



# Safety alert

13/11/2023

## Minor Electric Shock while using a Portable Grinder

Minor Electric shock received while using a portable electric grinder.

A Contractor was using a tagged grinder to buff the turbine casing half joint. When he had finished, he pulled the grinder lead towards himself. The lead was draped over a scaffold, and he received a minor electric shock. On inspection a small section of the grinder electrical lead was found to have exposed wiring, the exposed conductor appears to have made contact with the scaffold.

### Pre-Work Equipment Inspections:

Always check your power cords and appliances for damage before using them.

### Double Insulated Appliances:

This particular electrical device was double insulated, meaning that protection from serious electric shock is provided by adding an additional layer of insulation, and removing the requirement for a protective earthing conductor.

### Residual Current Devices:

Although an RCD (Residual Current Device) should be used where possible, they do not eliminate the risk of electric shock. An RCD provides added safety by monitoring any leakage between phase and earthing connection. In this instance the RCD did not provide protection as double insulated power tools do not have a earthing connection.

Promote the use of Battery-Operated Grinders & tools (this brings additional housekeeping requirements for safe battery charging).

Identification of Electricity Hazards in general for work parties.

If you require any further information, please contact  
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