

Meter Base Failures

Distribution Company Awareness

Meter replacements and other related work can cause Electrical Distributors to interact with customer-owned meter bases. This bulletin addresses a safety concern when working with revenue meters and undertaking repair work.

Conductors shorting to meter base covers upon removal of a meter from the meter base is a safety concern. Failure analysis of the equipment indicates that downward pressure of the supply cables can cause cracks or breaks in the porcelain or plastic of the meter base socket. When the meter is removed from the meter base, the supply conductor can make an electrical connection to the meter cover.



ESA Recommends

When a meter base's socket is damaged and needs replacement, the Electrical Distributor should contact a Licenced Electrical Contractor or the owner should be made aware of the issue. Arrangements can be made for a Licenced Electrical Contractor to implement repairs as per the requirements of the Ontario Electrical Safety Code.

Electrical Distributor's trained and qualified workers should be informed of the safety concern and take proper precautions. Actions may include:

- Identifying all potentially problem meter bases with an indicator, such as a warning sticker
- Arranging for isolation by the Electrical Distributor at the transformer before pulling the meter, on problem meter bases
- Ensuring use of proper PPE and meter pulling tools, which direct any hazard away from workers
- Ensuring secondary cables are installed with sufficient slack
- Performing meter base socket retrofits, where possible