

SECTION1-NOTES AND CAUTIONAS**■ NOTE**

Statements marked with "NOTE" indicate necessary precautions to avoid potential damage and hazard.

■ CAUTION

"CAUTION" indicates that potential danger exists.

This equipment must be correctly installed and properly maintained. Please follow the sequent installing and operating requests.

- Read instruction manual before operation and installation.
- Qualified service personnel must do installation and repairs.
- Do not operate unit in excess of specifications.
- Do not operate unit in flammable or explosive atmospheres.
- Do not operate unit in wet environment.
- Do not allow filter-nozzle to touch alcohols or glycols.

If there damage on gun, cable or power cord , please remove and deliver it to qualified service personnel or contact HORB for help.

SECTION2-INTRODUCTION

SUPPER GUN is an ionizing air gun that produces an intense air flow which is rich in both positive and negative ions. Directing the air flow on an item that has static electricity will neutralize the static charges and clean the item. Typical uses include cleaning items that have generated static charges due to handling or fabricating processes. If the item has a negative static charge, it will draw positive ions from the air flow. If the item has a positive static charge, it will draw negative ions from the airflow. The air ions are attracted to the oppositely charged item thereby neutralizing the static charge on the item.

SUPPER GUN should use clean compressed air, nitrogen or inert gases at pressures up to 100 PSI. Compressed gas is connected to quick tie-in connector on the power box that contains a solenoid to turn gas flow on and off. High quality polyurethane tubing transmit the gas to the gun. In the gun, gas flow is controlled by an integral valve. The compressed gas is filtered by an integrated, replaceable filter nozzle. The nozzle has been specially designed to yield maximal airflow while the least noise levels.

SUPPER GUN supplies low current, high voltage to ionizer, which is beneath the filter. In this position, ionized air generated by the cartridge is absorbed into the air flow from the nozzle. The transformer that provides power for the cartridge. It locates in the power box along with the solenoid and control circuit. This makes the gun as light as possible. Ion balance is controlled by a adjustment ring outside the ionizer. SUPPER GUN uses a light touch trigger for operation. Pressing the trigger activates a control circuit to supply high voltage. When the valve is turned on, the air blows out and LED indicator in the gun indicates stand-by / operation status.

■ Features

- Filter at the exit of the gun ensures air blowing to the target surface is clean.
- Light and reasonable design make operation more comfortable.
- Airflow control valve adjusts air flow fit for each specific application.
- Ionizing indicator light verifies the state of ion-generating.
- Ion balance: $\leq \pm 15V$

■ Receipt of Equipment

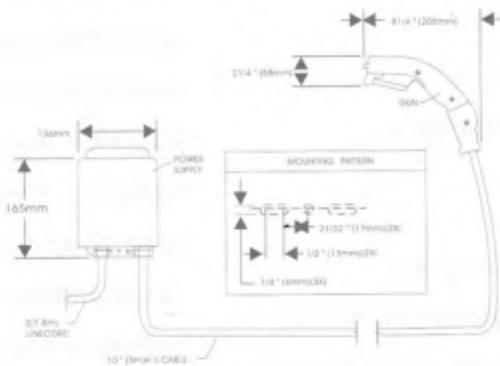
- Carefully takeout the equipment from the carton.
- Inspect contents for damage that may have occurred during shipment. If any damage has occurred during shipment, please immediately notify the local carrier and contact Horb Tech Development Co. Ltd., 7/F New Holdfound Building, Shennan Road. Nanshan District Shenzhen GUANGDONG CHINA 86 755 261509916 26509936 or domestic free hotline 800-830-9665
- Empty the carton to ensure that small parts are not discarded.

■ Return Goods

Before returning goods, please contact HORB Tech Development Co.,Ltd and fill out relative form and packed the returned goods well. The relative fees should be paid according rules negotiated by seller and buyer.

SECTION3-SPECIFICATION

- The length of cable: 2.8M
- Operating voltage: 5.6KV
- Current consumption(at rest): 0.05Amps
- Dimensions of windpipe tie-in: 1/8NPT(female)
- Air input pressure:
100PSI(7 bar)maximal pressure
compressed air, inert gases or nitrogen gases.
- Air consumption: 2.4 SCFM at 30 PSI(68 l/min. at 2bar)
4.6 SCFM at 60 PSI(130 l/min. at 4bar)
7.4 SCFM at 100 PSI(210 l/min. at 7bar)
- Replaceable filter: 0.02micron
- Noise: 76 dB at 30PSI (2 bar)
89 dB at 60PSI (4 bar)
97 dB at 100PSI (7 bar)
measure at the position 24" (600mm)
away from nozzle
- Ozone content:
0.001 PPM measure at 18" (450mm)
away from gun and working pressure 15
PSI (1 bar). Test depends on American
Federation Standard: EPA EQOA-0577-019
Using Dasibi ozone measuring instrument,
model 1003AH.
- Working temperature: 0°C to 50°C
- Material:
Gun body: ABS molded
Cable: shielding cable
Generator: cold rolled steel plates sprinkled with powder
- Weight:
4.6kg(including gun body, high-voltage ionizer and cable)
- Ion balance: $< \pm 15V$

■ SUPPER GUN OVERVIEW DRAWING**SECTION4-INSTALLATION****■ Mounting the Power Box**

The power unit can be mounted on any convenient surface such as a wall or work bench leg, etc. There are different holes beside of the power box. They are convenient for installation. If installation is OK and when power and gas tube is pulled, the power unit itself can be used as a container for the blow-off gun cable.

13

IONIZING AIR GUN ECO-G03

■ Compressed Air and Line Voltage Connections to the Power Unit

Compressed air, nitrogen or inert gases are supplied to the power unit through a 1/8" NPT connector. The compressed gas tube should match with the quick tie-in connector. The flow diameter of the tubing and fittings should not be less than 3/16" (4 mm). The compressed air must be clean, dry and oil free. The maximum allowable input pressure is no more than 100 PSI (7 bar). We suggest using external pressure regulator and filter / dryer. Line voltage is supplied to the power unit must measure up with related standard and have good grounding. Do not ignore equipping the grounding line.

■ Mounting the Gun Bracket

*The gun bracket can be mounted on any convenient surface such as a wall, table top or other plane. The bracket can also be mounted on the top of the power box.

*Optional pedal control switch.

■ Hook-up**CAUTION: ELECTRIC SHOCK HAZARD**

When power is under pedal control, we need to connect the pedal switch. Just need to connect the socket of pedal switch with the jack of power box. The voltage of pedal switch is about DC 100V.

SECTION5-OPERATION

Hold nozzle of blow-off gun at desired distance (typically 2 to 12 inches from object to be cleaned) and press trigger to activate air flow. Move the gun back and forth to clean object. The airflow will neutralize static charges. When the trigger is pressed, the LED on gun will increase in intensity indicating operation of the electrical circuit OK. If LED reduce intensity indicating the gun is ready for operation. The air flow can be set as desired by the flow control knob in the gun handle.

NOTE:

This gun complies with the Occupational Safety and Health Act (OSHA), 29 CFR ch. XVII, Part 1910.242B, measure up with the requirements of "Compressed air used for cleaning". At maximum pressure the gun produces a noise level of 97 dB, therefore, please wear hearing protectors and avoid to operate gun continuously for more than 3 hours.

SECTION6-MAINTENANCE**■ Inspection and cleaning on ion needles**

The typical frequency of inspection and cleaning on ion needles is once a week. You should adjust the frequency according to specific situation, but not longer than a month. The inspection items include whether there is distorted or curved needle, whether there is so many dust. The ion needles are beneath

15

IONIZING AIR GUN ECO-G03

the air output. You need to turn off the power and clean needles by swab or wiper with alcohol.

■ Replace filter

Compressed air filter is a special filtration media. It will become red when dust and dirty thing collected. If the filter becomes red, the air will not pass through freely and we need to replace the filter. Processes for replacement is as following: First, turn off the power and compressed air. Then, disassemble and replace the filter. And then, clean ion needles and adjust the ion balance. Last, to re-operate the gun, if everything is OK.

■ Ion balance test

Put ionizing gun at distance of 50mm in front of the test plate. Set the parameter of test instrument. Then, turn on the ionizing gun. And then, adjust the pressure of compressed air at 50 PIS (3.5 bar) and turn on the airflow adjustment valve completely. Last, test the decay time (decrease from $\pm 1000V$ to $\pm 100V$). Test for several times and gain the average value to make sure the result is exact. Please take the technological parameter in section 3 for reference.

■ Ion balance adjustment

The ion balance adjustment knob is in the middle of the gun. Press the switch and adjust ion balance adjustment hole to make ion balance voltage near to 0V.

SECTION7-PACKING LIST

- G03 Ionizing Gun: 1 set
- G03H High-voltage Ion Generator: 1 set
- Instruction Manual: 1 copy
- Ex-work Inspection Report: 1 copy
- Warranty Card: 1 copy

SECTION8-WARRANTY

This product has been carefully tested at the factory and is warranted to be free from any defects in materials or workmanship. HORB promises one-year warranty period from the date of purchasement.

This warranty is not effective when the equipment has been tampered with, misused, improperly installed, altered, or suffer damage by abuse, carelessness, accident, connected to improper voltage, or has been serviced by anyone other than an authorized factory representative.