

# **Polymak<sup>®</sup>**

Solutions Provider For Industry & Trade

## **ELECTRIC PAINT SPRAYER**

# **PM60ESG**





INSTRUCTION MANUAL




**Read and follow all safety precautions in instruction manual.**

## Original instructions

### Symbol Explanation

	WARNING - To reduce the risk of injury, user must read instruction manual
	The product complies with the applicable European Directives and an evaluation method of conformity.
	Safety Class II
	Do not dispose of electrical equipment in the Domestic waste.

Technical Data	
Max. viscosity	50 DIN-s
Voltage	220-240V
Power	400W
Double insulation	
Sound pressure level	84 dB(A) [ K =3dB (A)]
Sound power level	95 dB(A) [ K =3dB (A)]
Oscillation level	$< 2.5\text{m/ s}^2, K=1.5\text{m/ s}^2$
Weight	1.40Kg



**WARNING! Read all safety warnings and all Instructions .**

**operating the equipment. Save these instructions**



# GENERAL POWER TOOL SAFETY WARNINGS

**WARNING** Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

**Save all warnings and instructions for future reference.**

*The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.*

## 1) Work area safety

**a) Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

**b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*

**c) Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

## 2) Electrical safety

**a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*

**b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*

**c) Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

**d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*

**e) When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

**f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

## 3) Personal safety

**a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*

**b) Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

**c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*

**d) Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

**e) Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

**f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*

**g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

## 4) Power tool use and care

## Original instructions

---

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

### 5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

### 6) Addition Safety for Spray Gun

- a) **Do not use guns for spraying flammable materials.**
- b) **Beware of any hazard presented by the material being sprayed and consult the markings on the container or the information supplied by the manufacture.**
- c) **Do not spray any material where the hazard is not known.**
- d) **Always wear a dust mask while spraying.**
- e) **Recommend to wear ear protection during the operation.**
- f) **Do not clean guns with flammable solvents.**
- g) **Warning! Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.**
- h) **If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the service organization.**
- i) **If the carbon brushes need to be replaced, have this done by a qualified repair person (always replace the two brushed at the same time).**

## Original instructions

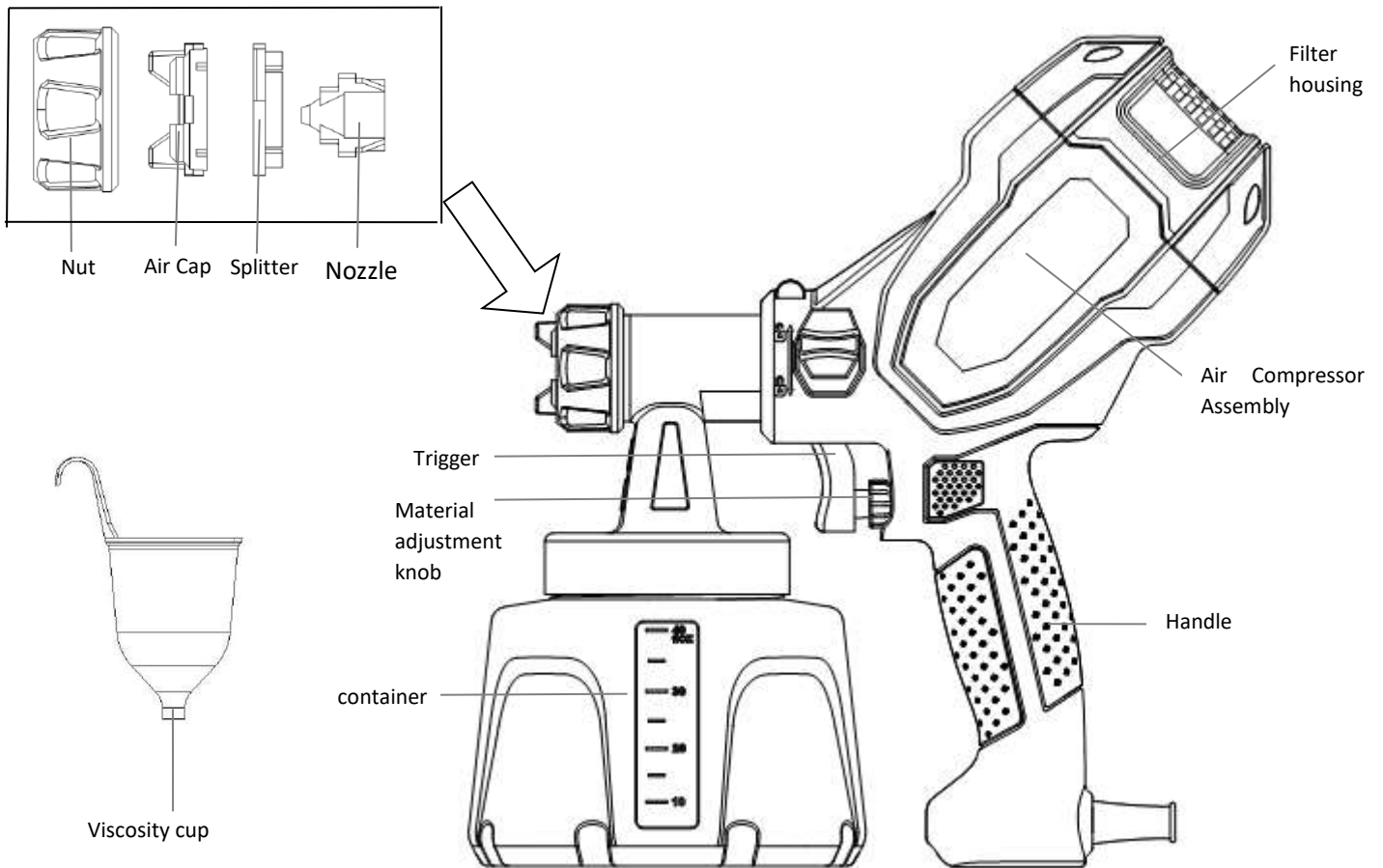
### Coating Material Suitable for Use

Water- and solvent-based paints, emulsion paint, finishes, primers, 2-component paints, Clear finishes, automotive finishes, staining sealers and wood sealer-preservatives.

### Coating Material Not Suitable for Use

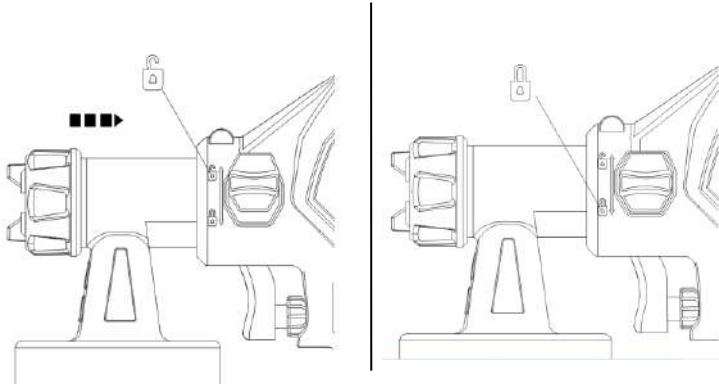
Materials that contain highly abrasive components, facade paint, sealant, caustic solutions and acidic coating substances.  
Coating material with a flash point below 21°C.

## Components



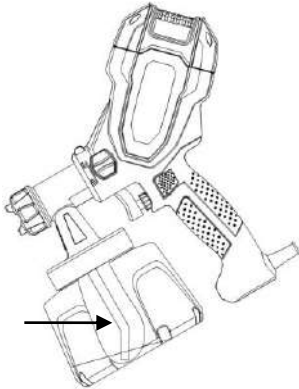
# Setup

1. Turn both knobs on both sides of the Air Compressor Assembly to the "Unlock" position, and Insert the spray gun into the Air Compressor Assembly into place,
2. Turn both knobs on both sides of the Air Compressor Assembly to the "Lock" position to lock the two pieces into place.

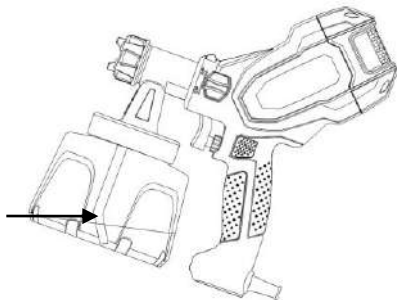


## Aligning the Suction Tube

If you are going to be spraying in a downward direction, the angled end of the suction tube should be pointing toward the front of the gun.



If you are going to be spraying in an upward direction, the angled end of the suction tube should be pointing toward the rear of the gun.



By pointing the suction tube in the proper direction, you will not have to refill the container as often..

## Material Preparation

Before spraying, the material being used may need to be thinned with the proper solvent as specified by the material manufacturer. Never exceed the thinning advice given by the coating manufacturer.

Do not use materials with a flashpoint below 70°F (21°C). Follow the instructions below.

1. Stir the spraying material thoroughly before measuring viscosity.
2. Dip the viscosity test cup completely into the spraying material.



3. Hold the test cup up and measure the time in seconds until the liquid empties out. This time is referred to below as

Runout Time.

### Thinning Chart

Material	Runout Time
1) Oil enamel	25-40
2) Oil based primer	30-45
3) Oil stain	No thinning required
4) Clear sealer	No thinning required
5) Polyurethane	No thinning required
6) Varnish	20-50

Material to be sprayed should always be strained to remove any impurities in the paint which may enter and clog the system. Impurities in the paint will give poor performance and a poor finish.



**MATERIAL FLASH POINT MUST BE 70°F (21°C) OR HIGHER.**

## Fill Container

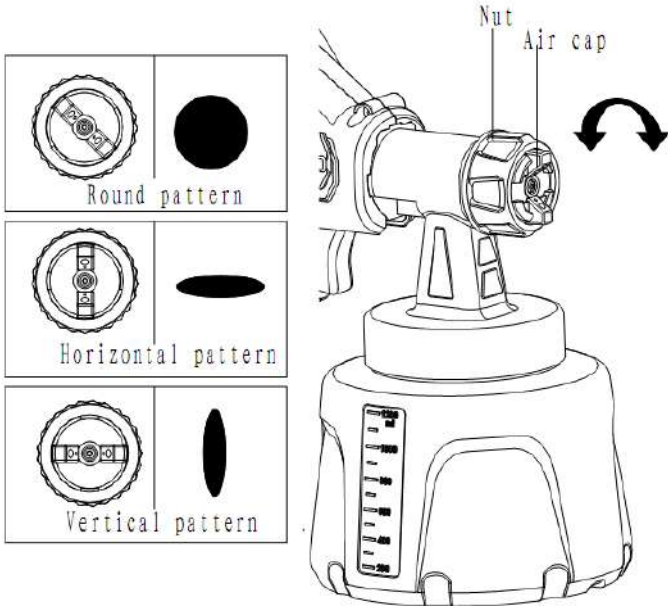
1. Unscrew the cup from the spray gun.
2. After the material has been properly thinned and strained, fill the container to the top of the neck.



3. Carefully screw the cup back onto the

# Spraying

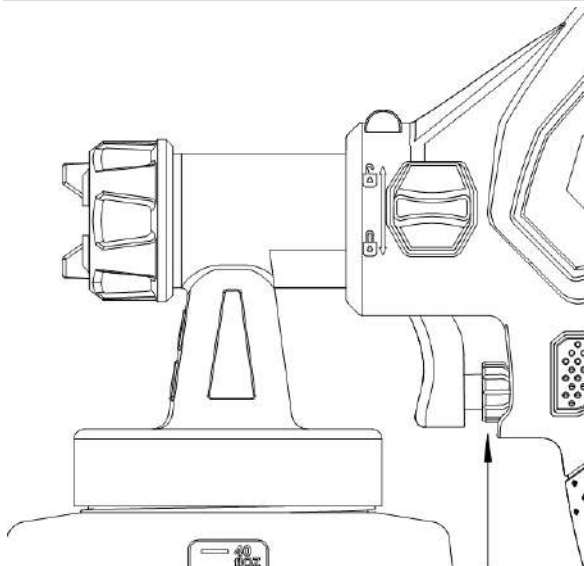
The spray pattern shape is adjusted by turning the ears of the air cap to either the vertical, horizontal, or diagonal positions. The positions of the air cap and the corresponding spray pattern shapes are illustrated below. Test each pattern and use whichever pattern is suitable for your application.



**NEVER** trigger the gun while adjusting the ears on the air cap. **NEVER** point the spray gun at any part of the body.

## Material Flow Adjustment

Set the material volume by turning the regulator behind the trigger of the spray gun.



## Proper Spraying Technique

If spraying with an HVLP spray system is new or unfamiliar to you, it is advisable to practice on a piece of scrap wood or cardboard before beginning on your intended workpiece.

### Surface Preparation

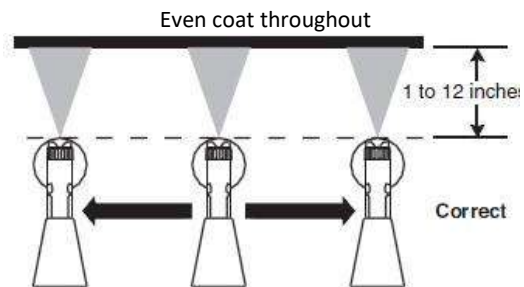
All objects to be sprayed should be thoroughly cleaned before spraying material on them. Areas not to be sprayed may, in certain cases, need to be masked or covered.

### Spray Area Preparation - outdoor use only

The spray area must be clean and free of dust in order to avoid blowing dust onto your freshly sprayed surface.

### How to Spray Properly

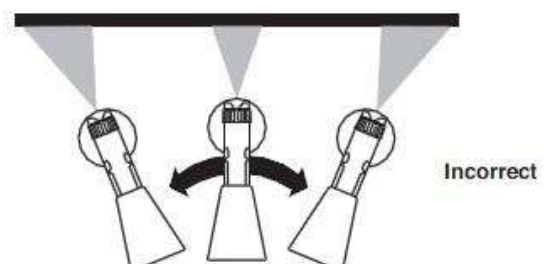
- Position the spray gun perpendicular to and one (1) or more inches from the spray surface, depending upon the spray pattern size desired.
- Spray parallel to the surface with smooth passes at a consistent speed as illustrated below. Doing this will help avoid irregularities in the finish (i. e. runs and sags).
- Always apply a thin coat of material on the first pass and allow to dry before applying a second, slightly heavier coat.
- The closer your sprayer is to the object being sprayed the lower the overspray.



Keep stroke smooth and at an even speed

- When spraying, always trigger the spray gun after spray pass has begun and release trigger before stopping the pass. Always keep the gun pointed squarely at the spray surface and overlap passes slightly to obtain the most consistent and professional finish possible.

Light coat      Heavy coat      Light coat



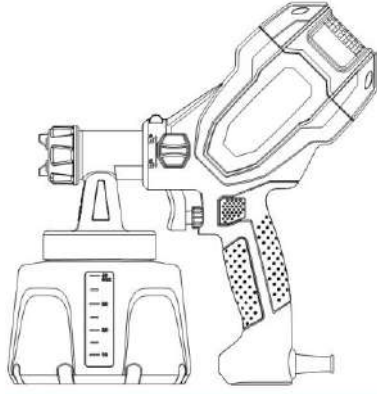


# Cleanup

## Cleaning the Spray Gun

- Always flush spray gun outside.
- Area must be free of flammable vapors.
- Cleaning area must be well-ventilated.
- **DO NOT SUBMERGE Air Compressor!**

1. Unplug the spray gun, and trigger the spray gun so that the material inside the spray gun flows back into the container.



2. Unscrew the container. Empty any remaining material back into the material container.

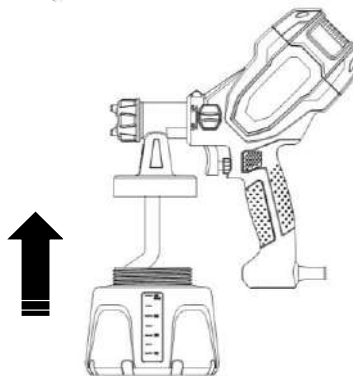


3. Pour a small amount of the appropriate cleaning solution into the cup (warm, soapy water for latex materials; mineral spirits for oil-based materials). **Clean cup and properly dispose of cleaning solution.**

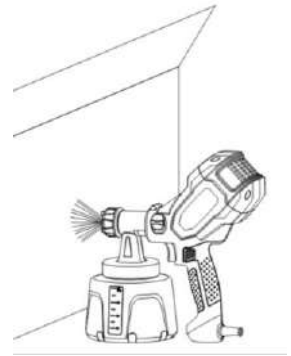


4. Refill the cup with **NEW** cleaning solution.

5. Attach the cup to the gun and plug in the sprayer.



6. Spray the solution through the gun for two seconds in a safe area. Spray again for two seconds. Unplug the spray gun, and trigger the spray gun so that the material inside the spray gun flows back into the container.



7. Wipe the exterior of the cup and gun until clean.



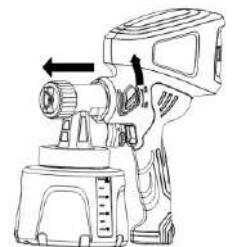
8. Unscrew the nut and remove the air cap and nozzle.



9. Clean the container, suction tube, air cap and nozzle with a cleaning brush and the appropriate cleaning solution.

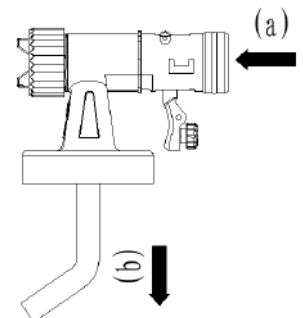
**Never clean nozzle or air holes in the spray gun with sharp metal objects. Do not use solvents or lubricants containing silicone.**

10. Turn both knobs on both sides of the Air Compressor Assembly to the "Unlock" position, pull and separate the spray gun from the Air Compressor Assembly.



11. (a) Clean the rear of the spray gun with the appropriate cleaning solution.

(b) Turn the suction tube anti-clockwise and pull the suction tube downward to disassemble it from the spray gun. Then clean the suction tube with the appropriate cleaning solution.



**Attention!** The Seal Ring (4) between Suction Tube 1(3) and Suction Tube 2 (5) must be put back into place after cleaning. Otherwise, some paint in the container will be sucked into the air duct and interfere with the function of the unit.



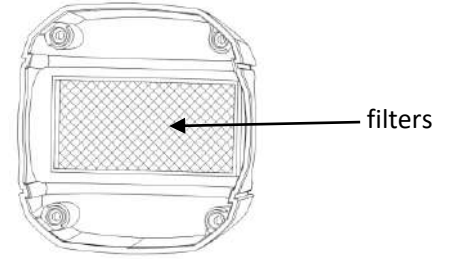
# Maintenance

You should inspect the air filter in the Air Compressor Assembly to see if it is excessively dirty. If it is dirty, follow the steps below to replace it.

1. Unplug the spray gun. Remove the filter cover with a tool (such as a flat screw driver)



2. Remove the dirty filters and replace with new ones.



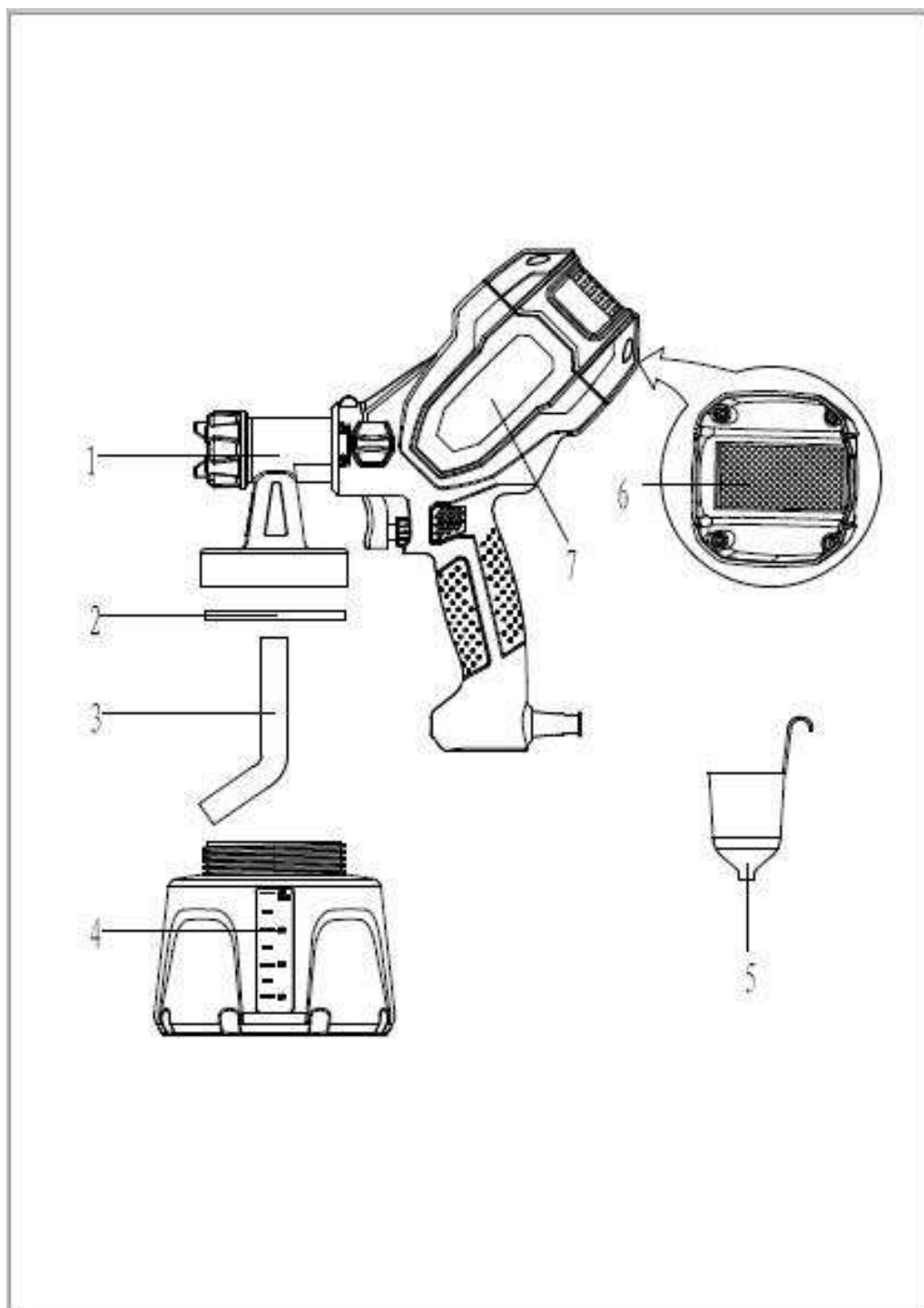
3. Secure the cover back onto the turbine.

**Never operate your unit without the air filters. Dirt could be sucked in and interfere with the function of the unit.**

# Troubleshooting

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
A. Little or no material flow	<ol style="list-style-type: none"> <li>1. Nozzle clogged.</li> <li>2. Suction tube clogged.</li> <li>3. Material volume setting turned too low(-).</li> <li>4. Suction tube loose.</li> <li>5. No pressure build up in container.</li> <li>6. Air filter clogged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean.</li> <li>2. Clean.</li> <li>3. Increase volume setting (+).</li> <li>4. Insert.</li> <li>5. Tighten container.</li> <li>6. Change.</li> </ol>
B. Material leaking	<ol style="list-style-type: none"> <li>1. Nozzle loose.</li> <li>2. Nozzle worn.</li> <li>3. Nozzle seal worn.</li> <li>4. Material build-up on air cap and nozzle</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten.</li> <li>2. Replace.</li> <li>3. Replace.</li> <li>4. Clean.</li> </ol>
C. Atomization is too coarse	<ol style="list-style-type: none"> <li>1. Viscosity of material too high.</li> <li>2. Material volume too large.</li> <li>3. Material volume setting too high (+).</li> <li>4. Nozzle clogged.</li> <li>5. Air filter clogged.</li> <li>6. Too little pressure build-up in container.</li> </ol>	<ol style="list-style-type: none"> <li>1. Thin.</li> <li>2. Decrease volume setting (-).</li> <li>3. Decrease volume setting (-).</li> <li>4. Clean.</li> <li>5. Change.</li> <li>6. Tighten container.</li> </ol>
D. Spray jet pulsates	<ol style="list-style-type: none"> <li>1. Material in container running out.</li> <li>2. Air filter clogged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Refill.</li> <li>2. Change.</li> </ol>
E. Pattern runs or sags	<ol style="list-style-type: none"> <li>1. Applying too much material.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust material flow or increase movement of spray gun.</li> </ol>
F. Too much overspray	<ol style="list-style-type: none"> <li>1. Gun too far from spray object.</li> <li>2. Too much material applied.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce distance.</li> <li>2. Decrease volume setting (-).</li> </ol>
G. Pattern is very light and splotchy.	<ol style="list-style-type: none"> <li>1. Moving the spray gun too fast</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust material flow or decrease movement of spray gun.</li> </ol>

# Parts List



## Parts list

Number	Part Description	Quantity
1	Sprayer Assembly	1
2	Container Seal	1
3	Suction Tube	1
4	Container	1
5	Viscosity Cup	1
6	Air Filter	1
7	Air Compressor Assembly	1

## Environment



Electrical products must not be thrown out with domestic waste. Recycle them at the special disposal centers provided for the purpose. Contact your local authorities or stockiest for advice on recycling.

The potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.

For disposal, this tool also can be returned to the hardware store or vendor (or Dexter dealer)

# **Polymak<sup>®</sup>**

Solutions Provider For Industry & Trade

**Polymak Tools(India)Pvt.Ltd**

186/187, P.H Road,Alsa Towers,Kilpauk,  
Chennai – 600 010,

Tel. : +91-44-48631869

E-mail : [info@polymak.co.in](mailto:info@polymak.co.in)

Visit us at : [www.polymak.co.in](http://www.polymak.co.in)