

# Foot Grounders - Grounding, Testing, and Maintenance



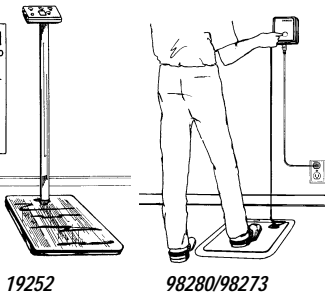
Made in America

## Description

Desco's complete line of foot grounders has been created to provide a continuous ground path between the operator and a properly grounded ESD protected flooring. Foot grounders are designed for use in applications where user mobility is required, such as wave solder, kitting, and quality control. Per ANSI/ESD S20.20 Paragraph 6.2.2.2, "ESD protective flooring used with approved footwear, may be used as an alternative to the wrist strap system for standing operations." Foot grounders quickly and effectively drain the static charges which collect on personnel during normal, everyday activities.

## General Guidelines

1. It is recommended that foot grounders be worn on both feet, in order to assure that a continuous path to ground is maintained.
2. Grounding tabs should be tucked inside the shoe with as much contact area as possible to the bottom of the stockinged foot. Foot grounders rely upon the perspiration in the shoe to sustain electrical contact between the conductive grounding tab and the body.
3. Foot grounders should be used in conjunction with floor surfaces which have a surface resistance of less than  $1 \times 10^9$  ohms.
4. A current limiting one or two megohm resistor in series with the grounding tab is recommended. Models 07504, 07505, 07506, 07507, 07508, 07509, 07515, 07522, 07523, 07560, 07590, 07593, 07595, 17200, 17202, 17222, 17252, 17280, 17281, and 17282 are listed.



## Testing Your Foot Grounders

The best test of your foot groud is one that includes all three components: the individual foot groud, the grounding tab and the interface between the grounding tab and the wearer's sweat layer.

Desco has testers designed to properly test foot grounders. For more detailed information on these testers, ask for technical bulletins TB-2040 (19252, 19253), and/or TB-3000 (98280).

If you obtain a fail reading from the tester you should stop working and clean the foot ground and grounding tab. Retest after cleaning. If the unit still fails, replace the foot groud. Retest the system before beginning work.

## Cleaning

Foot grounders are to ground static charges, while dirt generally provides an insulative layer adversely affecting reliability. For proper operation, the Foot Grounder and its conductive strip must be kept clean.

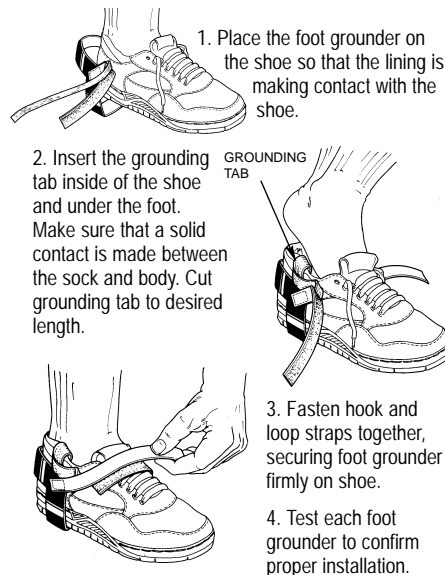
The rubber portion of the Foot Grounder should be cleaned using Desco's Rezstore™ Antistatic Surface & Mat Cleaner or "Static-Wipes" wipers. An alternative would be to clean using isopropyl alcohol. The Desco cleaning products are specially formulated for cleaning ESD control components and are silicone free. This is critical as silicone is an insulator. Desco ESD cleaners should not be used to clean the nylon polyester grounding tab.

Foot Grounders can be safely hand or machine washed on gentle cycle. Mild detergents, such as Woolite® or a liquid dish washing product and warm water are recommended. However, care must be taken to ensure that these detergents are silicone free.

## Installation

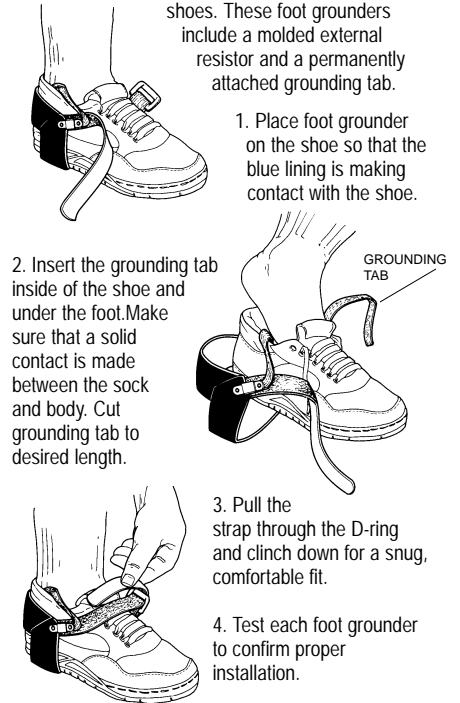
### HOOK & LOOP AND MARR RESISTANT

Desco model 07560, 17200, 17202, 17210, 17250, and 17252 heel grounders are designed for use on standard shoes. All Desco foot grounders can be easily adjusted to fit the individual wearer. Desco heel grounders have a dissipative lining that will not mar white or light colored shoes. Models 07560, 17200, 17202, and 17252 have a current limiting one or two megohm resistor in series with the grounding tab. Models 17250 and 17210 have no resistor.



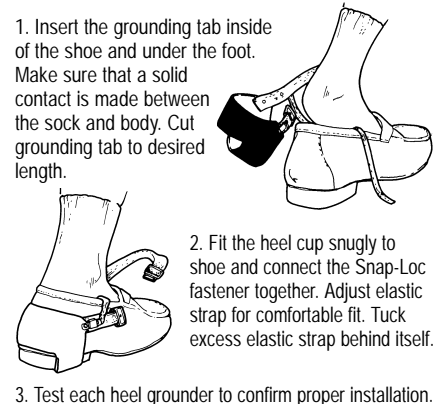
### D-RING HEEL GROUNDERS

Desco model 07590 and 07593 heel grounders are equipped with an elastic D-ring fastening system which provides snug cinching of the ankle strap and allows "flex" during walking. They are designed for use on most types of shoes and boots. The light blue lining prevents marring on white or light colored



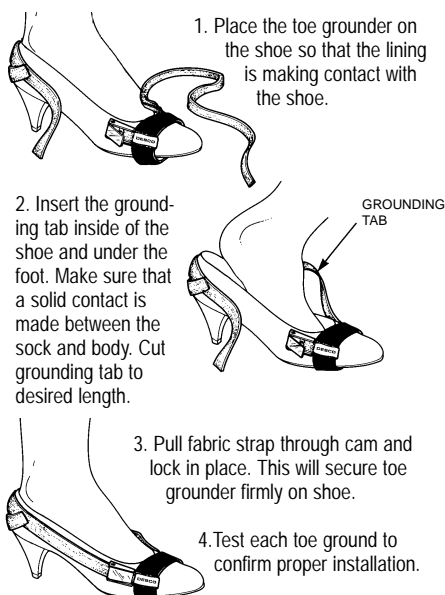
### HEEL GROUNDERS WITH SNAP-LOC FASTENING SYSTEM

The Desco model 07515, 07522, and 07523 heel grounders are equipped with a Snap-Loc quick release fastening system. The model 07515 has a cup and lining that will not mar shoes or floors. The 07515 has a molded exterior 2 megohm resistor, while the 07522 and 07523 have a 1 megohm flat "flex" resistor.



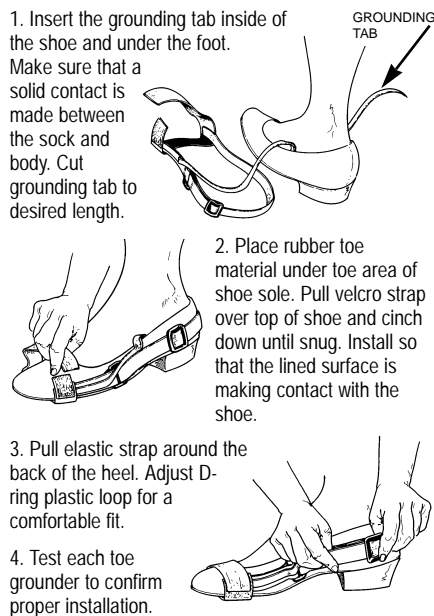
### HOOK & LOOP TOE GROUNDERS

Desco model 17222 toe grounders are designed for use on heeled shoes. Desco toe grounders have a lining that prevents marring on white or light colored shoes. Model 17222 has a current limiting one megohm resistor in series with the grounding tab.



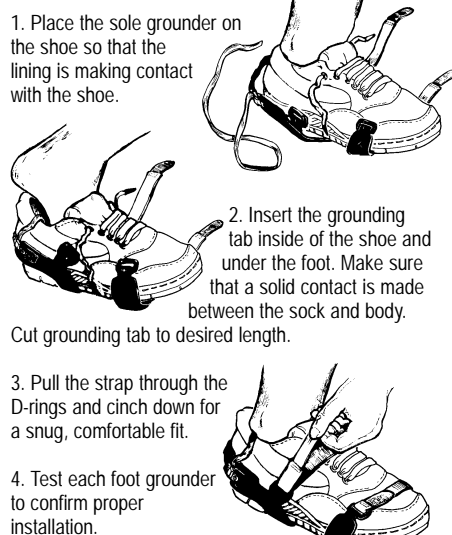
### D-RING TOE GROUNDERS

Desco model 07595 toe grounders with the elastic D-ring fastening system are designed for use on heeled shoes. Desco toe grounders have a blue lining that will prevent marring on white or light colored shoes. These toe grounders include a molded external 2 megohm resistor and a permanently attached grounding tab.



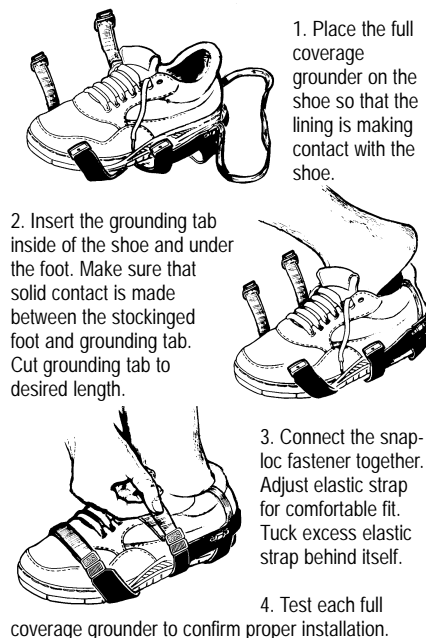
### SOLE GROUNDERS

Desco model 07504, 07505, 07506, 07507, 07508 and 07509 sole grounders are designed for use on standard shoes. Desco sole grounders are available in three sizes and can be easily adjusted to fit the individual wearer. Sole grounders have a lining that prevents marring on white or light colored shoes. Models 07507, 07508, and 07509 also have a non-marring exterior to prevent marks on floors. Sole grounders have a molded exterior 2 megohm resistor.



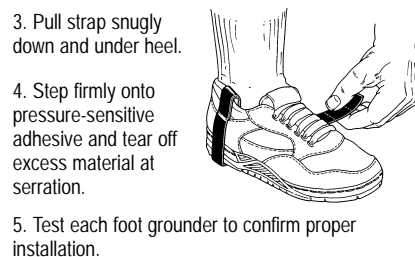
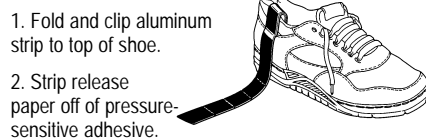
### FULL COVERAGE GROUNDERS

Desco model 17280, 17281, and 17282 full coverage grounders are designed for use on standard shoes. They can be easily adjusted to fit the individual wearer. They have a lining that will not mar most footwear. These foot grounders have a discrete one megohm resistor built into the grounding tab.



### DISPOSABLE FOOT GROUNDERS

The Desco model 17100 disposable foot grounders are designed for applications where the use of permanent foot grounders is not economical or practical. They are constructed so that it may be used once and then discarded.



**ATTENTION:** This product is not recommended for use on equipment with operating voltage exceeding 250 VAC.

**CAUTION:** The ESD Series is for electrostatic control. It will not reduce or increase your risk of receiving electric shock when using or working on electrical equipment. Follow the same precautions you would use without wrist straps, including:

- Make certain that equipment having a grounding type plug is properly grounded.
- Make certain that you are not in contact with grounded objects other than through the ESD Series.

### Limited Warranty

Desco expressly warrants that for a period of one (1) year from the date of purchase, Desco foot grounders will be free of defects in material (parts) and workmanship (labor). Within the warranty period, the product will be tested, repaired, or replaced at Desco's option, free of charge. Call our Customer Service Department at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Include a copy of your original packing slip, invoice, or other proof of purchase date. Any unit under warranty should be shipped prepaid to the Desco factory. Warranty repairs will take approximately two weeks.

If your unit is out of warranty call Customer Service at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Ship your unit freight prepaid. Desco will quote repair charges necessary to bring your unit up to factory standards.

### Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

### Limit of Liability

In no event will Desco or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.