

# ESD Grounding Block Kit Installation

## Description

Your system includes an ESD (ElectroStatic Discharge) grounding block kit. Use this kit to ground your powder application equipment to the powder booth base.

Proper electrostatic grounding is mandatory in an electrostatic powder coating system. Powder spray guns generate significant voltages, up to 100,000 volts. With these high voltages, it does not take long for ungrounded equipment to build up a strong static charge. When discharged, the high voltage and high frequency of the electrostatic arc can damage ESD-sensitive equipment.

Ordinary ground wires do not protect equipment from the high frequencies of an electrostatic discharge. Use the special flat braided ground cables included with your Nordson equipment and the grounding block kit to connect the equipment to the grounding block.



**WARNING:** Do not use this grounding block for protective earth (PE) grounding or AC supply grounding. These grounds use wire with green/yellow insulation and are designed to conduct electrical power to earth ground if an electrical fault occurs.

**NOTE:** For more information on system grounding, refer to Technical Bulletin TCTT-06-3881.

## Installation

### Grounding Block Location

The grounding block must be mounted directly on the welded powder booth base in order to establish an effective ESD ground. Do not install the block on panels, brackets, or other items that are bolted to the booth base.

The booth base mounting location should allow you to connect the flat braided ground cables from your powder application equipment and control units to the grounding block.

## Mounting

See Figure 1.

1. Clamp or hold the grounding block to the base.
2. Drive the two self-drilling hex head screws into the base until the screws are tight against the block and the block is up against the base.
3. Remove the clamps, if used.
4. Remove the backing from the ESD label and apply it to the base next to the block.

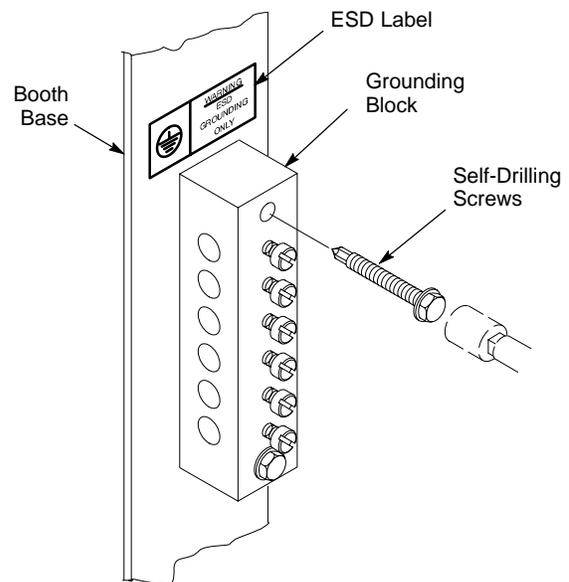


Figure 1 Mounting the Grounding Block

## Ground Cable Connections

See Figure 2.

**NOTE:** Other powder coating equipment such as hoppers, sieves, color modules, dolly systems, gun stands, and gun movers that are part of your system can be connected to this grounding block. Always use the flat braided cables supplied with the equipment for ESD grounding.

1. Remove the clamps from the ends of the flat braided ground cables. The ends of the cables are tinned.
2. Back off one of the six slotted screws on the top of the block.
3. Insert the ends of the ground cables into the hole below the screw. You should be able to get three or four cables in one hole.
4. Tighten the screw to secure the cables to the block.

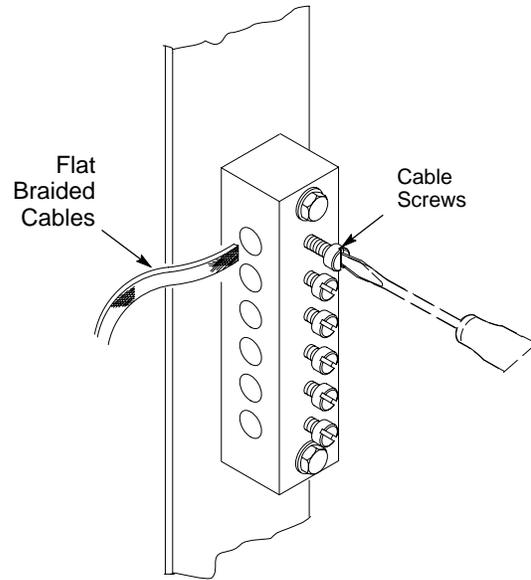


Figure 2 Connecting the Ground Cables to the Block

## Parts

For technical support and replacement parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

This instruction sheet is furnished with the ESD grounding kit. Order additional kits as needed to properly ground your ESD-sensitive equipment. The kit includes a grounding block and 15 meters (50 ft) of flat braided cable.

Part	Description	Quantity	Note
1067694	KIT, ground bus bar, ESD, 6 position, with hardware	1	
—	• BUS BAR, ground, with M5 cheese head screws	2	
—	• SCREW, hex, washer, 10-16 x 1.5 in., self drill, stainless steel	4	
306727	• WIRE, braided, flat, flexible	50 ft.	A
939110	• TERMINAL, ring tong, 12-10, 10	2	
—	• LABEL, warning, ESD grounding only	2	
NOTE A: Order additional wire in one foot increments.			

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