# Bulletin 10-15-9 Grounding with a meter base on the supply side of service boxes Rules 6-402, 10-210, 10-604, and 10-616

Issued Oct 2025

Supersedes Bulletin 10-15-8

#### Scope

- 1) Background
- 2) Single meter base grounding
- 3) Multi-gang meter base grounding
- 4) Modifications of legacy meter base installations

#### 1) Background

Rule 6-402 2) states metering equipment may be connected on the supply side of a service box within limits placed on voltage and amperage common, but not limited, to residential services.

Rule 10-210 requires the grounding connection of the supply authority system grounded conductor (neutral) to be made at one point only at the consumer's service and have no other connection to metal parts of the electrical equipment on the supply or load side from where the grounding connection is made.

## 2) Single meter base grounding

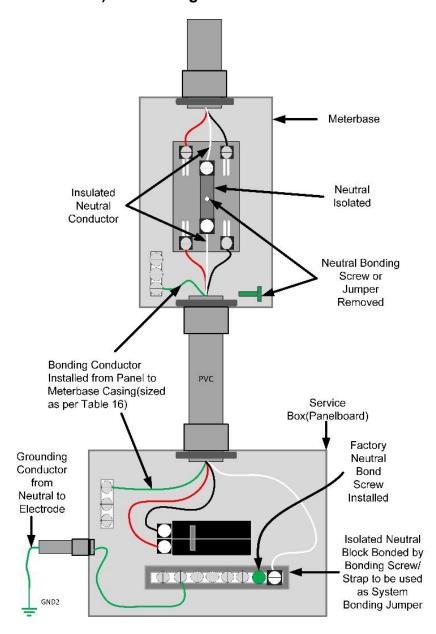
Where a consumer's service has a single meter base and service box, the Ontario Electrical Safety Code (OESC) permits the grounding connection at the meter base or at the service box as per examples shown in Diagrams B1 a) and b) below.

The configuration of the meter base neutral assembly is required to be suitable for the grounding method being used.

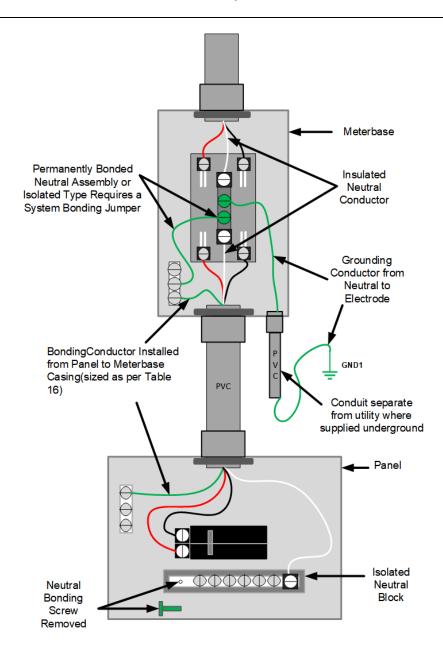
When grounding is installed at the meter base, the grounding conductor is not permitted to be installed in the conduit containing the Supply Authority's conductors. A separate conduit would be required since Rule 2-038 does not permit the use of the Supply Authority's distribution equipment to meet the requirements of the OESC.

## Diagram B1 - Grounding at a single meter base or service box

## a) Grounding at service box



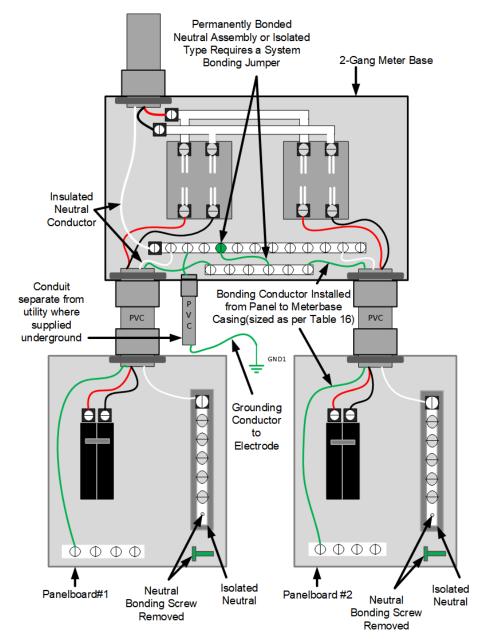
## b) Grounding at a single meter base



### 3) Multi-gang meter base grounding

Where a consumer's service is subdivided using a multi-gang meter base, the grounding conductor is not permitted to be installed in the conduit containing the Supply Authority's conductors as per Diagram B2. Grounding at each service box is not permitted since each service box is located on the supply side of the others. Grounding at each service box could result in objectionable current over the grounding conductors, which is prohibited by Rule 10-100. A bonding connection is required between each of the service boxes and the meter base as per Rule 10-604 and sized as per Rule10-616. The system bonding jumper shall be removed from each service box.

Diagram B2- Grounding at multi-gang meter base



When grounding is installed at a meter base as per Diagrams B1 b) and B2 and the neutral assembly is connected to the meter base enclosure, a field-installed system bonding jumper conductor sized in accordance with Rule 10-616 is required to be installed to ensure permanent bonding of neutral assembly, unless a manufactured bonding screw or jumper has been provided with the neutral assembly. For some installations, a service box is installed on the line side of a multi-gang meter base and Diagram B2 would not be applicable. Grounding would be required at the service box with an isolated neutral in the multi-gang meter base.

#### 4) Modifications of legacy meter base installations

<u>Legacy meter base installations with notifications filed prior to October 1, 2025 were allowed to be installed per diagrams B3 and B4. The bonding connection to the meter base enclosure was provided by the service neutral conductor connection, which was notwithstanding the requirements of Rule 10-210.</u>

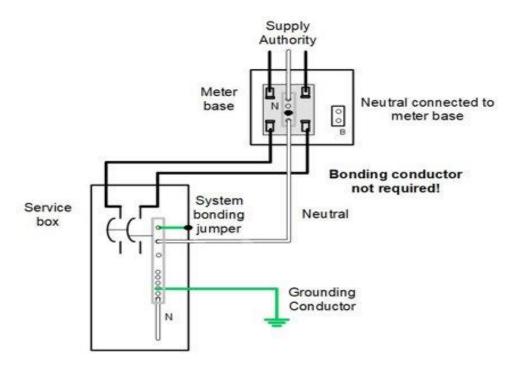
<u>Modifications of legacy meter base installations shall be permitted to remain in</u> alignment with diagrams B3 or B4, for the following conditions:

- Replacement of meter base only;
- Replacement or relocation of permanent service box only, having same electrical ratings or;
- Repair of damaged consumer's service raceway or wiring.

If the replacement meter base has an isolated neutral assembly, it is critical to ensure that a bond jumper is included or installed

For the addition of a service rated transfer switch, refer to Bulletin 10-24-\*.

<u>Diagram B3 – Legacy grounding at a single meter base or service box (previously</u> accepted for notifications filed prior October 1, 2025)



## <u>Diagram B4 – Legacy grounding at a multi-gang meter base or service box</u> (previously accepted for notifications filed prior to October 1, 2025)

