CAUTION: Read, understand and follow all Safety Rules and Operating Instructions in this manual before using this product.

TECH LINE 1-866-603-0082

Rev. 9
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**12 MONTH FULL WARRANTY ON WAI POWDER COATING SYSTEM**

If this WAI tool fails to give complete satisfaction within 12 months from the date of purchase. Please contact WAI at 1-866-603-0082 for repair or replacement at our discretion. This warranty covers defective components and workmanship only.

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**READ AND SAVE THESE INSTRUCTIONS!**
SAFETY INSTRUCTIONS:

⚠️ WARNING: BE SURE to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, poor finish, and/or serious personal injury.

SAVE THESE INSTRUCTIONS!

WORK AREA

- Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- 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, liquids, or fumes.
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.
- Do not alter the plug or powder coat system in any way.
- You must plug the powder coating system directly into a grounded outlet (three prong outlet), or a grounded extension cord that will plug into a grounded wall outlet. For the system to operate properly and safely, you MUST use a grounded outlet or cord.
- Only use an extension cord as long as it is in good shape, and at least 16 guage wire.
- Don’t expose power tools to rain or wet conditions. Water entering a power tool may increase the risk of electric shock.
- Don’t abuse the cord. NEVER use the cord to carry the tool or pull the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- When operating a power tool outside, ALWAYS use an outdoor extension cord marked “W-A” or “W”. These cords are rated for outdoor use and reduce the risk of electric shock.
- Do not touch the emitter to the part to be coated, or any part of your body with the trigger depressed.
SAFETY INSTRUCTIONS cont’d.

PERSONAL SAFETY

- ALWAYS contact the powder gun handle with bare hands. Do not wear insulated gloves.

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

- DO NOT TOUCH EMITTER WITH ANY PART OF YOUR BODY OR BYSTANDERS, WHILE TRIGGER IS DEPRESSED.

- DO NOT overreach. ALWAYS keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

- Use safety equipment. Always wear eye protection. ALWAYS wear a dust mask while applying powder, and during cleaning operations.

- ALWAYS wear a NIOSH approved respirator when handling cleaning solvents, paint strippers, etc.

TOOL USE AND CARE

- DO NOT use tool if switch does not turn it “ON” or “OFF”. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

- Disconnect the plug from the power source before changing colors and when finished coating part.

- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

- Maintain tools with care. Properly maintained tools are easier to control. Any alteration or modification is a misuse and may result in a dangerous condition and may void warranty.
SAFETY INSTRUCTIONS cont’d.

- **DO NOT powder coat near open flame(s).** Powder coating material, when suspended in a confined area, presents the risk of explosion if exposed to an open flame.

- **ALWAYS wear a dust mask when applying powder.** Powder coating dust is considered a nuisance dust and should be treated in the same manner as saw dust.

- **DO NOT hold the trigger and touch the emitter at the same time.** Due to the high voltage of the gun, a shock may occur.

- **ALWAYS apply powder and cure in a well ventilated area.**

KNOW YOUR POWDER COATING SYSTEM

![Diagram of the Powder Coating System](image-url)
WHAT IS POWDER COATING?

- Powder coating is the process of electrostatically spraying pulverized particles of plastic (usually polyester or polyurethane) onto a clean metal substrate (the part to be coated).
- The applied powder is then heated (cured) at a temperature of 400°F peak metal temperature for 10-30 minutes.
- Once the part has been cured for the proper time, and is cool to the touch, the part is ready to be placed into service.
- Powder coating offers superior durability and is very resistant to corrosion, cracking, UV rays, scratches, grease, and most chemicals.
- Powder coating easily turns unattractive parts, into beautifully coated works of art!
WHAT IS NEEDED TO POWDER COAT?

- WAI Powder Coating System.
- WAI Powder Coating Material.
- Non-food preparation toaster oven, non-food prep kitchen oven, or a medium-wave infrared lamp.
- Part to powder coat.
- A safe, clean, well-lit and well ventilated area.
- Disposable dust mask.
- Disposable vinyl or nitrile gloves, to be used with part preparation solvents.
- Eye protection.
- Timer.
- Powder coating accessories (included with WAI Powder Coating System): high temperature masking tape; pack of 10 high temperature silicone plugs; pack of 10 hooks; instruction booklet.
- Acetone, mineral spirits, quality paint thinner or a non-residue solvent cleaner.
GENERAL POWDER COATING QUESTIONS:

- **Is Powder Coating more durable than liquid paint?**
  Powder coated parts will be more flexible, UV and chemical resistant than typical enamel or aerosol coatings. Powder coated parts will also be more corrosion resistant than most aerosol coatings.

- **Can I powder coat over rust?**
  NO, just as in applying a quality liquid coating you must remove the rust or corrosion first. This is accomplished with abrasive blasting, wire brush, an angle grinder with wire wheel, or sand paper.

- **Can I powder coat over paint?**
  If the coating can withstand the 400°F cure then you can apply powder coat over it. If you are not sure of the previous coating or there are signs of coating failure it is best to remove the coating. This is easily accomplished with liquid paint removers available at home improvement or hardware stores. You may also remove the coating with abrasive blasting, wire brush or sandpaper.

- **How do I remove corrosion?**
  Corrosion can be removed by abrasive blasting, wire brush on an angle grinder or sandpaper.

- **How do I remove paint?**
  Paint can be removed with liquid paint strippers, abrasive blasting, wire wheel on an angle grinder or sandpaper.

- **How do I prep my part?**
  It is best to powder coat over bare clean metal. Using the above methods of paint and rust removal will assure a high quality finish.

- **What is the average coverage of the powder?**
  The 1.5 oz. Powder Packet will yield approximately 7 sq. ft. of coverage. Just as with liquid coatings this will vary with the type of part to be coated. If the part is a large flat object you will transfer more of the powder to the part than if you were coating a part that had many holes. Transfer of the powder to the part may decrease due to the powder being "blown" through the holes of part to be coated.

- **Are any toxic fumes generated during the cure?**
  As with any coating process you must cure the powder in a ventilated area. The powder does not contain the VOC’s (volatile organic compounds) associated with solvent based aerosol coatings, but you may notice a slight odor as the metal is heated to 400°F.
GENERAL POWDER COATING QUESTIONS cont’d.:

- Will the WAI System obtain the same results as a professional?
  Your WAI Powder Coat System will give you professional results if you follow the instructions in this manual. The powder coating material itself is the same chemistry as what is used by professionals.

- Why use powder in place of liquid or aerosol coatings?
  Speed of application, faster clean up, no hazardous solvents, environmentally friendly, more durable and flexible than most liquid coatings, very chemical resistant and the elimination of runs, drips, sags and defects.

WHAT PARTS CAN BE POWDER COATED?

- Aluminum
- Steel
- Cast Iron
- Copper
- Gold
- Brass
- Bronze
- Nickel
- Stainless Steel
- Chrome plated metals

WHAT PARTS CANNOT BE POWDER COATED?

Natural wood, vinyl, rubber, die cast metals, most plastics and some composites. Any part that can not withstand the 400°F cure must not be placed in the cure oven.

**NOTE:** Any rubber, plastic, or vinyl type components installed on the part you wish to powder coat must first be removed. These include items such as o-rings, seals, etc. If not they will be damaged during the cure. Any material that can not withstand the 400°F cure must be removed from the part prior to coating.
PART PREP MASKING AND HANGING:

- **Part Preparation:**
  Thoroughly clean and degrease the part before coating. Failure to remove previous coatings or grease and oils will result in a poor finish. Use the below processes for part prep to assure a durable highly functional coating.

- **Removing Corrosion or Paint:**
  Removing corrosion is accomplished with abrasive blasting, wire wheel, brush, or sandpaper. All of the corrosion must be removed prior to powder coating to assure proper adhesion. Paint is easily removed using liquid paint strippers.
  **NOTE:** Use a large disposable aluminum foil pan to place the part in and follow the manufacturer's instructions for the proper use of liquid strippers.

- **Cleaning/degreasing:**
  Cleaning the part after removing paint or corrosion will eliminate any residue or greases that may be on the part. A final wipe down with a quality paint thinner or mineral spirits is sufficient to remove these contaminants.

- **Masking:**
  You must mask any areas or holes that you do not want powder to stick to. Powder coating is a very durable coating but is also hard to remove in areas where you did not want the coating. Follow the directions below for proper use of masking supplies.

- **High Temperature Tape Usage:**
  The supplied high temperature tape is used like conventional masking tape and applied to areas where you do not want powder. For masking large areas you can also use aluminum foil with supplied hi-temperature tape. **NOTE:** The masking tape or aluminum foil is applied before the powder is applied and is removed AFTER the part has been removed from the oven, and cooled.

- **Reusable High Temperature Silicone Plug Usage:**
  The reusable high temperature silicone plugs are designed to be inserted in threaded or non-threaded holes where you do not want powder. These plugs are reusable and will withstand the 400°F cure. **NOTE:** The plugs are installed before powder is applied and removed AFTER the part is removed from the oven, and cool.

- **Hanging the Part:**
  Support the part either on top of the oven rack or suspended from below the oven rack. Large items that do not require powder on the bottom, can simply be set on top of the oven rack. More commonly you will be hanging or supporting items from below with the supplied hooks. **NOTE:** You can also use thin bare metal wire to support items.
GUN SET UP:

1. Turn cup lock to unlocked position.
2. Remove cup with a forward and down movement.
3. To remove cup lid, turn counter-clockwise. (NOTE: Remove plugs before filling cup with powder.)
5. Fill Powder just below exit tube.
6. Install lid and turn clockwise to close.
7. Install cup on gun.
8. Turn cup lock to the locked position.
9. Plug power supply lead into receptacle.
10. Ground part to be coated. Ground clip can be attached to part, wire hook, or oven rack
11. Plug power supply directly into grounded 120 volt outlet or grounded extension cord.
12. Trigger Control.
APPLICATION OF POWDER/SPRAYING:

1. After you remove all previous coatings or corrosion, thoroughly clean the part with lacquer thinner or acetone.
2. Mask all areas that you want to prevent the powder adhering to. (See previous page, masking tips.)
3. Attach power supply lead into gun receptacle (See page 11, picture 9).
4. Plug power supply into grounded 110-120 volt AC outlet or extension cord.
5. Attach ground clip directly to part or wire suspending part to be coated (see page 11, picture 10).
6. Hold gun about 6” from part to be coated.
7. Gently pull trigger until desired amount of powder flows from gun nozzle.
8. Evenly coat part with powder. Gun handling is simply moving the gun back and forth around the part. You may notice the gun coats quicker by gently shaking as you spray.
9. Stop and check part and look for recessed areas which are lightly coated. Reapply powder to these areas.
10. If you find that deep recesses or sharp corners are hard to coat, try holding the gun at different angles to coat these areas.
11. Once you are sure you have the part completely coated, remove the ground clip and spray the area where the clip was.

• NOTE: With a full cup of powder, you may need to hold the gun on its side and depress the trigger to begin the fluidizing process. Once powder flows from nozzle, you can hold the gun upright.
CURING INSTRUCTIONS:

1. Once the desired amount of powder is on the part to be coated, place part into a **preheated non-food prep oven**, set at 400°F, using oven mitts.

2. Wait for powder to flow out (turns from a solid powder form to a gel or gloss form).

3. **After entire piece flows out**, set timer for 20 minutes. (Important: Large parts may be in the oven for 10-20 minutes before flowout or gloss form. Continue to check the part every 5 minutes until entire part has flowed or glossed over). Do not inhale any fumes which may be emitted when the oven door is open.

4. Once the part has fully cured for **20 minutes after flow out**, turn oven off and allow part to cool in oven.

5. When the part is cool to the touch, the part may be placed back into service.

---

Motorcycle Fender  
Faucet  
Outdoor Light  
Motorcycle Air Cleaner Cover  

Cured Parts
COLOR CHANGE AND AREA CLEAN-UP:

Color Change:

Color change is accomplished two ways: 1. You can utilize only (1) cup and continue to clean out the powder with compressed air or water OR, 2. You can purchase additional cups and dedicate each color powder to its own cup. Also use a clean, soft paint brush or compressed air to wipe the gun tip and emitter where powder may have collected.

NOTE: Always disconnect input lead or transformer from 120V AC supply before removing the cup.

One Cup:

When changing colors and using only (1) cup you must remove the previous powder. You can store any unused powder from the cup in a re-sealable sandwich bag and clean the cup with compressed air or a water rinse. If using water rinse, clean the cup under cool, clean running water with a paper towel and thoroughly dry. Use a soft paper towel to gently dry the inside and outside of the cup. Once you have the cup dry, install it on the gun, plug the power cord into the gun and depress the trigger for (1) minute to completely dry the cup with the internal air source.

Multiple Cups:

If utilizing multiple cups you can simply install the included foam plugs in the cup inlet and outlet tubes (see picture at right).

NOTE: The small foam plug is inserted into the cup lid tube (do not push all the way in, you must be able to remove the plug for later use).

The longer plug is inserted in the cup outlet tube (again, do not push all the way in).

Area Clean up:

Any overspray of the powder is simply swept up with a dust broom and disposed of in the trash. We do not recommend utilizing an electric vacuum unless it is designed to handle fine particulate compounds.
TIPS:
● You may use aluminum foil to mask large areas that the tape will not be able to cover.
● Gently shake the gun when spraying (this will better help the powder to flow from the gun).
● **DO NOT** reuse the powder. Powder can easily become contaminated by foreign materials (example: dust, dirt, and other colored powders).
● Store powder in a cool, dry, place.
● Attach the ground clip directly to the part to be coated. If not possible, connect the clip to the oven rack or wire hook.

TROUBLESHOOTING:
● **Orange peel:**
  ● Orange peel (when the finish looks like the peel of an orange) generally occurs with poor part prep (cleaning), or incomplete cure. Cure the part for 20 minutes @ 400°F after the entire part has flowed out or glossed over.
● **Powder is spraying in clumps:**
  ● Humidity can have an affect on powder coating. Try shaking the gun when spraying.
  ● Store powder in a resealable sandwich bag, or in powder cup with supplied foam plugs.
  ● Are you spraying WAI powders? Some inferior powders may affect spray characteristics.
● **Gun does not work:**
  ● Is the gun’s power supply plugged into a grounded 120V AC outlet?
  ● Is the power supply plugged into the gun?
● **Powder does not stick to the metal part to be coated:**
  ● Is the gun’s power supply plugged into a grounded 120V AC outlet?
  ● Is the power supply plugged into the receptacle?
  ● Is the ground clamp connected directly to the part?
  ● Is the part clean of any previous coatings.
  ● During high humidity, you may need to spray powder onto the part for a few seconds.
● **Fan is on, but powder does not come out:**
  ● Do you have powder in the gun cup?
  ● Is the cup attached properly to the gun?
  ● Make sure the cup is fully seated in the gun and the gun lock is secured.
  ● Check to make sure that there is no foreign object in the cup inlet or outlet tubes.

TECHNICAL ASSISTANCE:
For technical assistance, please call **1-866-603-0082**, between 8:00 a.m. - 5:00 p.m. E.T. Monday - Friday.
ACCESSORIES:

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<th>ITEM</th>
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<td>01-06100-041</td>
<td>Signal Red Powder 1.50 oz</td>
<td>$5.99</td>
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<td>01-06100-042</td>
<td>Signal Blue Powder 1.50 oz</td>
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<td>01-06100-043</td>
<td>Signal Yellow Powder 1.50 oz</td>
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<td>Mint Green Powder 1.50 oz</td>
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<td>10 pc. Silicone plug assortment</td>
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<td>10 pc., 2&quot; hooks</td>
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<td>Hi-Temp Tape (1/2&quot; x 24 yards)</td>
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<td>01-05100-150</td>
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Paint can be removed with liquid paint strippers, abrasive blasting, wire wheel on an
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It is best to powder coat over bare clean metal. Be sure to wipe part with quality
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What is the average coverage of the powder?
The 1.5 oz. Powder Packet will yield approximately 7 sq. ft. of coverage. Just as with
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Speed of application, faster clean up, no hazardous solvents, environmentally friendly,
more durable and flexible than most liquid coatings, very chemical resistant and the
elimination of runs, drips, sags and defects.
Revolutionary New Product!

DO-IT-YOURSELF

POWDER COAT SYSTEM

Features:
- EPA approved process
- Elimination of runs, drips, sags or errors
- Unlimited color availability
- Superior corrosion and chemical resistance
- Ease of use and clean up

Benefits:
- No air compressor required!
- Quick change powder cartridge for ease of storage and color change
- Variable speed trigger for precise powder flow
- Very easy to use, includes all necessary accessories

FROM THIS

TO THIS

USING THIS

With just 3 OZS.

of powder

Professional results at a fraction of the cost.

THIS INNOVATIVE SYSTEM NOW ALLOWS YOU TO OBTAIN PROFESSIONAL RESULTS AT HOME OR SHOP!
**Signal Red Powder**

**Signal Blue Powder**

**Signal Yellow Powder**

**Bright Orange Powder**

**Gloss White Powder**

**Jet Black Powder**

**Satin Black Powder**

**Black Texture Powder**

**Gloss Clear Powder**

**Transparent Red Powder**

**Transparent Blue Powder**

**Eleven Colors Available!**

---

**WHAT YOU NEED TO POWDER COAT:**

- The Summit Powder Coating System
- A bare metal component to coat
- Desired powder color
- Non food prep oven

---

**System Includes:**

- Application gun
- 120VAC transformer
- Detailed instruction book
- Reusable silicone plugs
- High temperature masking tape
- Reusable support hooks

---

**P/N SUM-01-06100**

**TO ORDER:** CALL 1-800-230-3030

www.SummitRacing.com

**Guaranteed Results!**

**Superior to Liquid Coatings!**

**Money Back Guarantee!**

**Pays for Itself in just a few applications!**

**Begin Powder Coating Today For**

**One-of-a-kind Looks and Unsurpassed Durability!**