

INFORMATION BULLETIN

May 2018 #021

Power Supply Unit / Charger (PSU)

There have been a number of reported electric shock incidents from PSUs that have integral pins. The electric shocks have occurred when part of the enclosure has become detached.

Incidents include situations where ultrasonic welds, securing screws and clips used as the only securing method have failed, resulting in the users receiving electric shock due to access to live parts.

A number of safety standards address this issue by requiring two independent means of attachment to ensure that the enclosure is securely fixed, for example clause 19.14 in AS/NZS 61558.1:2018.

In some cases there has been confusion as to how the effectiveness of each independent means of securement is to be assessed. This information bulletin intends to provide guidance on the assessment of the effectiveness of each independent means of securement.

PSU covers providing protection against electric shock that require two means of attachment should comply by the following test:

One of the independent means of fixing shall be released or disabled and the test specified in clause 22.11 of AS/NZS 60335.1 is then applied to the cover. The cover shall not become detached.

The released independent means of fixing is then re-applied or another sample selected if this is not possible. The other independent means of fixing shall be released or disabled and the test specified in clause 22.11 of AS/NZS 60335.1 is then applied to the cover. The cover shall not become detached.

If the cover is fixed using multiple screws they are collectively considered to provide a single independent means of fixing and so are jointly tested as specified above.



Version 1.0

Information contained in this bulletin is supplied to give guidance on application of requirements in the following jurisdictions: <u>Australian Capital Territory, New Zealand, Northern Territory, Queensland, South Australia, Tasmania, Victoria and Western Australia.</u>

Information contained in this bulletin may not reflect provisions of legislation in the following jurisdictions (please contact the jurisdiction for further information): <u>New South Wales.</u>