

**Affects:**

- DS150i Request-to-Exit PIR Detector

**1.0 Issue**

When the DS150i's output relay is connected to an inductive load (for example, a magnetic door lock) without installing a protection diode, the relay might fail. This failure would result in a loss of door control.

**2.0 Resolution**

When connecting the DS150i's output relay to an inductive load, install the protection diode as shown in *Figure 1*. Connect the diode's striped end to the positive side of the circuit.

For the protection diode, use a 1N4007 diode, or equivalent, with the following ratings:

- **RMS Reverse Voltage:** 700 V
- **Average Rectified Forward Current:** 1.0 A
- **Maximum Reverse Current:** 50  $\mu$ A



