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Certificate No AU1659
Transition to ISO 9001 : 2015

ADVISORY NOTIFICATION

Subject: Earth Test Lead in relation to a Portable Appliance Tester

The Earth test lead is an integral component of a portable appliance tester. Even though it is detachable from the tester, it must be considered during the calibration process as a permanent connection.

The 1 Ohm threshold limit of an appliance under test is measured from the probe/clamp end of the Earth test lead to the plug of that appliance. The earth test lead resistance is zeroed in the calibration process.

The difference in resistance of new earth test leads can be 15 to 42mOhm. A used earth test lead, if not maintained properly can vary between 50 to 800mOhms or higher. If these leads are used during the safety testing of appliances, one can prematurely fail an electrical appliance under test.

The tolerance of the 0.2, 0.5 and 1 Ohm measurement threshold is 5% (50mOhm for 1 Ohm threshold). Therefore, an earth test lead which is not included in the calibration will result in an **out of tolerance reading**.

All portable appliance testers no matter what manufacturer must be calibrated with the user supplied earth test lead.