



Note:

"When the use of a wrist strap system is impractical, the [ESD] floor and [ESD] footwear shall be the primary means of ESD control." [EN 61340-5-1 clause 5.5 EPA working practices]

"Where personnel are mobile, in storing areas, operating large machinery, etc., it may be impractical or dangerous to have long cords attached to them. Where personnel are seated, footwear does not form a secure conductive path to ground so the wrist strap approach should be used as the preferred option."

Most people do not stand solidly on both feet, it is important that paths to ground are made in the heel and toe area of both feet. Where toe and heel straps are used as ESD footwear, once these are worn outside the EPA, particularly on carpets, they are likely to accumulate fluff and become ineffective; this requires that they be checked or replaced on every visit to the EPA [ESD Protected Area].

When ESD footwear is used, it should be noted that ESD footwear alone cannot achieve protection, but needs to be used in conjunction with a suitable ESD floor." [EN 61340-5-2 clause 5.2.8 Footwear]

Charleswater recommends the use of foot ground tester item No. [99004](#).



- A. Designed to meet the Footwear requirements of EN 61340-5-1 tested per IEC 61340-4-3 and EN 61340-5-1 clause A.2. Toe grounders are used for earthing personnel where mobility is required such as in stores areas and where static protective flooring or mats have been installed. Floors with a defined built-in resistance to earth between 1 and 20 megohm are preferred.
- B. Toe grounders are for use on shoes with raised heels.
- C. The conductive parts are two-layer rubber so as not to mark light coloured shoes.
- D. Connection between the operator and floor is achieved by a conductive textile tongue, that passes over the side of the shoe into the shoe itself where contact is made with the stockinged foot. Straps are hook and loop Velcro®; hook is 10cm long, loop is 36cm
- E. The rubber grounding strap passes under the front of the shoe. It is secured on top of the shoe with a distinctive blue strap.
- F. Both width and length are adjustable.
- G. Socks or stockings will not usually insulate the wearer as natural perspiration completes the path and achieves a body to earth resistance of less than 1 megohm. Where the resistance to earth of the floor is less than 1 megohm we recommend the use of heel grounders with a built-in 1 megohm resistor. The resistor is rated at ¼ Watt. Once fitted all heel grounders should be tested with a personnel test station ([99004](#)).
- H. Rg 10E6 – 10E7 ohms
- I. Supplied with resistor only.

Item	Description
70032	Toe Grounder, 1 Megohm resistor, Small, Bag of 2

Unless otherwise noted, tolerance ± 10%



Made in Britain

Specifications and procedures subject to change without notice.



Toe Grounder With Stretchable Velcro

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 70032.E

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