



Item #73083

5 LB. FLUIDIZING HOPPER

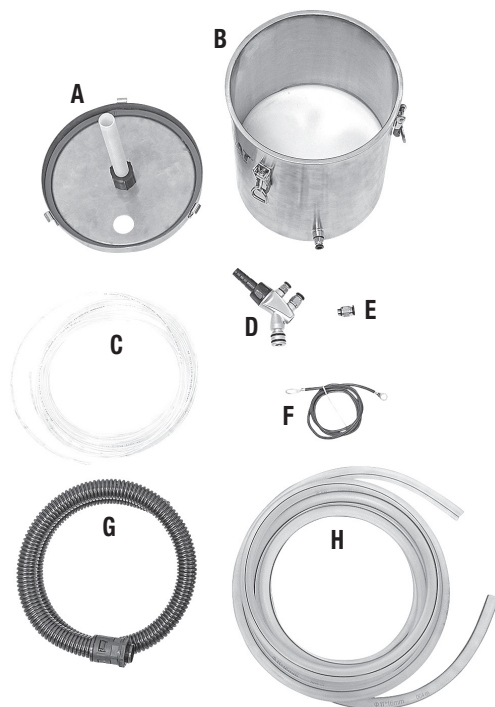
INSTRUCTIONS



The **HOTCOAT 5 LB. FLUIDIZING HOPPER** provides a high-capacity solution for coating large sized projects or high volume production runs with the HotCoat 100kV Powder Coating System (#71860). The capacity of the stainless-steel Hopper is 5 lbs. and features an integral Fluidizing Plate to provide powder aeration for smooth flow. An innovative Powder Pump ensures consistent and steady flow of powder to the powder gun without surging or spitting at the Nozzle. Output is further enhanced via Dosing Air injected to the powder flow. Upgrade your Powder Coating System with this production ready option!

INCLUDES

- (1) 5 lb. Hopper Lid with Seal, Stem installed **[A]**
- (1) 5 lb. Hopper with Fluidizing Plate, Air Fittings, Latches installed **[B]**
- (1) Ø6mm Air Tubing, 12' [3.7m] **[C]**
- (1) Powder Pump with O-rings, Fittings installed **[D]**
- (1) Spare Ø6mm Air Fitting **[E]**
- (1) Hopper Ground Lead, 4' [0.9m] **[F]**
- (1) Powder Vent Hose **[G]**
- (1) Grounded Powder Flow Hose **[H]**



SPECIFICATIONS

- Compatibility:** #71860 HotCoat 100kV Powder Coating System
- Powder Capacity:** 5 lbs.
- Air Fitting Size:** For Ø6mm O.D. line
- Overall Dimensions:** 9.95" x 9.95" x 13.35"

SAFETY INFORMATION

READ AND UNDERSTAND ALL INSTRUCTIONS AND PRECAUTIONS BEFORE PROCEEDING.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. Keep these product instructions for future reference.

The following explanations are displayed in this manual, on the labeling, and all other information provided with this product:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠ NOTICE

NOTICE is used to address practices not related to personal injury.



⚠ READ INSTRUCTIONS

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



⚠ DANGER HIGH VOLTAGE!

- Powder coating involves high voltage electricity that can shock you. Ensure all system components, including the Hopper, are grounded before use. Do not contact the Powder Coating Gun Emitter when in use.
- If you have a medical condition or pacemaker check with your doctor before powder coating.



⚠ WARNING SHOCK HAZARD!

- **NEVER BYPASS THE GROUND CONNECTIONS!**
DO NOT attempt to use the Hopper without secure grounding!
Complete grounding is necessary for proper operation of a powder coating system and prevents shock.
- **DO NOT** step on, kink, or pull the wires or hoses. Before using the Hopper inspect the condition of all wires and connections.
- **DO NOT** touch or hold the part while applying powder coating.
- **NEVER** operate or store the Hopper in damp or wet conditions.



⚠ WARNING HEALTH AND INJURY HAZARDS!

- Dust and fine particles are dispensed in use which can contain hazardous or toxic substances. Breathing this dust can cause respiratory health problems. Always use NIOSH approved respiratory protection while using this powder coating.
- Pressurized air discharge can eject powder particles, dirt and debris at high velocity. Always wear ANSI approved eye protection when powder coating.



⚠ WARNING FLAMMABILITY HAZARD!

- Powder coating powder poses a fire and explosion hazard when suspended in air. Keep away from ignition sources such as sparks and open flames! Never smoke when powder coating.
- **DO NOT** vacuum powder coating powder unless the vacuum is equipped with an explosion-proof motor.



⚠ CAUTION BURSTING HAZARD!

- **DO NOT** exceed 20 psi [1.4 bar] of air pressure to the Hopper inputs. Permanent equipment damage and/or bursting could occur and cause personal injury.



⚠ CAUTION INJURY HAZARD!

- Hoses, air tubes, and power cords present a trip hazard. Be cautious when moving around the work area.
- Fingers could be pinched by the Lid latches. Keep fingers clear of pinch areas when latching Lid.
- Powder coating can inundate the work area with powder dust. This will create slippery surfaces. Always be sure-footed and well balanced when powder coating. Wear appropriate footwear to increase grip.
- Improperly supported parts may shift or suddenly drop when powder coating. Properly support large parts and wear closed toe shoes when powder coating. The use of safety toe shoes is recommended.



⚠ NOTICE

- For intended use only.
- Do not carry by grasping Powder Pump.
- Disconnect air supplies from Hopper before opening Lid.
- Only powder coat in well ventilated areas.
- Inspect components for damage before use. Do not use if damaged.

COMPONENT IDENTIFICATION (FIG 1)

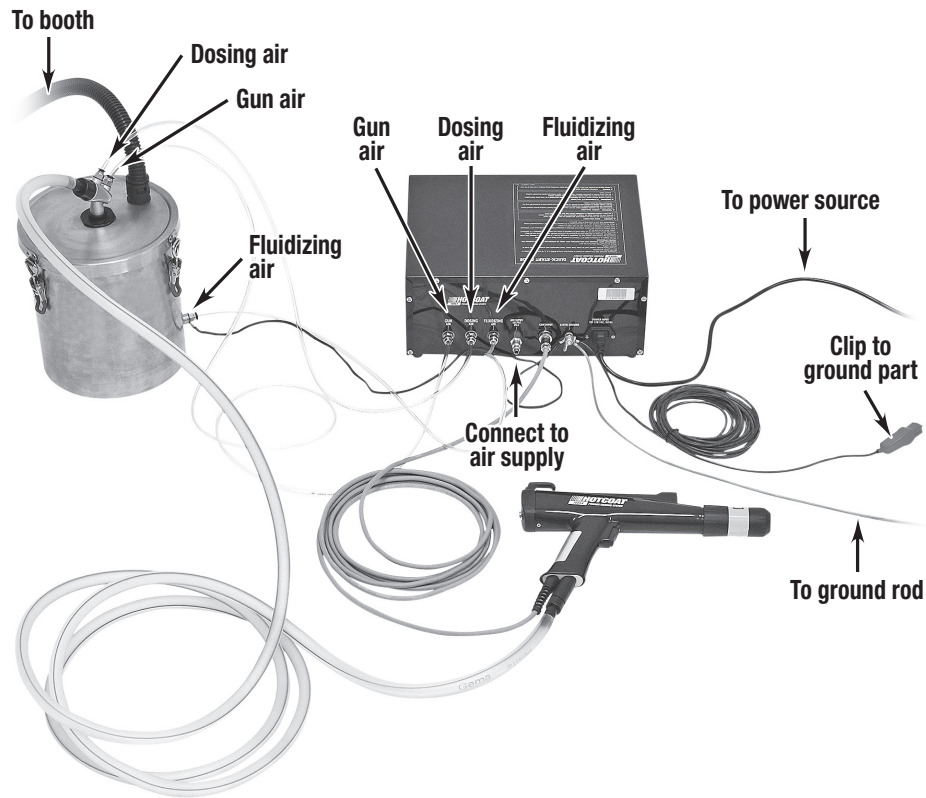
1. Hopper
2. Lid
3. Fluidizing Air Inlet / Hopper Grounding
4. Powder Pump
5. Gun Air Inlet
6. Dosing Air Inlet
7. Hopper Vent Port
8. Powder Supply Fitting

FIG. 1



SYSTEM READY FOR USE (FIG 2)

FIG. 2

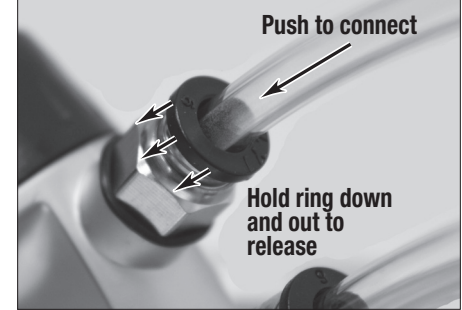


SET UP

ASSEMBLY

- Install the Powder Pump with O-rings, Fittings installed **[D]** to the 5 lb. Hopper Lid with Seal, Stem installed **[A]** by pressing it into the center port **(FIG 1)**.
- Install the Powder Vent Hose **[G]** to the offset port in the Lid. Remove the pre-installed nut, then insert it and fasten from the underside **(FIG 1)**.
- Fasten the Hopper Ground Lead, 4' [0.9m] **[F]** to the Fluidizing Air Inlet **[3]** **(FIG 1)**. Connect opposite end to Powder Coating System ground lug **(FIG 2)**.
- Use the Ø6mm Air Tubing, 12' [3.7m] **[C]** to connect the Fluidizing, Dosing, and Gun Air to the Powder Coating System **(FIG 2)**. Cut to length as needed. Use a sharp tool, such as cutting pliers or a razor blade, to make a clean and square cut. Bad cuts may not seal correctly.
- Push ends into the Push-to-Connect fittings. When seated the tube should be locked in place and not pull out. If removal is needed, hold down on the plastic ring to unlock the tube before pulling outward **(FIG 3)**.
- Slip Grounded Powder Flow Hose **[H]** end over stepped end of Powder Supply Fitting **[8]** until snug **(FIG 2)**.

FIG. 3



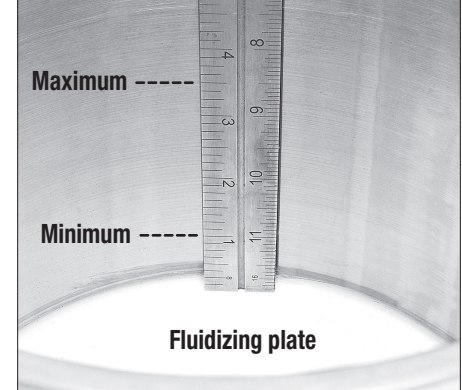
FILLING THE 5 LBS. HOPPER

⚠ NOTICE

Handle powder with the same considerations as handling liquid paint.
Use clean, disposable gloves when handling powder to avoid contamination.
Keep powder containers tightly closed and in a dry, room temperature environment as excessive humidity and heat will contaminate the powder.

- Unlatch and remove the Lid from the Hopper.
- Pour the powder into the Hopper.
- Fill a minimum depth of 1" [25mm] of powder in the Hopper **(FIG 4)**. Do not exceed 5 lbs. of powder or more than halfway.

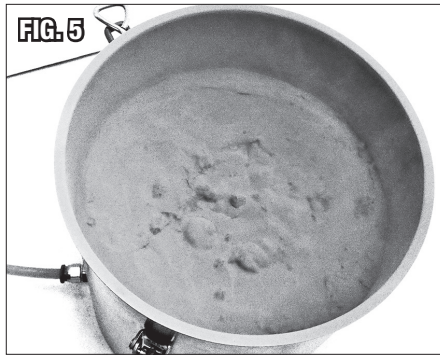
FIG. 4



FLUIDIZING AIR PRESSURE SETTINGS

Fluidizing refers to the use of low-pressure air, forced through a porous “Fluidizing Plate” in the bottom of the Hopper, acting on the powder to help it flow like fluid.

- With the Lid removed from the Hopper, slowly increase Fluidizing Air Pressure initially to bubble in what resembles gently rolling boiling water (**FIG 5**).
 - If it pops in random locations and emits small bubble-like eruptions, it needs more air. Slowly increase the Fluidizing Air Pressure until the powder takes on a gentle, rolling, fluid like appearance.
 - If a powder cloud begins to form and rolls over the sides of the Hopper, decrease the level of the Fluidizing Air Pressure.



NOTE: As the amount of powder in the Hopper is depleted during use, the Fluidizing Air Pressure will need to be gradually tweaked downward to maintain proper fluidizing.

- When the Fluidizing has been optimized, place the Lid back on the Hopper and latch it in place. Verify there is no leakage from the Lid seal. Adjust latch tension if a leak is observed.
- Route the end of the Vent Hose into spray area or booth to capture powder discharge.

GUN AIR PRESSURE SETTING

After setting fluidizing, adjust the Gun Air Pressure to achieve an optimal setting where the amount of powder delivered to the surface is maximized and wasted powder that blows by is minimized.

- Initially set the Gun Air pressure to 20 psi [1.4 bar]. Generally, it should never be necessary to set the Gun Air pressure any higher than 50 psi [3.4 bar].
- Depress the Gun Trigger and observe powder flow onto and around an object to be coated.
 - If excess powder blows by the part and is wasted, lower the Gun Air pressure to decrease flow slightly.
 - If the powder being applied to a surface has a thin, sparse appearance, raise the Gun Air pressure to increase flow slightly.
 - This is a standard but necessary “Trial-and-Error” process that may require several attempts to fine tune and will vary with each type of powder and part surface configuration. Note that most tubular and round objects will, by nature, produce more powder waste than a flatter, larger object will.
- Keep in mind that powder coating powders vary widely in specific density. Dense powders may require slightly more air pressure than less dense powders.

DOSING AIR PRESSURE SETTING

Dosing Air is the injection of clean air to the fluidized powder stream. This can assist in reaching deep recesses without increasing powder volume, which could create heavy areas and runs.

- If you think Dosing Air may be helpful, depress the Trigger and slowly increase the Dosing Air Pressure until the desired powder output is achieved.

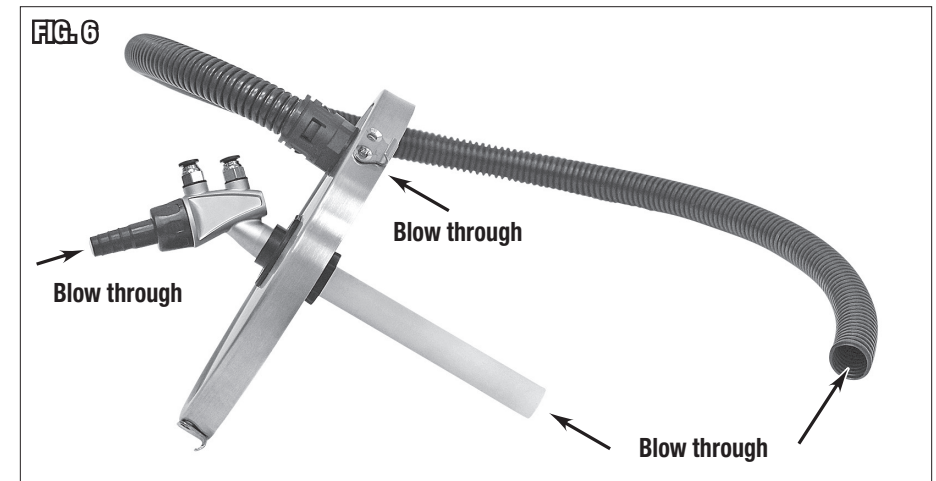
POWDER COATING PROCESS

After setup, application of powder using the 5 lb. Hopper is the same as with the 2 lb. Hopper included with the #71860 HotCoat 100kV Powder Coating System. Refer to that product’s manual for full guidance on preparation of parts and application of powder coat.

CLEAN UP

- With gloves on, gently pull the Powder Feed Hose from the fitting on the Powder Pump.
- Using a blow gun, blow out all powder from the Powder Feed Hose.
- Unlatch the Hopper Lid and carefully pour out any remaining powder from the Hopper. Place any unused powder in the original container.
- Using a blow gun, blow out remaining powder left in the corners and crevices of the Hopper paying attention to cleaning the white Fluidizing Plate in the base of the Hopper.
- Blow up through the stem of the Lid and down through the end of the Powder Pump (**FIG 6**).
- Blow out the Powder Vent Hose.

NOTE: To minimize repeated cleanings, extra Powder Feed Hoses and Hoppers may be purchased from Eastwood to dedicate for specific colors.



STORAGE

- Before putting the Hopper into storage, clean it of powder build up as described in **CLEAN UP** above. If stubborn powder exists, cleaning brushes can be used to dislodge it.
- Store Hopper only in a dry, safe location and preferably covered with plastic sheeting for additional protection.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Powder Flow is Surging After Quick Triggering	Ensure Powder Hose From Hopper to Gun is Not Kinked or Obstructed	Route Powder Hose from Hopper to Gun with minimal bends.
Powder Not Sticking to Part or Pin Holes Seen As Applying Powder	Back Ionization, Too Little Powder Flowing From Gun	Increase Gun Air Pressure slowly while triggering Gun in booth and produce a fairly large “plume” of powder. It is better to discharge what appears to be “too much powder” than too little. Hold Gun minimum 10” from part and coat normally. The goal is to get full coverage on the part quickly before creating back ionization or “Faraday-Cage Effect” areas.

ADDITIONAL ITEMS

SAFETY ITEMS

- #43090** Safety Goggles
- #31575** Rockwood Valved Dust Mask (10-Pack)
- #21294** Welding Gloves

SPARE/REPLACEMENT ITEMS

- #54308** Grounded Powder Feed Hose 13' [4.9m]
- #71854** Air Tubing, 12' [3.7m]
- #71855** Standard Emitter (includes 18mm Deflector, installed)

PART PREPARATION

- #10041Z** Eastwood PRE-Painting Prep Aerosol 12 oz
- #11949Z** Eastwood Low VOC Pre Paint Prep Aerosol 12 oz
- #10288Z** High-Temp Lab Metal Filler
- #58041** High-Temp Silicone Caps and Plugs
- #16315** High Temperature Polyester Masking Tape 1/8" x 72 yd
- #16316** High Temperature Polyester Masking Tape 1/4" x 72 yd
- #16317** High Temperature Polyester Masking Tape 1/2" x 72 yd
- #16318** High Temperature Polyester Masking Tape 3/4" x 72 yd
- #16319** High Temperature Polyester Masking Tape 1" x 72 yd
- #16321** High Temperature Polyester Masking Tape 2" x 72 yd
- #16315** High Temperature Fiberglass Masking Tape 1/2" x 36 yd
- #16315** High Temperature Fiberglass Masking Tape 1" x 36 yd
- #32054** Fine Line High Temperature Masking Tape 1/8" x 72 yd
- #32055** Fine Line High Temperature Masking Tape 1/4" x 72 yd
- #43045** 0.041" Stainless Steel Safety Wire, 1lb. Spool

Visit eastwood.com for complete info and pricing.

ADDITIONAL ITEMS

SPRAYING AND CURING

- #15556** Paint and Powder Coating Stand
- #70016** Benchtop Powder Coating Booth
- #33276** 4X4X6 Powder Coating Booth
- #68076** Benchtop Powder Coating Oven
- #68139** Oven Thermometer
- #33273** 4X4X6 Powder Coating Oven
- #10170** InfraRed Powder Curing Lamp, 1800 Watts
- #10680A** Infrared Curing Lamp 6000, 6000 Watts

AIR SYSTEM COMPONENTS

- #15862** Eastwood Powder Coating Polish
- #31633** Eastwood Air CFS Filter/Regulator
- #31635** Eastwood Inline Air Filters (2 Pack)
- #34570** Desiccant Snake

Visit eastwood.com for complete info and pricing.

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: tech@eastwood.com

PDF version of this manual is available at eastwood.com

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