### **GUIDE**

Replacing the temperature sensor on the Hilo smart water heater controller



#### Caution

#### Risk of electric shock

To avoid the risk of electric shock, ensure the circuit powering Hilo's smart water heater controller is switched off at the electrical panel before replacing the temperature sensor.

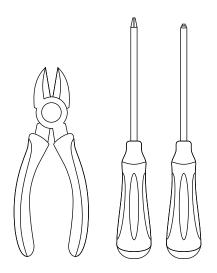




### Required tools and materials

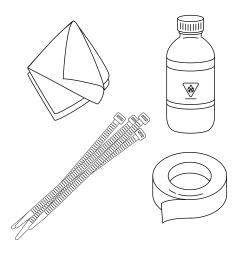
#### 1.1 Required tools

- Wire cutters
- One of the following screwdrivers (depending on the types of screws used on the water heater access panel — see Section 2.2)
  - Phillips (crosshead) screwdriver no.2
  - Robertson (square head) screwdriver no.2



#### 1.2 Required materials

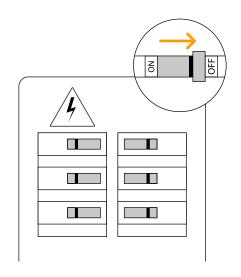
- · Clean cloth
- Isopropyl alcohol
- One of the following:
  - Zip ties
  - Cable clips
  - Electrical tape ("electrician's tape")



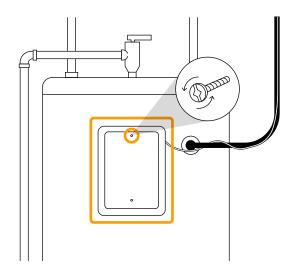


# Removing the old temperature sensor

2.1 Turn off the circuit powering the smart water heater controller at the electrical panel.

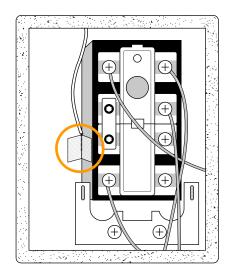


2.2 Using the appropriate screwdriver, remove the screws securing the top access panel of the water heater and take off the access panel.

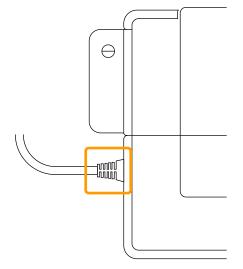


2.3 Remove or move aside the insulation to expose the thermostat and the sensor you'll be replacing.

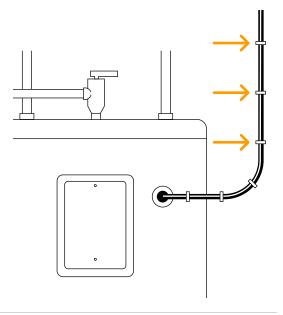
**Note:** The sensor is attached to the left or right side of the thermostat.



- **2.4** Disconnect the sensor wire from the side of the controller:
  - Press lightly on the tab located under the connector with your finger.
  - Pull the connector to release it.

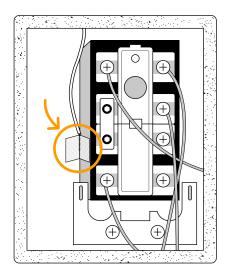


2.5 Using a pair of wire cutters, cut any cable clips (or zip ties) securing the sensor wire along the water heater's electrical power cable. Take care not to damage the electrical power cable.



2.6 Caution: Note the exact location of the old sensor — the new one will be installed in the same place.

Gently pull on the wire to detach the sensor.



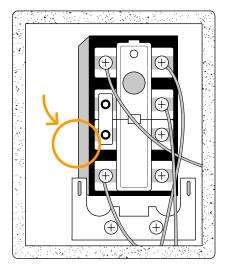


#### Installing the new sensor

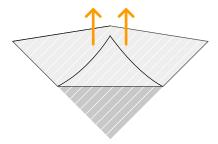
3.1 Thoroughly clean the surface where the new sensor will be attached (on the left or right side of the thermostat, and on the tank) using a clean cloth and isopropyl alcohol.

Wait a few minutes for the alcohol to fully evaporate.

**Note:** This step is important to ensure proper adhesion of the new sensor.

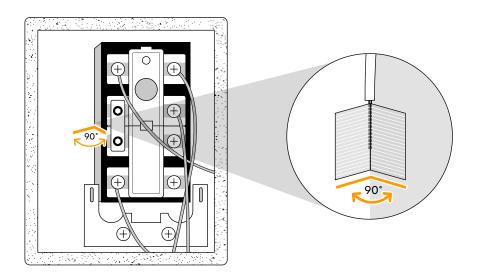


3.2 Remove the protective film from the new sensor, being careful not to touch the adhesive surface.



**3.3** Position the sensor in the corner where the edge of the thermostat meets the tank (in the same location as the previous sensor).

Firmly press the sensor with your fingertips so it adheres evenly across the entire surface.



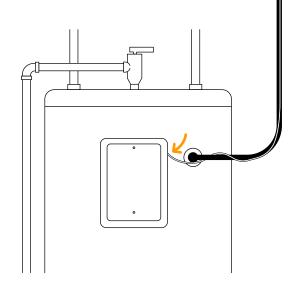


### Routing the sensor wire

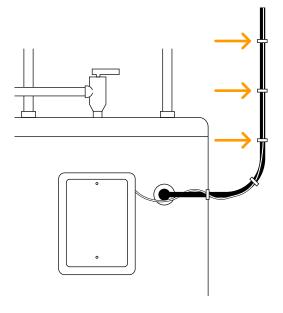
4.1 Route the sensor wire alongside the water heater's electrical power cable, being careful not to pull on it.

Put the insulation back in place so that it covers the thermostat.

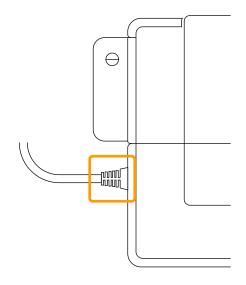
Reattach the access panel, making sure the sensor wire isn't stretched or under tension, then screw the access panel back into place.



4.2 Make sure the sensor wire runs alongside the water heater's electrical power cable. Secure it with cable clips, zip ties, or electrical tape to prevent accidental snagging.



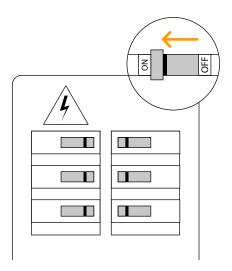
**4.3** Plug the new sensor wire into the side of the controller.





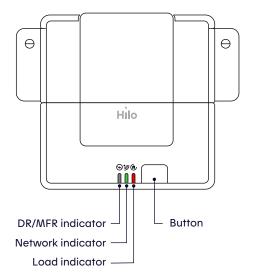
## Powering the controller back on

**5.1** Restore power to the water heater controller circuit at the electrical panel.



5.2 Make sure the load indicator light is solid red (not blinking), the network indicator light is solid green, and the DR/MFR indicator light is off.

If the load indicator light is off and both the network and DR/MFR indicator lights are green, the controller is in Outage Recovery Management mode.



This feature activates when a water heater controller connected to the Hilo hub loses power for more than 30 minutes — for example, during a power outage or a planned shutdown, such as during this sensor replacement.

No action is needed; the controller will restart automatically after about 10 minutes (the delay may vary depending on the length of the power outage). Note that the device cannot be managed in the Hilo app until the DR/MFR indicator light turns off.

- 5.3 Run a quick test (once the DR/MFR indicator light is off):
  - · Press the button on the controller to turn it off.
  - Open the Hilo app and turn the controller back on.