



# Static Neutralizing Cobra Air Gun

IMS # 133036 / 133037 / 130679 / 134997

## INSTRUCTION MANUAL



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## Safety Overview

This manual uses the following signal words to call attention to the safety sign and to designate a degree or level of hazard seriousness.

1. **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.
2. **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
3. **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. Also used to alert against unsafe practices or property damage only accidents.
4. **NOTE:** Indicates general safe practices, machine use instructions and information, property damage only hazards, temporary hazards, precautions to avoid a hazard, results of not avoiding a hazard, or any combination of these messages.
5. **SYMBOL/PICTORIAL:** Conveys a message without words.
6. **SAFETY ALERT SYMBOL:** Indicates a potential personal injury hazard; an exclamation point inside a triangle.



## Safety Overview (continued)

The following are general safety alerts that **apply specifically to this product and are to be followed for the safe and efficient operation of this machine.** They are listed here to alert the operator before using the product in any capacity and to serve as an example of the safety alerts used in this manual.

### WARNING

This unit uses electrical power and has live electrical parts, which can cause **death** or **shock**

All electrical connections **must be grounded** at all times

### CAUTION

The Cobra Air Gun creates a significant amount of noise when used

If used frequently, you **must** wear ear protection to avoid long term hearing damage





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## Specifications

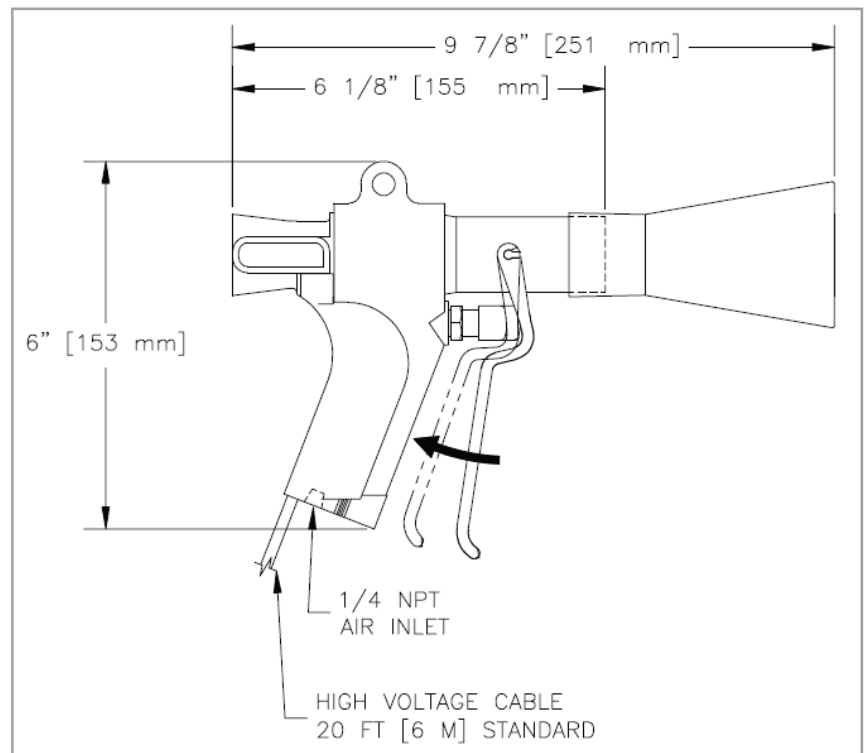
Operating Voltage.....	5kV AC
Operating Temperature.....	110 °F (43 °C) Maximum
Operating Humidity.....	70% RH Maximum
Weight.....	1.5 lbs (0.68 kg), Gun and 20 ft (6.1 m) Cable
Materials.....	High Impact Plastic Gun Body Stainless Steel (Type 302) Ionizing Point
Maximum Pressure.....	100 psig (689.5 kPa), ¼” NPT Connector
Air Consumption.....	9 SCFM (255 L/min) at 30 psig (689.5 kPa) 22 SCFM (623 L/min) at 100 psig (689.5 kPa)
Outlet Air Flow.....	80 CFM (2265 L/min) at 50 psig (344.7 kPa) 130 CFM (3681 L/min) at 100 psig (689.5 kPa)
Noise Level (2 ft from unit).....	92 dB at 30 psig (206.8 kPa) 101 dB at 60 psig (413.7 kPa) 104 dB at 100 psig (689.5 kPa)

## Description

Thank you for purchasing an IMS Static Neutralizing Cobra Air Gun. The Cobra Air Gun delivers a powerful blast of ionized air designed for cleaning and neutralizing large surfaces in rugged industrial environment. It is capable of reducing costly rework in your facility by preventing the re-attraction of dust and lint to the cleaned surface. The gun also features a lightweight frame with an ergonomic handle, made of durable high impact plastic and an easy to use hook and hanger for effective storage.

The Cobra Air Gun works by providing a stream of ionized air (contains positively and negatively charged atoms) that neutralizes the surface it contacts by adding or removing electrons. Once a surface has been neutralized, the ionized air no longer has any effect on the surface.

### Dimensions:



## Installation

The Cobra Air Gun requires either the Model G165 (120 VAC, 50/60 Hz, 0.25 A) or Model G265 (230 VAC, 50/60 Hz, 0.12 A) power supply. One power supply can energize either one or two air guns. Use the following steps to install the air gun:

### 1. Shipment

- a. Check that the air gun and power supply (possibly included, depends on the model purchased) are present and undamaged, and that you have received the correct version.
- b. Check that the data on the packing slip corresponds with the data on the product received.
- c. Check that the voltage shown on the rating plate matches the voltage you will be using.
- d. If any of these do not match, contact the carrier immediately. If the issue cannot be resolved with the carrier, contact IMS at 1-800-537-5375.

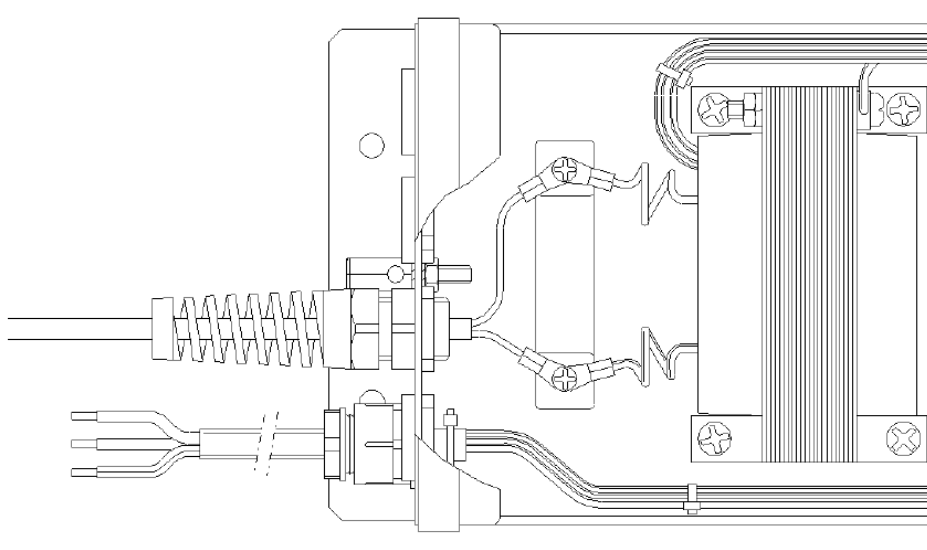
### 2. Mounting the Power Unit

- a. Mount the power unit in the position you like, provided that the switch and neon lamp are properly accessible and visible.
- b. Attach the power unit using the mounting holes in the base plate.
- c. Run the connection cable to your power source.
- d. Attach the connection cable with a plug, or by hard-wiring.
- e. Make sure all connections are grounded to avoid shock hazard.



## Installation (continued)

3. Fitting the Air Gun
  - a. Remove the lid from the power unit.
  - b. Remove one of the central blind glands from the rear of the box.
  - c. Fit the gland with the air gun cable into this opening.



### NOTE

Make sure the HV cable is not looped inside the housing.

### NOTE

The compressed air must be clean, dry and free of oil. It is recommended to use a filter.

Use a pressure regulator to adjust the blow-off power.



## Operation

### 1. Setup

- a. Remove the air-connecting nipple from the gun.
- b. Wrap sealing tape around the nipple.
- c. Thread the nipple into the gun.
- d. Connect the air hose to the connecting nipple.
- e. Connect the air hose to your compressed air source.



### 2. Operation

- a. Make sure the gun is supplied with clean, oil-free and dry compressed air.
- b. Switch on the power unit.
- c. Point the air gun at the object to be cleaned.
- d. Pull the trigger of the air gun.

### 3. Functional Check

- a. The indicator lamp on the power unit is an indication of the available high voltage.
- b. To measure the efficiency of the ionizing air gun, you must use an electrostatic field meter.
  - i. Measure the charge on the material before and after the gun has been used.
  - ii. The charge should have disappeared after use of the gun, if

the charge has not changed, the gun is not functioning properly and may have been installed incorrectly.

## Maintenance

The Cobra Air Gun requires very little maintenance. However, the following should be done to keep the gun and power supply in working order:

1. Keep the air gun clean and dry.
2. Check the HV cable for damage monthly, or as needed.
3. Lubricate the valve spindle with a drop of oil monthly, or as needed.
4. Keep the power supply unit clean and dry at all times.





## Troubleshooting

Problem:

1. Indicator Lamp Stays Dark
  - a. Try switching on the main power to the unit.
  - b. Try switching on the power unit.
  - c. Replace the switch.
  
2. HV Neon Lamp Stays Dark, Lamp of Switch is Still Lit
  - a. Locate the short circuit and fix it.
  - b. Replace the transformer.
  - c. Replace the neon lamp.
  
3. Gun Does Not Ionize, or Inefficiently Ionizes
  - a. Switch on the power unit, if not already on.
  - b. If possible, shorten the HV cable, or contact IMS at 1-800-537-5375 for repair.
  
4. No Compressed Air, or Insufficient Air from the Gun
  - a. Connect or re-connect the compressed air hose.
  - b. Try setting or re-setting the compressed air pressure
  - c. Replace your compressed air valve.
  
5. Valve Remains Stuck
  - a. Lubricate the valve spindle with light oil.
  - b. Replace the valve if there is visible damage.



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## Replacement Parts

<u>Description</u>	<u>IMS Item Number</u>
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G165 Power Supply (120 Volts).....	133242
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G265 Power Supply (230 Volts).....	133035
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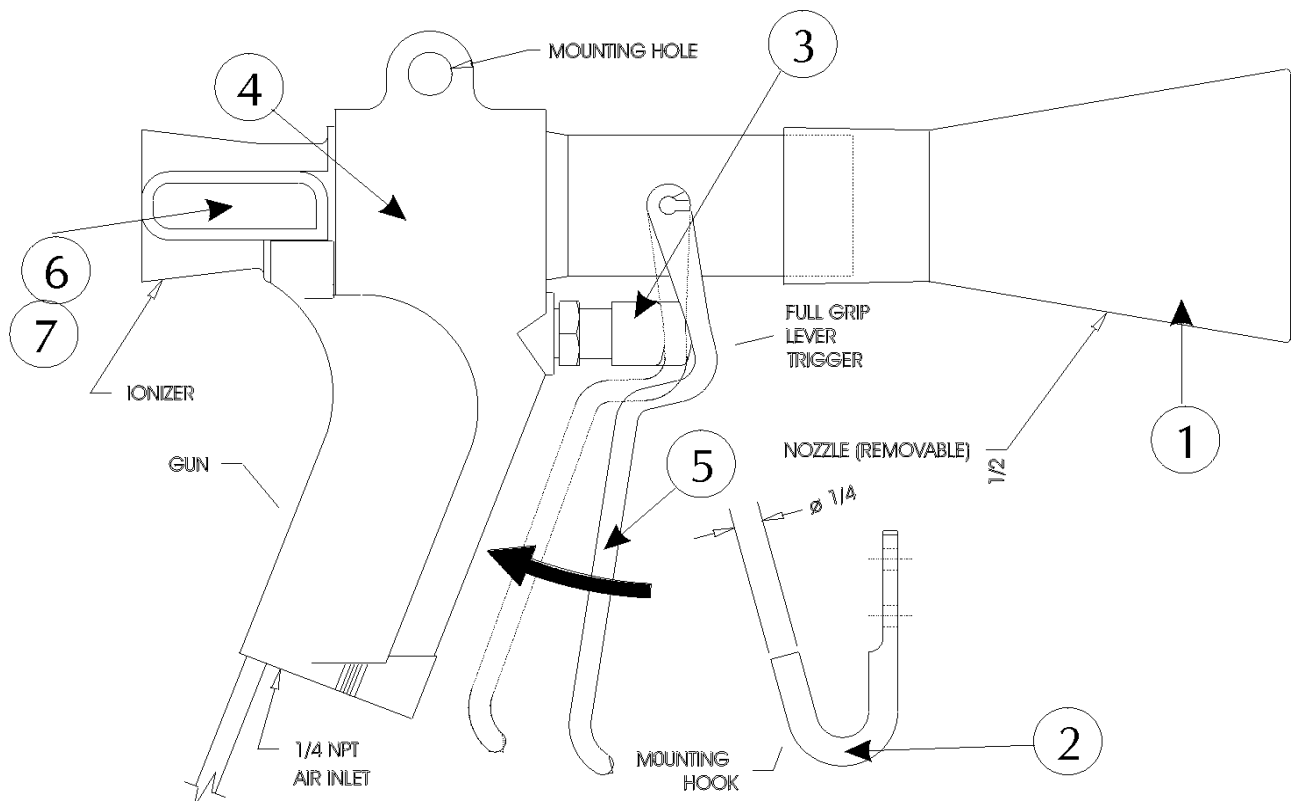
Valve and Actuator Assembly.....	134067
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Hand Lever.....	136828
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Cable Assembly, 20 ft (6.1 m).....	136170
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Removable Nozzle.....	148432
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Description	Item	IMS #
Nozzle	1	148432
Hook	2	4670836
Valve & Trigger	3	134067
Gun Body	4	4401781
Lever	5	136828
Ionizer - 20' cable assembly	6	136170
Ionizer - 40' cable assembly	7	4104342





## Notes and Maintenance Record

