint gun. As result, the required Needle/Nozzle sizes for the Turbine gun will be much smaller than those of a conventional, compressed air paint gun when spraying the same material. The Eastwood Turbine Gun is assembled with a 0.8mm Needle/Nozzle set and Air Cap as standard. All others denoted by \*(1.0mm, 1.3mm, 1.5mm & 1.8mm) are available separately.

Use the following chart as a guide for selecting the correct Needle/Nozzle & Air Cap sizes:

COATING	NEEDLE/NOZZLE SIZE
Primers	1.5mm*
Primer Sealers	1.3mm* or 1.5mm*
Epoxy Primers	1.8mm*
Solvent Based & Urethane Basecoats	0.8mm, 1.0mm*, 1.3mm*
Fine Metallics & Pearls	0.8mm, 1.0mm*
Waterbourne-Basecoats	0.8mm, 1.0mm*
Enviro-Base	0.8mm, 1.0mm*, 1.3mm*
Clearcoats/Low Solid	0.8mm, 1.0mm*, 1.3mm*
Clearcoats/Med/High Solids	1.0mm*, 1.3mm*
Single Stage Urethane	1.5mm*

\*Available Separately

## PAINT CUP SET-UP

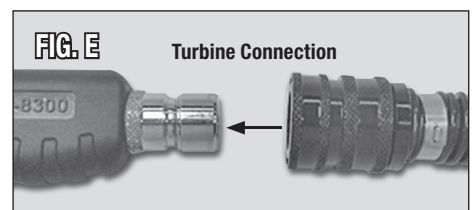
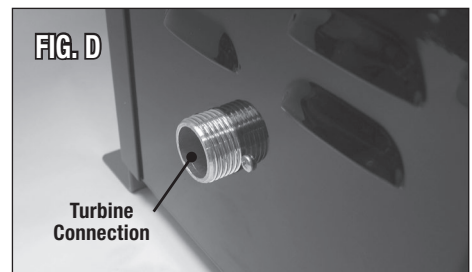
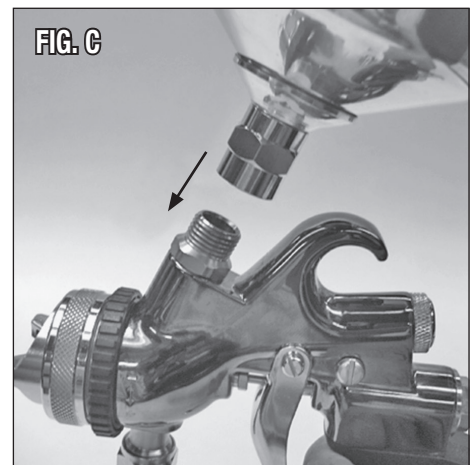
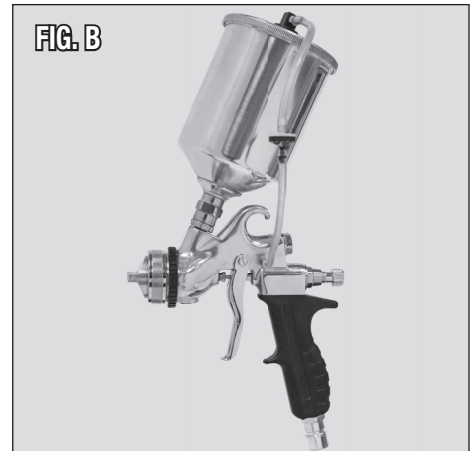
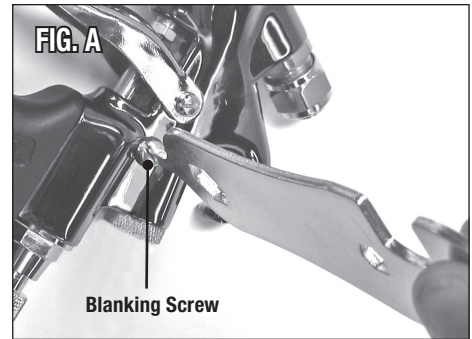
- For most coatings using the standard, as supplied 0.8mm or optional 1.0mm or 1.3mm nozzle, the Turbine Paint Gun may be used as configured.
- If using thicker coatings requiring the use of the optional 1.5mm or 1.8mm Needle/Nozzle sets or if additional Turbine Gun performance is desired, install the optional Air Feed Connector system.

To install:

- Remove the Stainless Steel Screw located on the left side of the Gun Body and replace it with the barbed air fitting (**Fig A**).
- Select the Paint Gun Lid with the barbed air fitting.
- Slip the Clear Plastic Hose onto both barbed air fittings making sure the black half of the check valve is directed toward the paint gun cup (**Fig B**).
- Attach Paint Cup by threading onto the male paint inlet fitting at the top of the gun (**Fig C**).  
**NOTE:** Several popular disposable paint cup adapter systems fitting the common M16x 1.5 thread will work well on this gun.

## TURBINE & HOSE SET-UP

- Attach the Air Supply Hose to the Turbine Unit:
    - Thread the female fitting on the end of the Air Supply Hose onto the male fitting of the lower left side of the Turbine Unit (**Fig D**).
    - Hand-tighten securely.
  - Connect opposite end of Air Supply Hose to Paint Gun:
    - Pull back on the spring-loaded ring of the larger female quick-disconnect fitting.
    - Slip in the, smaller male quick-disconnect fitting in the bottom of the Paint Gun.
    - Release ring (**Fig E**). The gun should be connected to hose. Pull gently to test.
- NOTE:** an identical fitting is attached to the top of the Turbine Unit for gun storage.





## PREPARATION

- The HVLP Paint Gun is assembled with a 0.8mm Needle/Nozzle set which will accommodate a wide range of coating viscosities.
- Follow label instructions and thoroughly mix the paint or coating material, thinning or reducing may be necessary. Follow coating manufacturer's instructions for thinning.
- The use of a Paint Strainer when filling cup is strongly recommended to avoid possible Needle/Nozzle blockage (**Fig F**).

## GUN SETTINGS

- **Fan Pattern Orientation** - Make sure the Air Cap is properly oriented to produce a vertical fan spray pattern by viewing the HVLP Paint Gun from the front. (**Fig G**). Note: This is the most common setting. To adjust to a horizontal pattern, rotate Retaining Ring by rotating counter-clockwise slightly, adjust Air Cap then re-tighten Retaining Ring.
- **Fan Pattern Size & Shape** – For larger Fan Pattern, Adjust Retaining Ring toward the “ + ” by rotating downward. To reduce Fan Pattern, Adjust Retaining Ring toward the “ - ” by rotating downward (**Fig H**).  
**NOTE:** fully rotating toward the “ - ” will produce a round, focused spray pattern.
- **Fluid Control Setting** – The Fluid Control regulates the distance the Needle travels and the amount of paint or coating flowing through the gun. Note: While a wider opening is generally desired, a fine adjustment must always be made due to many variables including; paint viscosity and composition, air temperature and ambient humidity, barometric pressure and more. To adjust, rotate the Fluid Control Knob outward (counter-clockwise as viewed from the rear) to increase flow and turn inward to reduce flow (**Fig H**).

**IMPORTANT NOTE BEFORE PAINTING:** It is always best to test spray on sheets of cardboard or masking paper with the actual coating you will be applying while making your adjustments to become familiar with the gun and achieve the ideal Fluid Control Setting. A small amount of product wasted at this point can avoid great disappointment in your results and the need to re-do your work later.

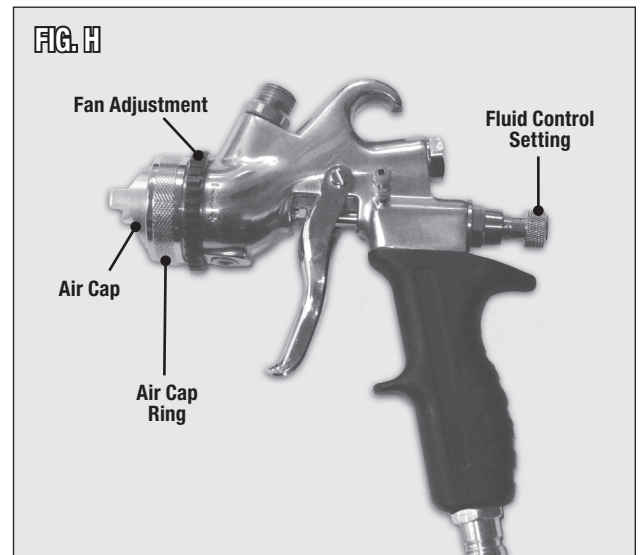
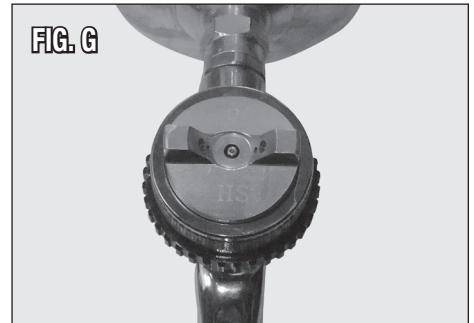
## OPERATION

- Place a small amount of mild solvent compatible with the coating about to be used in the Paint Cup then run it through the HVLP Paint Gun to remove any residual manufacturing oils or lubricants present in the Paint Gun or Cup.
- Plug power cord into suitable electrical source.

**IMPORTANT NOTE BEFORE STARTING:** Be sure that the Turbine Unit is

positioned on a secure, level surface as far from the paint spray area as possible and the air intake of the Turbine unit will not draw in paint spray.

- Turn Power Switch located on the front of the Turbine Unit to the On position.  
**NOTE:** A stream of warm, bleed air will flow out of a hole on the upper right side of the Turbine Unit. This is excess air bleed and is normal
- Depress Trigger of HVLP Paint Gun to start paint spraying keeping the Nozzle approx 6" to 8" from the work surface.
- Keep the nozzle at an even distance from and parallel to the work surface to provide an even coating. Avoid having the gun travel in an arc as this will cause uneven coating thickness.
- Some spray pass overlap is normal and varies with the individual coating being applied. A 50% overlap is a good starting point for this gun with a medium bodied coating.
- When between coatings or when finished spraying, turn off the Turbine Unit as soon as possible. Failure to do so can overheat the motor and cause permanent damage.



# CLEAN-UP

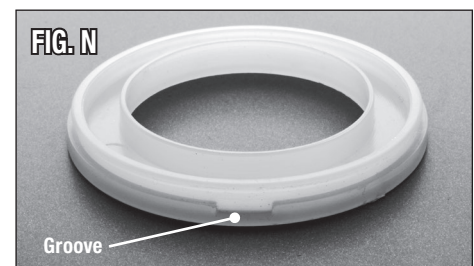
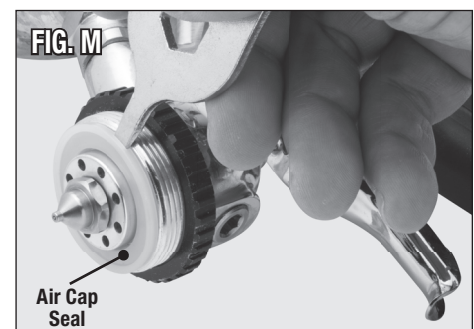
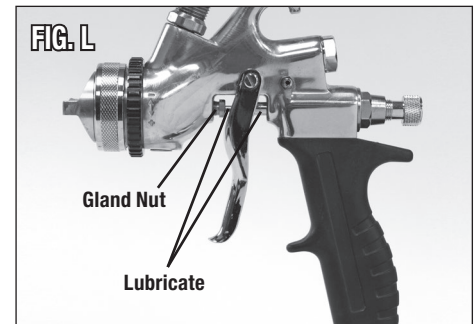
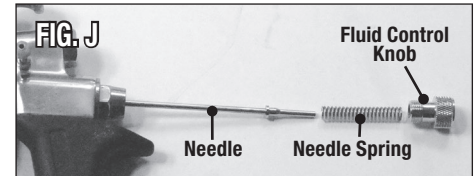
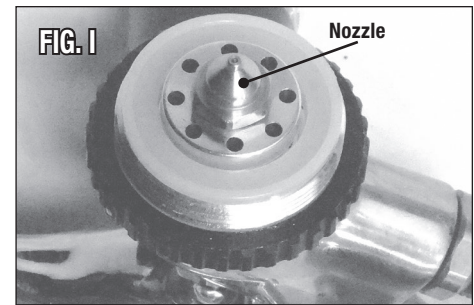
- Unplug Turbine Unit power cord.
- Remove Paint Cup and pour unused coating into proper container.
- Remove Air Supply Hose from HVLP Gun.

## PAINT GUN BASIC DISASSEMBLY FOR NORMAL CLEANING

1. Empty any unused material (paint) from the cup and wash out any residue with an appropriate solvent compatible with the coating, or water if using water-based material. Partially fill the cup with solvent and run through the gun to flush out the material passages.
2. Remove the Air Cap (**Fig H**) and clean. Ensure that all the air holes in the air cap are clear.
3. Using a brush and solvent, remove any paint deposits on the outer surface of the Nozzle (**Fig I**).
4. Unscrew and remove the Material Flow Adjusting Screw (**Fig J**).
5. Remove the Needle spring (**Fig J**).
6. Pull the trigger and then pull the needle (**Fig J**) out through the back of the spray gun.
7. Remove the Nozzle with the Wrench (Included) (**Fig K**).
8. Clean both Nozzle and Needle assembly using appropriate solvent or water and a brush.
9. Make sure to lube (included) the Needle spring, the Air Valve Stem and the Gland Seal to prevent the needle from sticking.
10. To adjust the Gland Nut (**Fig L**), tighten until the needle sticks slightly when trigger is pulled, then back off the nut about 1/8 turn. Do not over-tighten the gland nut or the needle will stick. Do not under tighten or the Gland Seal will leak.
11. Check the Cup Top Gasket and replace if damaged. Always seat the cup top gasket flat in the cup groove. Failure to do this will allow the cup to drip and impair the spray pattern due to loss of cup pressure.

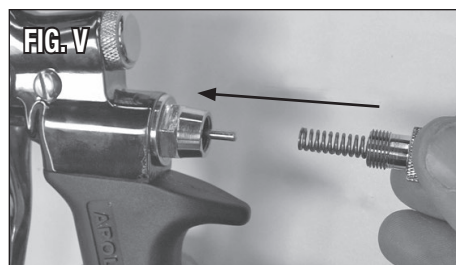
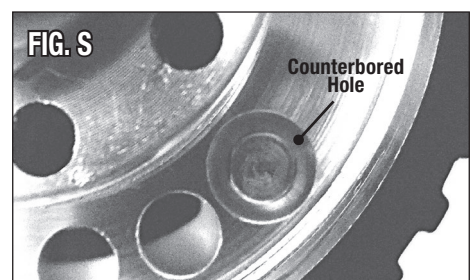
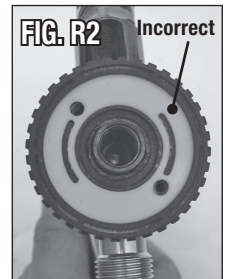
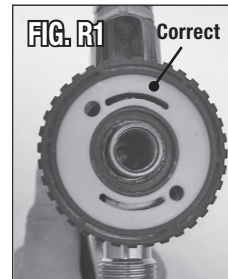
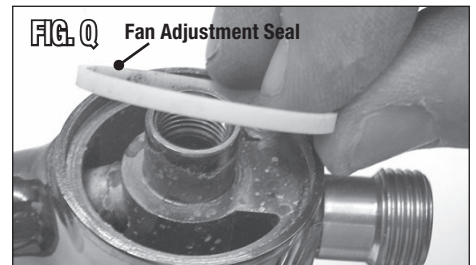
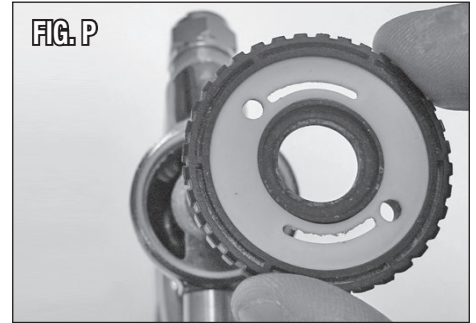
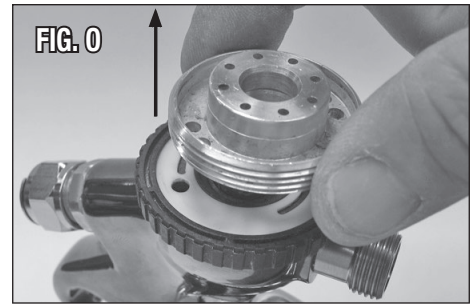
## ADVANCED DISASSEMBLY FOR REBUILD/REPAIR:

1. Follow steps above for partial cleaning.
2. To further disassemble the spray gun now that you have already removed the Air Cap Ring, Air Cap, Fluid Nozzle and Needle assembly, locate the Air Cap Seal. To remove the Air Cap seal, lay the Spray Gun on its side (**Fig M**).
3. Locate the small groove on the Air Cap Seal (**Fig M**). You can rotate the groove to a comfortable position for removal. (3 o'clock or 9 o'clock).
4. Place the flat tip of the wrench (included) in the Air Cap Seal groove. Push in and pry up until the Air Cap Seal pops out (**Fig N**). (Clean if necessary).
5. Remove the Air Distributor (**Fig O**) and clean if necessary.
6. Remove the Fan Adjustment Ring and Air Distributor Plate (**Fig P**). The Air Distributor Plate is attached to the Ring. These two pieces separate. Clean them both if necessary.  
**NOTE:** Make sure you reassemble the two pieces correctly or you will not have any fan pattern adjustment.
7. Remove the Fan Adjustment Seal (**Fig Q**). Clean if necessary.



## REASSEMBLY FOR REBUILD/REPAIR

1. Insert the Fan Adjustment Seal (**Fig Q**).
2. Insert the Fan Adjustment Ring and Air Distributor Plate (**Fig P**). **NOTE:** If you have separated these two pieces it is critical that the white Air Distributor Plate is correctly re-inserted into the Fan Adjustment Ring. Note that the open slots on the Air Distributor Plate must be visible through the holes of the Fan Adjustment Ring. Using the back end of the Needle assembly, move the Distributor Plate so that the round screw hole is at the 5 o'clock position. **DO NOT** put the Distributor Plate and Fan Adjustment Ring together at this point.
3. Place the Air Distributor on top of the paired Fan Adjustment Ring and Air Distributor plate. Align the screw hole in the Air Distributor with the holes in the Fan Adjustment Ring and Air Distributor Plate (**Figs R1 & R2**).
4. Place Air Cap Assembly over Stainless Steel Locating Pin (**Figs S & T**).
5. Screw the Fluid Nozzle back onto the Spray Gun body, finger tight. Rotate the Fan Adjustment Ring to be sure it rotates freely and easily. Tighten the Nozzle slightly more with the wrench (included). Rotate Fan Adjustment Ring again. Do not over tighten the Fluid Nozzle as it will stop the Fan Adjustment Ring from rotating. If too tight, back off slightly. Be sure that the Fluid Nozzle is not too loose or leaking will occur.
6. Insert the Air Cap Seal (**Fig U**). To insert, observe both sides of the seal. One side should have three small circles. This side goes toward the Spray Gun. Snap the Air Cap Seal onto the Air Distributor.
7. Push the needle back into the spray gun.
  - Insert the Needle spring into the Material Adjustment Screw (**Fig V**).
  - Install the Material Adjustment Screw with Needle Spring.
  - Install air cap and air cap ring. Spray gun is now re-assembled and ready to use.





# MAINTENANCE

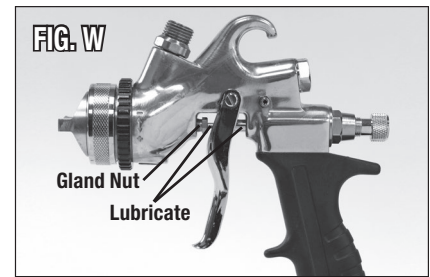
## PAINT GUN

After reassembly after cleaning or periodically with frequent use, apply Gun Lubricant (included) to lubricate the Air Valve Stem and Gland Seal to prevent the Needle from sticking (**Fig W**).

## TURBINE UNIT

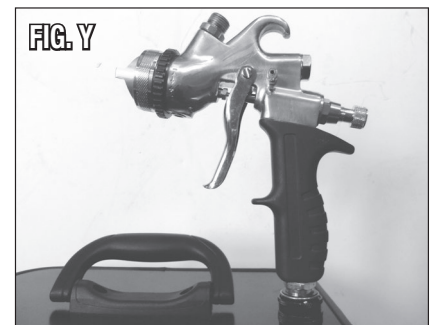
The motor has sealed bearings that are pre-lubricated and no internal maintenance is necessary or recommended. Clogged Air Intake Filters can cause motor overheating and diminished spray capability. Every 50 hours of operation (more often in dirty conditions) the 2 replaceable Air Intake Filters should be inspected and cleaned or replaced.

- To remove filters: Remove Air Filter Housing Acorn Nuts, pull off Air Filter Housings then remove Filters (**Figs X1 & X2**). When replacing foam filters, align the holes and slide them over the threaded posts first then re-install Housings.
- When checking filters, also inspect the Power Cord and Air Feed Hose for cuts, kinks or any other damage.



## STORAGE

- Insert the Air Coupler of the Paint Gun Handle into the Receptacle located on top of the Turbine Unit cabinet (**Fig Y**).
- Cover with a plastic trash bag and keep entire unit in a clean, dry environment.



## TROUBLESHOOTING

- **Gun produces an uneven spray pattern or fan**
  - Paint or film buildup on Air Cap blocking air holes  
Unplug Turbine Unit and clean buildup from Air Cap
- **Gun “spits” or sputters; discharges large droplets**
  - Paint or film buildup on Needle & Nozzle  
Unplug Turbine Unit and clean buildup from Needle & Nozzle. Note: Use of solvent may be helpful, removal of the Nozzle may be necessary
- **Gun sprays only a small amount of paint or none at all**
  - Clump or piece of paint film blocking paint path  
Unplug Turbine Unit; remove Paint Cup. Remove blockage from paint path of gun then strain paint or coating to remove clumps or film

## ACCESSORIES

- # 10041Z - Eastwood PRE Painting Prep, Aero.
- # 12846Z - Aerosol Injected Cleaner
- # 15335 - 0.5mm Needle/Nozzle Set
- # 15336 - 0.8mm Needle/Nozzle Set
- # 15337 - 1.0mm Needle/Nozzle Set
- # 15338 - 1.3mm Needle/Nozzle Set
- # 15339 - 1.5mm Needle/Nozzle Set
- # 15340 - 1.8mm Needle/Nozzle Set

- # 15343 - 250cc Aluminum Cup w/ Air Feed Tube & Check Valve
- # 15344 - 250cc Aluminum Cup w/ Teflon Lining, Air Feed Tube & Check Valve
- # 15345 - 600cc Aluminum Cup w/ Air Feed Tube & Check Valve
- # 15346 - 600cc Aluminum Cup w/ Teflon Lining, Air Feed Tube & Check Valve
- # 15347 - 1000cc Aluminum Cup w/ Air Feed Tube & Check Valve
- # 15348 - 1000cc Aluminum Cup w/ Teflon Lining, Air Feed Tube & Check Valve
- # 15349 - Replacement Air Inlet Filters (2 Pack)
- # 50207 - DeKups #11 Adapter

- # 29954 - DeKups Starter Set
- # 14049 - Gunner Cup Adapter
- # 11549 - 3M PPS #2 Adapter
- # 11455 – 11456 - Respirators
- # 20403 – 20406 - Coveralls

**If you have any questions about the use of this product, please contact**

Eastwood Technical Assistance Service Department: 800.544.5118 >> email: [techhelp@eastwood.com](mailto:techhelp@eastwood.com)  
PDF version of this manual is available online >> [eastwood.com/15334manual](http://eastwood.com/15334manual)

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